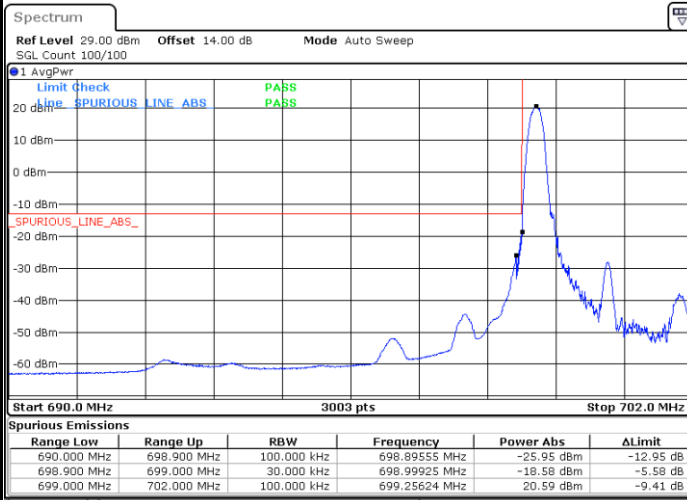




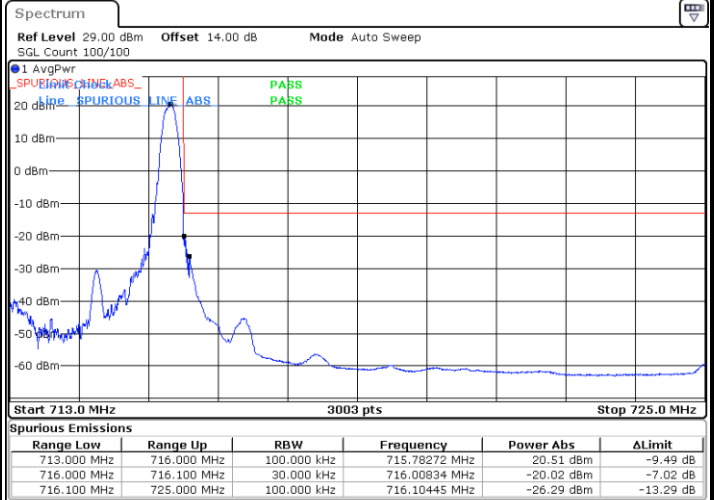
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



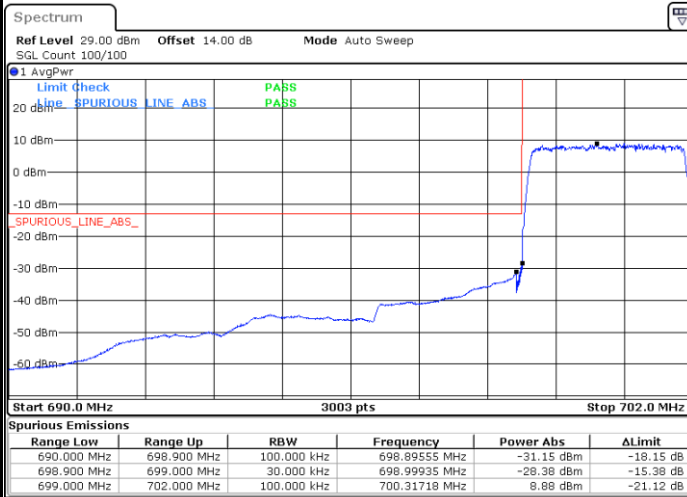
Date: 29.JAN.2021 11:50:07

Highest Band Edge / 1 RB



Date: 29.JAN.2021 11:59:08

Lowest Band Edge / Full RB



Date: 29.JAN.2021 11:46:55

Highest Band Edge / Full RB



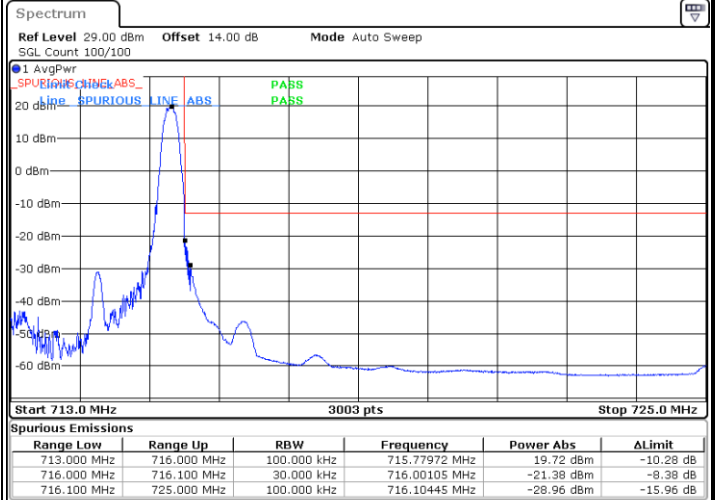
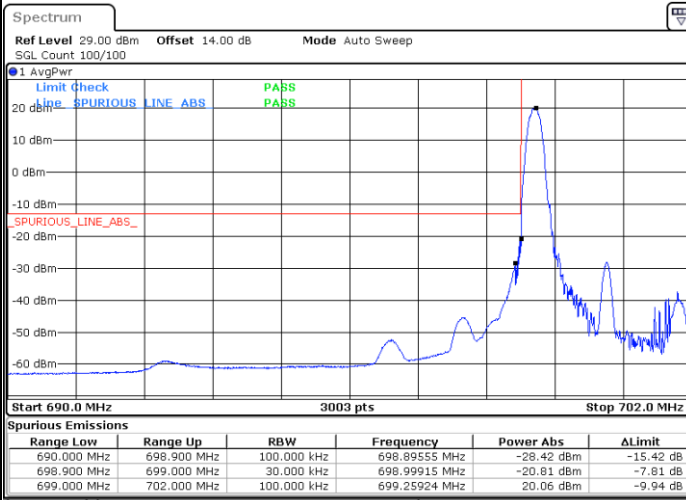
Date: 29.JAN.2021 11:55:56



LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

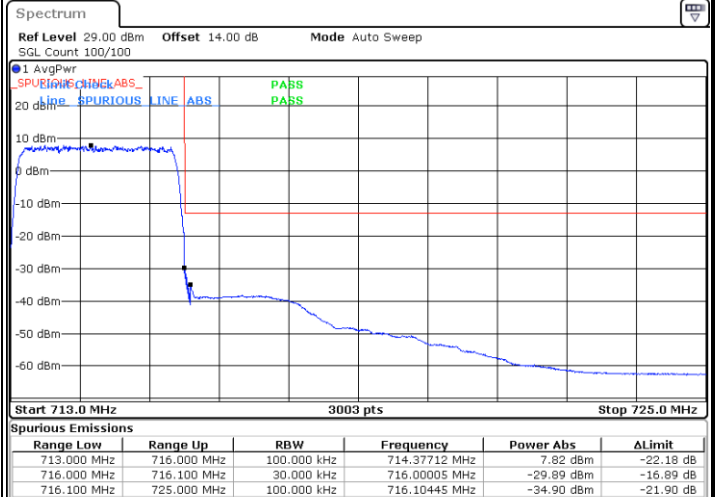
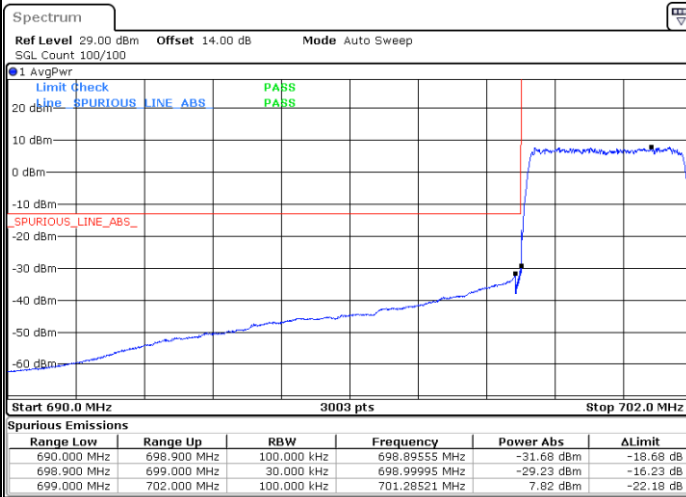


Date: 29.JAN.2021 11:49:03

Date: 29.JAN.2021 11:58:04

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



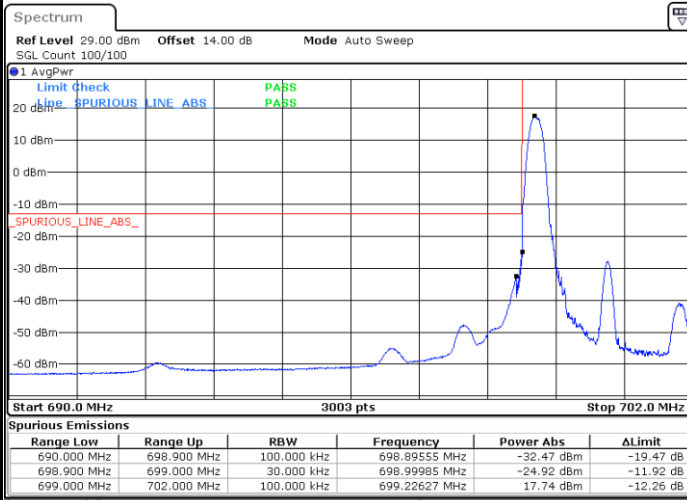
Date: 29.JAN.2021 11:47:59

Date: 29.JAN.2021 11:57:00



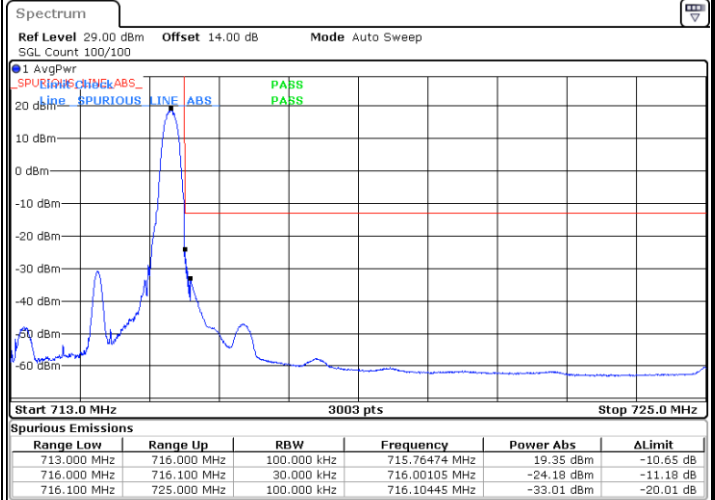
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



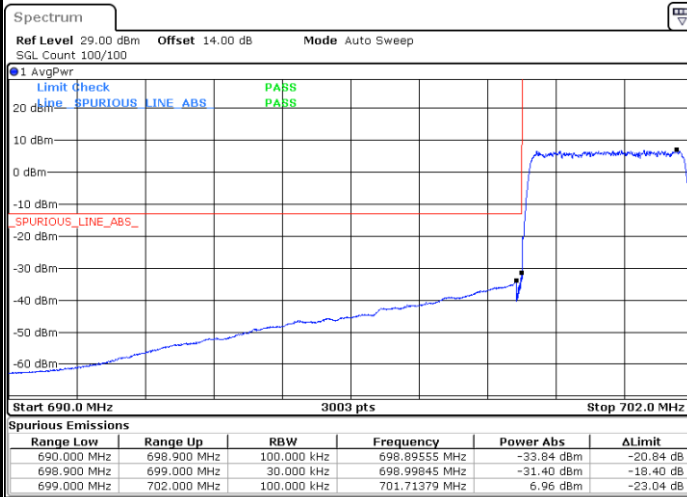
Date: 29.JAN.2021 12:03:16

Highest Band Edge / 1 RB



Date: 29.JAN.2021 12:07:47

Lowest Band Edge / Full RB



Date: 29.JAN.2021 12:02:12

Highest Band Edge / Full RB

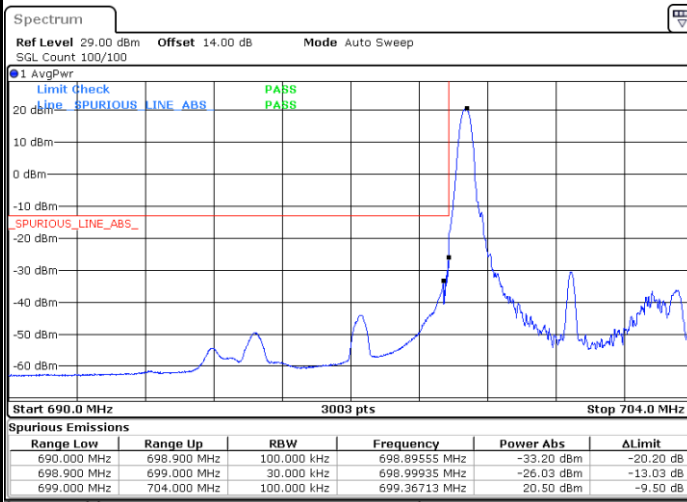


Date: 29.JAN.2021 12:06:43



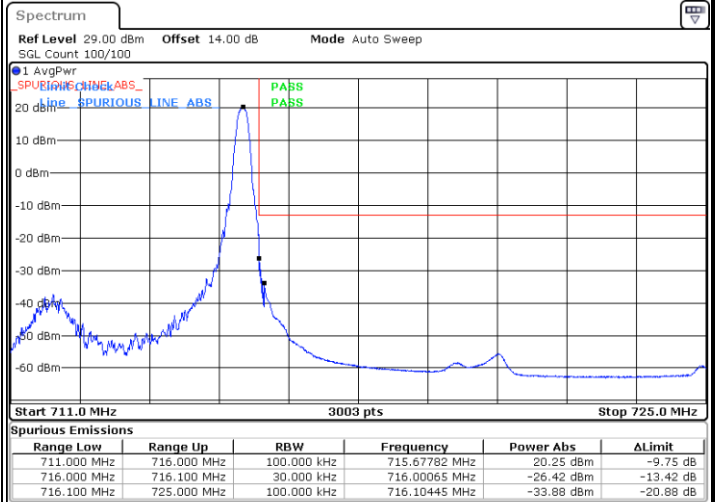
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



