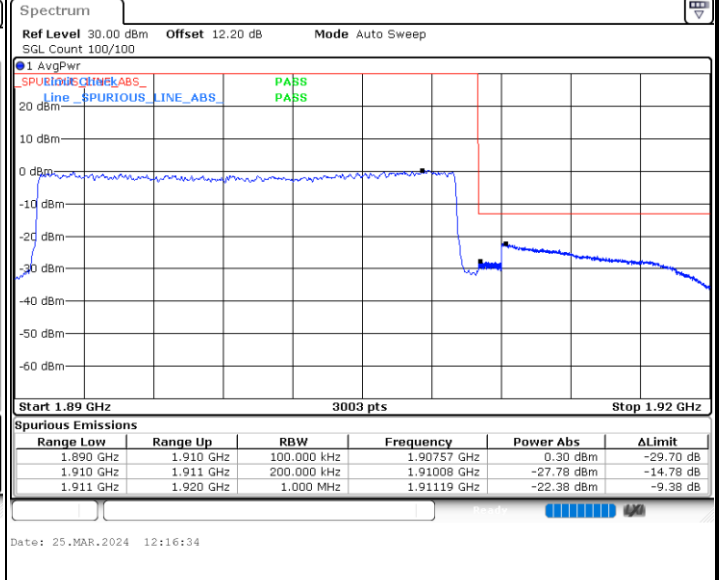
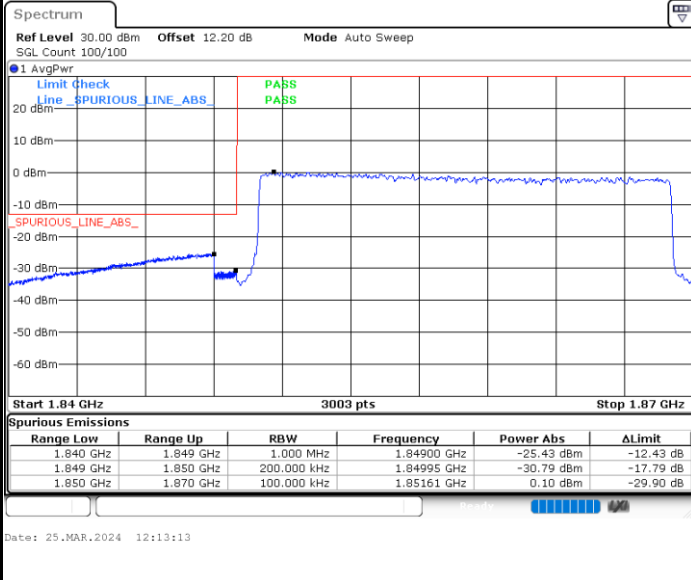




LTE Band 2 / 20MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



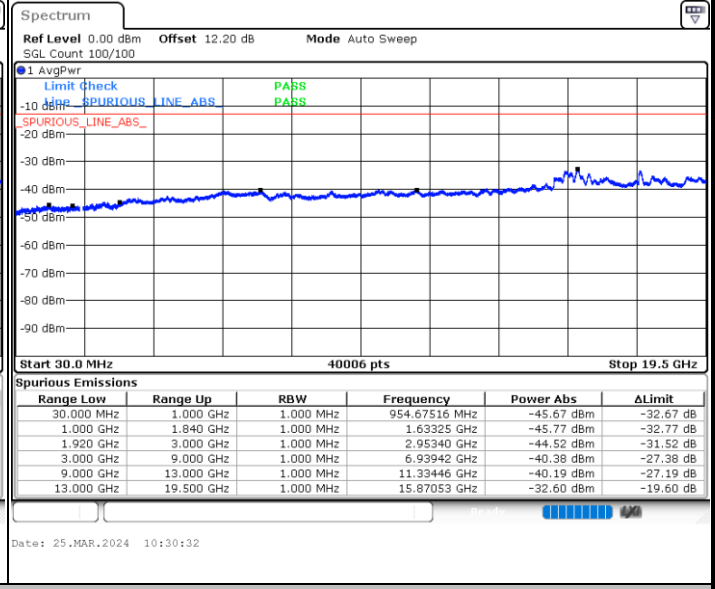
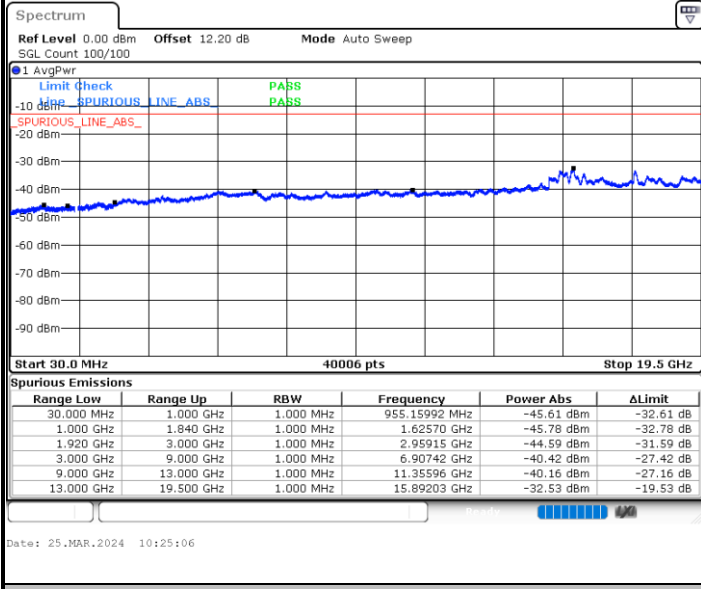


# Conducted Spurious Emission

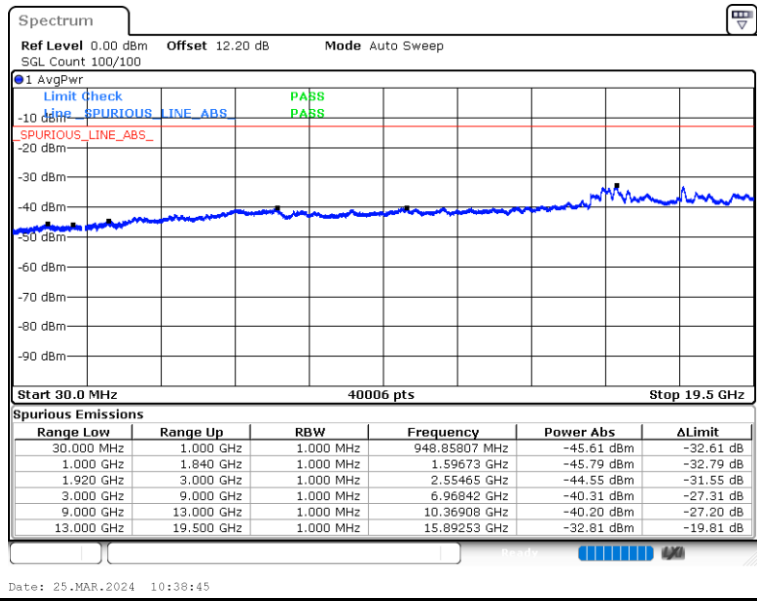
## LTE Band 2 / 1.4MHz

### Lowest Channel / QPSK

### Middle Channel / QPSK



### Highest Channel / QPSK

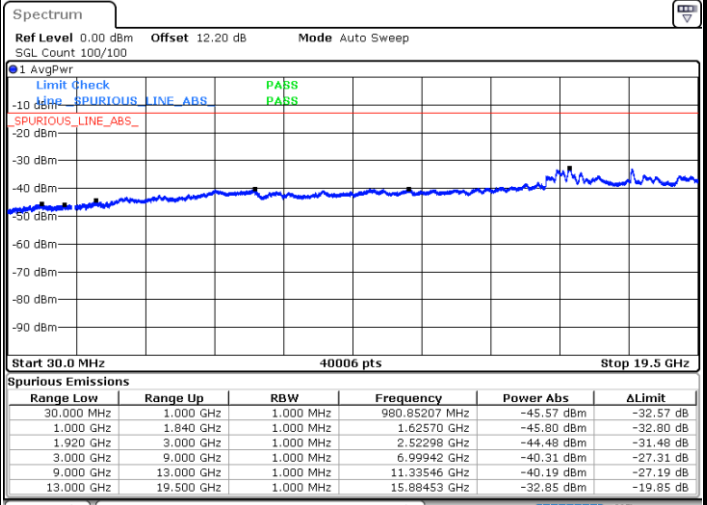
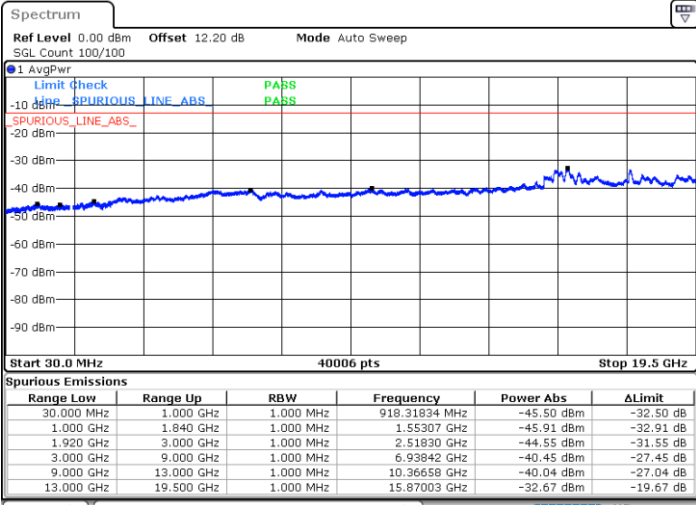




LTE Band 2 / 3MHz

Lowest Channel / QPSK

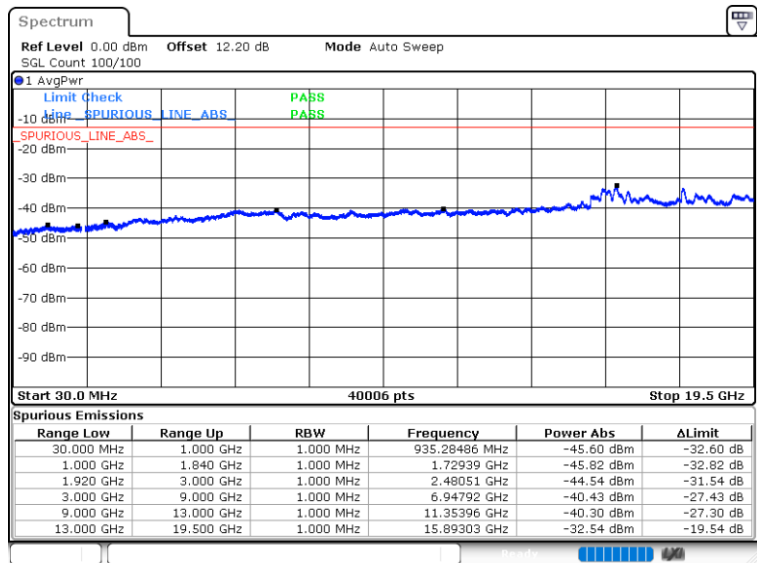
Middle Channel / QPSK



Date: 25.MAR.2024 10:47:20

Date: 25.MAR.2024 10:49:08

Highest Channel / QPSK



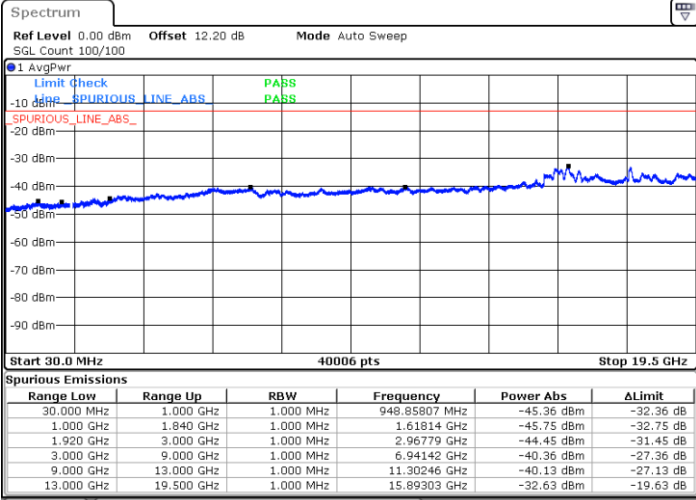
Date: 25.MAR.2024 10:50:55



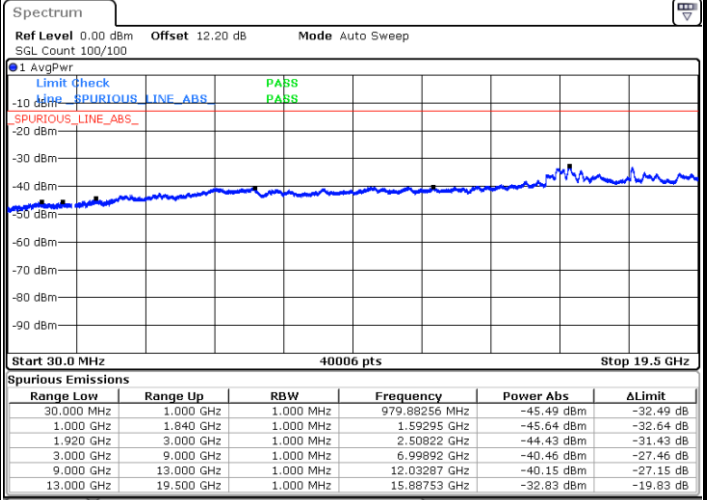
LTE Band 2 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

