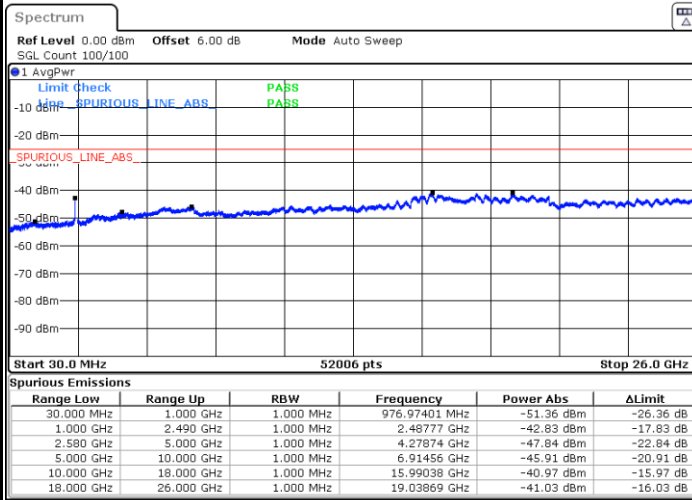




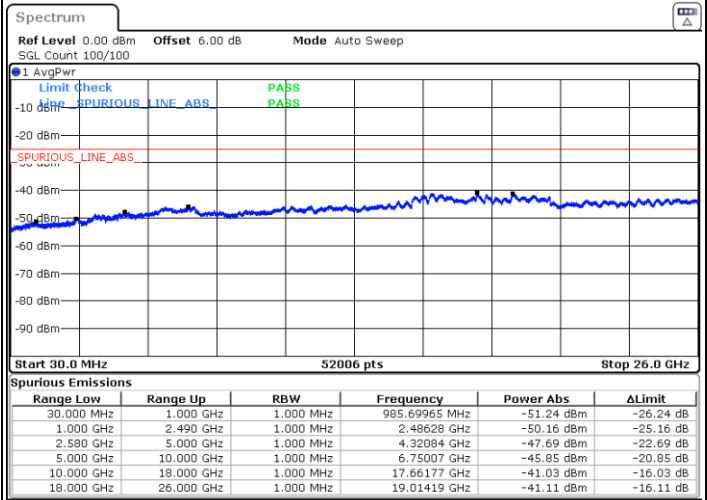
LTE Band 7 / 15MHz

Lowest Channel / QPSK



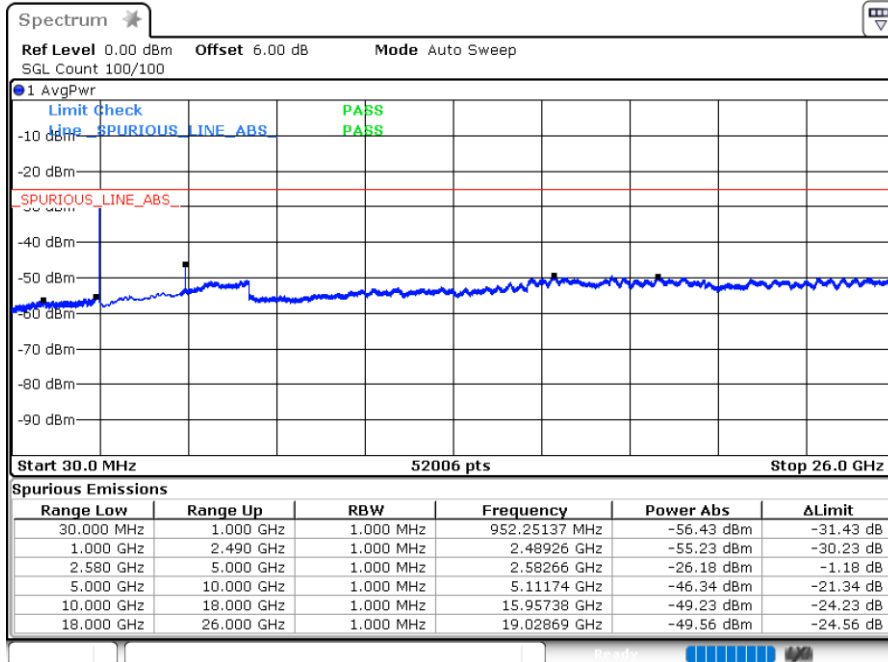
Date: 2.JUN.2024 04:48:43

Middle Channel / QPSK



Date: 2.JUN.2024 04:49:48

Highest Channel / QPSK

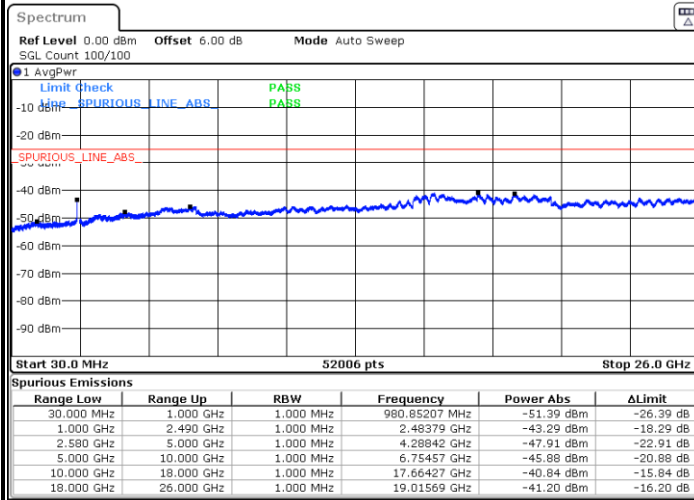


Date: 7.JUN.2024 21:53:35



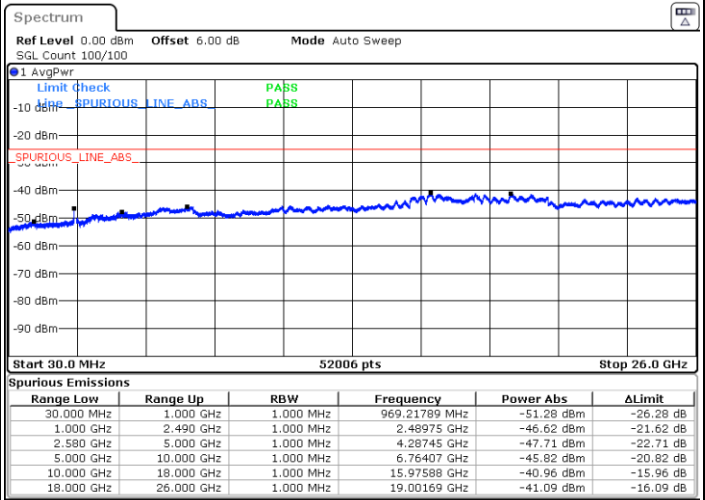
LTE Band 7 / 20MHz

Lowest Channel / QPSK



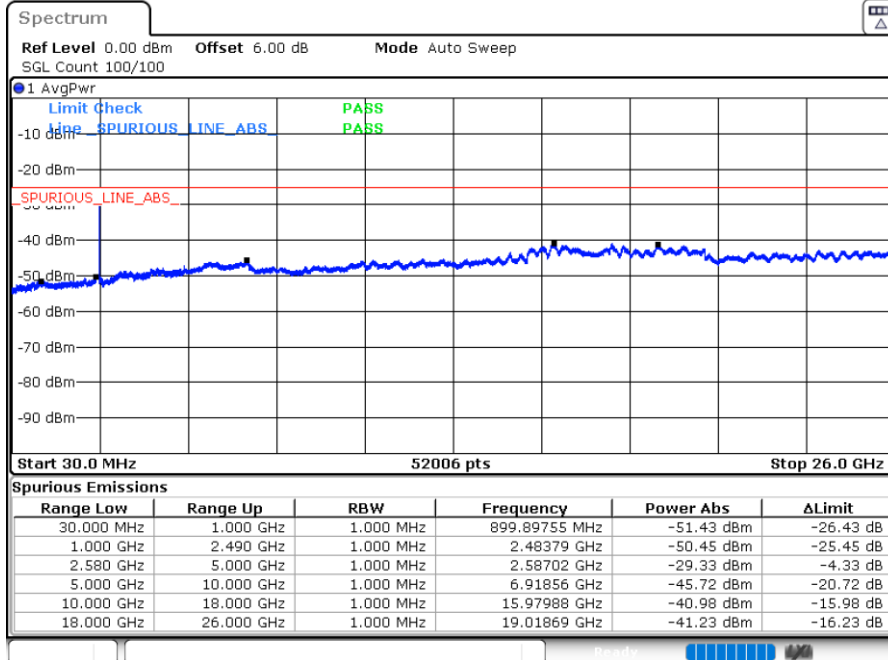
Date: 2.JUN.2024 06:03:14

Middle Channel / QPSK



Date: 2.JUN.2024 06:04:19

Highest Channel / QPSK



Date: 2.JUN.2024 06:10:03

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0015	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0038	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0046	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0075	
-20	Normal Voltage	0.0055	
-30	Normal Voltage	0.0033	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0004	
20	Minimum Voltage	0.0012	

Note:

1. Normal Voltage = 5V ; Minimum Voltage =4.6V. ; Maximum Voltage =5.5V
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



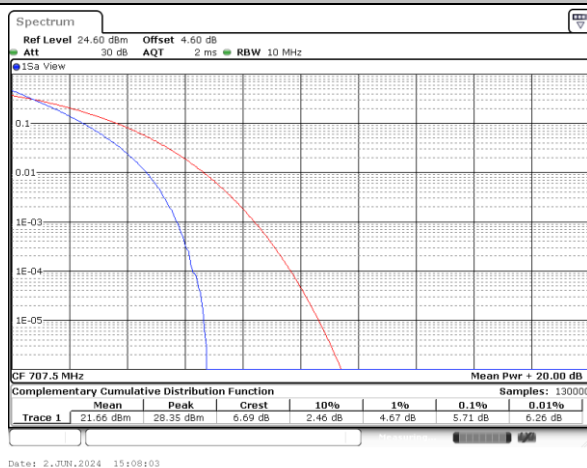
LTE Band 12

Peak-to-Average Ratio

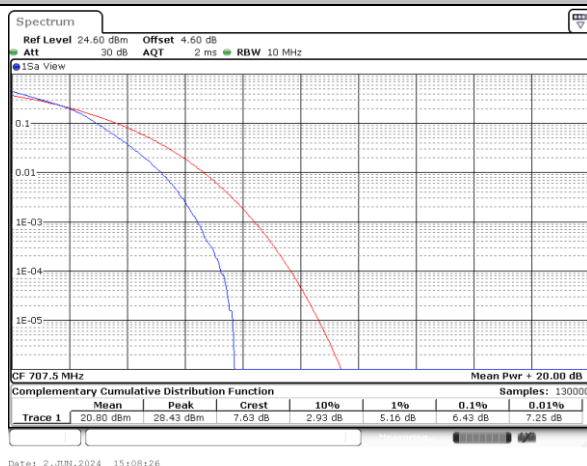
Mode	LTE Band 12 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.71	6.43	6.58	6.81	PASS

LTE Band 12 / 10MHz

Middle Channel / Full RB/ QPSK

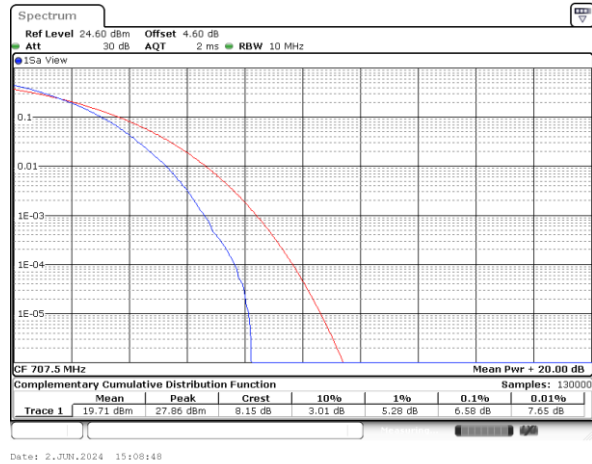


Middle Channel / Full RB/ 16QAM

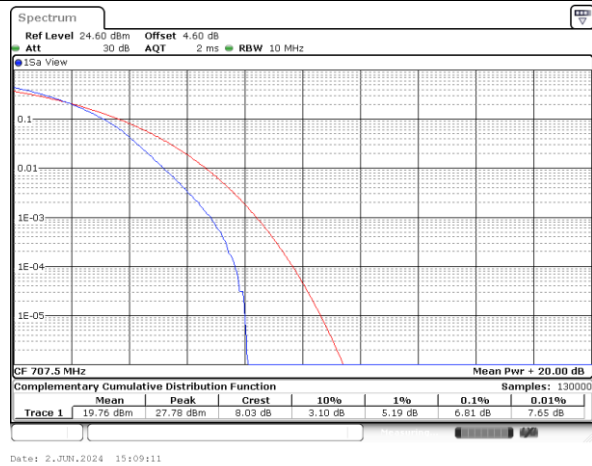




Middle Channel / Full RB/ 64QAM

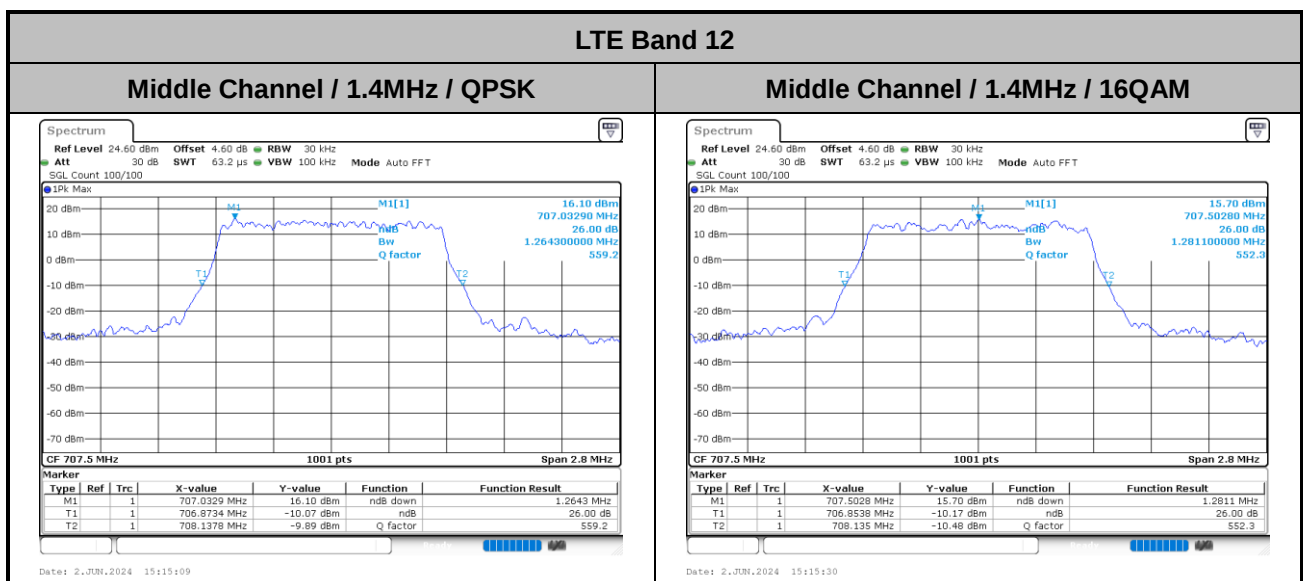


Middle Channel / Full RB/ 256QAM



**26dB Bandwidth**

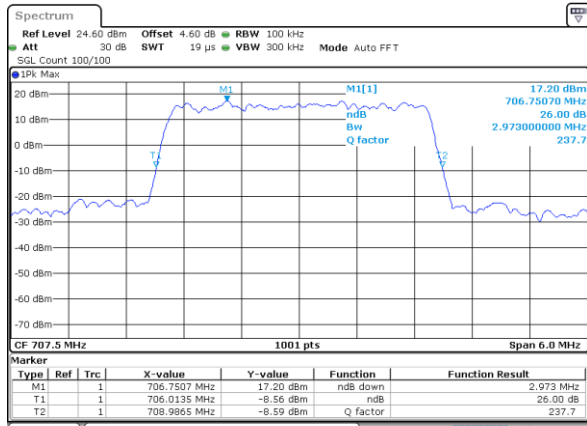
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.26	1.28
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.97	2.93
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	5.14	5.12
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.75	9.91