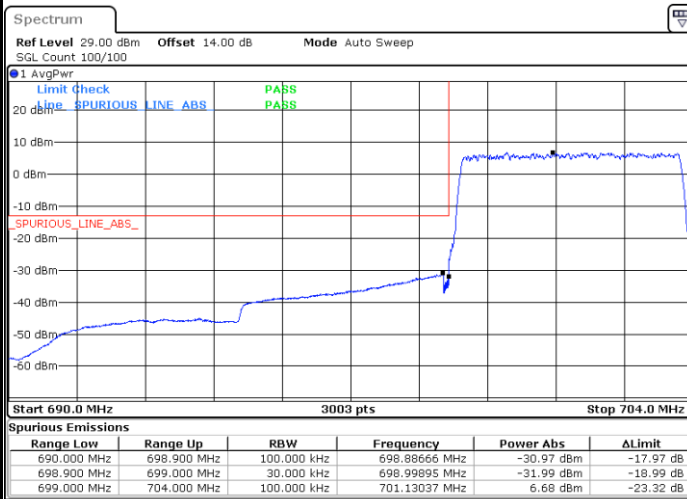
Date: 29.JAN.2021 13:56:24

Highest Band Edge / 1 RB



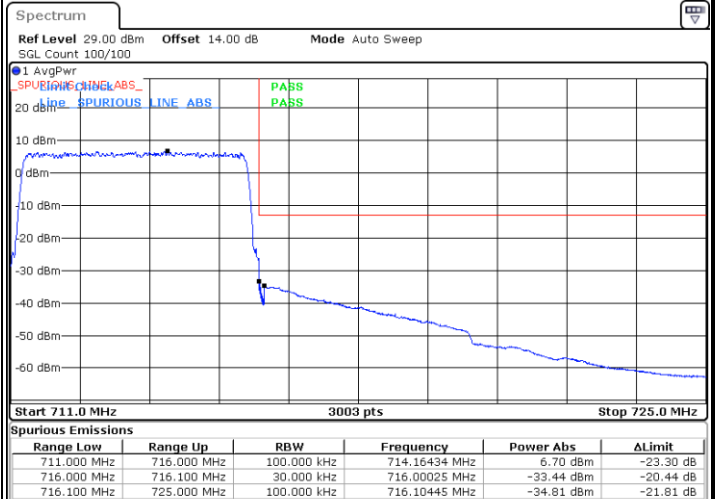
Date: 29.JAN.2021 14:04:20

Lowest Band Edge / Full RB



Date: 29.JAN.2021 13:53:12

Highest Band Edge / Full RB

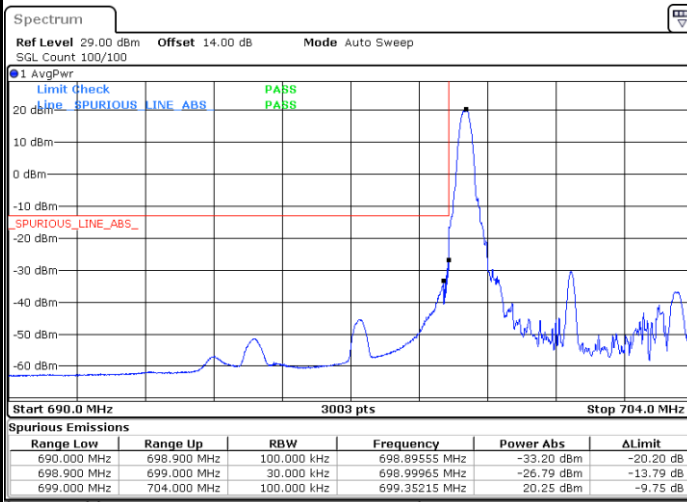


Date: 29.JAN.2021 14:02:12



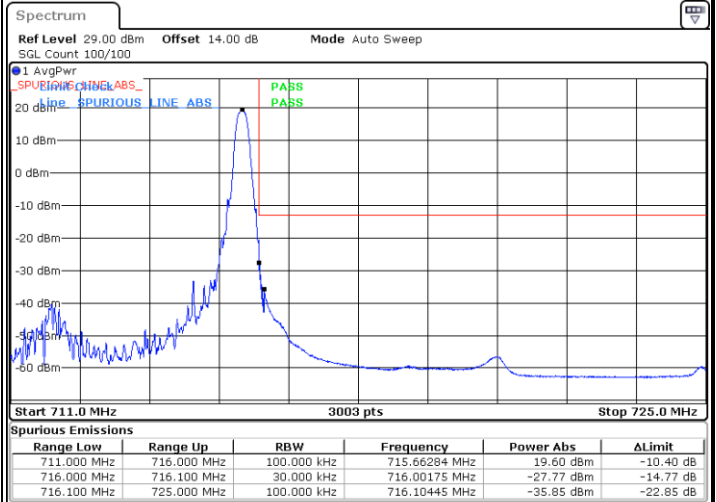
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



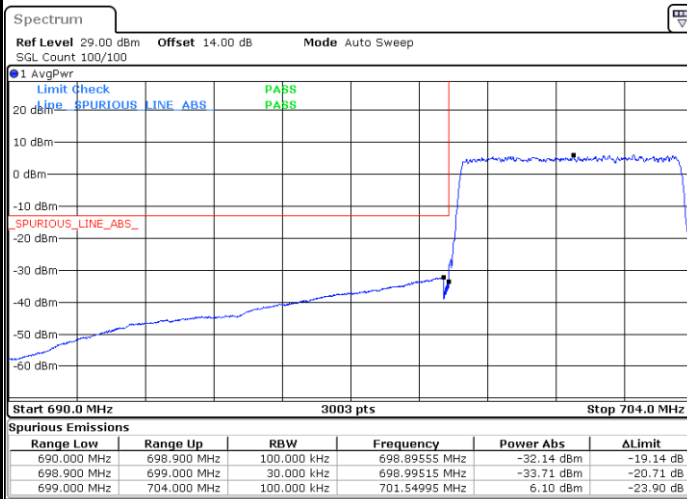
Date: 29. JAN. 2021 13:55:20

Highest Band Edge / 1 RB



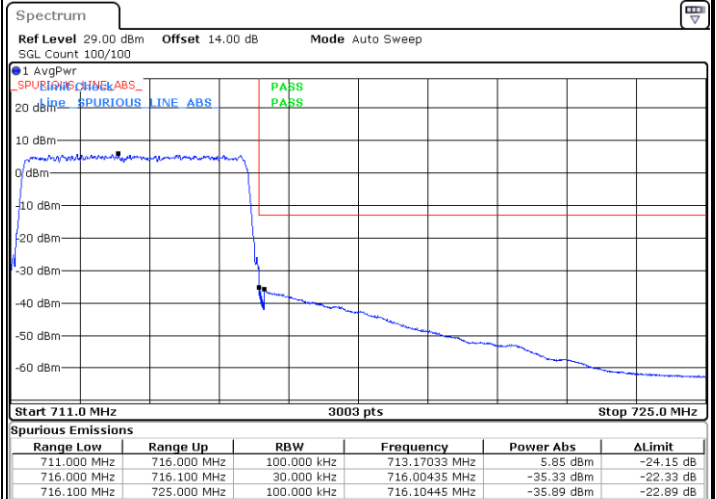
Date: 29. JAN. 2021 14:05:24

Lowest Band Edge / Full RB



Date: 29. JAN. 2021 13:54:16

Highest Band Edge / Full RB

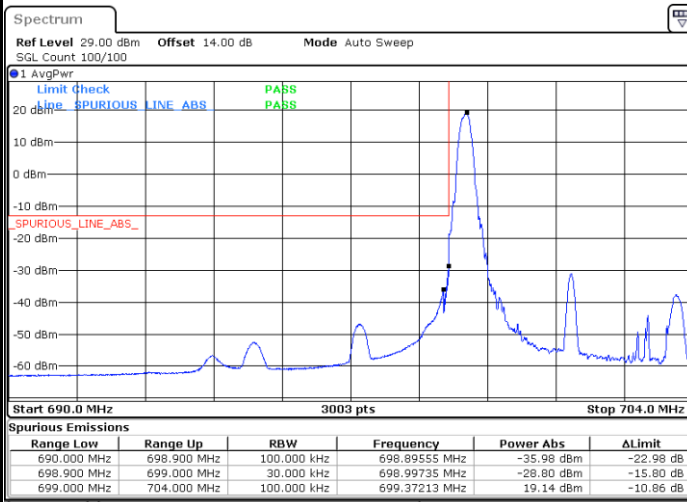


Date: 29. JAN. 2021 14:03:16



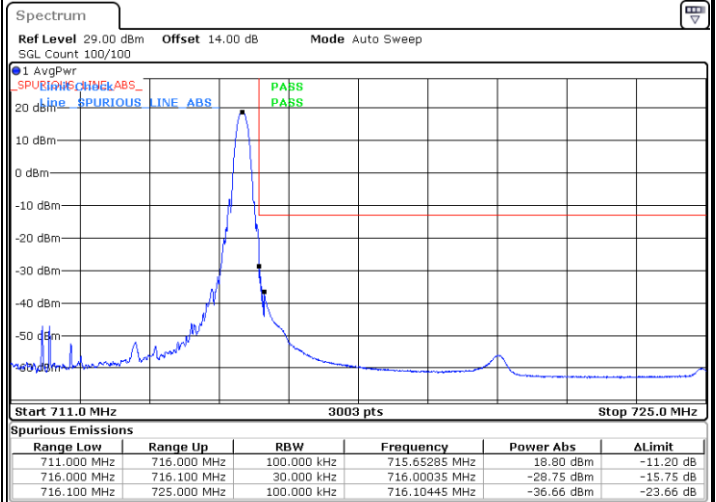
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



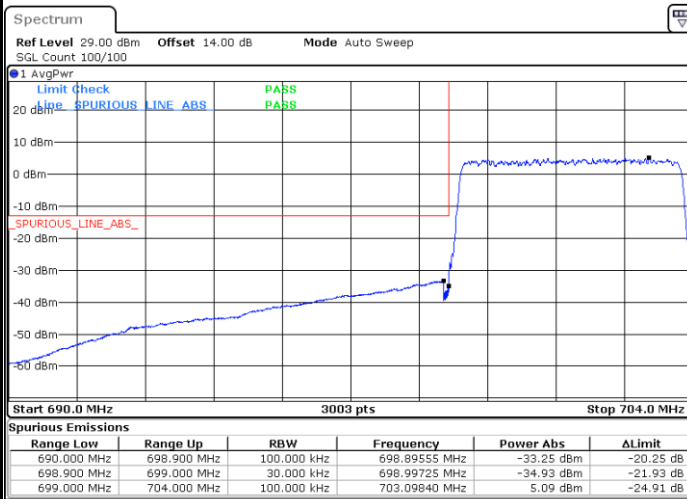
Date: 29. JAN. 2021 13:46:04

Highest Band Edge / 1 RB



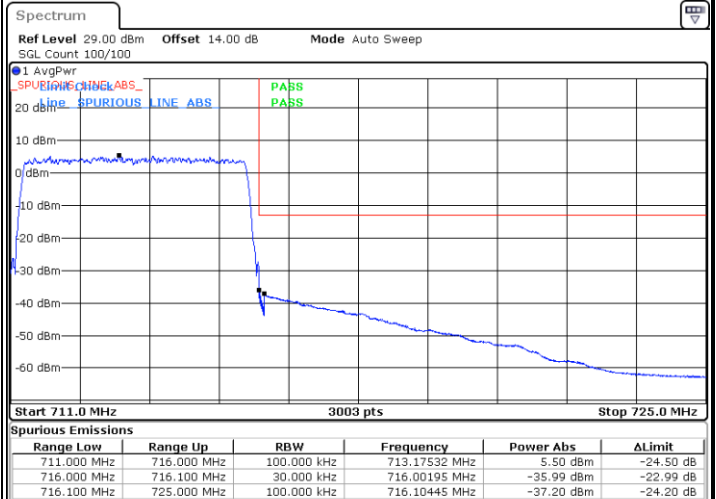
Date: 29. JAN. 2021 13:50:35

Lowest Band Edge / Full RB



Date: 29. JAN. 2021 13:45:00

Highest Band Edge / Full RB

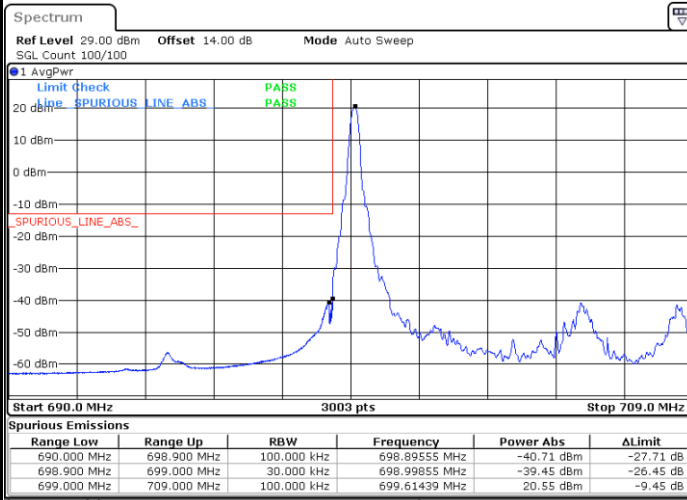


Date: 29. JAN. 2021 13:49:31



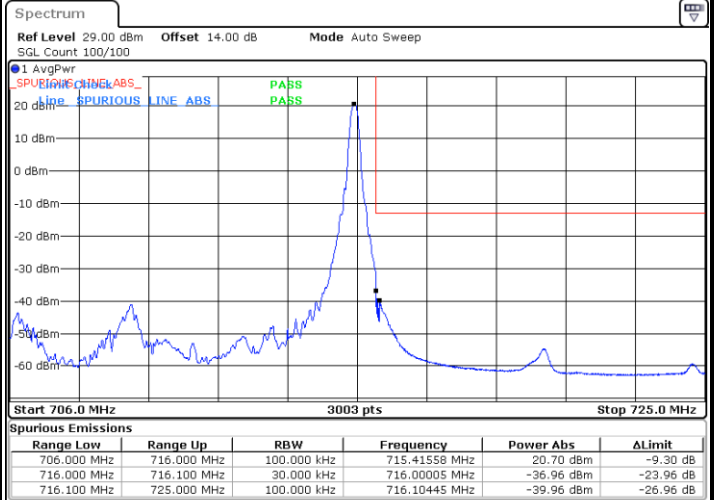
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



