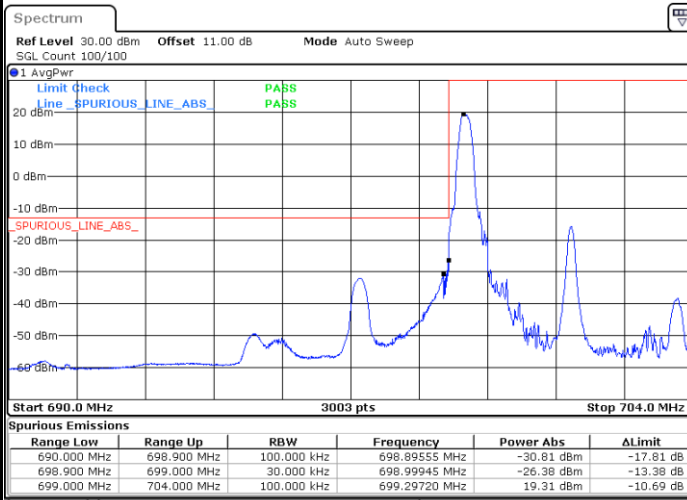




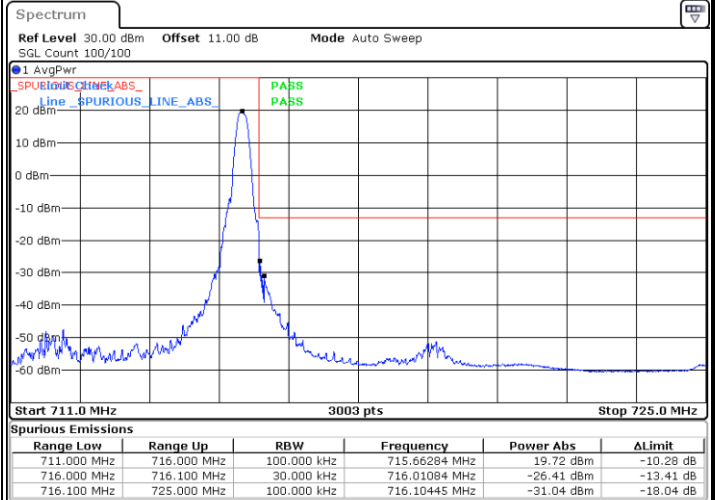
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



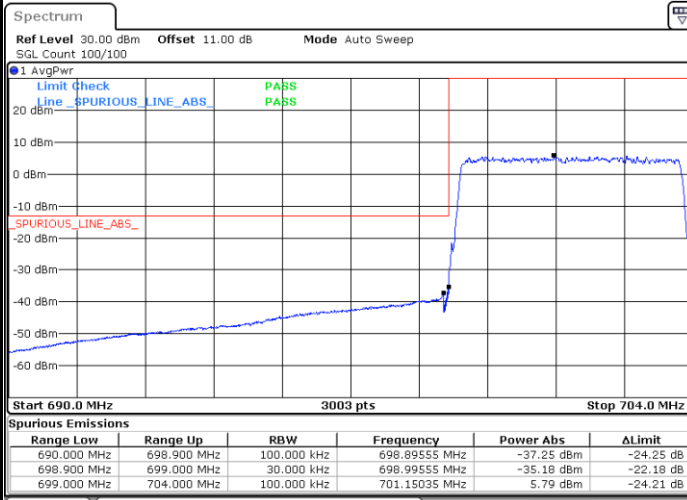
Date: 17.AUG.2020 19:56:44

Highest Band Edge / 1 RB



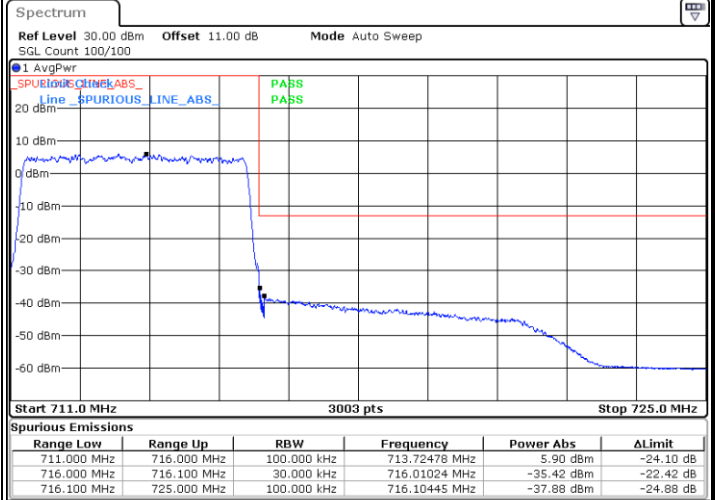
Date: 17.AUG.2020 20:04:09

Lowest Band Edge / Full RB



Date: 17.AUG.2020 19:56:09

Highest Band Edge / Full RB

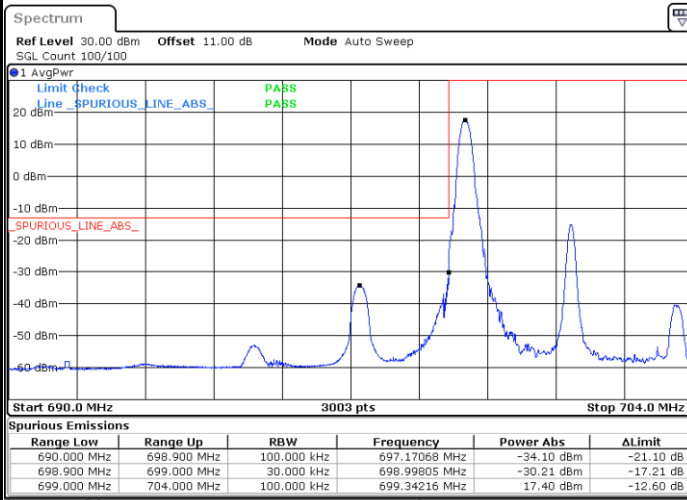


Date: 17.AUG.2020 20:02:59



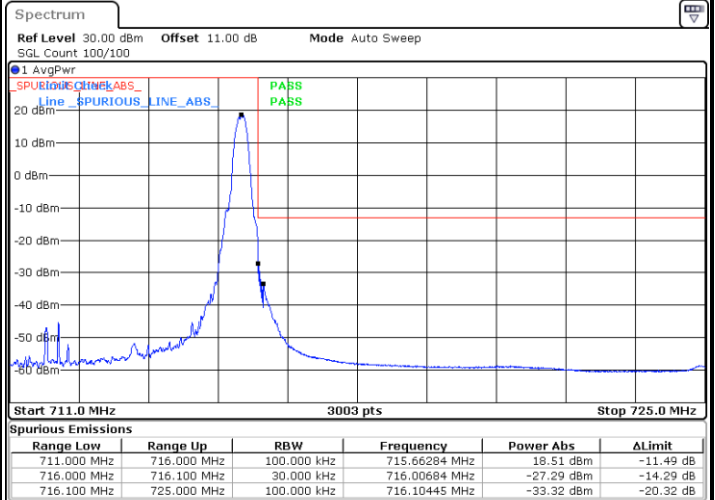
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



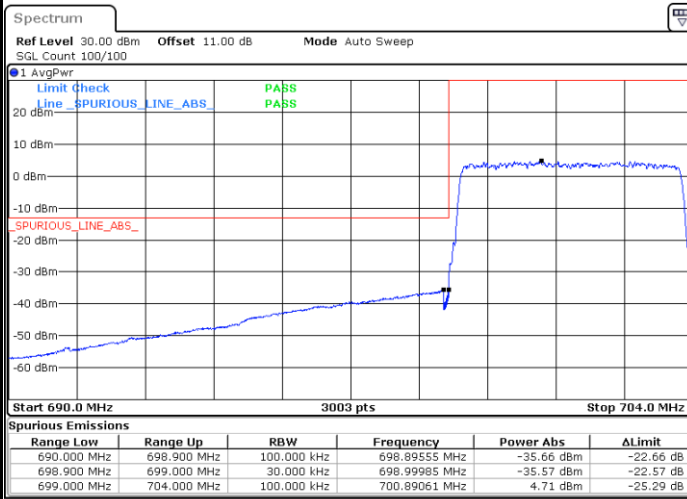
Date: 17.AUG.2020 19:50:02

Highest Band Edge / 1 RB



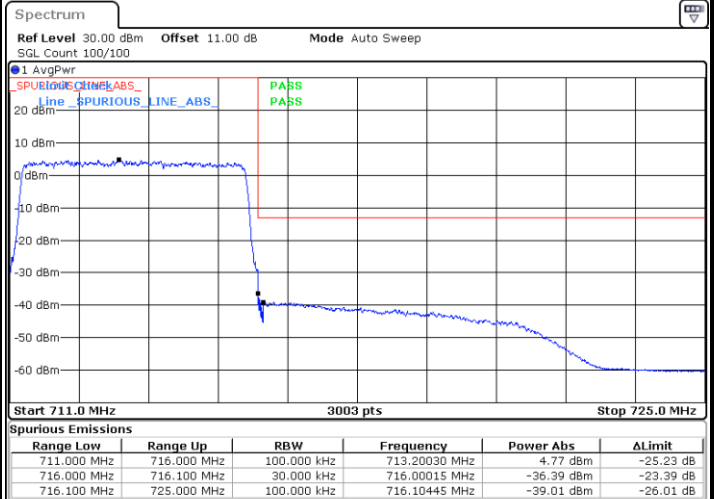
Date: 17.AUG.2020 19:53:27

Lowest Band Edge / Full RB



Date: 17.AUG.2020 19:49:28

Highest Band Edge / Full RB

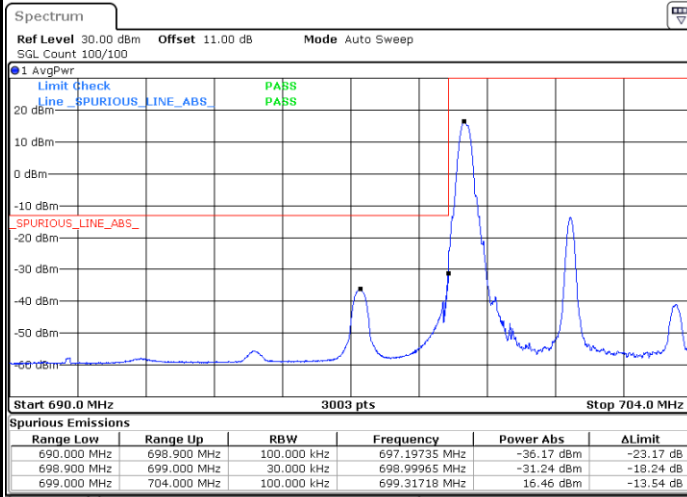


Date: 17.AUG.2020 19:52:52



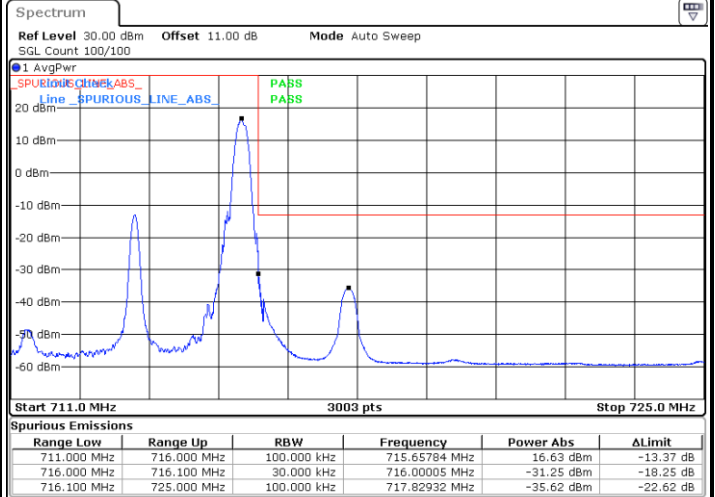
LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



