



LTE Band 48 / 15MHz

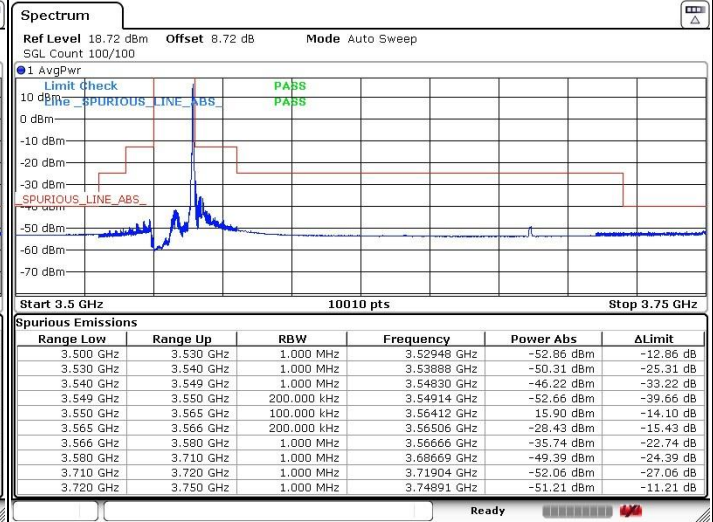
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



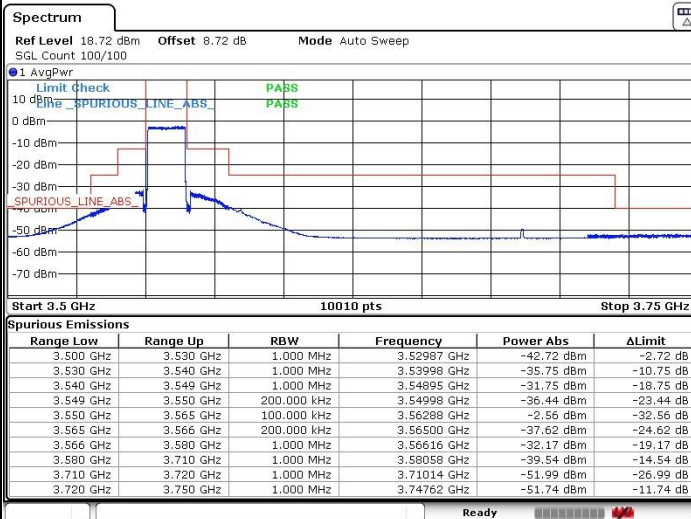
Date: 29.AUG.2020 18:44:23



Date: 29.AUG.2020 18:47:40

Lowest Channel / Full RB

N/A



Date: 29.AUG.2020 18:41:18

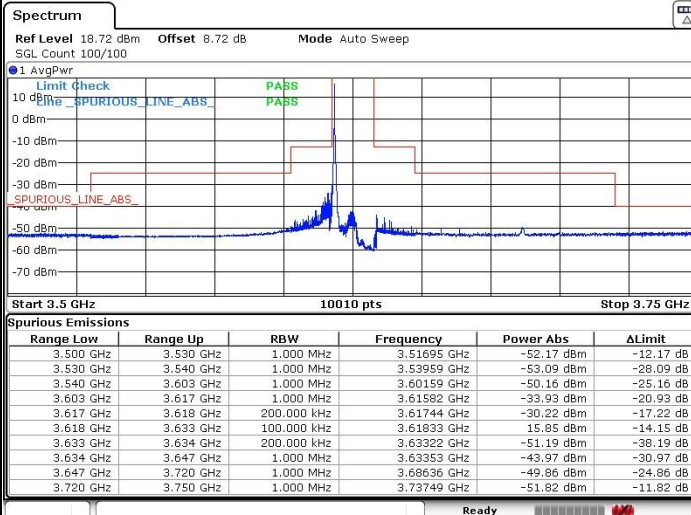


LTE Band 48 / 15MHz

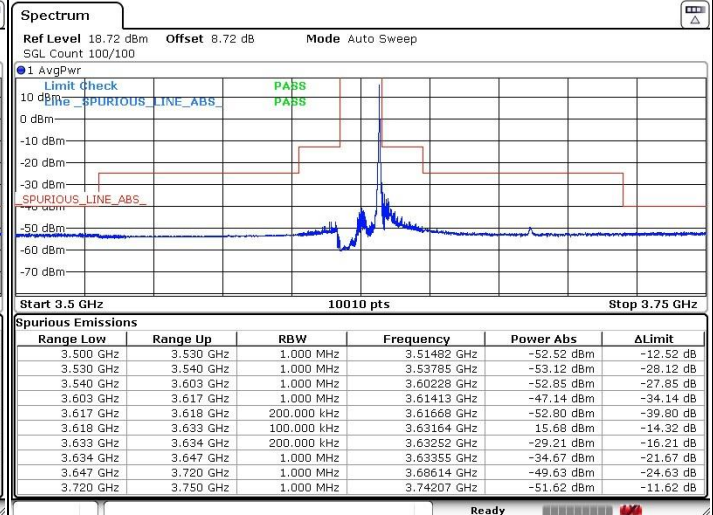
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



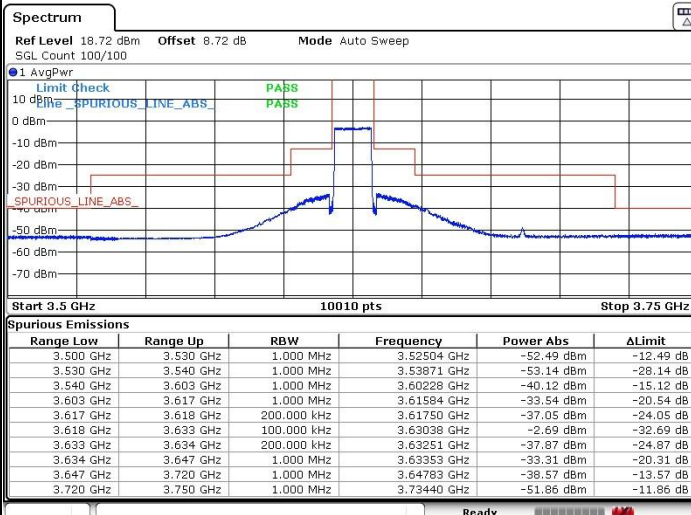
Date: 29.AUG.2020 19:34:48



Date: 29.AUG.2020 19:32:14

Middle Channel / Full RB

N/A



Date: 29.AUG.2020 19:37:35



LTE Band 48 / 15MHz

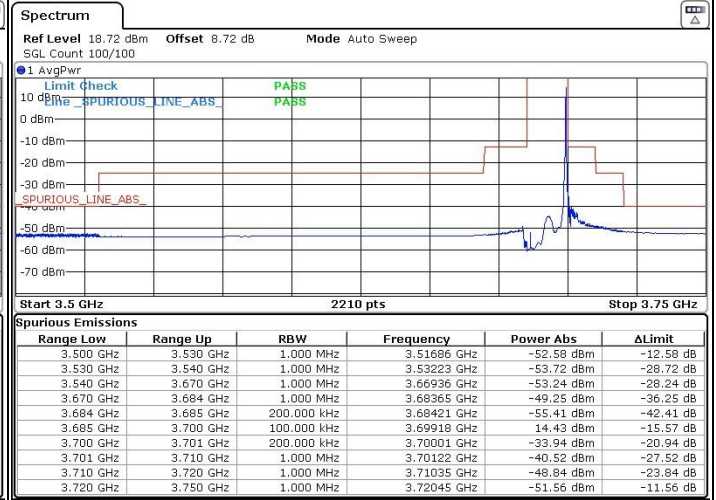
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



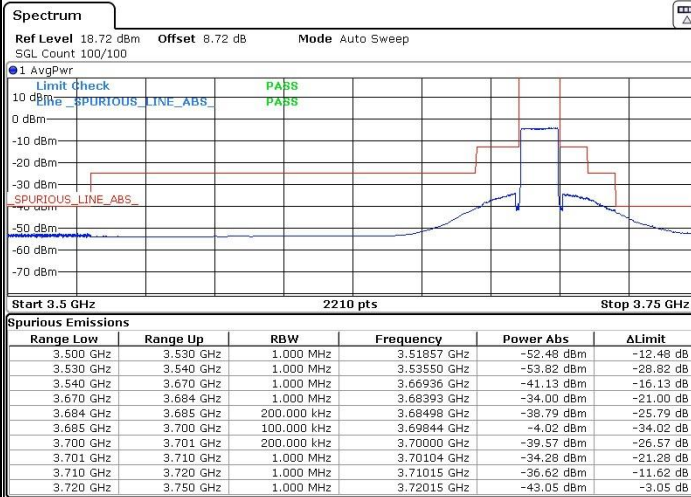
Date: 29.AUG.2020 19:44:21



Date: 29.AUG.2020 19:47:30

Highest Channel / Full RB

N/A



Date: 29.AUG.2020 19:41:36

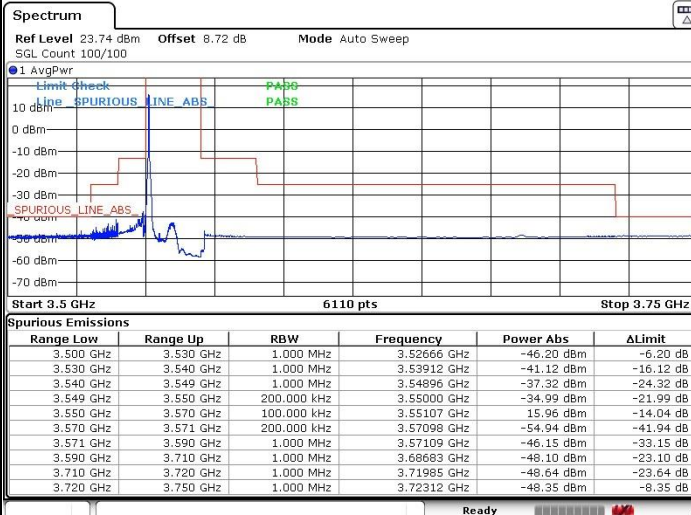


LTE Band 48 / 20MHz

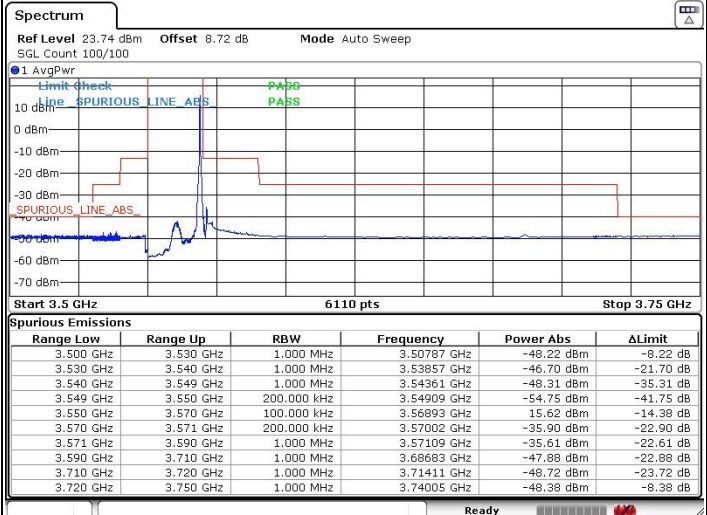
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



