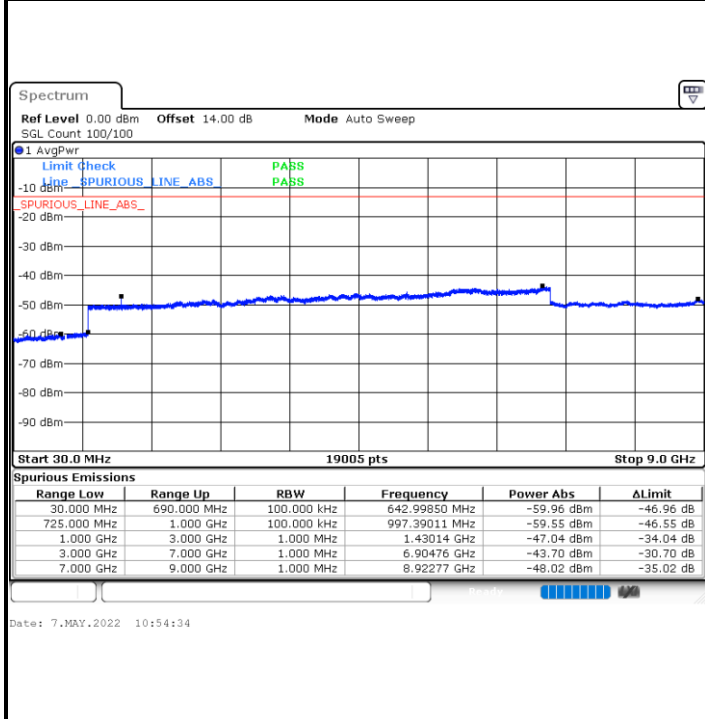


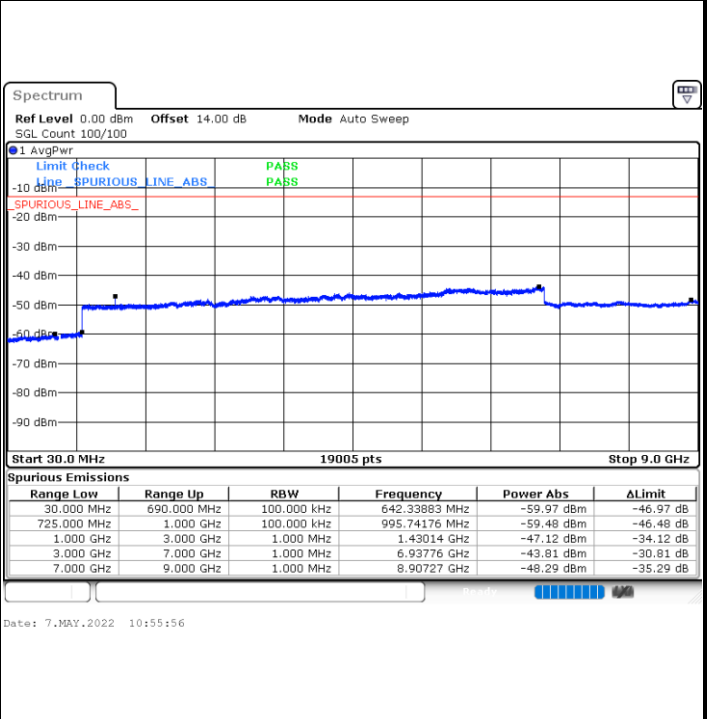


LTE Band 12 / 1.4MHz

Highest Channel / QPSK

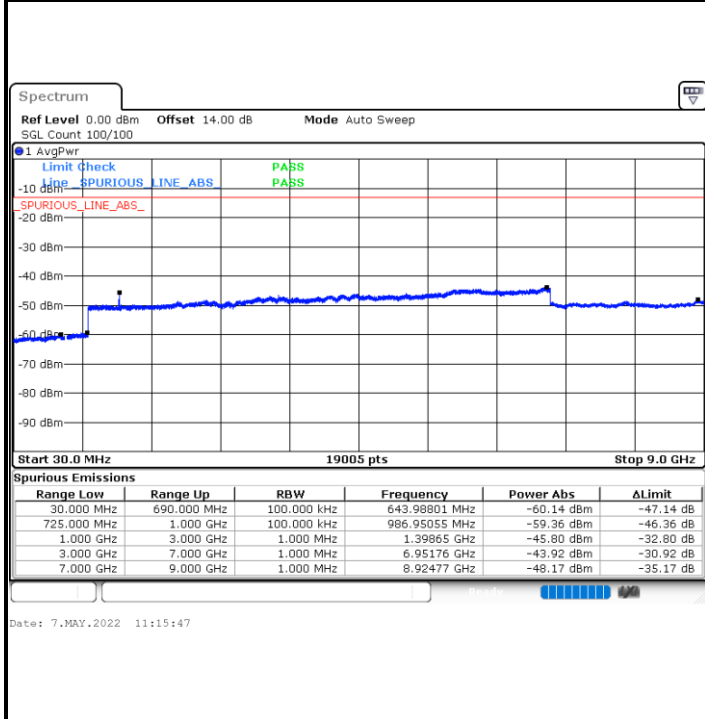


Highest Channel / 16QAM

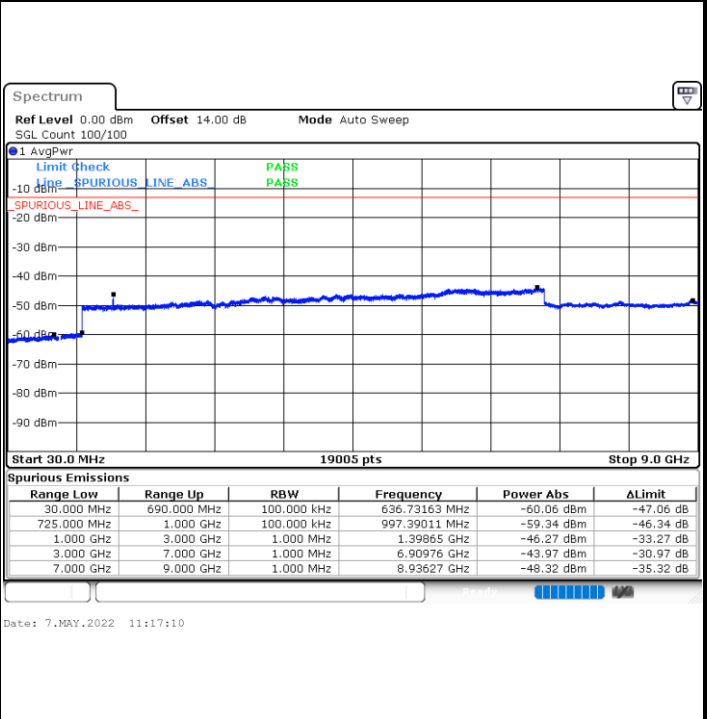


LTE Band 12 / 3MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

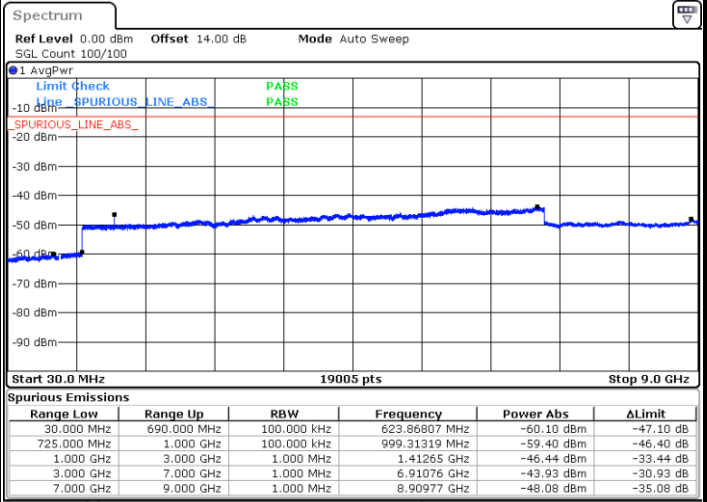
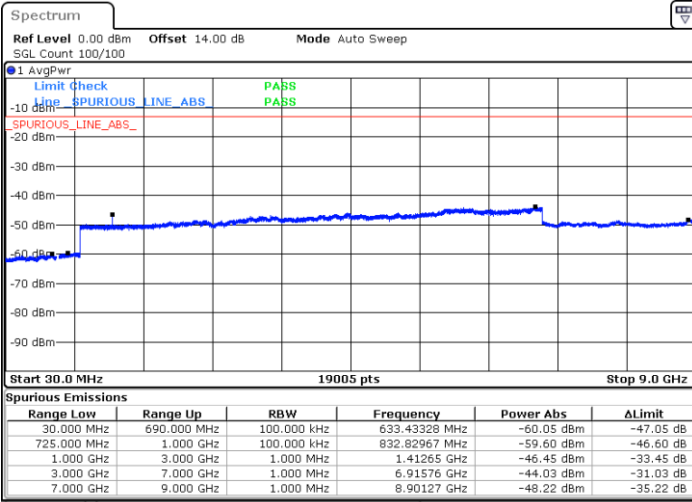




LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

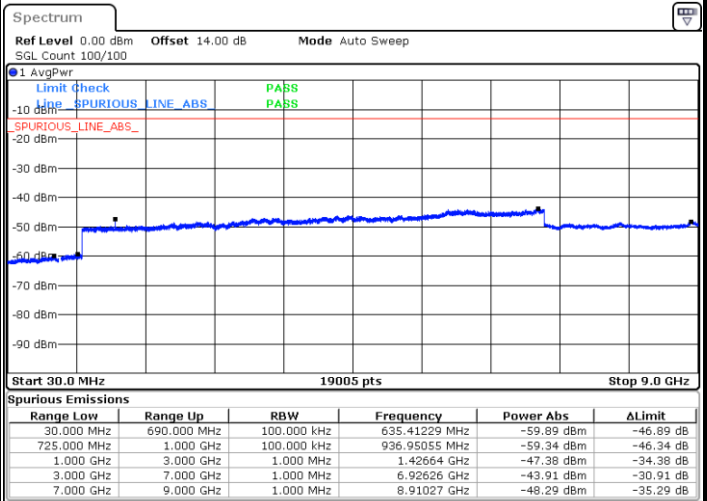
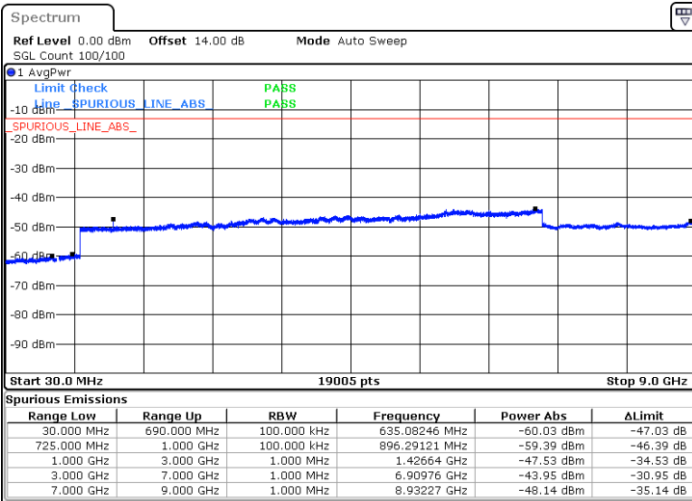


Date: 7.MAY.2022 11:21:21

Date: 7.MAY.2022 11:19:59

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 7.MAY.2022 11:29:52

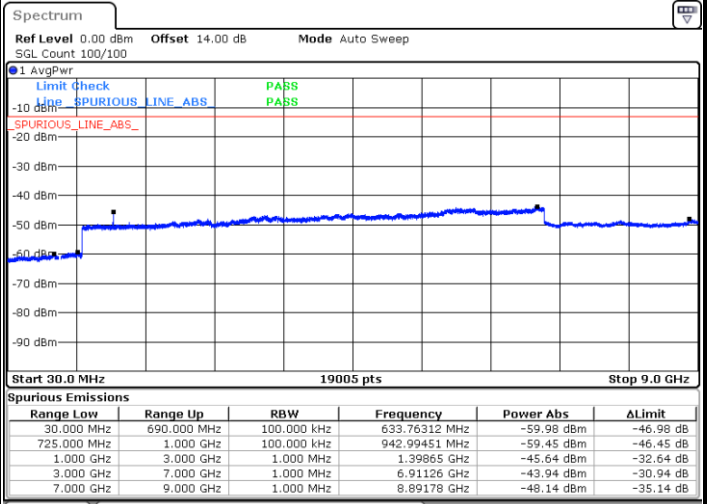
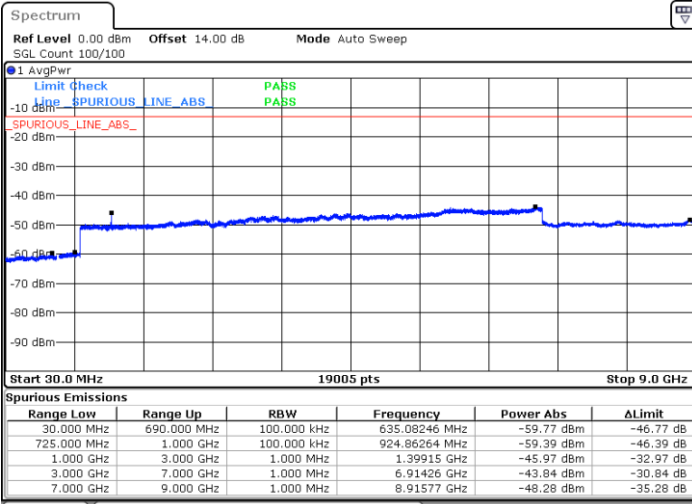
Date: 7.MAY.2022 11:31:15



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

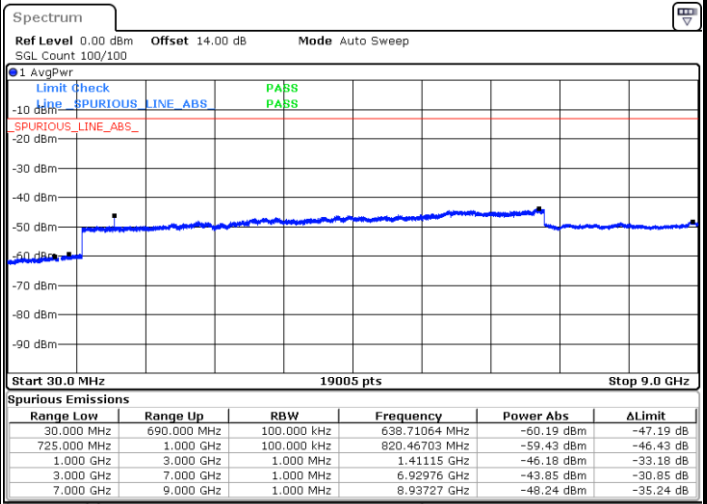
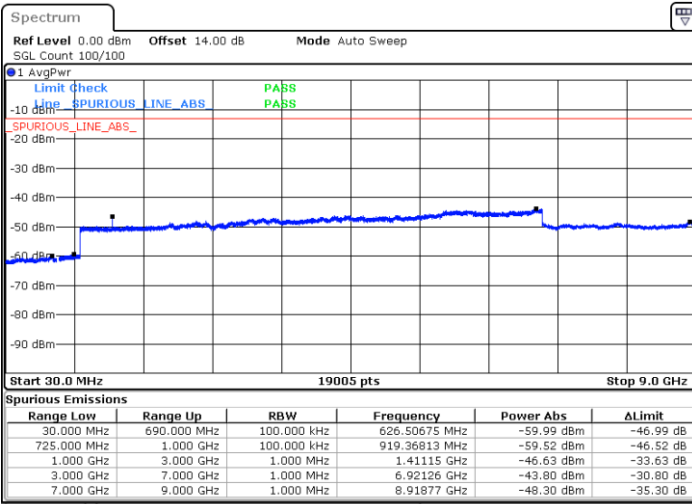