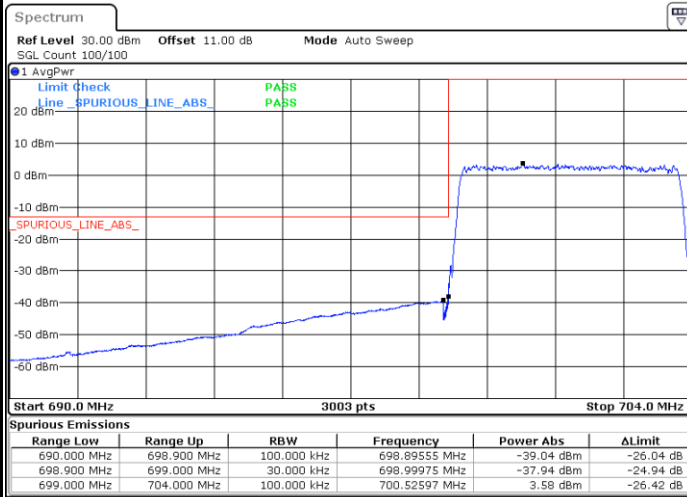
Date: 19.AUG.2020 10:49:20

Highest Band Edge / 1 RB



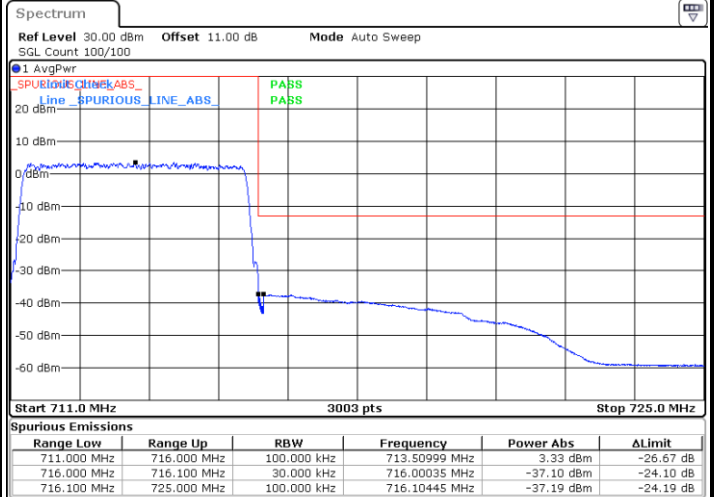
Date: 19.AUG.2020 10:52:12

Lowest Band Edge / Full RB



Date: 19.AUG.2020 10:48:44

Highest Band Edge / Full RB

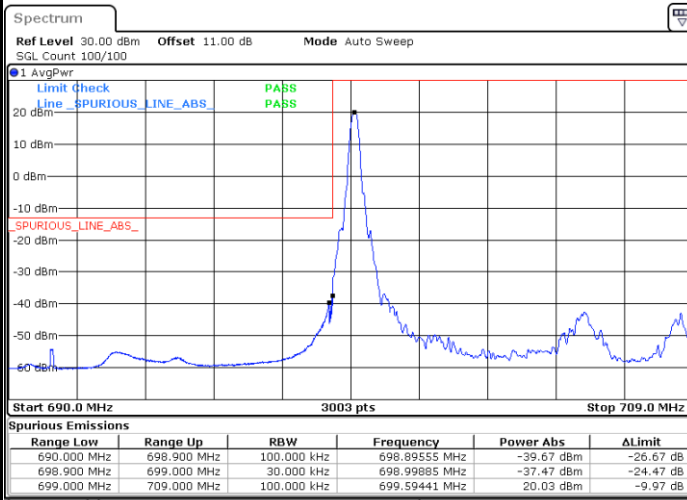


Date: 19.AUG.2020 10:50:58



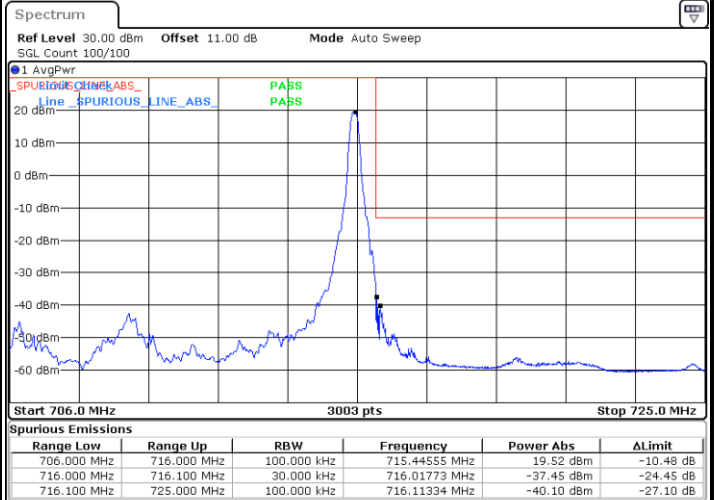
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



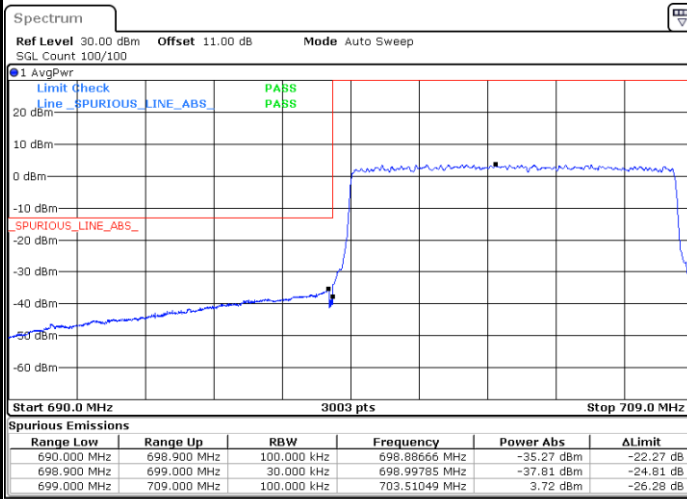
Date: 17.AUG.2020 20:08:46

Highest Band Edge / 1 RB



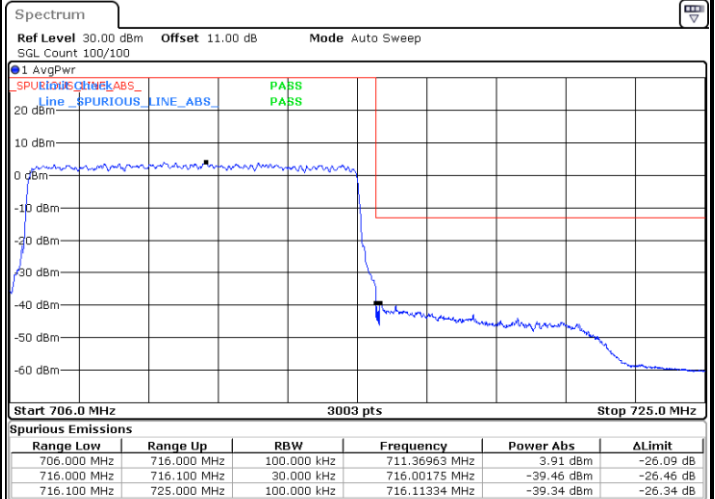
Date: 17.AUG.2020 20:15:36

Lowest Band Edge / Full RB



Date: 17.AUG.2020 20:07:01

Highest Band Edge / Full RB

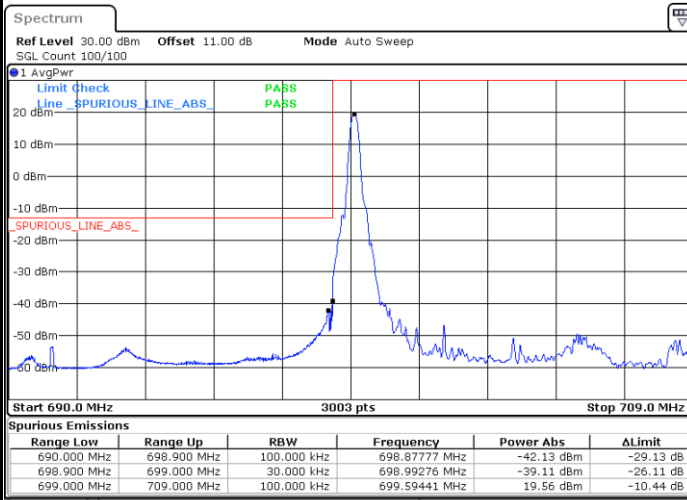


Date: 17.AUG.2020 20:13:52



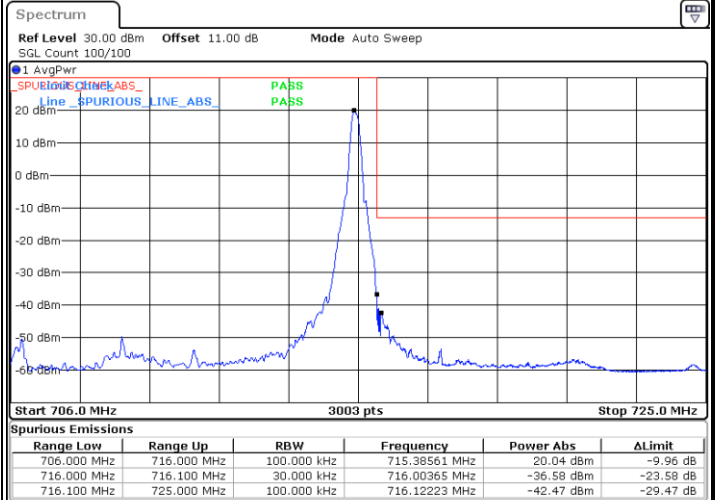
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



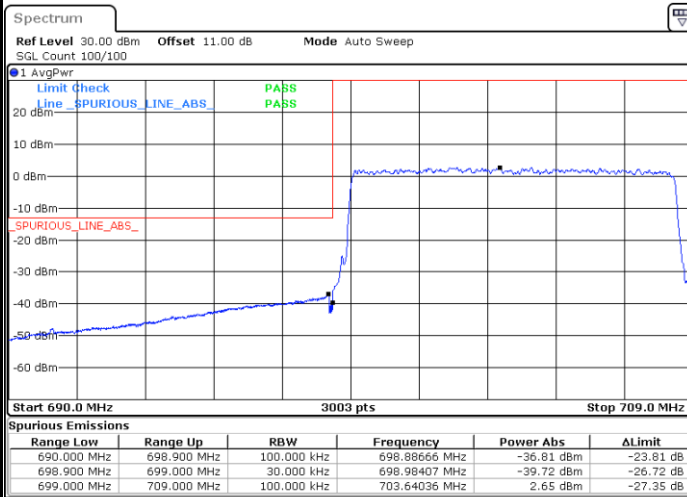
Date: 17.AUG.2020 20:08:11

Highest Band Edge / 1 RB



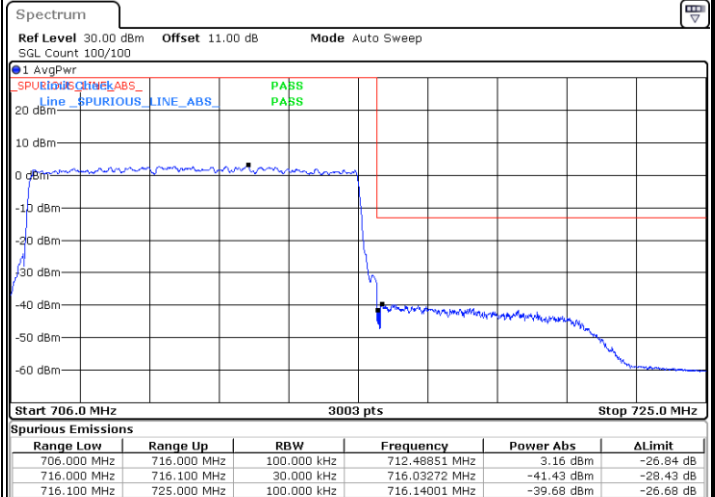
Date: 17.AUG.2020 20:15:02

Lowest Band Edge / Full RB



Date: 17.AUG.2020 20:07:36

Highest Band Edge / Full RB

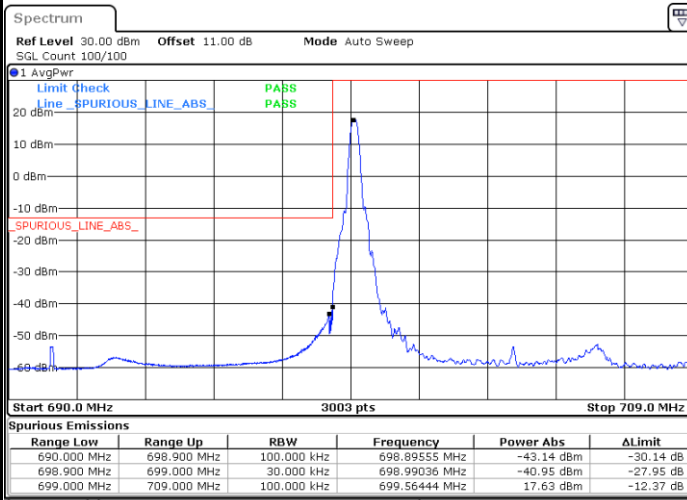


Date: 17.AUG.2020 20:14:27



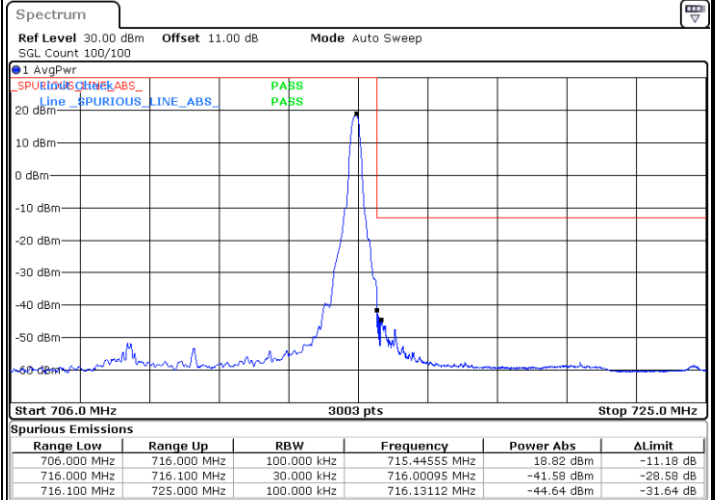
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