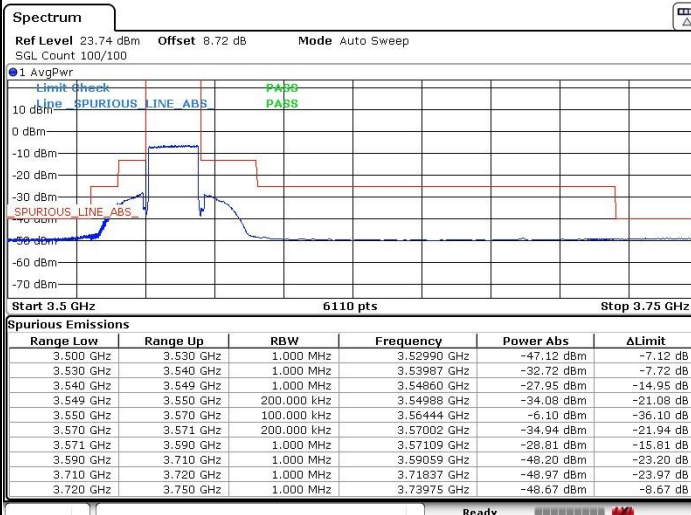
Date: 29.AUG.2020 20:06:00



Date: 29.AUG.2020 20:10:59

Lowest Channel / Full RB

N/A



Date: 7.SEP.2020 06:19:34

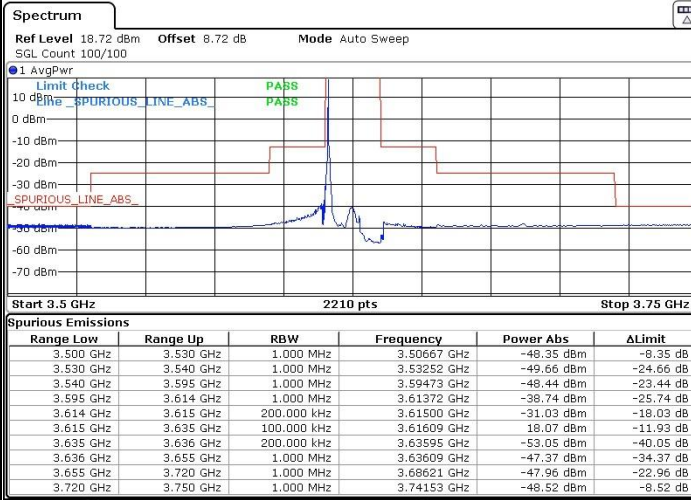


LTE Band 48 / 20MHz

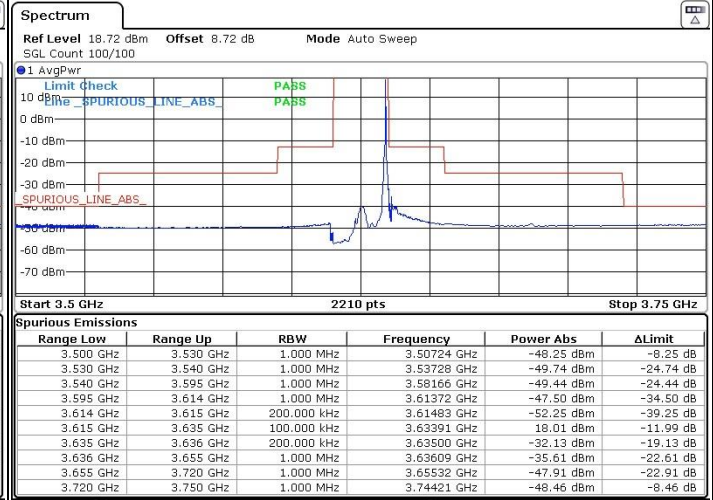
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



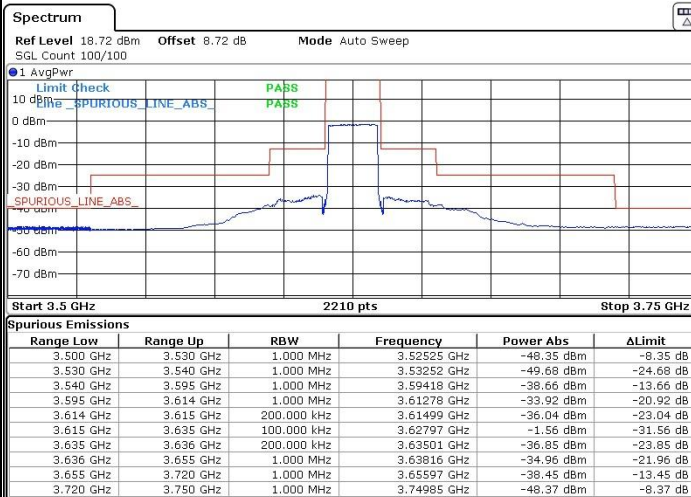
Date: 29.AUG.2020 20:15:53



Date: 29.AUG.2020 20:12:42

Middle Channel / Full RB

N/A



Date: 29.AUG.2020 20:19:08

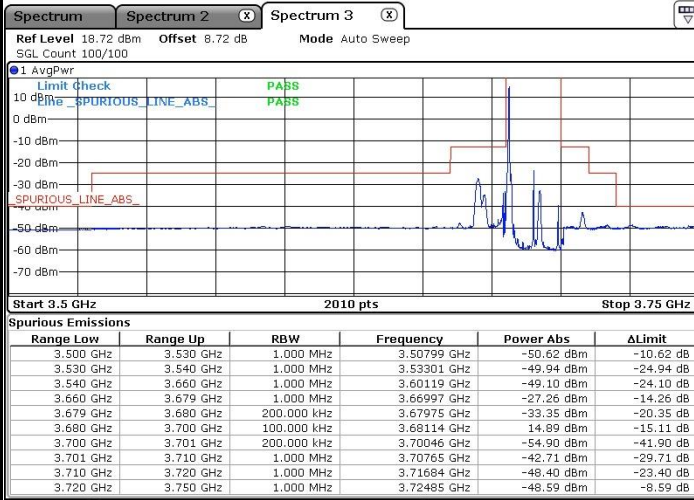


LTE Band 48 / 20MHz

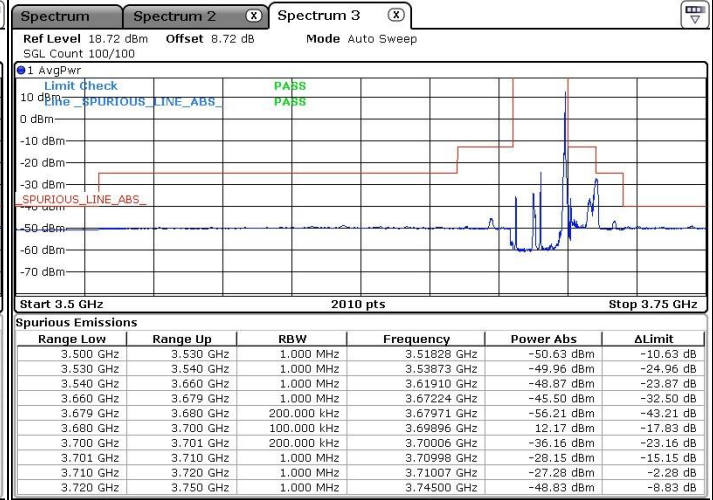
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



