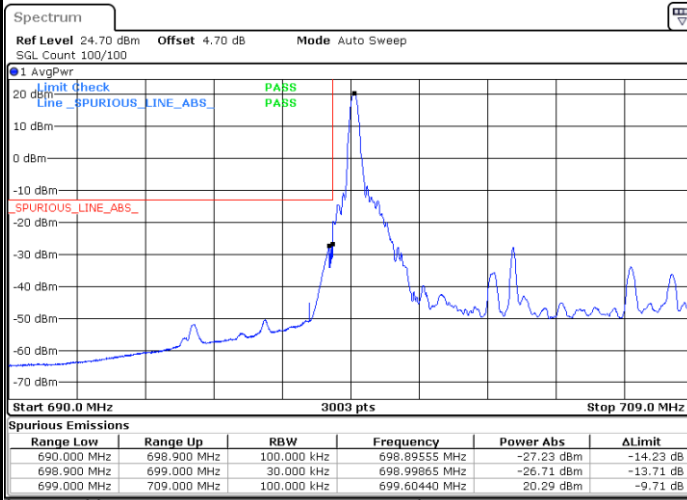




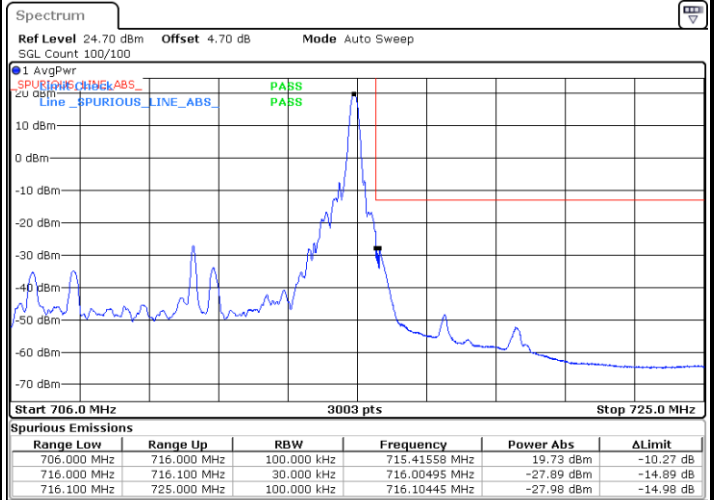
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



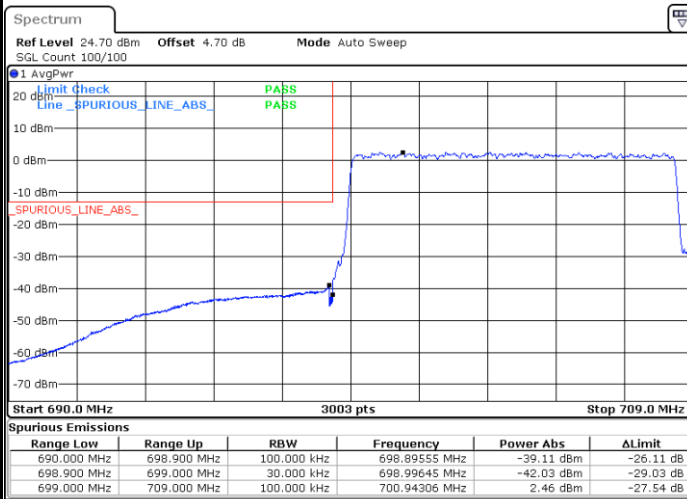
Date: 17.MAY.2023 02:12:02

Highest Band Edge / 1 RB



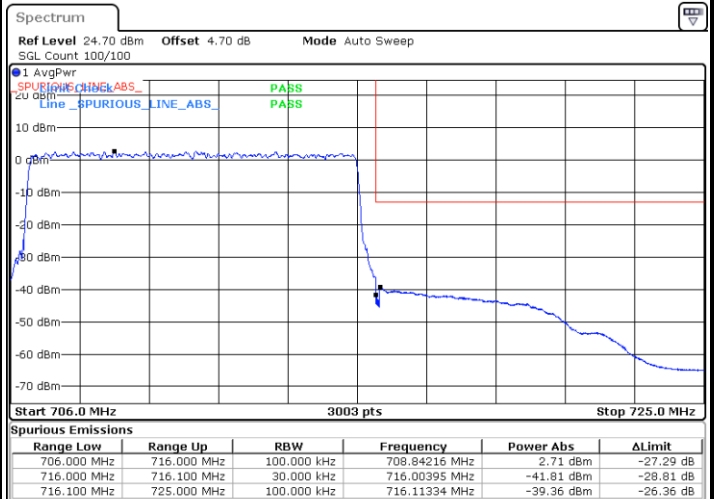
Date: 17.MAY.2023 02:29:05

Lowest Band Edge / Full RB



Date: 17.MAY.2023 02:22:23

Highest Band Edge / Full RB

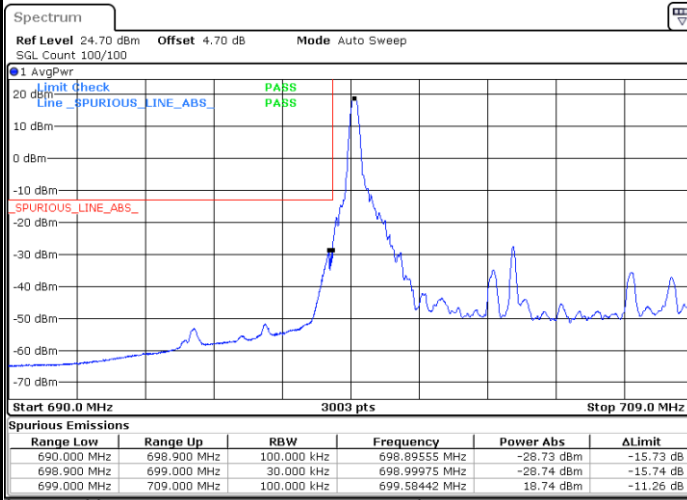


Date: 17.MAY.2023 02:39:32



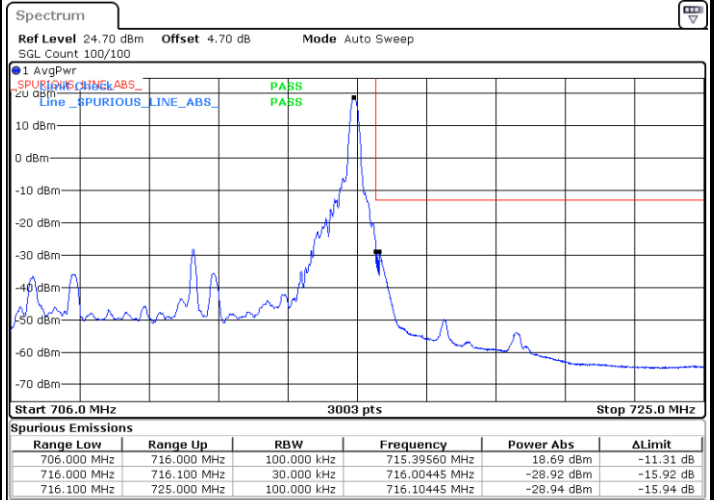
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



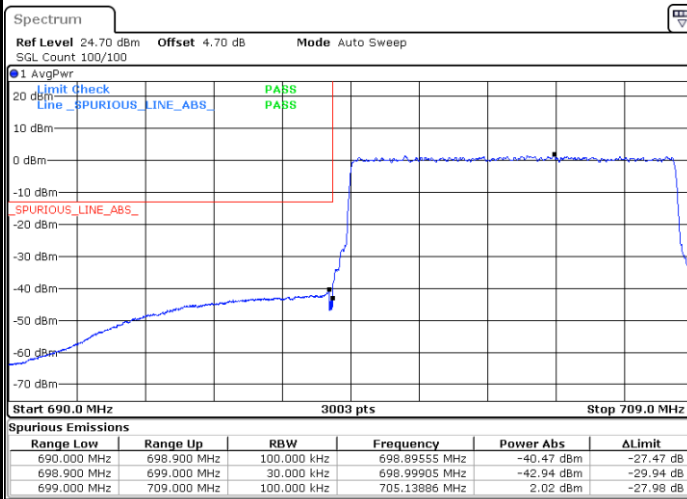
Date: 17.MAY.2023 02:13:22

Highest Band Edge / 1 RB



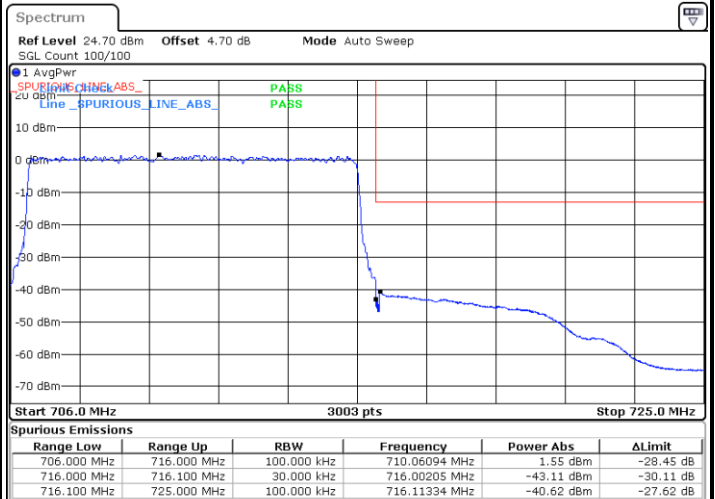
Date: 17.MAY.2023 02:30:25

Lowest Band Edge / Full RB



Date: 17.MAY.2023 02:21:03

Highest Band Edge / Full RB

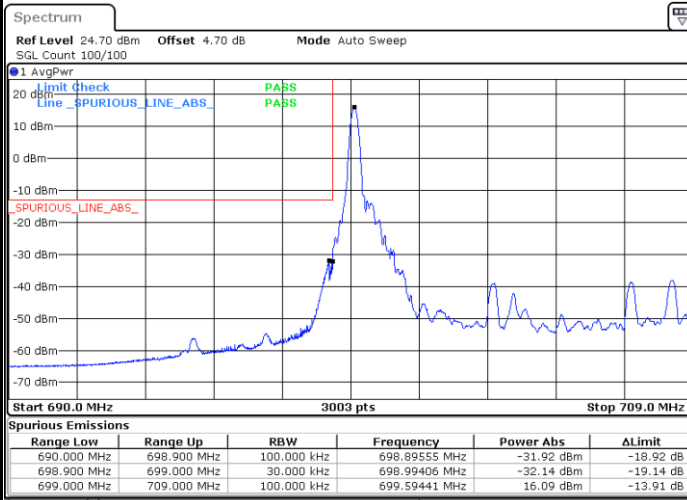


Date: 17.MAY.2023 02:38:12



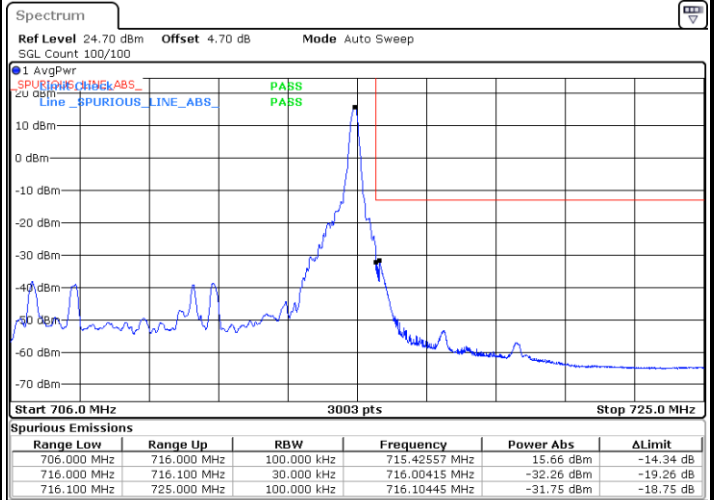
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