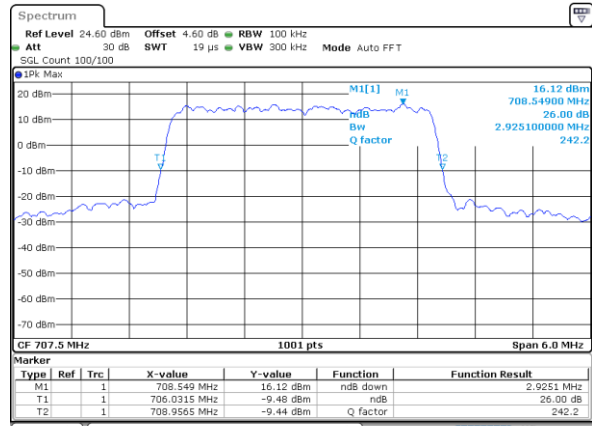
LTE Band 12

Middle Channel / 3MHz / QPSK



Date: 2 JUN 2024 15:13:44

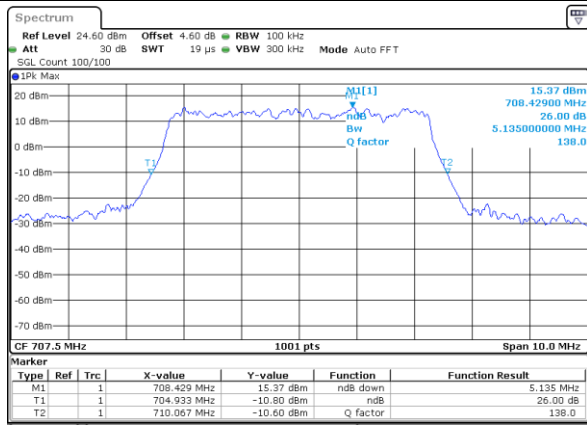
Middle Channel / 3MHz / 16QAM



Date: 2 JUN 2024 15:14:05

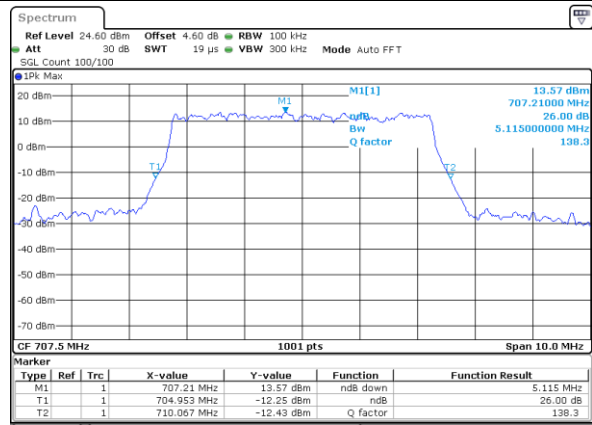
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 2 JUN 2024 15:12:20

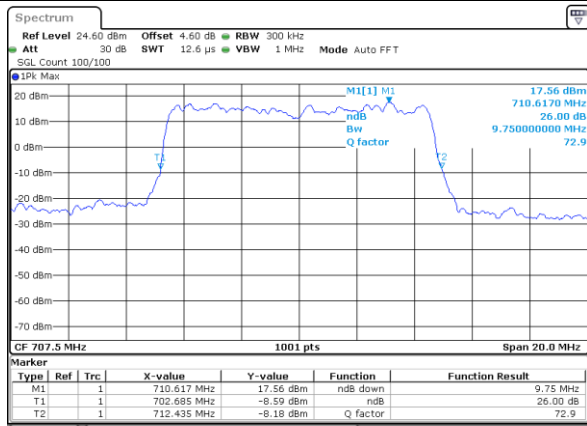
Middle Channel / 5MHz / 16QAM



Date: 2 JUN 2024 15:12:41

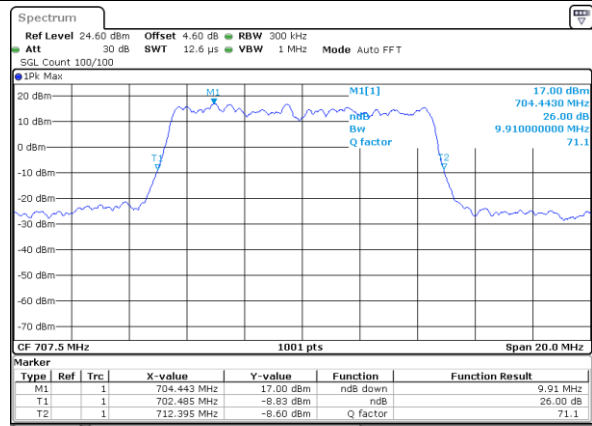
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 2 JUN 2024 15:11:16

Middle Channel / 10MHz / 16QAM

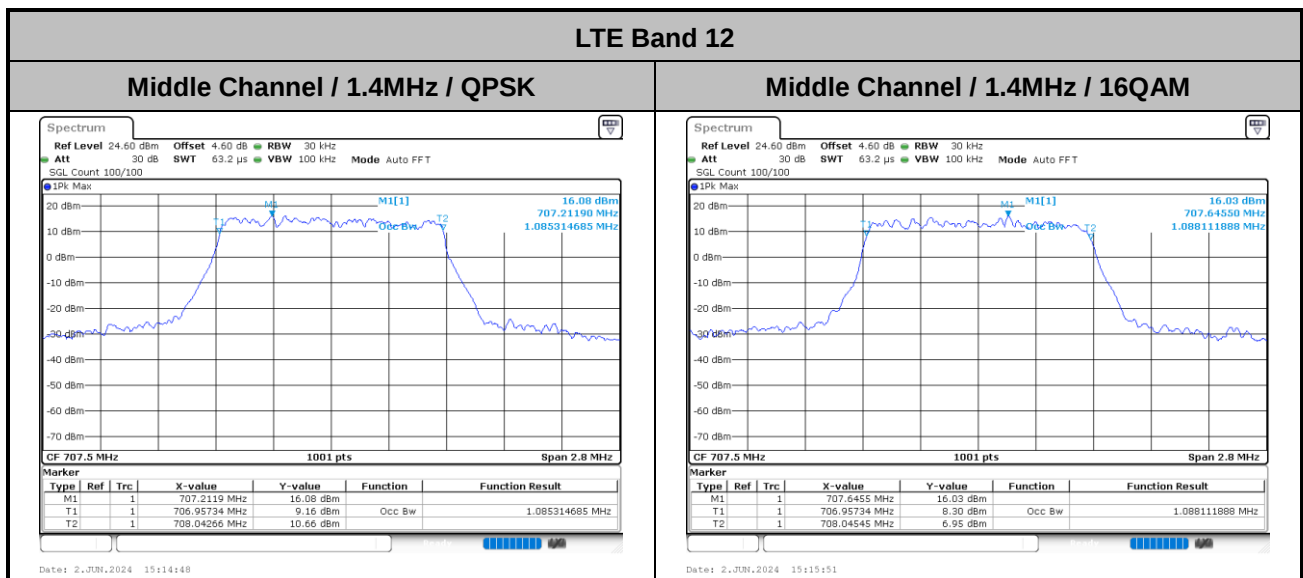


Date: 2 JUN 2024 15:11:37



Occupied Bandwidth

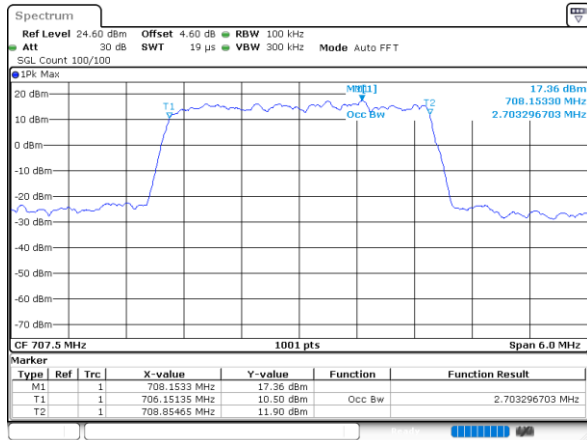
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.09
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.70	2.71
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.51	4.51
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.07	9.01



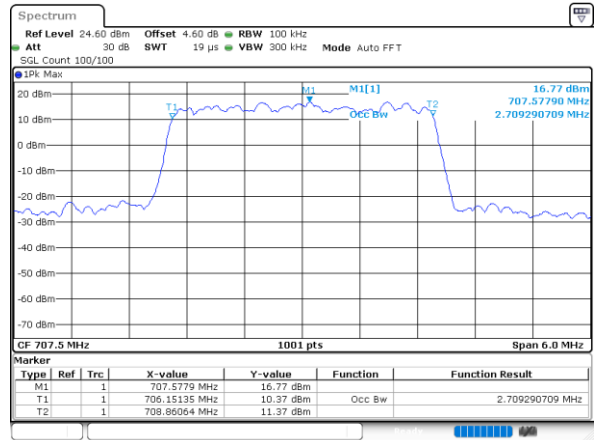


LTE Band 12

Middle Channel / 3MHz / QPSK

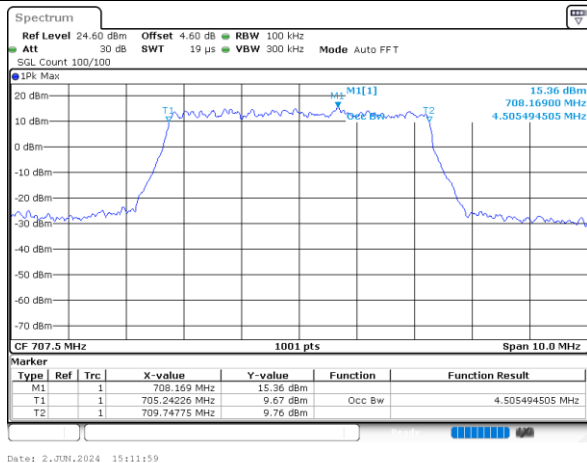


Middle Channel / 3MHz / 16QAM

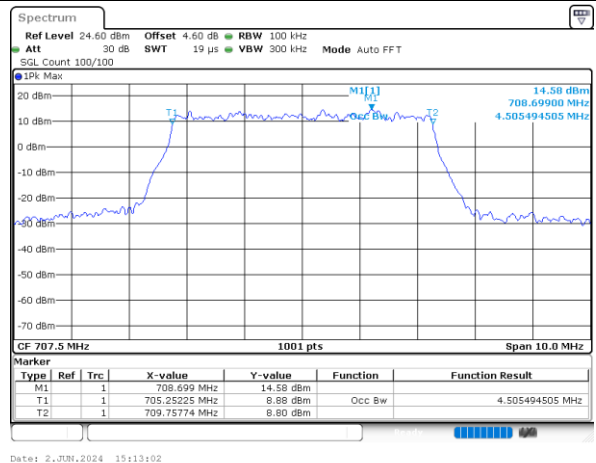


LTE Band 12

Middle Channel / 5MHz / QPSK

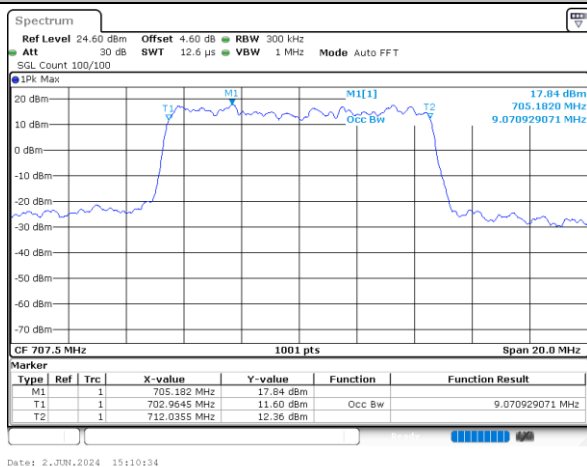


Middle Channel / 5MHz / 16QAM

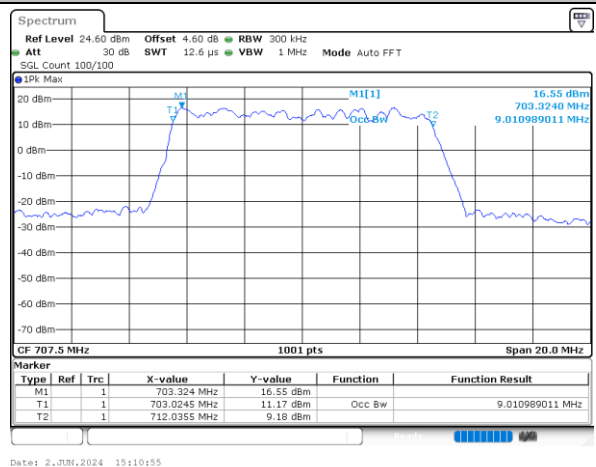


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

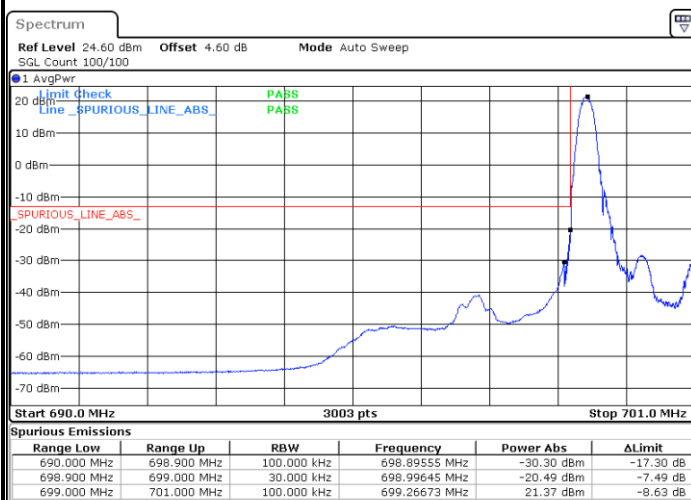




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

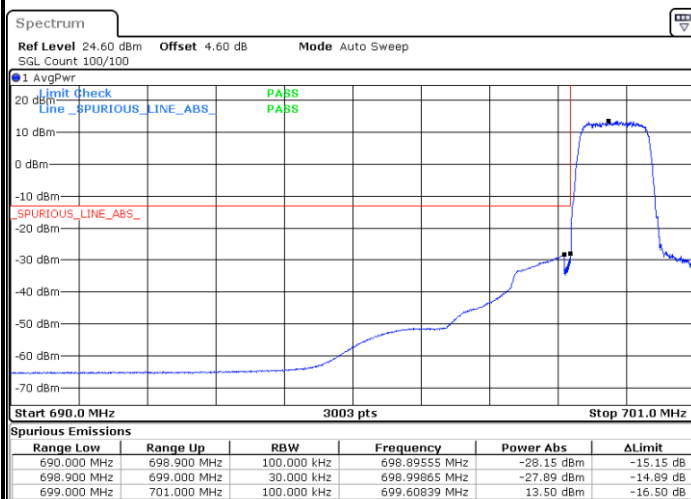
Lowest Band Edge / 1RB



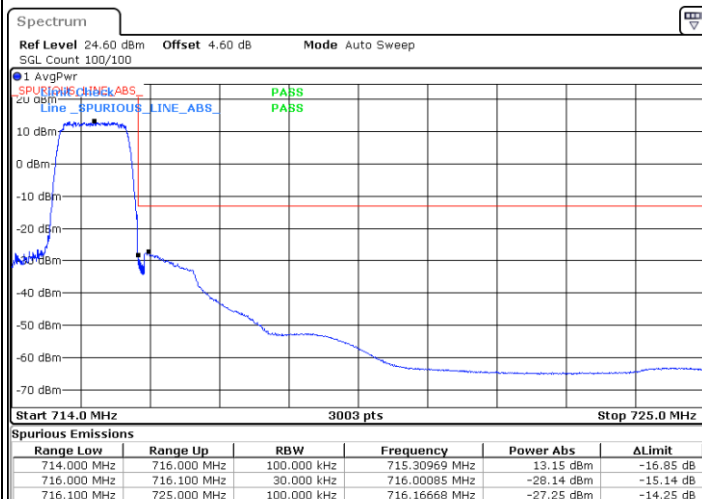
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