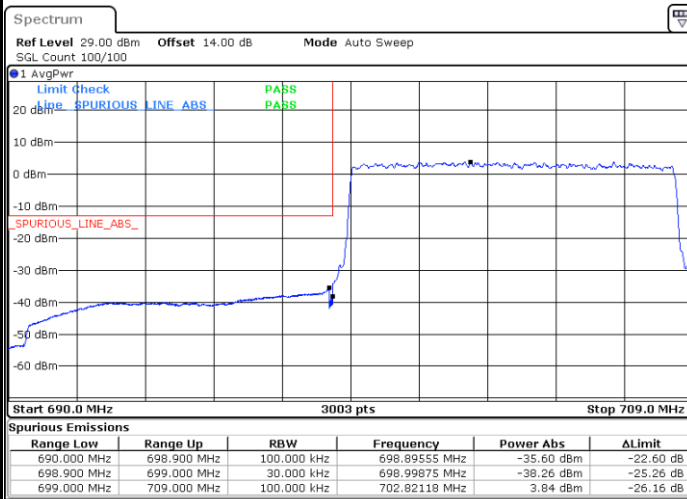
Date: 29.JAN.2021 14:12:03

Highest Band Edge / 1 RB



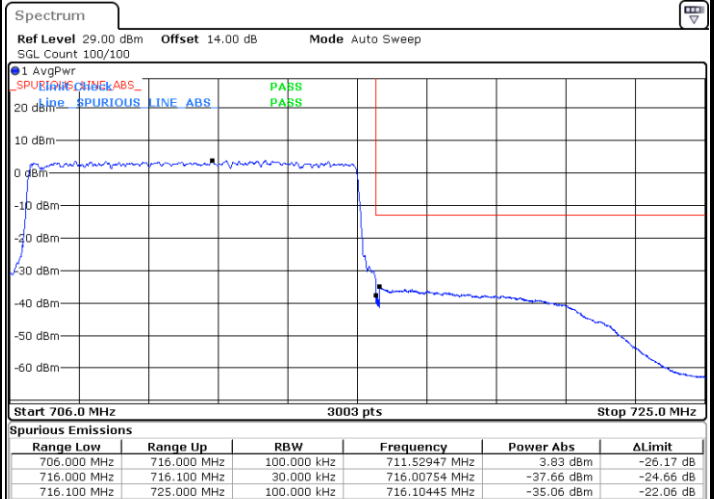
Date: 29.JAN.2021 14:21:03

Lowest Band Edge / Full RB



Date: 29.JAN.2021 14:08:51

Highest Band Edge / Full RB

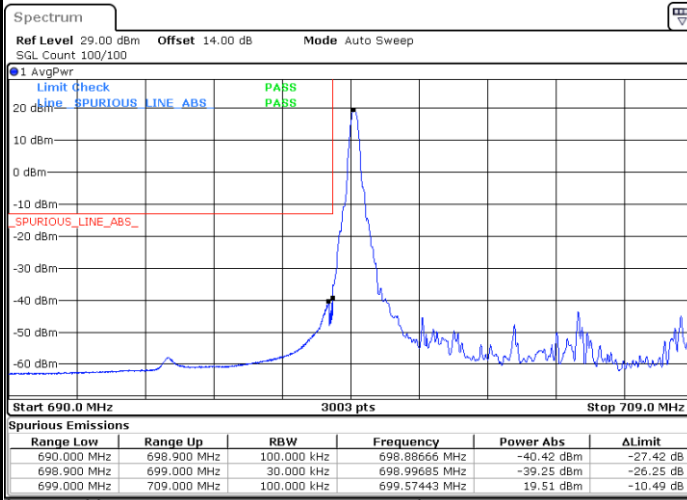


Date: 29.JAN.2021 14:17:52



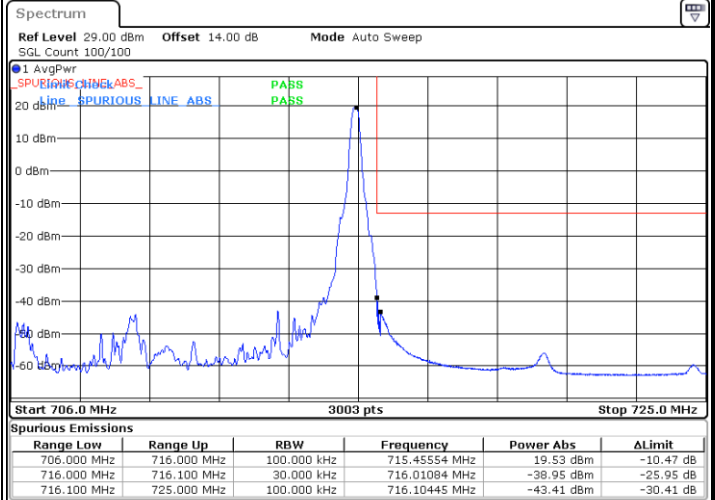
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



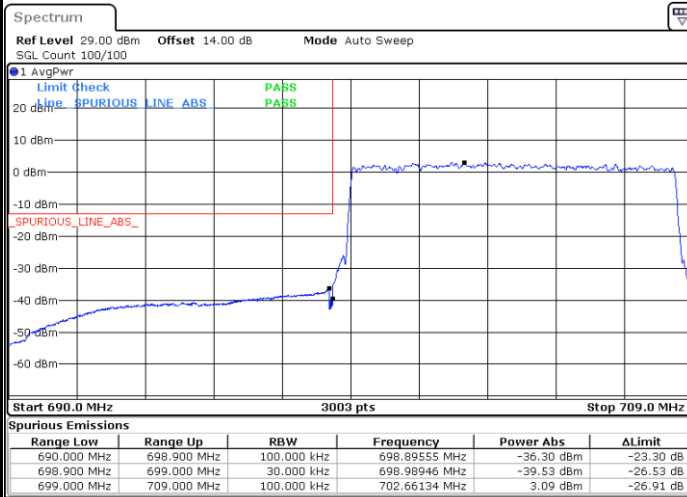
Date: 29.JAN.2021 14:10:59

Highest Band Edge / 1 RB



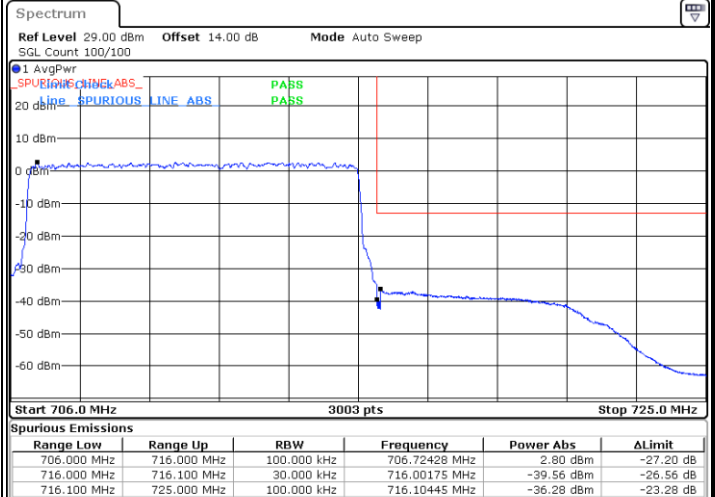
Date: 29.JAN.2021 14:19:59

Lowest Band Edge / Full RB



Date: 29.JAN.2021 14:09:55

Highest Band Edge / Full RB

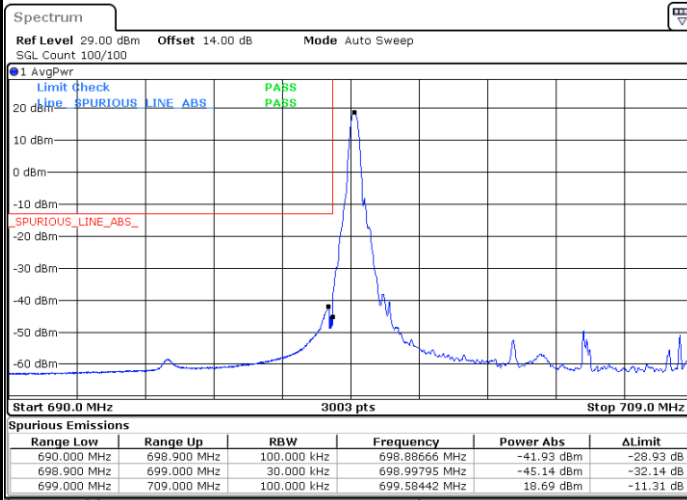


Date: 29.JAN.2021 14:18:56



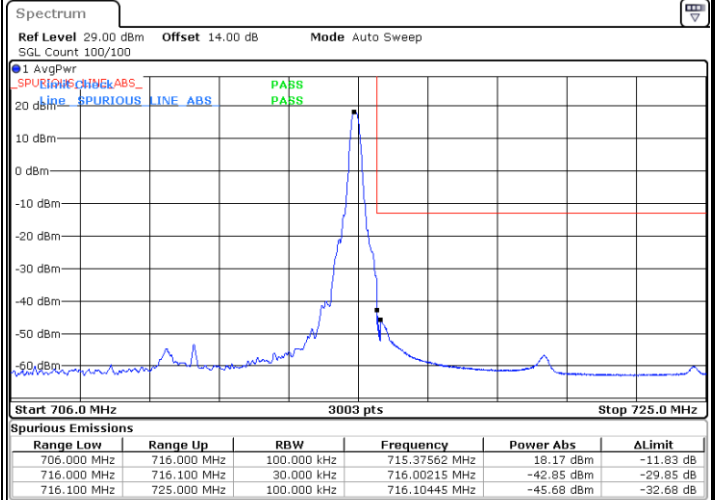
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



