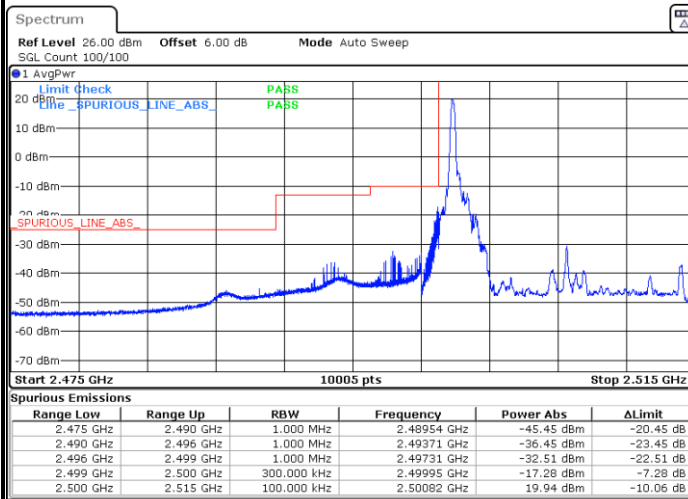


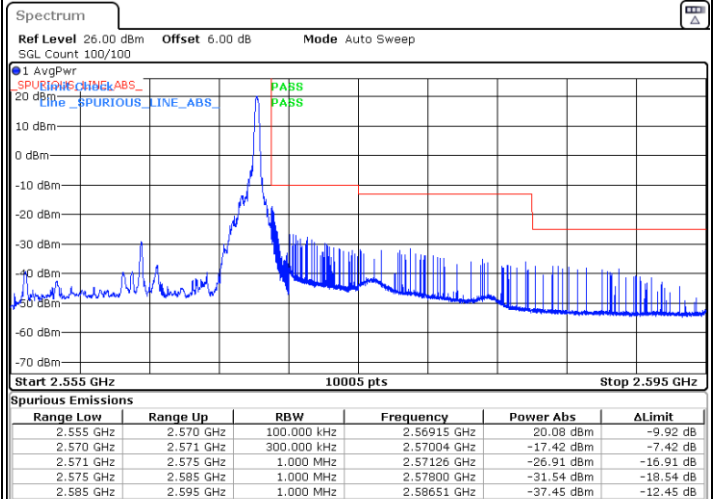


LTE Band 7 / 15MHz / 16QAM

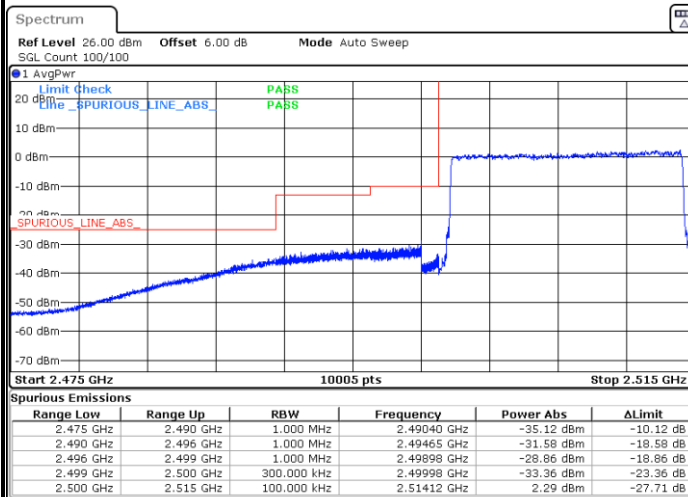
Lowest Band Edge / 1 RB



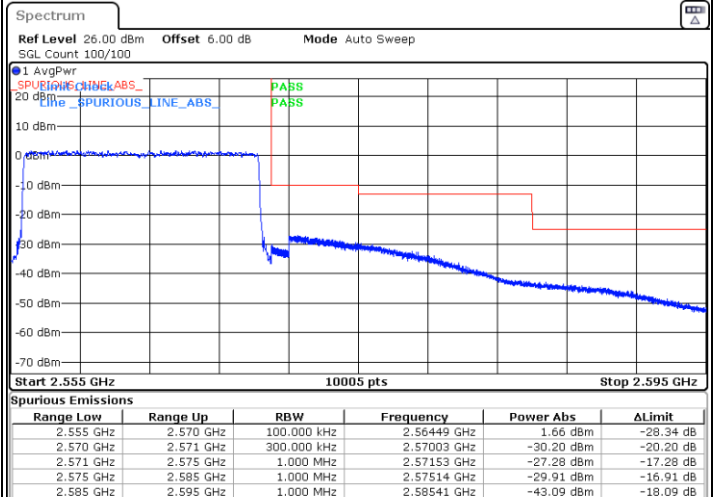
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



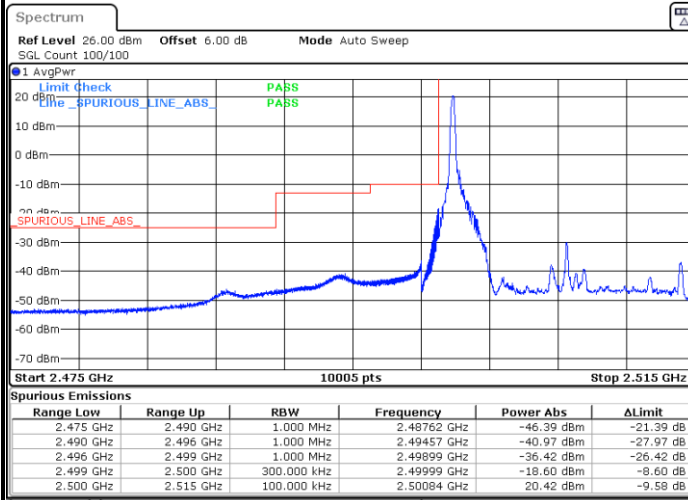
Highest Band Edge / Full RB



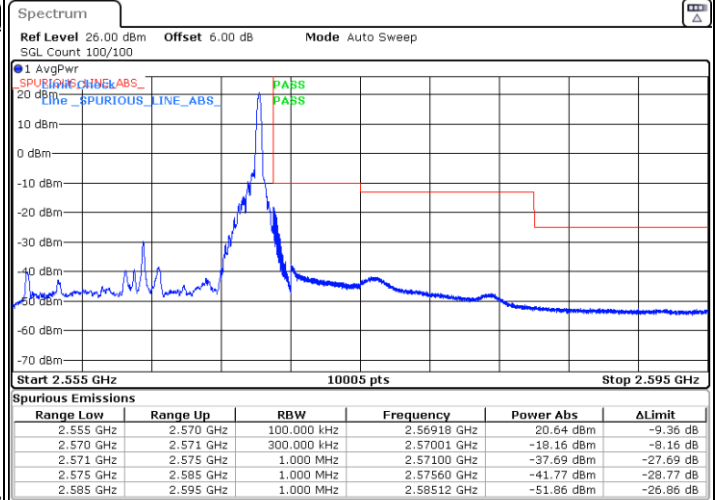


LTE Band 7 / 15MHz / 64QAM

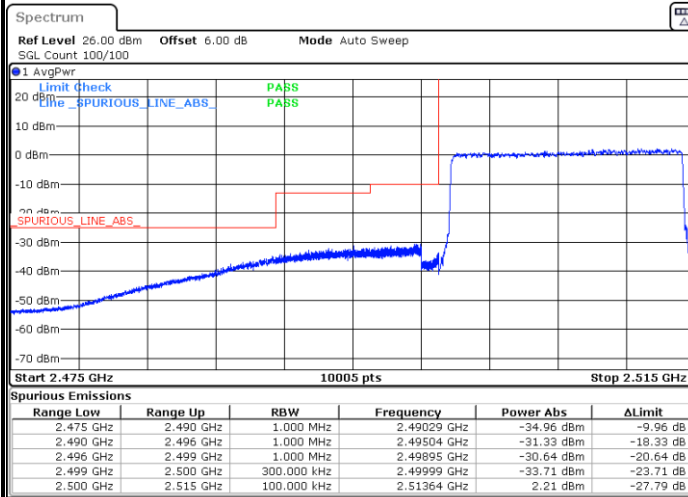
Lowest Band Edge / 1 RB



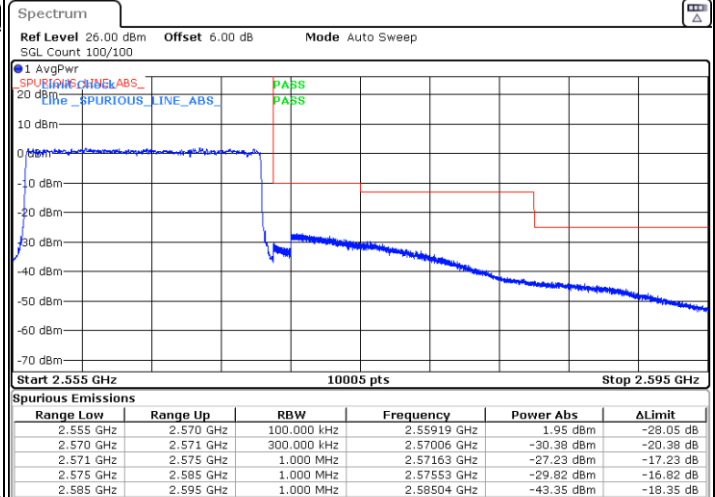
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



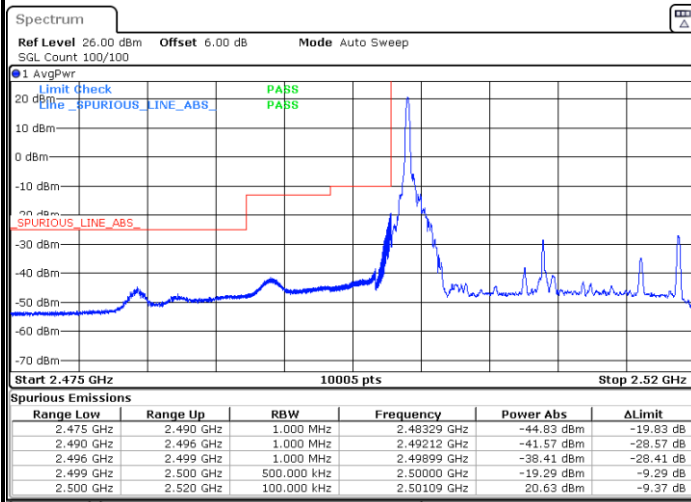
Highest Band Edge / Full RB



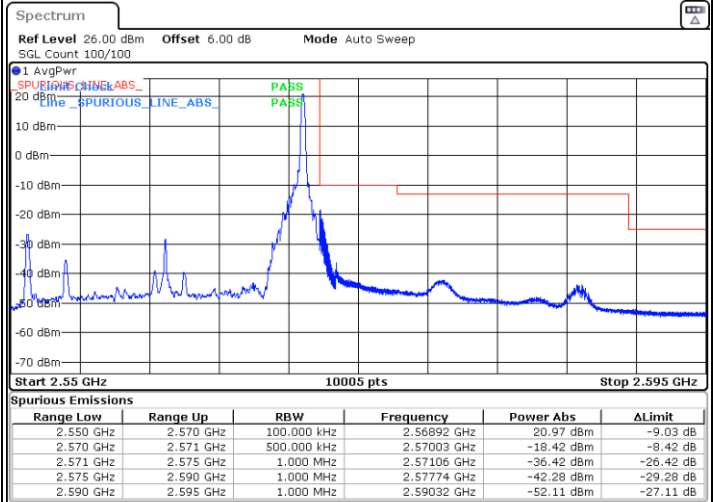


LTE Band 7 / 20MHz / QPSK

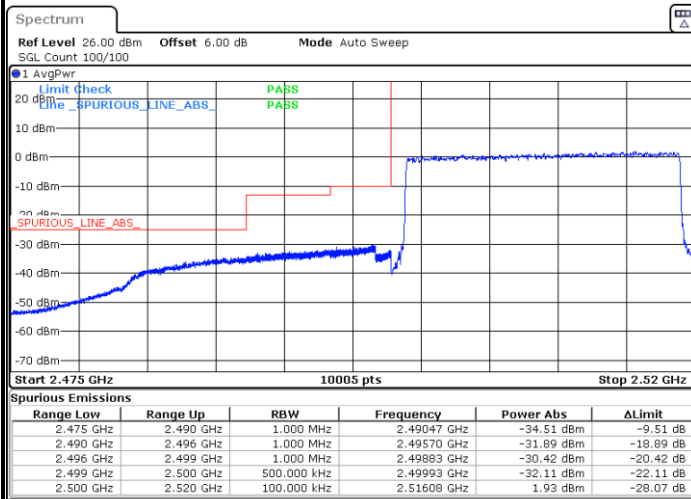
Lowest Band Edge / 1 RB



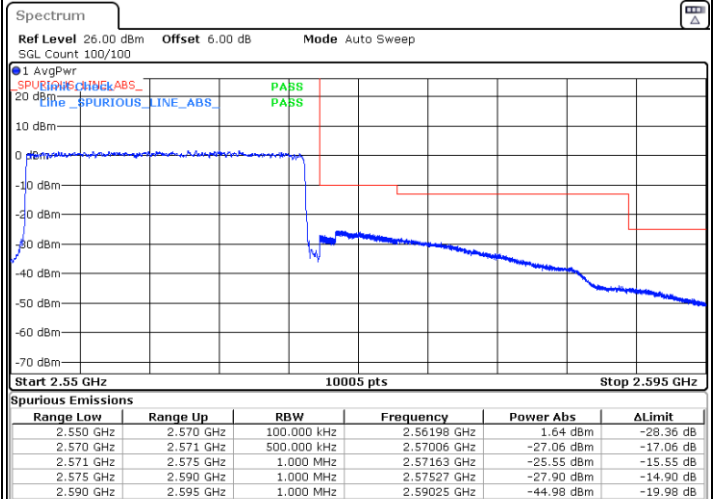
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



