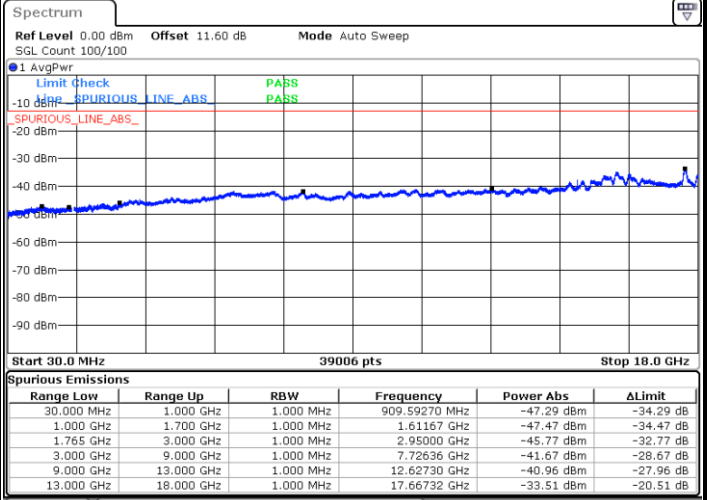
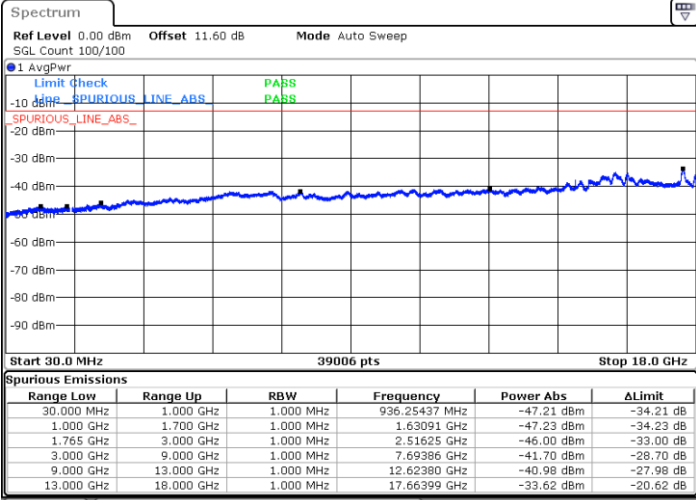




LTE Band 4 / 3MHz

Lowest Channel / QPSK

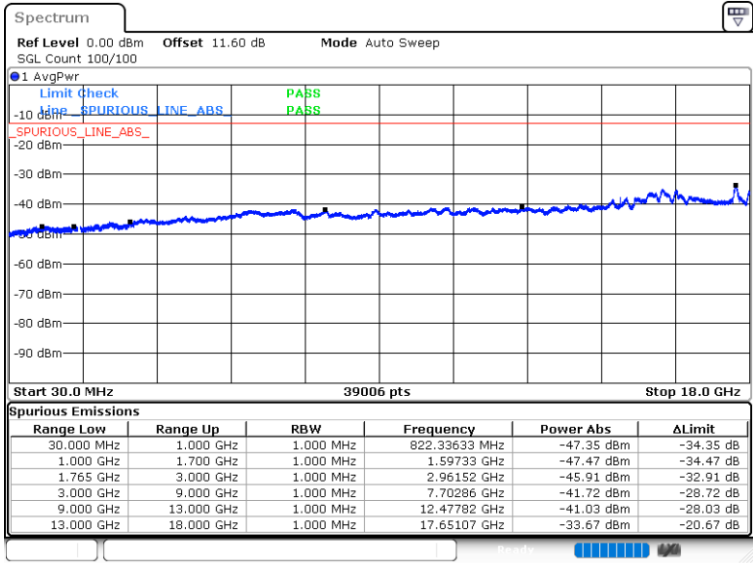
Middle Channel / QPSK



Date: 18.MAY.2023 12:00:23

Date: 18.MAY.2023 12:01:31

Highest Channel / QPSK



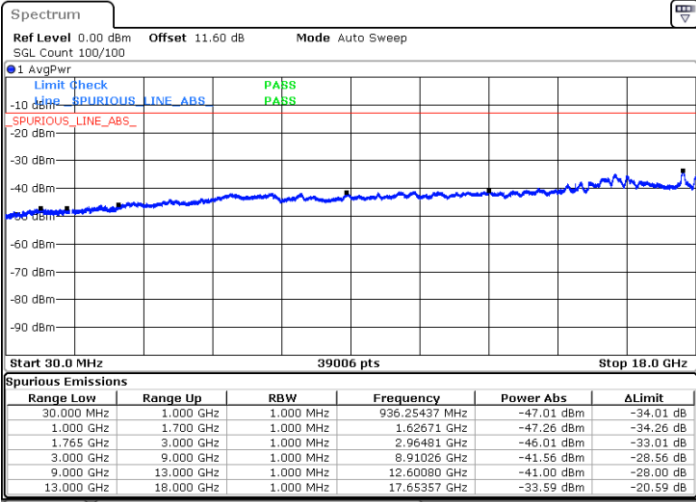
Date: 18.MAY.2023 12:02:40



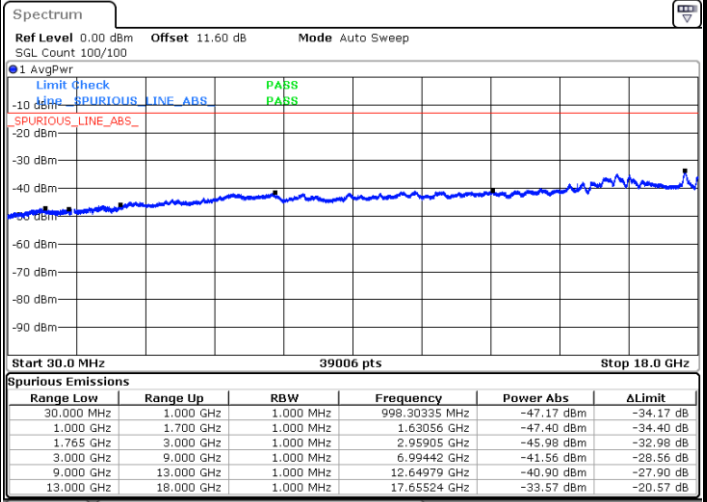
LTE Band 4 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

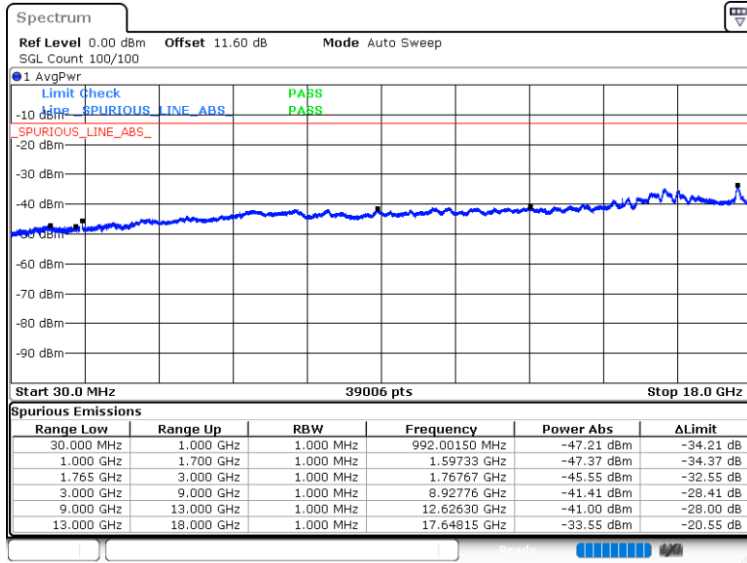


Date: 18.MAY.2023 12:13:09



Date: 18.MAY.2023 12:14:17

Highest Channel / QPSK



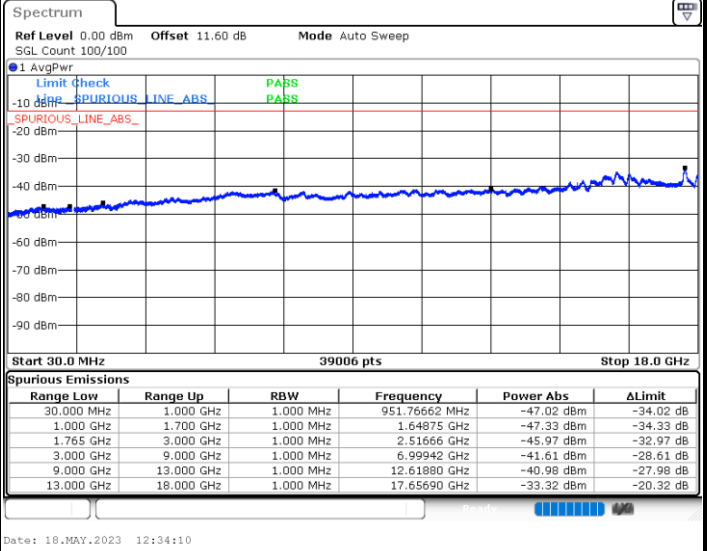
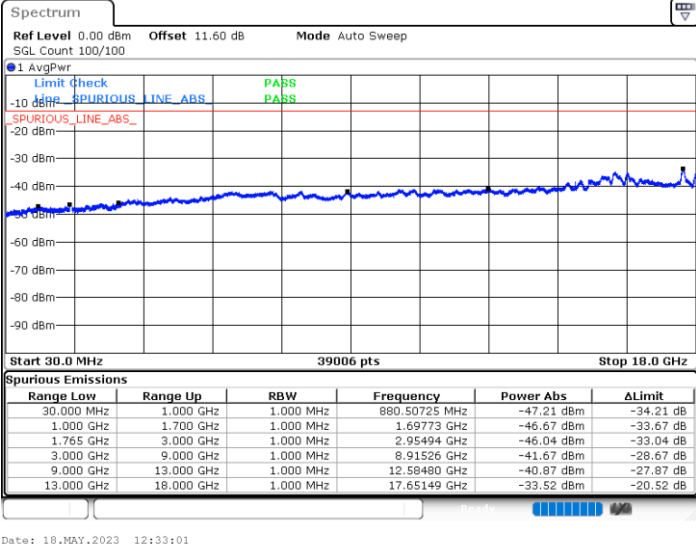
Date: 18.MAY.2023 12:15:24



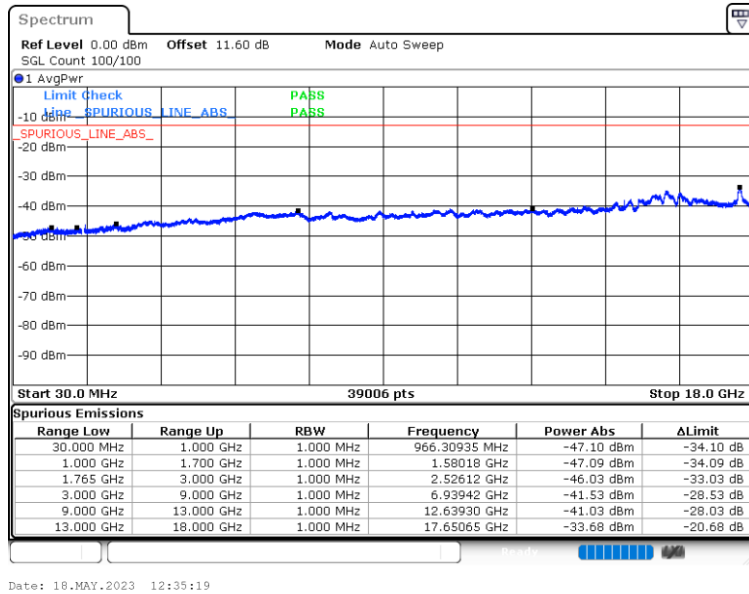
LTE Band 4 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

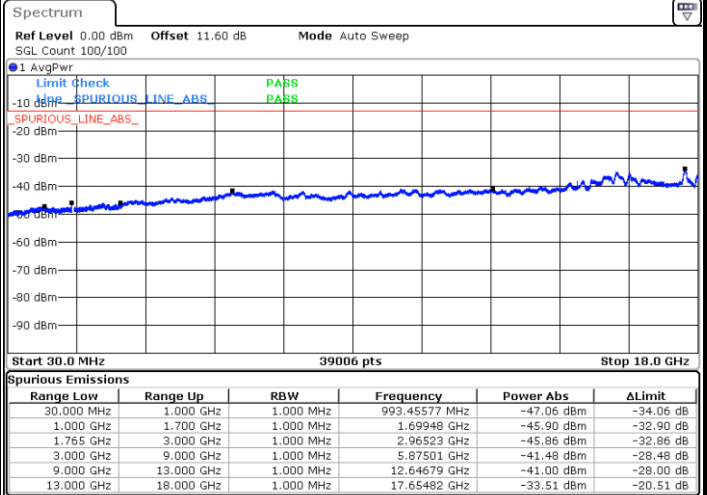
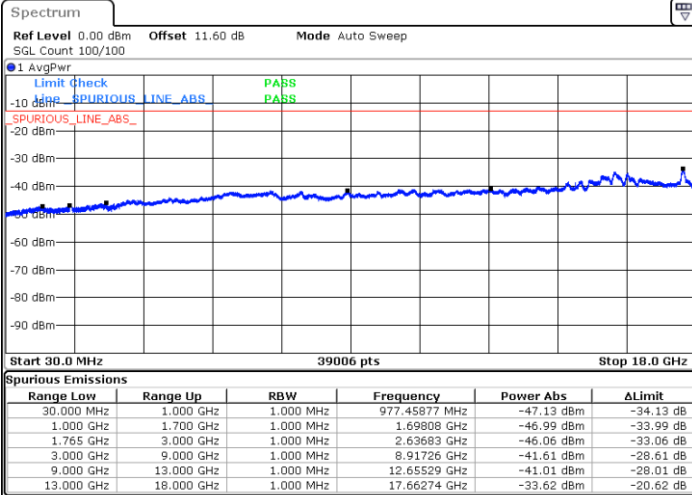