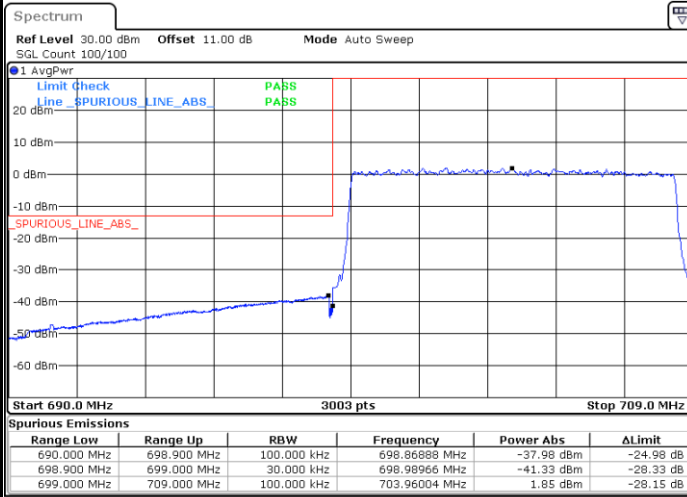
Date: 17.AUG.2020 20:18:39

Highest Band Edge / 1 RB



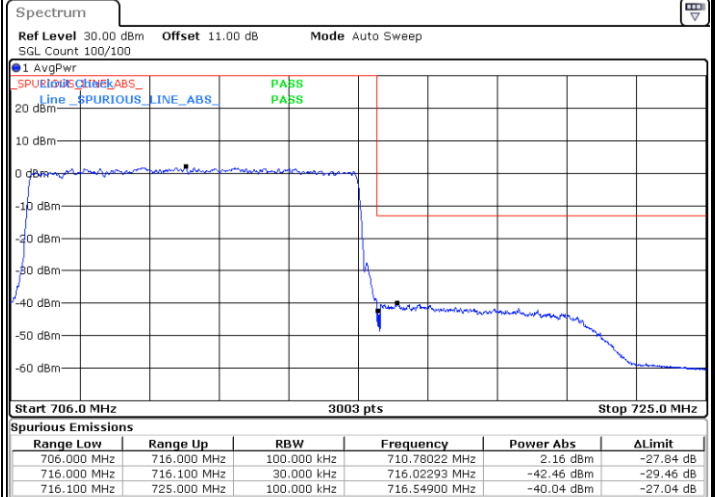
Date: 17.AUG.2020 20:22:05

Lowest Band Edge / Full RB



Date: 17.AUG.2020 20:18:05

Highest Band Edge / Full RB

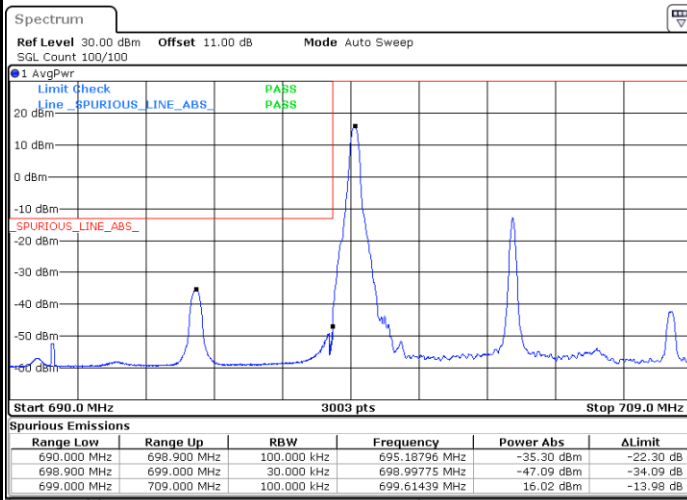


Date: 17.AUG.2020 20:21:30



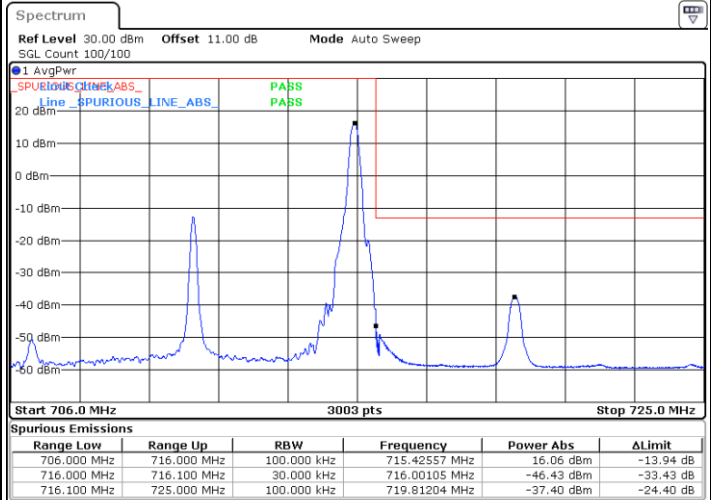
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



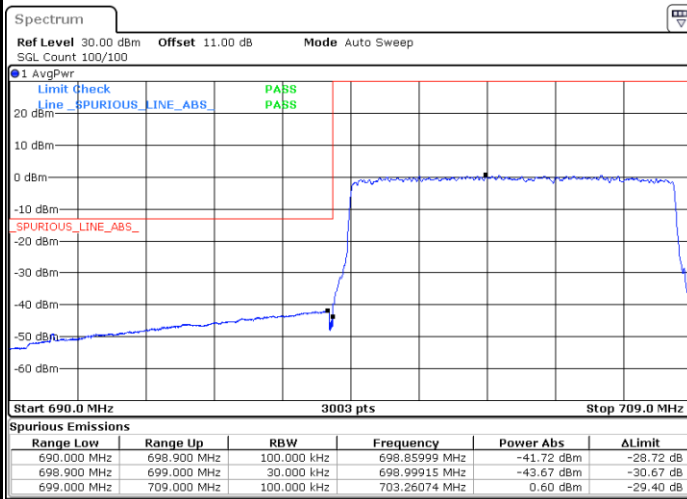
Date: 19.AUG.2020 10:56:11

Highest Band Edge / 1 RB



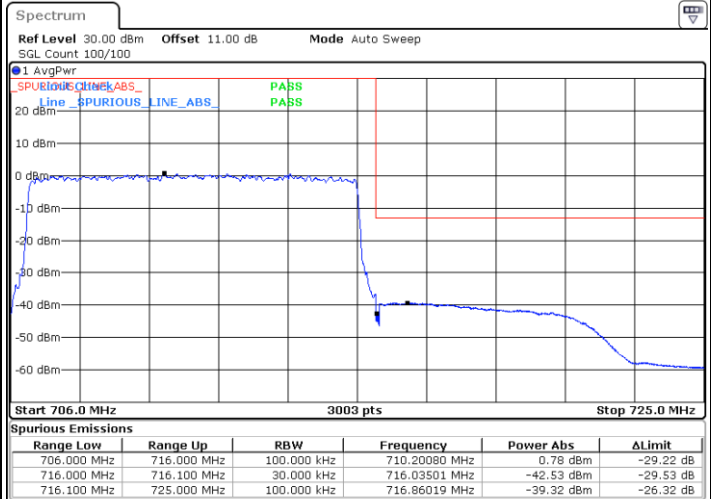
Date: 19.AUG.2020 10:59:44

Lowest Band Edge / Full RB



Date: 19.AUG.2020 10:55:09

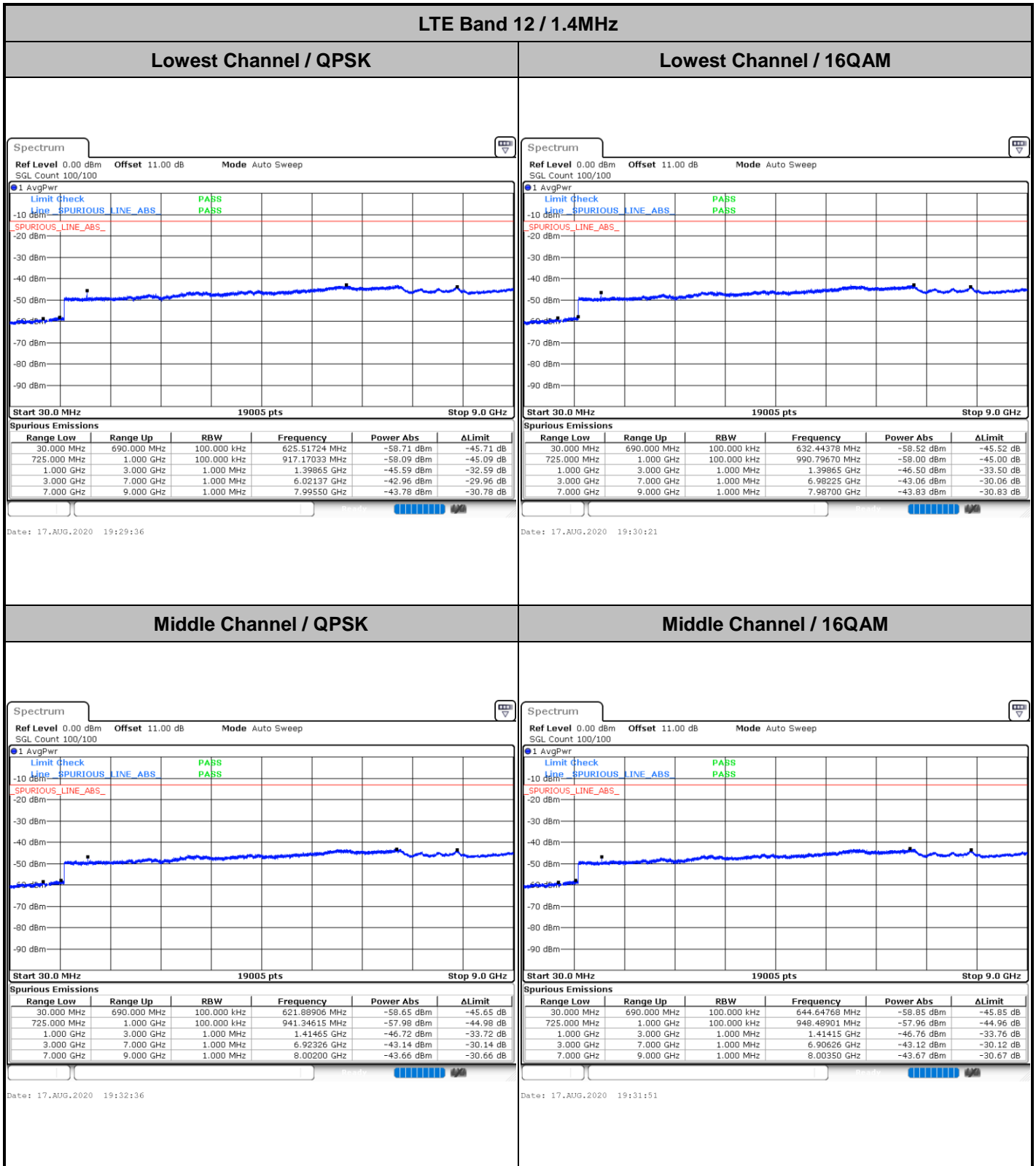
Highest Band Edge / Full RB



Date: 19.AUG.2020 10:58:09



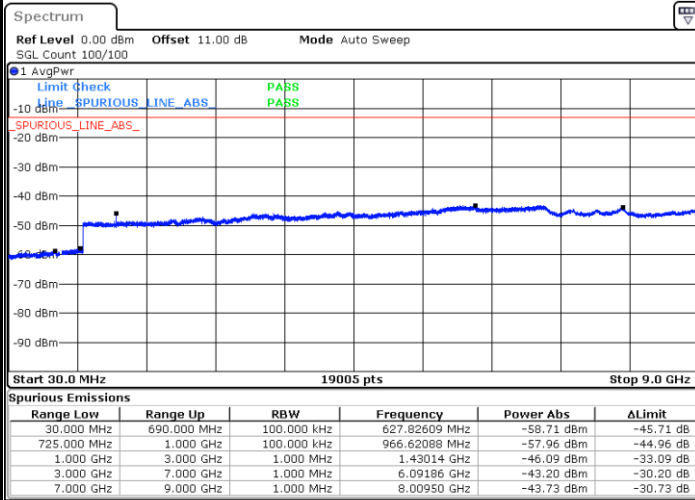
Conducted Spurious Emission





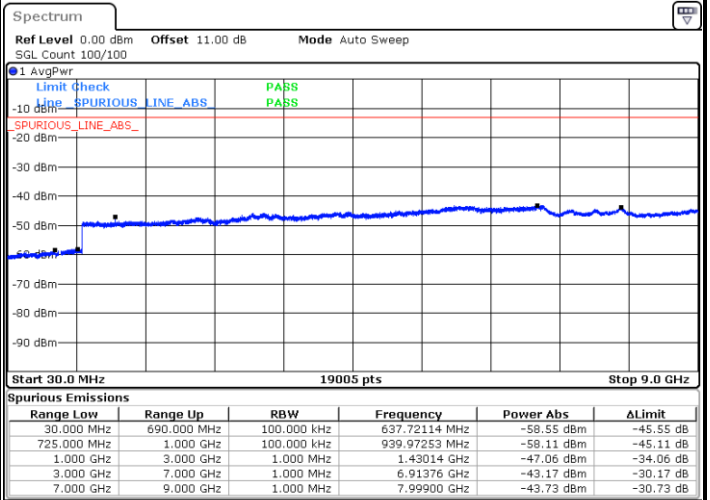
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 17.AUG.2020 19:34:08

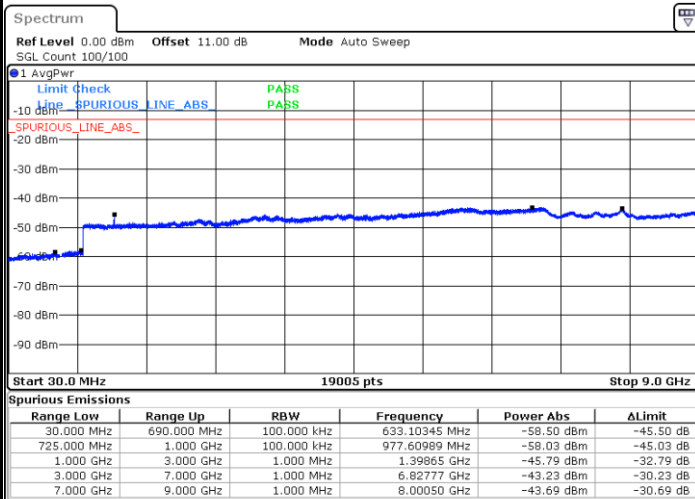
Highest Channel / 16QAM



Date: 17.AUG.2020 19:34:53

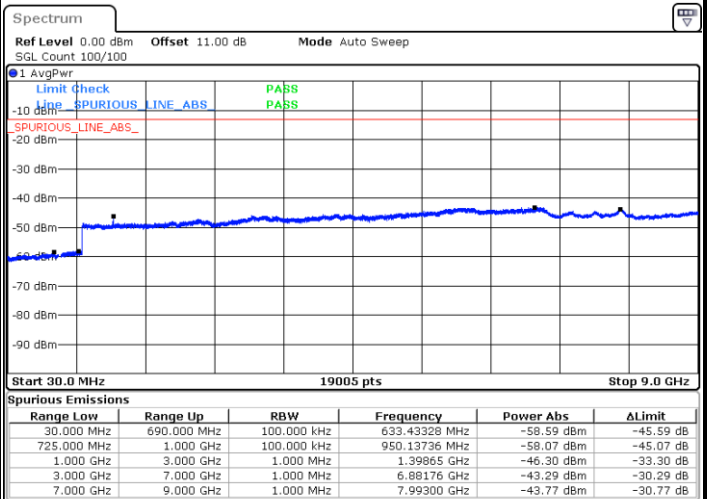
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 17.AUG.2020 19:39:49

