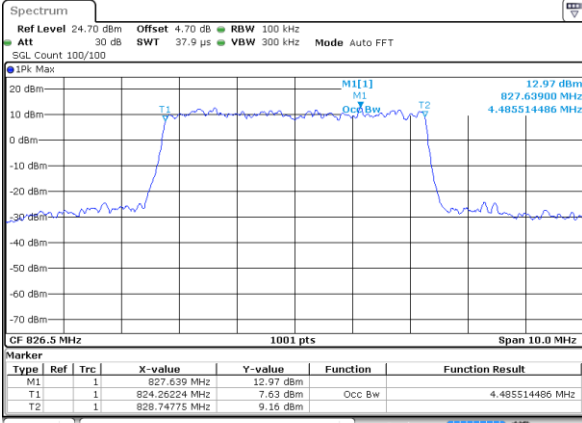




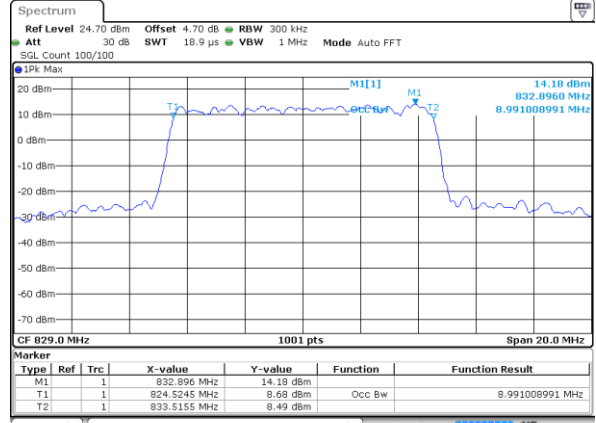
LTE Band 5

Lowest Channel / 5MHz / 64QAM



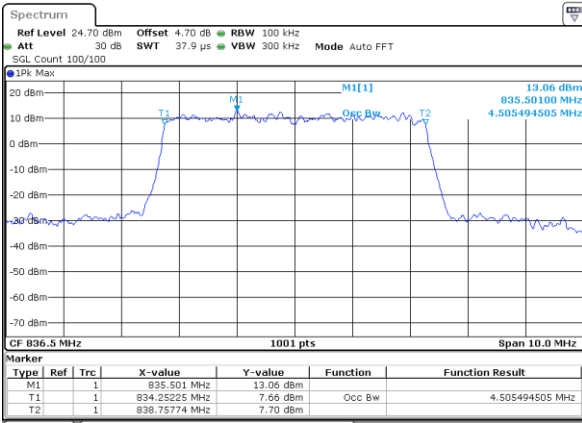
Date: 30 DEC 2019 11:40:03

Lowest Channel / 10MHz / 64QAM



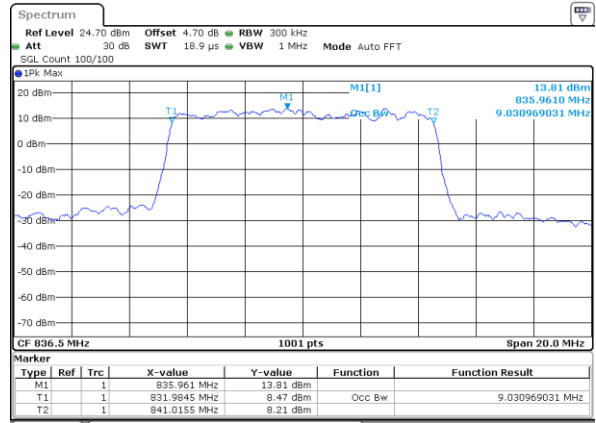
Date: 30 DEC 2019 11:50:17

Middle Channel / 5MHz / 64QAM



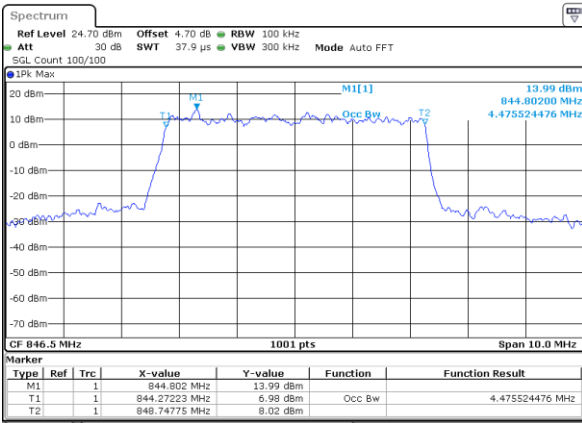
Date: 30 DEC 2019 11:45:27

Middle Channel / 10MHz / 64QAM



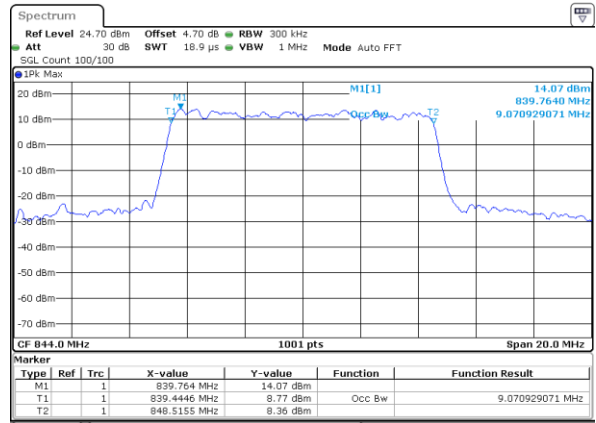
Date: 30 DEC 2019 11:55:41

Highest Channel / 5MHz / 64QAM



