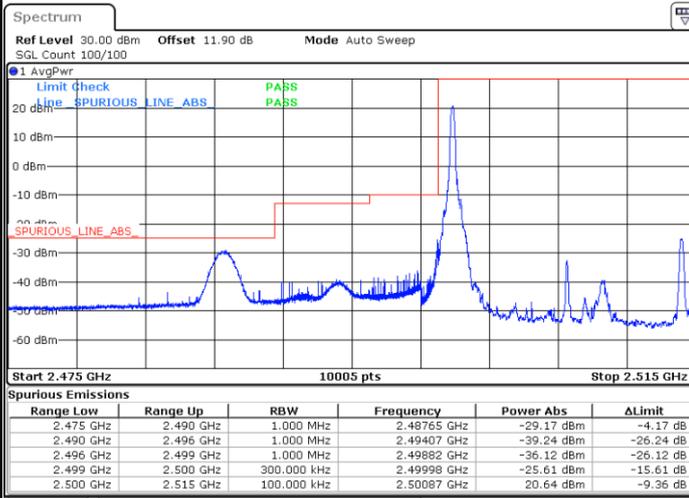




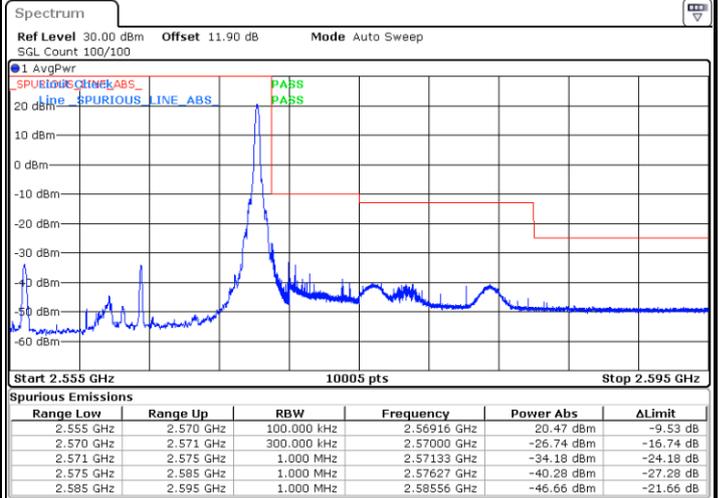
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



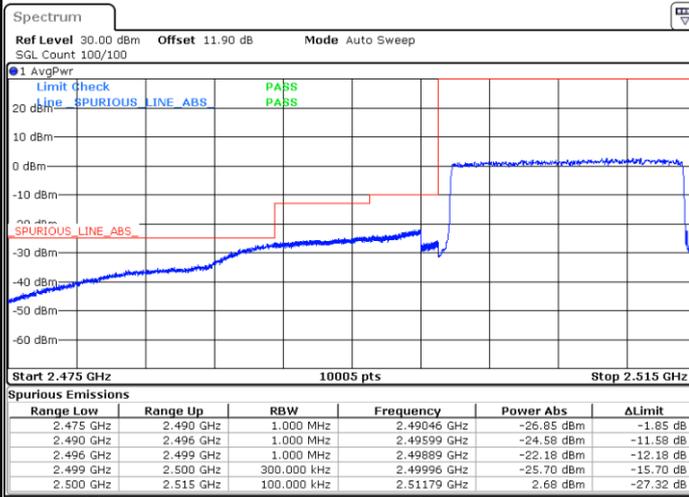
Date: 4 JAN 2020 18:29:43

Highest Band Edge / 1 RB



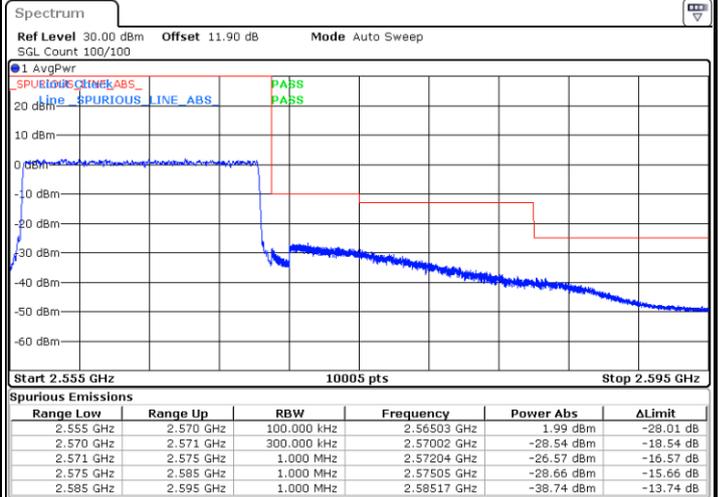
Date: 4 JAN 2020 18:36:58

Lowest Band Edge / Full RB



Date: 4 JAN 2020 18:31:07

Highest Band Edge / Full RB

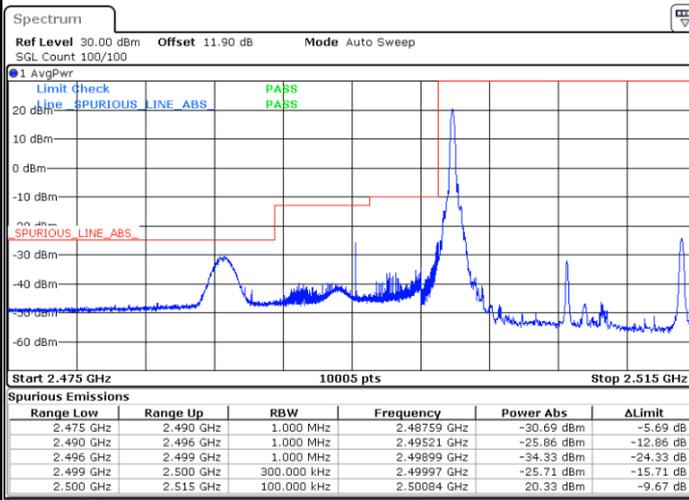


Date: 4 JAN 2020 18:38:20



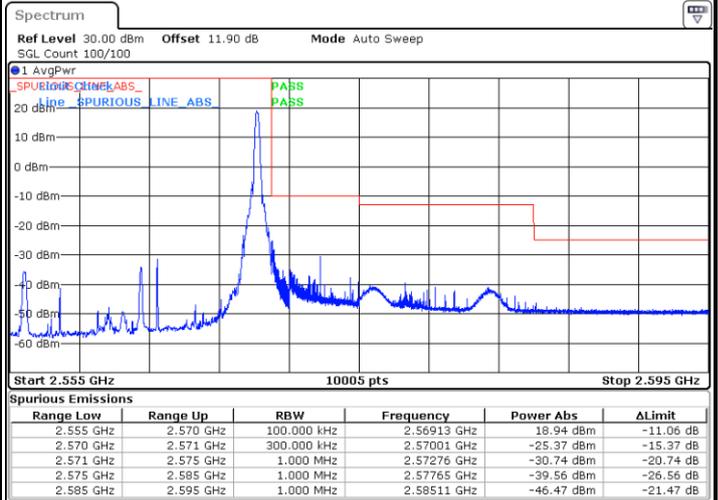
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



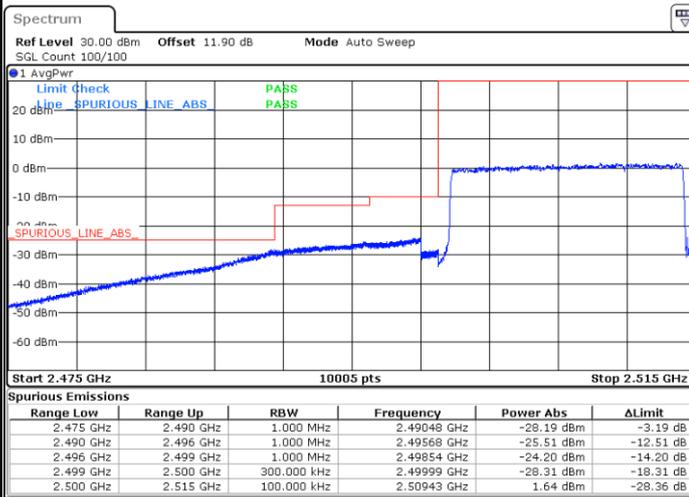
Date: 4 JAN 2020 18:30:25

Highest Band Edge / 1 RB



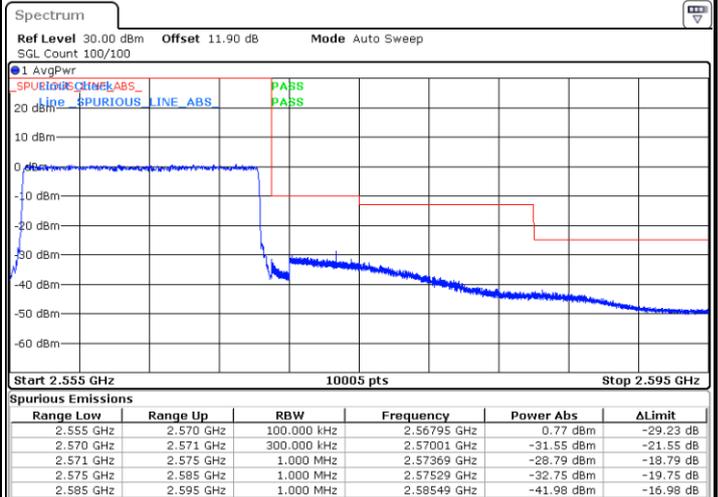
Date: 4 JAN 2020 18:37:39

Lowest Band Edge / Full RB



Date: 4 JAN 2020 18:31:48

Highest Band Edge / Full RB

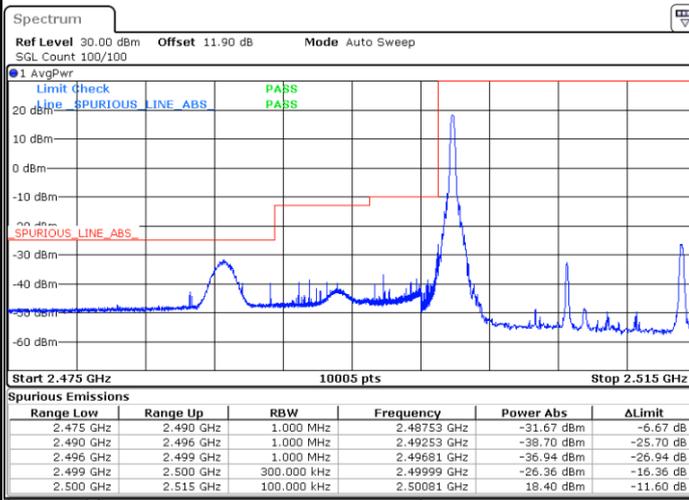


Date: 4 JAN 2020 18:39:02



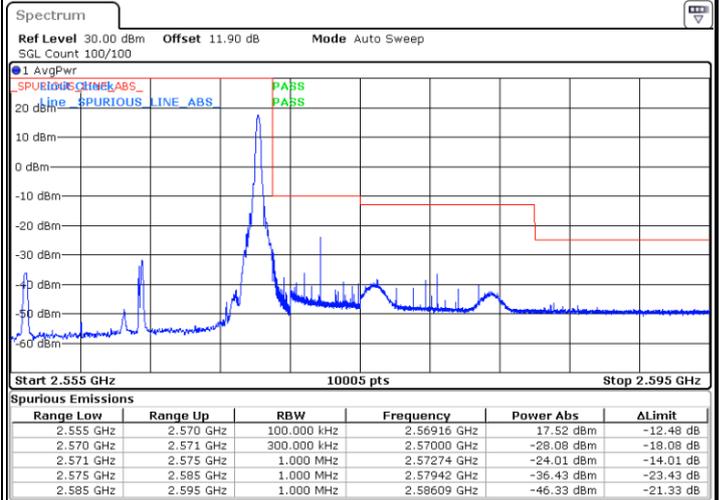
LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



