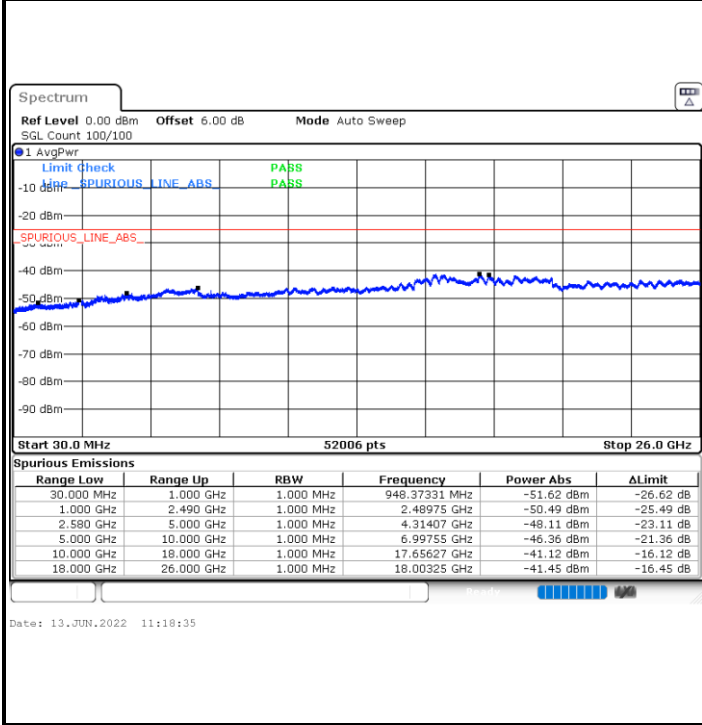




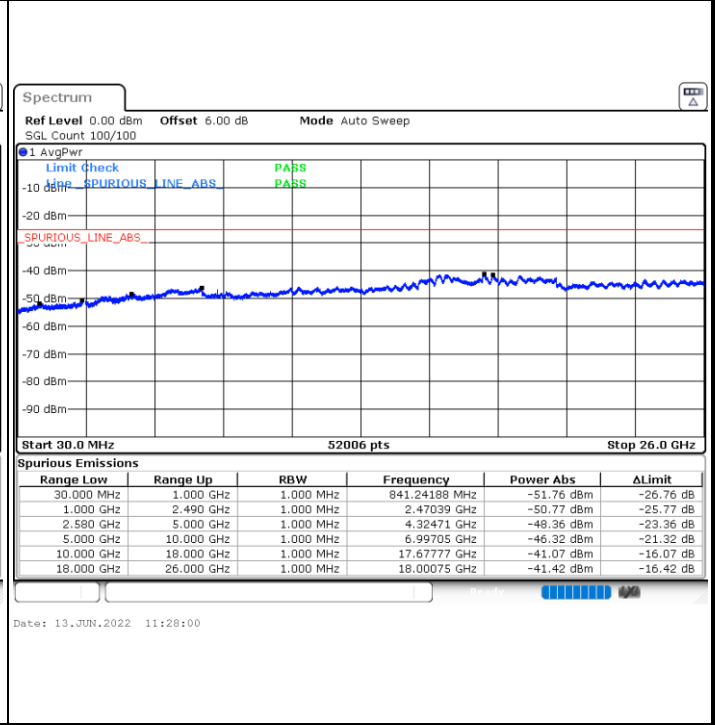
LTE Band 7 / 20MHz

Lowest Channel / QPSK



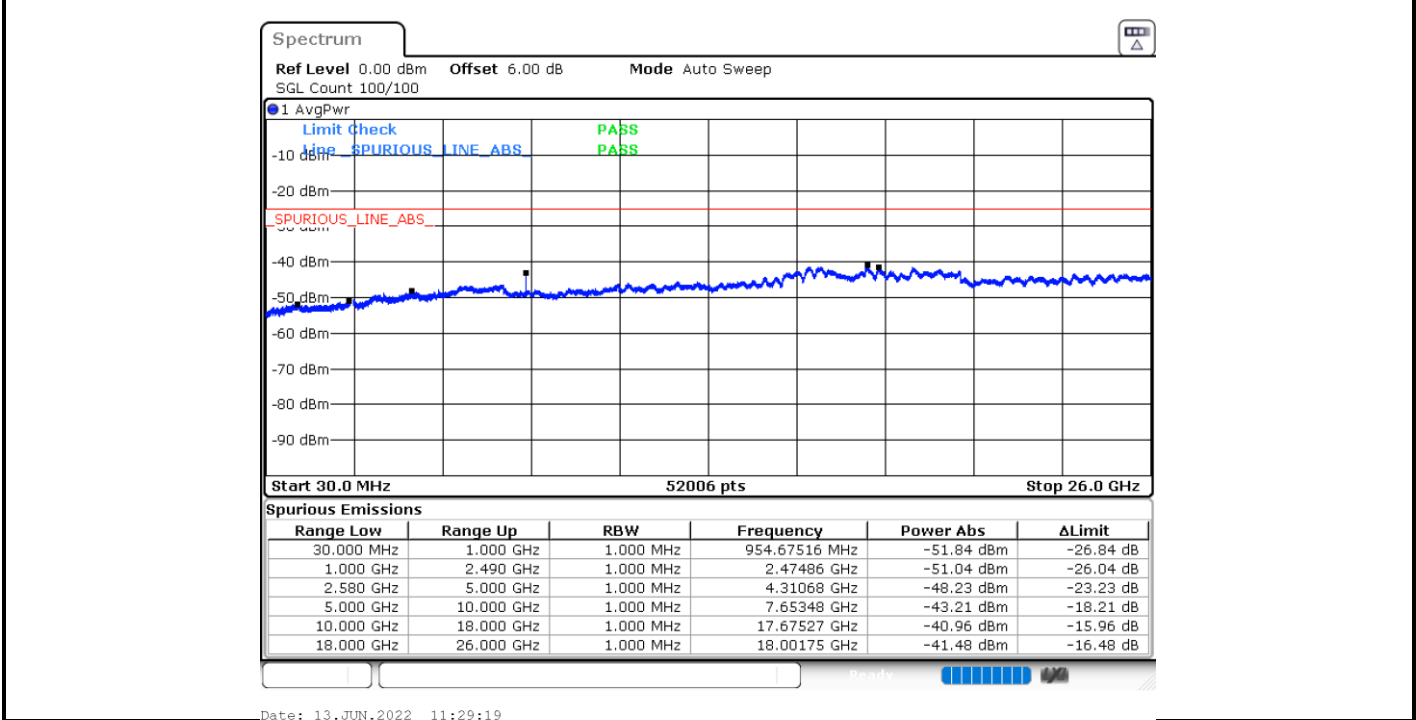
Date: 13 JUN.2022 11:18:35

Middle Channel / QPSK



Date: 13 JUN.2022 11:28:00

Highest Channel / QPSK



Date: 13 JUN.2022 11:29:19



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	0.0032	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0027	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0027	
20	Battery End Point	0.0011	

Note:

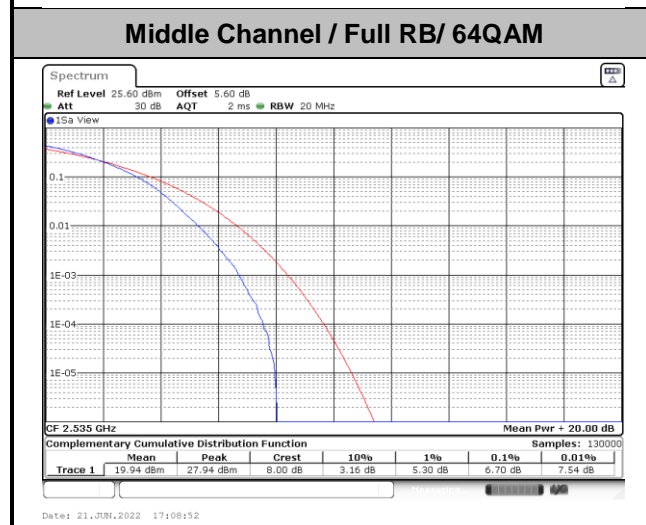
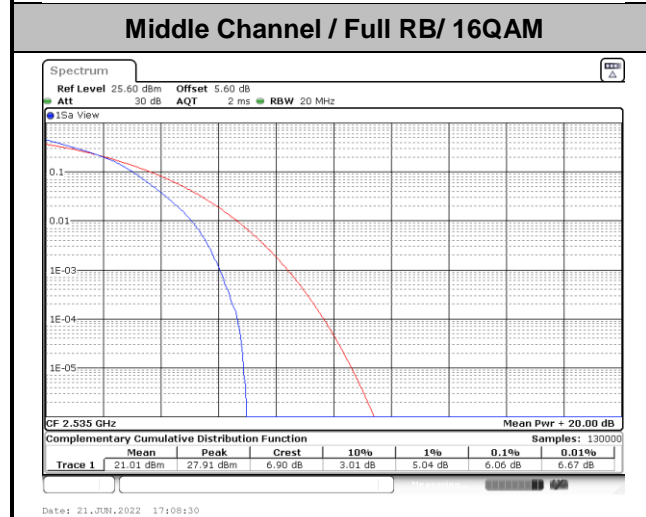
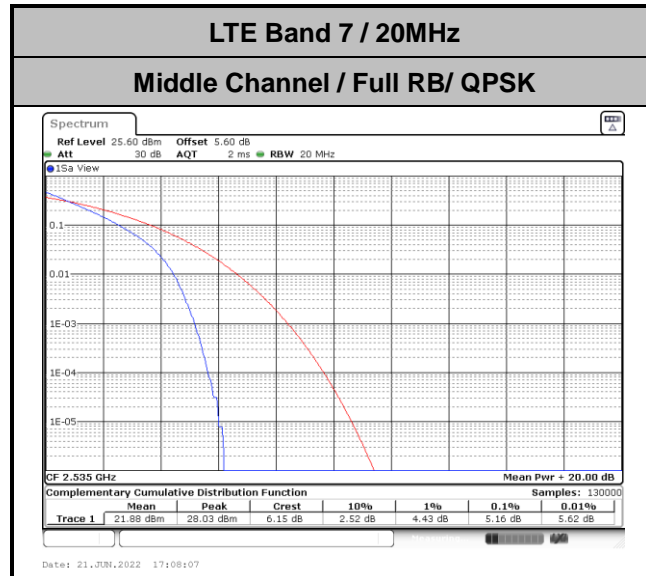
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.55 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7(PA2)

Peak-to-Average Ratio

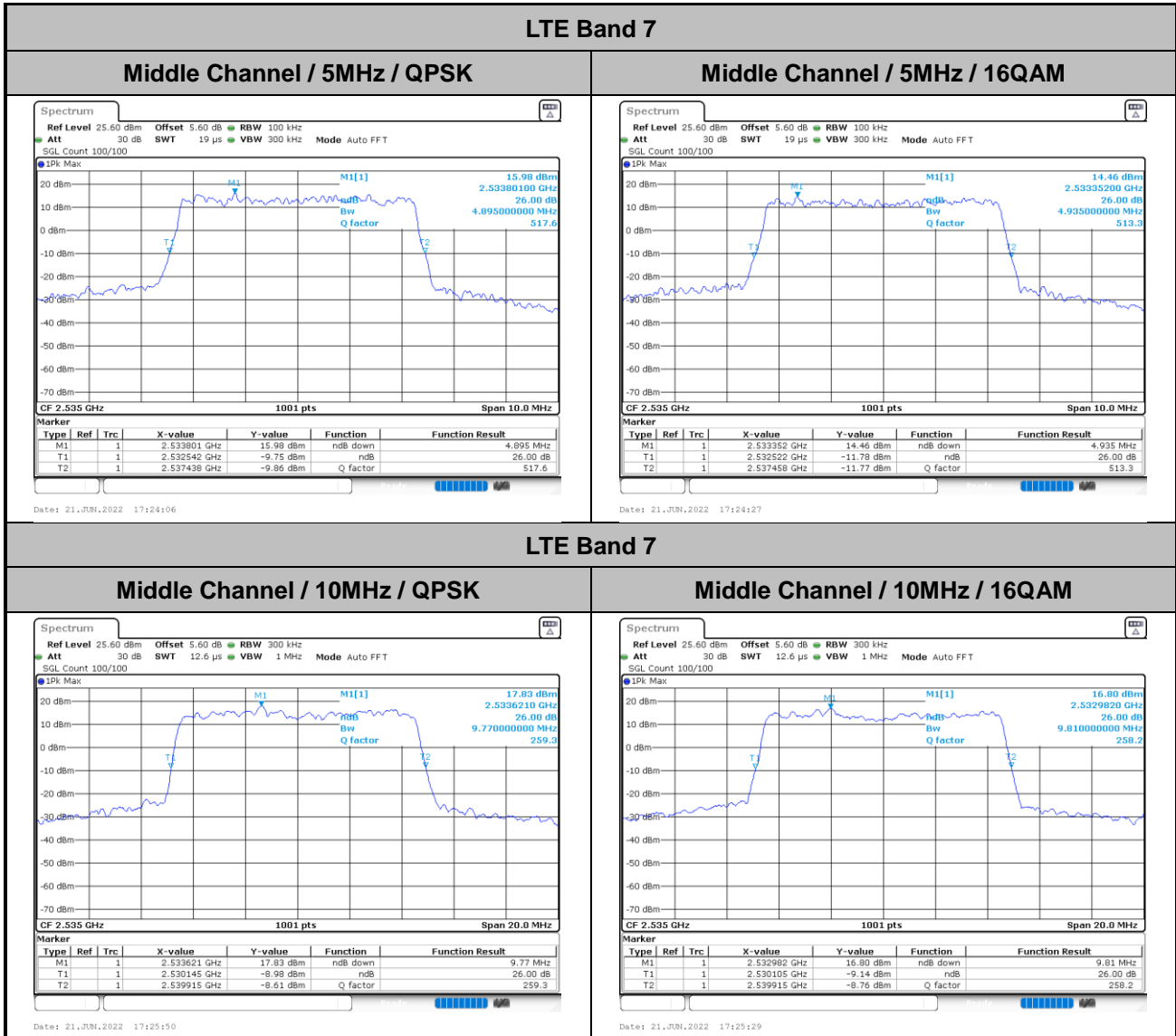
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.16	6.06	6.7	PASS