Date: 30 DEC 2019 11:45:47

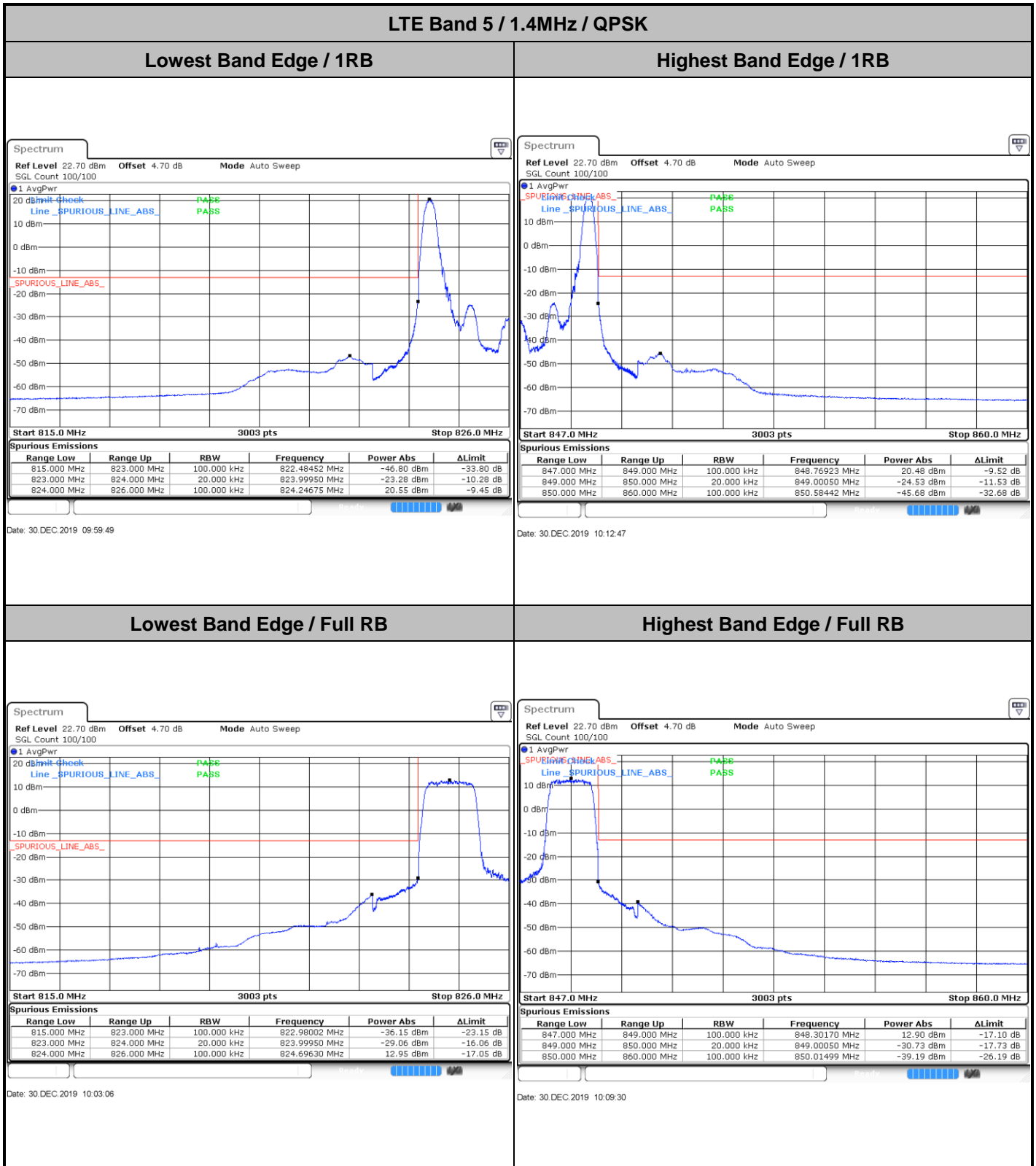
Highest Channel / 10MHz / 64QAM



Date: 30 DEC 2019 11:56:01



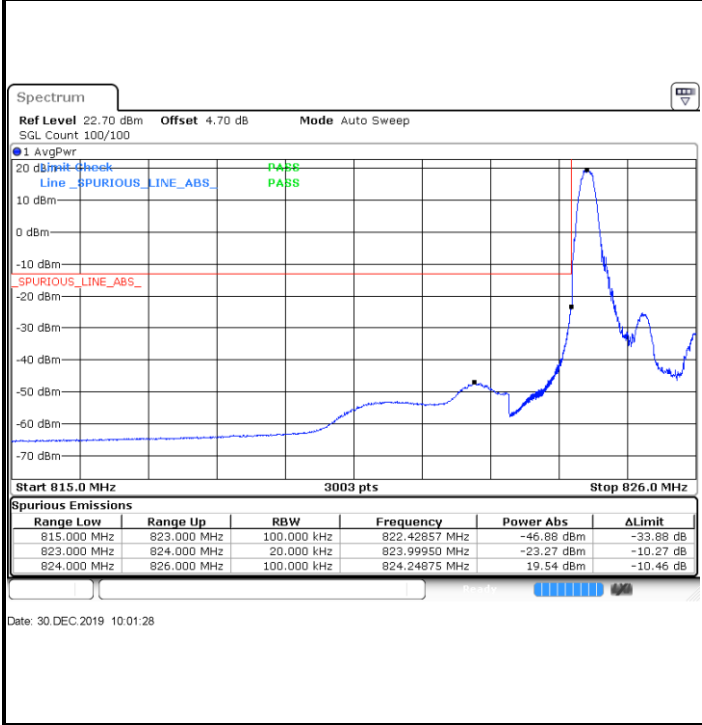
# Conducted Band Edge



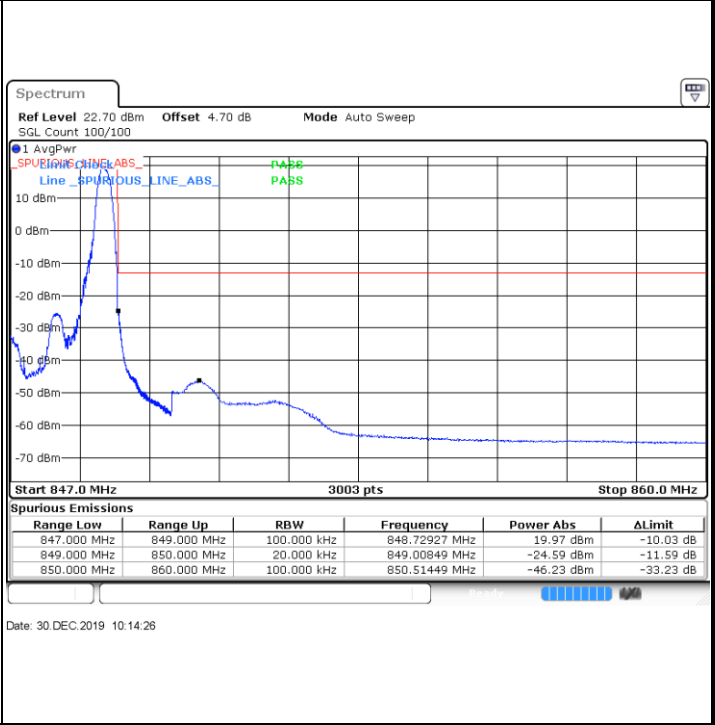


**LTE Band 5 / 1.4MHz / 16QAM**

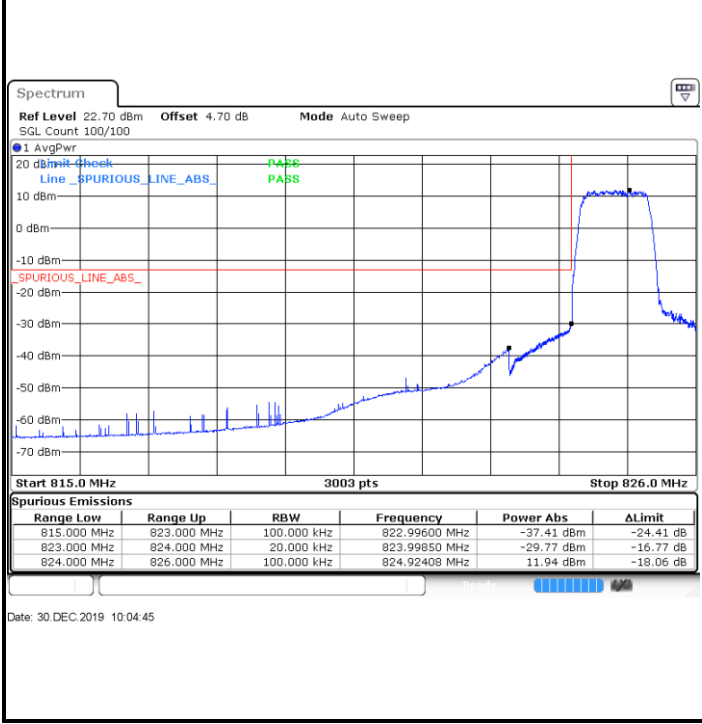
**Lowest Band Edge / 1 RB**



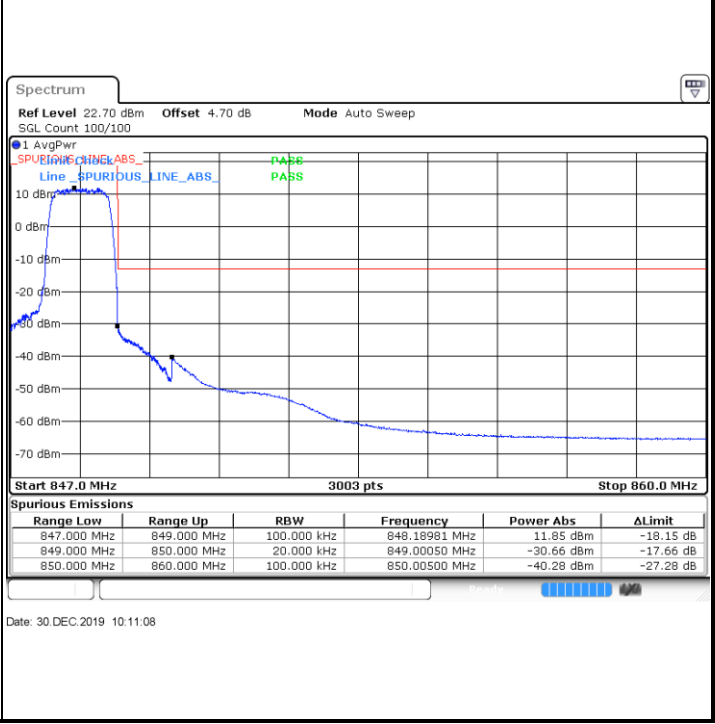
**Highest Band Edge / 1 RB**



**Lowest Band Edge / Full RB**



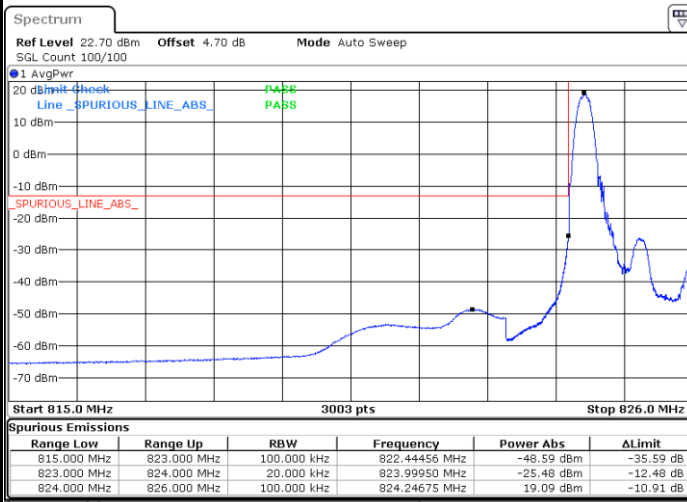