Date: 7.MAY.2022 12:02:29

Date: 7.MAY.2022 12:03:52

Middle Channel / QPSK

Middle Channel / 16QAM



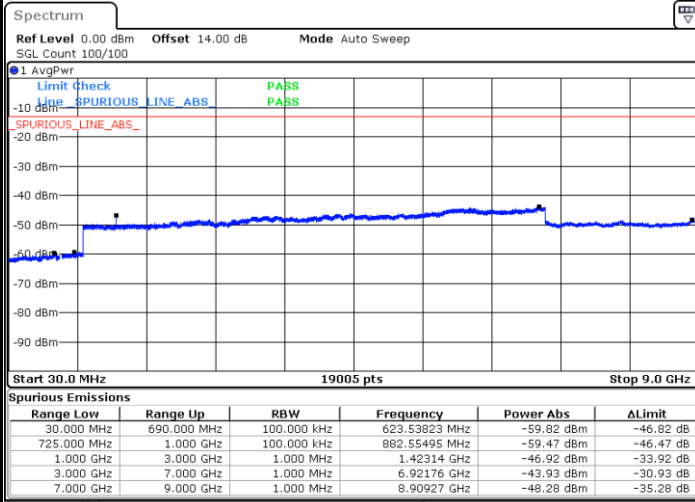
Date: 7.MAY.2022 12:08:03

Date: 7.MAY.2022 12:06:41



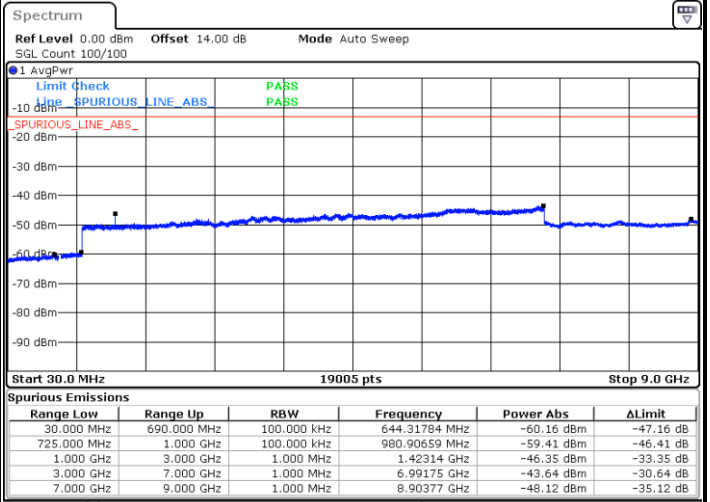
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 7.MAY.2022 12:17:58

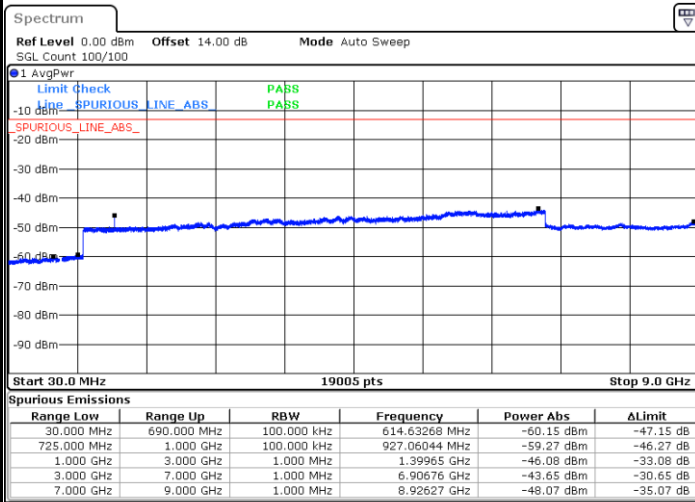
Highest Channel / 16QAM



Date: 7.MAY.2022 12:16:35

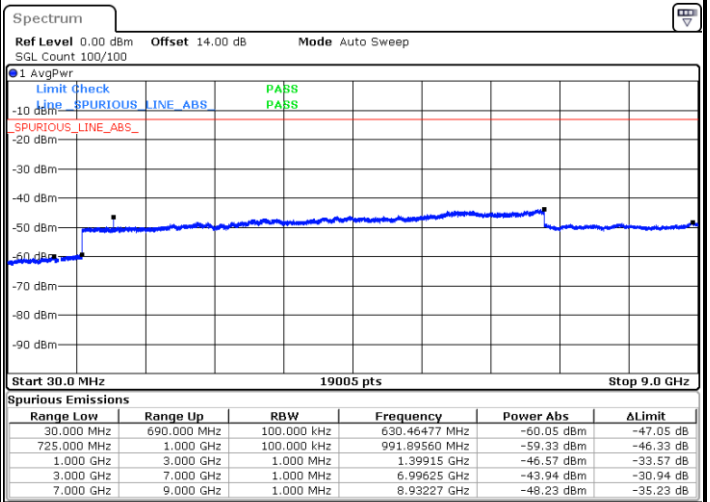
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 7.MAY.2022 12:26:20

Lowest Channel / 16QAM

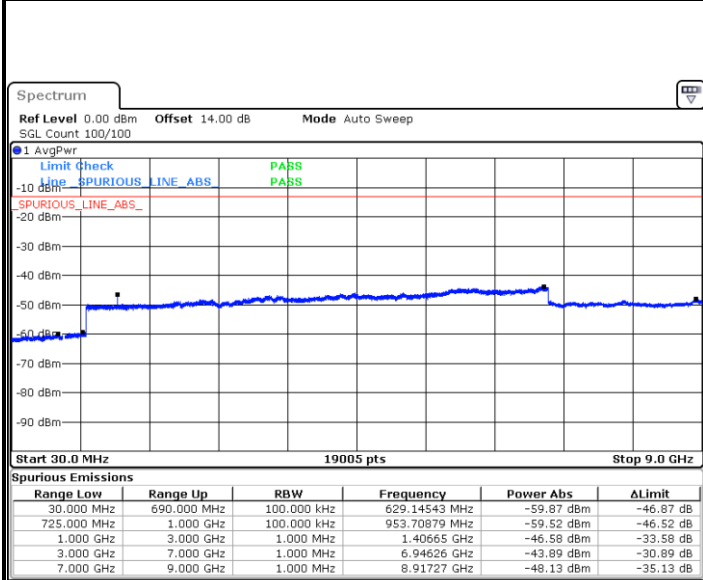


Date: 7.MAY.2022 12:27:42



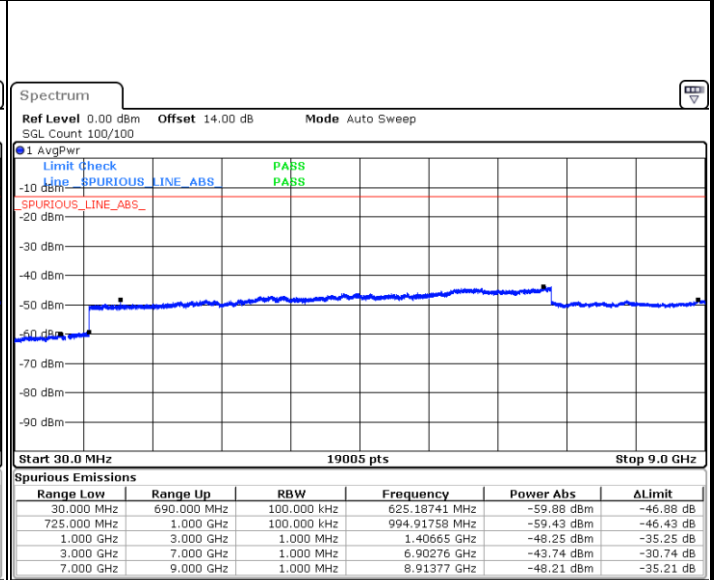
LTE Band 12 / 10MHz

Middle Channel / QPSK



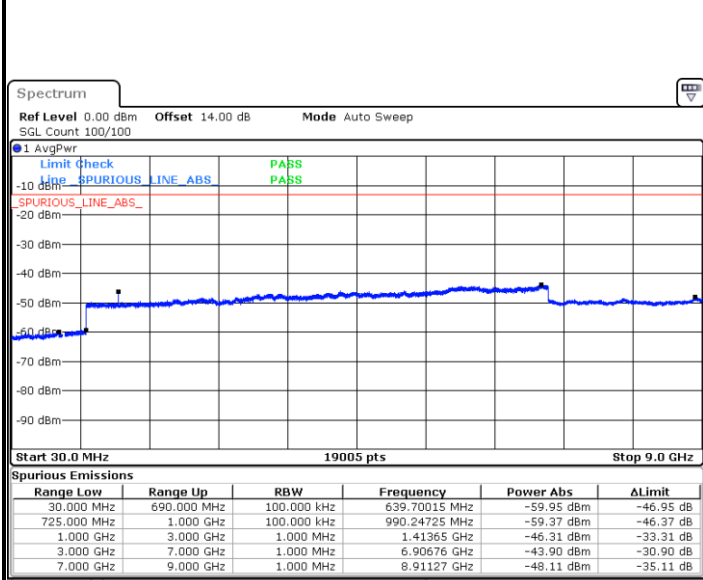
Date: 7.MAY.2022 12:31:53

Middle Channel / 16QAM



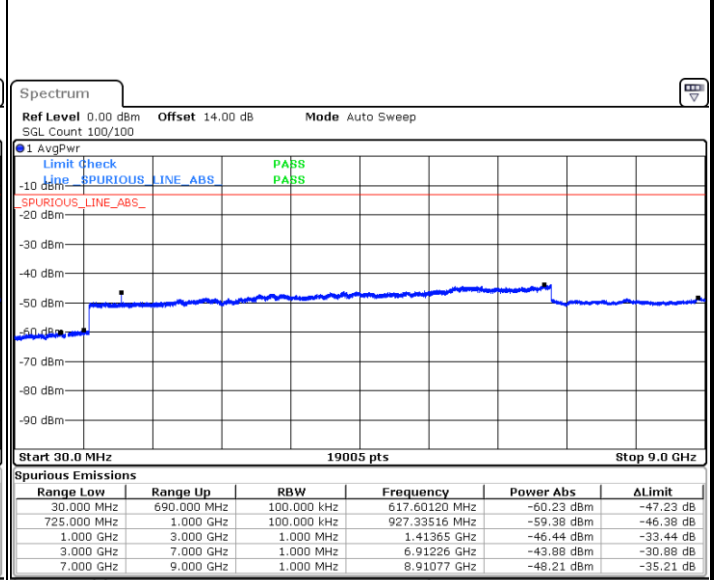
Date: 7.MAY.2022 12:30:31

Highest Channel / QPSK



Date: 7.MAY.2022 12:40:24

Highest Channel / 16QAM

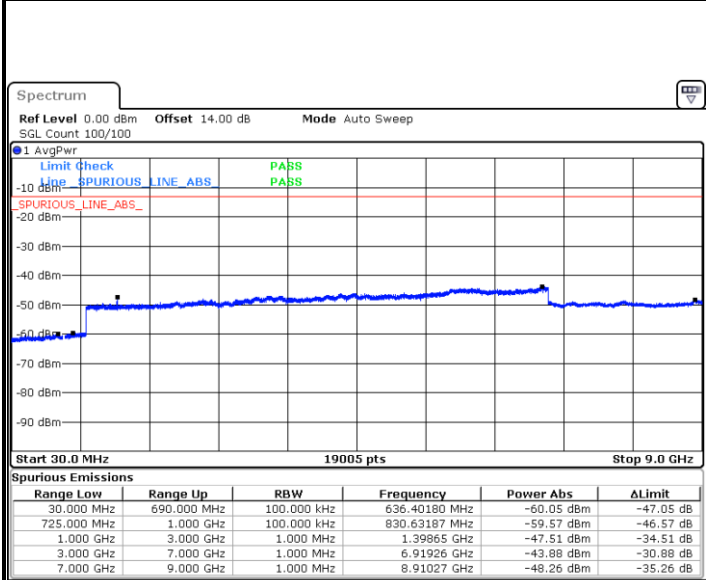


Date: 7.MAY.2022 12:41:47



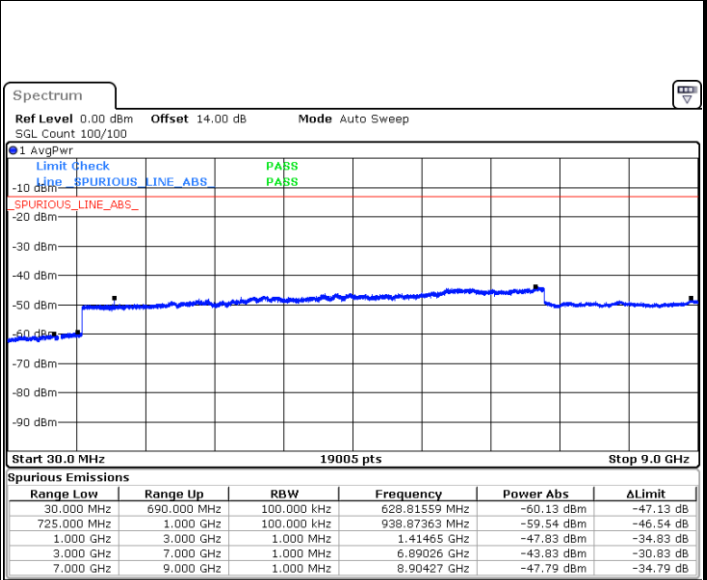
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