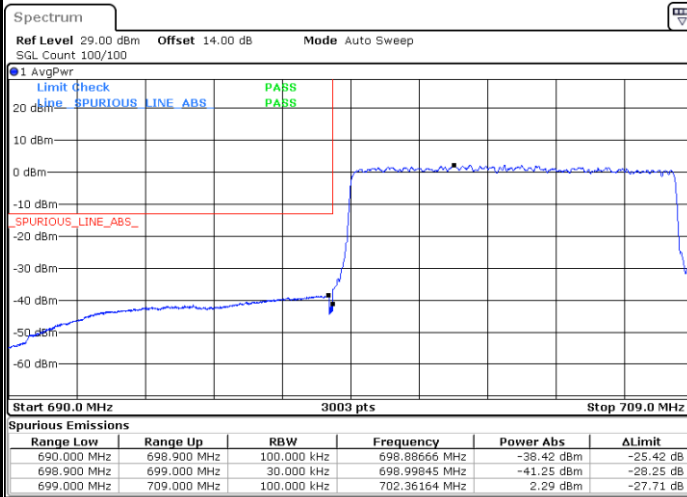
Date: 29.JAN.2021 14:25:12

Highest Band Edge / 1 RB



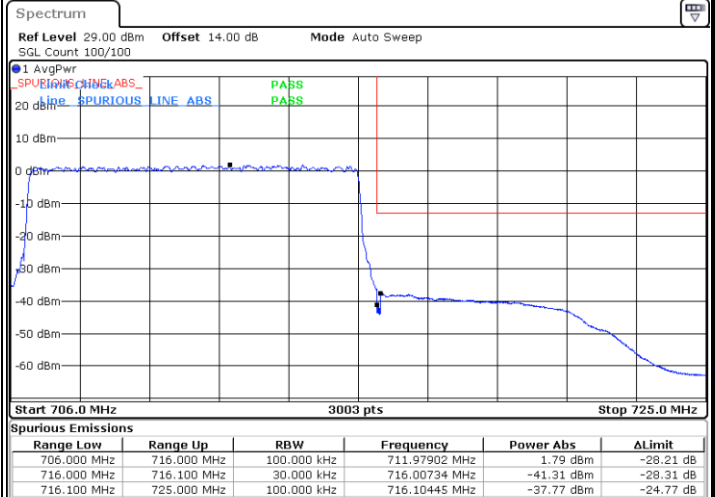
Date: 29.JAN.2021 14:29:42

Lowest Band Edge / Full RB



Date: 29.JAN.2021 14:24:08

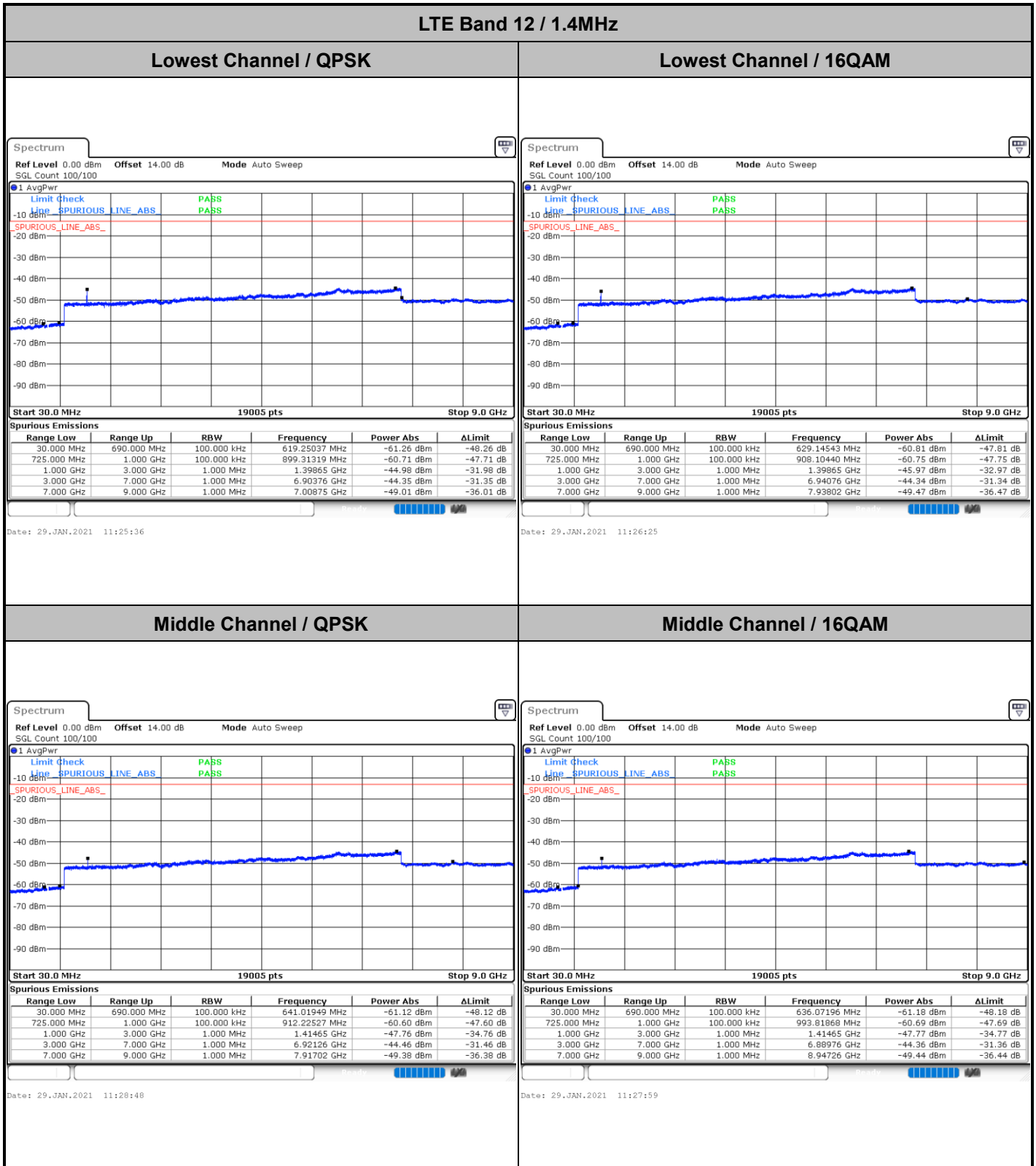
Highest Band Edge / Full RB



Date: 29.JAN.2021 14:28:38



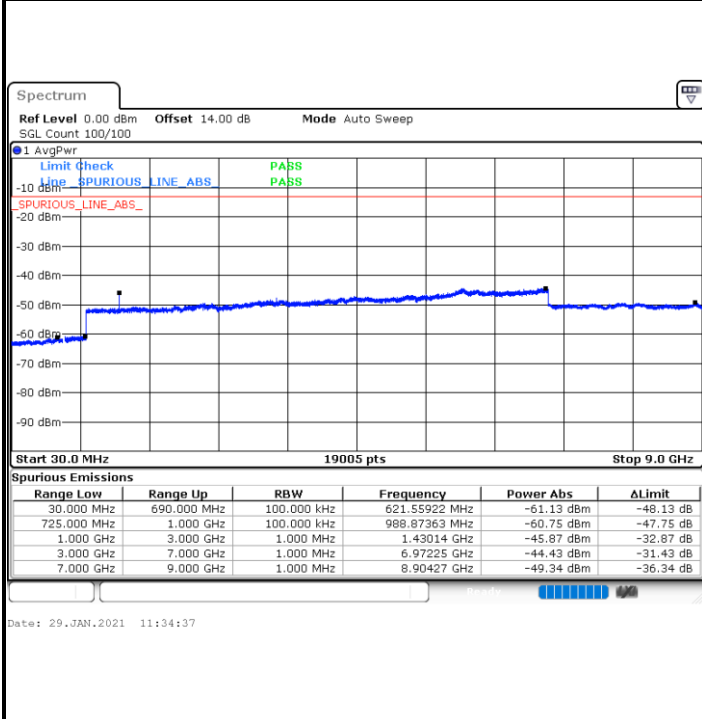
Conducted Spurious Emission



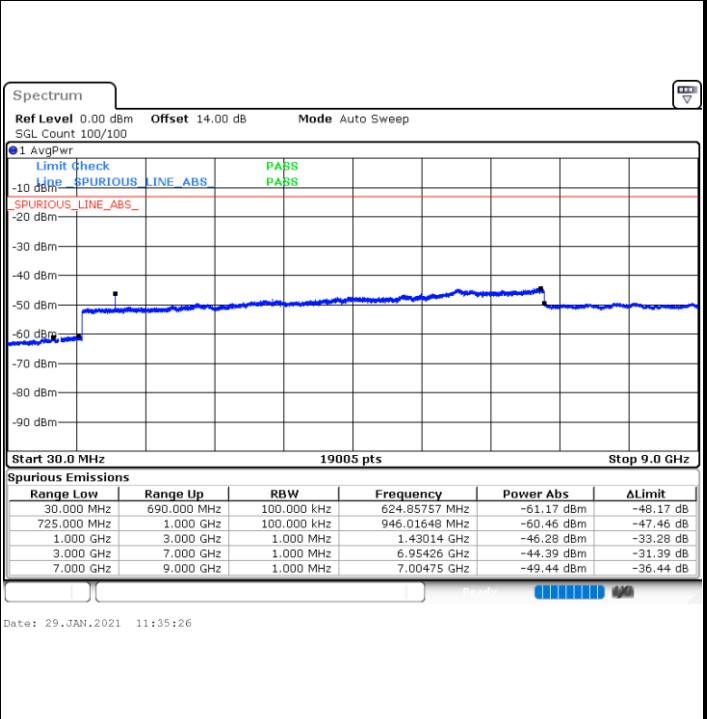


LTE Band 12 / 1.4MHz

Highest Channel / QPSK

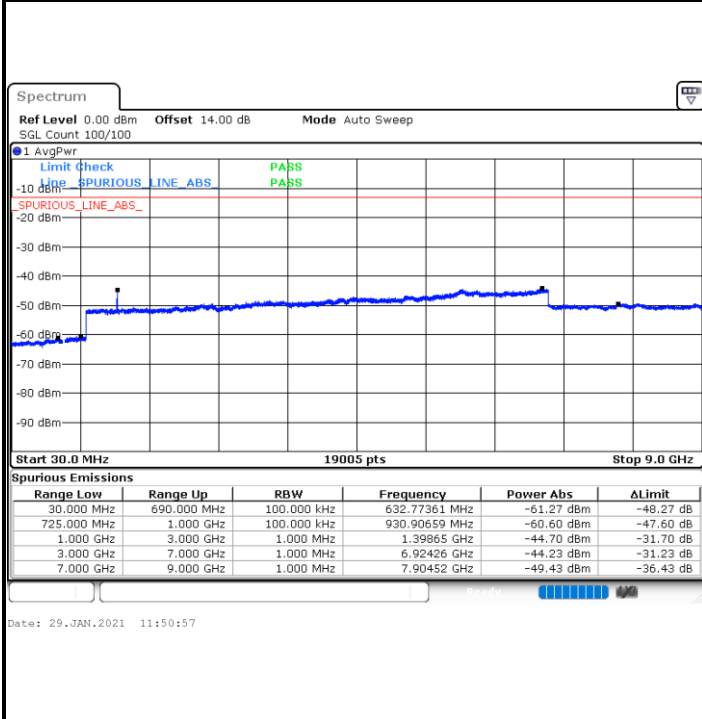


Highest Channel / 16QAM

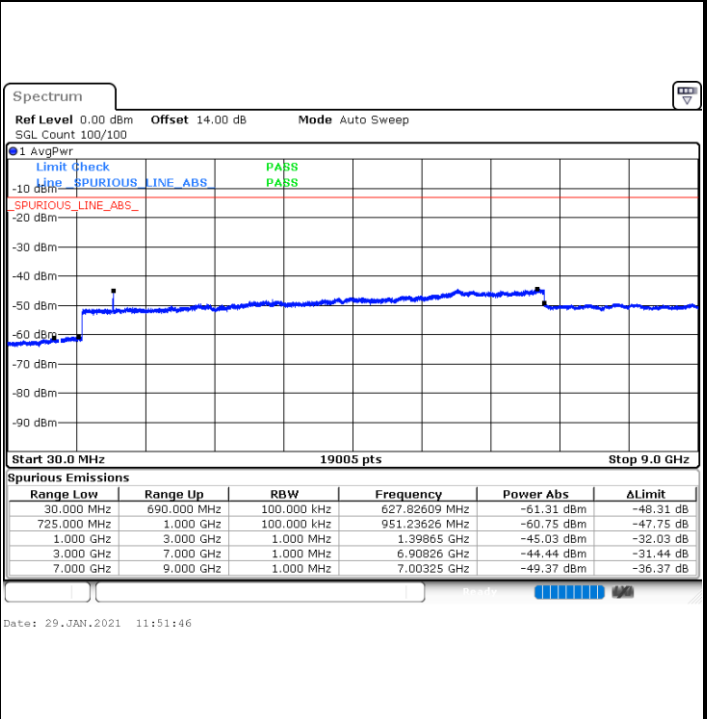


LTE Band 12 / 3MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

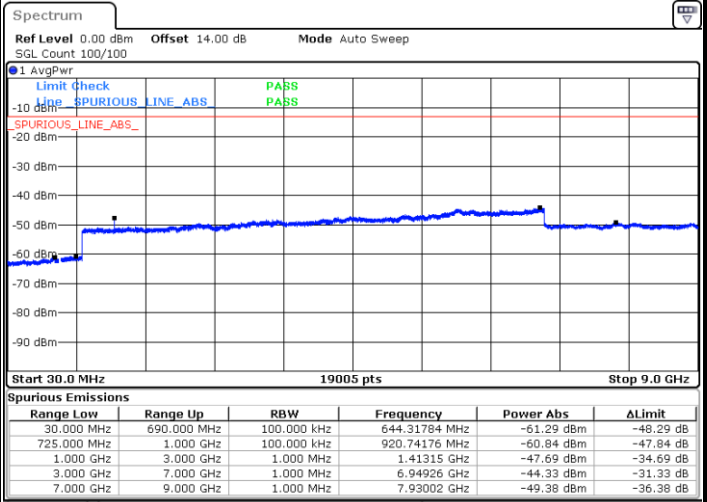
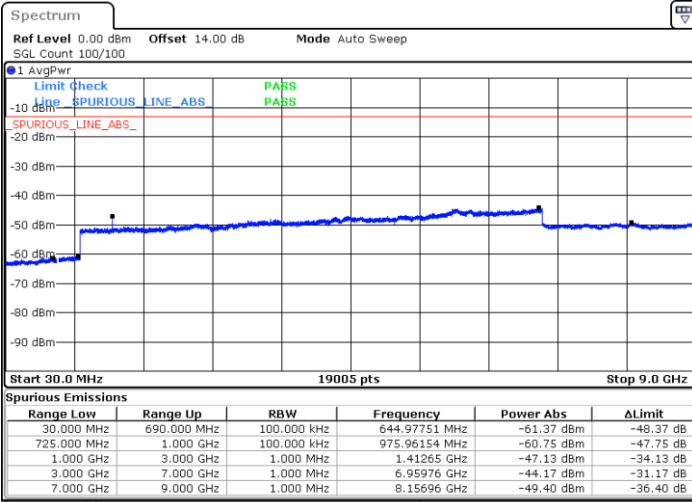




LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

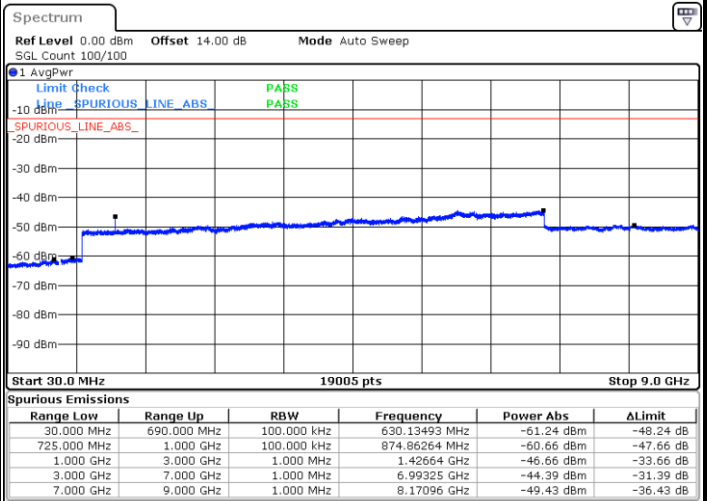
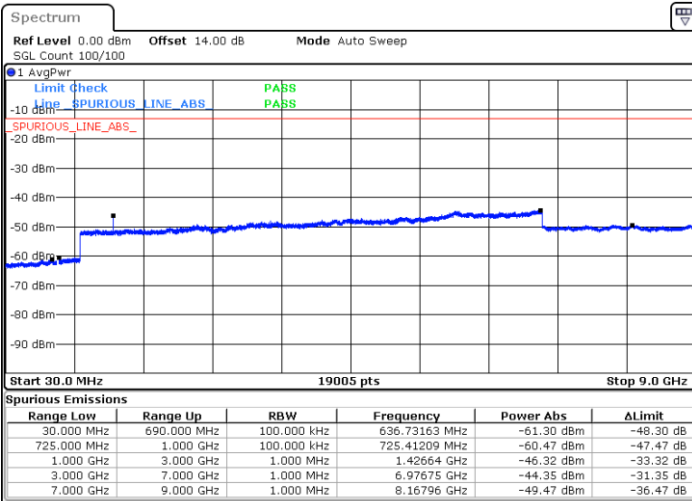