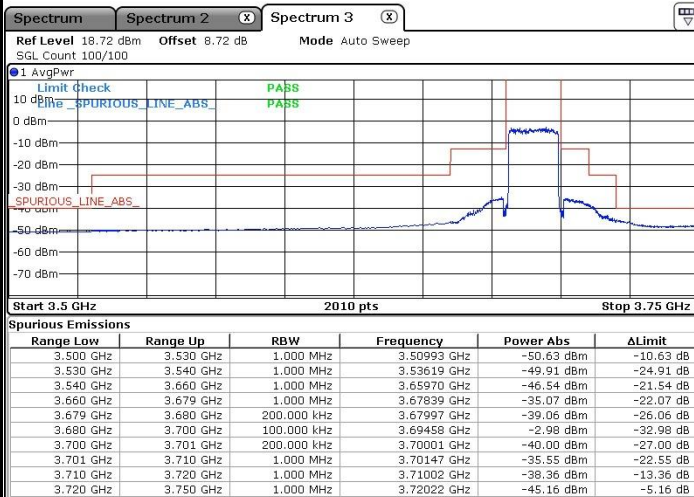
Date: 9 SEP. 2020 20:19:28



Date: 9 SEP. 2020 20:26:47

Highest Channel / Full RB

N/A



Date: 9 SEP. 2020 20:18:40

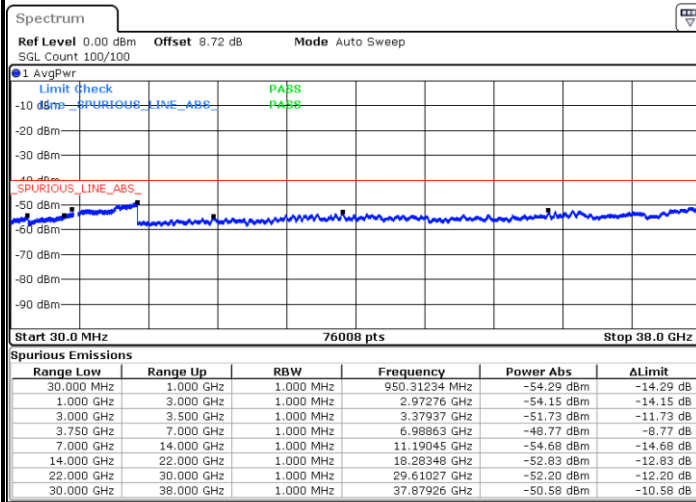


Conducted Spurious Emission

LTE Band 48 / 5MHz

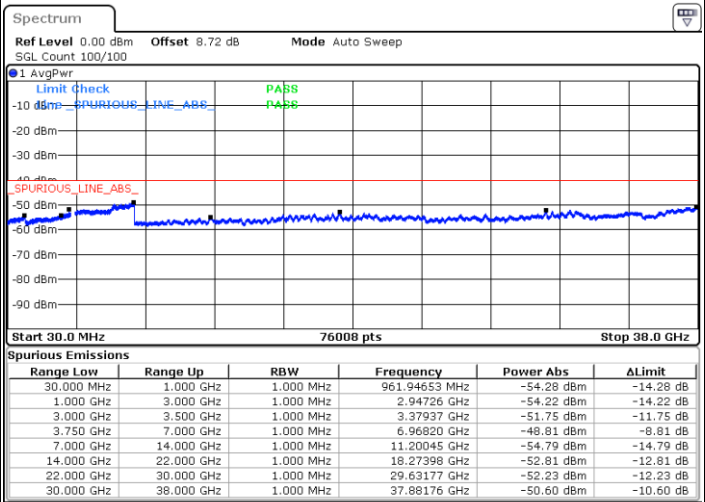
QPSK

Lowest Channel / 1RB0



Date: 29 AUG 2020 16:59:27

Middle Channel / 1RB0

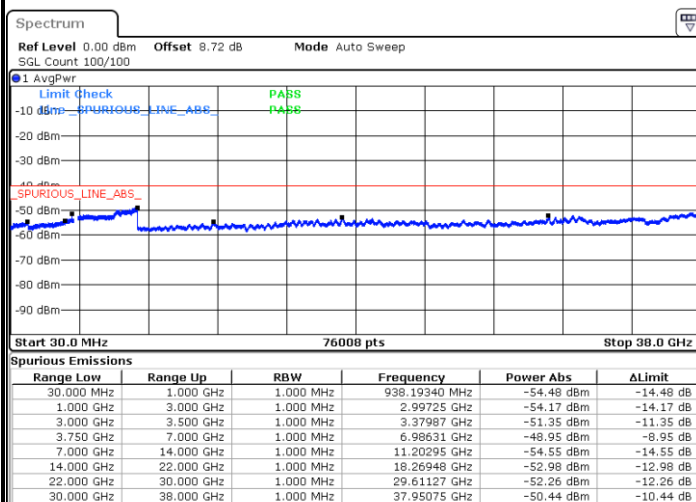


Date: 29 AUG 2020 16:58:17

LTE Band 48 / 5MHz

QPSK

Highest Channel / 1RB0



Date: 29 AUG 2020 17:03:19

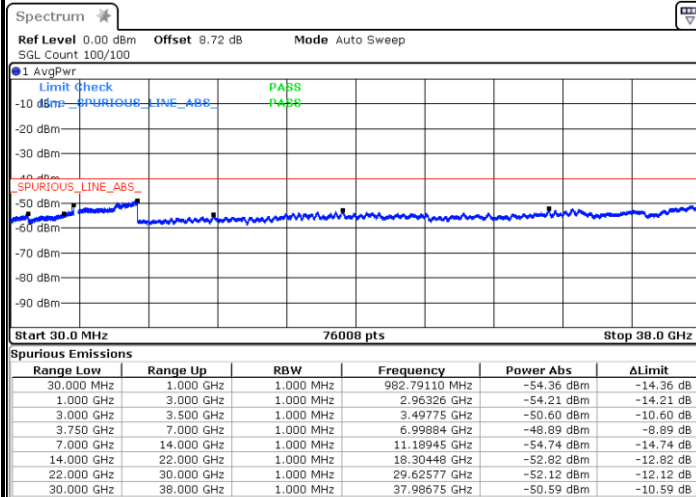
N/A



LTE Band 48 / 10MHz

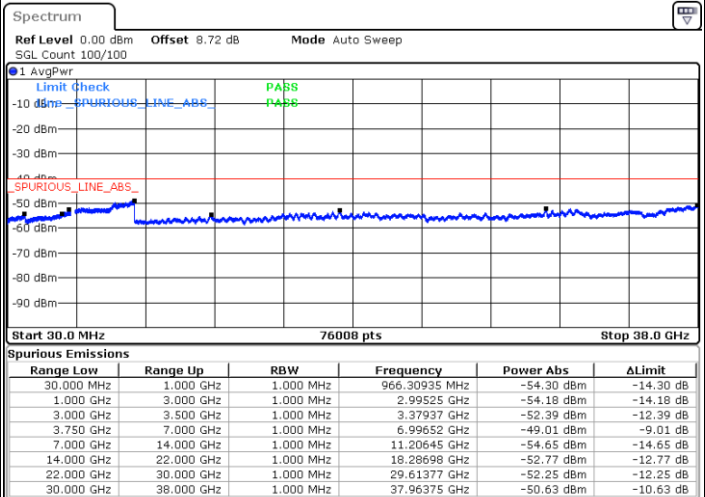
QPSK

Lowest Channel / 1RB0



Date: 29 AUG 2020 17:09:30

Middle Channel / 1RB0

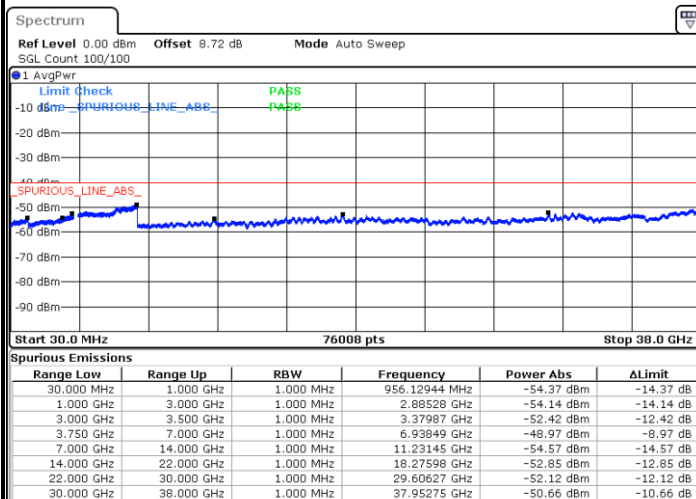


Date: 29 AUG 2020 17:14:18

LTE Band 48 / 10MHz

QPSK

Highest Channel / 1RB0



Date: 29 AUG 2020 17:16:43

N/A

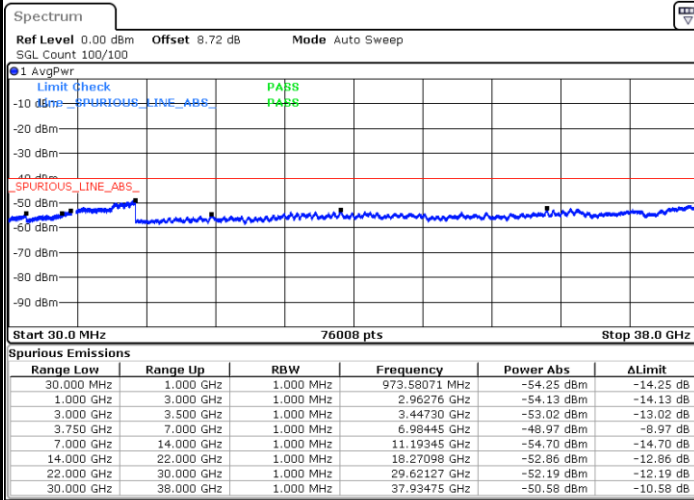


LTE Band 48 / 15MHz

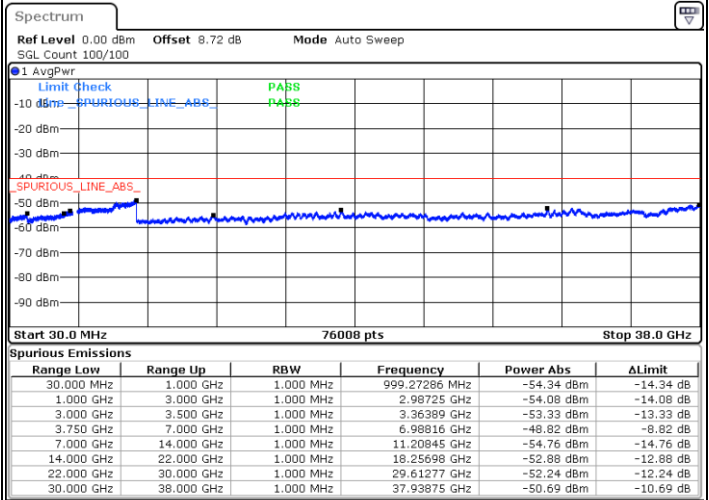
QPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0



Date: 29 AUG 2020 17:22:16



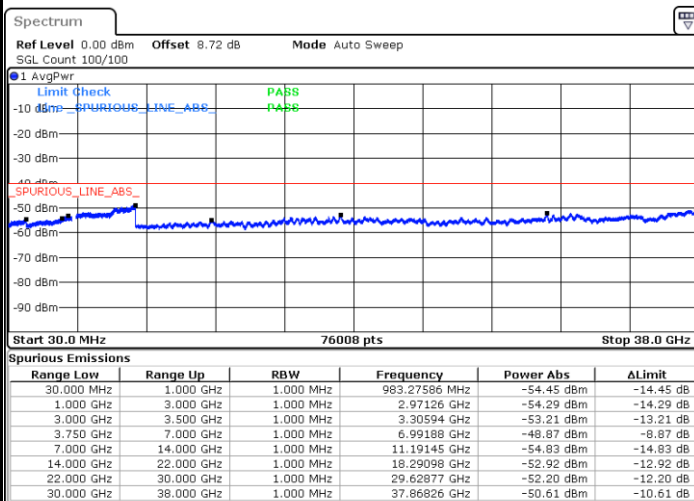
Date: 29 AUG 2020 17:26:16

LTE Band 48 / 15MHz

QPSK

Highest Channel / 1RB0

N/A



Date: 29 AUG 2020 17:30:03

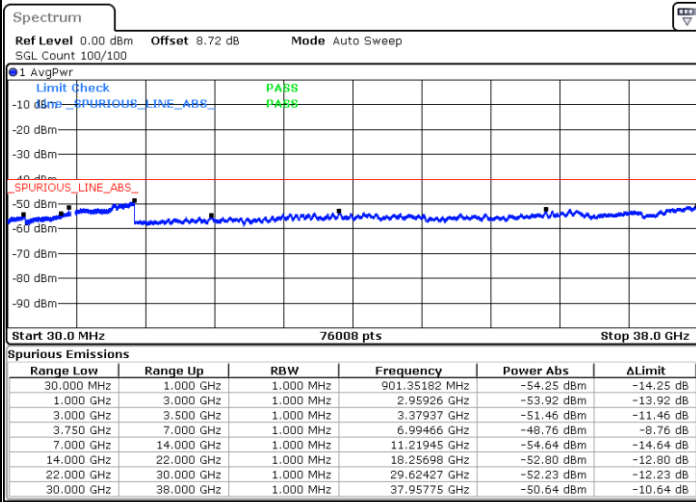


LTE Band 48 / 20MHz

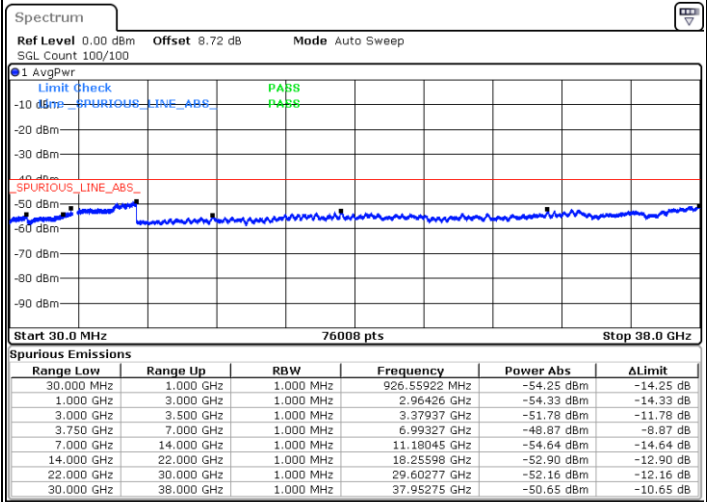
QPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0



