

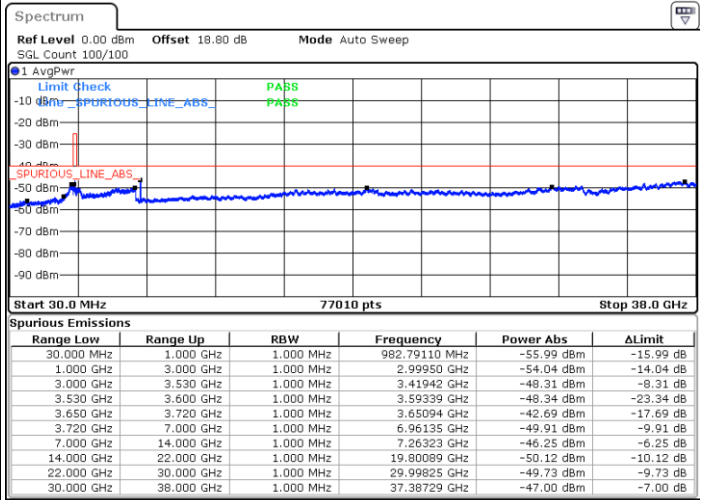
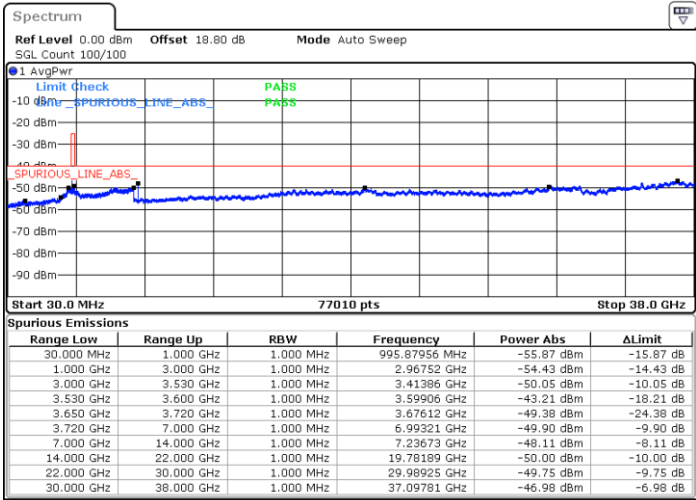


LTE Band 48 / 15MHz

16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

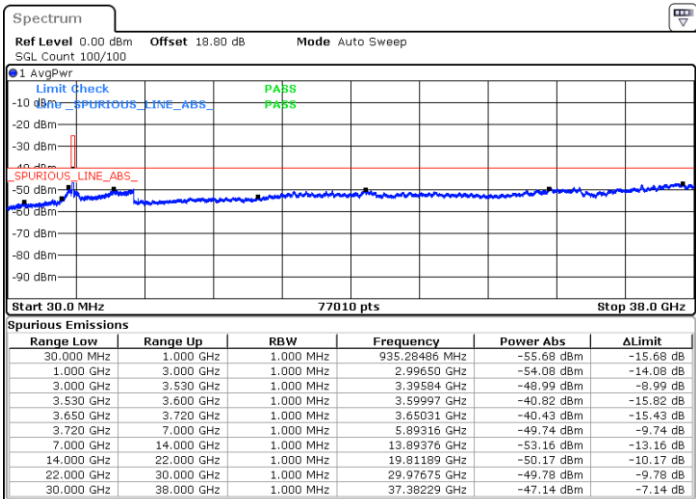


Date: 26.AUG.2021 17:39:35

Date: 26.AUG.2021 17:49:33

Middle Channel / Full RB

N/A



Date: 26.AUG.2021 18:05:36

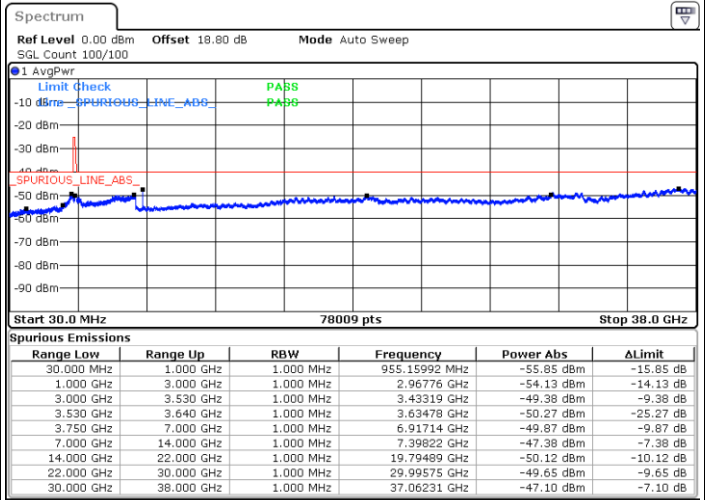
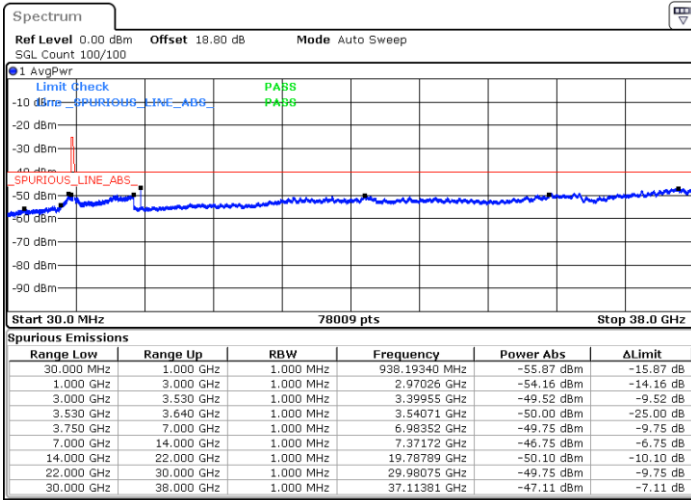


LTE Band 48 / 15MHz

16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

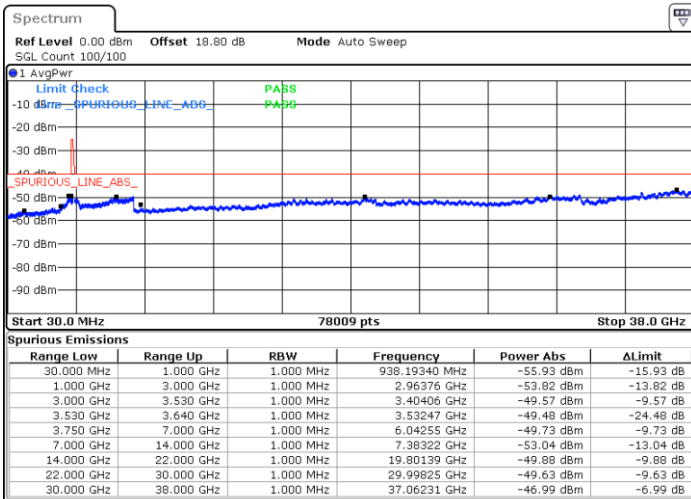


Date: 26.AUG.2021 18:18:44

Date: 26.AUG.2021 18:27:19

Highest Channel / Full RB

N/A



Date: 26.AUG.2021 18:48:17

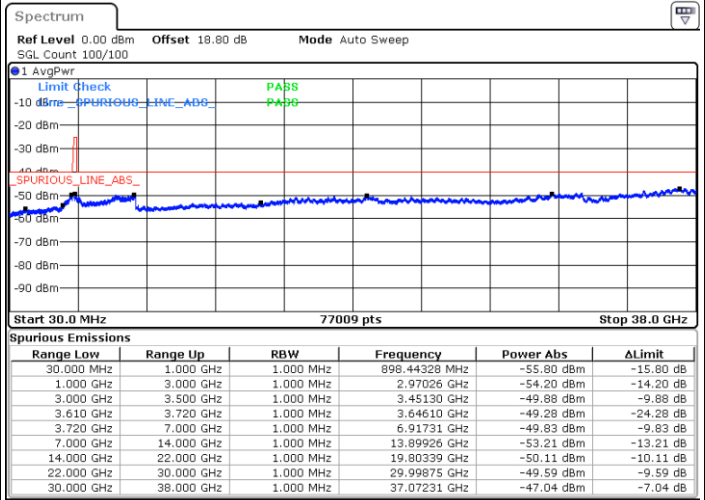
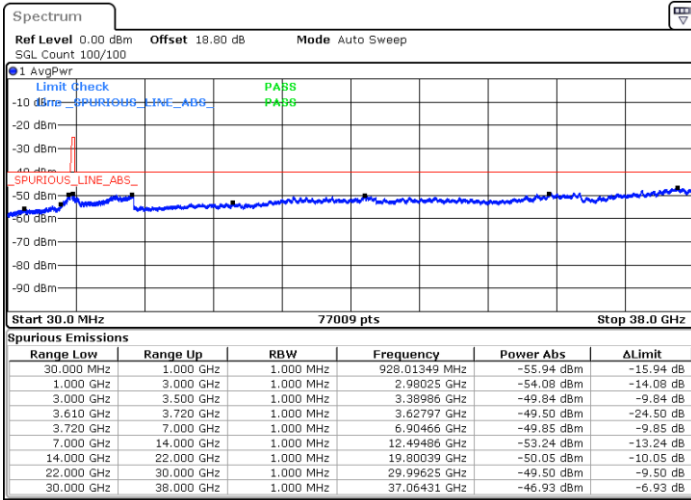


LTE Band 48 / 20MHz

16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

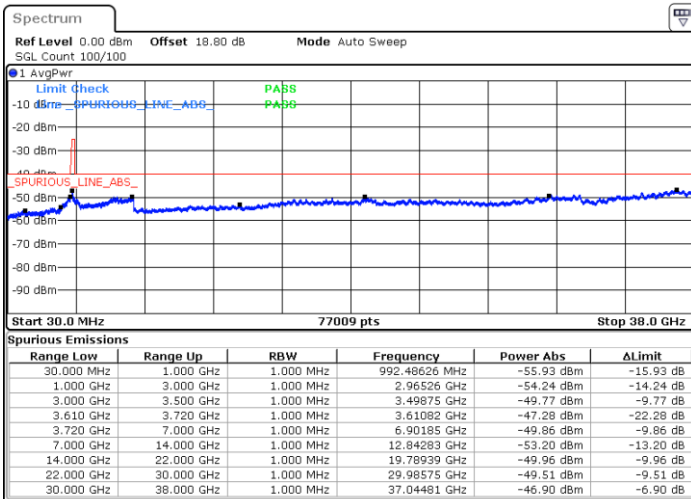


Date: 26.AUG.2021 12:29:48

Date: 26.AUG.2021 12:57:16

Lowest Channel / Full RB

N/A



Date: 26.AUG.2021 12:43:00

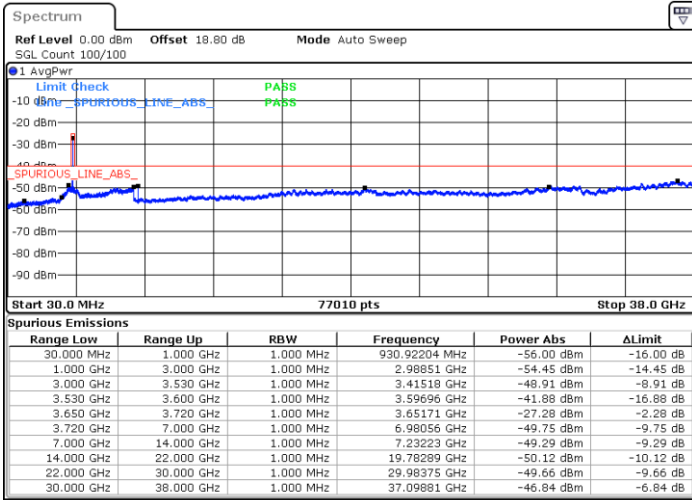


LTE Band 48 / 20MHz

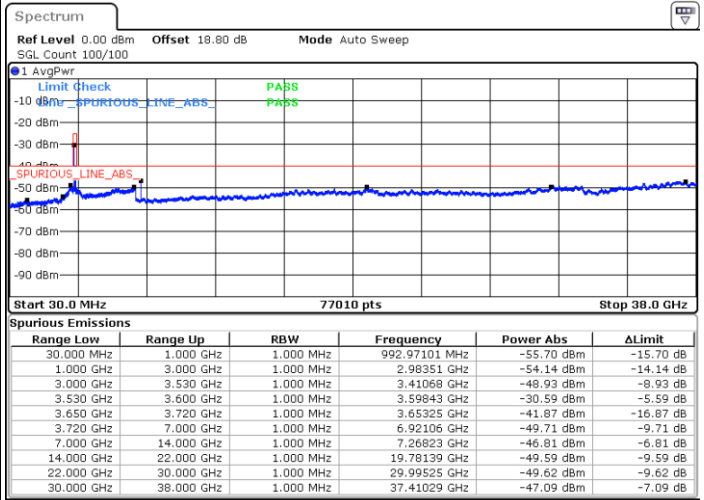
16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