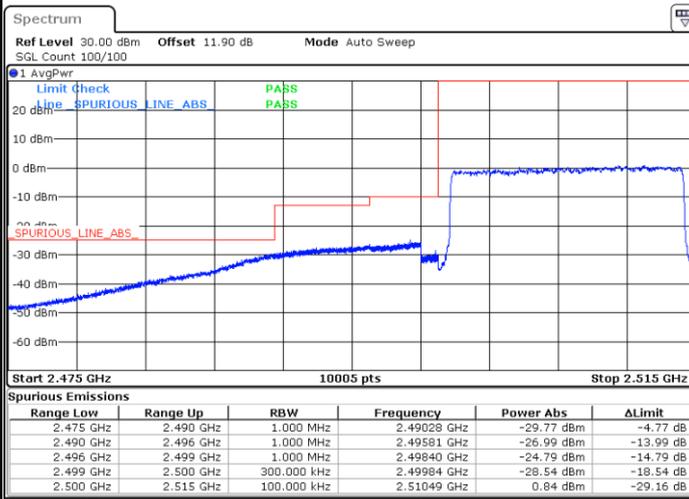
Date: 4 JAN 2020 18:41:34

Highest Band Edge / 1 RB



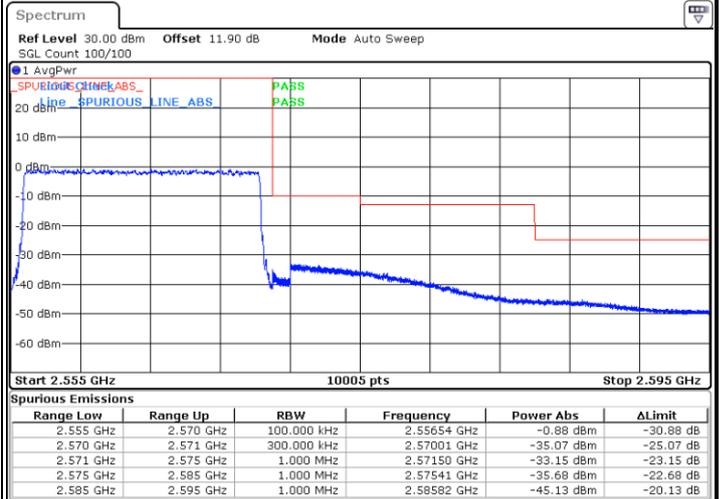
Date: 4 JAN 2020 18:45:11

Lowest Band Edge / Full RB



Date: 4 JAN 2020 18:42:16

Highest Band Edge / Full RB

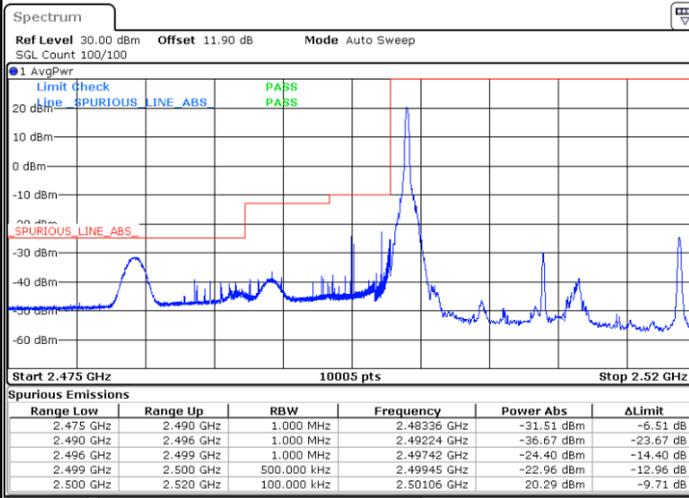


Date: 4 JAN 2020 18:45:53



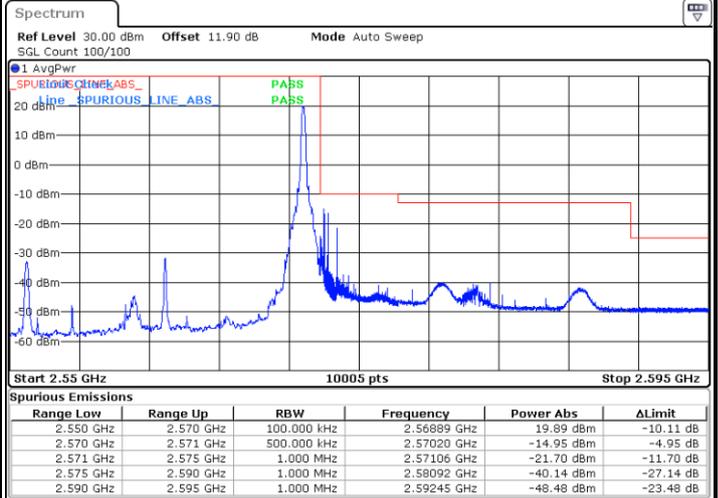
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



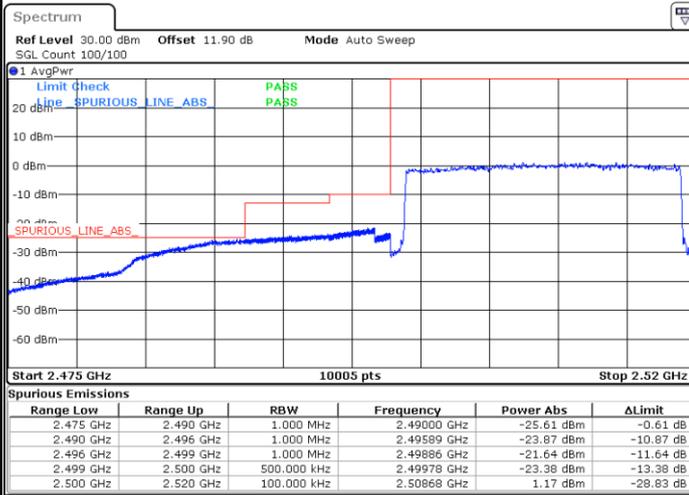
Date: 4 JAN 2020 18:48:08

Highest Band Edge / 1 RB



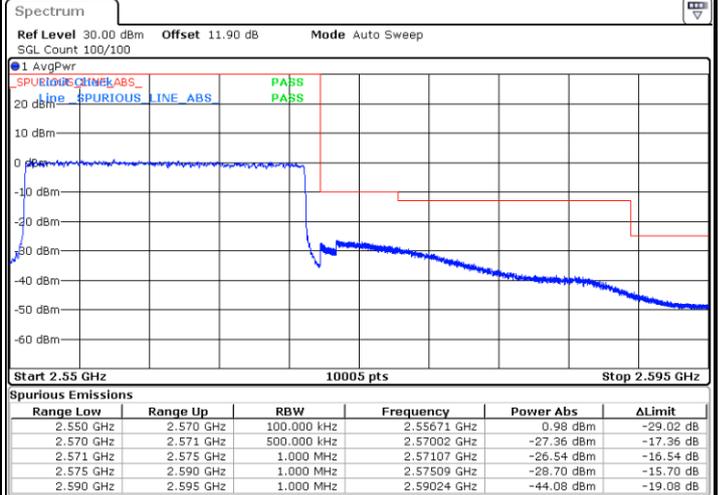
Date: 4 JAN 2020 18:55:23

Lowest Band Edge / Full RB



Date: 7 JAN 2020 05:31:45

Highest Band Edge / Full RB

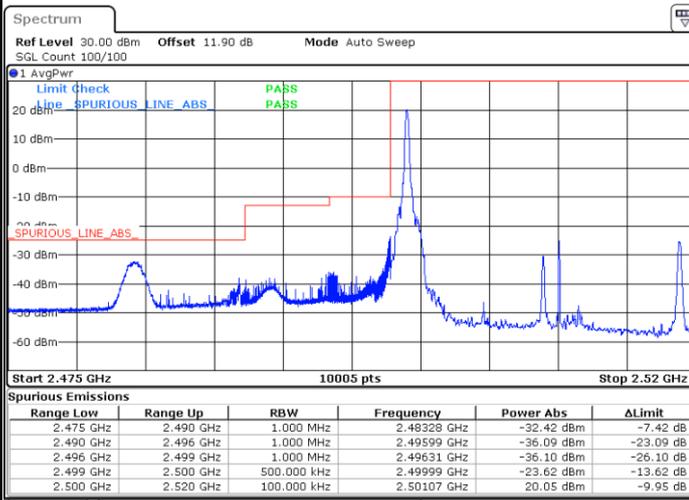


Date: 4 JAN 2020 18:57:27



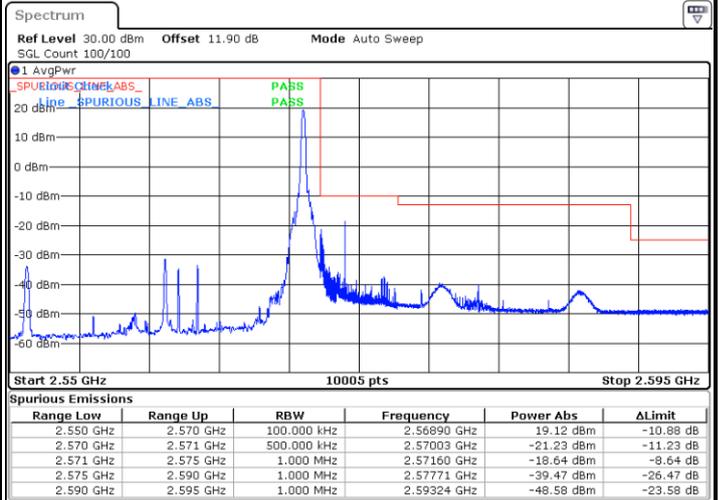
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



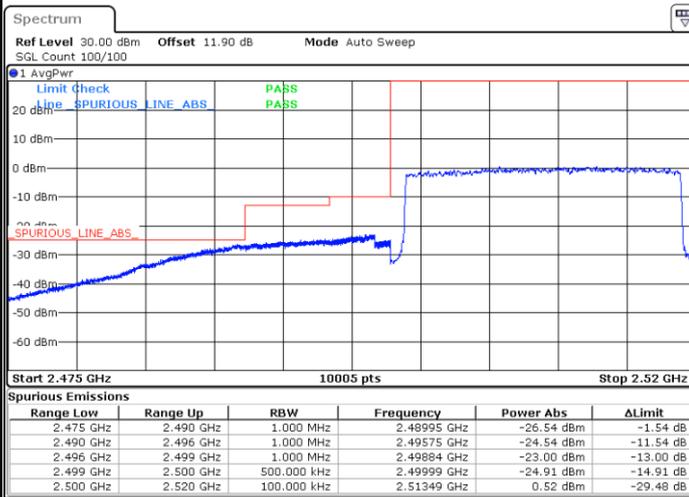
Date: 4 JAN 2020 18:48:50

Highest Band Edge / 1RB



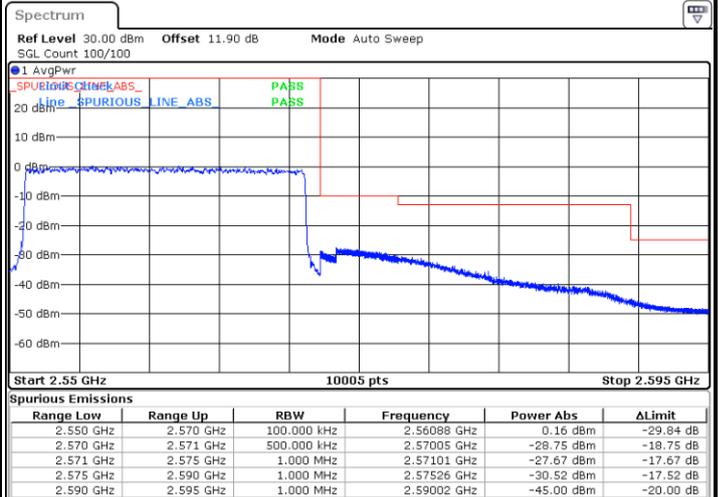
Date: 4 JAN 2020 18:56:05

Lowest Band Edge / Full RB



Date: 4 JAN 2020 18:50:13

Highest Band Edge / Full RB

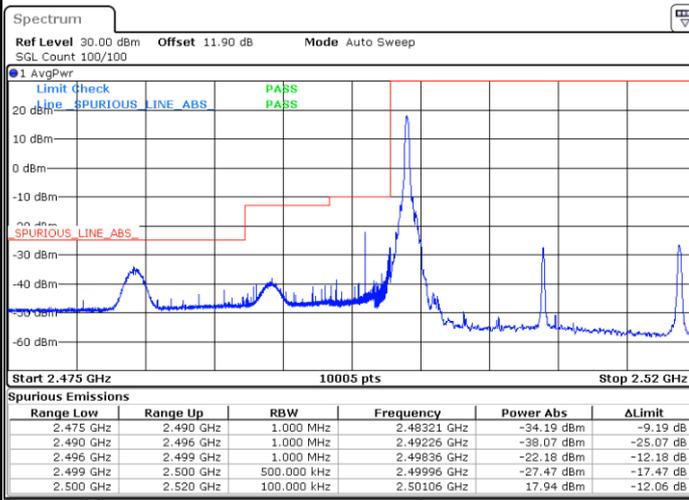


Date: 4 JAN 2020 18:56:46



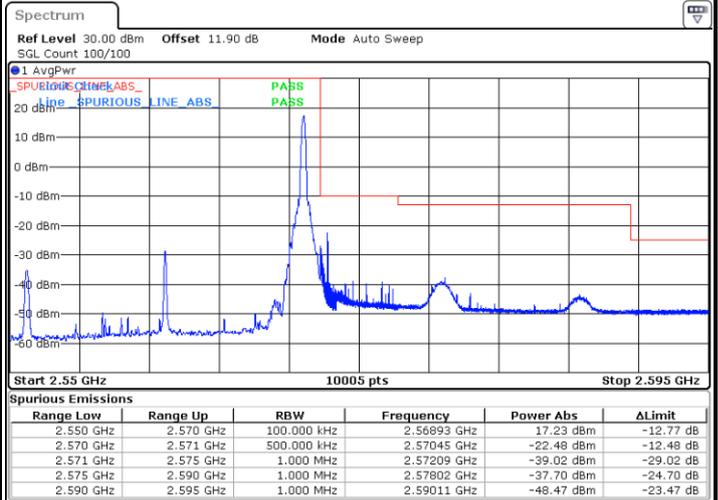
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



