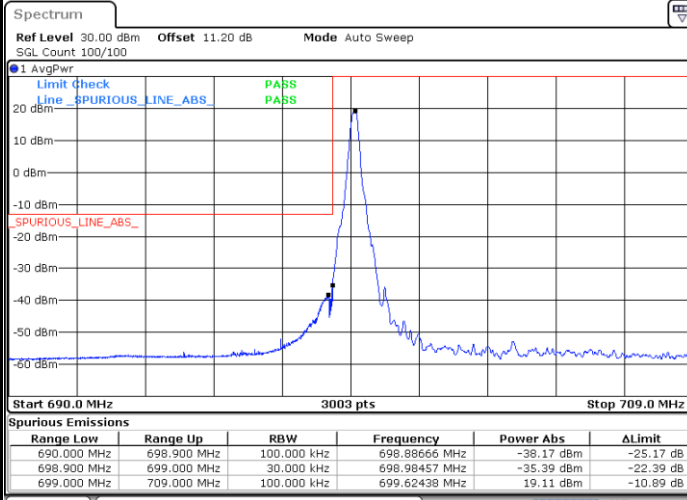




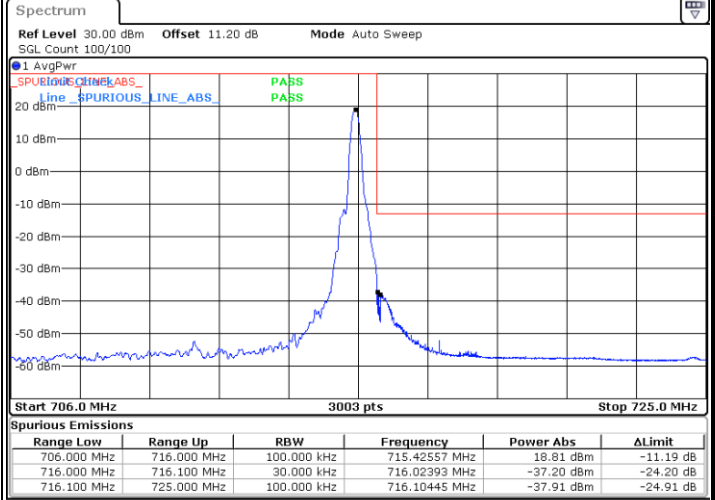
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



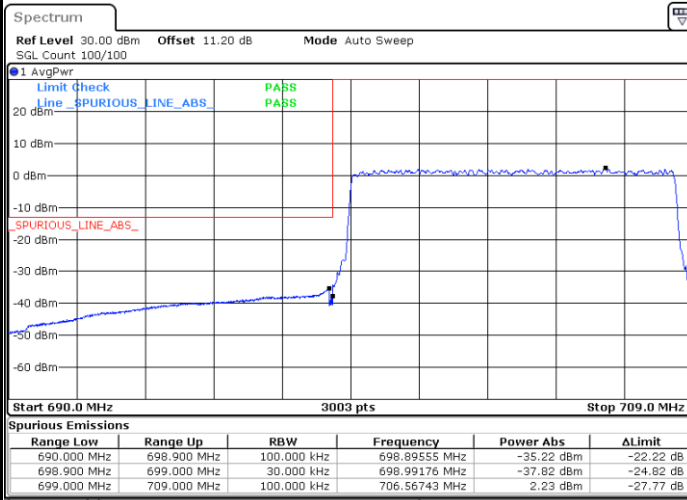
Date: 14.AUG.2022 03:18:08

Highest Band Edge / 1 RB



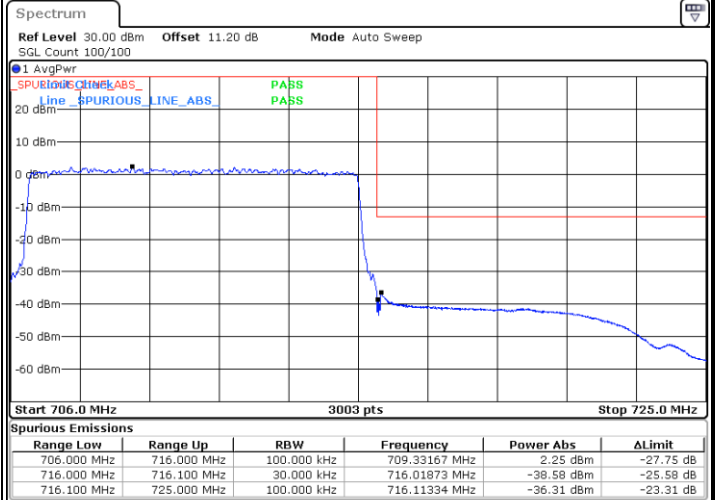
Date: 14.AUG.2022 03:20:33

Lowest Band Edge / Full RB



Date: 14.AUG.2022 03:17:17

Highest Band Edge / Full RB

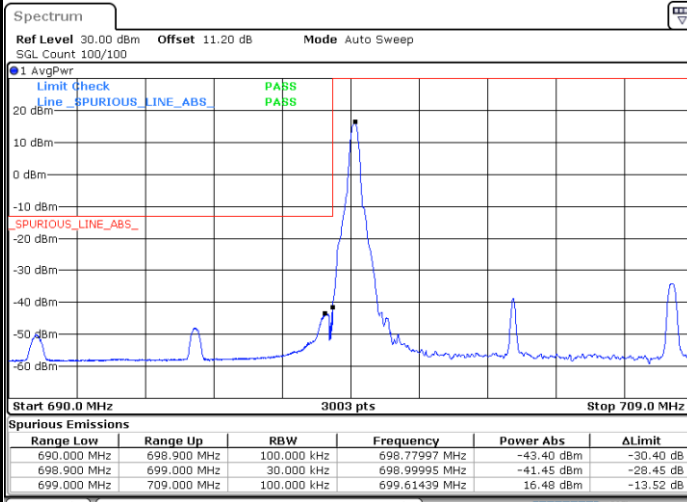


Date: 14.AUG.2022 03:19:42



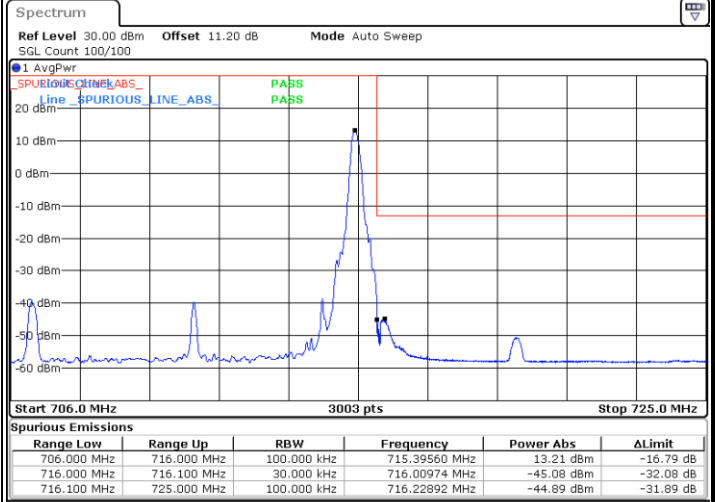
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



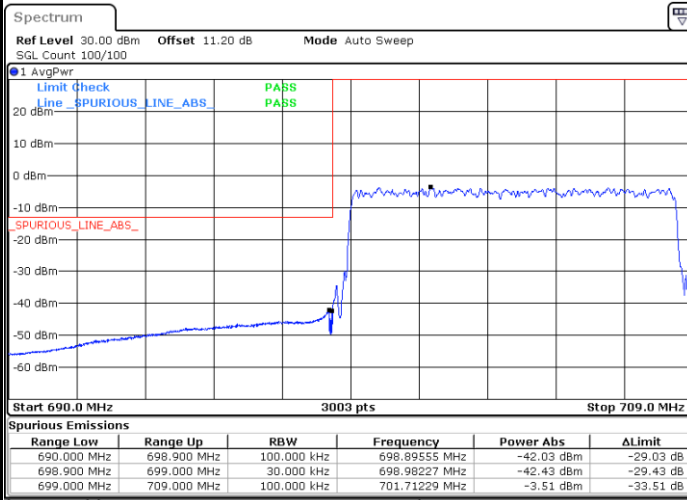
Date: 15.AUG.2022 10:22:32

Highest Band Edge / 1 RB



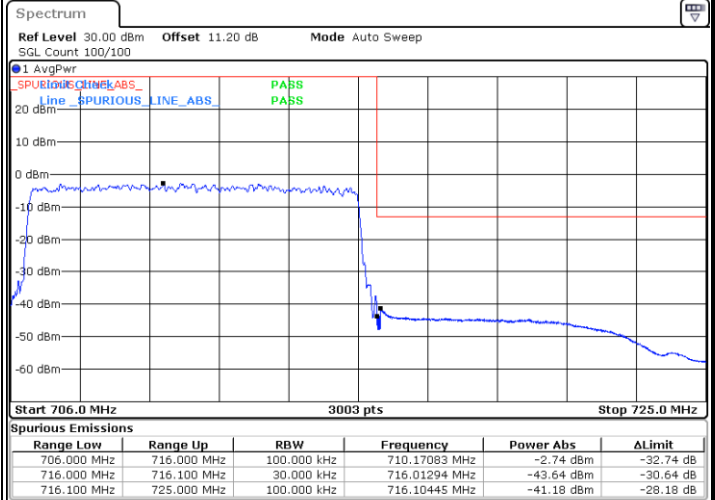
Date: 15.AUG.2022 09:50:38

Lowest Band Edge / Full RB



Date: 15.AUG.2022 09:44:22

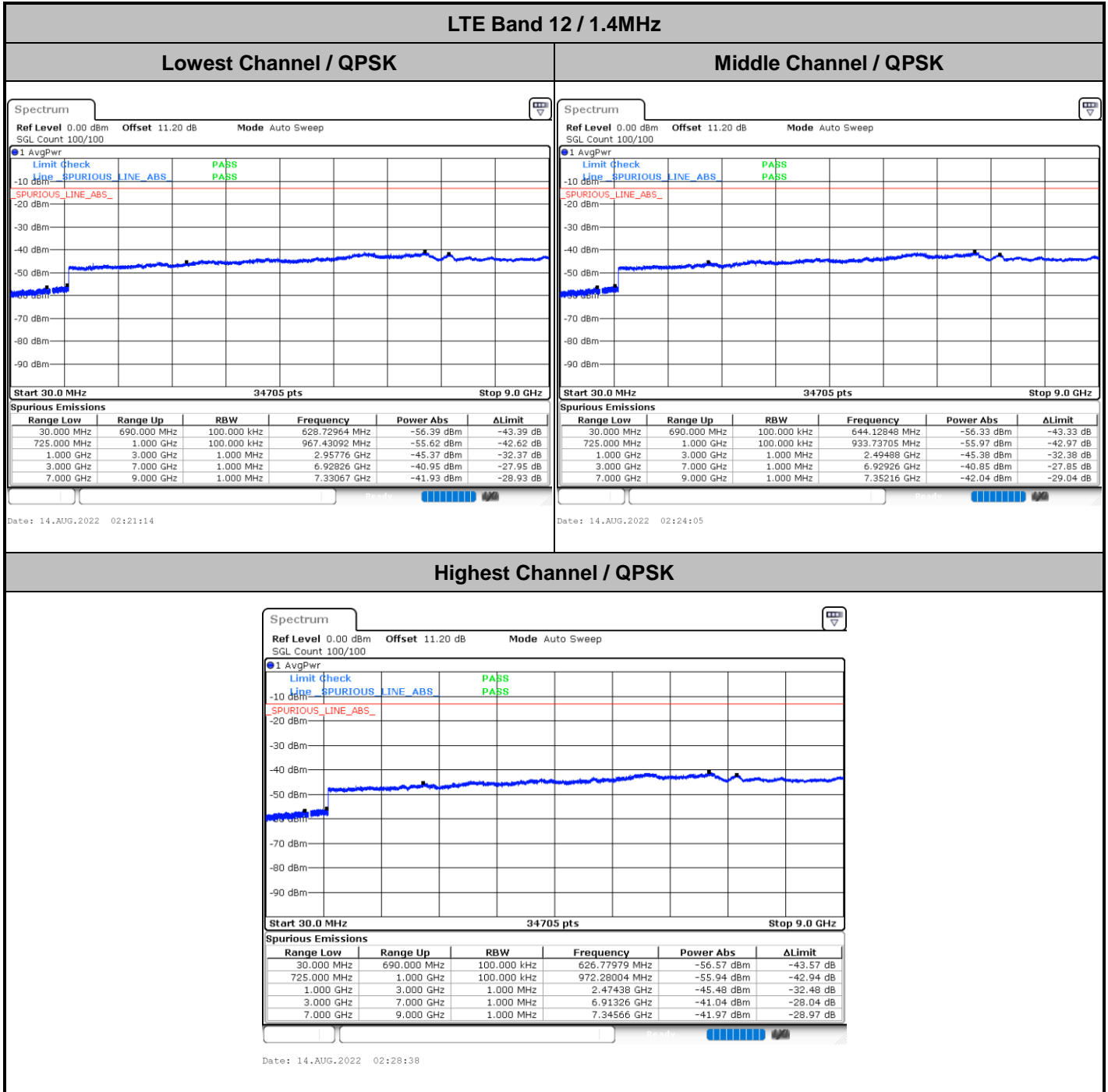
Highest Band Edge / Full RB



Date: 15.AUG.2022 09:49:50



# Conducted Spurious Emission

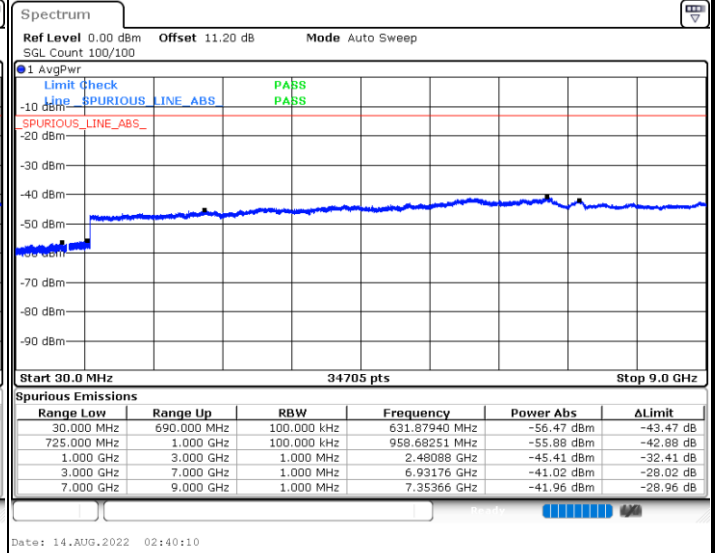
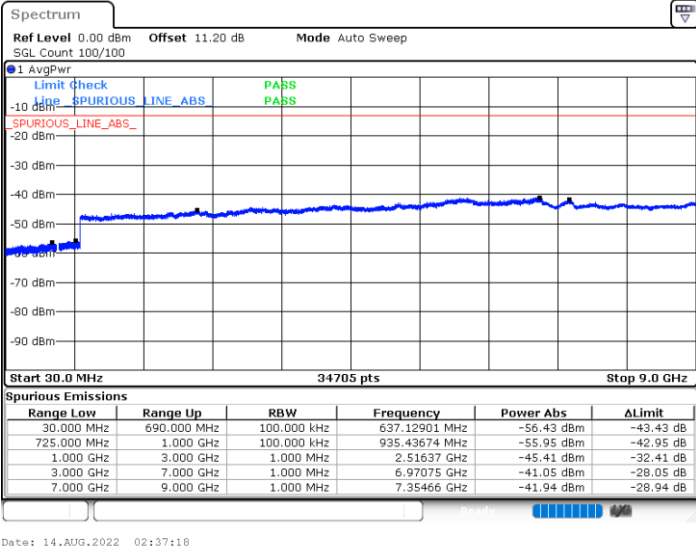