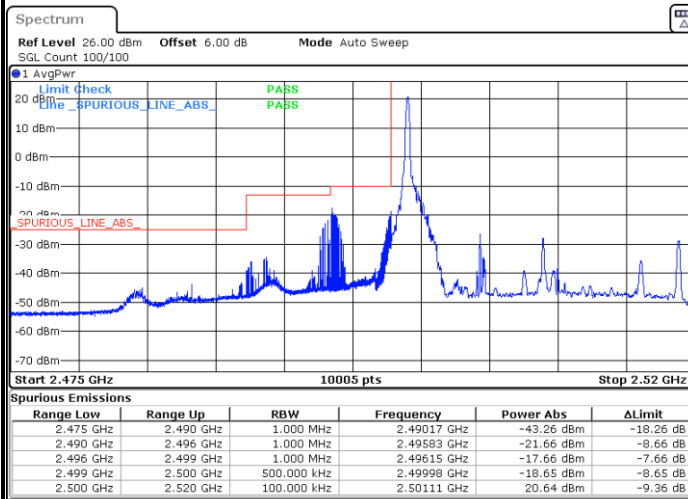
Highest Band Edge / Full RB



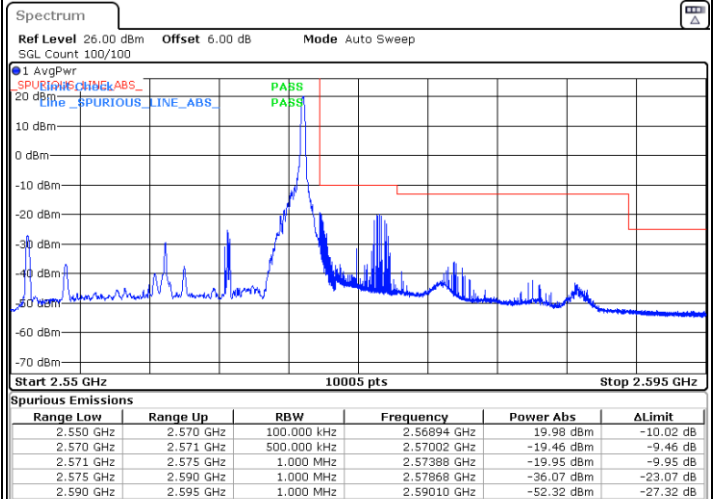


LTE Band 7 / 20MHz / 16QAM

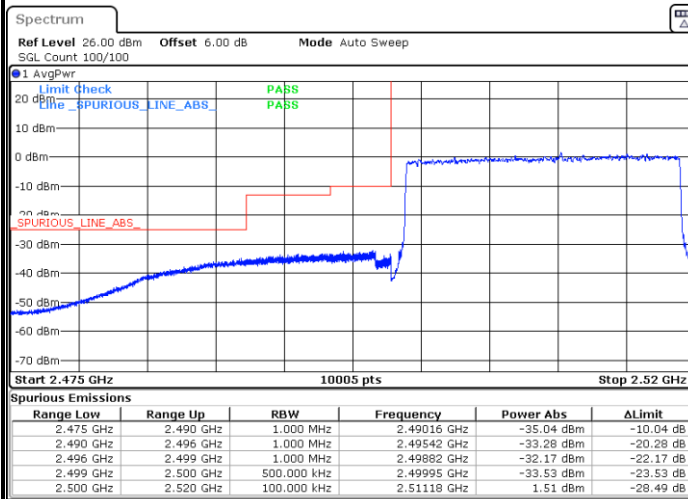
Lowest Band Edge / 1 RB



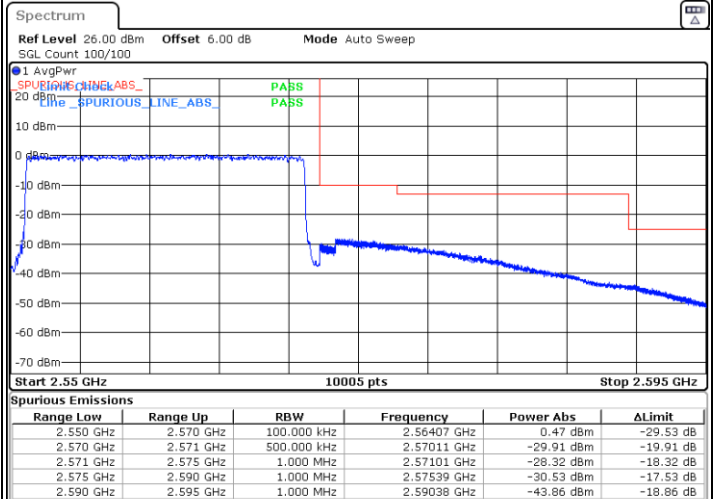
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



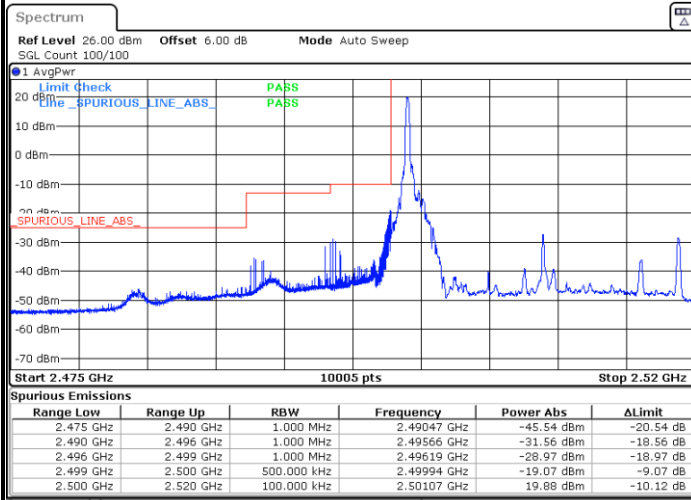
Highest Band Edge / Full RB



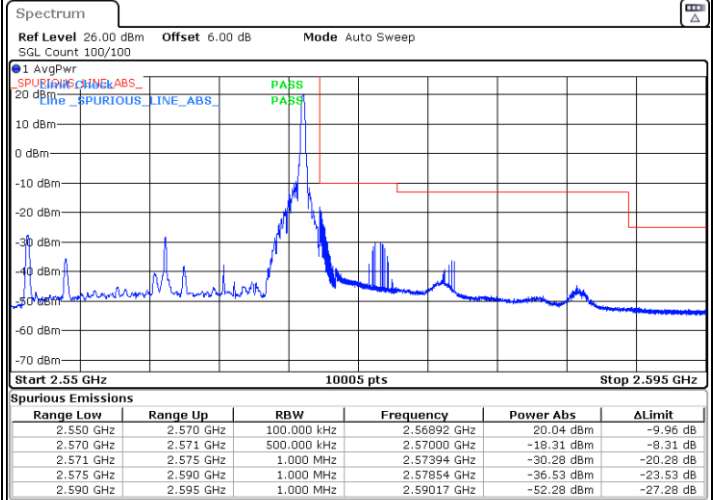


LTE Band 7 / 20MHz / 64QAM

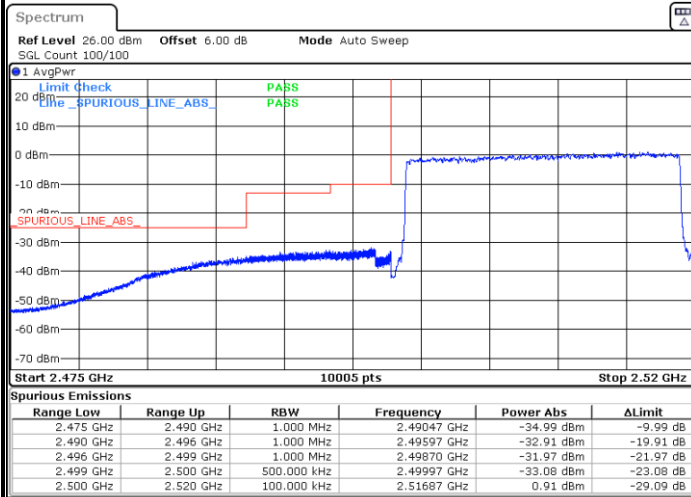
Lowest Band Edge / 1 RB



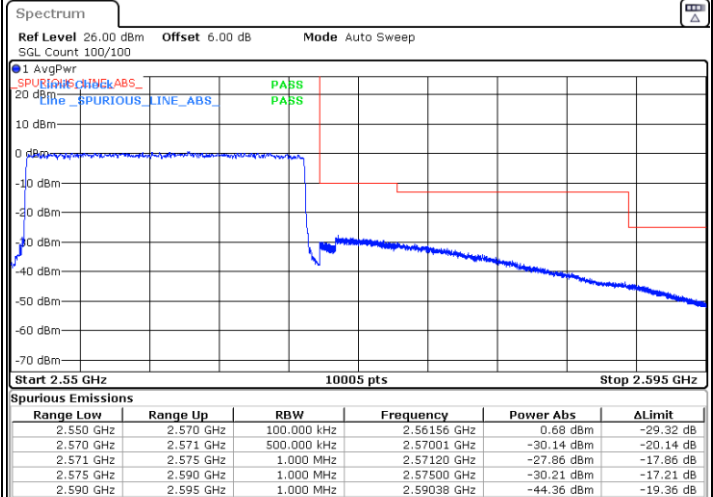
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