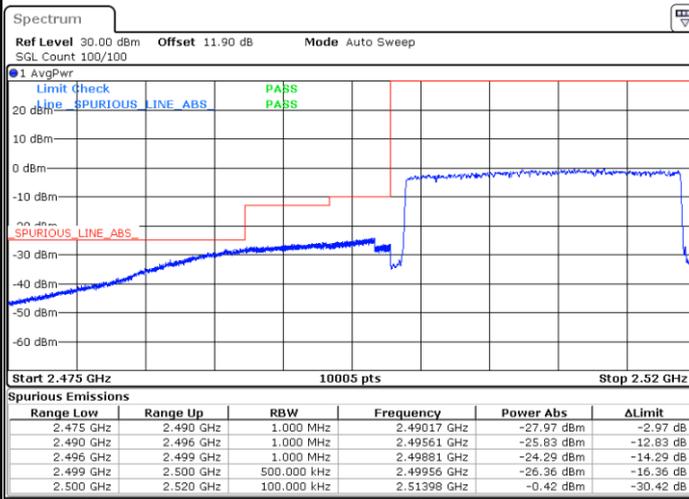
Date: 4 JAN 2020 19:00:01

Highest Band Edge / 1 RB



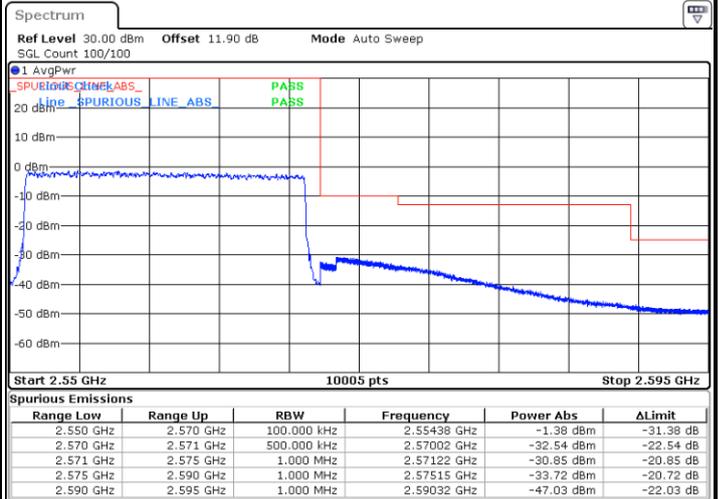
Date: 4 JAN 2020 19:03:38

Lowest Band Edge / Full RB



Date: 4 JAN 2020 19:00:42

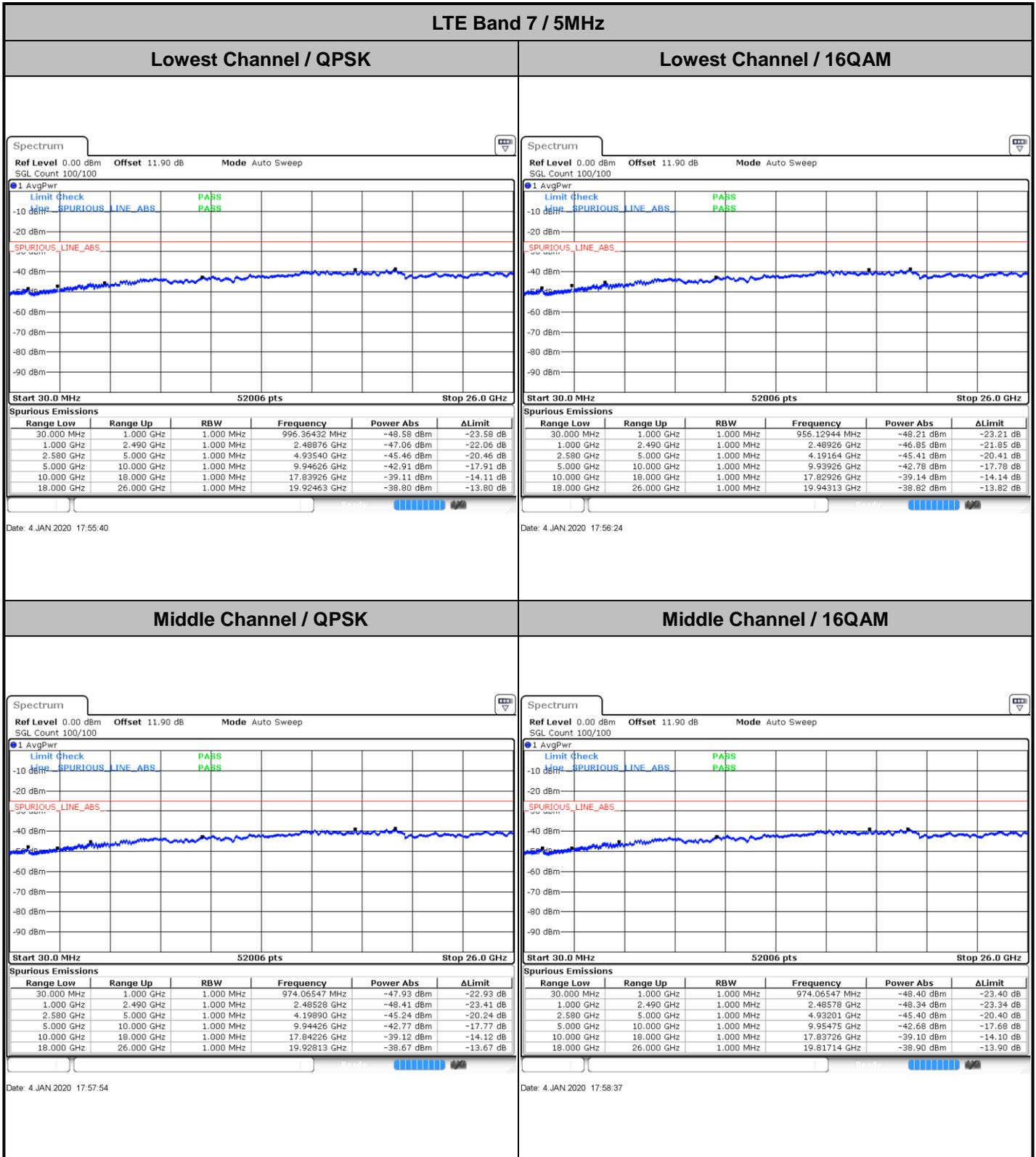
Highest Band Edge / Full RB



Date: 4 JAN 2020 19:04:20



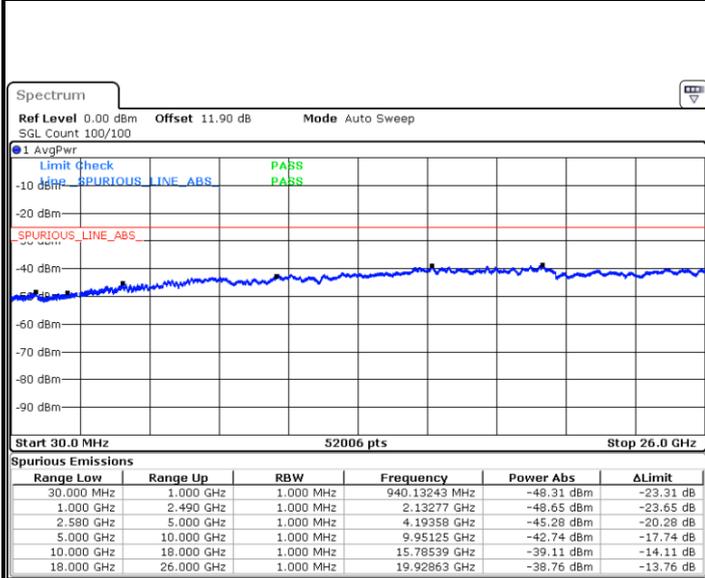
Conducted Spurious Emission





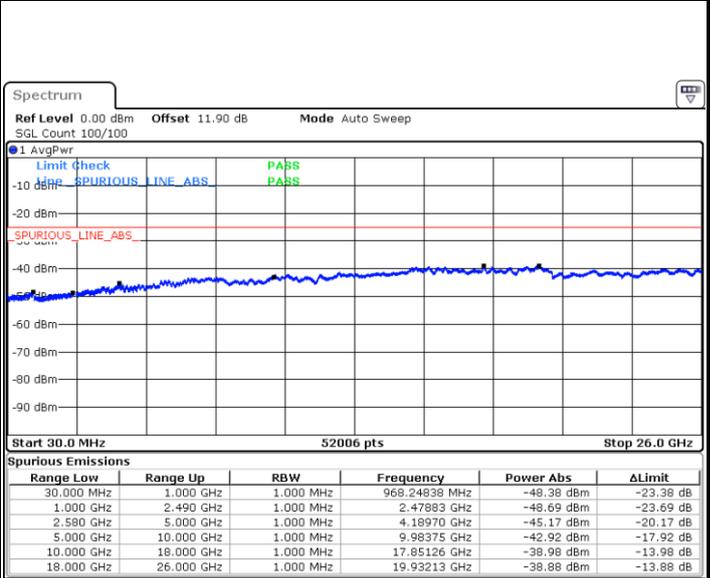
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 4 JAN 2020 18:02:55

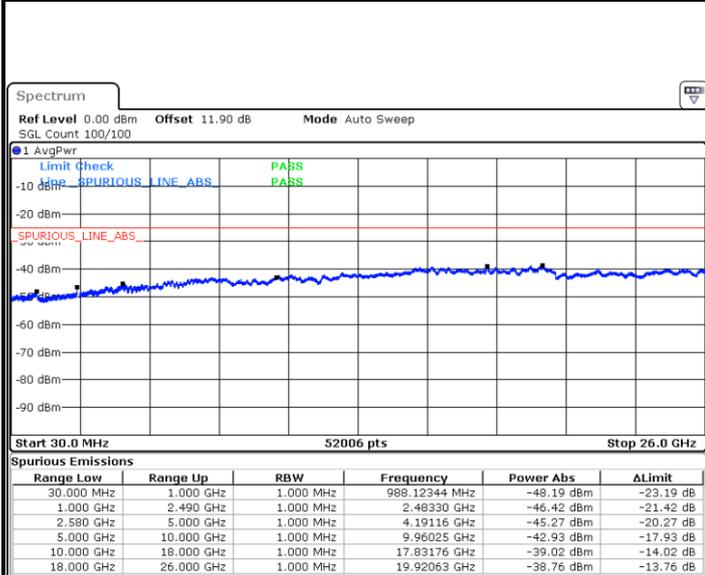
Highest Channel / 16QAM



Date: 4 JAN 2020 18:03:39

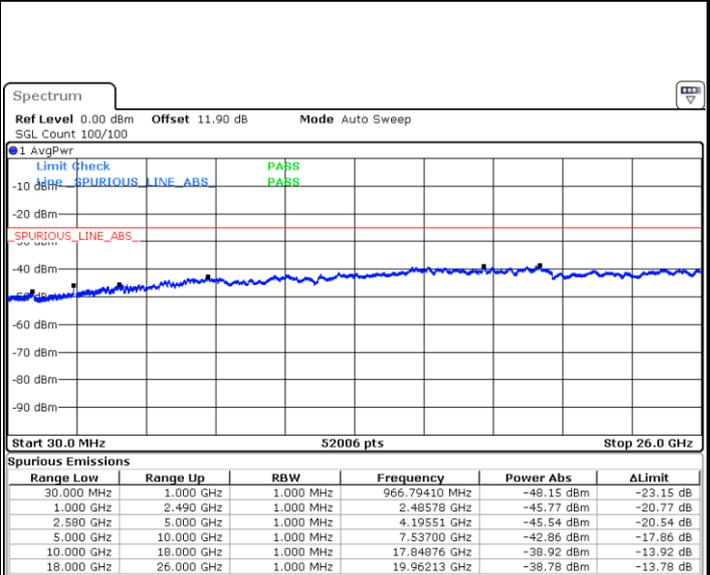
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 18:14:06

Lowest Channel / 16QAM



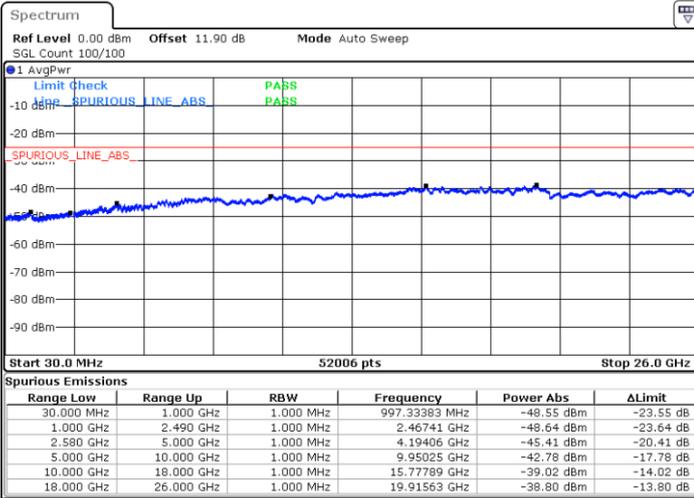
Date: 4 JAN 2020 18:14:50



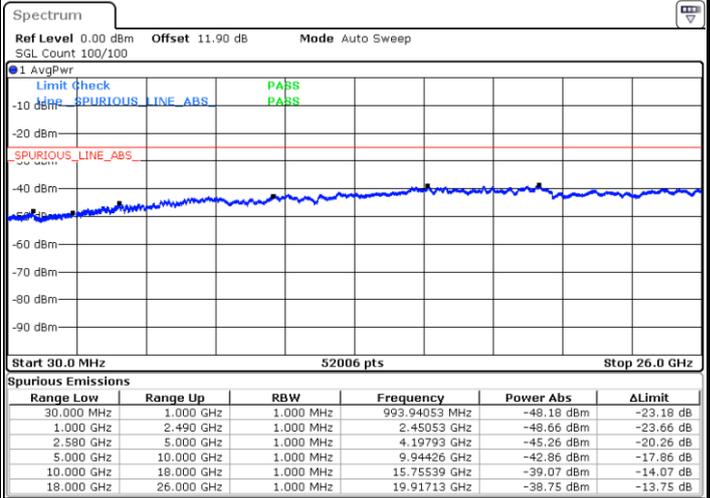
LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