Lowest Channel / 16QAM



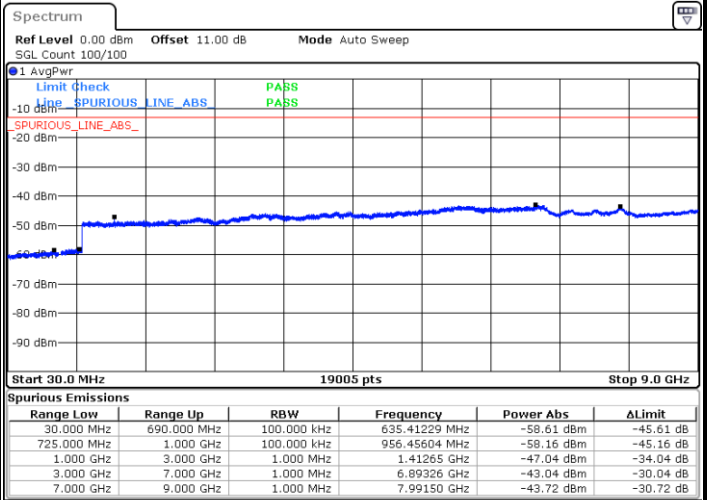
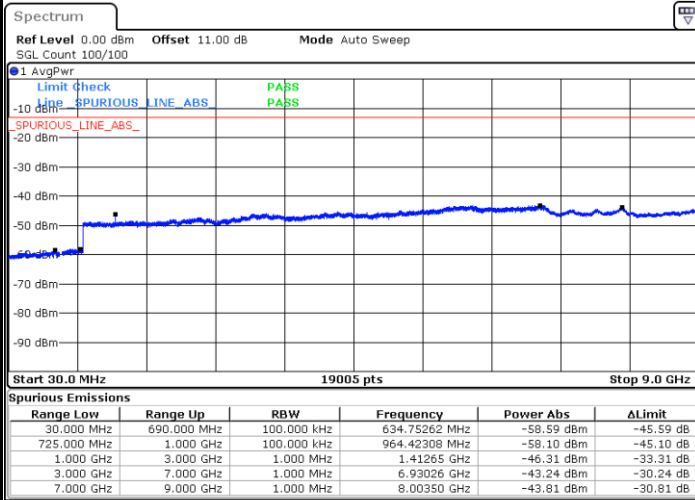
Date: 17.AUG.2020 19:40:34



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

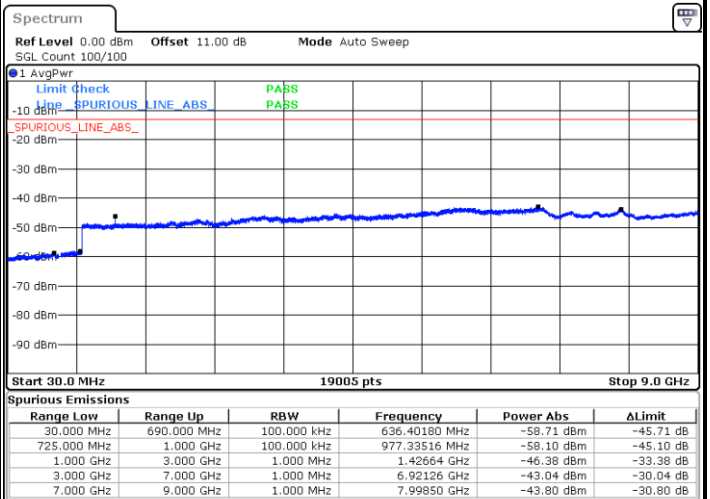
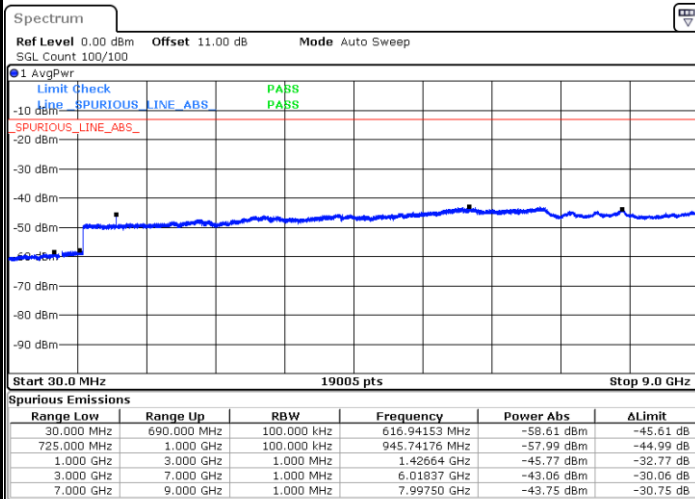


Date: 17.AUG.2020 19:42:48

Date: 17.AUG.2020 19:42:04

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 17.AUG.2020 19:44:20

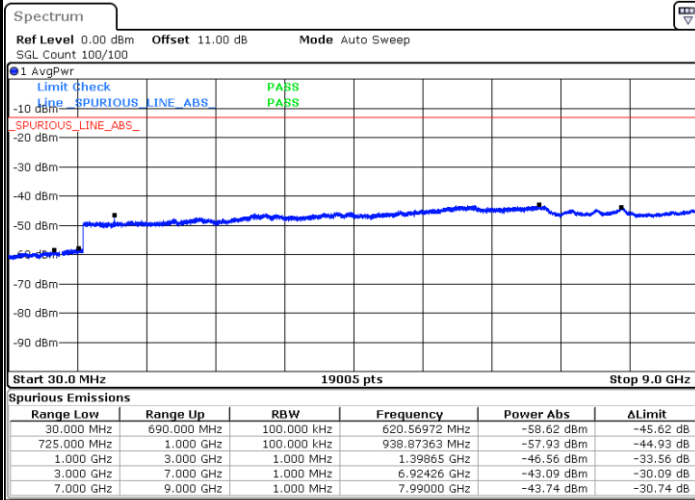
Date: 17.AUG.2020 19:45:05



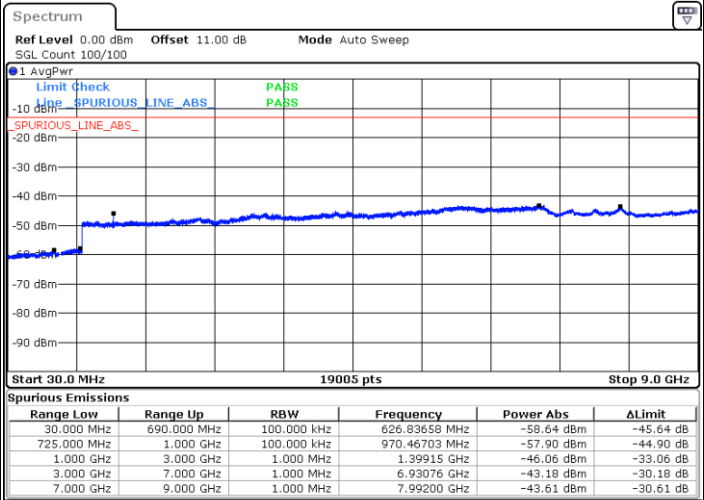
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



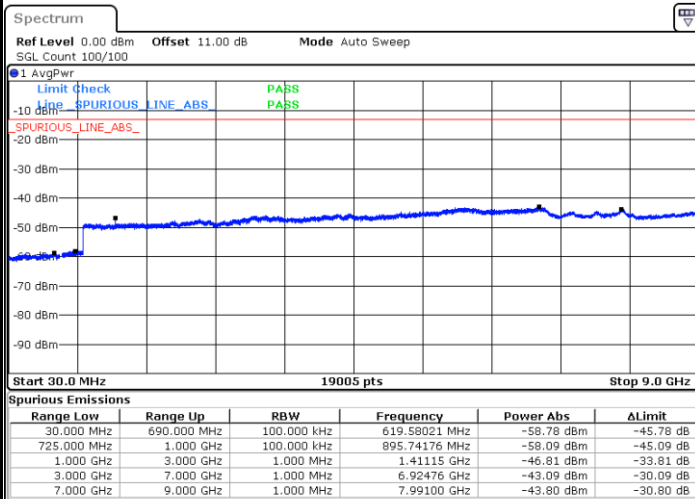
Date: 17.AUG.2020 19:58:04



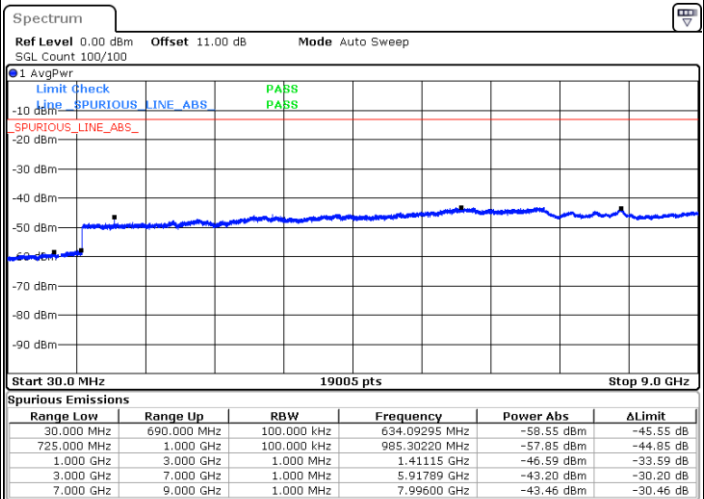
Date: 17.AUG.2020 19:58:49

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 17.AUG.2020 20:01:03

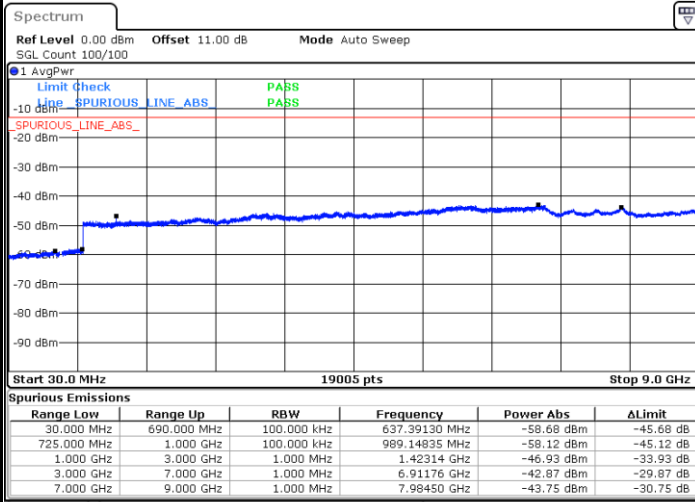


Date: 17.AUG.2020 20:00:19



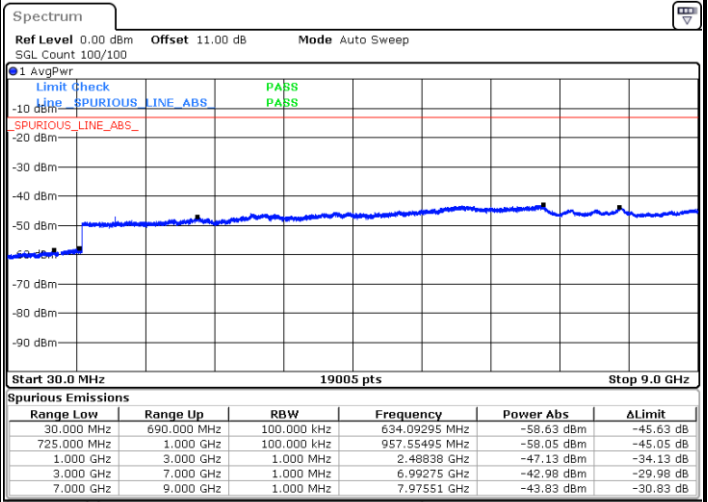
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 17.AUG.2020 20:05:39

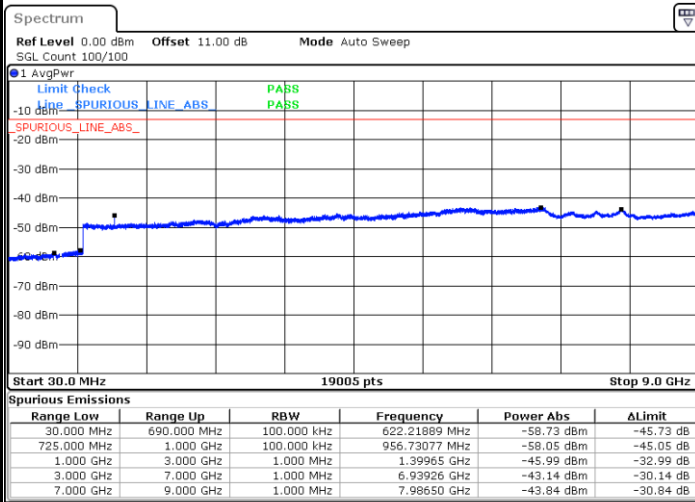
Highest Channel / 16QAM



Date: 17.AUG.2020 20:04:54

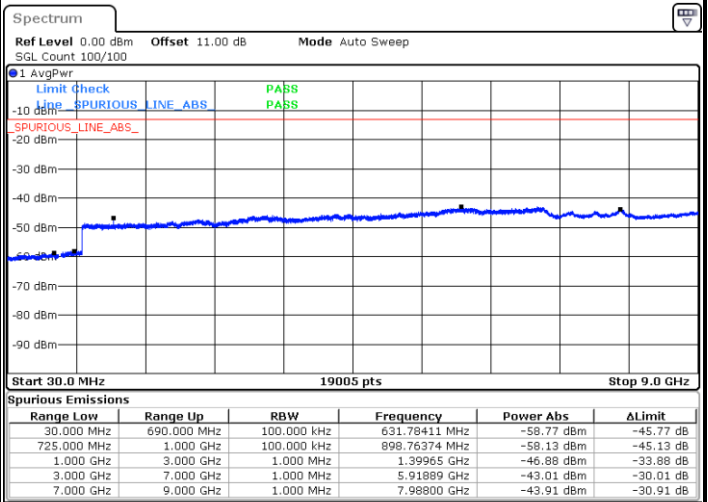
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 17.AUG.2020 20:09:31

