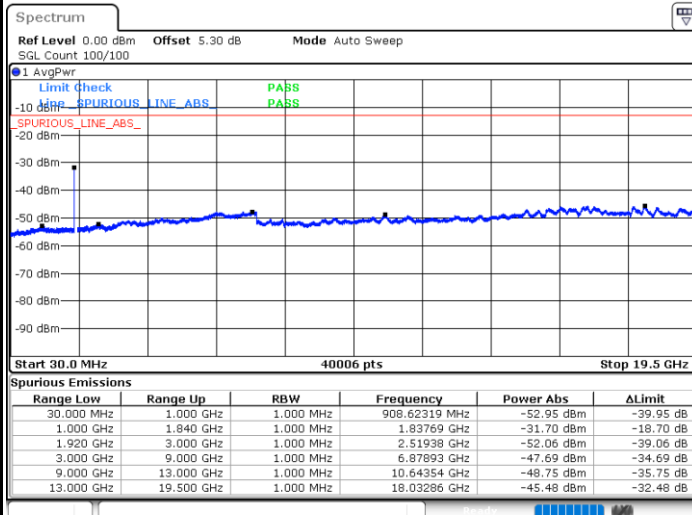




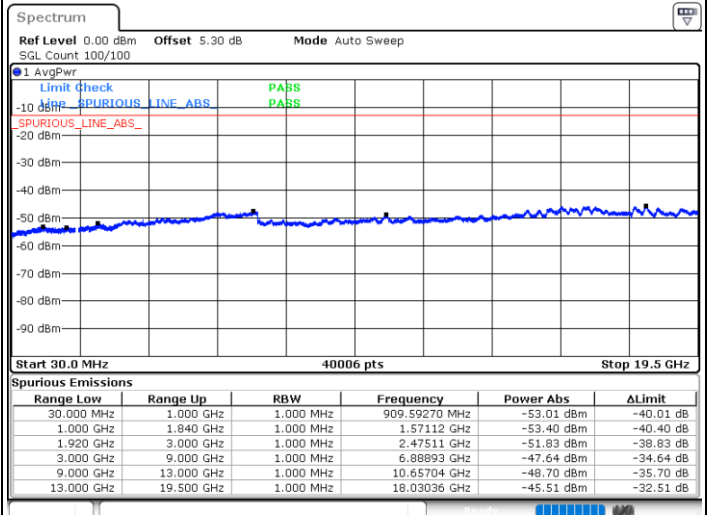
LTE Band 2 / 15MHz

Lowest Channel / QPSK



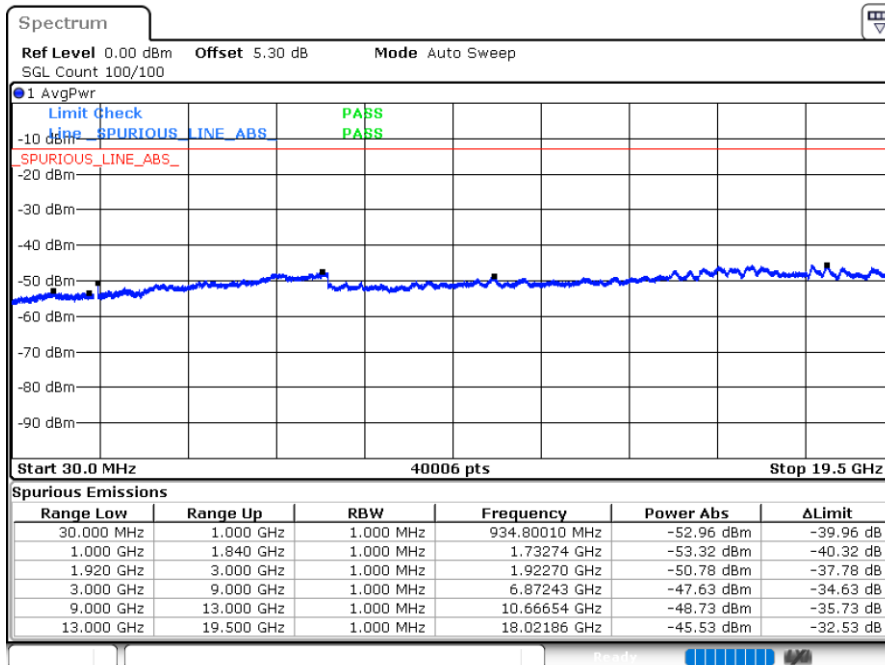
Date: 7.AUG.2024 11:00:27

Middle Channel / QPSK



Date: 7.AUG.2024 11:05:02

Highest Channel / QPSK

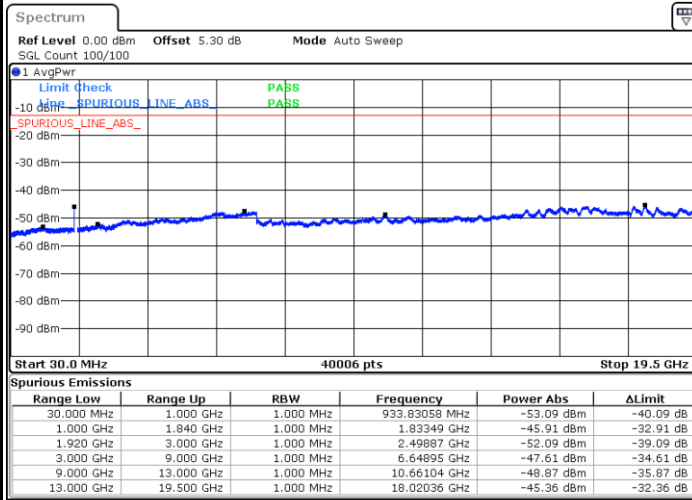


Date: 7.AUG.2024 11:07:45



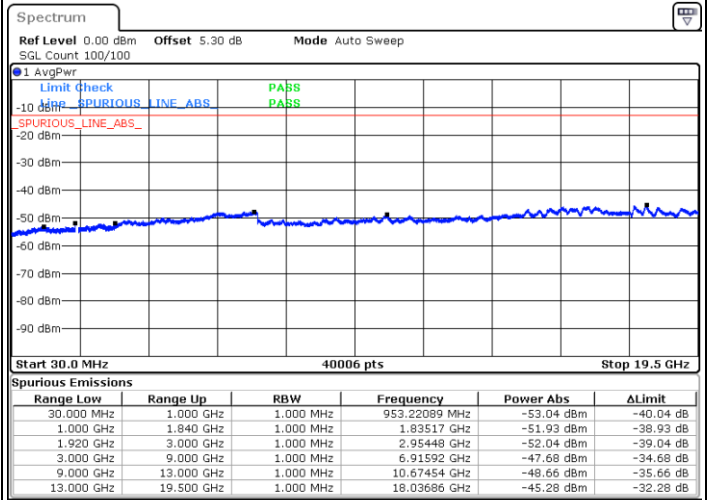
LTE Band 2 / 20MHz

Lowest Channel / QPSK



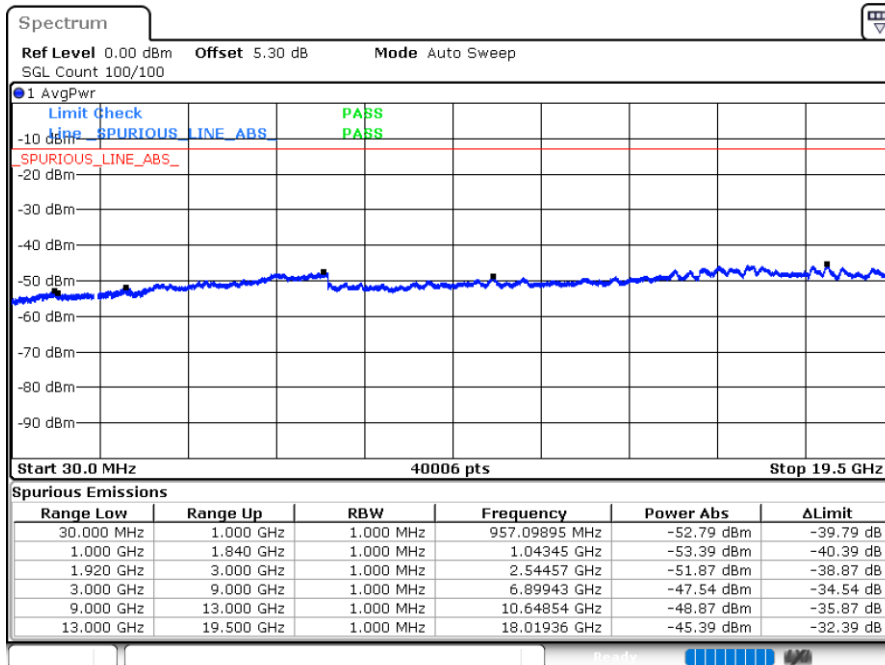
Date: 8.AUG.2024 15:24:27

Middle Channel / QPSK



Date: 8.AUG.2024 15:29:05

Highest Channel / QPSK



Date: 8.AUG.2024 15:30:30

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0036	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0037	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0036	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0021	

Note:

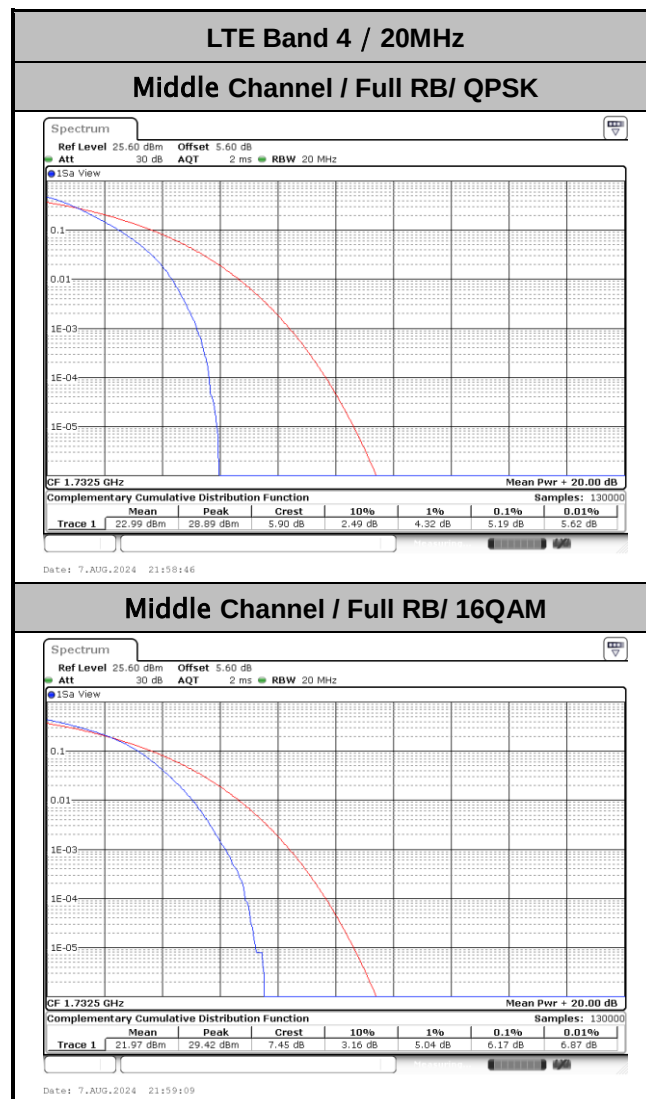
1. Normal Voltage = 3.8 V. ; Minimum Voltage =3.55. ; Maximum Voltage = 4.4V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 4

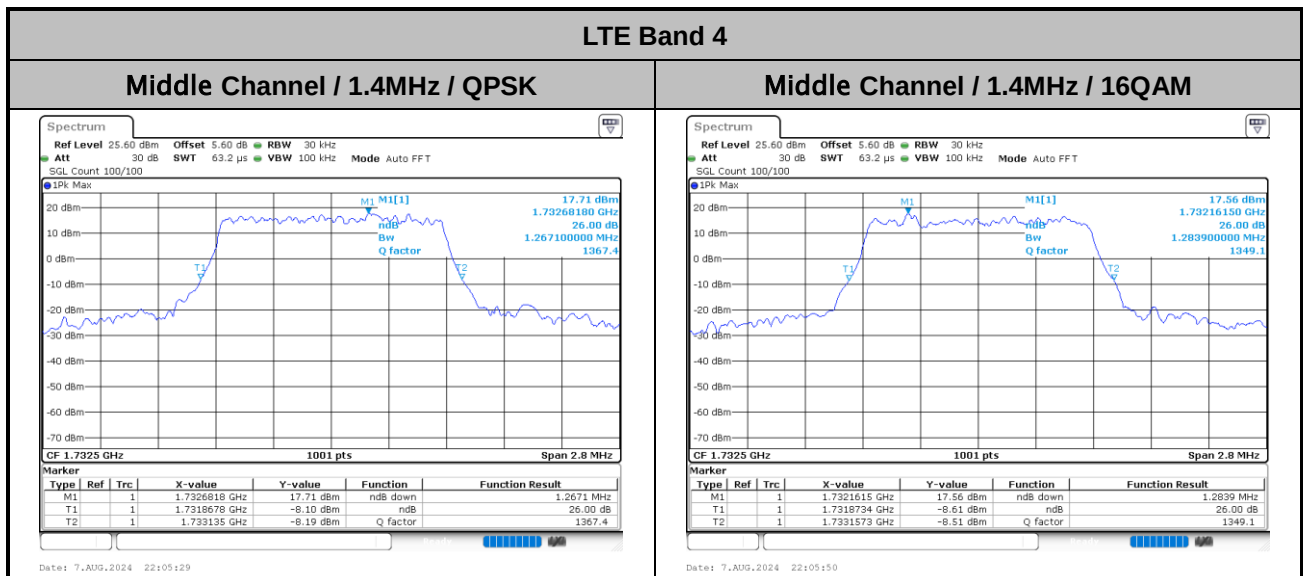
Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz			
Mod.	QPSK	16QAM		Limit: 13dB
RB Size	Full RB	Full RB		Result
Middle CH	5.19	6.17		PASS



**26dB Bandwidth**

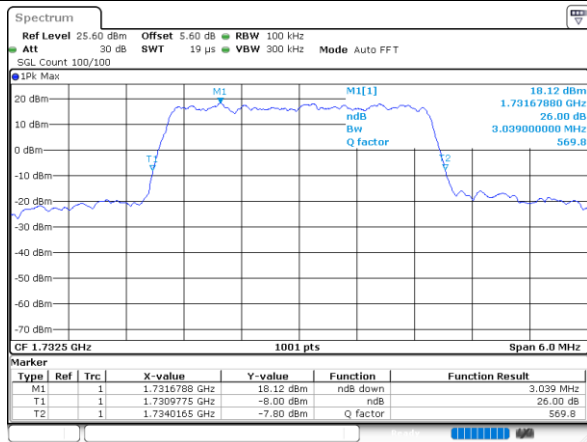
Mode	LTE Band 4 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.27	1.28
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.04	3.04
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.89	4.91
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.85	9.75
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.45	14.33
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.66	18.82