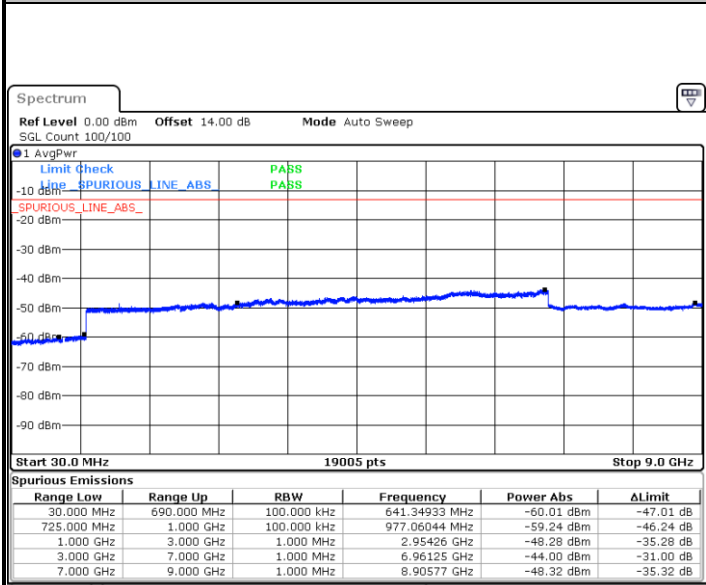
Date: 7.MAY.2022 11:00:35

Middle Channel / 64QAM



Date: 7.MAY.2022 11:02:36

Highest Channel / 64QAM



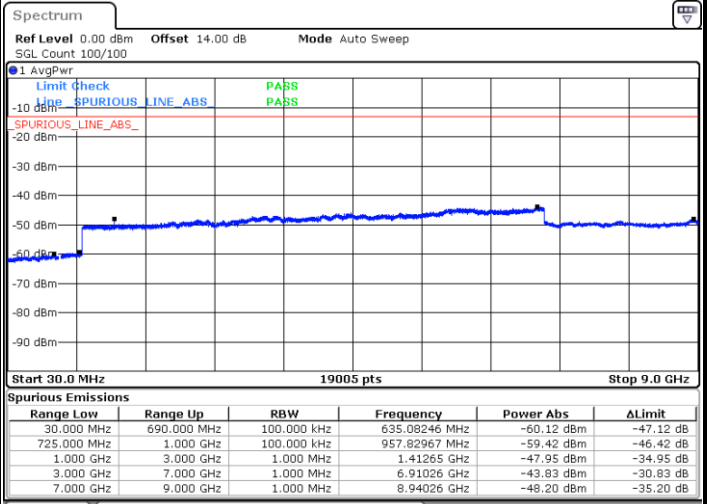
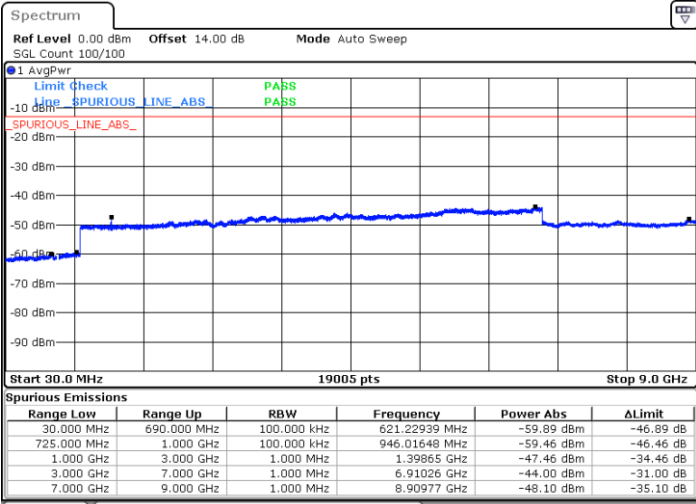
Date: 7.MAY.2022 11:07:24



LTE Band 12 / 3MHz

Lowest Channel / 64QAM

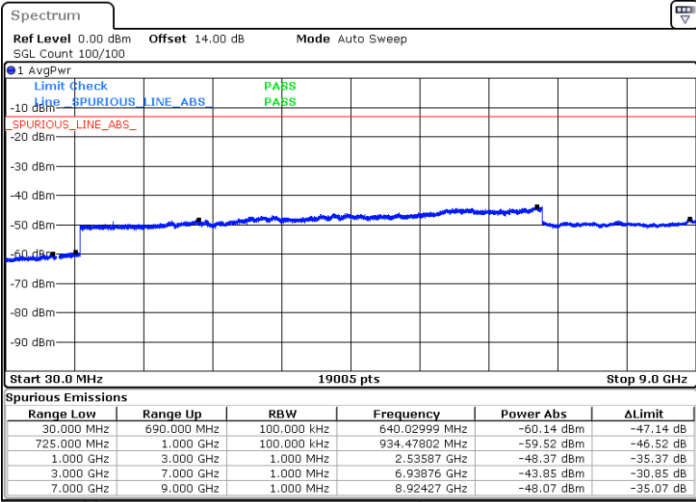
Middle Channel / 64QAM



Date: 7.MAY.2022 11:35:52

Date: 7.MAY.2022 11:37:53

Highest Channel / 64QAM



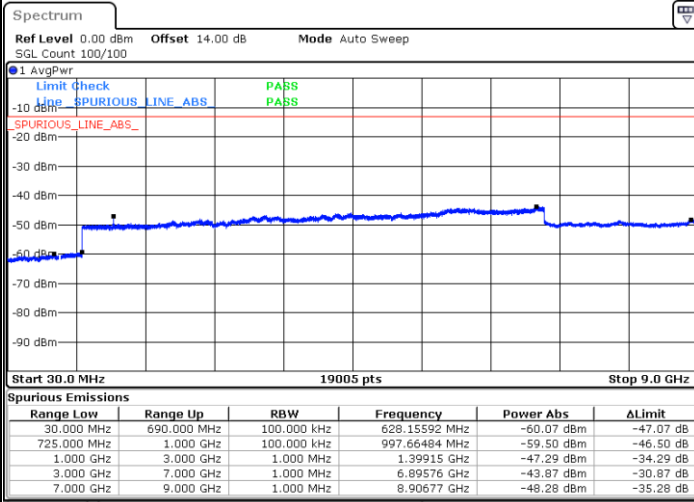
Date: 7.MAY.2022 11:42:41



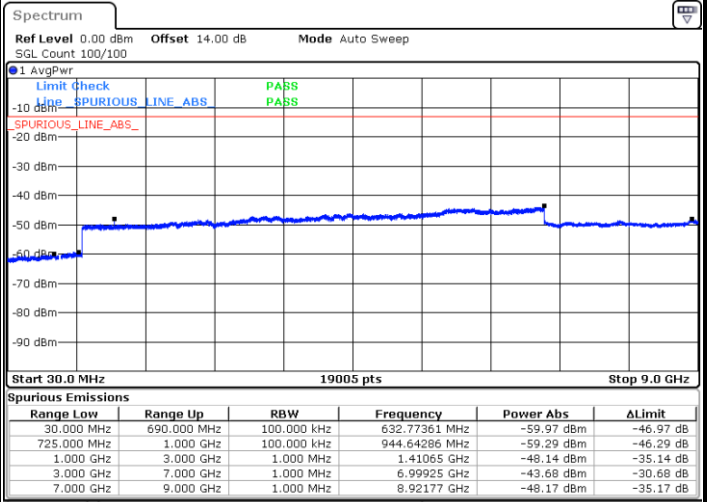
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

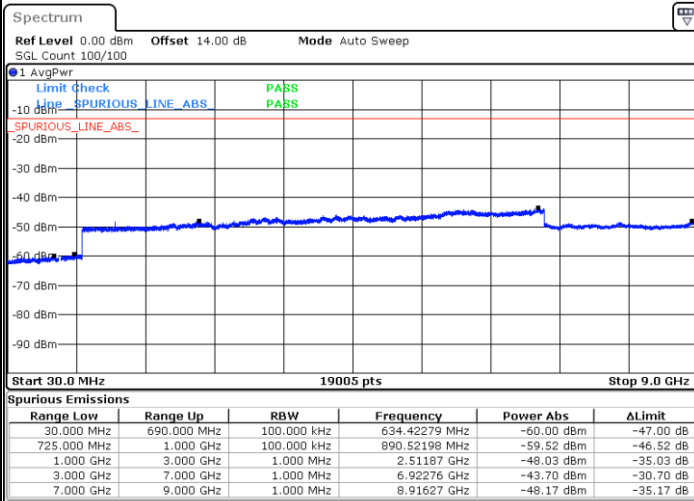


Date: 7.MAY.2022 11:47:19



Date: 7.MAY.2022 11:49:21

Highest Channel / 64QAM



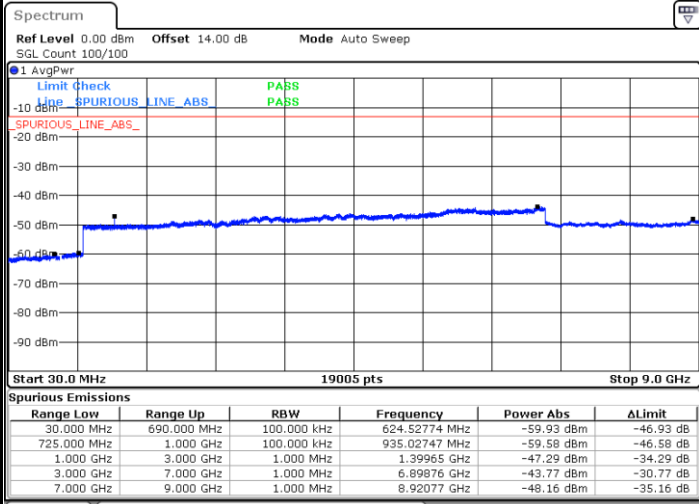
Date: 7.MAY.2022 11:54:08



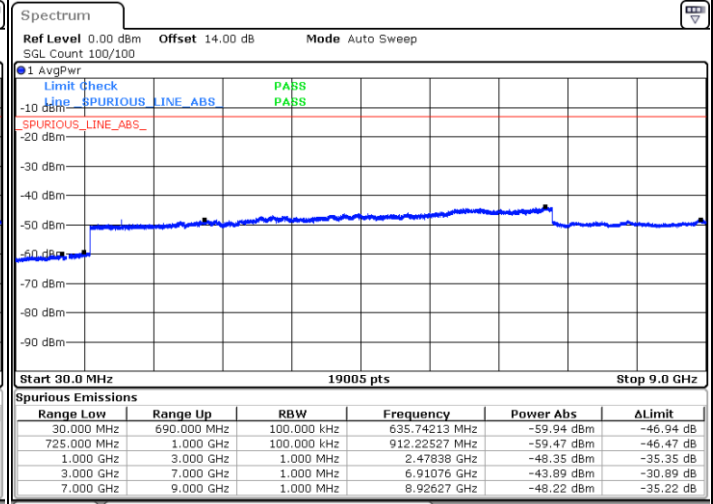
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

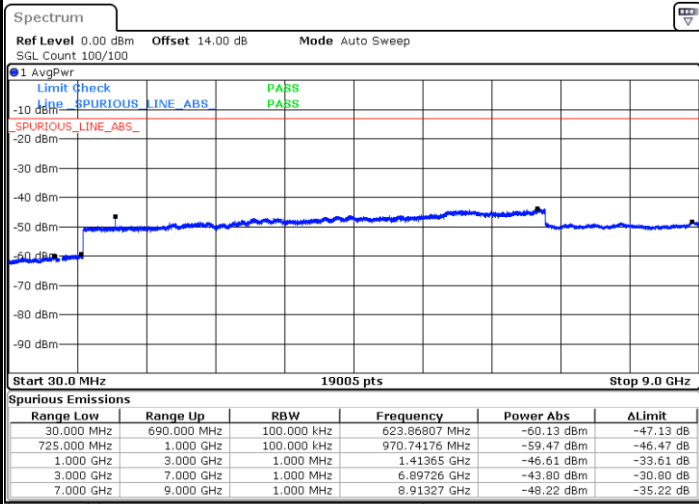


Date: 7.MAY.2022 12:46:24



Date: 7.MAY.2022 12:48:25

Highest Channel / 64QAM



Date: 7.MAY.2022 12:53:12



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	0.0001	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0010	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.6 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

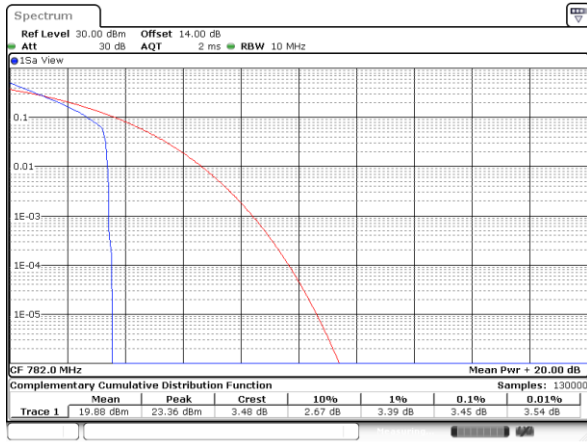
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.45	4.81	4.75	6.06	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	5.74	6.58	-	-	
Highest CH	-	-	-	-	



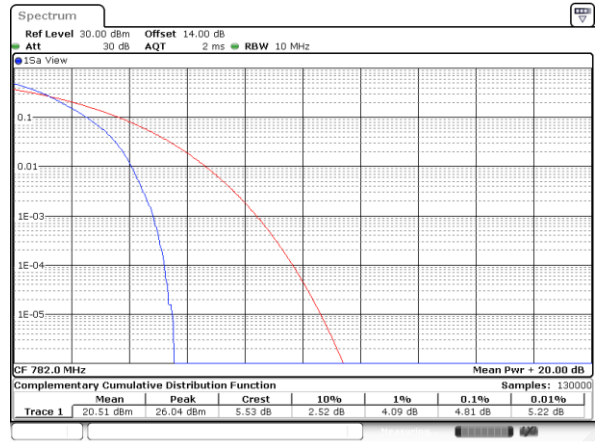
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 5.MAY.2022 14:36:28

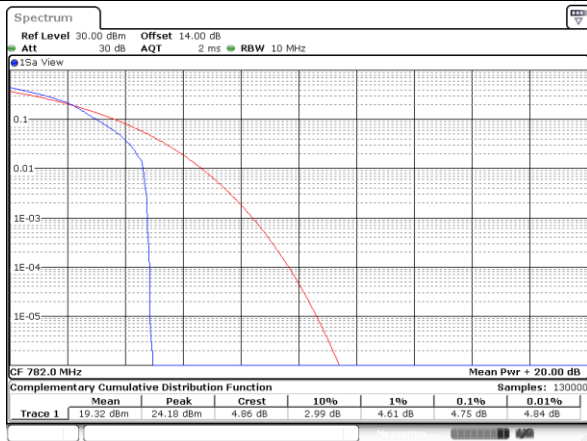
Middle Channel / Full RB



Date: 5.MAY.2022 14:36:54

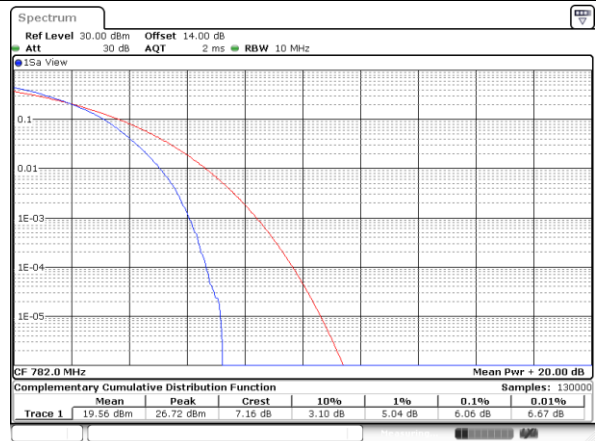
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 5.MAY.2022 14:35:37