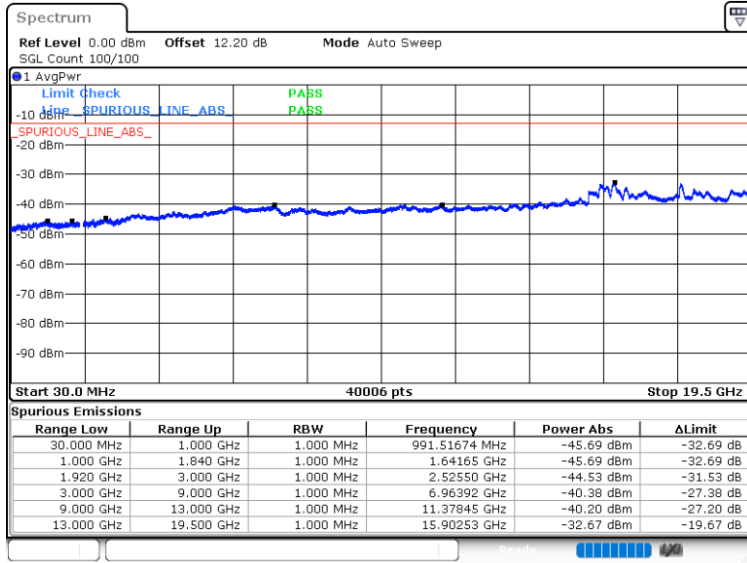


Date: 25.MAR.2024 11:15:10



Date: 25.MAR.2024 11:16:47

Highest Channel / QPSK



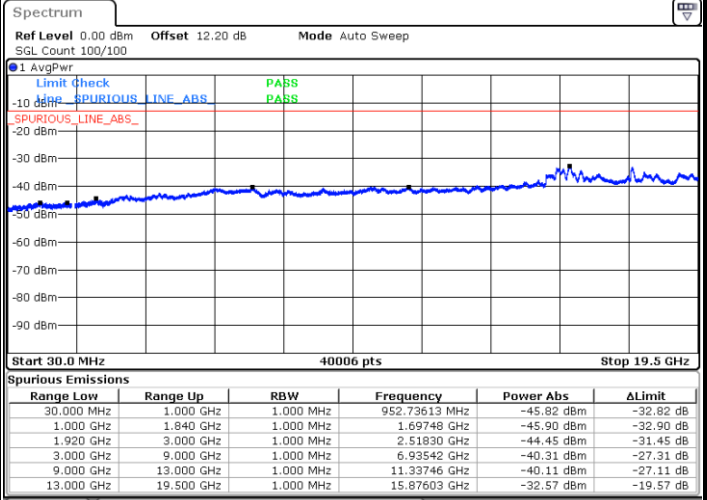
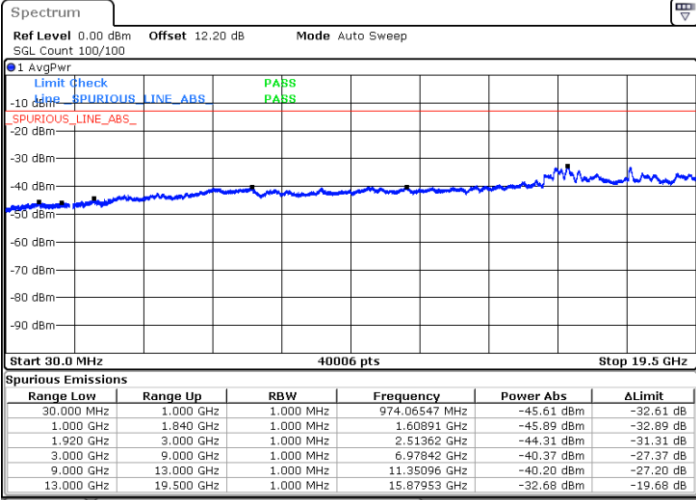
Date: 25.MAR.2024 11:18:26



LTE Band 2 / 10MHz

Lowest Channel / QPSK

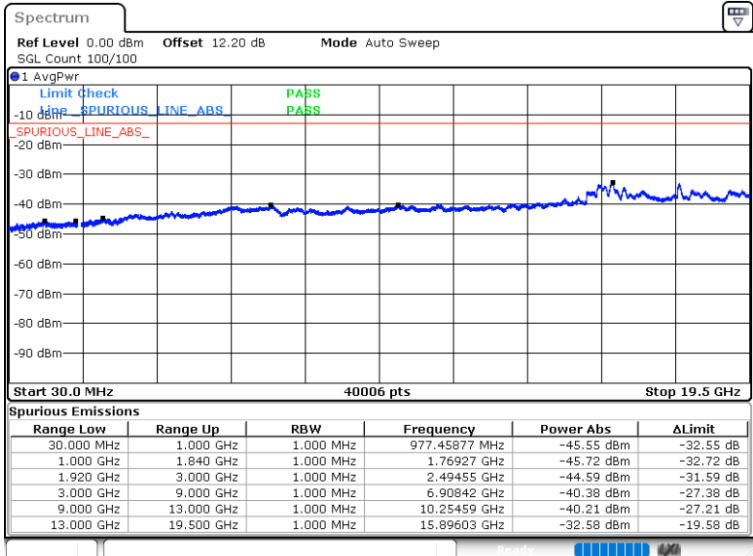
Middle Channel / QPSK



Date: 25.MAR.2024 11:28:53

Date: 25.MAR.2024 11:30:28

Highest Channel / QPSK



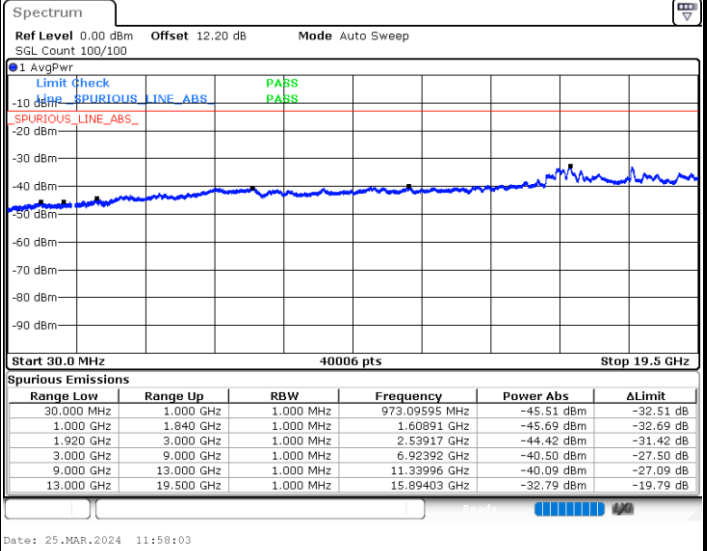
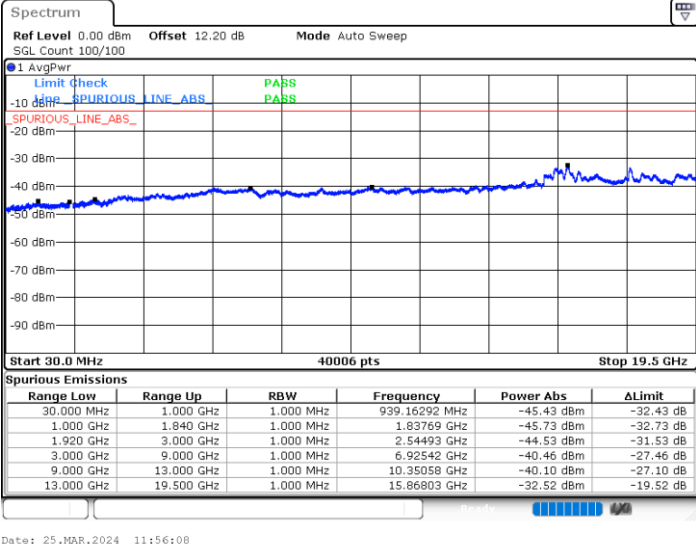
Date: 25.MAR.2024 11:32:18



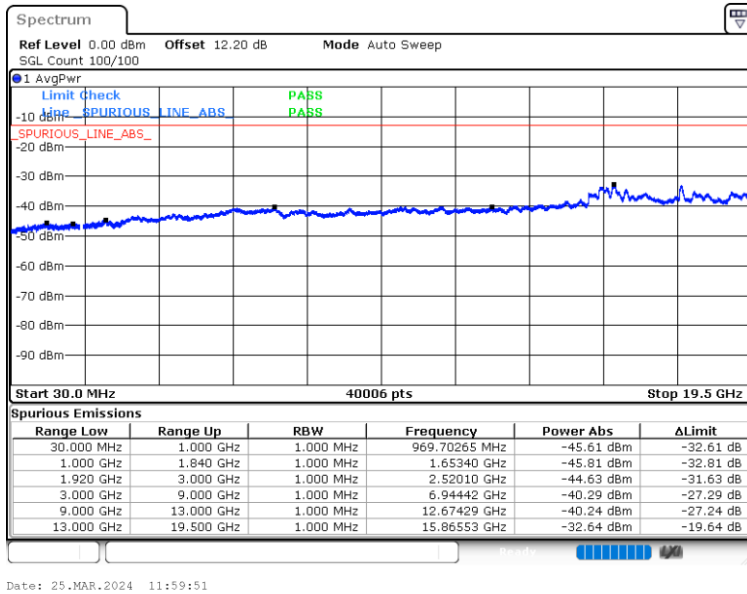
LTE Band 2 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

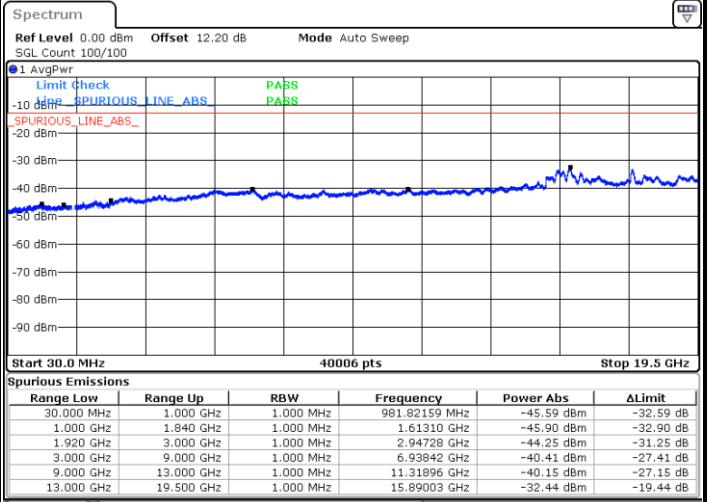
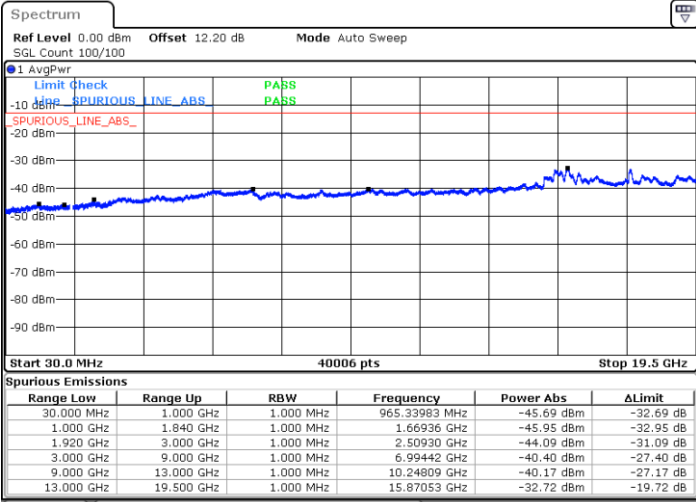




LTE Band 2 / 20MHz

Lowest Channel / QPSK

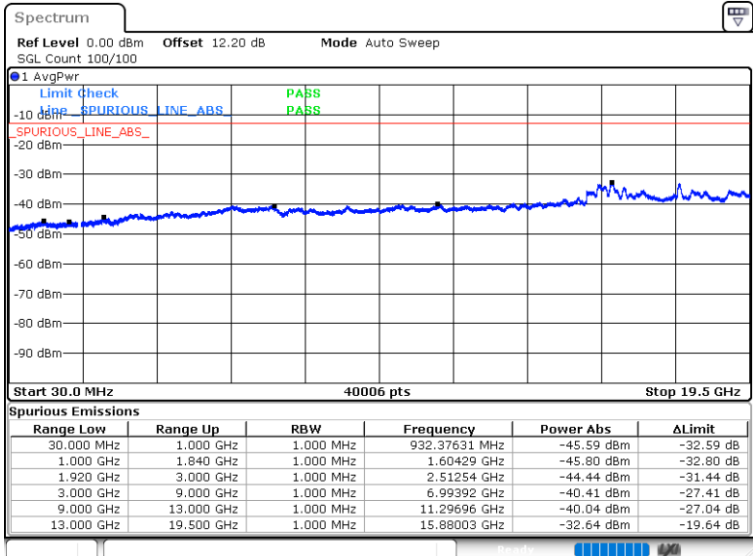
Middle Channel / QPSK



Date: 25.MAR.2024 12:21:17

Date: 25.MAR.2024 12:23:07

Highest Channel / QPSK



Date: 25.MAR.2024 12:24:54



Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0009	PASS
40	Normal Voltage	0.0034	
30	Normal Voltage	0.0042	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0057	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0047	
-20	Normal Voltage	0.0055	
-30	Normal Voltage	0.0058	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0034	

Note: Normal Voltage = 3.87 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.2 V.



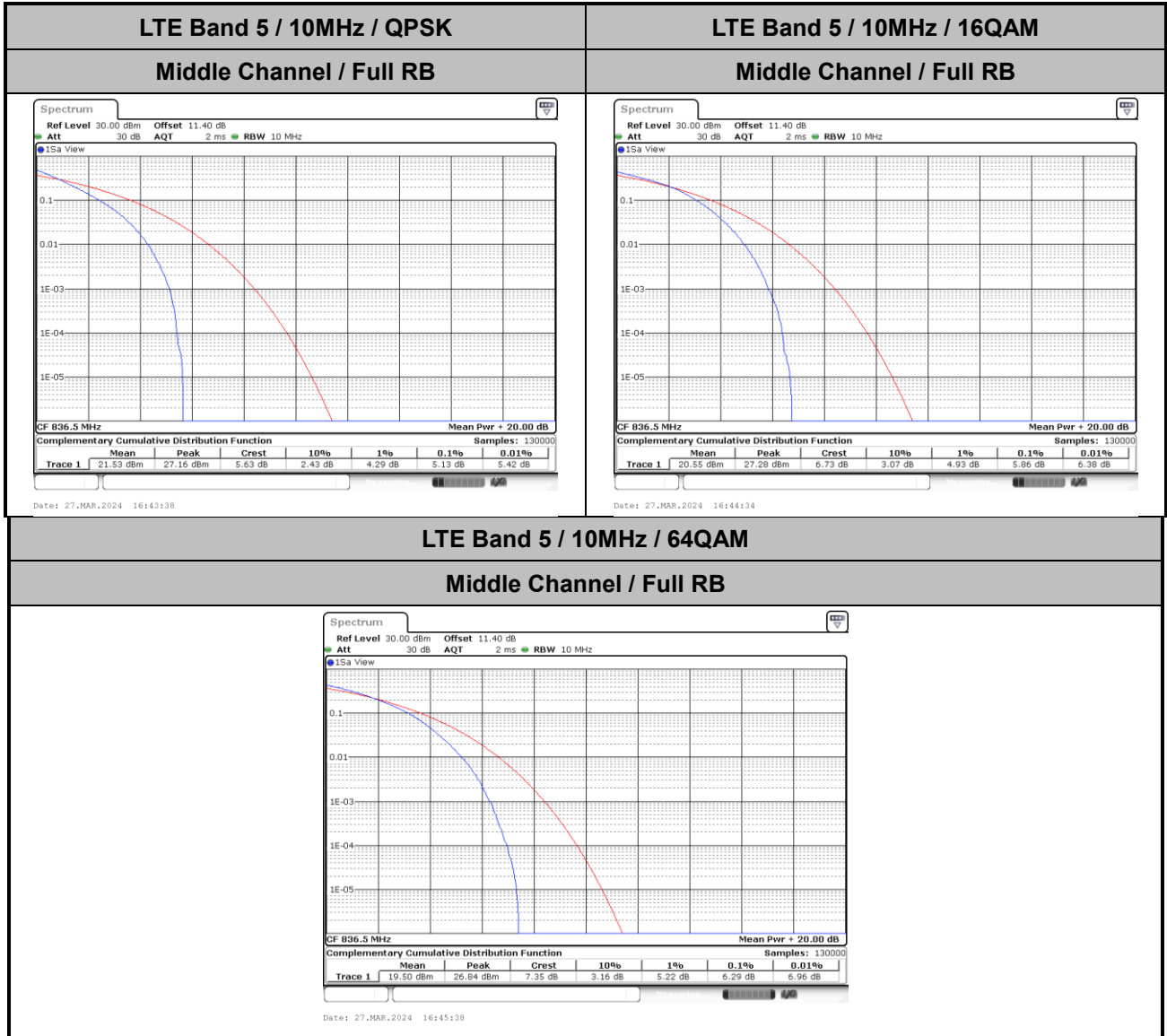


<Ant. 0>

LTE Band 5

**Peak-to-Average Ratio**

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.13	5.86	6.29	-	PASS





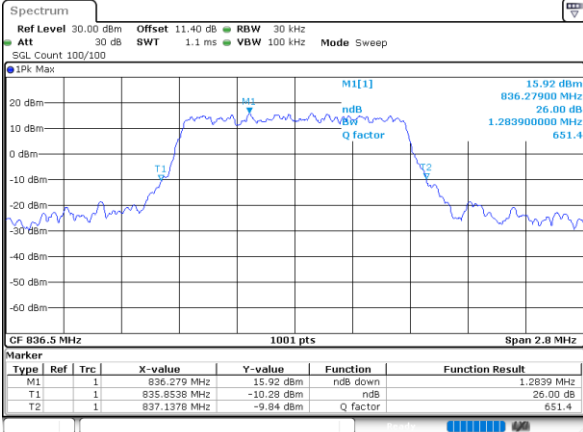
**26dB Bandwidth**

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	1.28	1.23	3.00	2.93	4.84	4.84	9.71	9.75	-	-	-	-
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	1.25	-	2.97	-	4.85	-	9.75	-	-	-	-	-