Date: 29 AUG 2020 17:34:27



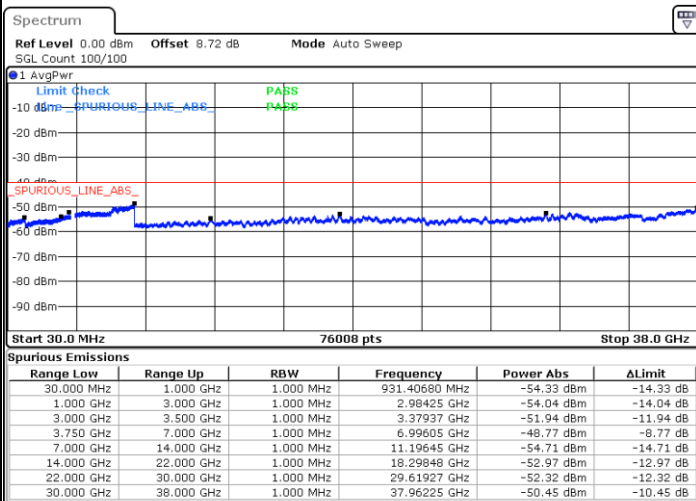
Date: 29 AUG 2020 17:38:30

LTE Band 48 / 20MHz

QPSK

Highest Channel / 1RB0

N/A



Date: 29 AUG 2020 17:42:26

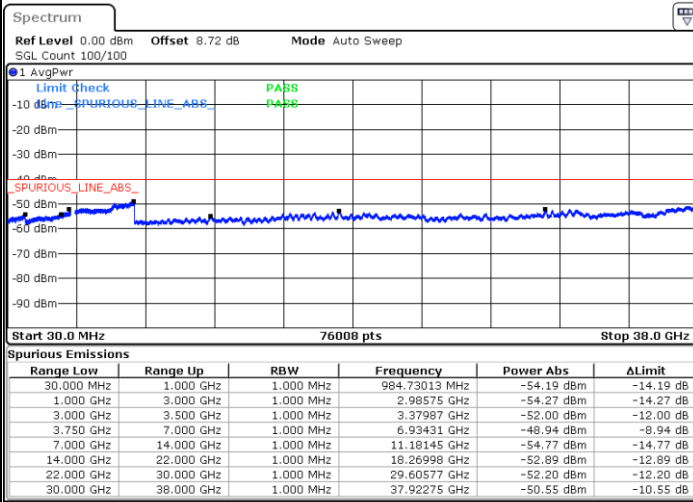


LTE Band 48 / 5MHz

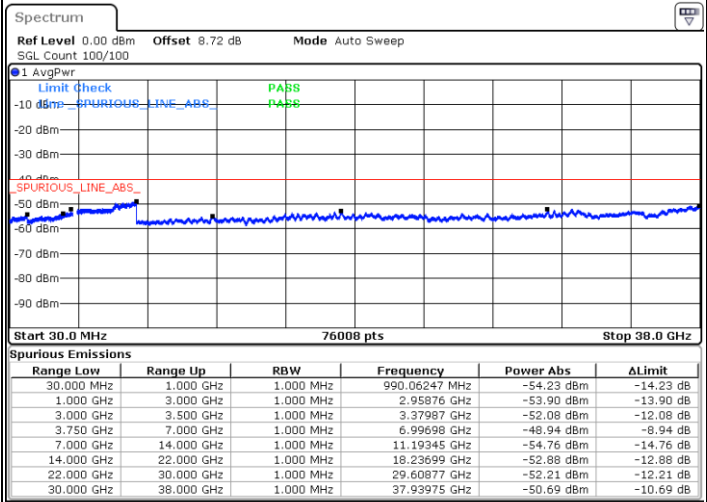
16QAM

Lowest Channel / 1RB0

Middle Channel / 1RB0



Date: 29 AUG 2020 16:55:50



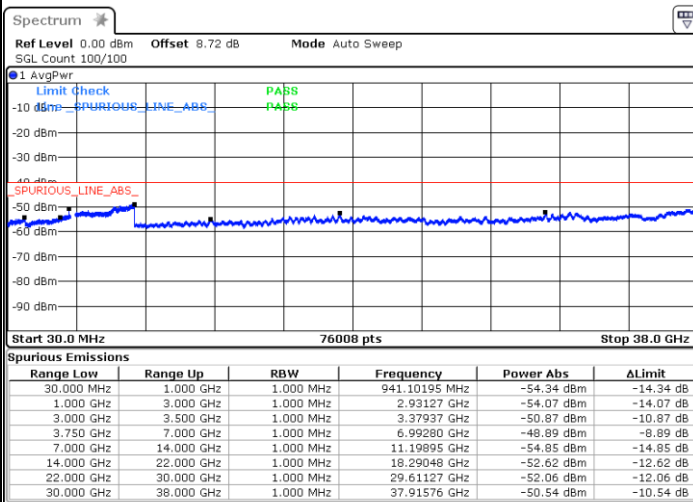
Date: 29 AUG 2020 17:00:45

LTE Band 48 / 5MHz

16QAM

Highest Channel / 1RB0

N/A



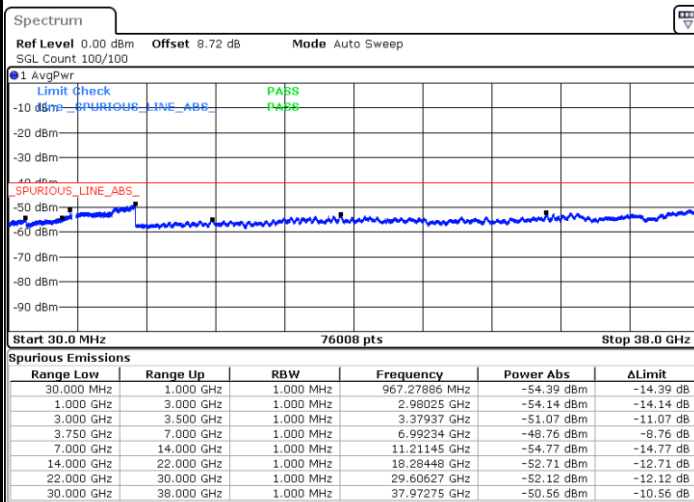
Date: 29 AUG 2020 17:04:52



LTE Band 48 / 10MHz

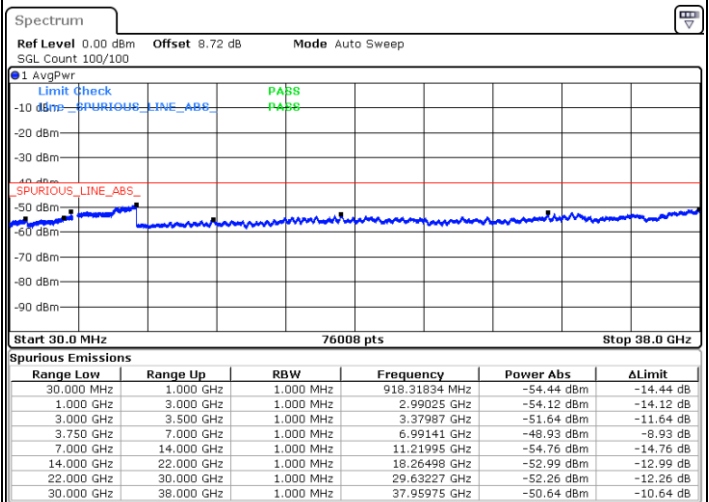
16QAM

Lowest Channel / 1RB0



Date: 29 AUG 2020 17:10:38

Middle Channel / 1RB0



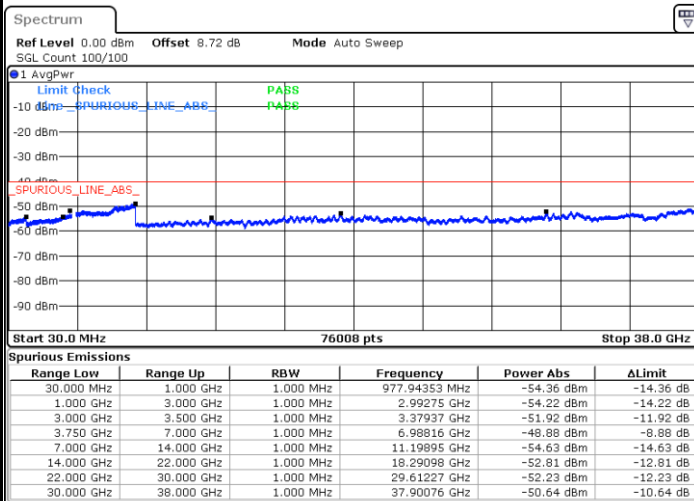
Date: 29 AUG 2020 17:15:24

LTE Band 48 / 10MHz

16QAM

Highest Channel / 1RB0

N/A



Date: 29 AUG 2020 17:17:56

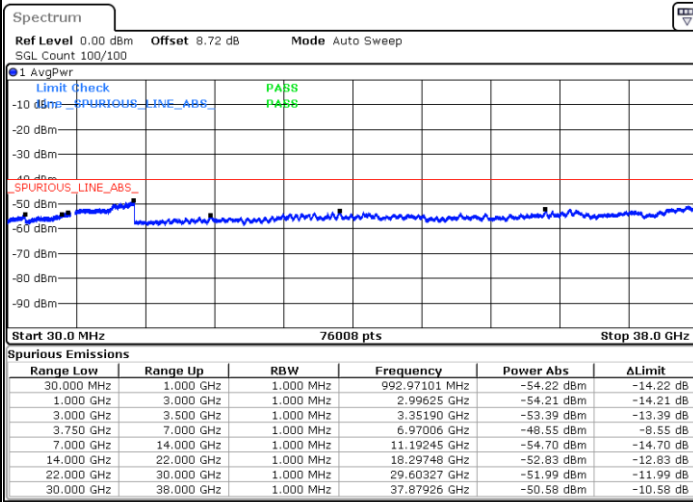


LTE Band 48 / 15MHz

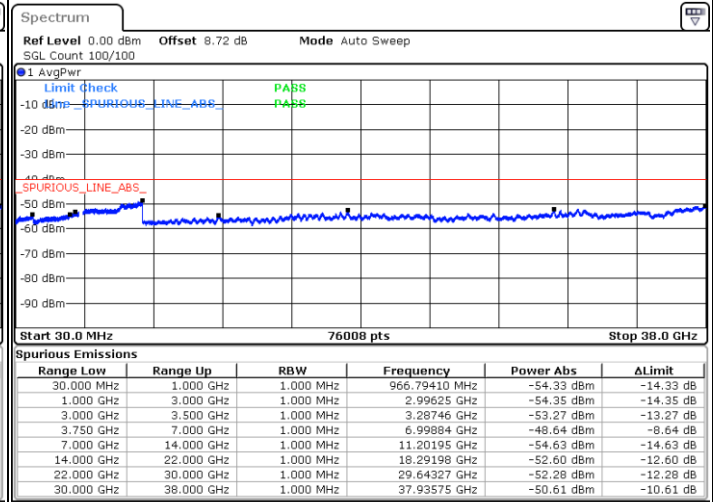
16QAM

Lowest Channel / 1RB0

Middle Channel / 1RB0



Date: 29 AUG 2020 17:23:54



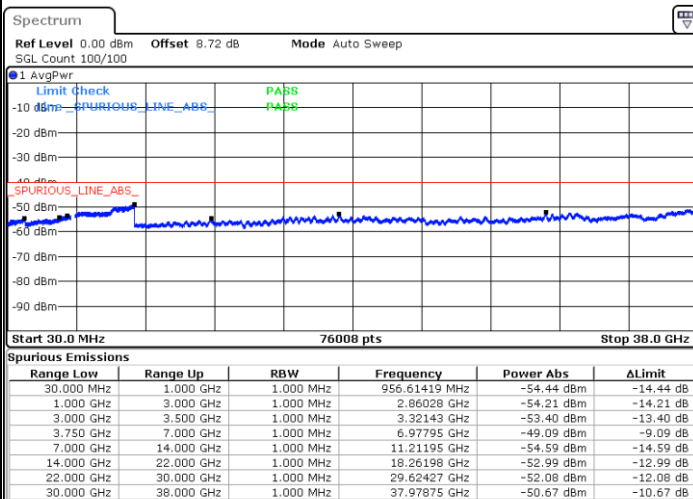
Date: 29 AUG 2020 17:27:37

LTE Band 48 / 15MHz

16QAM

Highest Channel / 1RB0

N/A



Date: 29 AUG 2020 17:31:11

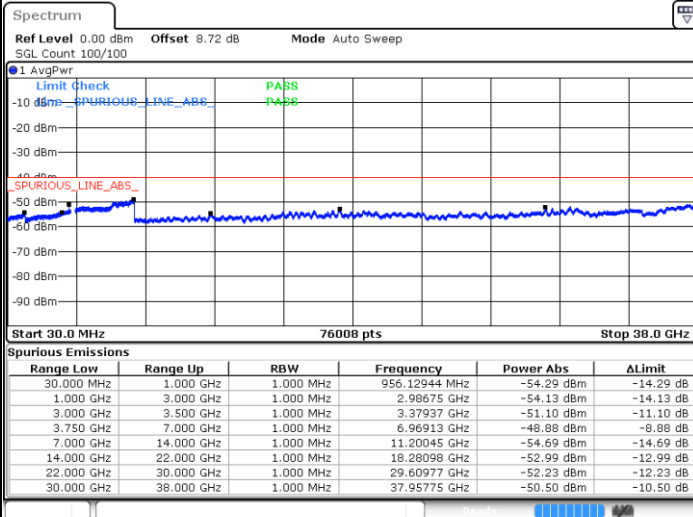


LTE Band 48 / 20MHz

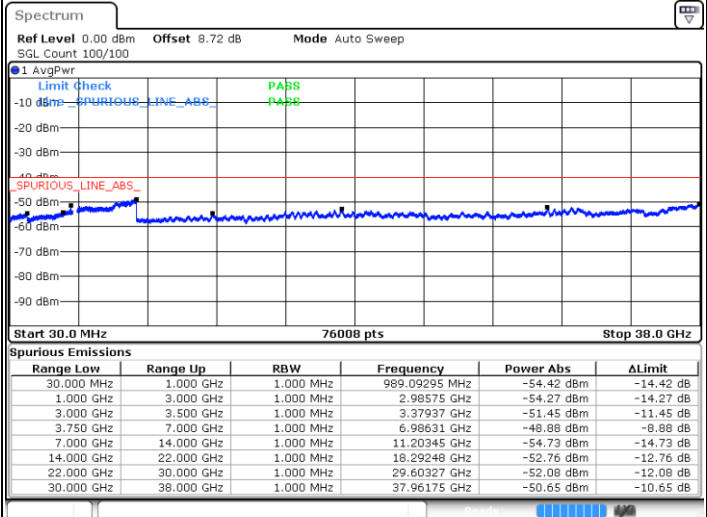
16QAM

Lowest Channel / 1RB0

Middle Channel / 1RB0



Date: 29 AUG 2020 17:35:44



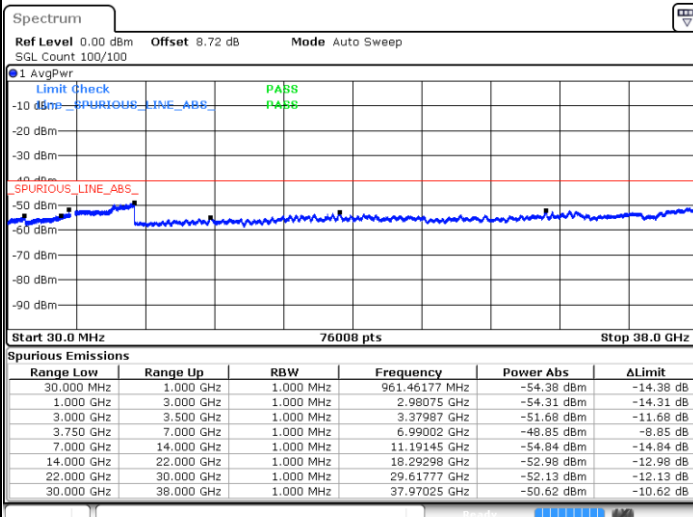
Date: 29 AUG 2020 17:39:38

LTE Band 48 / 20MHz

16QAM

Highest Channel / 1RB0