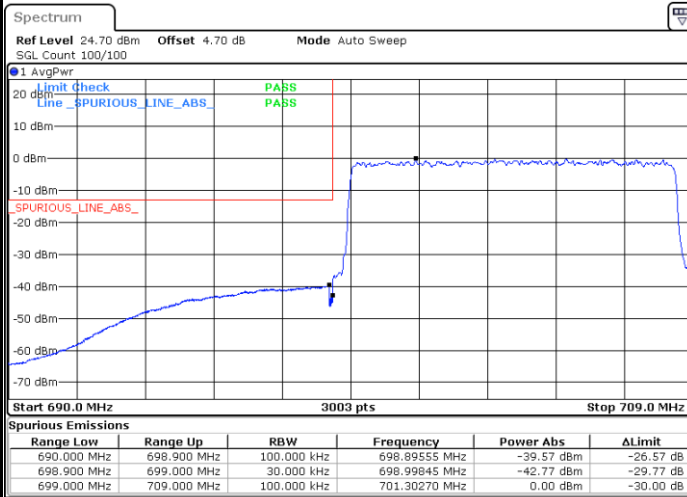
Date: 17.MAY.2023 02:14:42

Highest Band Edge / 1 RB



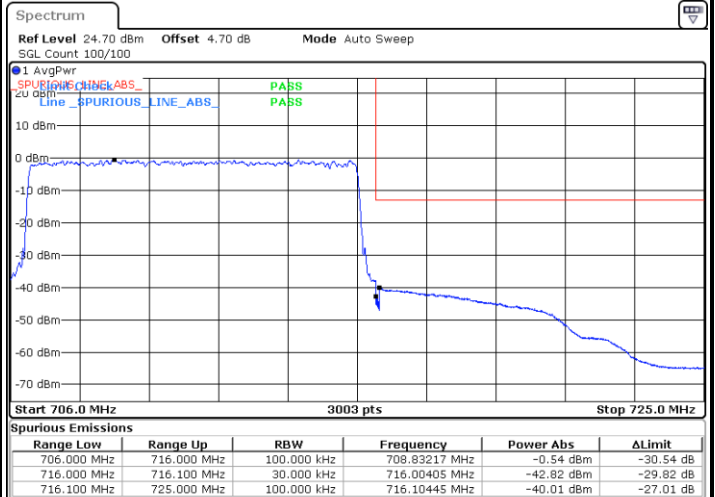
Date: 17.MAY.2023 02:31:45

Lowest Band Edge / Full RB



Date: 17.MAY.2023 02:19:44

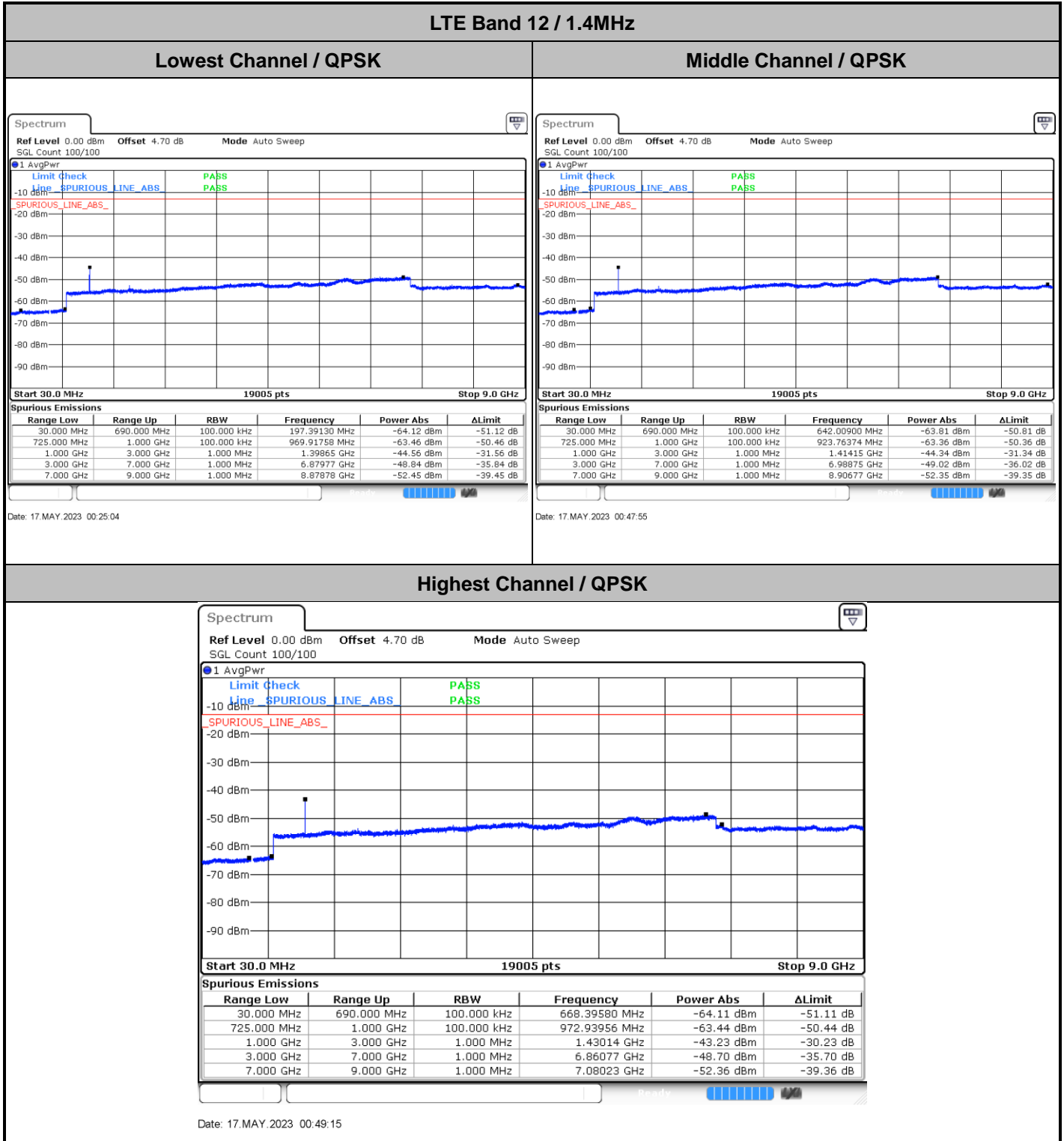
Highest Band Edge / Full RB



Date: 17.MAY.2023 02:36:48



### A3.5 Conducted Spurious Emission

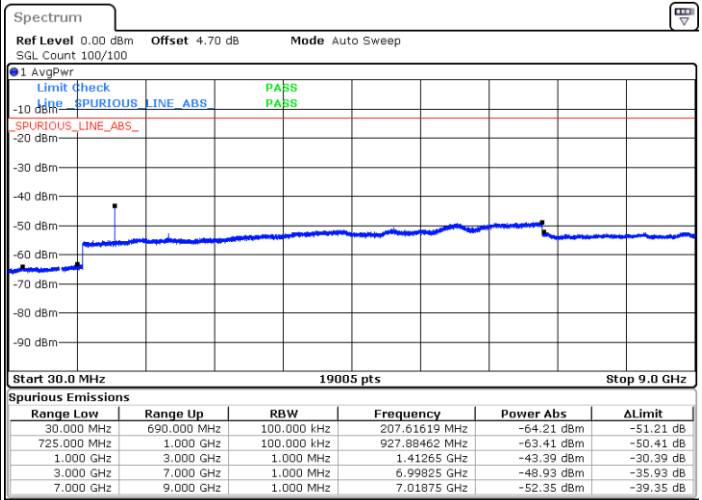
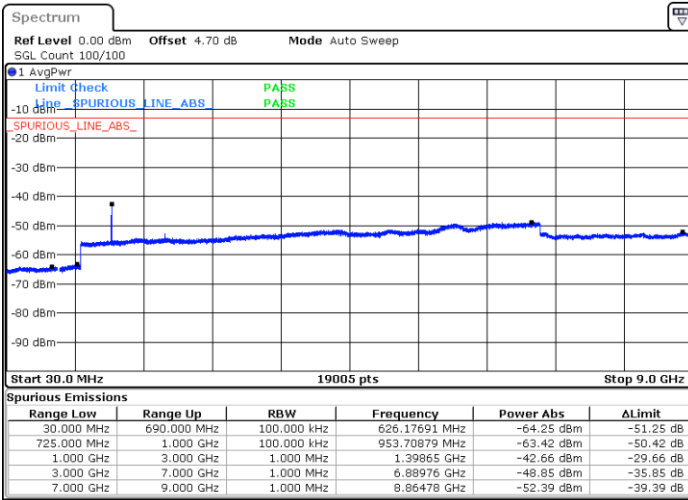




LTE Band 12 / 3MHz

Lowest Channel / QPSK

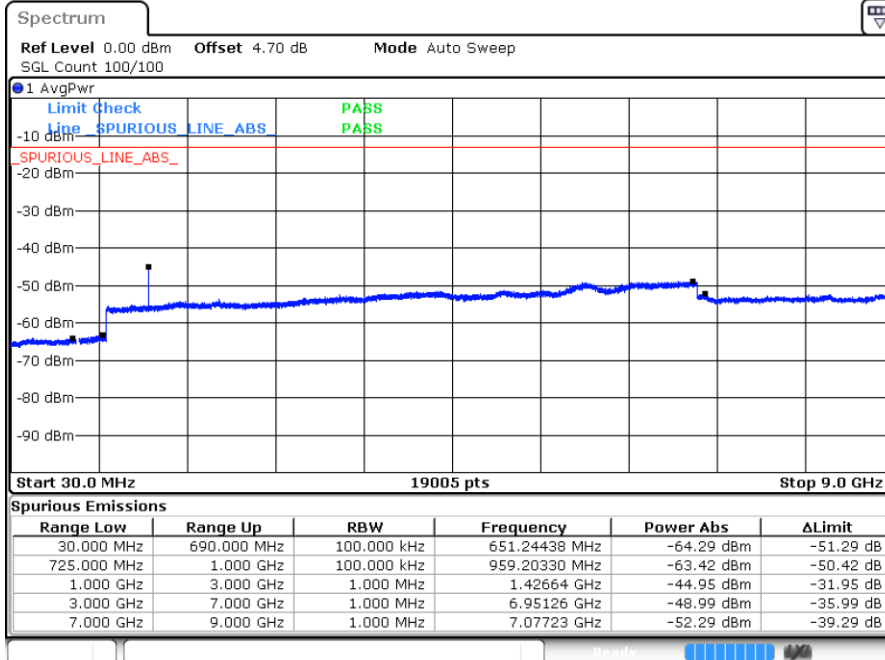
Middle Channel / QPSK



Date: 17.MAY.2023 01:06:13

Date: 17.MAY.2023 01:23:11

Highest Channel / QPSK



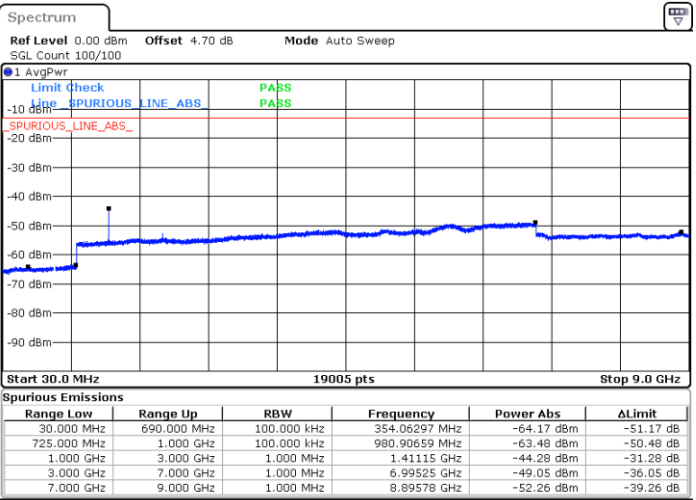
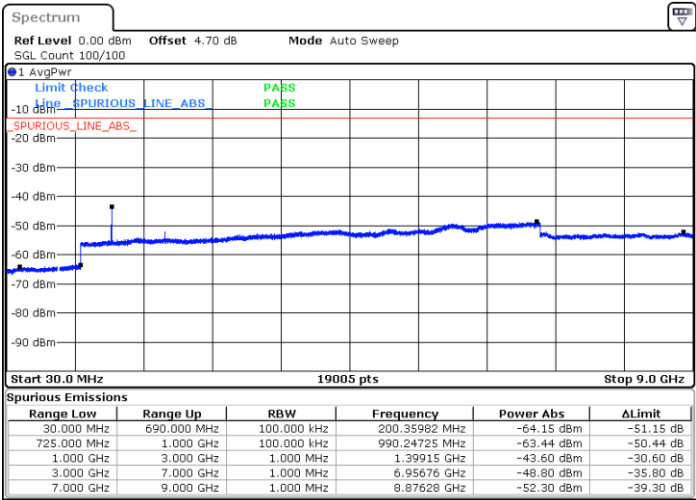
Date: 17.MAY.2023 01:24:32



LTE Band 12 / 5MHz

Lowest Channel / QPSK

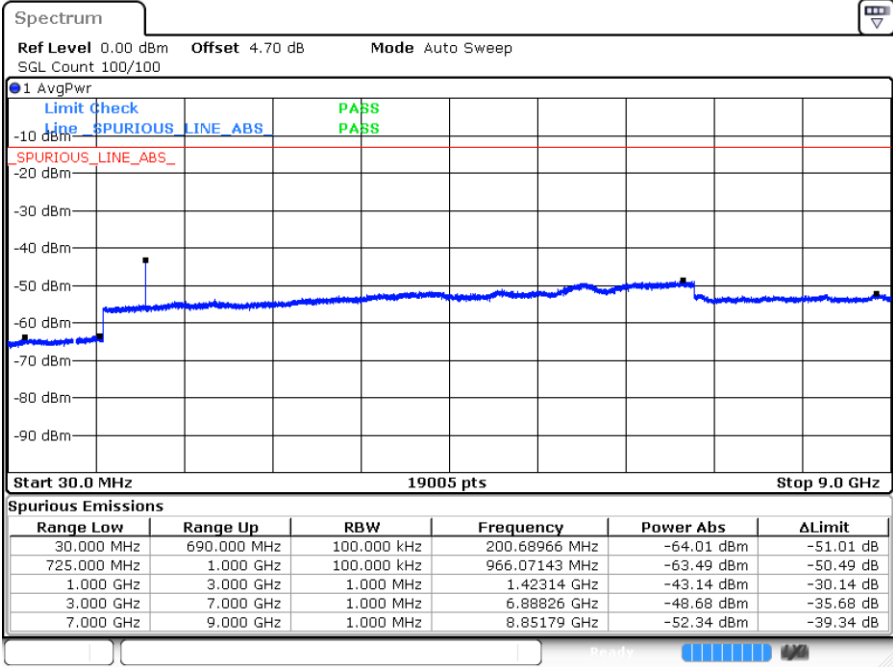
Middle Channel / QPSK



Date: 17.MAY.2023 01:37:49

Date: 17.MAY.2023 01:51:05

Highest Channel / QPSK



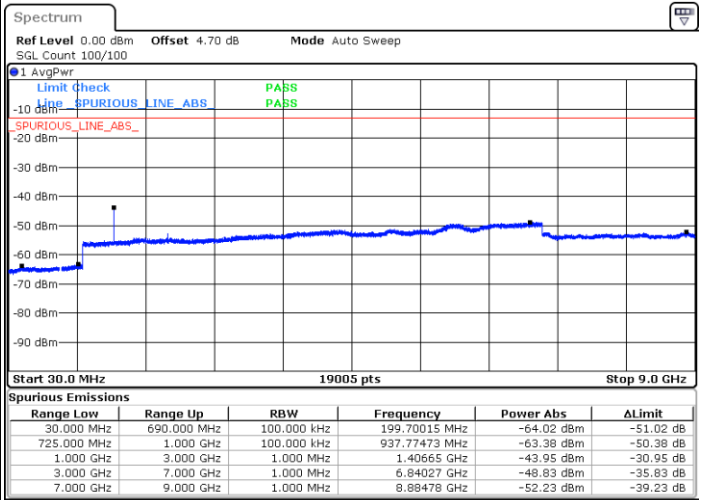
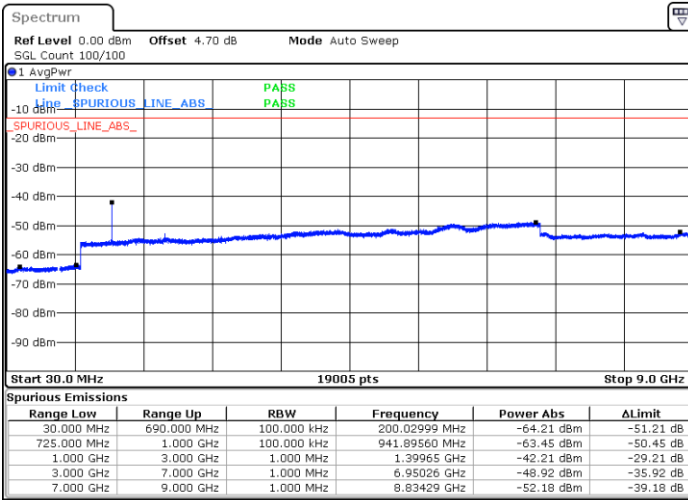
Date: 17.MAY.2023 01:52:25