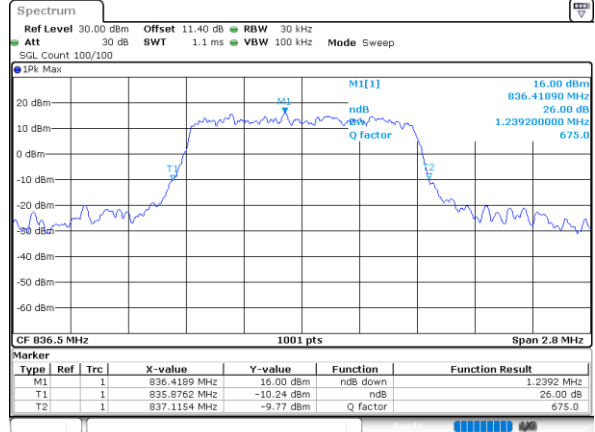
LTE Band 5

Middle Channel / 1.4MHz / QPSK



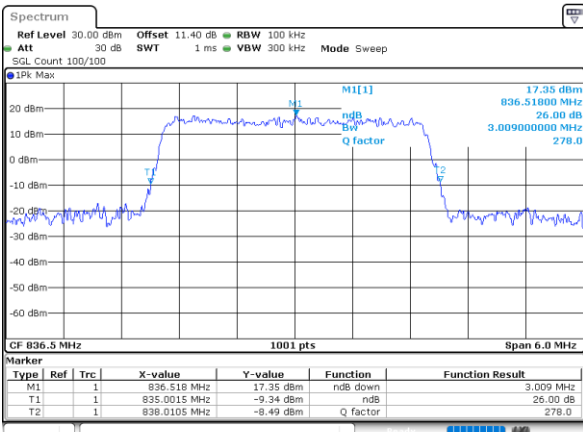
Date: 27\_MAR\_2024 15:01:41

Middle Channel / 1.4MHz / 16QAM



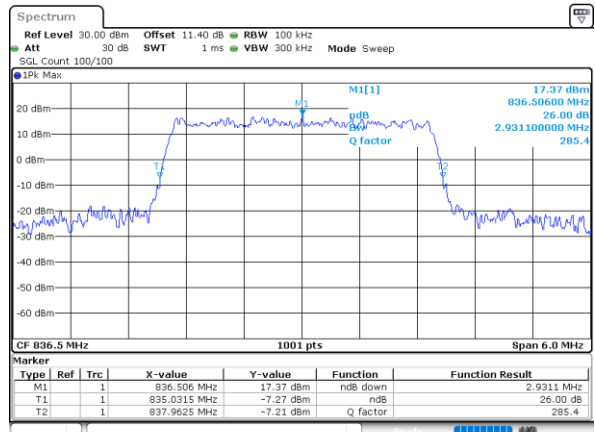
Date: 27\_MAR\_2024 15:01:30

Middle Channel / 3MHz / QPSK



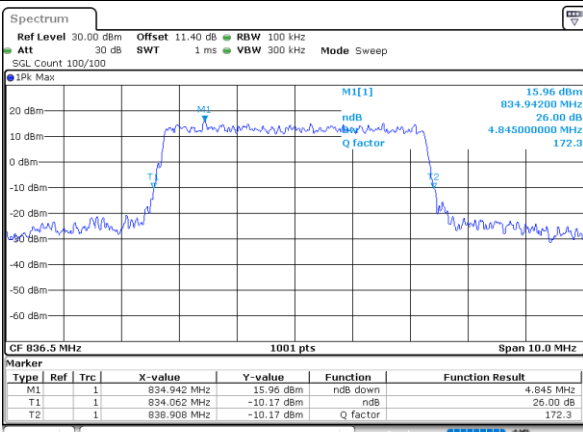
Date: 27\_MAR\_2024 15:01:08

Middle Channel / 3MHz / 16QAM



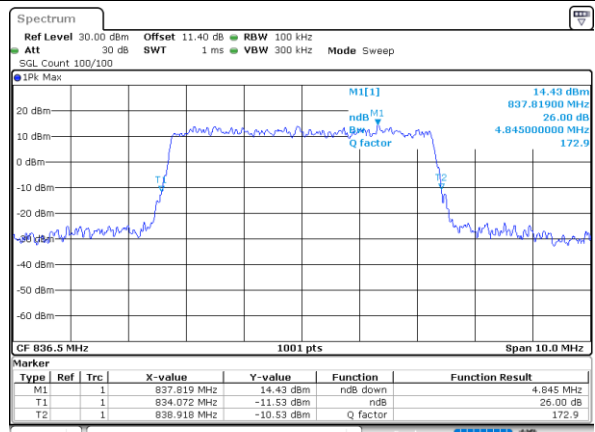
Date: 27\_MAR\_2024 15:02:16

Middle Channel / 5MHz / QPSK



Date: 27\_MAR\_2024 16:01:41

Middle Channel / 5MHz / 16QAM

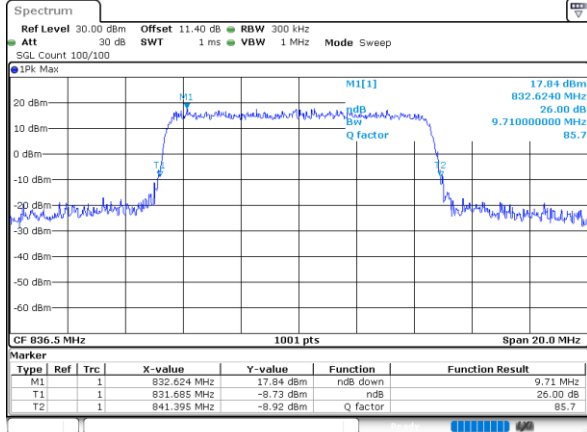


Date: 27\_MAR\_2024 16:02:26



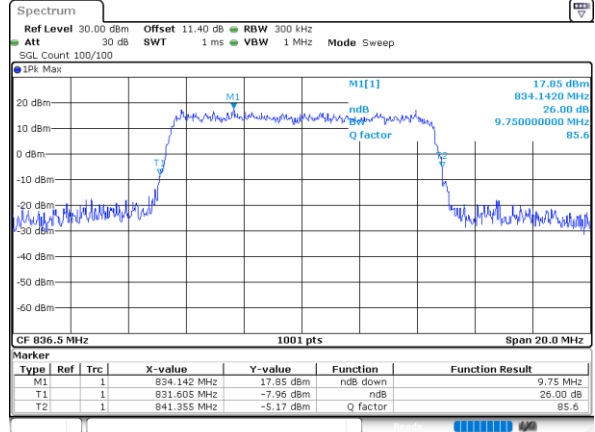
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 27\_MAR\_2024 16:36:01

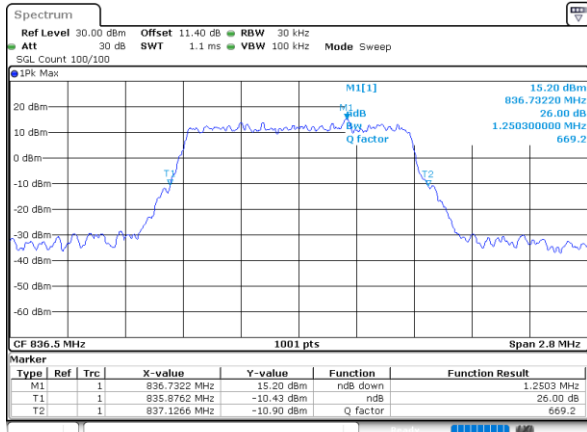
Middle Channel / 10MHz / 16QAM



Date: 27\_MAR\_2024 16:36:159

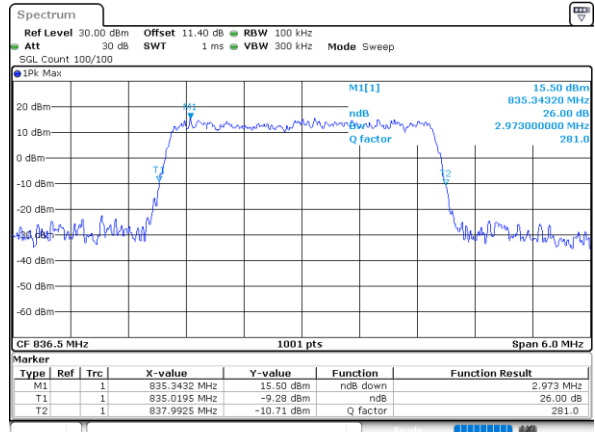
LTE Band 5

Middle Channel / 1.4MHz / 64QAM



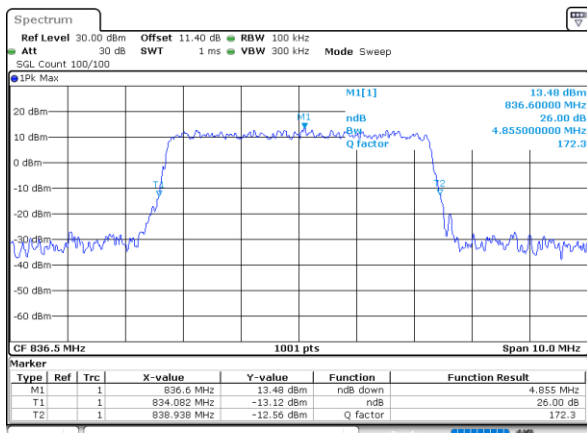
Date: 27\_MAR\_2024 15:02:18

Middle Channel / 3MHz / 64QAM



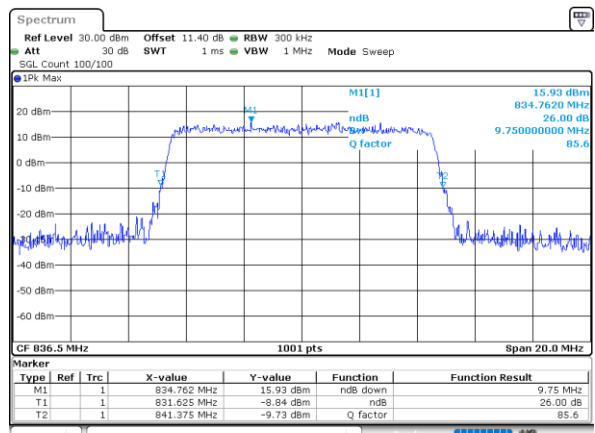
Date: 27\_MAR\_2024 15:33:28

Middle Channel / 5MHz / 64QAM



Date: 27\_MAR\_2024 16:03:15

Middle Channel / 10MHz / 64QAM



Date: 27\_MAR\_2024 16:37:47



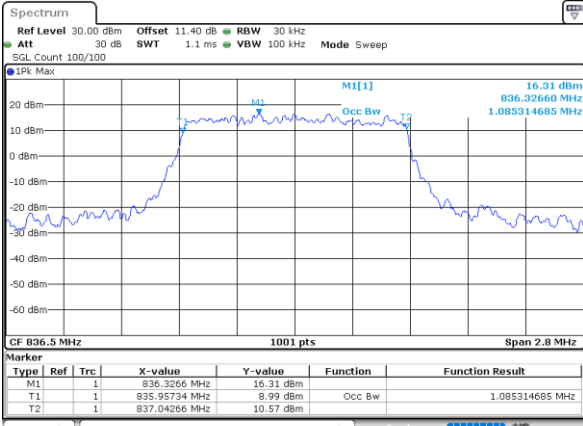
**Occupied Bandwidth**

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	2.71	2.70	4.49	4.49	9.07	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	1.09	-	2.72	-	4.48	-	9.01	-	-	-	-	-