26dB Bandwidth

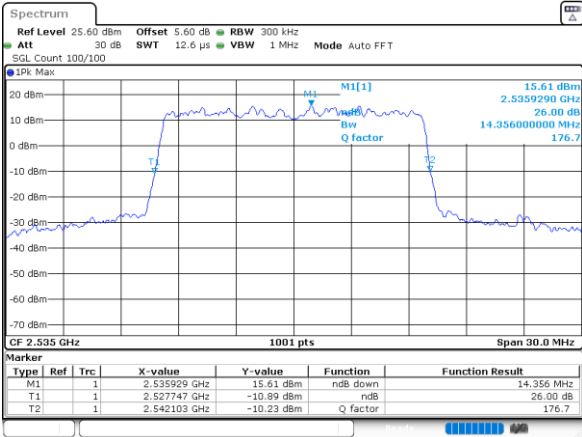
Mode	LTE Band 7 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.90	4.94	9.77	9.81	14.36	14.36	18.90	19.10





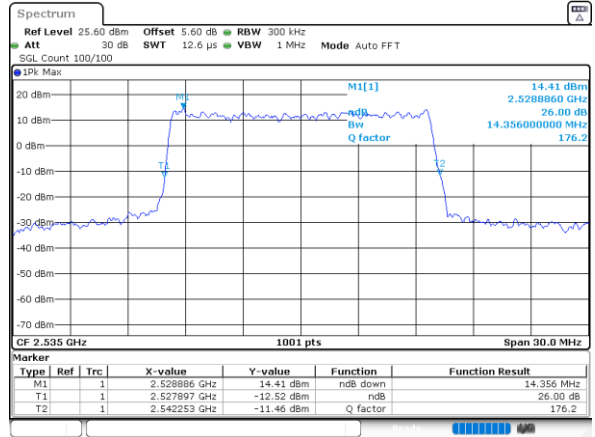
LTE Band 7

Middle Channel / 15MHz / QPSK



Date: 21 JUN 2022 17:26:53

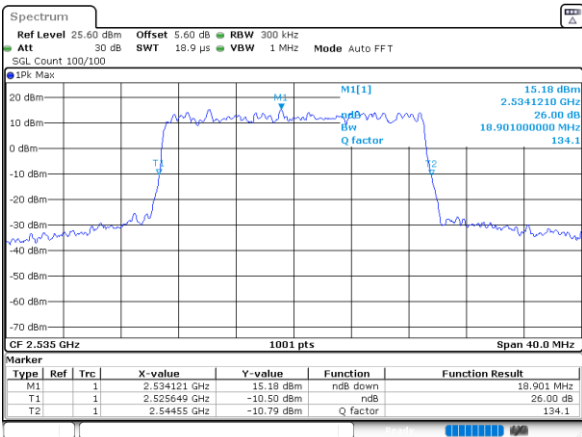
Middle Channel / 15MHz / 16QAM



Date: 21 JUN 2022 17:27:14

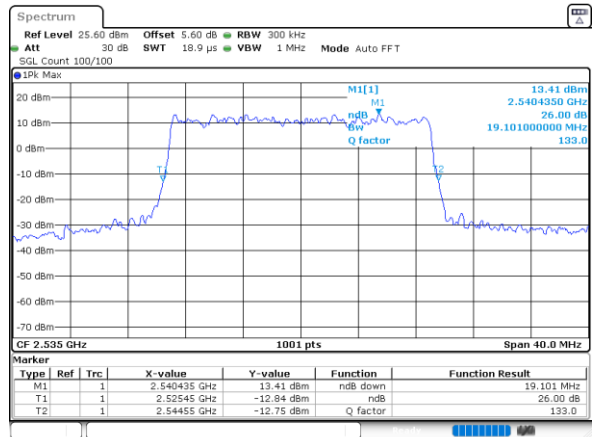
LTE Band 7

Middle Channel / 20MHz / QPSK



Date: 21 JUN 2022 17:06:43

Middle Channel / 20MHz / 16QAM

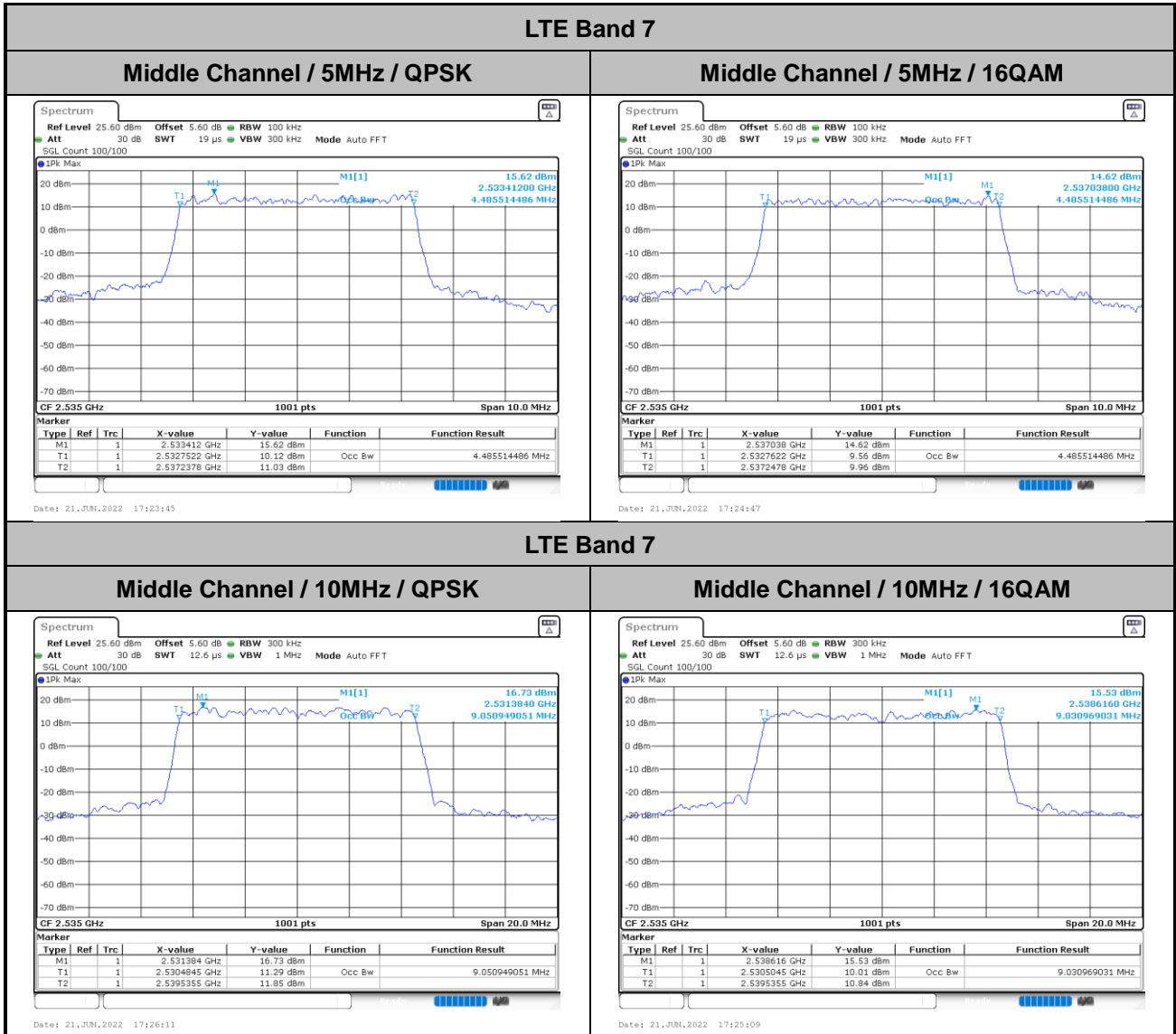


Date: 21 JUN 2022 17:07:45



Occupied Bandwidth

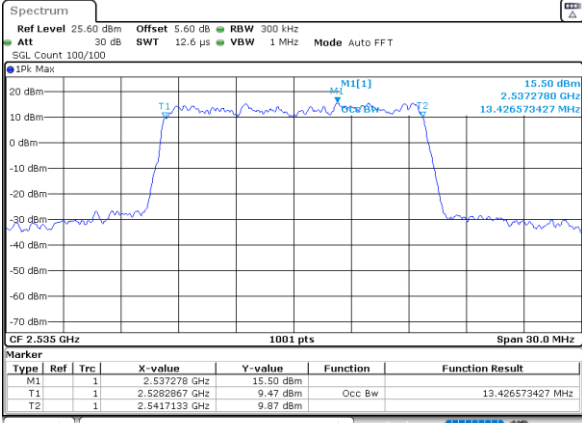
Mode	LTE Band 7 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.49	9.05	9.03	13.43	13.49	17.94	17.94