LTE Band 4 / 15MHz

Lowest Channel / QPSK

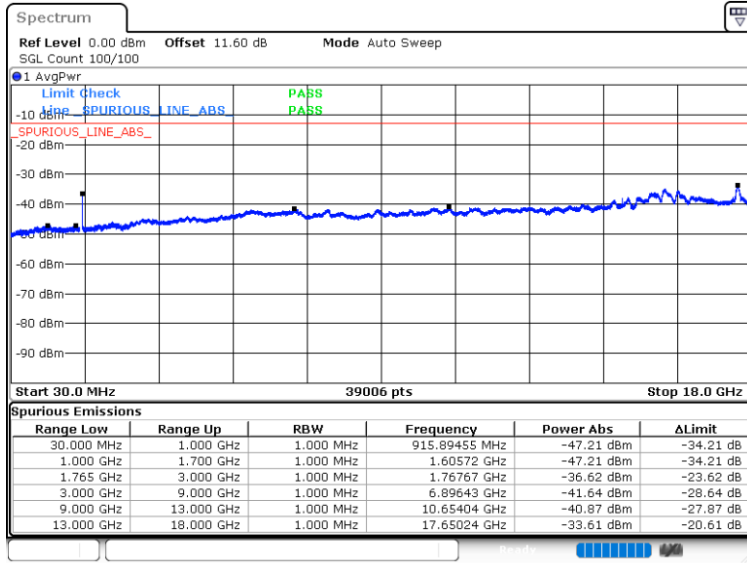
Middle Channel / QPSK



Date: 18.MAY.2023 12:41:26

Date: 18.MAY.2023 12:42:34

Highest Channel / QPSK



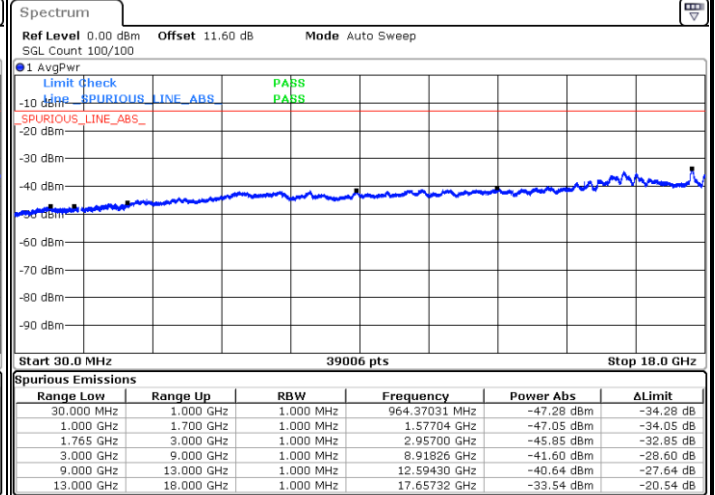
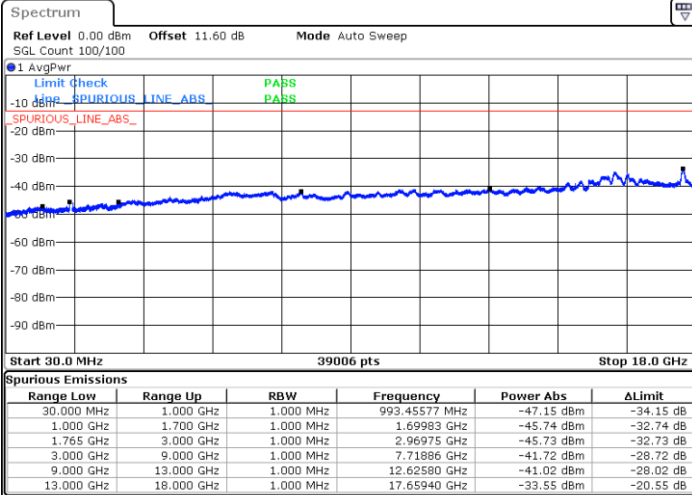
Date: 18.MAY.2023 12:43:42



LTE Band 4 / 20MHz

Lowest Channel / QPSK

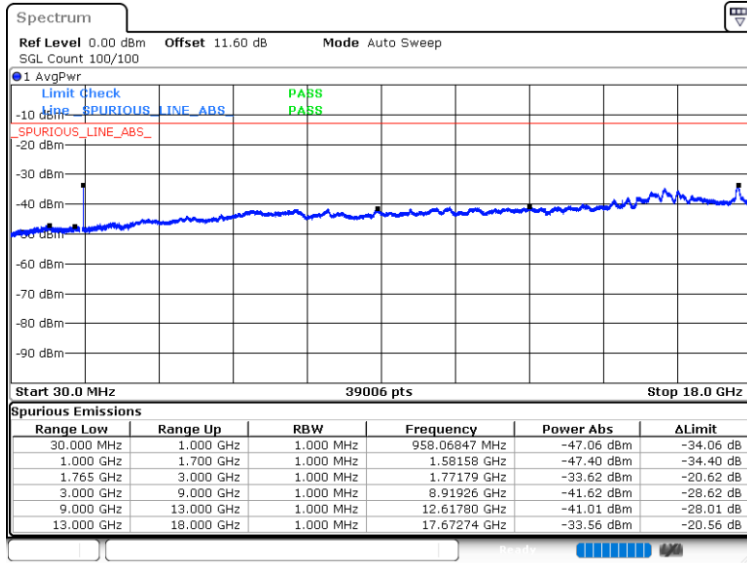
Middle Channel / QPSK



Date: 18.MAY.2023 12:55:27

Date: 18.MAY.2023 12:56:35

Highest Channel / QPSK



Date: 18.MAY.2023 12:57:43



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0070	PASS
40	Normal Voltage	0.0035	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0018	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0053	

Note:

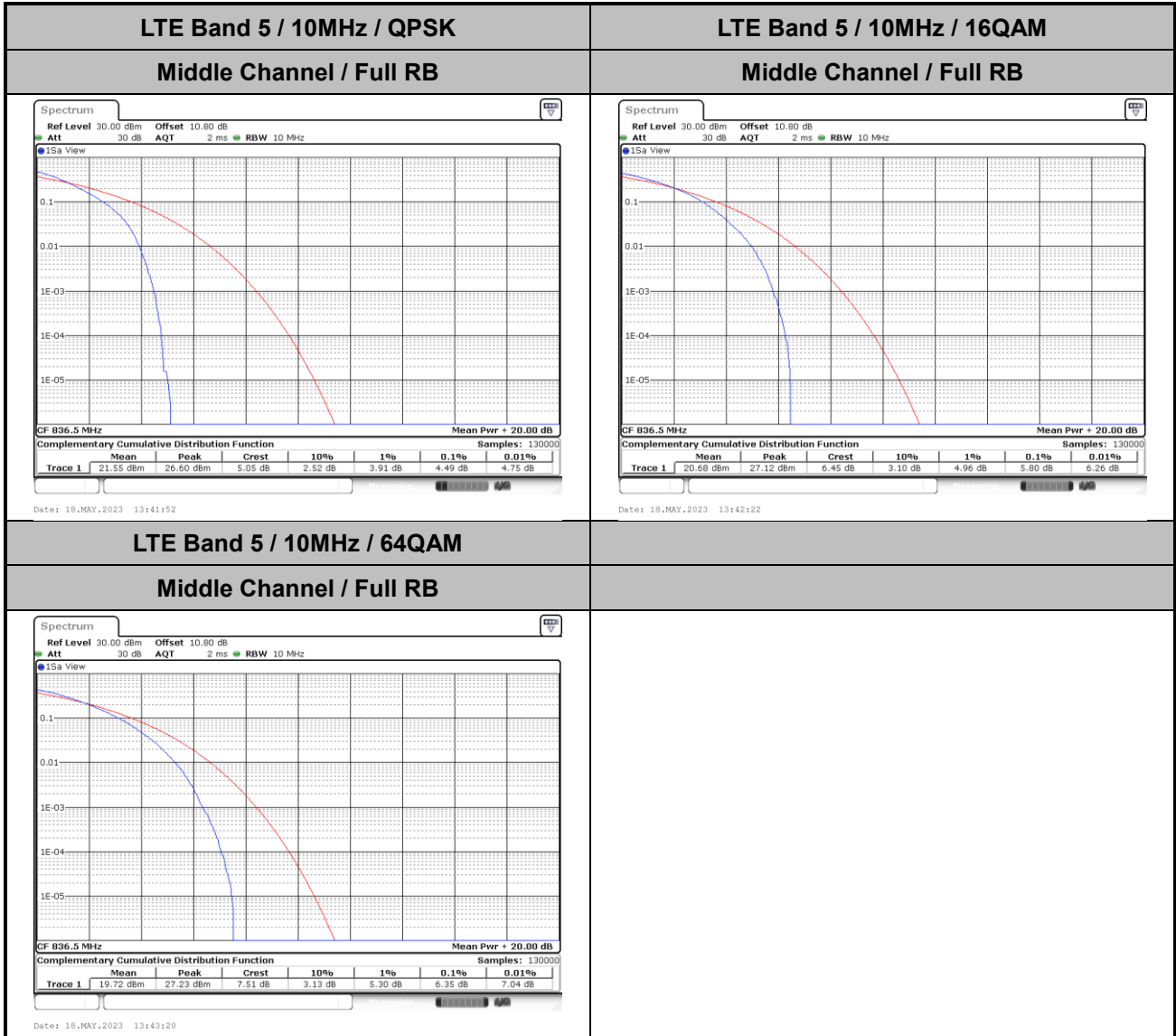
- 1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.42 V. ; Maximum Voltage = 4.45 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.49	5.80	6.35	PASS





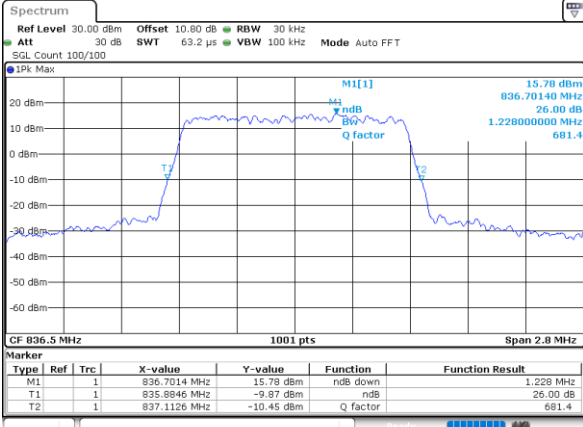
26dB Bandwidth

Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.23	1.23	3.00	2.97	4.85	4.93	9.73	9.81	-	-	-	-
Mode	LTE Band 5 : 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	1.23	-	2.96	-	4.98	-	9.69	-	-	-	-	-