Middle Channel / Full RB



Date: 5.MAY.2022 14:36:03

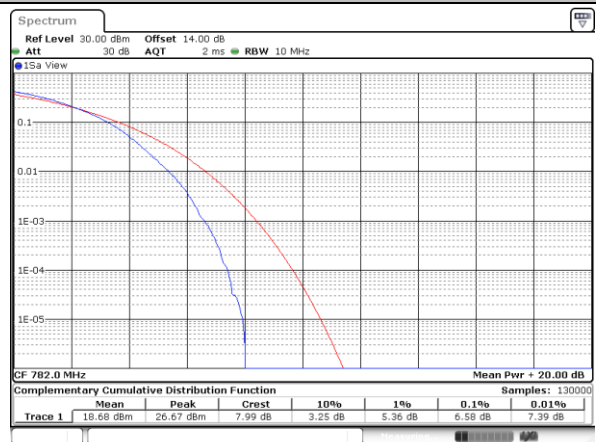
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 5.MAY.2022 14:34:46

Middle Channel / Full RB



Date: 5.MAY.2022 14:35:12



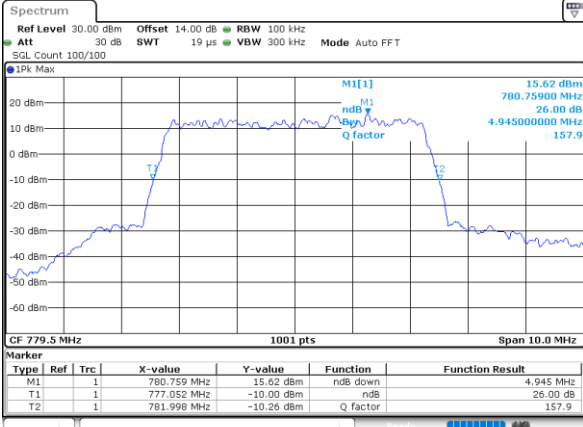
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.95	4.88	-	-	-	-	-	-
Middle CH	-	-	-	-	4.86	5.00	9.75	9.73	-	-	-	-
Highest CH	-	-	-	-	4.89	4.83	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.87	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.95	-	9.85	-	-	-	-	-
Highest CH	-	-	-	-	4.94	-	-	-	-	-	-	-



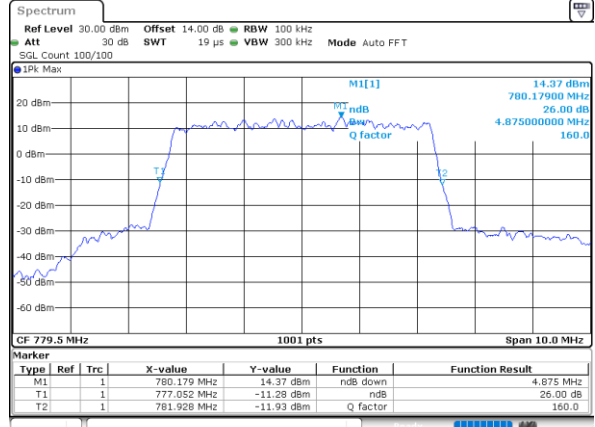
LTE Band 13

Lowest Channel / 5MHz / QPSK



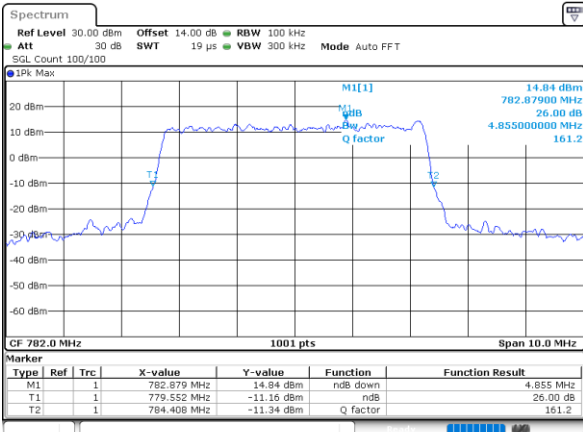
Date: 5.MAY.2022 13:34:02

Lowest Channel / 5MHz / 16QAM



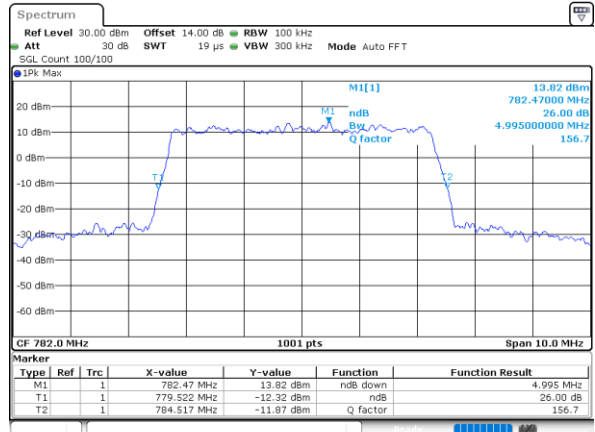
Date: 5.MAY.2022 13:33:38

Middle Channel / 5MHz / QPSK



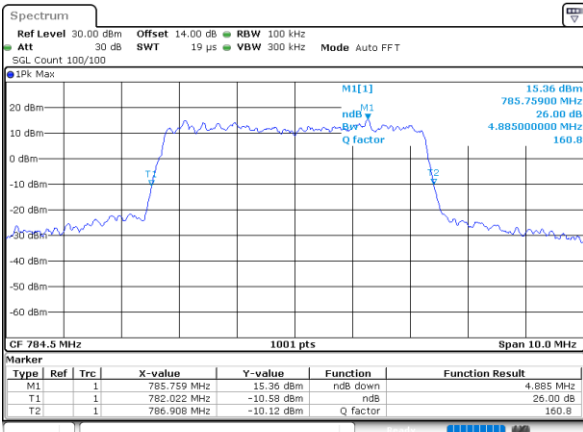
Date: 5.MAY.2022 13:46:47

Middle Channel / 5MHz / 16QAM



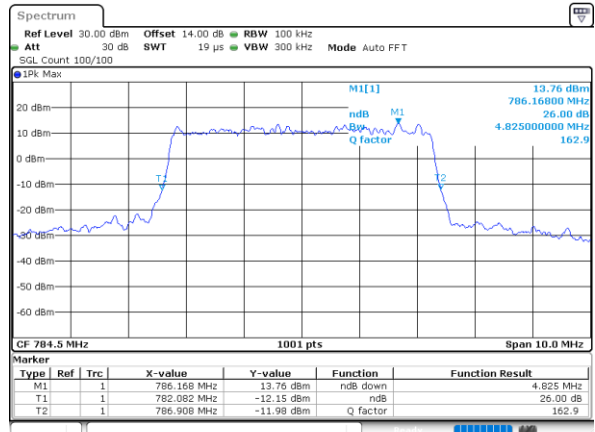
Date: 5.MAY.2022 13:47:11

Highest Channel / 5MHz / QPSK



Date: 5.MAY.2022 13:49:17

Highest Channel / 5MHz / 16QAM

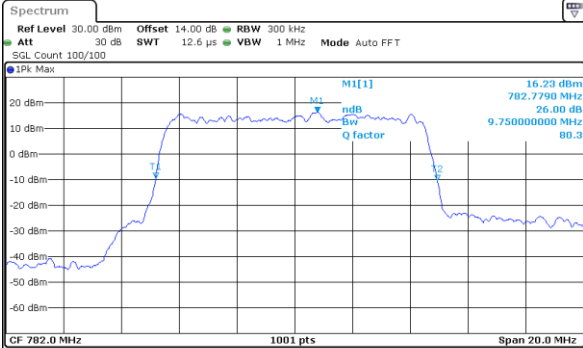


Date: 5.MAY.2022 13:48:53



LTE Band 13

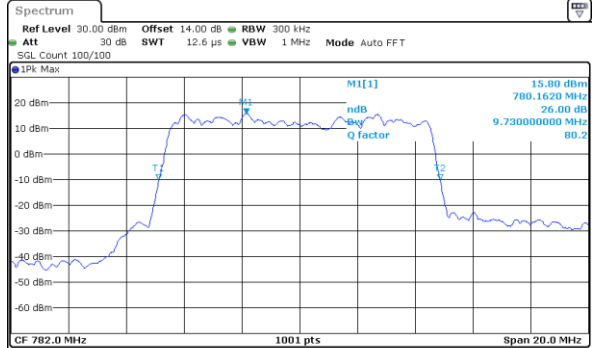
Middle Channel / 10MHz / QPSK



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		782.779 MHz	16.23 dBm	ndB down	9.75 MHz
T1	1		777.185 MHz	-9.37 dBm	ndB	26.00 dB
T2	1		786.935 MHz	-10.19 dBm	Q factor	80.3

Date: 5.MAY.2022 14:13:31

Middle Channel / 10MHz / 16QAM

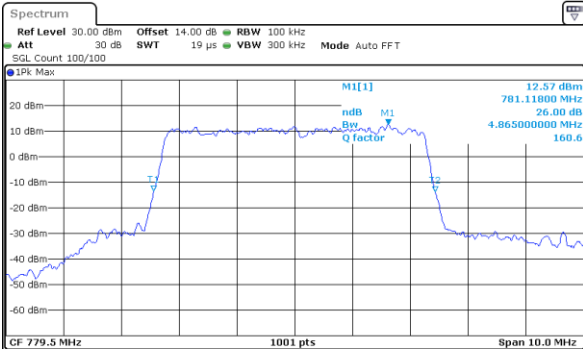


Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		780.162 MHz	15.80 dBm	ndB down	9.73 MHz
T1	1		777.125 MHz	-9.94 dBm	ndB	26.00 dB
T2	1		786.935 MHz	-9.93 dBm	Q factor	80.2

Date: 5.MAY.2022 14:13:07

LTE Band 13

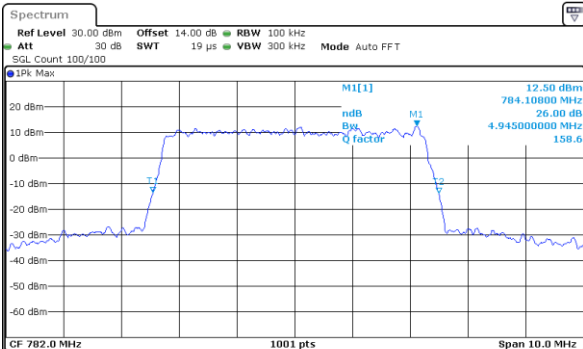
Lowest Channel / 5MHz / 64QAM



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		781.118 MHz	12.57 dBm	ndB down	4.865 MHz
T1	1		777.062 MHz	-13.52 dBm	ndB	26.00 dB
T2	1		781.928 MHz	-13.85 dBm	Q factor	160.6

Date: 5.MAY.2022 13:59:53

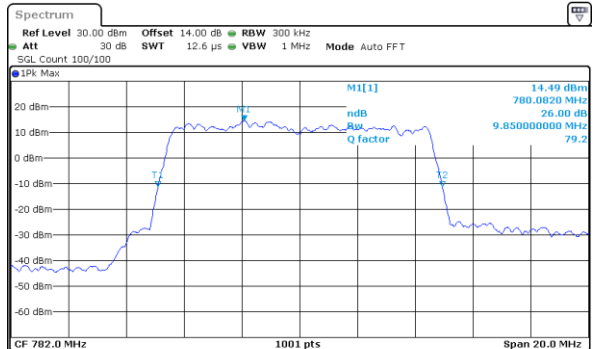
Middle Channel / 5MHz / 64QAM



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		784.10000 MHz	12.50 dBm	ndB down	4.945 MHz
T1	1		779.542 MHz	-13.46 dBm	ndB	26.00 dB
T2	1		784.488 MHz	-13.60 dBm	Q factor	158.6

Date: 5.MAY.2022 14:06:17

Middle Channel / 10MHz / 64QAM

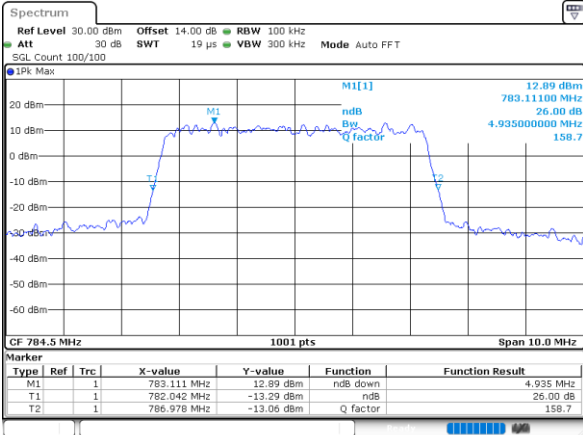


Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		780.082 MHz	14.49 dBm	ndB down	9.85 MHz
T1	1		777.085 MHz	-11.11 dBm	ndB	26.00 dB
T2	1		786.935 MHz	-11.19 dBm	Q factor	79.2

Date: 5.MAY.2022 14:27:47



Highest Channel / 5MHz / 64QAM



Date: 5 MAY 2022 14:07:10



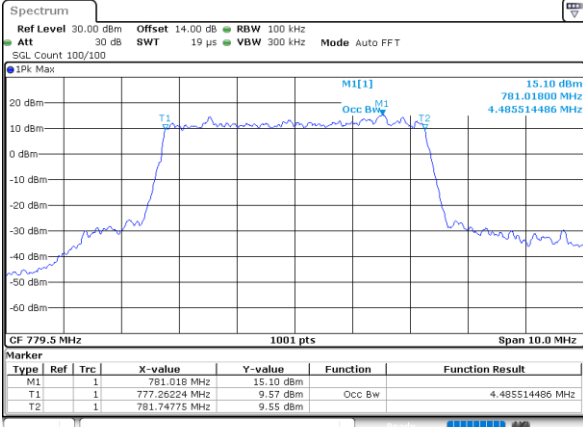
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.47	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	4.49	8.97	8.97	-	-	-	-
Highest CH	-	-	-	-	4.50	4.48	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.47	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.51	-	-	-	-	-	-	-