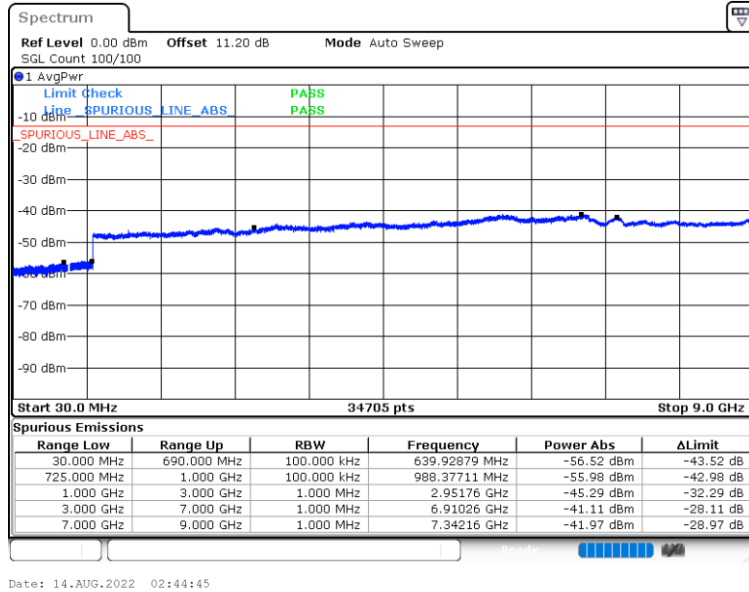
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



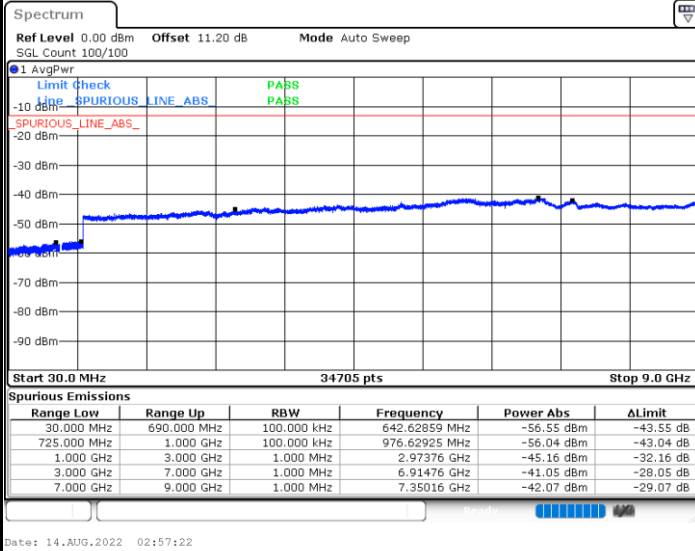
Highest Channel / QPSK



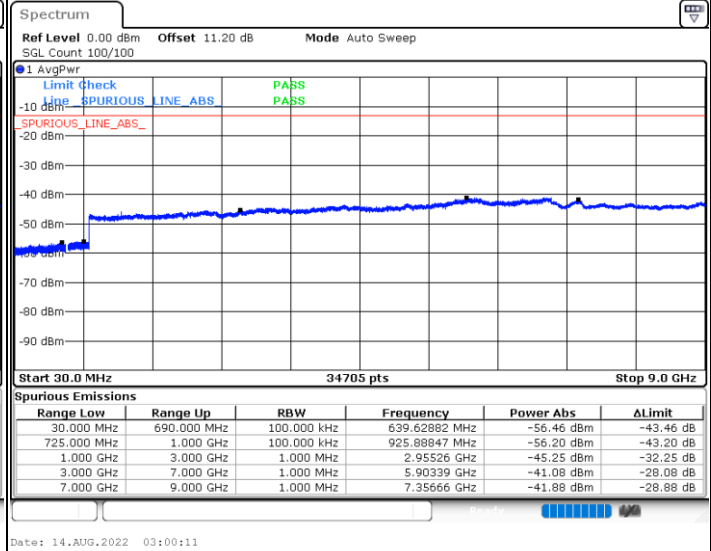


LTE Band 12 / 5MHz

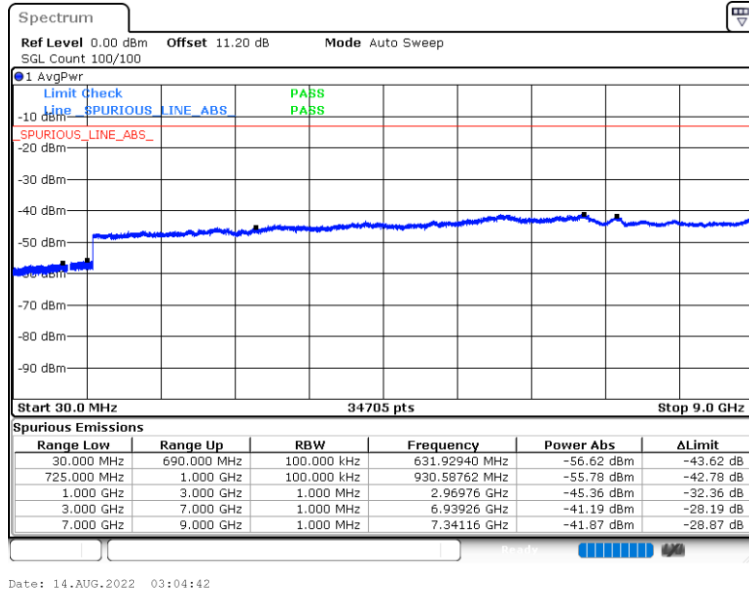
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

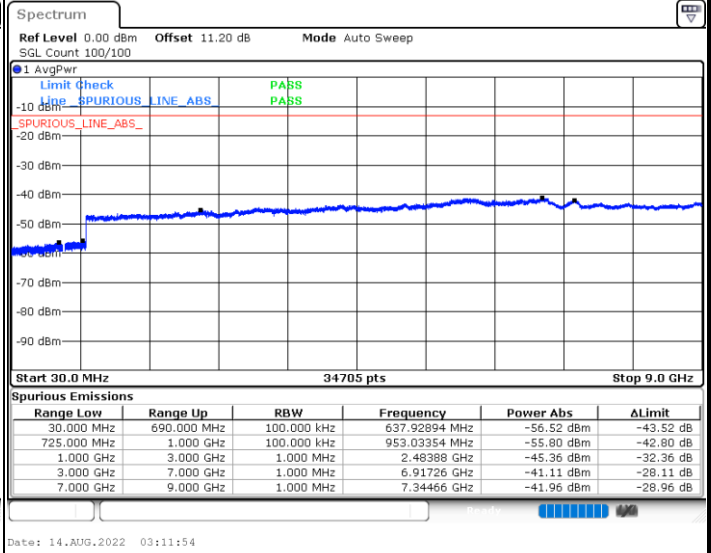
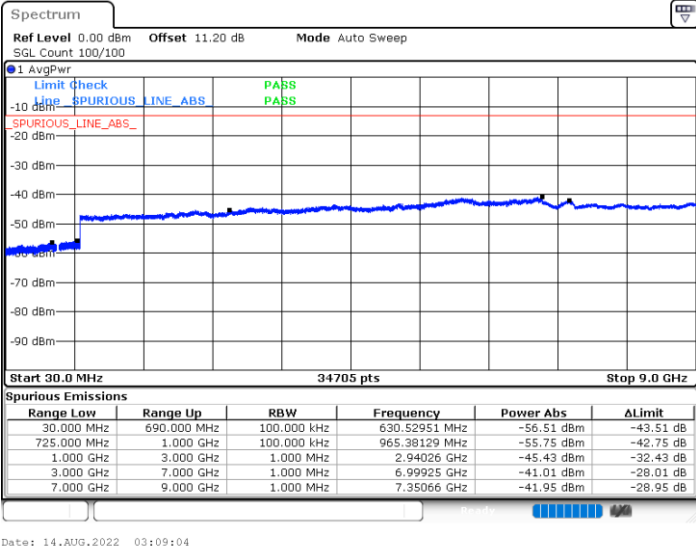




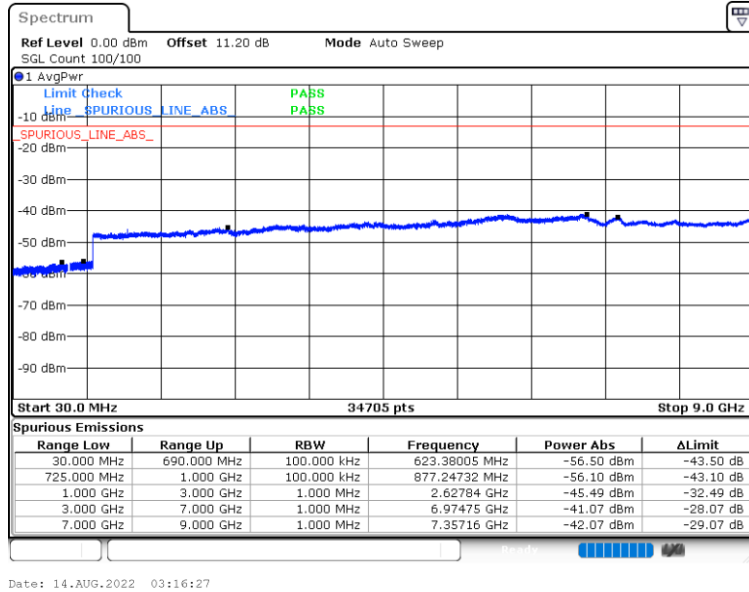
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





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	0.0016	PASS
40	Normal Voltage	0.0047	
30	Normal Voltage	0.0208	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0020	
0	Normal Voltage	0.0216	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0206	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0127	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0182	

Note:

1. Normal Voltage = 3.3 V. ; Battery End Point (BEP) = 3.135 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

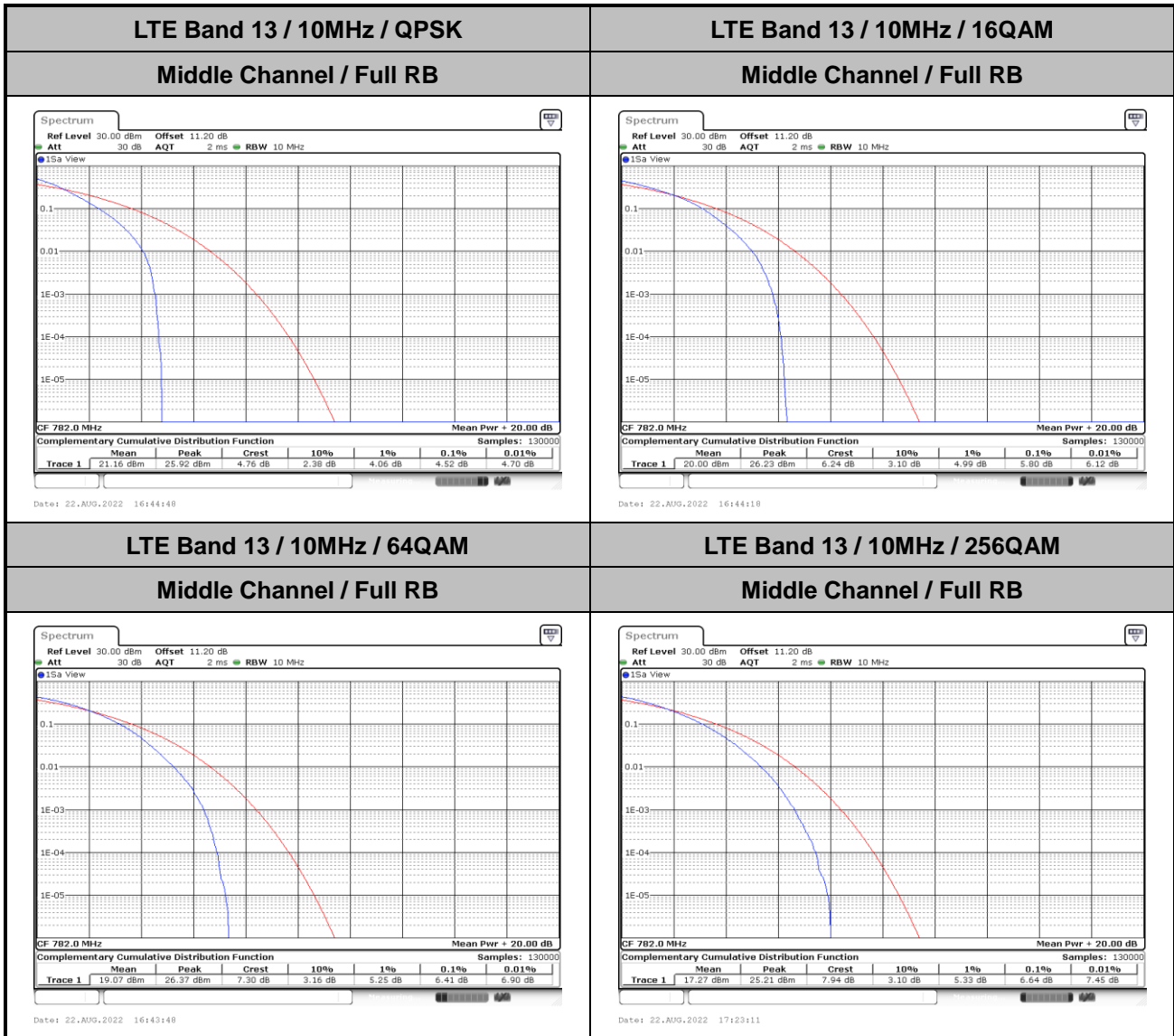


## LTE Band 13

### Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.52	5.80	6.41	6.64	<b>PASS</b>