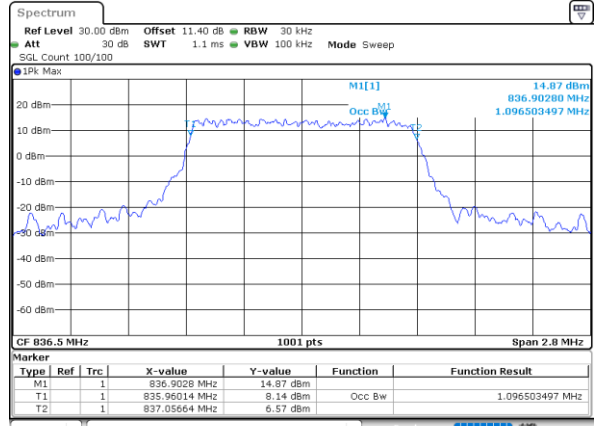
LTE Band 5

Middle Channel / 1.4MHz / QPSK



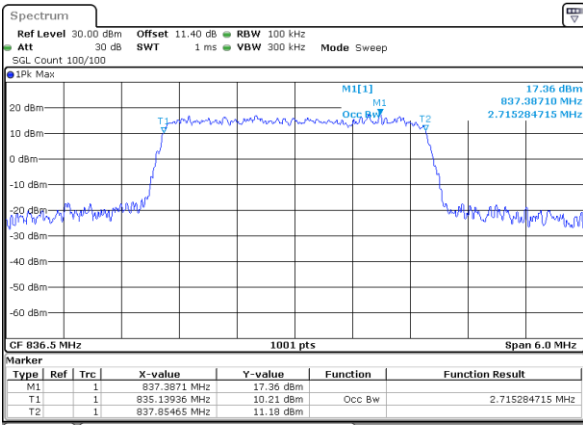
Date: 27.MAR.2024 14:57:53

Middle Channel / 1.4MHz / 16QAM



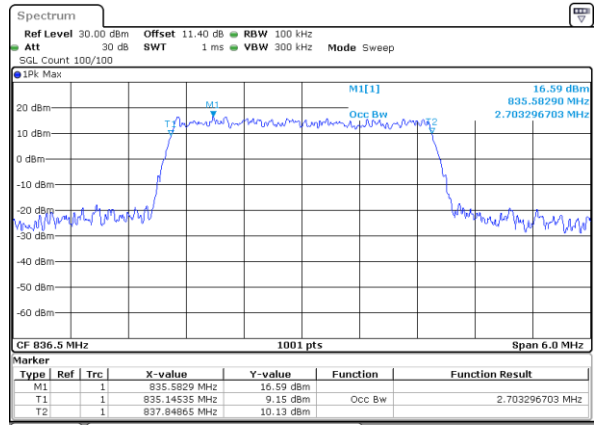
Date: 27.MAR.2024 14:58:49

Middle Channel / 3MHz / QPSK



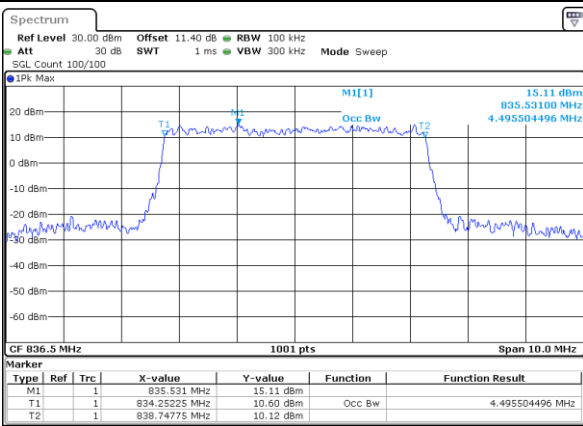
Date: 27.MAR.2024 15:28:47

Middle Channel / 3MHz / 16QAM



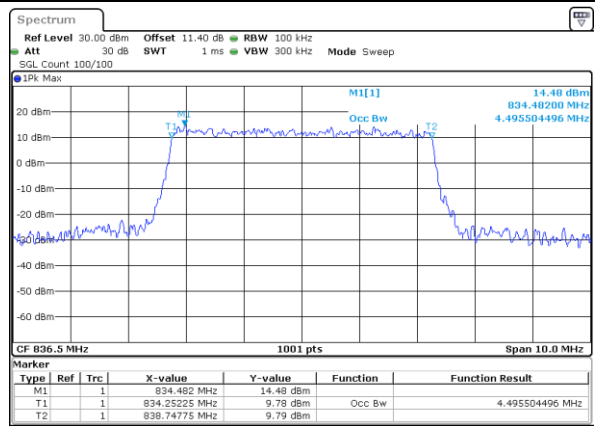
Date: 27.MAR.2024 15:29:45

Middle Channel / 5MHz / QPSK



Date: 27.MAR.2024 15:59:11

Middle Channel / 5MHz / 16QAM

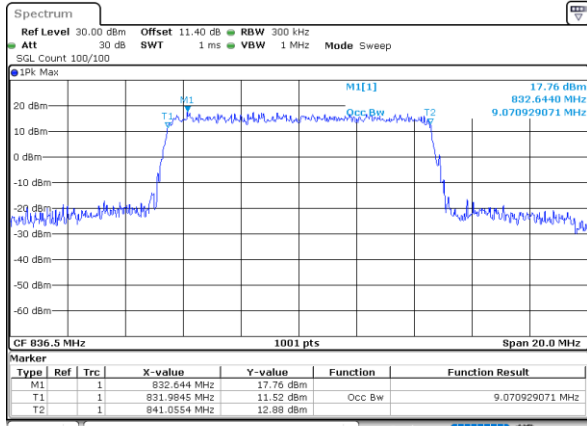


Date: 27.MAR.2024 16:00:07



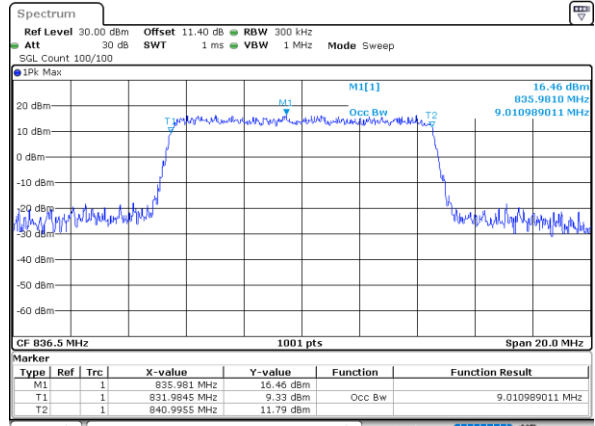
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 27.MAR.2024 16:33:19

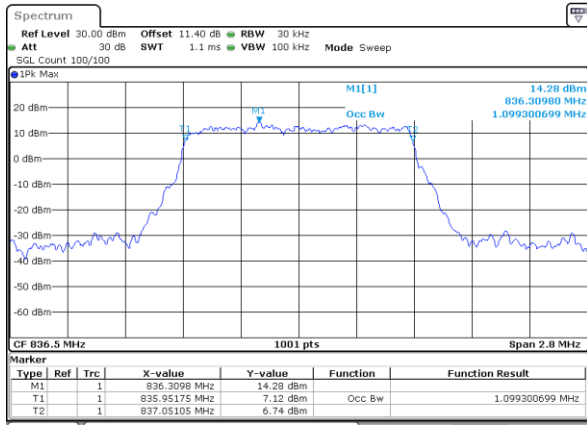
Middle Channel / 10MHz / 16QAM



Date: 27.MAR.2024 16:34:12

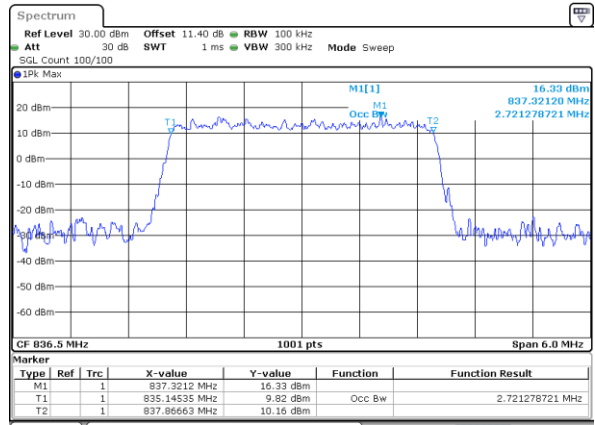
LTE Band 5

Middle Channel / 1.4MHz / 64QAM



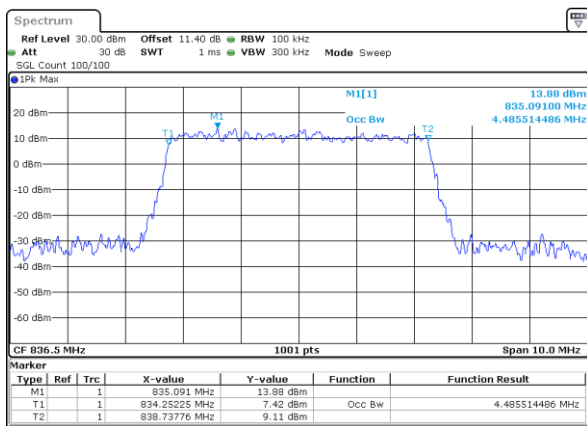
Date: 27.MAR.2024 14:59:45

Middle Channel / 3MHz / 64QAM



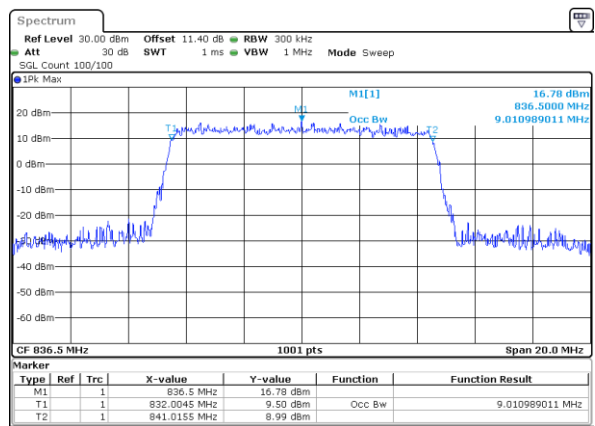
Date: 27.MAR.2024 15:10:43

Middle Channel / 5MHz / 64QAM



Date: 27.MAR.2024 16:00:57

Middle Channel / 10MHz / 64QAM

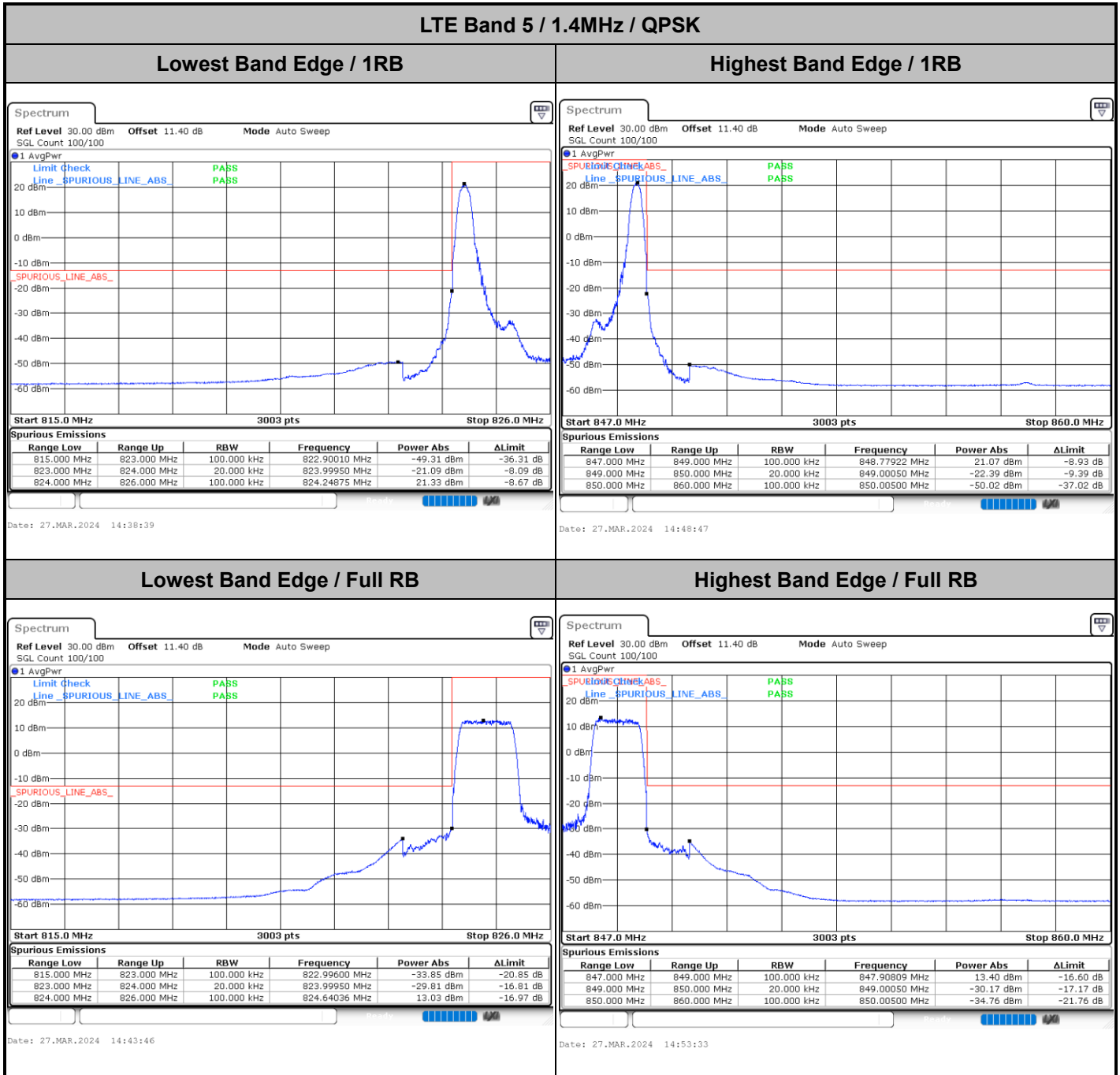


Date: 27.MAR.2024 16:13:05





# Conducted Band Edge





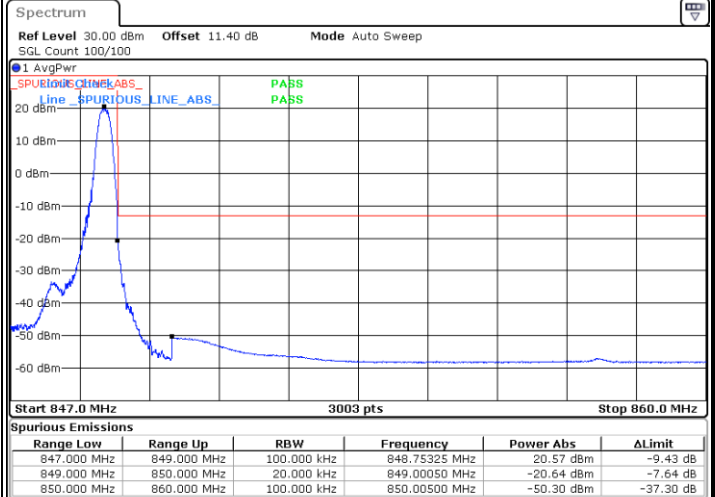
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