**Highest Band Edge / Full RB**





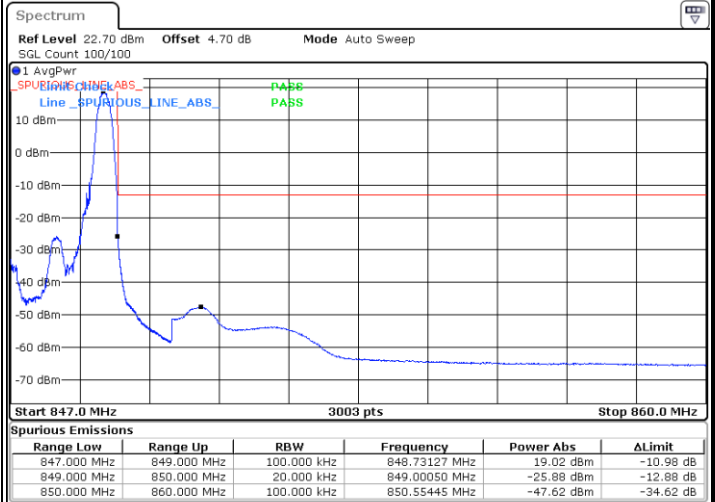
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



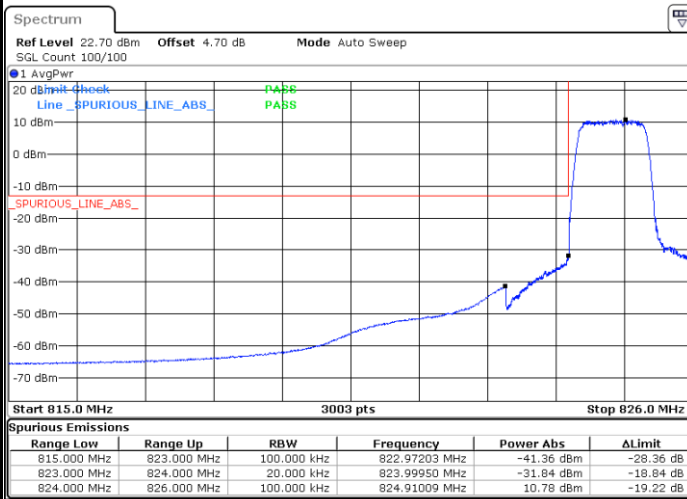
Date: 30 DEC 2019 11:23:01

Highest Band Edge / 1 RB



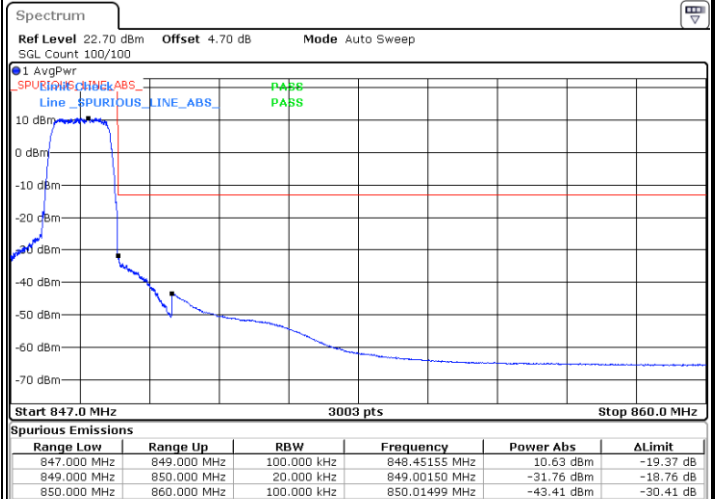
Date: 30 DEC 2019 11:28:44

Lowest Band Edge / Full RB



Date: 30 DEC 2019 12:02:45

Highest Band Edge / Full RB

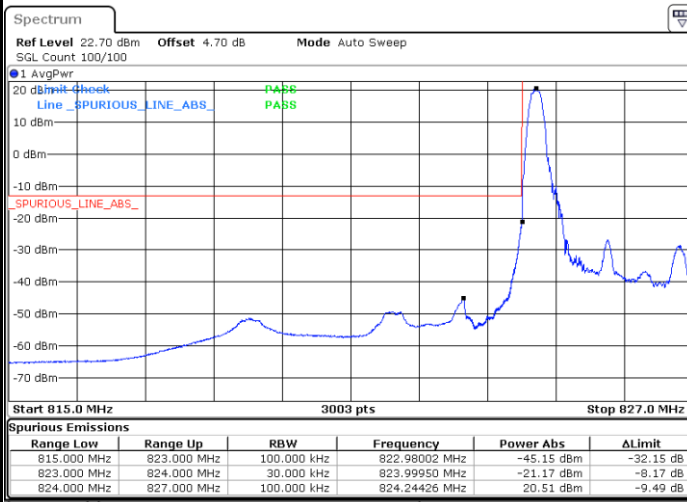


Date: 30 DEC 2019 11:27:06



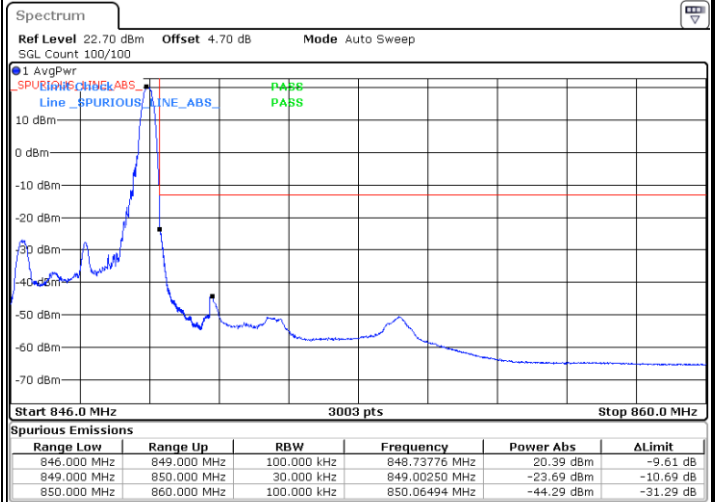
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