LTE Band 12 / 10MHz

Lowest Channel / QPSK

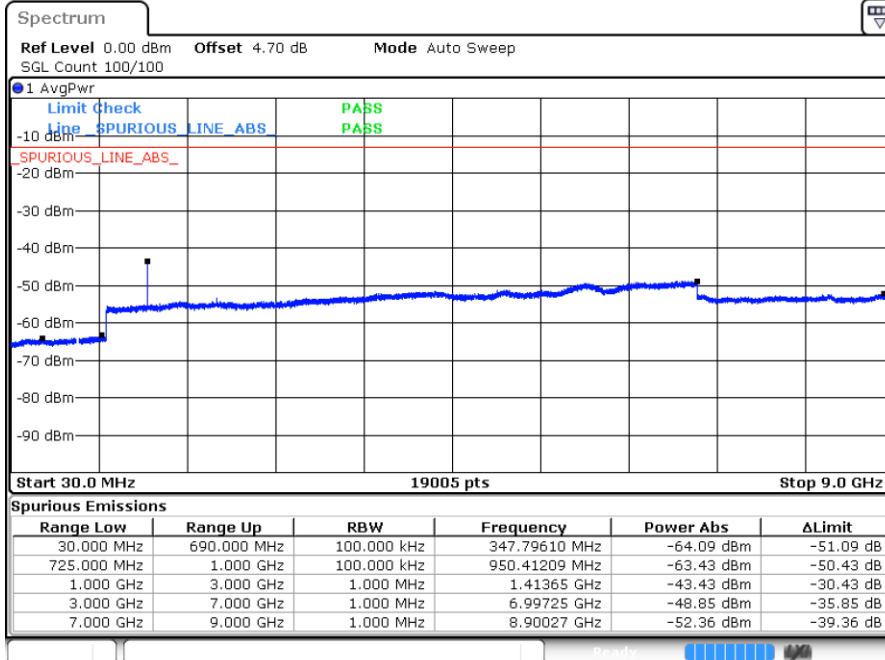
Middle Channel / QPSK



Date: 17.MAY.2023 02:09:22

Date: 17.MAY.2023 02:25:04

Highest Channel / QPSK



Date: 17.MAY.2023 02:26:24



A3.6 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	0.0023	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0024	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0006	
20	Minimum Voltage	0.0012	

Note:

1. Normal Voltage =54 V. ; Minimum Voltage =48 V. ; Maximum Voltage =57 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

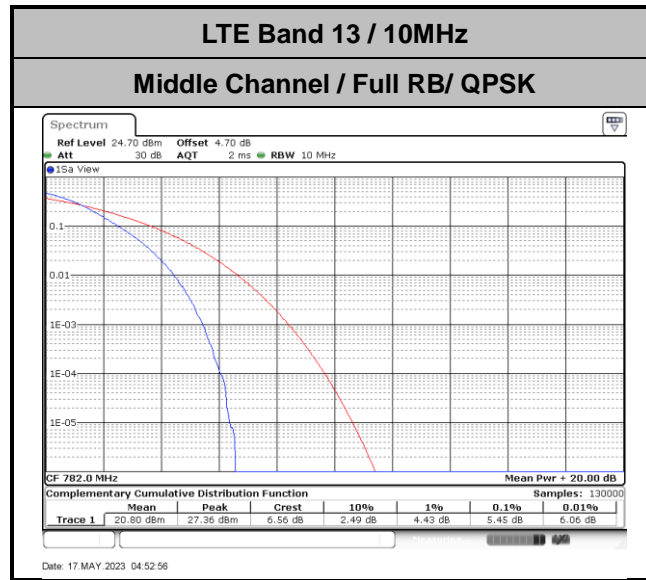


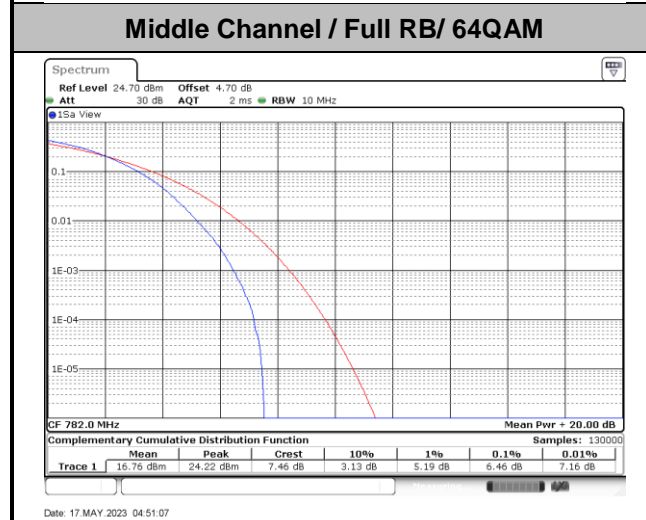
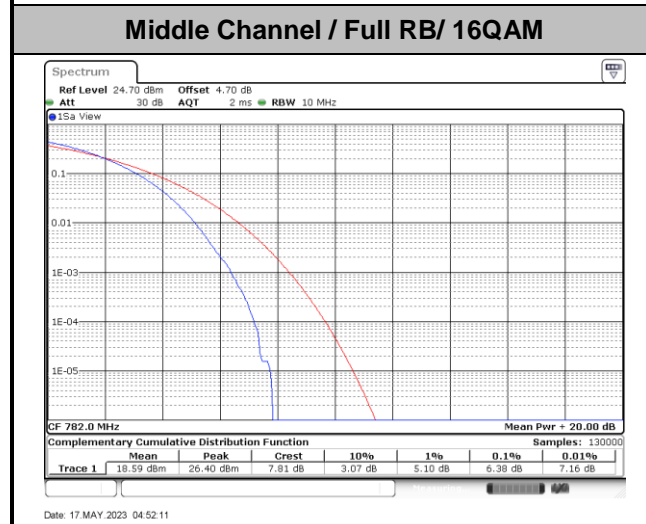
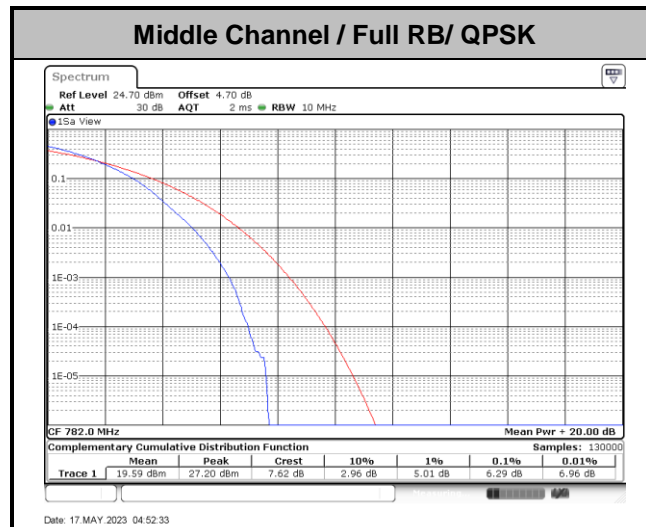


### A4. LTE Band 13

#### A4.1 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	5.45	6.29	6.38	6.46	PASS

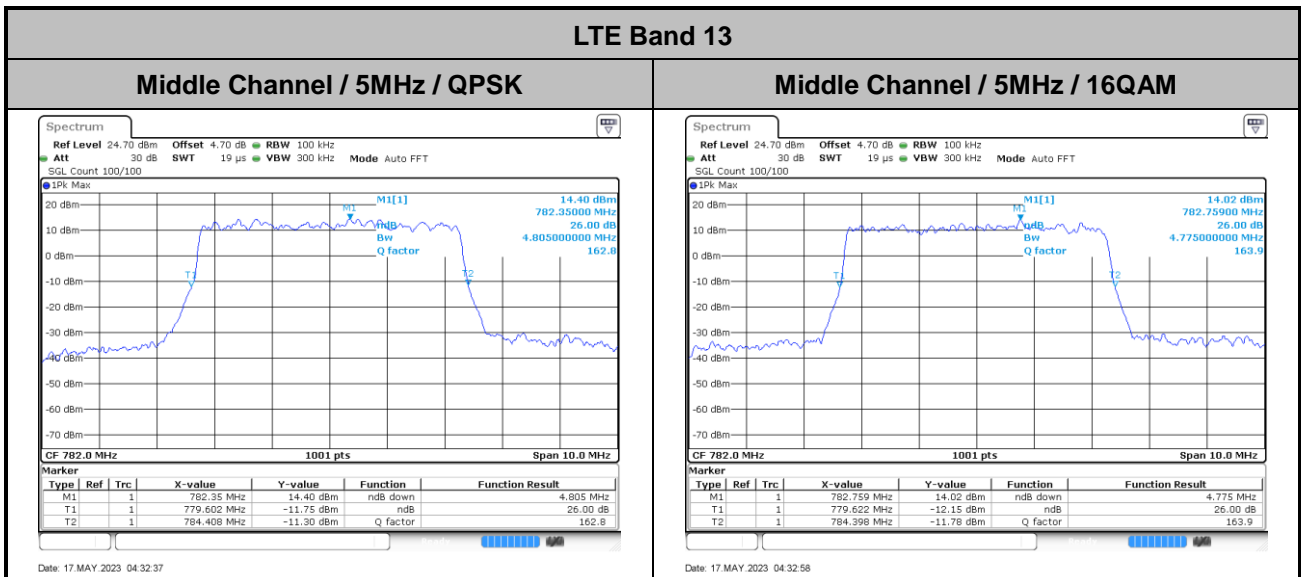






A4.2 26dB Bandwidth

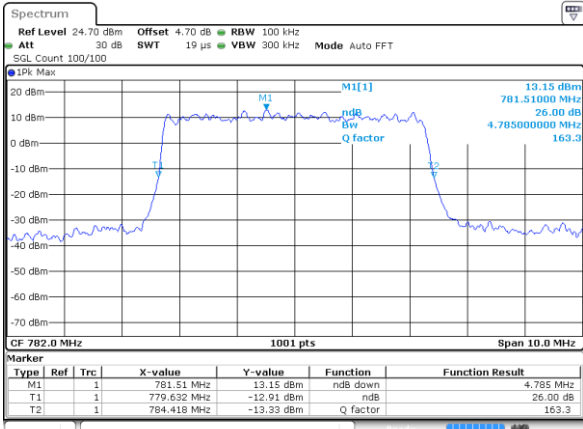
Mode	LTE Band 13 : 26dB BW(MHz)	
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	4.81	4.78
<b>Mod.</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	4.79	4.87
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.83	9.75
<b>Mod.</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	9.73	9.69