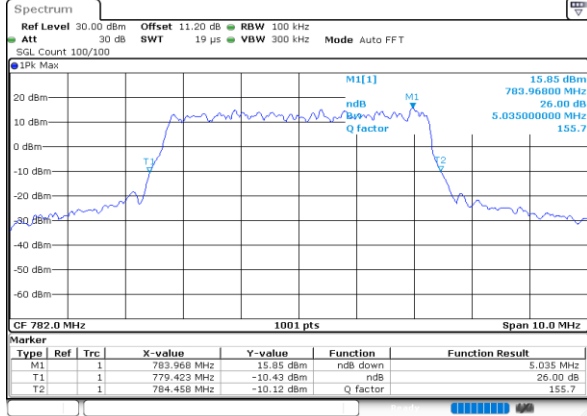
**26dB Bandwidth**

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
Middle CH	-	-	-	-	5.04	4.95	10.11	9.99	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	5.02	4.97	9.83	9.95	-	-	-	-



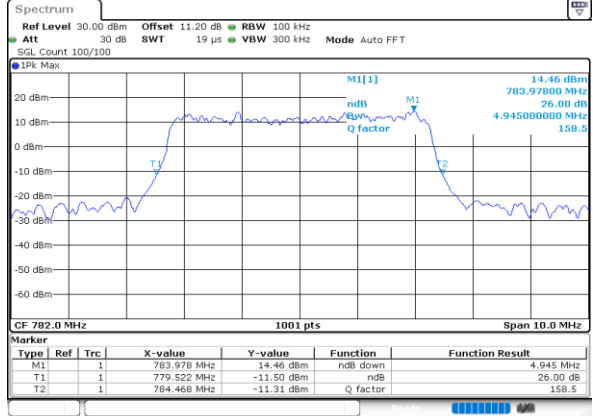
LTE Band 13

Middle Channel / 5MHz / QPSK



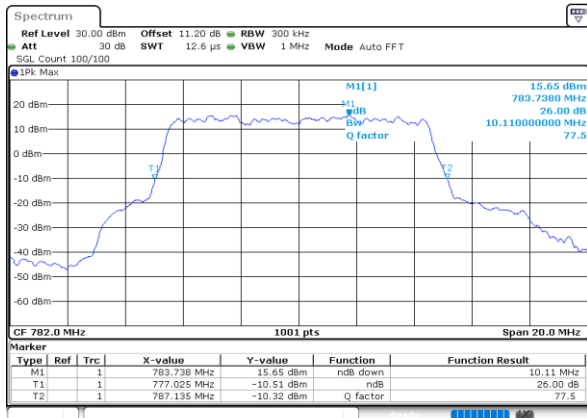
Date: 22\_AUG.2022 16:20:34

Middle Channel / 5MHz / 16QAM



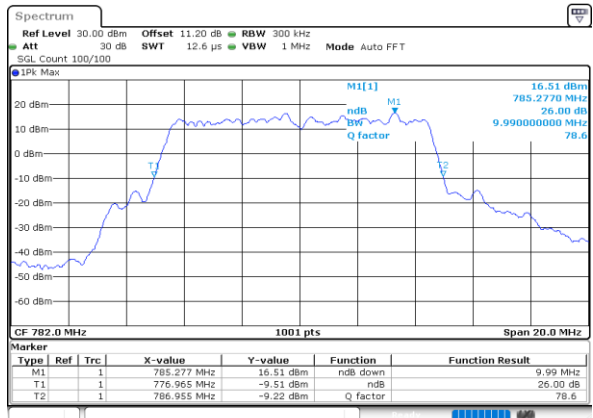
Date: 22\_AUG.2022 16:21:03

Middle Channel / 10MHz / QPSK



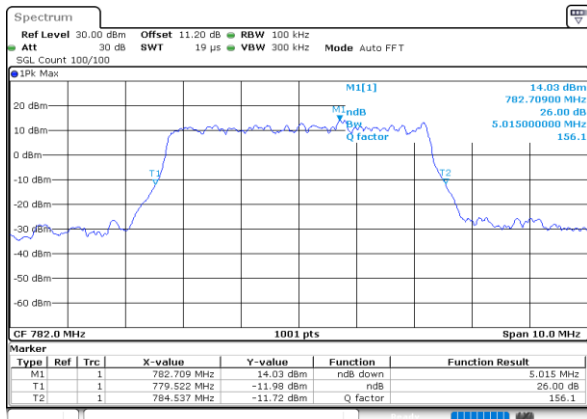
Date: 22\_AUG.2022 16:33:14

Middle Channel / 10MHz / 16QAM



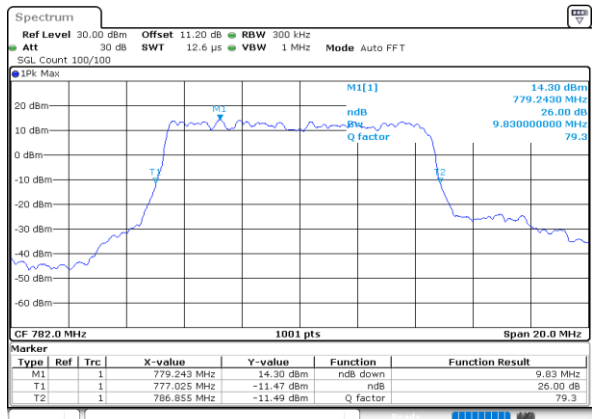
Date: 22\_AUG.2022 16:32:45

Middle Channel / 5MHz / 64QAM



Date: 22\_AUG.2022 16:29:16

Middle Channel / 10MHz / 64QAM



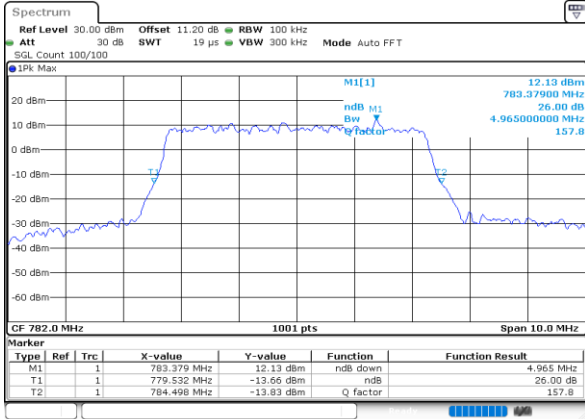
Date: 22\_AUG.2022 16:40:38



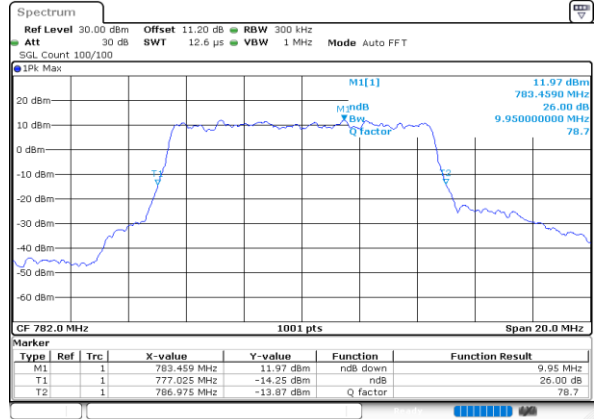
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 22.AUG.2022 17:15:50



Date: 22.AUG.2022 17:22:45



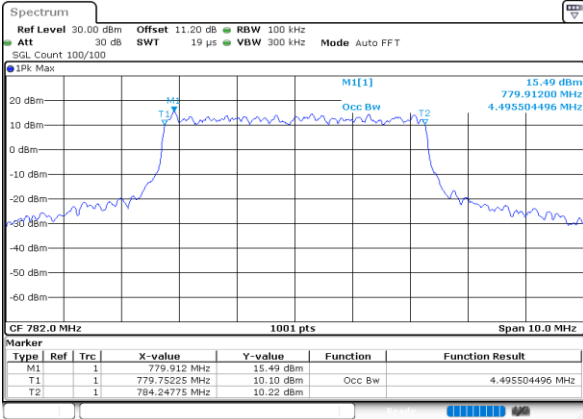
**Occupied Bandwidth**

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
Middle CH	-	-	-	-	4.50	4.50	9.01	9.03	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.51	4.48	9.05	9.01	-	-	-	-



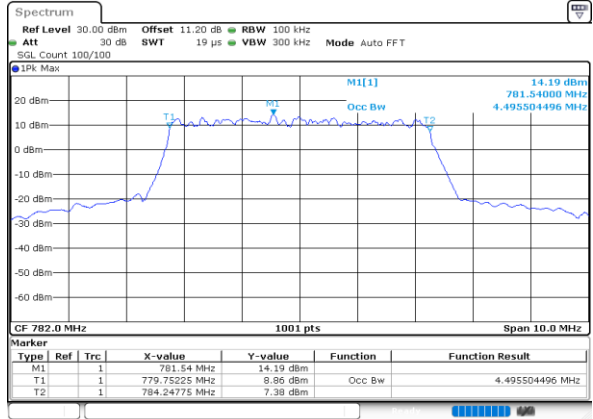
LTE Band 13

Middle Channel / 5MHz / QPSK



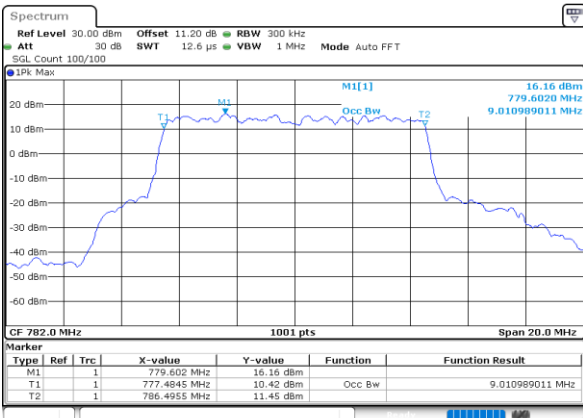
Date: 22.AUG.2022 16:21:46

Middle Channel / 5MHz / 16QAM



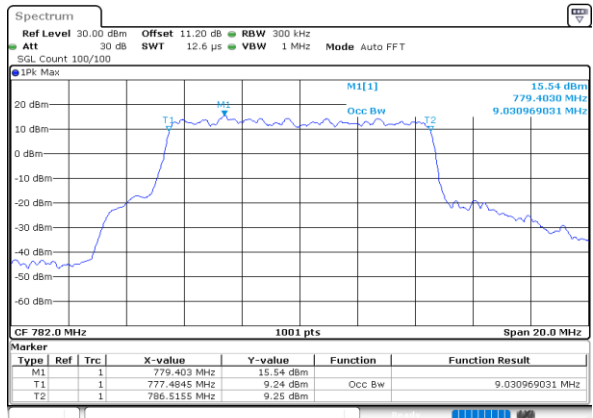
Date: 22.AUG.2022 16:21:17

Middle Channel / 10MHz / QPSK



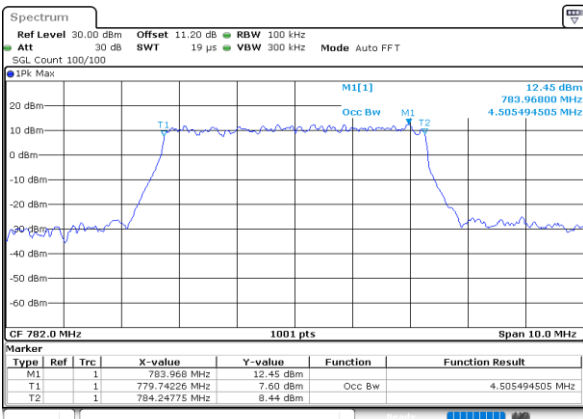
Date: 22.AUG.2022 16:32:02

Middle Channel / 10MHz / 16QAM



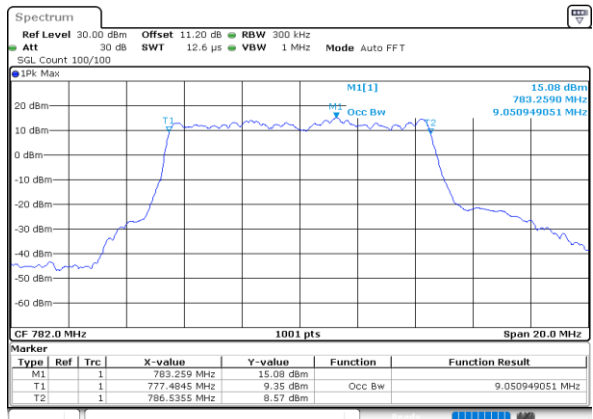
Date: 22.AUG.2022 16:32:31

Middle Channel / 5MHz / 64QAM



Date: 22.AUG.2022 16:29:30

Middle Channel / 10MHz / 64QAM



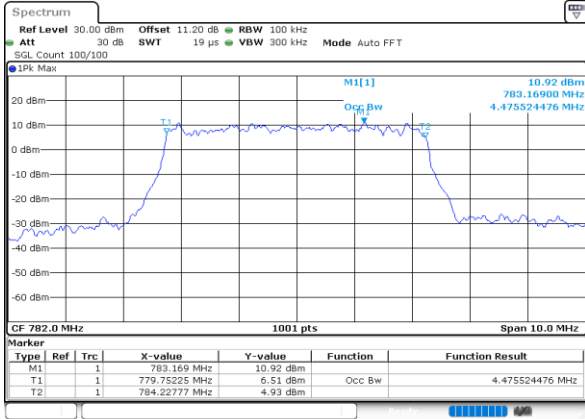
Date: 22.AUG.2022 16:40:24



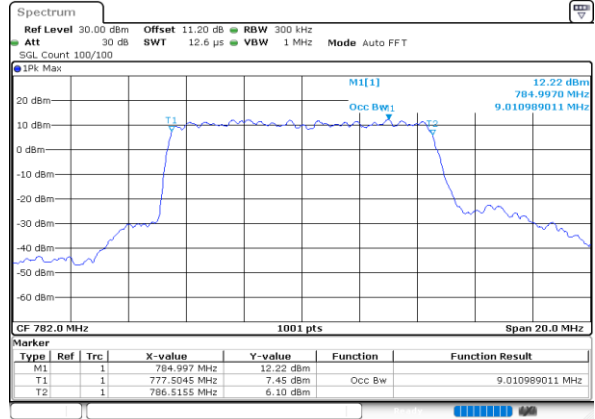
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 22.AUG.2022 17:15:05