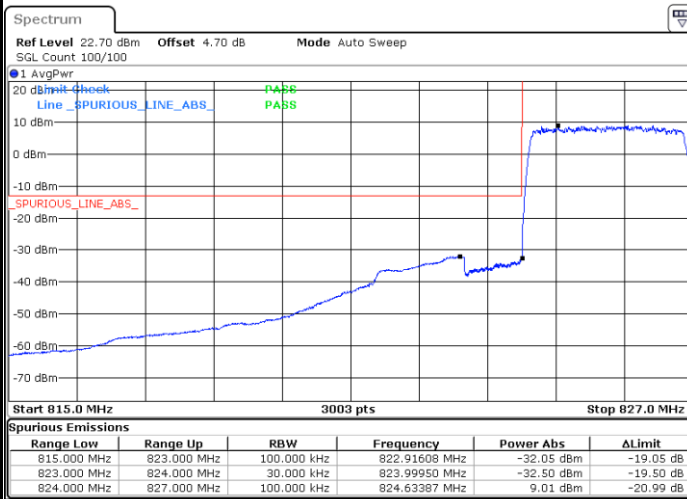
Date: 30 DEC 2019 10:18:31

Highest Band Edge / 1 RB



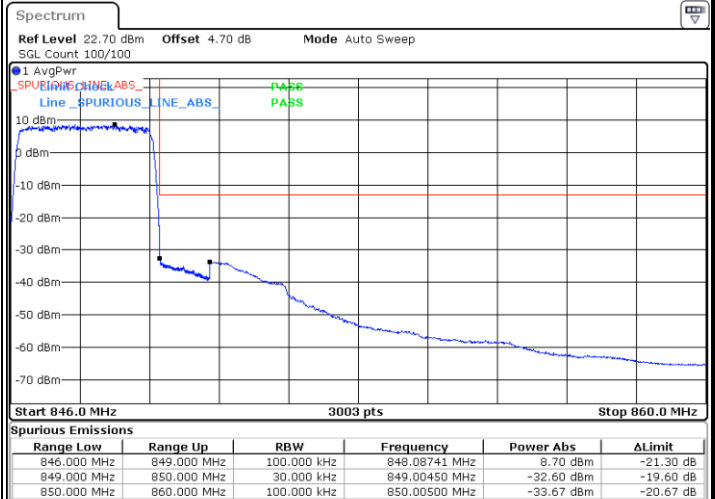
Date: 30 DEC 2019 10:29:59

Lowest Band Edge / Full RB



Date: 30 DEC 2019 10:21:48

Highest Band Edge / Full RB

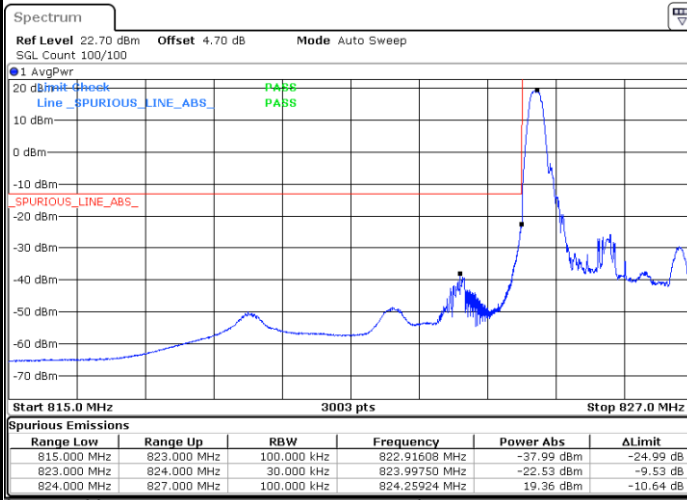


Date: 30 DEC 2019 10:33:16



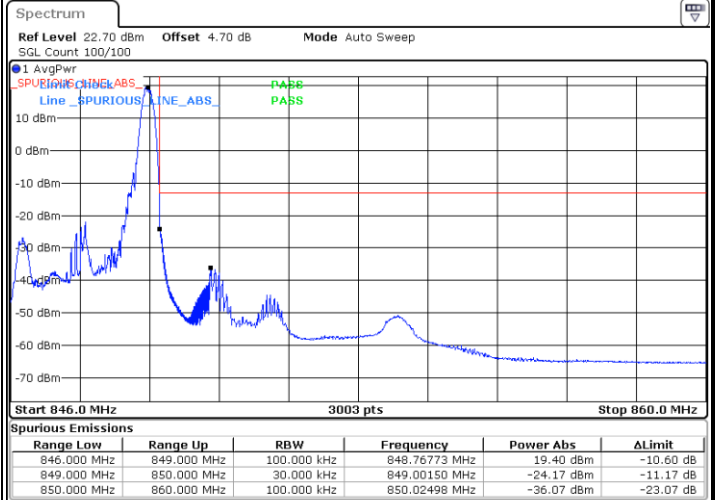
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



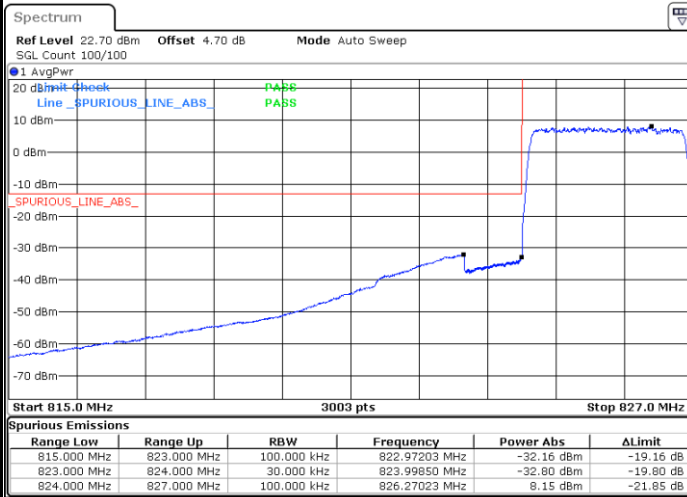
Date: 30.DEC.2019 10:20:09

Highest Band Edge / 1 RB



Date: 30.DEC.2019 10:31:37

Lowest Band Edge / Full RB



Date: 30.DEC.2019 10:23:26

Highest Band Edge / Full RB

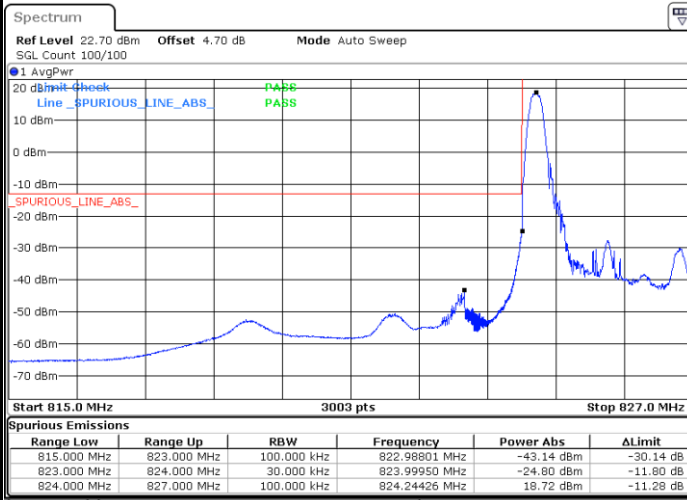


Date: 30.DEC.2019 10:34:54



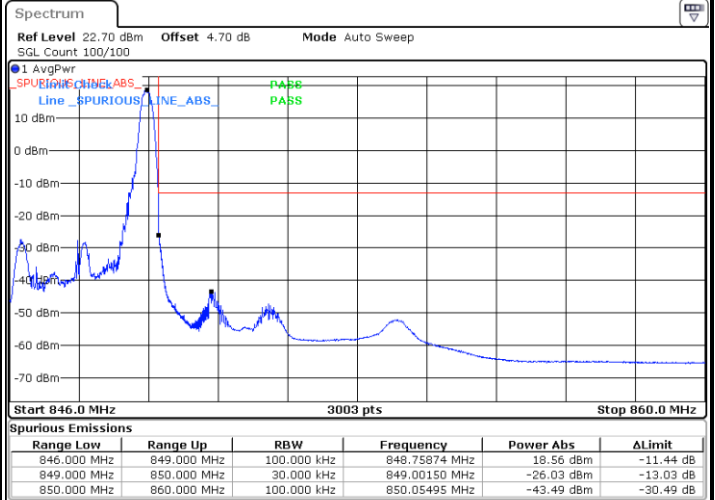
LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