N/A



Date: 29 AUG 2020 17:43:27

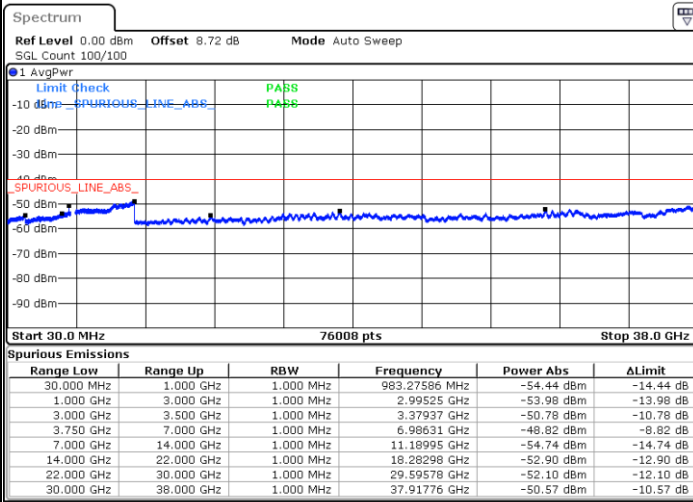


LTE Band 48 / 5MHz

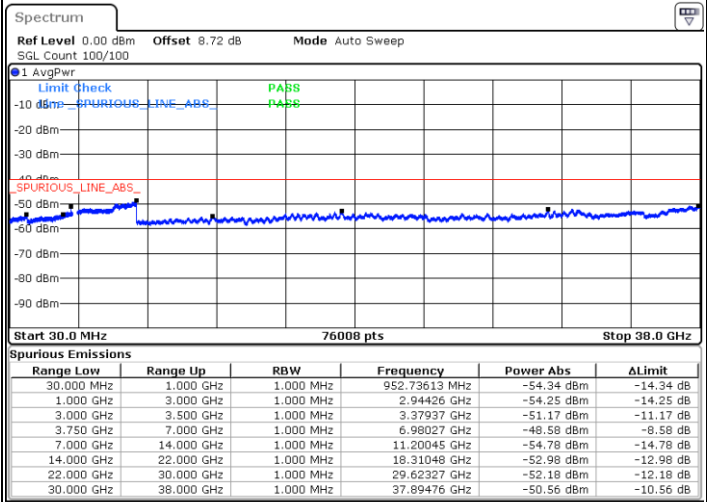
64QAM

Lowest Channel / 1RB0

Middle Channel / 1RB0



Date: 29 AUG 2020 16:57:00



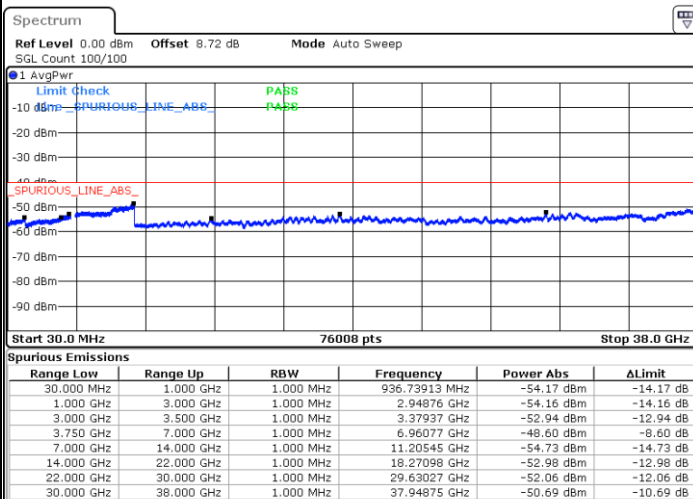
Date: 29 AUG 2020 17:01:57

LTE Band 48 / 5MHz

64QAM

Highest Channel / 1RB0

N/A



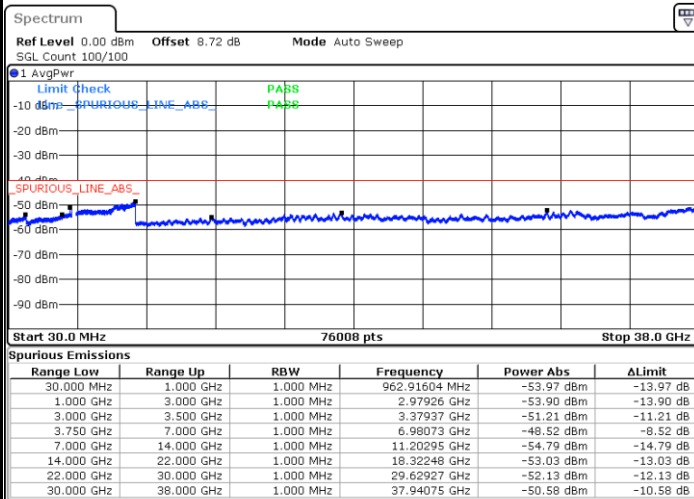
Date: 29 AUG 2020 17:06:00



LTE Band 48 / 10MHz

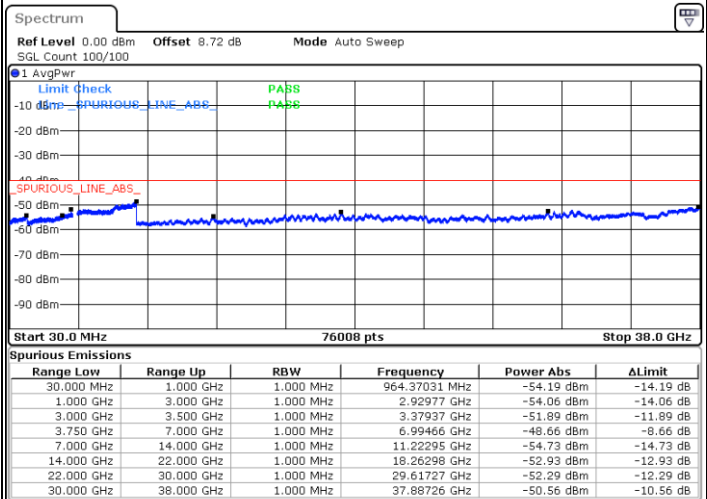
64QAM

Lowest Channel / 1RB0



Date: 29 AUG 2020 17:11:53

Middle Channel / 1RB0

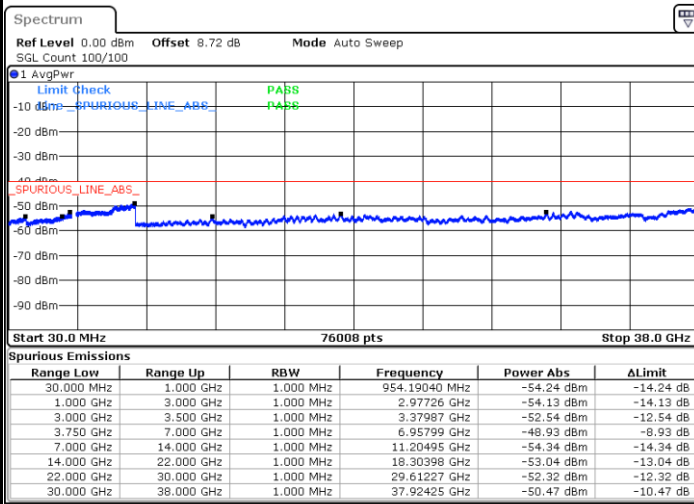


Date: 29 AUG 2020 17:13:11

LTE Band 48 / 10MHz

64QAM

Highest Channel / 1RB0



Date: 29 AUG 2020 17:19:04

N/A

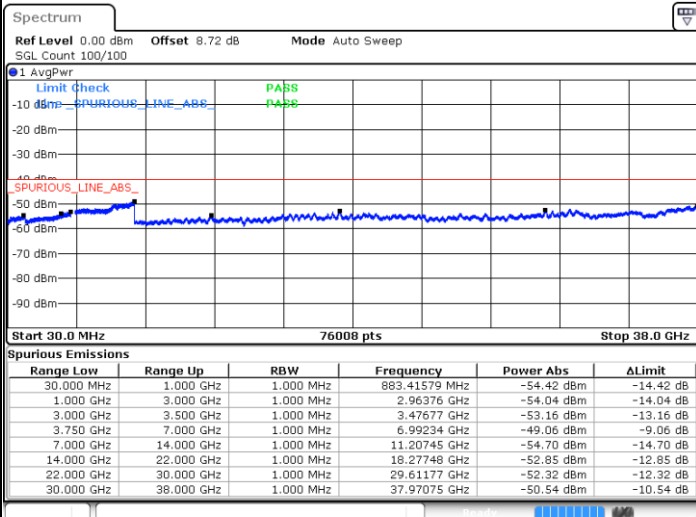


LTE Band 48 / 15MHz

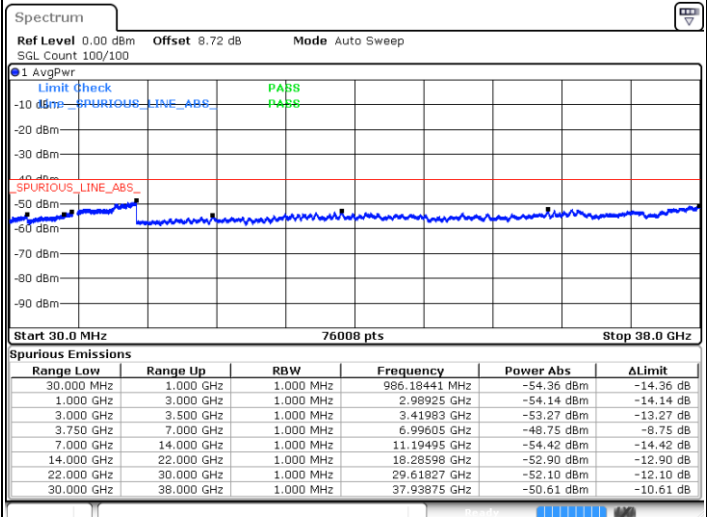
64QAM

Lowest Channel / 1RB0

Middle Channel / 1RB0



Date: 29 AUG 2020 17:25:04



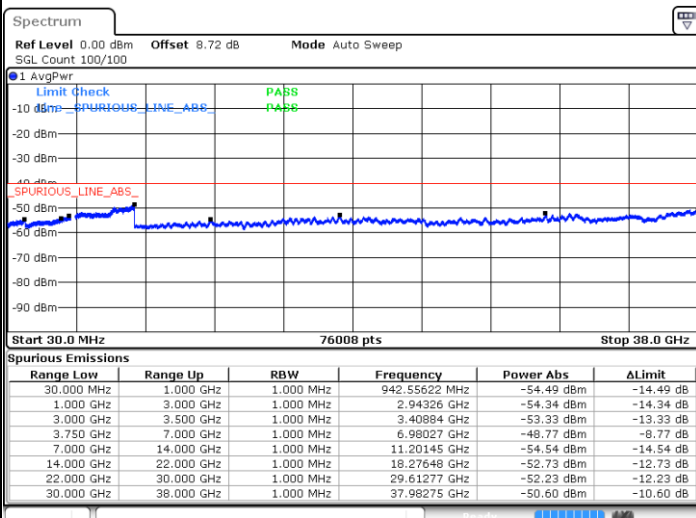
Date: 29 AUG 2020 17:28:42

LTE Band 48 / 15MHz

64QAM

Highest Channel / 1RB0

N/A



Date: 29 AUG 2020 17:32:21

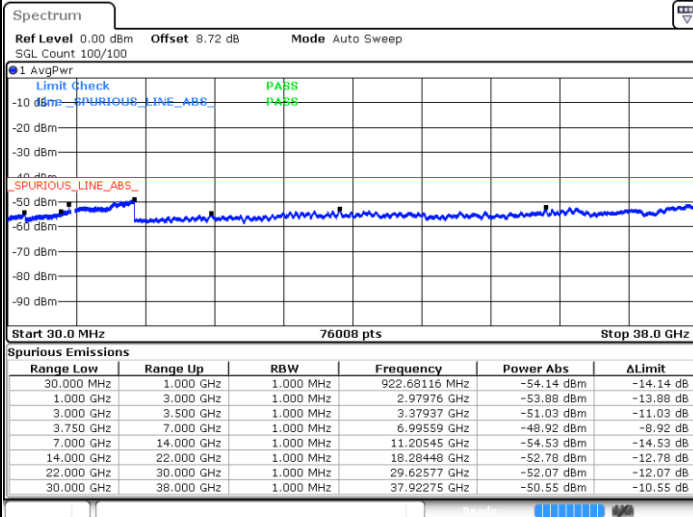


LTE Band 48 / 20MHz

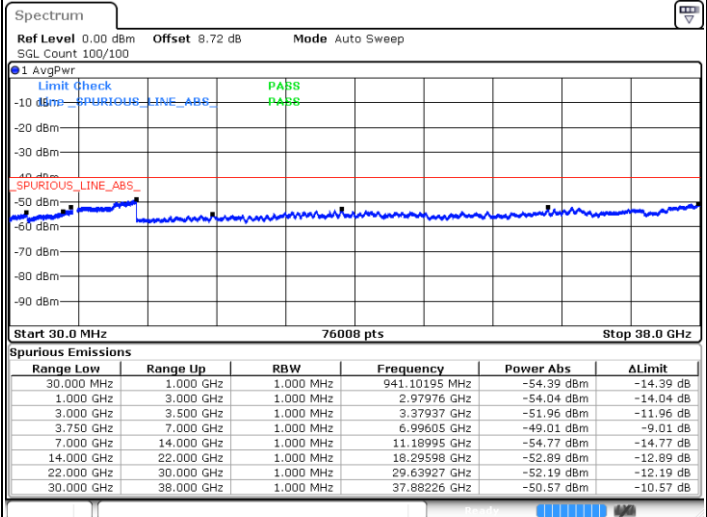
64QAM

Lowest Channel / 1RB0

Middle Channel / 1RB0



Date: 29 AUG 2020 17:36:54



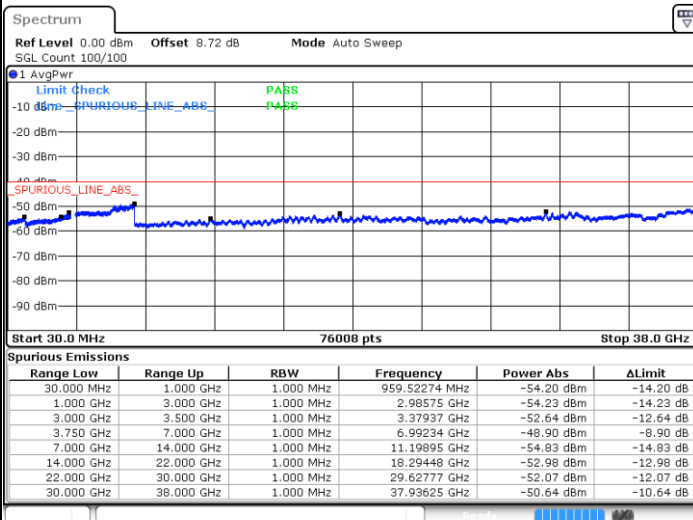
Date: 29 AUG 2020 17:40:52

LTE Band 48 / 20MHz

64QAM

Highest Channel / 1RB0

N/A



Date: 29 AUG 2020 17:44:34