Date: 29.JAN.2021 11:54:09

Date: 29.JAN.2021 11:53:19

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 29.JAN.2021 11:59:58

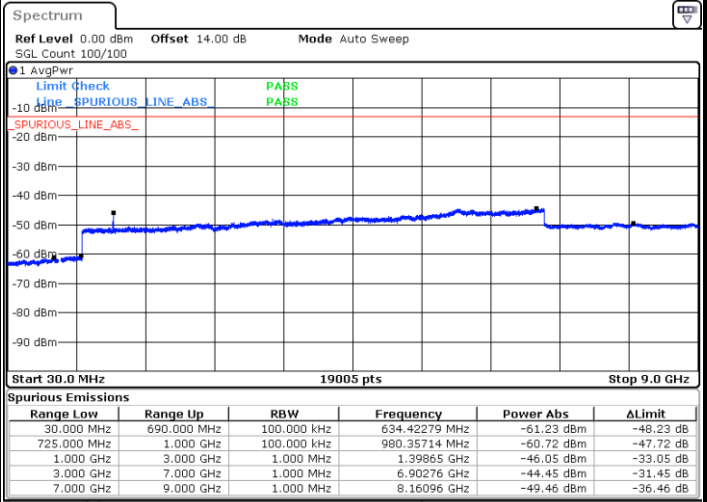
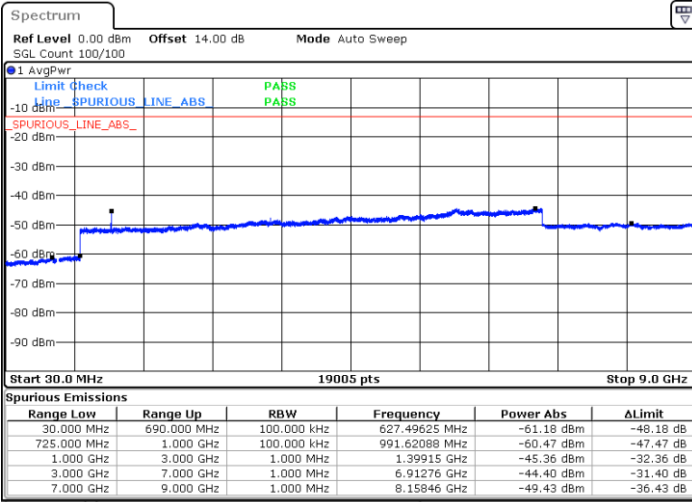
Date: 29.JAN.2021 12:00:47



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

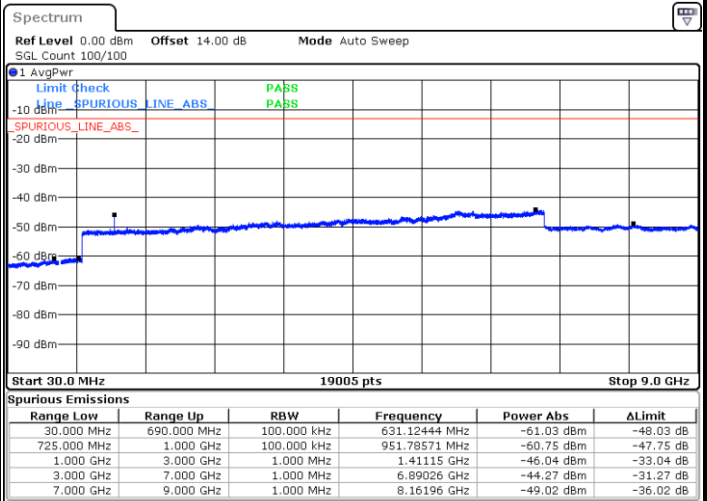
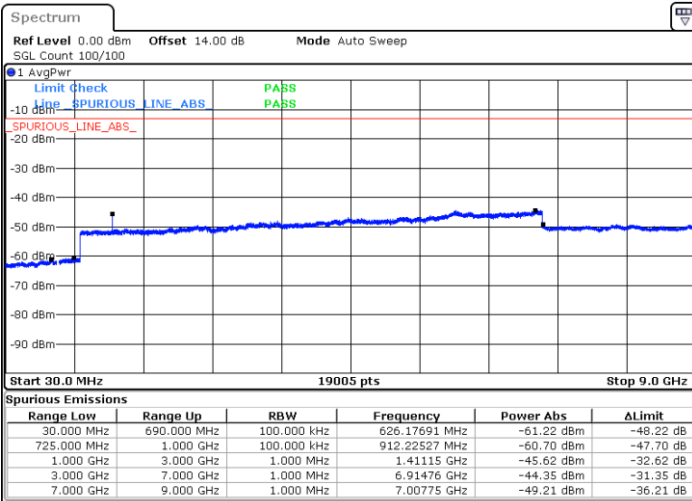


Date: 29.JAN.2021 13:57:13

Date: 29.JAN.2021 13:58:02

Middle Channel / QPSK

Middle Channel / 16QAM



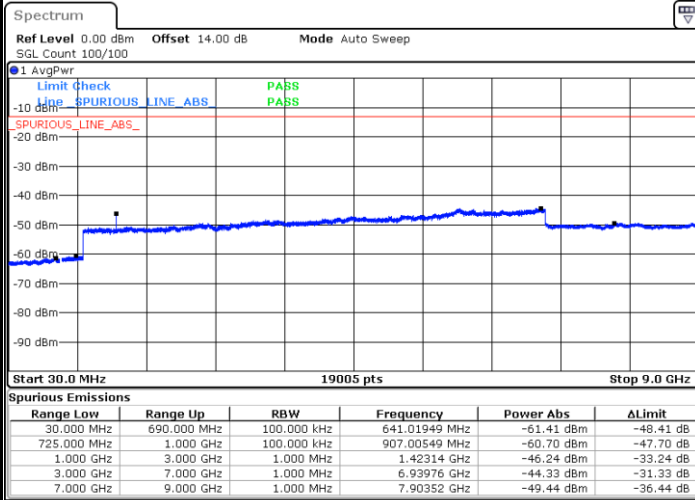
Date: 29.JAN.2021 14:00:25

Date: 29.JAN.2021 13:59:36



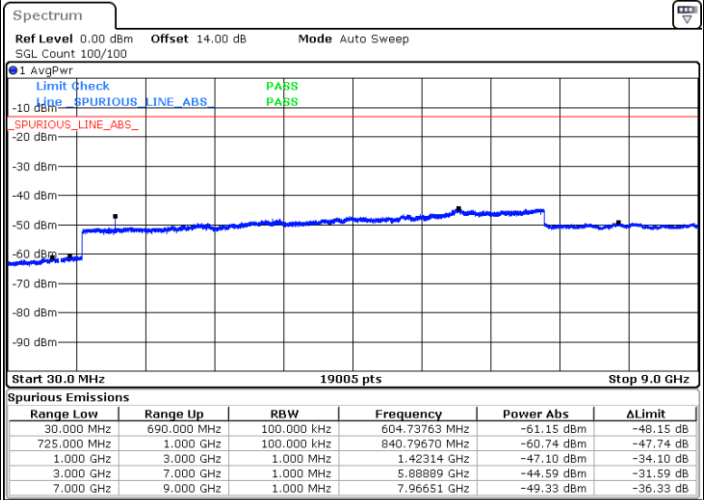
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 29.JAN.2021 14:07:03

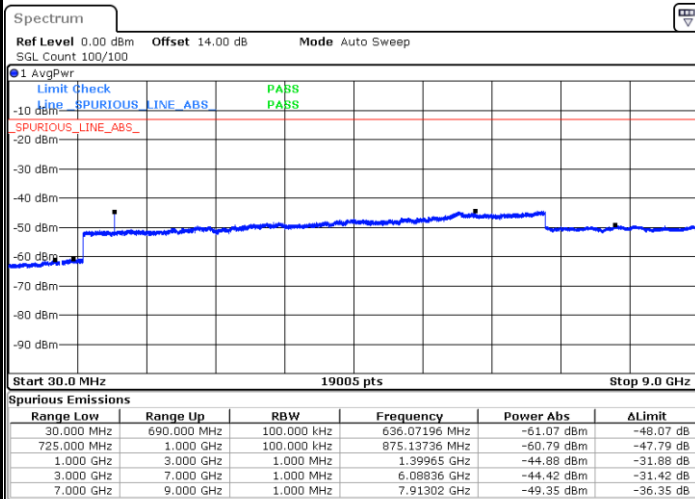
Highest Channel / 16QAM



Date: 29.JAN.2021 14:06:14

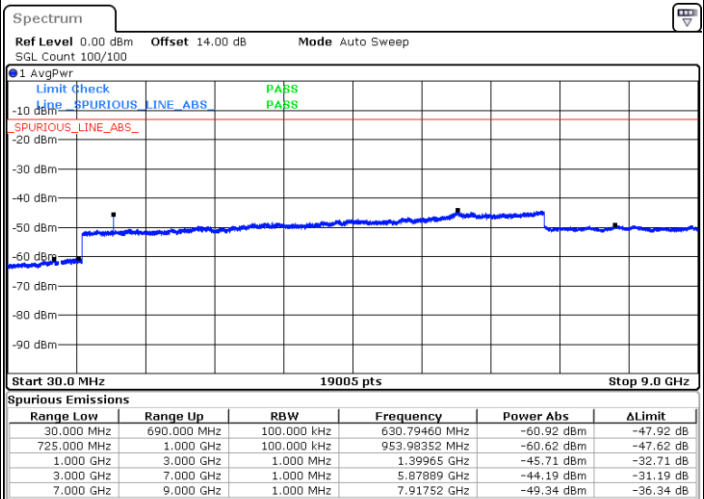
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 29.JAN.2021 14:12:52