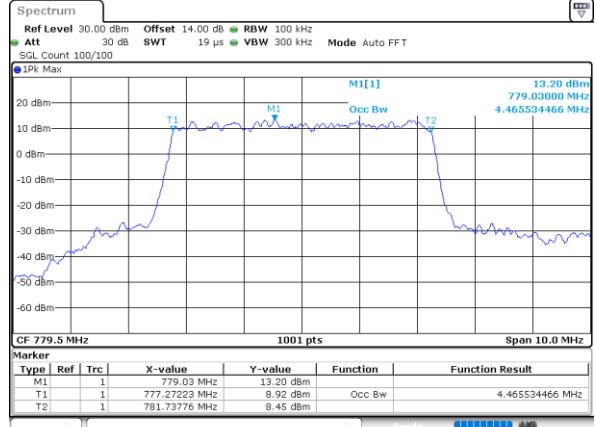
LTE Band 13

Lowest Channel / 5MHz / QPSK



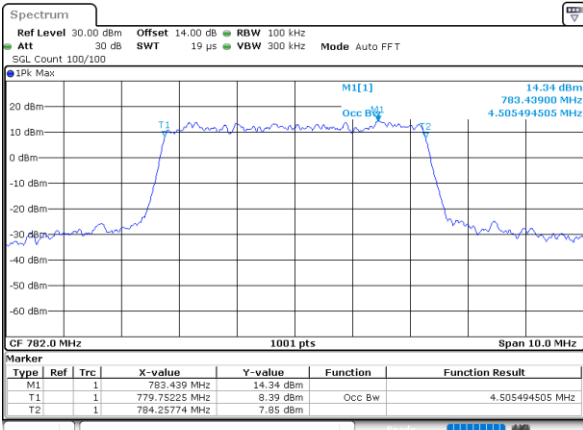
Date: 5.MAY.2022 13:32:59

Lowest Channel / 5MHz / 16QAM



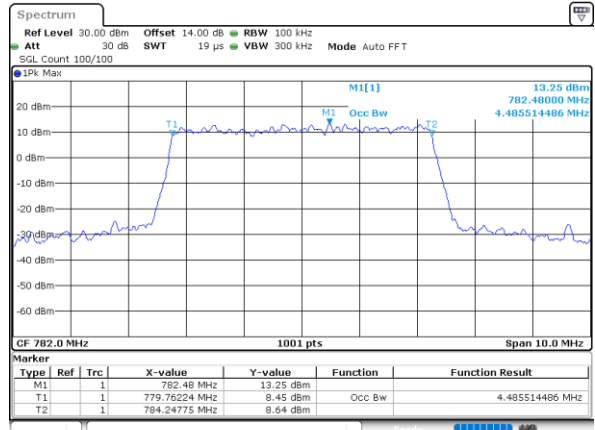
Date: 5.MAY.2022 13:33:23

Middle Channel / 5MHz / QPSK



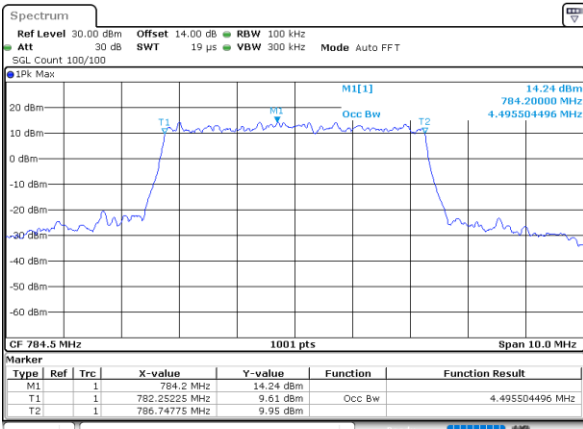
Date: 5.MAY.2022 13:47:50

Middle Channel / 5MHz / 16QAM



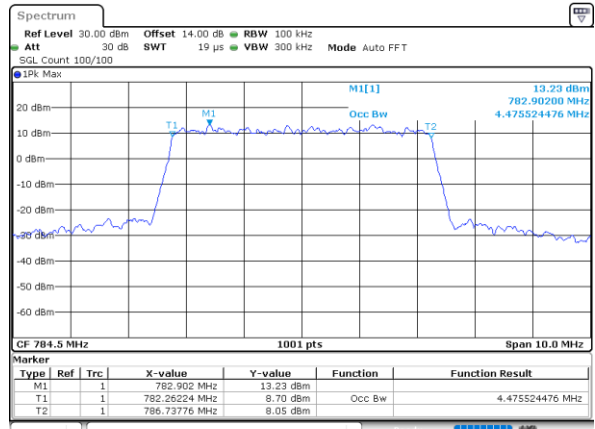
Date: 5.MAY.2022 13:47:56

Highest Channel / 5MHz / QPSK



Date: 5.MAY.2022 13:48:14

Highest Channel / 5MHz / 16QAM

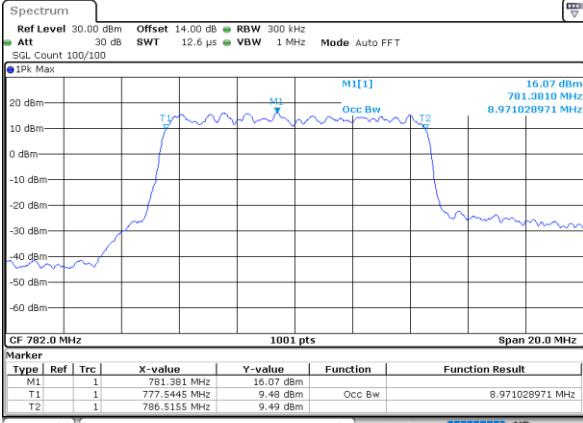


Date: 5.MAY.2022 13:48:38



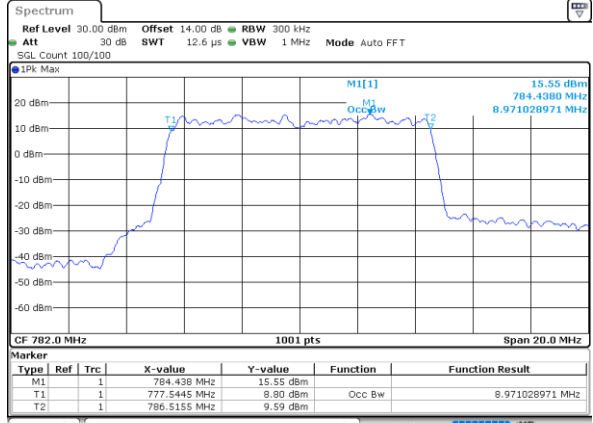
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 5.MAY.2022 14:12:28

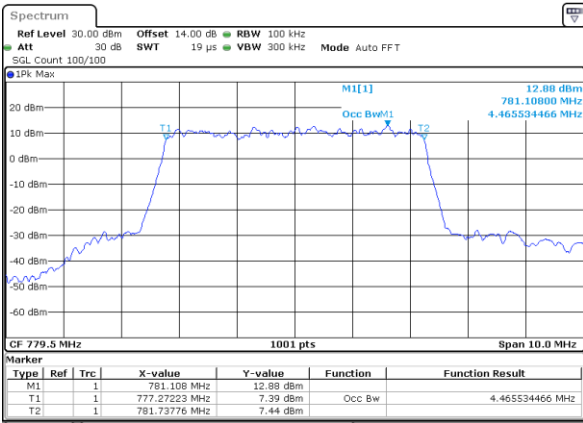
Middle Channel / 10MHz / 16QAM



Date: 5.MAY.2022 14:12:52

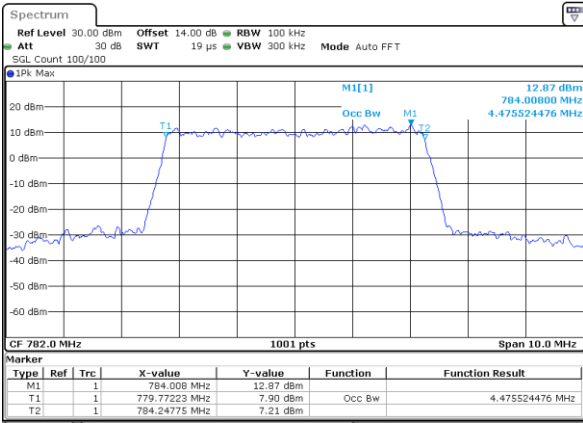
LTE Band 13

Lowest Channel / 5MHz / 64QAM



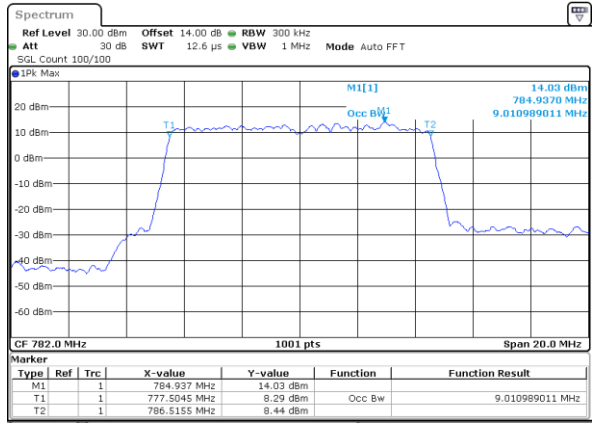
Date: 5.MAY.2022 13:59:38

Middle Channel / 5MHz / 64QAM



Date: 5.MAY.2022 14:06:32

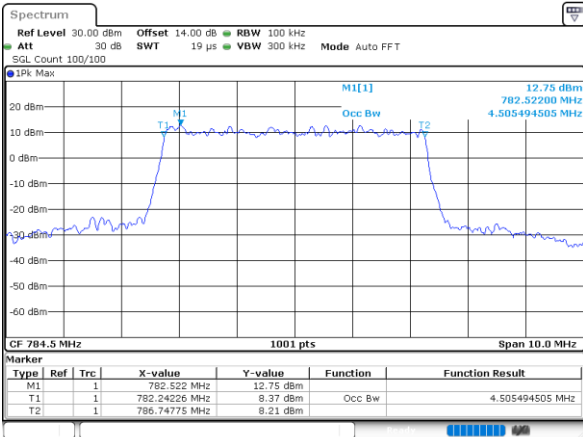
Middle Channel / 10MHz / 64QAM



Date: 5.MAY.2022 14:27:32



Highest Channel / 5MHz / 64QAM



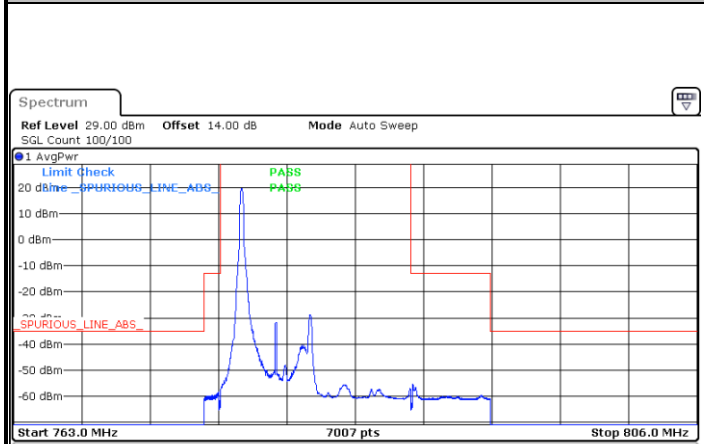
Date: 5.MAY.2022 14:10:56



Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

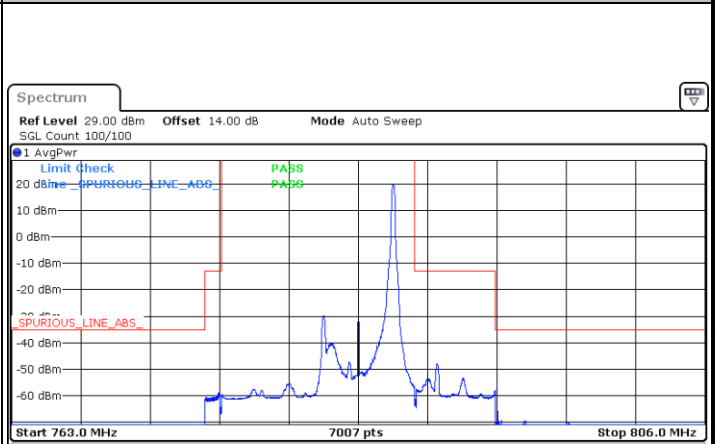
Lowest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.99401 MHz	-72.26 dBm	-37.26 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89775 MHz	-58.33 dBm	-45.33 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99076 MHz	-61.59 dBm	-48.59 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.34865 MHz	19.84 dBm	-10.16 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.09915 MHz	-58.25 dBm	-45.25 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.11224 MHz	-55.51 dBm	-42.51 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.65584 MHz	-71.29 dBm	-36.29 dB

Date: 5.MAY.2022 13:41:24

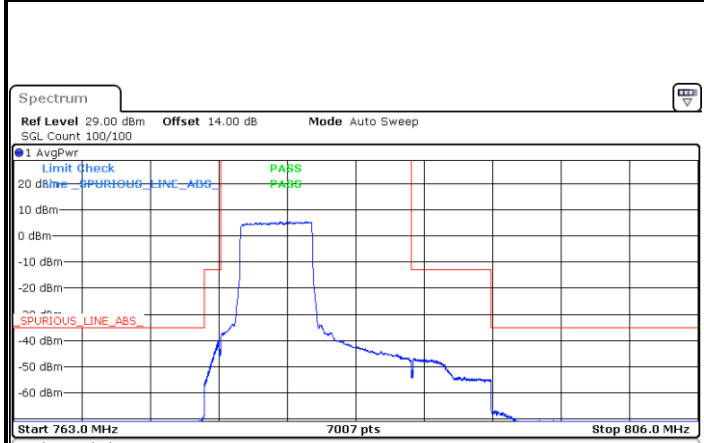
Highest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.81019 MHz	-72.13 dBm	-37.13 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.85100 MHz	-59.10 dBm	-46.10 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99625 MHz	-63.18 dBm	-50.18 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.68731 MHz	19.92 dBm	-10.08 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00485 MHz	-60.99 dBm	-47.99 dB
788.100 MHz	793.000 MHz	100.000 kHz	789.40944 MHz	-47.97 dBm	-34.97 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.17532 MHz	-65.96 dBm	-30.96 dB

Date: 5.MAY.2022 13:56:39

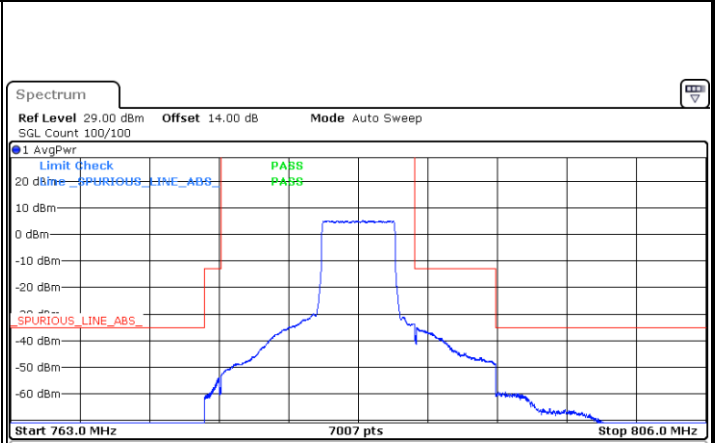
Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.98202 MHz	-68.23 dBm	-33.23 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89505 MHz	-40.06 dBm	-27.06 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99116 MHz	-43.20 dBm	-30.20 dB
776.000 MHz	788.000 MHz	100.000 kHz	780.38162 MHz	5.44 dBm	-24.56 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.03691 MHz	-51.40 dBm	-38.40 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.13671 MHz	-46.88 dBm	-33.88 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.11039 MHz	-66.51 dBm	-31.51 dB