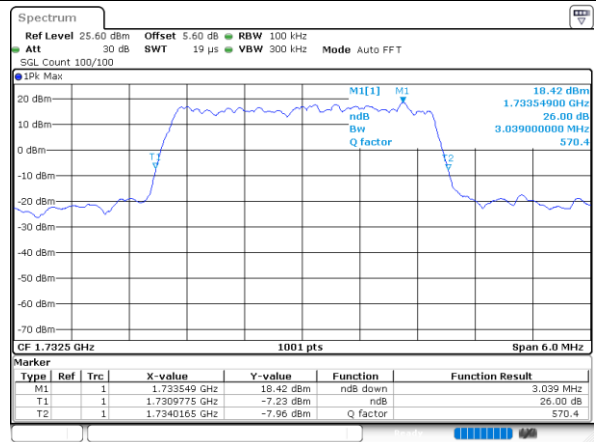


LTE Band 4

Middle Channel / 3MHz / QPSK

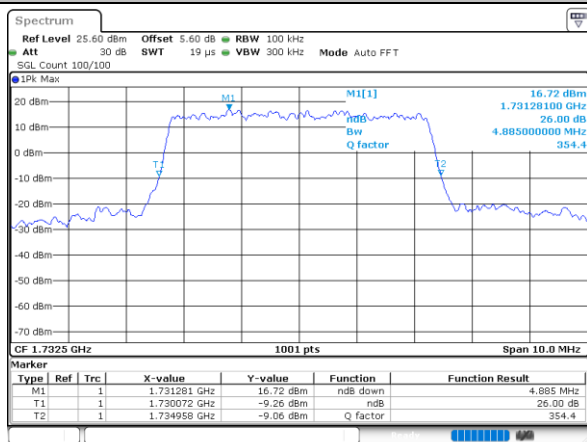


Middle Channel / 3MHz / 16QAM

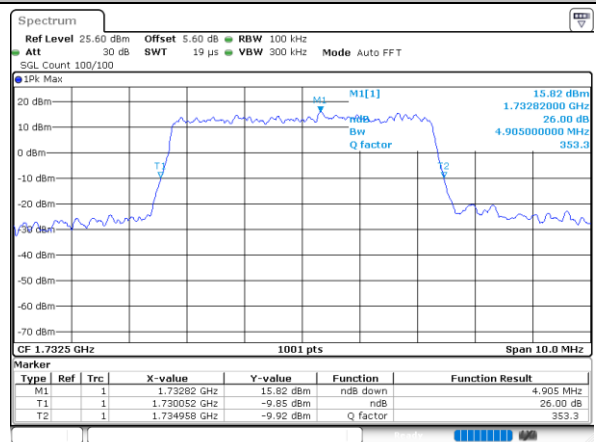


LTE Band 4

Middle Channel / 5MHz / QPSK

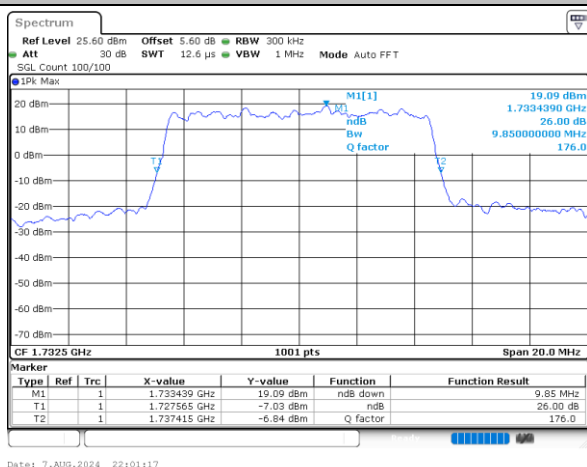


Middle Channel / 5MHz / 16QAM

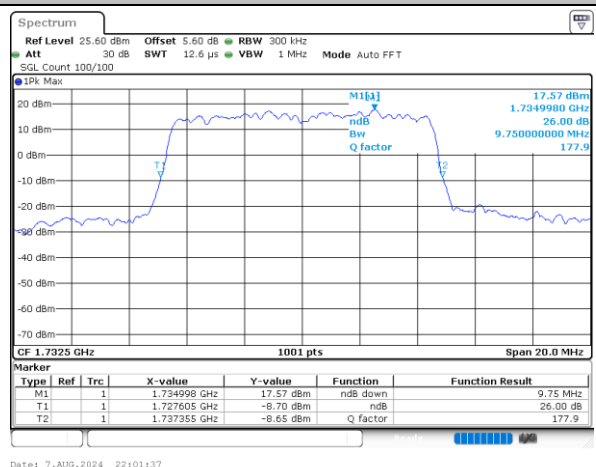


LTE Band 4

Middle Channel / 10MHz / QPSK



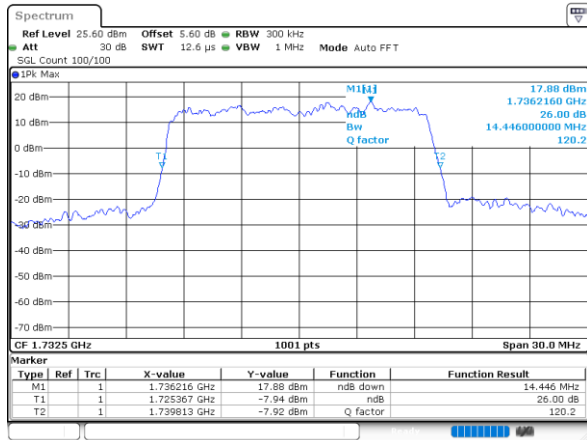
Middle Channel / 10MHz / 16QAM





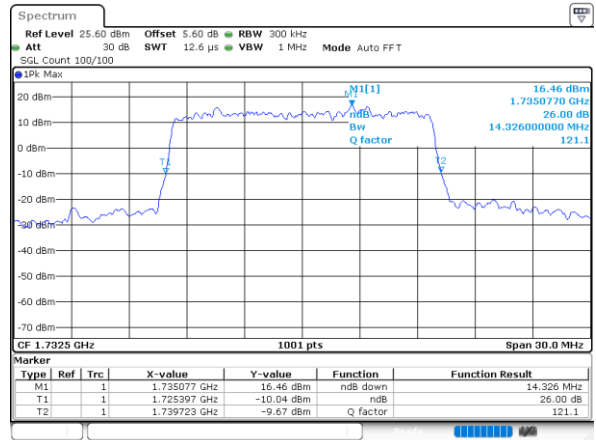
LTE Band 4

Middle Channel / 15MHz / QPSK



Date: 7.AUG.2024 21:59:52

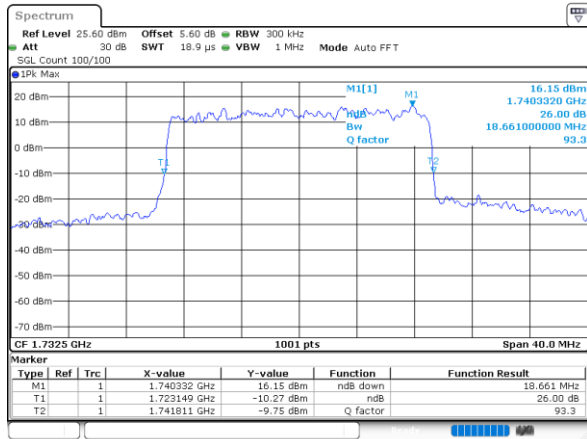
Middle Channel / 15MHz / 16QAM



Date: 7.AUG.2024 22:00:13

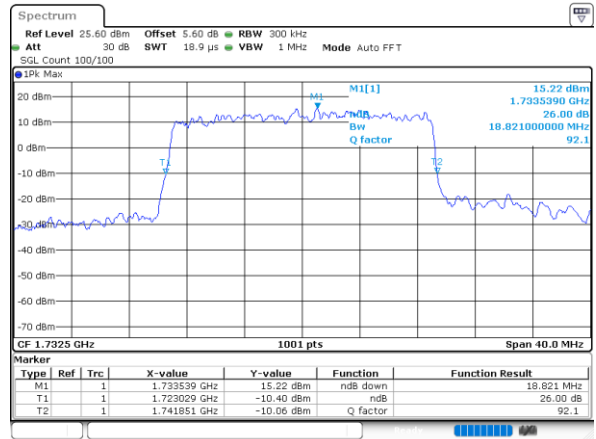
LTE Band 4

Middle Channel / 20MHz / QPSK



Date: 7.AUG.2024 21:57:21

Middle Channel / 20MHz / 16QAM

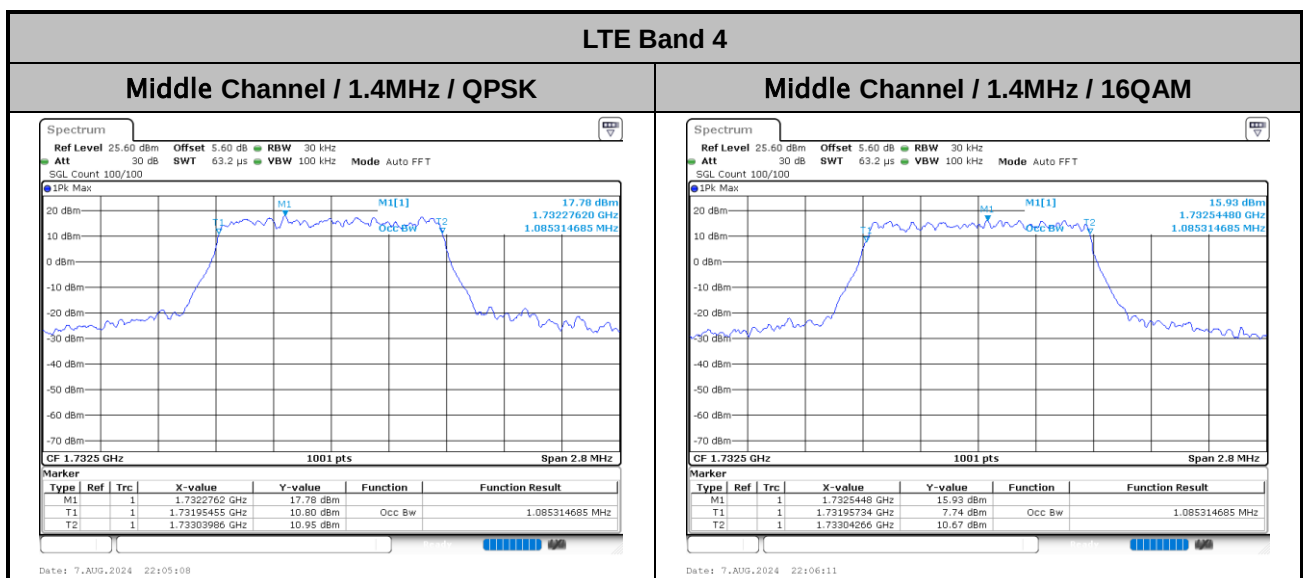


Date: 7.AUG.2024 21:58:24



Occupied Bandwidth

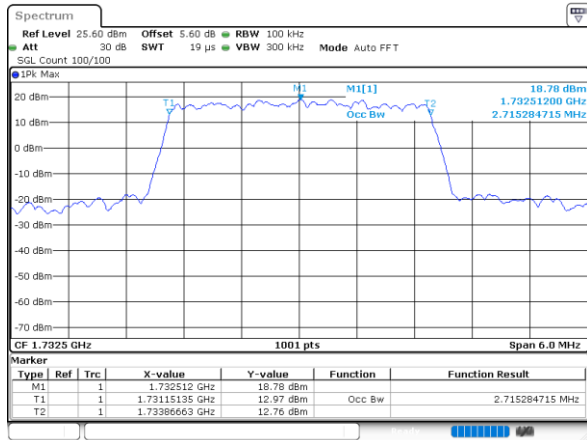
Mode	LTE Band 4 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.09
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.72	2.72
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.99	9.03
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.37	13.40
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.78	17.82