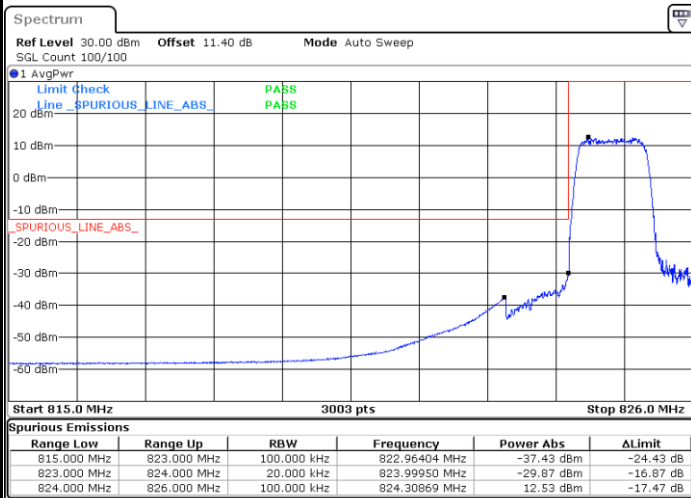
Date: 27.MAR.2024 14:40:17

Highest Band Edge / 1 RB



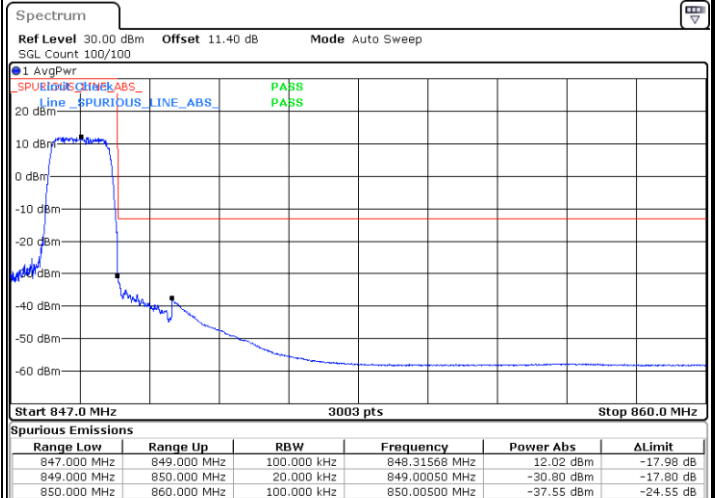
Date: 27.MAR.2024 14:50:22

Lowest Band Edge / Full RB



Date: 27.MAR.2024 14:45:30

Highest Band Edge / Full RB

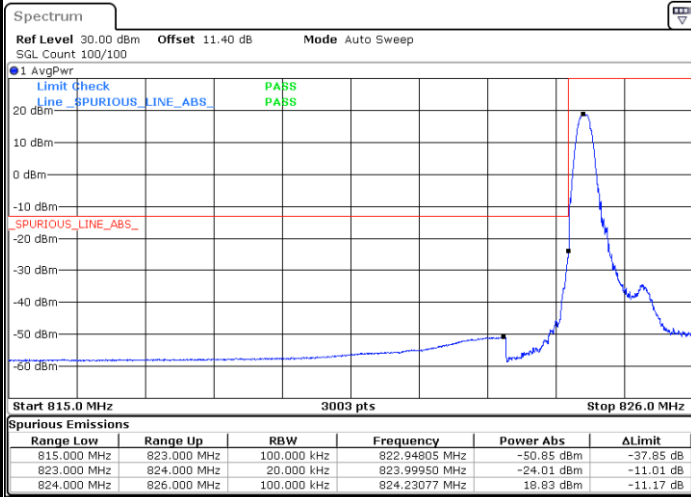


Date: 27.MAR.2024 14:55:18



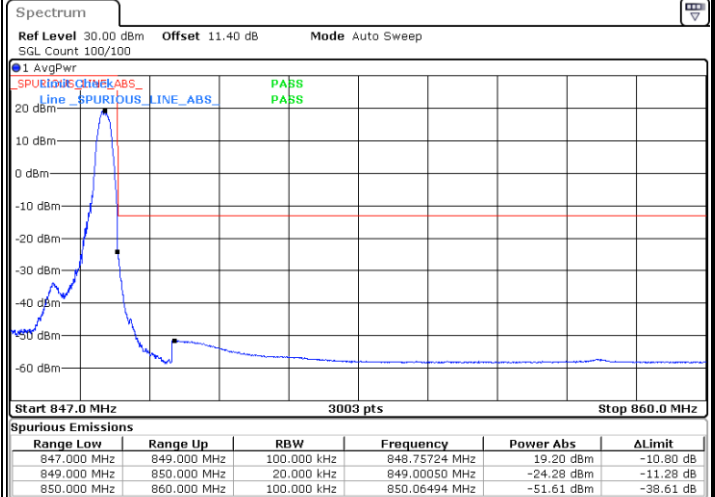
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



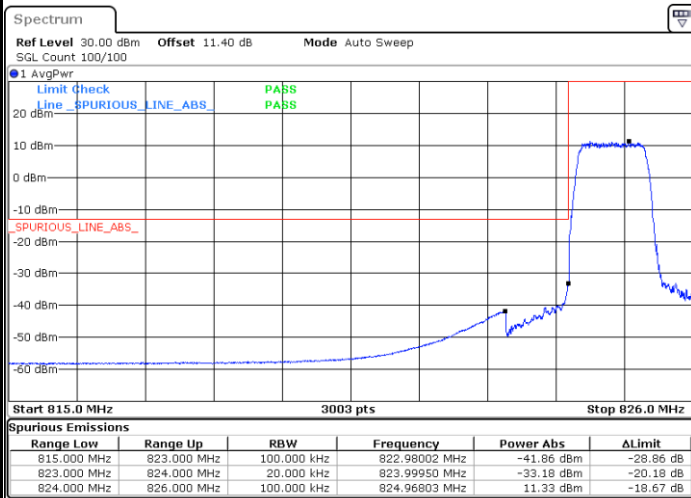
Date: 27.MAR.2024 14:42:00

Highest Band Edge / 1 RB



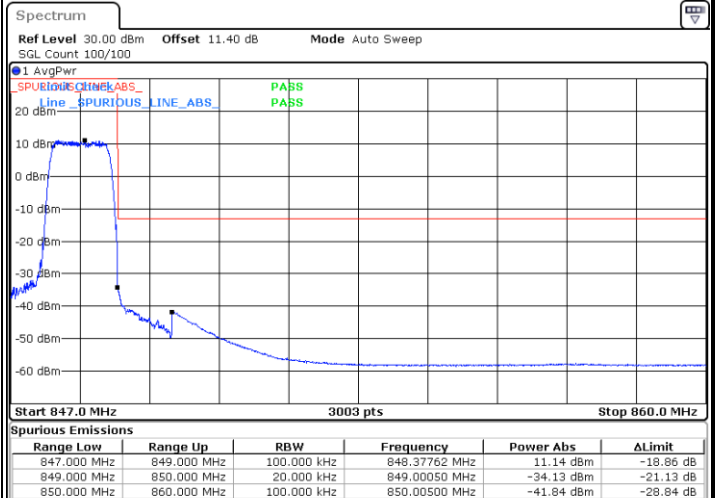
Date: 27.MAR.2024 14:51:59

Lowest Band Edge / Full RB



Date: 27.MAR.2024 14:47:12

Highest Band Edge / Full RB

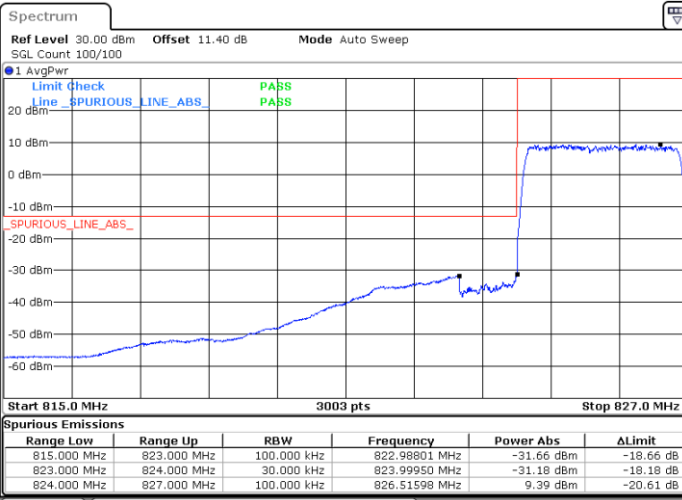


Date: 27.MAR.2024 14:56:59



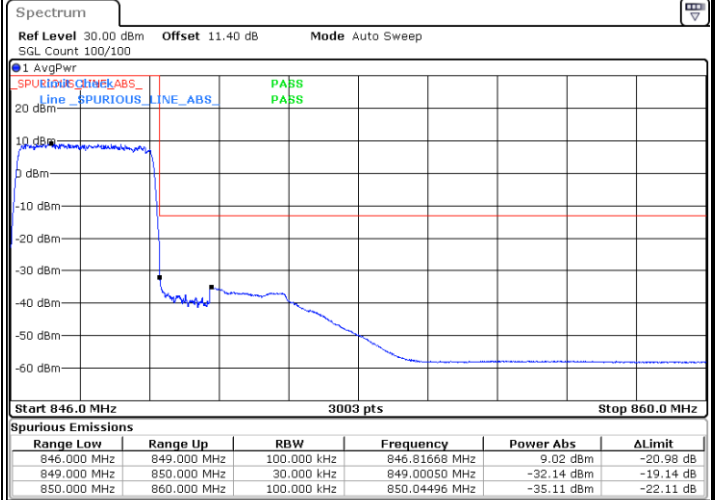
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / Full RB



Date: 27.MAR.2024 15:14:12

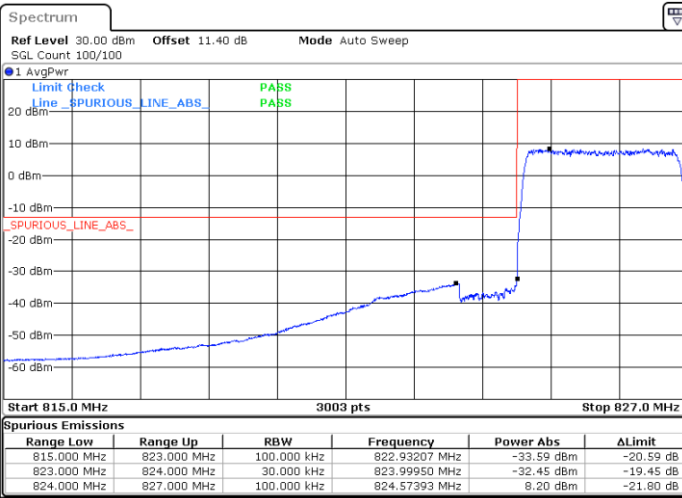
Highest Band Edge / Full RB



Date: 27.MAR.2024 15:24:16

LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / Full RB

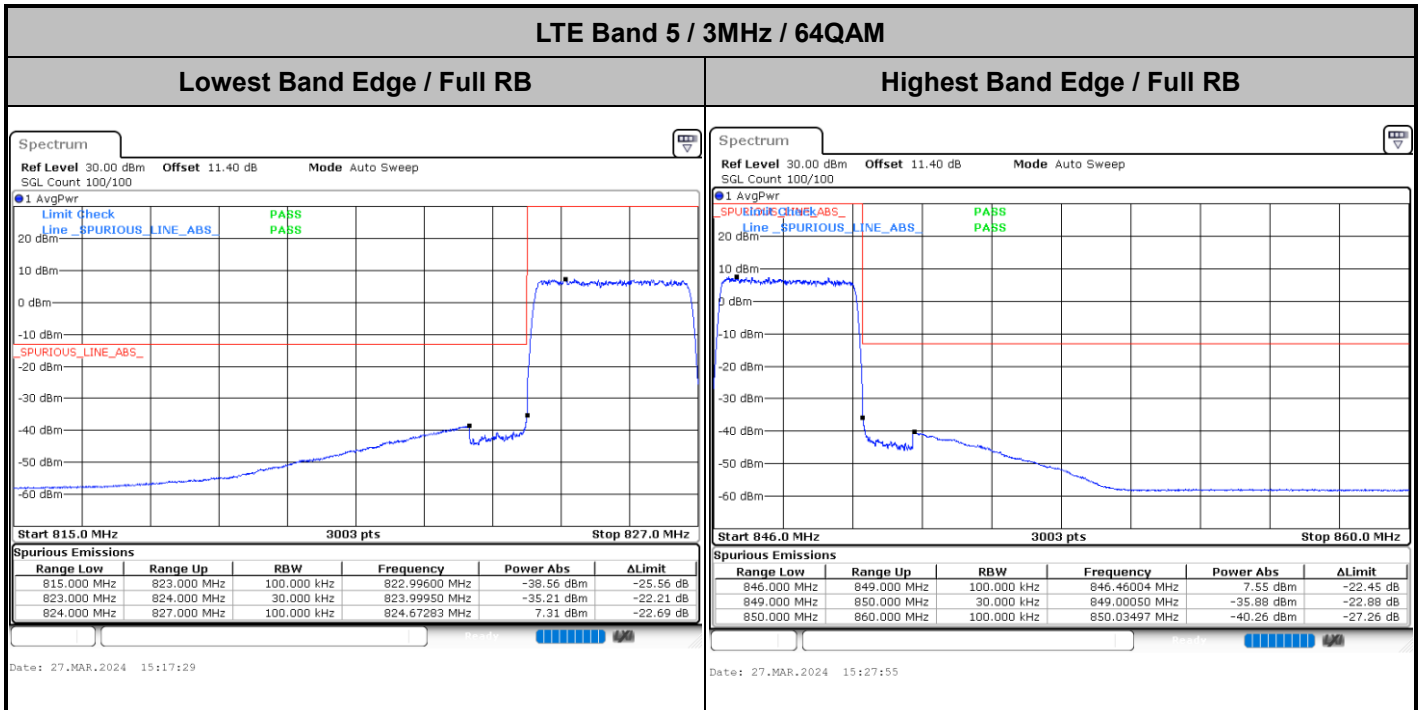


Date: 27.MAR.2024 15:15:50

Highest Band Edge / Full RB



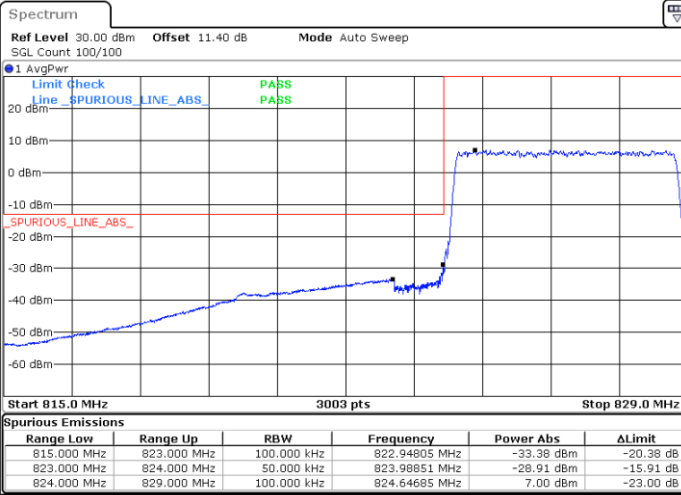
Date: 27.MAR.2024 15:26:11





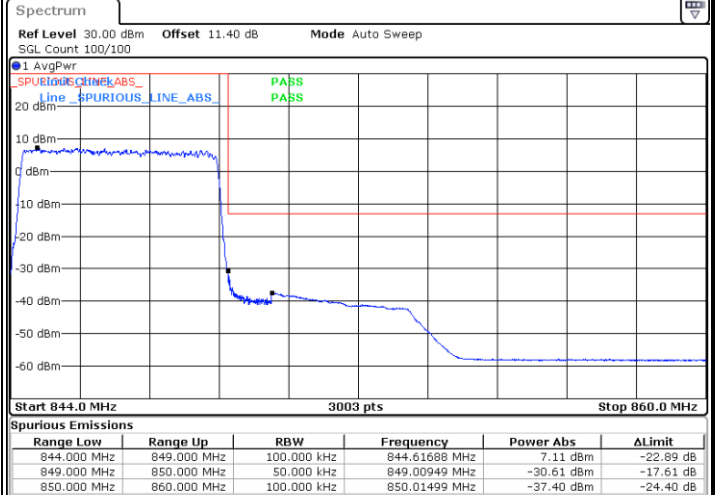
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / Full RB