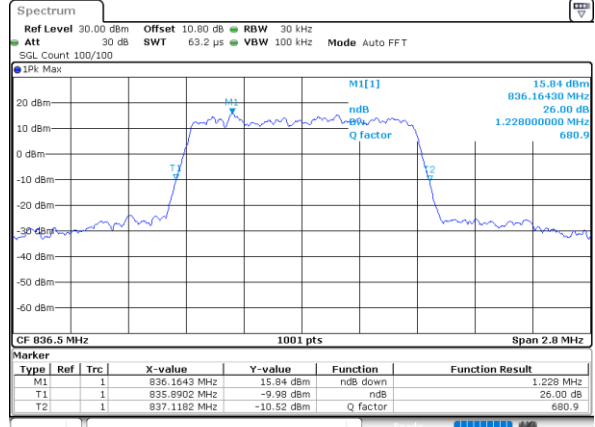
LTE Band 5

Middle Channel / 1.4MHz / QPSK



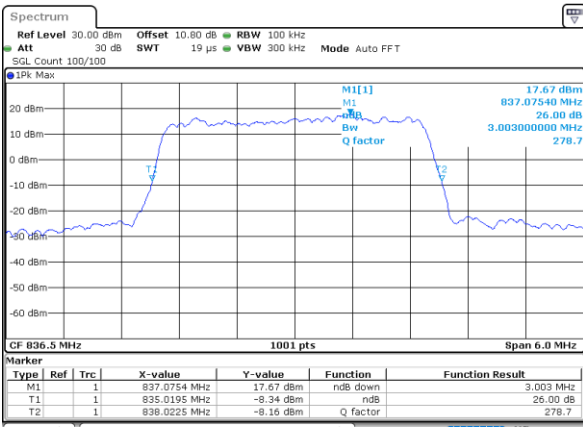
Date: 18.MAY.2023 13:12:56

Middle Channel / 1.4MHz / 16QAM



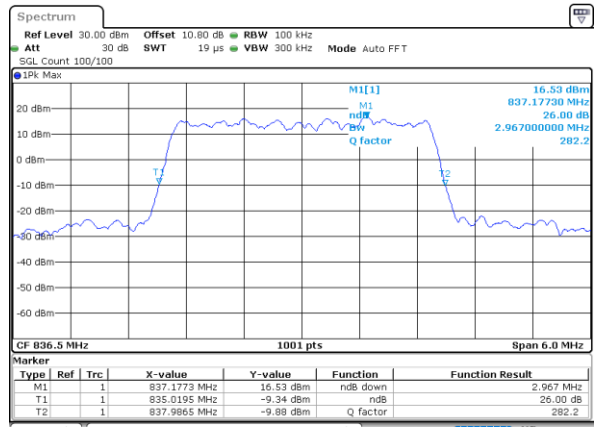
Date: 18.MAY.2023 13:13:39

Middle Channel / 3MHz / QPSK



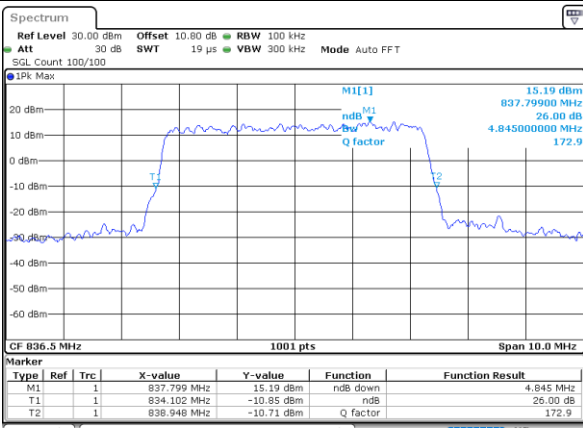
Date: 18.MAY.2023 13:25:15

Middle Channel / 3MHz / 16QAM



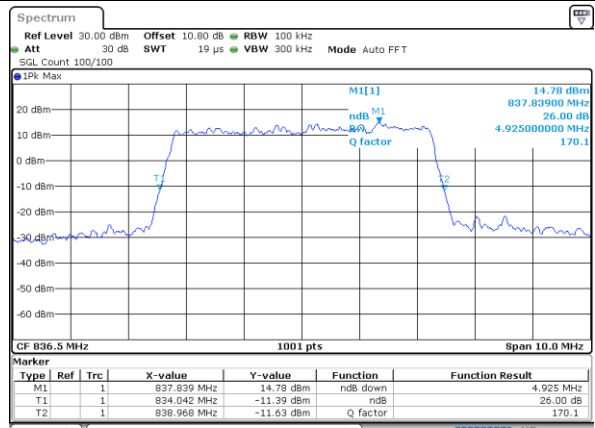
Date: 18.MAY.2023 13:25:58

Middle Channel / 5MHz / QPSK



Date: 18.MAY.2023 13:33:26

Middle Channel / 5MHz / 16QAM

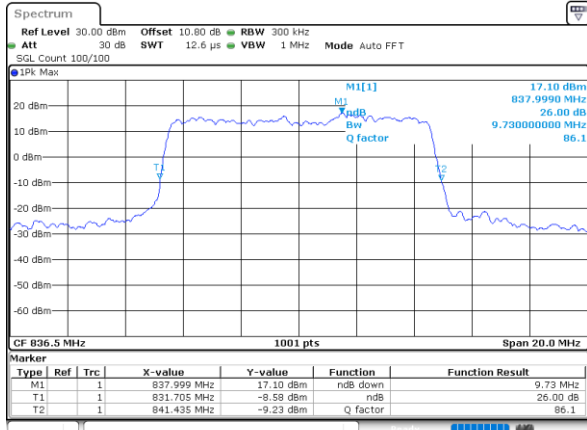


Date: 18.MAY.2023 13:34:09



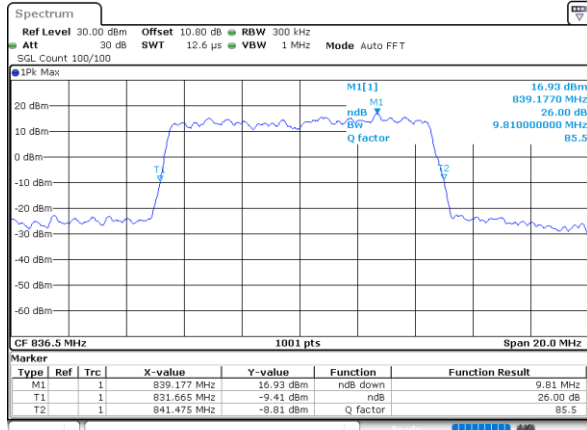
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 18.MAY.2023 13:41:37

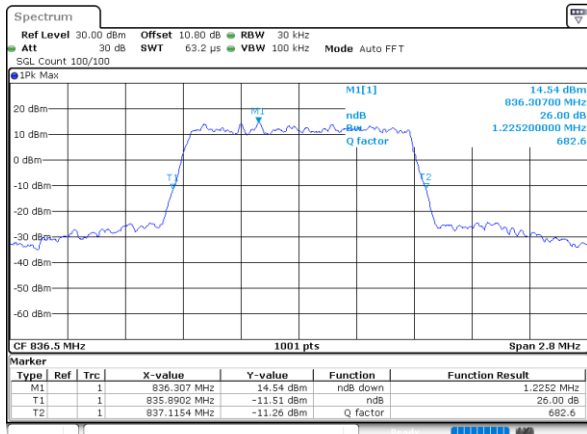
Middle Channel / 10MHz / 16QAM



Date: 18.MAY.2023 13:42:50

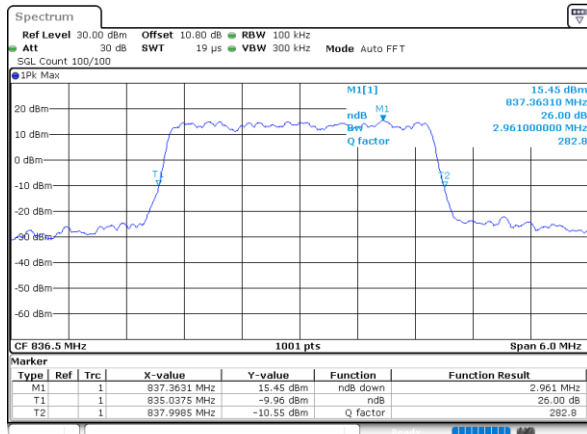
LTE Band 5

Middle Channel / 1.4MHz / 64QAM



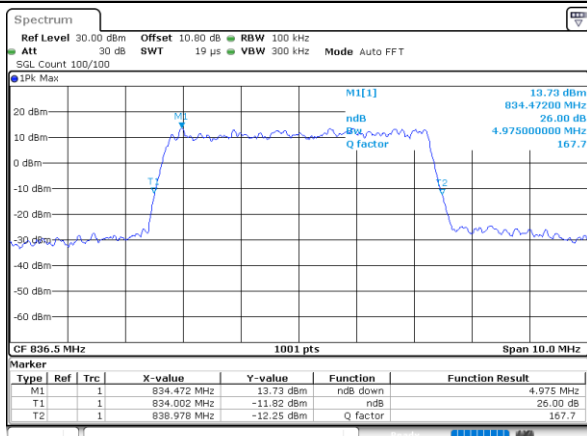
Date: 18.MAY.2023 13:14:22

Middle Channel / 3MHz / 64QAM



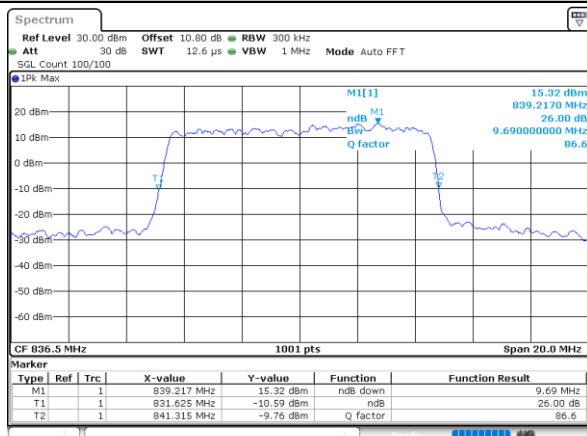
Date: 18.MAY.2023 13:26:41

Middle Channel / 5MHz / 64QAM



Date: 18.MAY.2023 13:34:52

Middle Channel / 10MHz / 64QAM



Date: 18.MAY.2023 13:43:48



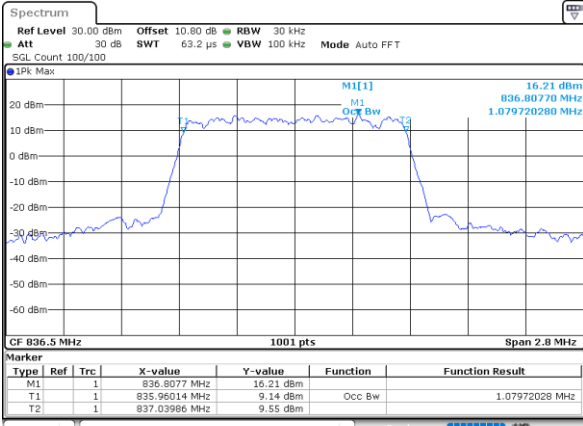
Occupied Bandwidth

Mode	LTE Band 5 : 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	1.08	1.09	2.70	2.72	4.50	4.52	8.97	9.01	-	-	-	-
Mode	LTE Band 5 : 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	-	2.73	-	4.48	-	8.99	-	-	-	-	-



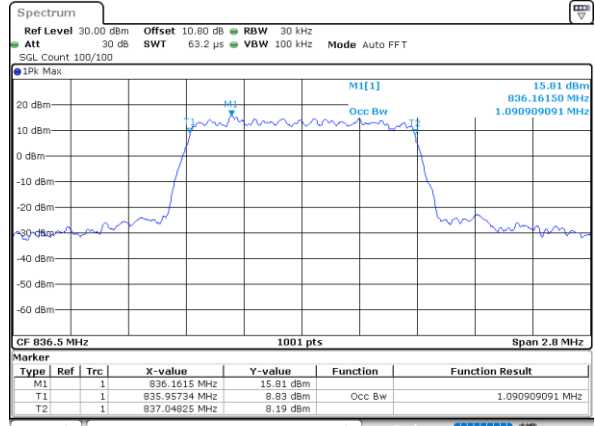
LTE Band 5

Middle Channel / 1.4MHz / QPSK



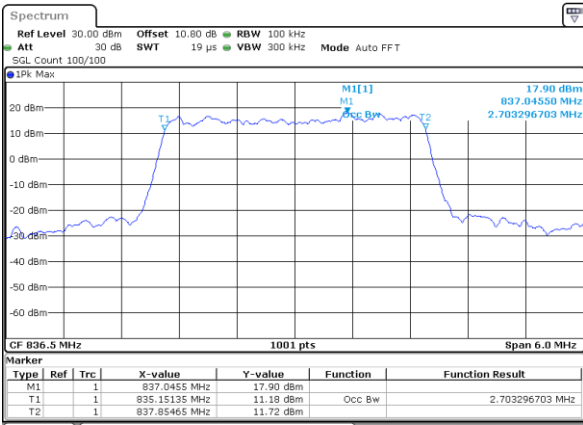
Date: 18.MAY.2023 13:12:42

Middle Channel / 1.4MHz / 16QAM



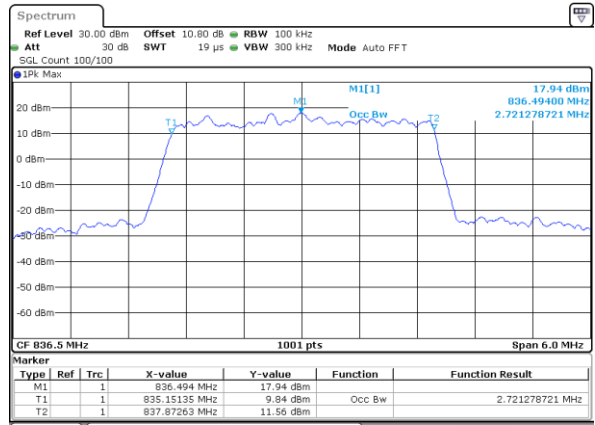
Date: 18.MAY.2023 13:13:25

Middle Channel / 3MHz / QPSK



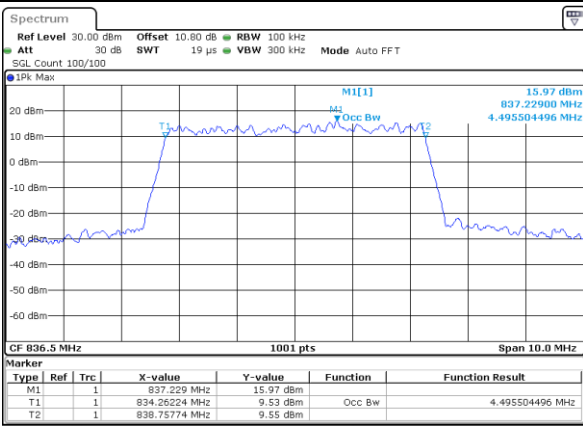
Date: 18.MAY.2023 13:25:01

Middle Channel / 3MHz / 16QAM



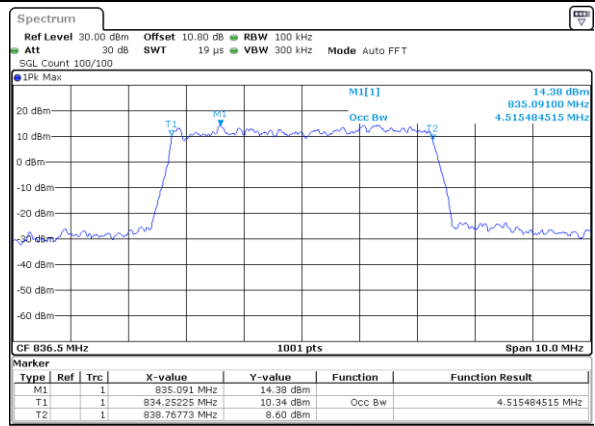
Date: 18.MAY.2023 13:25:44

Middle Channel / 5MHz / QPSK



Date: 18.MAY.2023 13:33:12

Middle Channel / 5MHz / 16QAM

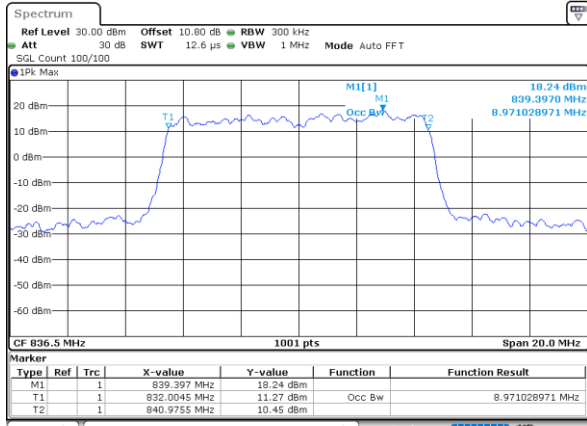


Date: 18.MAY.2023 13:33:55



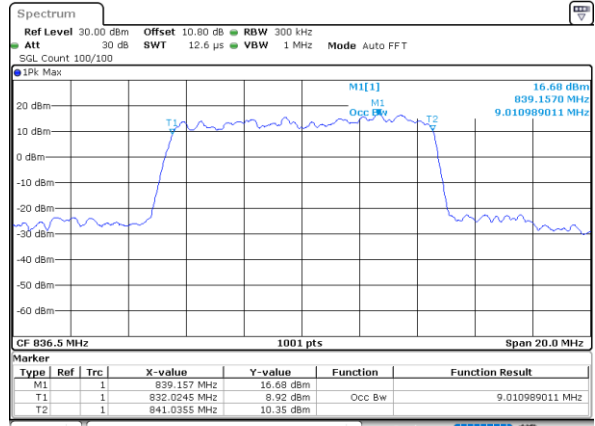
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 18.MAY.2023 13:41:23