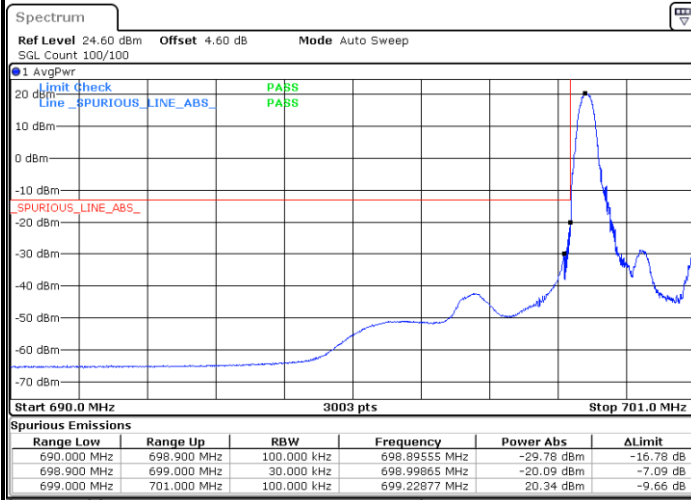
Highest Band Edge / Full RB



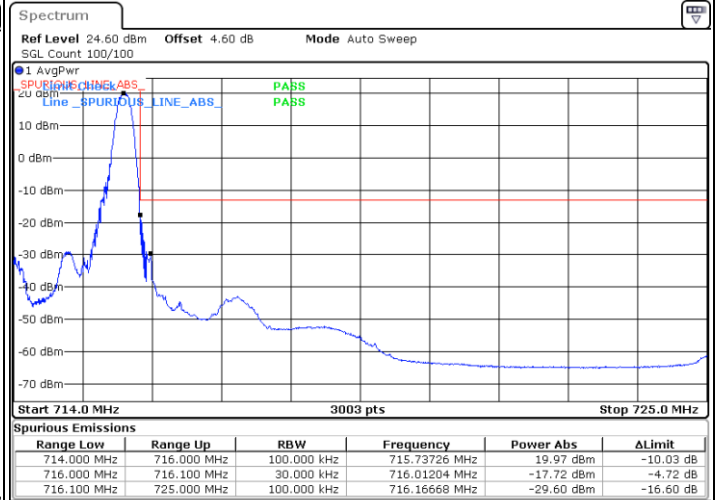


LTE Band 12 / 1.4MHz / 16QAM

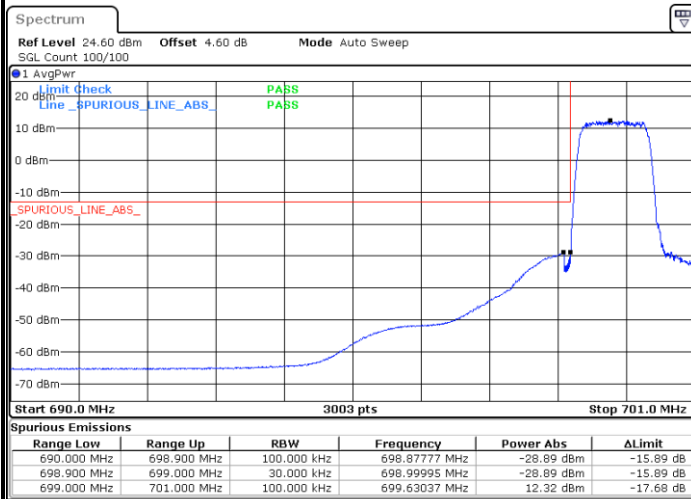
Lowest Band Edge / 1 RB



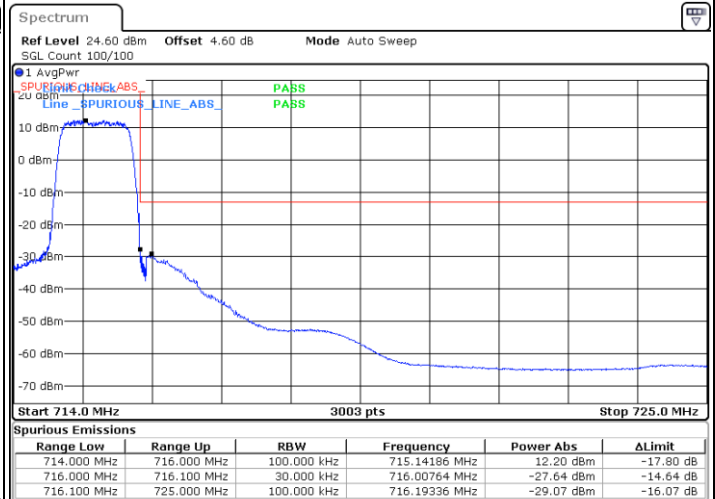
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



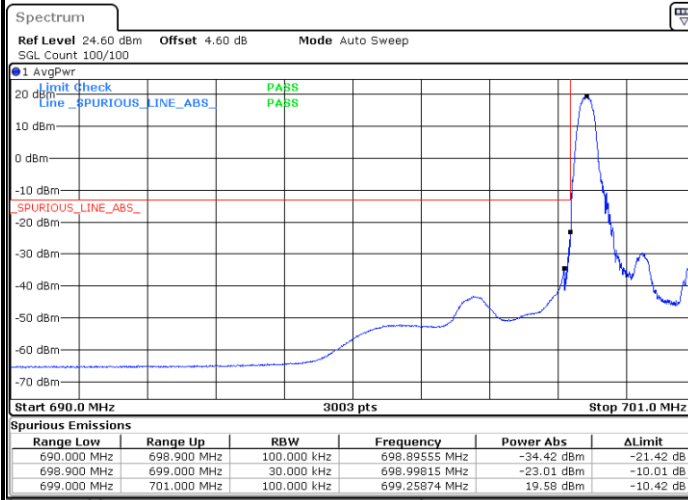
Highest Band Edge / Full RB



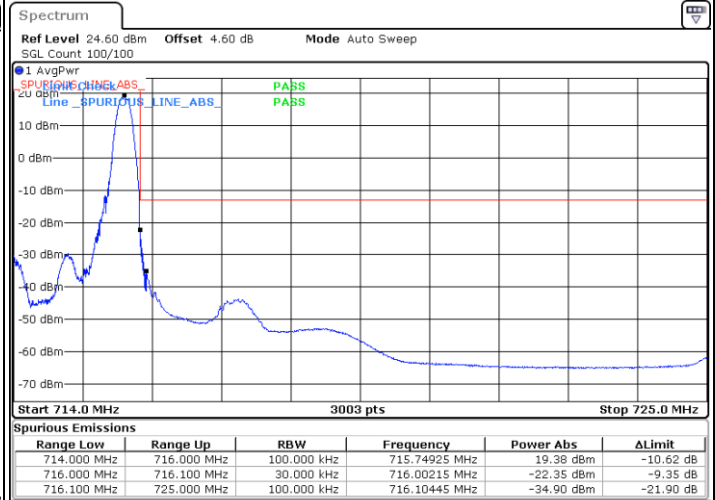


LTE Band 12 / 1.4MHz / 64QAM

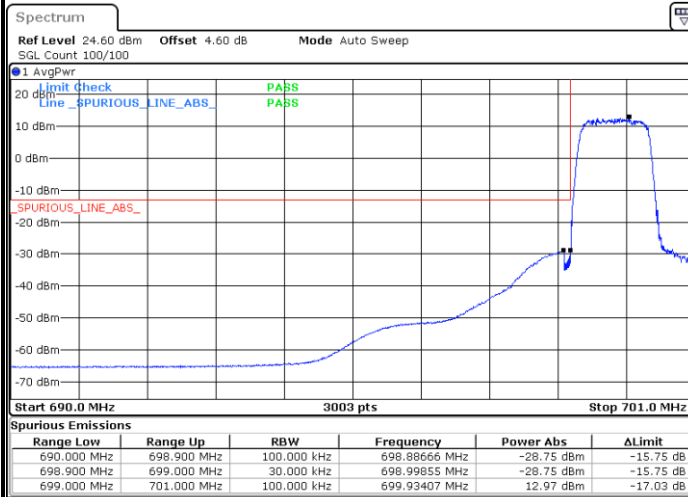
Lowest Band Edge / 1 RB



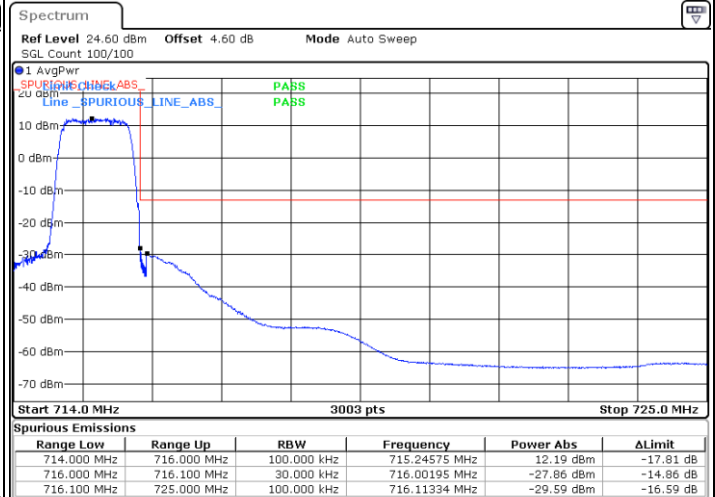
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



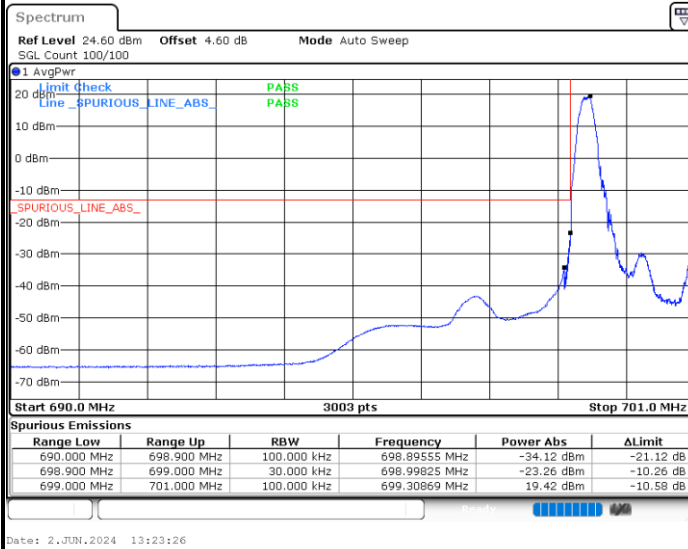
Highest Band Edge / Full RB



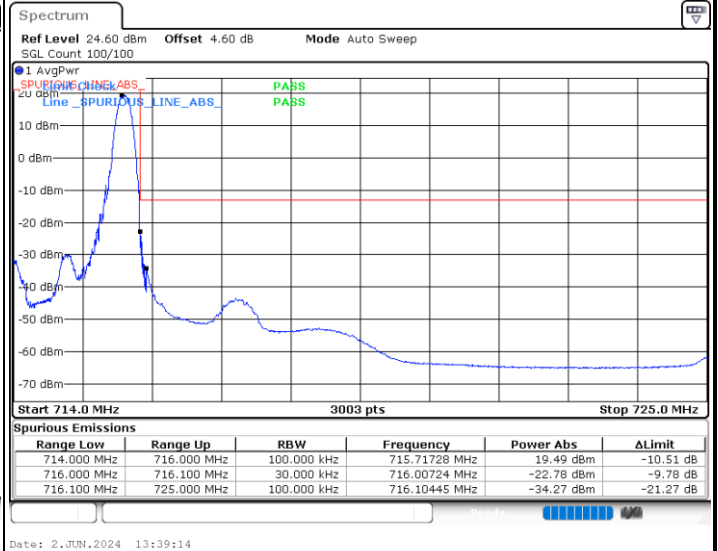


LTE Band 12 / 1.4MHz / 256QAM

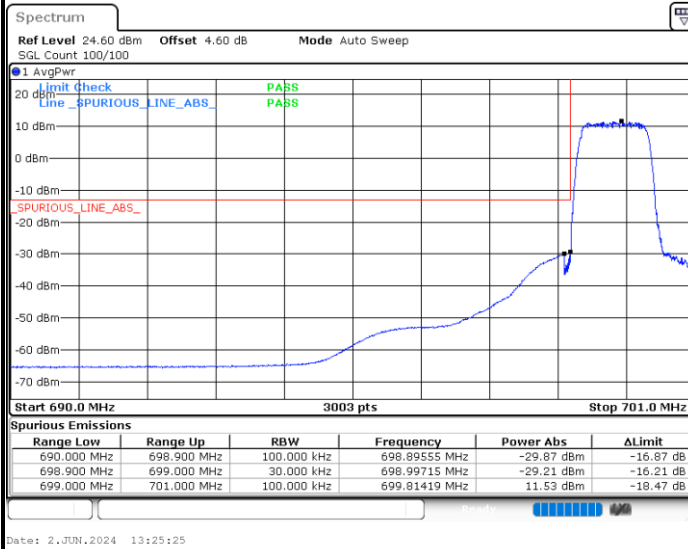
Lowest Band Edge / 1 RB



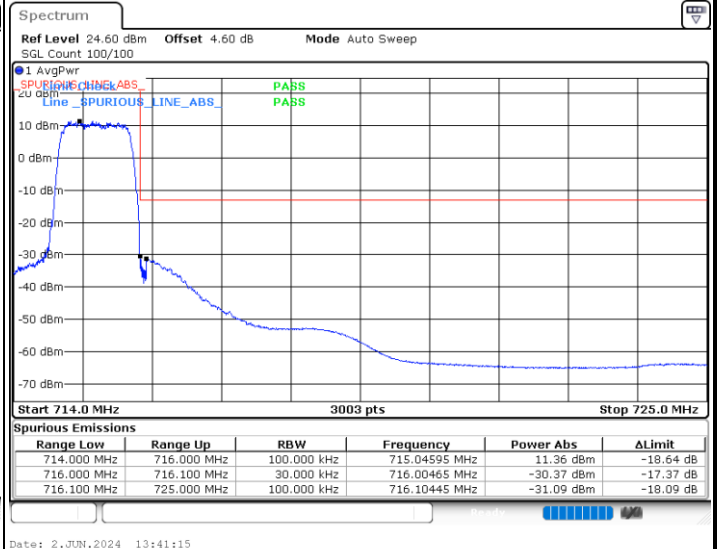
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