Date: 22.AUG.2022 17:22:05

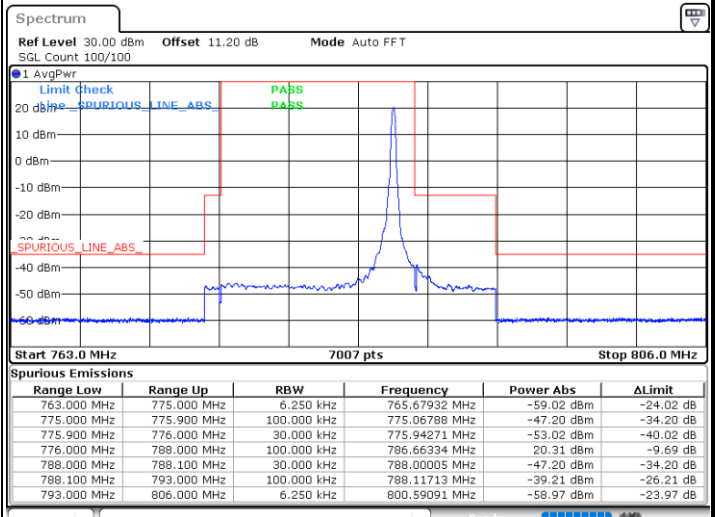
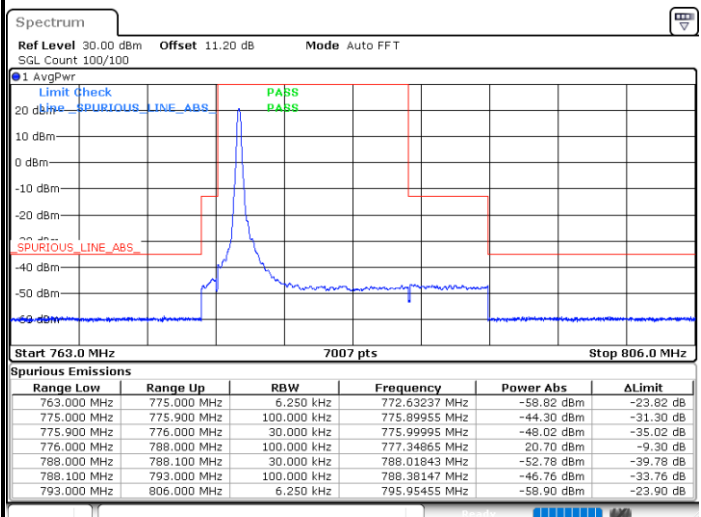


Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

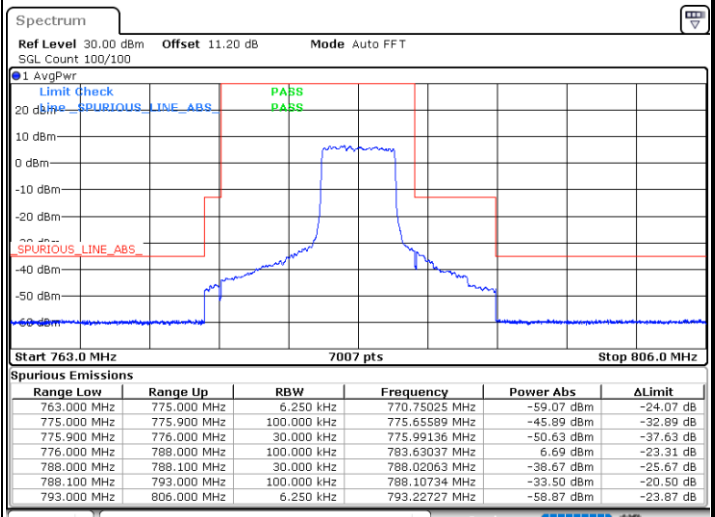
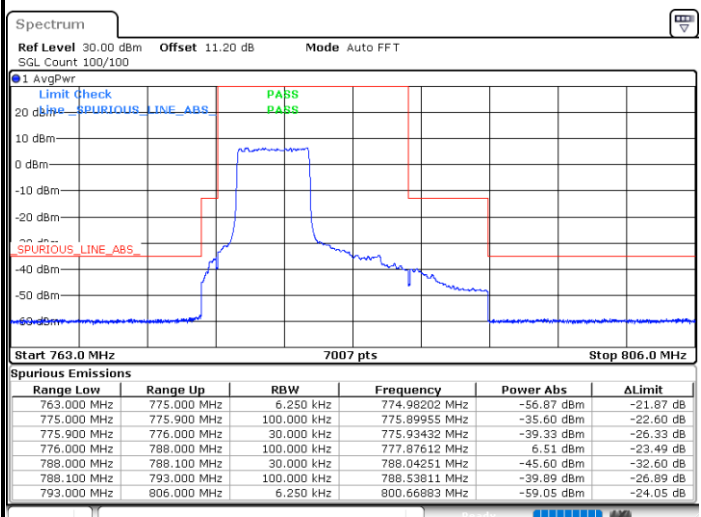


Date: 22.AUG.2022 16:18:04

Date: 22.AUG.2022 16:25:41

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22.AUG.2022 16:15:07

Date: 22.AUG.2022 16:22:44

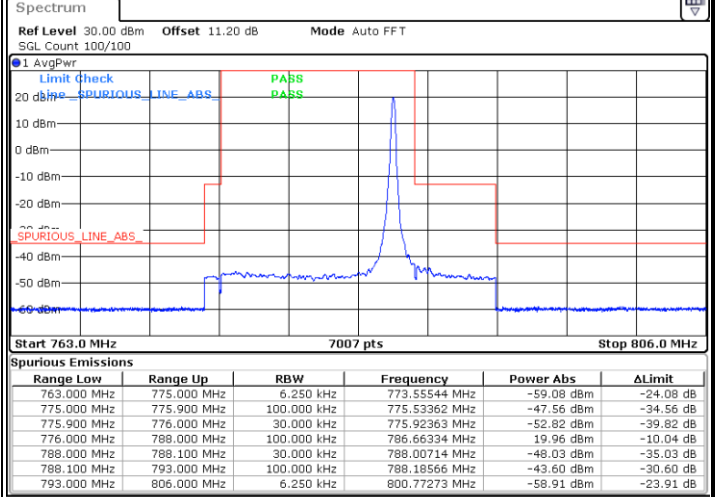
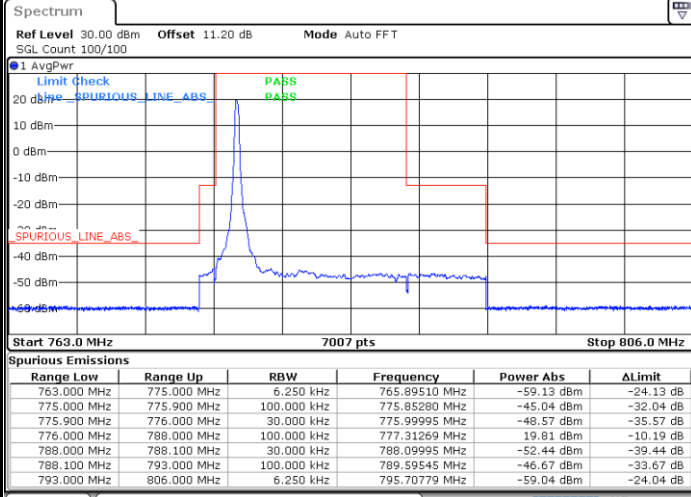




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

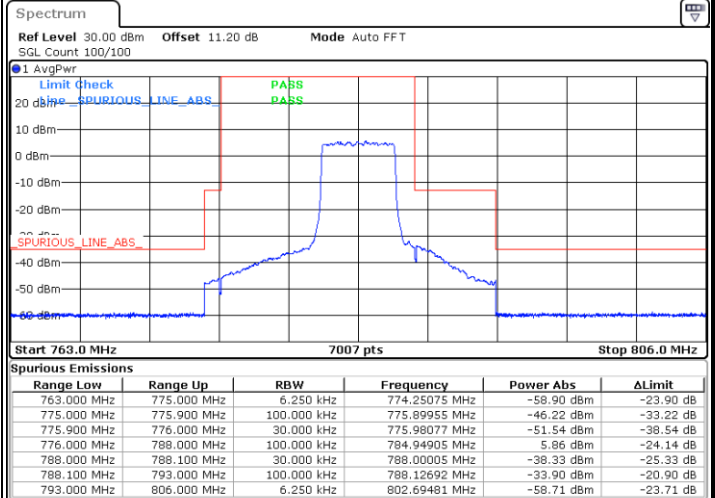
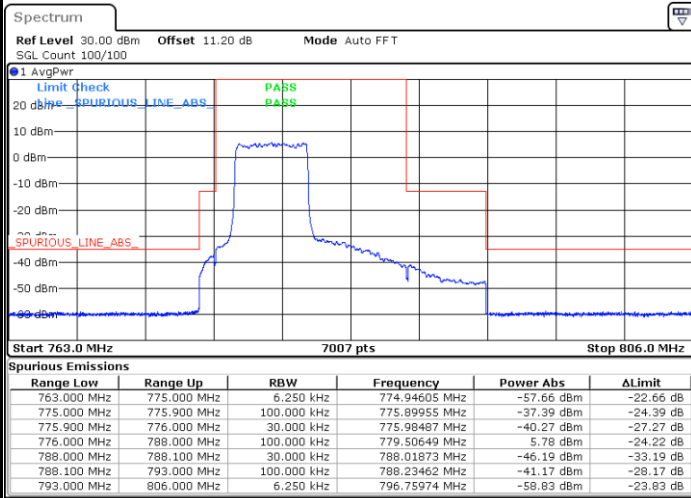


Date: 22.AUG.2022 16:17:05

Date: 22.AUG.2022 16:24:42

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22.AUG.2022 16:16:07

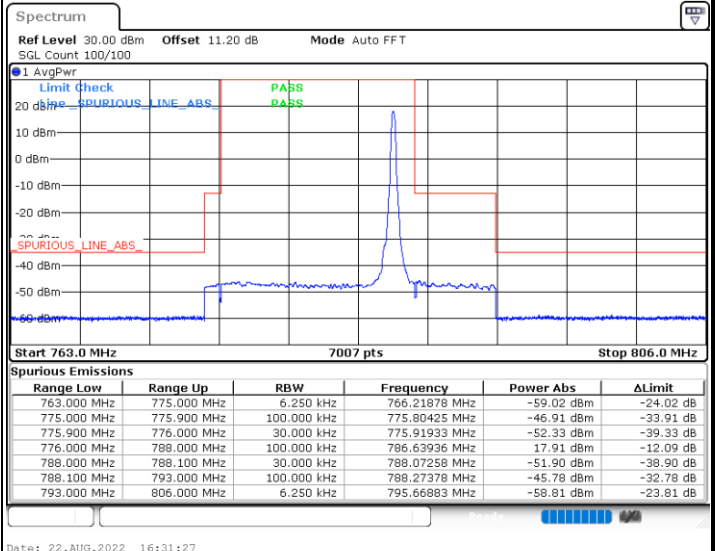
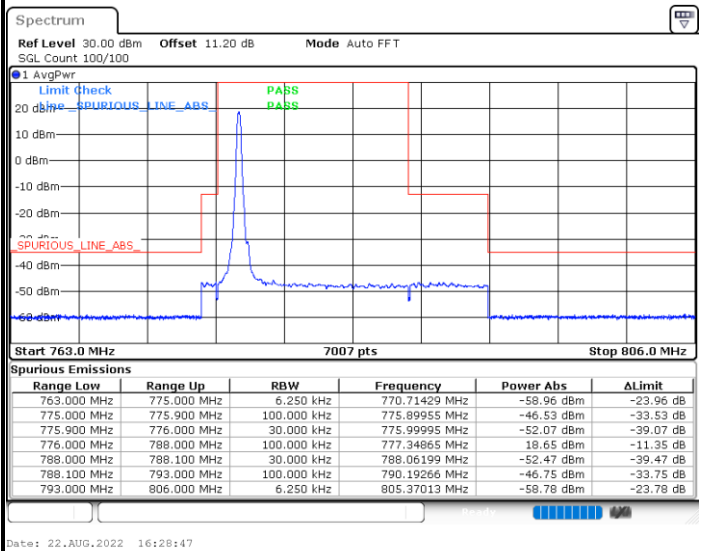
Date: 22.AUG.2022 16:23:43



LTE Band 13 / 5MHz / 64QAM

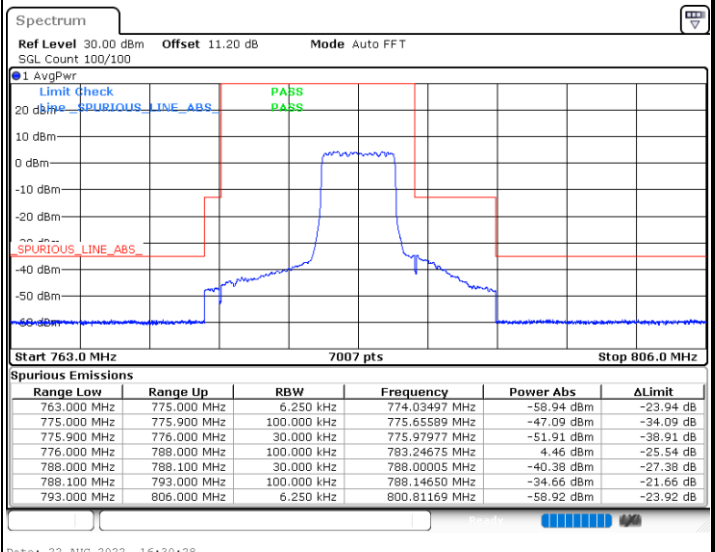
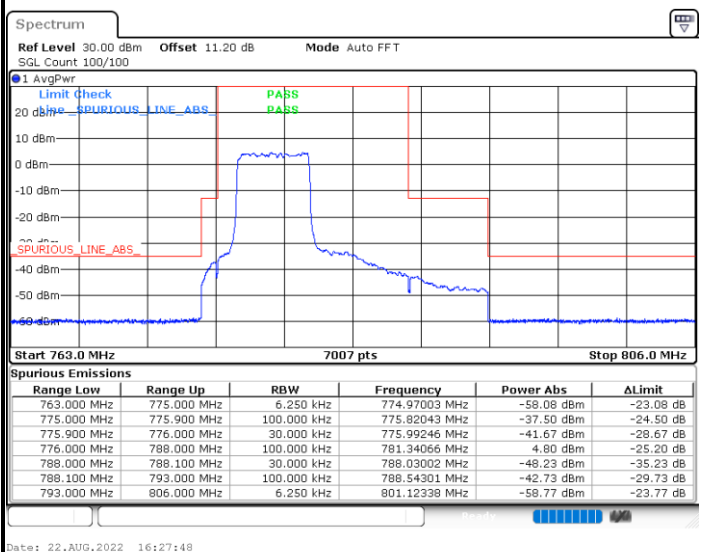
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