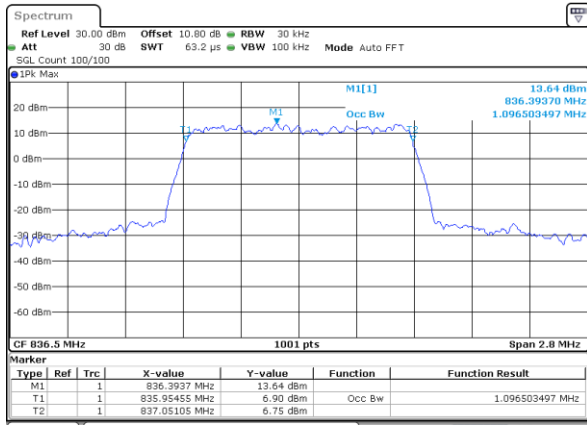
Middle Channel / 10MHz / 16QAM



Date: 18.MAY.2023 13:42:136

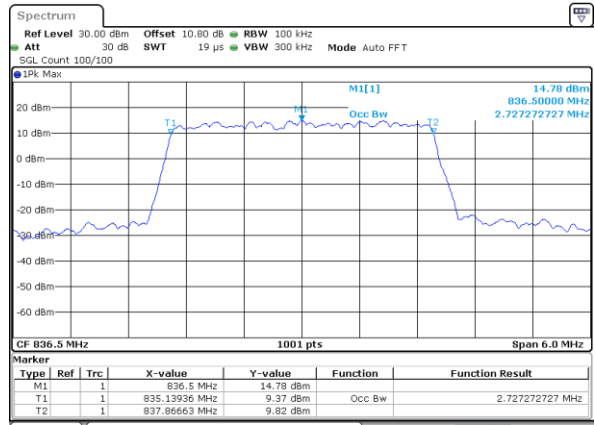
LTE Band 5

Middle Channel / 1.4MHz / 64QAM



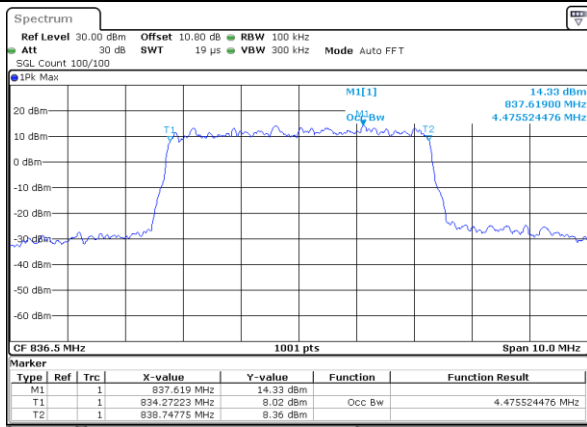
Date: 18.MAY.2023 13:14:08

Middle Channel / 3MHz / 64QAM



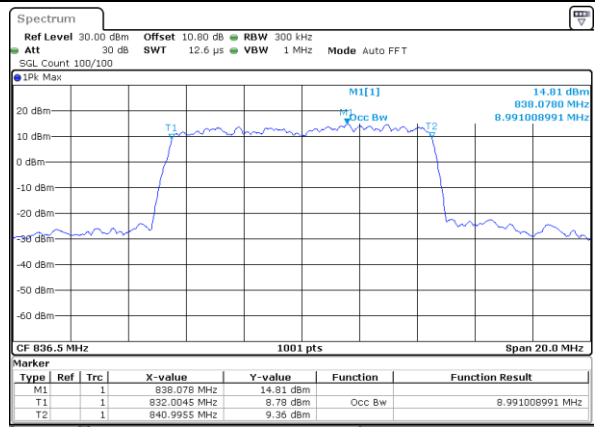
Date: 18.MAY.2023 13:12:127

Middle Channel / 5MHz / 64QAM



Date: 18.MAY.2023 13:34:38

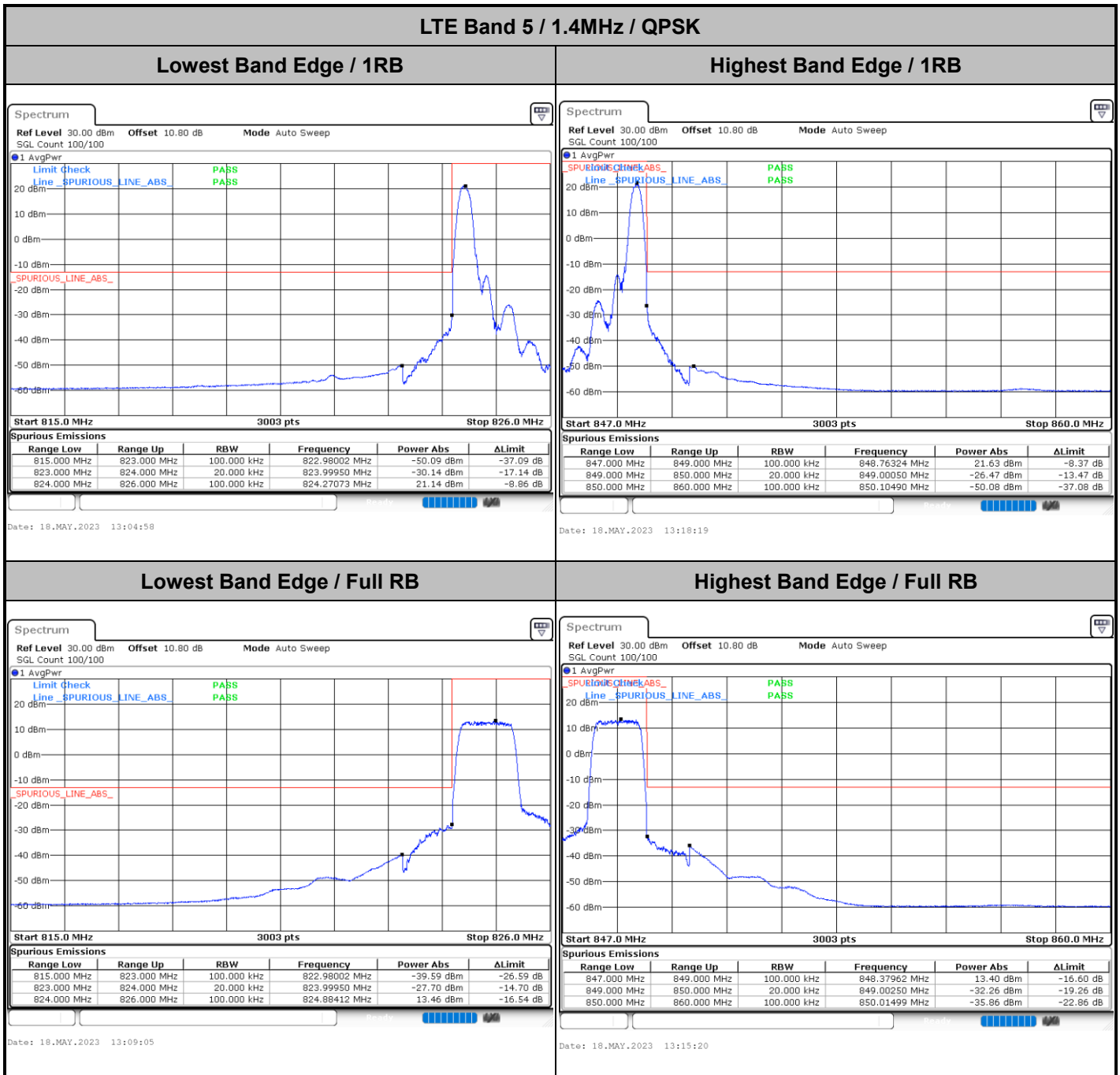
Middle Channel / 10MHz / 64QAM



Date: 18.MAY.2023 13:43:134



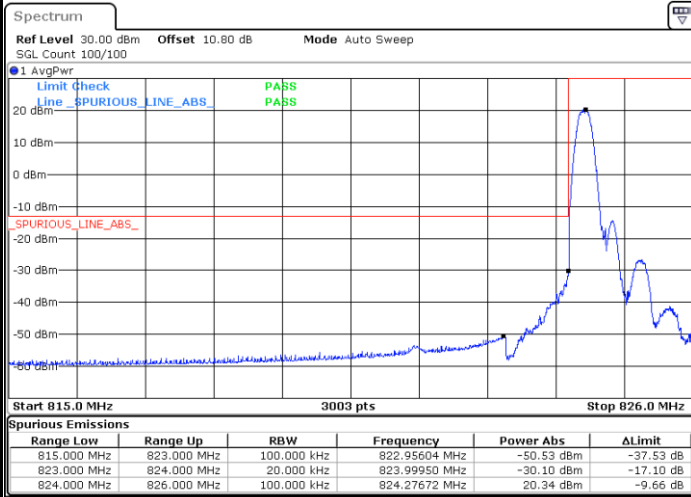
Conducted Band Edge





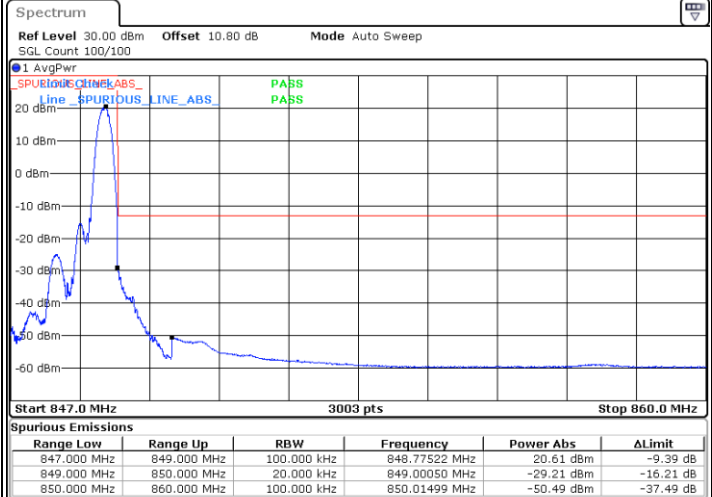
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



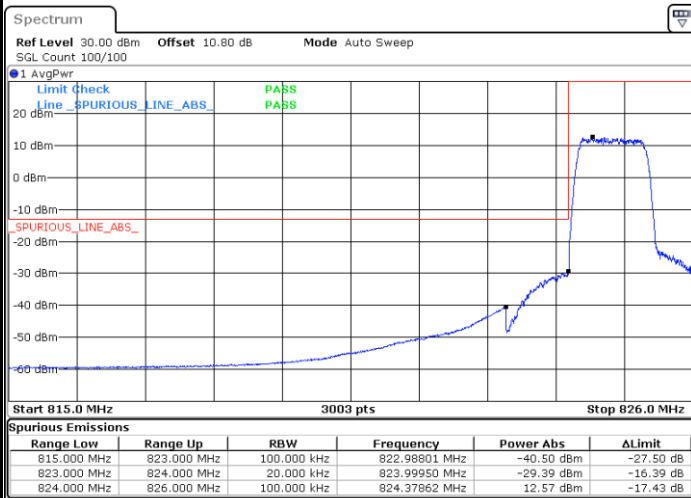
Date: 18.MAY.2023 13:05:58

Highest Band Edge / 1 RB



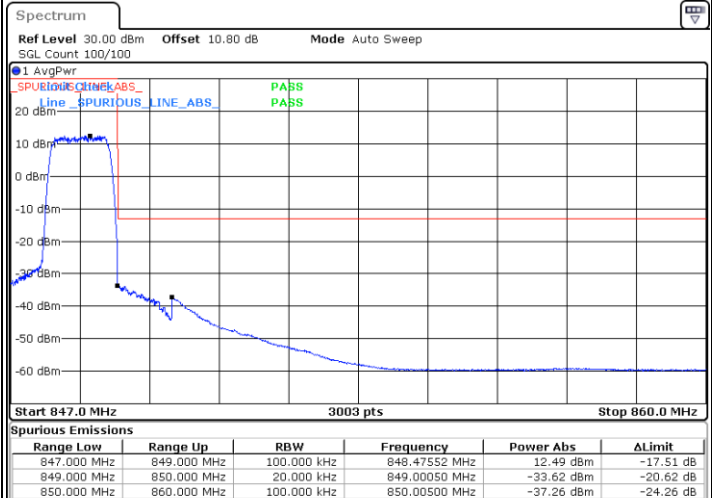
Date: 18.MAY.2023 13:19:19

Lowest Band Edge / Full RB



Date: 18.MAY.2023 13:10:05

Highest Band Edge / Full RB

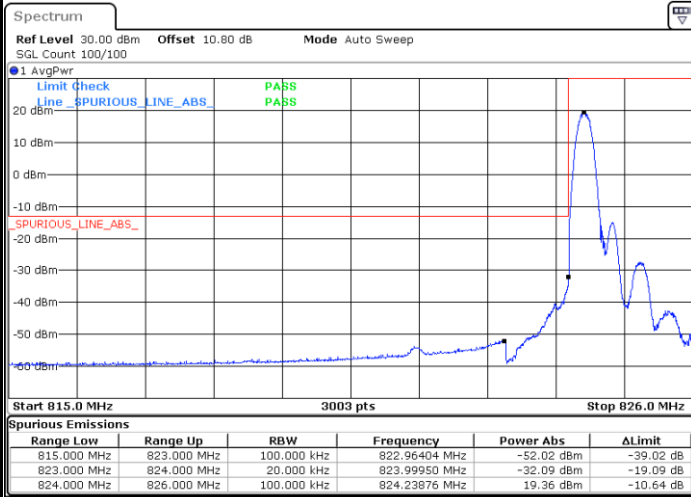


Date: 18.MAY.2023 13:16:20



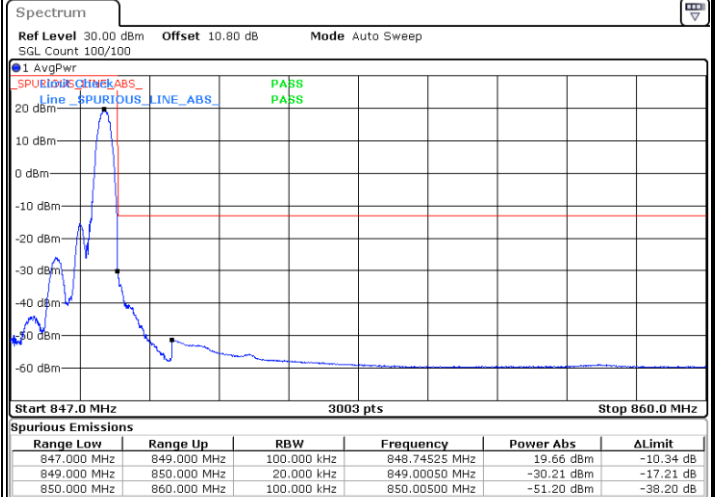
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