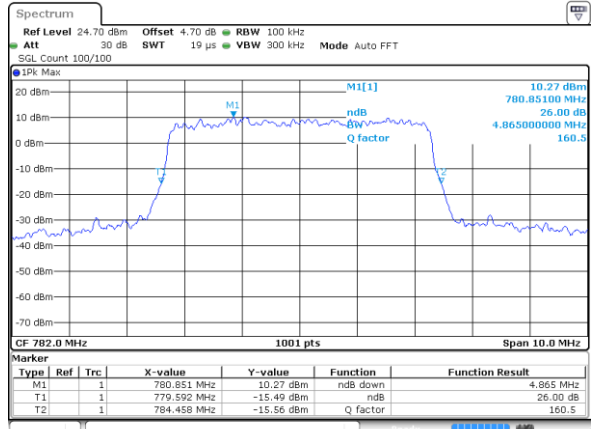
LTE Band 13

Middle Channel / 5MHz / 64QAM



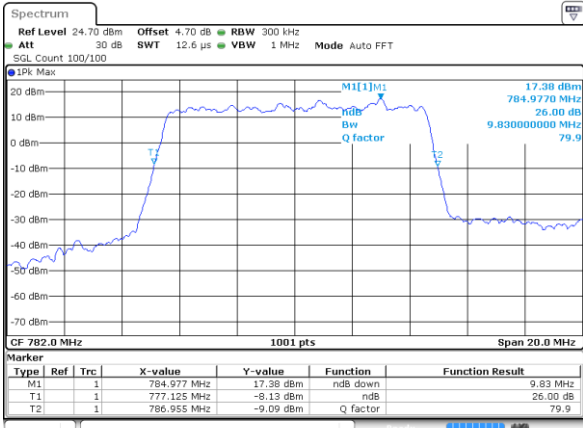
Date: 17 MAY 2023 04:33:19

Middle Channel / 5MHz / 256QAM



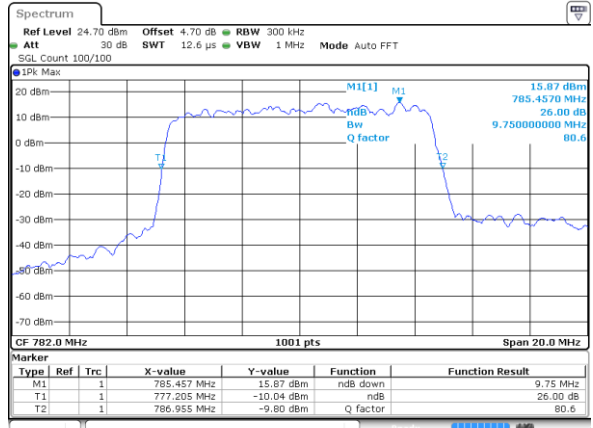
Date: 17 MAY 2023 04:33:40

Middle Channel / 10MHz / QPSK



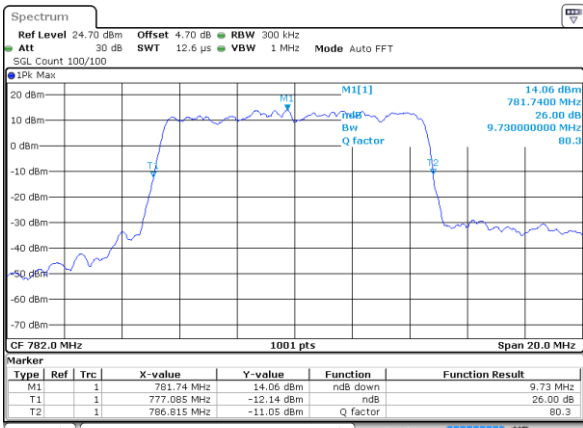
Date: 17 MAY 2023 04:48:24

Middle Channel / 10MHz / 16QAM



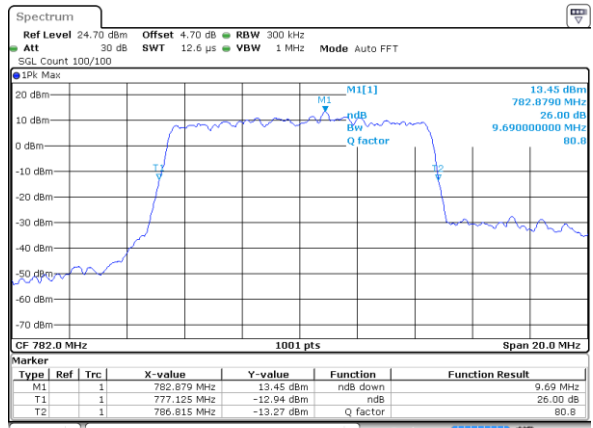
Date: 17 MAY 2023 04:48:45

Middle Channel / 10MHz / 64QAM



Date: 17 MAY 2023 04:49:06

Middle Channel / 10MHz / 256QAM

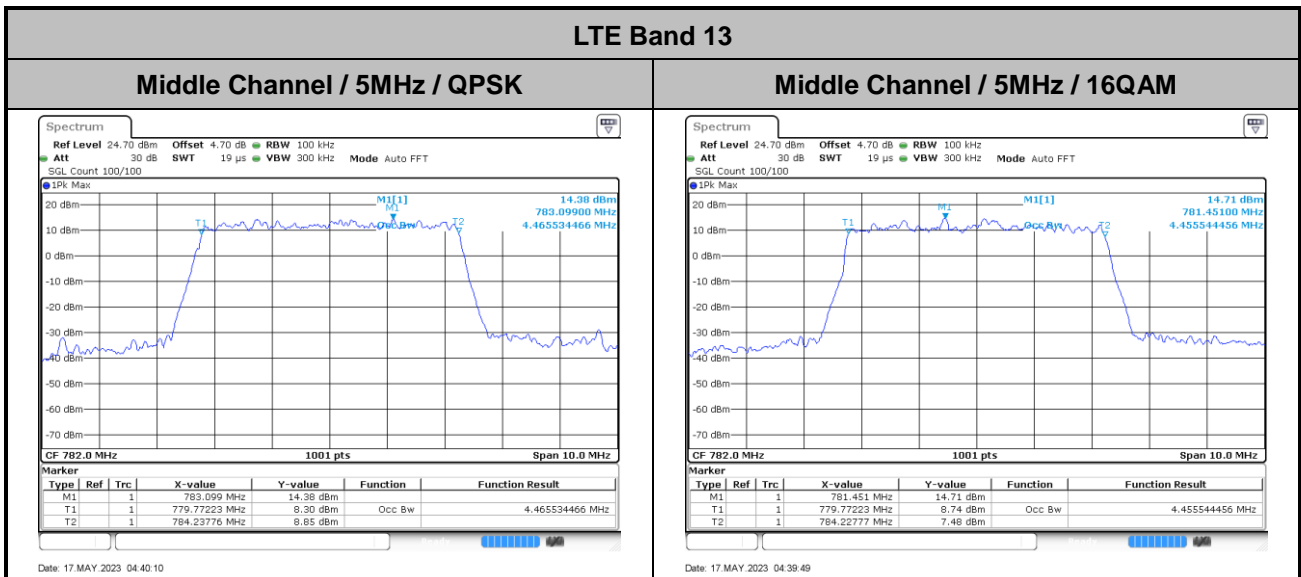


Date: 17 MAY 2023 04:49:26



### A4.3 Occupied Bandwidth

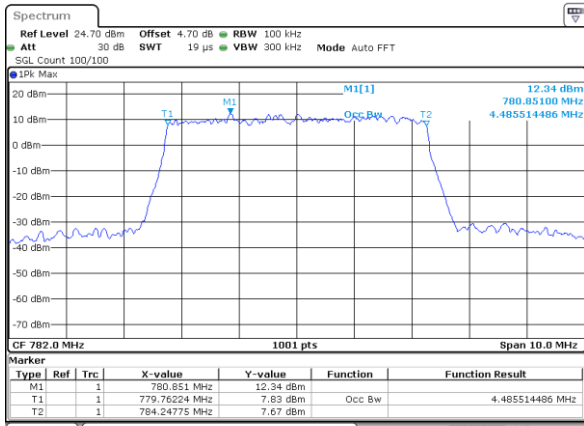
Mode	LTE Band 13 : 99%OBW(MHz)	
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	4.47	4.46
<b>Mod.</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	4.49	4.48
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	8.95	8.97
<b>Mod.</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	8.99	8.99





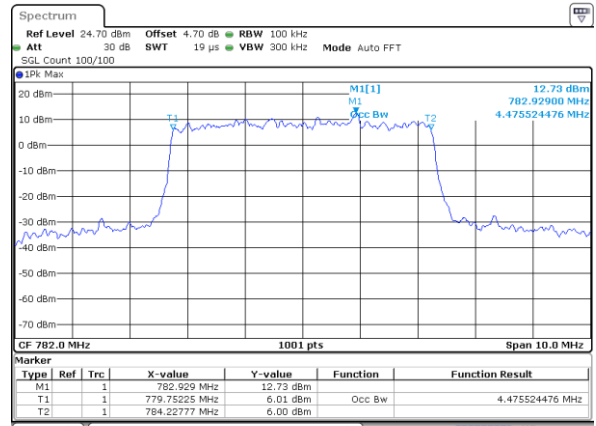
LTE Band 13

Middle Channel / 5MHz / 64QAM



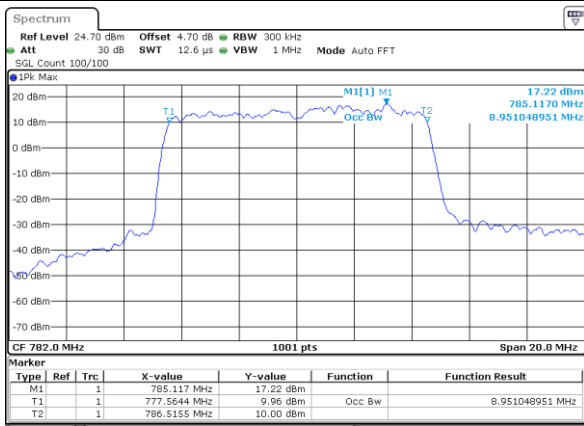
Date: 17 MAY 2023 04:38:37

Middle Channel / 5MHz / 256QAM



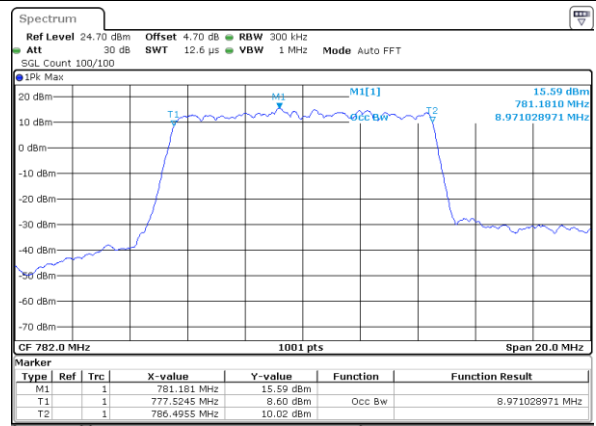
Date: 17 MAY 2023 04:38:03

Middle Channel / 10MHz / QPSK



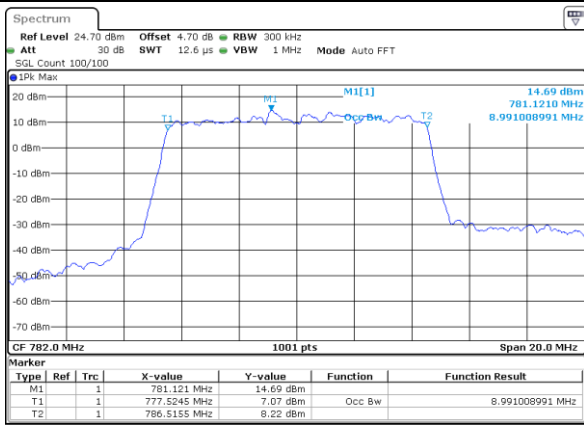
Date: 17 MAY 2023 04:45:52

Middle Channel / 10MHz / 16QAM



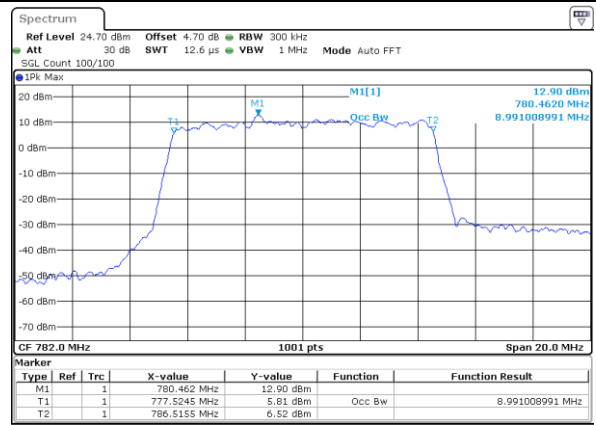
Date: 17 MAY 2023 04:46:13

Middle Channel / 10MHz / 64QAM



Date: 17 MAY 2023 04:46:34

Middle Channel / 10MHz / 256QAM



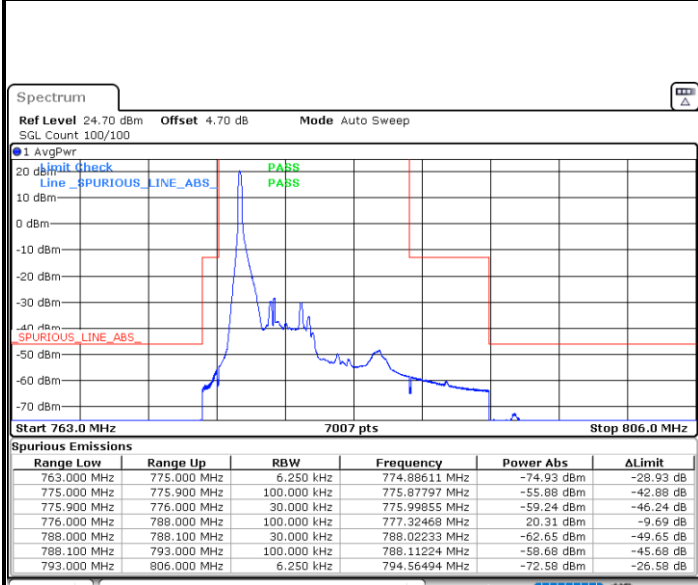
Date: 17 MAY 2023 04:46:55



A4.4 Conducted Band Edge

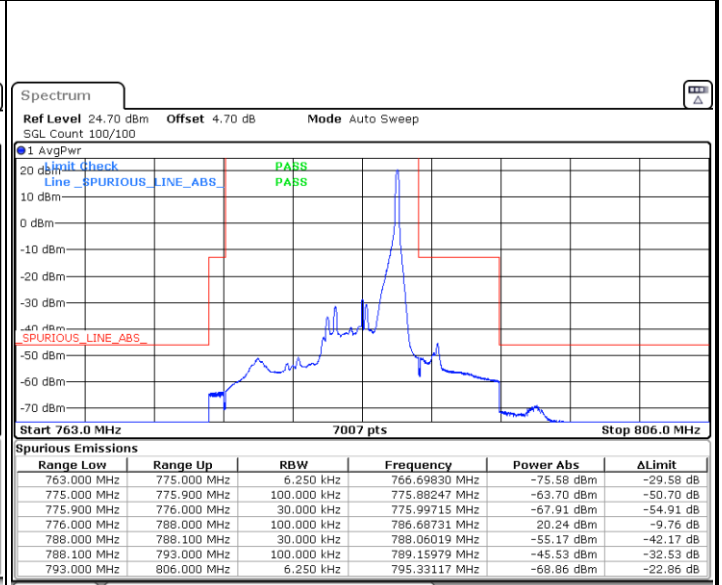
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