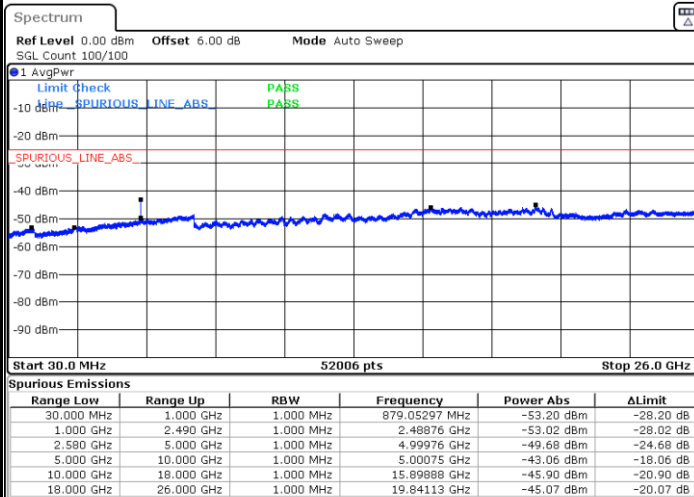




Conducted Spurious Emission

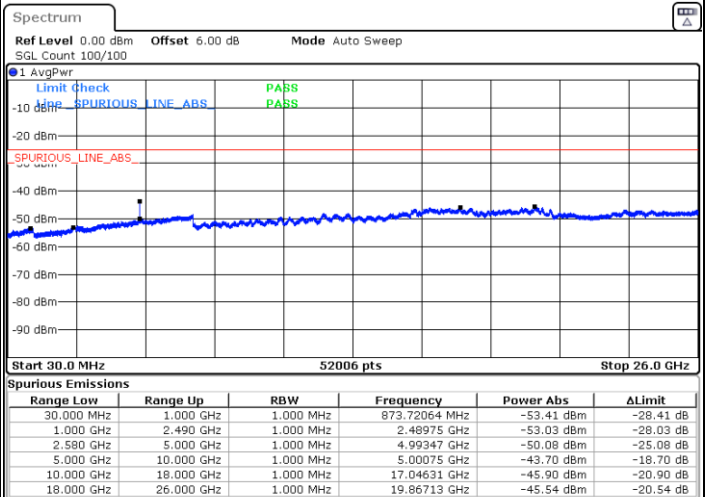
LTE Band 7 / 5MHz

Lowest Channel / QPSK



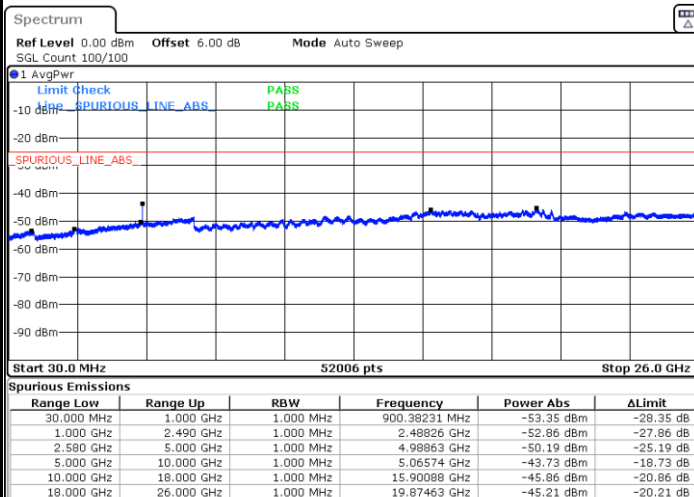
Date: 4 JAN 2020 21:11:09

Lowest Channel / 16QAM



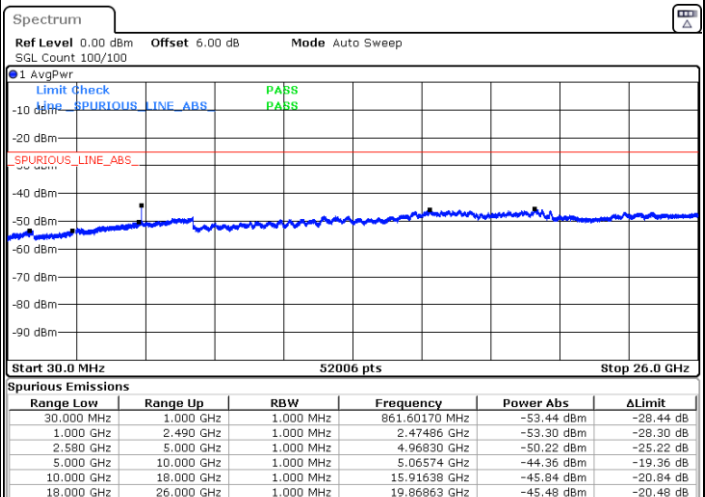
Date: 4 JAN 2020 21:12:03

Middle Channel / QPSK



Date: 4 JAN 2020 21:13:51

Middle Channel / 16QAM

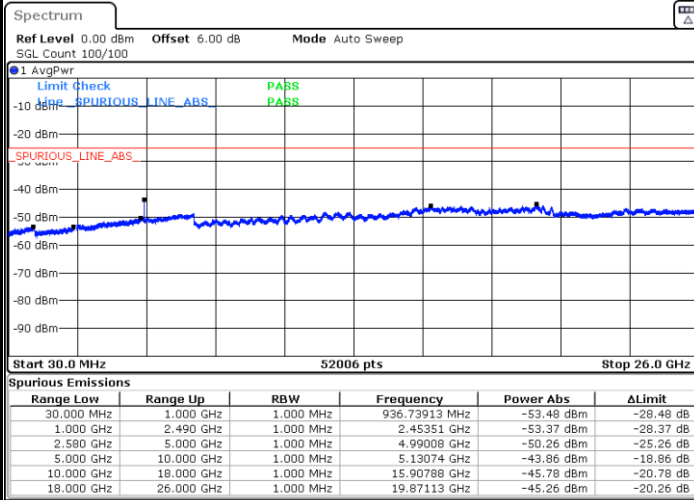


Date: 4 JAN 2020 21:12:57



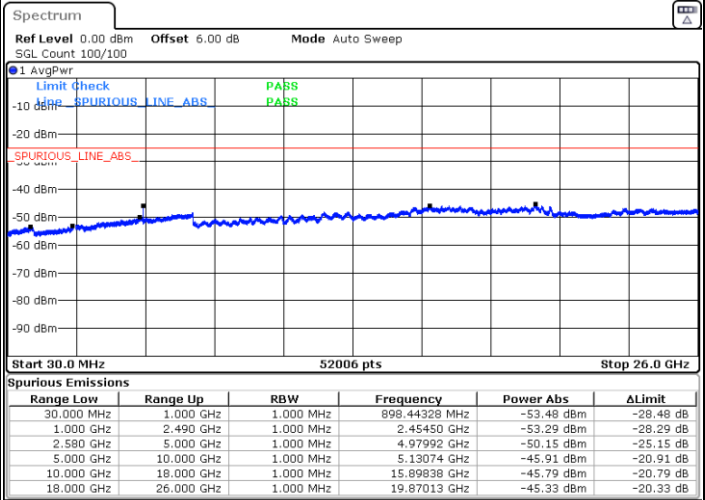
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 4 JAN 2020 21:14:44

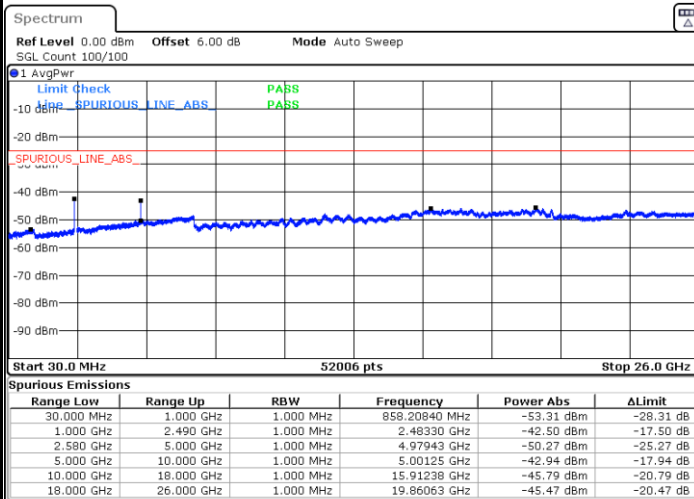
Highest Channel / 16QAM



Date: 4 JAN 2020 21:15:38

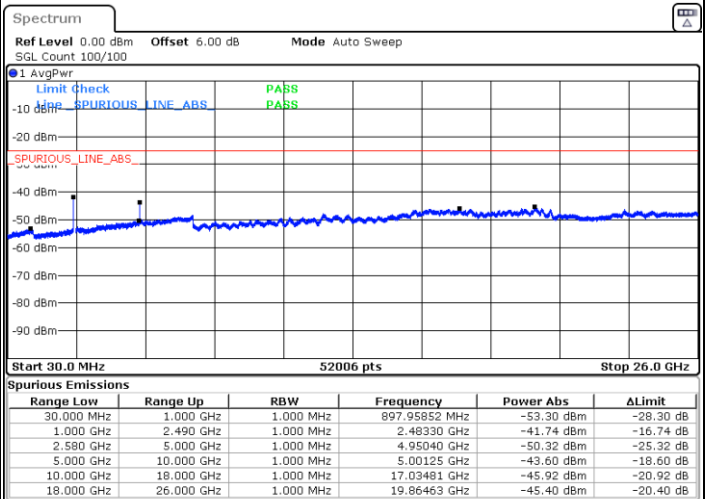
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 21:27:36