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	0.0025	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0032	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0019	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0033	
20	Battery End Point	0.0044	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 48C

EIRP

Full RB0

Mode	LTE Band 48C : EIRP							
BW	5MHz+20MHz		10MHz+20MHz		15MHz+20MHz		20M+5M	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	9.82	10.27	9.8	10.11	8.78	9.17	8.62	8.83
Middle CH	16.27	15.08	15.37	14.73	14.29	13.13	15.44	14.95
Highest CH	9.03	9.44	9.38	9	8.37	8.34	8.93	8.61
Limit	23dBm /10MHz							
Result	Pass							

Mode	LTE Band 48C : EIRP					
BW	20M+10M		20M+15M		20M+20M	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	8.46	8.83	8.05	8.07	8.32	7.88
Middle CH	14.65	13.42	13.35	12.69	13.44	12.09
Highest CH	8.43	7.99	7.38	7.31	7	7.1
Limit	23dBm /10MHz					
Result	Pass					

Mode	LTE Band 48C : EIRP						
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20M+5M	20M+10M	20M+15M	20M+20M
Mod.	64QAM	64QAM	64QAM	64QAM	64QAM	64QAM	64QAM
Lowest CH	9.94	10.39	8.75	9.11	8.83	7.64	8.20
Middle CH	13.80	13.49	12.01	13.64	12.51	11.38	11.16
Highest CH	8.93	9.72	8.59	8.63	8.29	7.81	7.56
Limit	23dBm /10MHz						
Result	Pass						

1RBMAX 1RB0

Mode	LTE Band 48C : EIRP							
BW	5MHz+20MHz		10MHz+20MHz		15MHz+20MHz		20M+5M	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	18.62	19.14	17.85	17.84	17.90	18.03	19.41	19.25
Middle CH	21.72	22.02	22.12	21.45	22.45	22.43	22.00	21.99
Highest CH	18.14	17.91	17.05	17.16	17.41	17.32	18.46	18.62
Limit	23dBm /10MHz							
Result	Pass							