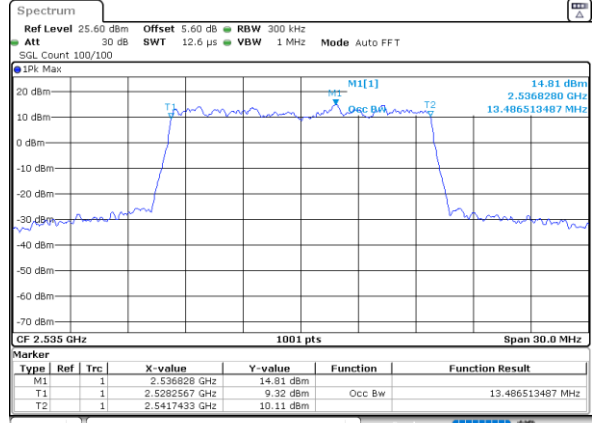
LTE Band 7

Middle Channel / 15MHz / QPSK



Date: 21 JUN 2022 17:26:32

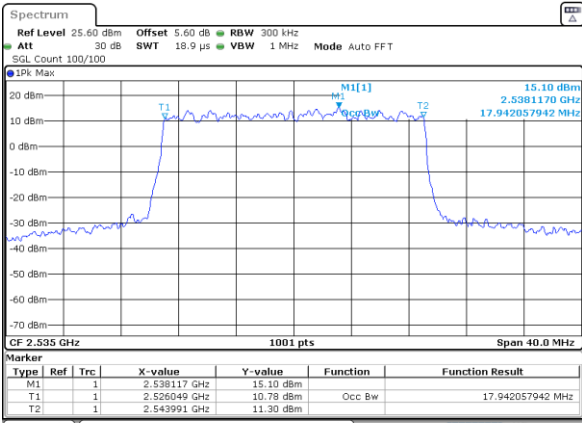
Middle Channel / 15MHz / 16QAM



Date: 21 JUN 2022 17:27:34

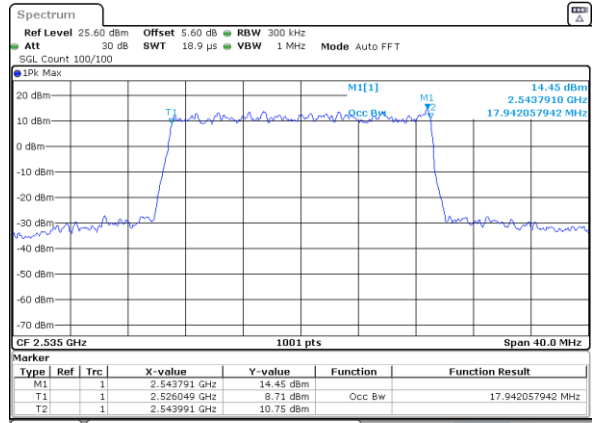
LTE Band 7

Middle Channel / 20MHz / QPSK



Date: 21 JUN 2022 17:07:04

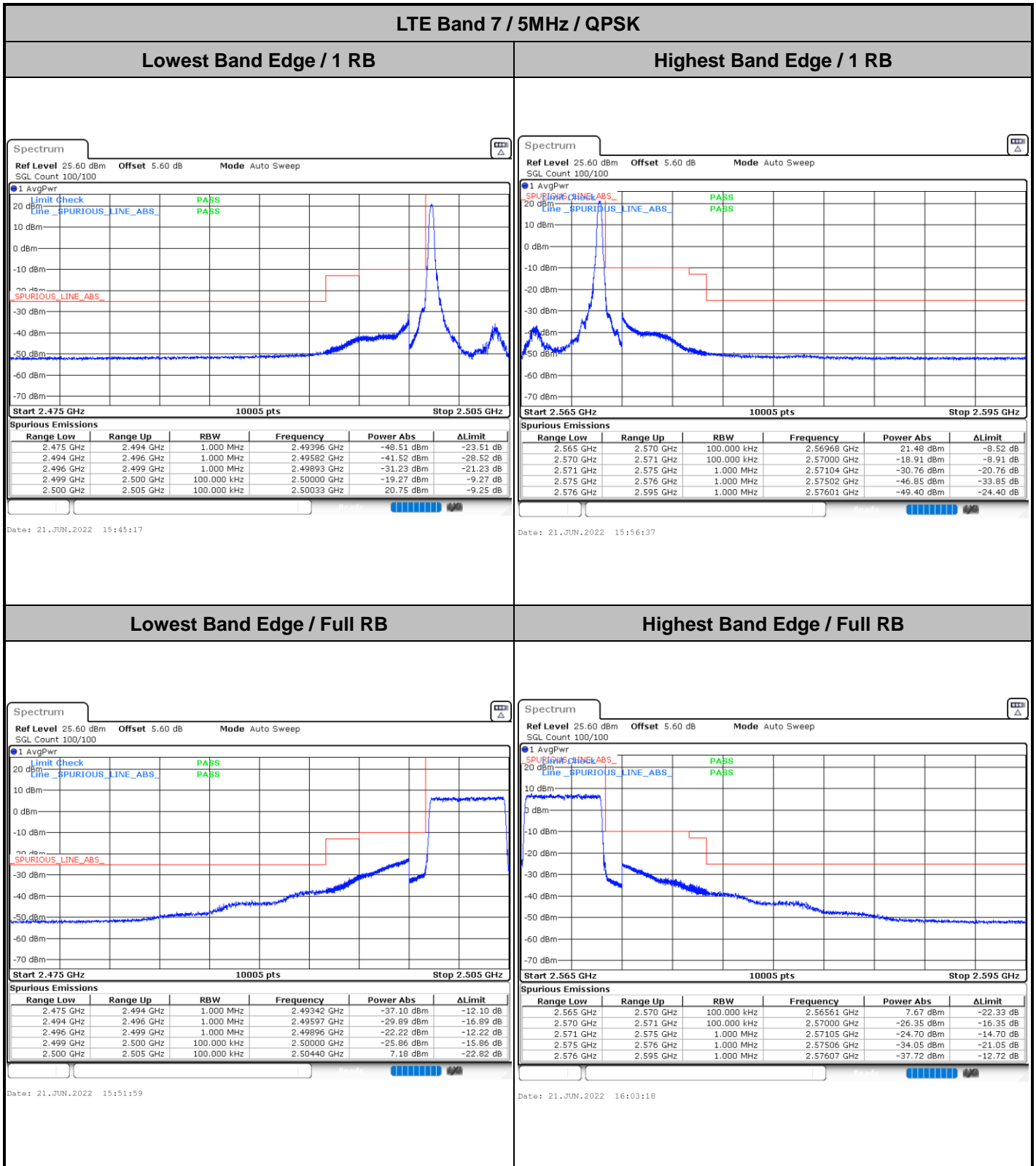
Middle Channel / 20MHz / 16QAM



Date: 21 JUN 2022 17:07:25



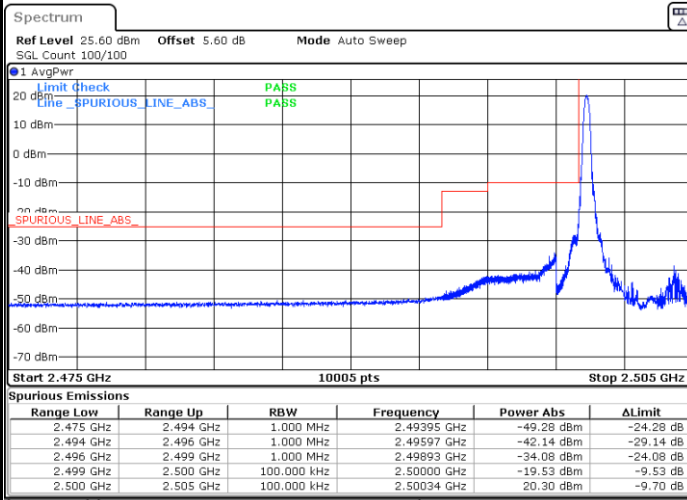
Conducted Band Edge





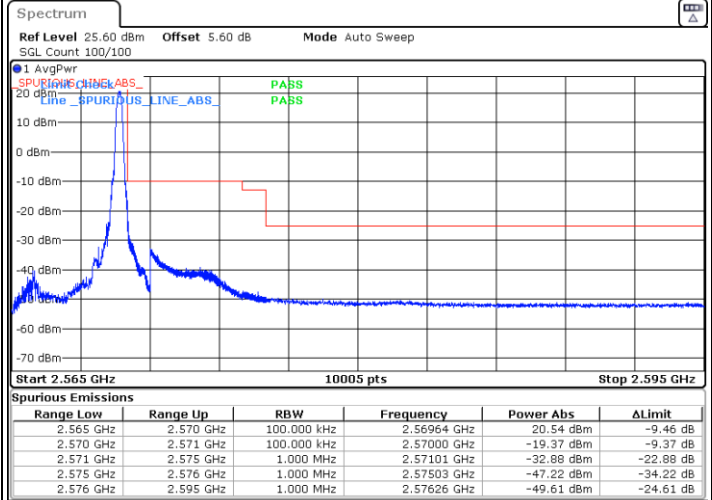
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



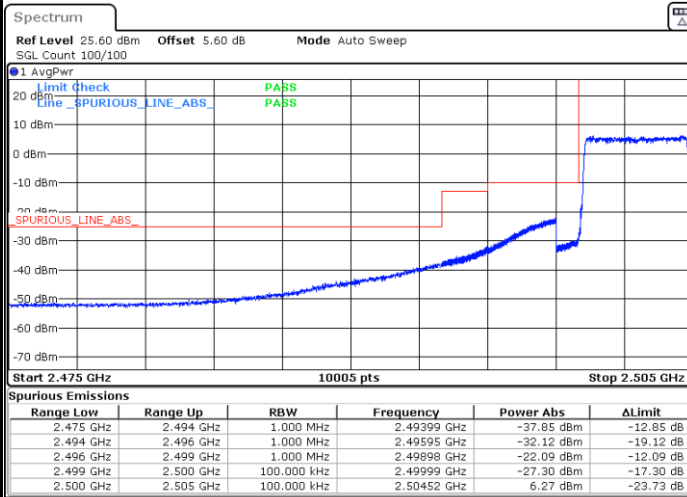
Date: 21.JUN.2022 15:46:37

Highest Band Edge / 1 RB



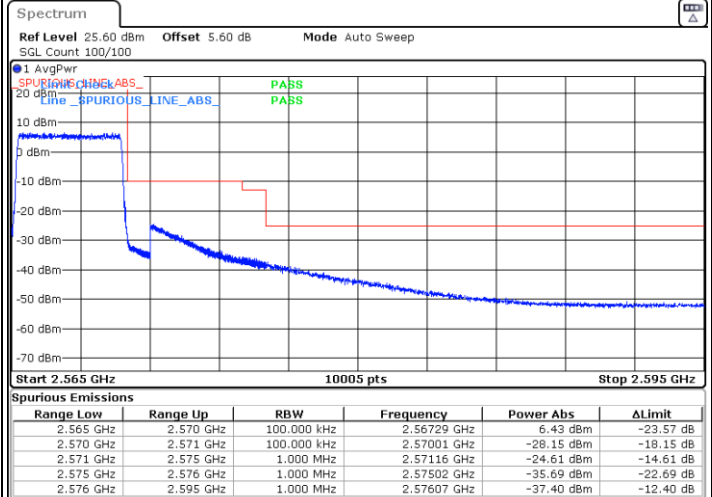
Date: 21.JUN.2022 15:57:57

Lowest Band Edge / Full RB



Date: 21.JUN.2022 15:50:39

Highest Band Edge / Full RB

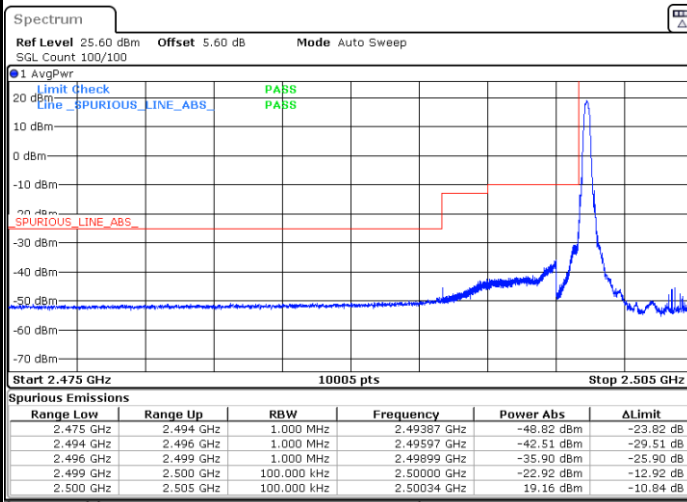


Date: 21.JUN.2022 16:01:58



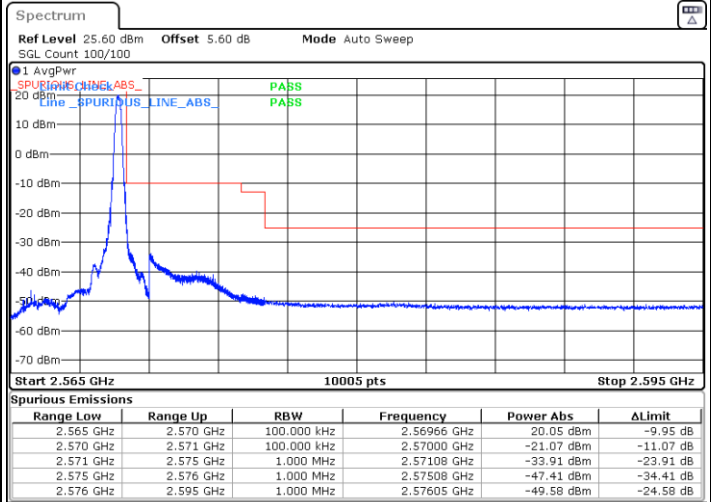
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



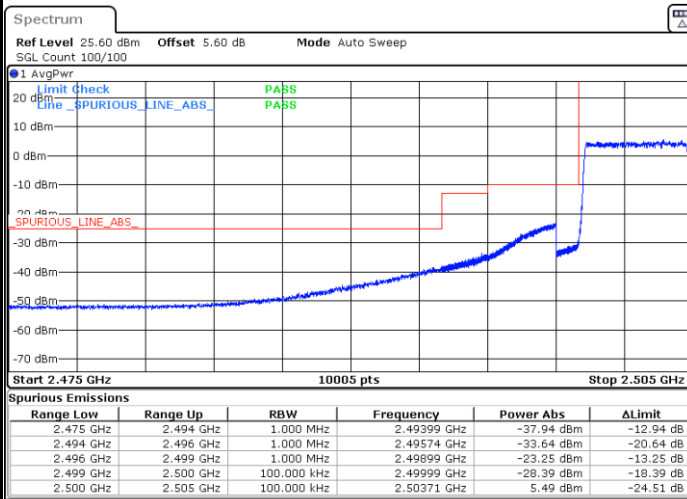
Date: 21.JUN.2022 15:47:57

Highest Band Edge / 1 RB



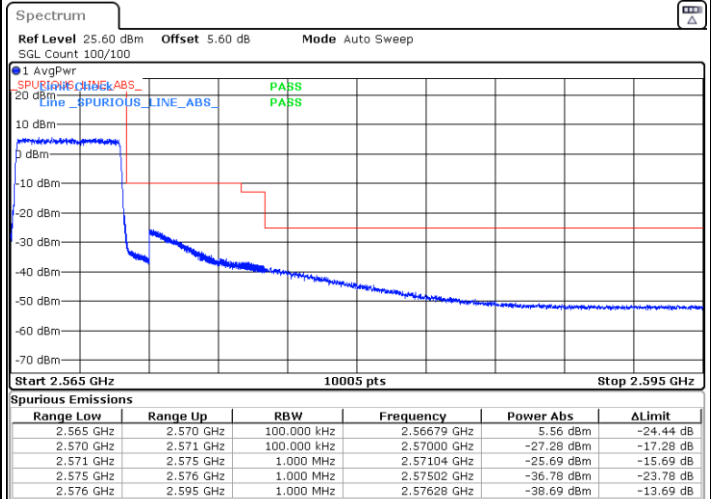
Date: 21.JUN.2022 15:59:17

Lowest Band Edge / Full RB



Date: 21.JUN.2022 15:49:18

Highest Band Edge / Full RB

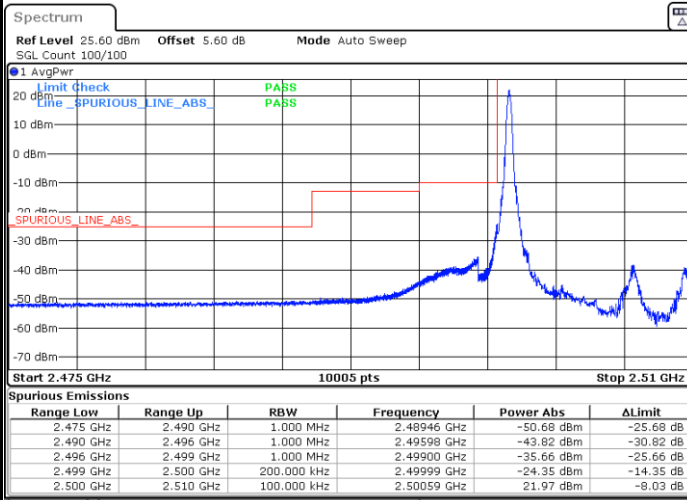


Date: 21.JUN.2022 16:00:38



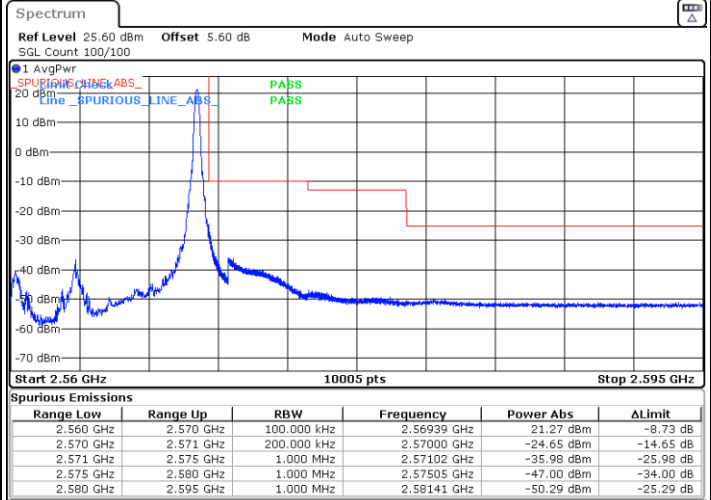
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