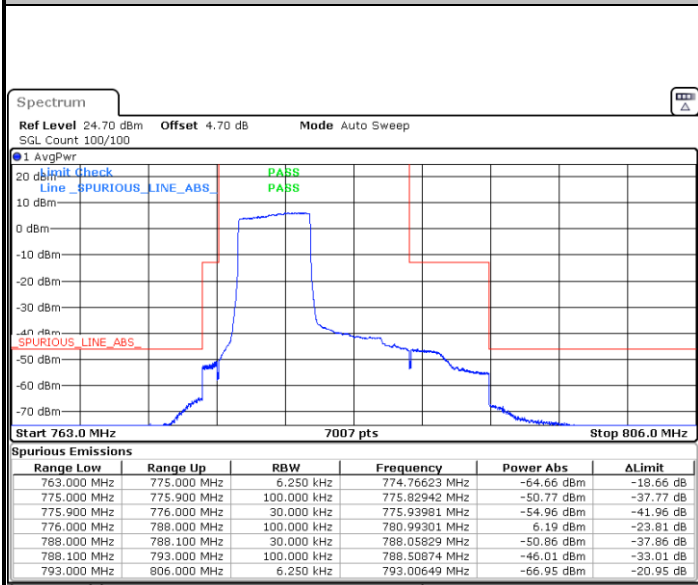
Date: 21 JUN.2023 22:51:12

Highest Band Edge / 1 RB



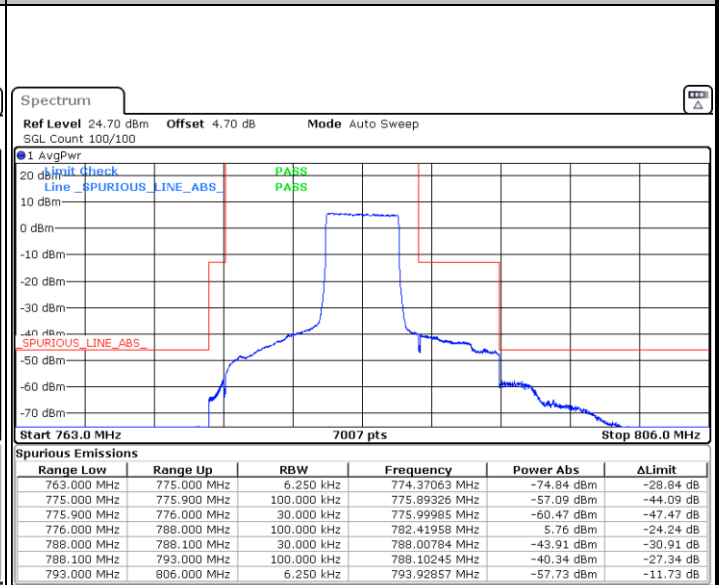
Date: 21 JUN.2023 22:52:51

Lowest Band Edge / Full RB



Date: 21 JUN.2023 23:06:15

Highest Band Edge / Full RB



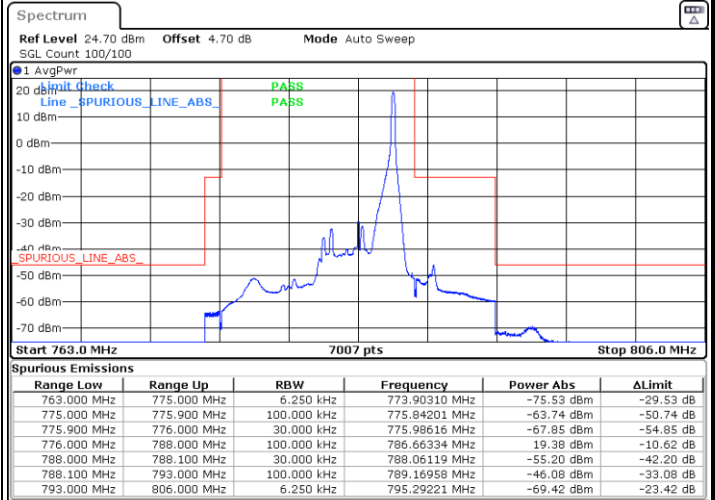
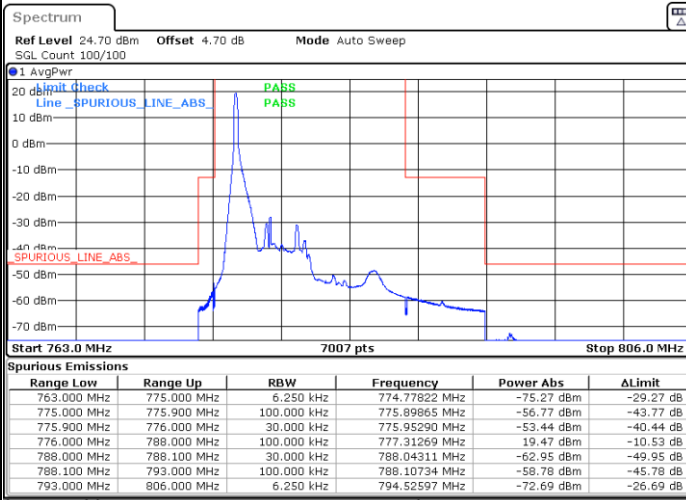
Date: 21 JUN.2023 23:19:06



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

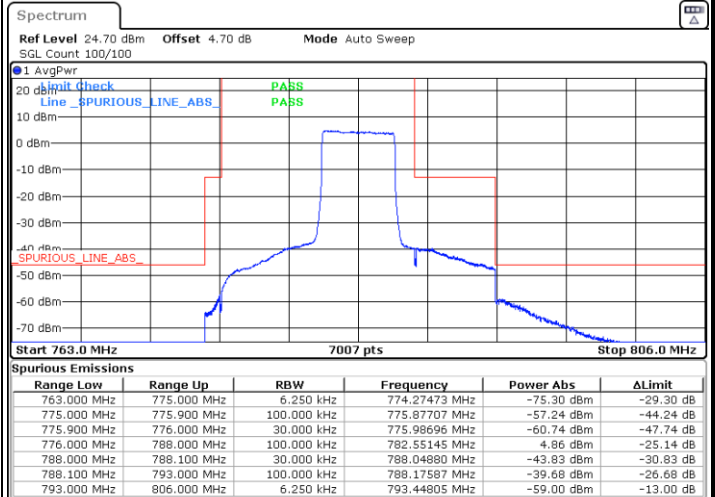
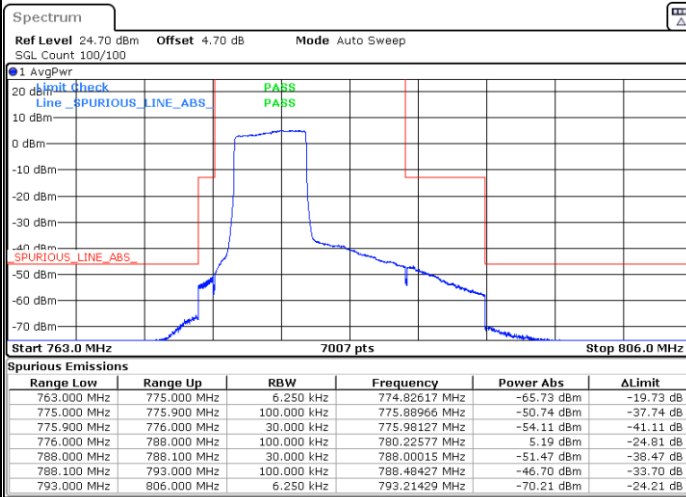


Date: 21 JUN 2023 22:58:59

Date: 21 JUN 2023 23:13:36

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21 JUN 2023 23:08:05

Date: 21 JUN 2023 23:20:56

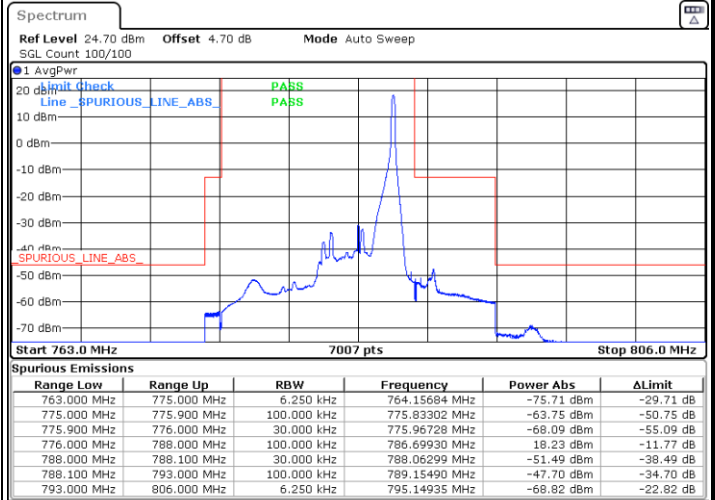
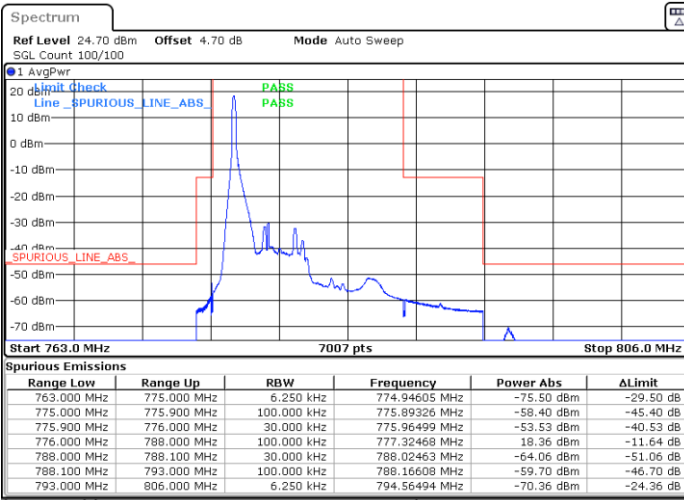




LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

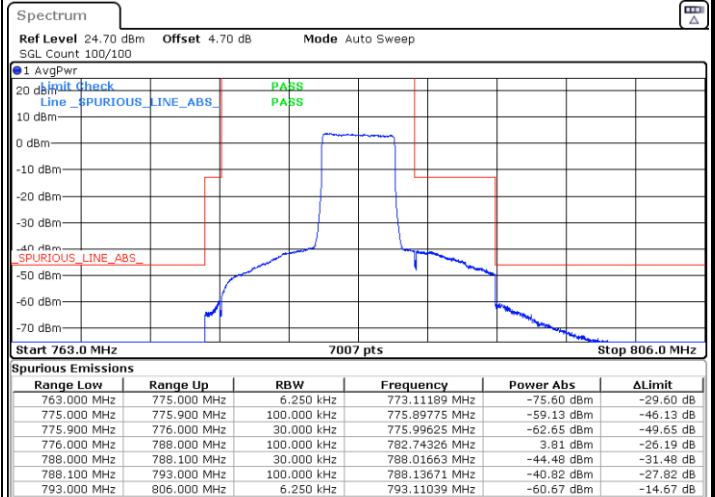
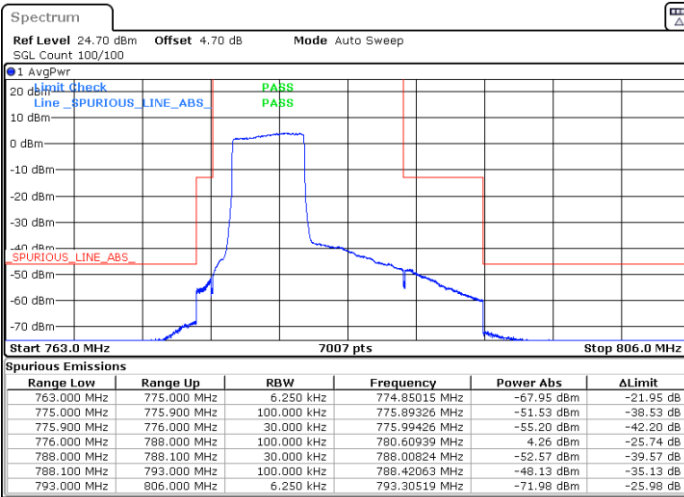


Date: 21.JUN.2023 23:00:50

Date: 21.JUN.2023 23:15:26

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.JUN.2023 23:09:55

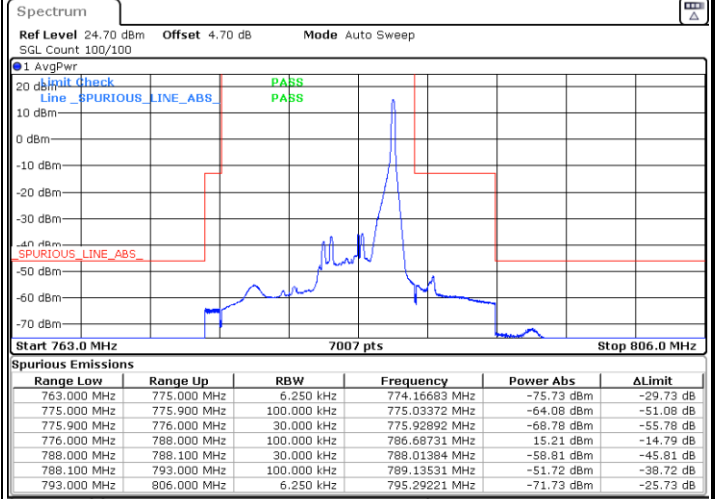
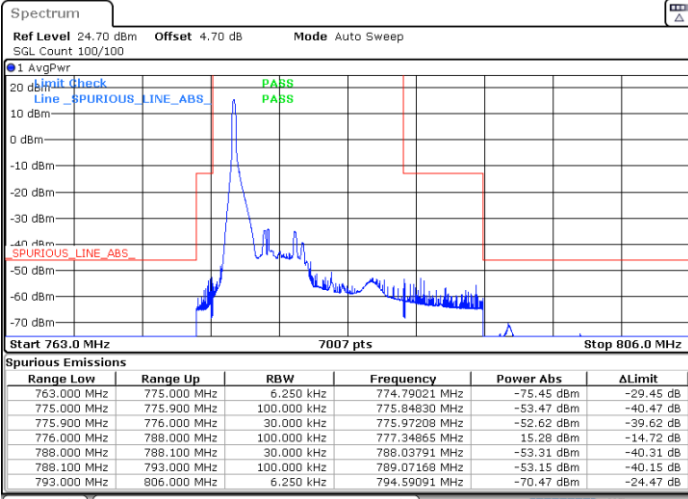
Date: 21.JUN.2023 23:22:46



LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

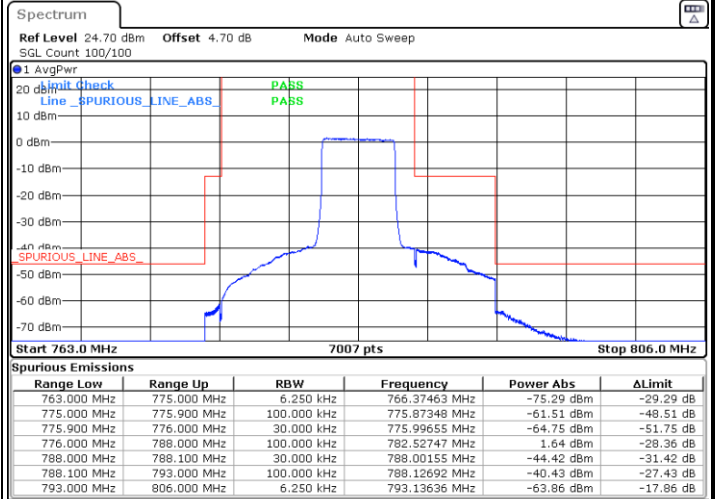
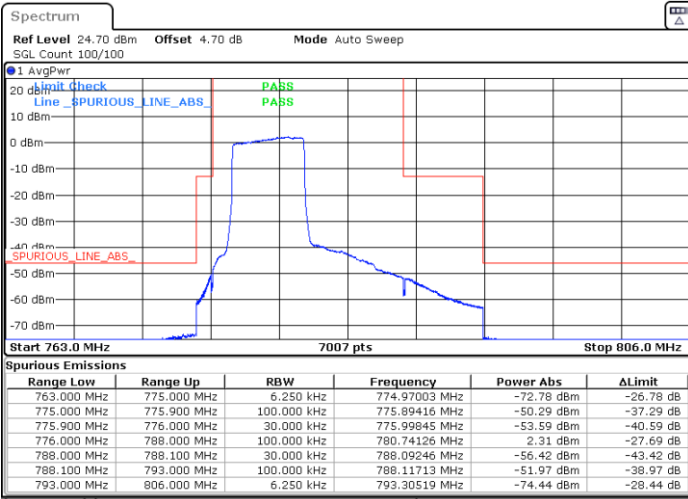