Date: 5.MAY.2022 13:35:46

Highest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.75025 MHz	-72.16 dBm	-37.16 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-53.91 dBm	-40.91 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99476 MHz	-57.53 dBm	-44.53 dB
776.000 MHz	788.000 MHz	100.000 kHz	784.75724 MHz	5.33 dBm	-24.67 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00235 MHz	-37.80 dBm	-24.80 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10245 MHz	-35.05 dBm	-22.05 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.16234 MHz	-59.22 dBm	-24.22 dB

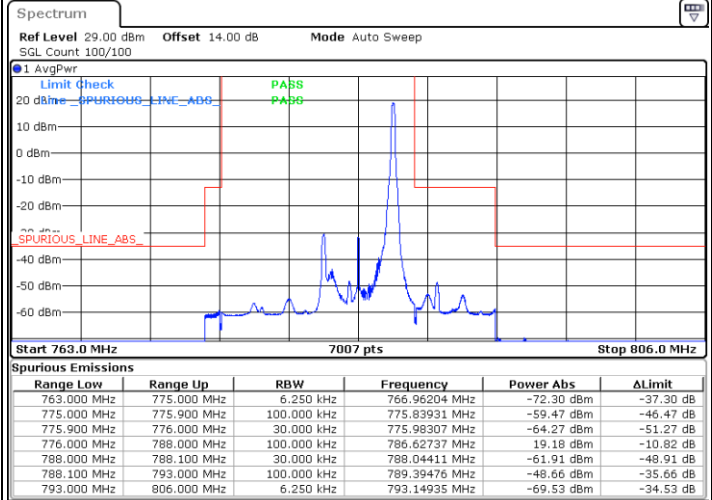
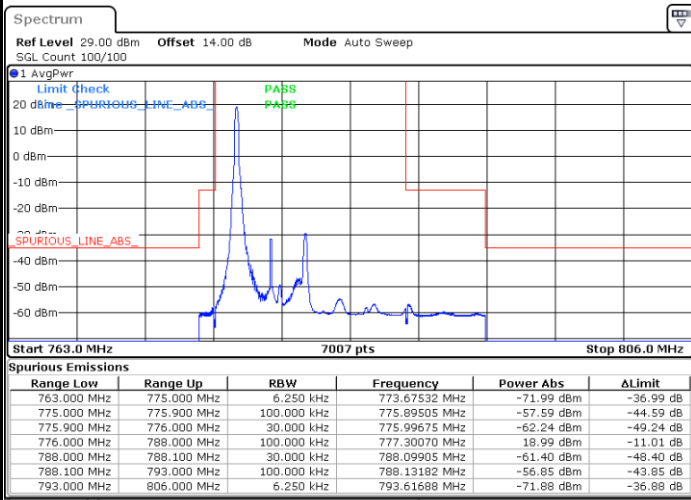
Date: 5.MAY.2022 13:51:00



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

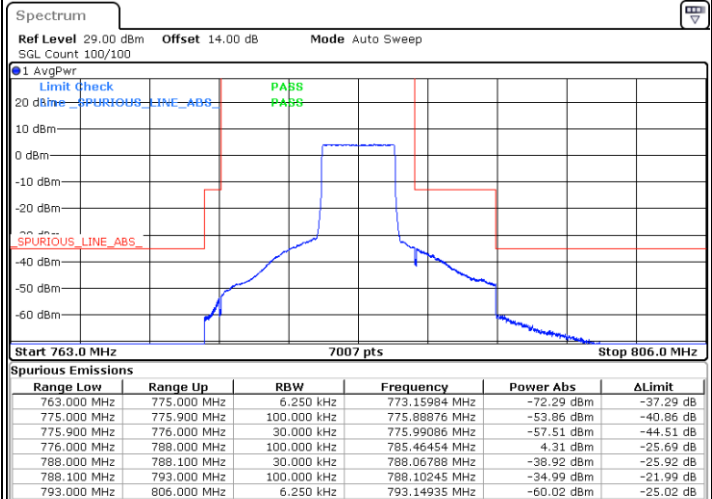
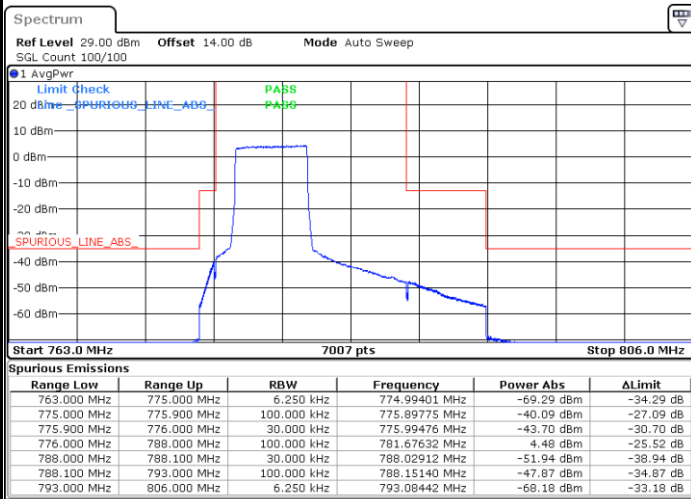


Date: 5.MAY.2022 13:39:31

Date: 5.MAY.2022 13:54:46

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 5.MAY.2022 13:37:38

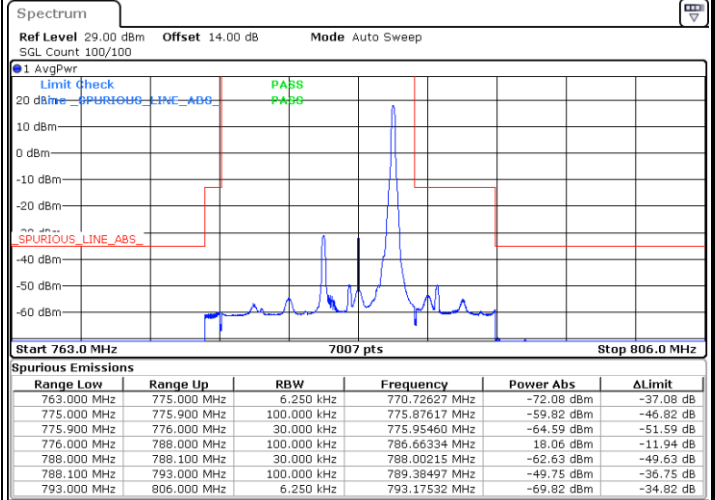
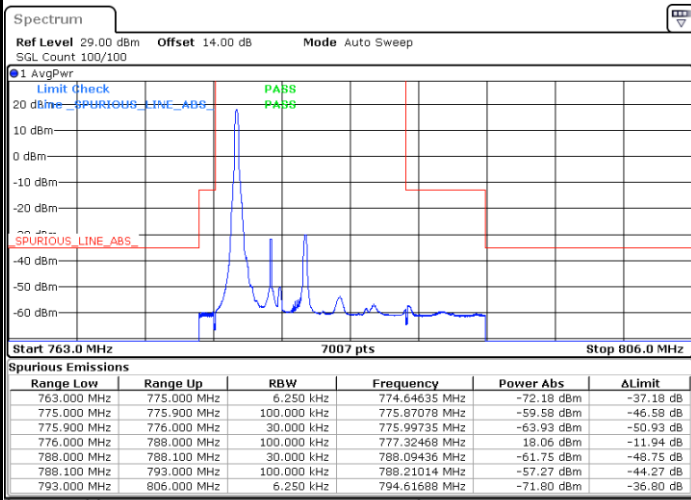
Date: 5.MAY.2022 13:52:53



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

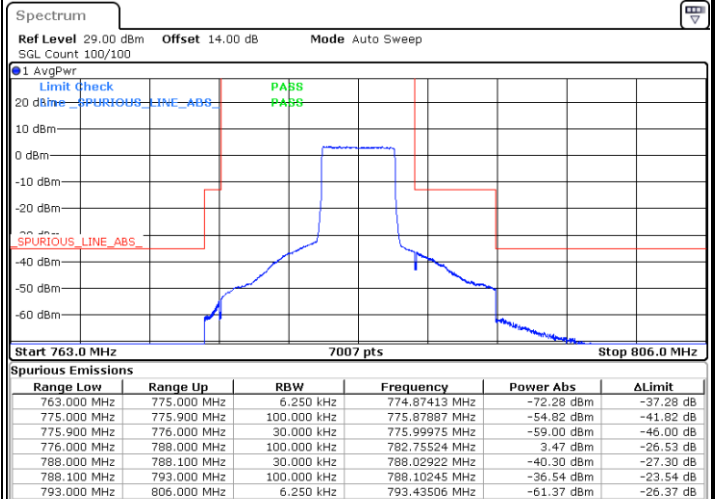
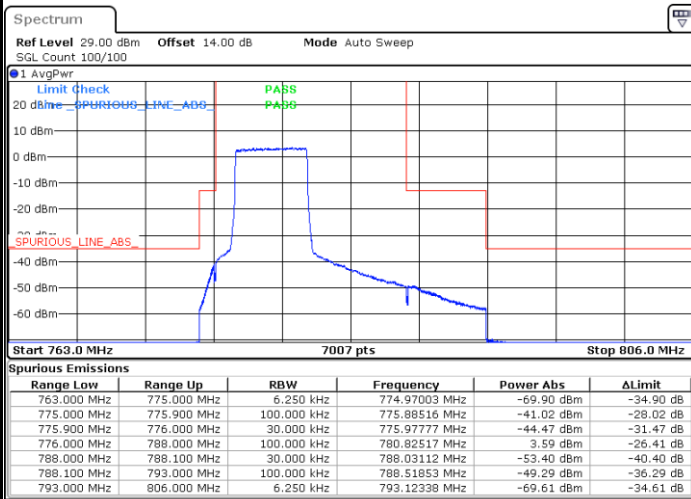


Date: 5.MAY.2022 14:03:28

Date: 5.MAY.2022 14:10:46

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 5.MAY.2022 14:01:36

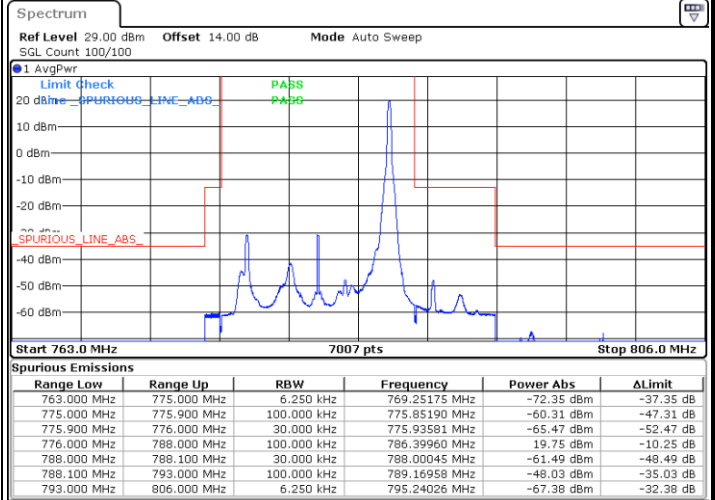
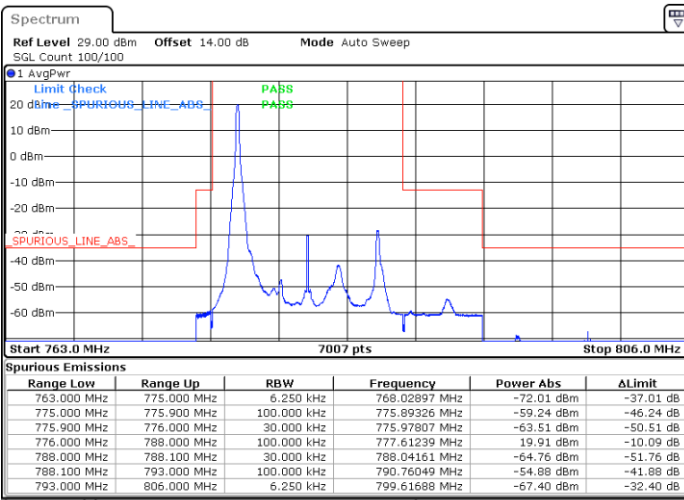
Date: 5.MAY.2022 14:08:53



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

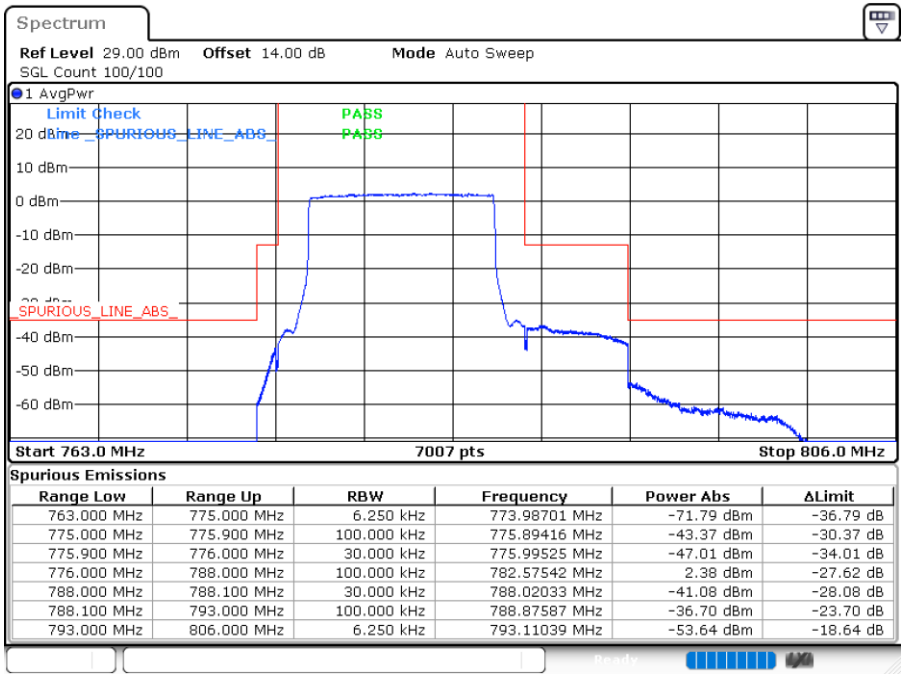
Highest Band Edge / 1 RB



Date: 5.MAY.2022 14:20:50

Date: 5.MAY.2022 14:22:42

Band Edge / Full RB



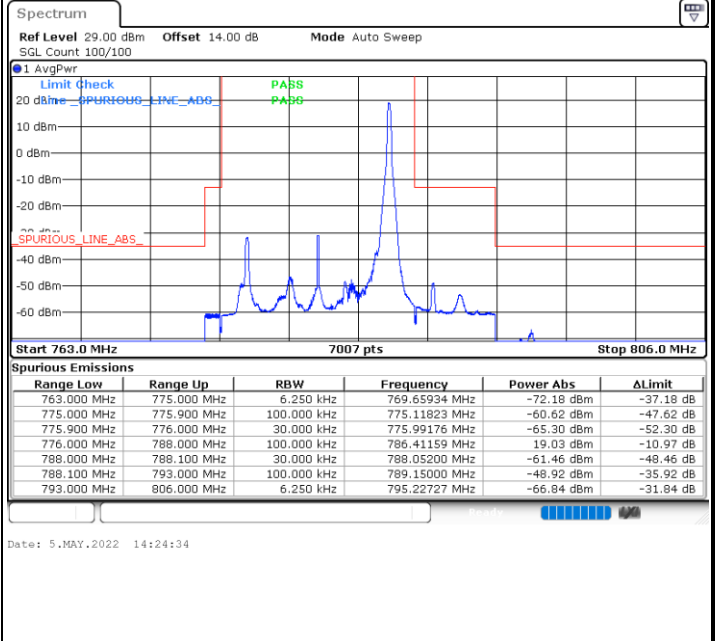
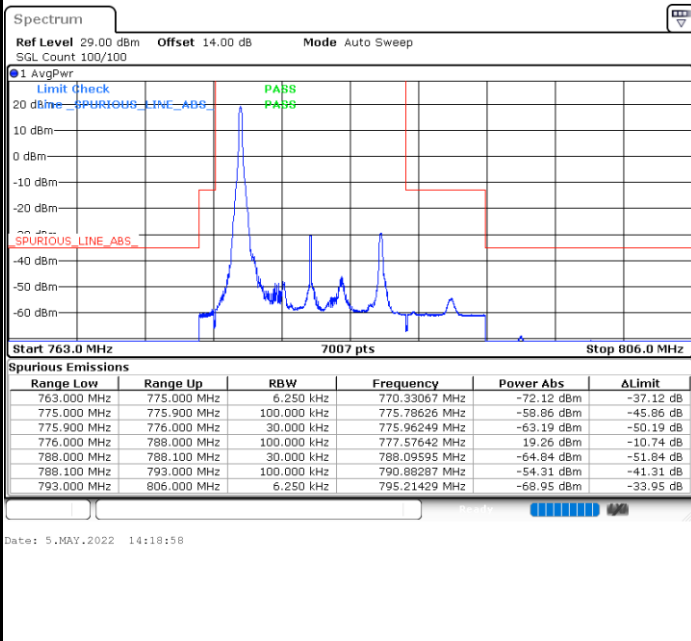
Date: 5.MAY.2022 14:15:14