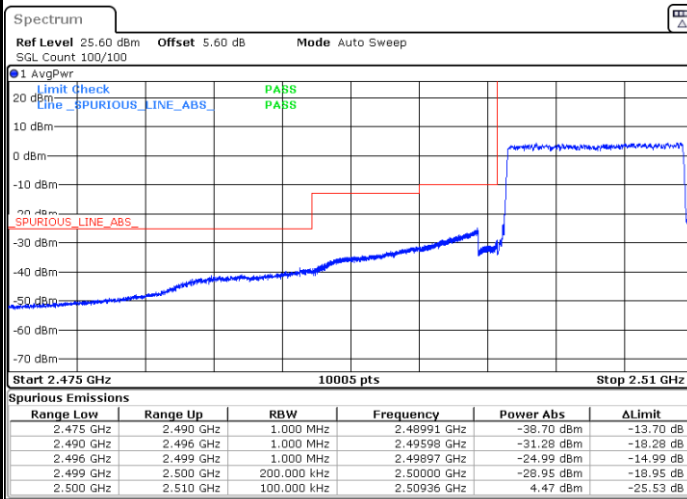
Date: 21.JUN.2022 16:06:19

Highest Band Edge / 1 RB



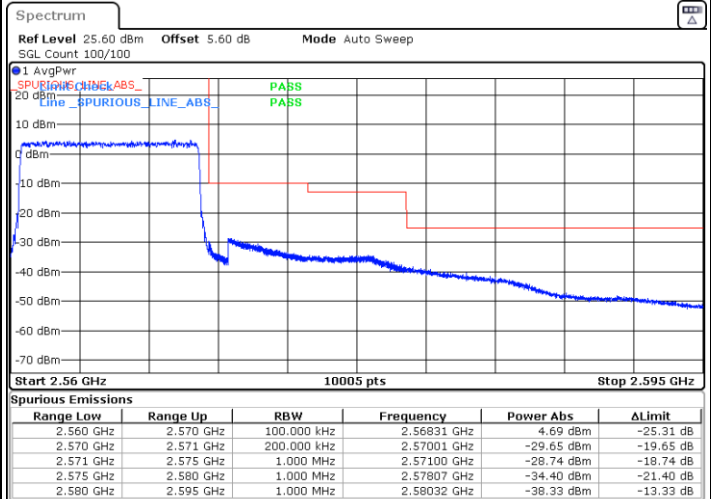
Date: 21.JUN.2022 16:17:38

Lowest Band Edge / Full RB



Date: 21.JUN.2022 16:13:00

Highest Band Edge / Full RB



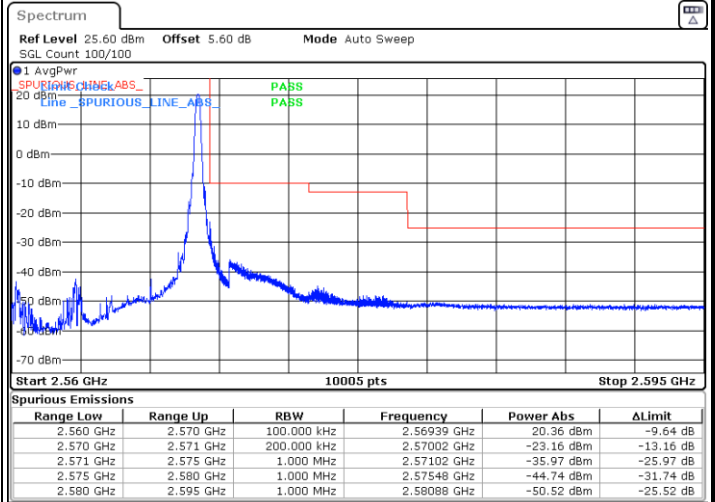
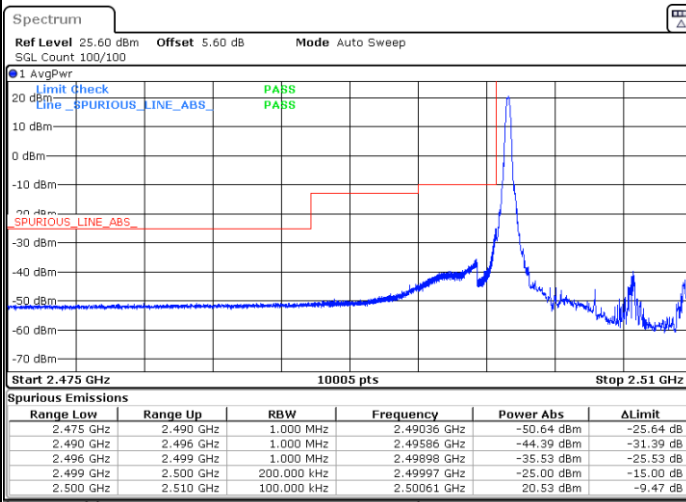
Date: 21.JUN.2022 16:24:19



LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

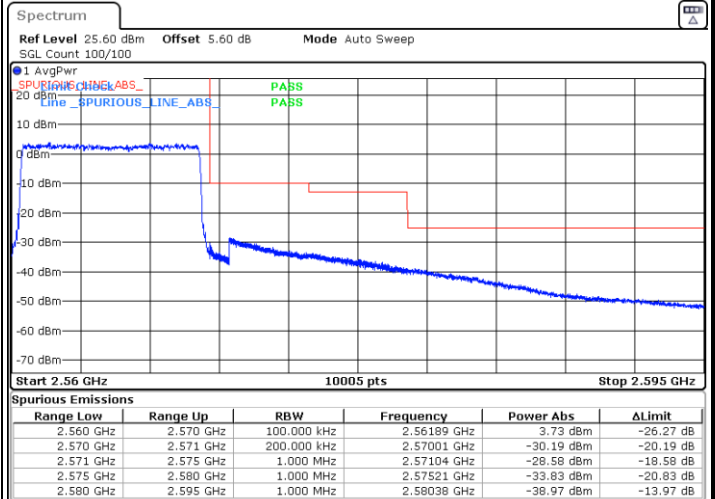
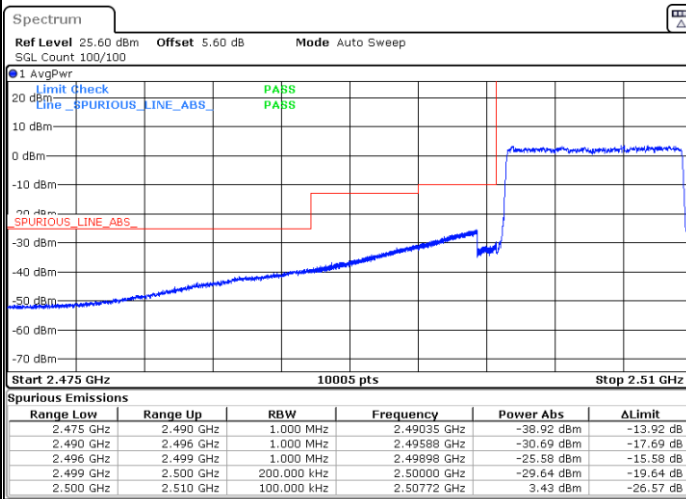


Date: 21.JUN.2022 16:07:39

Date: 21.JUN.2022 16:18:58

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



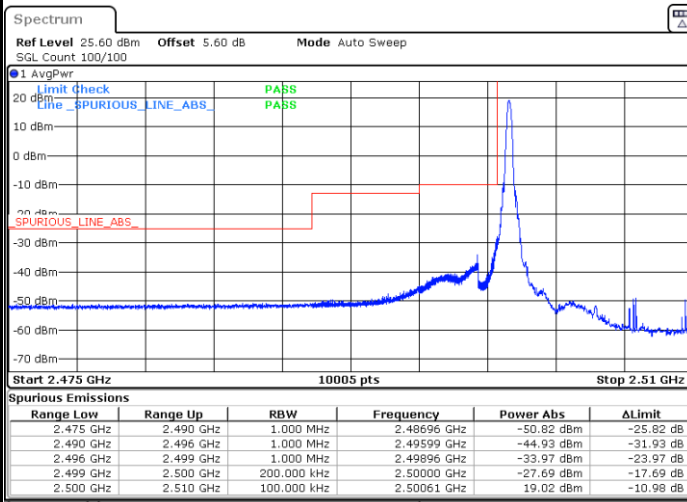
Date: 21.JUN.2022 16:11:39

Date: 21.JUN.2022 16:22:59



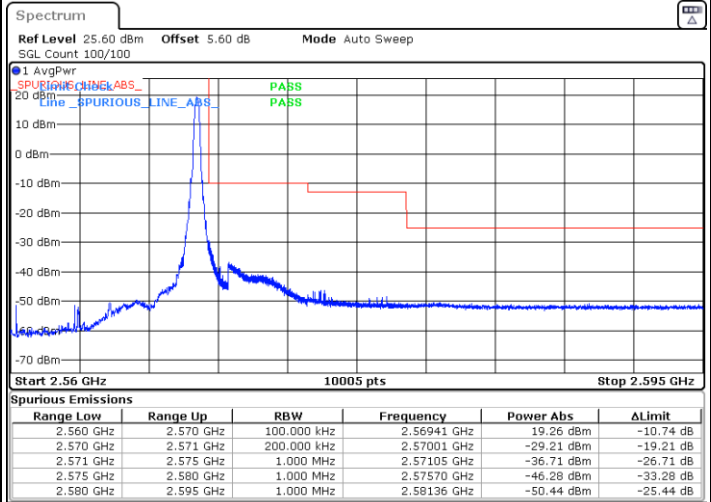
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



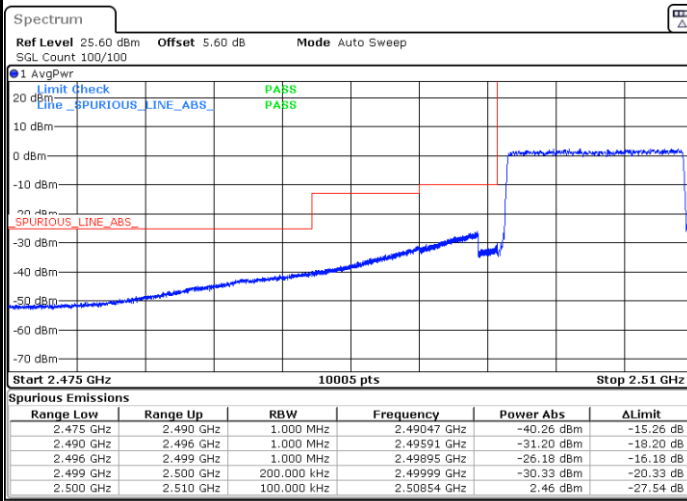
Date: 21.JUN.2022 16:08:59

Highest Band Edge / 1 RB



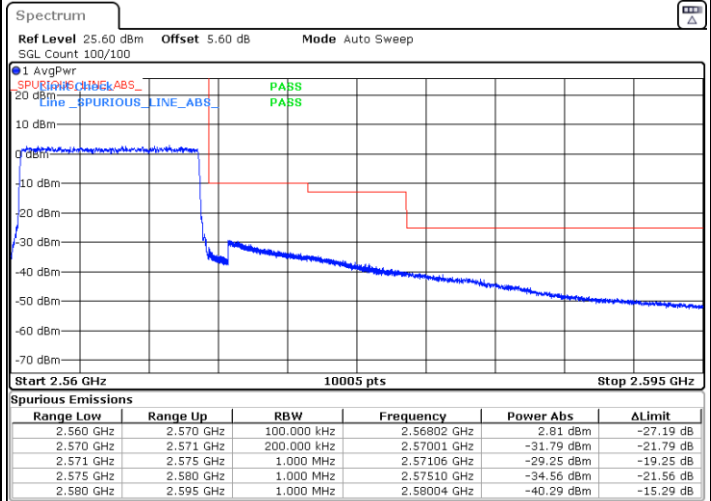
Date: 21.JUN.2022 16:20:18

Lowest Band Edge / Full RB



Date: 21.JUN.2022 16:10:19

Highest Band Edge / Full RB

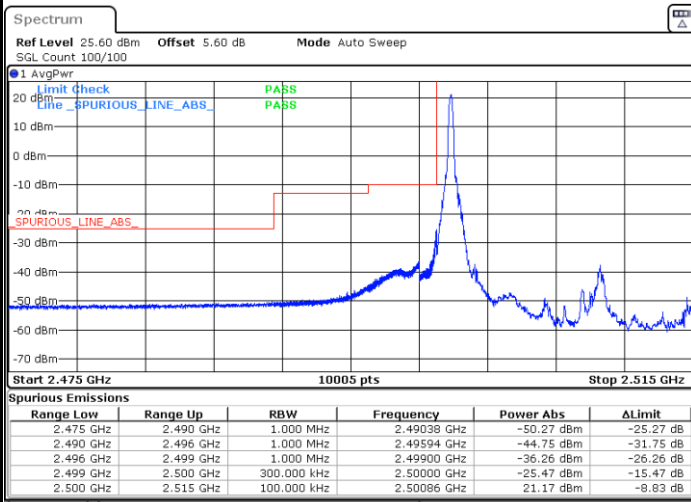


Date: 21.JUN.2022 16:21:39



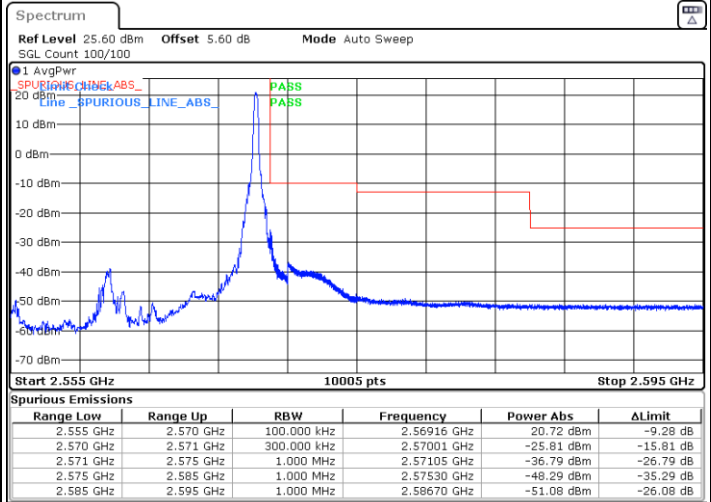
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