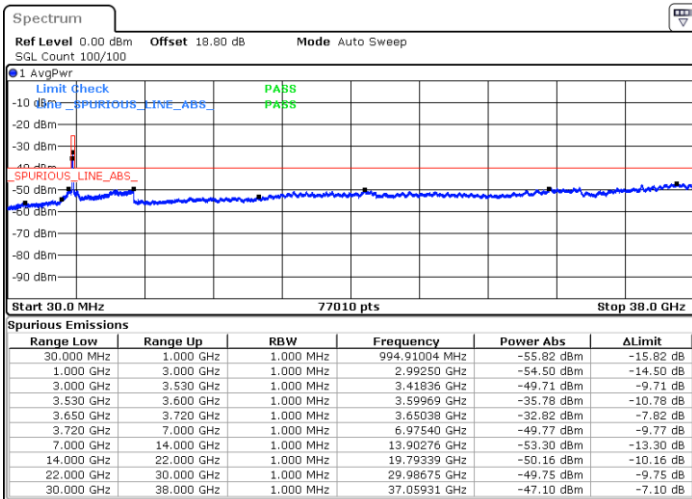
Date: 26.AUG.2021 15:18:42



Date: 26.AUG.2021 15:44:55

Middle Channel / Full RB

N/A



Date: 26.AUG.2021 16:00:15

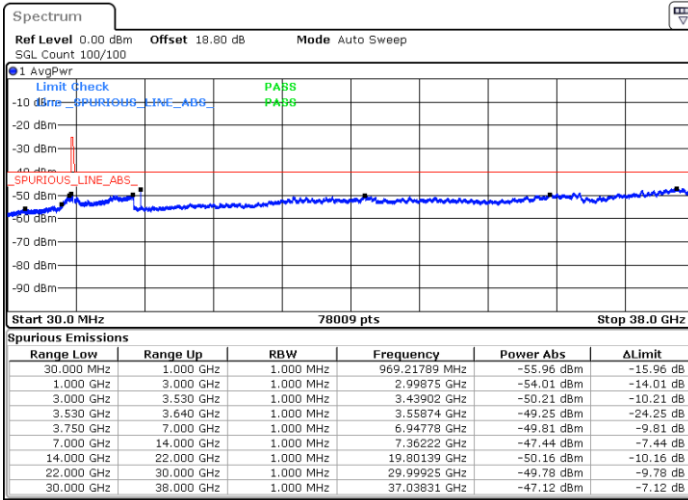


LTE Band 48 / 20MHz

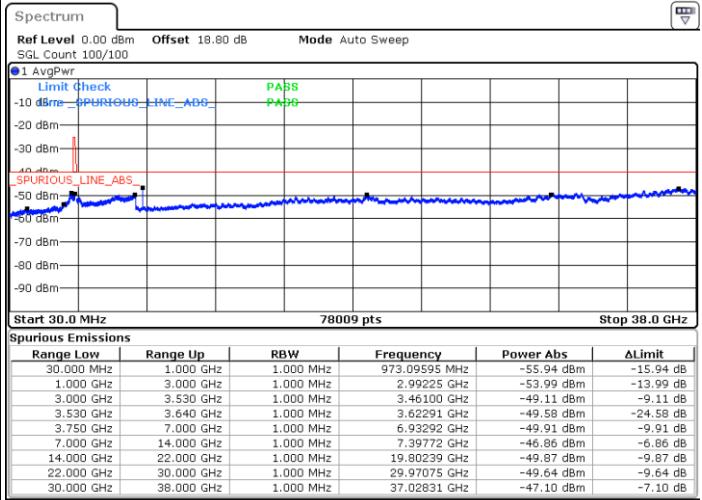
16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



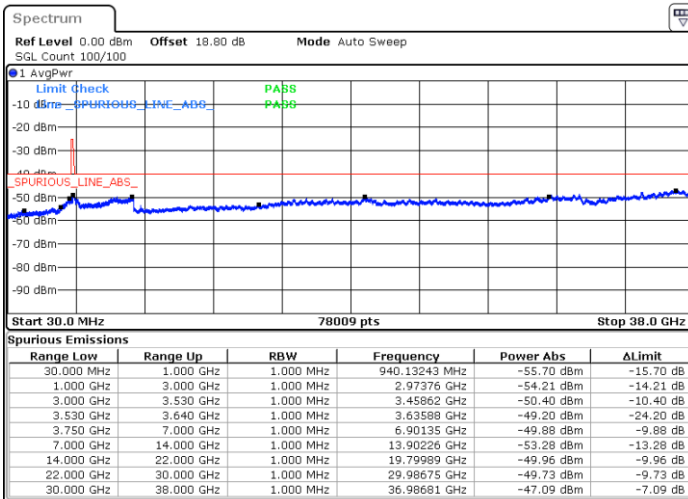
Date: 26.AUG.2021 16:17:08



Date: 26.AUG.2021 16:25:23

Highest Channel / Full RB

N/A



Date: 26.AUG.2021 16:32:25

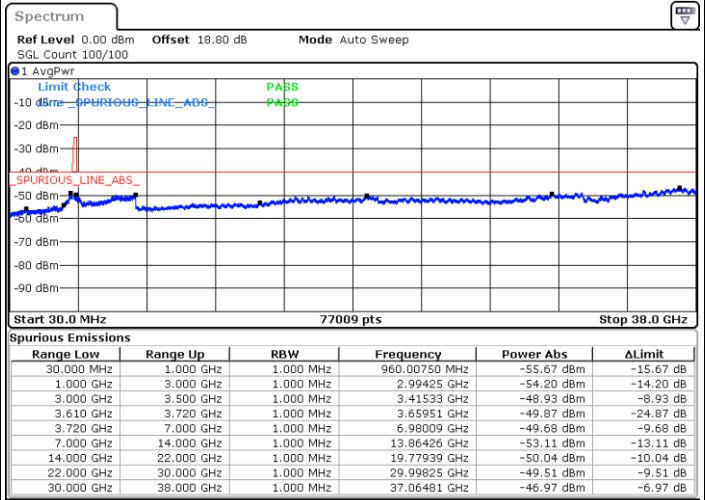
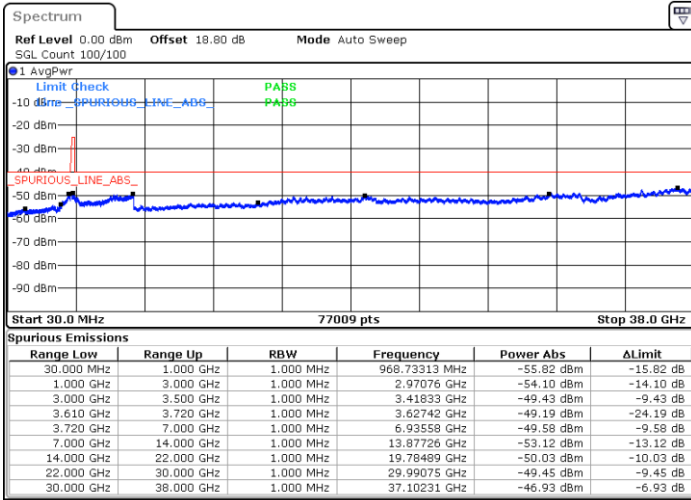


LTE Band 48 / 5MHz

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

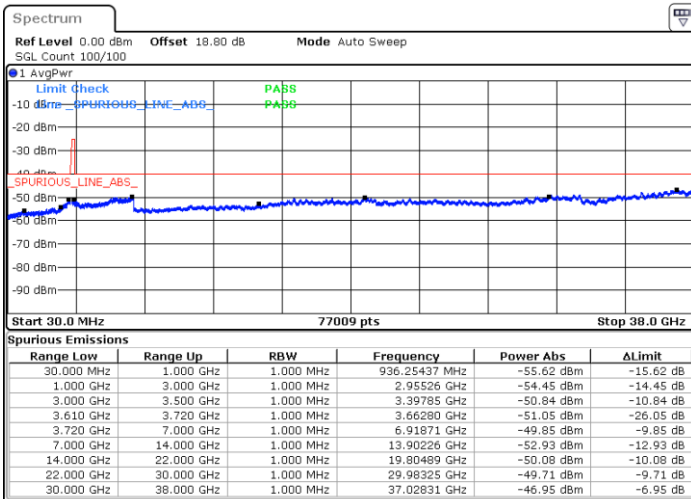


Date: 27.AUG.2021 18:13:28

Date: 27.AUG.2021 18:16:23

Lowest Channel / Full RB

N/A



Date: 31.AUG.2021 23:36:39

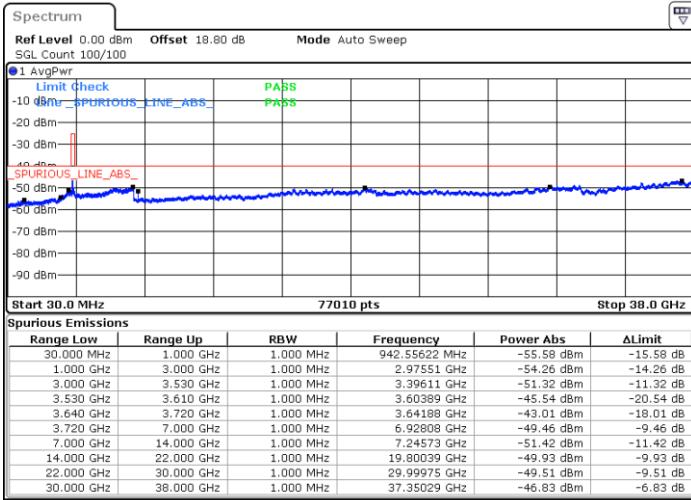


LTE Band 48 / 5MHz

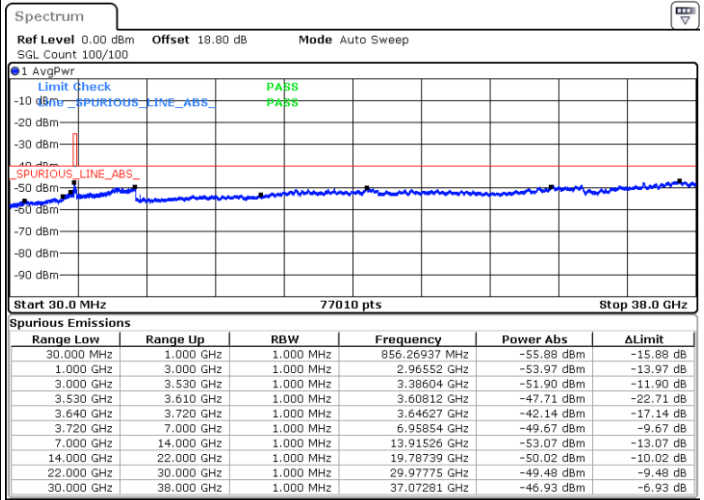
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



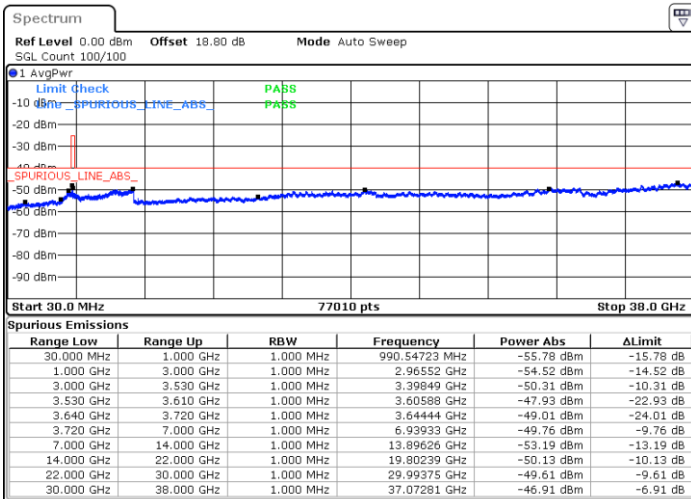
Date: 31.AUG.2021 23:49:32



Date: 31.AUG.2021 23:51:42

Middle Channel / Full RB

N/A



Date: 31.AUG.2021 23:38:51

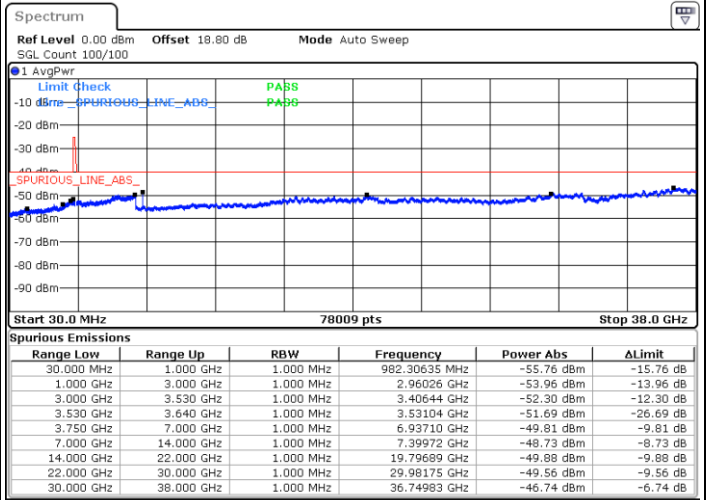
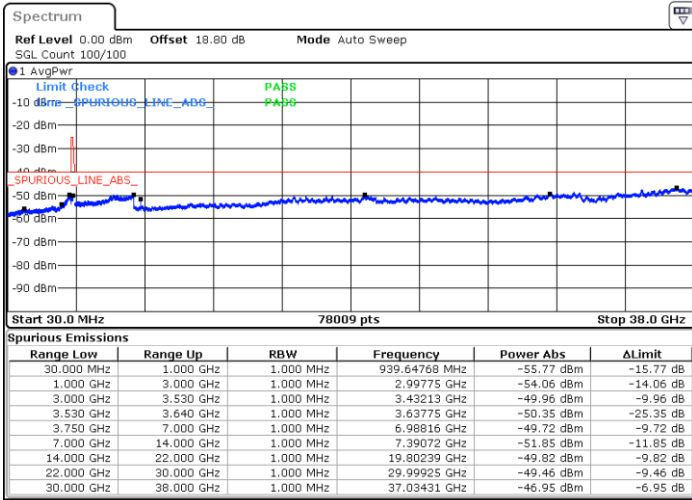