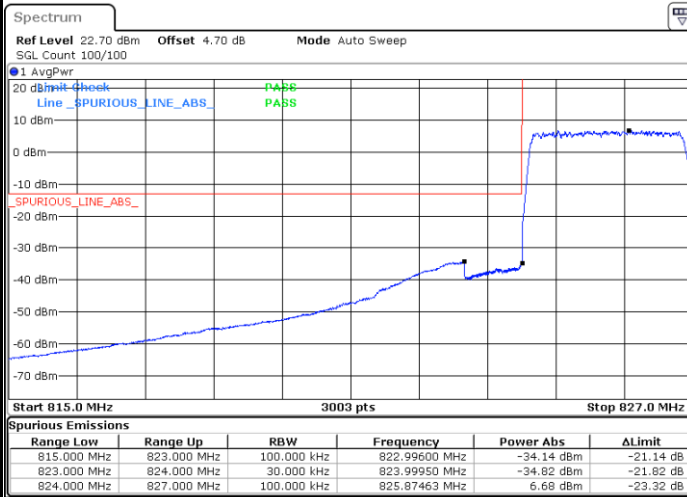
Date: 30 DEC 2019 11:33:15

Highest Band Edge / 1 RB



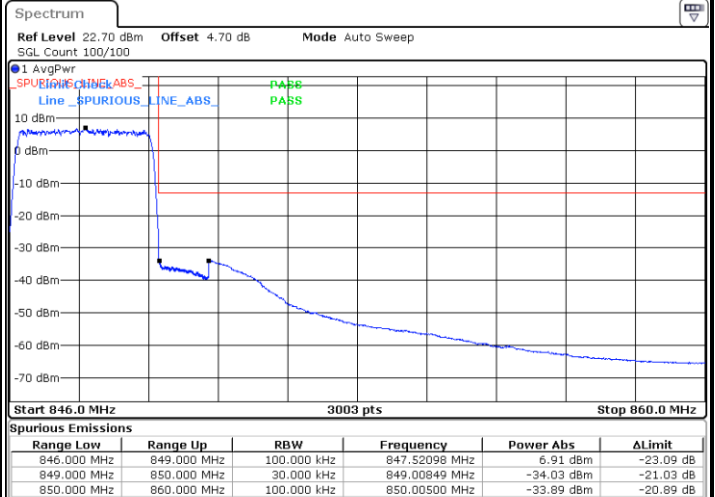
Date: 30 DEC 2019 11:38:59

Lowest Band Edge / Full RB



Date: 30 DEC 2019 11:31:36

Highest Band Edge / Full RB

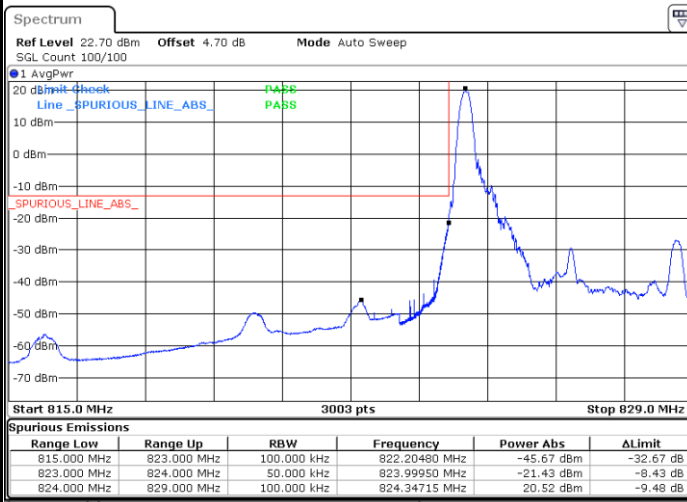


Date: 30 DEC 2019 11:37:20



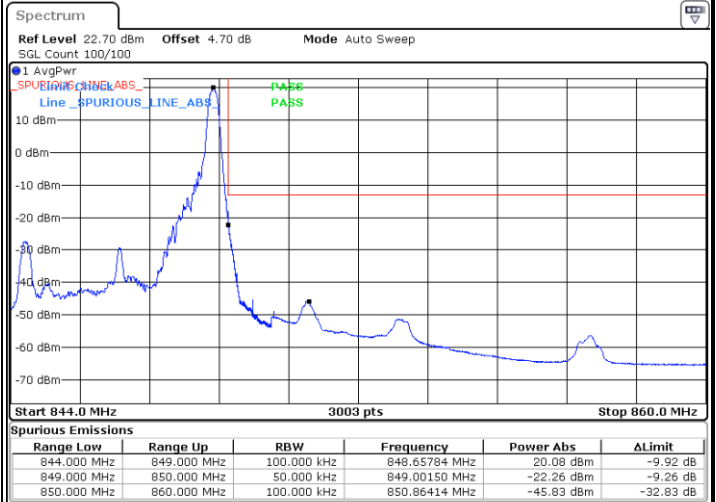
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