Date: 27.MAR.2024 15:45:16

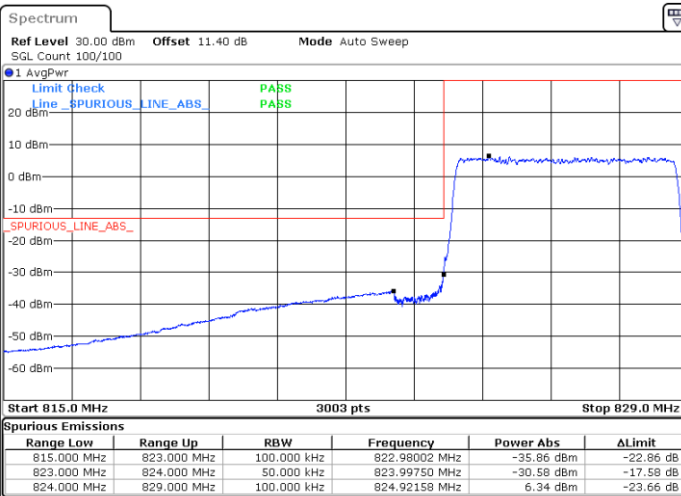
Highest Band Edge / Full RB



Date: 27.MAR.2024 15:54:57

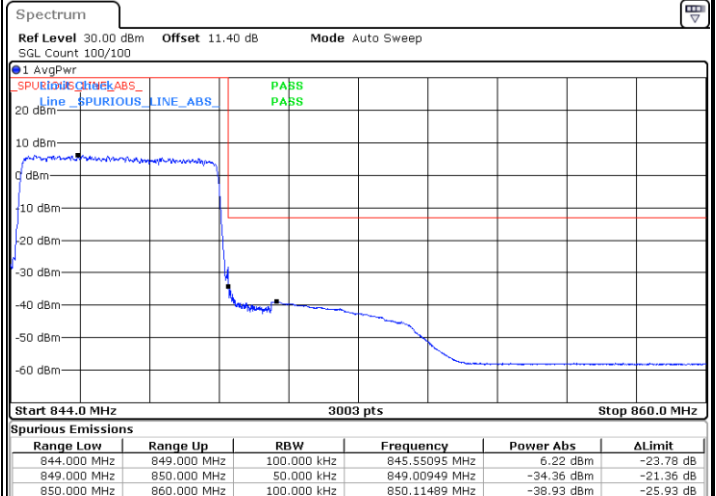
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / Full RB



Date: 27.MAR.2024 15:46:51

Highest Band Edge / Full RB



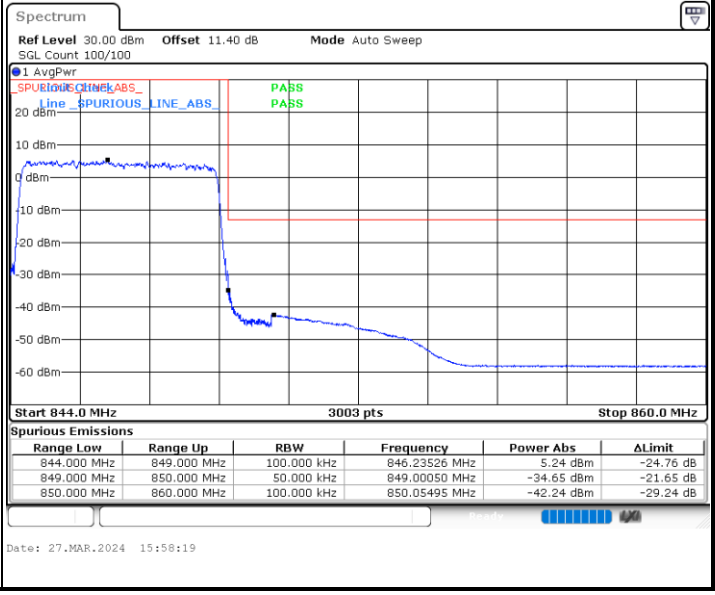
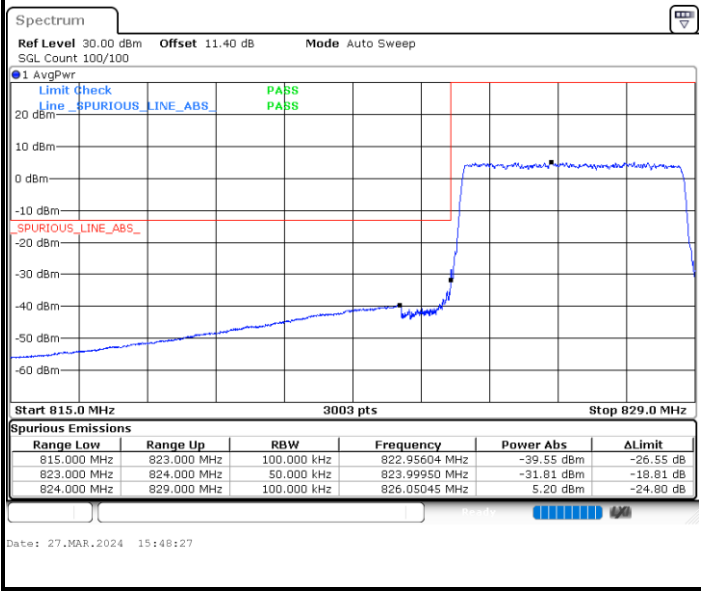
Date: 27.MAR.2024 15:56:40



LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / Full RB

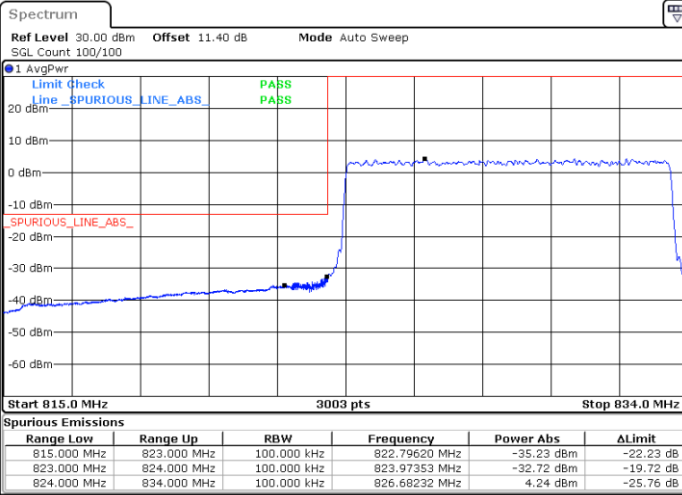
Highest Band Edge / Full RB





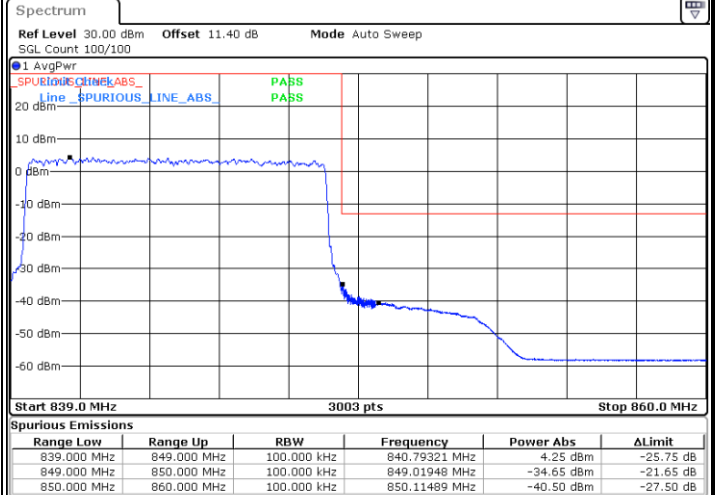
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 27.MAR.2024 16:18:54

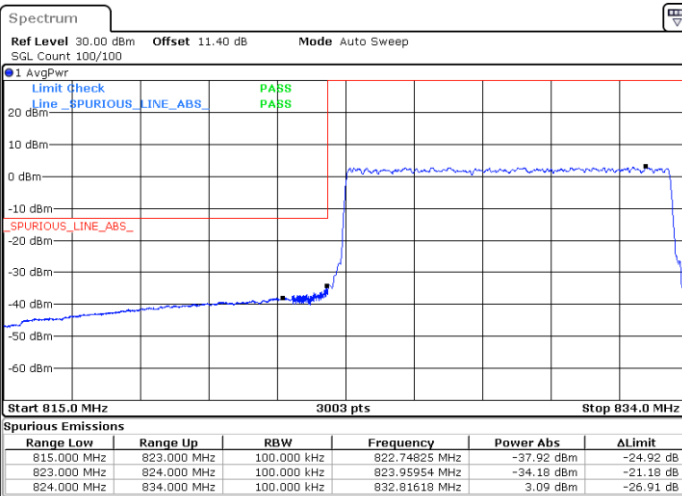
Highest Band Edge / Full RB



Date: 27.MAR.2024 16:29:19

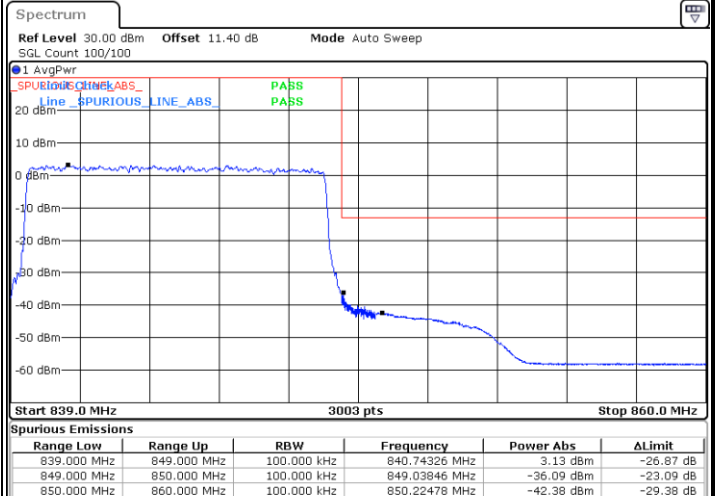
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / Full RB



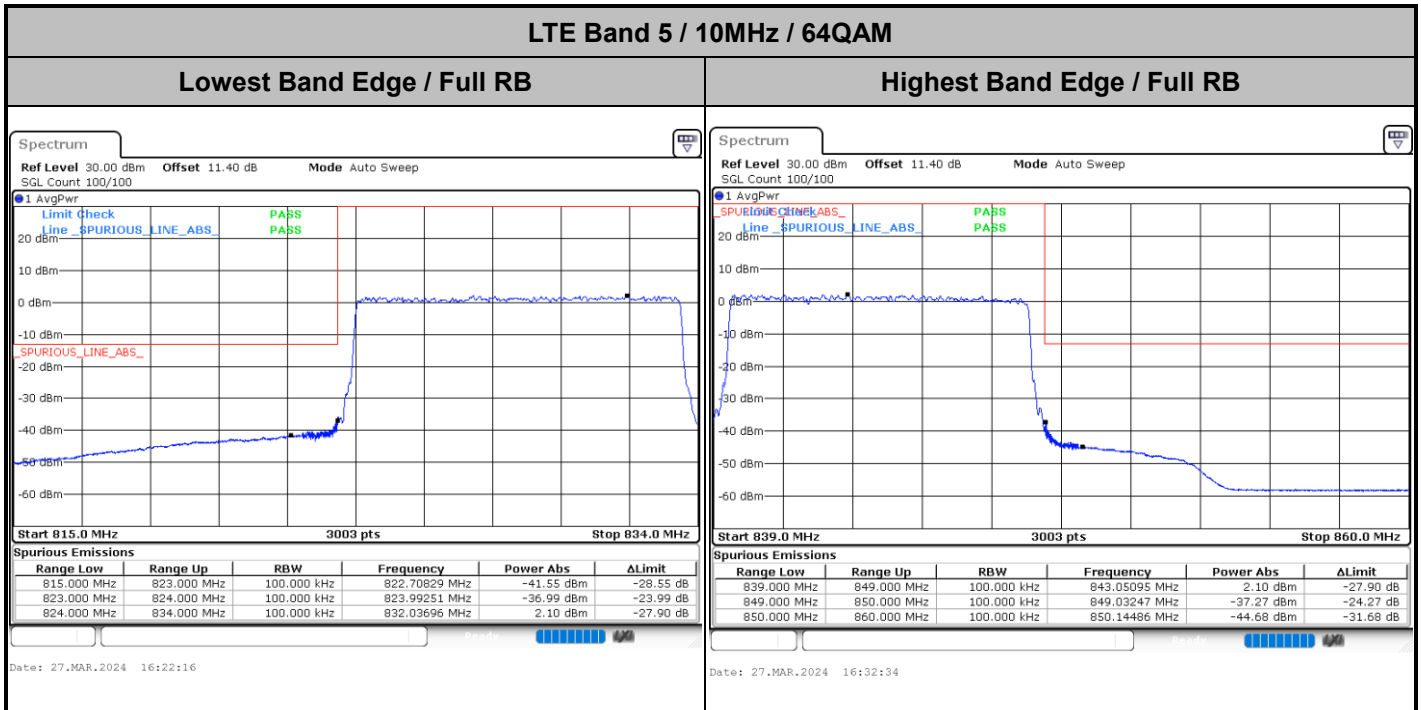
Date: 27.MAR.2024 16:20:34

Highest Band Edge / Full RB



Date: 27.MAR.2024 16:31:00





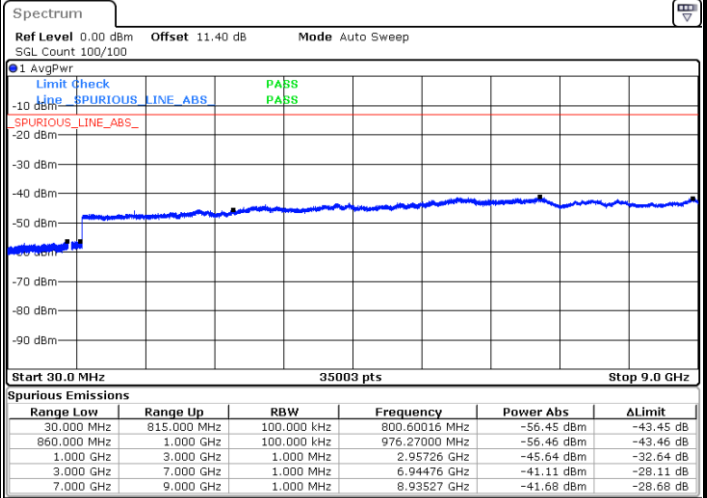
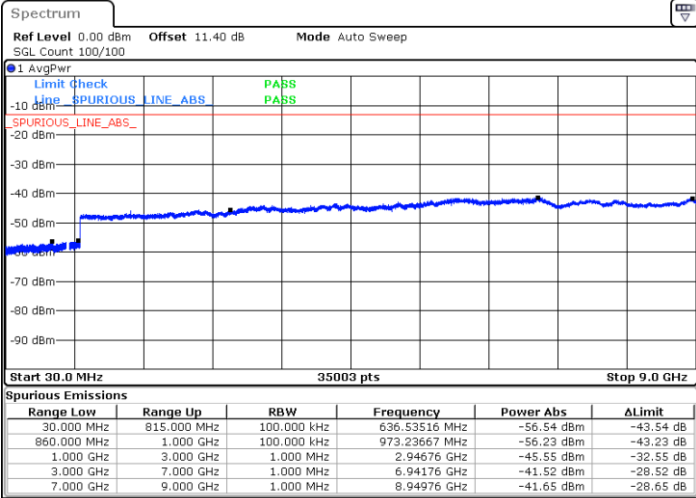