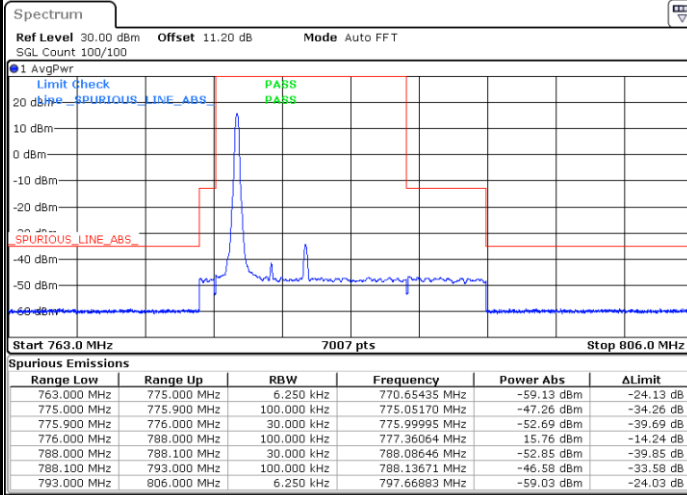
Highest Band Edge / Full RB





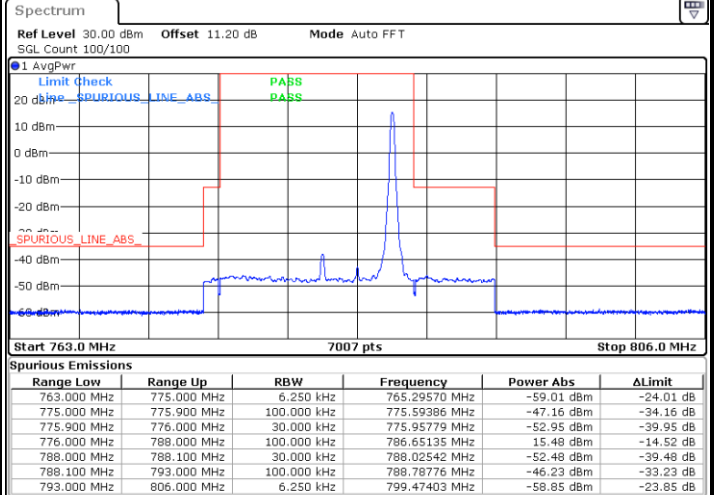
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



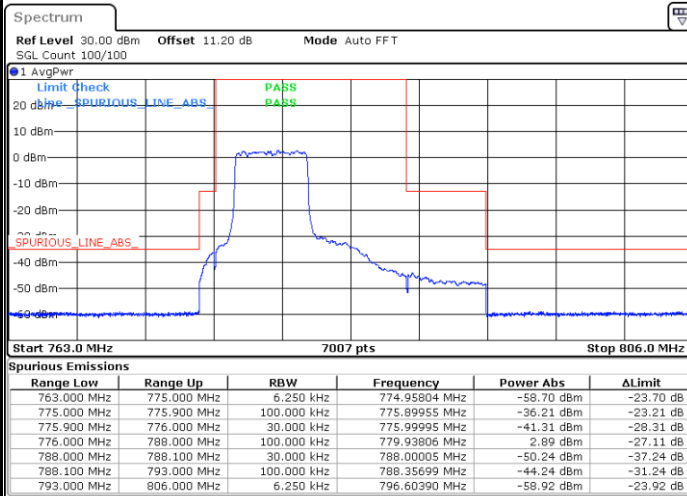
Date: 22.AUG.2022 17:14:07

Highest Band Edge / 1 RB



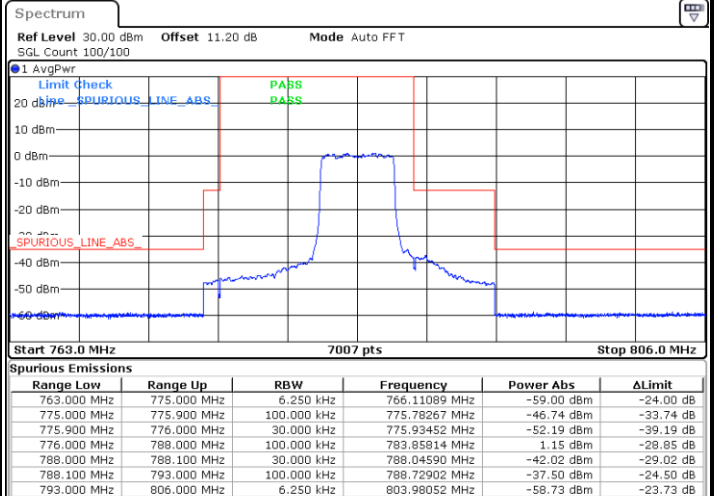
Date: 22.AUG.2022 17:18:38

Lowest Band Edge / Full RB



Date: 22.AUG.2022 17:07:16

Highest Band Edge / Full RB



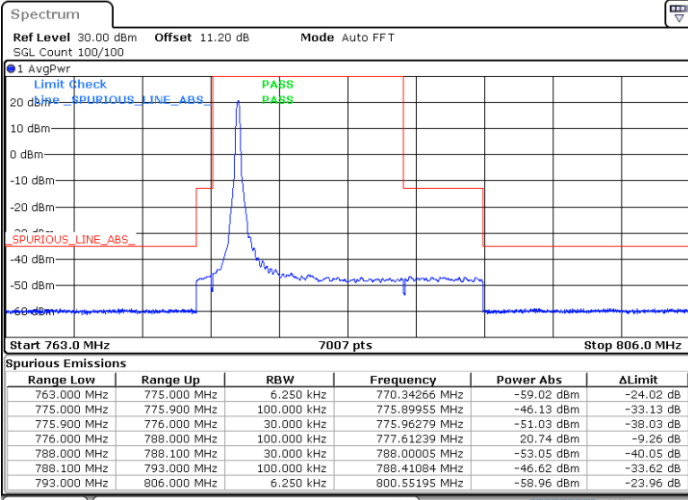
Date: 22.AUG.2022 17:19:32



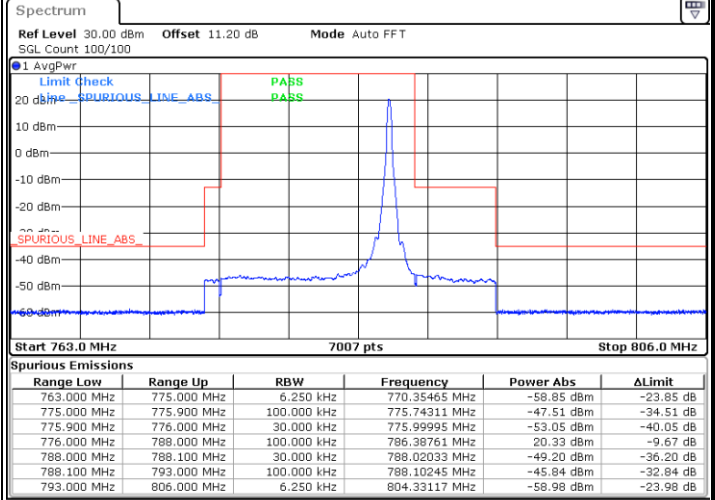
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

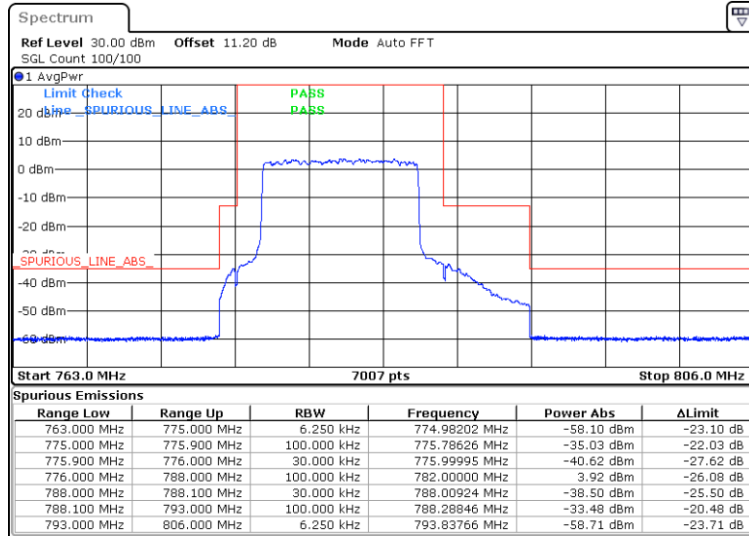


Date: 22.AUG.2022 16:36:51



Date: 22.AUG.2022 16:37:49

Band Edge / Full RB



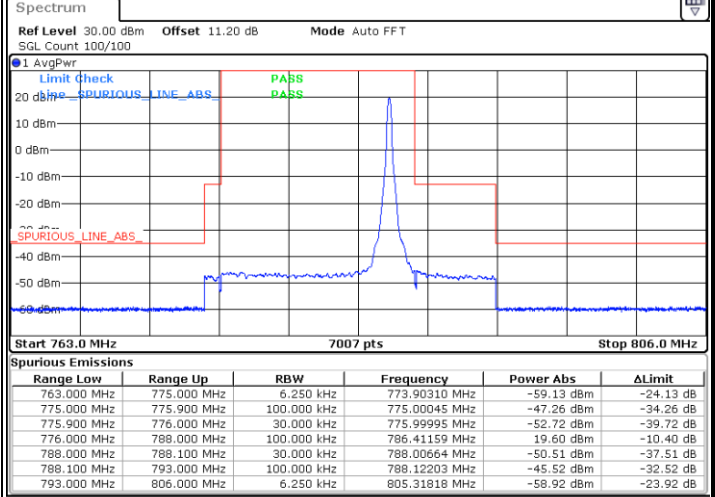
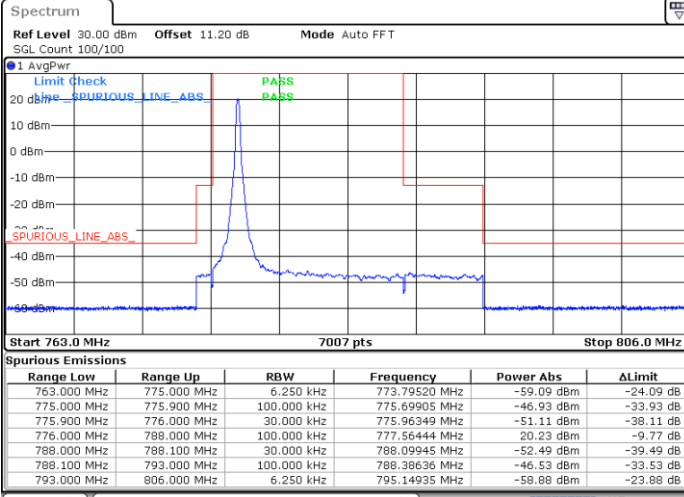
Date: 22.AUG.2022 16:33:57



LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

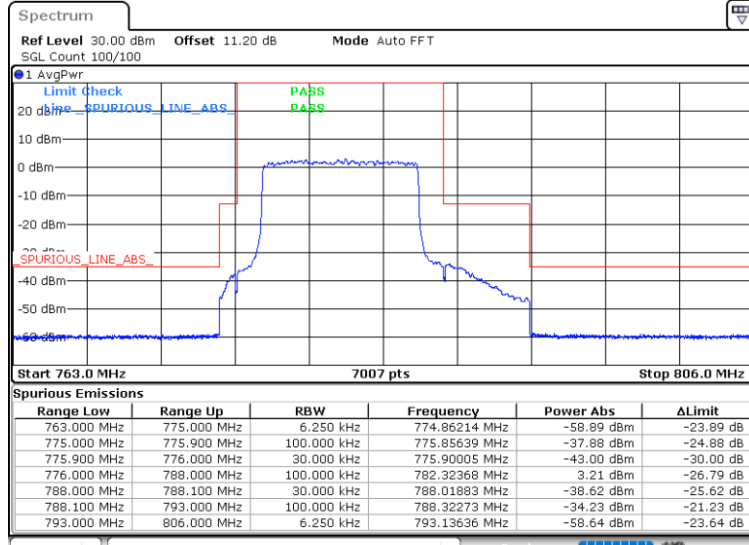
Highest Band Edge / 1 RB



Date: 22.AUG.2022 16:35:53

Date: 22.AUG.2022 16:38:47

Band Edge / Full RB



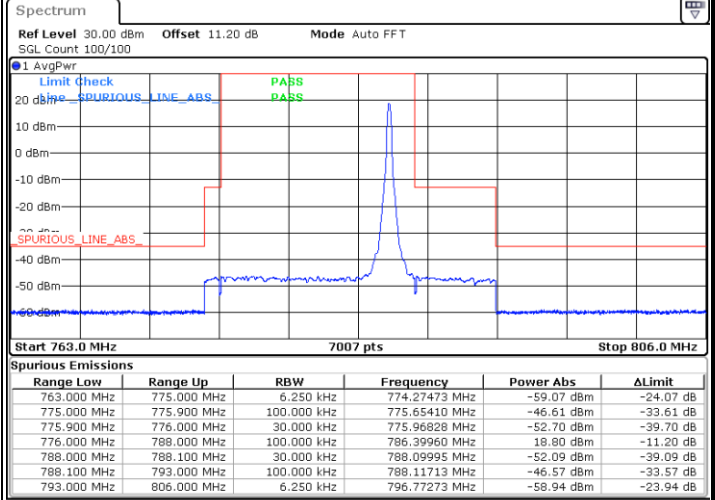
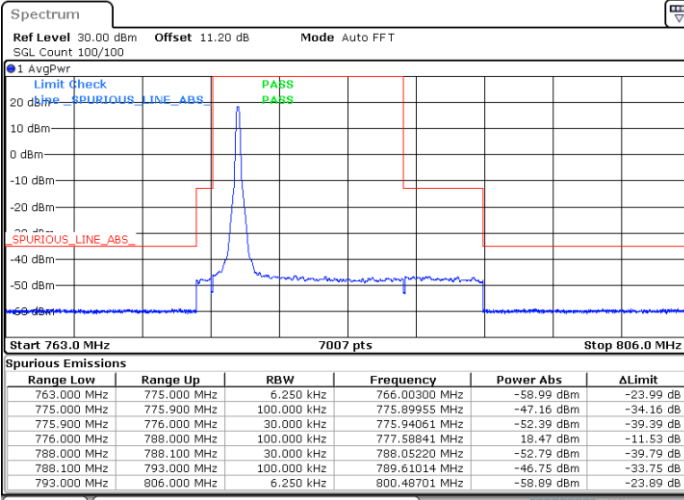
Date: 22.AUG.2022 16:34:55



LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

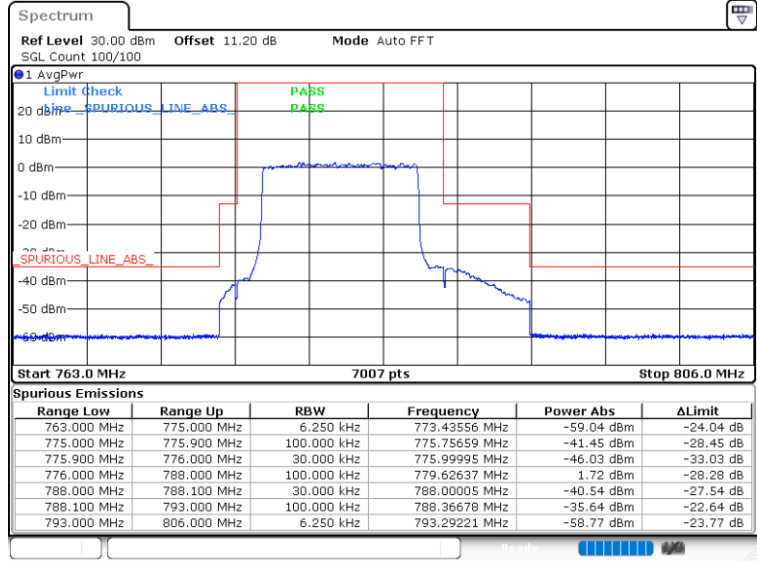
Highest Band Edge / 1 RB



Date: 22.AUG.2022 16:42:19

Date: 22.AUG.2022 16:43:17

Band Edge / Full RB



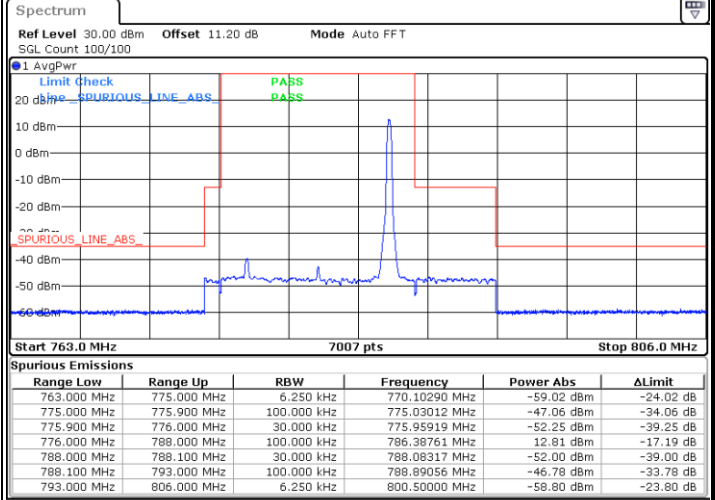
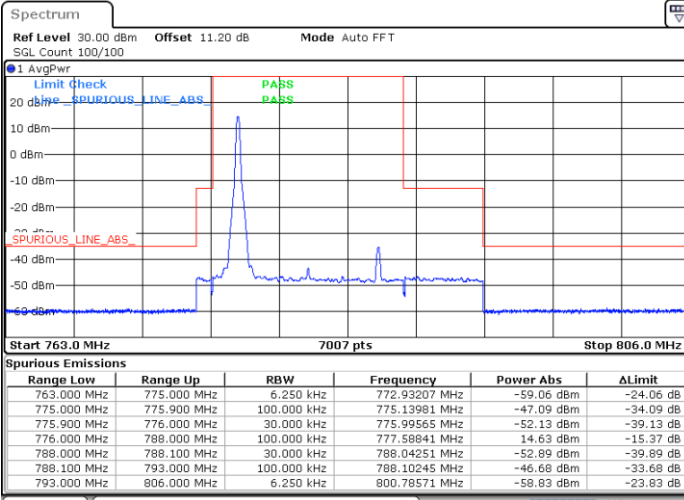
Date: 22.AUG.2022 16:41:21



LTE Band 13 / 10MHz / 256QAM

Lowest Band Edge / 1 RB

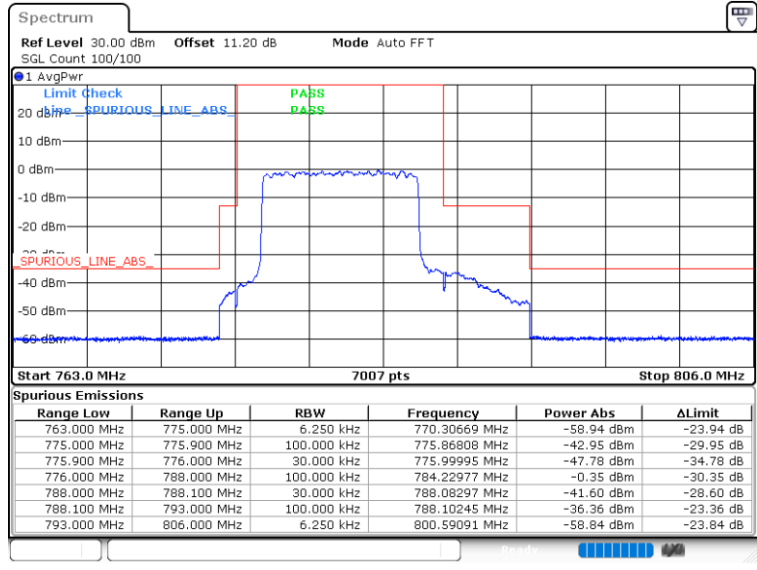
Highest Band Edge / 1 RB



Date: 22.AUG.2022 17:23:50

Date: 22.AUG.2022 17:25:38

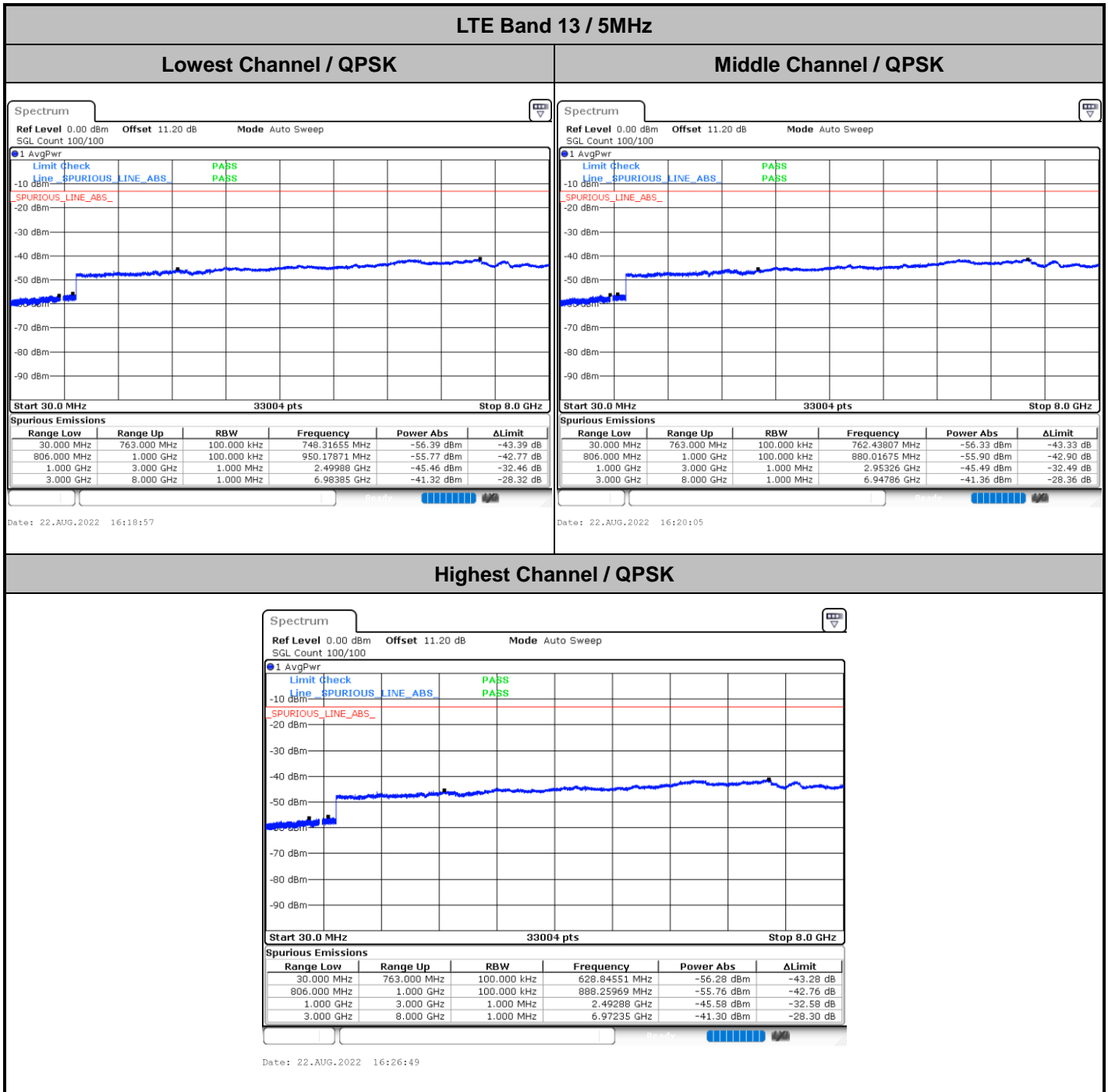
Band Edge / Full RB



Date: 22.AUG.2022 17:21:32



# Conducted Spurious Emission

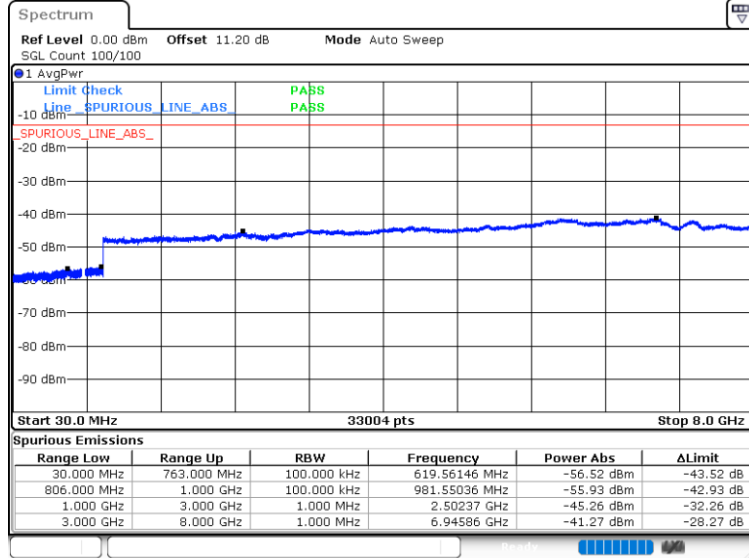






LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 22.AUG.2022 16:39:55



Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0038	PASS
40	Normal Voltage	0.0064	
30	Normal Voltage	0.0073	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0128	
-20	Normal Voltage	0.0119	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0124	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0161	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 25

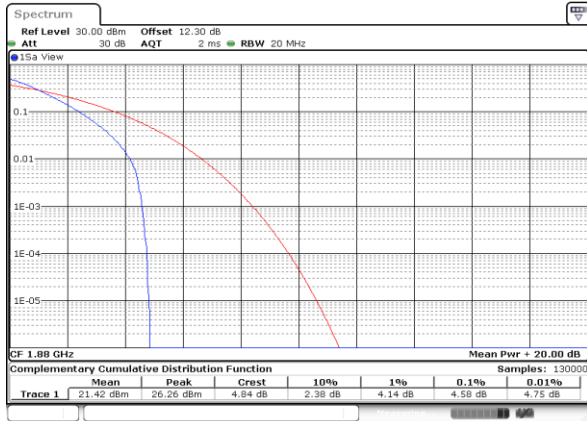
### Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.58	5.71	6.29	6.55	PASS