Lowest Channel / 16QAM



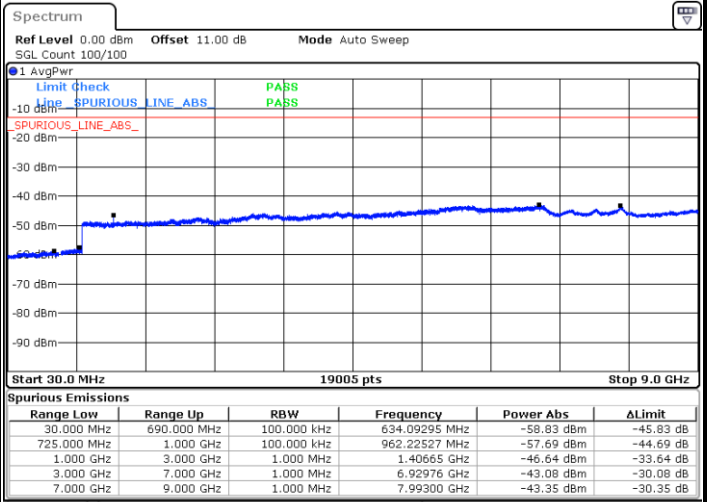
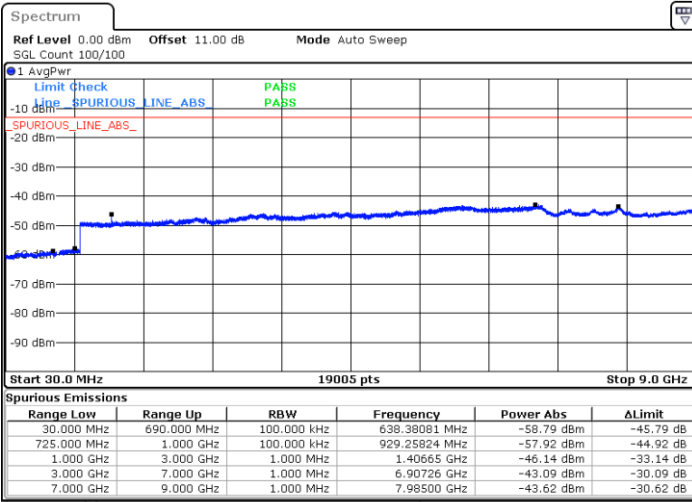
Date: 17.AUG.2020 20:10:16



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

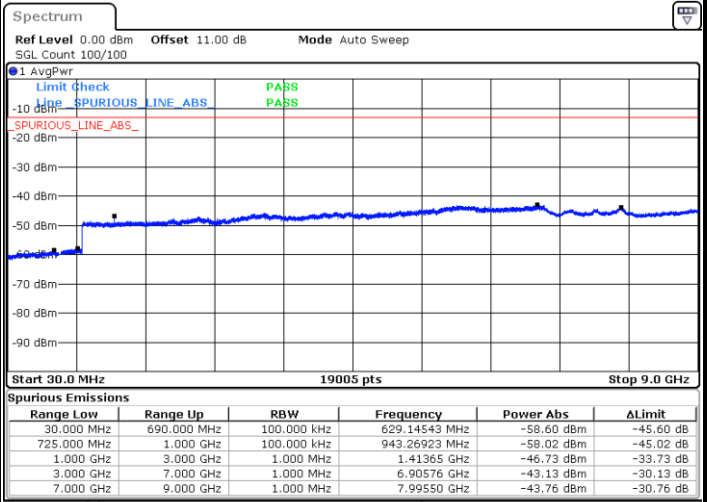
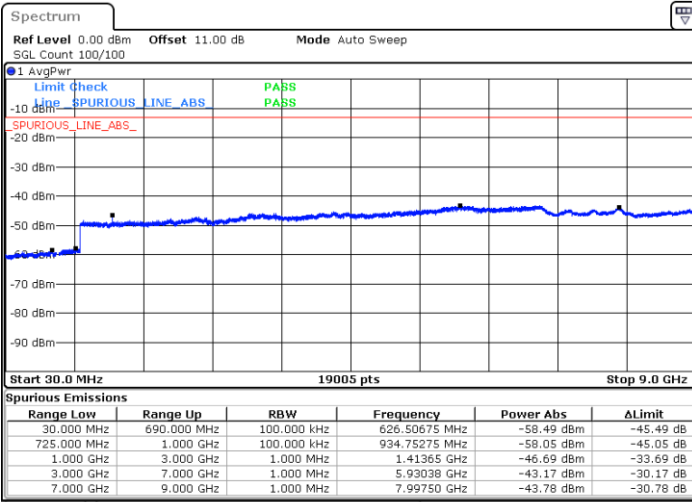


Date: 17.AUG.2020 20:12:30

Date: 17.AUG.2020 20:11:46

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 17.AUG.2020 20:16:22

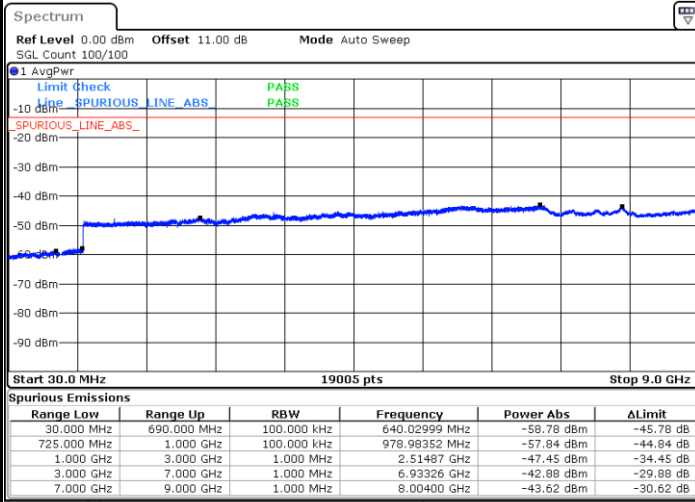
Date: 17.AUG.2020 20:17:07



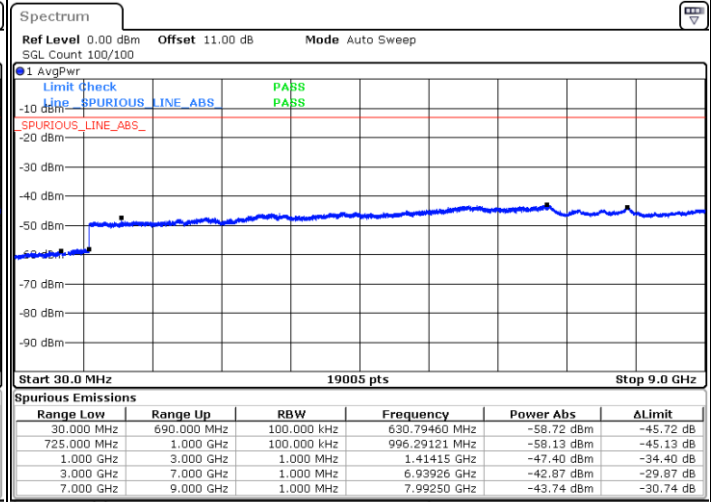
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

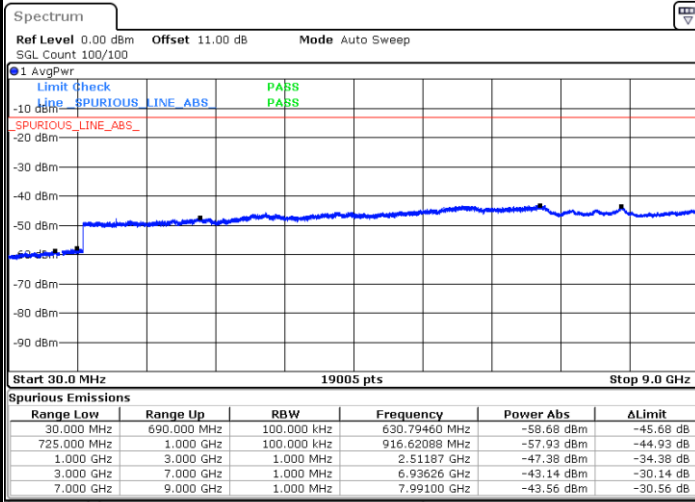


Date: 17.AUG.2020 19:36:01



Date: 17.AUG.2020 19:37:08

Highest Channel / 64QAM



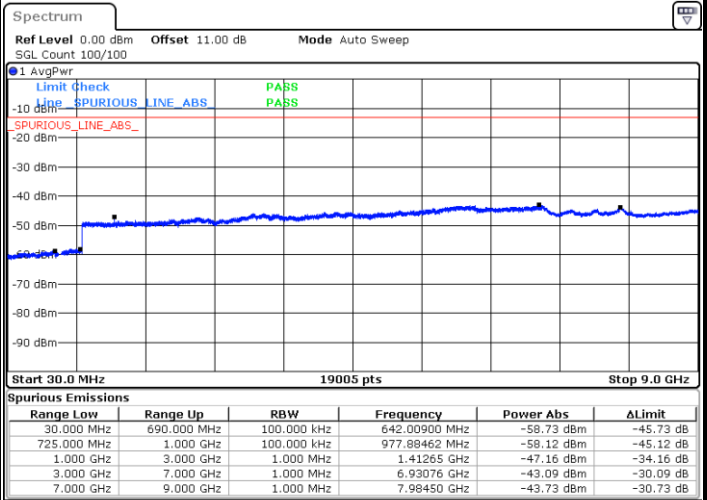
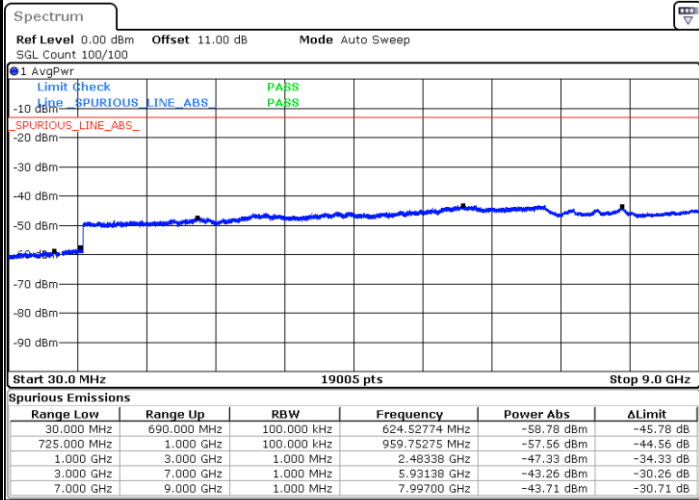
Date: 17.AUG.2020 19:38:17



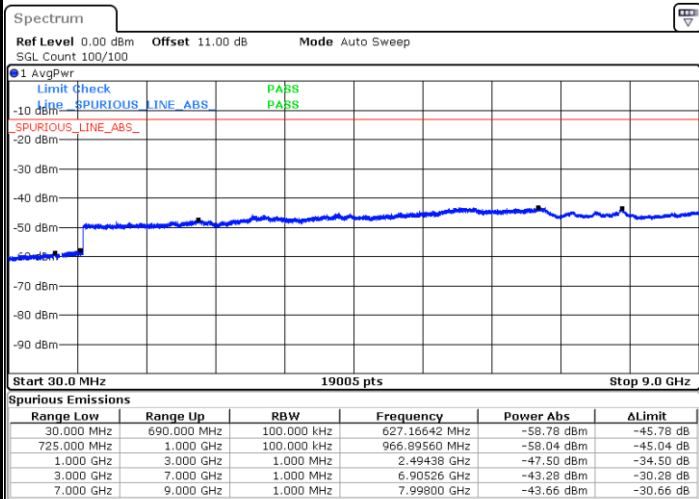
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



Highest Channel / 64QAM

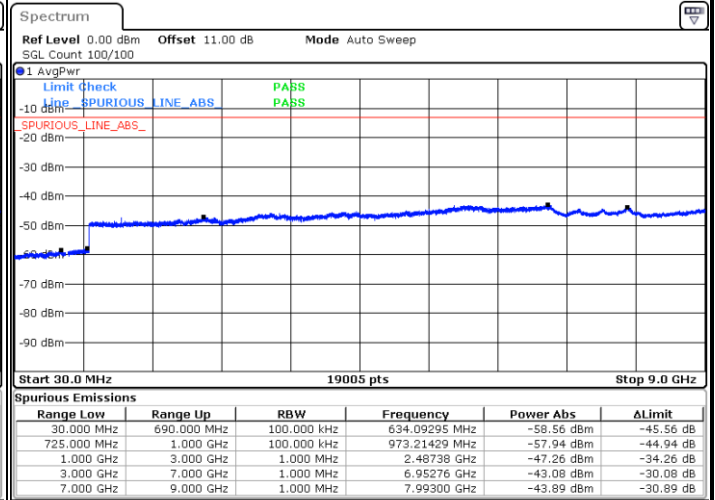
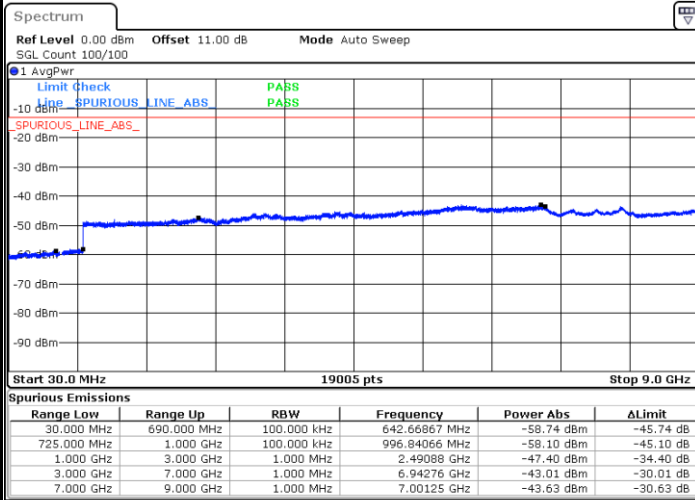