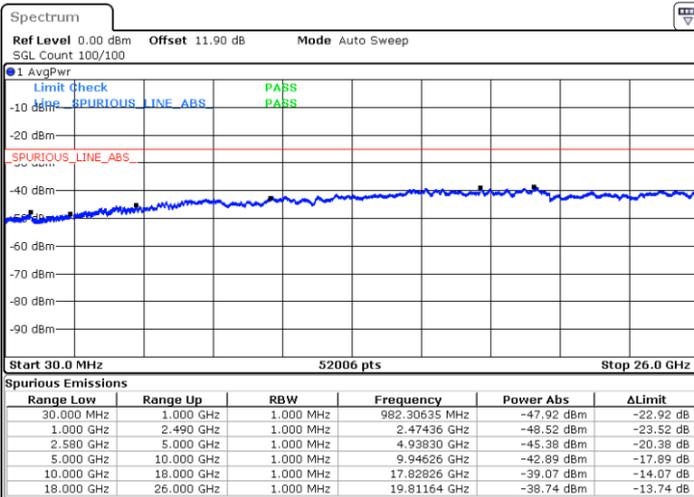
Date: 4 JAN 2020 18:16:20



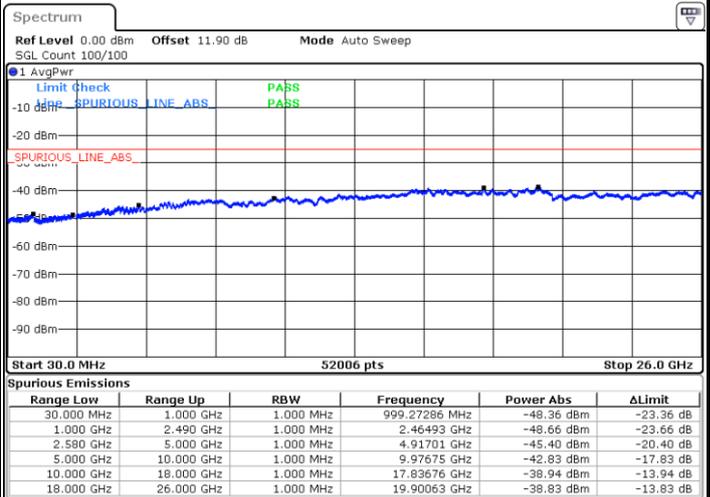
Date: 4 JAN 2020 18:17:03

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 4 JAN 2020 18:21:21

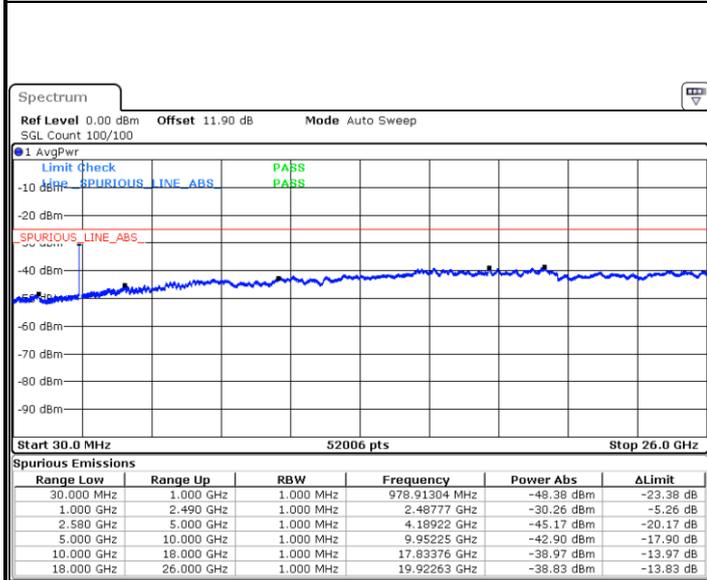


Date: 4 JAN 2020 18:22:05



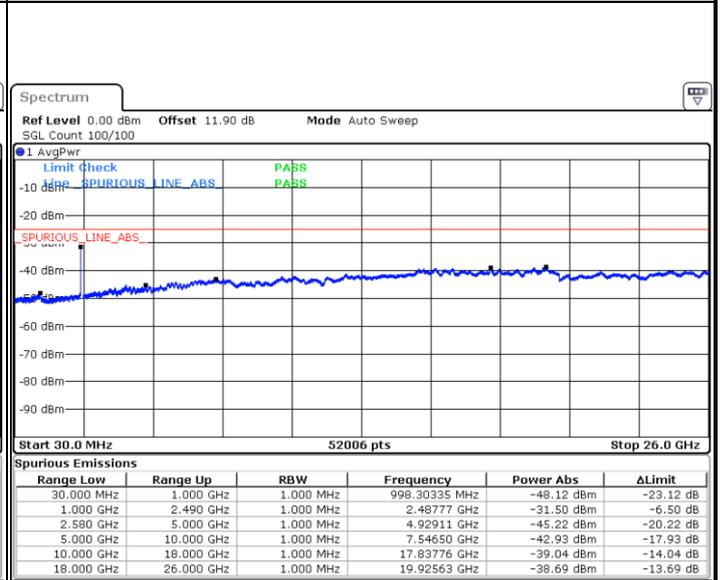
LTE Band 7 / 15MHz

Lowest Channel / QPSK



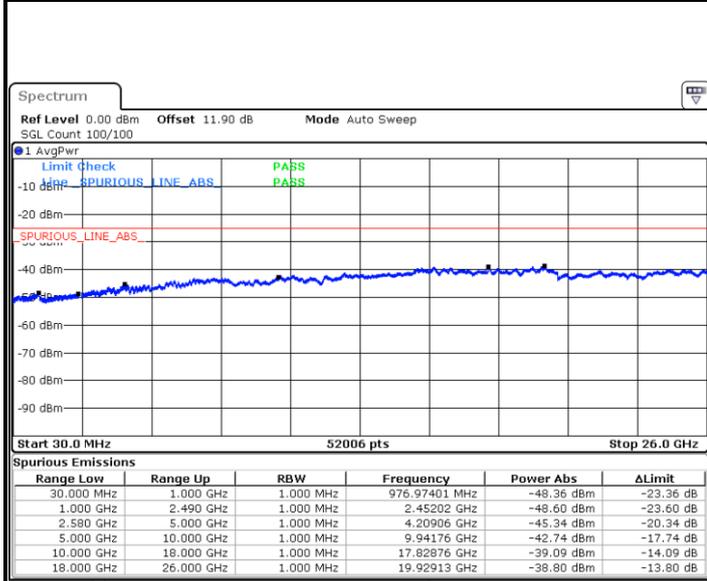
Date: 4 JAN 2020 18:32:32

Lowest Channel / 16QAM



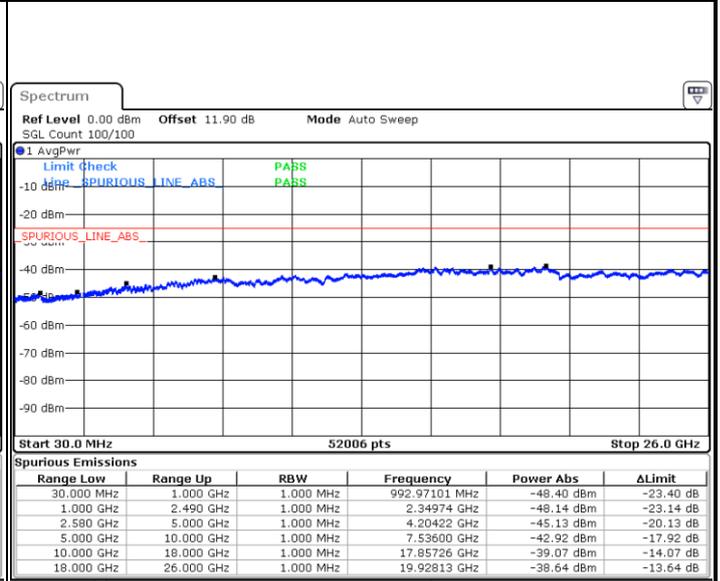
Date: 4 JAN 2020 18:33:16

Middle Channel / QPSK



Date: 4 JAN 2020 18:34:45

Middle Channel / 16QAM

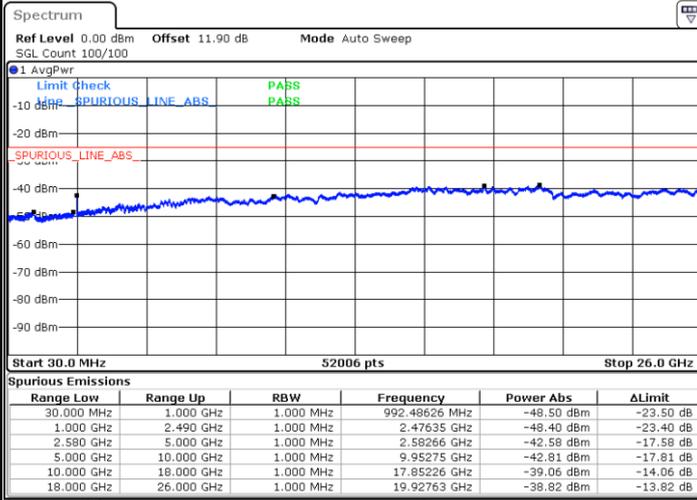


Date: 4 JAN 2020 18:35:28



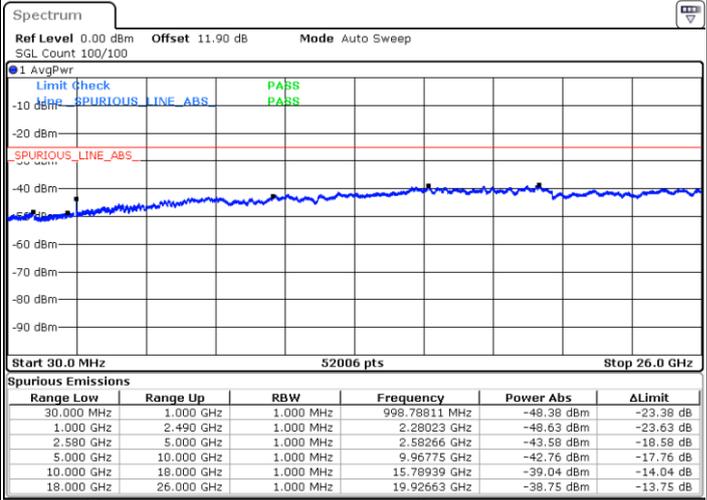
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 4 JAN 2020 18:39:46

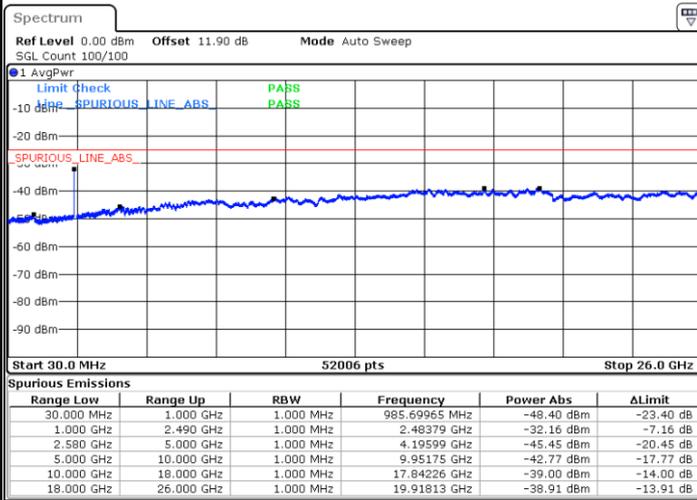
Highest Channel / 16QAM



Date: 4 JAN 2020 18:40:29

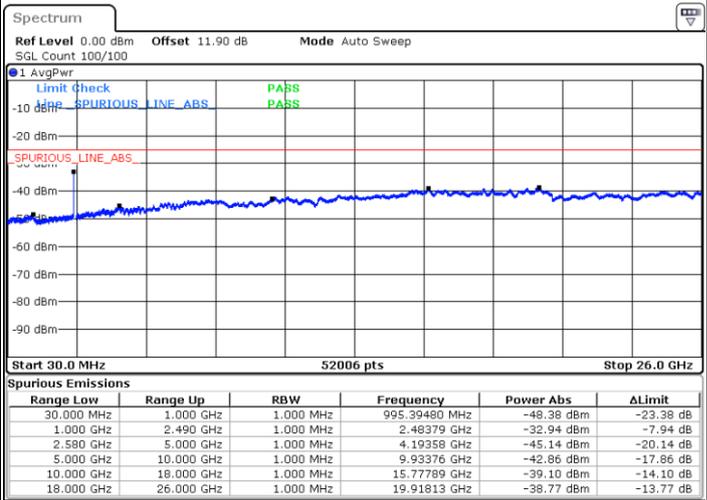
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 18:50:57