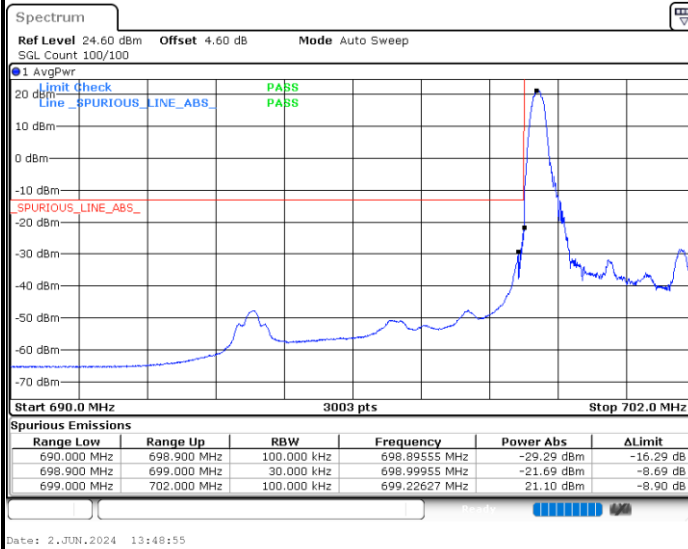
Highest Band Edge / Full RB



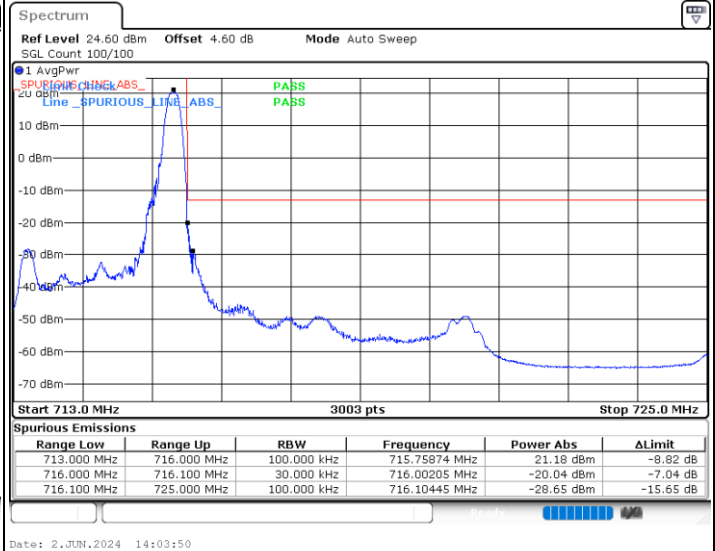


LTE Band 12 / 3MHz / QPSK

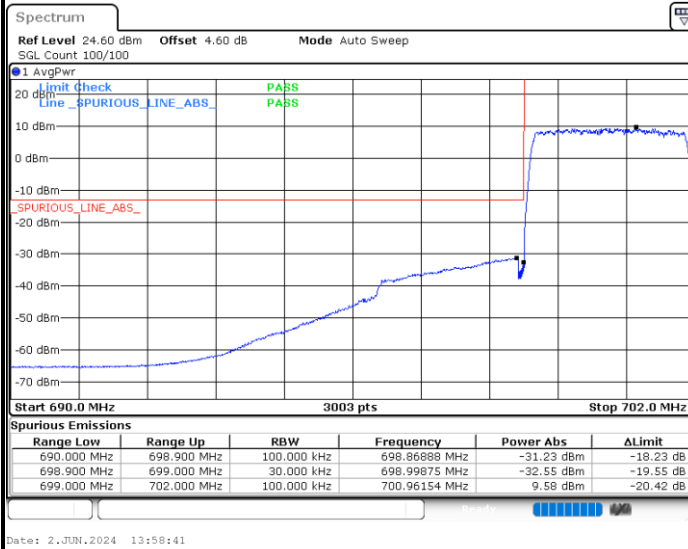
Lowest Band Edge / 1RB



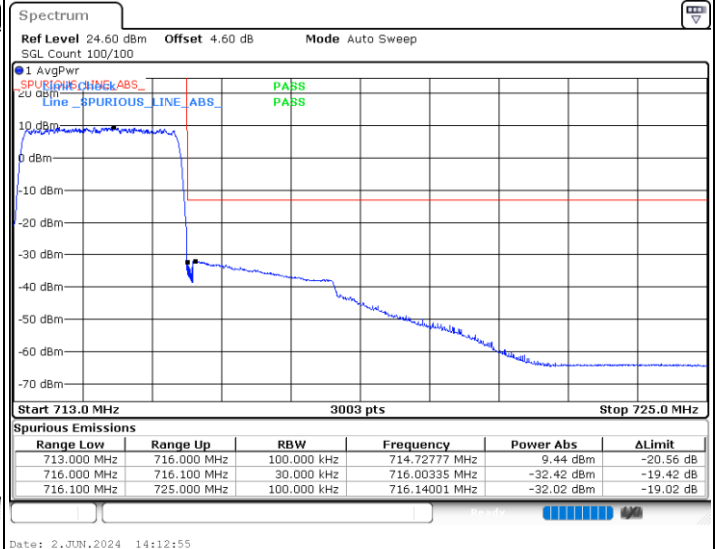
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



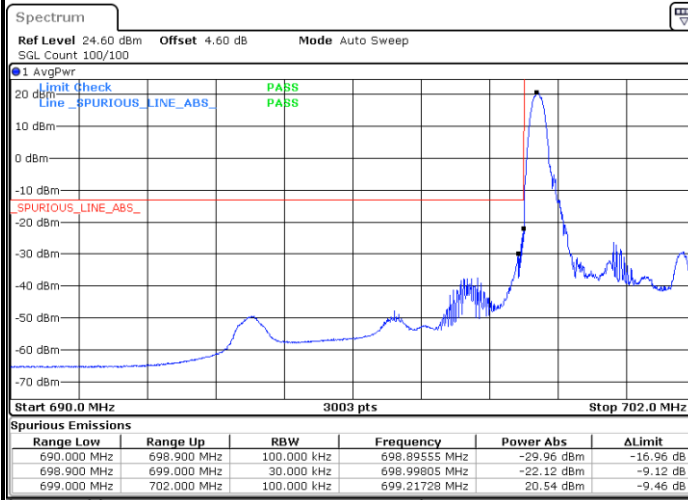
Highest Band Edge / Full RB





LTE Band 12 / 3MHz / 16QAM

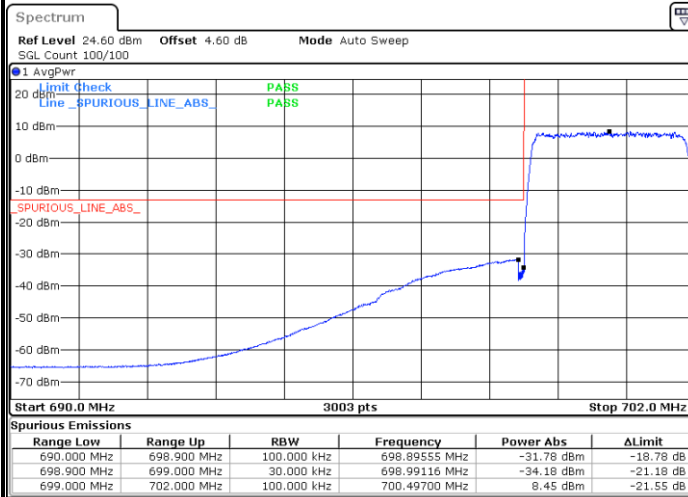
Lowest Band Edge / 1 RB



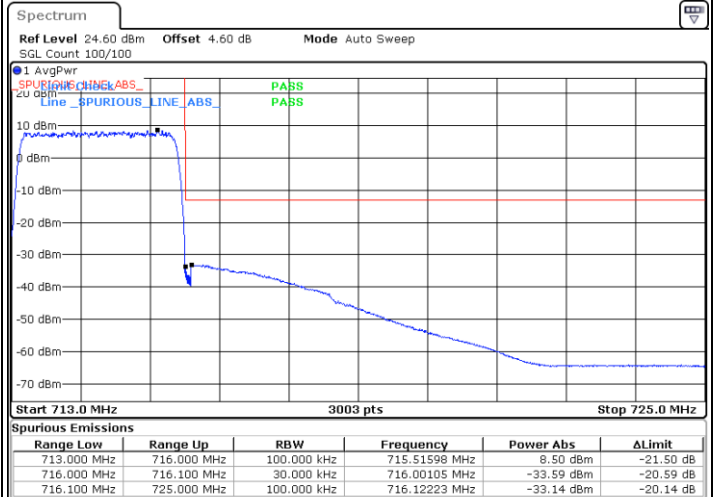
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



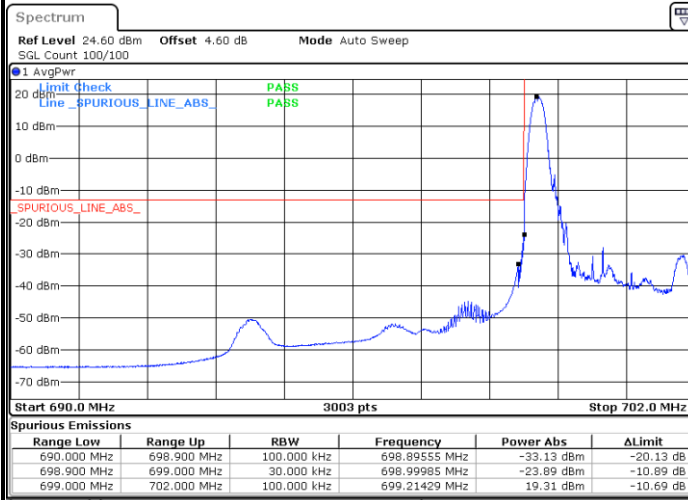
Highest Band Edge / Full RB



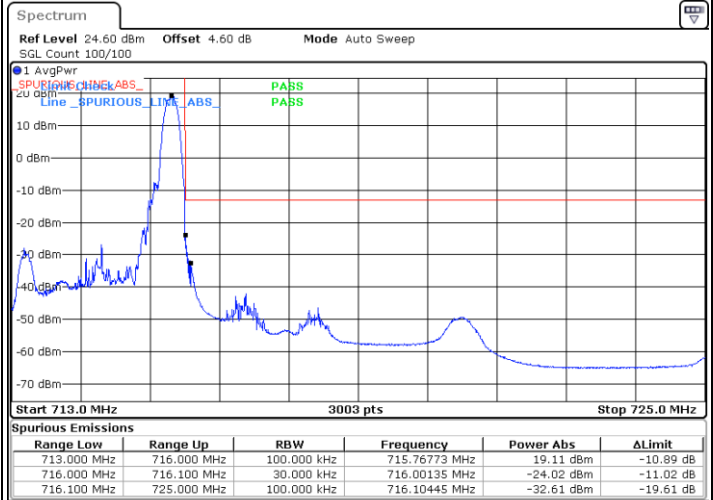


LTE Band 12 / 3MHz / 64QAM

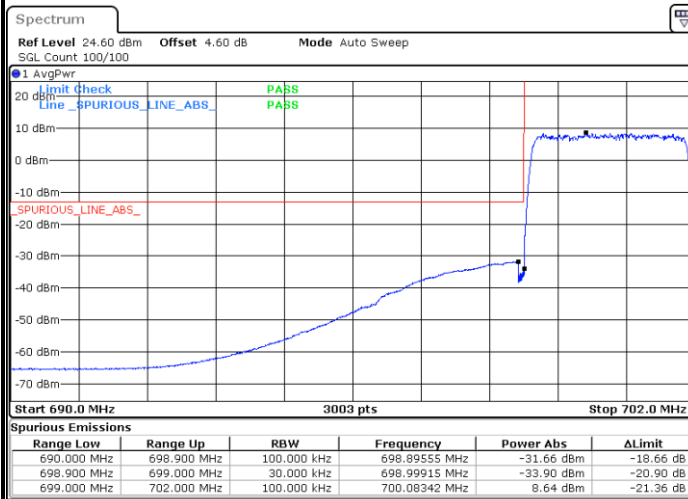
Lowest Band Edge / 1 RB



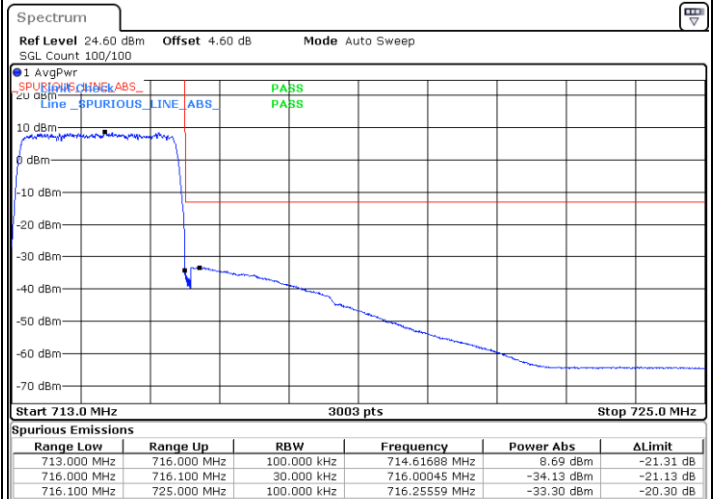
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