Lowest Channel / 16QAM

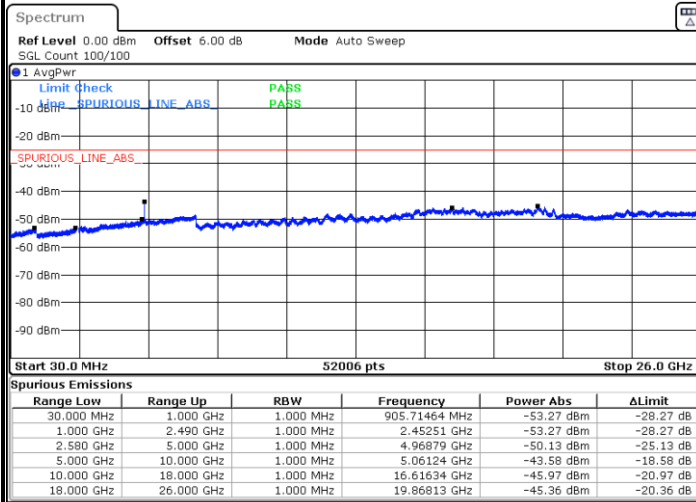


Date: 4 JAN 2020 21:28:30



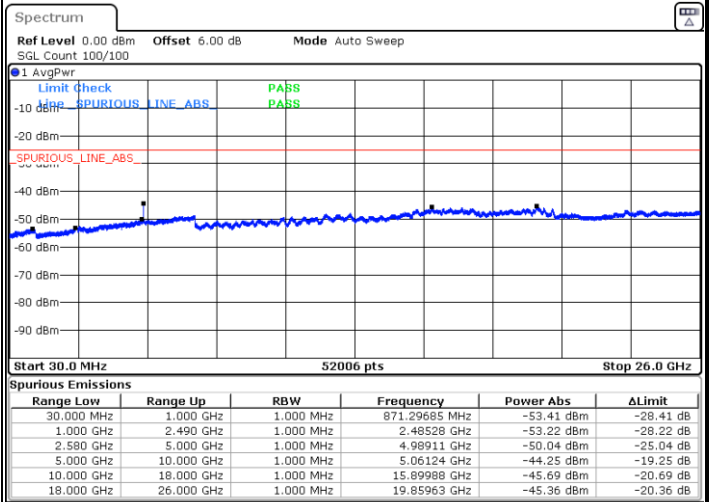
LTE Band 7 / 10MHz

Middle Channel / QPSK



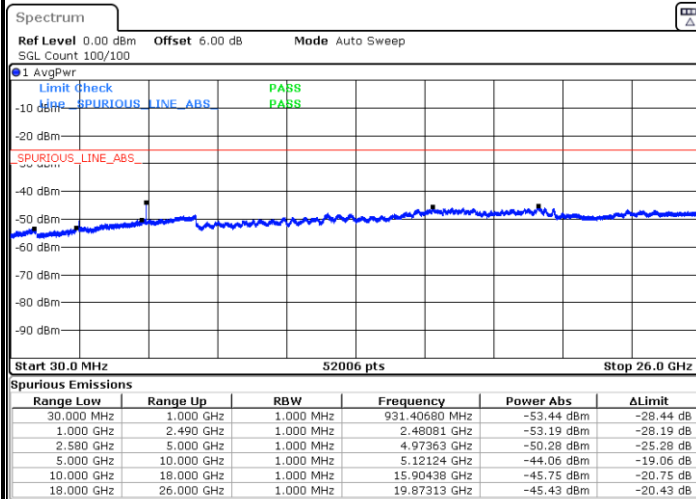
Date: 4 JAN 2020 21:30:18

Middle Channel / 16QAM



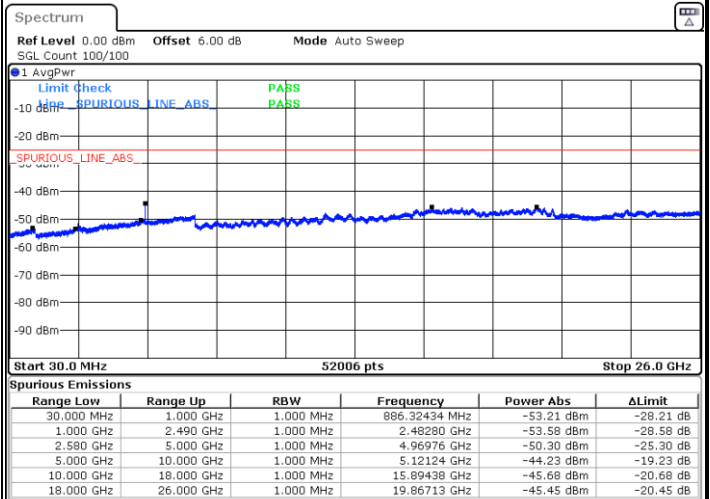
Date: 4 JAN 2020 21:29:24

Highest Channel / QPSK



Date: 4 JAN 2020 21:31:11

Highest Channel / 16QAM

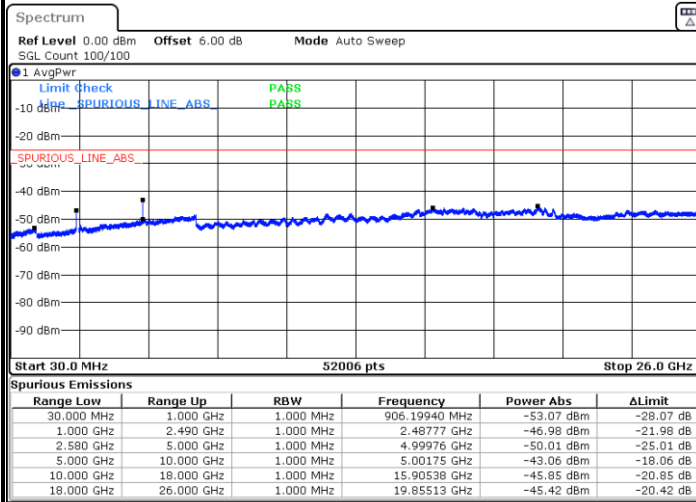


Date: 4 JAN 2020 21:32:05



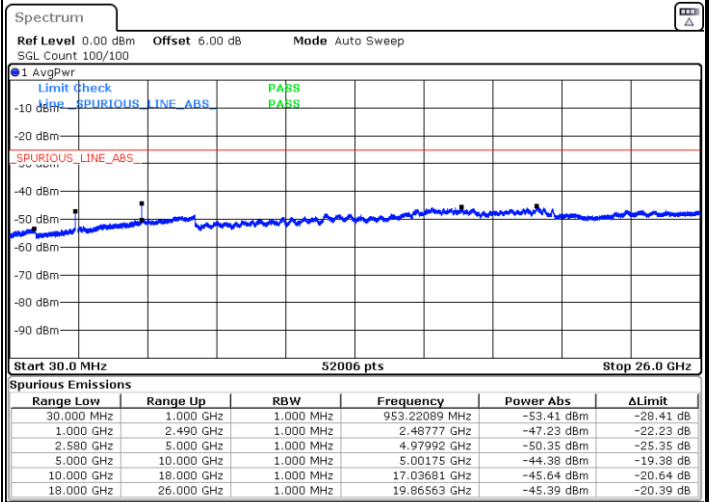
LTE Band 7 / 15MHz

Lowest Channel / QPSK



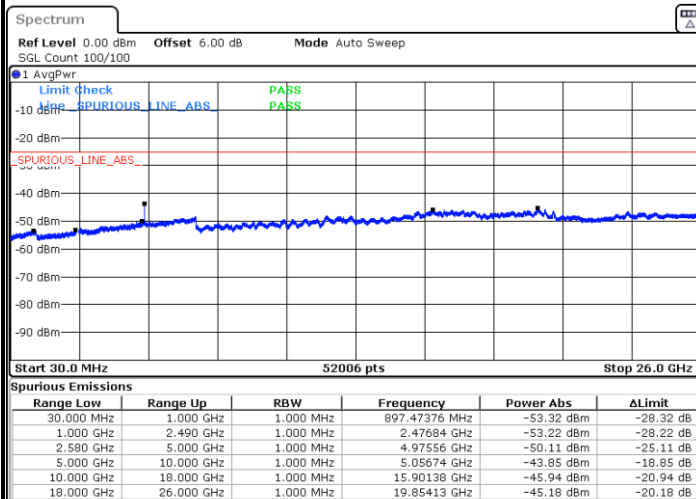
Date: 4 JAN 2020 21:44:04

Lowest Channel / 16QAM



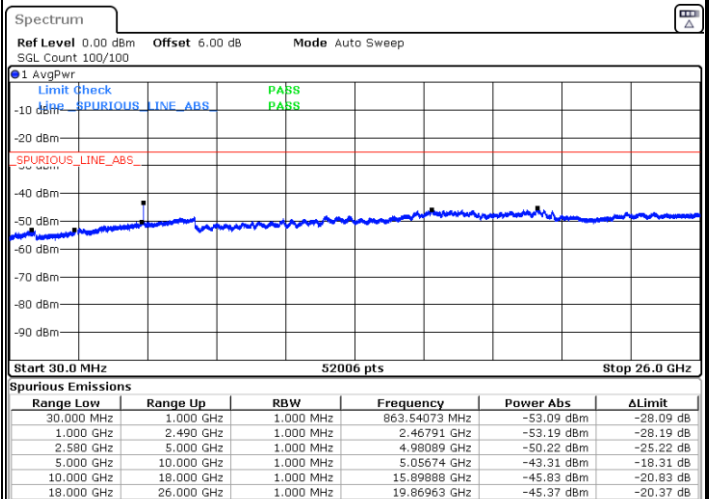
Date: 4 JAN 2020 21:44:58

Middle Channel / QPSK



Date: 4 JAN 2020 21:46:46

Middle Channel / 16QAM

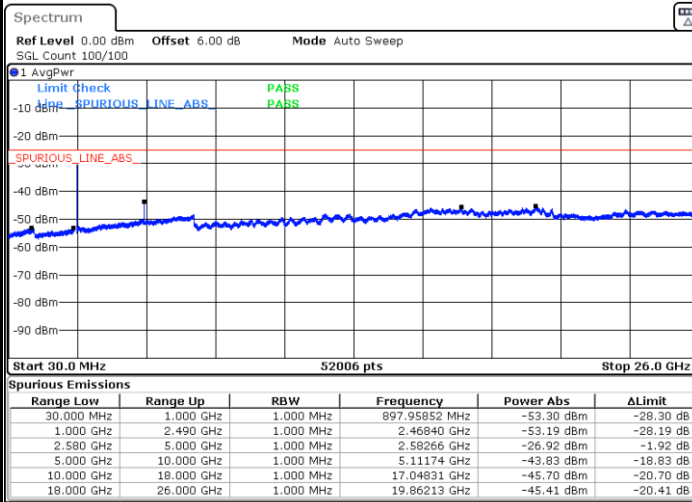


Date: 4 JAN 2020 21:45:52



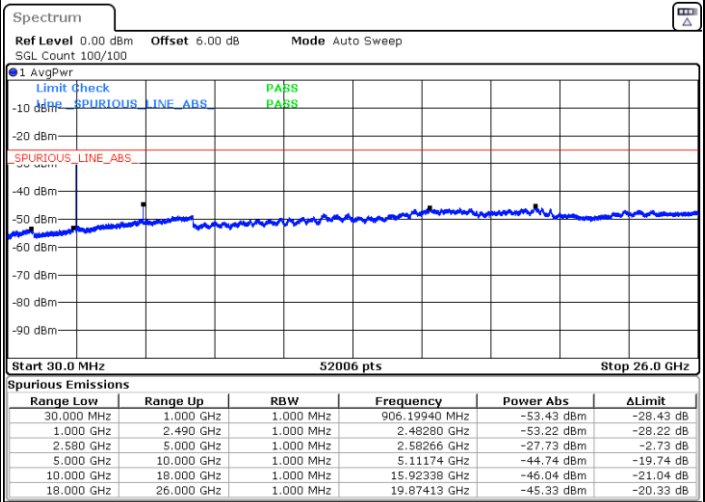
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 4 JAN 2020 21:47:39

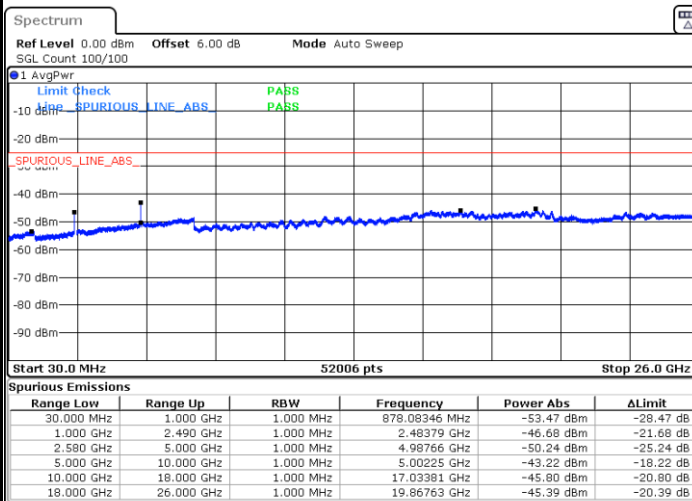
Highest Channel / 16QAM



Date: 4 JAN 2020 21:48:33

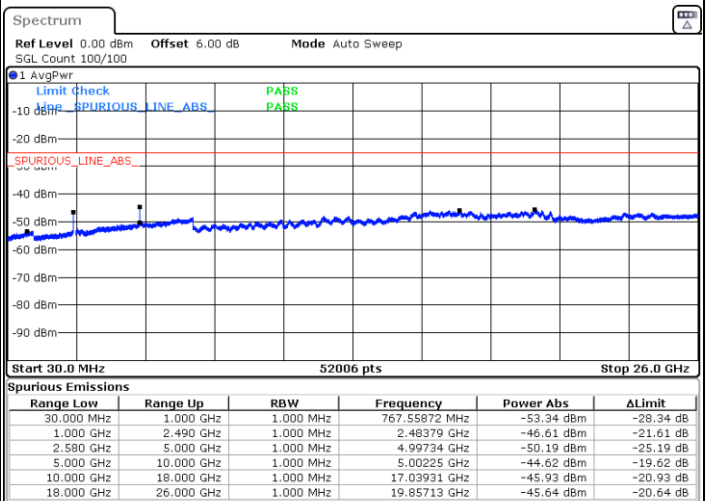
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 22:00:32

Lowest Channel / 16QAM

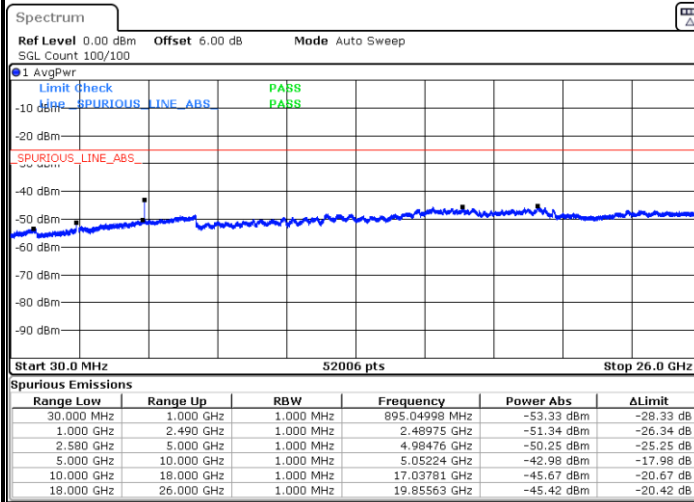


Date: 4 JAN 2020 22:01:26



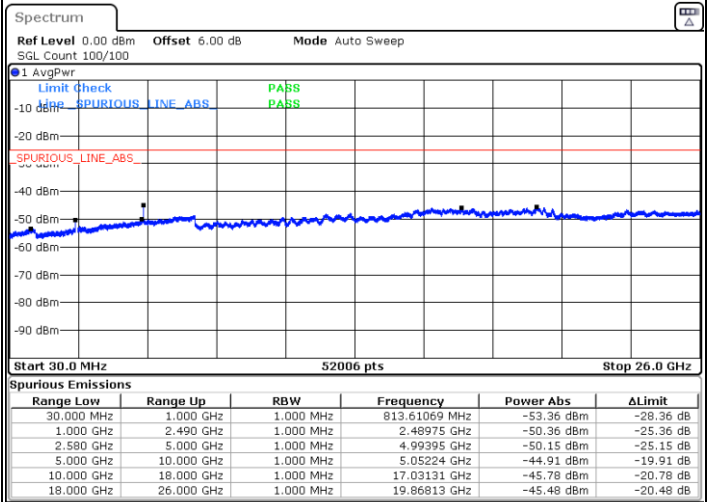
LTE Band 7 / 20MHz

Middle Channel / QPSK



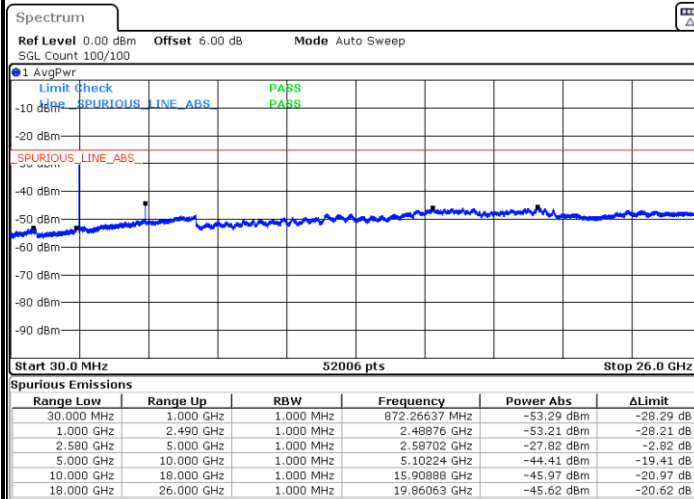
Date: 4 JAN 2020 22:03:14

Middle Channel / 16QAM



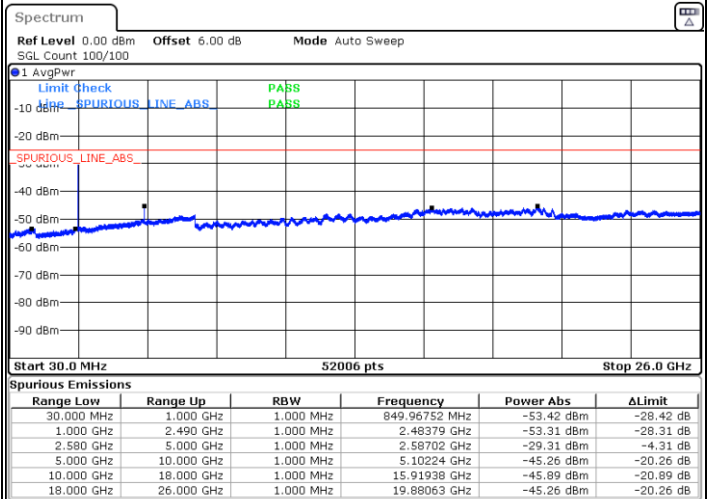
Date: 4 JAN 2020 22:02:20

Highest Channel / QPSK



Date: 4 JAN 2020 22:04:07

Highest Channel / 16QAM

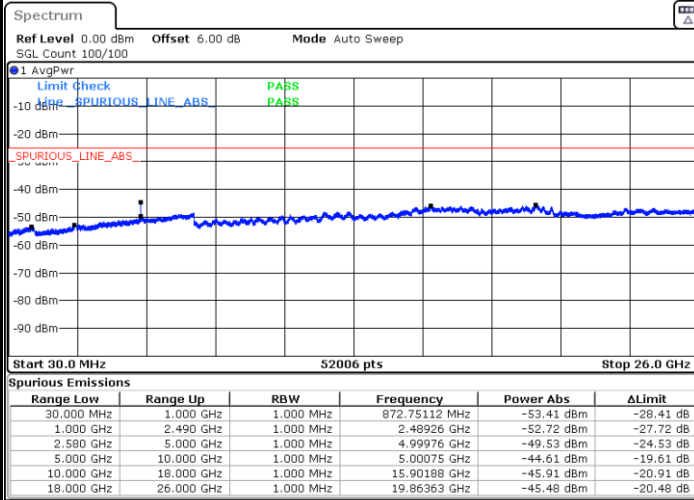


Date: 4 JAN 2020 22:05:01



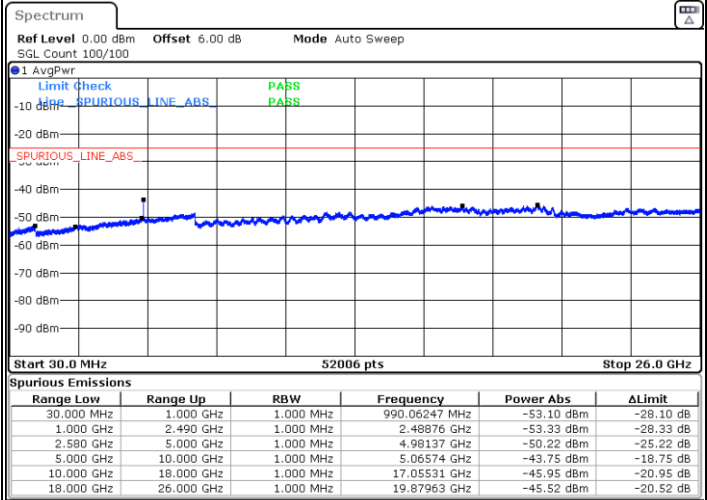
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