Lowest Channel / 16QAM



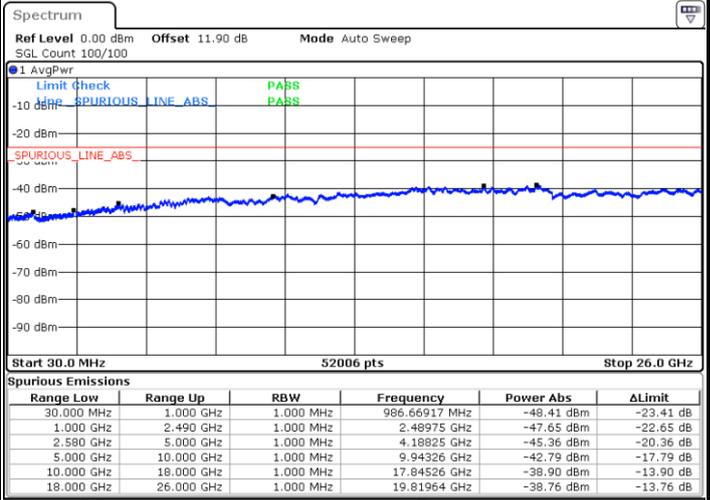
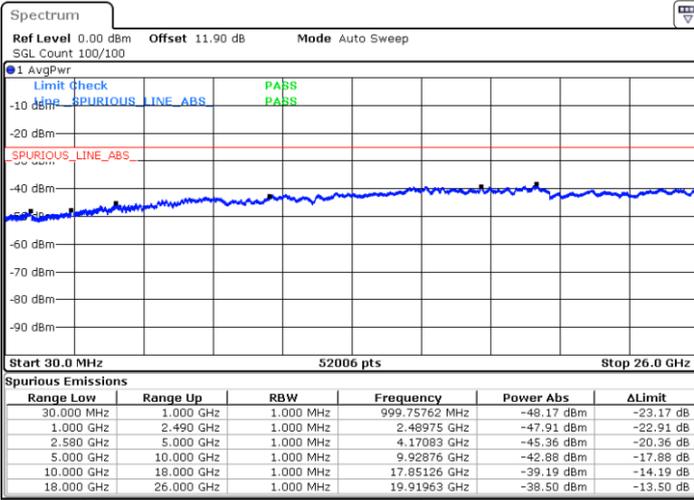
Date: 4 JAN 2020 18:51:41



LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

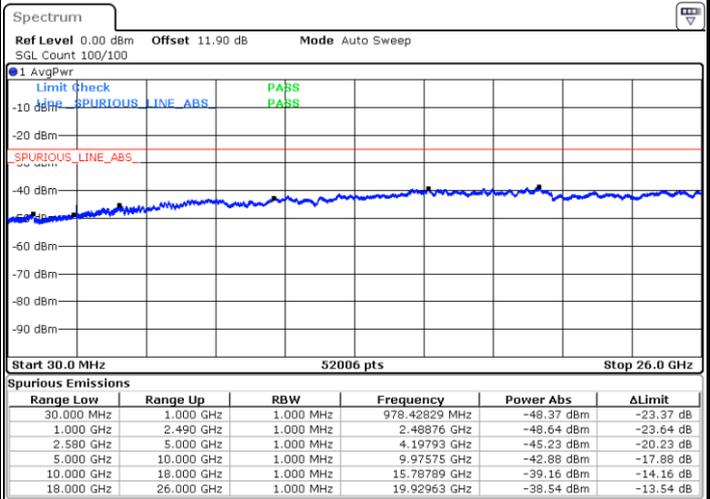
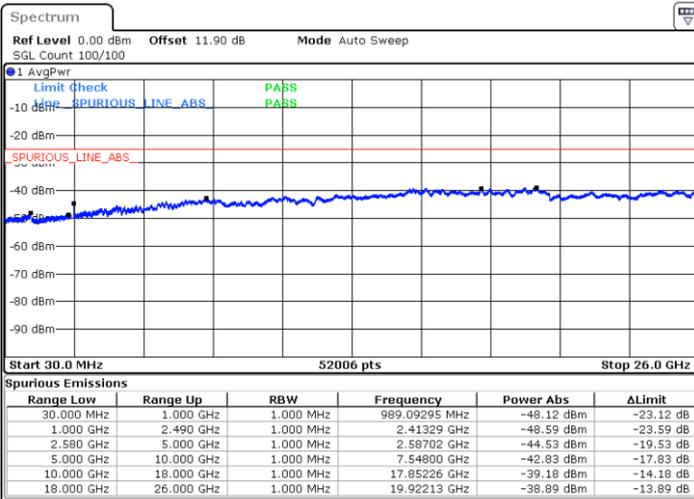


Date: 4 JAN 2020 18:53:11

Date: 4 JAN 2020 18:53:53

Highest Channel / QPSK

Highest Channel / 16QAM



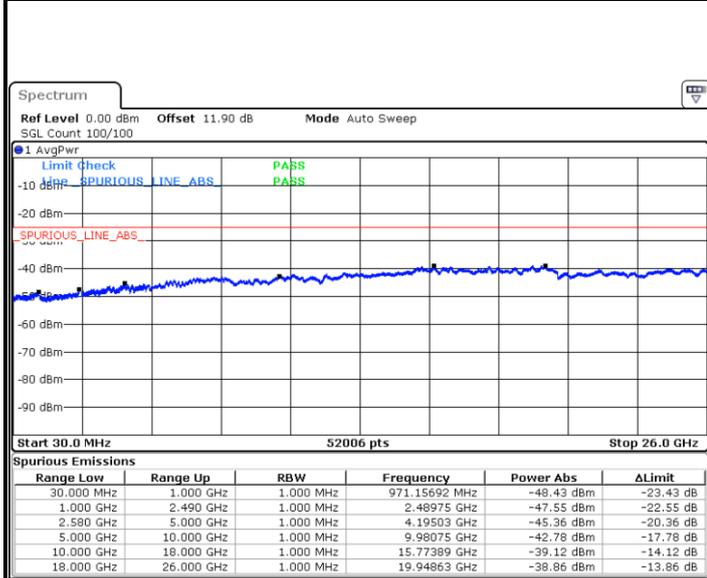
Date: 4 JAN 2020 18:58:11

Date: 4 JAN 2020 18:58:55



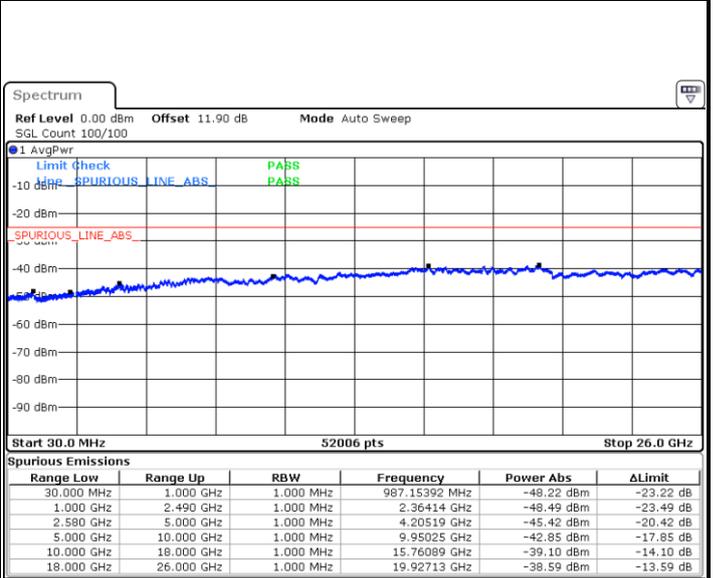
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



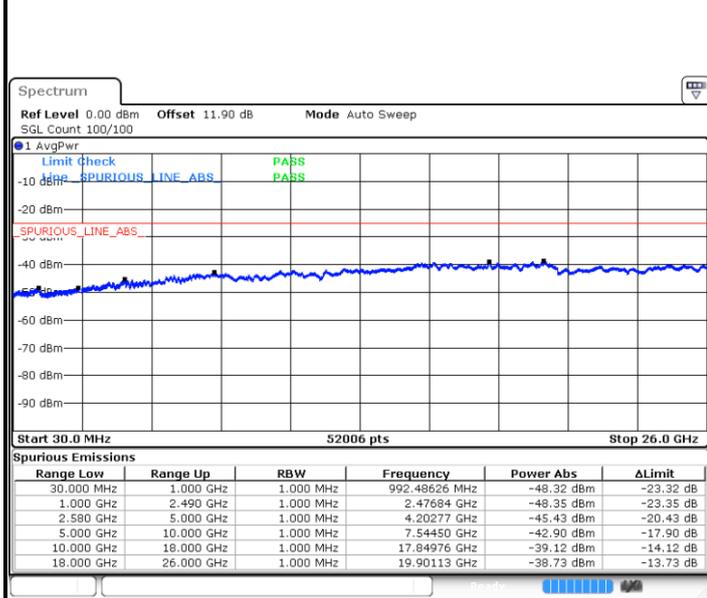
Date: 4 JAN 2020 18:06:10

Middle Channel / 64QAM



Date: 4 JAN 2020 18:07:16

Highest Channel / 64QAM



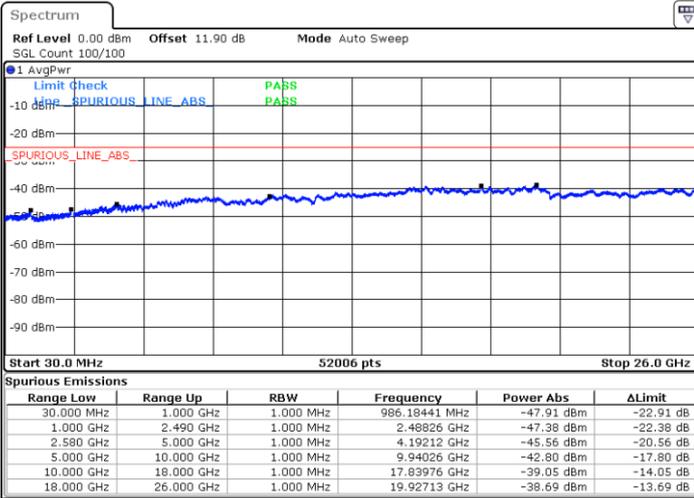
Date: 4 JAN 2020 18:09:47



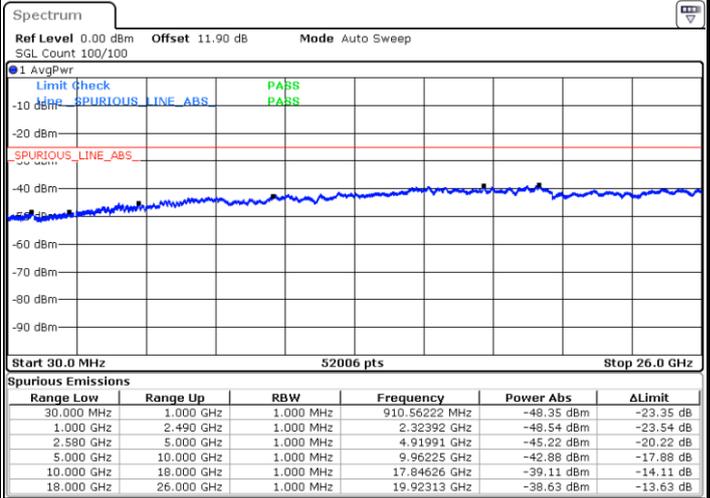
LTE Band 7 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