LTE Band 48 / 5MHz

64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

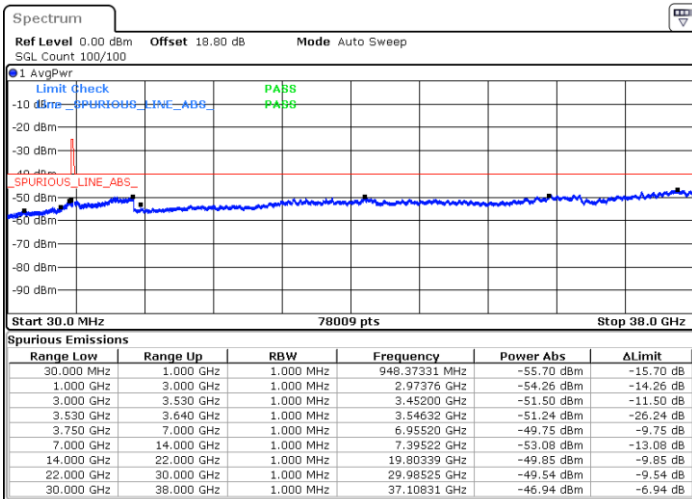


Date: 1.SEP.2021 00:11:02

Date: 1.SEP.2021 00:08:58

Highest Channel / Full RB

N/A



Date: 1.SEP.2021 00:29:47

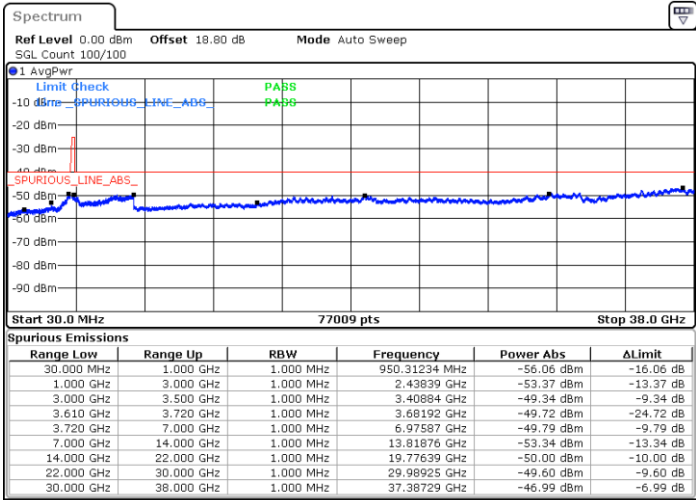


LTE Band 48 / 10MHz

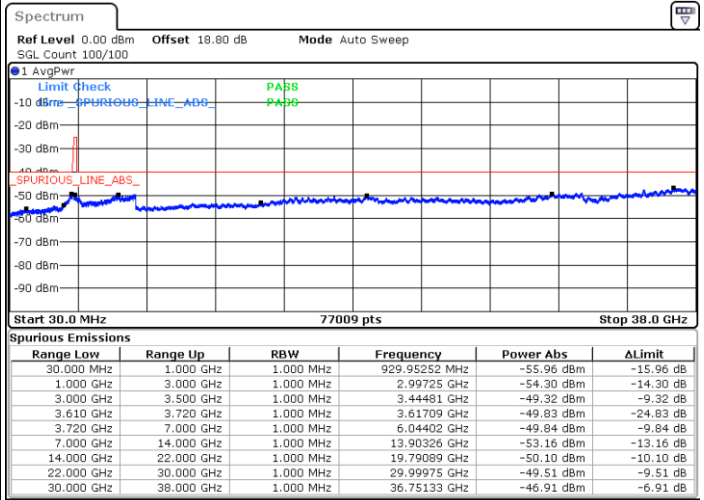
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



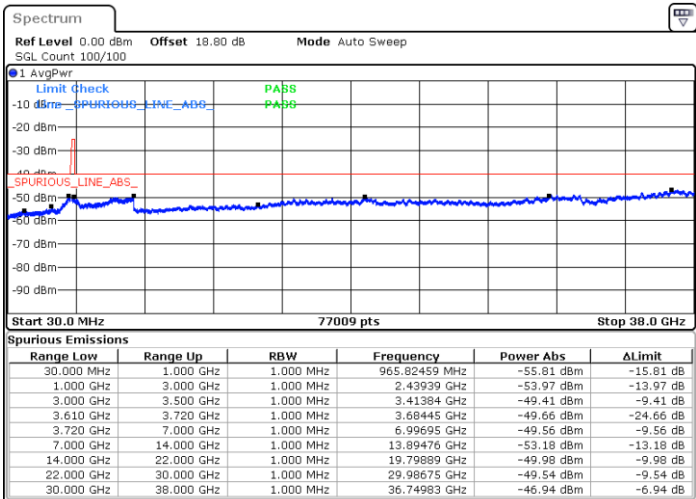
Date: 27.AUG.2021 10:00:32



Date: 27.AUG.2021 10:02:38

Lowest Channel / Full RB

N/A



Date: 27.AUG.2021 10:16:51

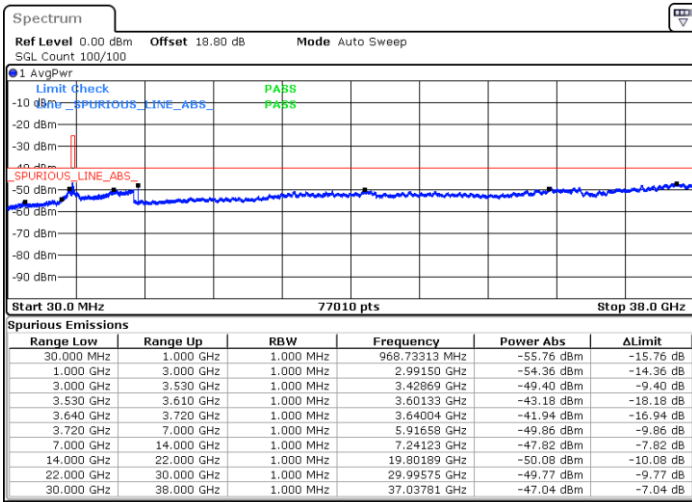


LTE Band 48 / 10MHz

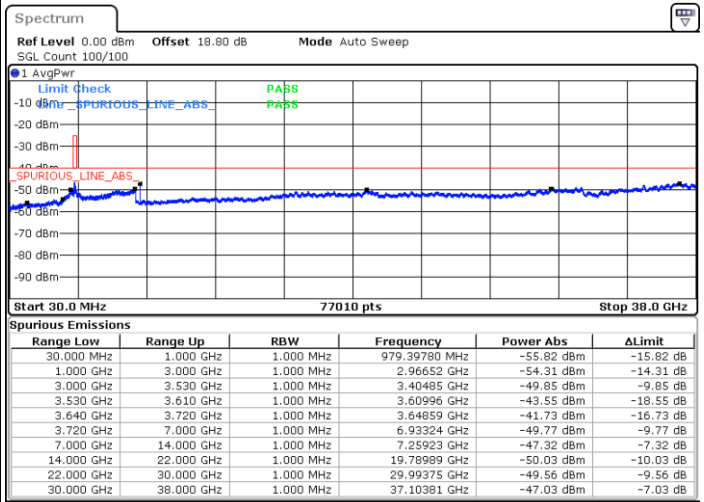
64QAM

MiddleChannel / 1RB0

Middle Channel / 1RBmax



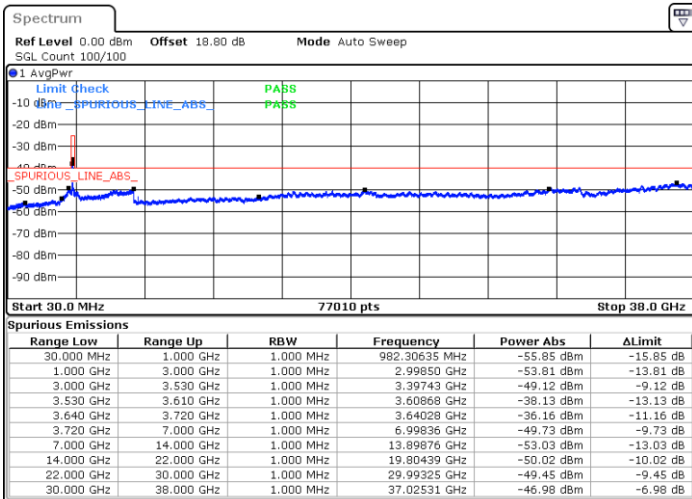
Date: 27.AUG.2021 10:24:10



Date: 27.AUG.2021 10:26:18

Middle Channel / Full RB

N/A



Date: 27.AUG.2021 10:39:40

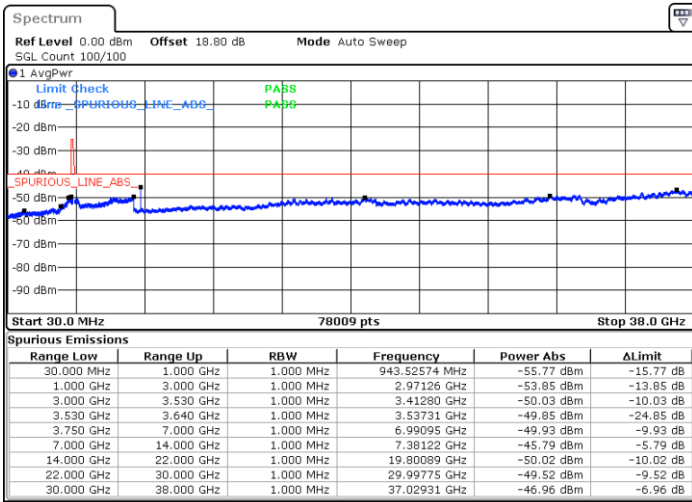


LTE Band 48 / 10MHz

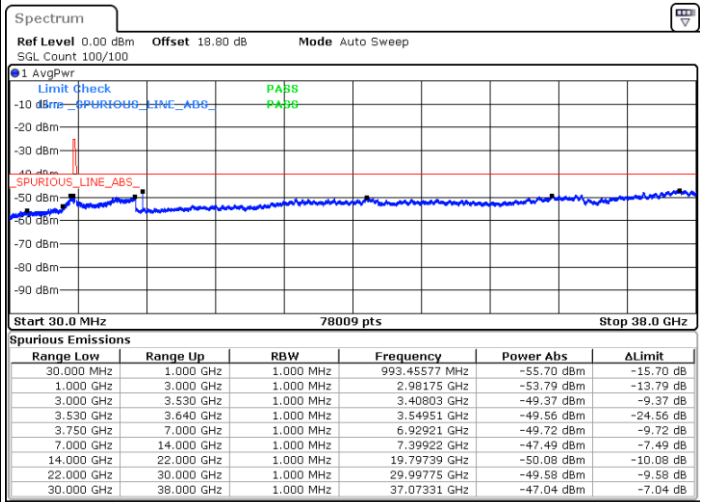
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



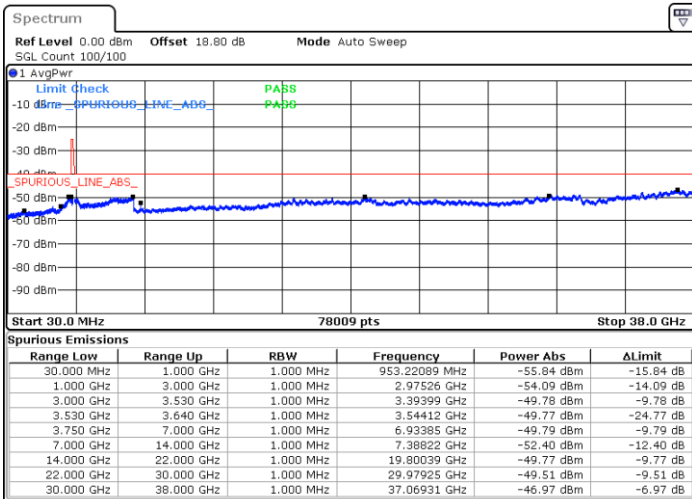
Date: 27.AUG.2021 10:49:23



Date: 27.AUG.2021 10:52:34

Highest Channel / Full RB

N/A



Date: 27.AUG.2021 11:03:03

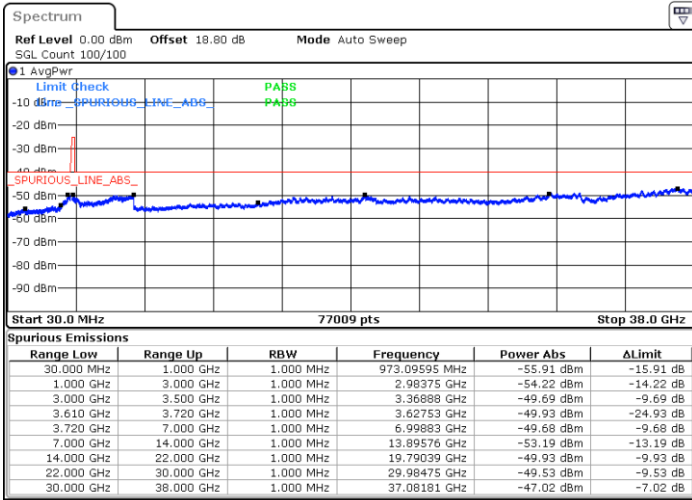


LTE Band 48 / 15MHz

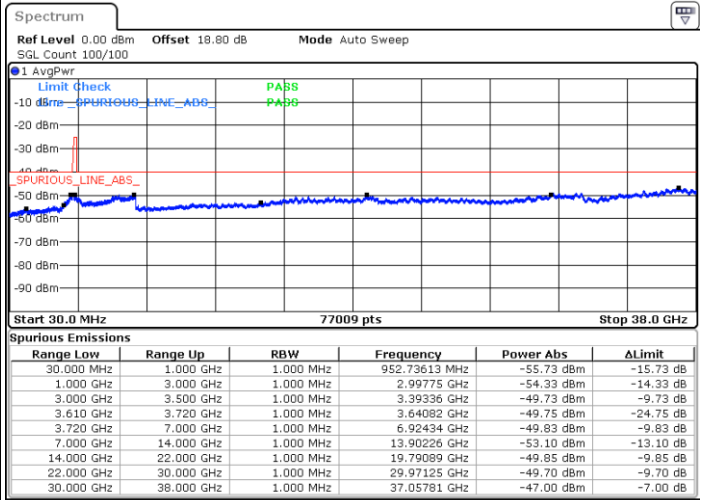
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