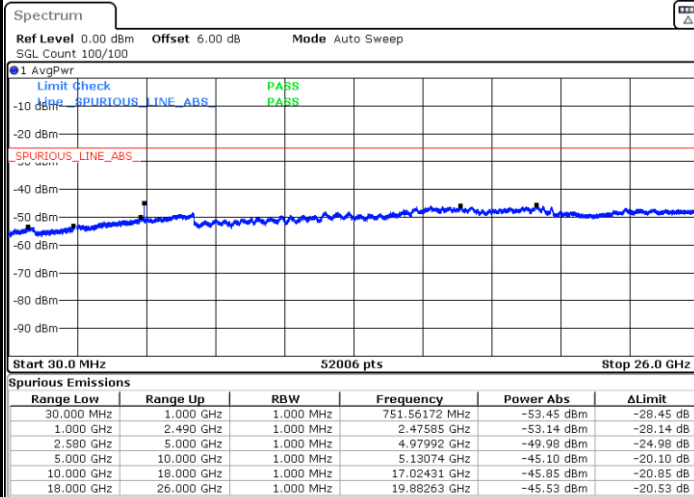
Date: 4 JAN 2020 22:06:55

Middle Channel / 64QAM



Date: 4 JAN 2020 22:07:49

Highest Channel / 64QAM

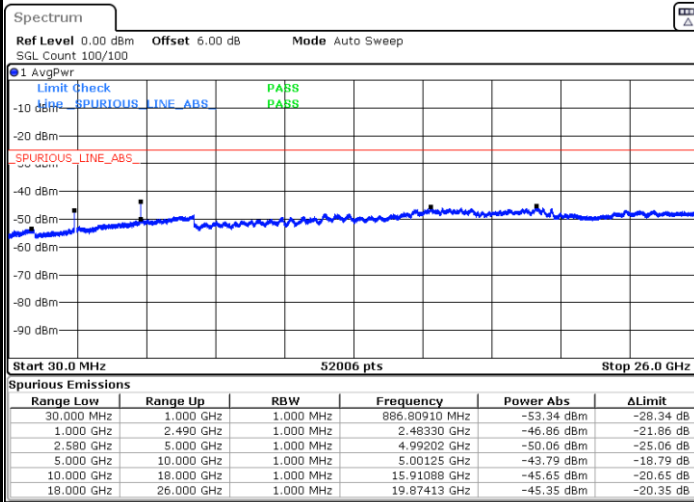


Date: 4 JAN 2020 22:08:42



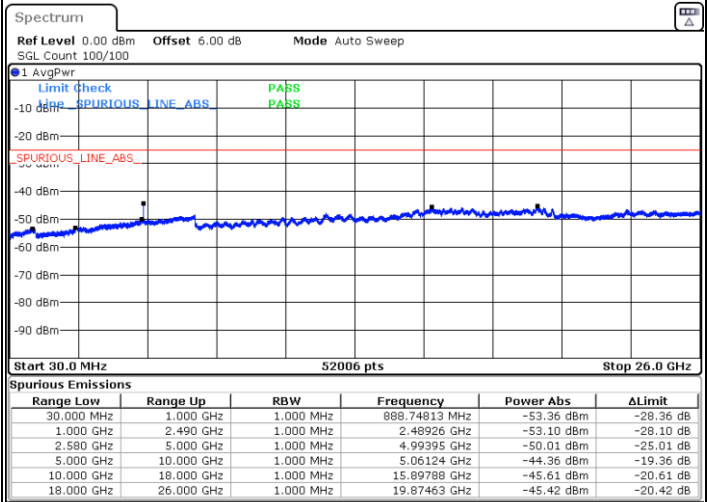
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



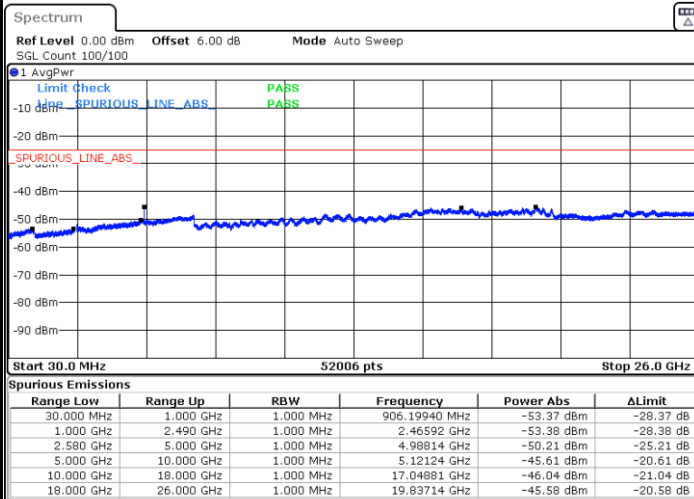
Date: 4 JAN 2020 22:15:09

Middle Channel / 64QAM



Date: 4 JAN 2020 22:16:03

Highest Channel / 64QAM

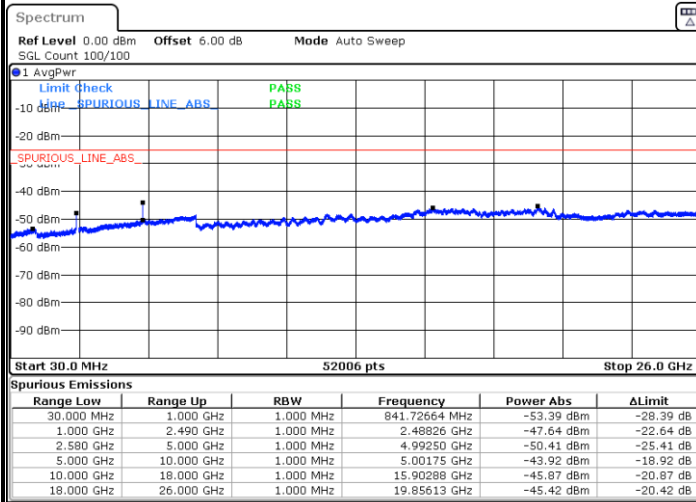


Date: 4 JAN 2020 22:16:57



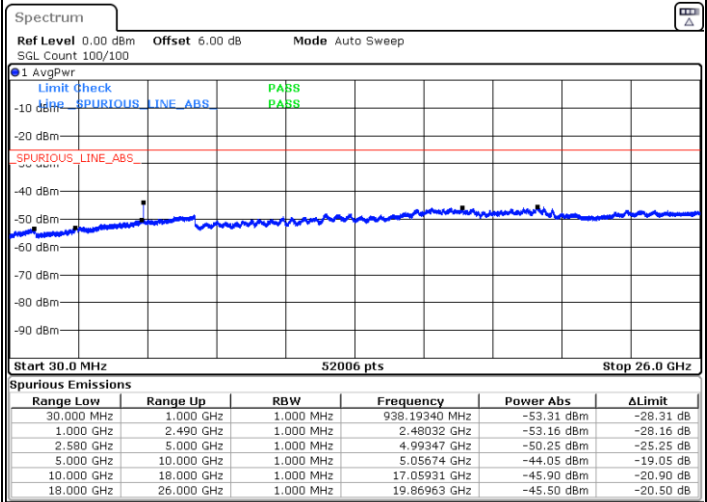
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



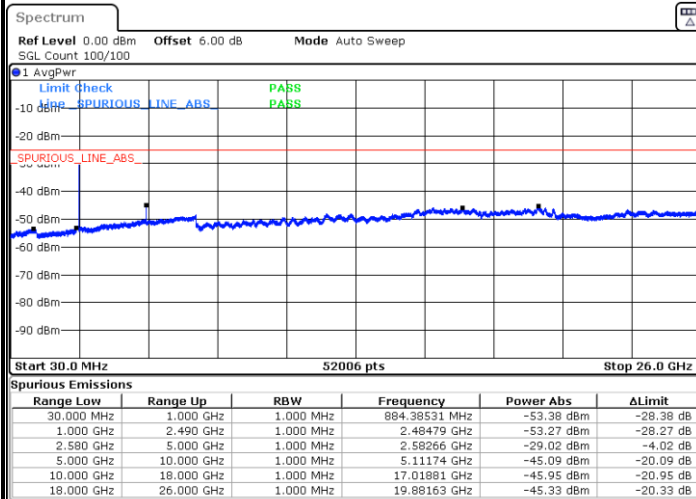
Date: 4 JAN 2020 22:27:56

Middle Channel / 64QAM



Date: 4 JAN 2020 22:28:49

Highest Channel / 64QAM

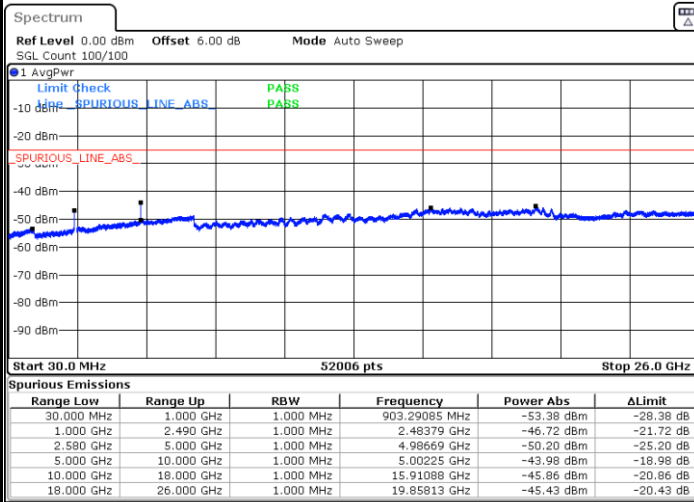


Date: 4 JAN 2020 22:29:43



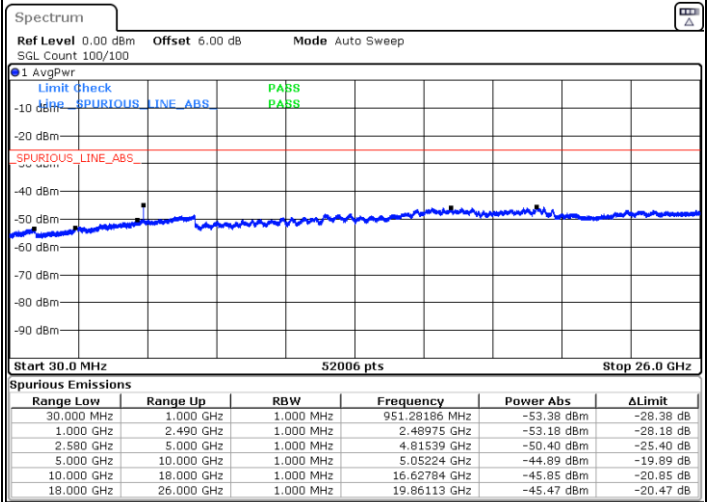
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



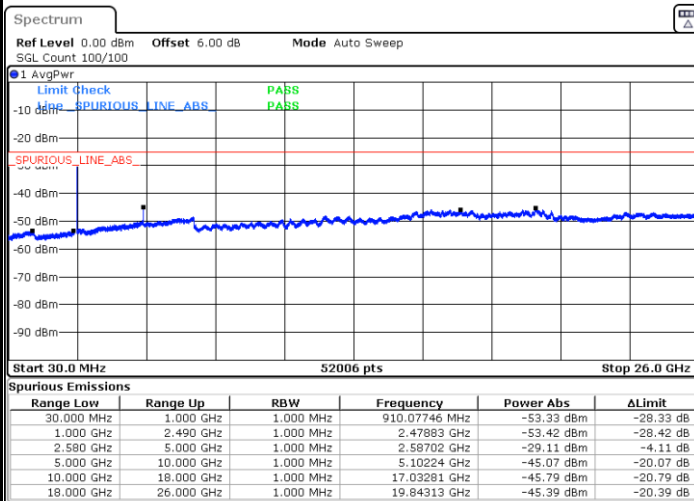
Date: 4 JAN 2020 22:36:09

Middle Channel / 64QAM



Date: 4 JAN 2020 22:37:03

Highest Channel / 64QAM



Date: 4 JAN 2020 22:37:57

**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	0.0023	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0027	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.0V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 38

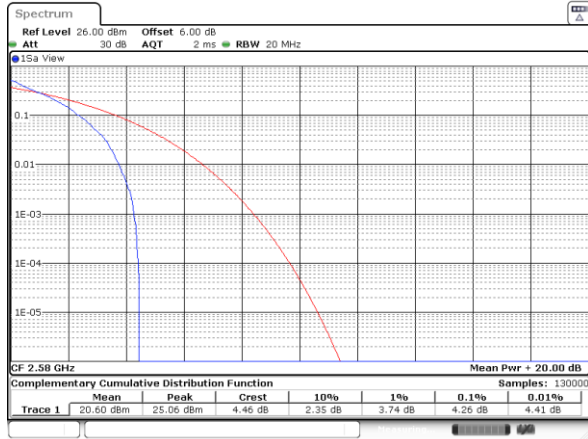
Peak-to-Average Ratio

Mode	LTE Band 38 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.26	5.62	5.33	6.52	PASS
Middle CH	4.52	5.13	5.57	6.03	
Highest CH	4.67	6.99	7.51	6.12	
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	5.45	6.38			PASS
Middle CH	5.42	5.86			
Highest CH	8.12	6.99			