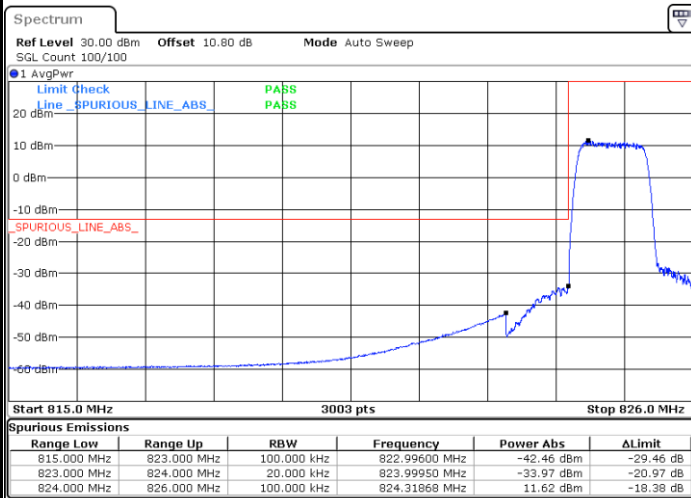
Date: 18.MAY.2023 13:06:57

Highest Band Edge / 1 RB



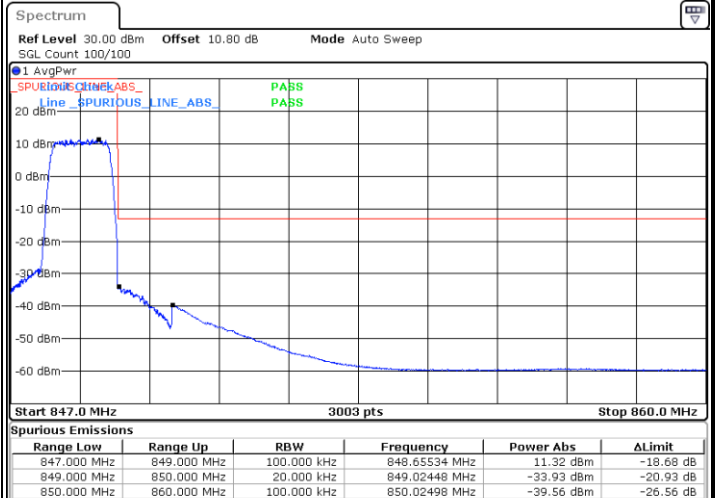
Date: 18.MAY.2023 13:20:18

Lowest Band Edge / Full RB



Date: 18.MAY.2023 13:11:04

Highest Band Edge / Full RB

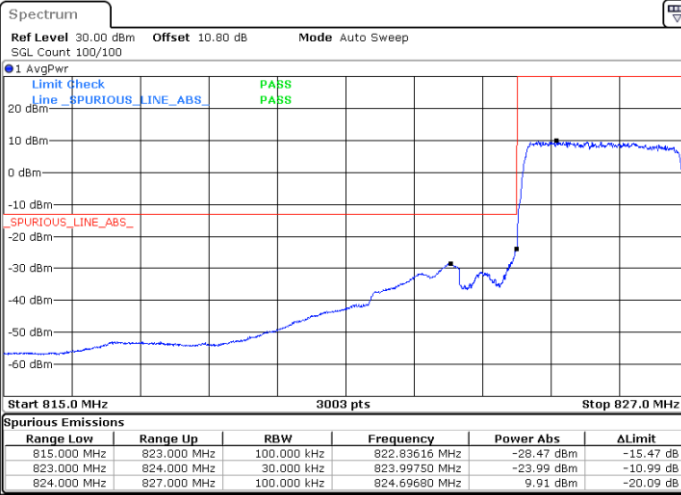


Date: 18.MAY.2023 13:17:20



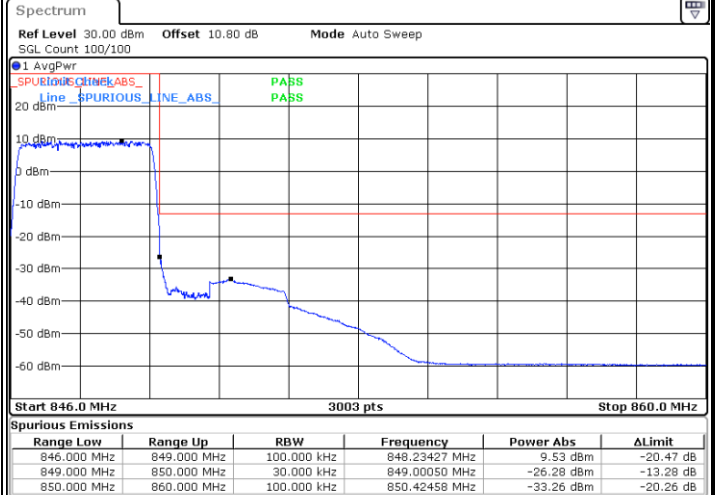
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / Full RB



Date: 18.MAY.2023 13:22:32

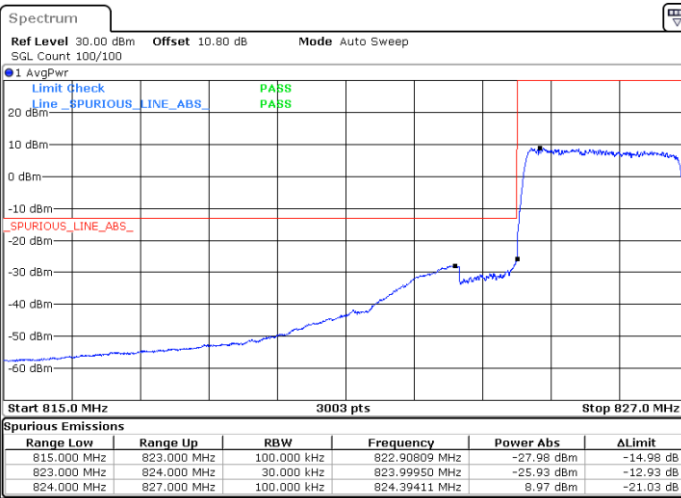
Highest Band Edge / Full RB



Date: 18.MAY.2023 13:27:39

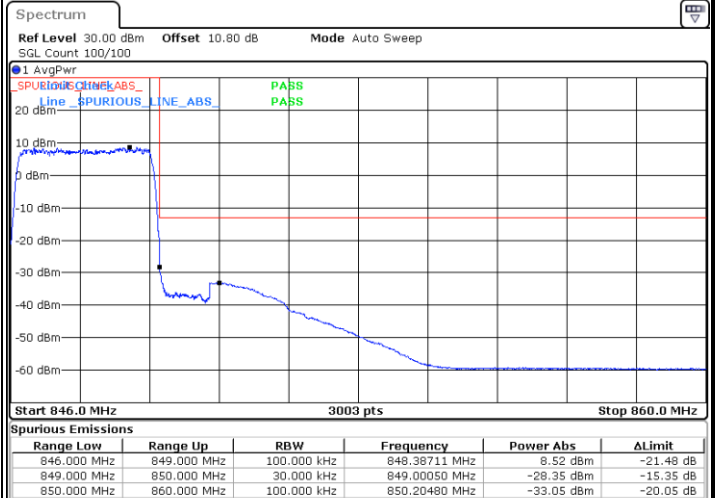
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / Full RB

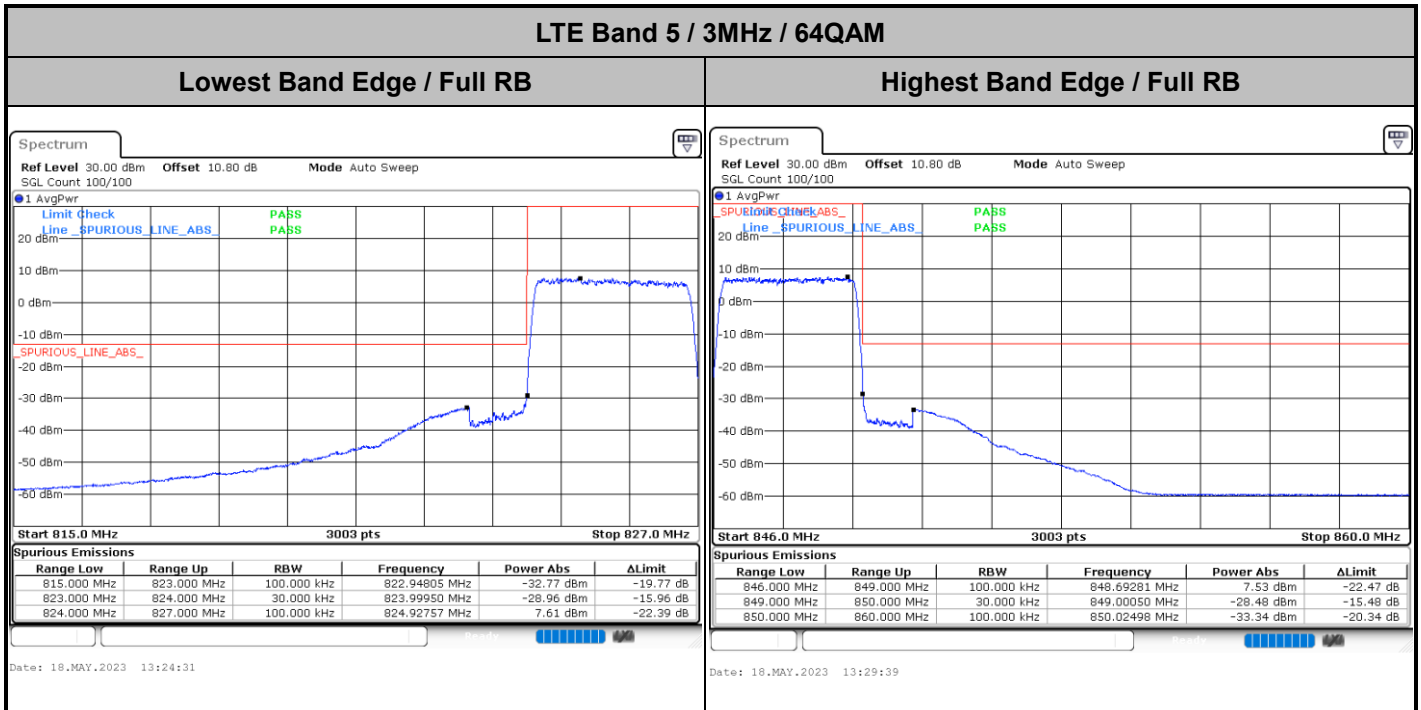


Date: 18.MAY.2023 13:23:31

Highest Band Edge / Full RB



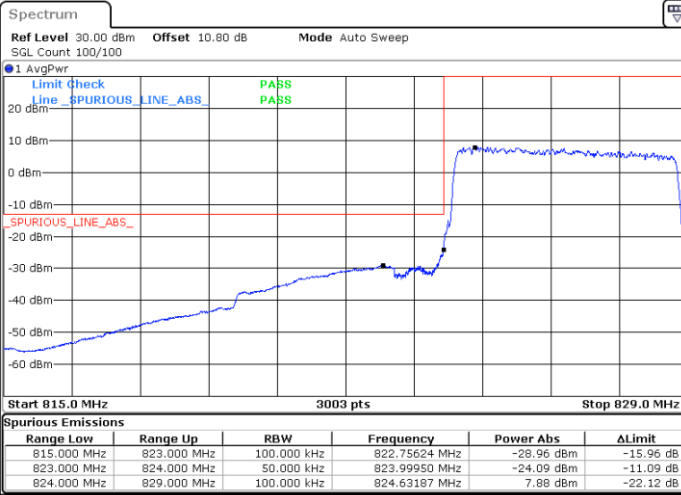
Date: 18.MAY.2023 13:28:39





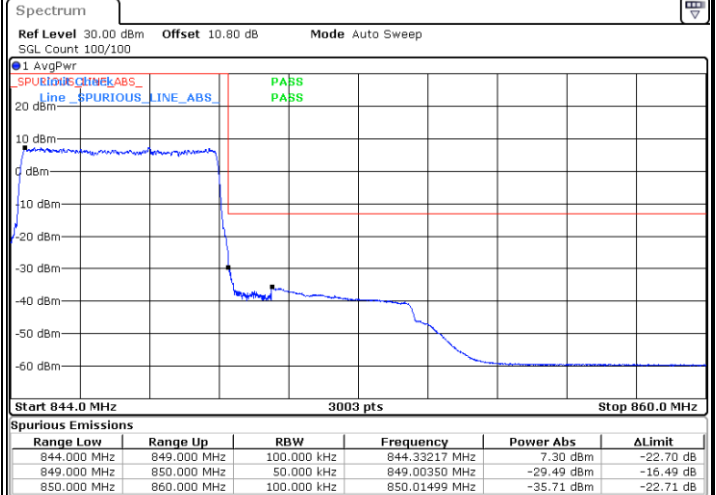
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / Full RB