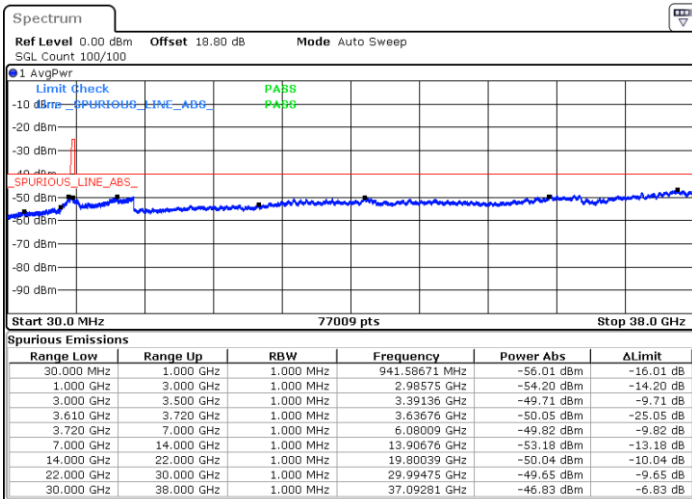
Date: 26.AUG.2021 16:44:10



Date: 26.AUG.2021 16:51:11

Lowest Channel / Full RB

N/A



Date: 26.AUG.2021 17:18:32

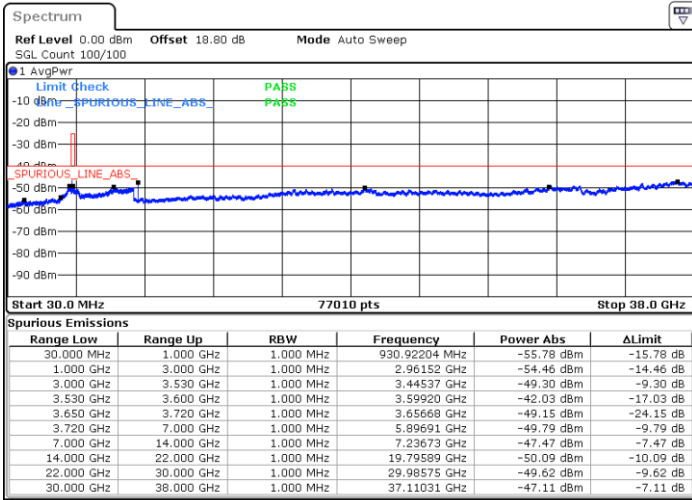


LTE Band 48 / 15MHz

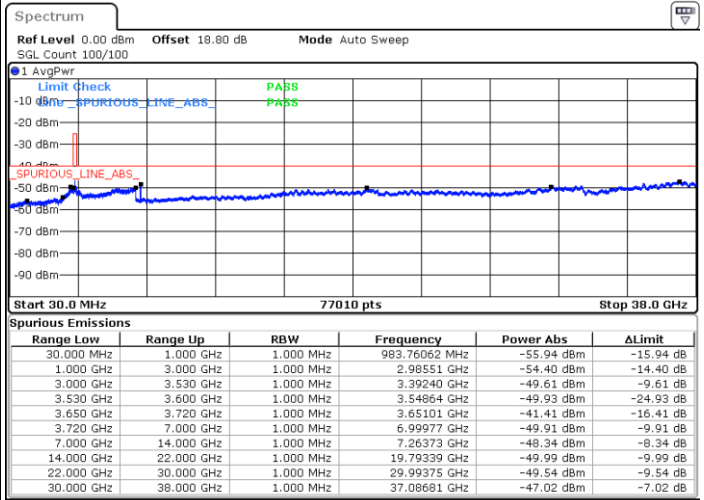
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



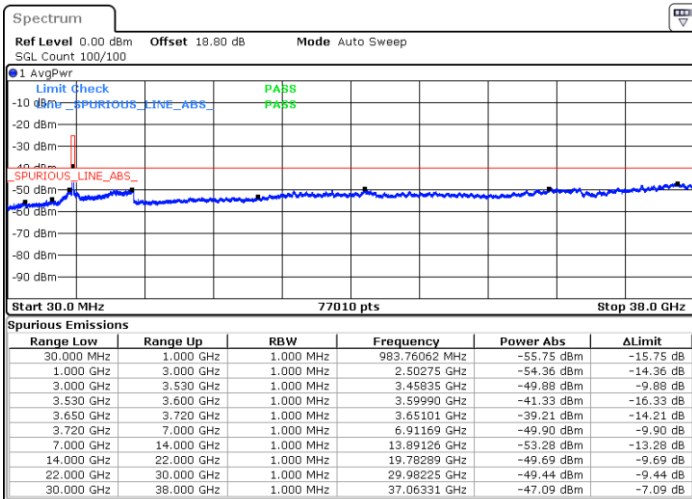
Date: 26.AUG.2021 17:42:06



Date: 26.AUG.2021 17:54:49

Middle Channel / Full RB

N/A



Date: 26.AUG.2021 18:08:55

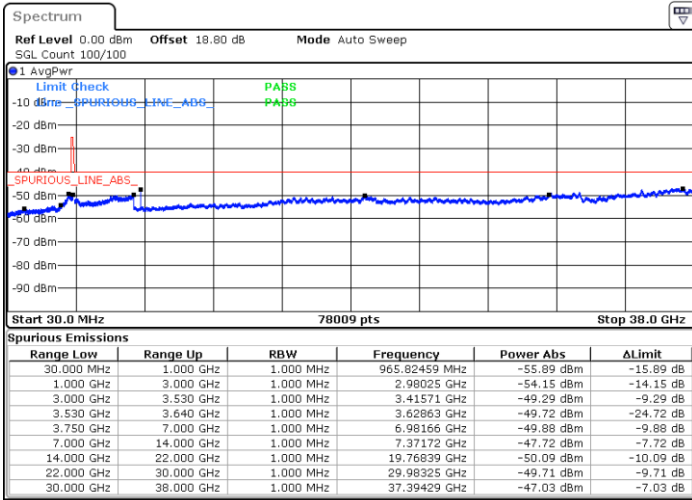


LTE Band 48 / 15MHz

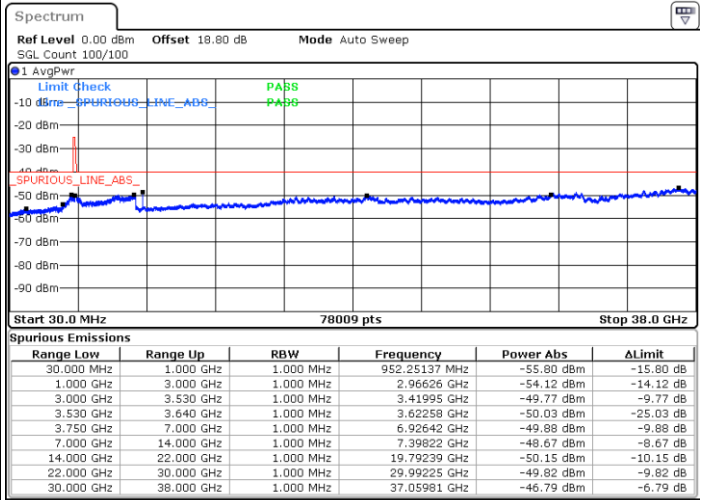
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



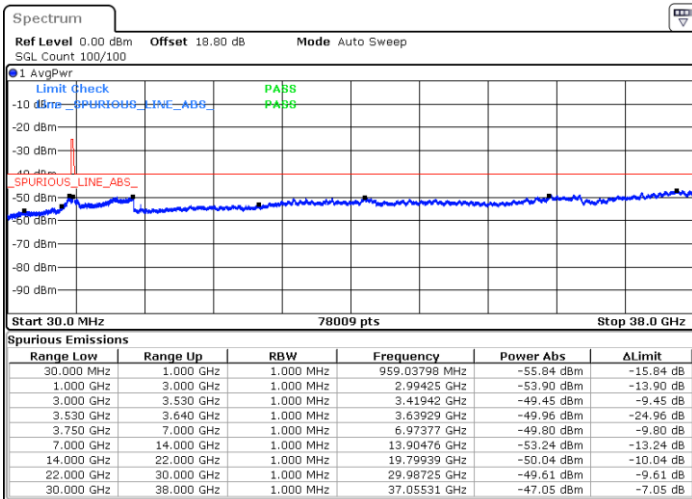
Date: 26.AUG.2021 18:21:41



Date: 26.AUG.2021 18:40:18

Highest Channel / Full RB

N/A



Date: 26.AUG.2021 18:52:07

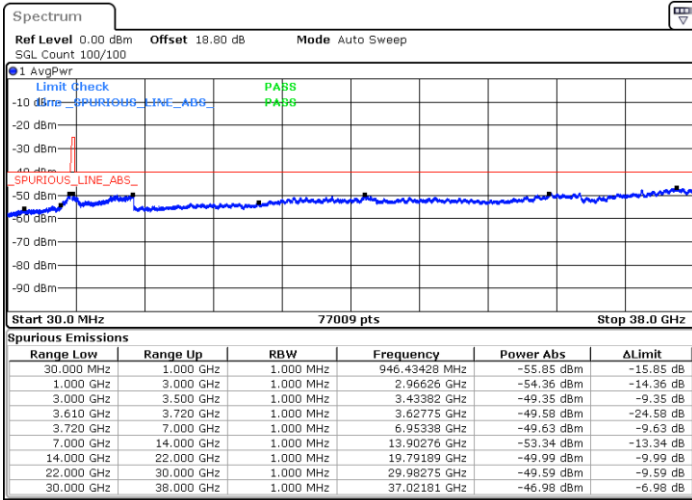


LTE Band 48 / 20MHz

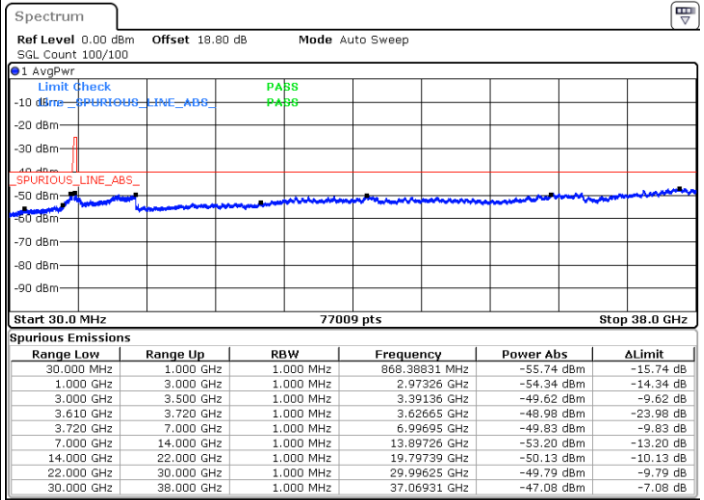
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



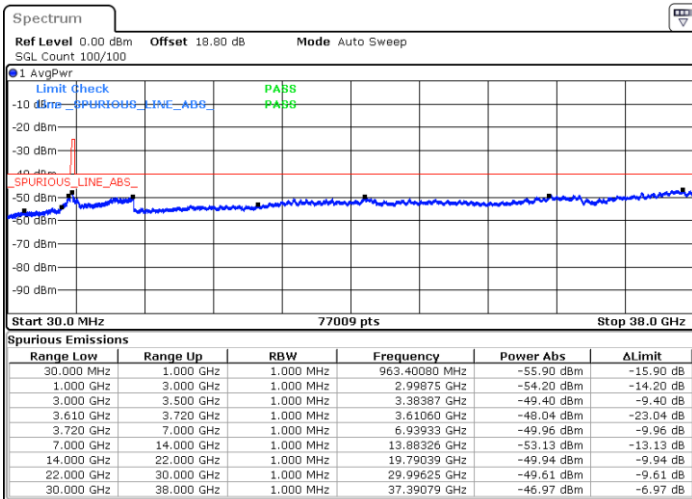
Date: 26.AUG.2021 12:32:09



Date: 26.AUG.2021 13:01:21

Lowest Channel / Full RB

N/A



Date: 26.AUG.2021 12:35:00

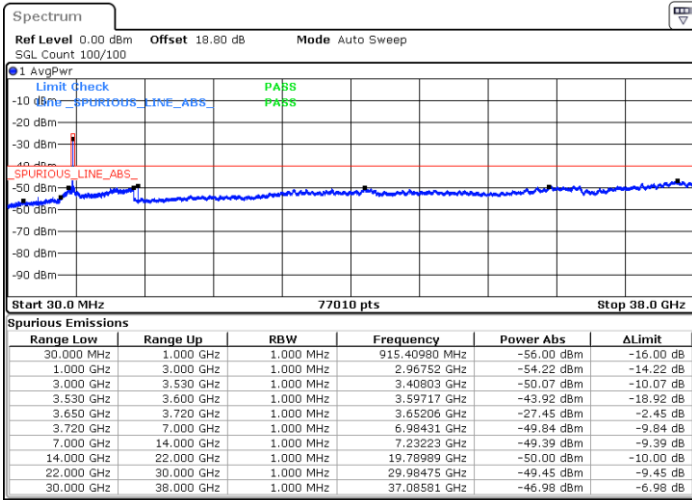


LTE Band 48 / 20MHz

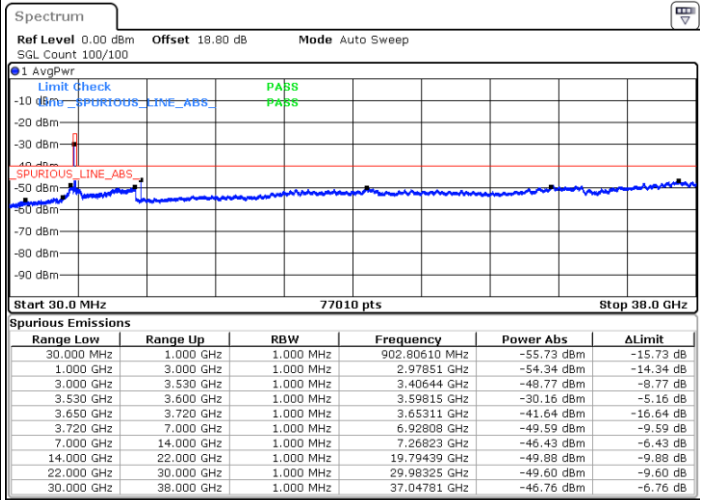
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