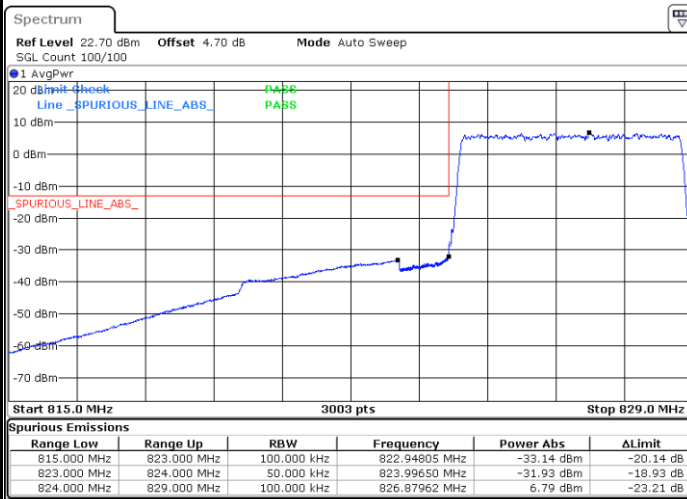
Date: 30 DEC 2019 10:39:00

Highest Band Edge / 1 RB



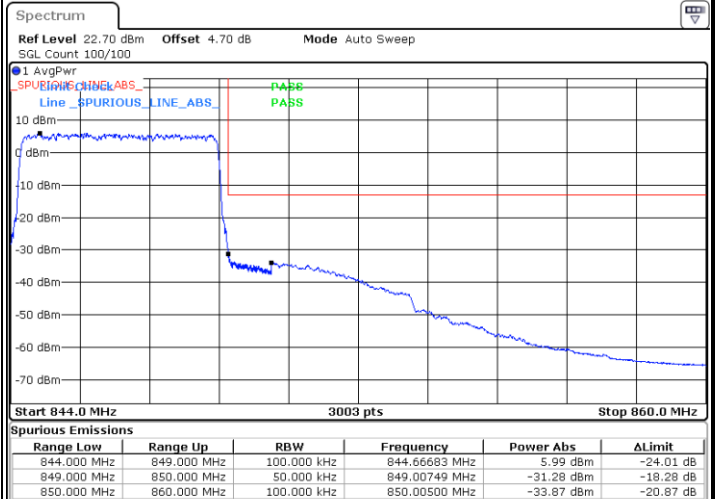
Date: 30 DEC 2019 10:50:27

Lowest Band Edge / Full RB



Date: 30 DEC 2019 10:42:17

Highest Band Edge / Full RB



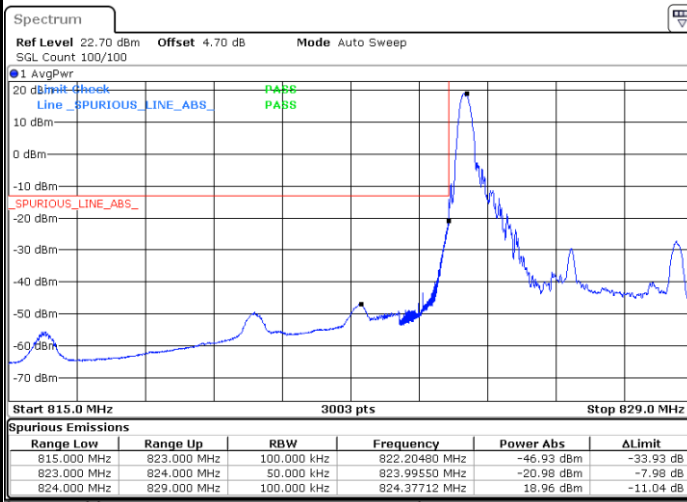
Date: 30 DEC 2019 10:53:45





LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



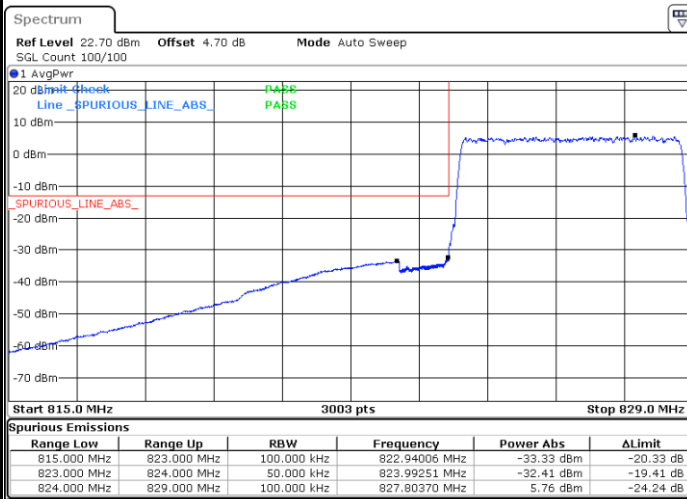
Date: 30 DEC 2019 10:40:38

Highest Band Edge / 1 RB



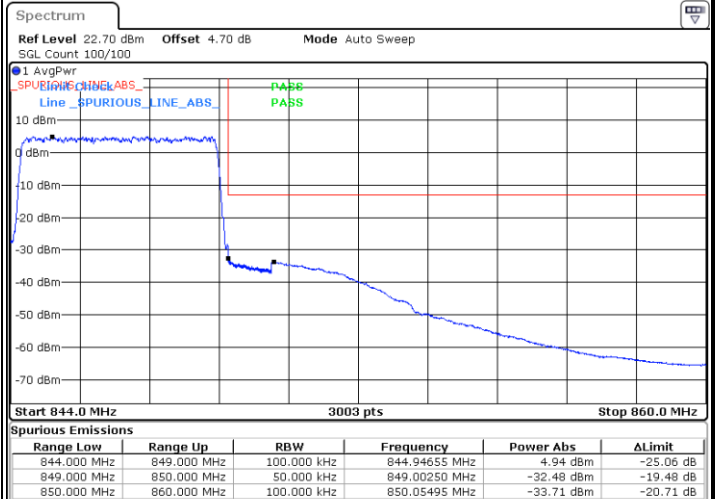
Date: 30 DEC 2019 10:52:06

Lowest Band Edge / Full RB



Date: 30 DEC 2019 10:43:56

Highest Band Edge / Full RB

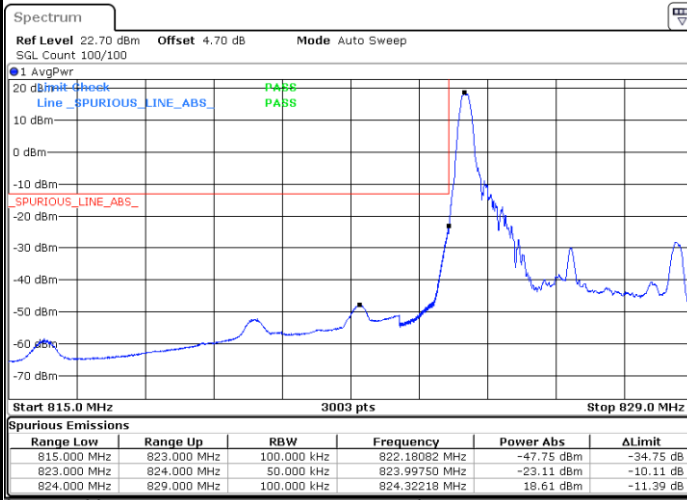


Date: 30 DEC 2019 10:55:23



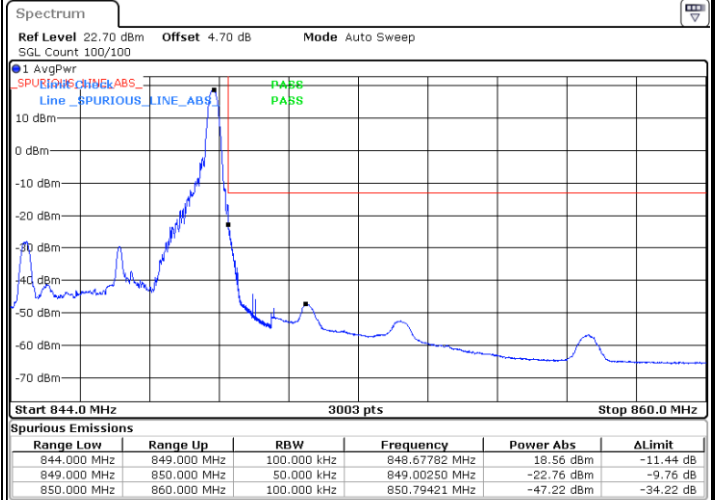
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / 1RB