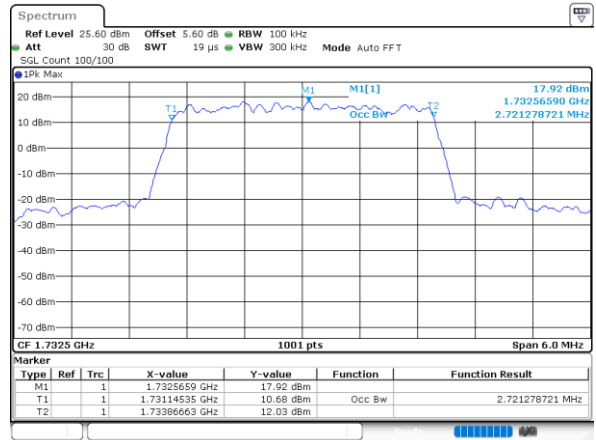


LTE Band 4

Middle Channel / 3MHz / QPSK

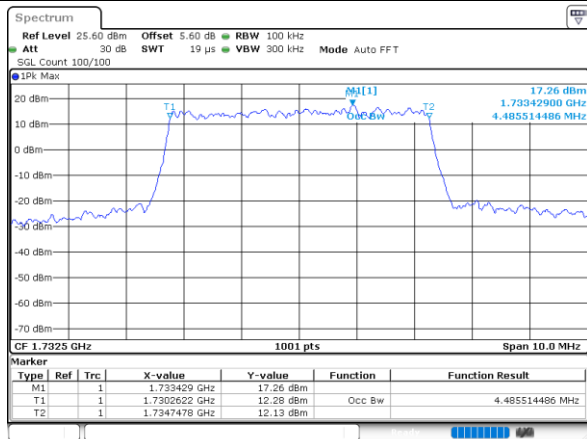


Middle Channel / 3MHz / 16QAM

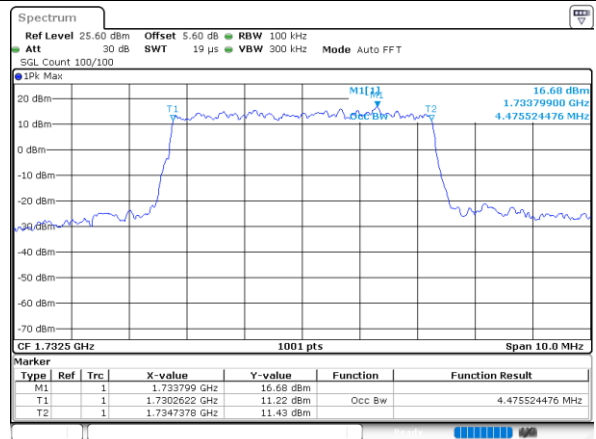


LTE Band 4

Middle Channel / 5MHz / QPSK

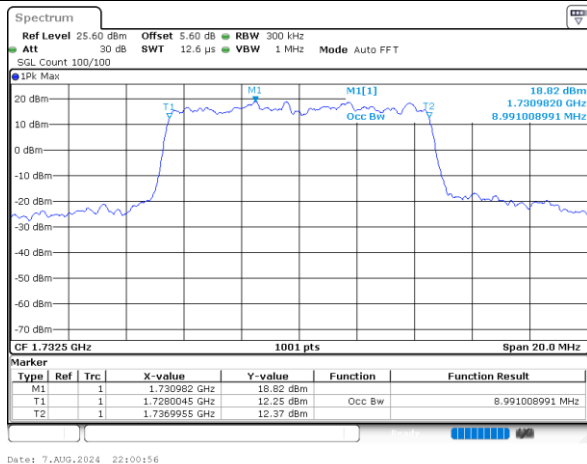


Middle Channel / 5MHz / 16QAM

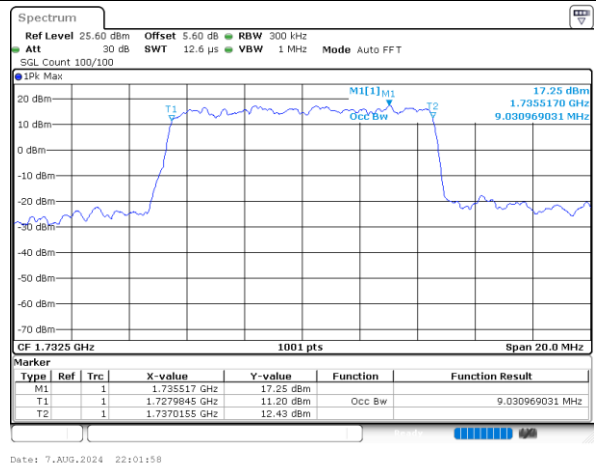


LTE Band 4

Middle Channel / 10MHz / QPSK



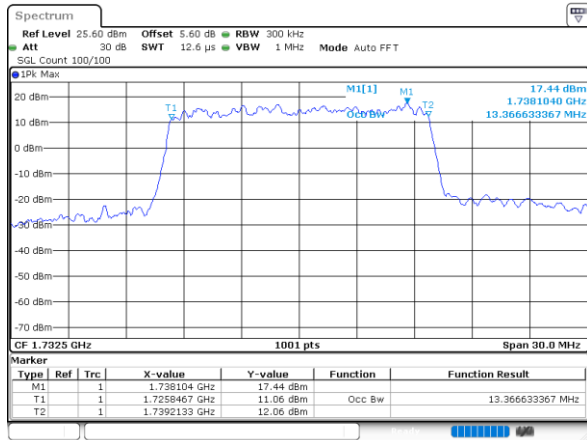
Middle Channel / 10MHz / 16QAM



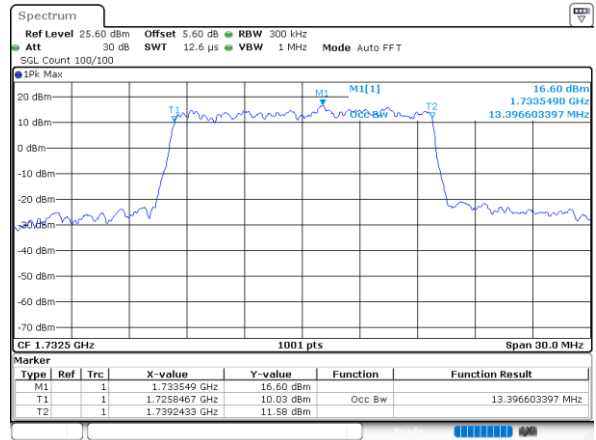


LTE Band 4

Middle Channel / 15MHz / QPSK

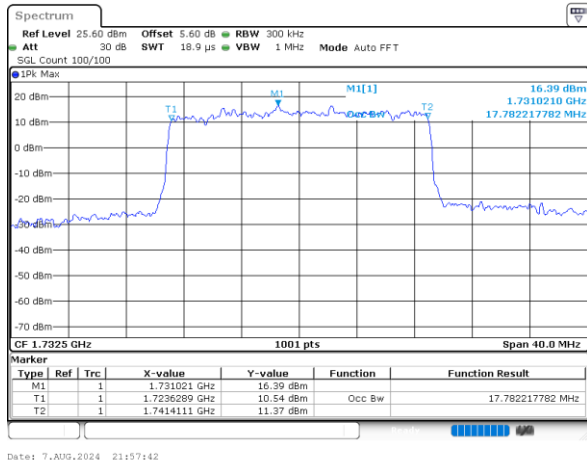


Middle Channel / 15MHz / 16QAM

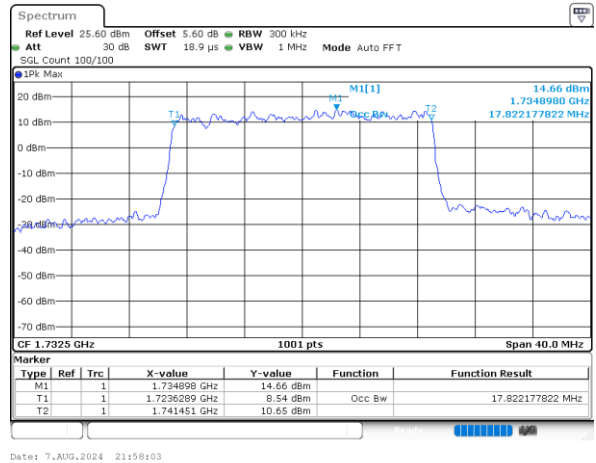


LTE Band 4

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

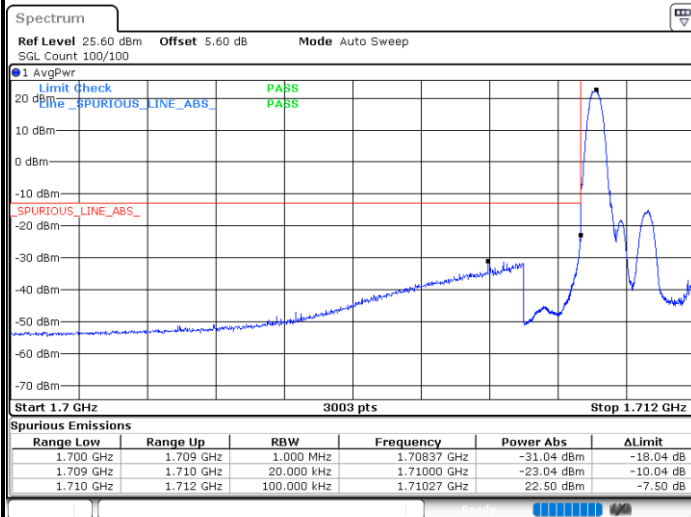




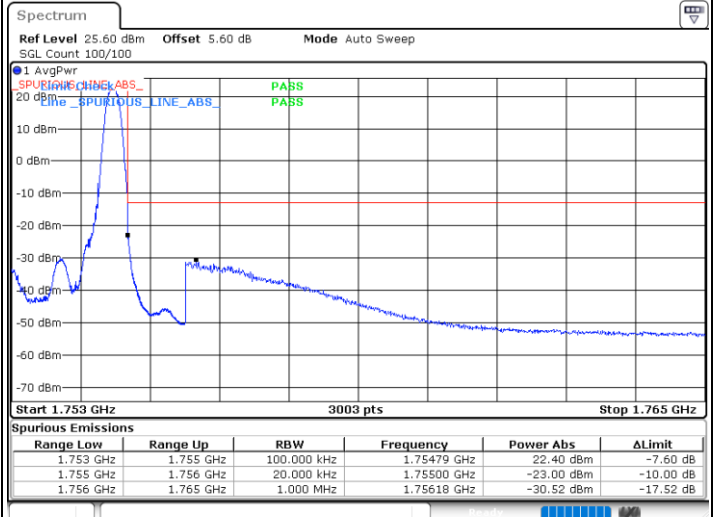
Conducted Band Edge

LTE Band 4 / 1.4MHz / QPSK

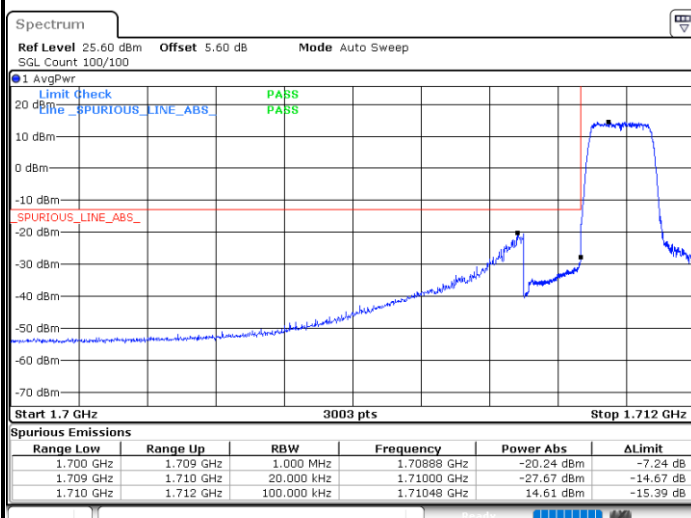
Lowest Band Edge / 1RB



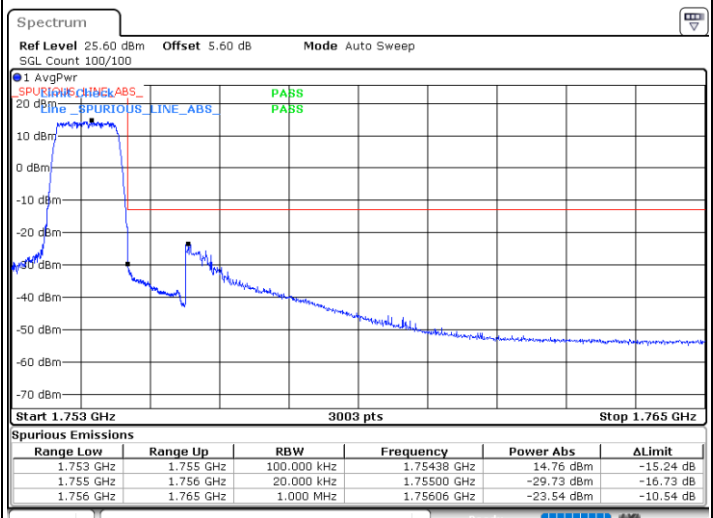
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



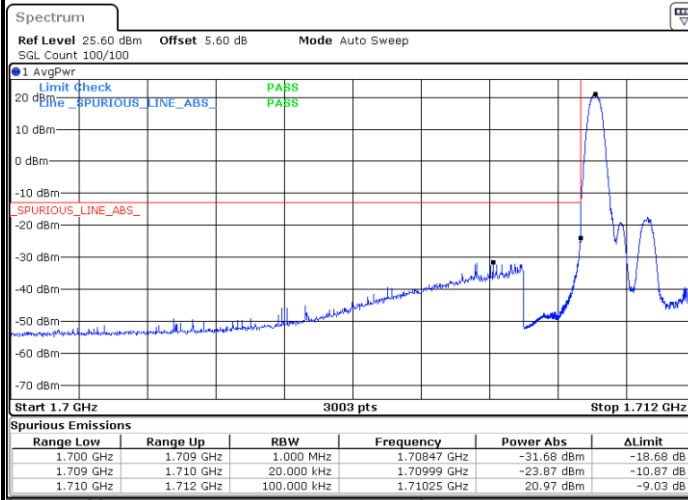
Highest Band Edge / Full RB



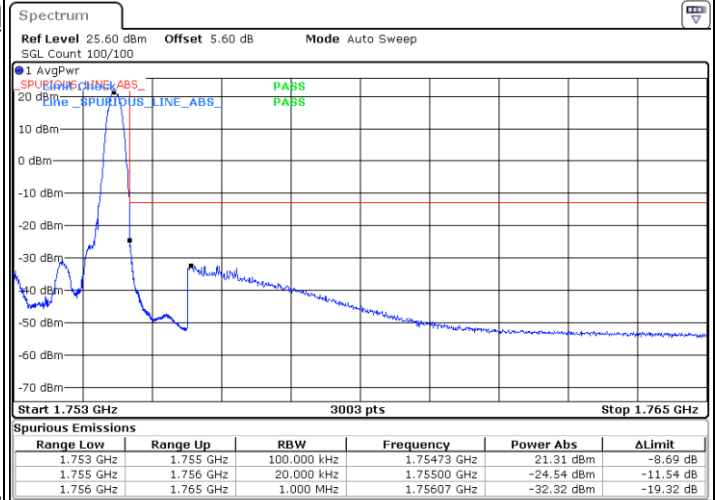


LTE Band 4 / 1.4MHz / 16QAM

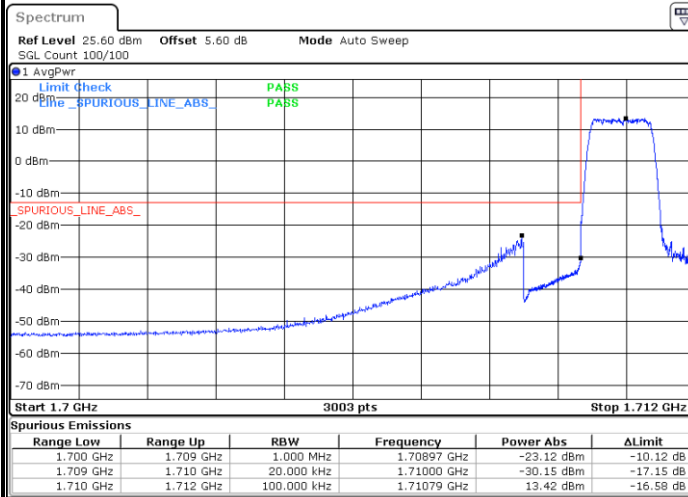
Lowest Band Edge / 1 RB



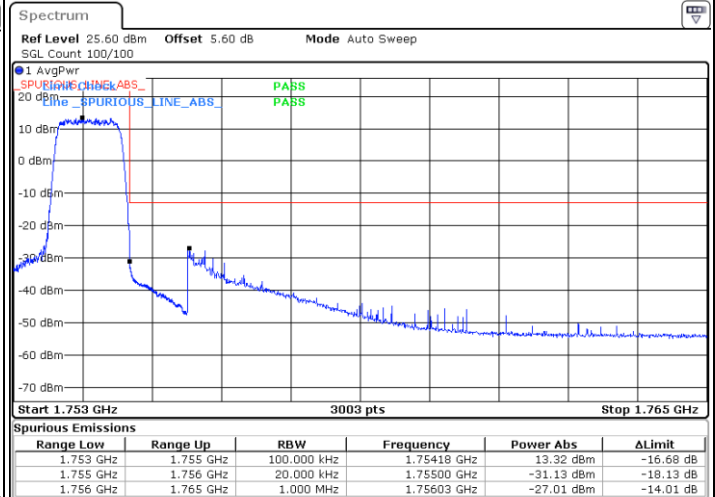
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