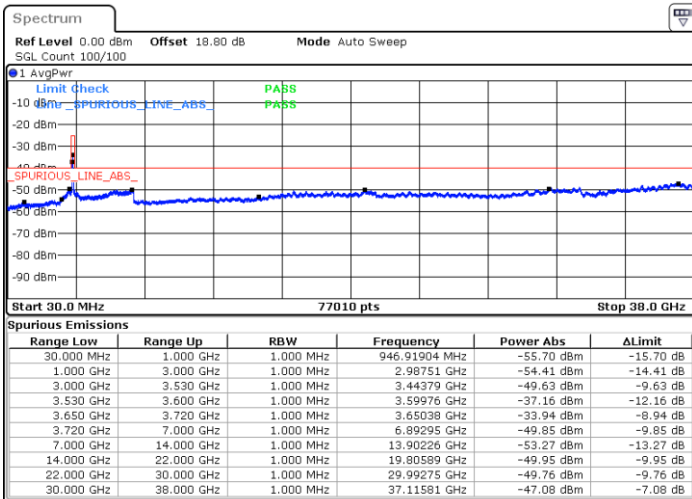
Date: 26.AUG.2021 15:35:57



Date: 26.AUG.2021 15:49:56

Middle Channel / Full RB

N/A



Date: 26.AUG.2021 16:04:17

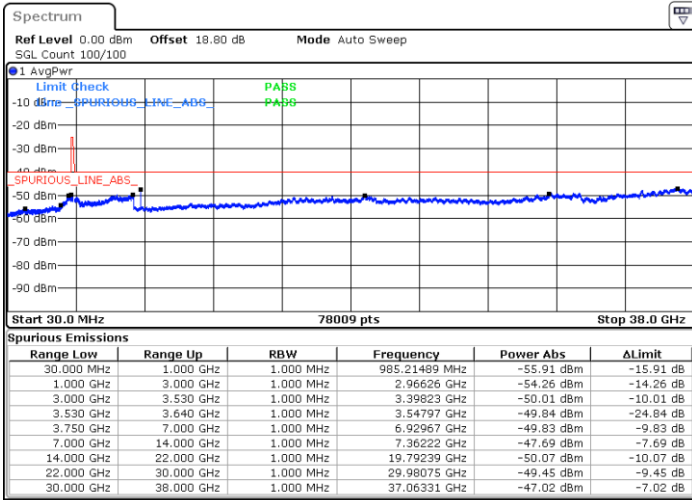


LTE Band 48 / 20MHz

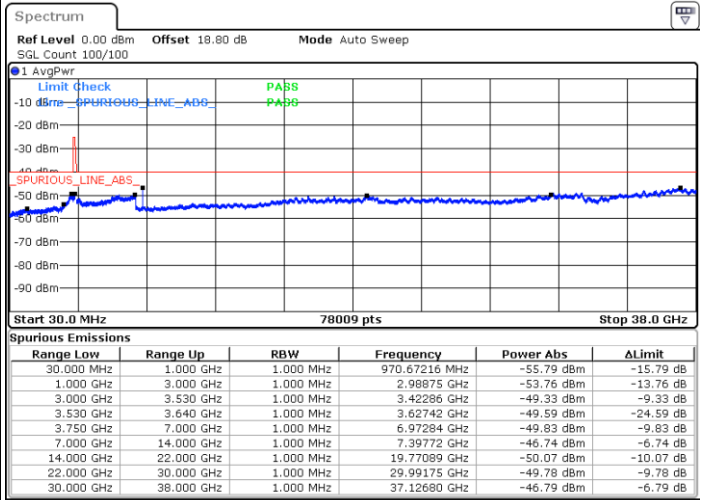
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



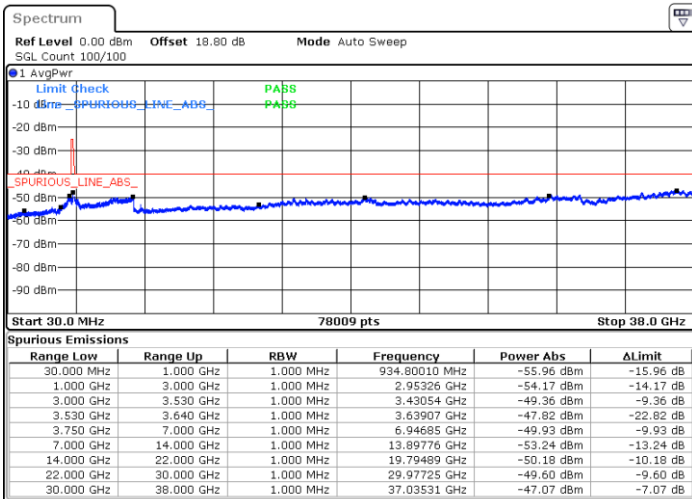
Date: 26.AUG.2021 16:19:34



Date: 26.AUG.2021 16:27:47

Highest Channel / Full RB

N/A



Date: 26.AUG.2021 16:34:33



Frequency Stability

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0077	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0076	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.0076	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0002	

Note:

1. Normal Voltage =48 V. ; Minimum Voltage =36V. ; Maximum Voltage =55 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 48 <CDD mode Ant. 0>

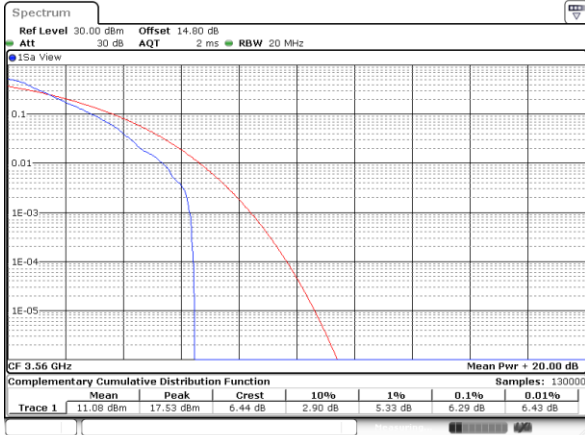
Peak-to-Average Ratio

Mode	LTE Band 48 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	6.29	5.77	7.16	6.46	PASS
Middle CH	5.62	6.03	7.22	6.72	
Highest CH	6.06	5.65	7.57	6.49	
Mode	LTE Band 48 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.75	6.55	-	-	PASS
Middle CH	6.26	6.26	-	-	
Highest CH	6.58	6.67	-	-	