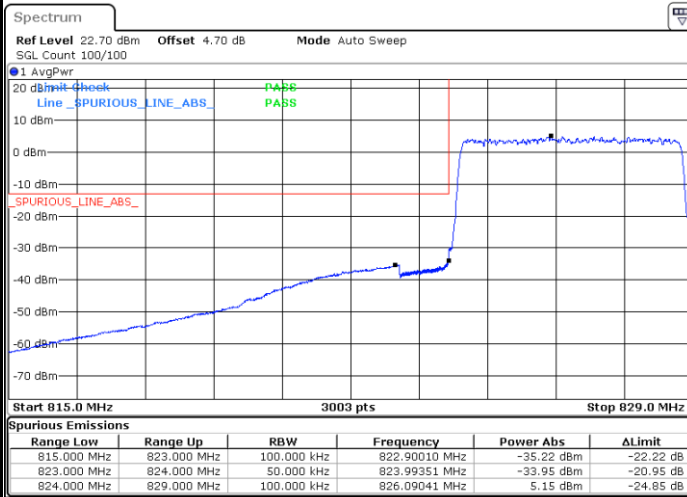
Date: 30.DEC.2019 11:43:29

Highest Band Edge / 1 RB



Date: 30.DEC.2019 11:49:13

Lowest Band Edge / Full RB



Date: 30.DEC.2019 11:41:51

Highest Band Edge / Full RB



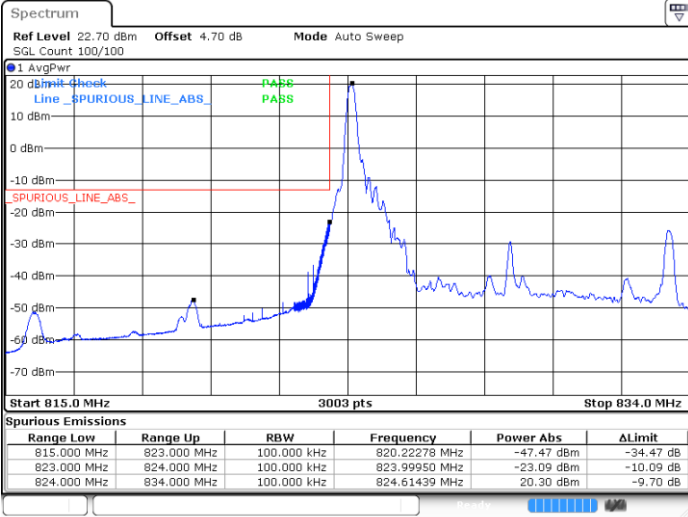
Date: 30.DEC.2019 11:47:35



LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



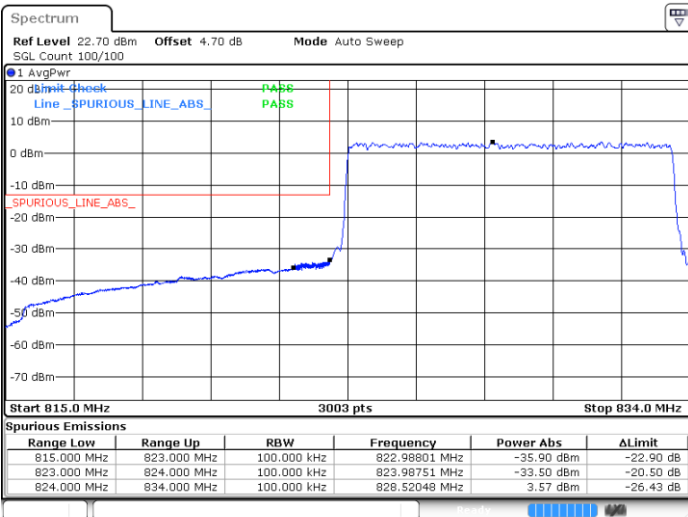
Date: 30 DEC 2019 10:59:28



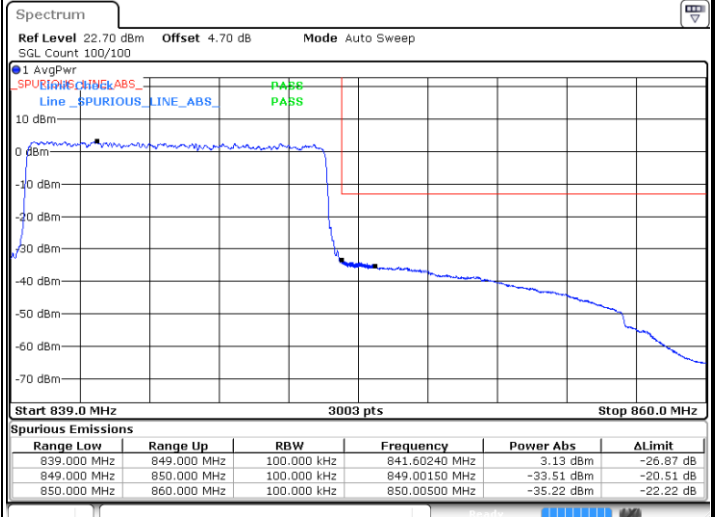
Date: 30 DEC 2019 11:10:56

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 30 DEC 2019 11:02:45

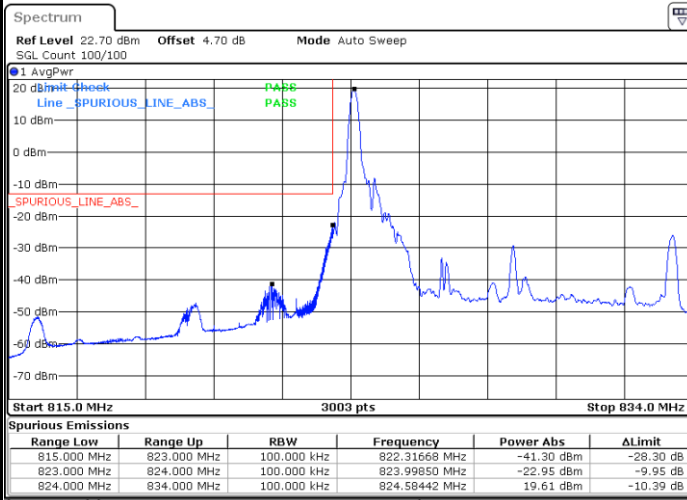


Date: 30 DEC 2019 11:14:13



LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



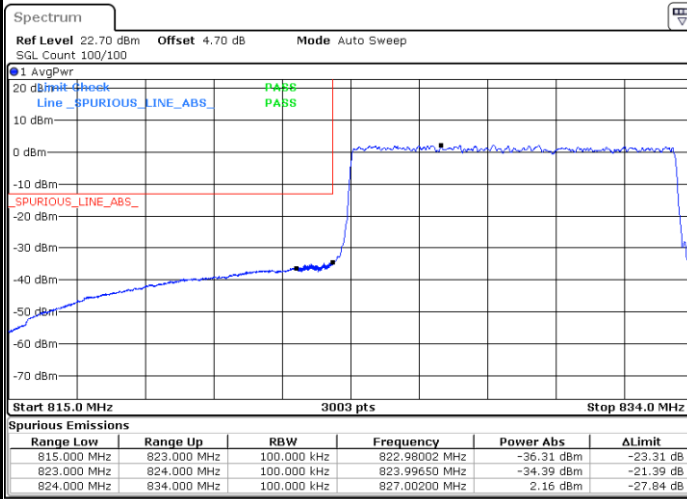
Date: 30.DEC.2019 11:01:07