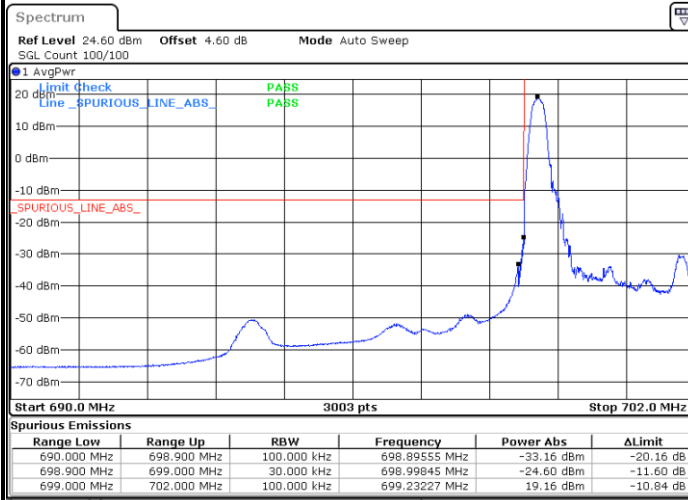
Highest Band Edge / Full RB



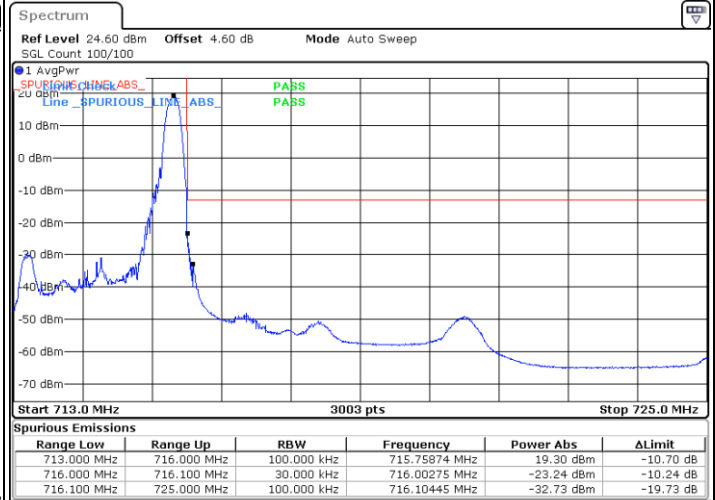


LTE Band 12 / 3MHz / 256QAM

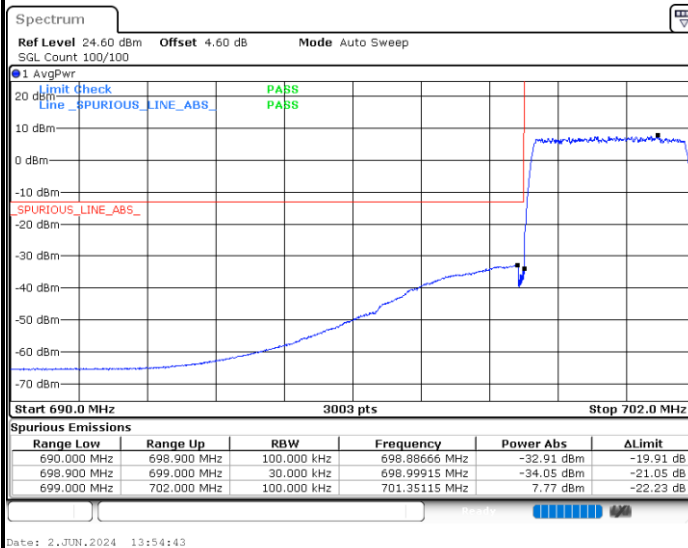
Lowest Band Edge / 1 RB



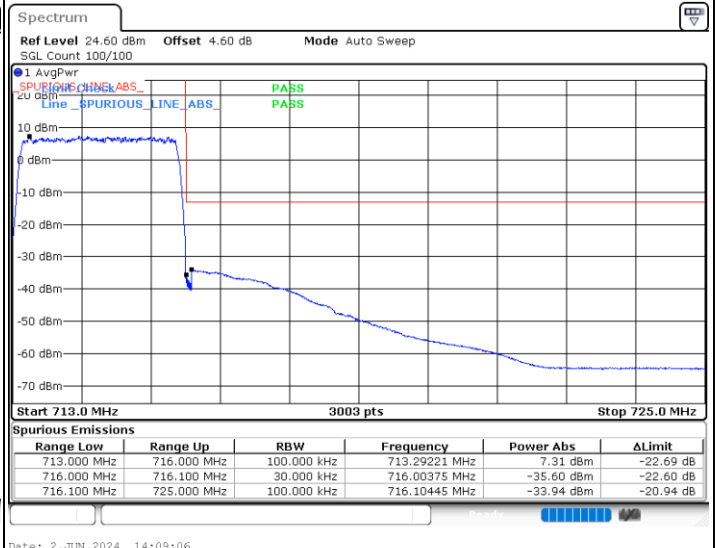
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



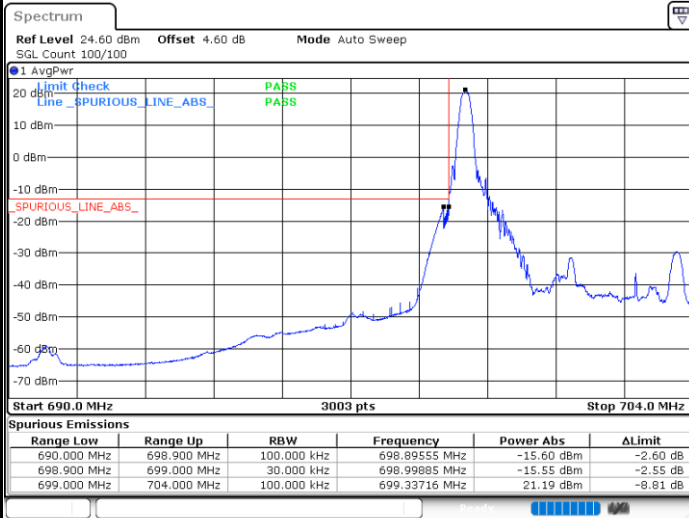
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / QPSK

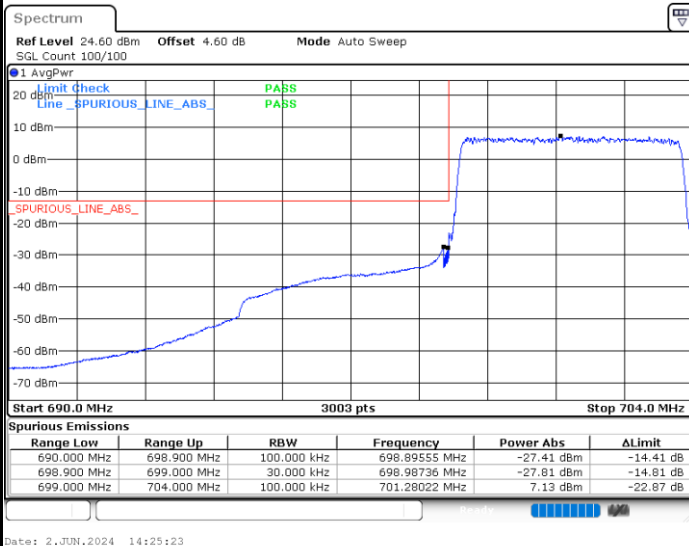
Lowest Band Edge / 1 RB



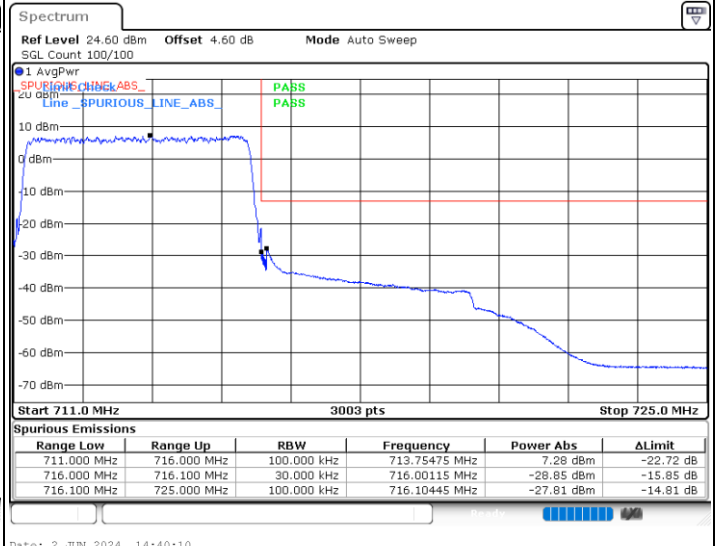
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



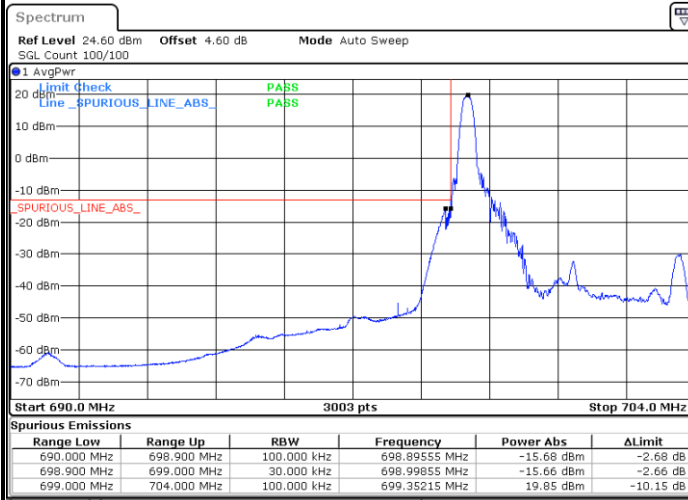
Highest Band Edge / Full RB



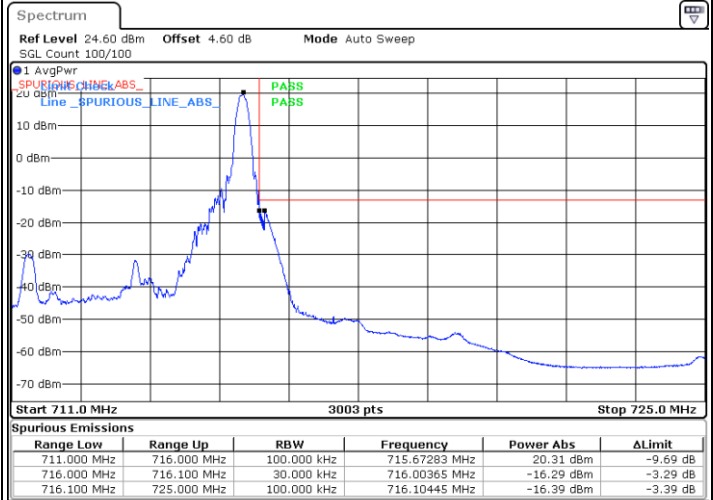


LTE Band 12 / 5MHz / 16QAM

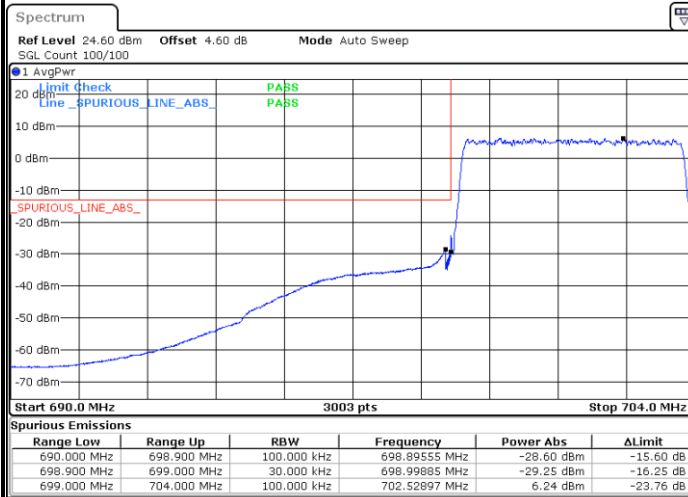
Lowest Band Edge / 1RB



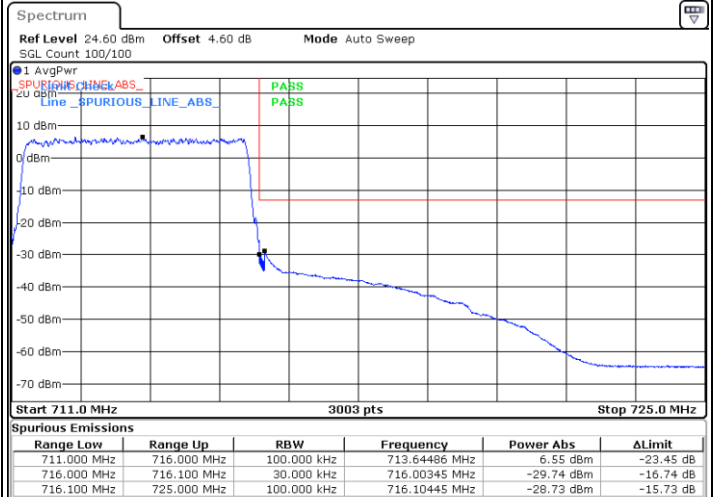
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



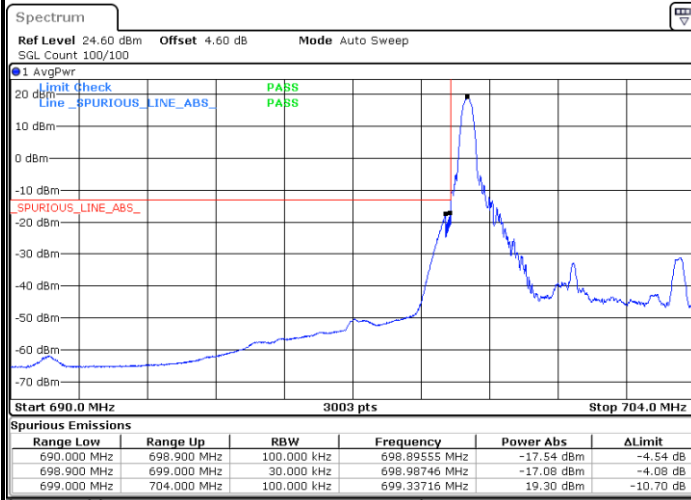
Highest Band Edge / Full RB



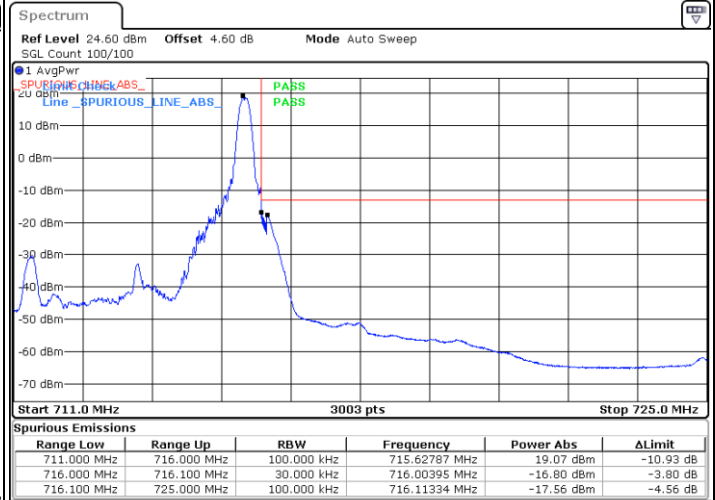


LTE Band 12 / 5MHz / 64QAM

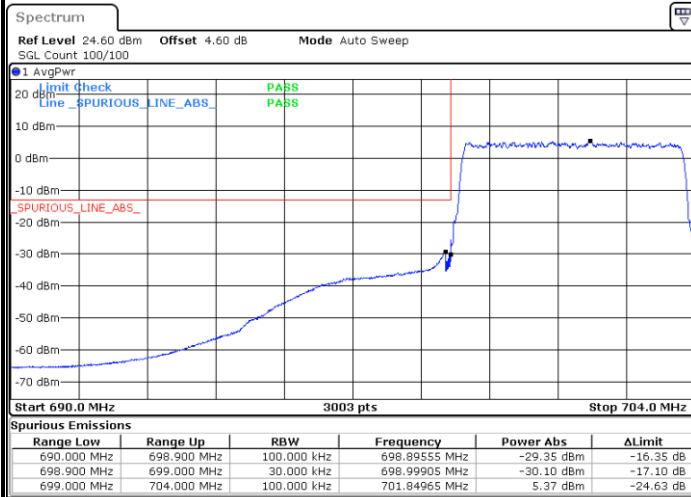
Lowest Band Edge / 1RB



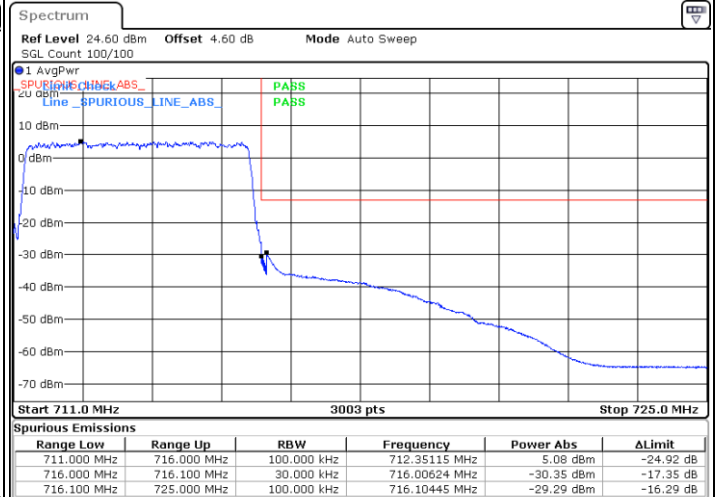
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