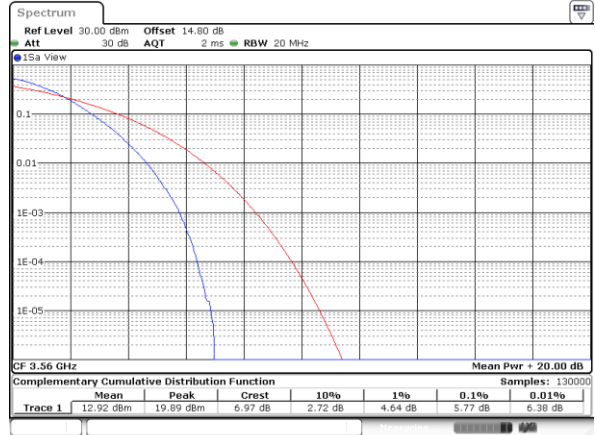


LTE Band 48 / 20MHz / QPSK

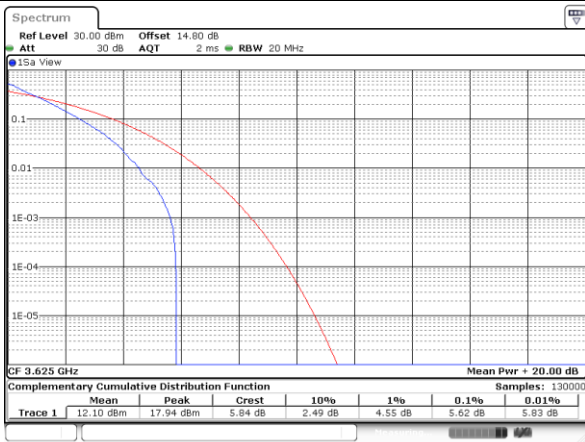
Lowest Channel / 1RB



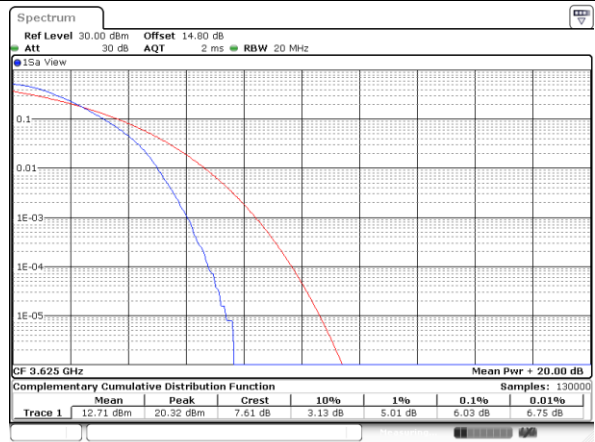
Lowest Channel / Full RB



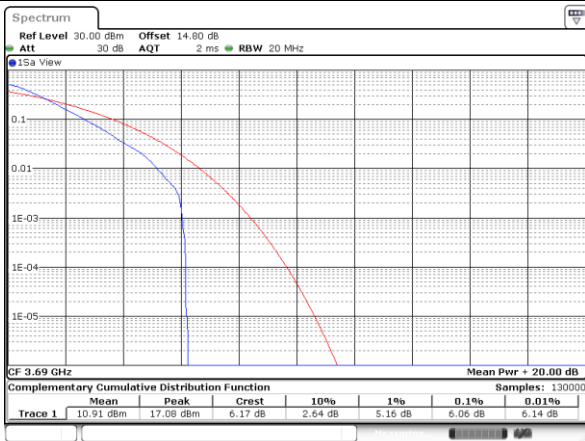
Middle Channel / 1RB



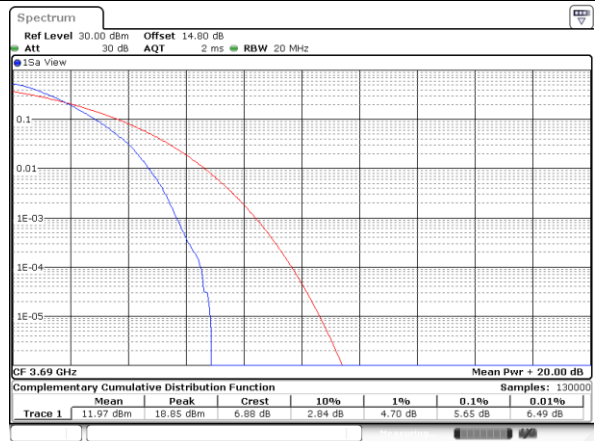
Middle Channel / Full RB



Highest Channel / 1RB



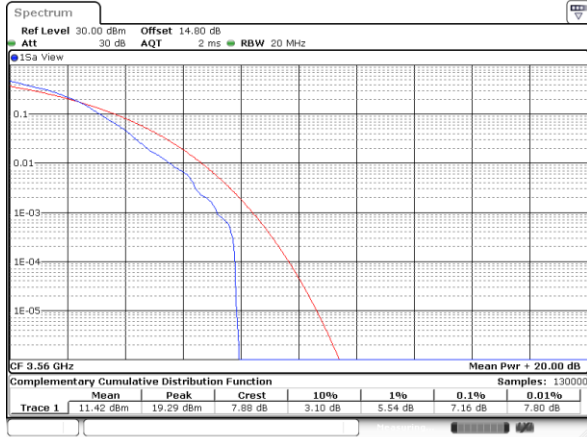
Highest Channel / Full RB





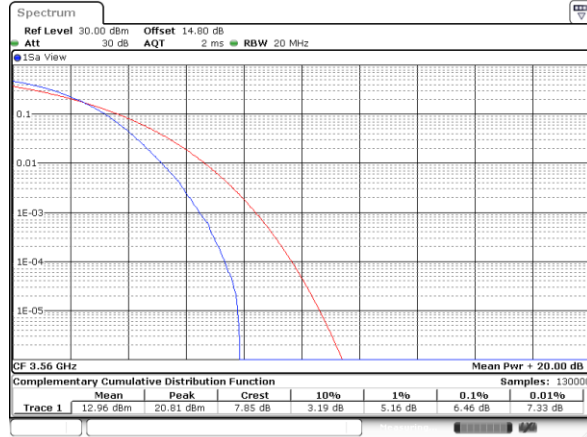
LTE Band 48 / 20MHz / 16QAM

Lowest Channel / 1RB



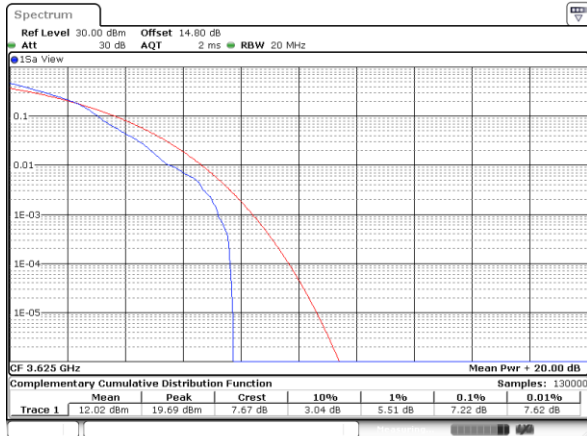
Date: 6,SEP,2021 10:05:23

Lowest Channel / Full RB



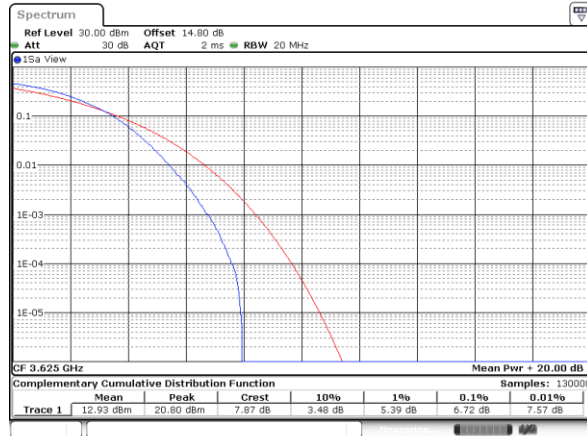
Date: 6,SEP,2021 10:06:54

Middle Channel / 1RB



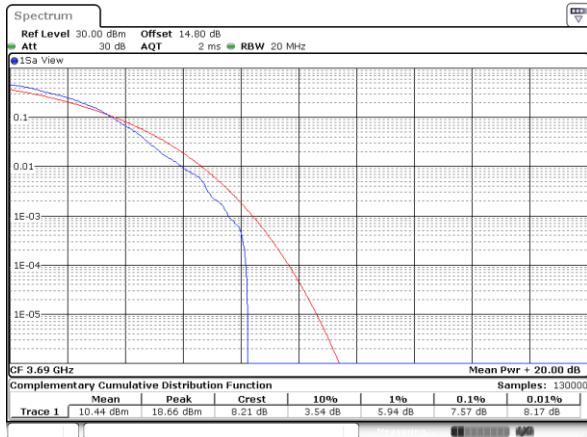
Date: 6,SEP,2021 10:11:11

Middle Channel / Full RB



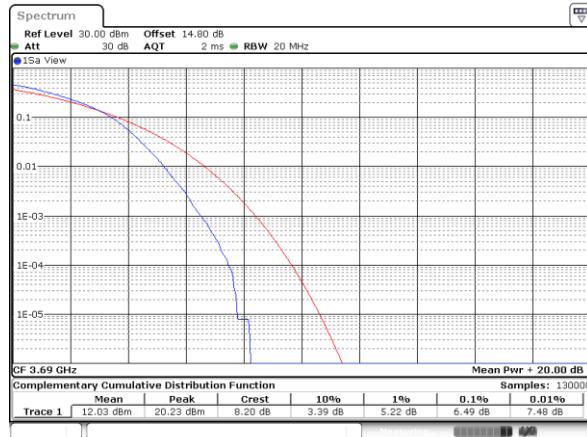
Date: 6,SEP,2021 10:08:21

Highest Channel / 1RB



Date: 6,SEP,2021 10:13:37

Highest Channel / Full RB

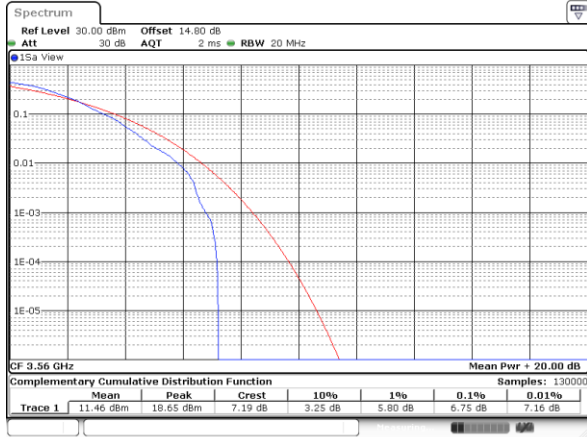


Date: 6,SEP,2021 10:15:18



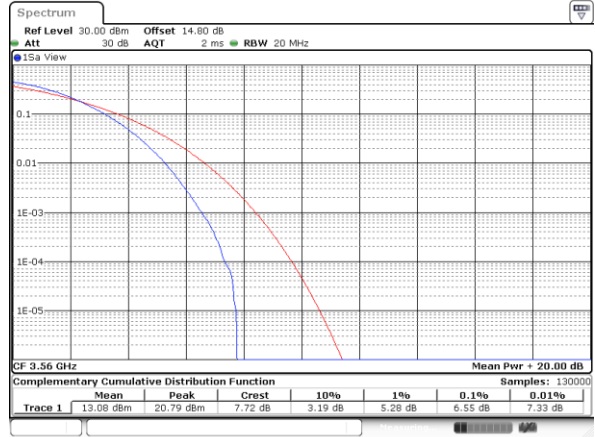
LTE Band 48 / 20MHz / 64QAM

Lowest Channel / 1RB



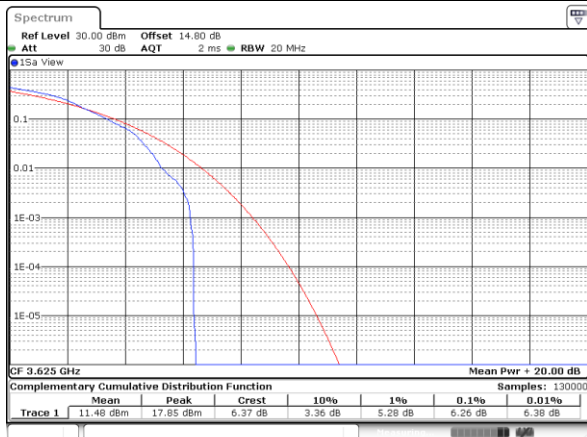
Date: 6,SEP,2021 10:05:46

Lowest Channel / Full RB



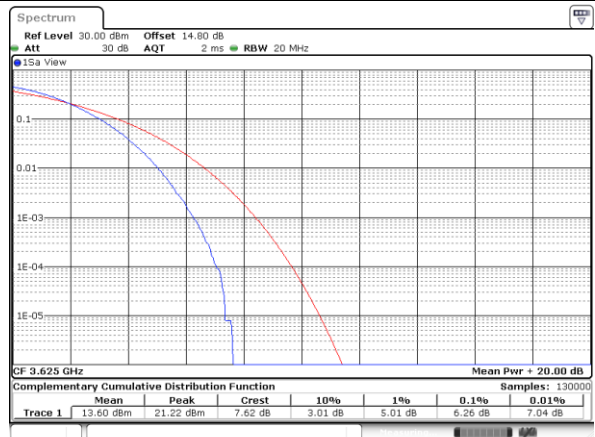
Date: 6,SEP,2021 10:06:24

Middle Channel / 1RB



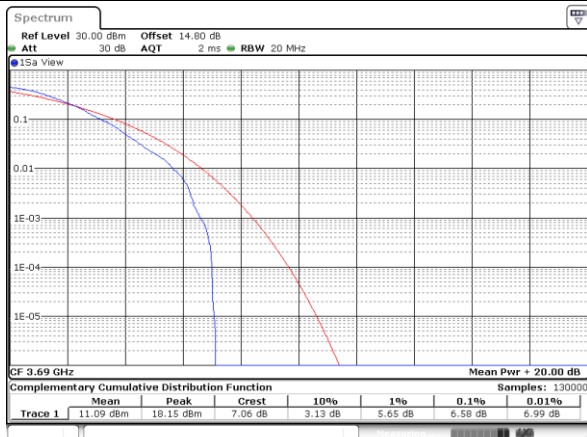
Date: 6,SEP,2021 10:09:36

Middle Channel / Full RB



Date: 6,SEP,2021 10:08:47

Highest Channel / 1RB



Date: 6,SEP,2021 10:14:00

Highest Channel / Full RB



Date: 6,SEP,2021 10:14:49



Maximum Power Spectral Density

Mode		LTE Band 48 : Conducted Power Density (dBm/MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz		
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Lowest CH	-	-	-	-	17.43	17.76	16.83	17.13	17.01	17.53	17.94	17.70	
Middle CH	-	-	-	-	17.09	17.73	17.60	17.51	18.11	17.57	18.41	18.03	
Highest CH	-	-	-	-	16.25	16.42	16.32	16.25	16.66	16.56	17.13	17.30	

Mode		LTE Band 48 : Conducted Power Density (dBm/MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz		
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM		
Lowest CH	-	-	-	-	17.20	-	17.29	-	17.74	-	17.91	-	
Middle CH	-	-	-	-	17.36	-	17.64	-	18.01	-	18.65	-	
Highest CH	-	-	-	-	16.53	-	16.48	-	16.76	-	16.75	-	

Mode		LTE Band 48 : EIRP Power Density (dBm/MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz		
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Lowest CH	-	-	-	-	35.44	35.77	34.84	35.14	35.02	35.54	35.95	35.71	
Middle CH	-	-	-	-	35.10	35.74	35.61	35.52	36.12	35.58	36.42	36.04	
Highest CH	-	-	-	-	34.26	34.43	34.33	34.26	34.67	34.57	35.14	35.31	

Mode		LTE Band 48 : EIRP Power Density (dBm/MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz		
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM		
Lowest CH	-	-	-	-	35.21	-	35.3	-	35.75	-	35.92	-	
Middle CH	-	-	-	-	35.37	-	35.65	-	36.02	-	36.66	-	
Highest CH	-	-	-	-	34.54	-	34.49	-	34.77	-	34.76	-	
Antenna Gain	18.01 dBi												
Limit	37 dBm/MHz												
Result	Pass												

Remark: The "Offset" in the Conducted Power Density plots already add 10 log2 (dB).

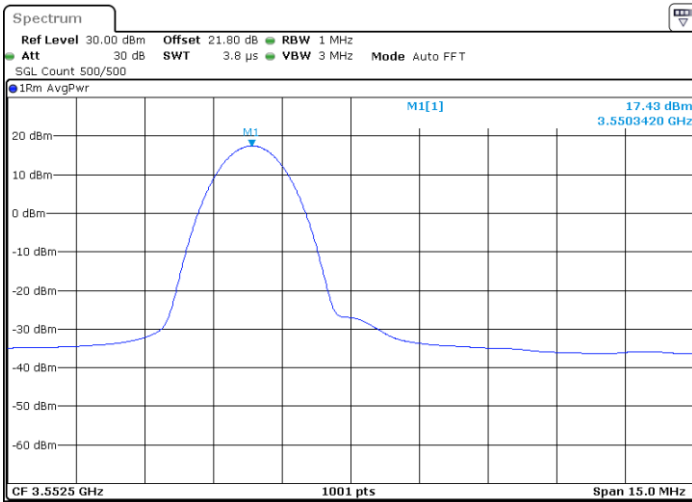


LTE Band 48 / 5MHz

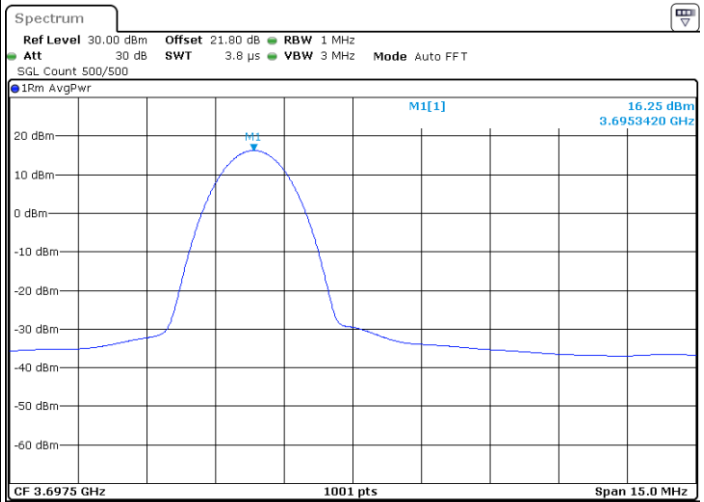
QPSK

Lowest Channel / 1RB0

Highest Channel / 1RB0



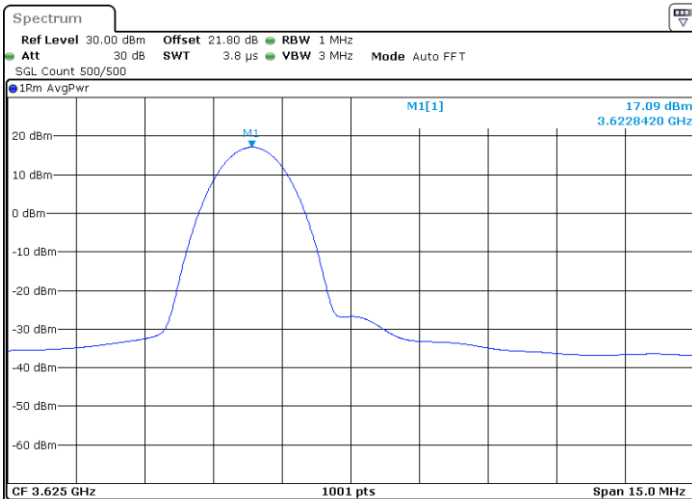
Date: 3.SEP.2021 02:30:59



Date: 3.SEP.2021 02:29:25

Middle Channel / 1RB0

N/A



Date: 3.SEP.2021 02:29:42

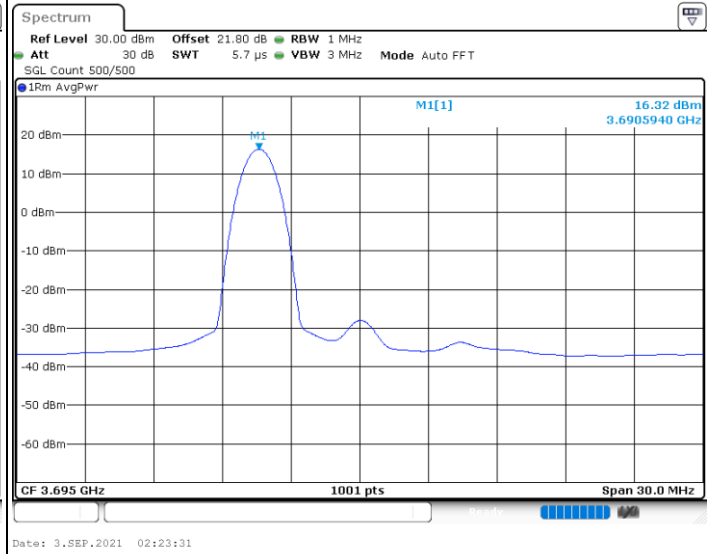
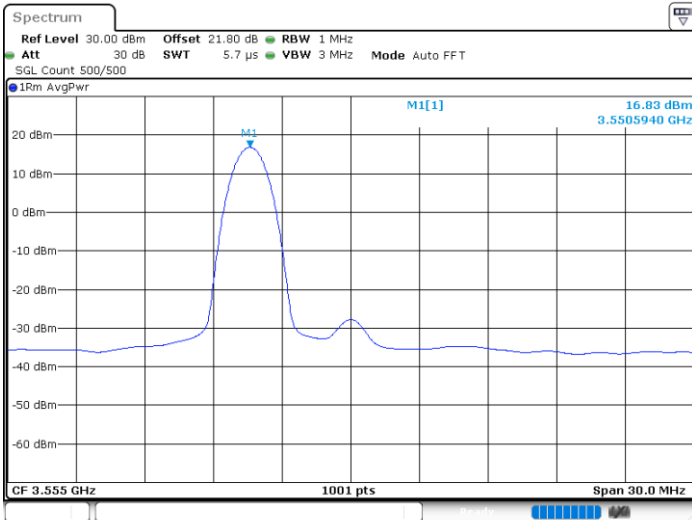