Mode	LTE Band 48C : EIRP					
BW	20M+10M		20M+15M		20M+20M	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	17.37	17.82	17.92	17.92	19.39	19.54
Middle CH	21.98	22.45	22.46	22.45	22.46	22.39
Highest CH	17.35	17.79	17.25	17.78	19.00	19.35
Limit	23dBm /10MHz					
Result	Pass					

Mode	LTE Band 48C : EIRP						
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20M+5M	20M+10M	20M+15M	20M+20M
Mod.	64QAM	64QAM	64QAM	64QAM	64QAM	64QAM	64QAM
Lowest CH	16.73	17.47	18.27	17.21	18.43	17.93	17.03
Middle CH	22.15	21.12	22.08	22.23	21.92	21.80	21.80
Highest CH	17.04	17.39	17.70	16.94	17.92	18.32	16.64
Limit	23dBm /10MHz						
Result	Pass						

1RB0 1RBMAX

Mode	LTE Band 48C : EIRP							
BW	5MHz+20MHz		10MHz+20MHz		15MHz+20MHz		20M+5M	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-1.85	-1.02	4.73	4.54	-1.41	-1.36	-1.36	-0.82
Middle CH	6.90	7.65	11.84	12.03	6.95	7.99	7.62	7.85
Highest CH	0.08	-0.06	3.26	3.82	-0.47	0.05	-0.03	0.53
Limit	23dBm /10MHz							
Result	Pass							

Mode	LTE Band 48C : EIRP					
BW	20M+10M		20M+15M		20M+20M	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	6.81	6.58	-1.76	-0.84	-1.59	-1.00
Middle CH	12.12	14.44	7.11	7.95	7.06	7.40
Highest CH	6.68	6.04	-0.36	0.10	-0.11	-0.58
Limit	23dBm /10MHz					
Result	Pass					

Mode	LTE Band 48C : EIRP						
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20M+5M	20M+10M	20M+15M	20M+20M
Mod.	64QAM	64QAM	64QAM	64QAM	64QAM	64QAM	64QAM
Lowest CH	-1.24	5.70	-1.26	-1.15	5.97	-0.95	-0.76
Middle CH	7.27	12.24	7.74	8.02	13.01	7.67	7.45
Highest CH	-0.07	4.16	0.21	0.40	6.31	-0.37	0.82
Limit	23dBm /10MHz						
Result	Pass						

26dB Bandwidth

Mode	LTE Band 48C : 26dB BW(MHz)			
QPSK				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	25.125	29.73	35.105	25.225
Middle CH	24.975	30.03	35.035	25.225
Highest CH	25.075	29.67	34.965	25.125
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	30.21	35.035	40.04	-
Middle CH	30.21	35.035	39.96	-
Highest CH	30.15	35.105	40.04	-

Mode	LTE Band 48C : 26dB BW(MHz)			
16QAM				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	25.025	29.67	34.965	25.125
Middle CH	25.075	29.79	35.105	25.175
Highest CH	24.975	29.67	35.105	25.125
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	30.03	35.035	39.88	-
Middle CH	30.03	34.965	39.88	-
Highest CH	30.09	35.035	40.04	-

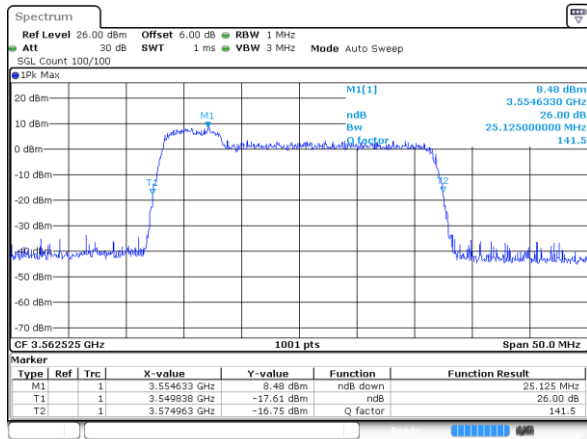
Mode	LTE Band 48C : 26dB BW(MHz)			
64QAM				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	25.075	29.73	34.965	25.075
Middle CH	25.025	29.97	35.035	25.025
Highest CH	24.925	29.73	34.825	25.075
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	30.03	34.965	39.88	-
Middle CH	30.15	35.105	39.88	-
Highest CH	30.03	35.035	39.96	-