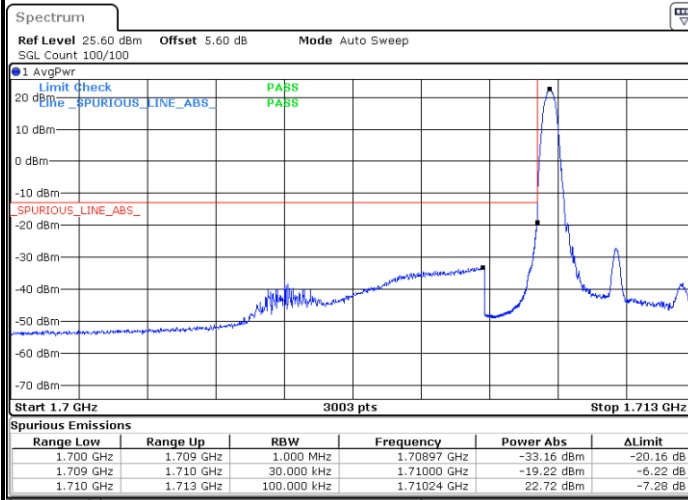
Highest Band Edge / Full RB



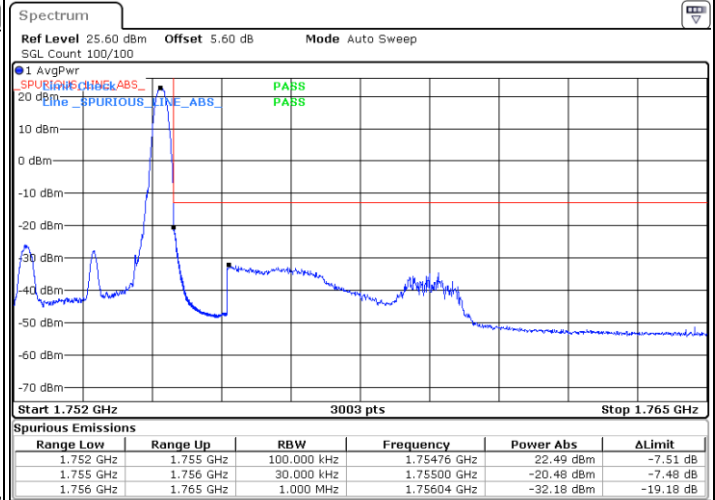


LTE Band 4 / 3MHz / QPSK

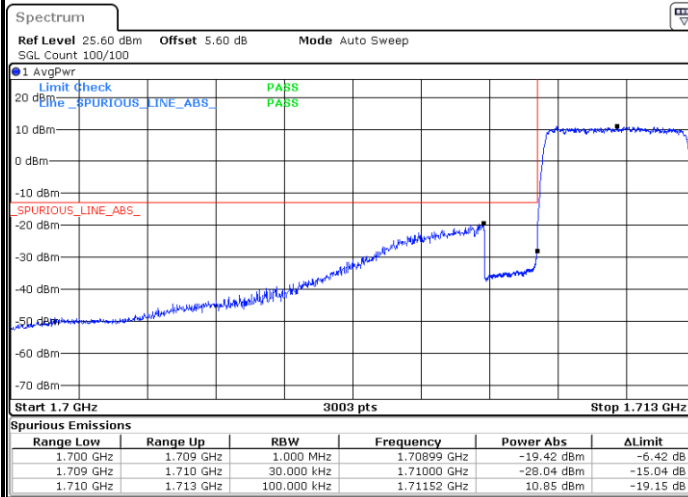
Lowest Band Edge / 1RB



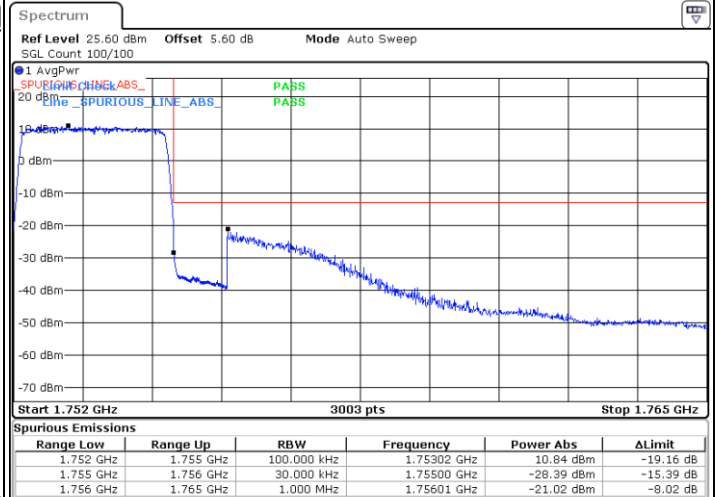
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



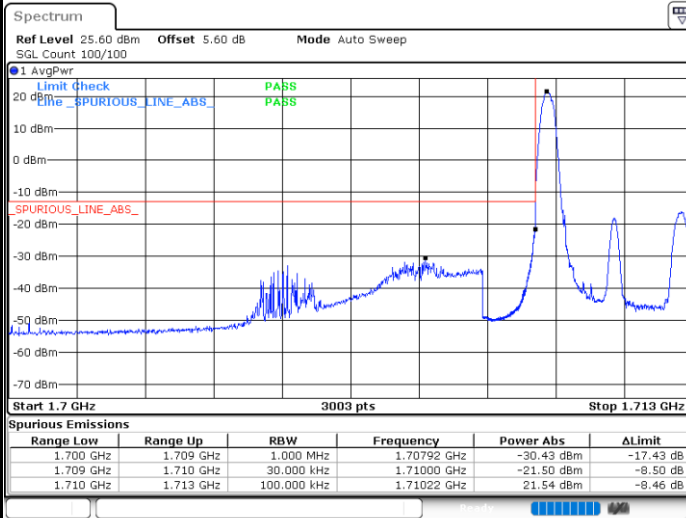
Highest Band Edge / Full RB



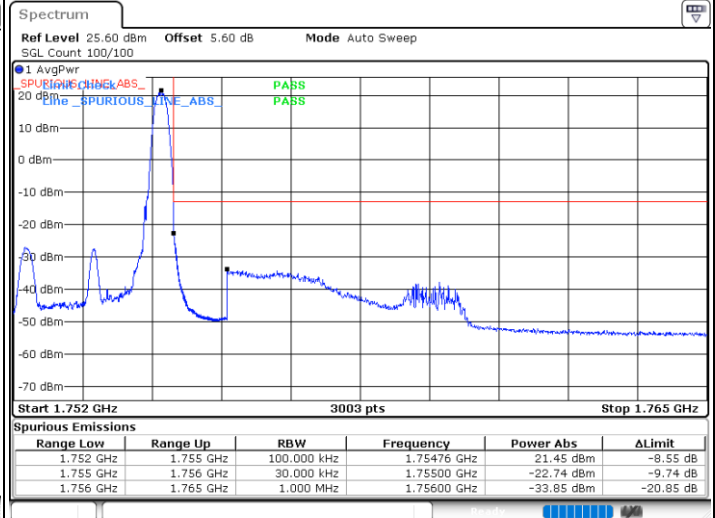


LTE Band 4 / 3MHz / 16QAM

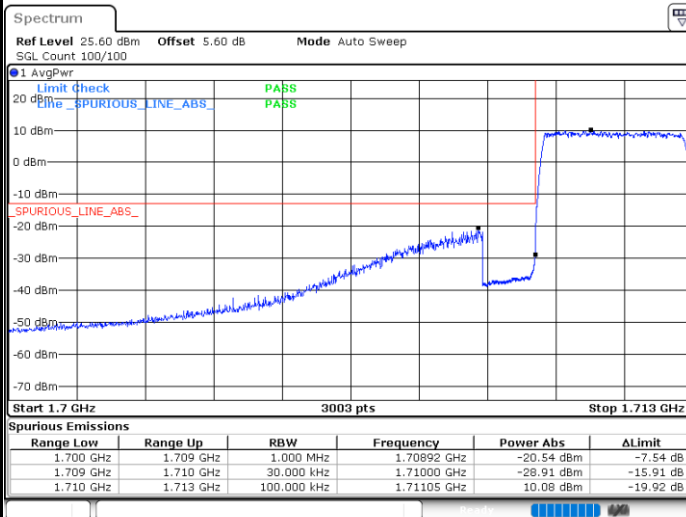
Lowest Band Edge / 1 RB



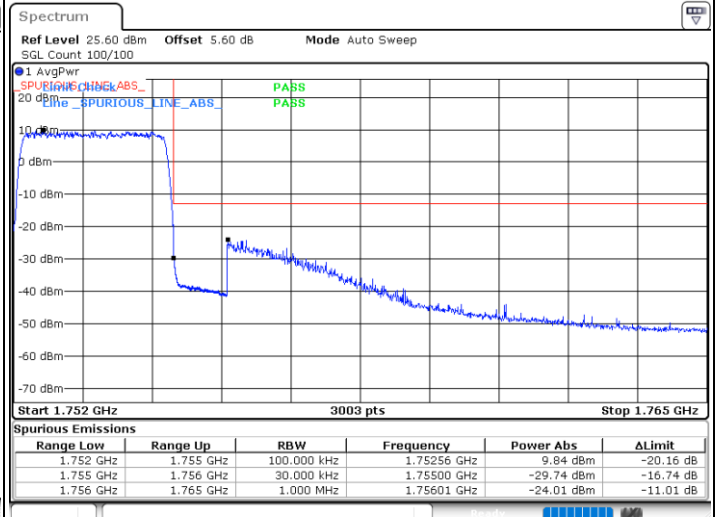
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



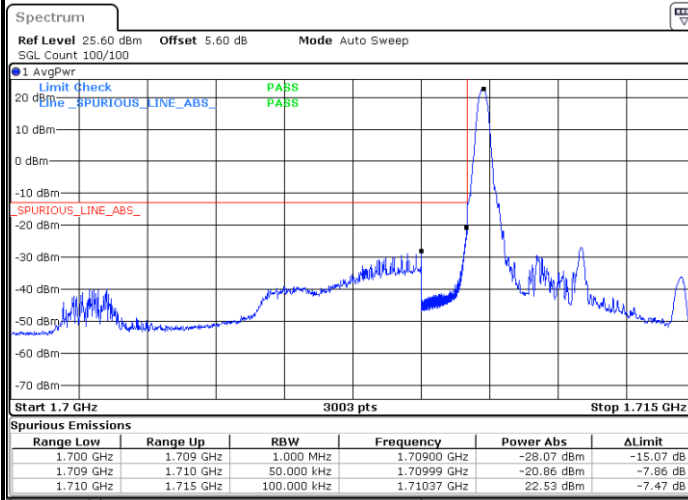
Highest Band Edge / Full RB



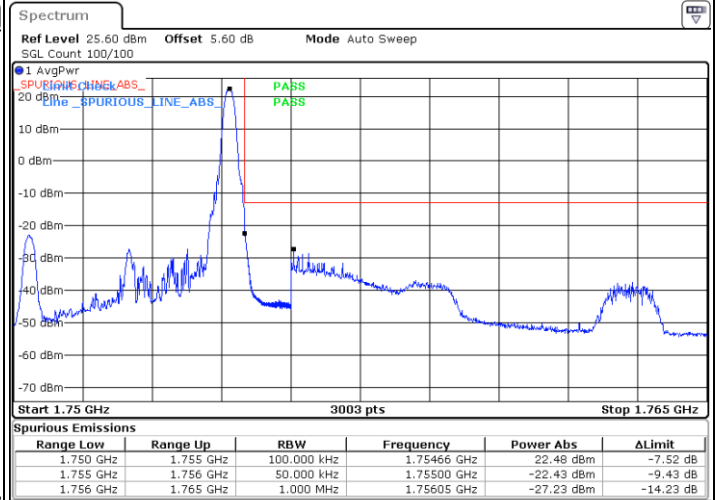


LTE Band 4 / 5MHz / QPSK

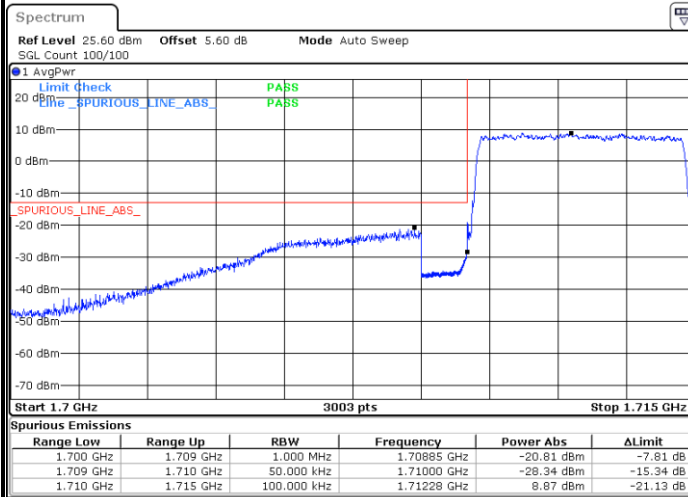
Lowest Band Edge / 1 RB



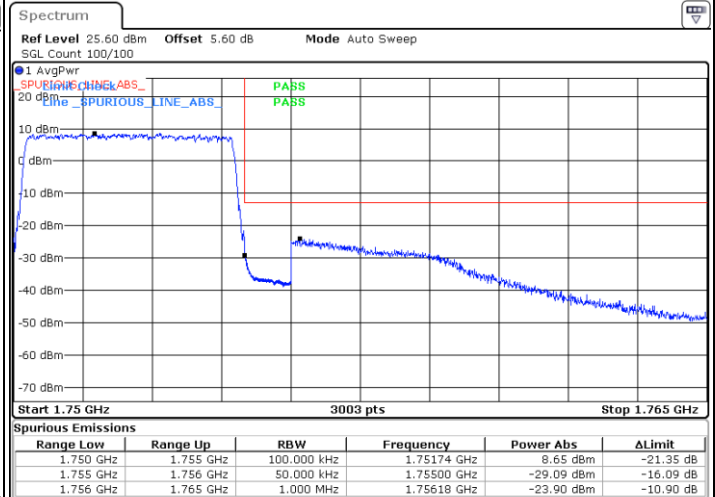
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