LTE Band 48 / 10MHz

QPSK

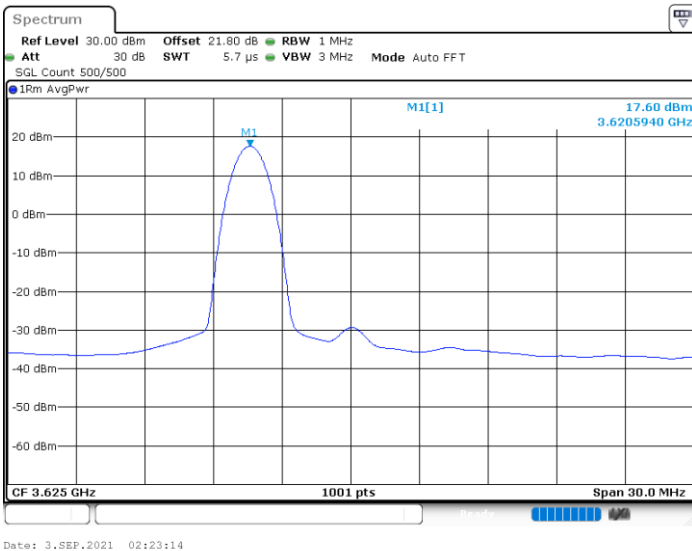
Lowest Channel / 1RB0

Highest Channel / 1RB0



Middle Channel / 1RB0

N/A



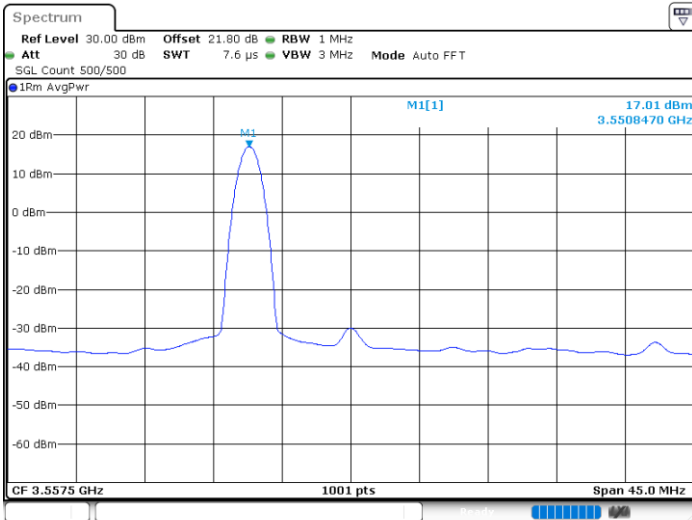


LTE Band 48 / 15MHz

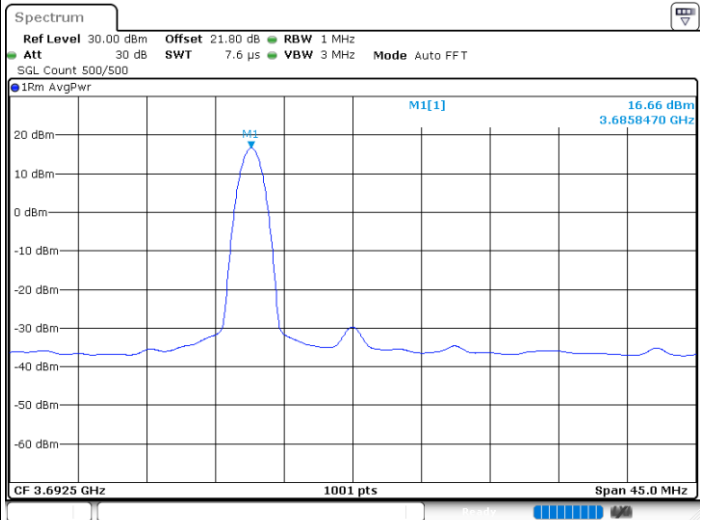
QPSK

Lowest Channel / 1RB0

Highest Channel / 1RB0



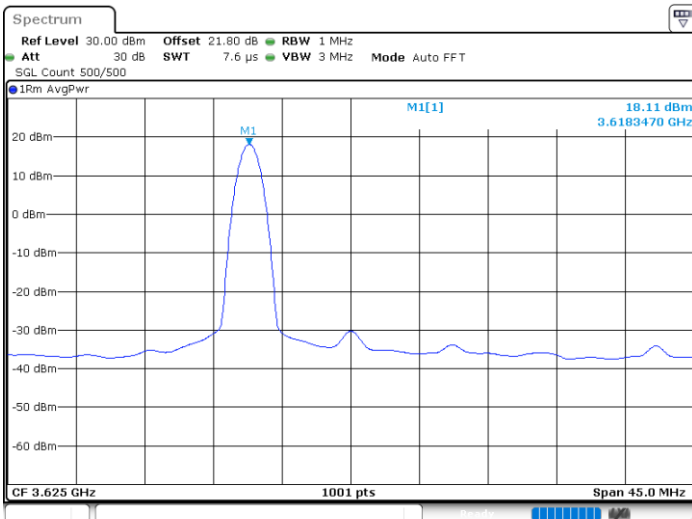
Date: 3.SEP.2021 02:21:10



Date: 3.SEP.2021 02:17:39

Middle Channel / 1RB0

N/A



Date: 3.SEP.2021 02:19:13

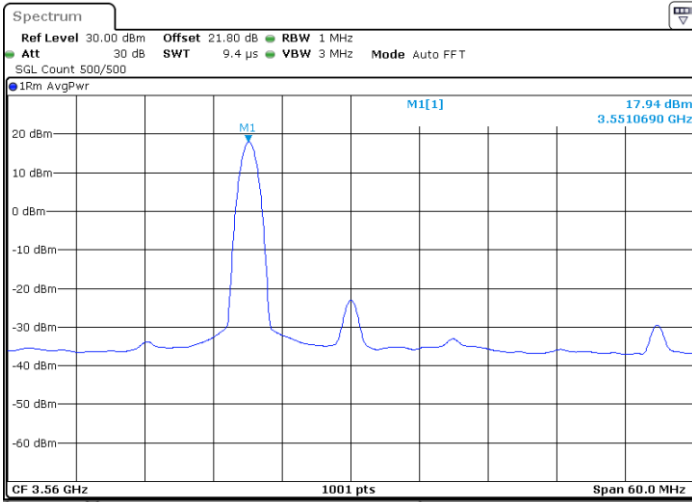


LTE Band 48 /20MHz

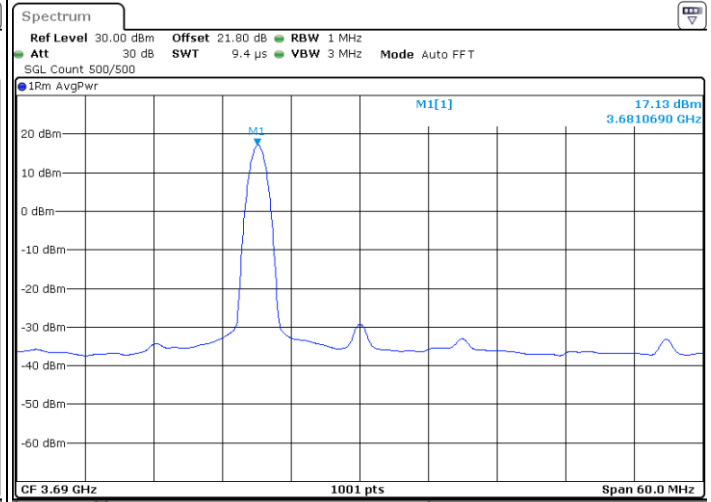
QPSK

Lowest Channel / 1RB0

Highest Channel / 1RB0



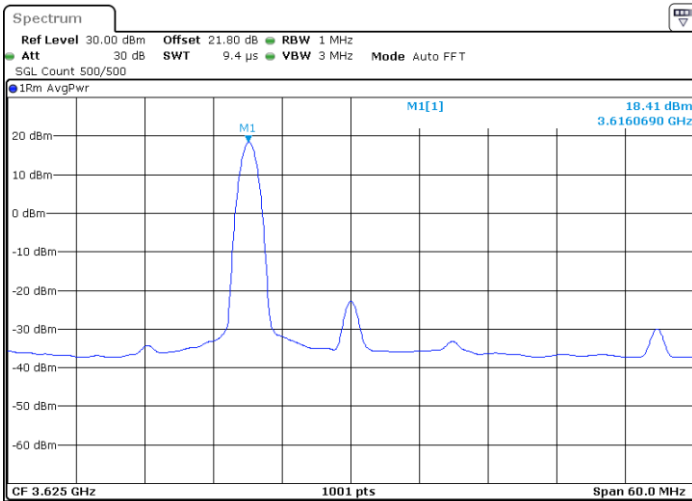
Date: 3.SEP.2021 02:06:58



Date: 3.SEP.2021 02:10:33

Middle Channel / 1RB0

N/A



Date: 3.SEP.2021 02:10:15

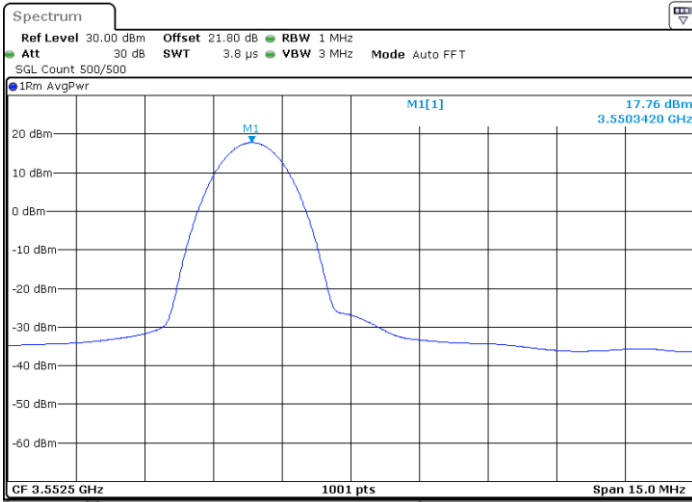


LTE Band 48 / 5MHz

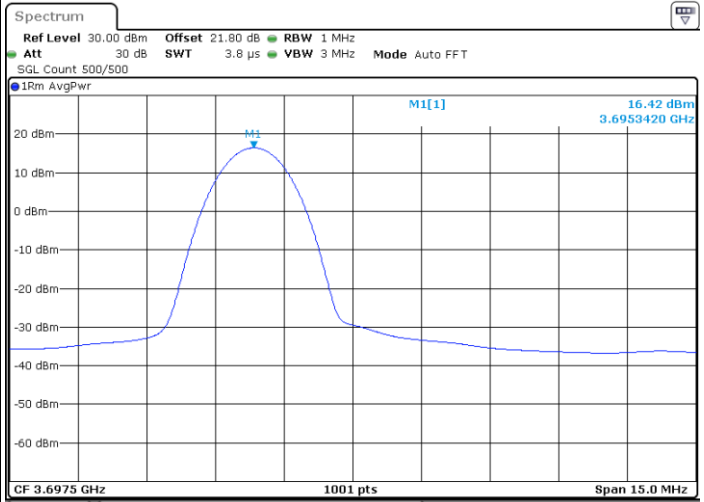
16QAM

Lowest Channel / 1RB0

Highest Channel / 1RB0



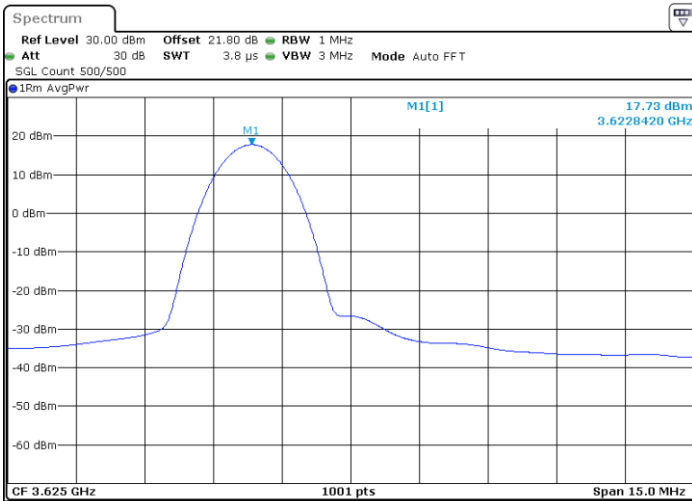
Date: 3.SEP.2021 02:30:44



Date: 3.SEP.2021 02:29:10

Middle Channel / 1RB0

N/A



Date: 3.SEP.2021 02:29:57

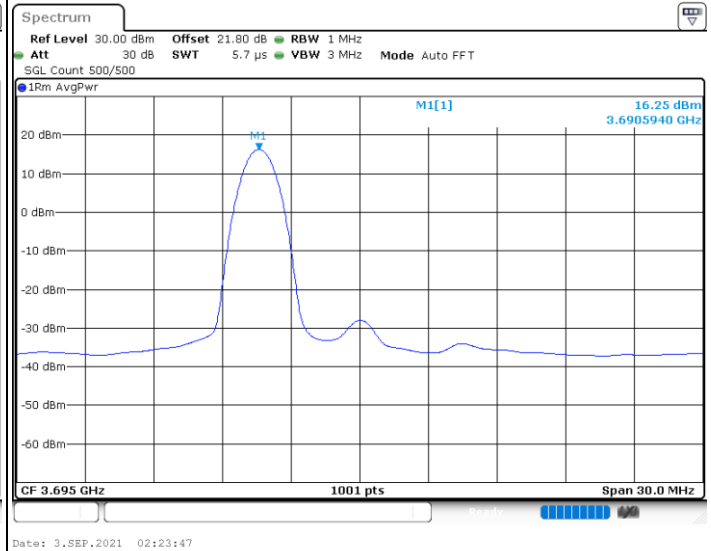
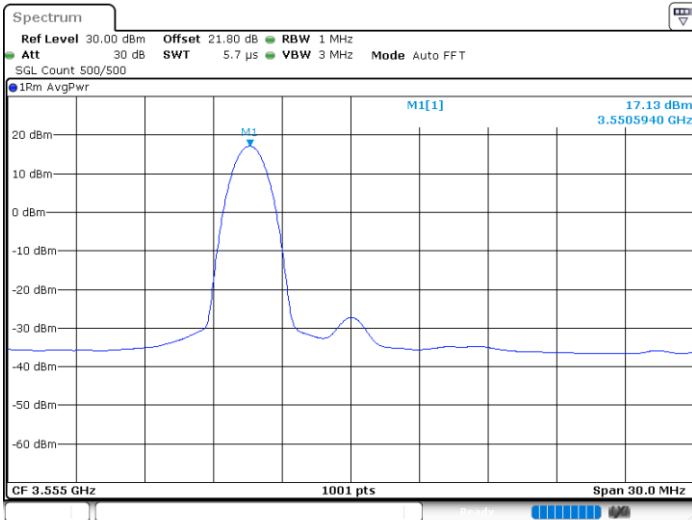