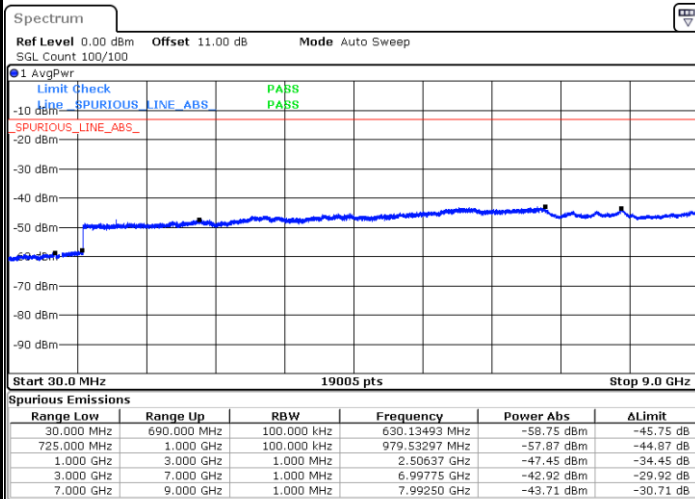
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



Highest Channel / 64QAM

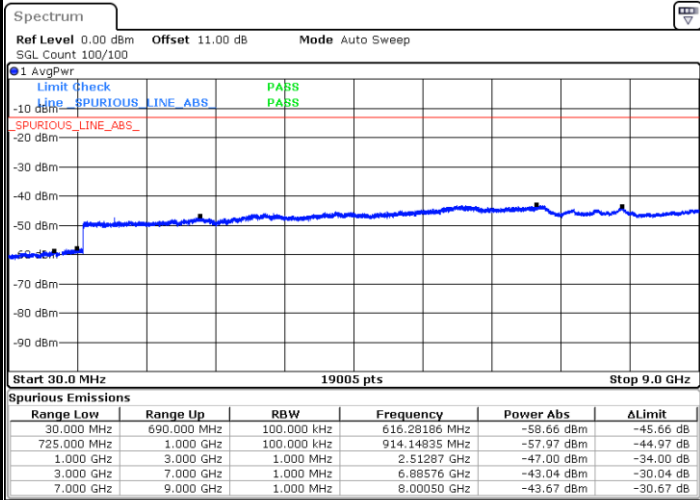




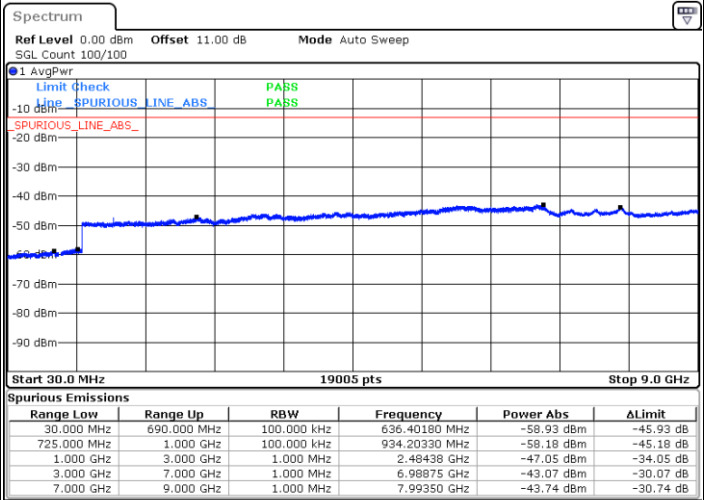
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