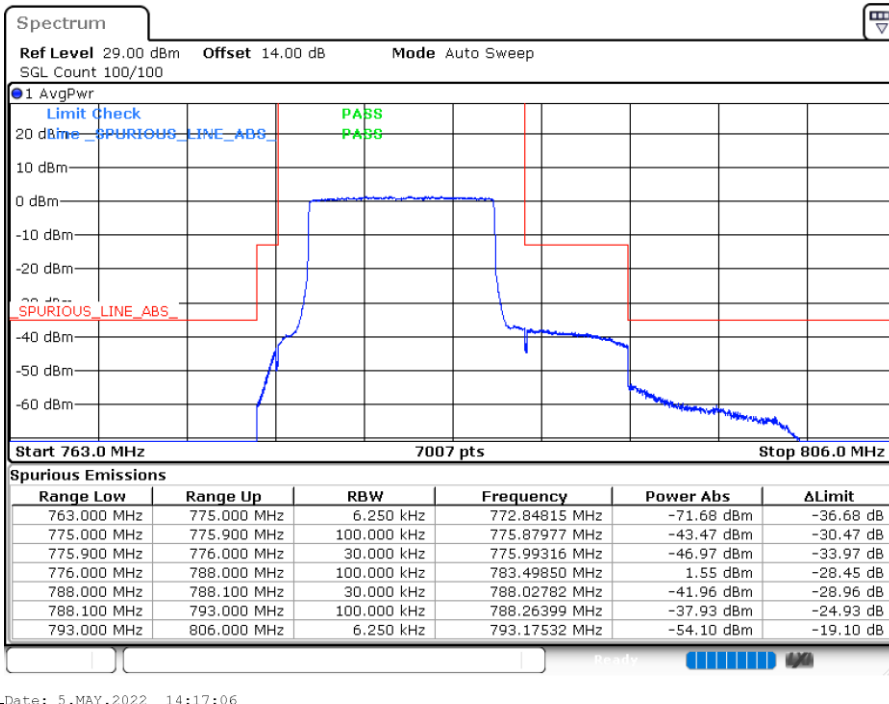
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



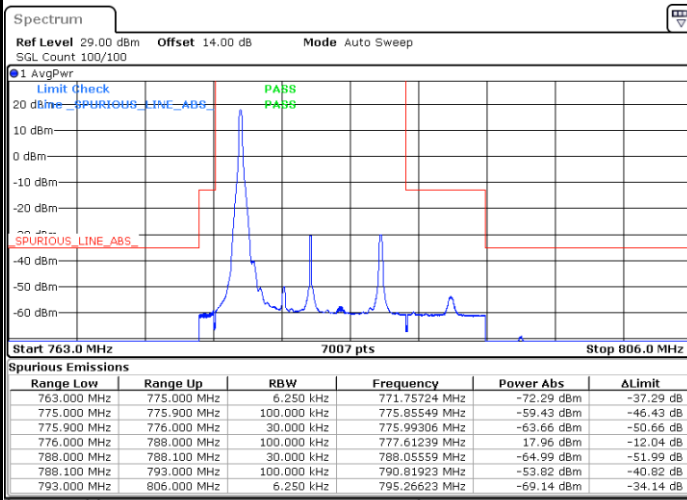
Band Edge / Full RB





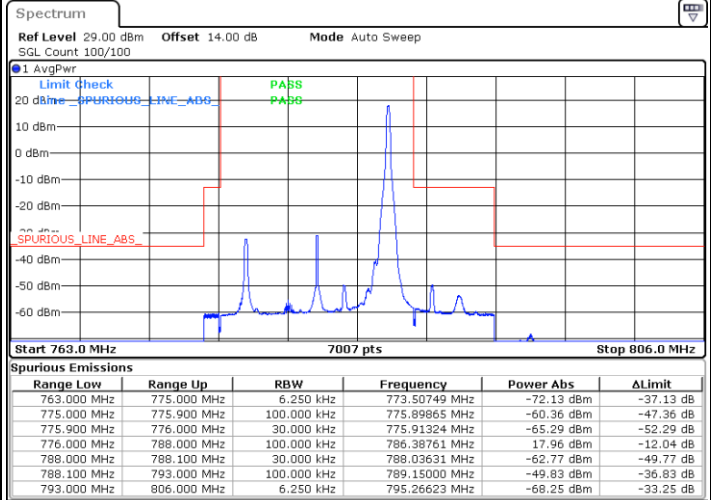
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