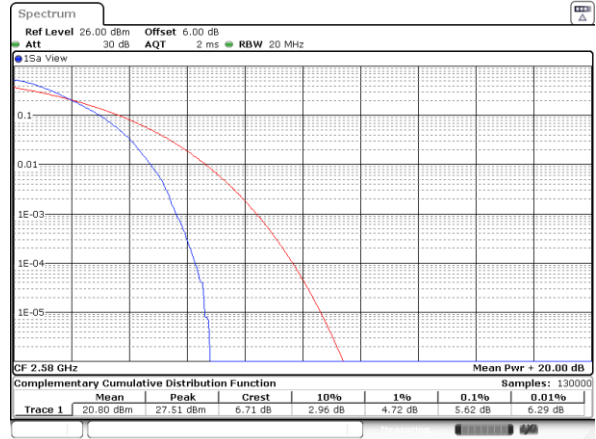


LTE Band 38 / 20MHz / QPSK

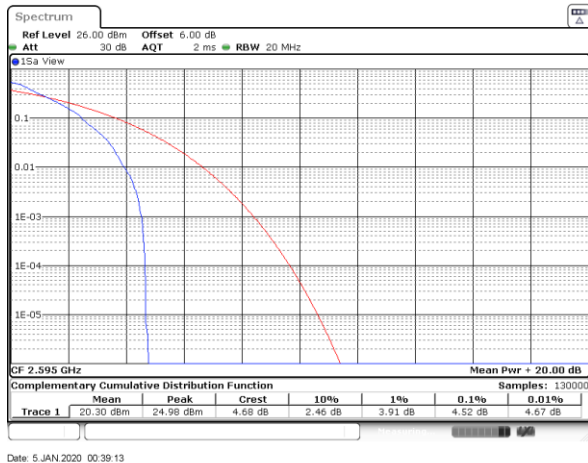
Lowest Channel / 1RB



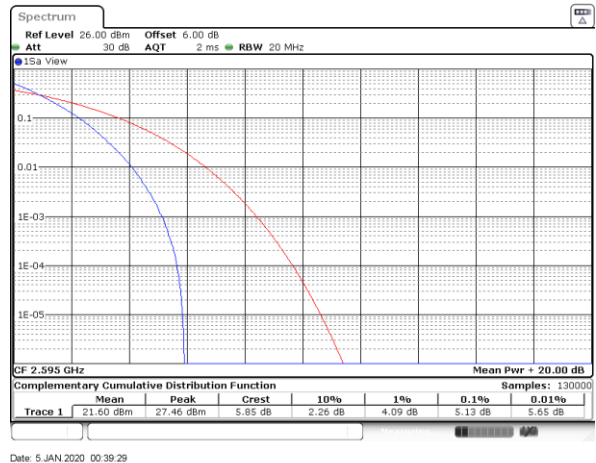
Lowest Channel / Full RB



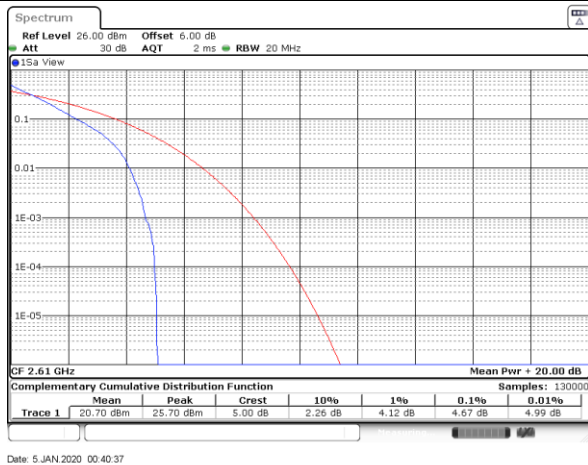
Middle Channel / 1RB



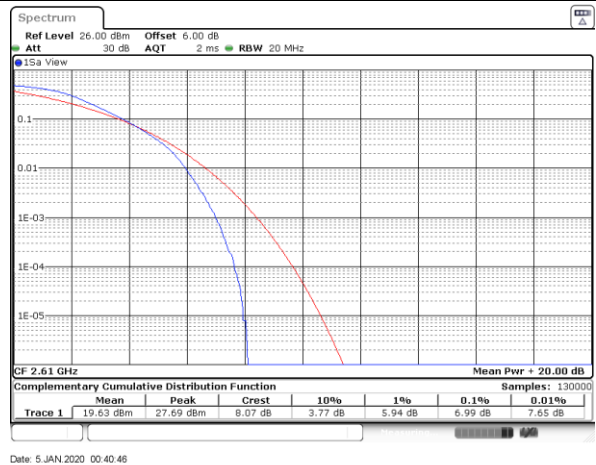
Middle Channel / Full RB



Highest Channel / 1RB



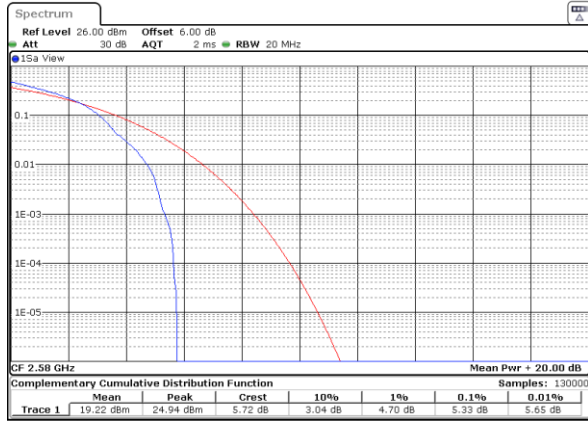
Highest Channel / Full RB



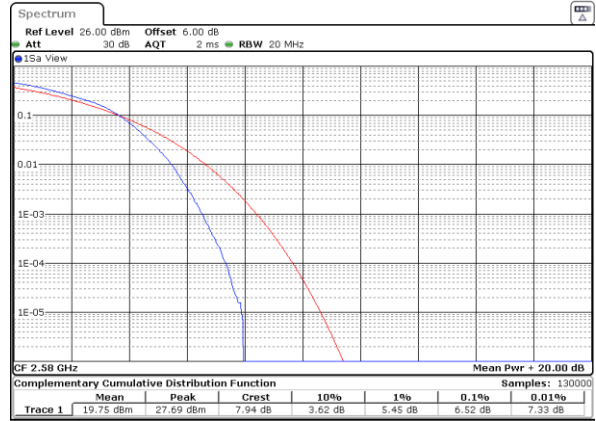


LTE Band 38 / 20MHz / 16QAM

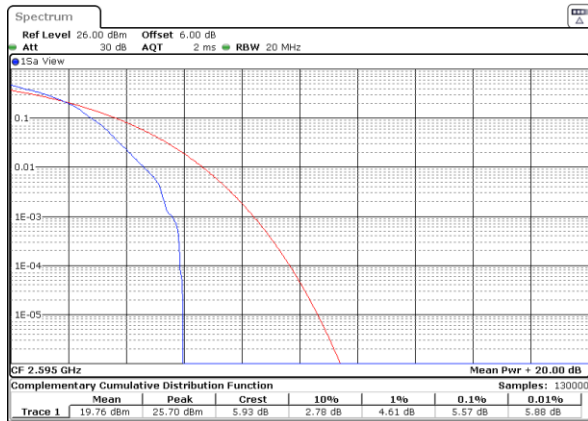
Lowest Channel / 1RB



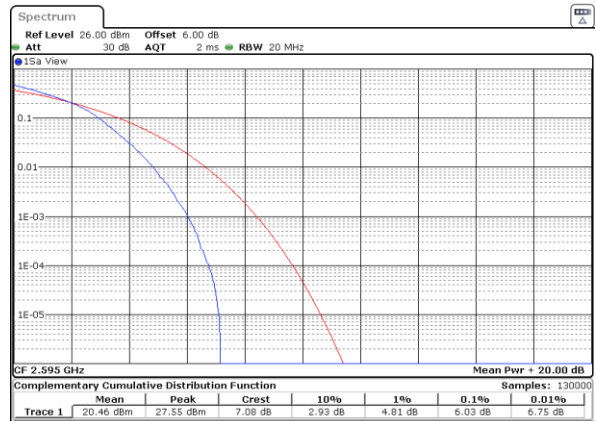
Lowest Channel / Full RB



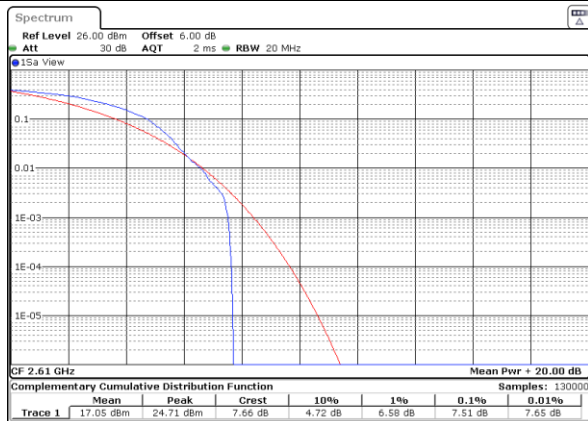
Middle Channel / 1RB



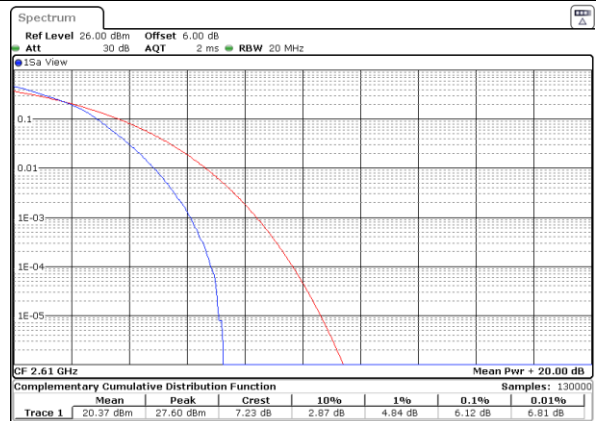
Middle Channel / Full RB



Highest Channel / 1RB



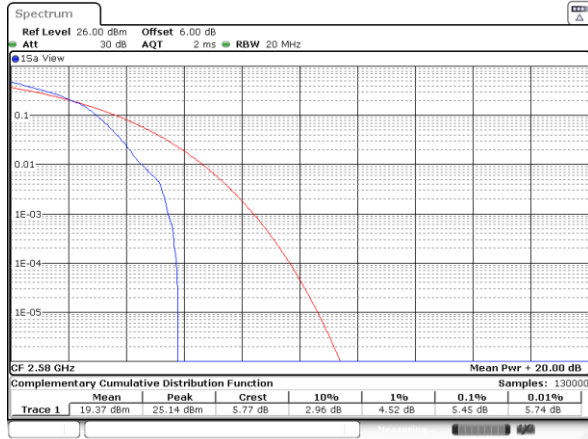
Highest Channel / Full RB



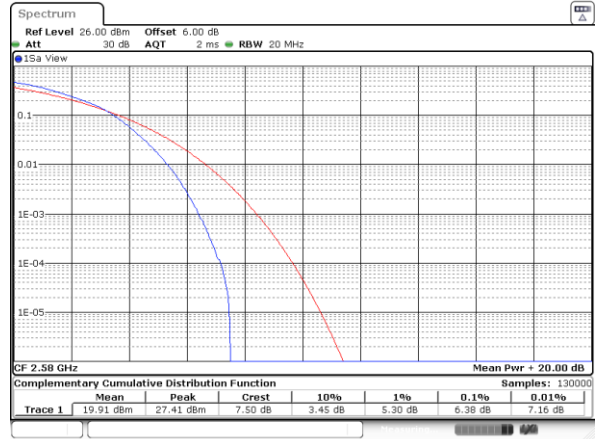


LTE Band 38 / 20MHz / 64QAM

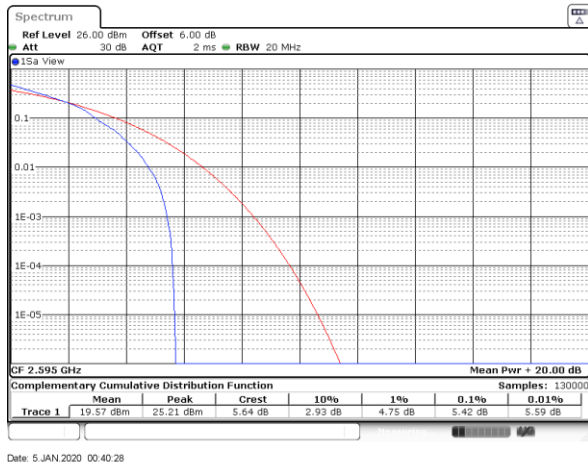
Lowest Channel / 1RB



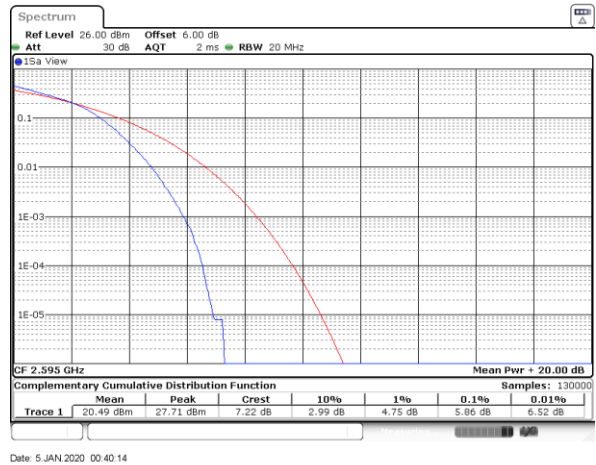
Lowest Channel / Full RB



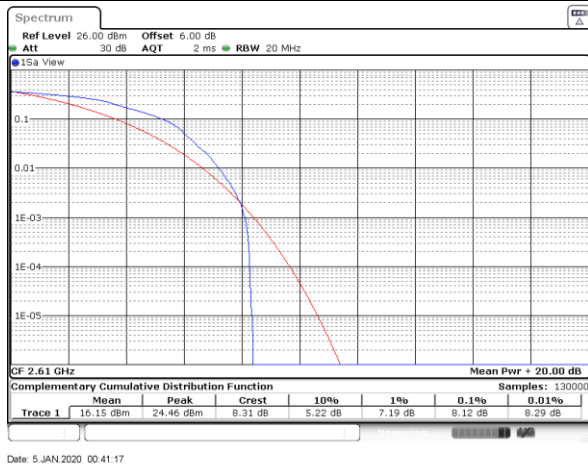
Middle Channel / 1RB



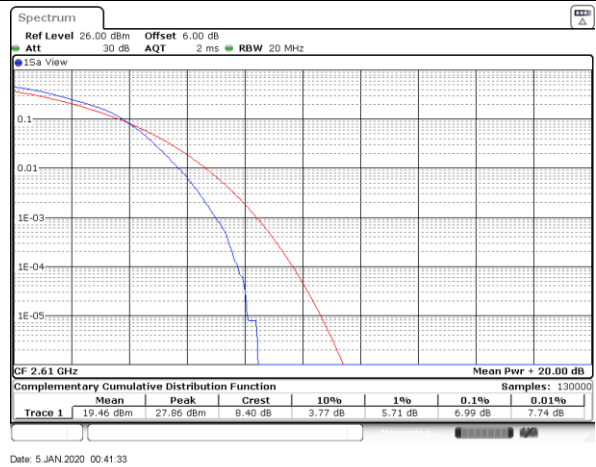
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