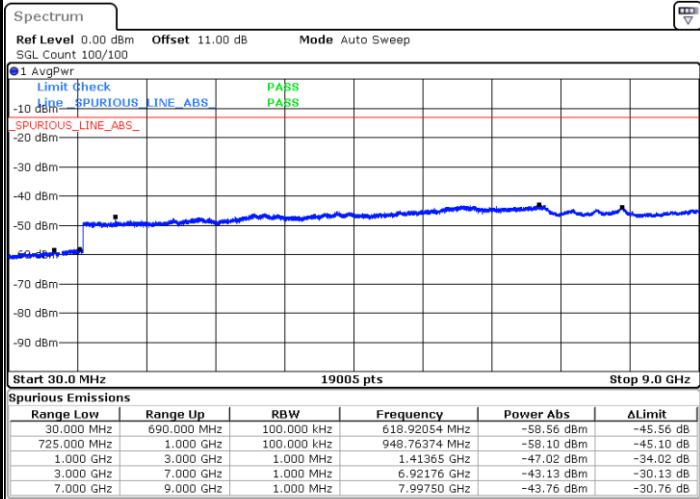


Date: 17.AUG.2020 20:19:25



Date: 17.AUG.2020 20:20:32

Highest Channel / 64QAM



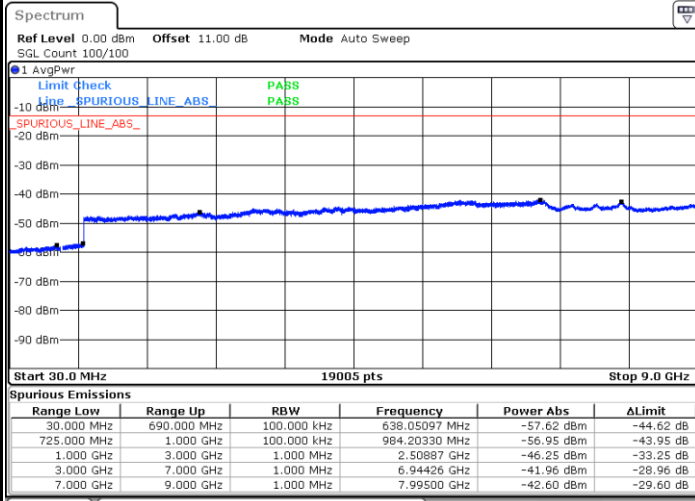
Date: 17.AUG.2020 20:22:50



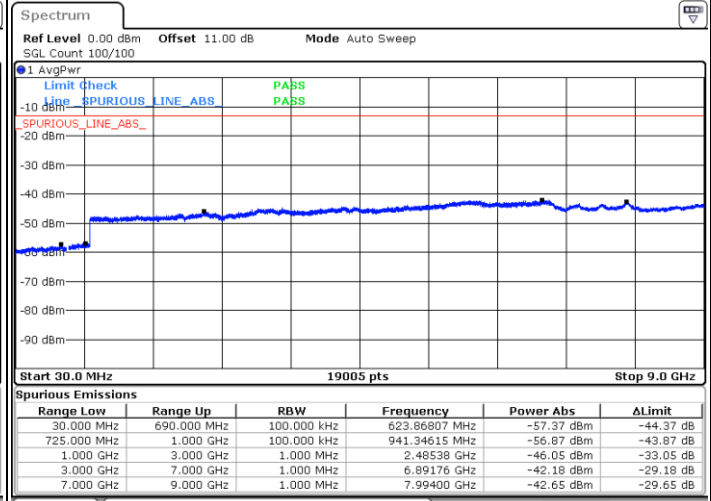
LTE Band 12 / 1.4MHz

Lowest Channel / 256QAM

Middle Channel / 256QAM

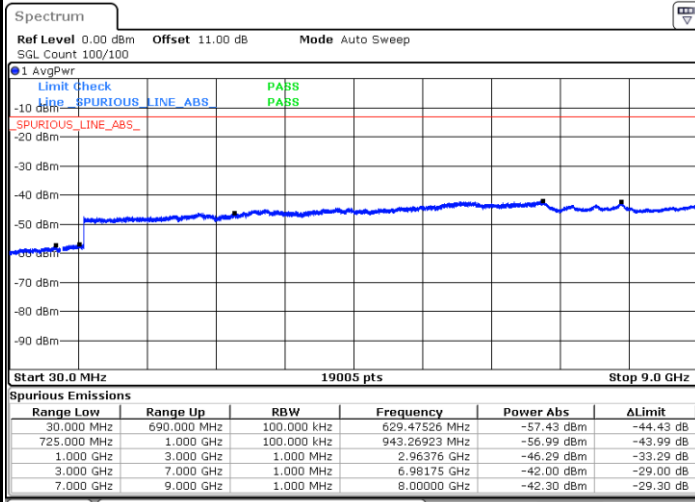


Date: 19.AUG.2020 09:57:24



Date: 19.AUG.2020 09:55:27

Highest Channel / 256QAM



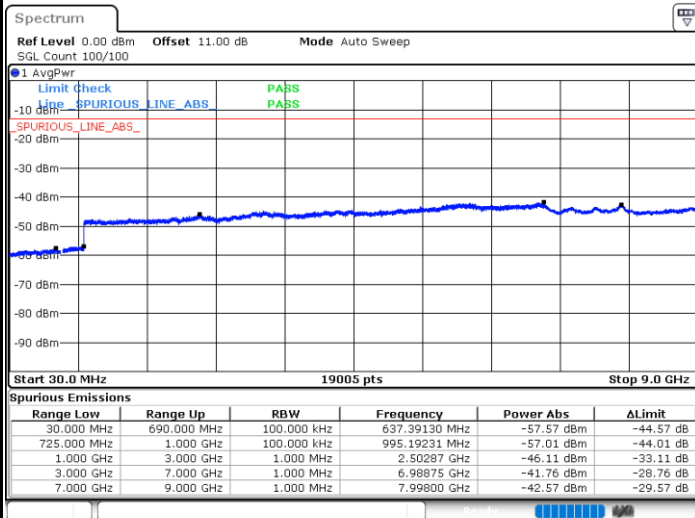
Date: 19.AUG.2020 10:00:06



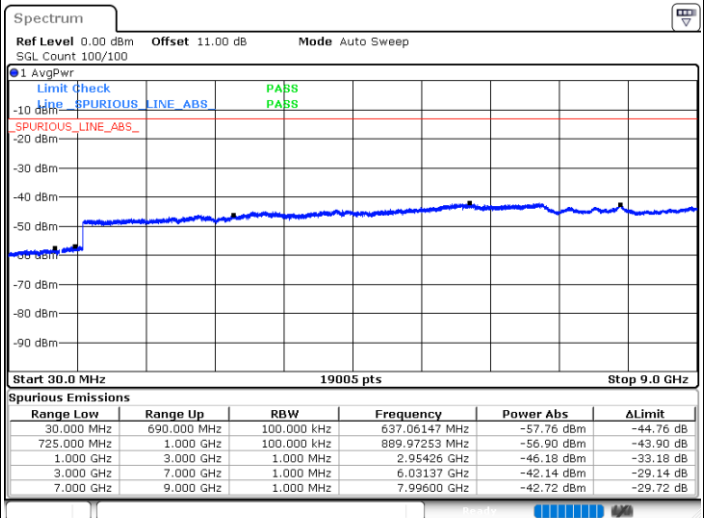
LTE Band 12 / 3MHz

Lowest Channel / 256QAM

Middle Channel / 256QAM

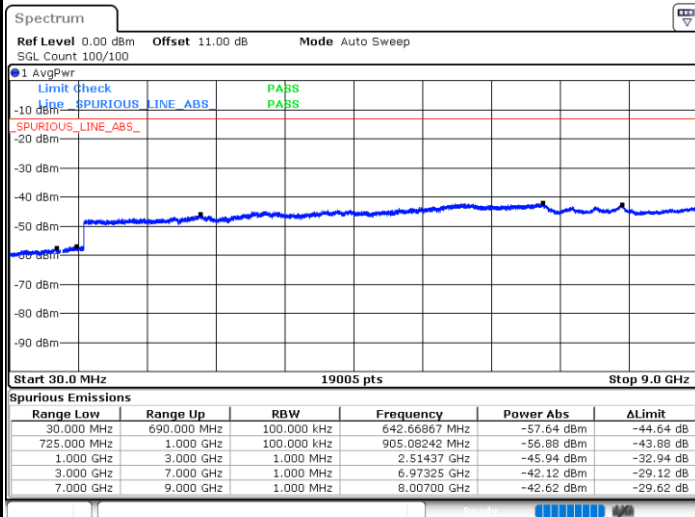


Date: 19.AUG.2020 10:42:45



Date: 19.AUG.2020 10:38:56

Highest Channel / 256QAM



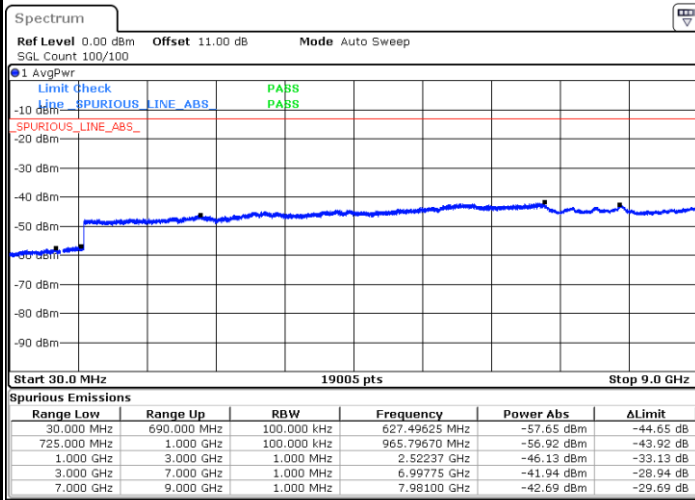
Date: 19.AUG.2020 10:45:39



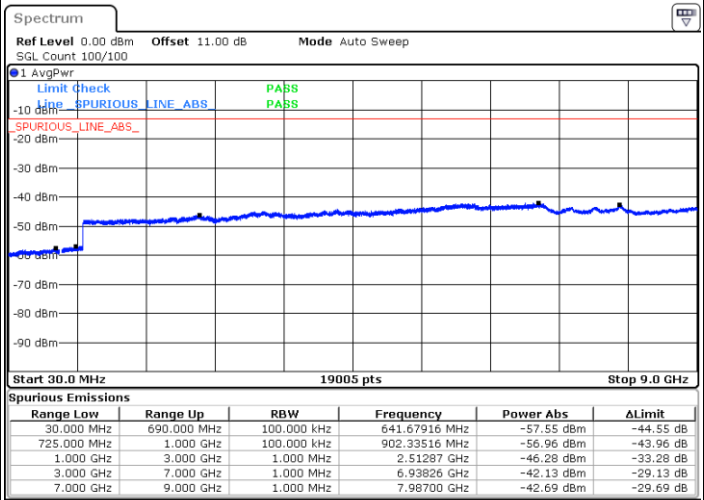
LTE Band 12 / 5MHz

Lowest Channel / 256QAM

Middle Channel / 256QAM

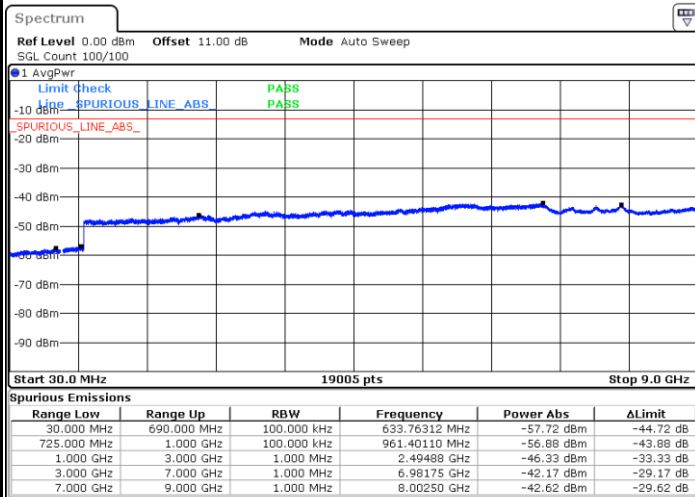


Date: 19.AUG.2020 10:49:44



Date: 19.AUG.2020 10:47:28

Highest Channel / 256QAM



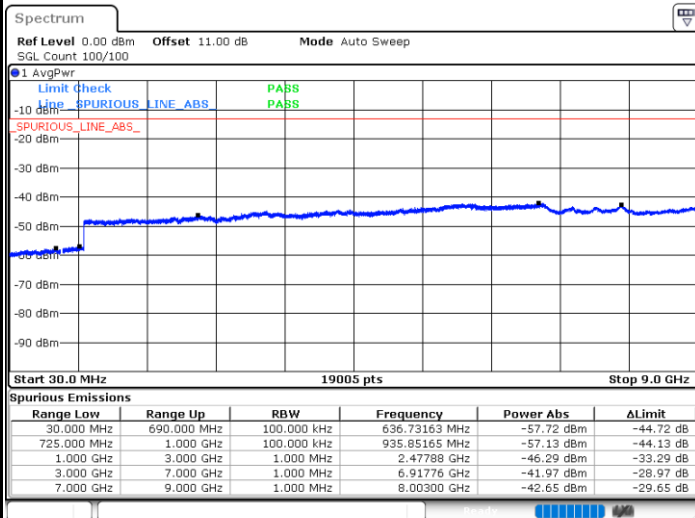
Date: 19.AUG.2020 10:51:34



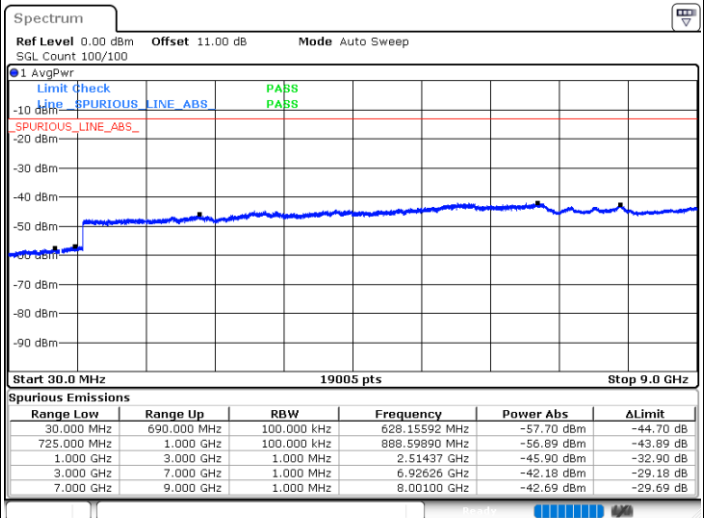
LTE Band 12 / 10MHz

Lowest Channel / 256QAM

Middle Channel / 256QAM

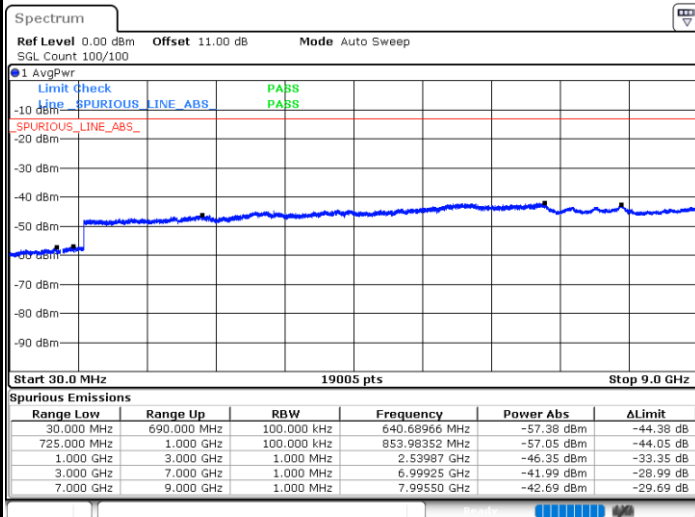


Date: 19.AUG.2020 10:56:48



Date: 19.AUG.2020 10:53:40

Highest Channel / 256QAM



Date: 19.AUG.2020 10:58:53



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	0.0129	PASS
40	Normal Voltage	0.0151	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0038	
0	Normal Voltage	0.0230	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

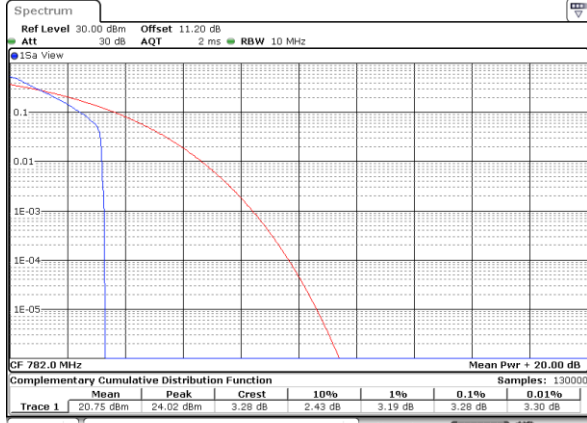
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.28	4.70	4.61	5.59	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM		256QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.29	6.29	5.94	6.49	
Highest CH	-	-	-	-	



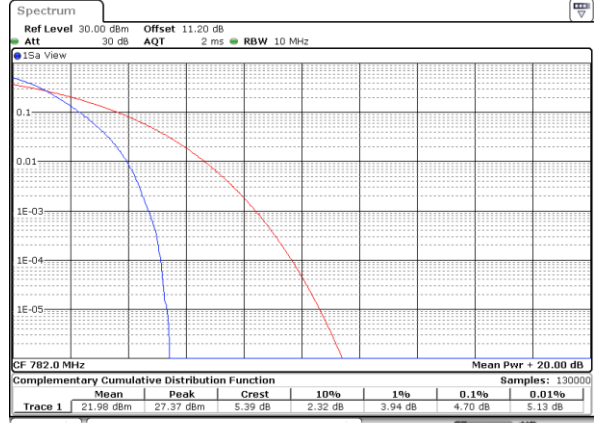
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 18_AUG.2020 11:06:44

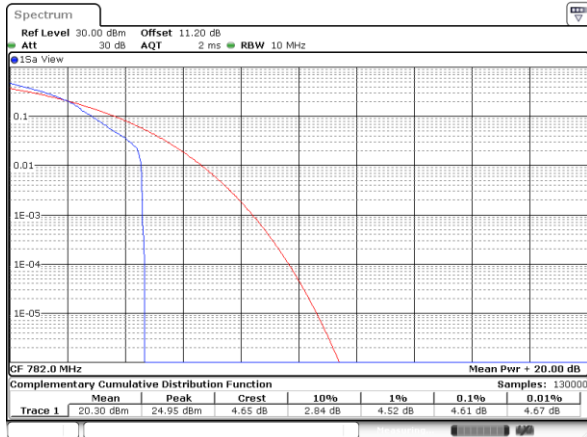
Middle Channel / Full RB



Date: 18_AUG.2020 11:06:54

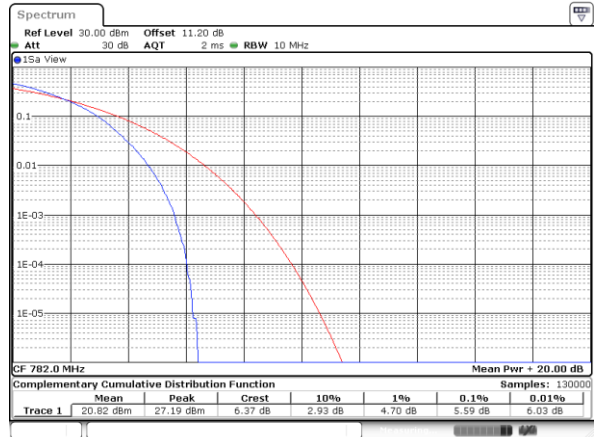
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 18_AUG.2020 11:06:24

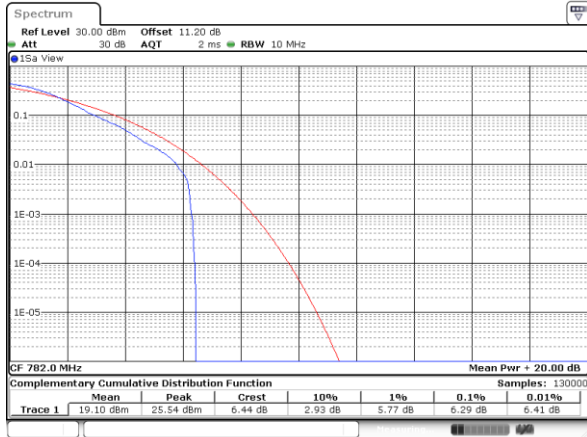
Middle Channel / Full RB



Date: 18_AUG.2020 11:06:34

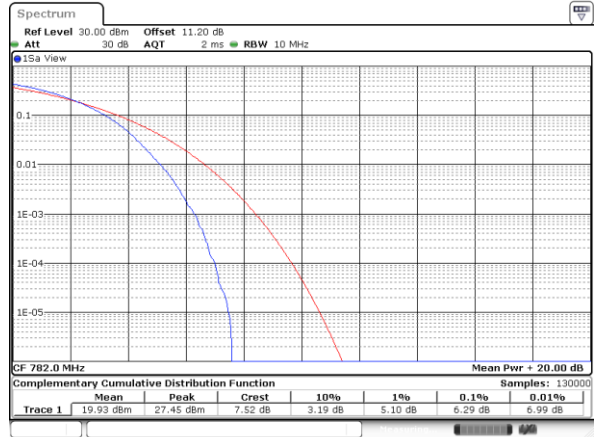
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 18_AUG.2020 11:06:03

Middle Channel / Full RB

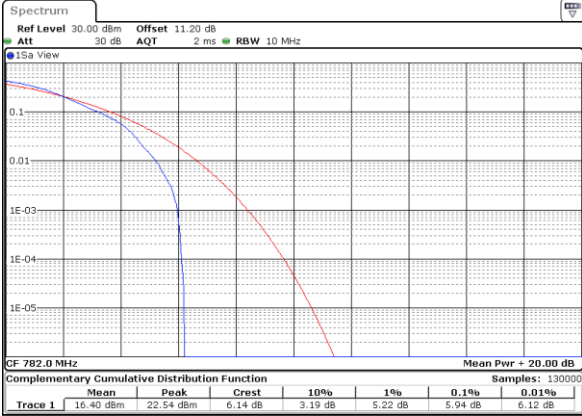


Date: 18_AUG.2020 11:06:13



LTE Band 13 / 10MHz / 256QAM

Middle Channel / 1RB



Date: 19_AUG.2020 11:11:27

Middle Channel / Full RB



Date: 19_AUG.2020 11:09:57



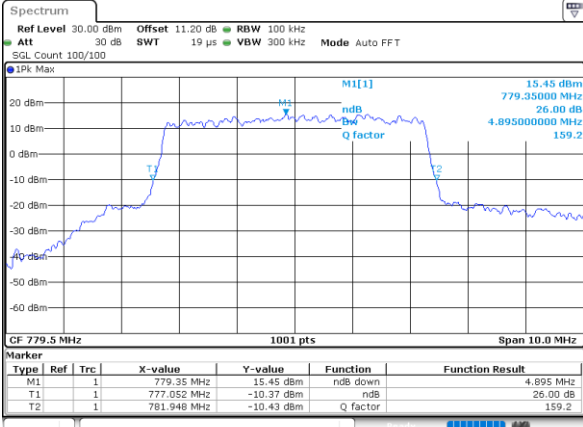
26dB Bandwidth

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	-	-	-	-	4.90	4.83	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	4.85	9.89	9.77	-	-	-	-
Highest CH	-	-	-	-	4.79	4.88	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	-	-	-	-	4.83	4.89	-	-	-	-	-	-
Middle CH	-	-	-	-	4.91	4.81	9.69	9.91	-	-	-	-
Highest CH	-	-	-	-	4.91	4.93	-	-	-	-	-	-