Lowest Channel / 16QAM

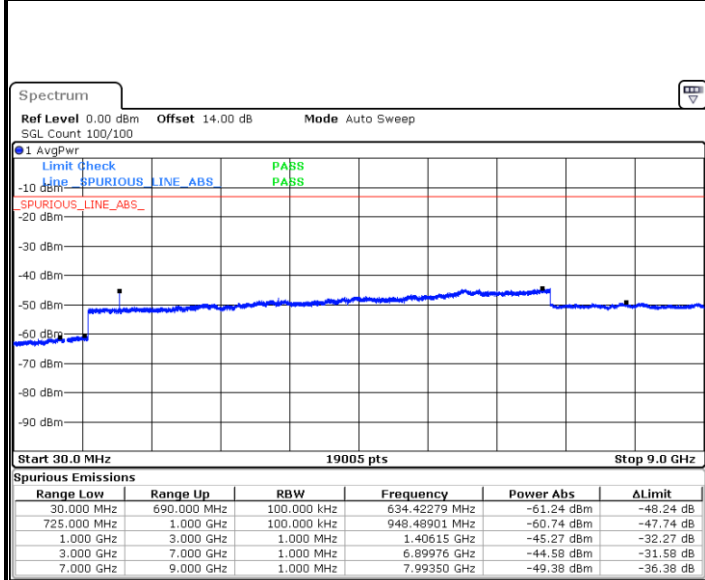


Date: 29.JAN.2021 14:13:42



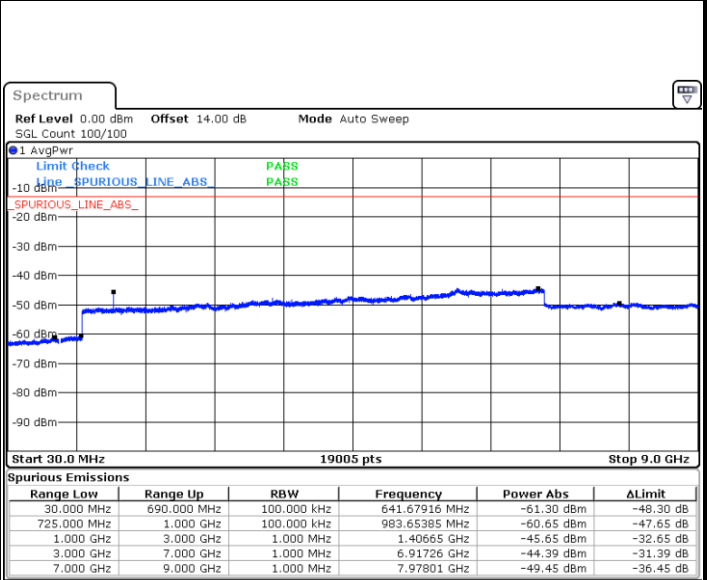
LTE Band 12 / 10MHz

Middle Channel / QPSK



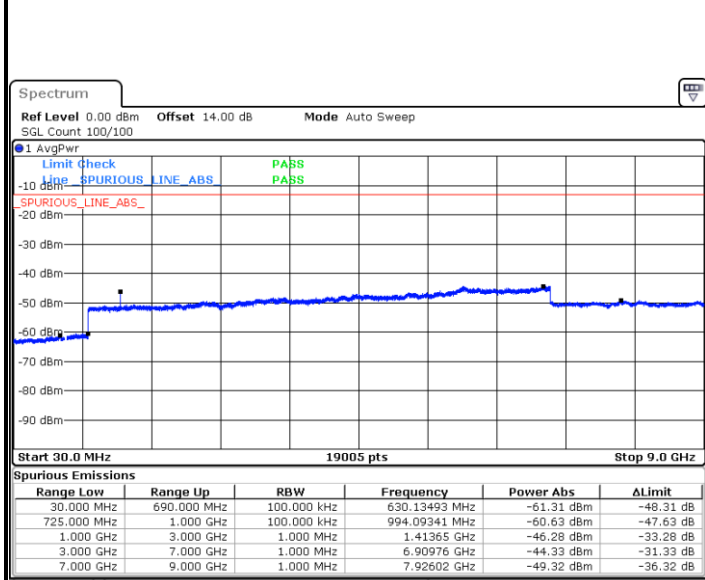
Date: 29.JAN.2021 14:16:04

Middle Channel / 16QAM



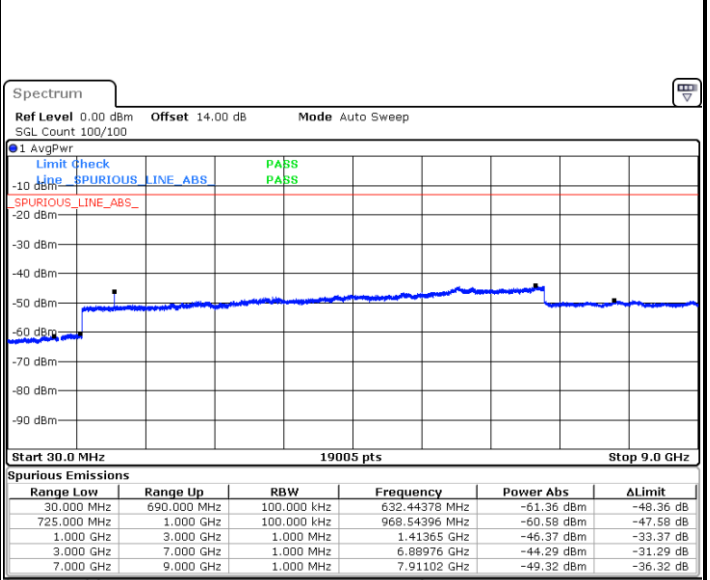
Date: 29.JAN.2021 14:15:15

Highest Channel / QPSK



Date: 29.JAN.2021 14:21:53

Highest Channel / 16QAM



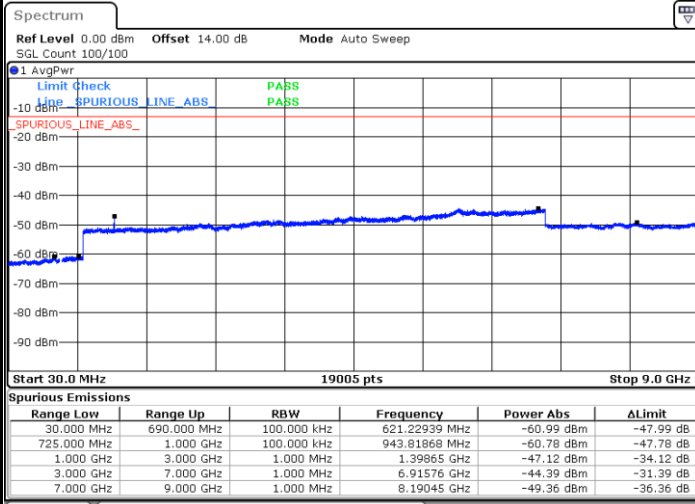
Date: 29.JAN.2021 14:22:42



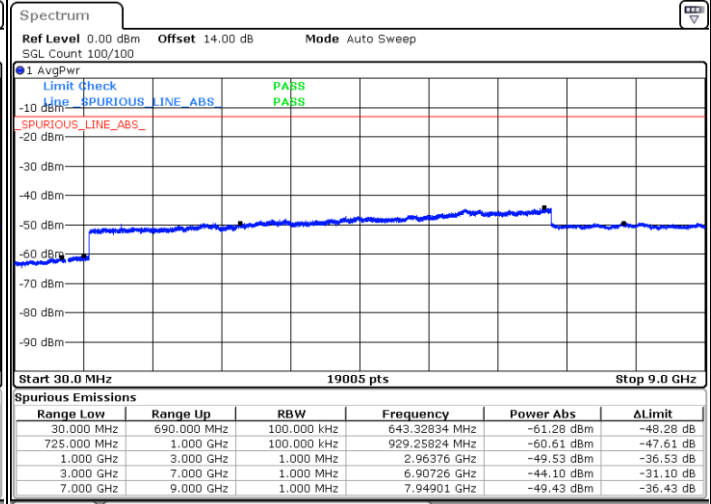
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

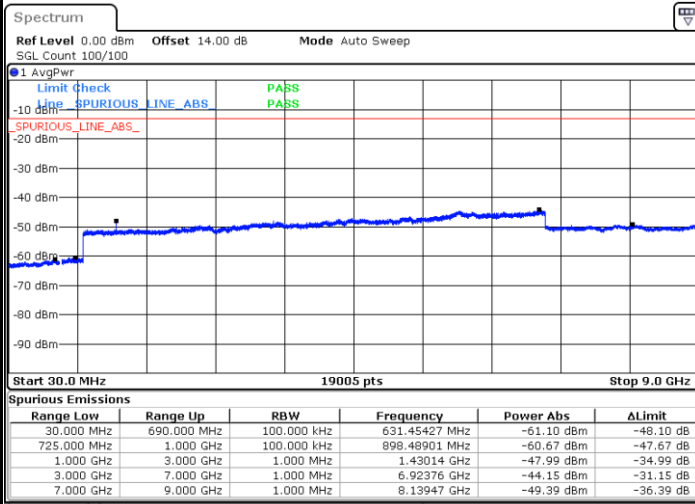


Date: 29.JAN.2021 11:38:45



Date: 29.JAN.2021 11:39:56

Highest Channel / 64QAM



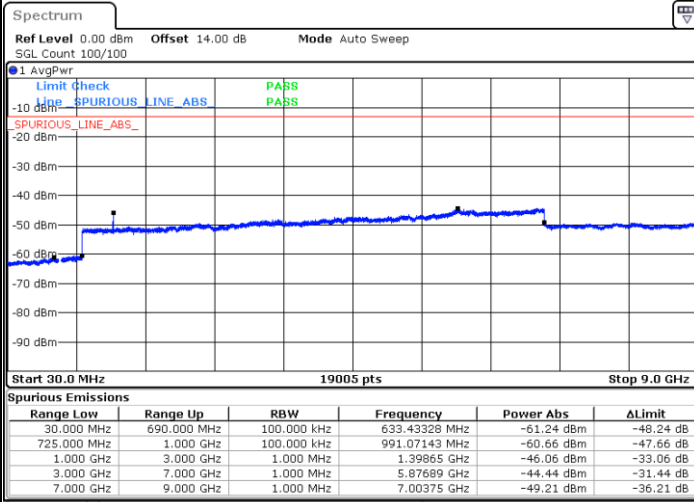
Date: 29.JAN.2021 11:43:16



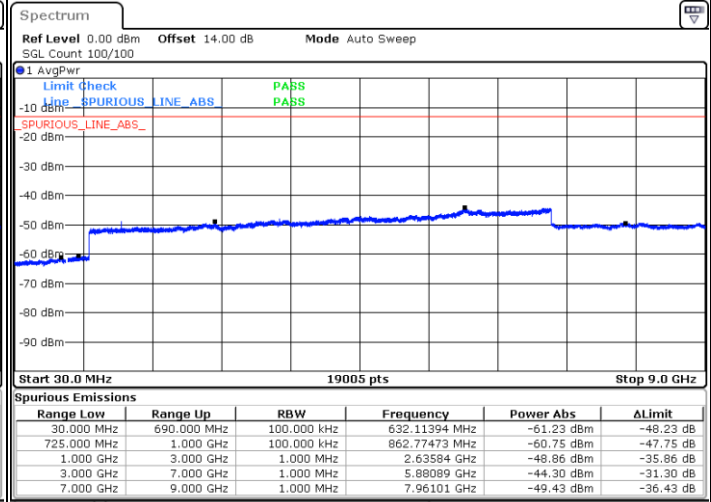
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

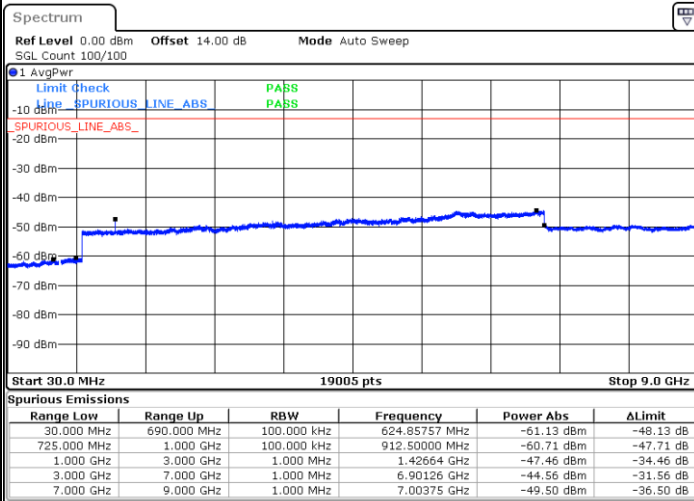


Date: 29.JAN.2021 12:04:06



Date: 29.JAN.2021 12:05:17

Highest Channel / 64QAM



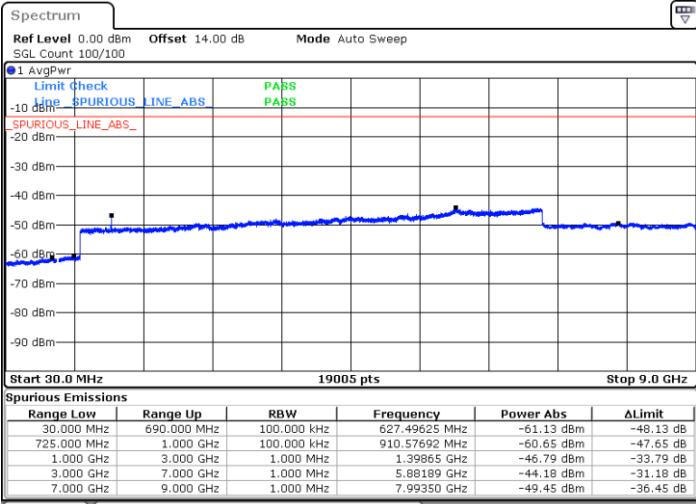
Date: 29.JAN.2021 12:08:36



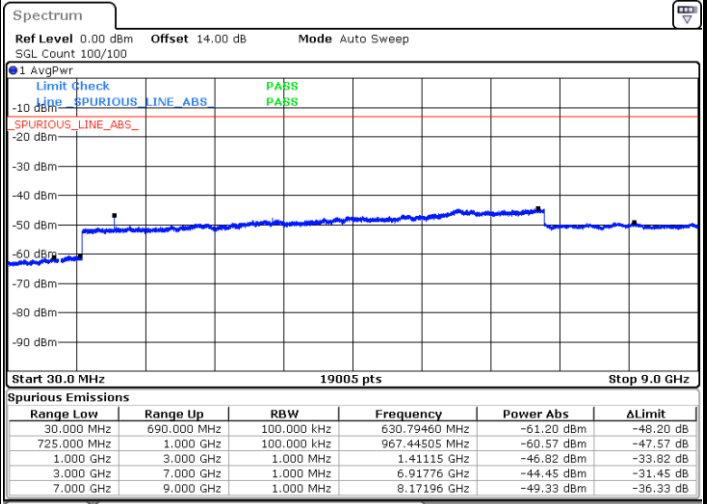
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

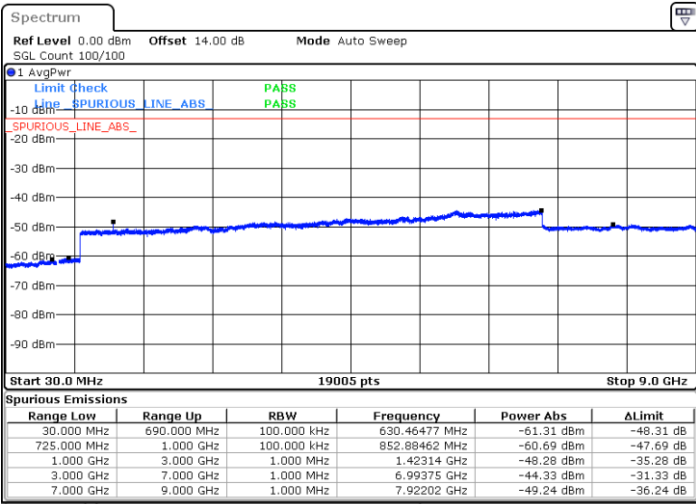


Date: 29.JAN.2021 13:46:54



Date: 29.JAN.2021 13:48:05

Highest Channel / 64QAM



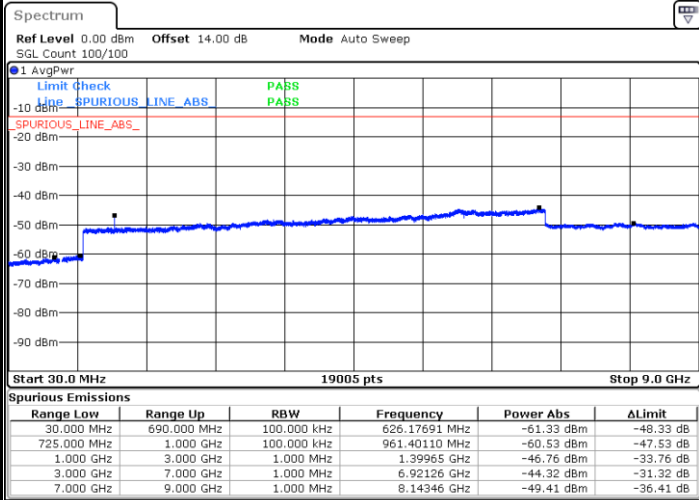
Date: 29.JAN.2021 13:51:24



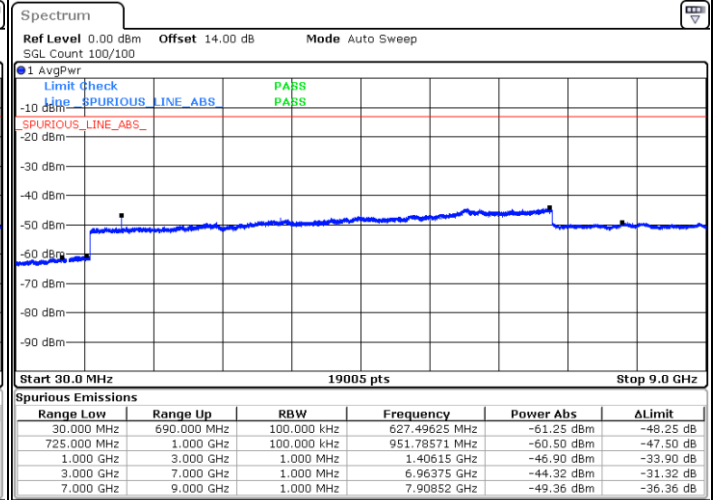
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