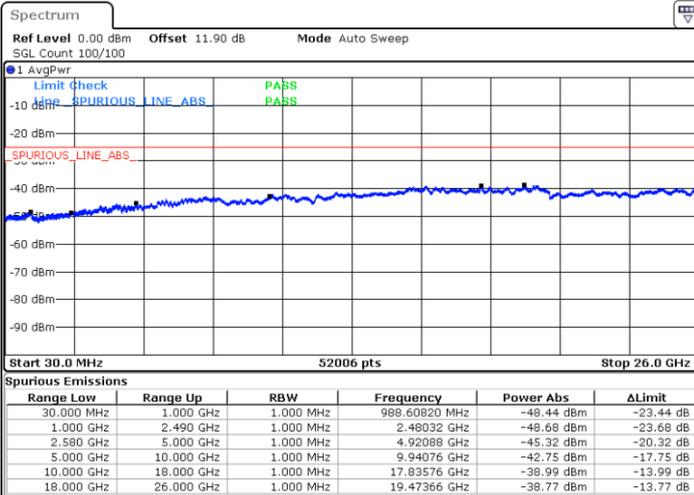


Date: 4. JAN 2020 18:24:35



Date: 4. JAN 2020 18:25:42

Highest Channel / 64QAM



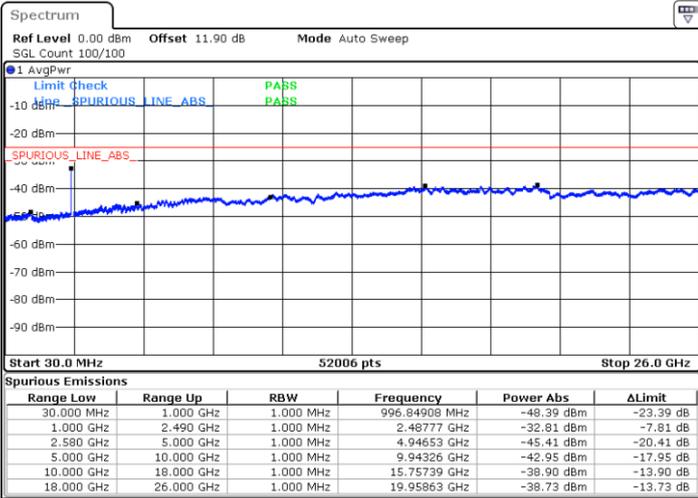
Date: 4. JAN 2020 18:28:13



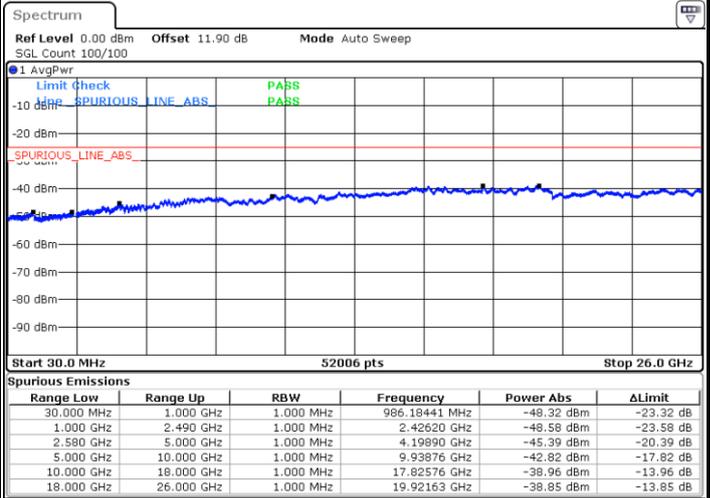
LTE Band 7 / 15MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

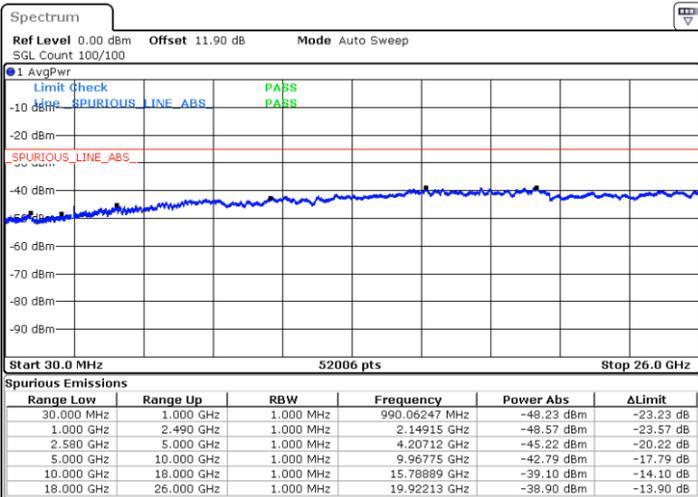


Date: 4 JAN 2020 18:43:00

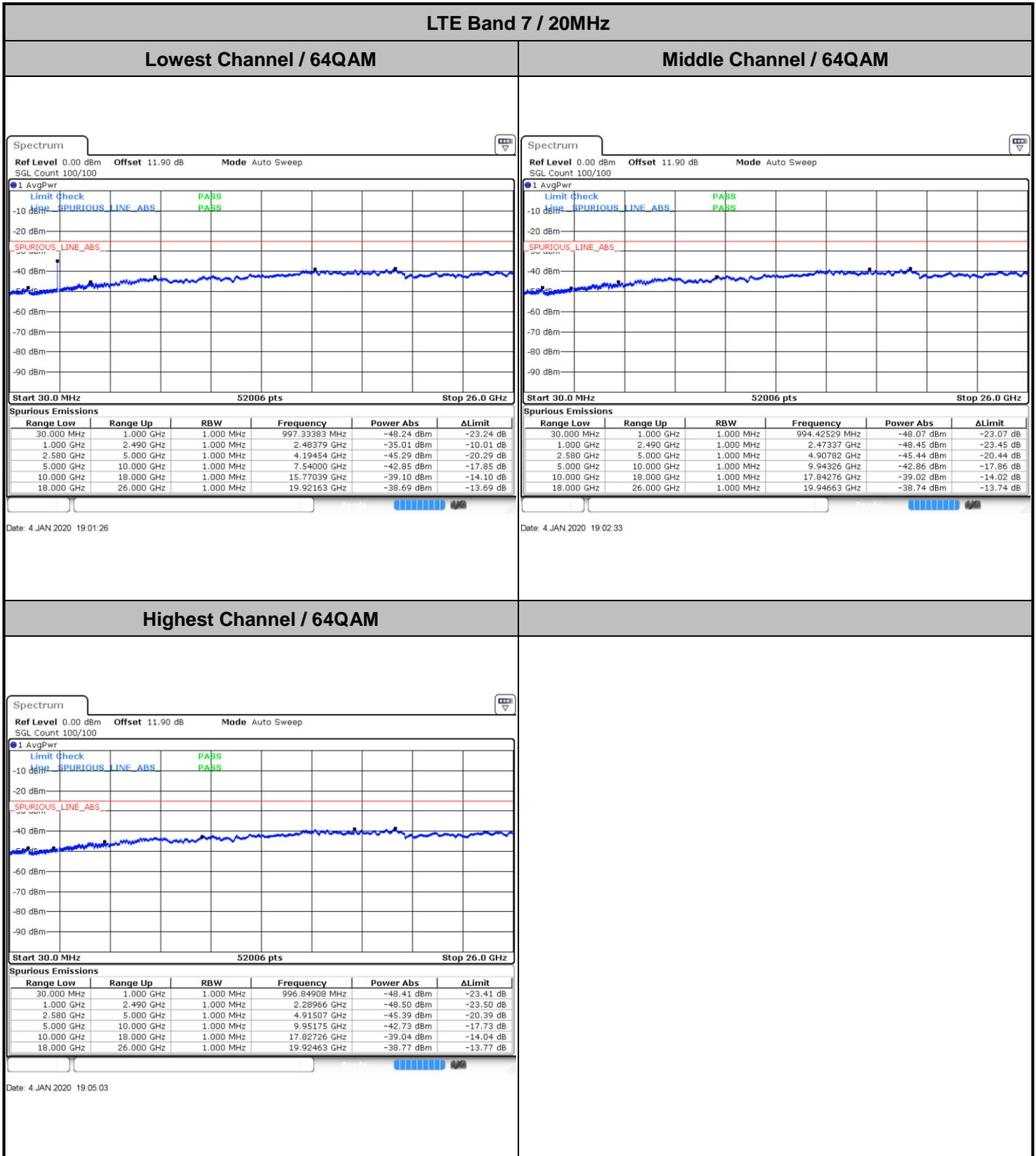


Date: 4 JAN 2020 18:44:06

Highest Channel / 64QAM



Date: 4 JAN 2020 18:46:37





Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0054	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0052	
0	Normal Voltage	0.0053	
-10	Normal Voltage	0.0058	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0057	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0050	

Note:

1. Normal Voltage =7.7 V. ; Battery End Point (BEP) =6.9 V. ; Maximum Voltage =8.5 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.48	4.84	4.64	5.77	PASS
Middle CH	3.57	4.84	4.81	5.83	
Highest CH	3.62	4.84	5.22	5.77	
Mode	LTE Band 12 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.09	6.49	-	-	PASS
Middle CH	6.38	6.29	-	-	
Highest CH	6.43	6.23	-	-	



LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 4 JAN 2020 23:20:07

Lowest Channel / Full RB



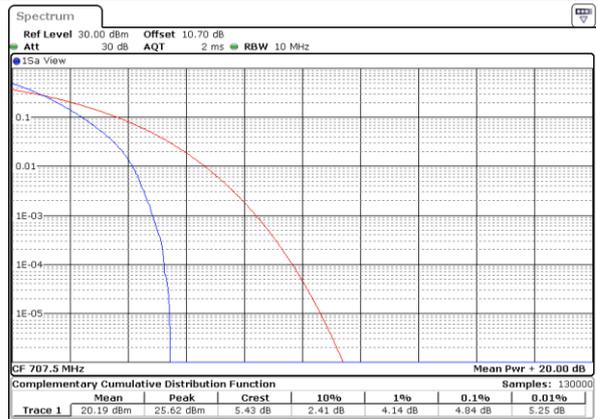
Date: 4 JAN 2020 23:19:57

Middle Channel / 1RB



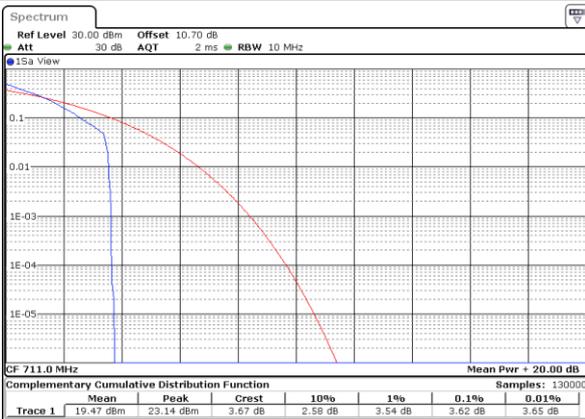
Date: 4 JAN 2020 23:20:17

Middle Channel / Full RB



Date: 4 JAN 2020 23:20:27

Highest Channel / 1RB



Date: 4 JAN 2020 23:20:47

Highest Channel / Full RB

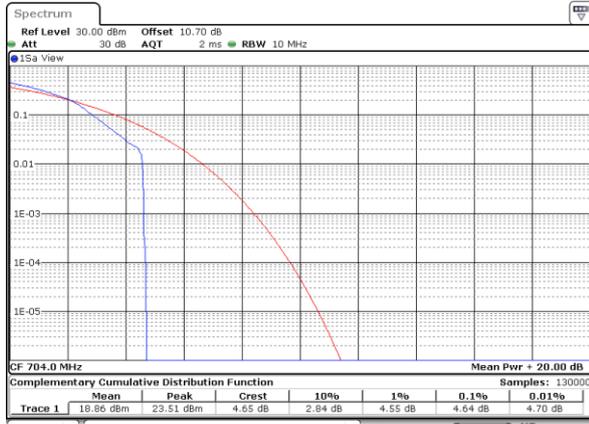


Date: 4 JAN 2020 23:20:36



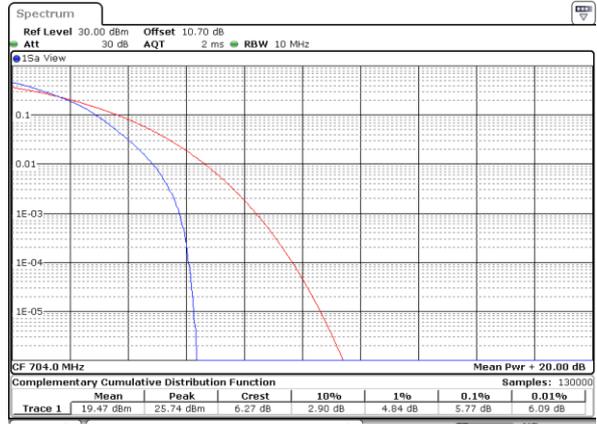
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