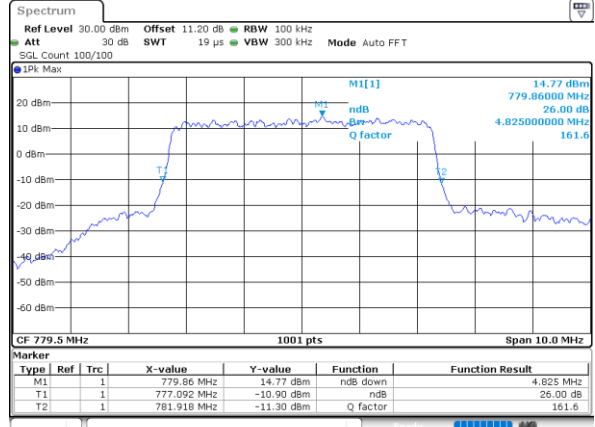
LTE Band 13

Lowest Channel / 5MHz / QPSK



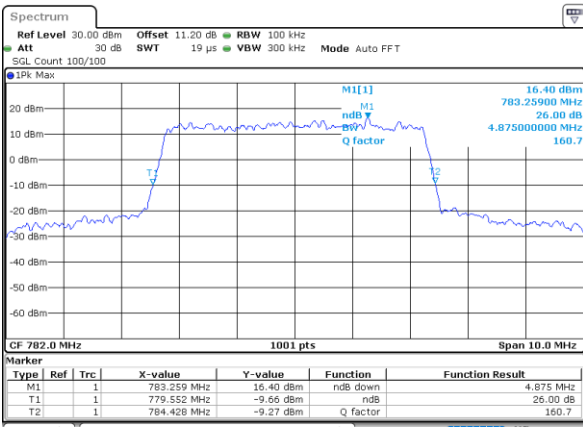
Date: 18_AUG.2020 10:17:13

Lowest Channel / 5MHz / 16QAM



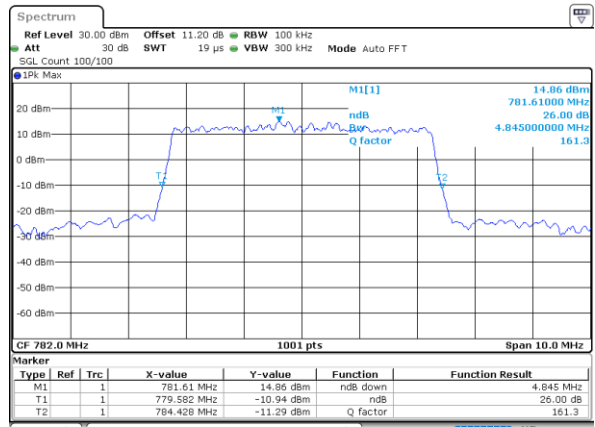
Date: 18_AUG.2020 10:17:01

Middle Channel / 5MHz / QPSK



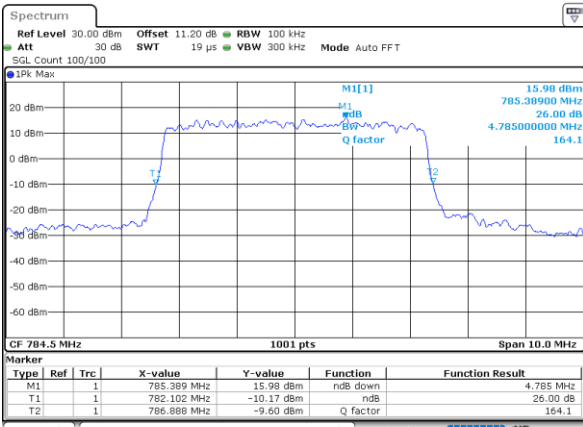
Date: 18_AUG.2020 10:27:03

Middle Channel / 5MHz / 16QAM



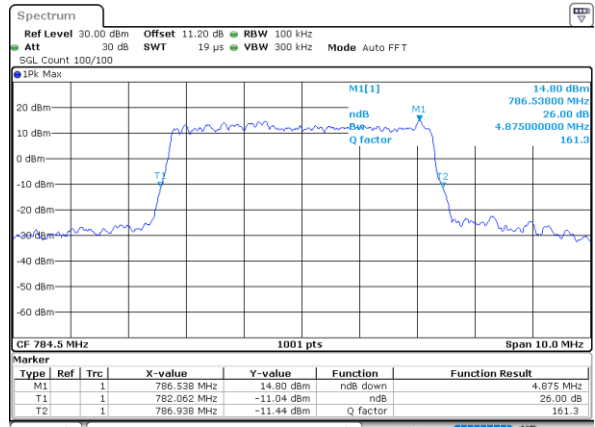
Date: 18_AUG.2020 10:27:14

Highest Channel / 5MHz / QPSK



Date: 18_AUG.2020 10:28:23

Highest Channel / 5MHz / 16QAM



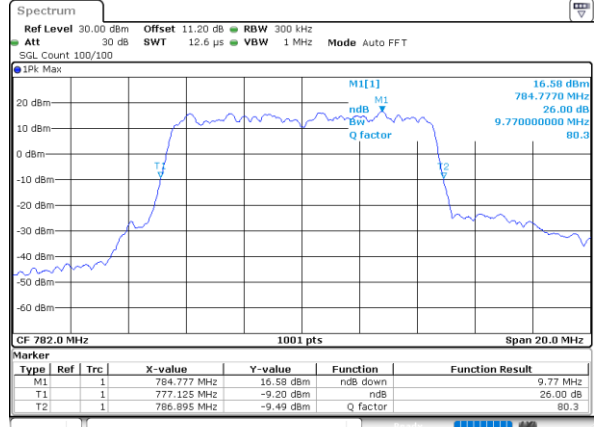
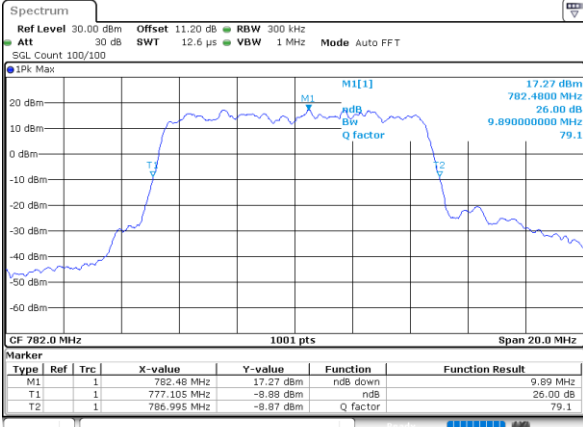
Date: 18_AUG.2020 10:28:11



LTE Band 13

Middle Channel / 10MHz / QPSK

Middle Channel / 10MHz / 16QAM



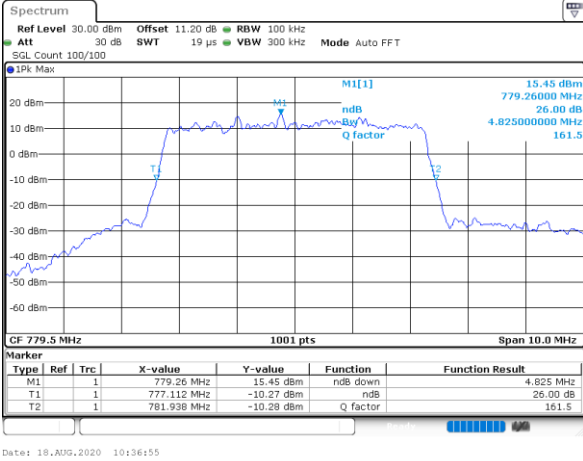
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Date: 18_AUG.2020 10:47:09



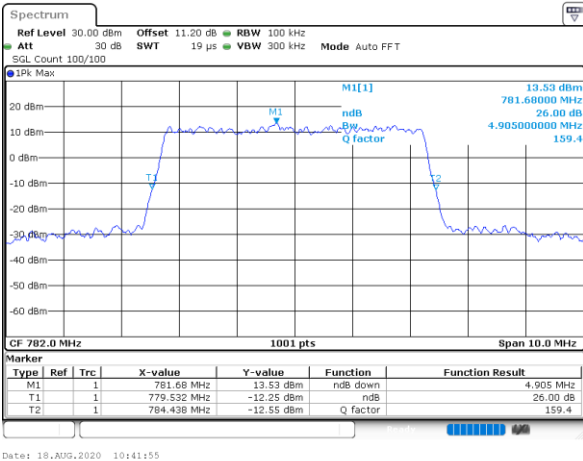
LTE Band 13

Lowest Channel / 5MHz / 64QAM



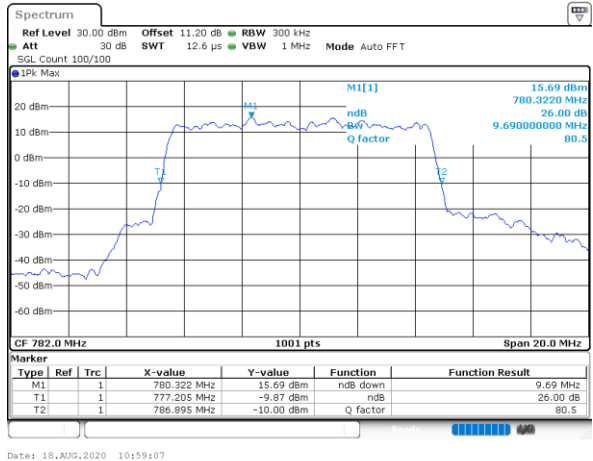
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Middle Channel / 5MHz / 64QAM



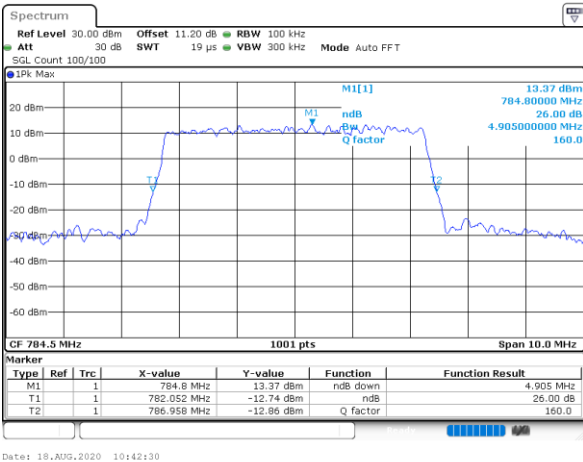
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Middle Channel / 10MHz / 64QAM



Date: 18_AUG_2020 10:59:07

Highest Channel / 5MHz / 64QAM

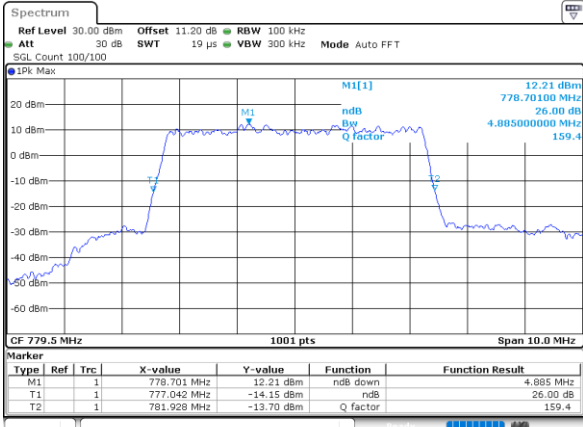


Date: 18_AUG_2020 10:42:30



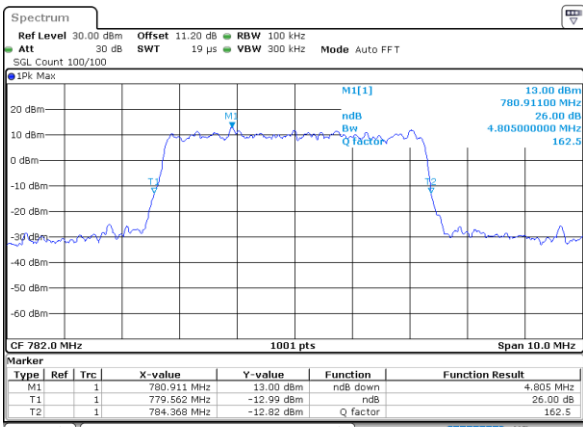
LTE Band 13

Lowest Channel / 5MHz / 256QAM



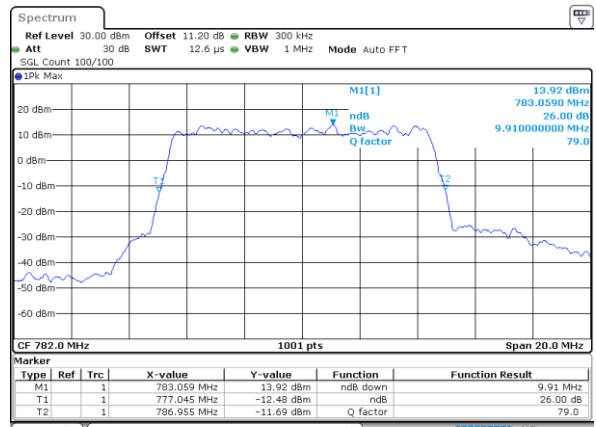
Date: 19_AUG.2020 11:02:43

Middle Channel / 5MHz / 256QAM



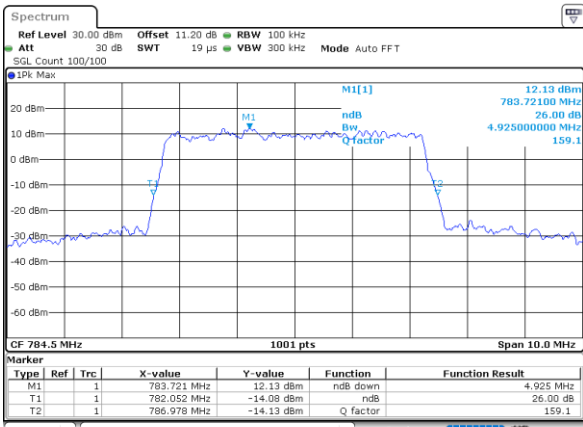
Date: 19_AUG.2020 11:01:33

Middle Channel / 10MHz / 256QAM



Date: 19_AUG.2020 11:08:39

Highest Channel / 5MHz / 256QAM



Date: 19_AUG.2020 11:05:58



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	-	-	-	-	4.48	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.46	4.48	9.11	8.99	-	-	-	-
Highest CH	-	-	-	-	4.49	4.47	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	-	-	-	-	4.47	4.47	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.50	8.95	8.95	-	-	-	-
Highest CH	-	-	-	-	4.51	4.48	-	-	-	-	-	-