Date: 18.MAY.2023 13:30:43

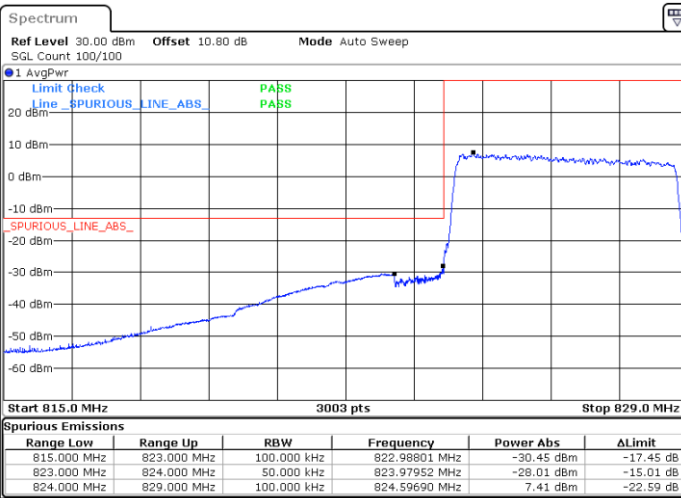
Highest Band Edge / Full RB



Date: 18.MAY.2023 13:35:50

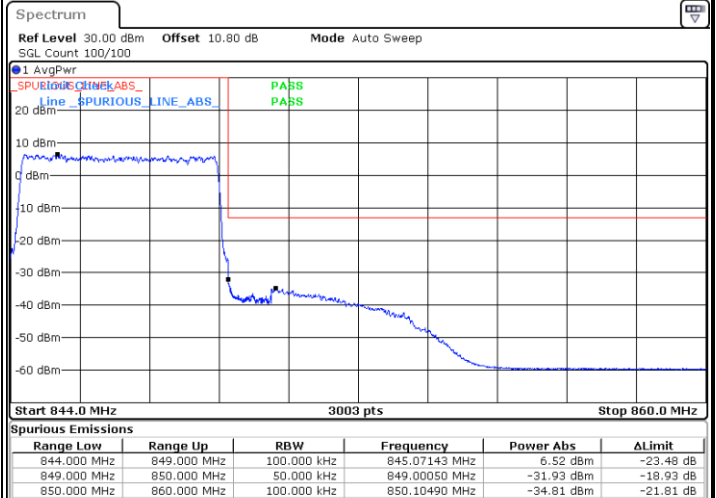
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / Full RB



Date: 18.MAY.2023 13:31:42

Highest Band Edge / Full RB



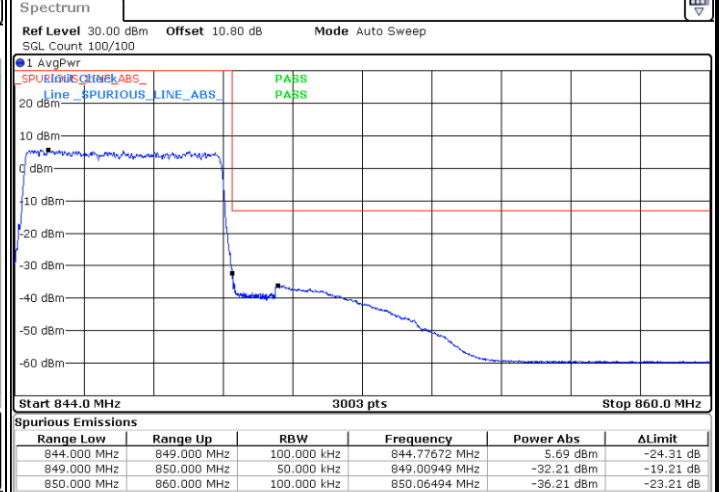
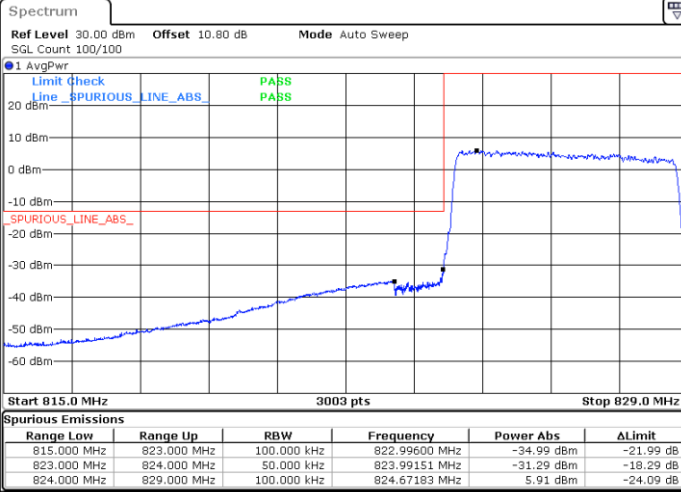
Date: 18.MAY.2023 13:36:49



LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



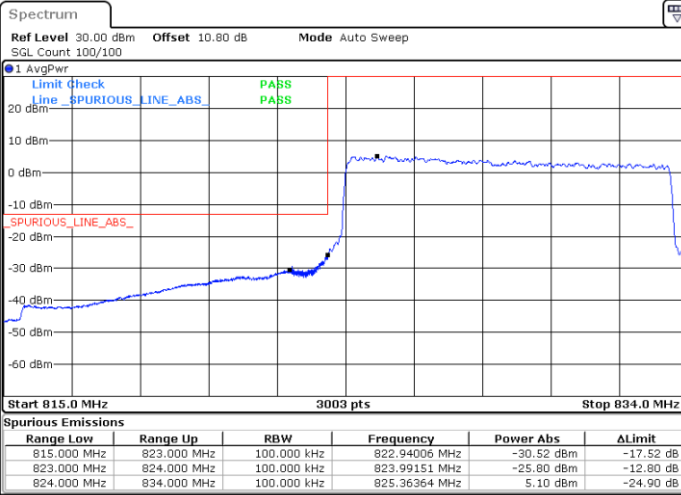
Date: 18.MAY.2023 13:32:42

Date: 18.MAY.2023 13:37:49



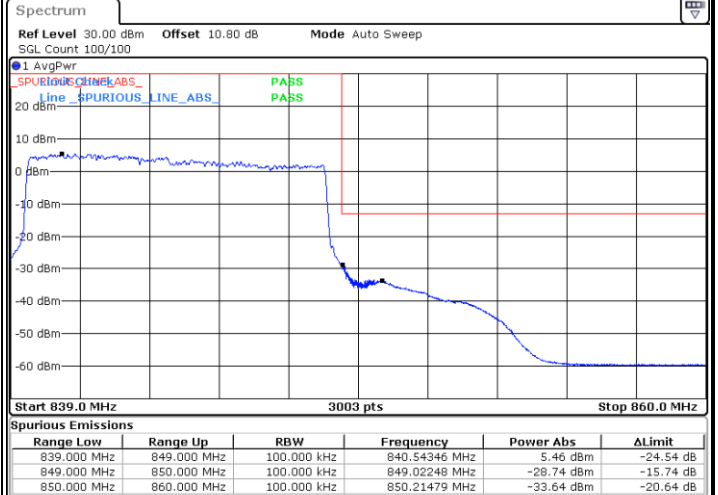
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 18.MAY.2023 13:38:53

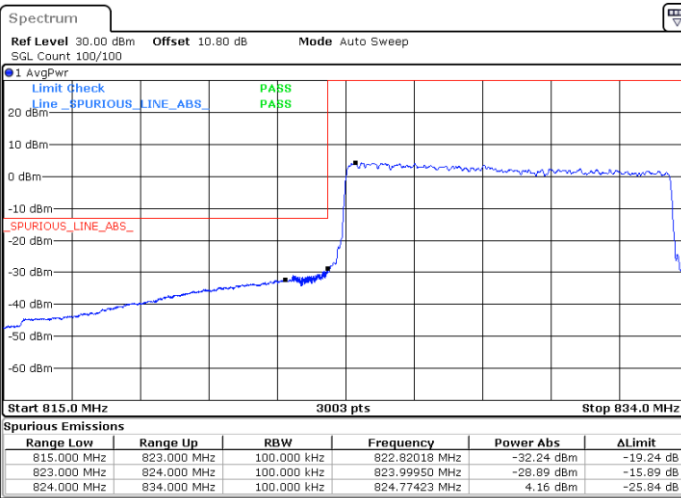
Highest Band Edge / Full RB



Date: 18.MAY.2023 13:44:46

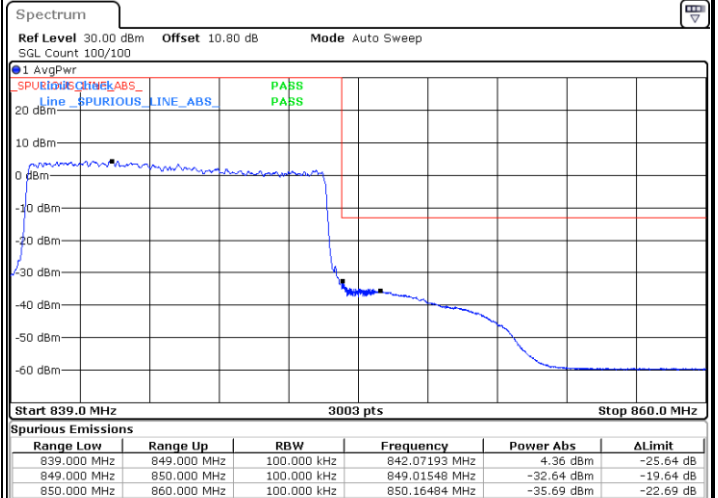
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / Full RB



Date: 18.MAY.2023 13:39:53

Highest Band Edge / Full RB



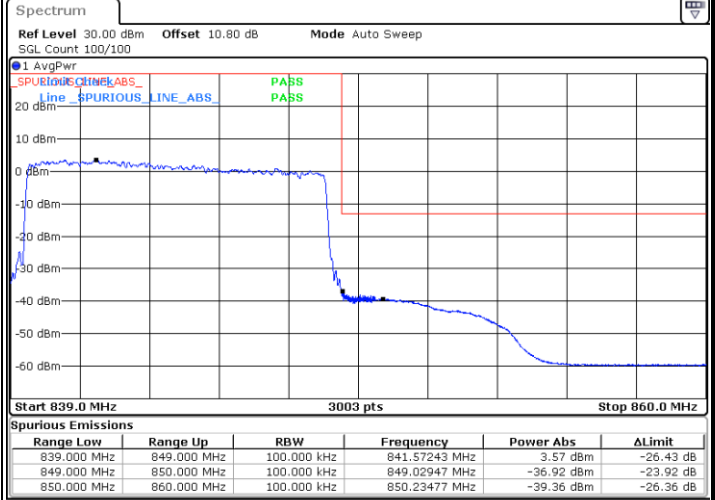
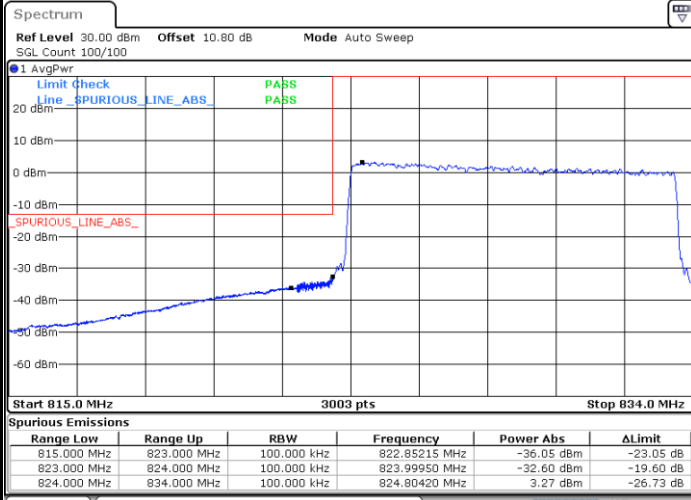
Date: 18.MAY.2023 13:45:46



LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18.MAY.2023 13:40:52

Date: 18.MAY.2023 13:46:45

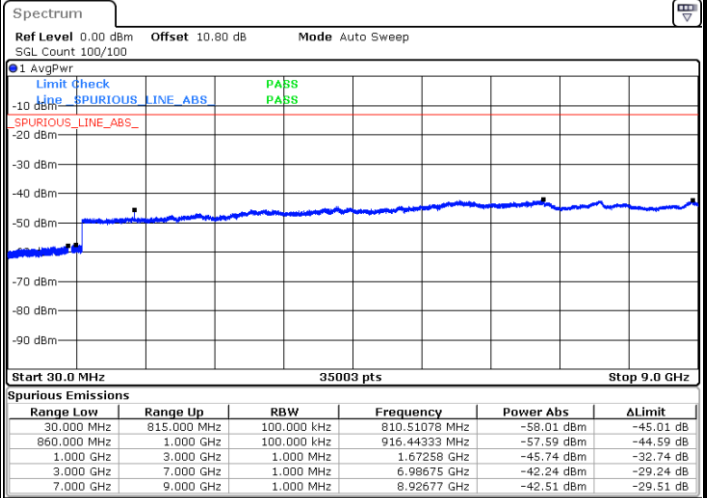
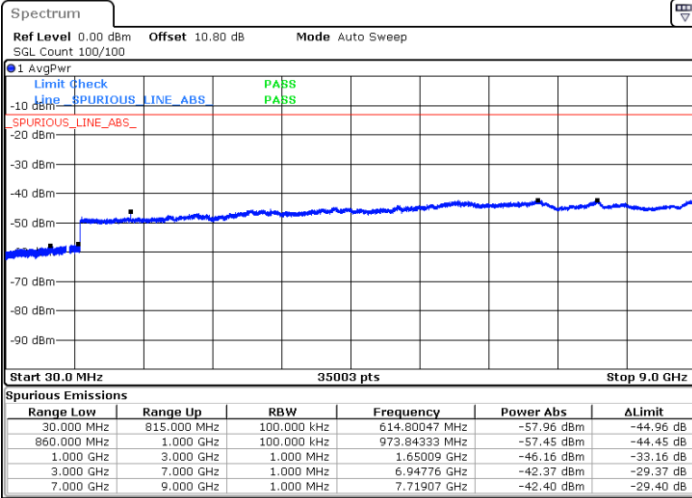