Date: 21.JUN.2023 23:04:24

Date: 21.JUN.2023 23:17:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



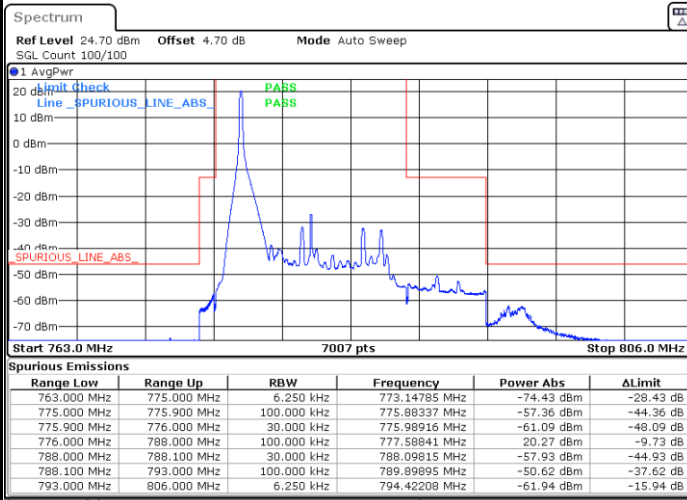
Date: 21.JUN.2023 23:11:45

Date: 21.JUN.2023 23:24:36



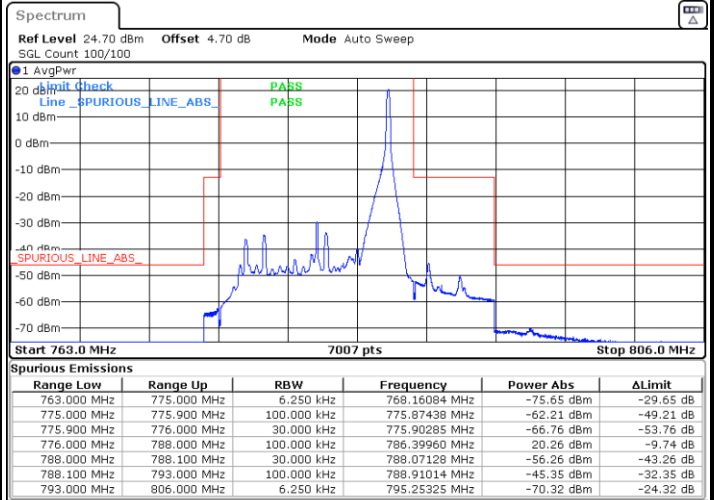
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



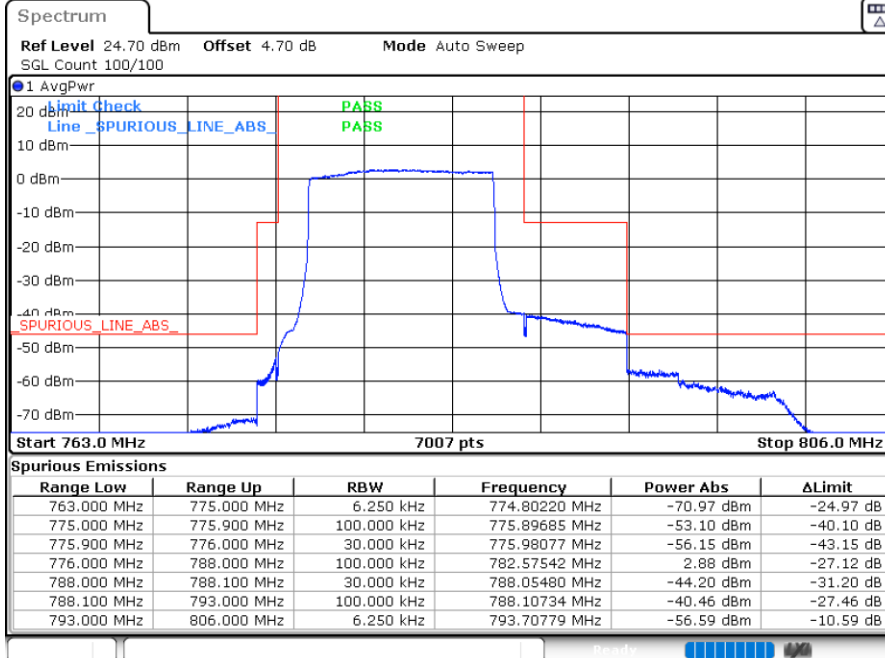
Date: 21.JUN.2023 22:54:53

middle Band Edge / 1 RB



Date: 21.JUN.2023 23:41:48

Middle Band Edge / Full RB

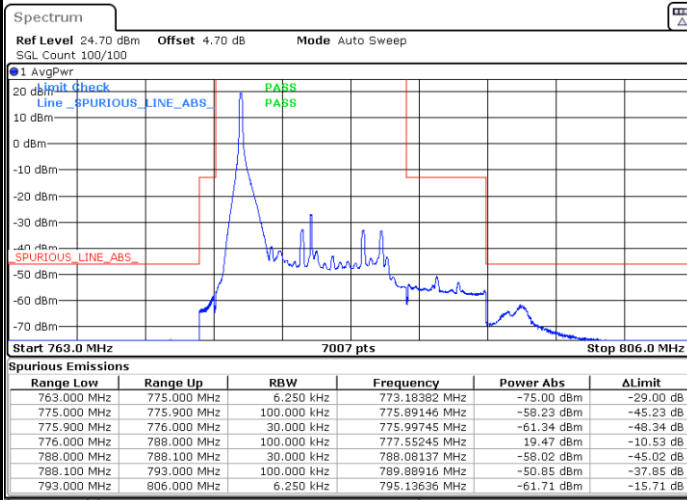


Date: 21.JUN.2023 23:34:30



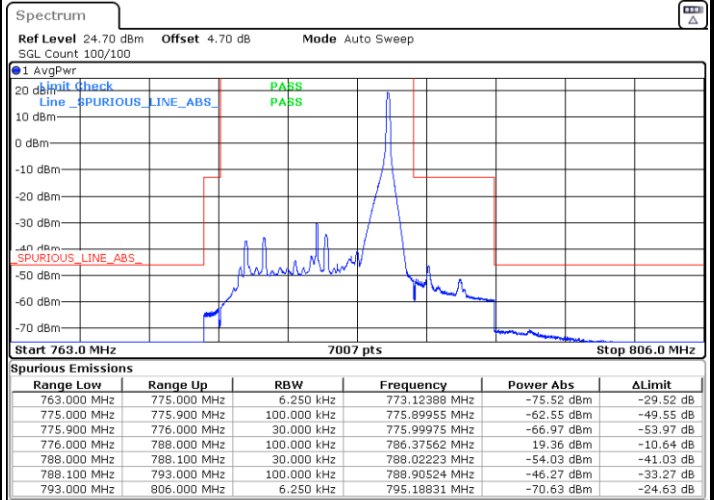
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



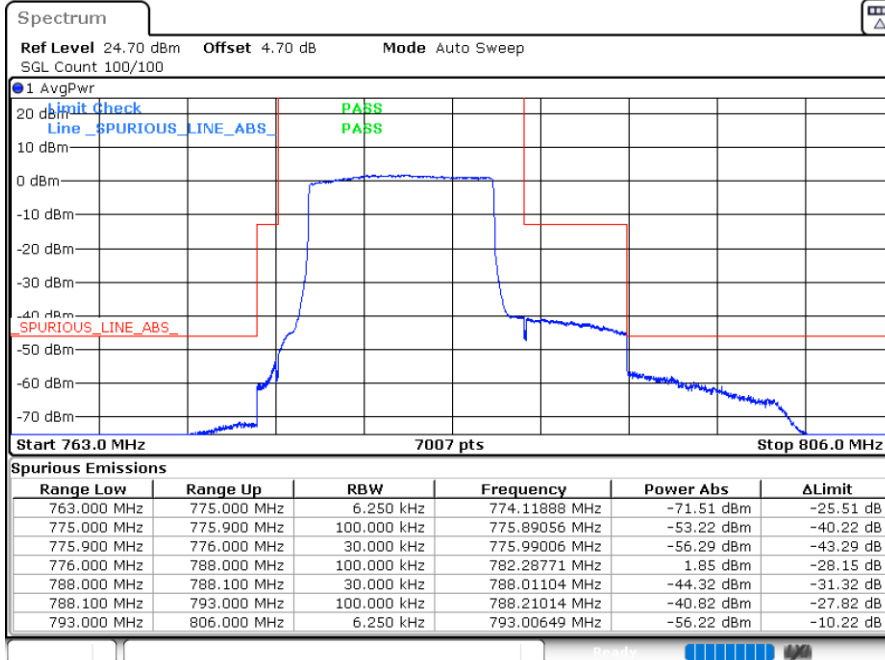
Date: 21.JUN.2023 23:27:18

middle Band Edge / 1 RB



Date: 21.JUN.2023 23:43:38

middle Band Edge / Full RB

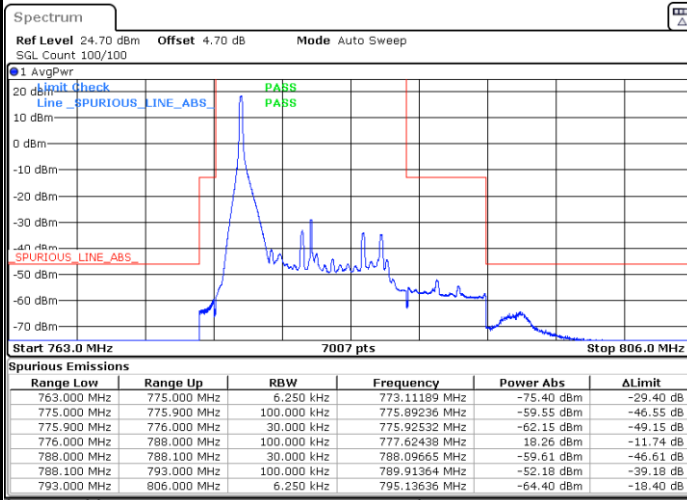


Date: 21.JUN.2023 23:36:20



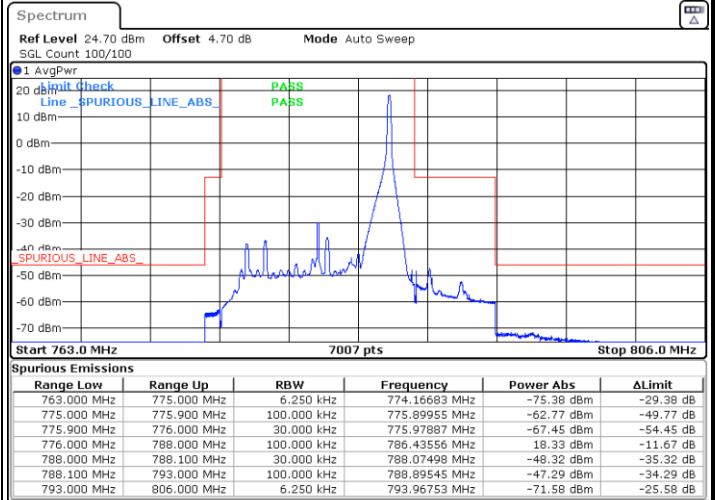
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



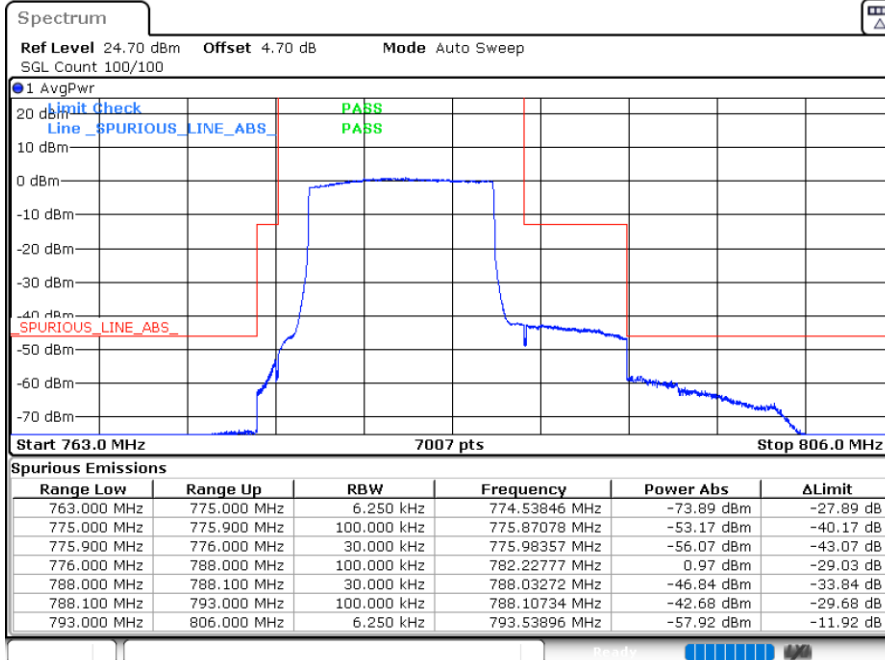
Date: 21 JUN.2023 23:29:07

middle Band Edge / 1 RB



Date: 21 JUN.2023 23:45:27

middle Band Edge / Full RB



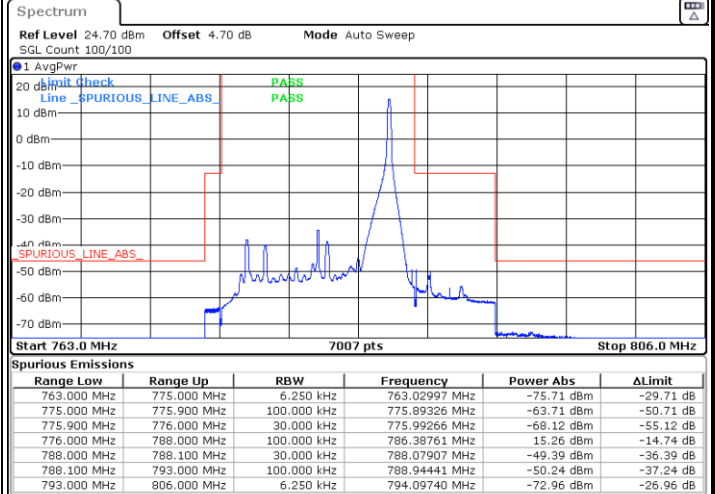
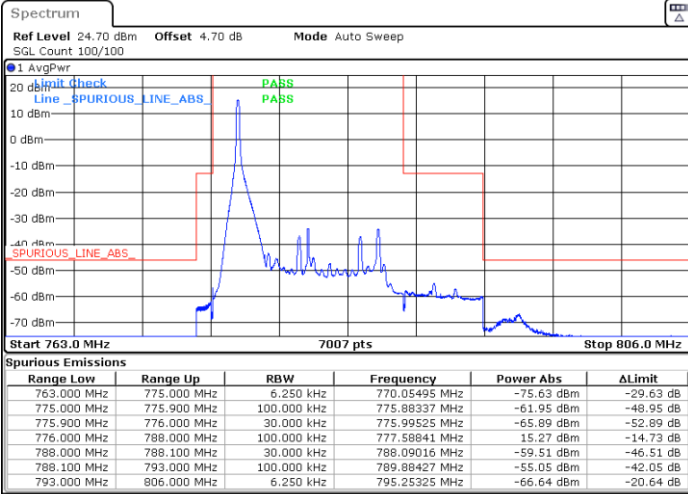
Date: 21 JUN.2023 23:38:09



LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB

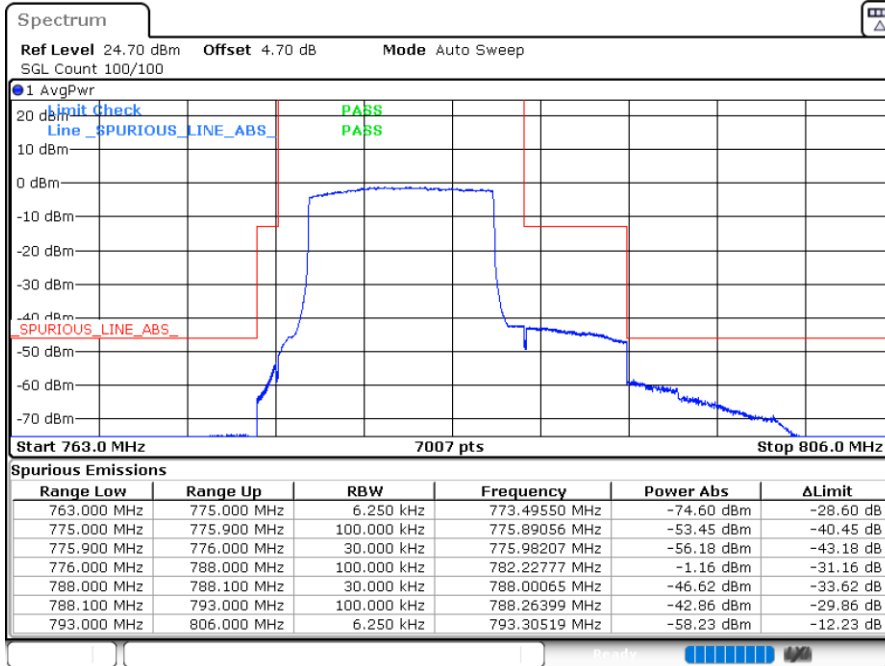
middle Band Edge / 1 RB



Date: 21.JUN.2023 23:32:41

Date: 21.JUN.2023 23:47:17

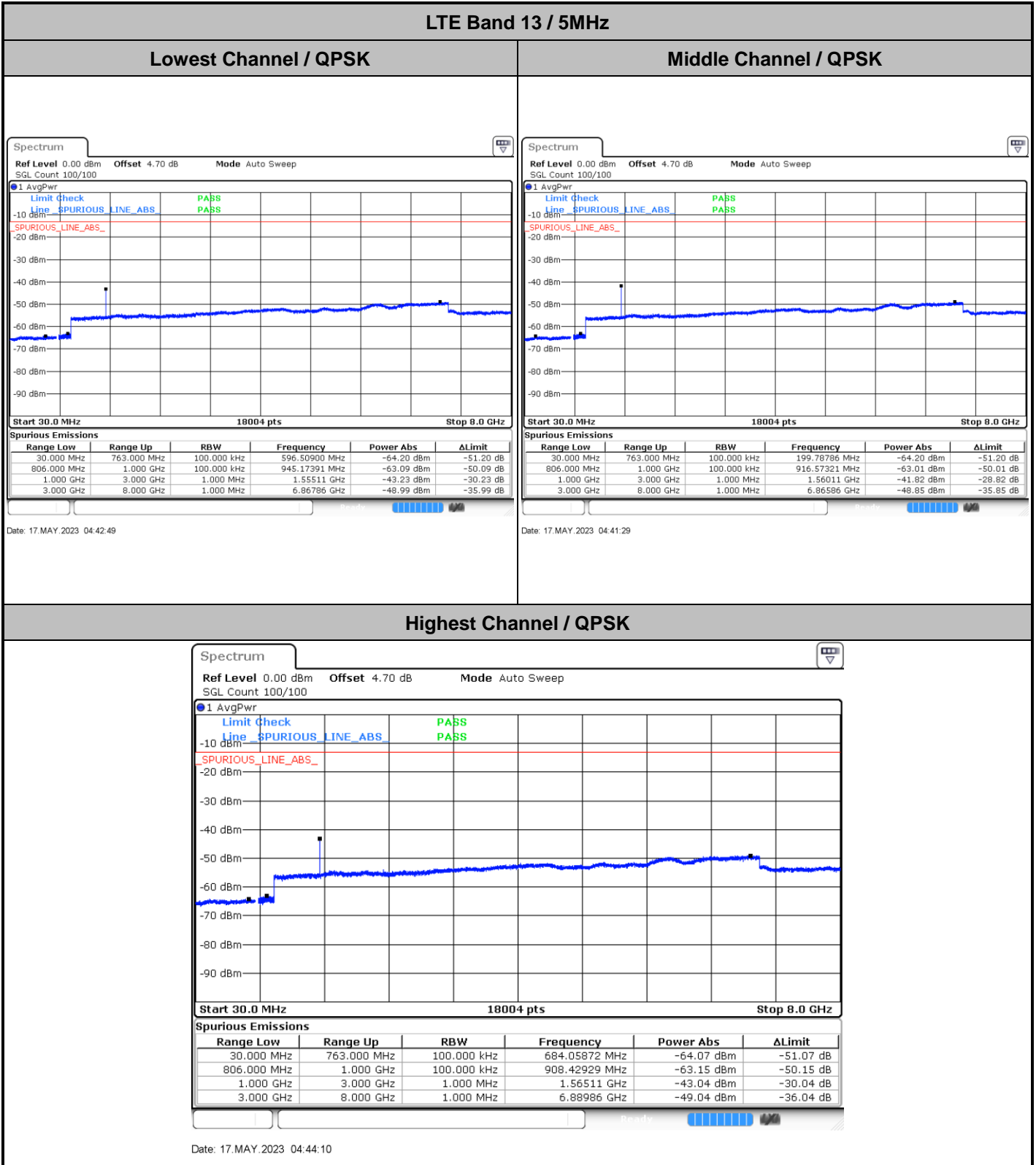
middle Band Edge / Full RB



Date: 21.JUN.2023 23:39:59



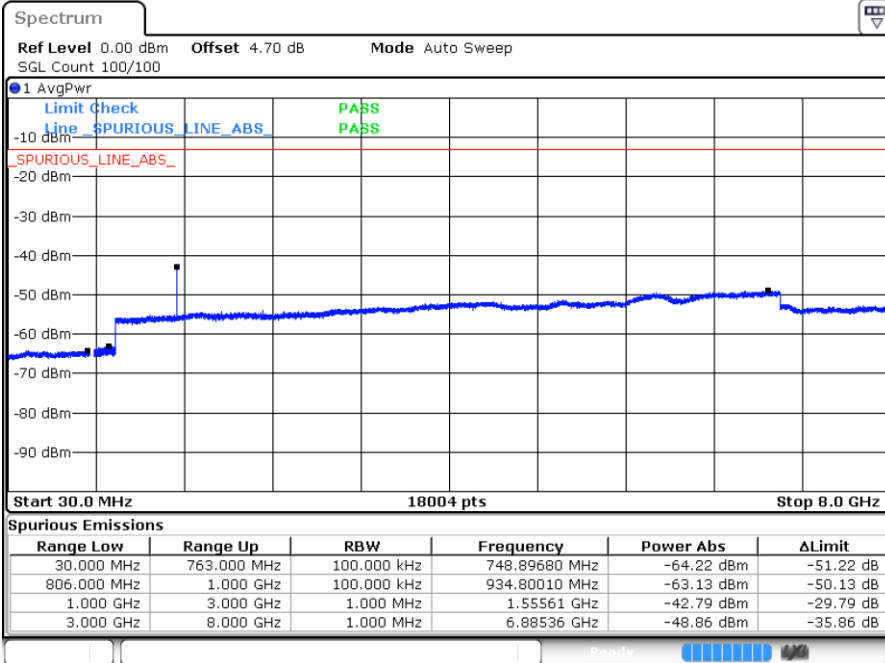
A4.5 Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 17.MAY.2023 04:45:30





A4.6 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	0.0005	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0052	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0041	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0002	
20	Minimum Voltage	0.0018	

Note:

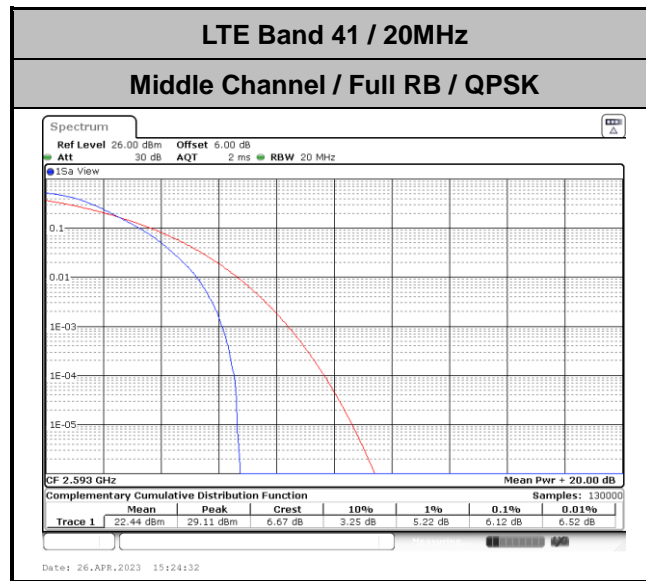
1. Normal Voltage =54 V. ; Minimum Voltage =48 V. ; Maximum Voltage =57 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

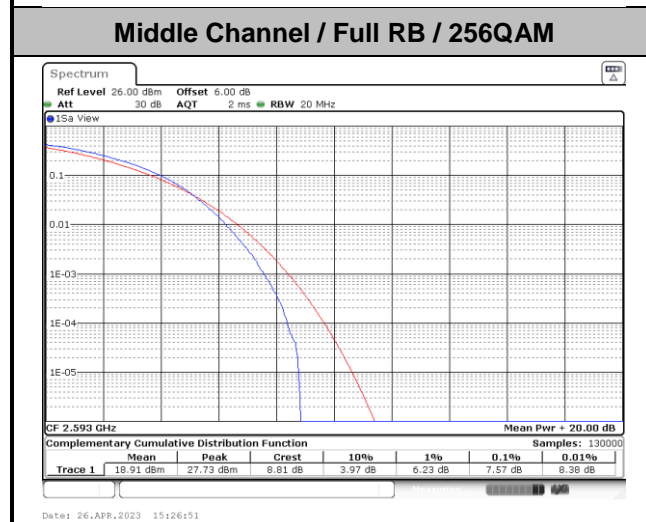
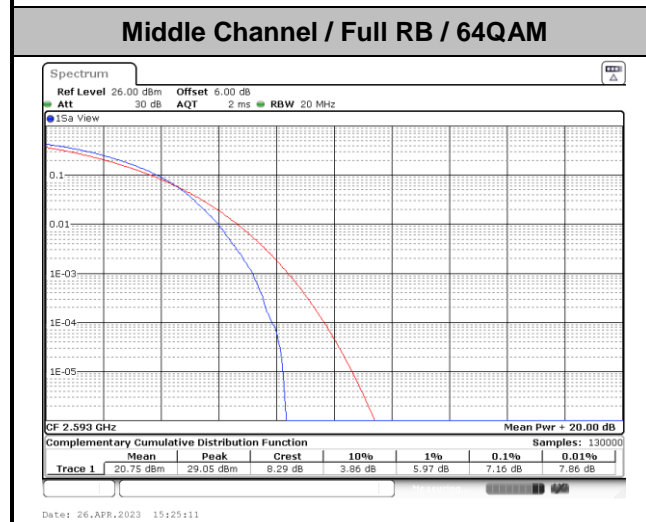
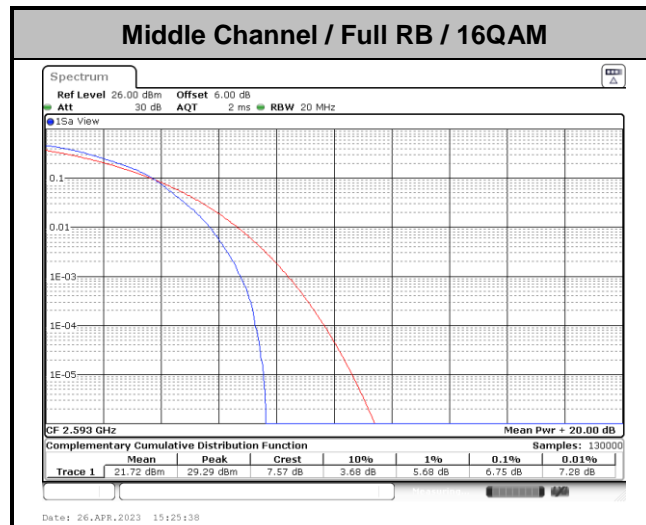


### A5. LTE Band 41

#### A5.1 Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	6.12	6.75	7.16	7.57	PASS







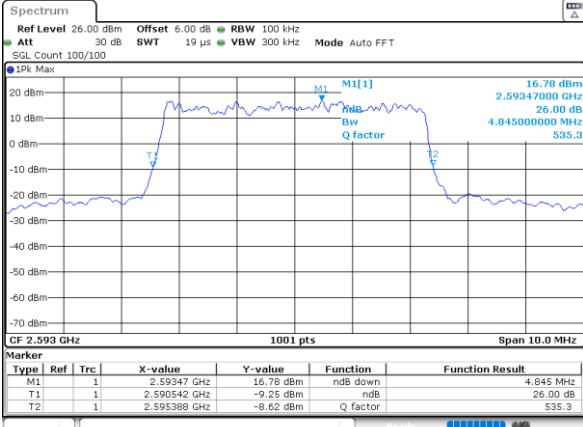
A5.2 26dB Bandwidth

Mode	LTE Band 41 : 26dB BW(MHz)			
<b>BW</b>	<b>5MHz</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	4.85	4.83	4.75	4.89
<b>BW</b>	<b>10MHz</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	9.63	9.75	9.61	9.65
<b>BW</b>	<b>15MHz</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	14.21	14.30	14.18	14.33
<b>BW</b>	<b>20MHz</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	18.82	18.82	18.90	18.74