LTE Band 48 / 10MHz

16QAM

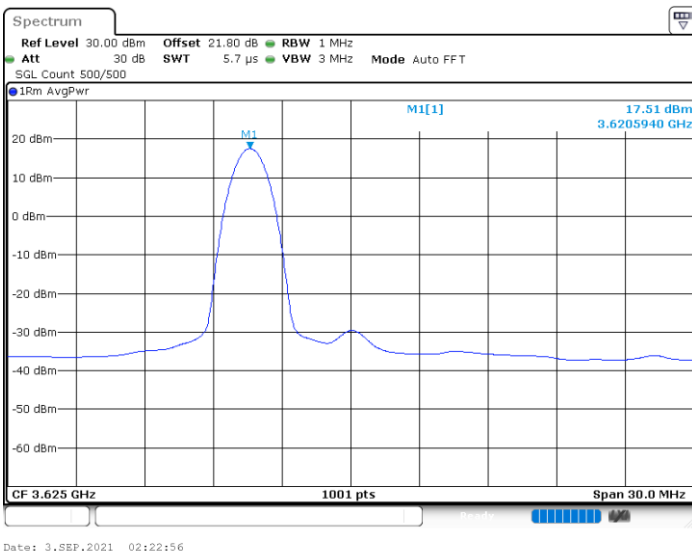
Lowest Channel / 1RB0

Highest Channel / 1RB0



Middle Channel / 1RB0

N/A



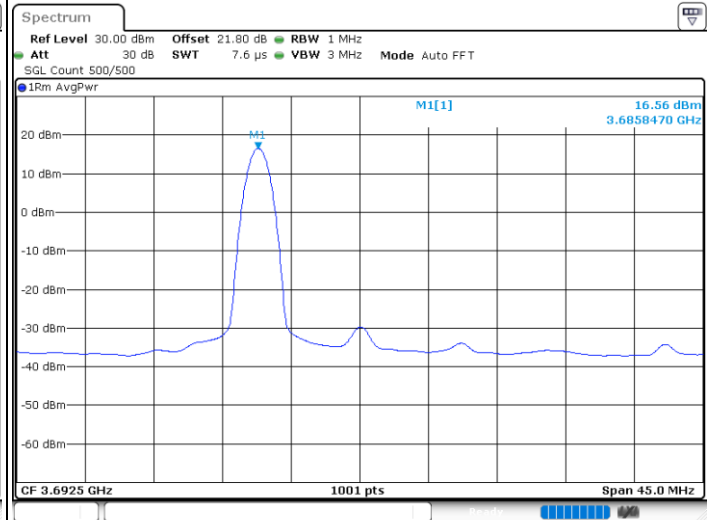
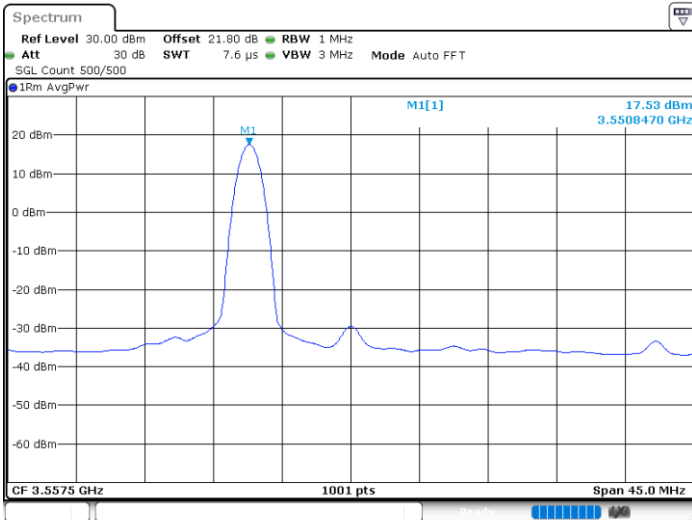


LTE Band 48 / 15MHz

16QAM

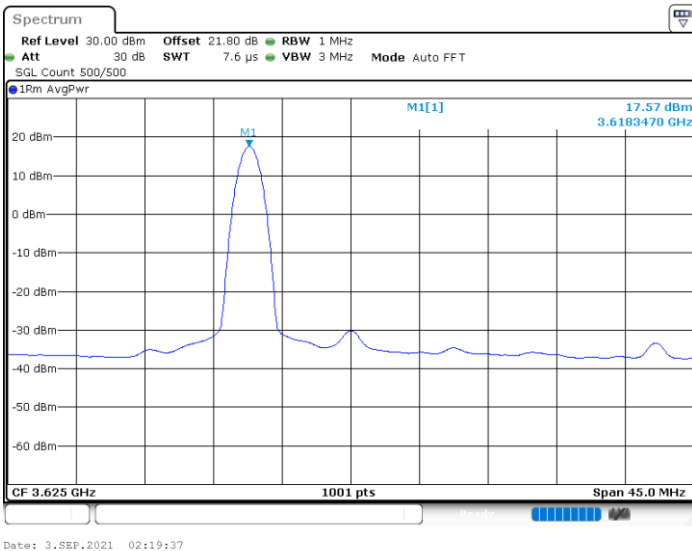
Lowest Channel / 1RB0

Highest Channel / 1RB0



Middle Channel / 1RB0

N/A



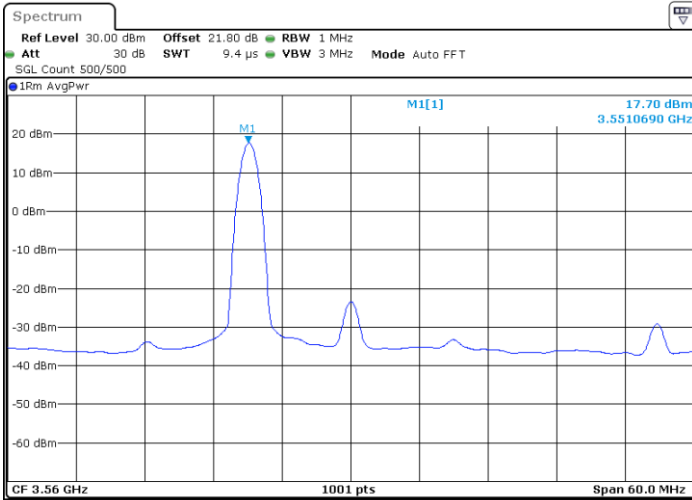


LTE Band 48 /20MHz

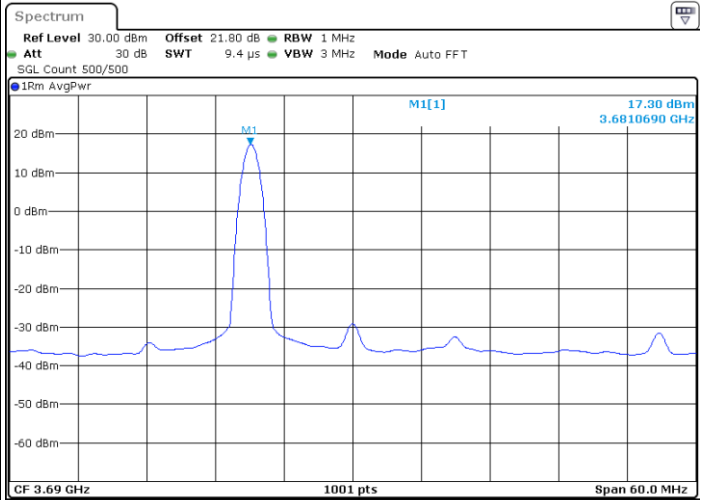
16QAM

Lowest Channel / 1RB0

Highest Channel / 1RB0



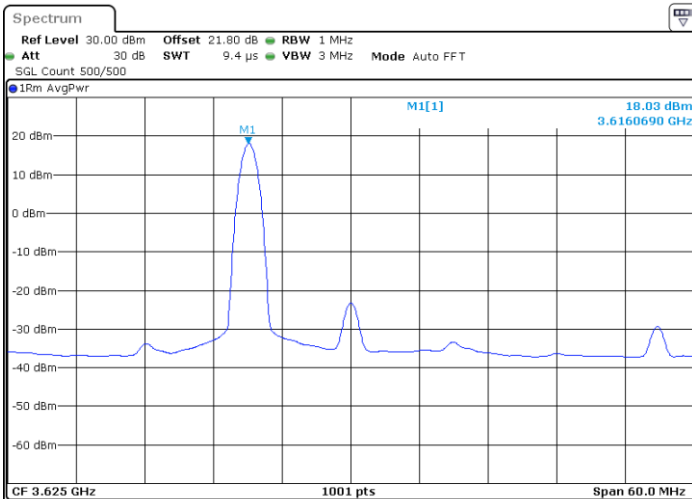
Date: 3.SEP.2021 02:07:19



Date: 3.SEP.2021 02:10:49

Middle Channel / 1RB0

N/A



Date: 3.SEP.2021 02:10:00

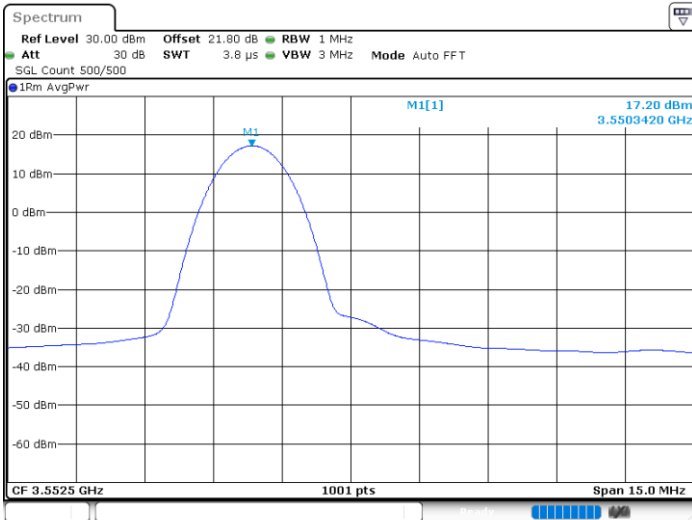


LTE Band 48 / 5MHz

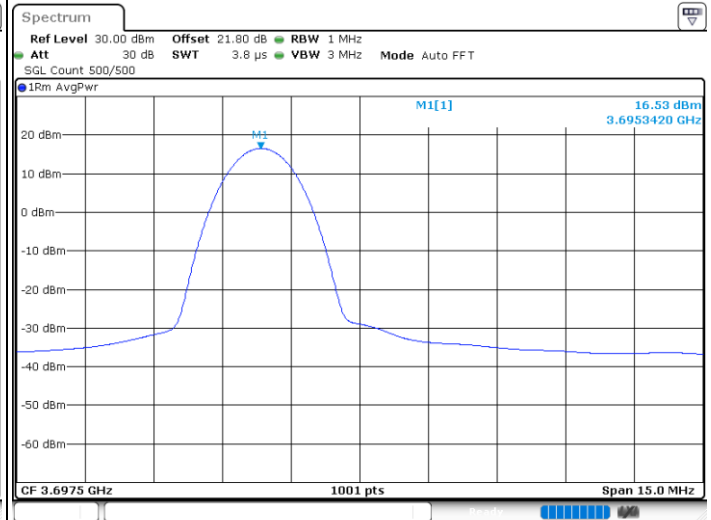
64QAM

Lowest Channel / 1RB0

Highest Channel / 1RB0



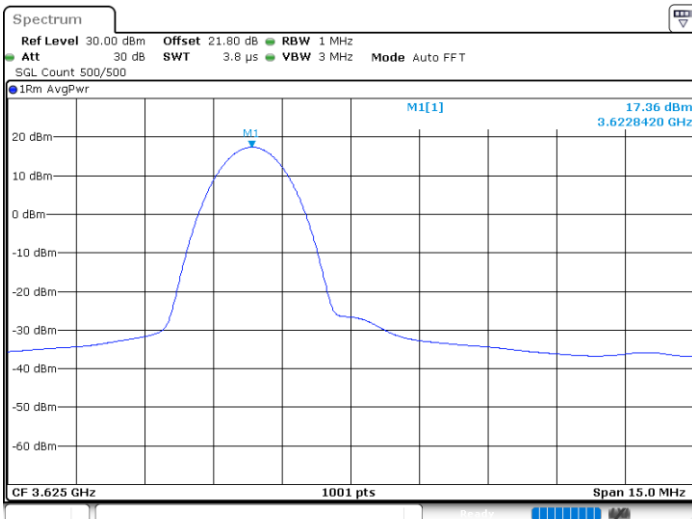
Date: 3.SEP.2021 02:30:29



Date: 3.SEP.2021 02:28:54

Middle Channel / 1RB0

N/A



Date: 3.SEP.2021 02:30:13

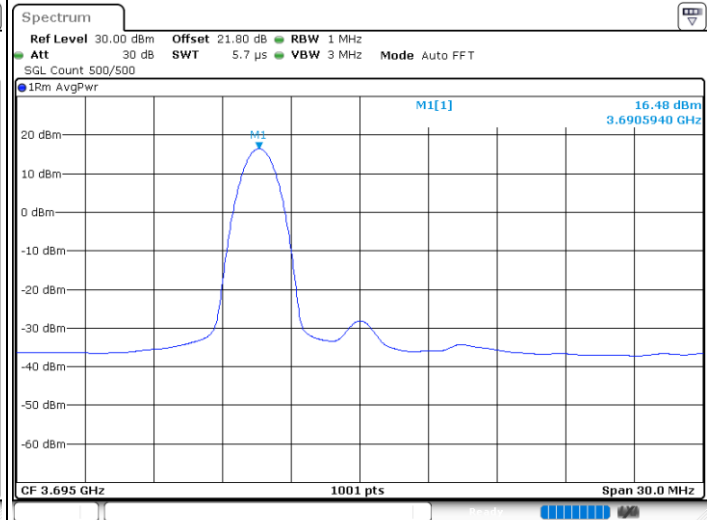
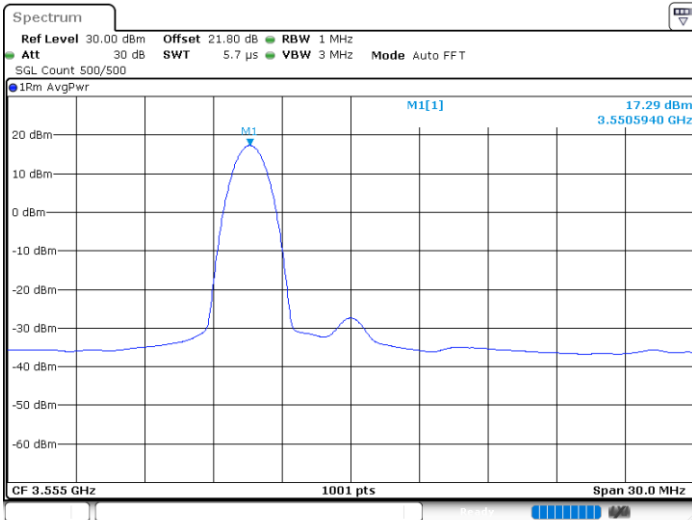


LTE Band 48 / 10MHz

64QAM

Lowest Channel / 1RB0

Highest Channel / 1RB0



Middle Channel / 1RB0

N/A