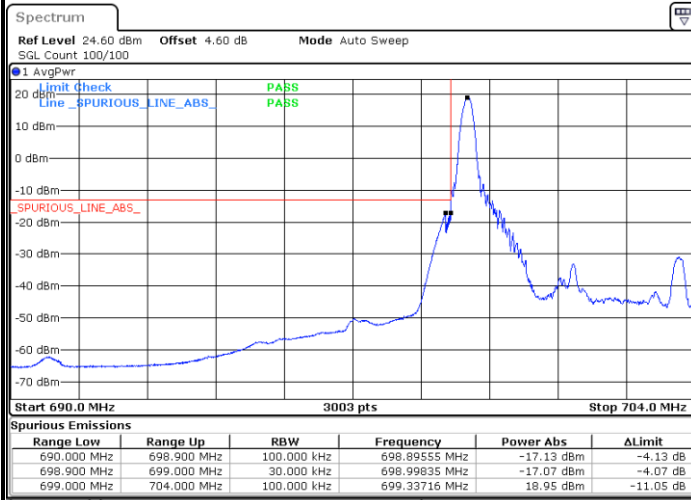
Highest Band Edge / Full RB



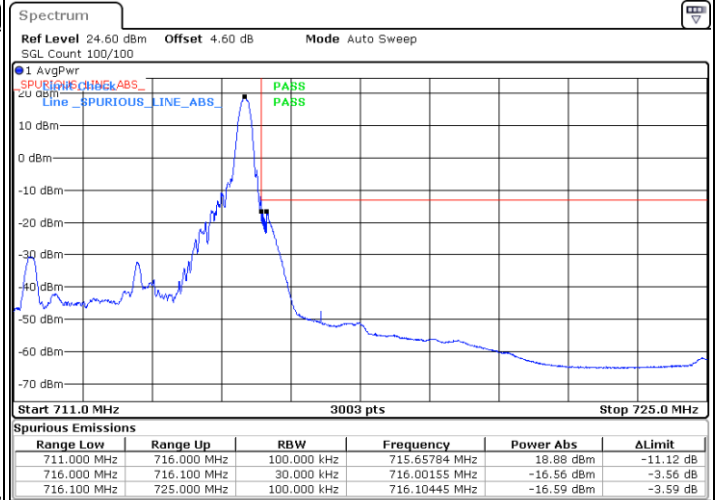


LTE Band 12 / 5MHz / 256QAM

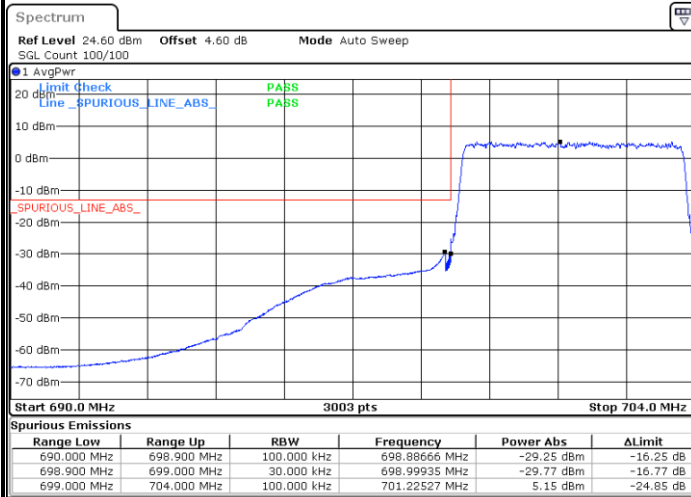
Lowest Band Edge / 1RB



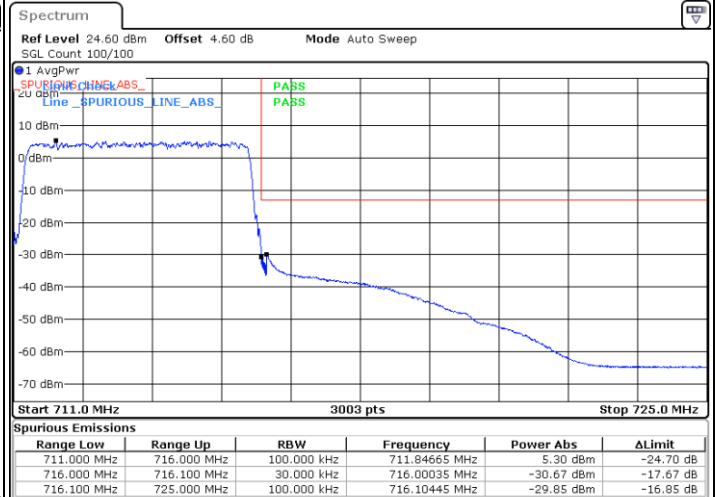
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



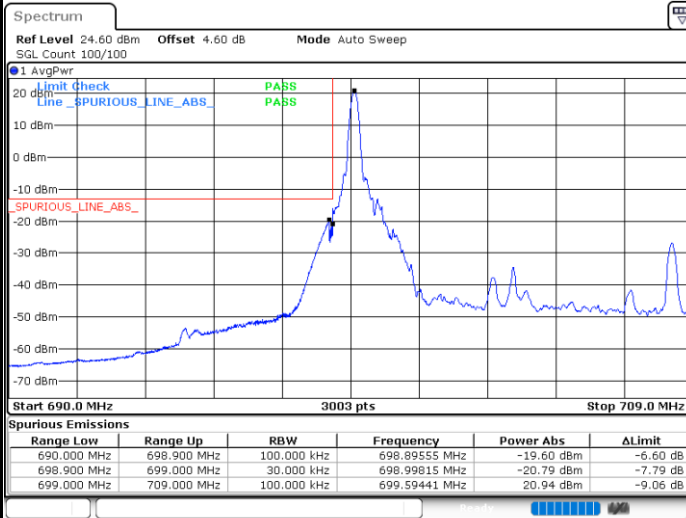
Highest Band Edge / Full RB



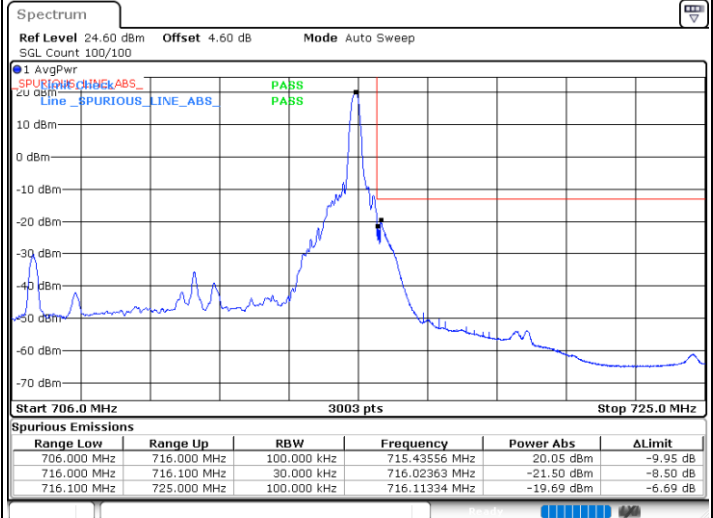


LTE Band 12 / 10MHz / QPSK

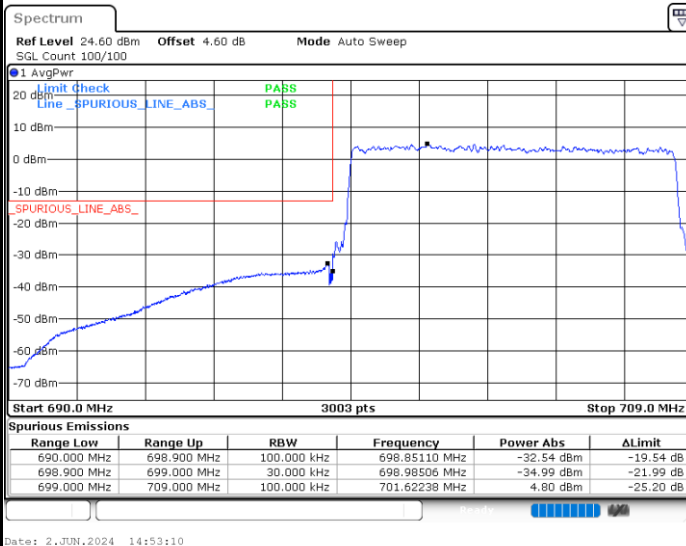
Lowest Band Edge / 1 RB



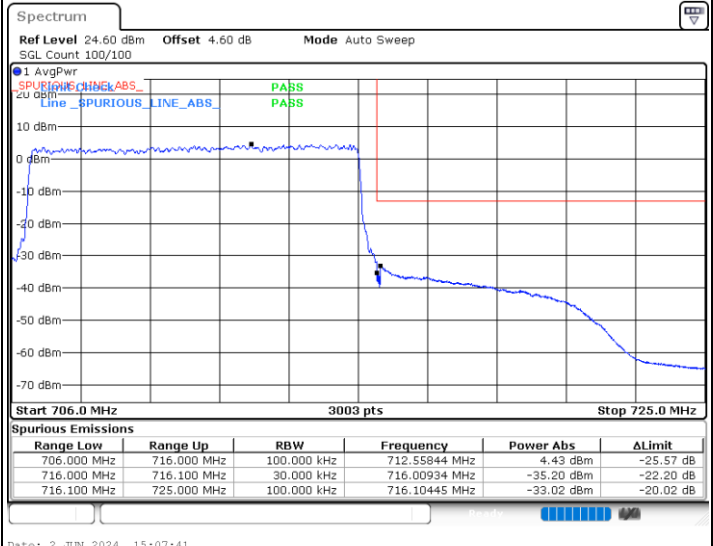
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



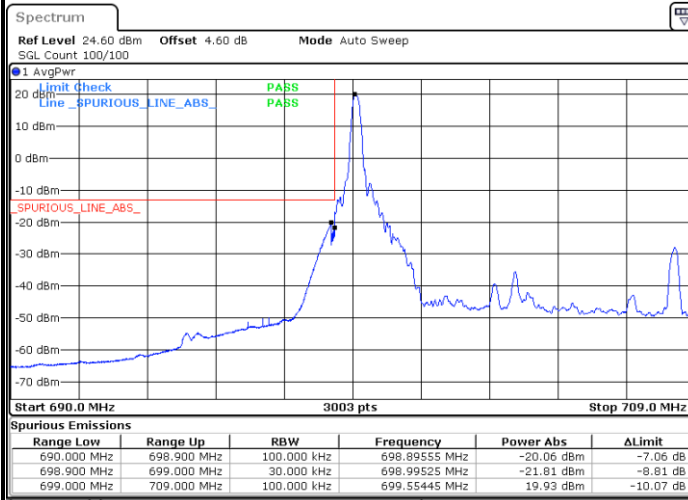
Highest Band Edge / Full RB



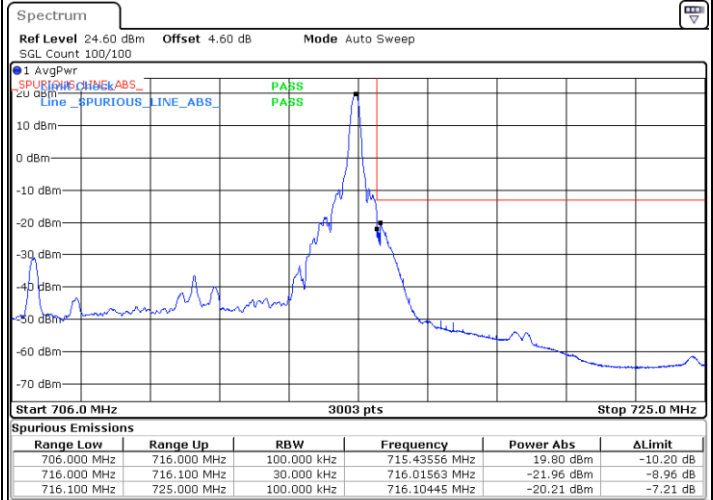


LTE Band 12 / 10MHz / 16QAM

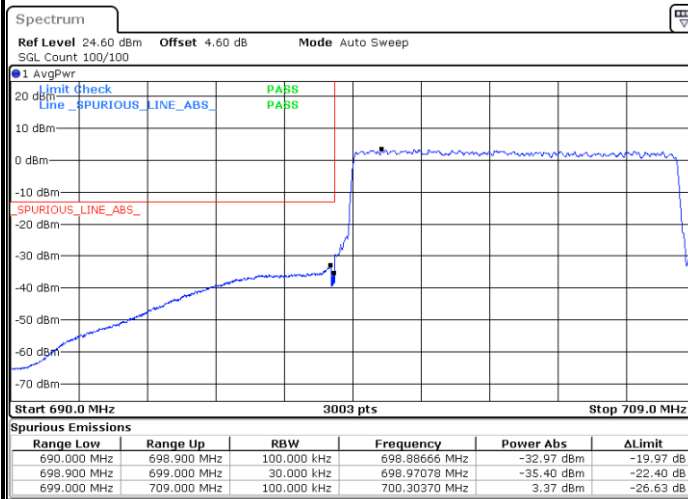
Lowest Band Edge / 1 RB



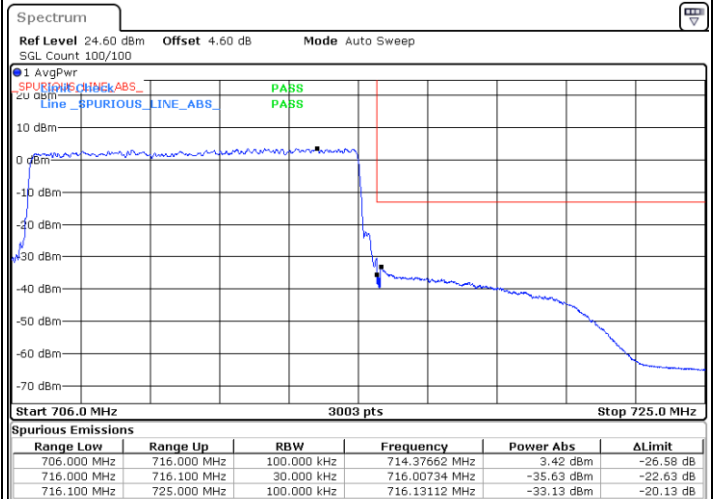
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