# Conducted Spurious Emission

## LTE Band 5 / 1.4MHz

### Lowest Channel / QPSK

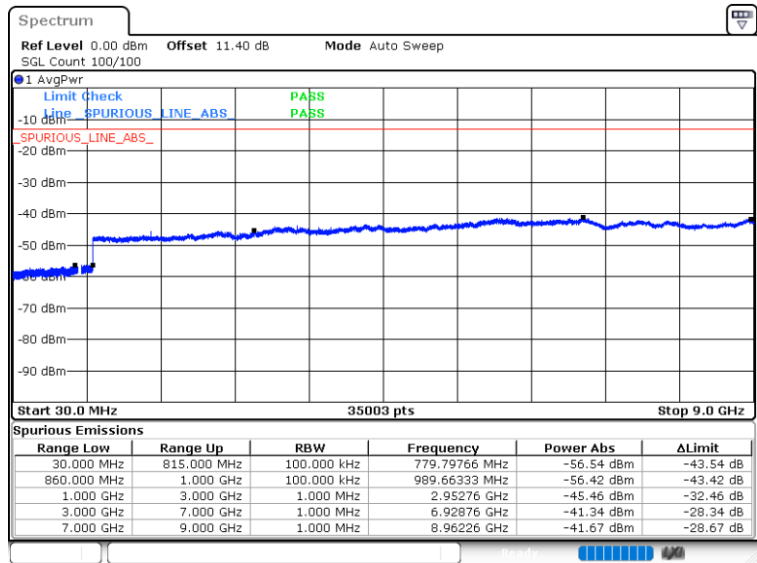
### Middle Channel / QPSK



Date: 27.MAR.2024 15:03:59

Date: 27.MAR.2024 15:05:39

### Highest Channel / QPSK



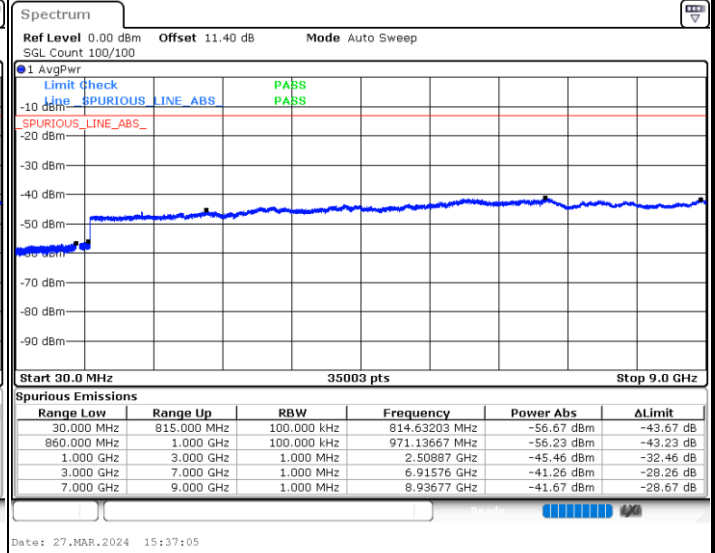
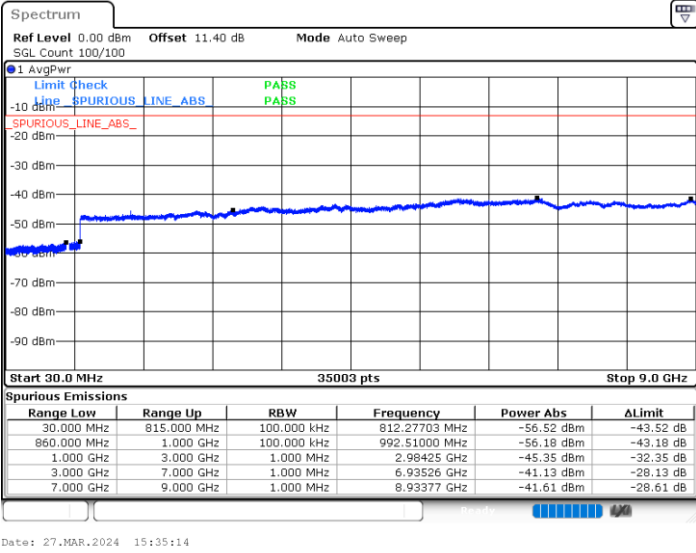
Date: 27.MAR.2024 15:07:23



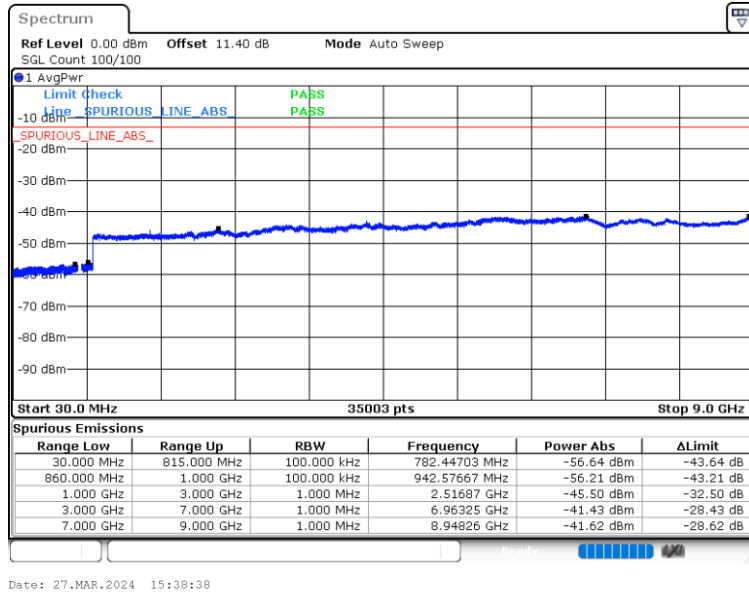
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

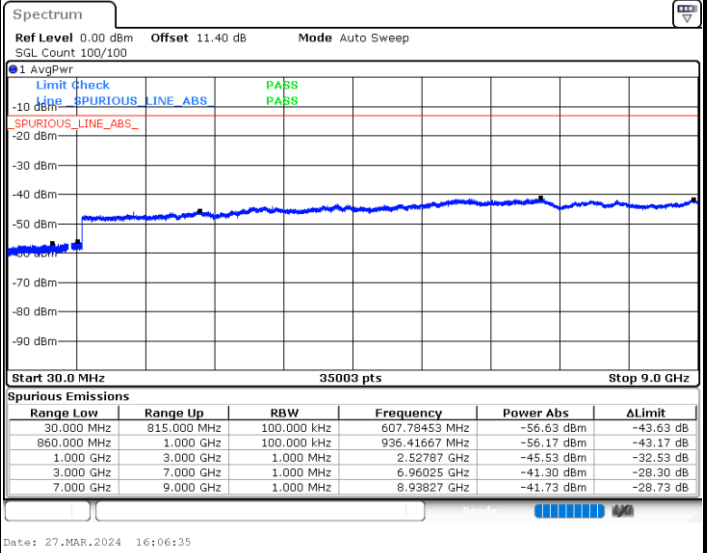
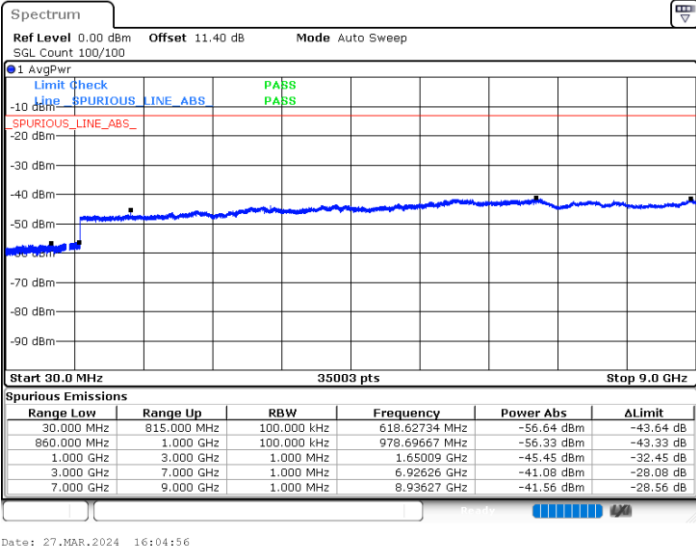




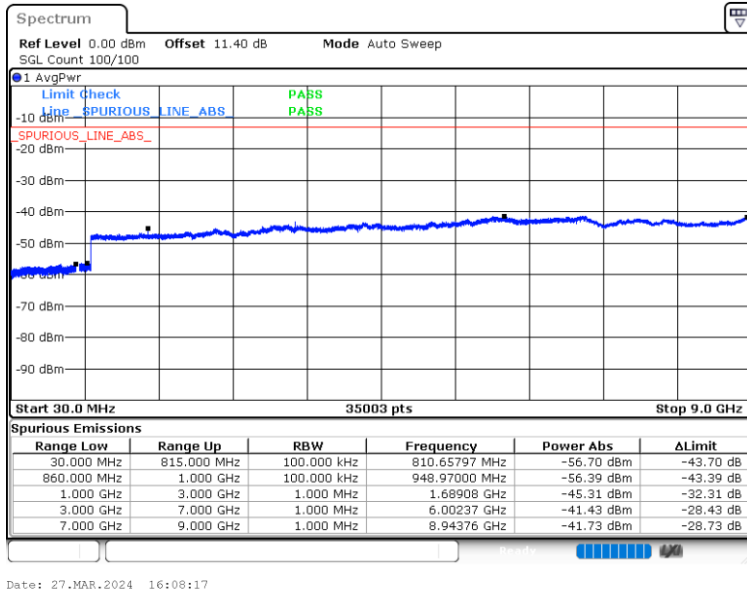
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

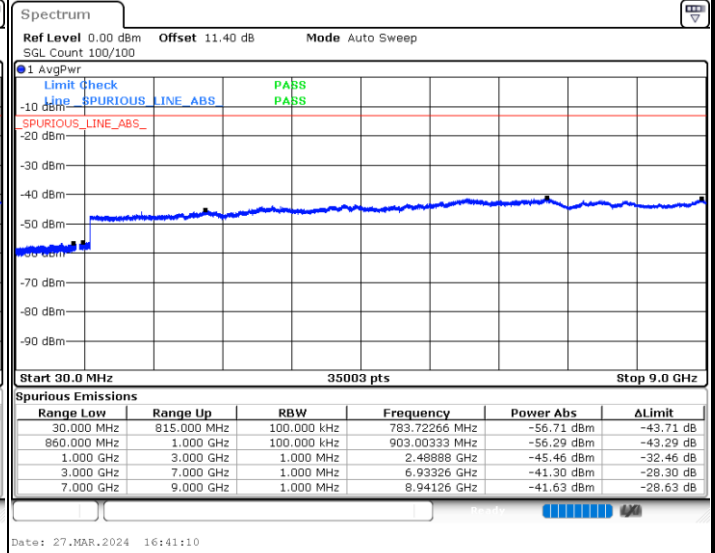
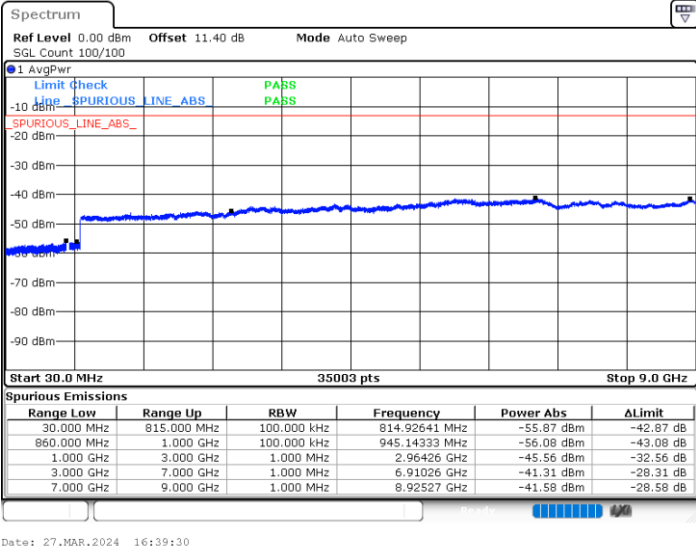




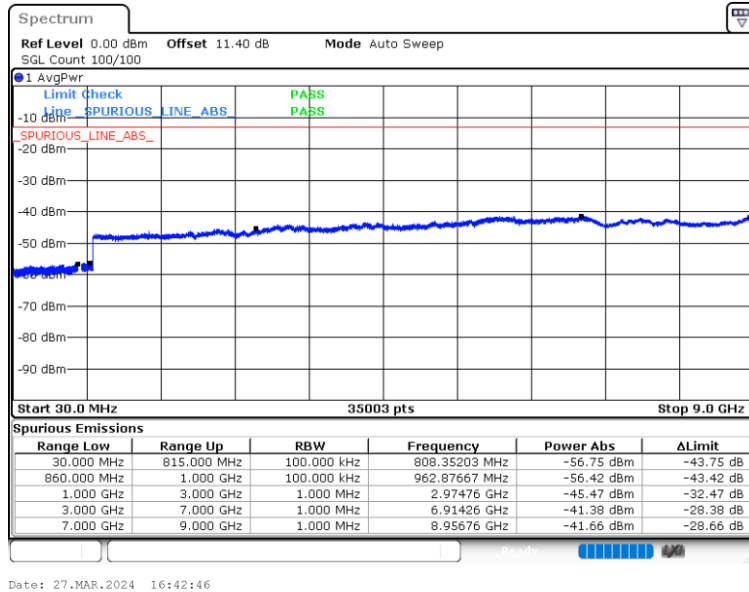
LTE Band 5 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