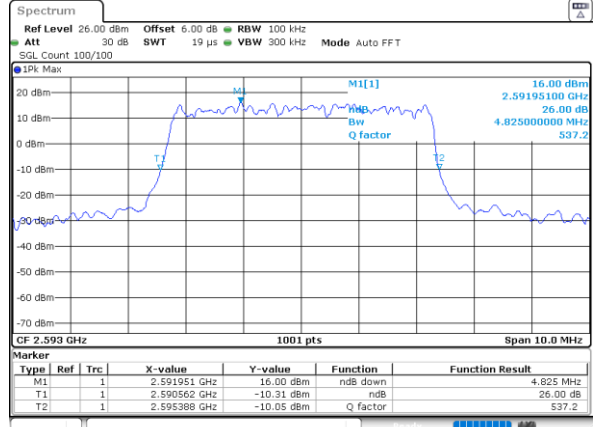
LTE Band 41

Middle Channel / 5MHz / QPSK



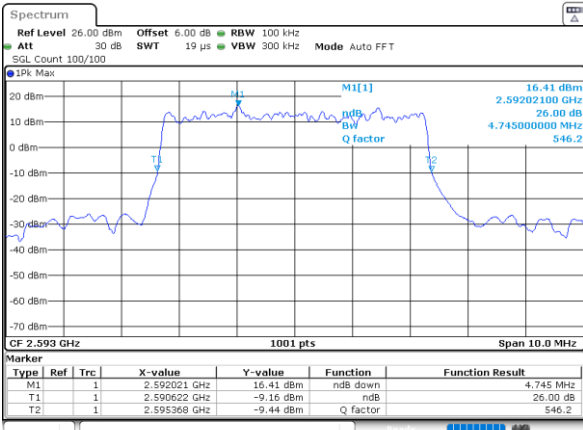
Date: 26.APR.2023 15:27:33

Middle Channel / 5MHz / 16QAM



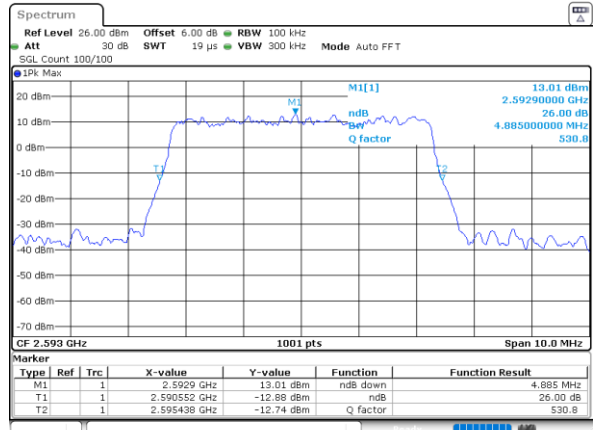
Date: 26.APR.2023 15:28:35

Middle Channel / 5MHz / 64QAM



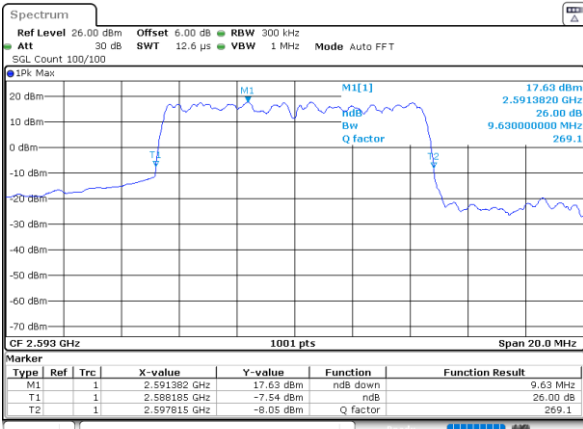
Date: 26.APR.2023 15:28:57

Middle Channel / 5MHz / 256QAM



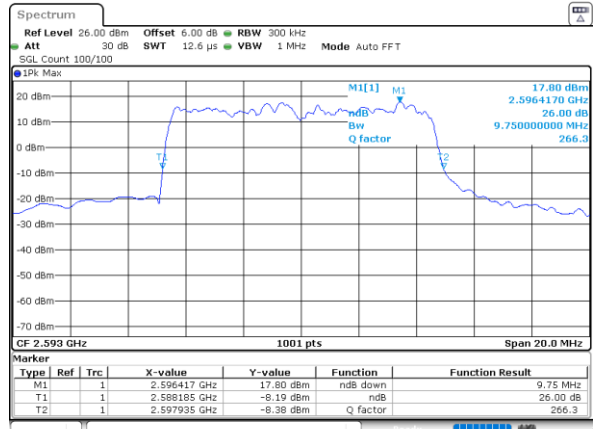
Date: 26.APR.2023 15:35:08

Middle Channel / 10MHz / QPSK



Date: 26.APR.2023 15:36:44

Middle Channel / 10MHz / 16QAM

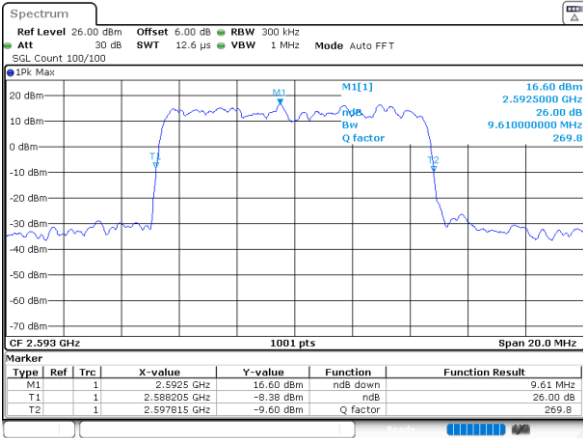


Date: 26.APR.2023 15:37:47



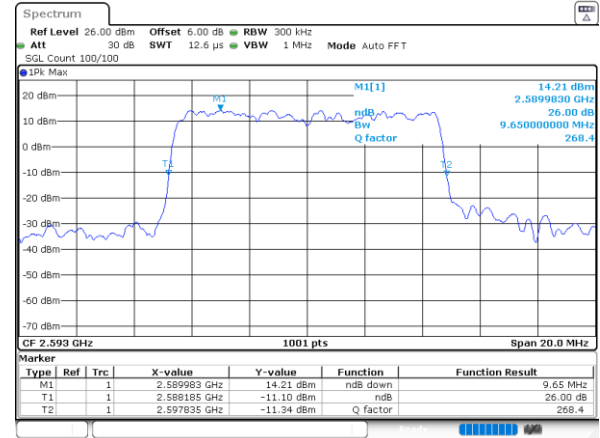
LTE Band 41

Middle Channel / 10MHz / 64QAM



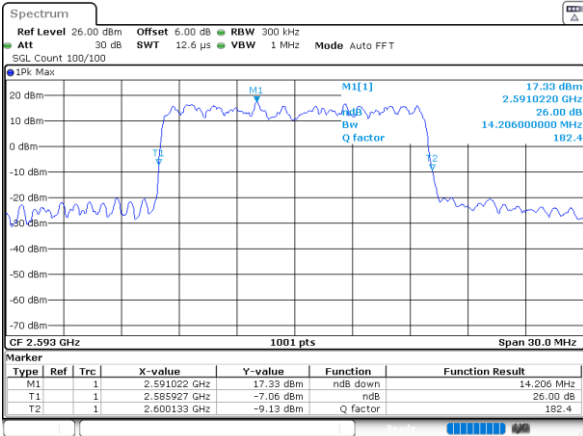
Date: 26.APR.2023 15:38:07

Middle Channel / 10MHz / 256QAM



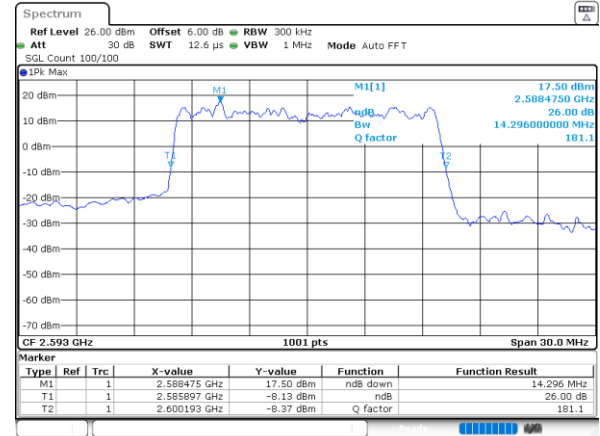
Date: 26.APR.2023 15:40:21

Middle Channel / 15MHz / QPSK



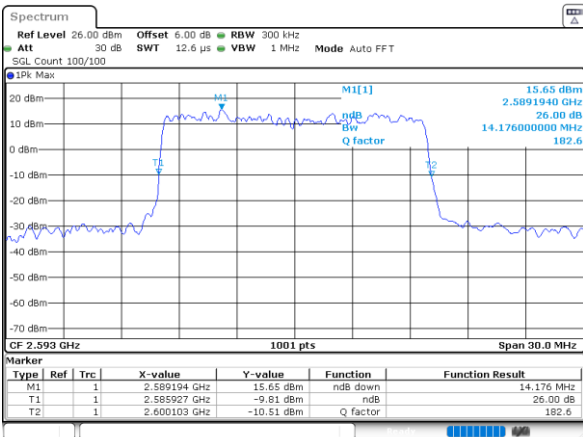
Date: 26.APR.2023 15:41:08

Middle Channel / 15MHz / 16QAM



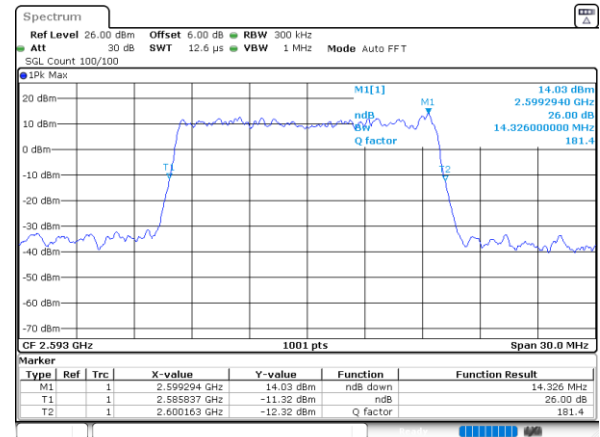
Date: 26.APR.2023 15:42:44

Middle Channel / 15MHz / 64QAM



Date: 26.APR.2023 15:43:02

Middle Channel / 15MHz / 256QAM

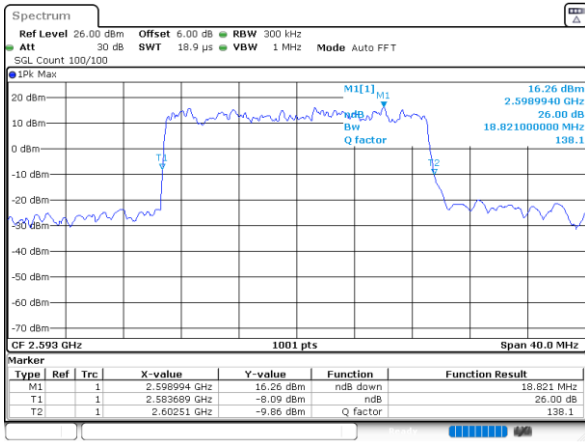


Date: 26.APR.2023 15:51:01



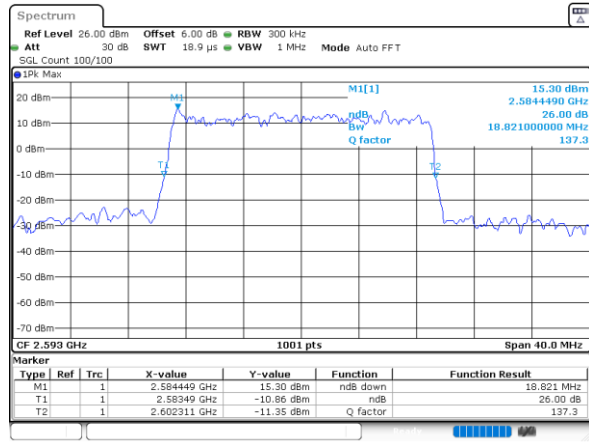
LTE Band 41

Middle Channel / 20MHz / QPSK



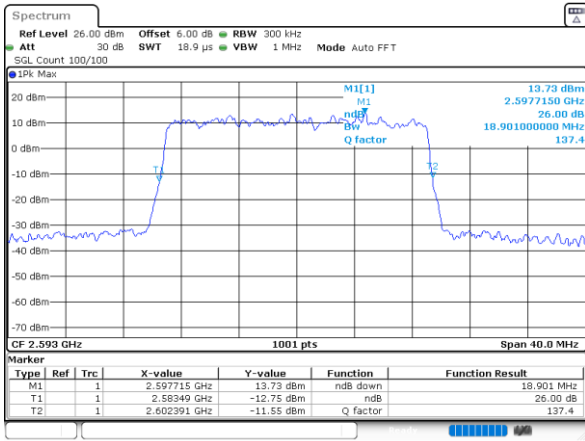
Date: 26.APR.2023 15:51:50

Middle Channel / 20MHz / 16QAM



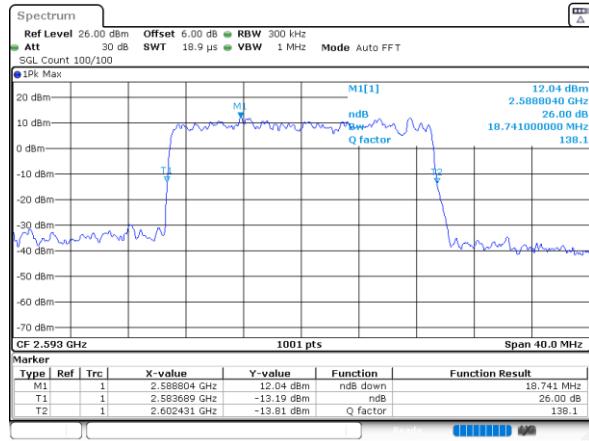
Date: 26.APR.2023 15:53:01

Middle Channel / 20MHz / 64QAM



Date: 26.APR.2023 15:53:22

Middle Channel / 20MHz / 256QAM



Date: 26.APR.2023 15:55:52



### A5.3 Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)			
<b>BW</b>	<b>5MHz</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	4.49	4.47	4.50	4.48
<b>BW</b>	<b>10MHz</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	9.07	9.07	9.05	9.01
<b>BW</b>	<b>15MHz</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	13.49	13.43	13.40	13.49
<b>BW</b>	<b>20MHz</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	17.94	17.86	17.78	17.86