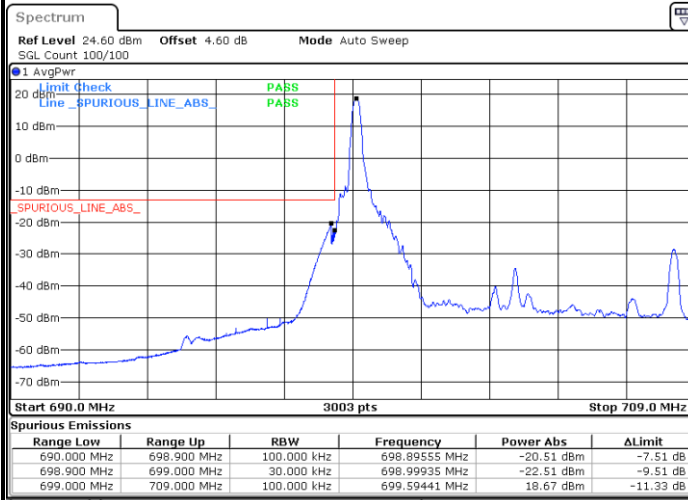
Highest Band Edge / Full RB



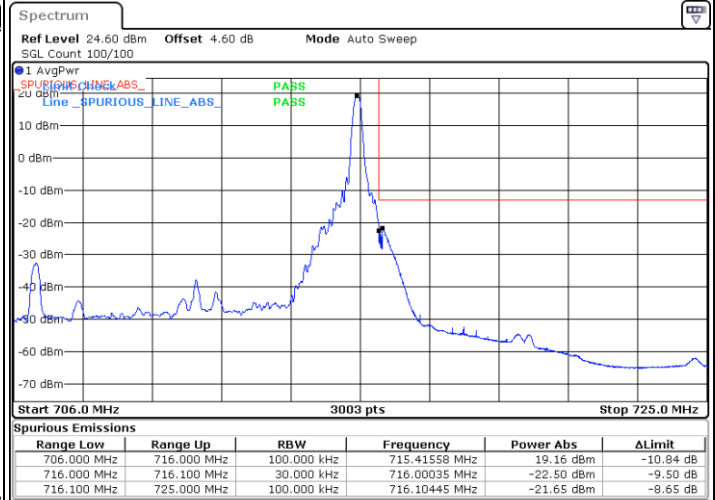


LTE Band 12 / 10MHz / 64QAM

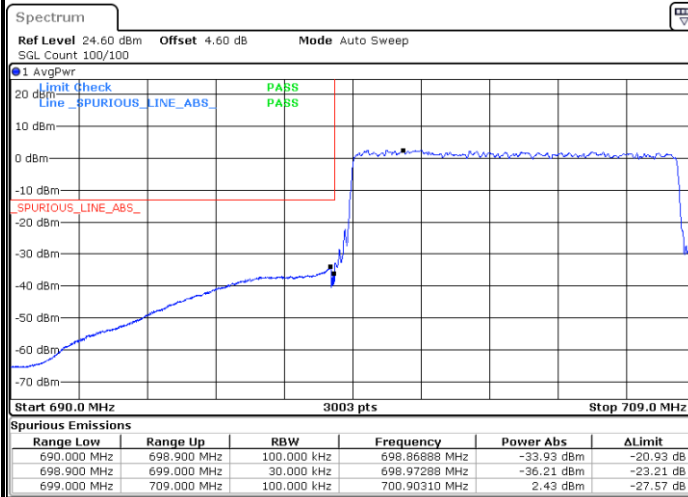
Lowest Band Edge / 1 RB



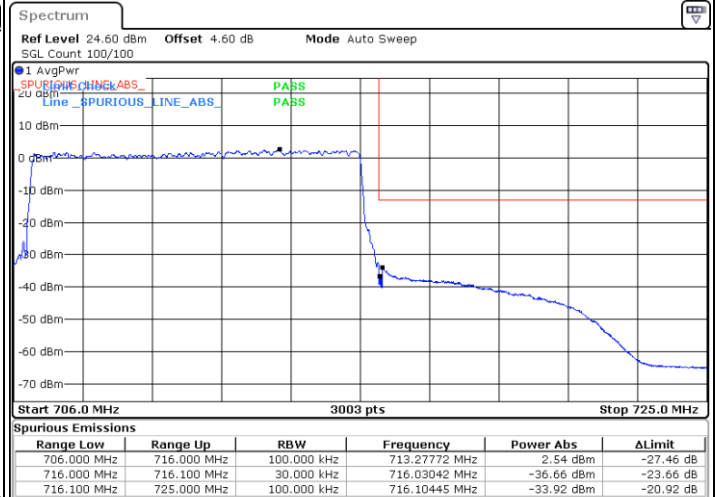
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



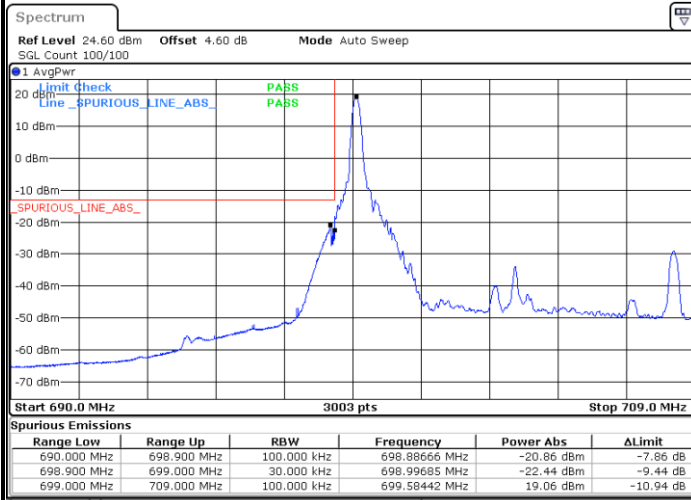
Highest Band Edge / Full RB



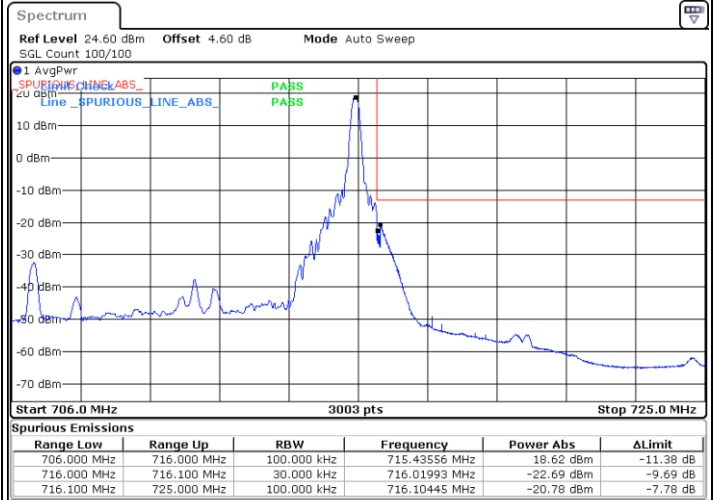


LTE Band 12 / 10MHz / 256QAM

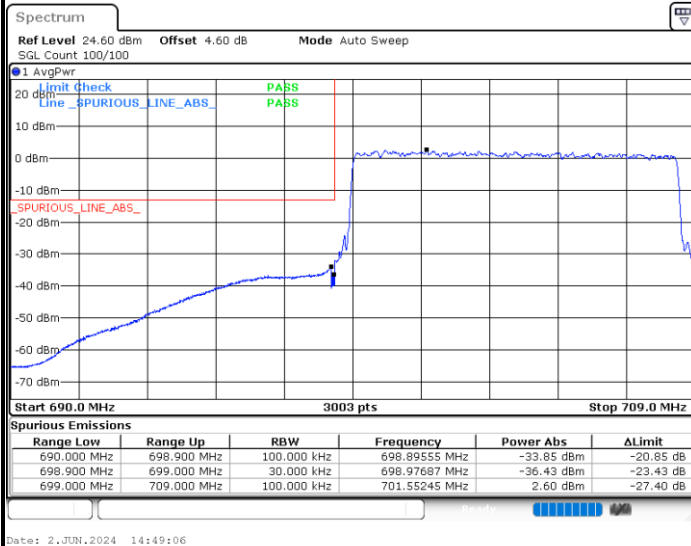
Lowest Band Edge / 1 RB



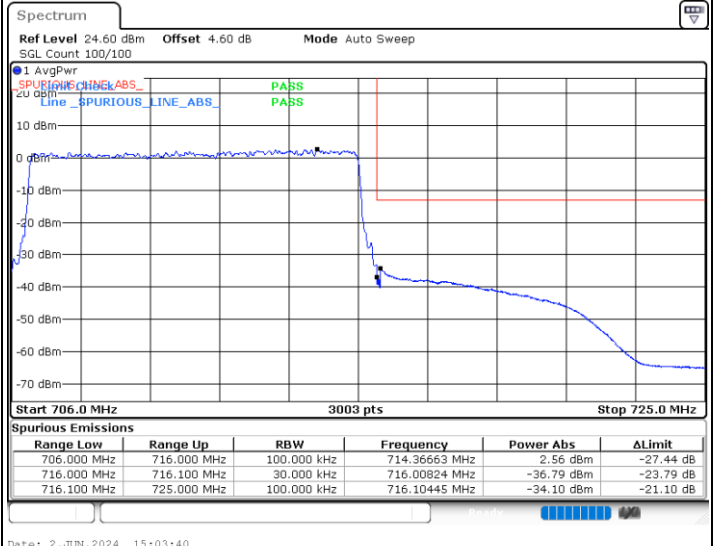
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

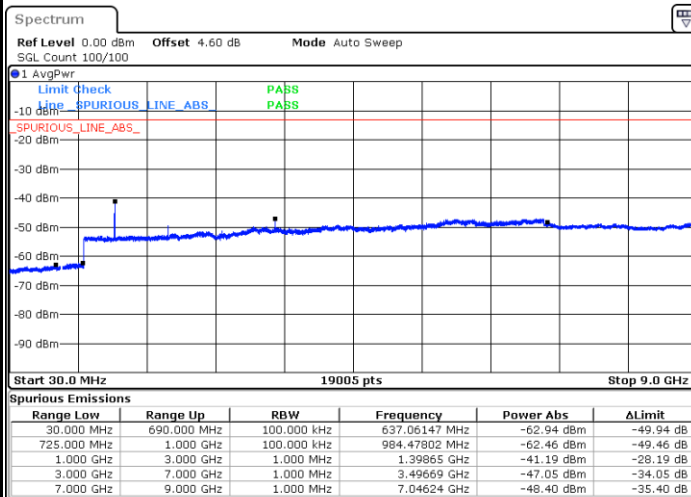




Conducted Spurious Emission

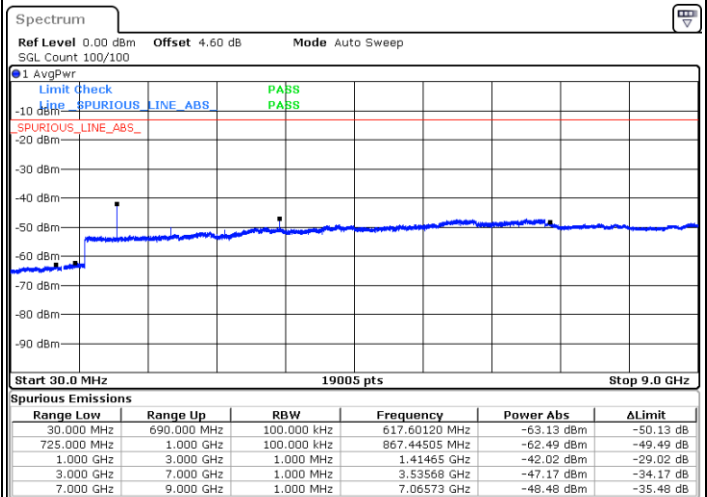
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