LTE Band 25 / 20MHz / QPSK

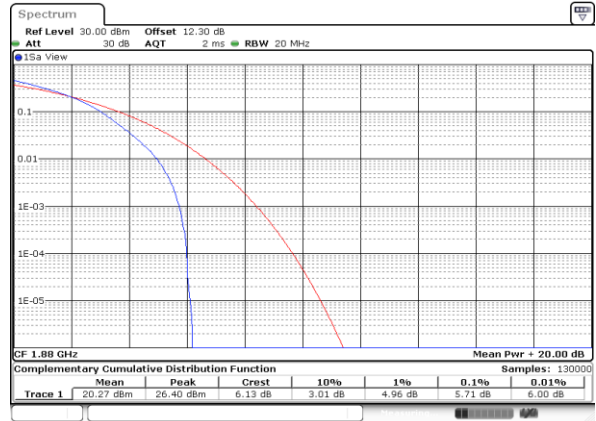
Middle Channel / Full RB



Date: 13.AUG.2022 17:48:22

LTE Band 25 / 20MHz / 16QAM

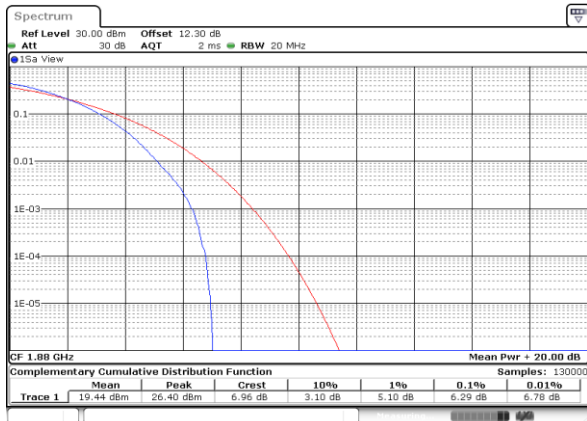
Middle Channel / Full RB



Date: 13.AUG.2022 17:47:50

LTE Band 25 / 20MHz / 64QAM

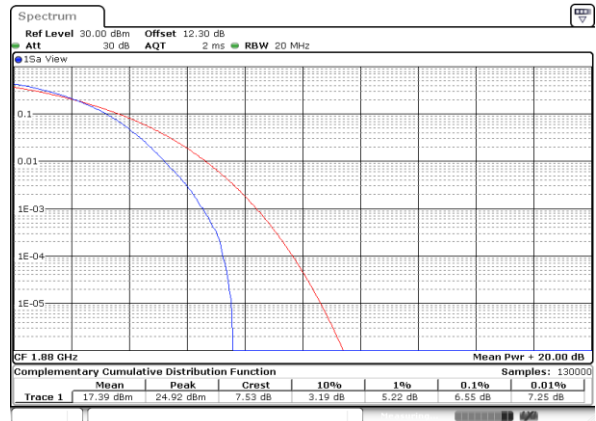
Middle Channel / Full RB



Date: 13.AUG.2022 17:47:19

LTE Band 25 / 20MHz / 256QAM

Middle Channel / Full RB



Date: 13.AUG.2022 22:14:36



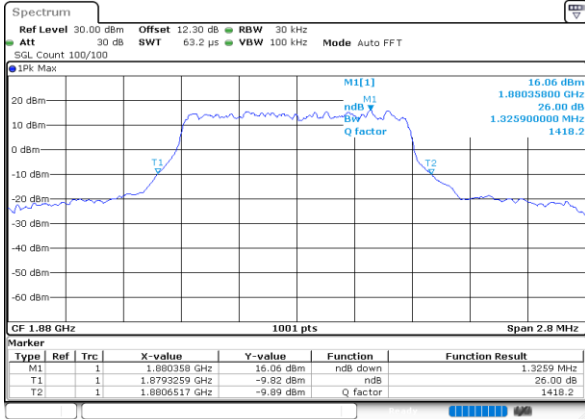
**26dB Bandwidth**

Mode	LTE Band 25 : 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	1.33	1.34	3.04	3.03	5.02	5.08	9.91	9.83	14.51	14.39	19.14	18.86
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	1.33	1.36	3.06	3.11	5.06	4.89	10.11	10.21	14.30	14.66	19.06	19.18