Conducted Spurious Emission

LTE Band 5 / 1.4MHz

Lowest Channel / QPSK

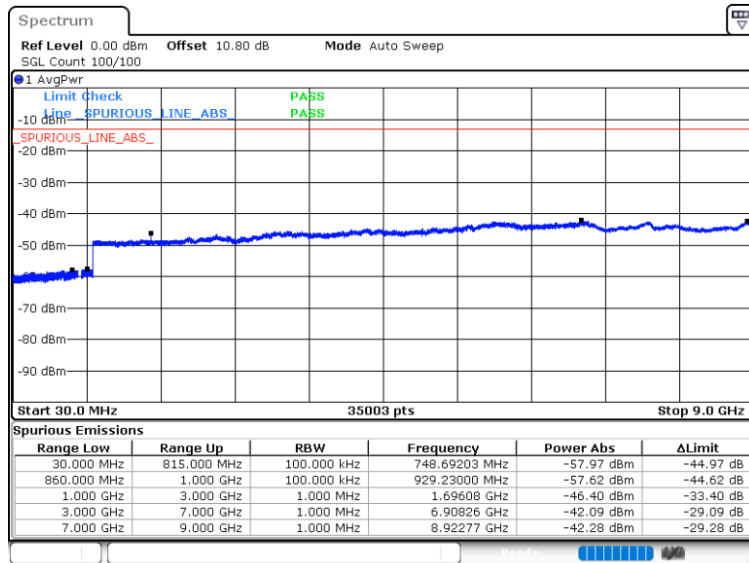
Middle Channel / QPSK



Date: 18.MAY.2023 13:08:06

Date: 18.MAY.2023 13:12:13

Highest Channel / QPSK



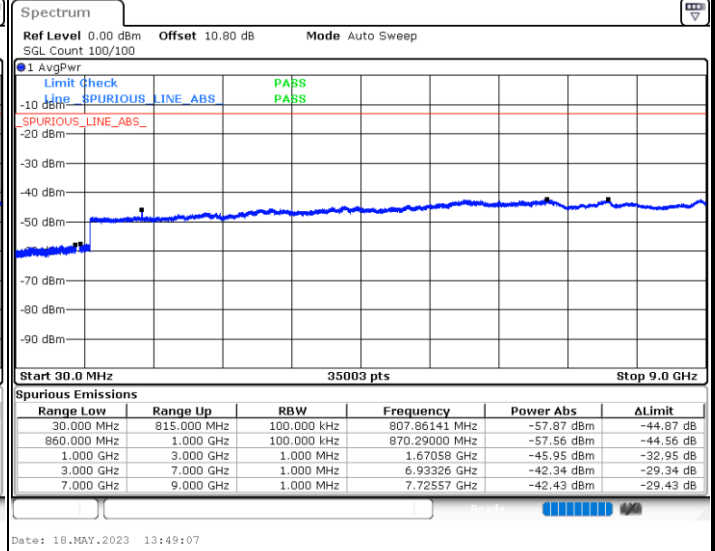
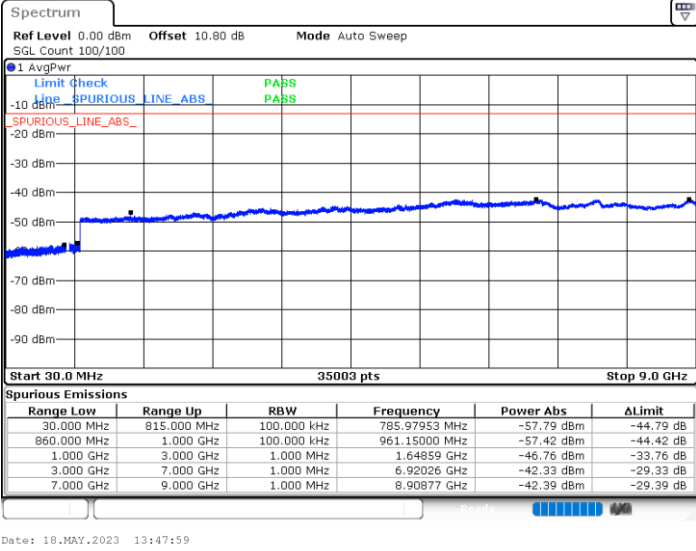
Date: 18.MAY.2023 13:21:28



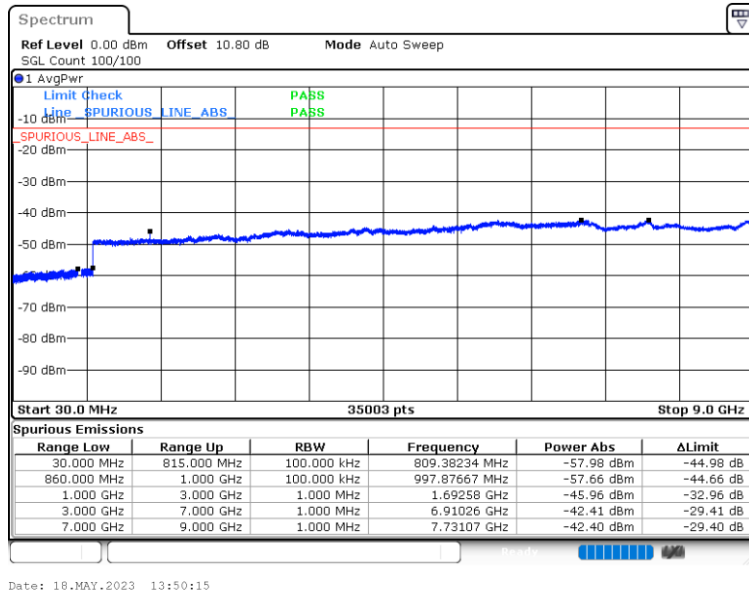
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

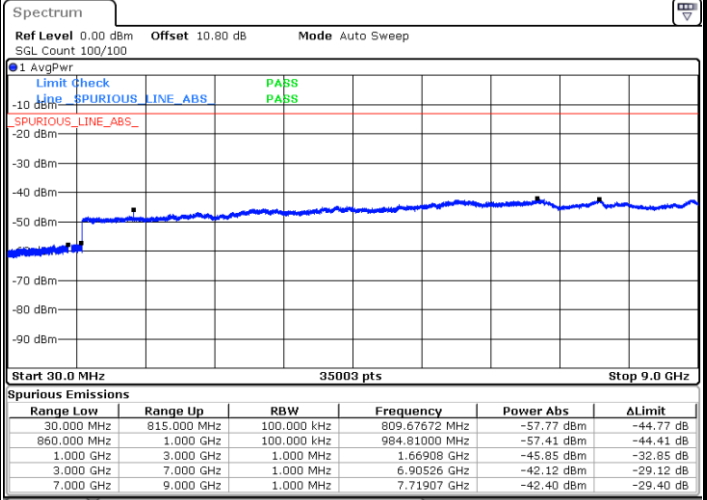
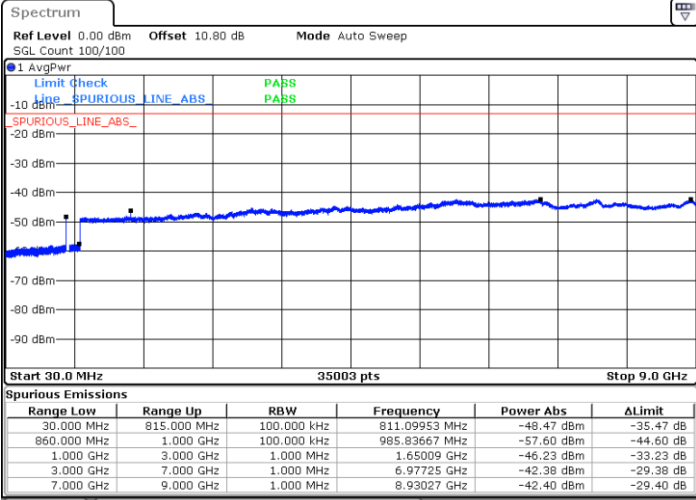




LTE Band 5 / 5MHz

Lowest Channel / QPSK

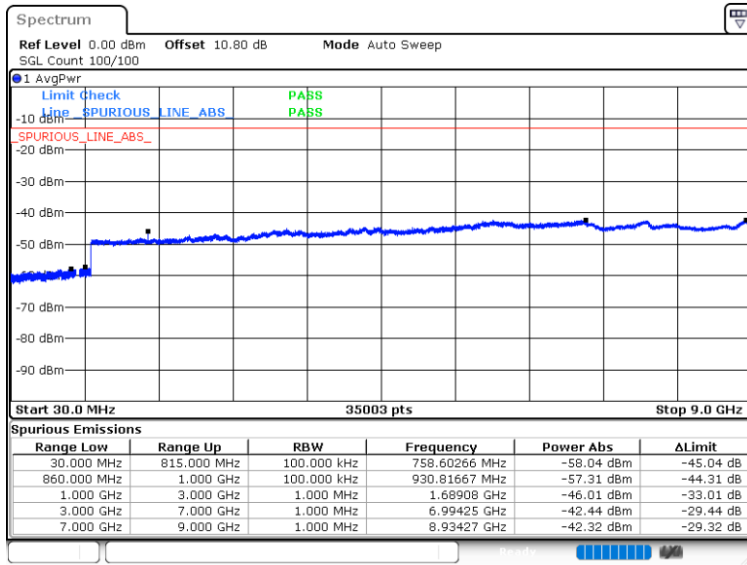
Middle Channel / QPSK



Date: 18.MAY.2023 13:51:28

Date: 18.MAY.2023 13:52:36

Highest Channel / QPSK

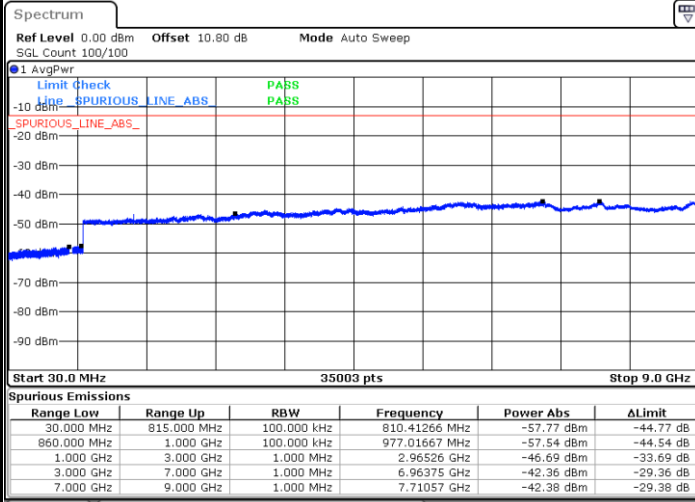


Date: 18.MAY.2023 13:53:44



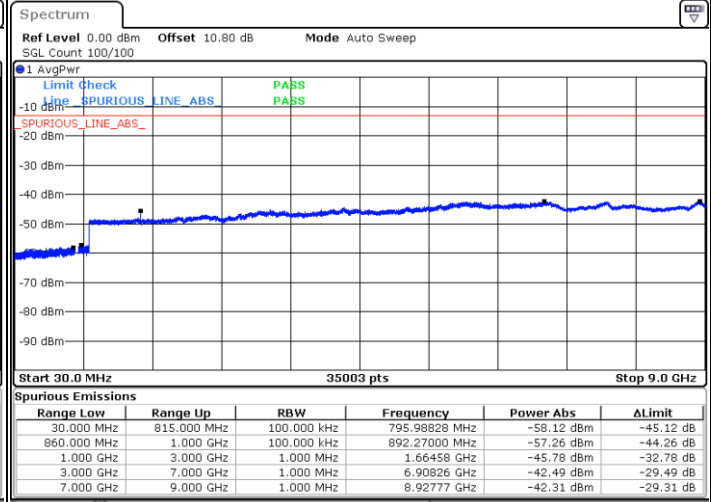
LTE Band 5 / 10MHz

Lowest Channel / QPSK



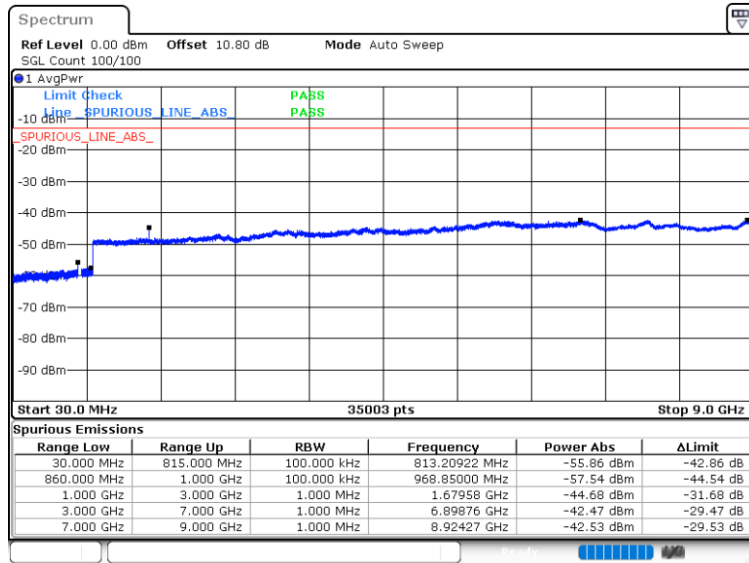
Date: 18.MAY.2023 13:54:57

Middle Channel / QPSK



Date: 18.MAY.2023 13:56:05

Highest Channel / QPSK



Date: 18.MAY.2023 13:57:13



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0030	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0048	
0	Normal Voltage	0.0074	
-10	Normal Voltage	0.0038	
20	Maximum Voltage	0.0134	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0063	

Note:

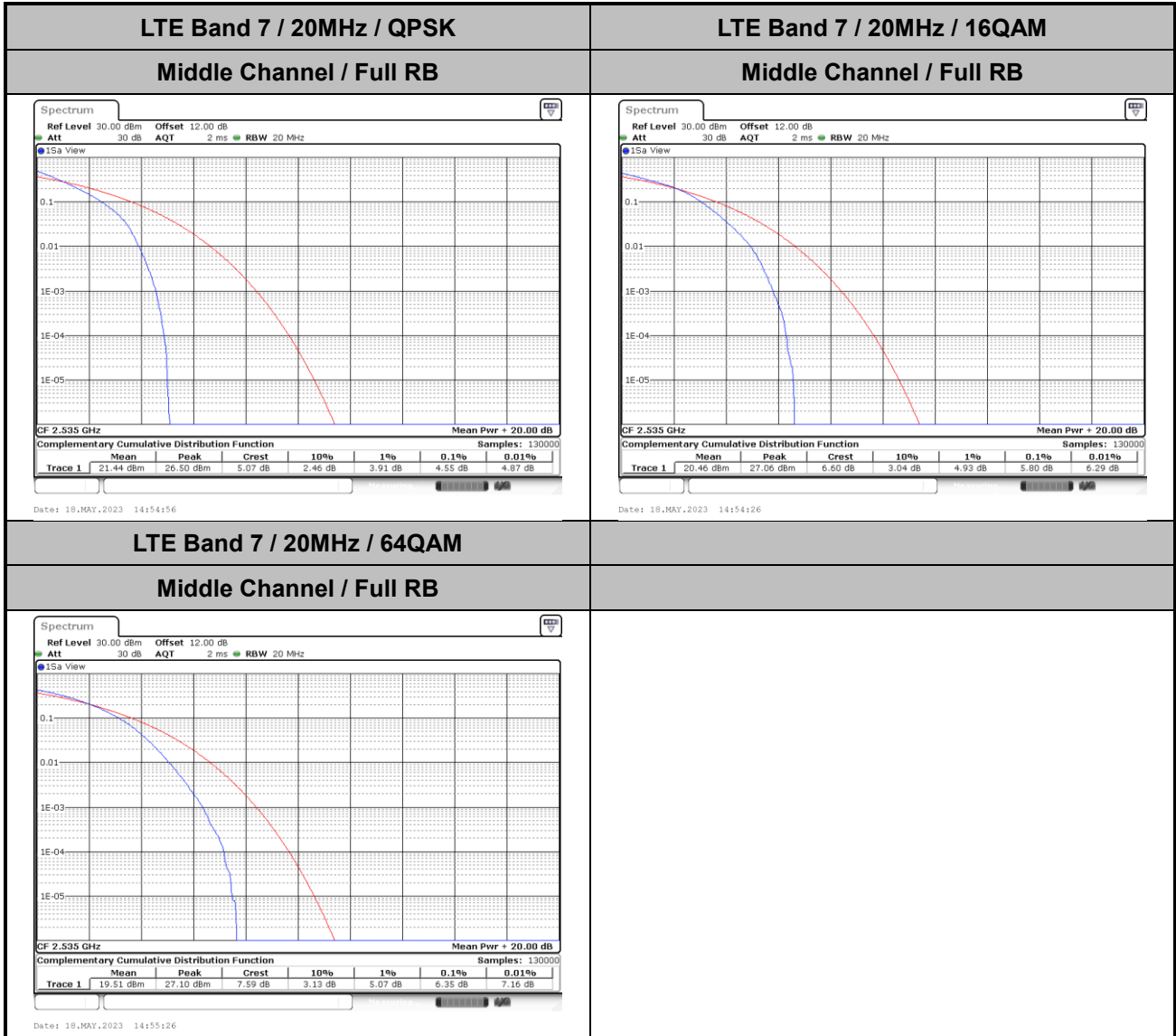
- 1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.42 V. ; Maximum Voltage = 4.45 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7

Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.55	5.80	6.35	PASS





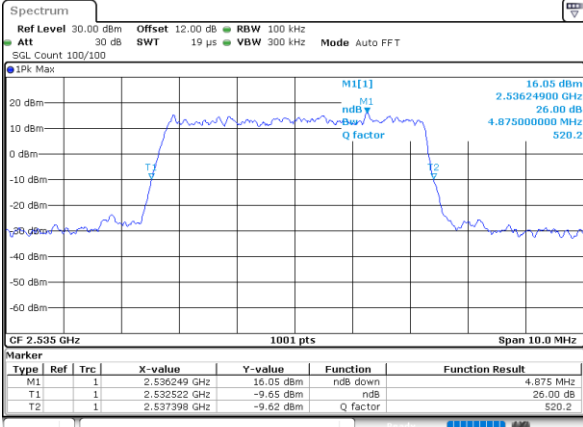
26dB Bandwidth

Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.88	4.87	9.79	9.89	14.33	14.30	19.06	18.74
Mode	LTE Band 7 : 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	-	-	-	-	4.93	-	9.71	-	14.15	-	18.78	-



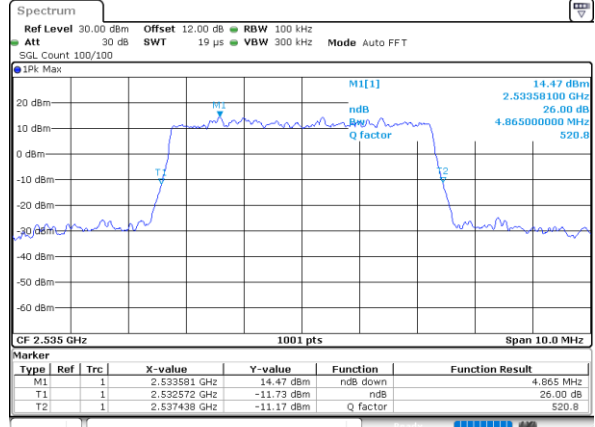
LTE Band 7

Middle Channel / 5MHz / QPSK



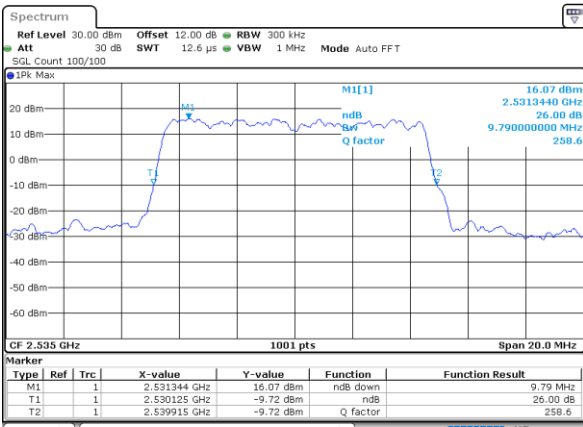
Date: 18_MAY.2023 14:16:25

Middle Channel / 5MHz / 16QAM



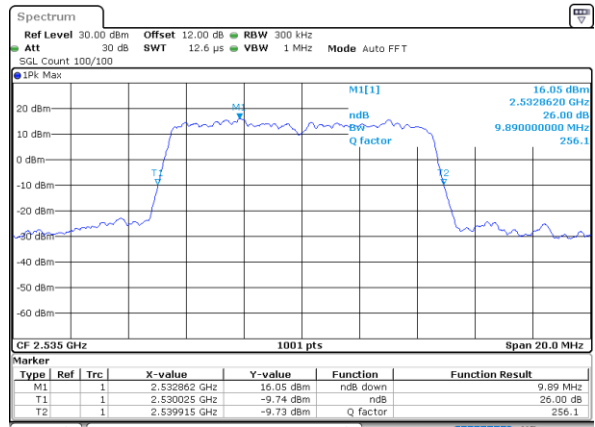
Date: 18_MAY.2023 14:16:54

Middle Channel / 10MHz / QPSK



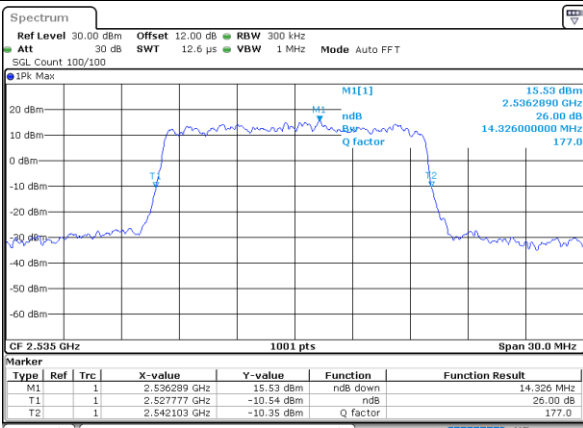
Date: 18_MAY.2023 14:31:21

Middle Channel / 10MHz / 16QAM



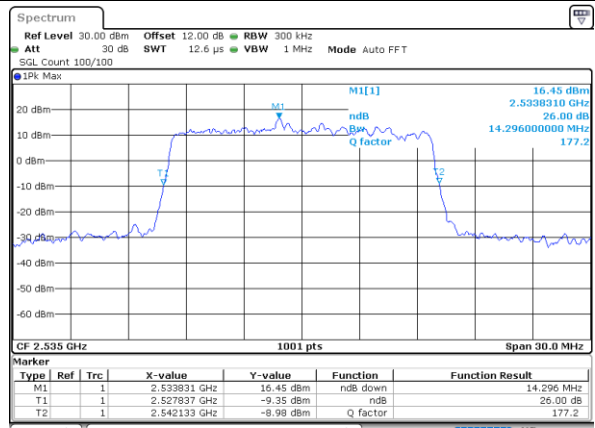
Date: 18_MAY.2023 14:31:50

Middle Channel / 15MHz / QPSK



Date: 18_MAY.2023 14:40:04

Middle Channel / 15MHz / 16QAM

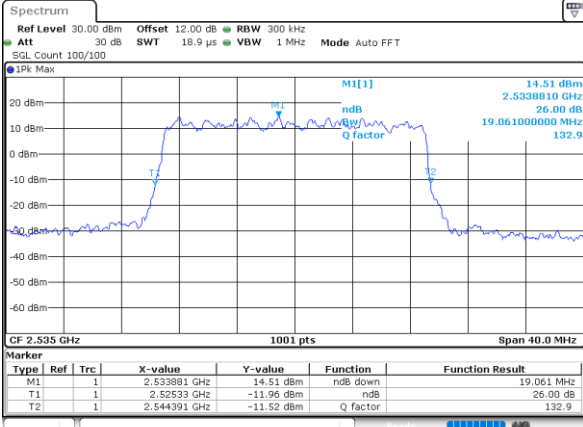


Date: 18_MAY.2023 14:40:33



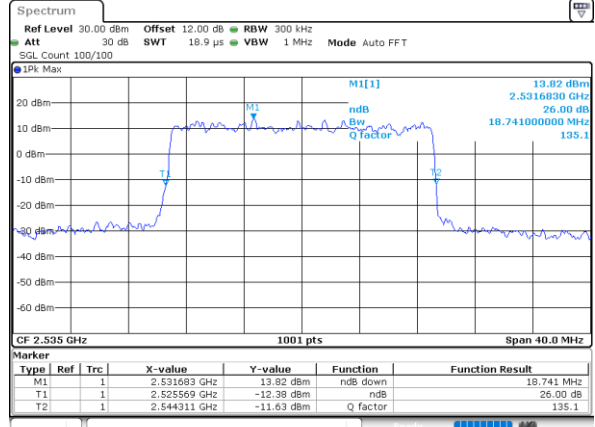
LTE Band 7

Middle Channel / 20MHz / QPSK



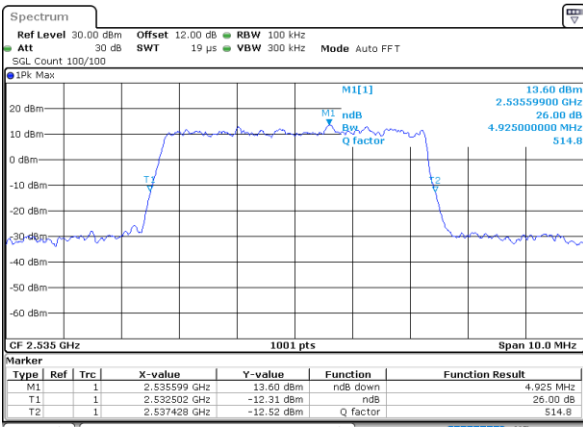
Date: 18.MAY.2023 14:48:45

Middle Channel / 20MHz / 16QAM



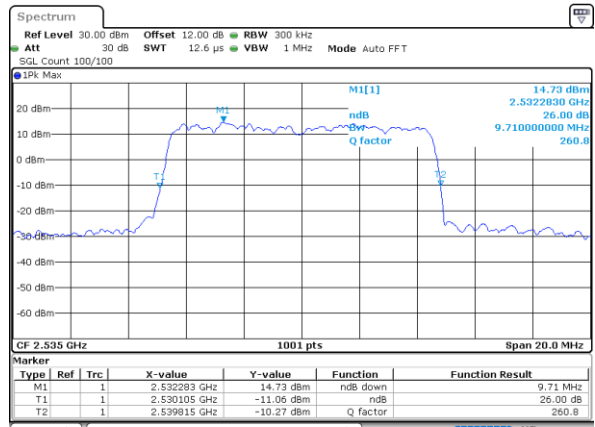
Date: 18.MAY.2023 14:49:14

Middle Channel / 5MHz / 64QAM



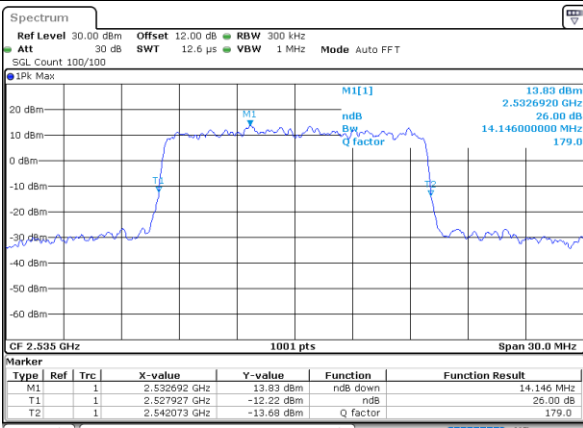
Date: 18.MAY.2023 14:25:50

Middle Channel / 10MHz / 64QAM



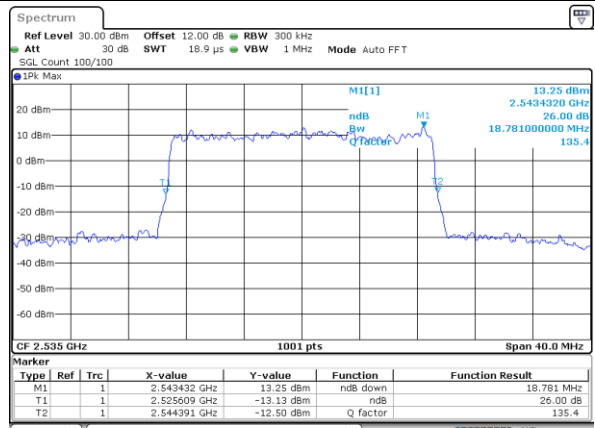
Date: 18.MAY.2023 14:35:32

Middle Channel / 15MHz / 64QAM



Date: 18.MAY.2023 14:44:14

Middle Channel / 20MHz / 64QAM



Date: 18.MAY.2023 14:52:56



Occupied Bandwidth

Mode	LTE Band 7 : 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	-	-	-	-	4.49	4.50	9.07	9.07	13.40	13.43	17.90	17.82
Mode	LTE Band 7 : 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	-	-	-	-	4.48	-	9.09	-	13.46	-	17.82	-