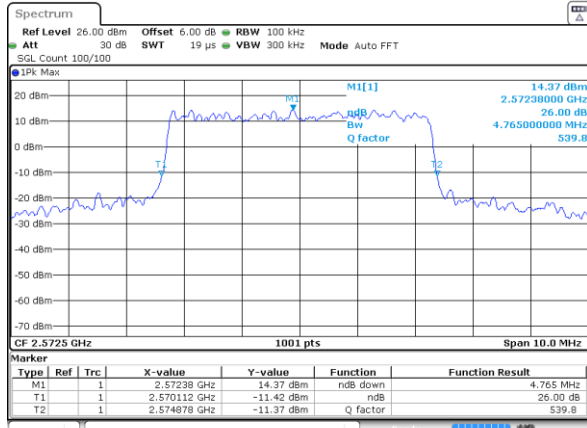
**26dB Bandwidth**

Mode	LTE Band 38 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.765	4.795	9.75	9.77	14.326	14.146	20.14	20.1
Middle CH	4.825	4.805	9.65	9.73	14.236	14.086	20.34	20.14
Highest CH	4.775	4.855	9.63	9.63	14.296	14.296	20.1	20.1
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	4.765		9.71		14.146		20.1	
Middle CH	4.755		9.71		14.326		20.26	
Highest CH	4.755		9.63		14.266		20.1	



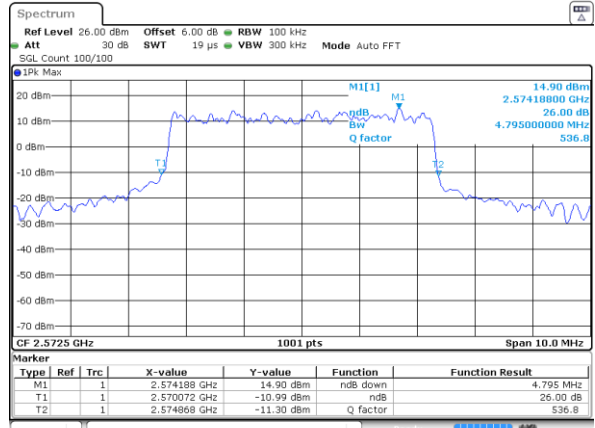
LTE Band 38

Lowest Channel / 5MHz / QPSK



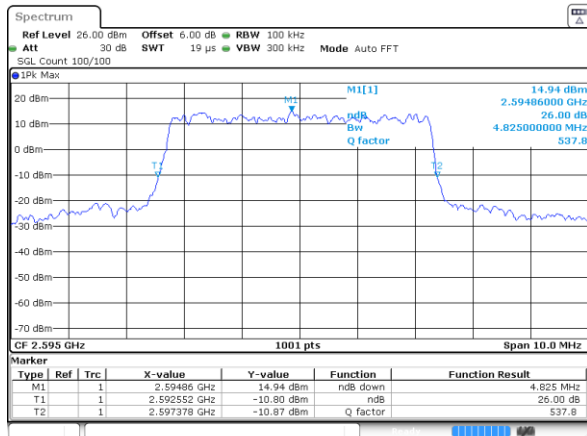
Date: 4 JAN 2020 22:46:34

Lowest Channel / 5MHz / 16QAM



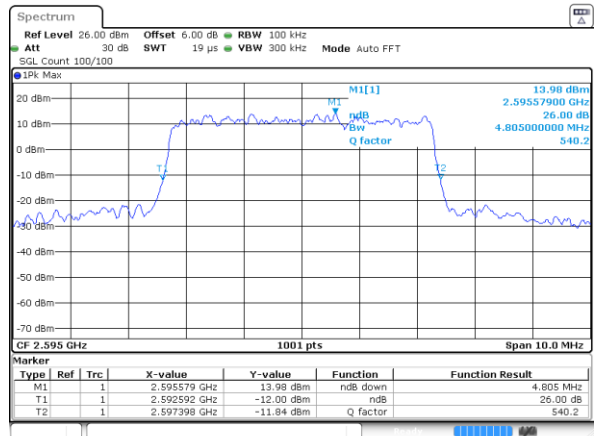
Date: 4 JAN 2020 22:46:44

Middle Channel / 5MHz / QPSK



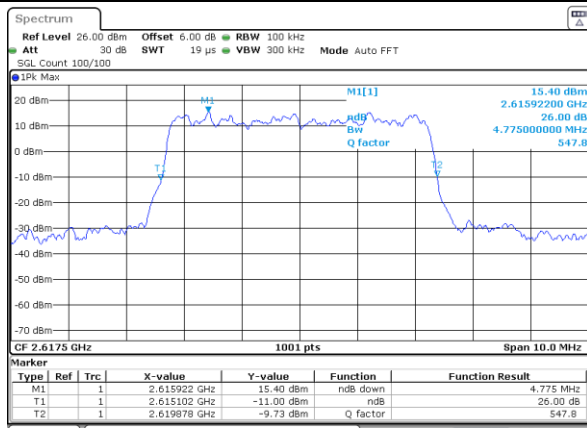
Date: 4 JAN 2020 22:47:14

Middle Channel / 5MHz / 16QAM



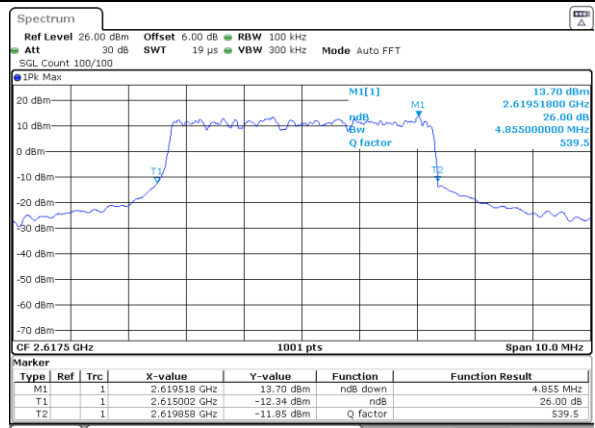
Date: 4 JAN 2020 22:47:24

Highest Channel / 5MHz / QPSK



Date: 4 JAN 2020 22:47:54

Highest Channel / 5MHz / 16QAM

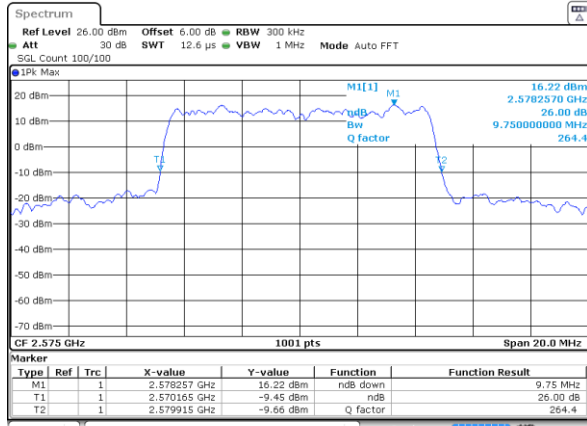


Date: 4 JAN 2020 22:48:04



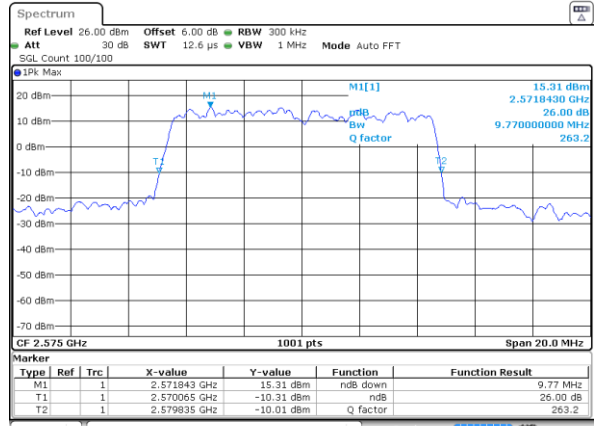
LTE Band 38

Lowest Channel / 10MHz / QPSK



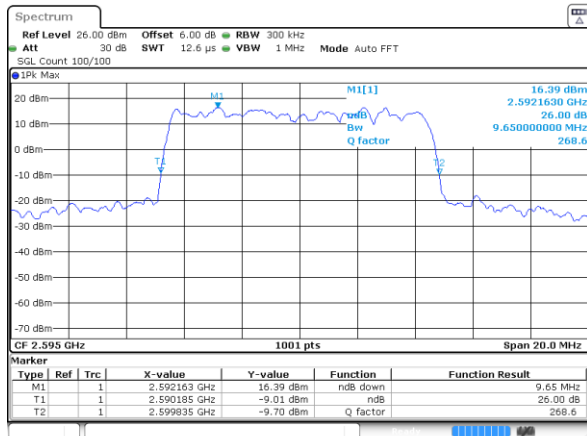
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Lowest Channel / 10MHz / 16QAM



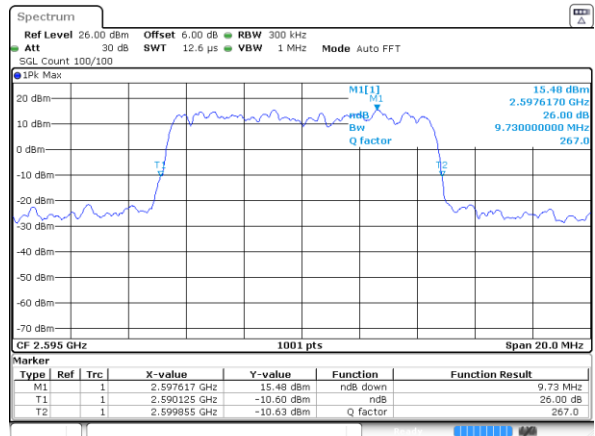
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Middle Channel / 10MHz / QPSK



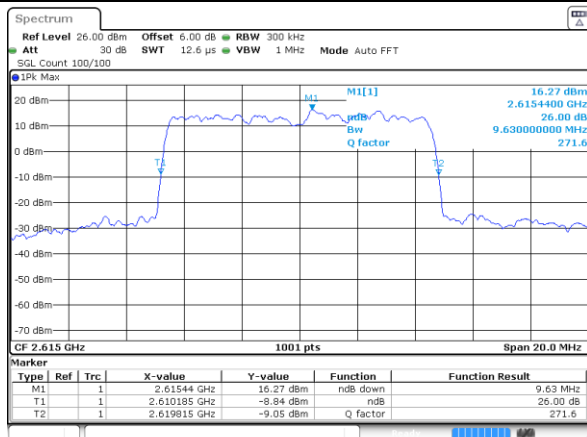
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Middle Channel / 10MHz / 16QAM



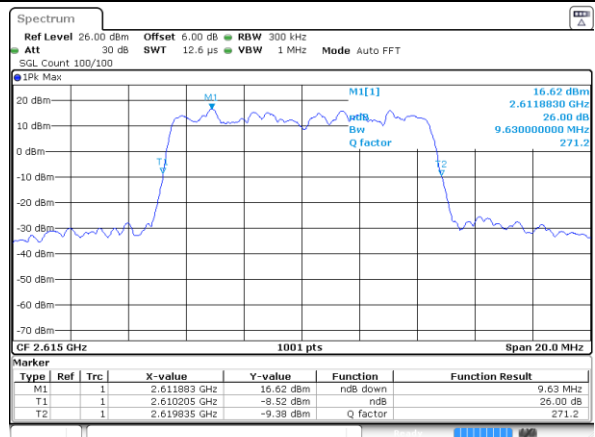
Date: 4 JAN 2020 22:49:24

Highest Channel / 10MHz / QPSK



Date: 4 JAN 2020 22:49:54

Highest Channel / 10MHz / 16QAM

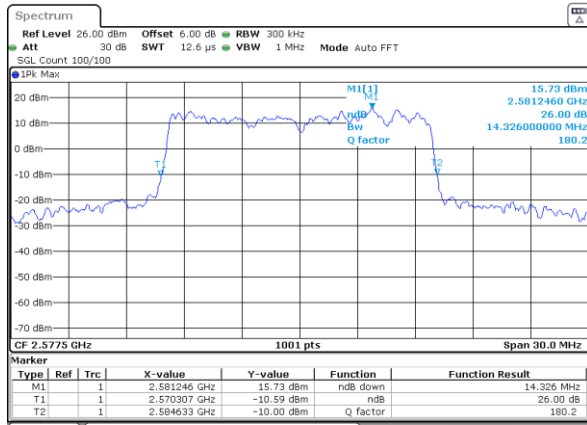


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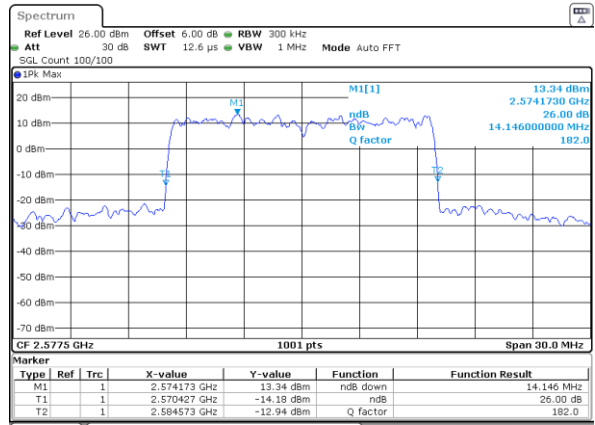
LTE Band 38