### 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	0.0019	PASS
40	Normal Voltage	0.0105	
30	Normal Voltage	0.0178	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0057	
0	Normal Voltage	0.0061	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0077	
-30	Normal Voltage	0.0182	
20	Maximum Voltage	0.0110	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0019	

**Note:**

1. Normal Voltage = 3.87 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



<Ant. 1>

LTE Band 7

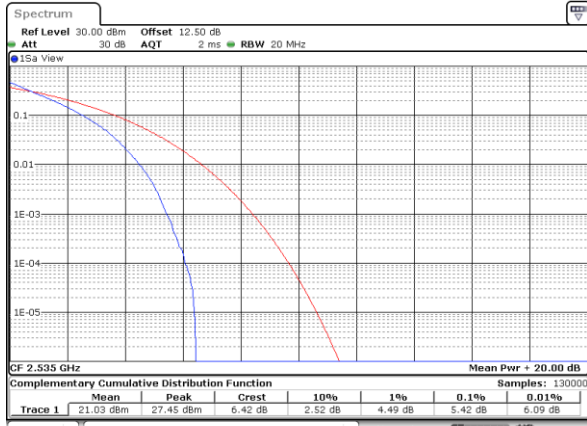
**Peak-to-Average Ratio**

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.42	6.26	6.58	-	PASS



LTE Band 7 / 20MHz / QPSK

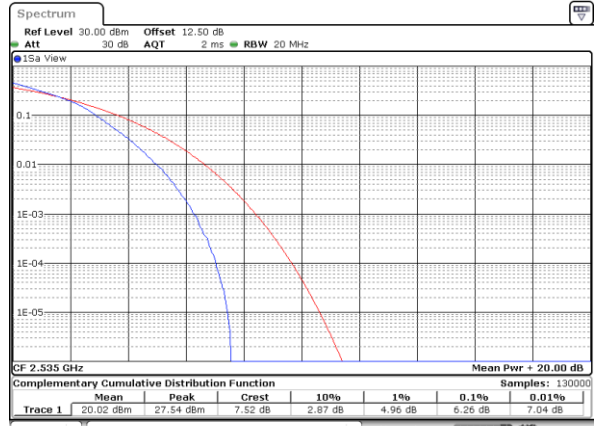
Middle Channel / Full RB



Date: 28.MAR.2024 10:52:23

LTE Band 7 / 20MHz / 16QAM

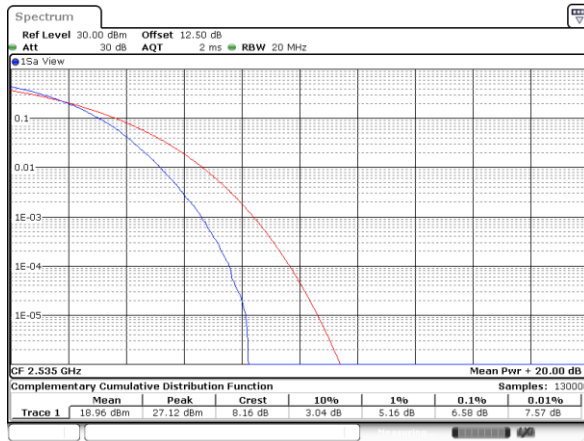
Middle Channel / Full RB



Date: 28.MAR.2024 10:53:12

LTE Band 7 / 20MHz / 64QAM

Middle Channel / Full RB



Date: 28.MAR.2024 10:54:04





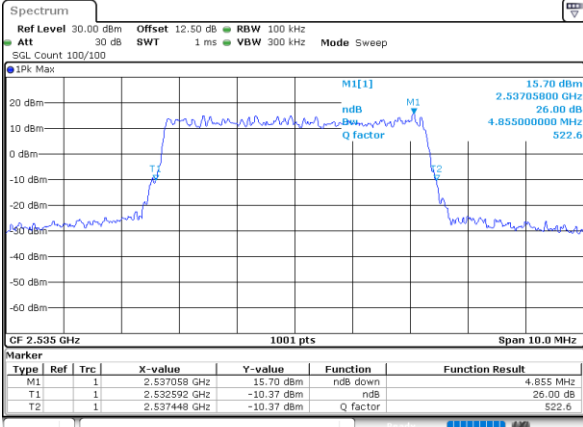
**26dB Bandwidth**

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	-	-	-	-	4.85	4.84	9.89	9.75	14.29	14.17	18.90	19.10
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	-	-	-	-	4.80	-	9.71	-	14.32	-	18.98	-



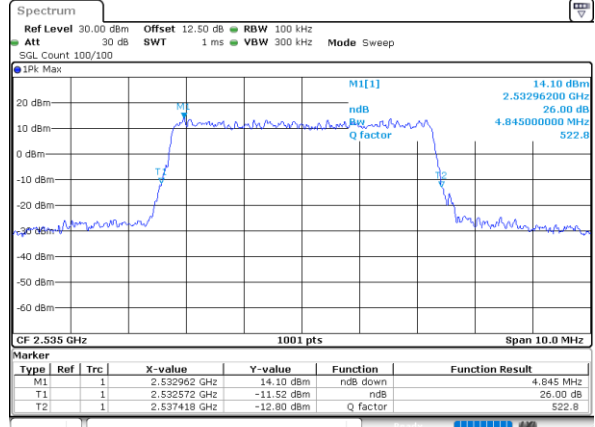
LTE Band 7

Middle Channel / 5MHz / QPSK



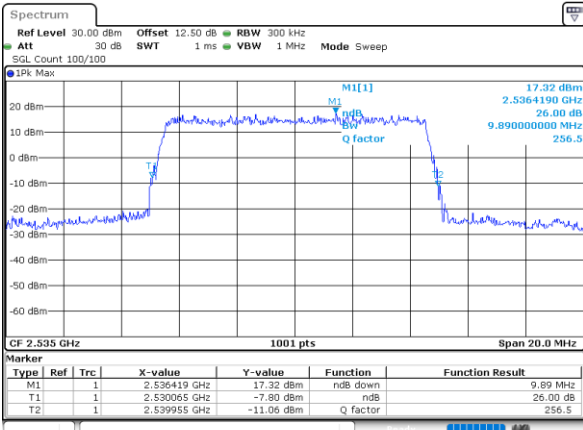
Date: 28\_MAR\_2024 09:48:47

Middle Channel / 5MHz / 16QAM



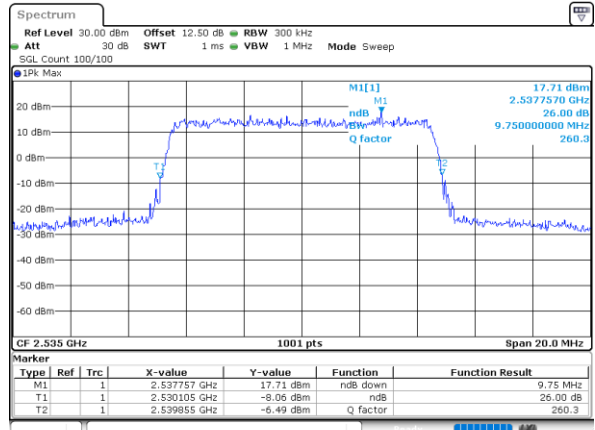
Date: 28\_MAR\_2024 09:49:37

Middle Channel / 10MHz / QPSK



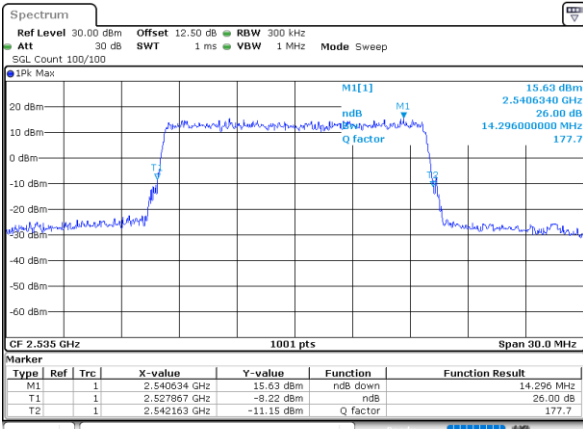
Date: 28\_MAR\_2024 10:09:19

Middle Channel / 10MHz / 16QAM



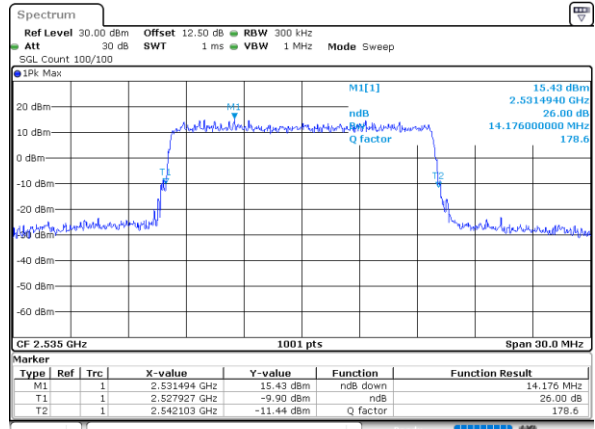
Date: 28\_MAR\_2024 10:10:08

Middle Channel / 15MHz / QPSK



Date: 28\_MAR\_2024 10:29:11

Middle Channel / 15MHz / 16QAM

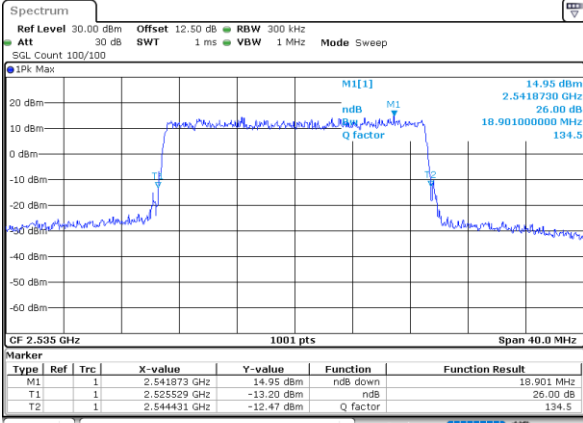


Date: 28\_MAR\_2024 10:30:03



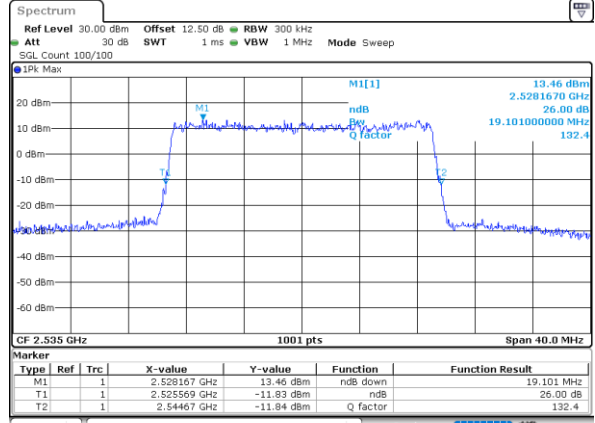
LTE Band 7

Middle Channel / 20MHz / QPSK



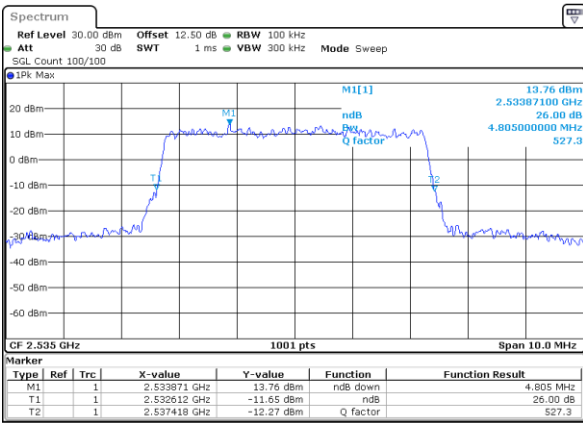
Date: 28\_MAR\_2024 10:49:43

Middle Channel / 20MHz / 16QAM



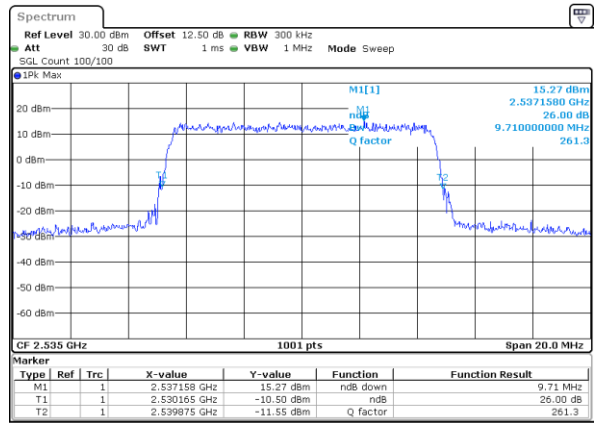
Date: 28\_MAR\_2024 10:50:35

Middle Channel / 5MHz / 64QAM



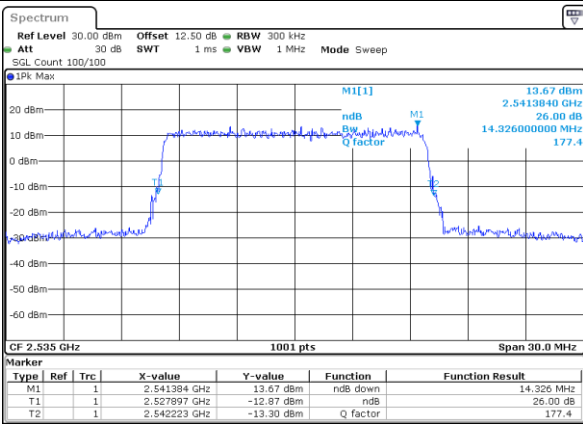
Date: 28\_MAR\_2024 09:50:38

Middle Channel / 10MHz / 64QAM



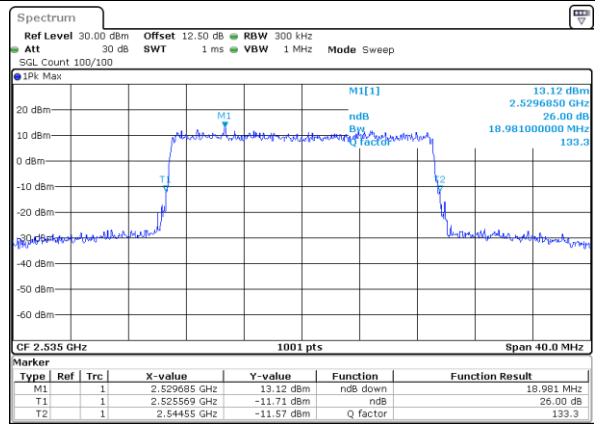
Date: 28\_MAR\_2024 10:11:01

Middle Channel / 15MHz / 64QAM



Date: 28\_MAR\_2024 10:31:00

Middle Channel / 20MHz / 64QAM



Date: 28\_MAR\_2024 10:51:24



**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	4.49	9.05	9.03	13.48	13.51	17.90	17.90
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	-	-	-	-	4.47	-	9.05	-	13.45	-	17.90	-