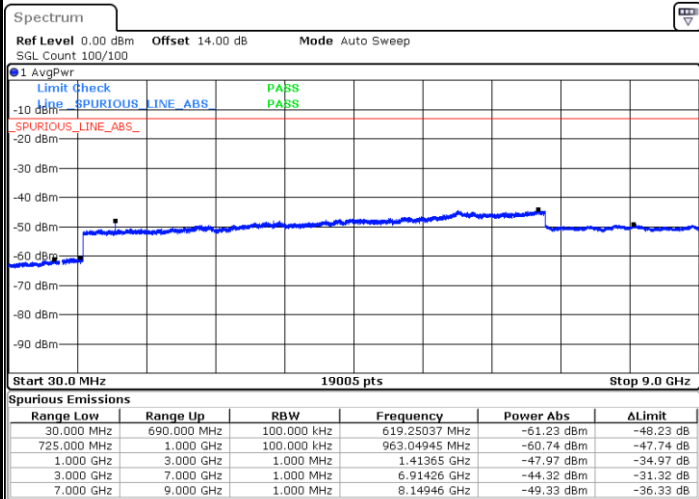


Date: 29.JAN.2021 14:26:01



Date: 29.JAN.2021 14:27:13

Highest Channel / 64QAM



Date: 29.JAN.2021 14:30:32



Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0058	
30	Normal Voltage	0.0031	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0033	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0055	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0041	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.45 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

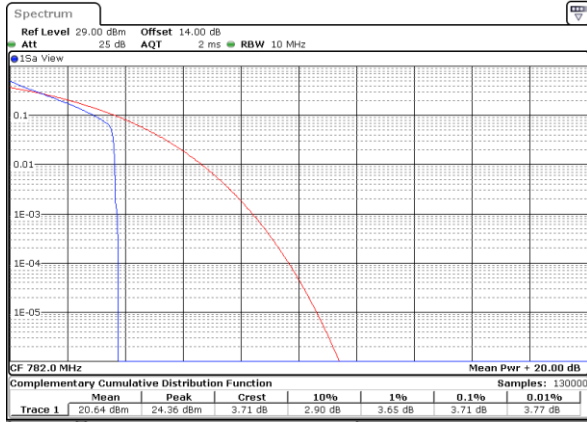
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.71	4.99	4.70	5.88	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.23	6.38	-	-	
Highest CH	-	-	-	-	



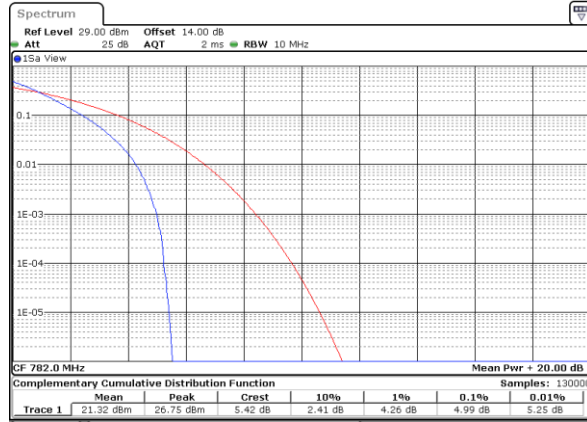
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 28_JAN,2021 15:39:20

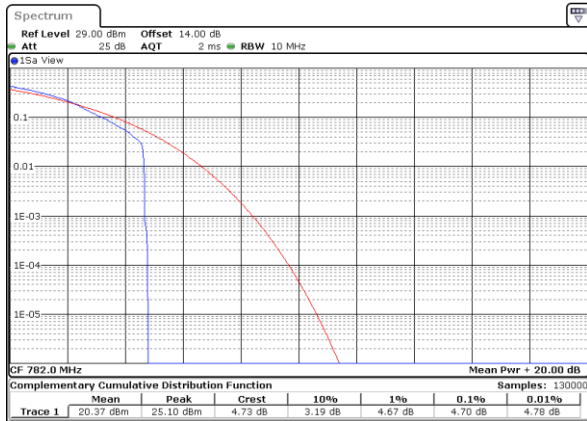
Middle Channel / Full RB



Date: 28_JAN,2021 15:39:43

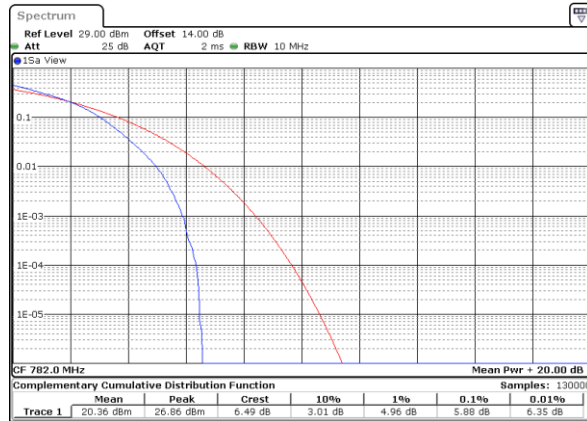
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 28_JAN,2021 15:39:03

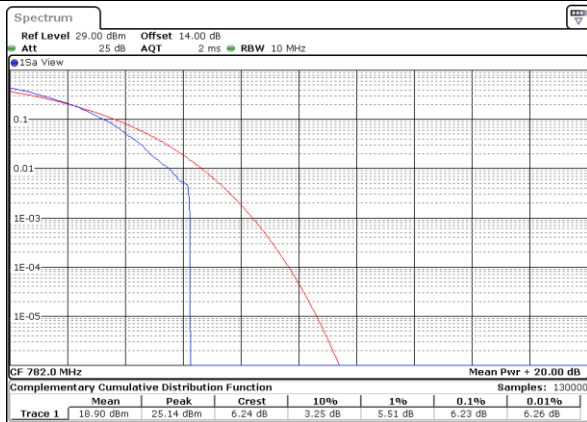
Middle Channel / Full RB



Date: 28_JAN,2021 15:39:57

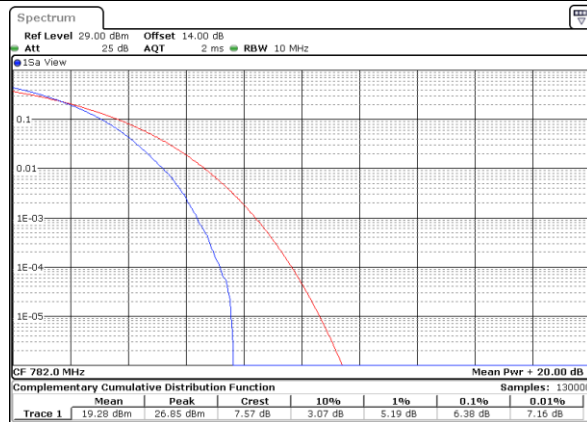
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 28_JAN,2021 15:38:44

Middle Channel / Full RB



Date: 28_JAN,2021 15:40:14



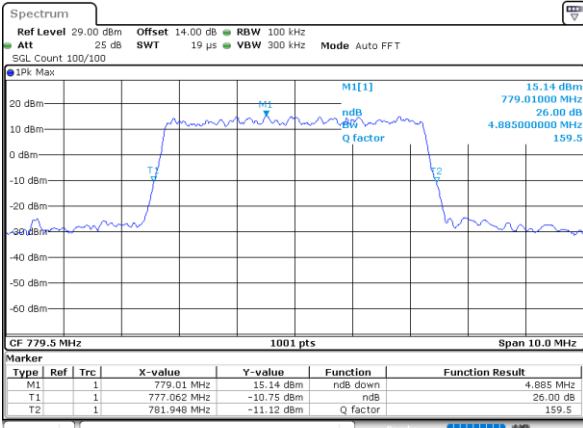
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.89	4.88	-	-	-	-	-	-
Middle CH	-	-	-	-	4.89	4.91	9.65	9.81	-	-	-	-
Highest CH	-	-	-	-	4.90	4.91	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.96	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.87	-	9.77	-	-	-	-	-
Highest CH	-	-	-	-	4.93	-	-	-	-	-	-	-



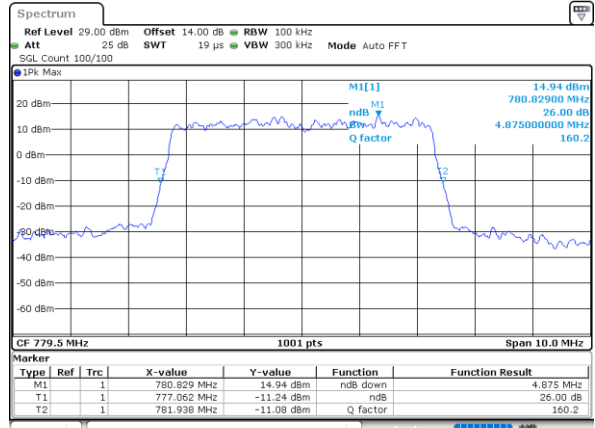
LTE Band 13

Lowest Channel / 5MHz / QPSK



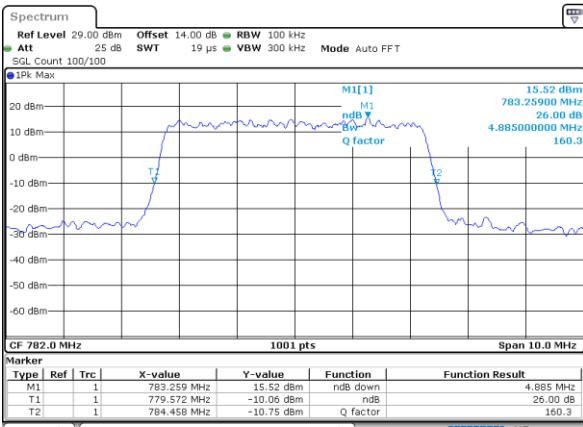
Date: 28_JAN,2021 14:03:16

Lowest Channel / 5MHz / 16QAM



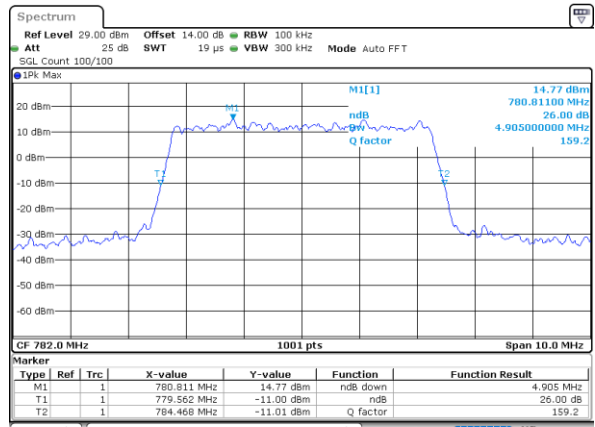
Date: 28_JAN,2021 14:06:37

Middle Channel / 5MHz / QPSK



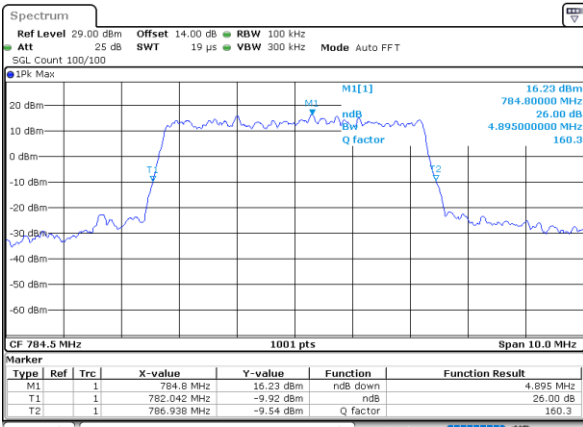
Date: 28_JAN,2021 14:11:16

Middle Channel / 5MHz / 16QAM



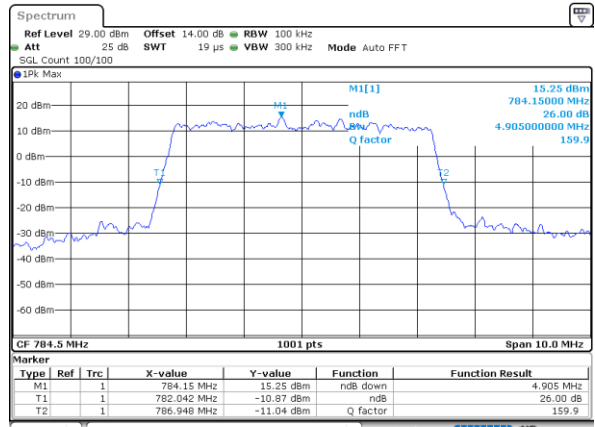
Date: 28_JAN,2021 14:10:55

Highest Channel / 5MHz / QPSK



Date: 28_JAN,2021 14:11:40

Highest Channel / 5MHz / 16QAM

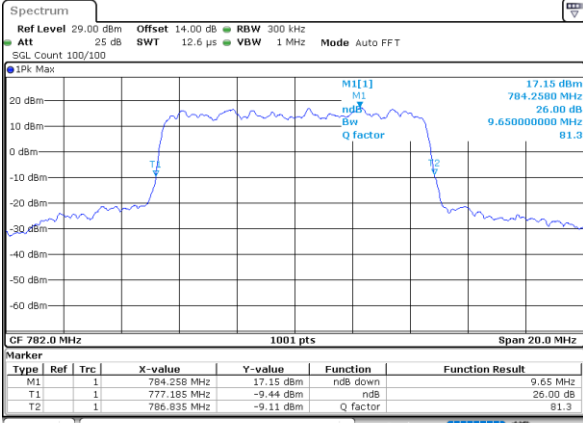


Date: 28_JAN,2021 14:14:31



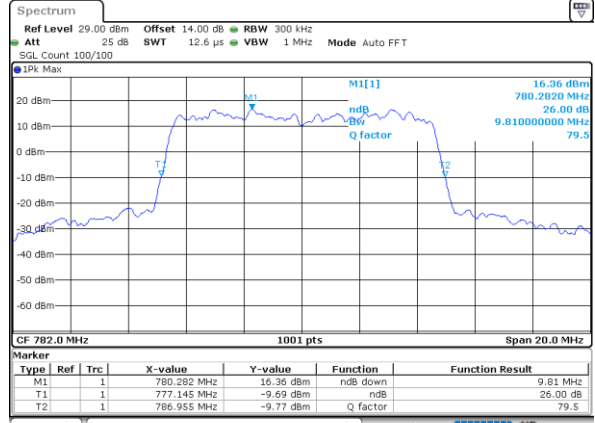
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 28_JAN_2021 15:35:25