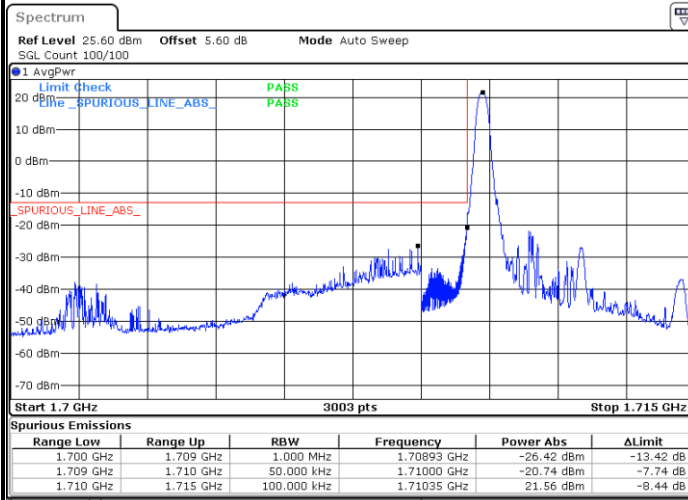
Highest Band Edge / Full RB



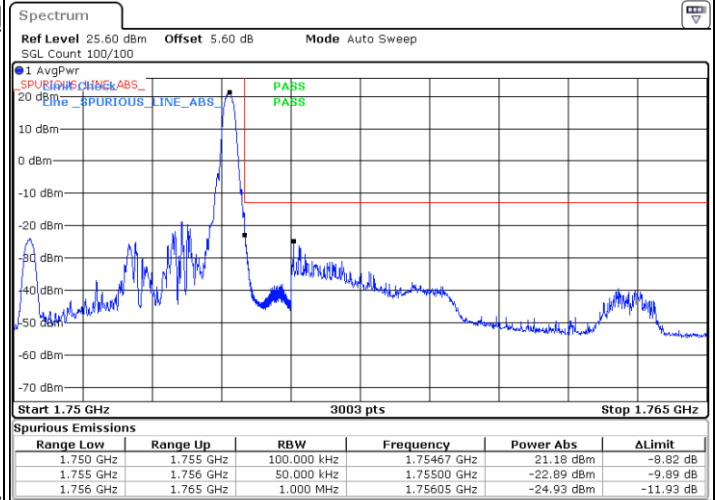


LTE Band 4 / 5MHz / 16QAM

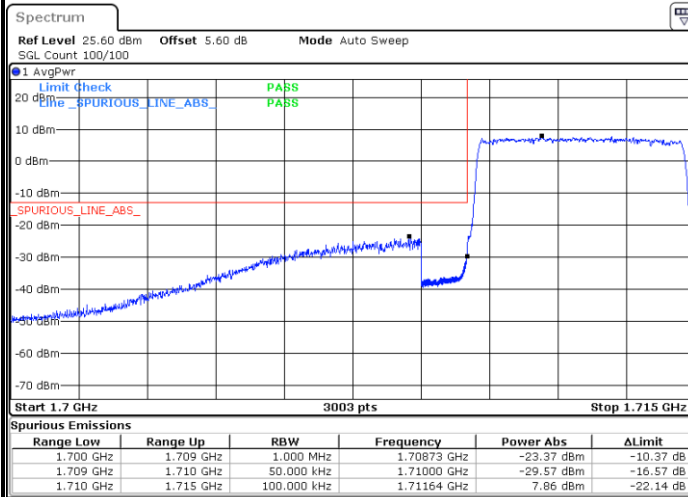
Lowest Band Edge / 1RB



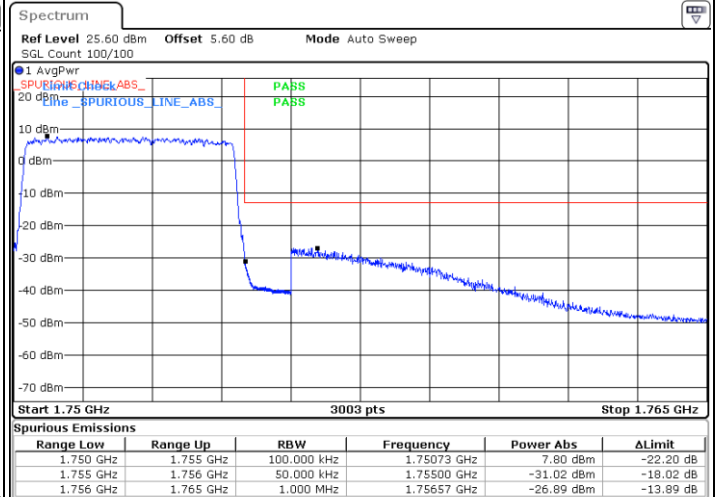
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



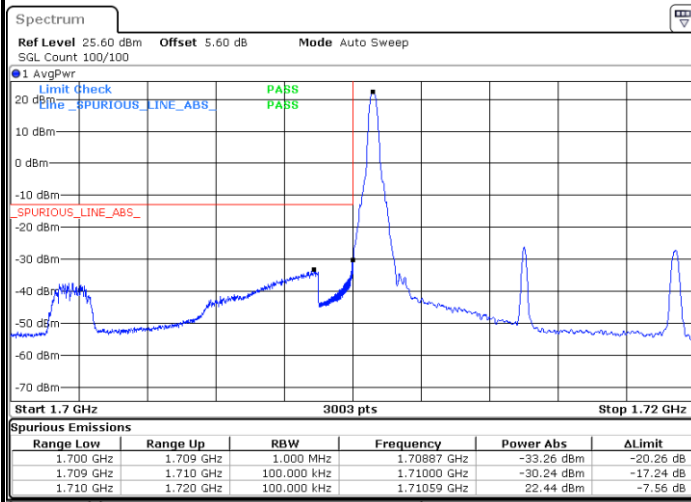
Highest Band Edge / Full RB



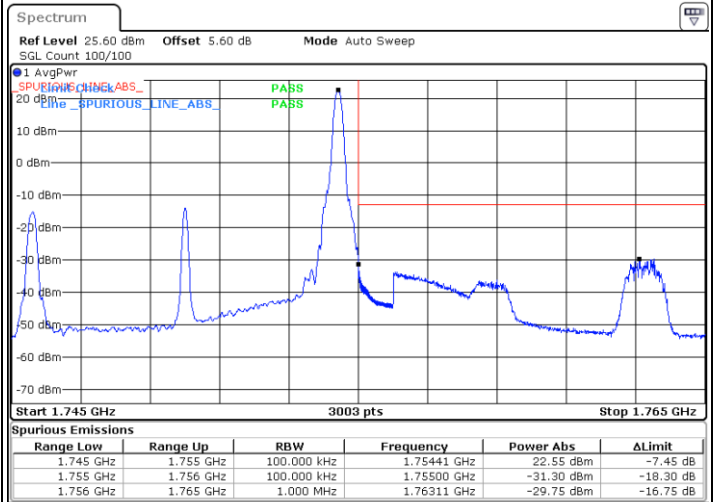


LTE Band 4 / 10MHz / QPSK

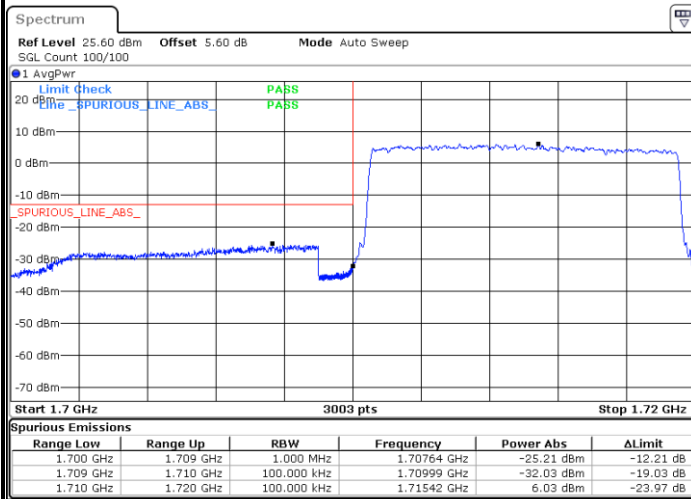
Lowest Band Edge / 1 RB



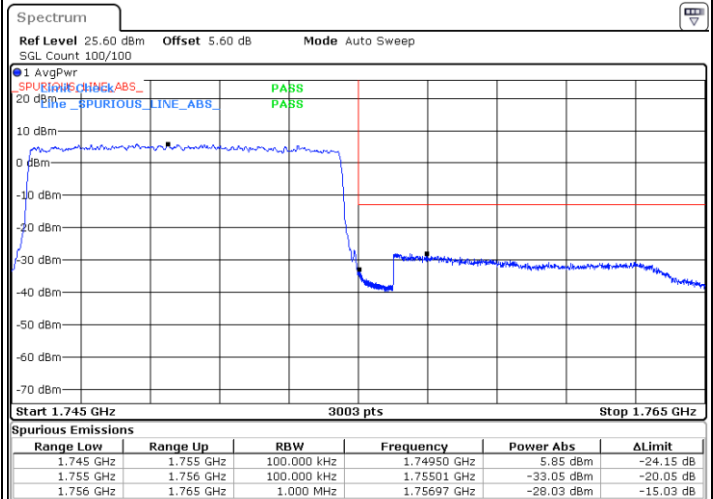
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



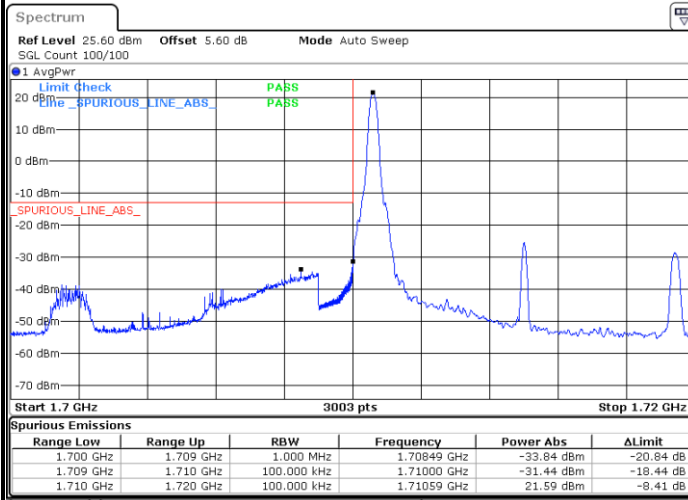
Highest Band Edge / Full RB



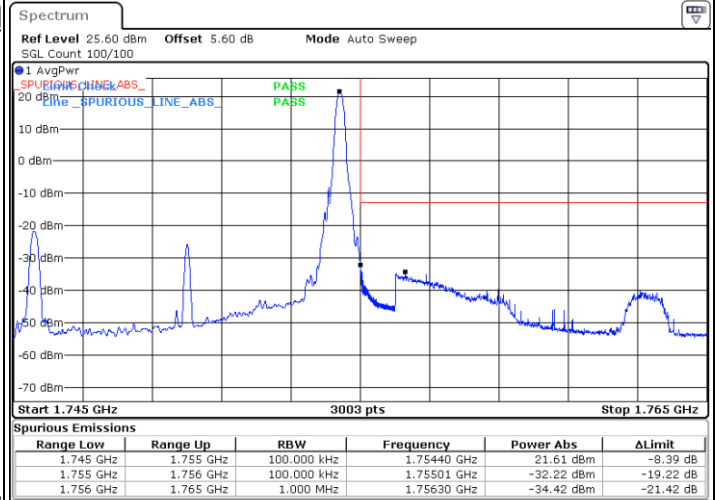


LTE Band 4 / 10MHz / 16QAM

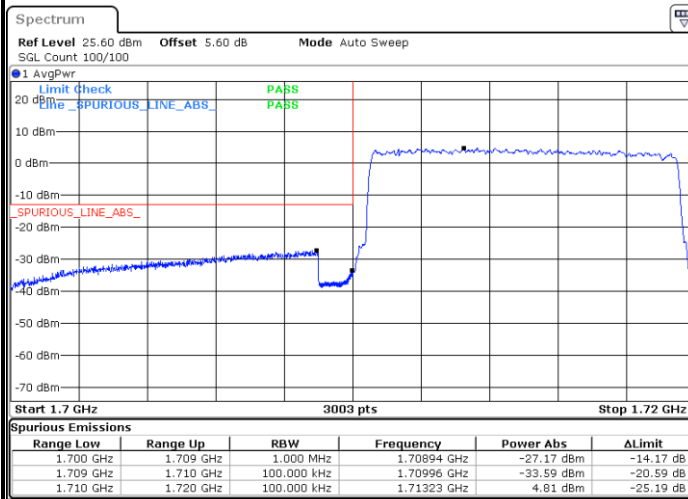
Lowest Band Edge / 1 RB



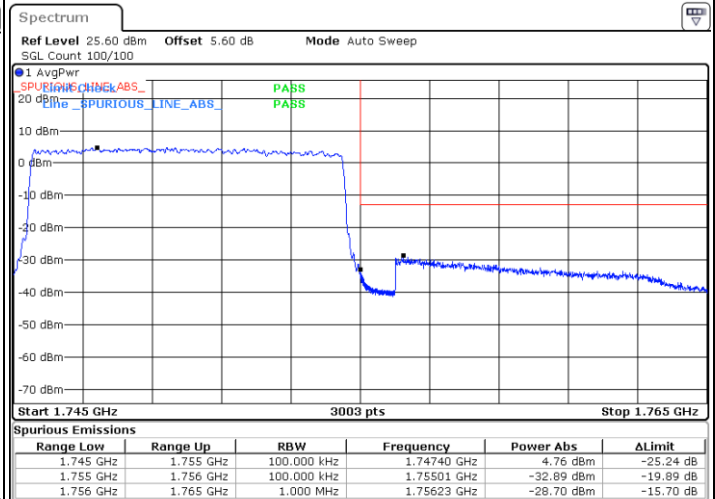
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



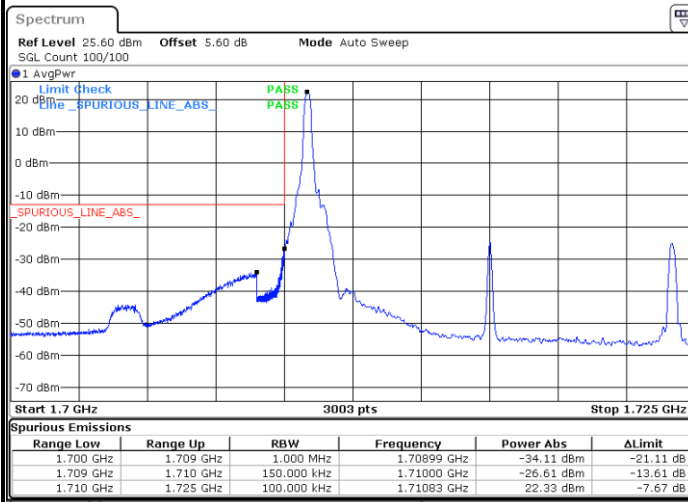
Highest Band Edge / Full RB



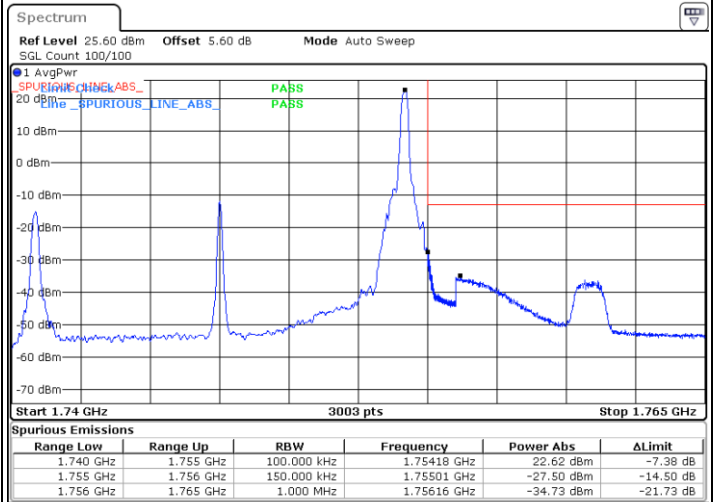


LTE Band 4 / 15MHz / QPSK

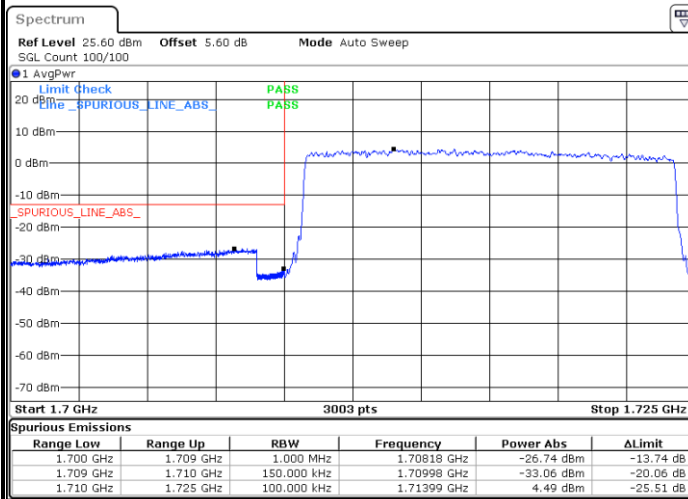
Lowest Band Edge / 1 RB



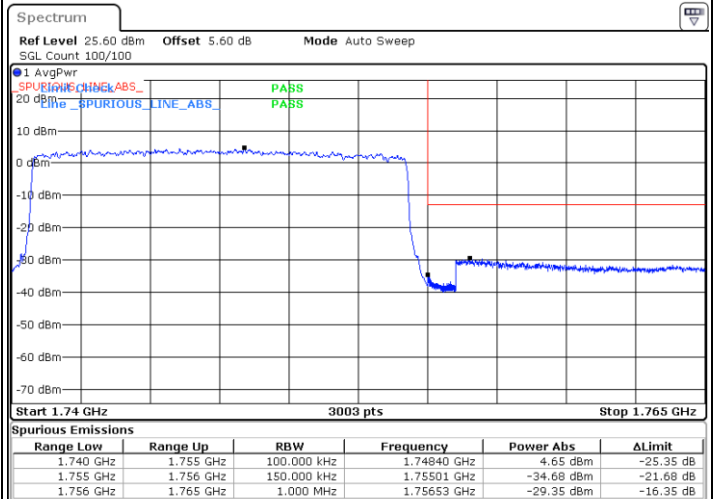
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