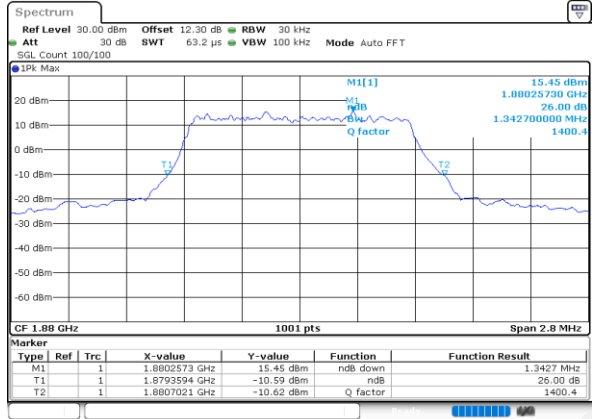
LTE Band 25

Middle Channel / 1.4MHz / QPSK



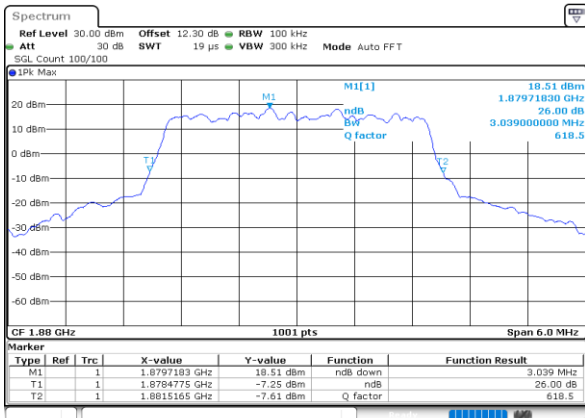
Date: 13.AUG.2022 16:04:22

Middle Channel / 1.4MHz / 16QAM



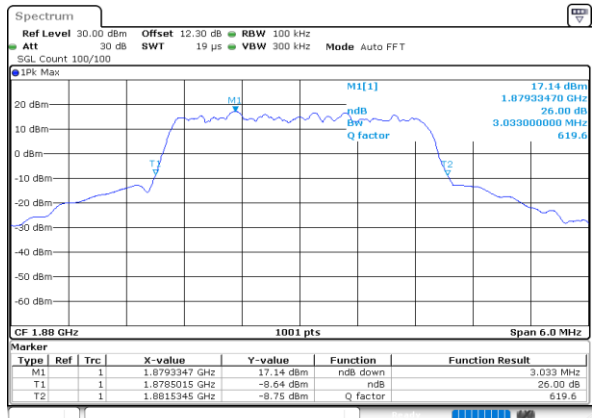
Date: 13.AUG.2022 16:04:52

Middle Channel / 3MHz / QPSK



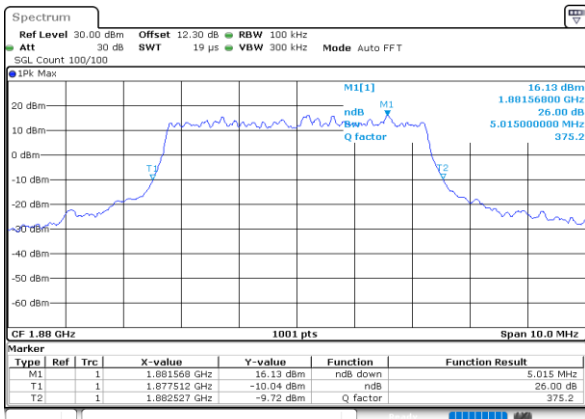
Date: 13.AUG.2022 16:27:19

Middle Channel / 3MHz / 16QAM



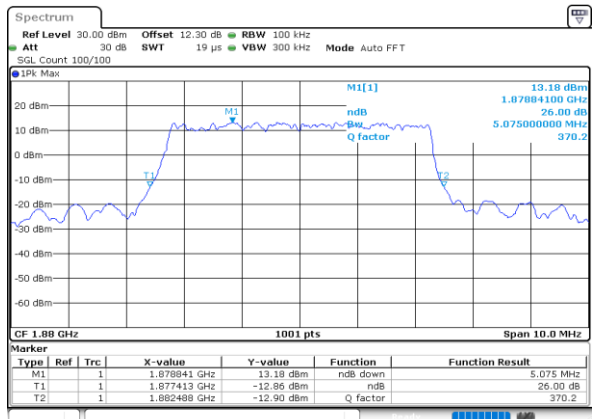
Date: 13.AUG.2022 16:27:47

Middle Channel / 5MHz / QPSK



Date: 13.AUG.2022 16:40:45

Middle Channel / 5MHz / 16QAM

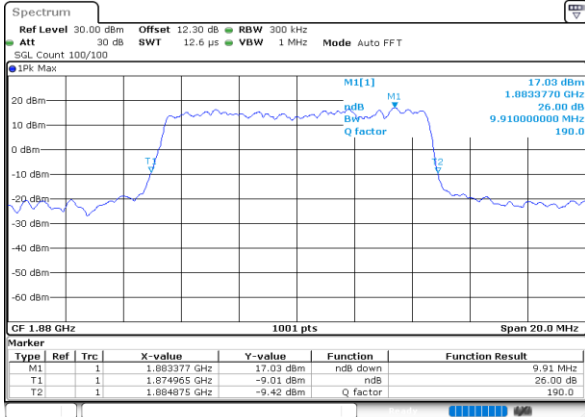


Date: 13.AUG.2022 16:41:14



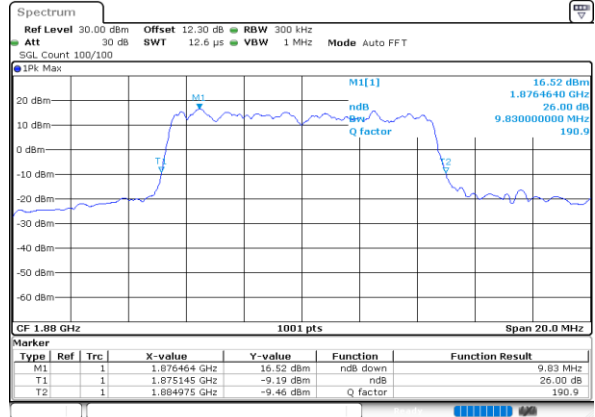
LTE Band 25

Middle Channel / 10MHz / QPSK



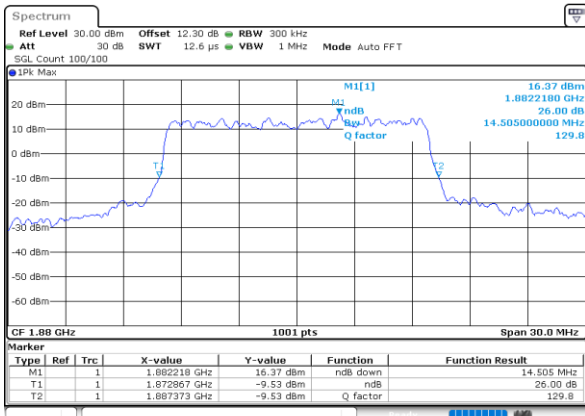
Date: 13.AUG.2022 16:58:56

Middle Channel / 10MHz / 16QAM



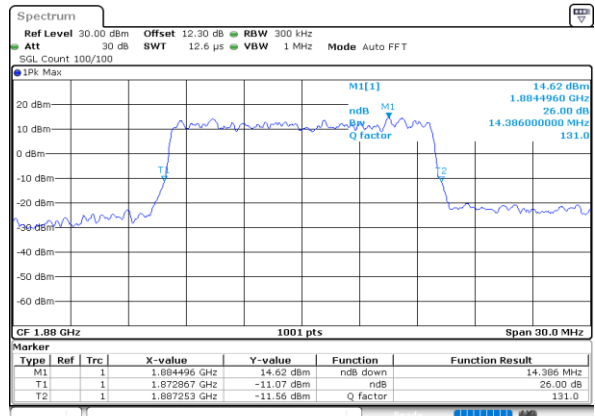
Date: 13.AUG.2022 16:59:26

Middle Channel / 15MHz / QPSK



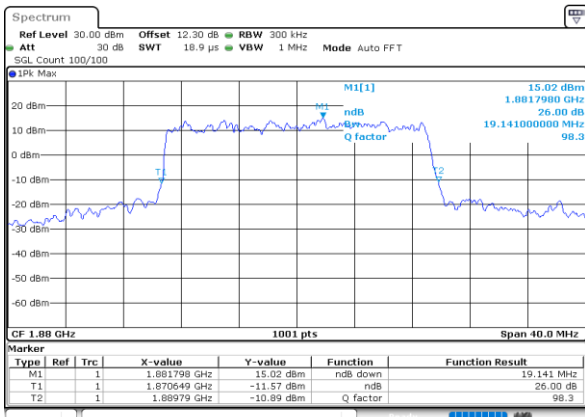
Date: 13.AUG.2022 17:21:50

Middle Channel / 15MHz / 16QAM



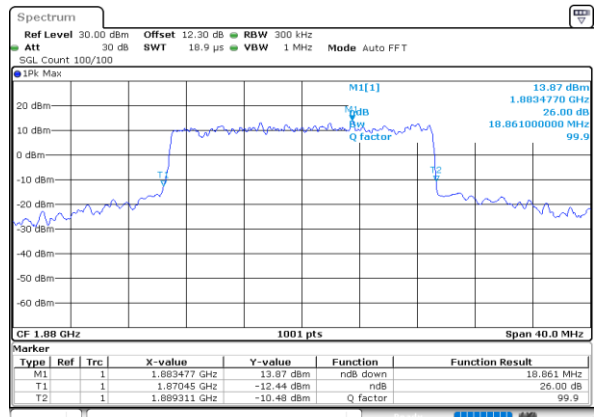
Date: 13.AUG.2022 17:22:19

Middle Channel / 20MHz / QPSK



Date: 13.AUG.2022 17:35:18

Middle Channel / 20MHz / 16QAM

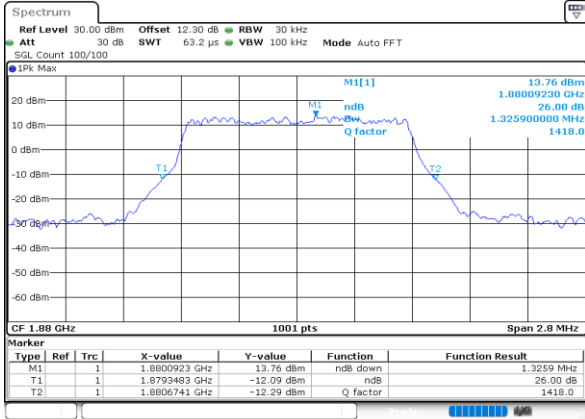


Date: 13.AUG.2022 17:35:48



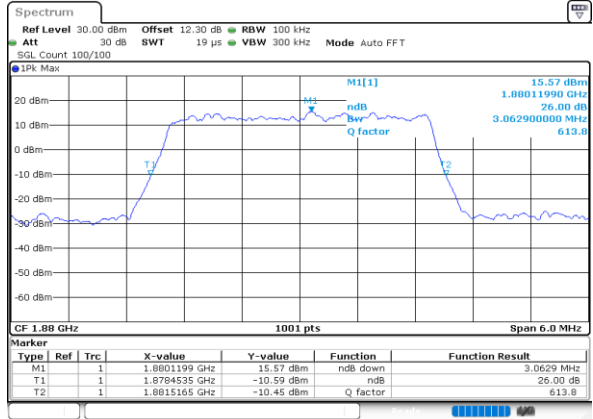
LTE Band 25

Middle Channel / 1.4MHz / 64QAM



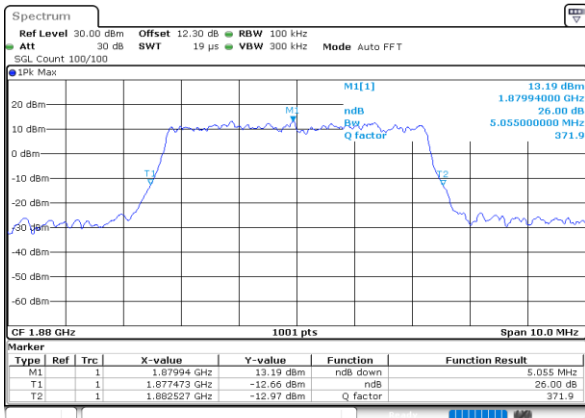
Date: 13.AUG.2022 16:13:51

Middle Channel / 3MHz / 64QAM



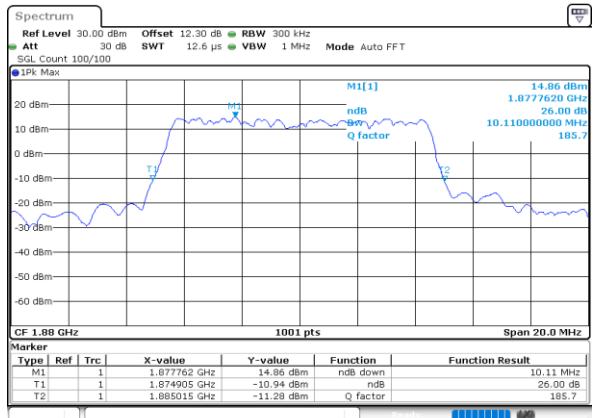
Date: 13.AUG.2022 16:18:41

Middle Channel / 5MHz / 64QAM



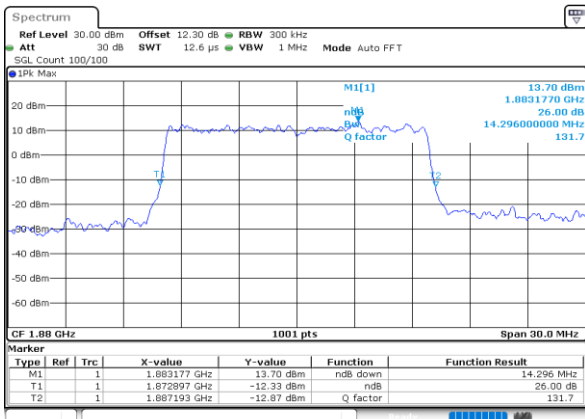
Date: 13.AUG.2022 16:50:15

Middle Channel / 10MHz / 64QAM



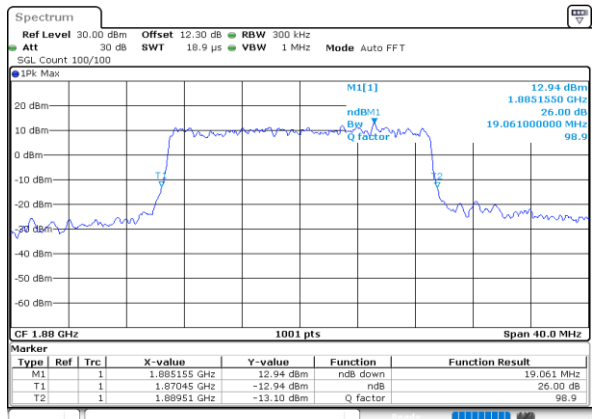
Date: 13.AUG.2022 17:08:26

Middle Channel / 15MHz / 64QAM



Date: 13.AUG.2022 17:13:14

Middle Channel / 20MHz / 64QAM



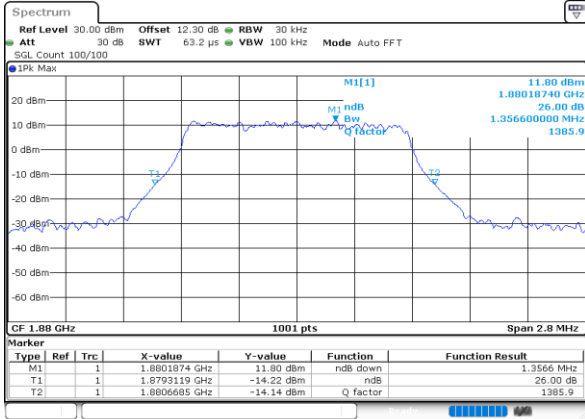
Date: 13.AUG.2022 17:44:47





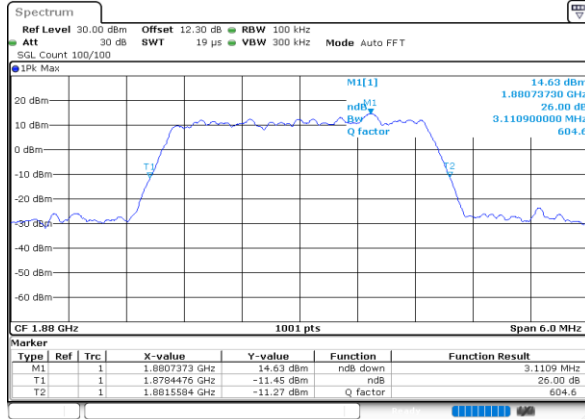
LTE Band 25

Middle Channel / 1.4MHz / 256QAM



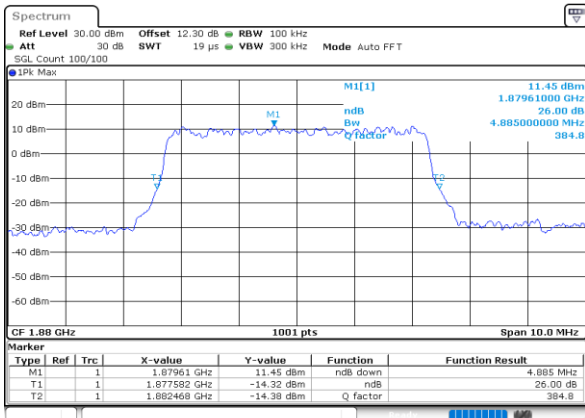
Date: 13\_AUG.2022 21:20:55

Middle Channel / 3MHz / 256QAM



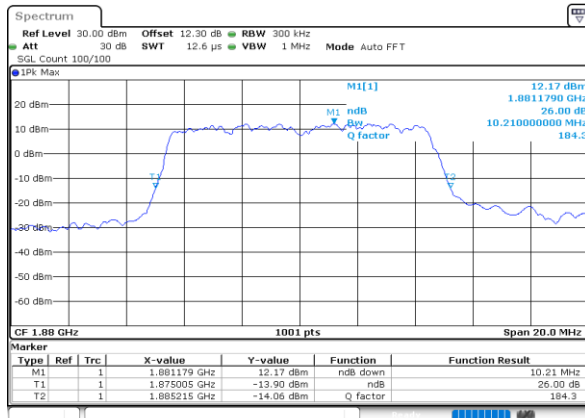
Date: 13\_AUG.2022 22:12:55

Middle Channel / 5MHz / 256QAM



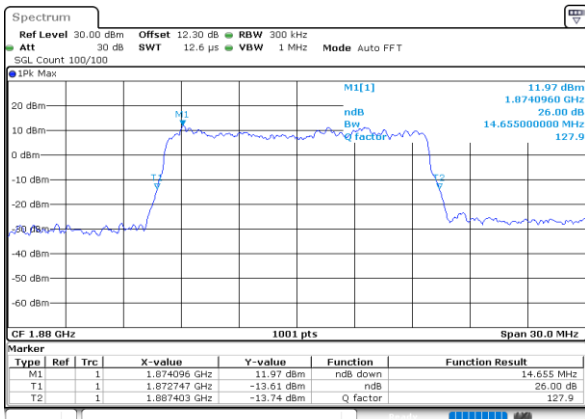
Date: 13\_AUG.2022 22:30:05

Middle Channel / 10MHz / 256QAM



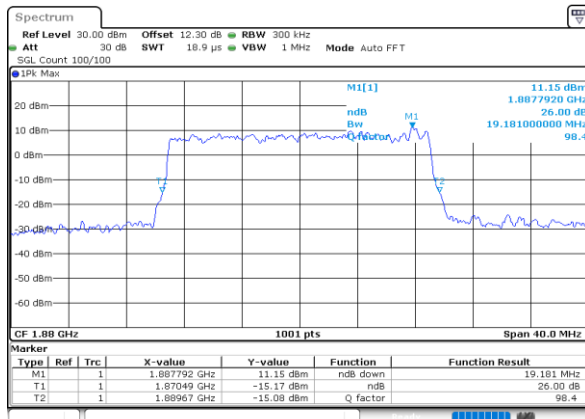
Date: 13\_AUG.2022 22:45:49

Middle Channel / 15MHz / 256QAM



Date: 13\_AUG.2022 21:59:45

Middle Channel / 20MHz / 256QAM



Date: 13\_AUG.2022 23:02:46



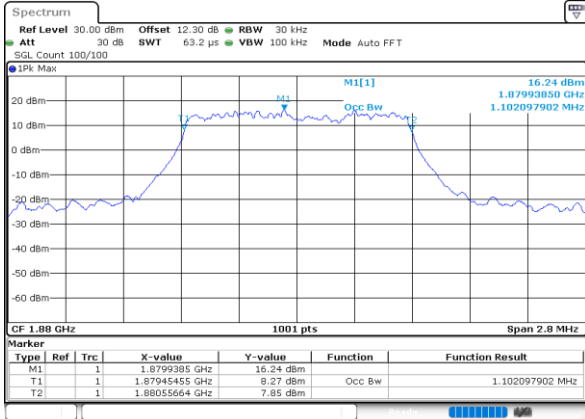
Occupied Bandwidth

Mode	LTE Band 25 : 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	1.10	1.10	2.72	2.71	4.52	4.51	9.01	9.01	13.43	13.46	17.94	17.94
Mode	LTE Band 25 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	1.10	1.09	2.72	2.72	4.51	4.48	8.99	9.03	13.46	13.46	17.90	17.94



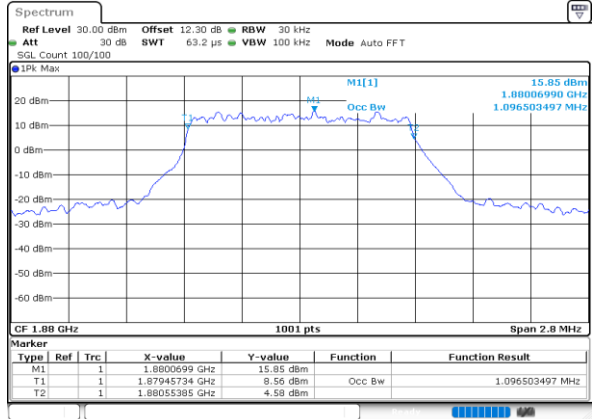
LTE Band 25

Middle Channel / 1.4MHz / QPSK



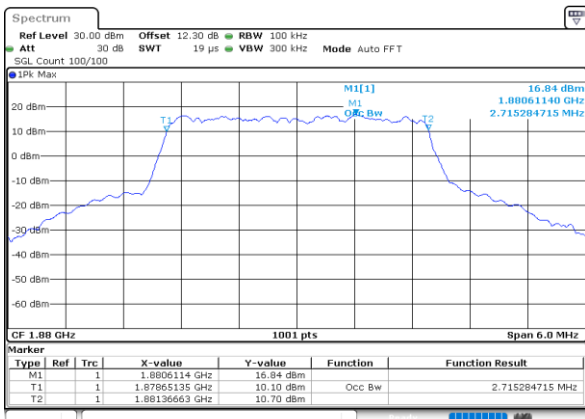
Date: 13.AUG.2022 16:03:23

Middle Channel / 1.4MHz / 16QAM



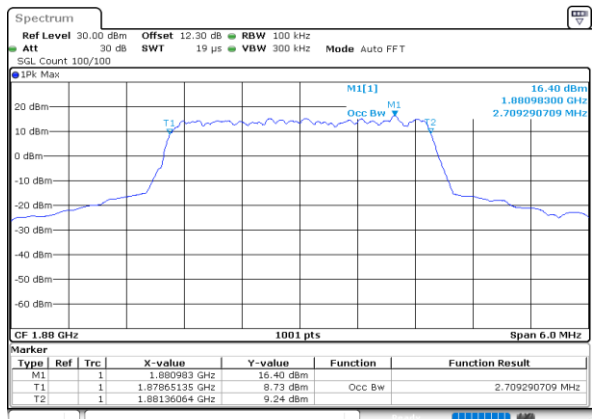
Date: 13.AUG.2022 16:03:53

Middle Channel / 3MHz / QPSK



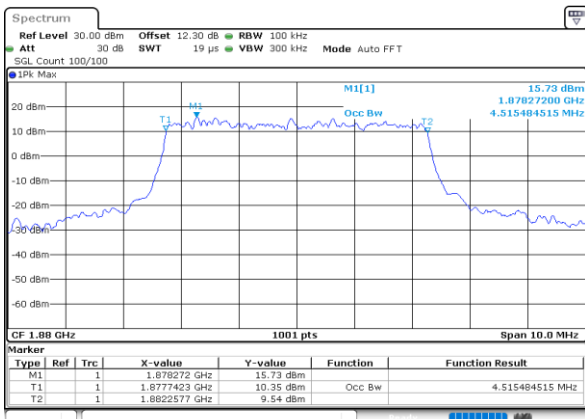
Date: 13.AUG.2022 16:26:19

Middle Channel / 3MHz / 16QAM



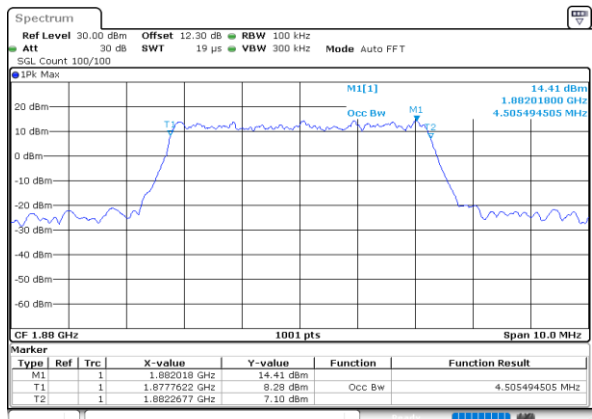
Date: 13.AUG.2022 16:26:48

Middle Channel / 5MHz / QPSK



Date: 13.AUG.2022 16:39:46

Middle Channel / 5MHz / 16QAM



Date: 13.AUG.2022 16:40:15