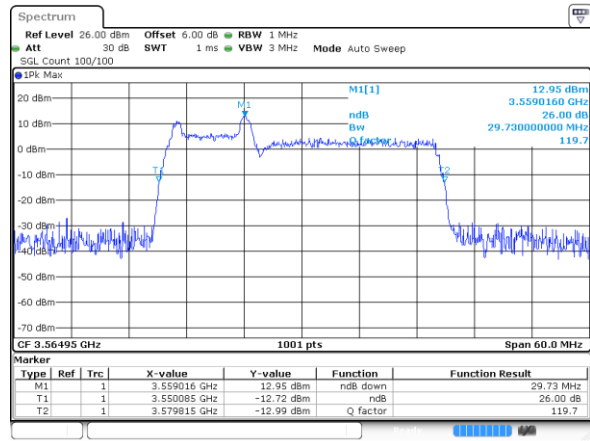
LTE Band 48C

QPSK

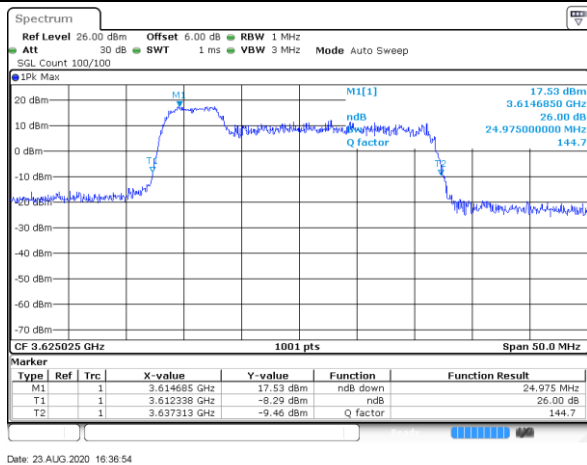
Lowest Channel / 5MHz+20MHz



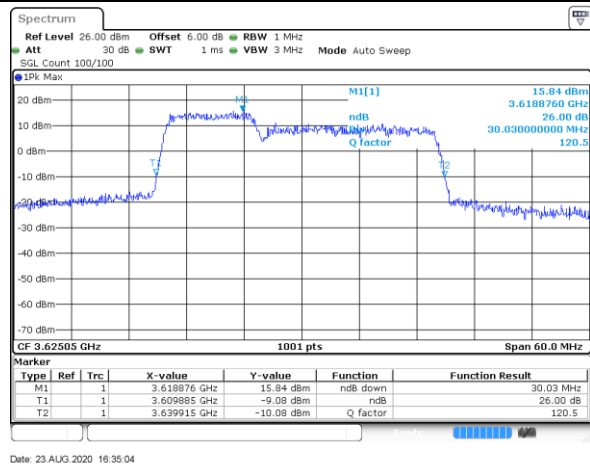
Lowest Channel / 10MHz+20MHz



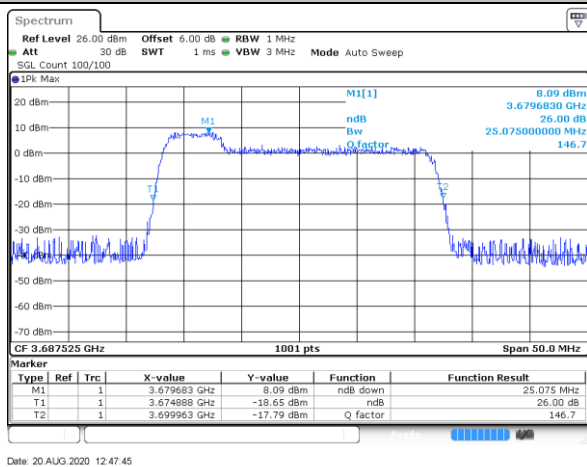
Middle Channel / 5MHz+20MHz



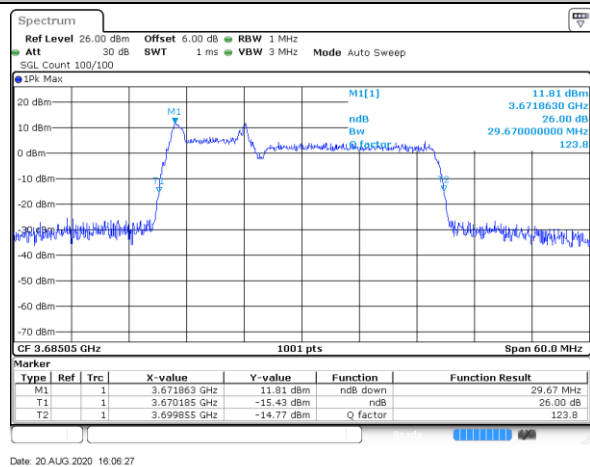
Middle Channel / 10MHz+20MHz



Highest Channel / 5MHz+20MHz



Highest Channel / 10MHz+20MHz

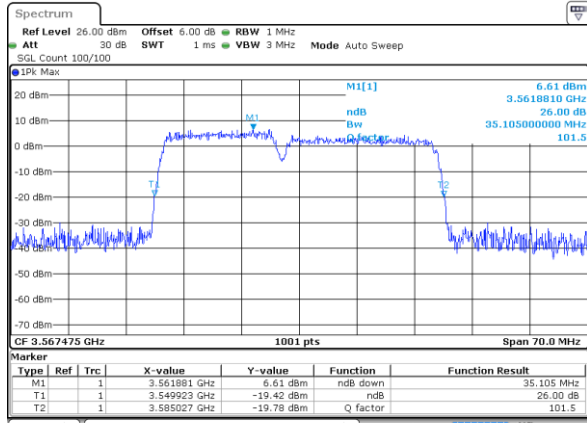




LTE Band 48C

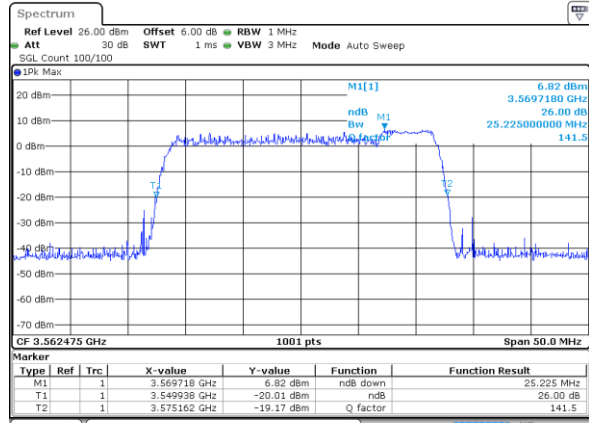
QPSK

Lowest Channel / 15MHz+20MHz



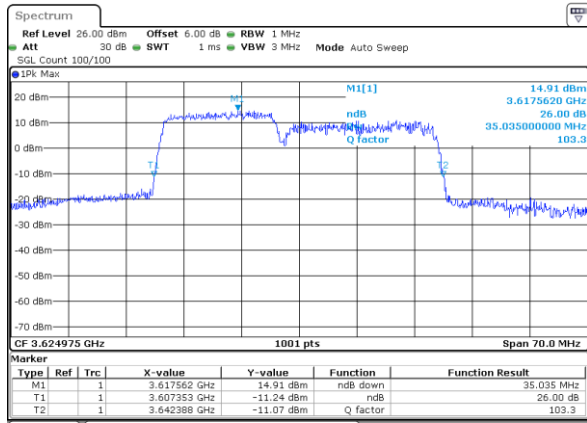
Date: 20 AUG 2020 18:38:20

Lowest Channel / 20MHz+5MHz



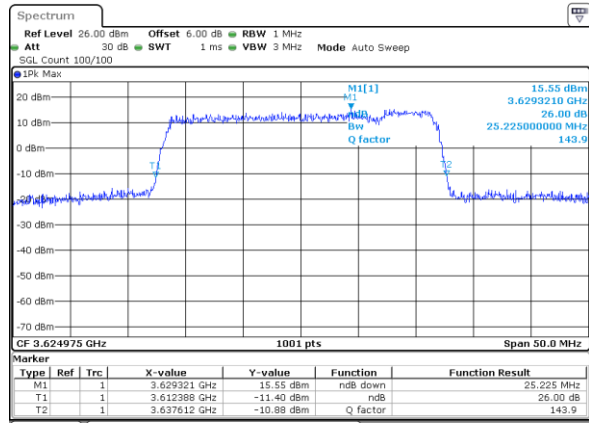
Date: 20 AUG 2020 13:06:12

Middle Channel / 15MHz+20MHz



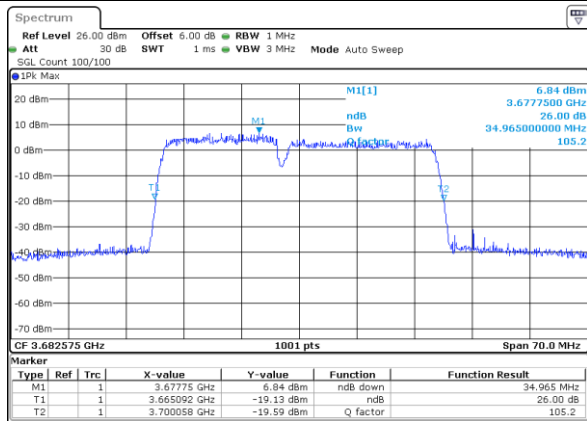
Date: 23 AUG 2020 16:04:13

Middle Channel / 20MHz+5MHz



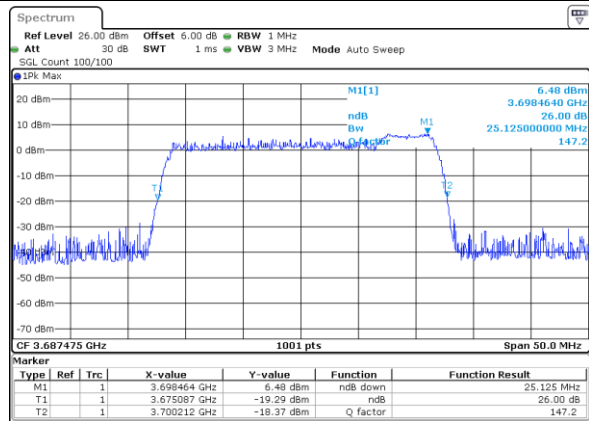
Date: 23 AUG 2020 16:06:42

Highest Channel / 15MHz+20MHz



Date: 20 AUG 2020 19:51:12

Highest Channel / 20MHz+5MHz



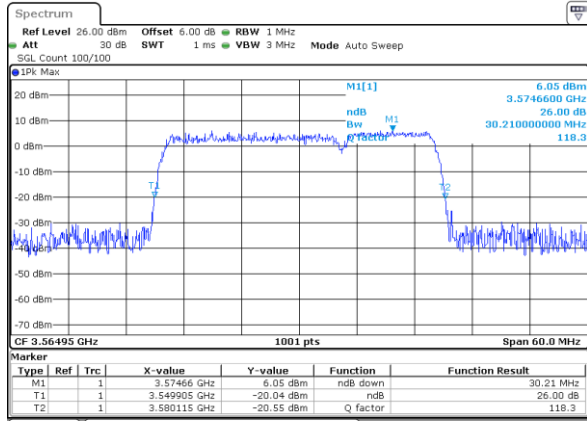
Date: 20 AUG 2020 15:01:41



LTE Band 48C

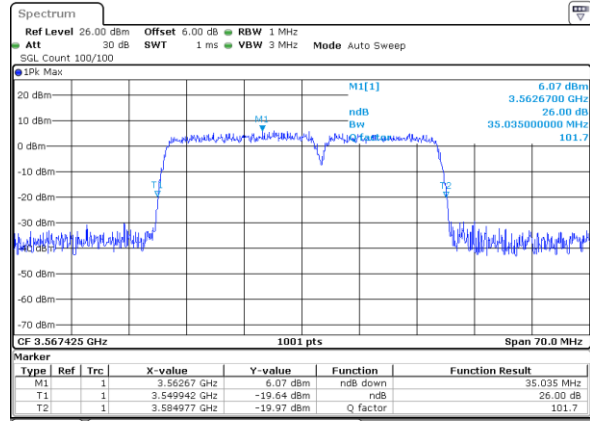
QPSK

Lowest Channel / 20MHz+10MHz



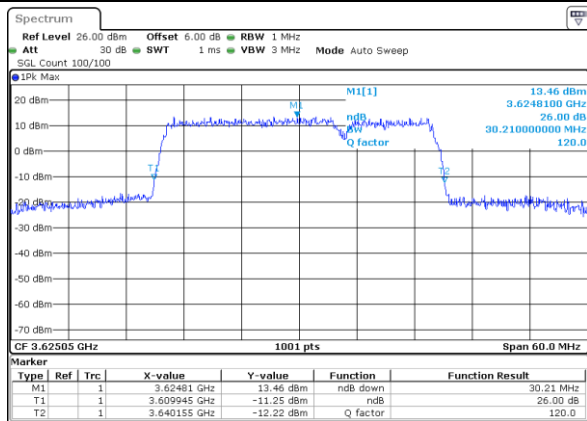
Date: 20 AUG 2020 16:26:40

Lowest Channel / 20MHz+15MHz



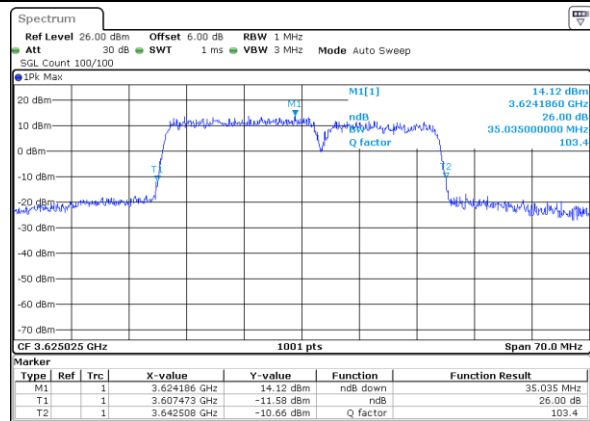
Date: 20 AUG 2020 17:36:37

Middle Channel / 20MHz+10MHz



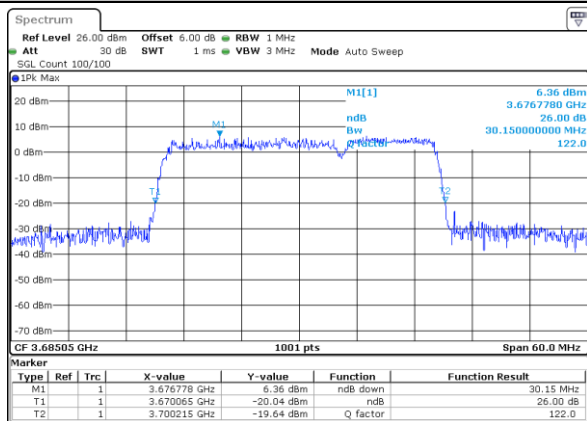
Date: 23 AUG 2020 14:58:15

Middle Channel / 20MHz+15MHz



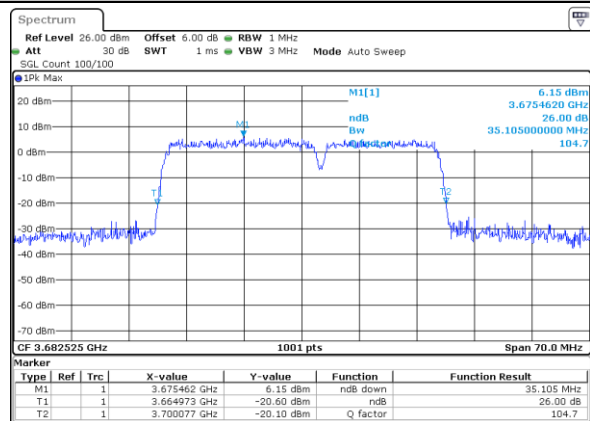
Date: 23 AUG 2020 15:39:55

Highest Channel / 20MHz+10MHz



Date: 20 AUG 2020 17:03:44

Highest Channel / 20MHz+15MHz



Date: 20 AUG 2020 18:15:32

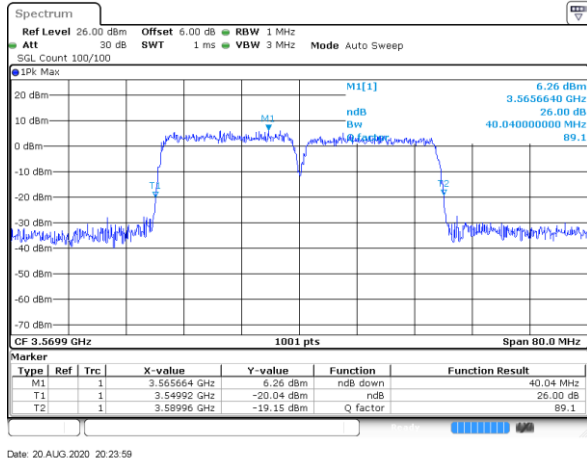


LTE Band 48C

QPSK

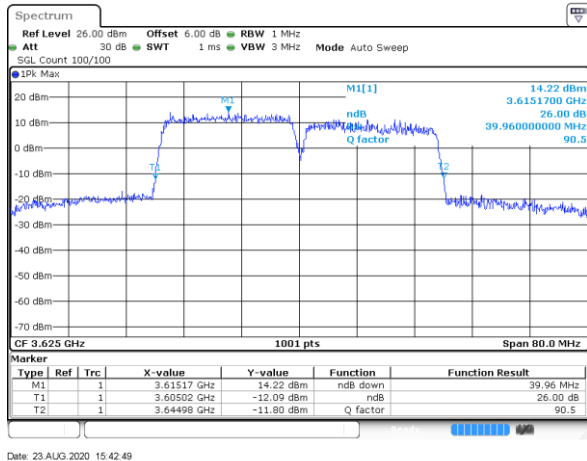
Lowest Channel / 20MHz+20MHz

N/A



Middle Channel / 20MHz+20MHz

N/A



Highest Channel / 20MHz+20MHz

N/A