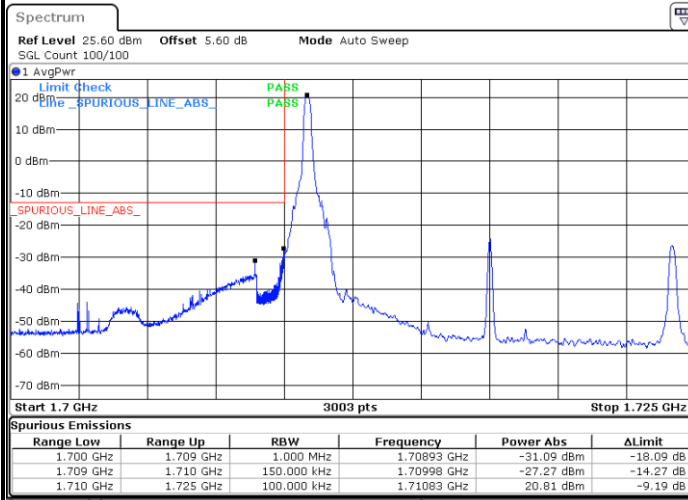
Highest Band Edge / Full RB



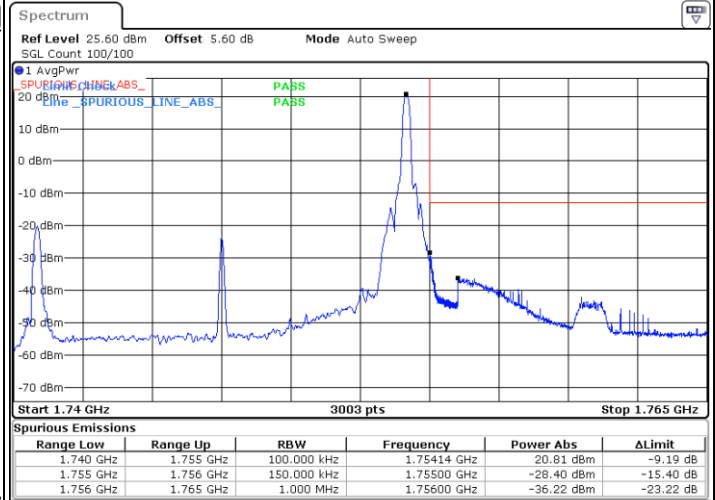


LTE Band 4 / 15MHz / 16QAM

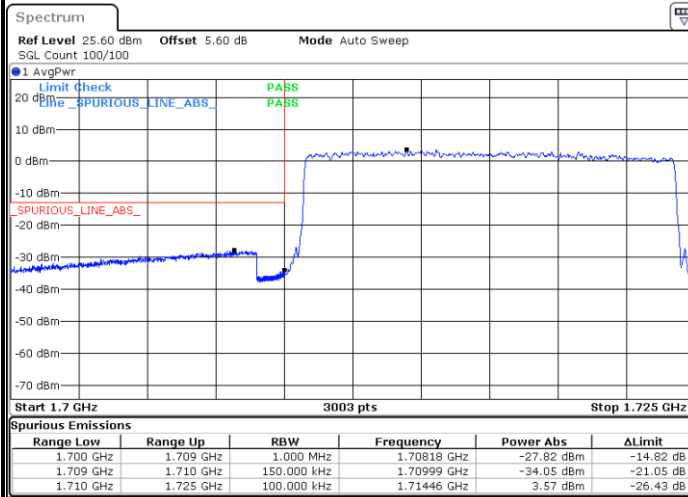
Lowest Band Edge / 1 RB



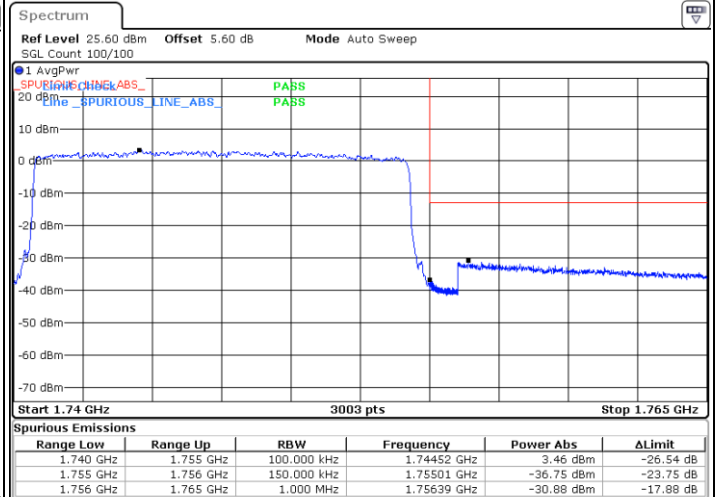
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



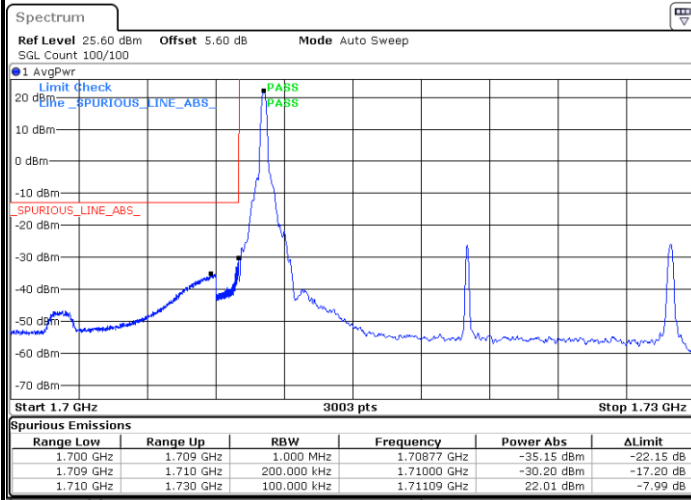
Highest Band Edge / Full RB



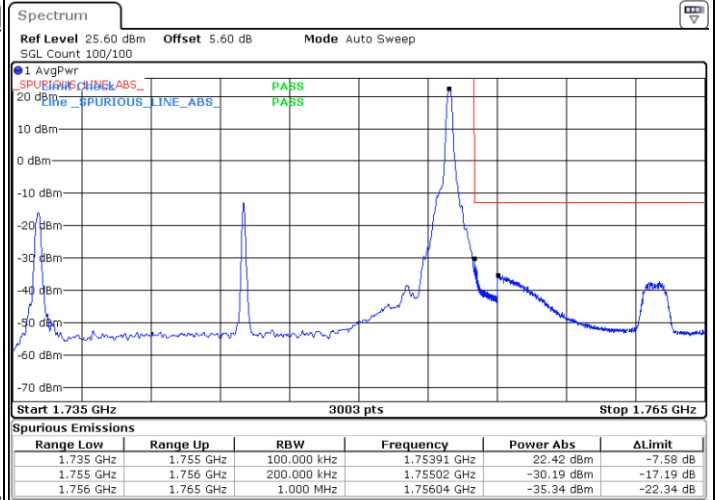


LTE Band 4 / 20MHz / QPSK

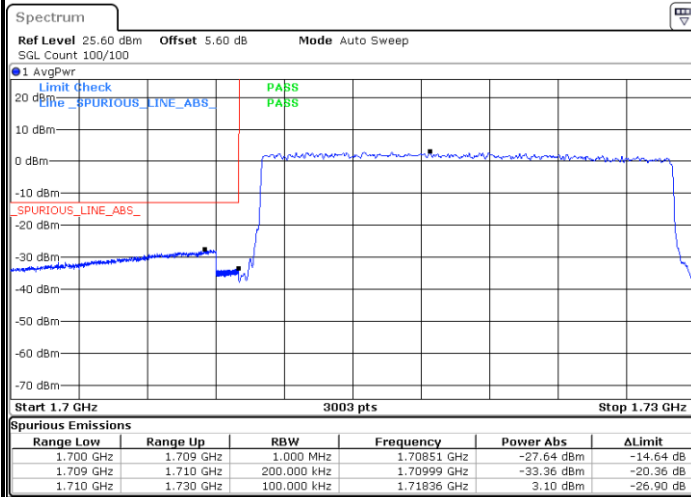
Lowest Band Edge / 1 RB



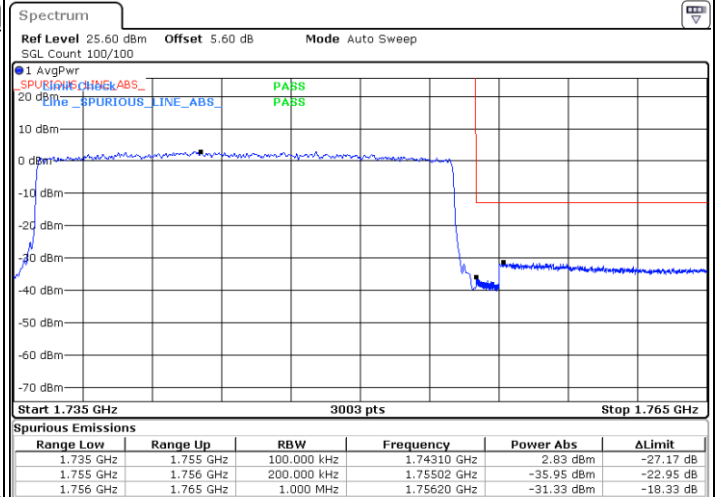
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



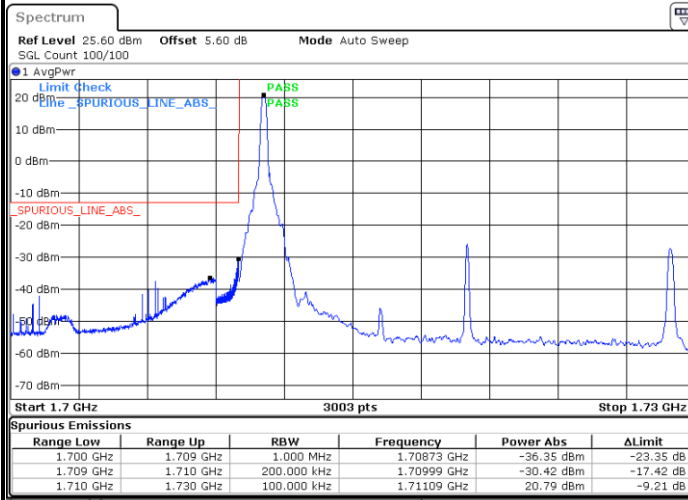
Highest Band Edge / Full RB



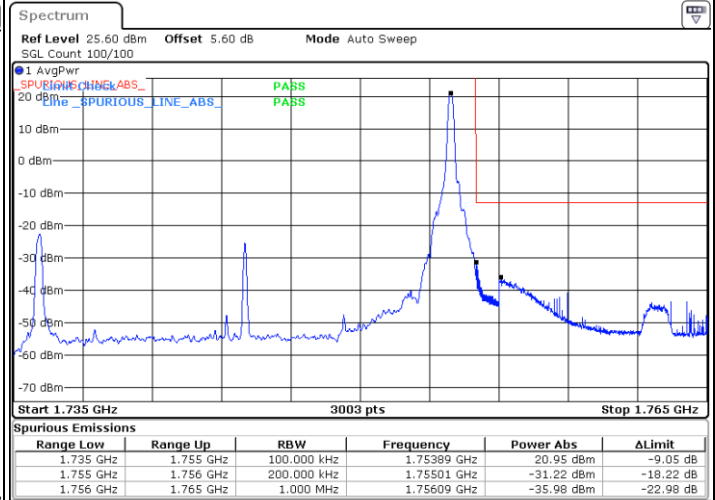


LTE Band 4 / 20MHz / 16QAM

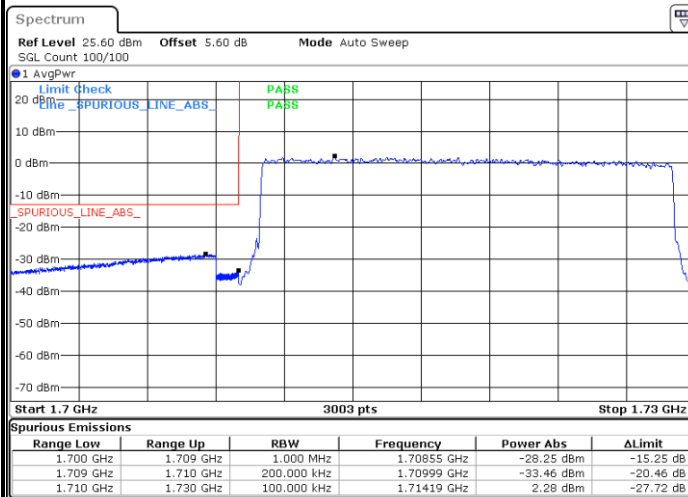
Lowest Band Edge / 1 RB



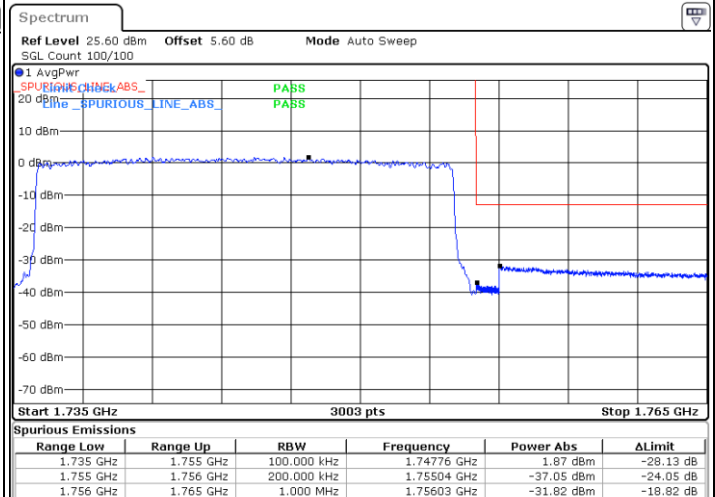
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