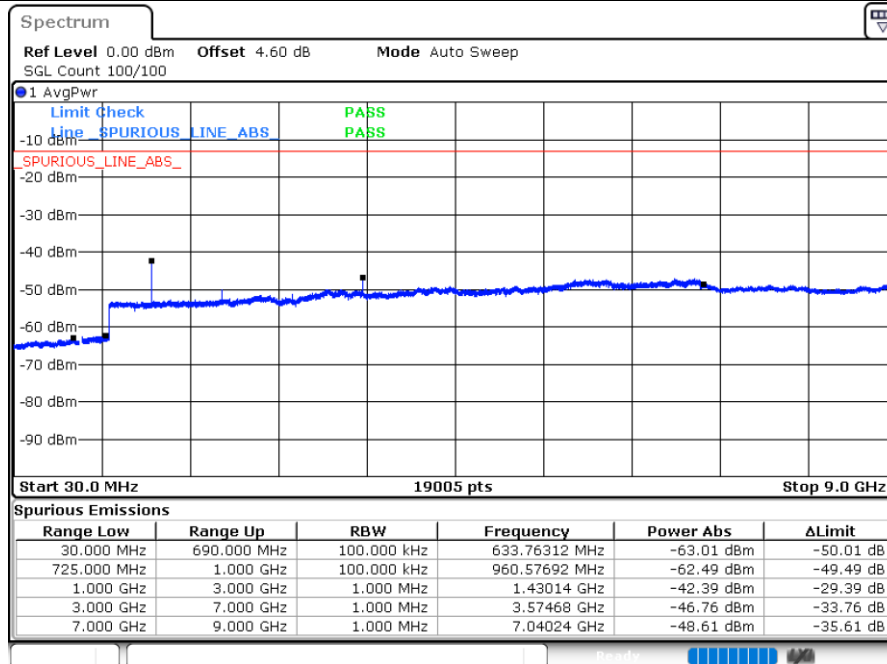
Date: 2.JUN.2024 13:18:07

Middle Channel / QPSK



Date: 2.JUN.2024 13:31:55

Highest Channel / QPSK

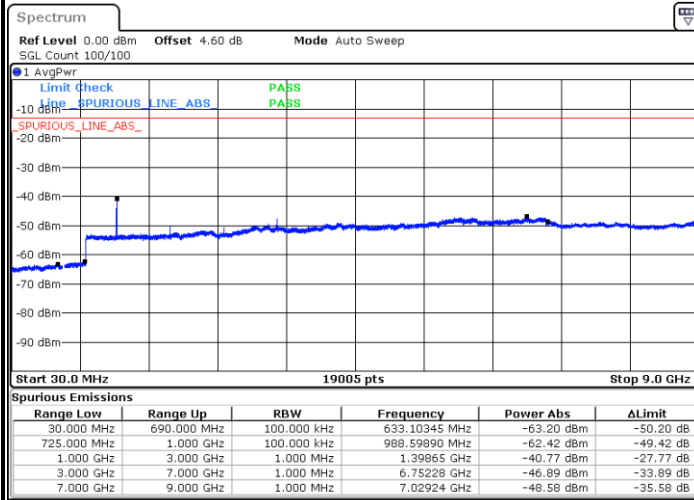


Date: 2.JUN.2024 13:33:55



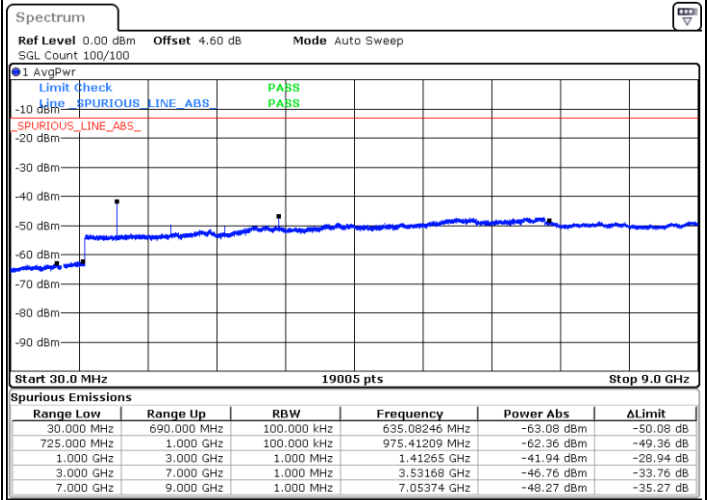
LTE Band 12 / 3MHz

Lowest Channel / QPSK



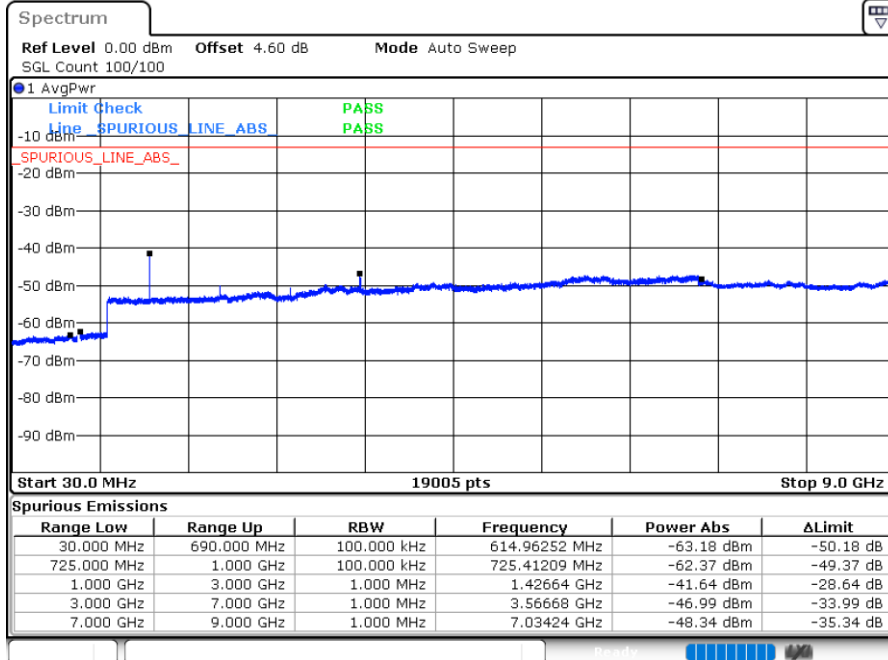
Date: 2.JUN.2024 13:47:35

Middle Channel / QPSK



Date: 2.JUN.2024 14:00:41

Highest Channel / QPSK

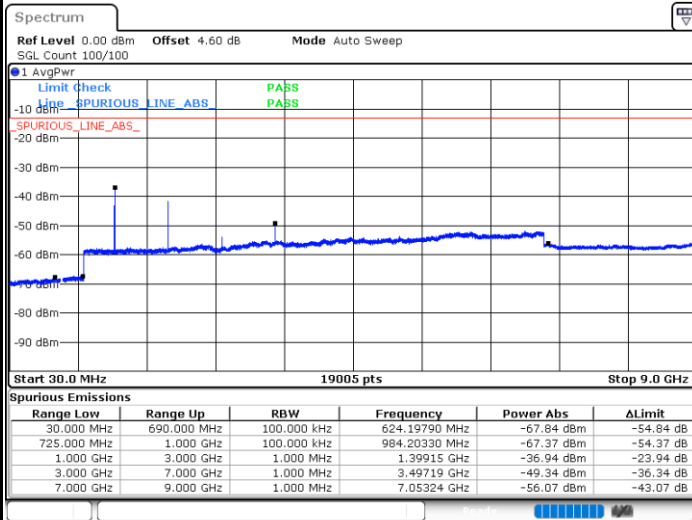


Date: 2.JUN.2024 14:02:41



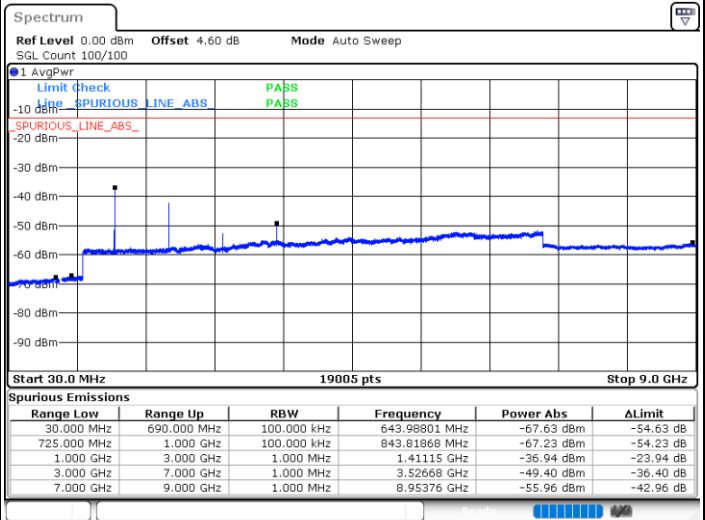
LTE Band 12 / 5MHz

Lowest Channel / QPSK



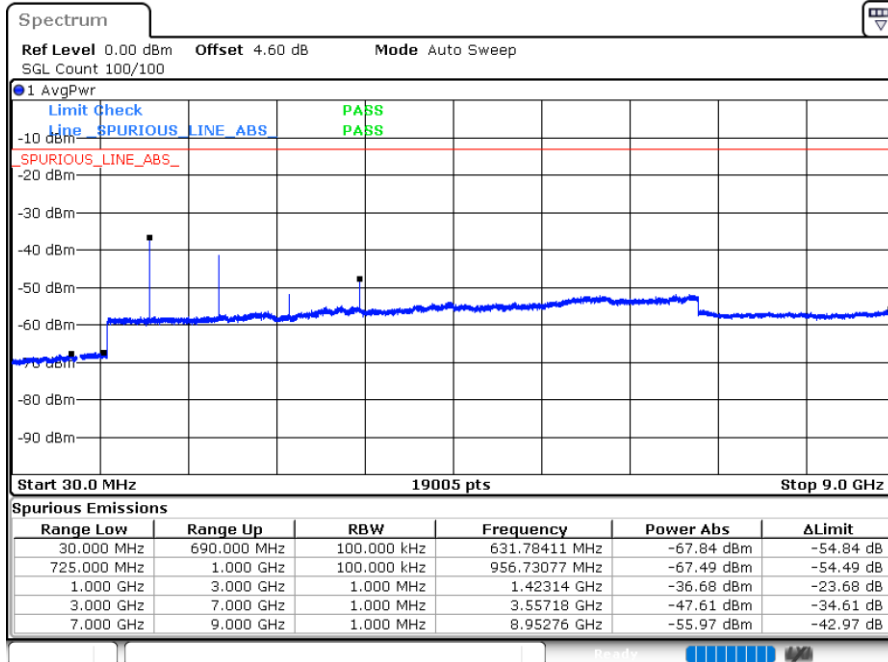
Date: 2.JUN.2024 14:14:55

Middle Channel / QPSK



Date: 2.JUN.2024 14:27:23

Highest Channel / QPSK

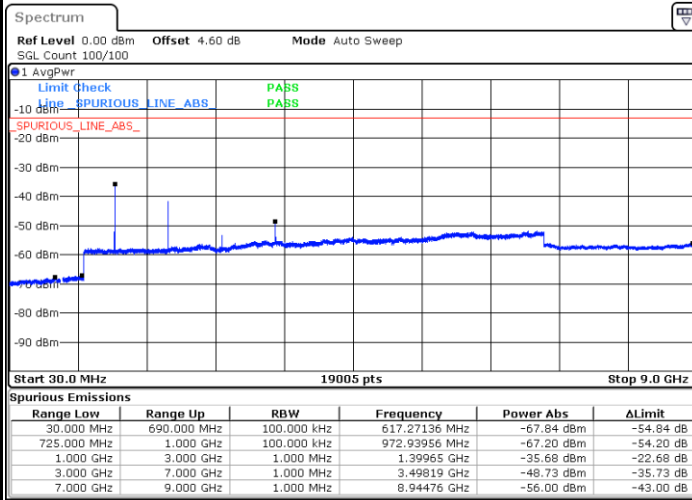


Date: 2.JUN.2024 14:29:22



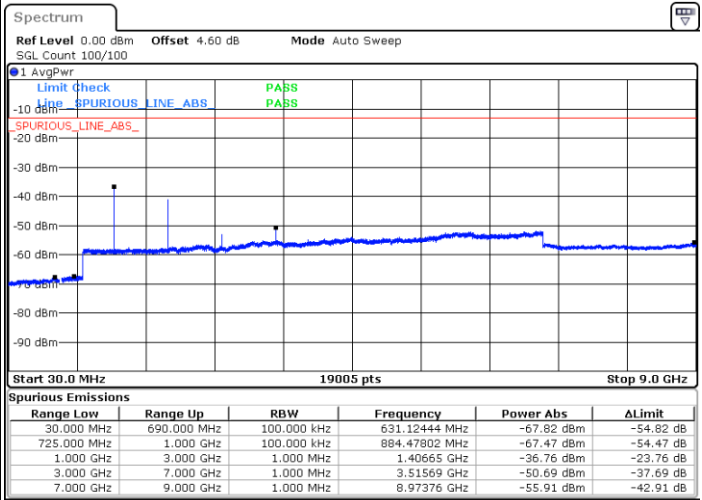
LTE Band 12 / 10MHz

Lowest Channel / QPSK



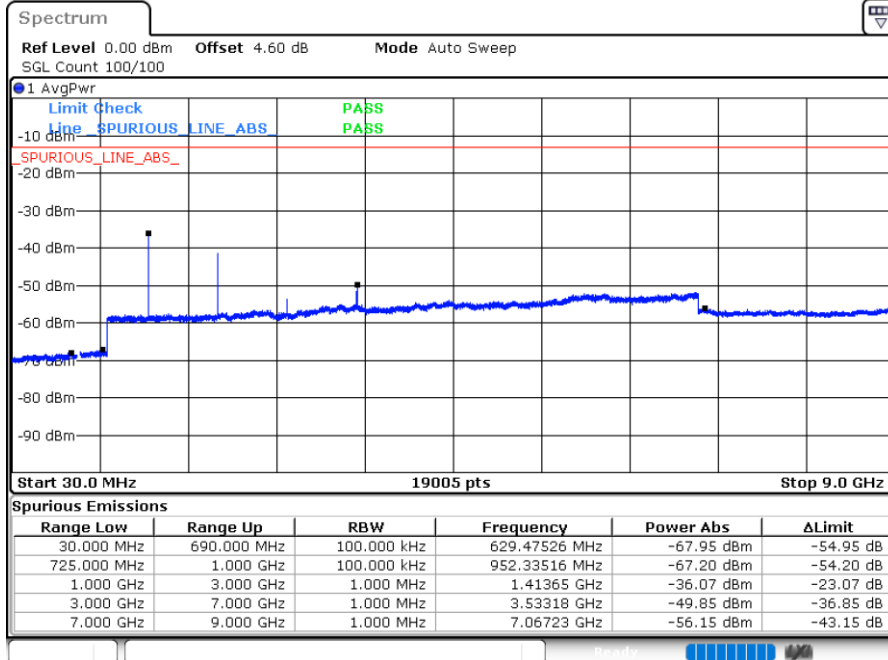
Date: 2.JUN.2024 14:42:10

Middle Channel / QPSK



Date: 2.JUN.2024 14:55:10

Highest Channel / QPSK



Date: 2.JUN.2024 14:57:10

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	0.0039	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0049	
-30	Normal Voltage	0.0058	
20	Maximum Voltage	0.0052	
20	Normal Voltage	0.0033	
20	Minimum Voltage	0.0011	

Note:

1. Normal Voltage = 5V ; Minimum Voltage =4.6V. ; Maximum Voltage =5.5V
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



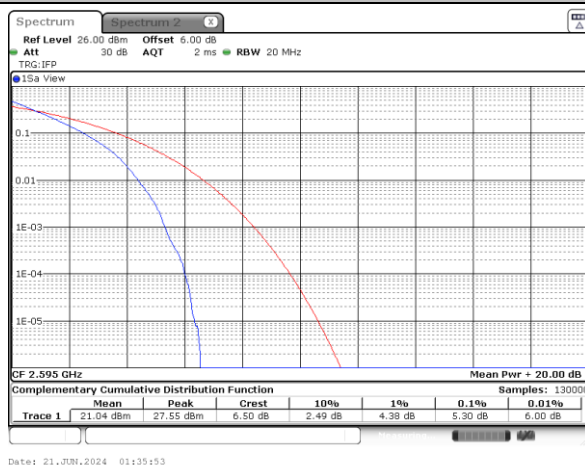
LTE Band 41

Peak-to-Average Ratio

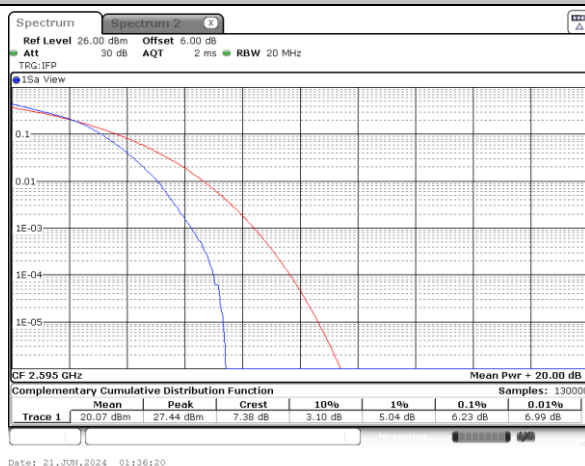
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.30	6.23	6.46	6.55	PASS

LTE Band 41 / 20MHz

Middle Channel / Full RB / QPSK

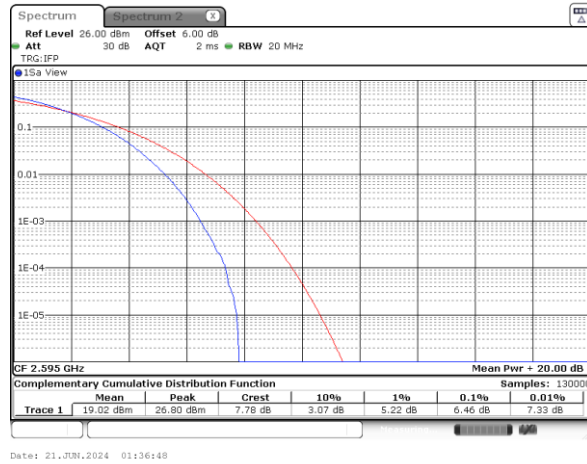


Middle Channel / Full RB / 16QAM

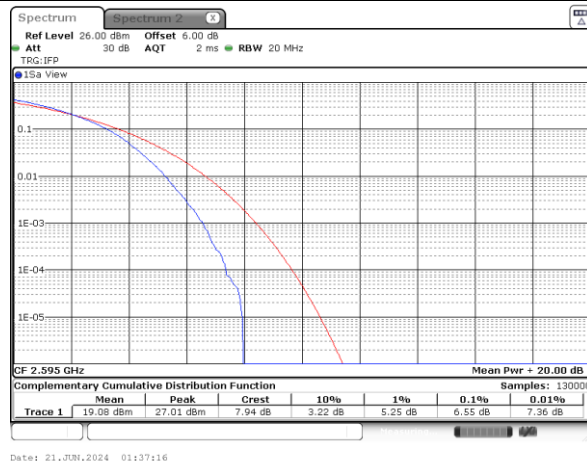




Middle Channel / Full RB / 64QAM



Middle Channel / Full RB / 256QAM



**26dB Bandwidth**

Mode	LTE Band 41 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.86	4.83
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.69	9.81
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.42	14.15
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.86	19.22