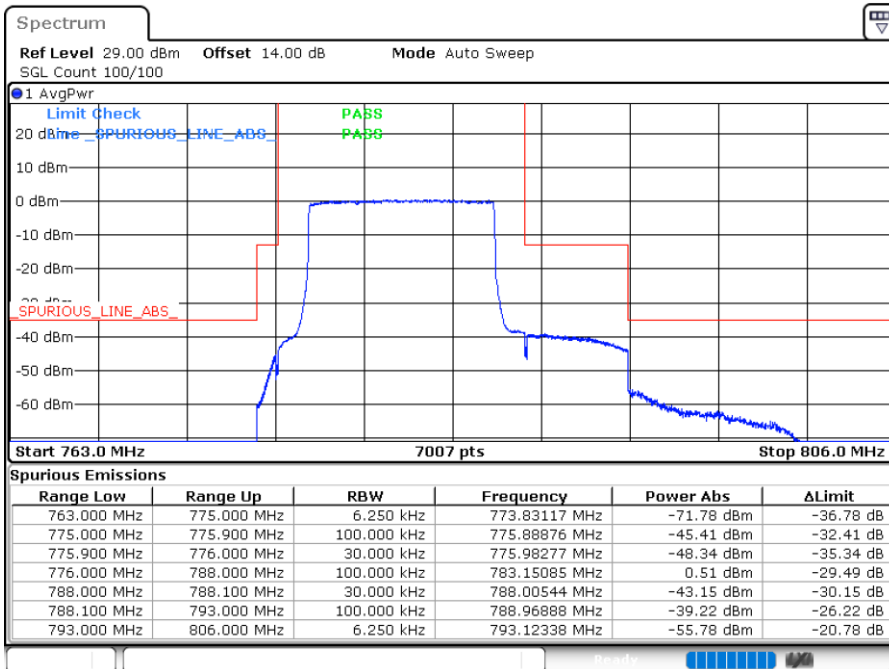
Date: 5.MAY.2022 14:31:22

Highest Band Edge / 1 RB



Date: 5.MAY.2022 14:33:14

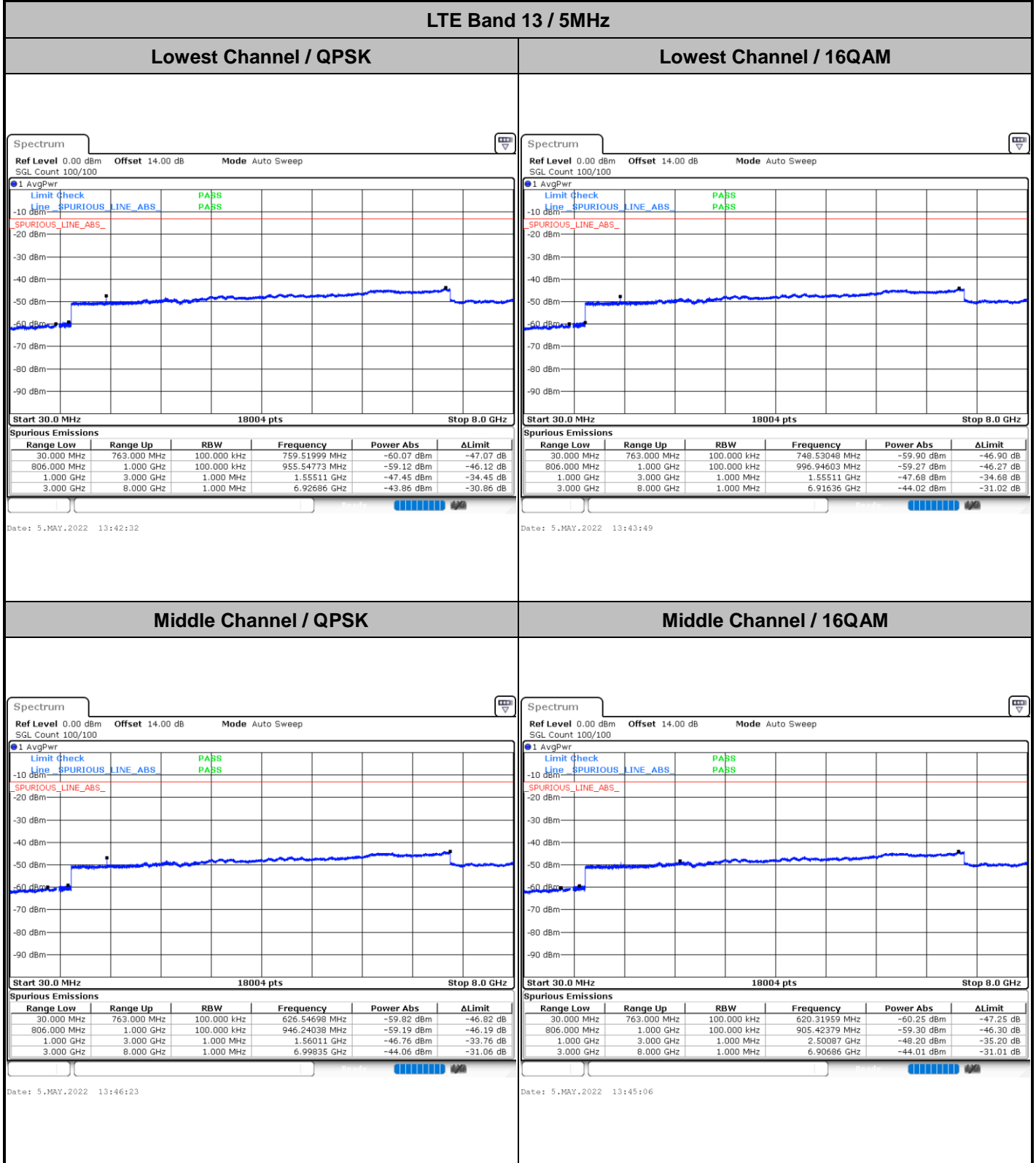
Band Edge / Full RB



Date: 5.MAY.2022 14:29:30



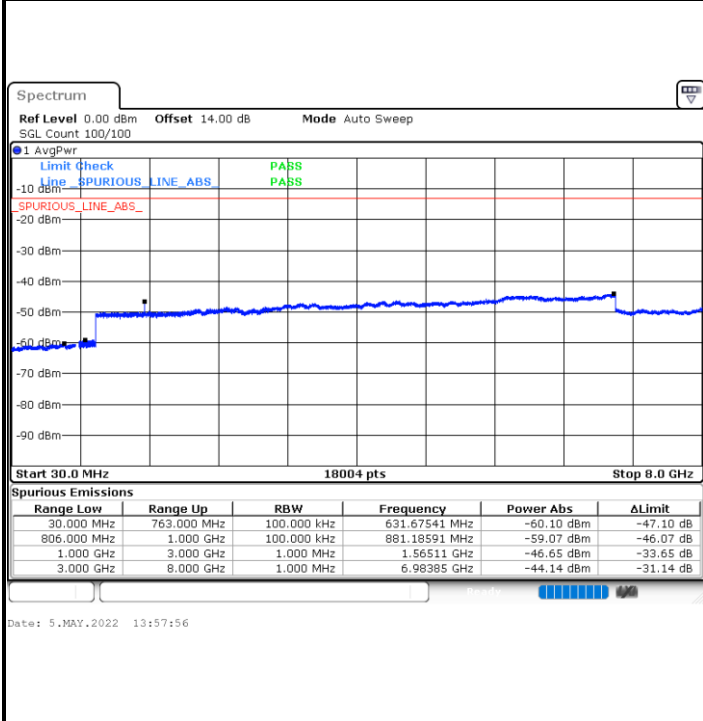
Conducted Spurious Emission



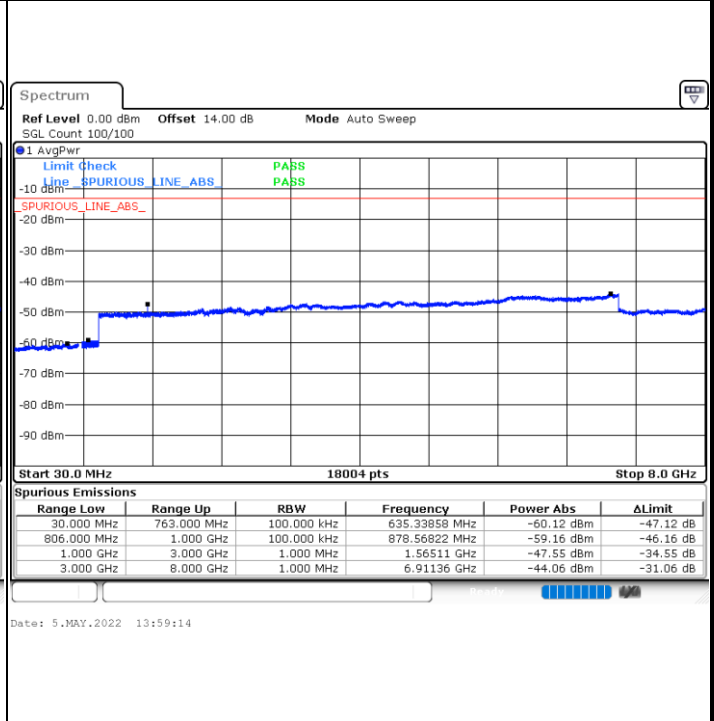


LTE Band 13 / 5MHz

Highest Channel / QPSK

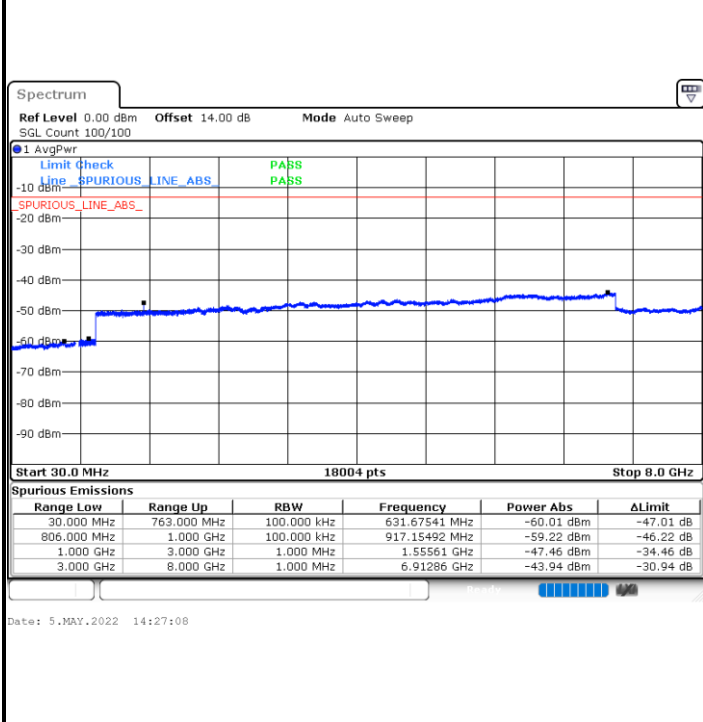


Highest Channel / 16QAM

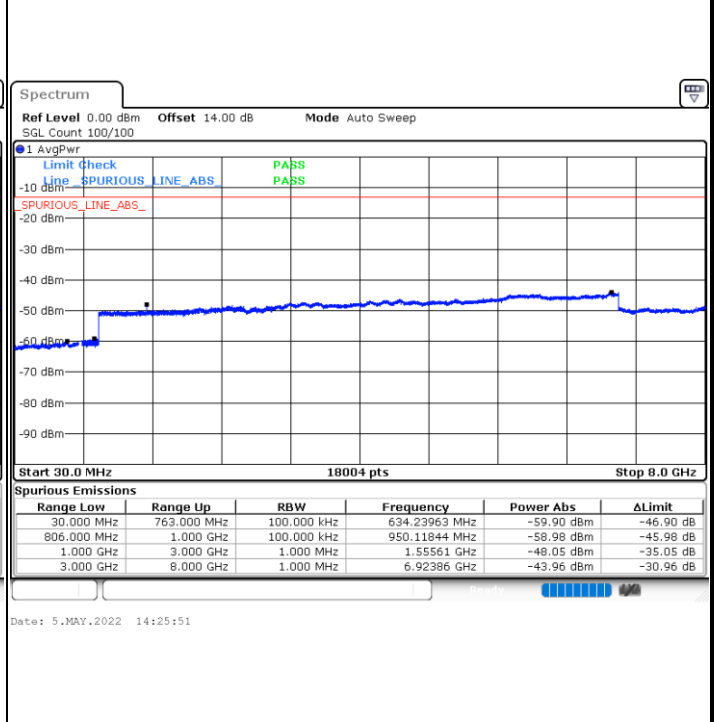


LTE Band 13 / 10MHz

Middle Channel / QPSK



Middle Channel / 16QAM

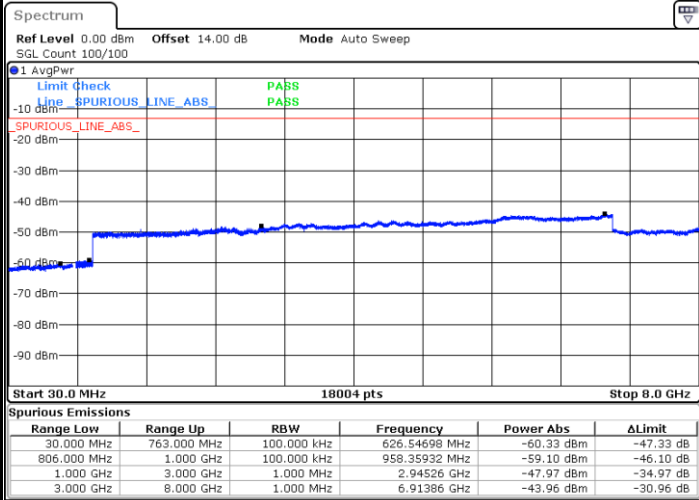




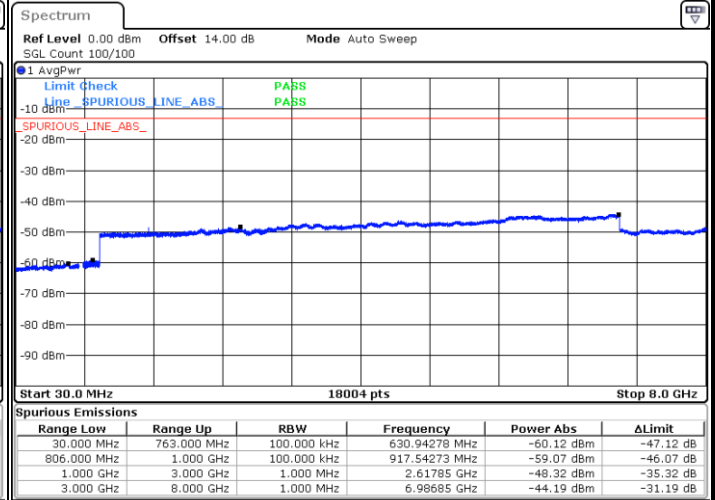
LTE Band 13 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

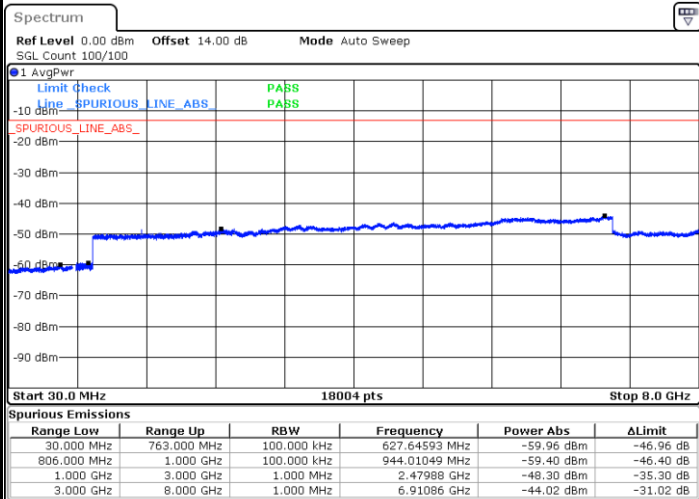


Date: 5.MAY.2022 14:04:36



Date: 5.MAY.2022 14:05:53

Highest Channel / 64QAM

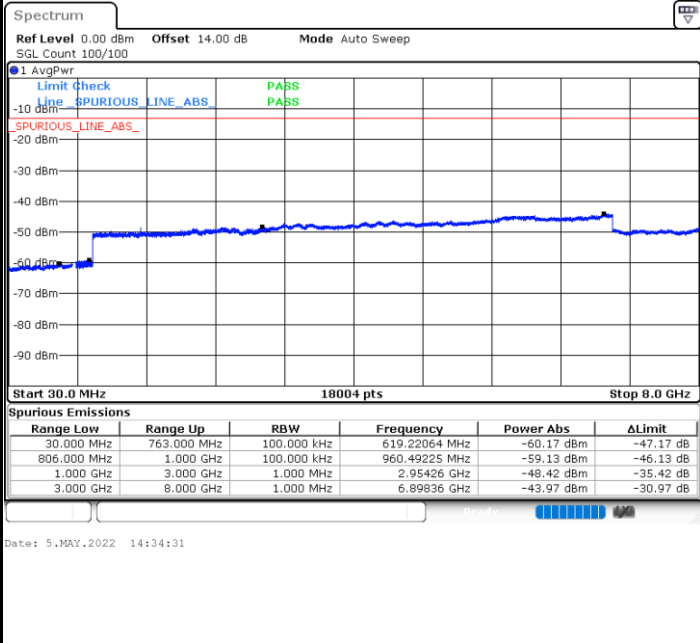


Date: 5.MAY.2022 14:12:04



LTE Band 13 / 10MHz

Middle Channel / 64QAM





Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0015	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.6 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

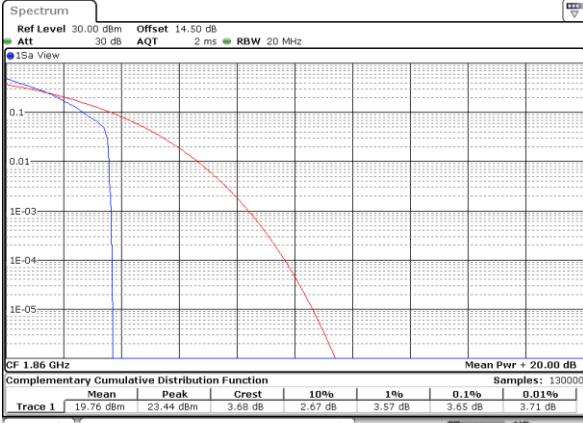
Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.65	4.58	5.19	5.94	PASS
Middle CH	3.77	4.61	5.71	6.03	
Highest CH	3.68	4.84	5.42	6.12	
Mode	LTE Band 25 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.58	6.52	-	-	PASS
Middle CH	6.52	6.55	-	-	
Highest CH	6.75	6.81	-	-	



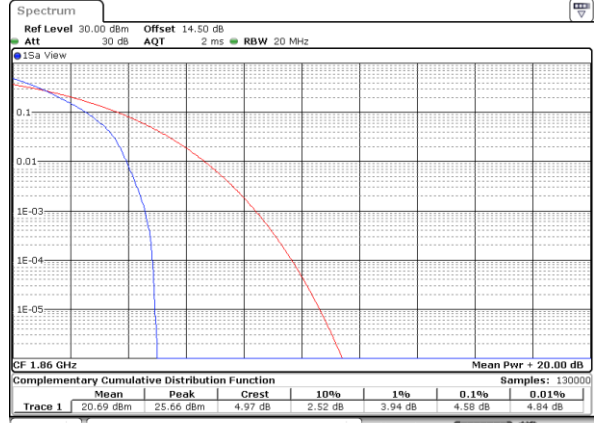
LTE Band 25 / 20MHz / QPSK

Lowest Channel / 1RB



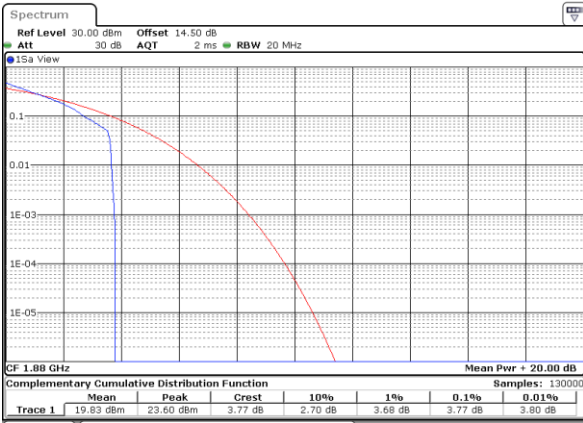
Date: 30_MAY.2022 23:33:14

Lowest Channel / Full RB



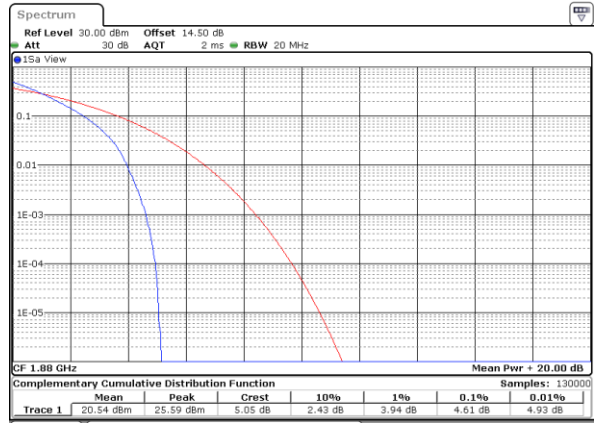
Date: 30_MAY.2022 23:33:59

Middle Channel / 1RB



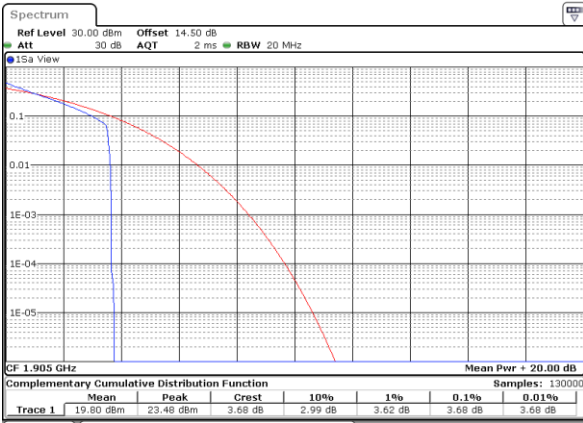
Date: 30_MAY.2022 23:35:05

Middle Channel / Full RB



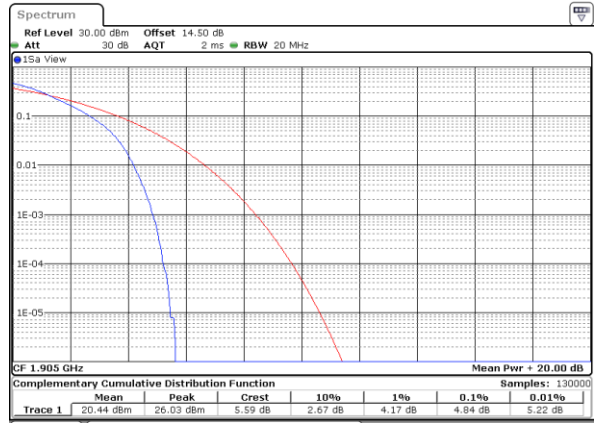
Date: 30_MAY.2022 23:36:02

Highest Channel / 1RB



Date: 30_MAY.2022 23:37:38

Highest Channel / Full RB



Date: 30_MAY.2022 23:38:05