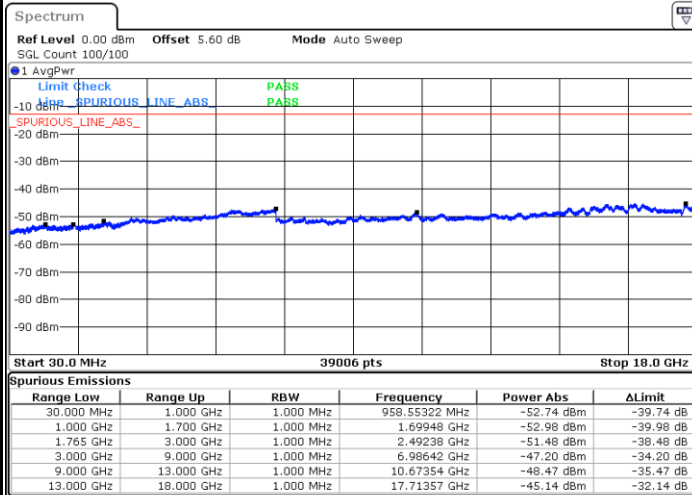




Conducted Spurious Emission

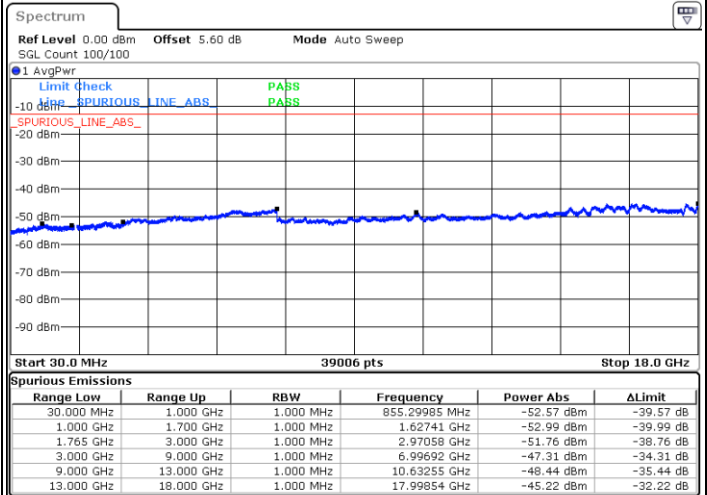
LTE Band 4 / 1.4MHz

Lowest Channel / QPSK



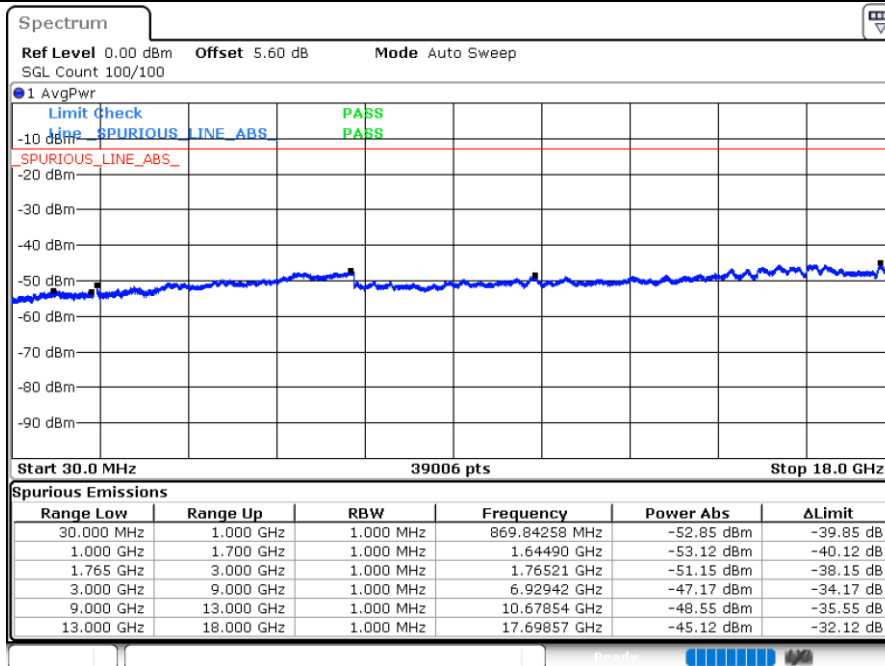
Date: 7.AUG.2024 20:42:28

Middle Channel / QPSK



Date: 7.AUG.2024 20:49:12

Highest Channel / QPSK

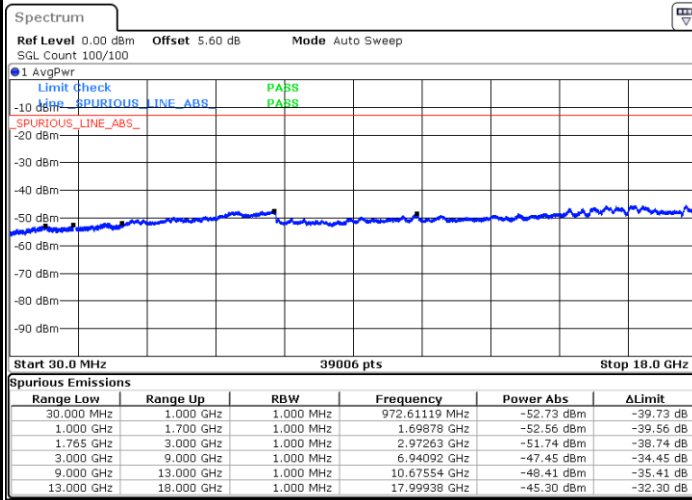


Date: 7.AUG.2024 20:50:37



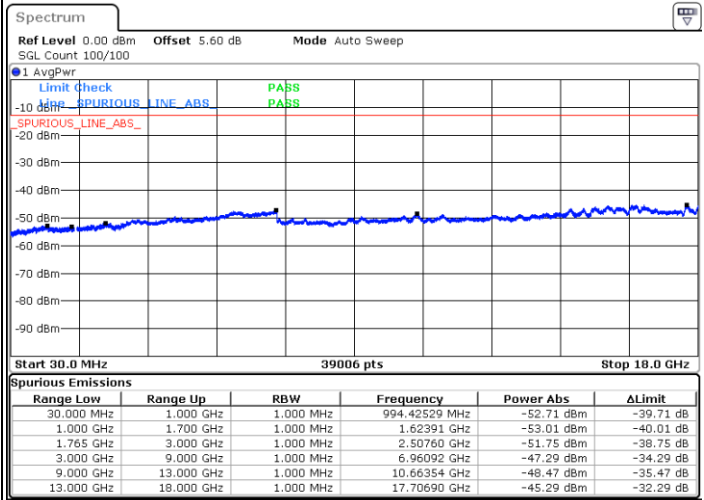
LTE Band 4 / 3MHz

Lowest Channel / QPSK



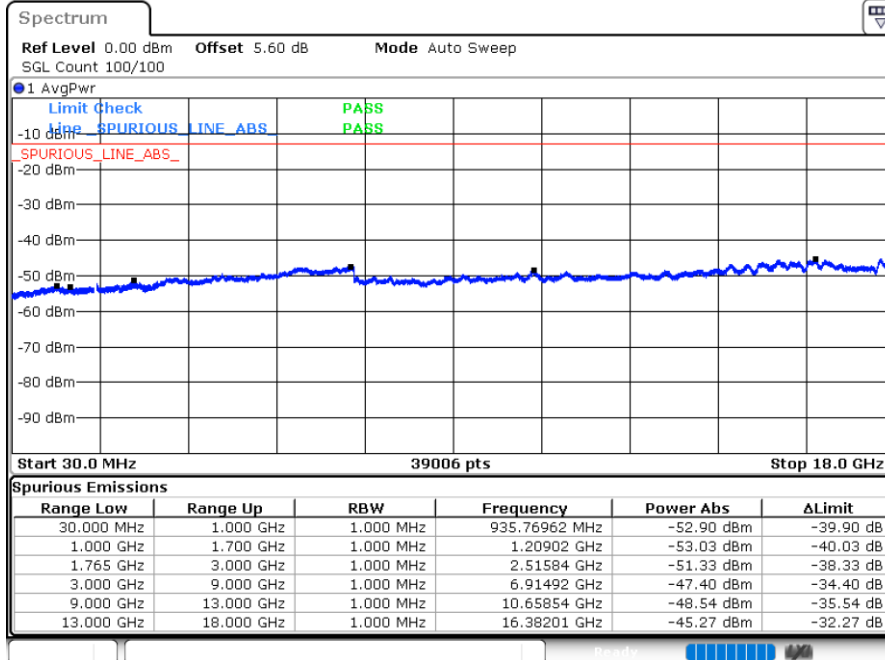
Date: 7.AUG.2024 20:57:21

Middle Channel / QPSK



Date: 7.AUG.2024 21:03:45

Highest Channel / QPSK

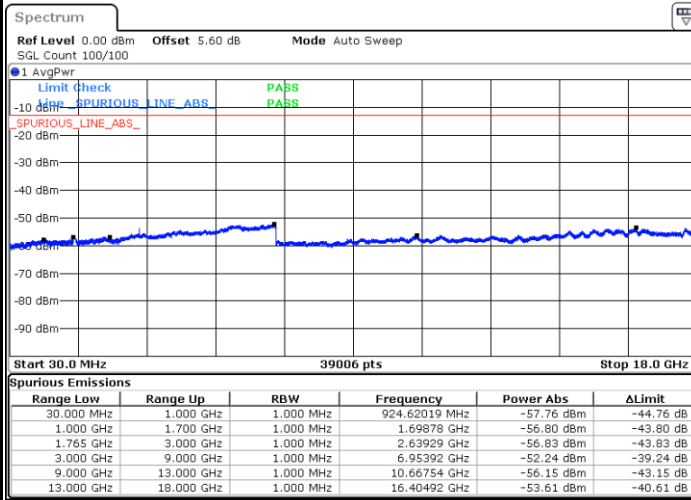


Date: 7.AUG.2024 21:05:09



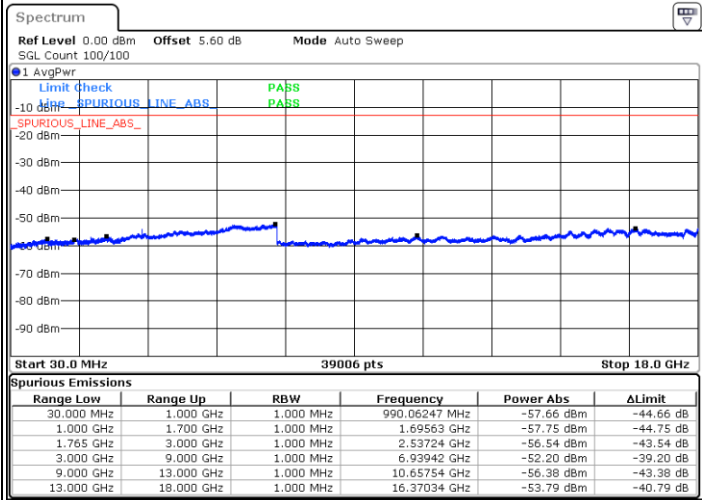
LTE Band 4 / 5MHz

Lowest Channel / QPSK



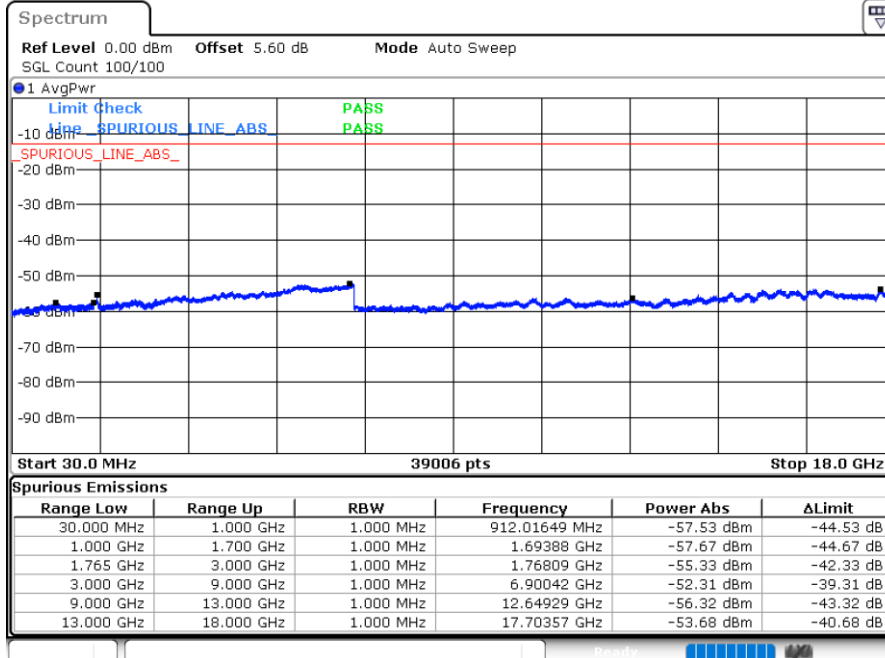
Date: 7.AUG.2024 21:11:14

Middle Channel / QPSK



Date: 7.AUG.2024 21:17:17

Highest Channel / QPSK

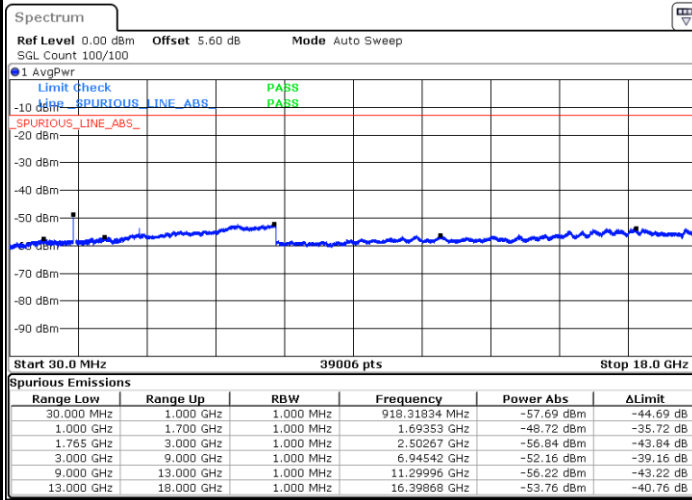


Date: 7.AUG.2024 21:18:42



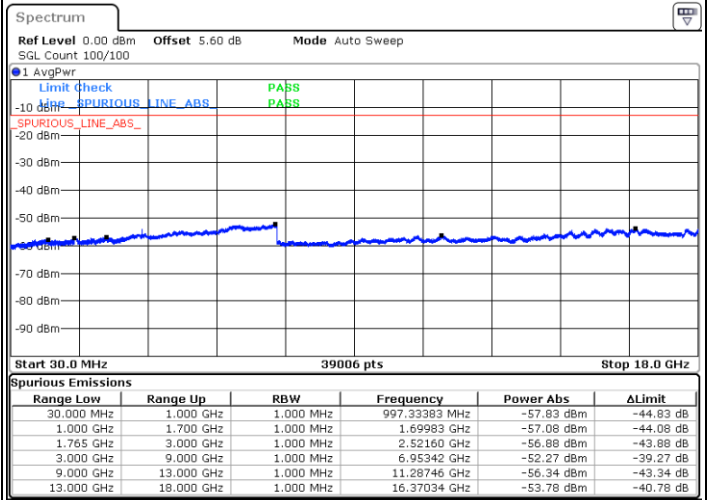
LTE Band 4 / 10MHz

Lowest Channel / QPSK



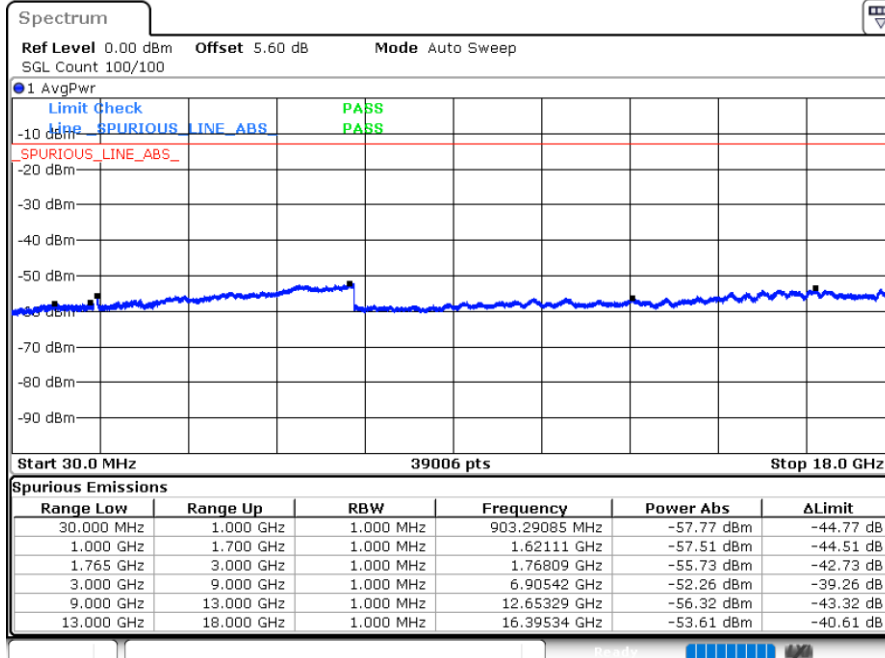
Date: 7.AUG.2024 21:24:47

Middle Channel / QPSK



Date: 7.AUG.2024 21:30:51

Highest Channel / QPSK

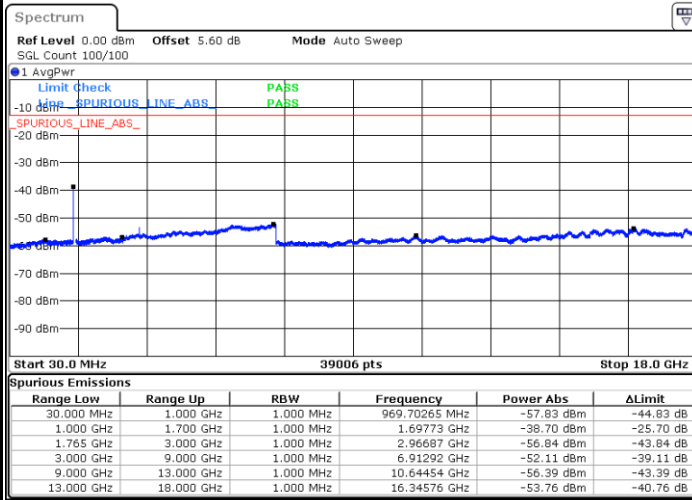


Date: 7.AUG.2024 21:32:15