Lowest Channel / 15MHz / QPSK



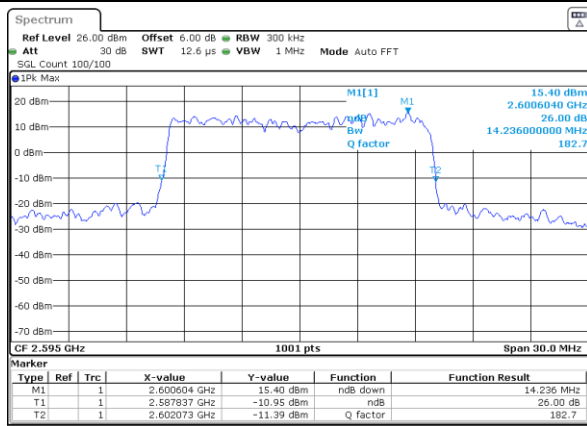
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Lowest Channel / 15MHz / 16QAM



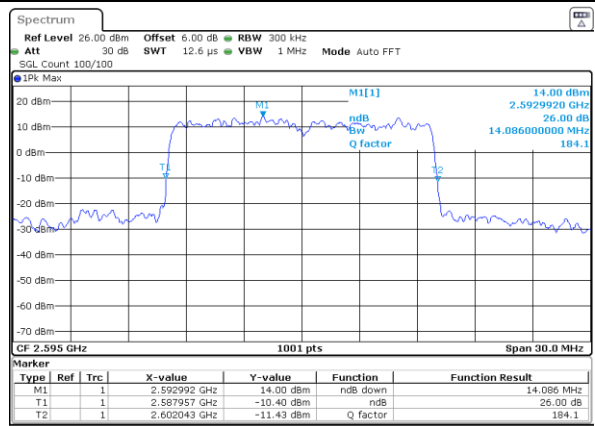
Date: 4 JAN 2020 22:50:44

Middle Channel / 15MHz / QPSK



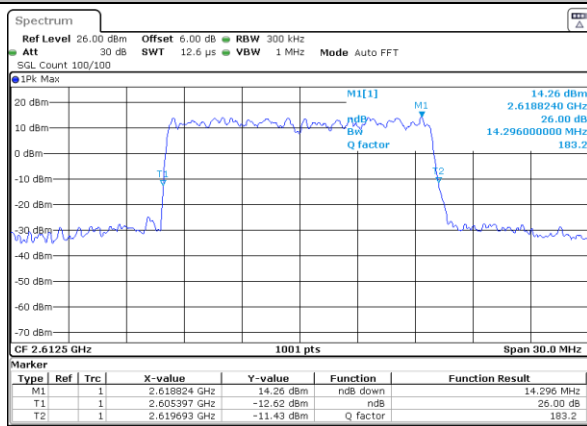
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Middle Channel / 15MHz / 16QAM



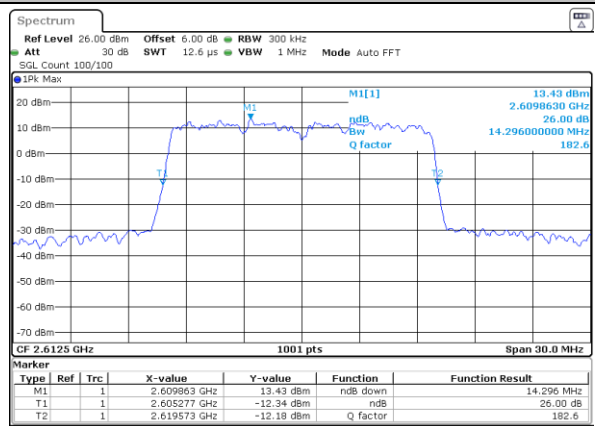
Date: 4 JAN 2020 22:51:24

Highest Channel / 15MHz / QPSK



Date: 4 JAN 2020 22:51:54

Highest Channel / 15MHz / 16QAM

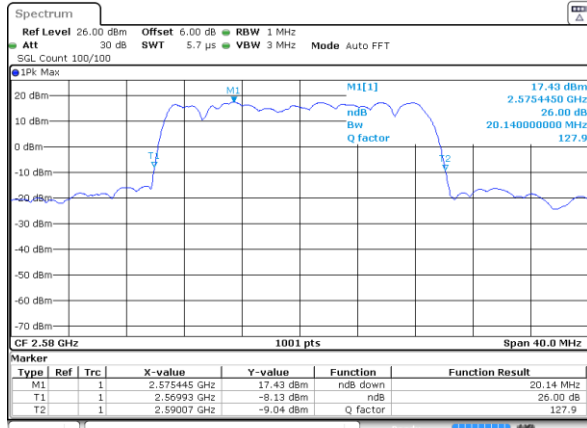


Date: 4 JAN 2020 22:52:04



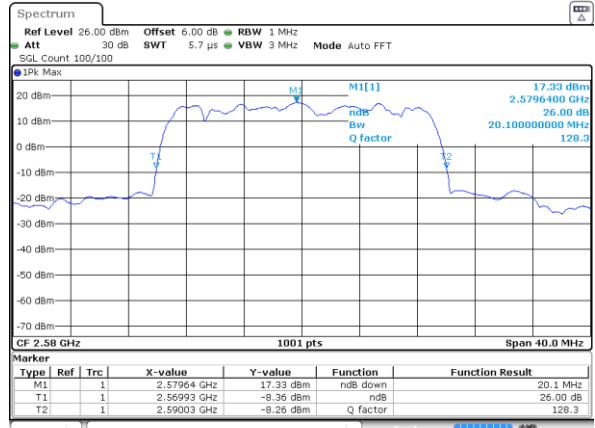
LTE Band 38

Lowest Channel / 20MHz / QPSK



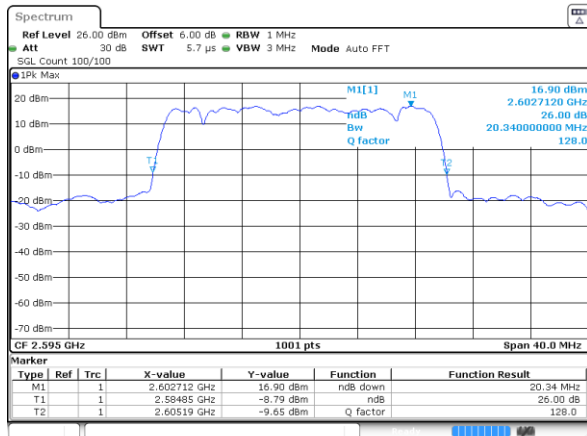
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Lowest Channel / 20MHz / 16QAM



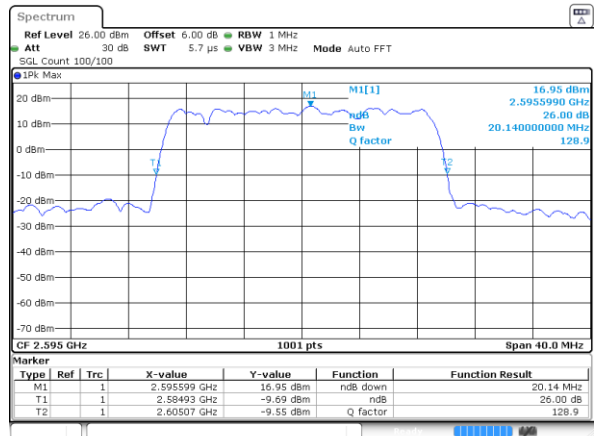
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Middle Channel / 20MHz / QPSK



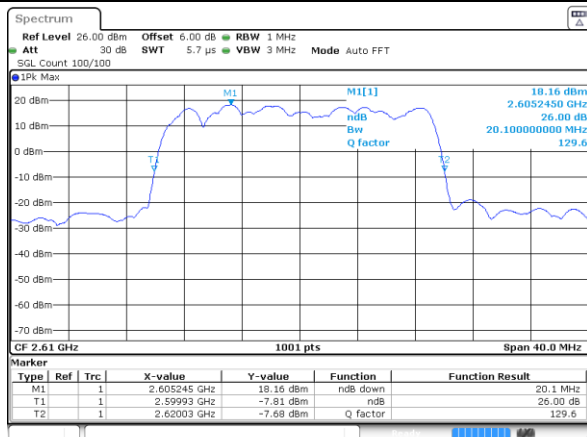
Date: 4 JAN 2020 22:53:14

Middle Channel / 20MHz / 16QAM



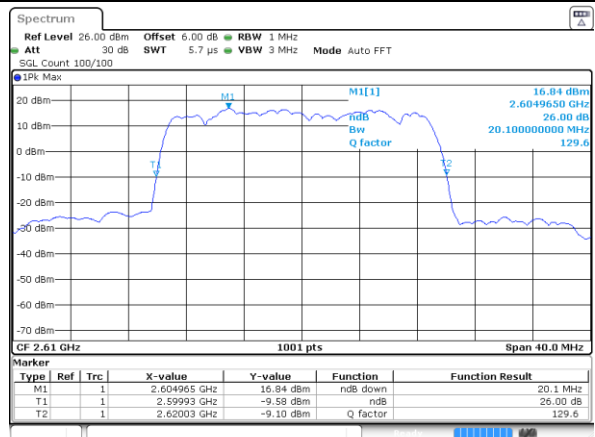
Date: 4 JAN 2020 22:53:24

Highest Channel / 20MHz / QPSK



Date: 4 JAN 2020 22:53:54

Highest Channel / 20MHz / 16QAM

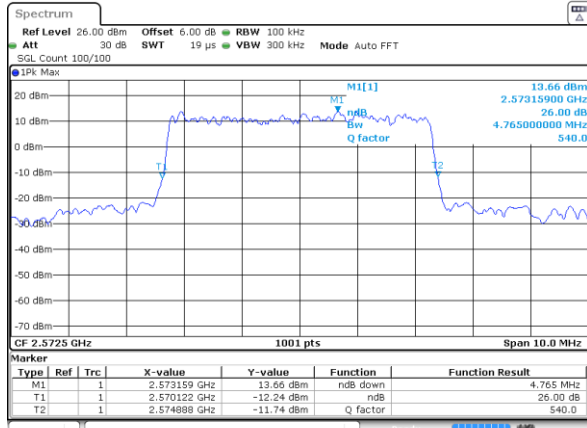


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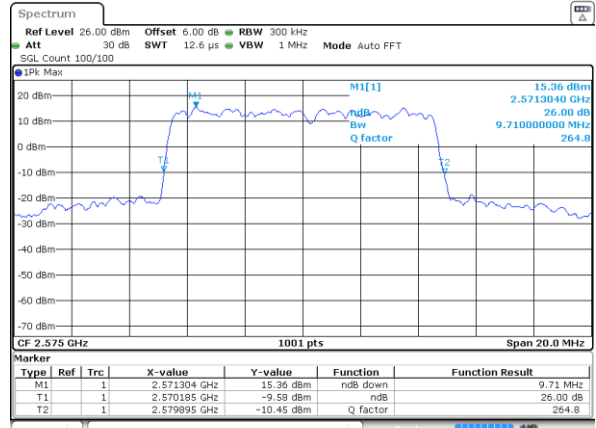


LTE Band 38

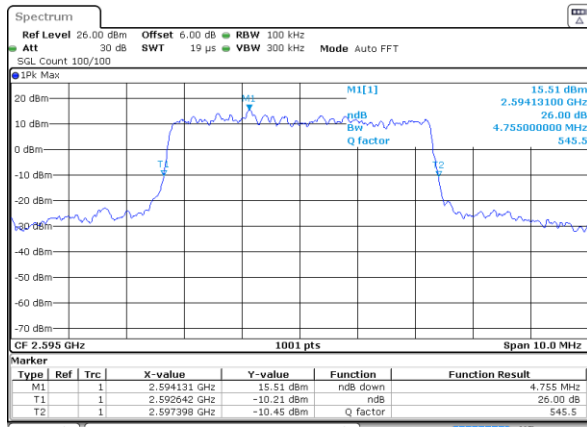
Lowest Channel / 5MHz / 64QAM



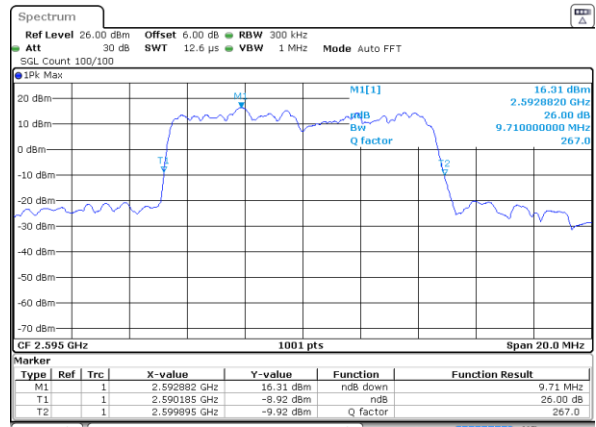
Lowest Channel / 10MHz / 64QAM



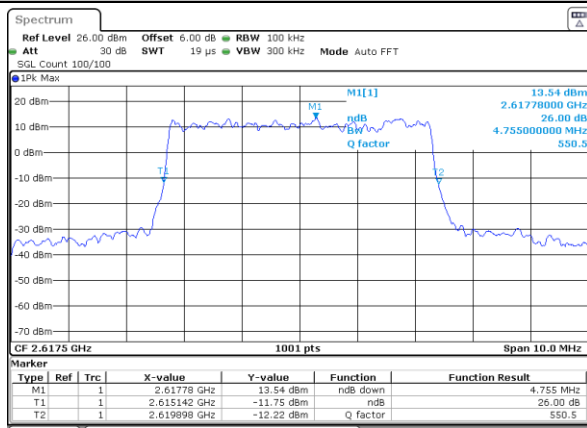
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM