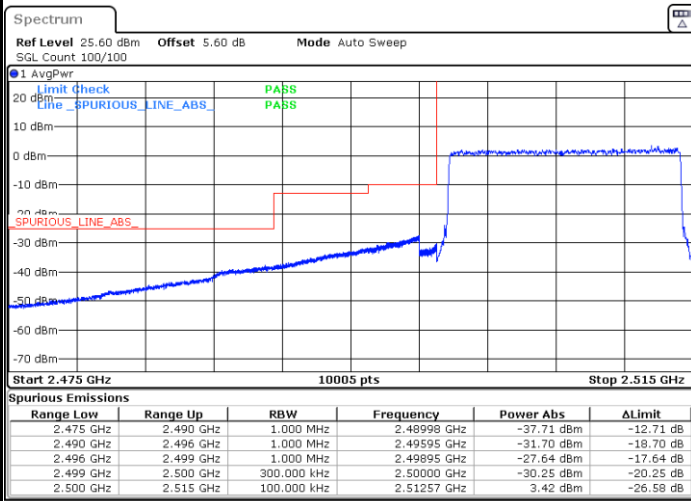
Date: 21.JUN.2022 16:27:19

Highest Band Edge / 1 RB



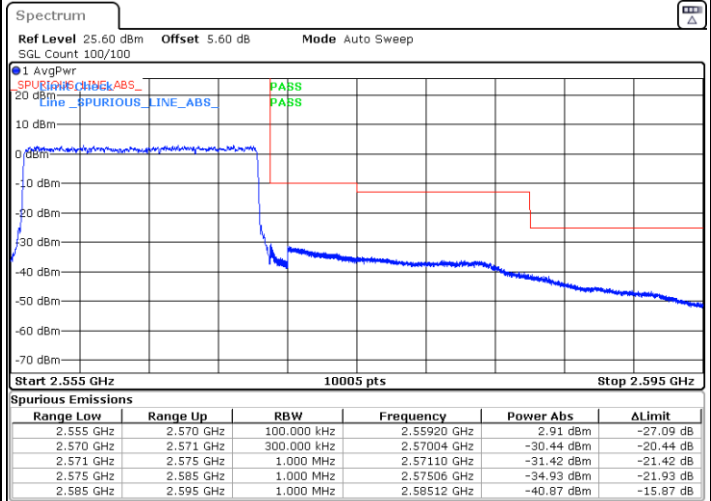
Date: 21.JUN.2022 16:38:40

Lowest Band Edge / Full RB



Date: 21.JUN.2022 16:34:02

Highest Band Edge / Full RB

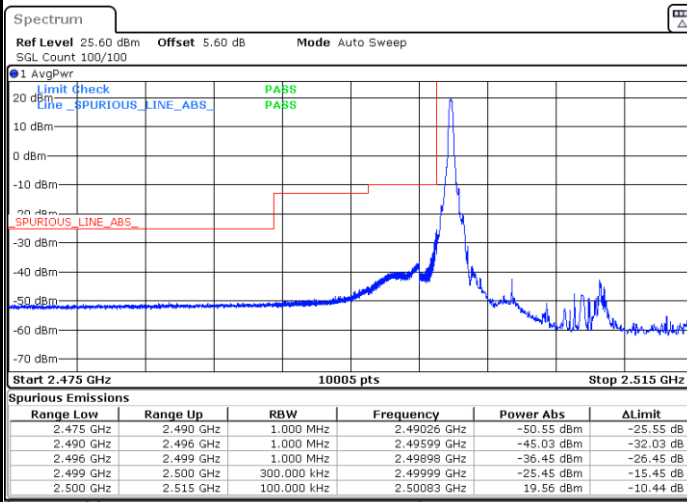


Date: 21.JUN.2022 16:45:21



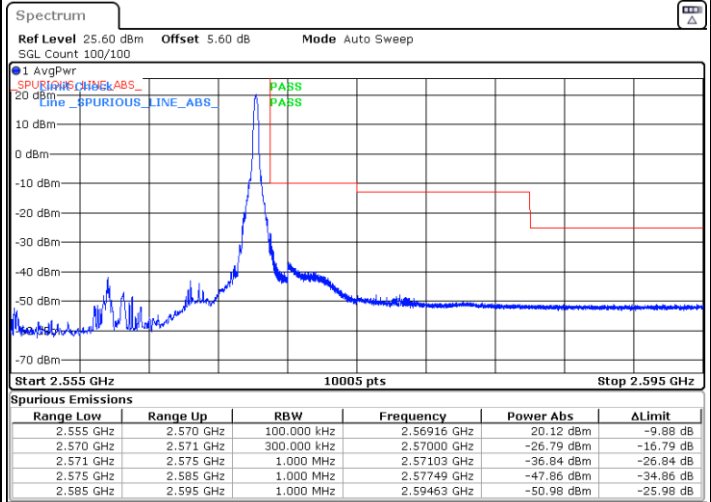
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



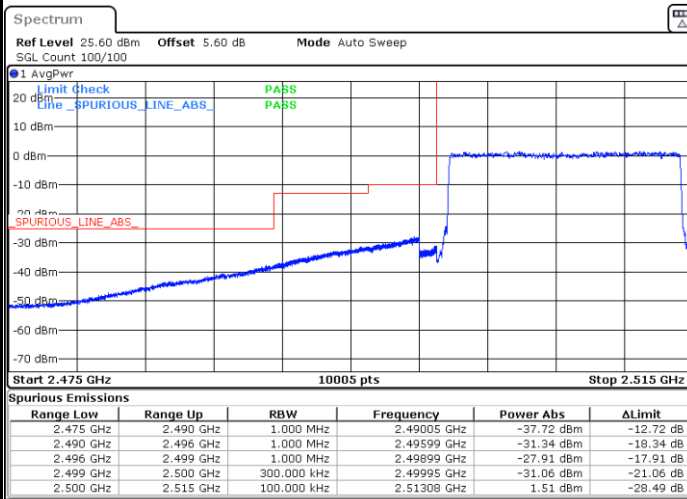
Date: 21.JUN.2022 16:28:40

Highest Band Edge / 1 RB



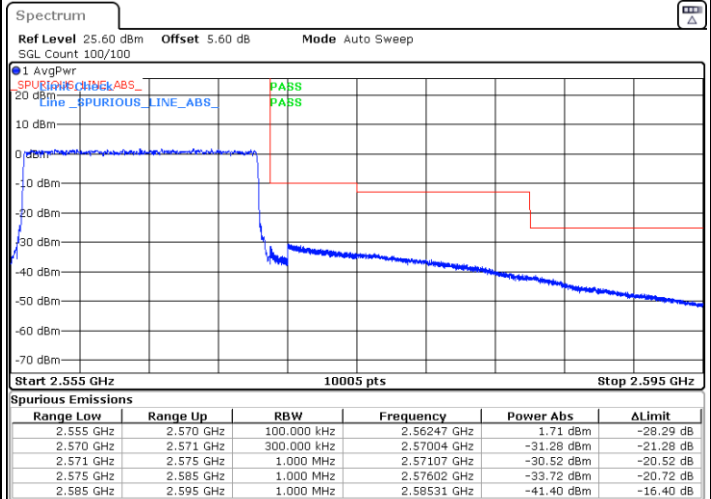
Date: 21.JUN.2022 16:40:00

Lowest Band Edge / Full RB



Date: 21.JUN.2022 16:32:42

Highest Band Edge / Full RB

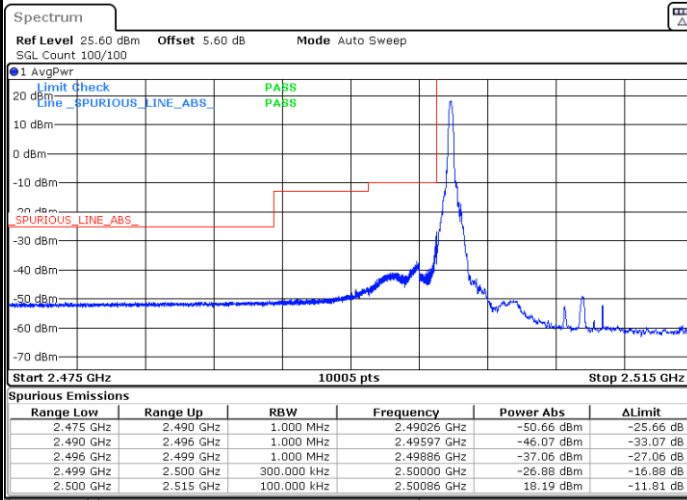


Date: 21.JUN.2022 16:44:00



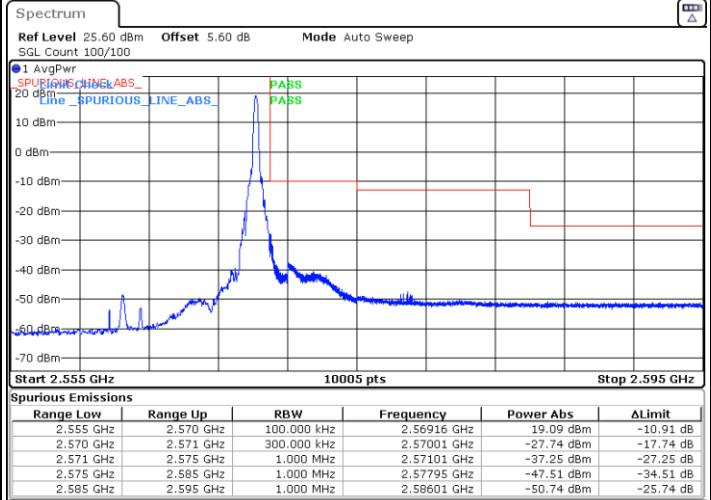
LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



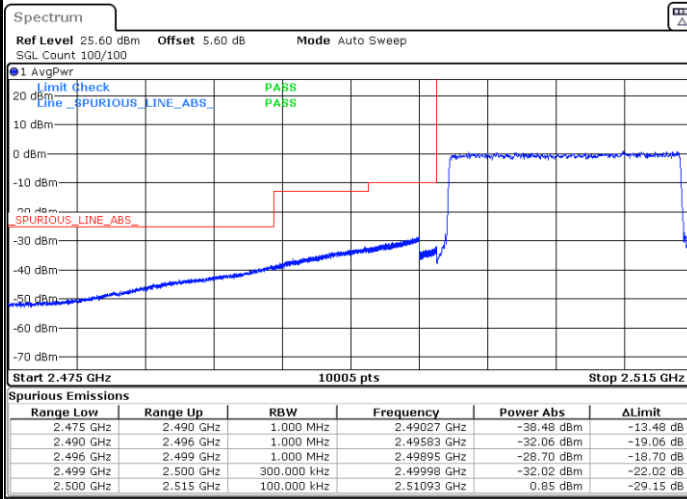
Date: 21.JUN.2022 16:30:00

Highest Band Edge / 1 RB



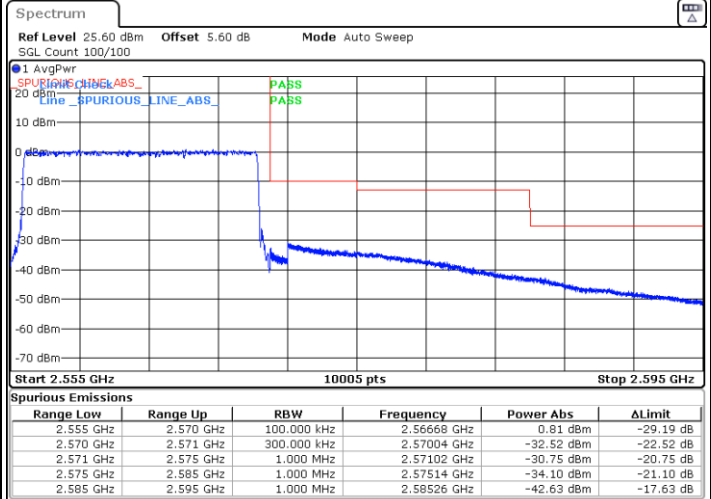
Date: 21.JUN.2022 16:41:20

Lowest Band Edge / Full RB



Date: 21.JUN.2022 16:31:21

Highest Band Edge / Full RB

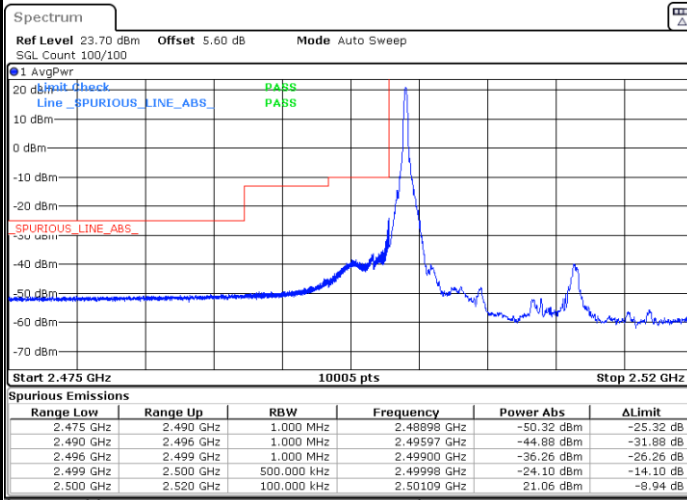


Date: 21.JUN.2022 16:42:40



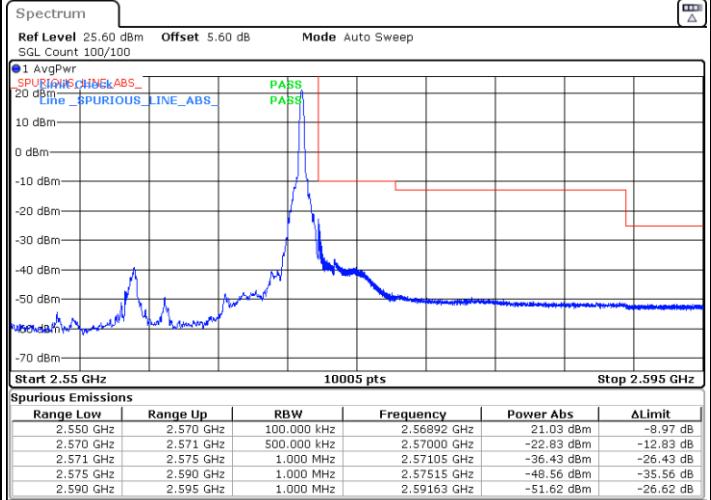
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