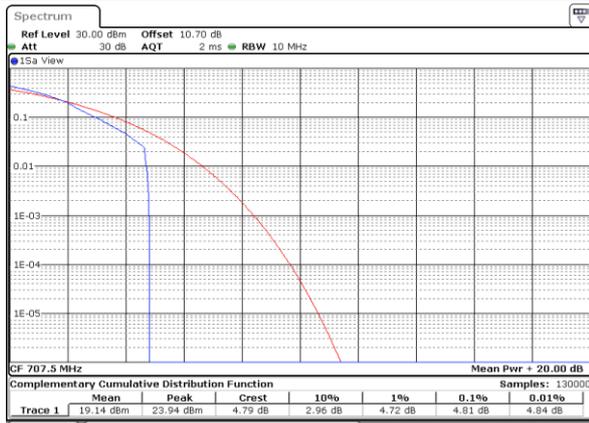
Date: 4 JAN 2020 23:19:06

Lowest Channel / Full RB



Date: 4 JAN 2020 23:18:56

Middle Channel / 1RB



Date: 4 JAN 2020 23:19:16

Middle Channel / Full RB



Date: 4 JAN 2020 23:19:26

Highest Channel / 1RB



Date: 4 JAN 2020 23:19:46

Highest Channel / Full RB

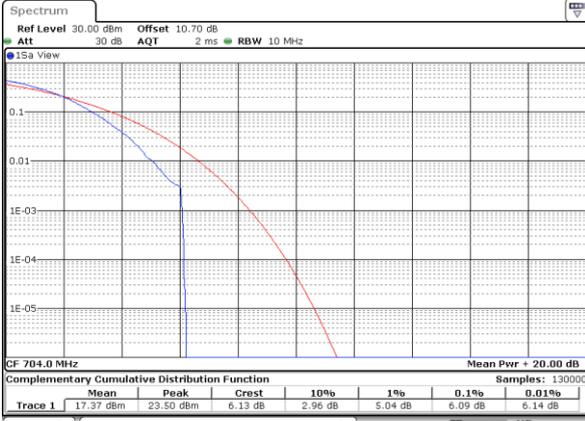


Date: 4 JAN 2020 23:19:36



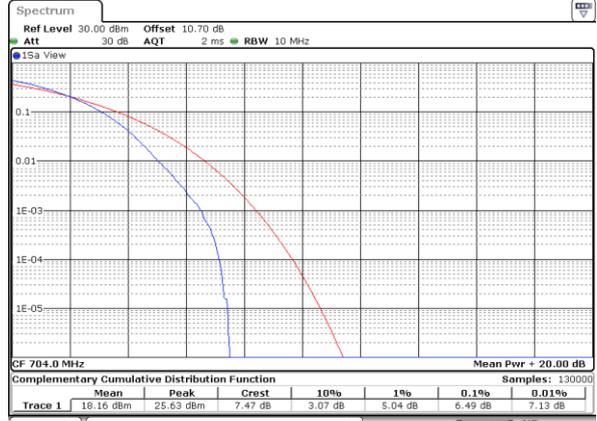
LTE Band 12 / 10MHz / 64QAM

Lowest Channel / 1RB



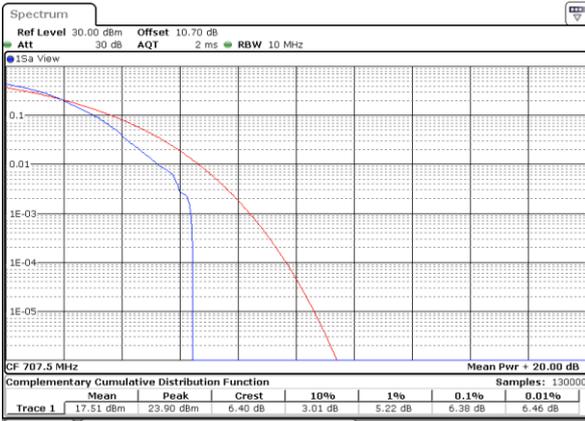
Date: 4 JAN 2020 23:18:06

Lowest Channel / Full RB



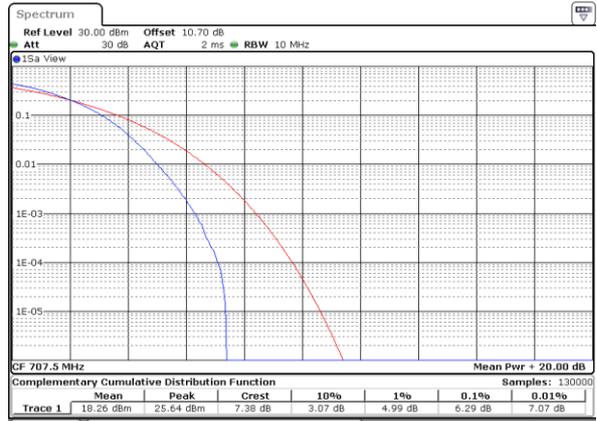
Date: 4 JAN 2020 23:17:55

Middle Channel / 1RB



Date: 4 JAN 2020 23:18:15

Middle Channel / Full RB



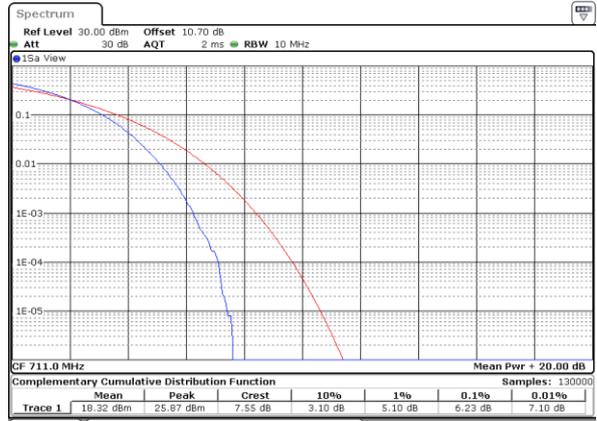
Date: 4 JAN 2020 23:18:25

Highest Channel / 1RB



Date: 4 JAN 2020 23:18:45

Highest Channel / Full RB



Date: 4 JAN 2020 23:18:35



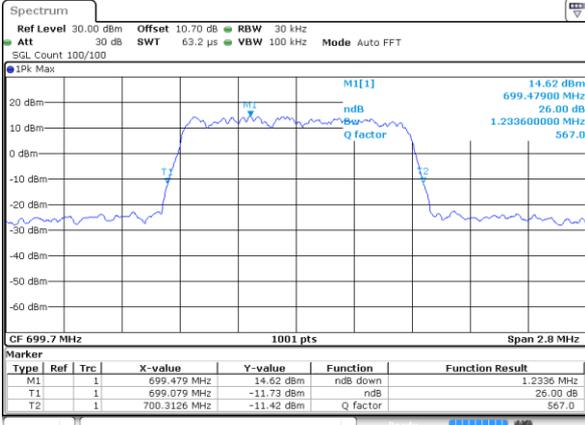
26dB Bandwidth

Mode	LTE Band 12 : 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	1.23	1.21	2.96	3.03	4.82	4.84	9.91	9.61	-	-	-	-
Middle CH	1.24	1.21	3.01	3.05	4.91	4.83	9.79	9.83	-	-	-	-
Highest CH	1.23	1.23	3.00	3.01	4.84	4.86	9.73	9.65	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.23	-	3.04	-	4.90	-	9.83	-	-	-	-	-
Middle CH	1.23	-	2.99	-	4.88	-	9.69	-	-	-	-	-
Highest CH	1.24	-	3.00	-	4.85	-	9.63	-	-	-	-	-



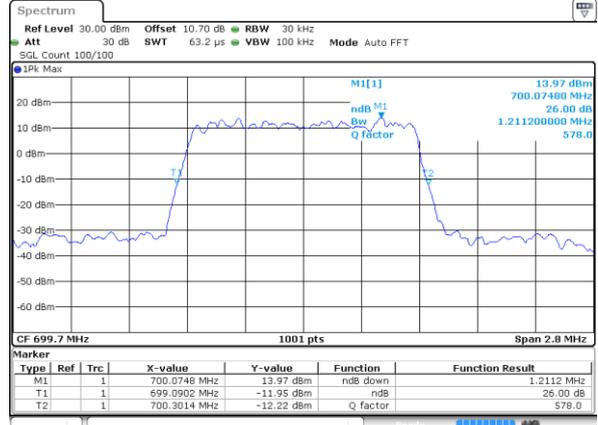
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



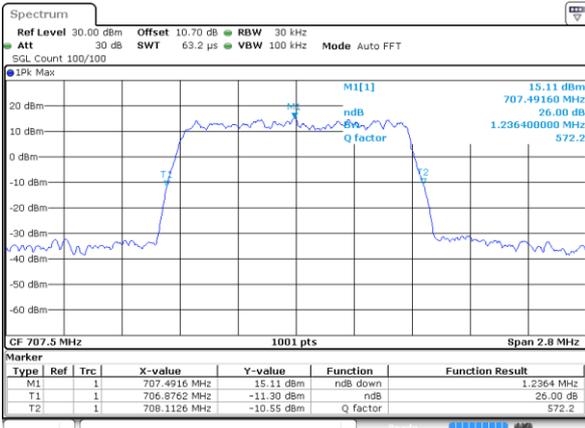
Date: 4 JAN 2020 21:48:57

Lowest Channel / 1.4MHz / 16QAM



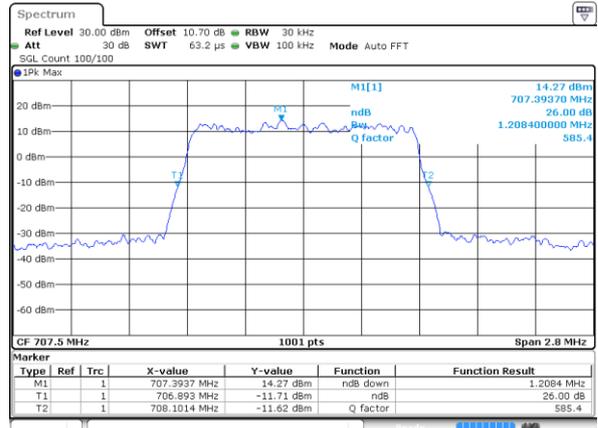
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Middle Channel / 1.4MHz / QPSK



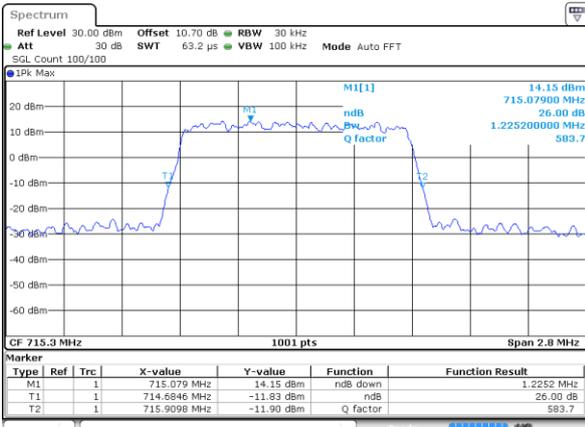
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Middle Channel / 1.4MHz / 16QAM



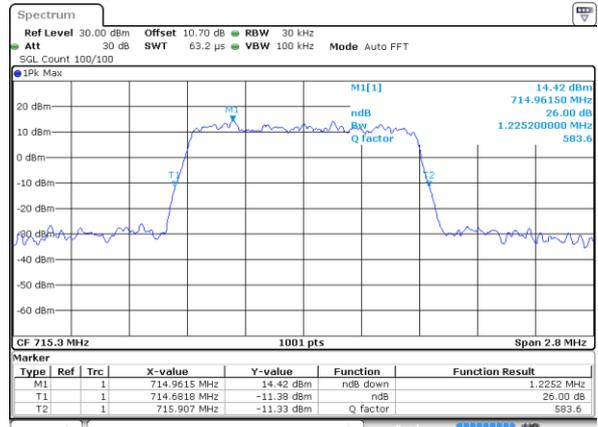
Date: 4 JAN 2020 21:55:09

Highest Channel / 1.4MHz / QPSK



Date: 4 JAN 2020 21:57:18

Highest Channel / 1.4MHz / 16QAM

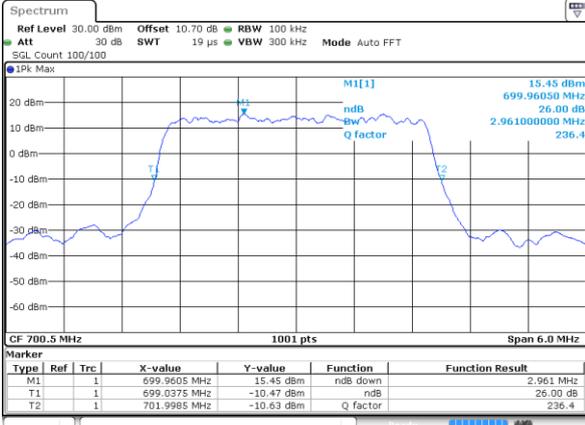


Date: 4 JAN 2020 21:57:06



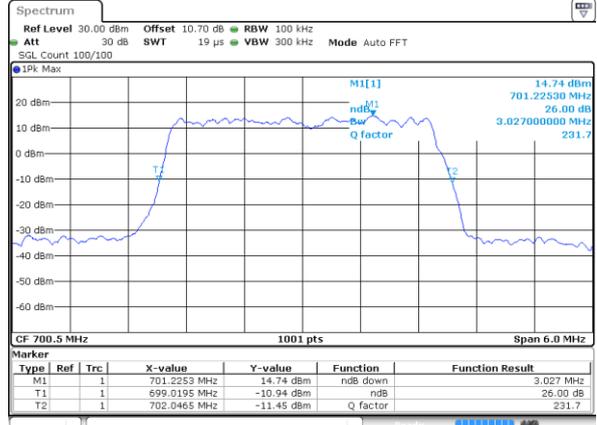
LTE Band 12

Lowest Channel / 3MHz / QPSK



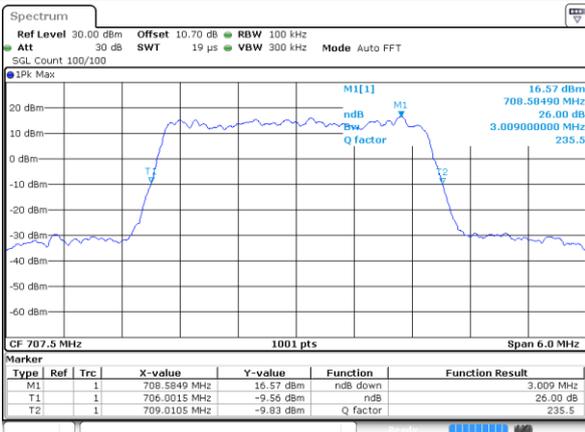
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Lowest Channel / 3MHz / 16QAM