Middle Channel / 10MHz / 16QAM

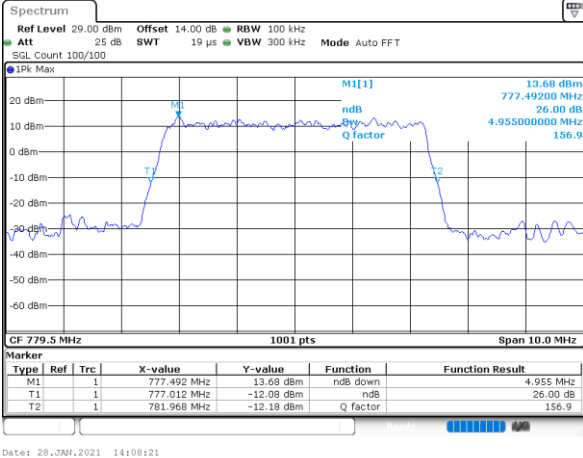


Date: 28_JAN_2021 15:35:03

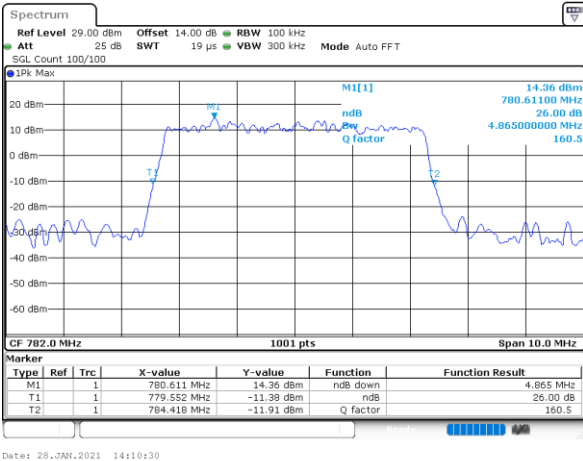


LTE Band 13

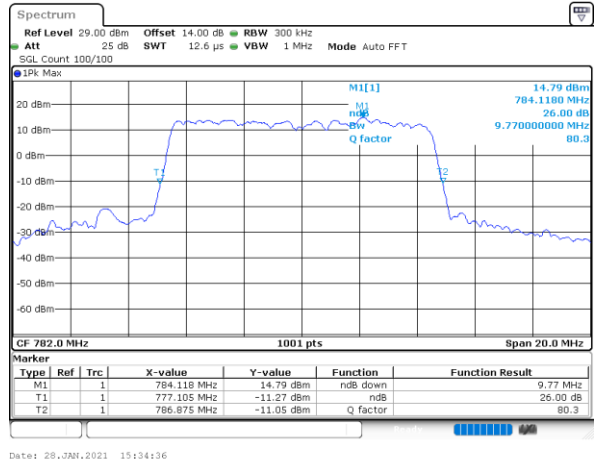
Lowest Channel / 5MHz / 64QAM



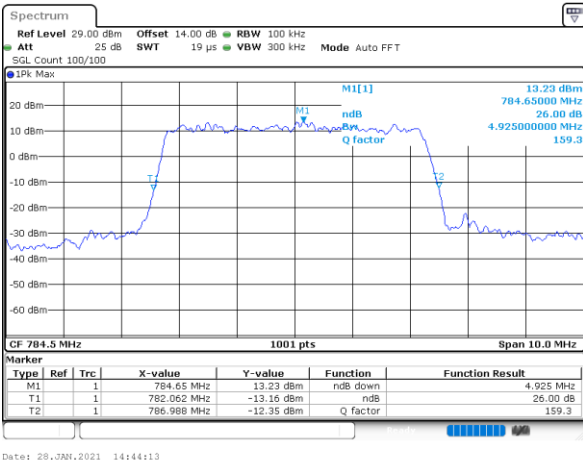
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM





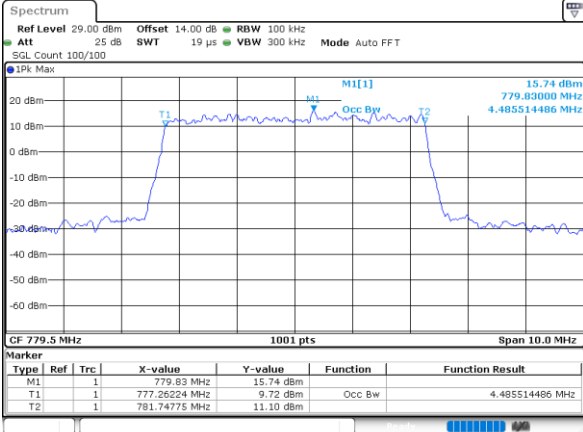
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.47	4.51	8.97	9.01	-	-	-	-
Highest CH	-	-	-	-	4.50	4.49	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.48	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	-	8.99	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	-	-	-	-	-	-



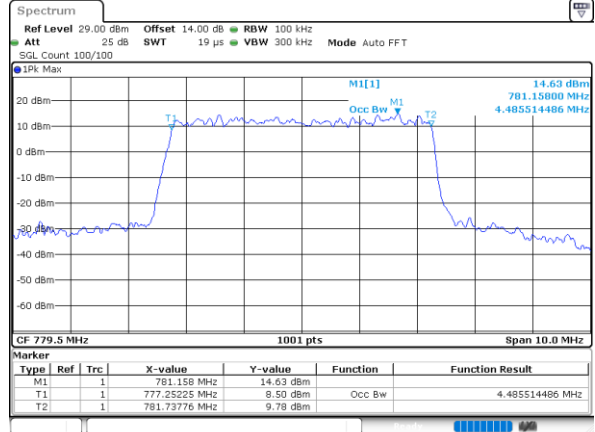
LTE Band 13

Lowest Channel / 5MHz / QPSK



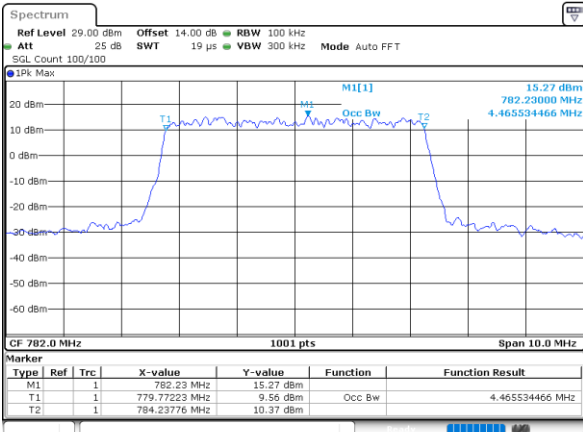
Date: 28_JAN,2021 14:03:32

Lowest Channel / 5MHz / 16QAM



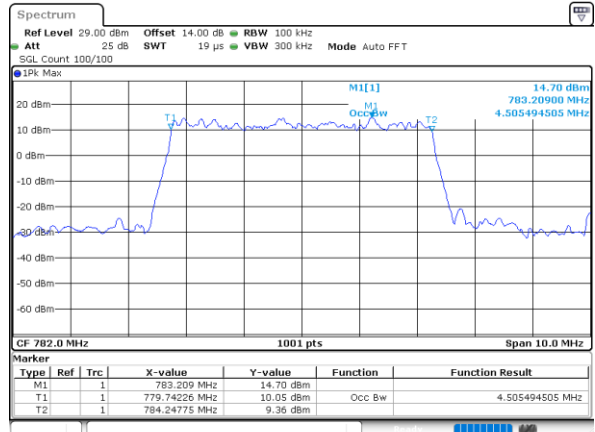
Date: 28_JAN,2021 14:06:25

Middle Channel / 5MHz / QPSK



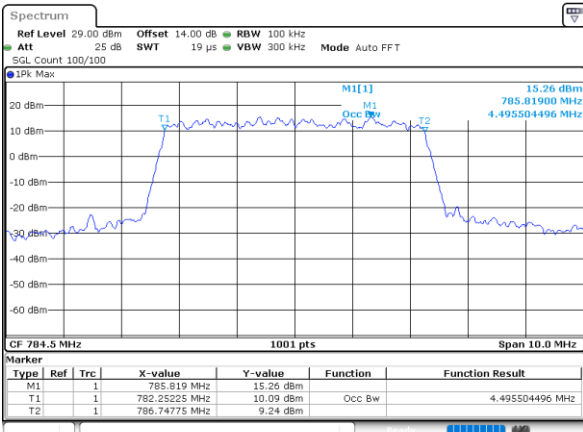
Date: 28_JAN,2021 14:11:05

Middle Channel / 5MHz / 16QAM



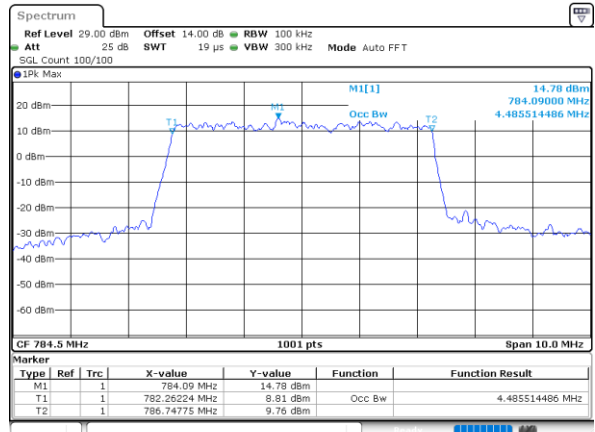
Date: 28_JAN,2021 14:10:44

Highest Channel / 5MHz / QPSK



Date: 28_JAN,2021 14:11:29

Highest Channel / 5MHz / 16QAM

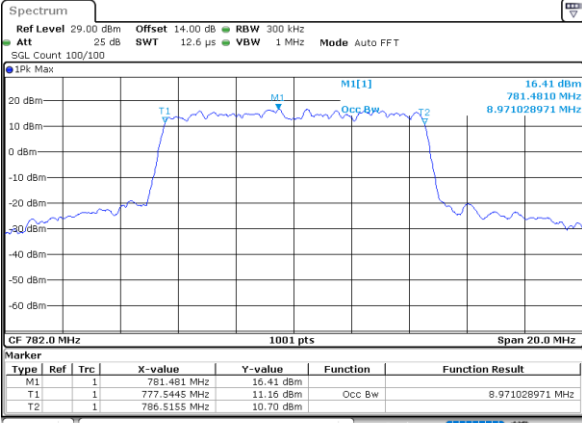


Date: 28_JAN,2021 14:14:18



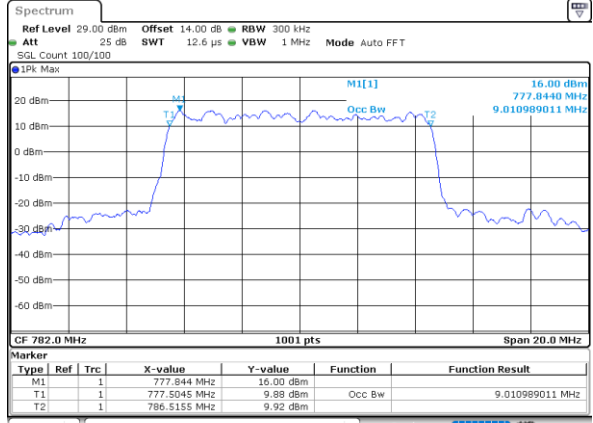
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 28_JAN_2021 15:35:17

Middle Channel / 10MHz / 16QAM

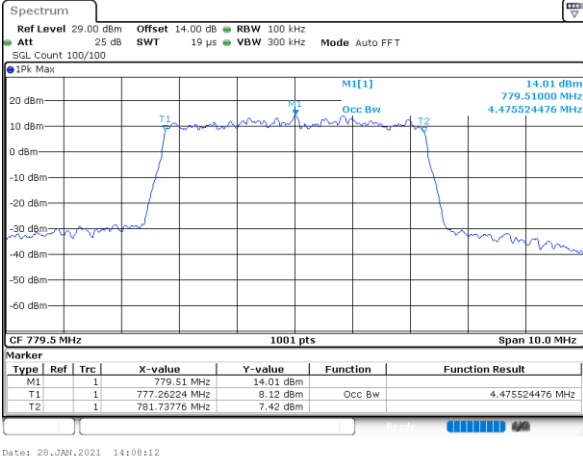


Date: 28_JAN_2021 15:34:51

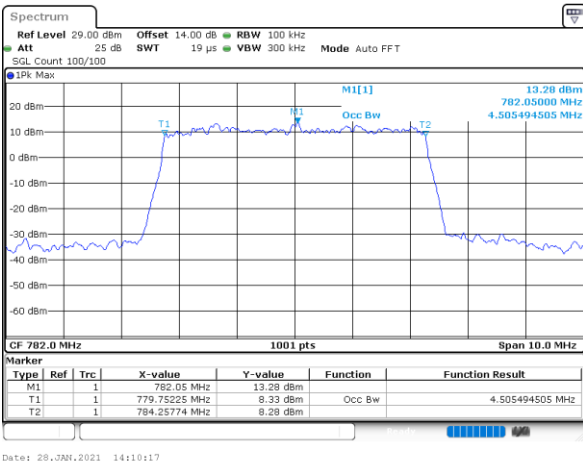


LTE Band 13

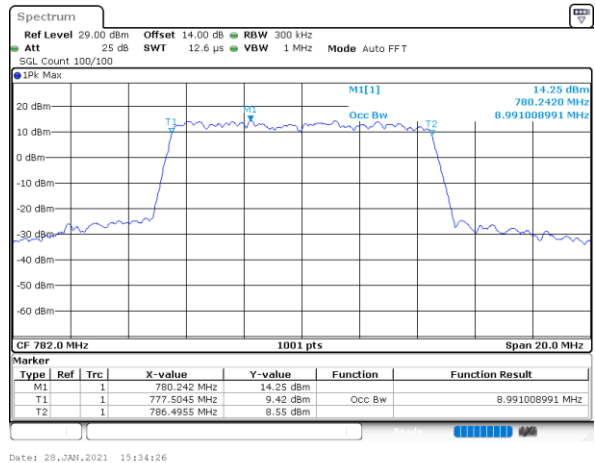
Lowest Channel / 5MHz / 64QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