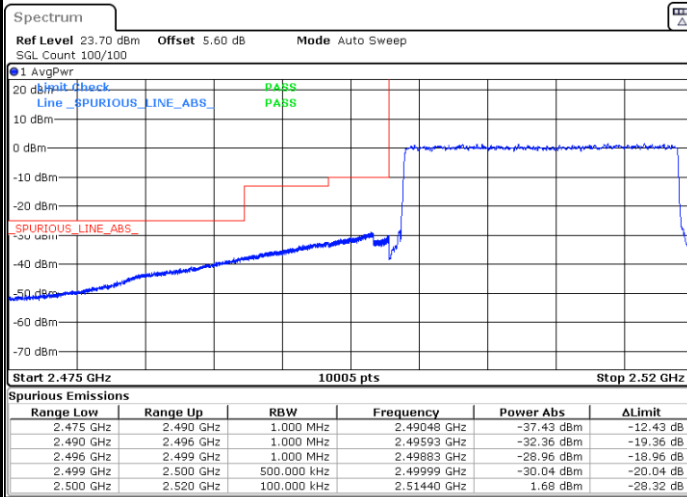
Date: 21.JUN.2022 16:48:20

Highest Band Edge / 1 RB



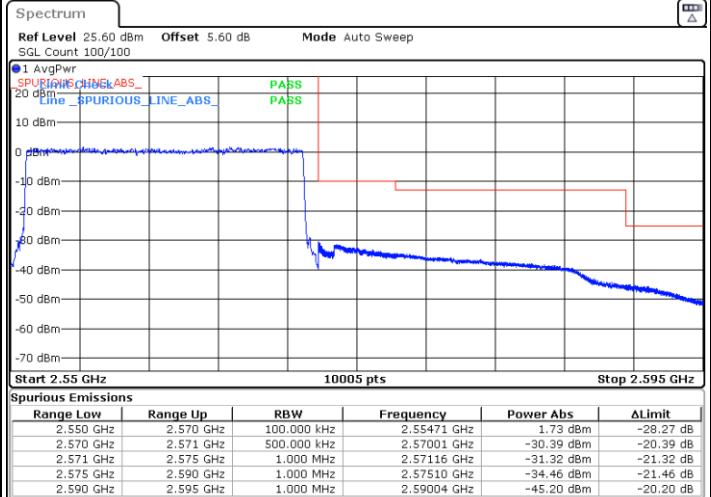
Date: 21.JUN.2022 16:59:41

Lowest Band Edge / Full RB



Date: 21.JUN.2022 16:55:03

Highest Band Edge / Full RB

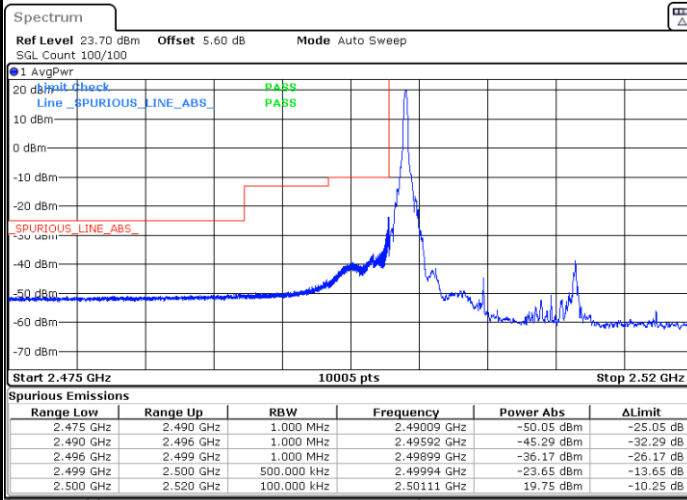


Date: 21.JUN.2022 17:06:22



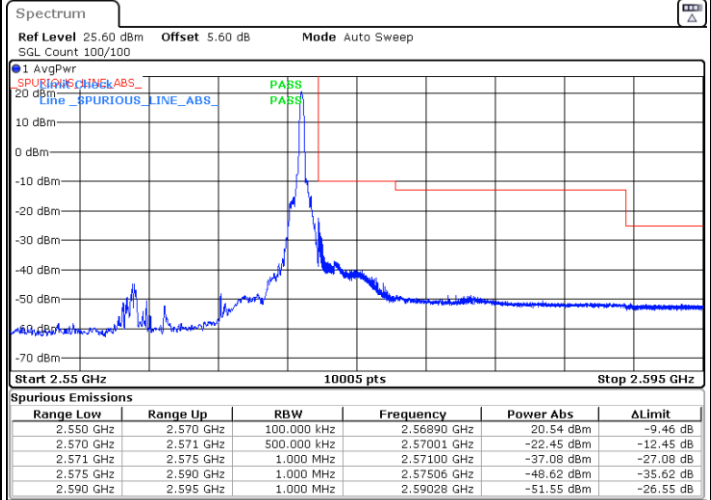
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



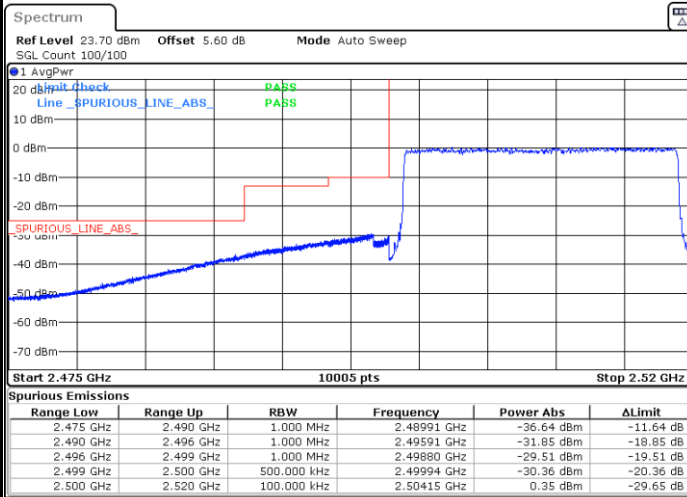
Date: 21.JUN.2022 16:49:41

Highest Band Edge / 1 RB



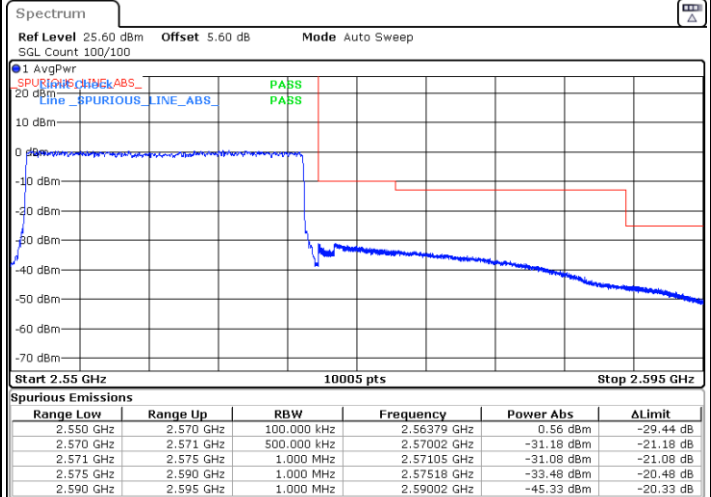
Date: 21.JUN.2022 17:01:01

Lowest Band Edge / Full RB



Date: 21.JUN.2022 16:53:43

Highest Band Edge / Full RB

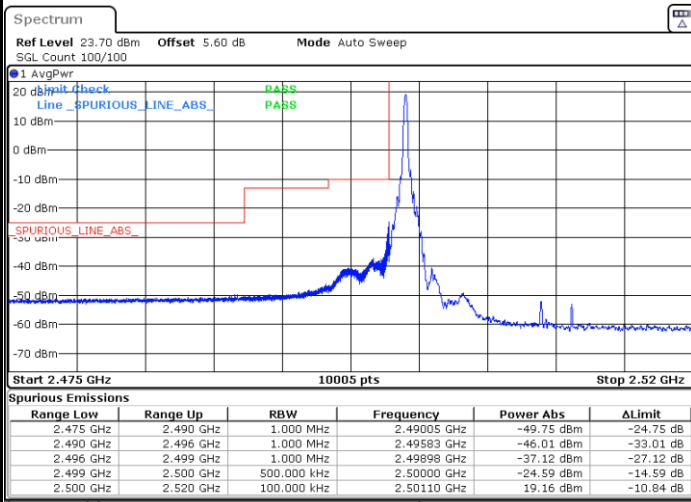


Date: 21.JUN.2022 17:05:02

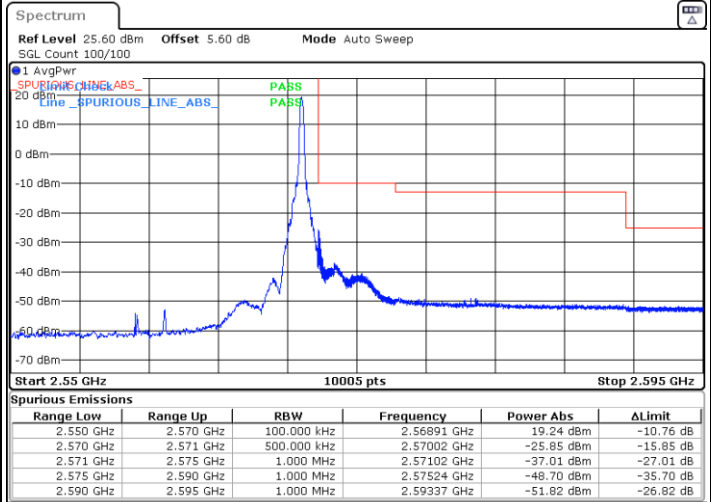


LTE Band 7 / 20MHz / 64QAM

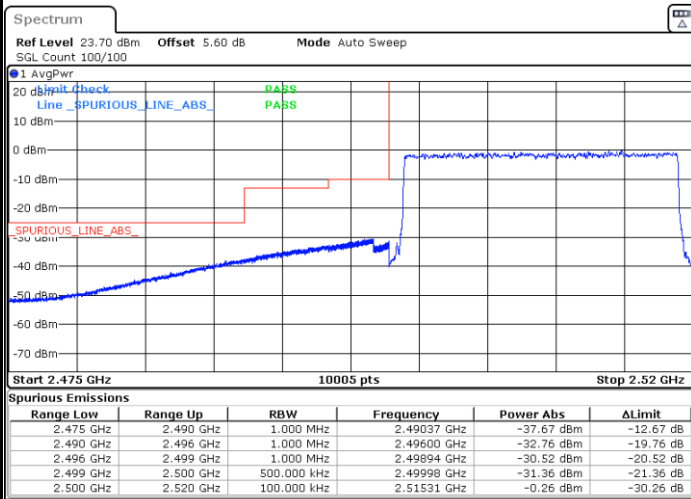
Lowest Band Edge / 1 RB



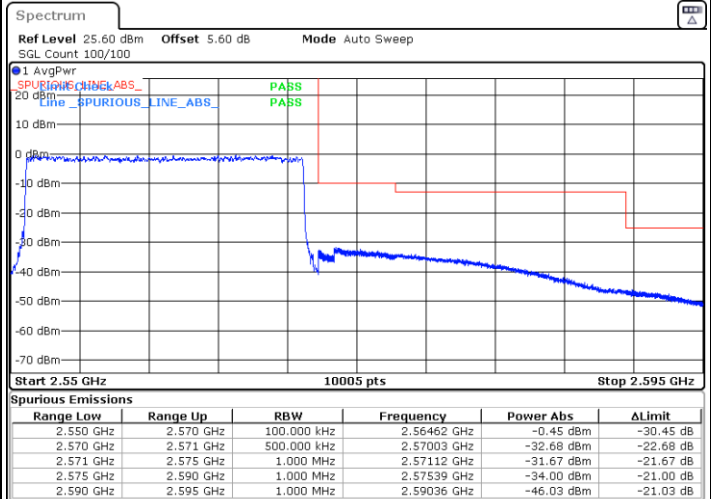
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