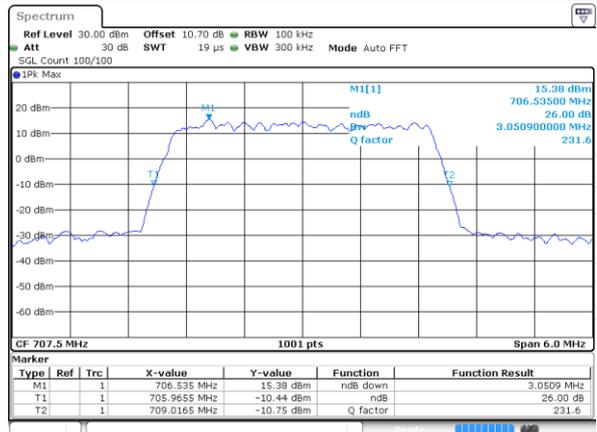
Date: 4 JAN 2020 22:10:36

Middle Channel / 3MHz / QPSK



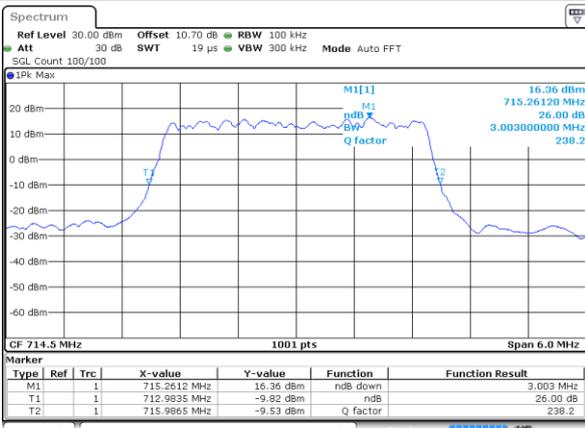
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Middle Channel / 3MHz / 16QAM



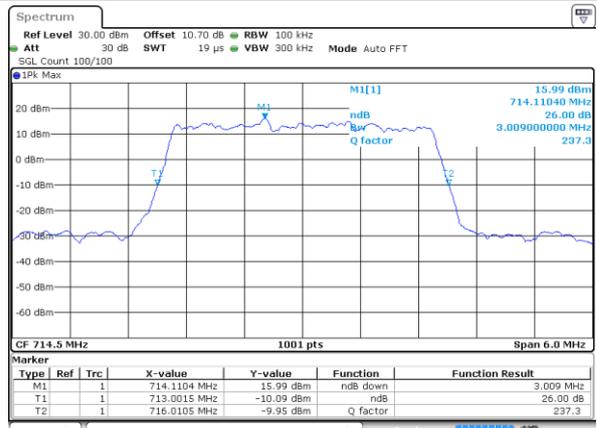
Date: 4 JAN 2020 22:17:00

Highest Channel / 3MHz / QPSK



Date: 4 JAN 2020 22:19:09

Highest Channel / 3MHz / 16QAM

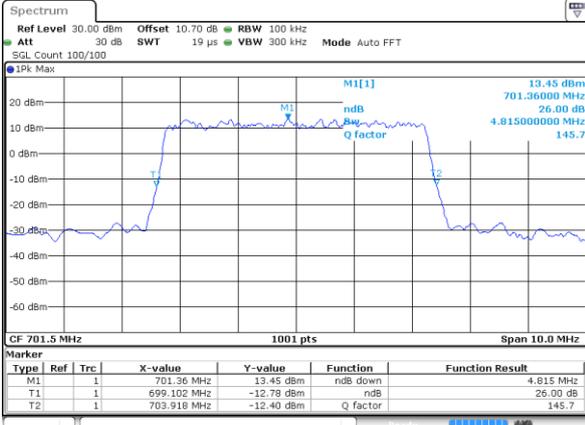


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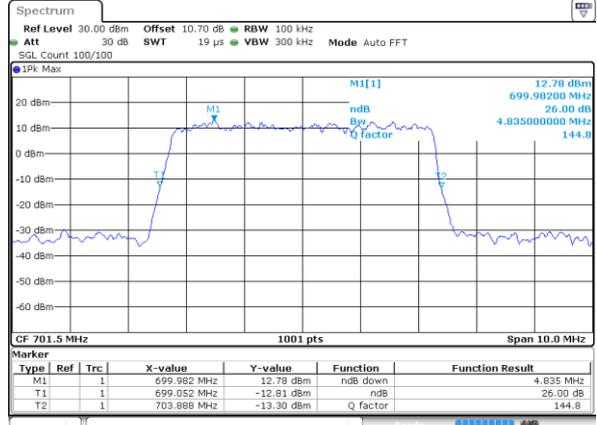
LTE Band 12

Lowest Channel / 5MHz / QPSK



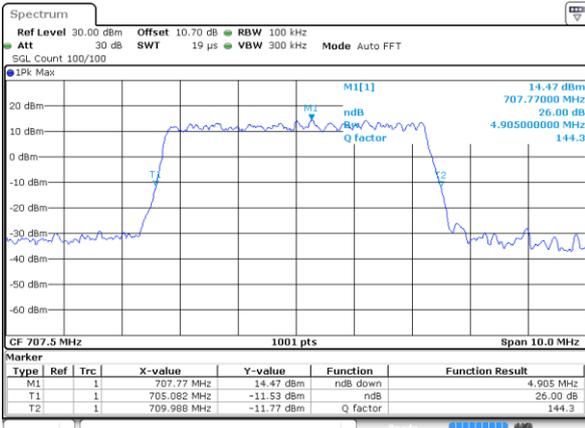
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Lowest Channel / 5MHz / 16QAM



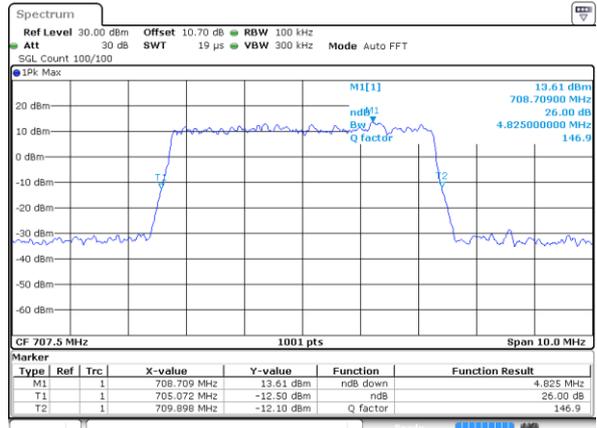
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Middle Channel / 5MHz / QPSK



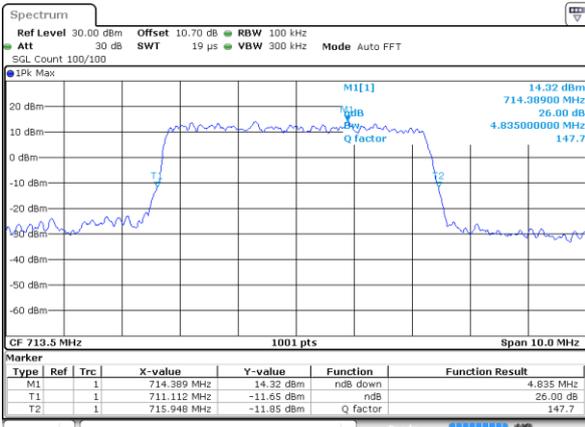
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Middle Channel / 5MHz / 16QAM



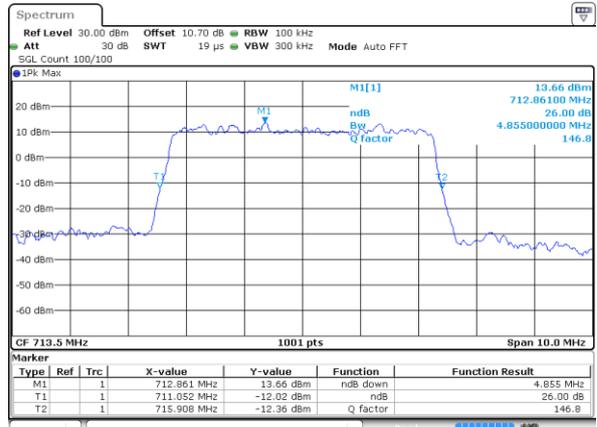
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Highest Channel / 5MHz / QPSK



Date: 4 JAN 2020 22:48:16

Highest Channel / 5MHz / 16QAM

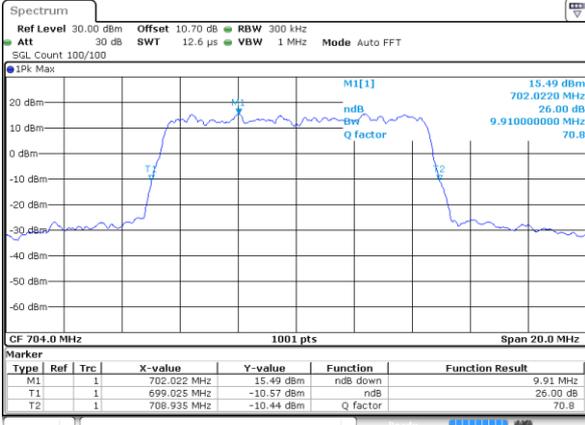


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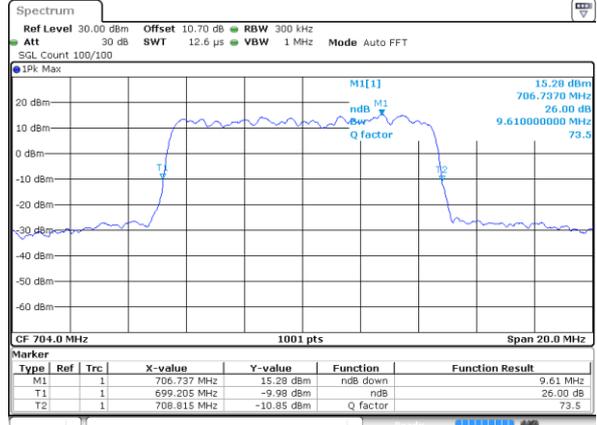
LTE Band 12

Lowest Channel / 10MHz / QPSK



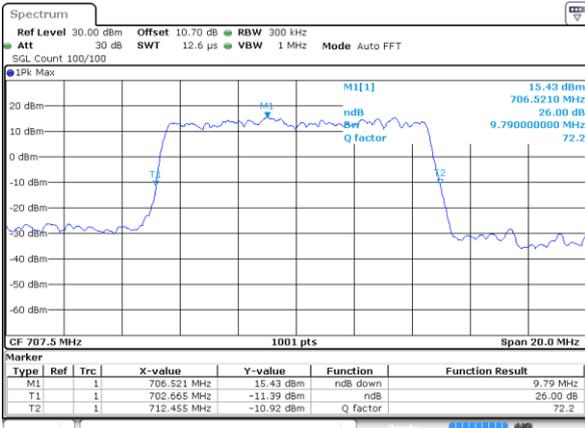
Date: 4 JAN 2020 22:54:31

Lowest Channel / 10MHz / 16QAM



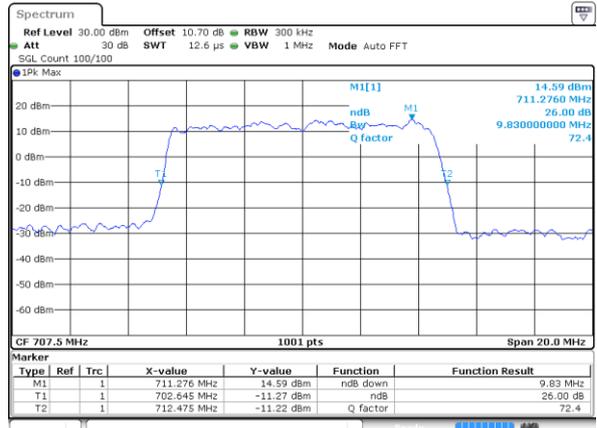
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Middle Channel / 10MHz / QPSK



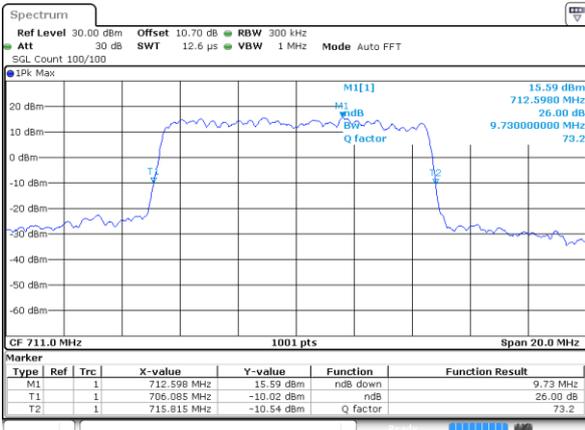
Date: 4 JAN 2020 23:00:31

Middle Channel / 10MHz / 16QAM



Date: 4 JAN 2020 23:00:42

Highest Channel / 10MHz / QPSK



Date: 4 JAN 2020 23:02:51

Highest Channel / 10MHz / 16QAM



Date: 4 JAN 2020 23:02:39