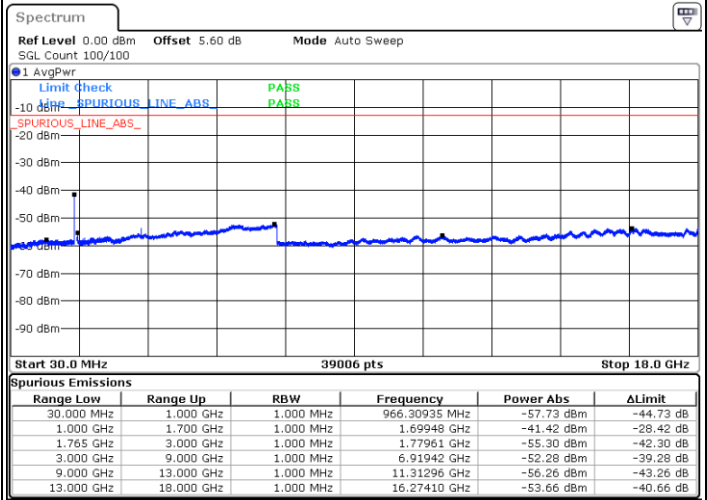
LTE Band 4 / 15MHz

Lowest Channel / QPSK



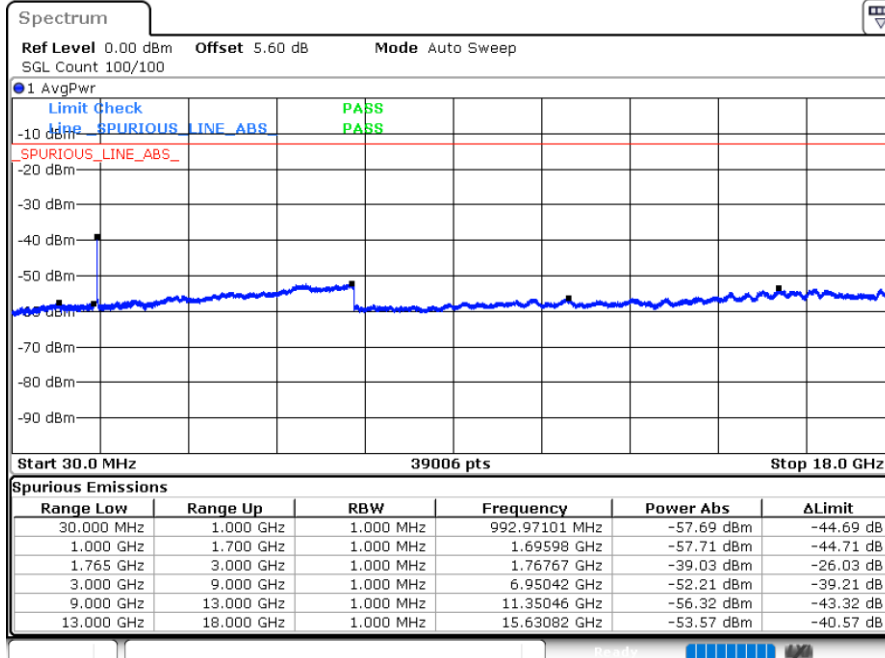
Date: 7.AUG.2024 21:38:20

Middle Channel / QPSK



Date: 7.AUG.2024 21:43:24

Highest Channel / QPSK

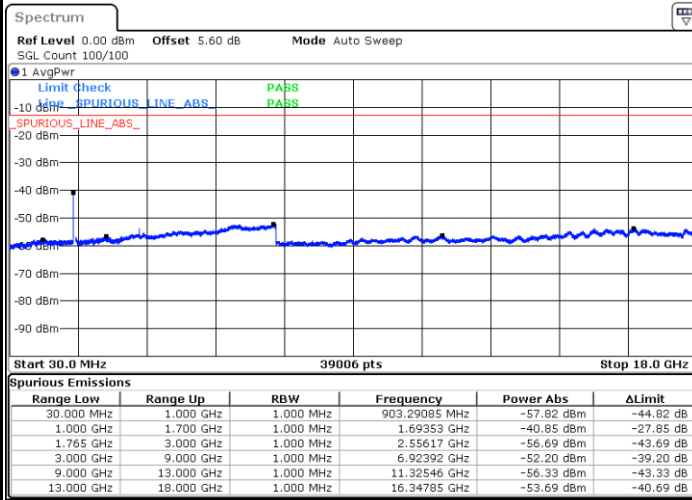


Date: 7.AUG.2024 21:44:49



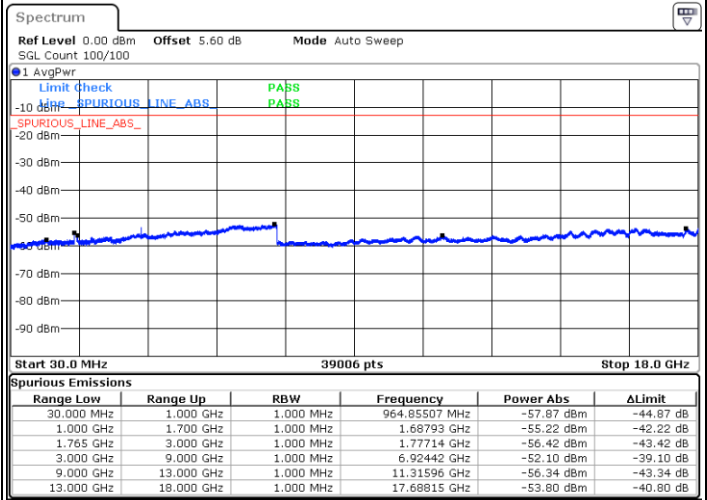
LTE Band 4 / 20MHz

Lowest Channel / QPSK



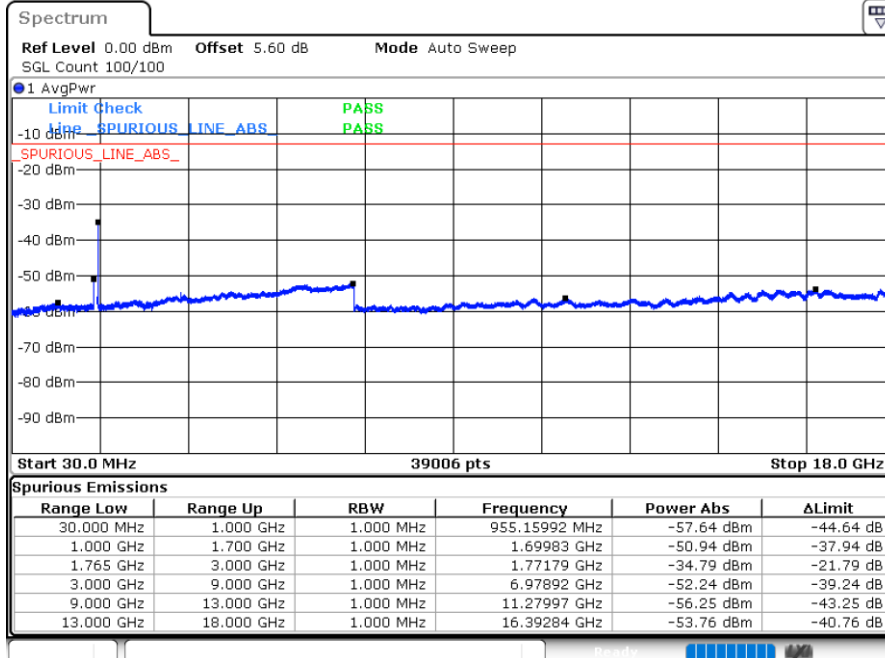
Date: 7.AUG.2024 21:48:53

Middle Channel / QPSK



Date: 7.AUG.2024 21:52:57

Highest Channel / QPSK



Date: 7.AUG.2024 21:54:21

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	0.0011	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0059	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0057	
-30	Normal Voltage	0.0063	
20	Maximum Voltage	0.0079	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0022	

Note:

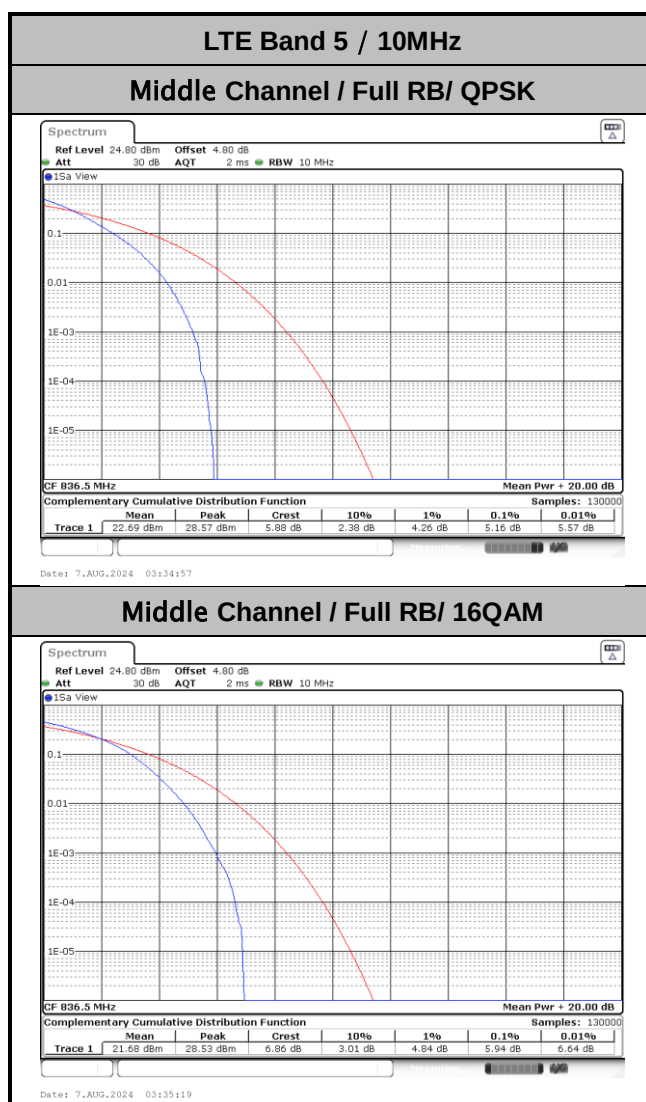
1. Normal Voltage =3.8 V. ; Minimum Voltage (BEP) =3.55 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	5.16	5.94	PASS



**26dB Bandwidth**

Mode	LTE Band 5 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.65	9.99
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.79	4.89
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.03	3.00
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.28	1.31