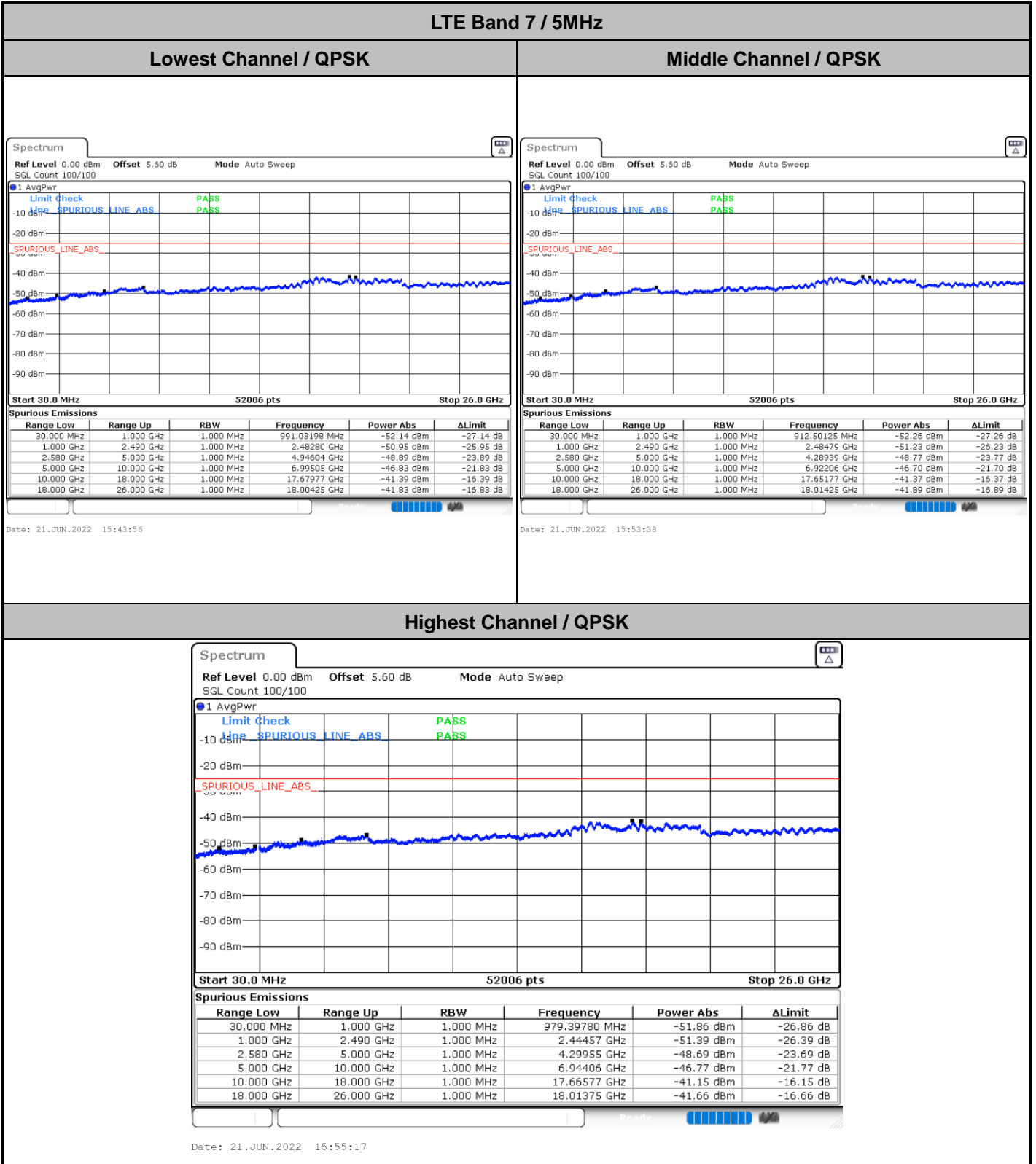


Highest Band Edge / Full RB





Conducted Spurious Emission

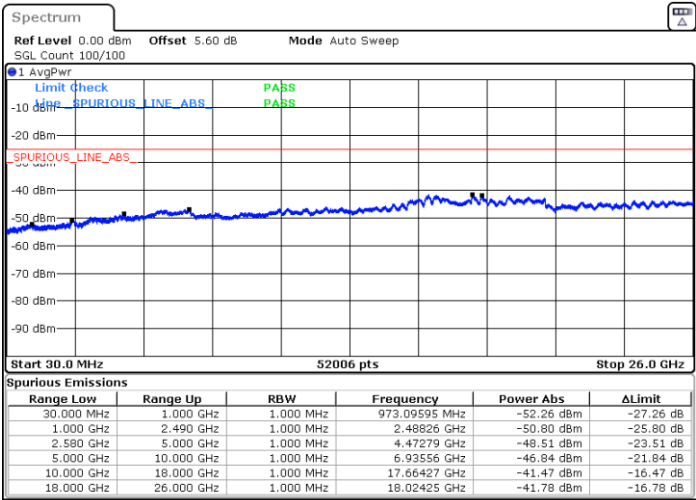




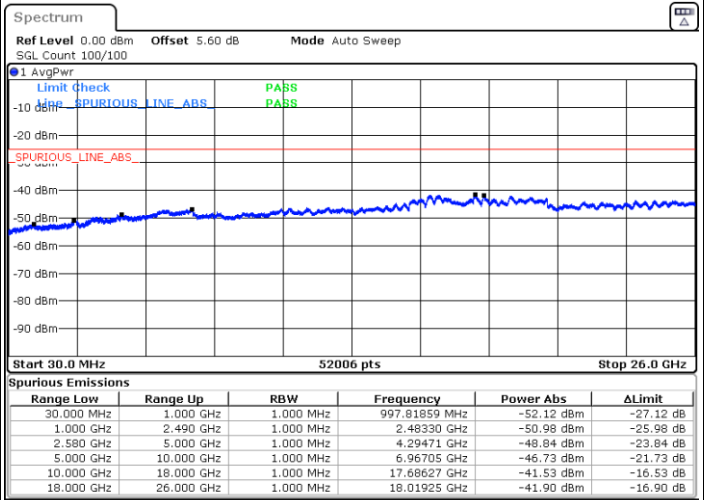
LTE Band 7 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

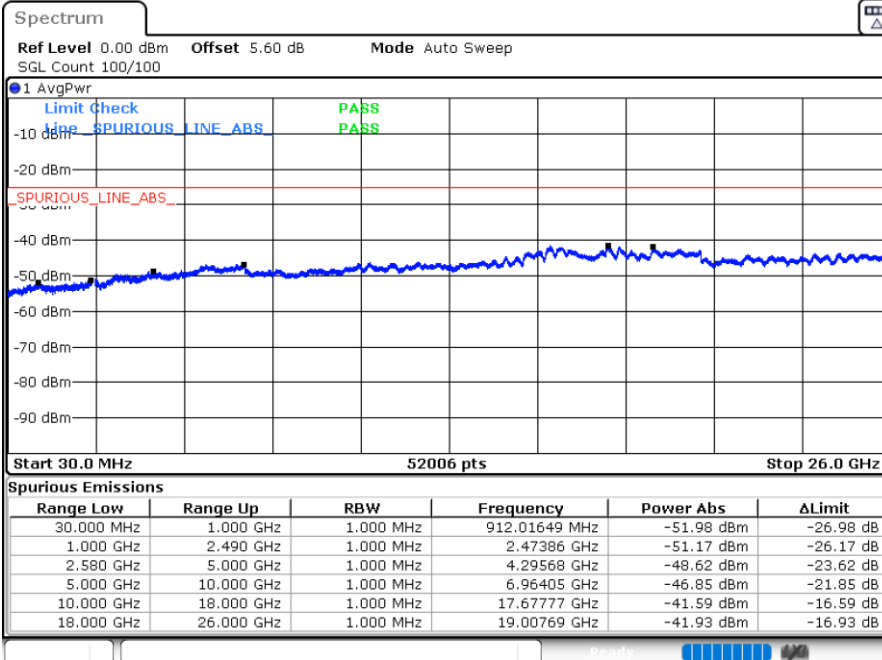


Date: 21.JUN.2022 16:04:58



Date: 21.JUN.2022 16:14:39

Highest Channel / QPSK



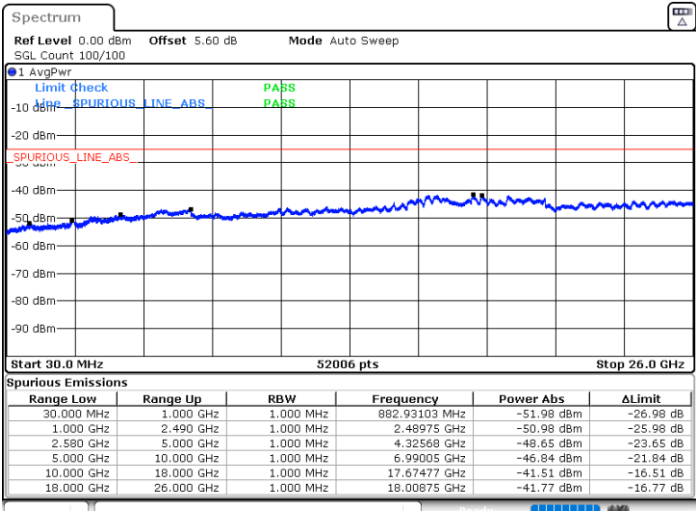
Date: 21.JUN.2022 16:16:18



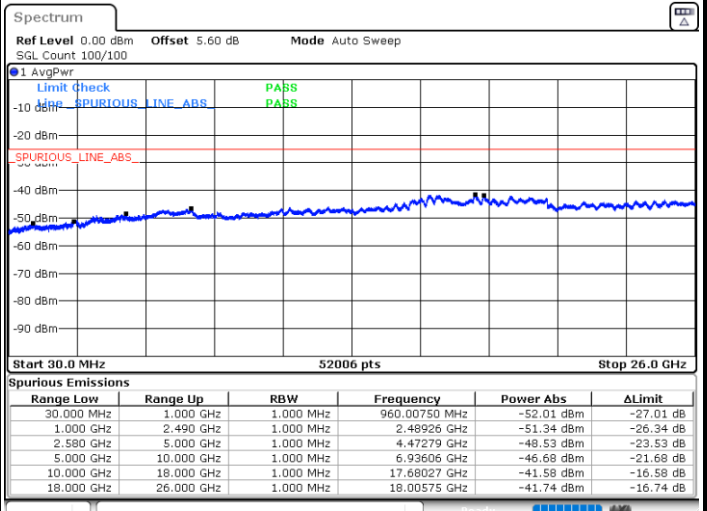
LTE Band 7 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK

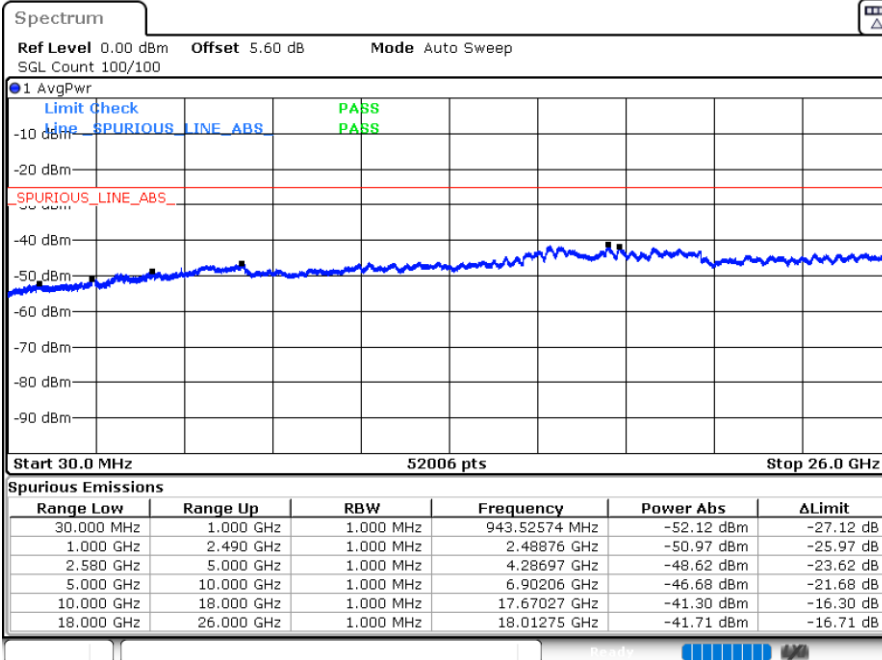


Date: 21.JUN.2022 16:25:59



Date: 21.JUN.2022 16:35:41

Highest Channel / QPSK



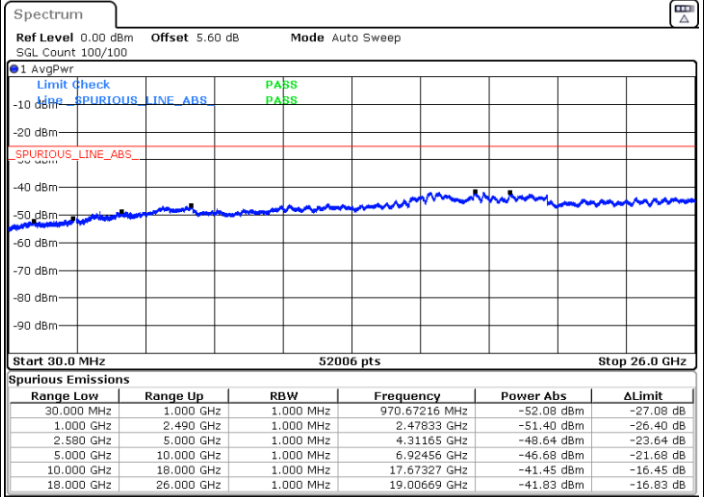
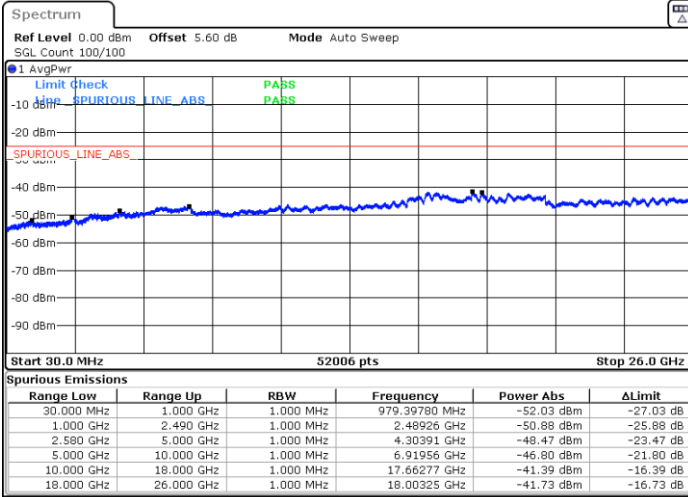
Date: 21.JUN.2022 16:37:20



LTE Band 7 / 20MHz

Lowest Channel / QPSK

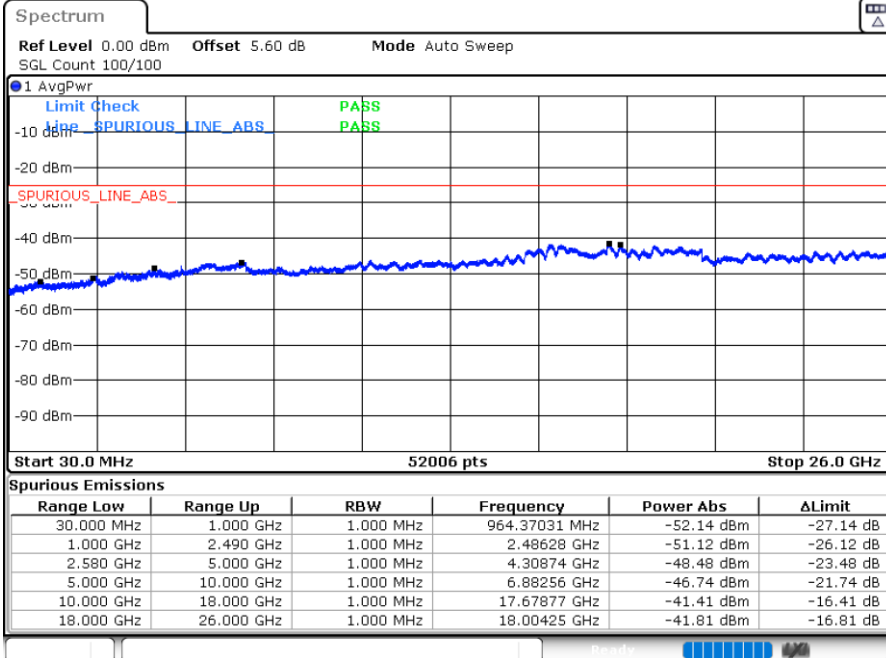
Middle Channel / QPSK



Date: 21.JUN.2022 16:47:00

Date: 21.JUN.2022 16:56:42

Highest Channel / QPSK



Date: 21.JUN.2022 16:58:20



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	0.0012	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0009	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0010	
20	Normal Voltage	0.0008	
20	Battery End Point	0.0025	

Note:

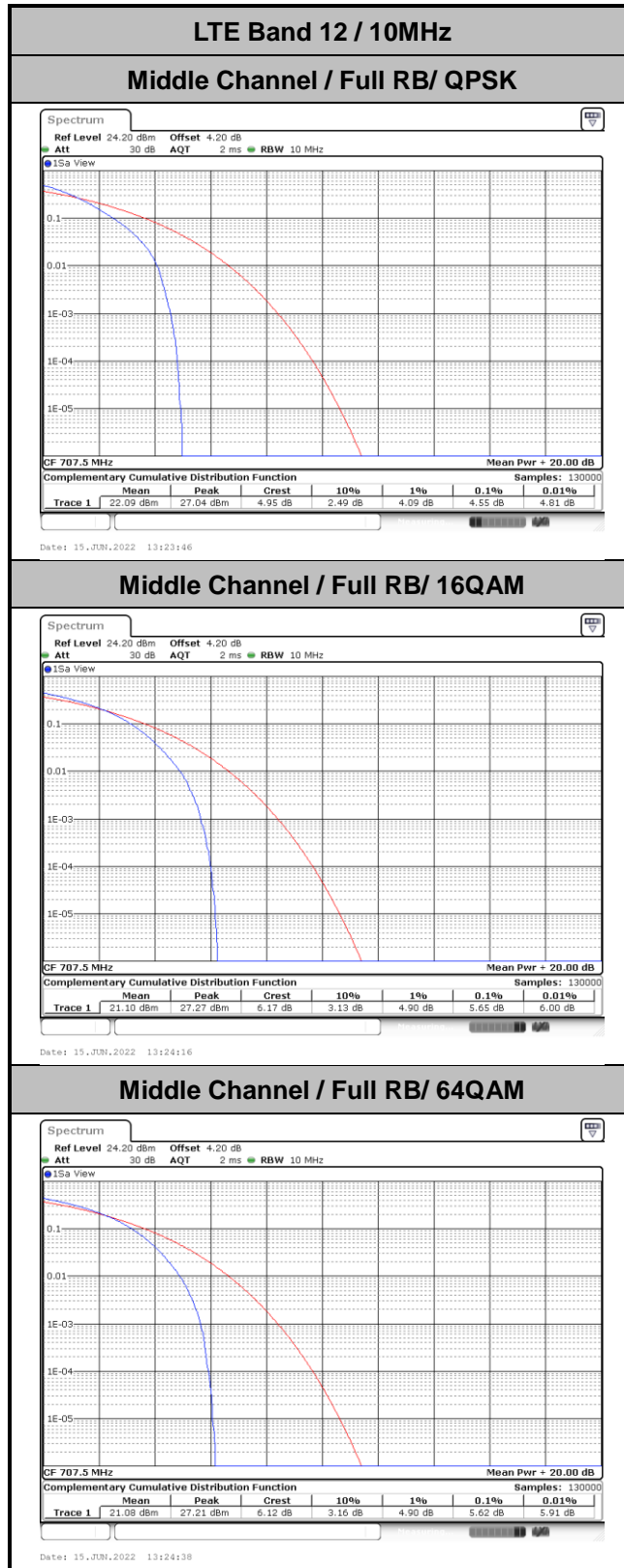
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.55 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

Peak-to-Average Ratio

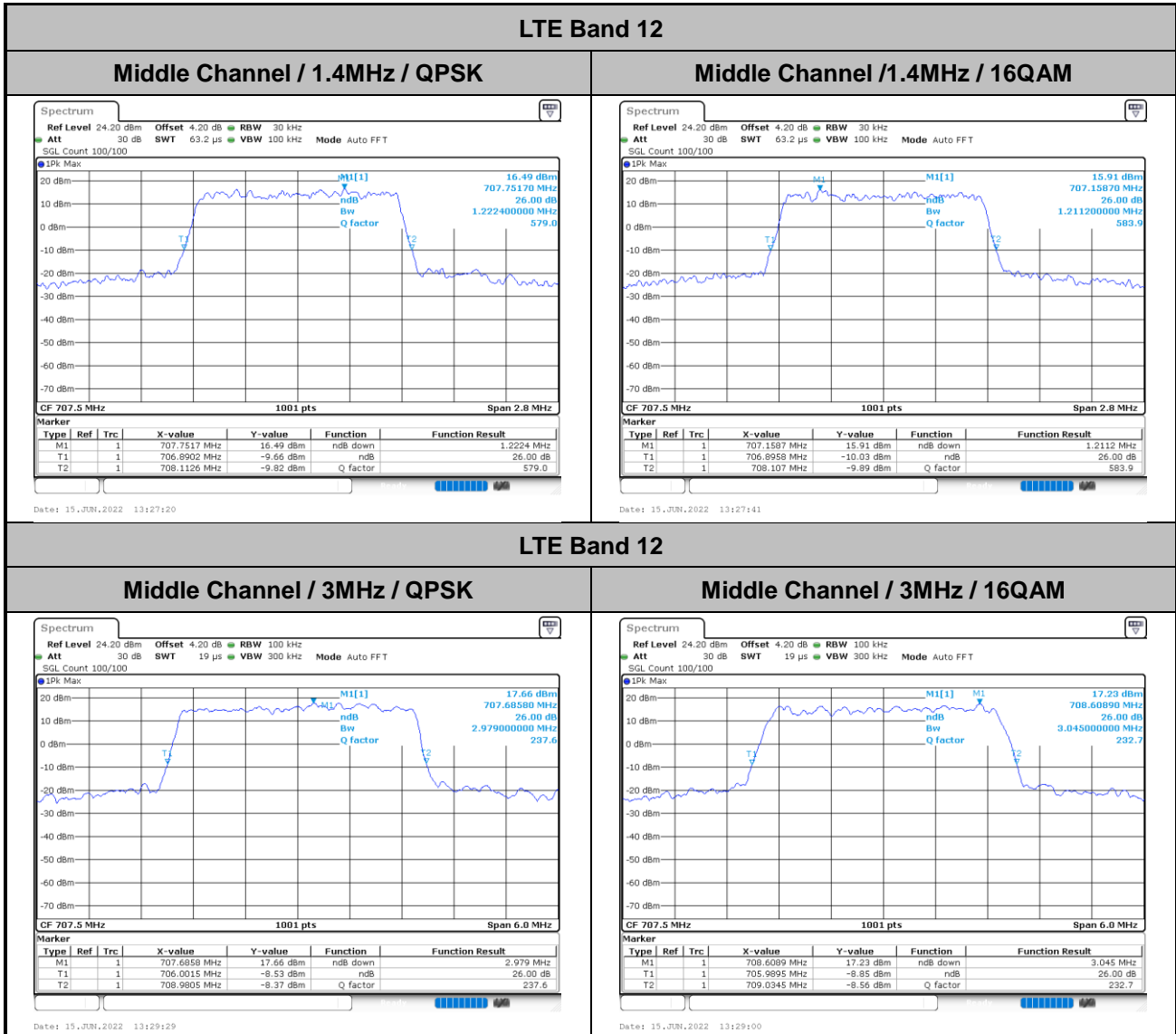
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.55	5.65	5.62	PASS





26dB Bandwidth

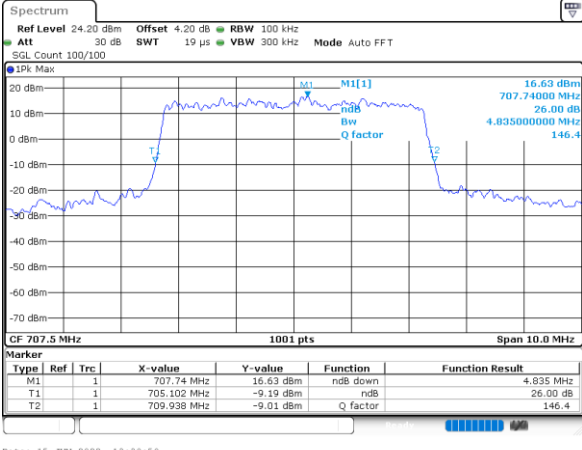
Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.22	1.21	2.98	3.05	4.84	4.91	9.81	9.75





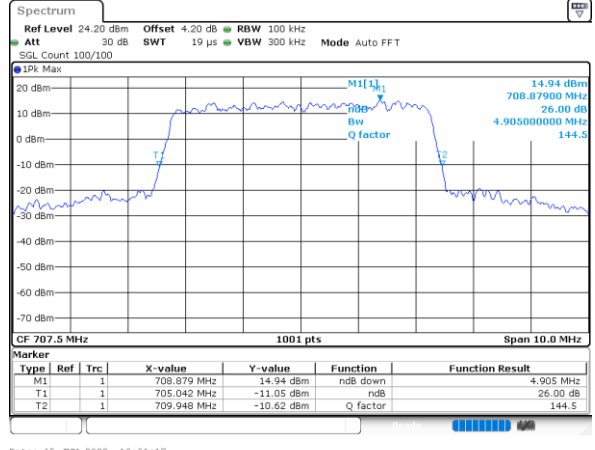
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 15 JUN 2022 13:30:50

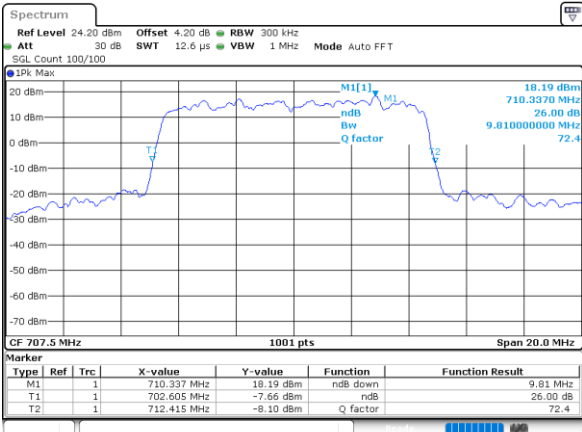
Middle Channel / 5MHz / 16QAM



Date: 15 JUN 2022 13:31:17

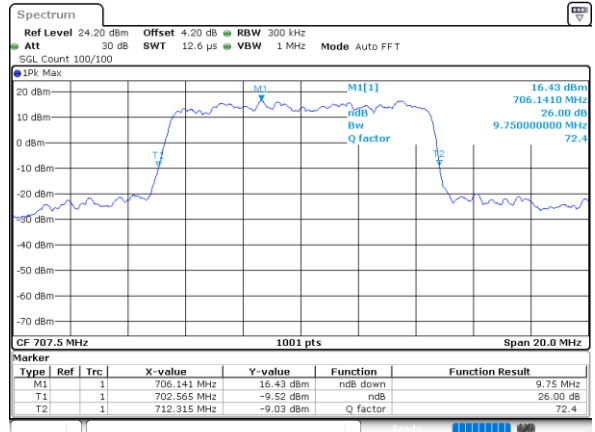
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 15 JUN 2022 13:25:58

Middle Channel / 10MHz / 16QAM



Date: 15 JUN 2022 13:26:26



Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.08	1.09	2.72	2.75	4.49	4.51	8.99	8.95