Highest Band Edge / 1 RB



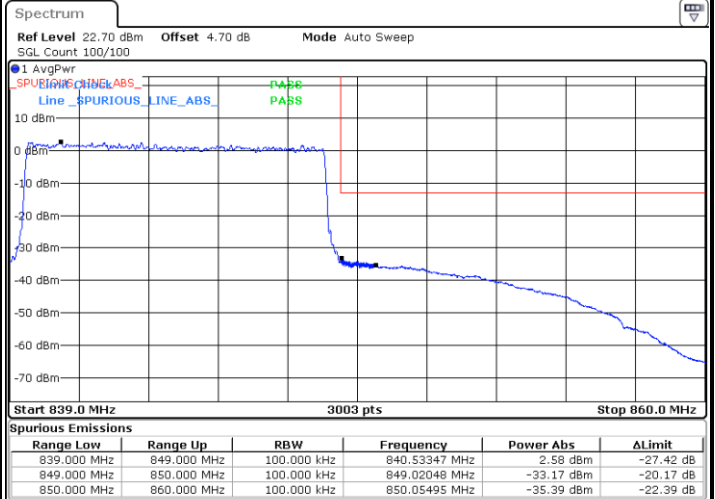
Date: 30.DEC.2019 11:12:35

Lowest Band Edge / Full RB



Date: 30.DEC.2019 11:04:24

Highest Band Edge / Full RB

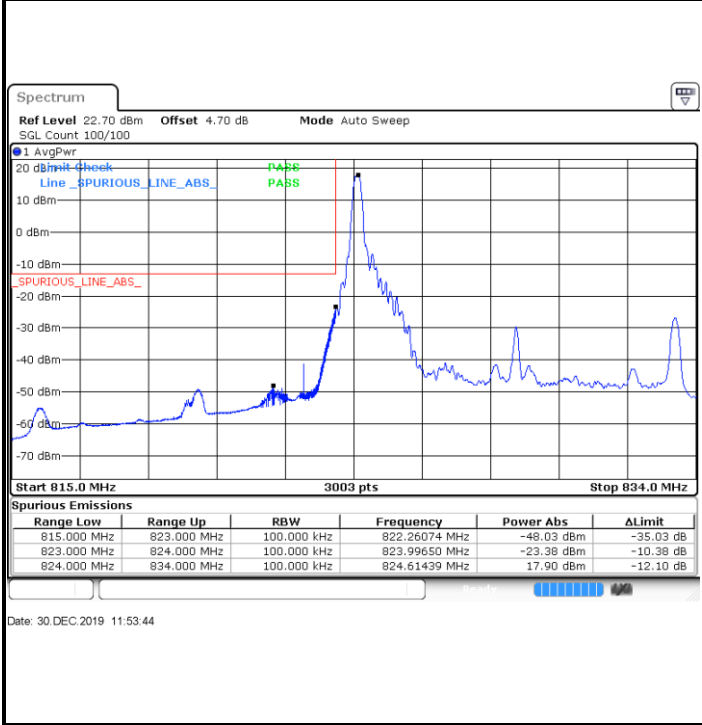


Date: 30.DEC.2019 11:15:52

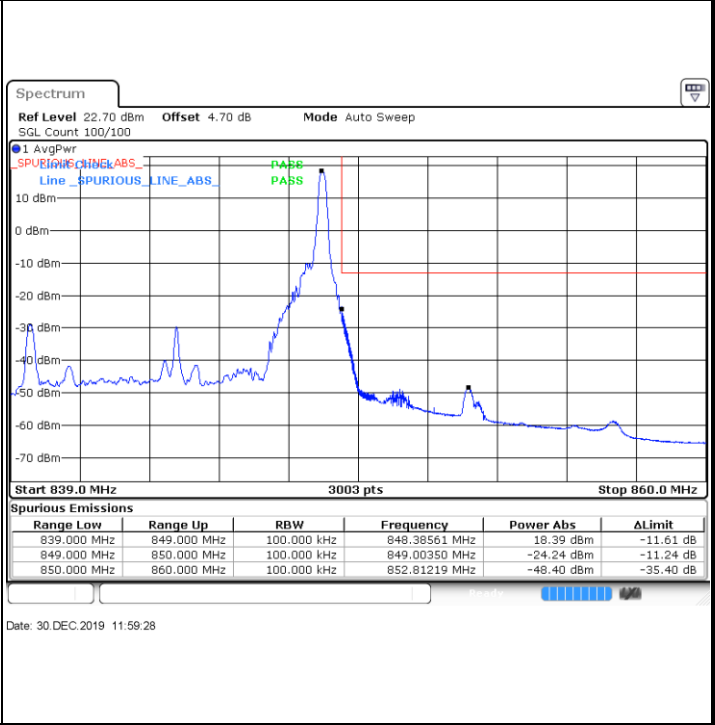


**LTE Band 5 / 10MHz / 64QAM**

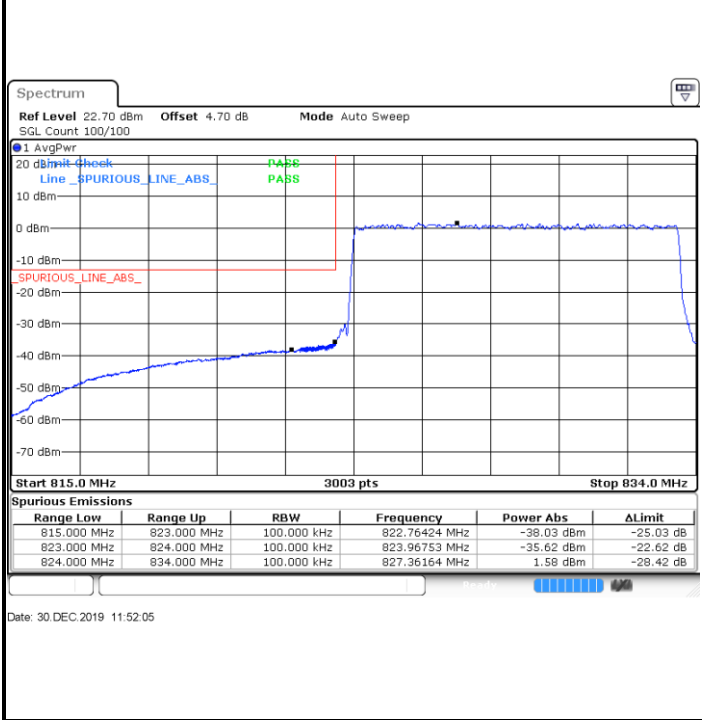
**Lowest Band Edge / 1 RB**



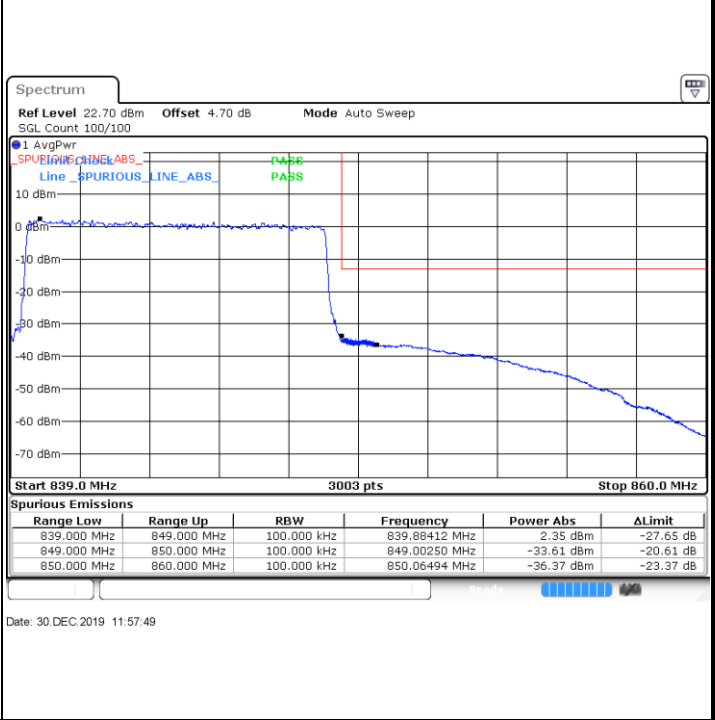
**Highest Band Edge / 1 RB**



**Lowest Band Edge / Full RB**

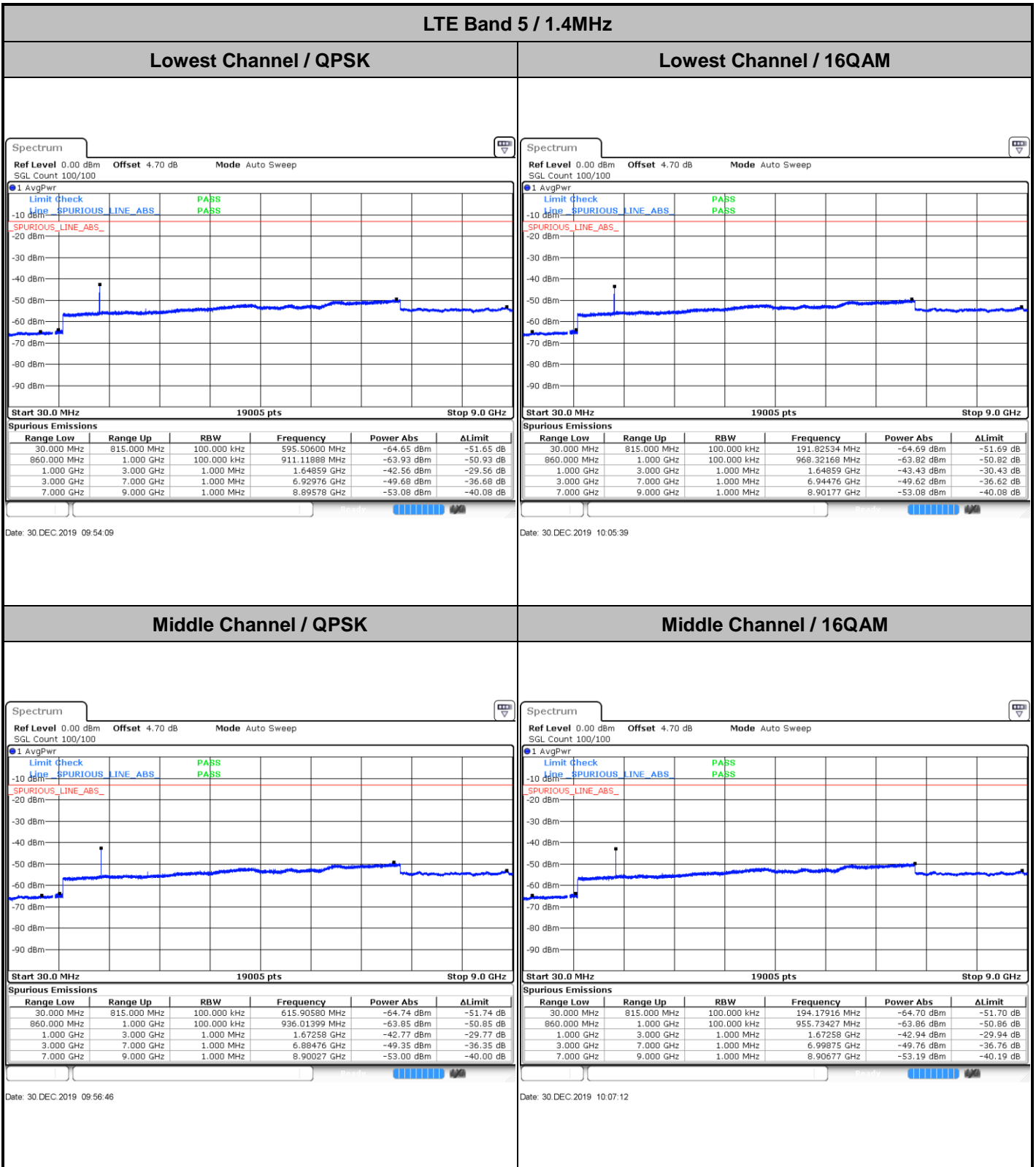


**Highest Band Edge / Full RB**





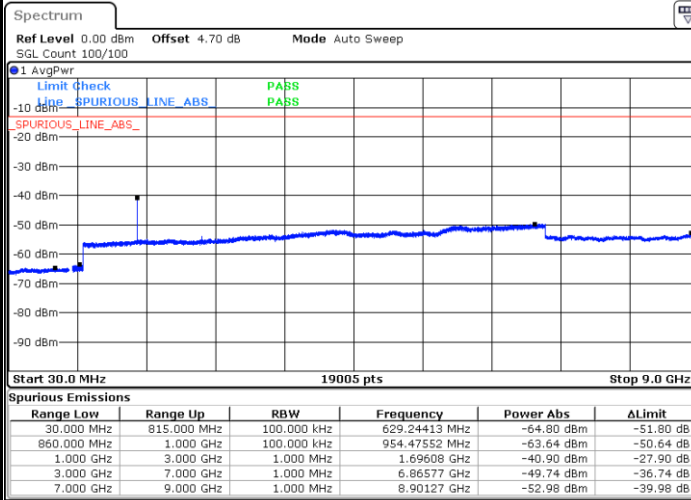
# Conducted Spurious Emission





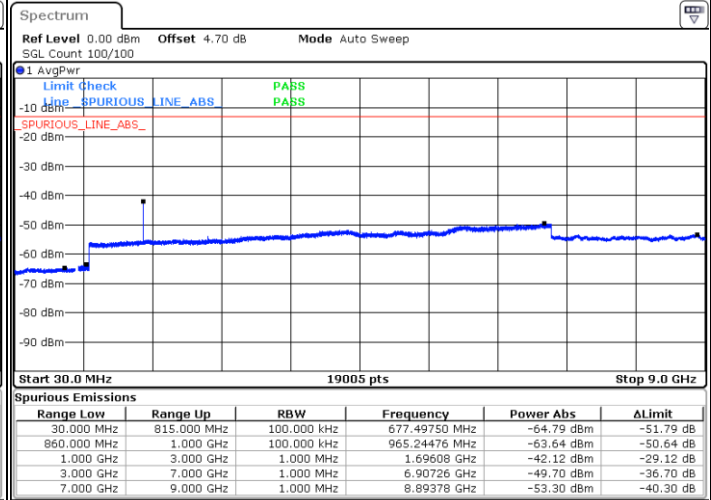
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 30 DEC 2019 10:15:20

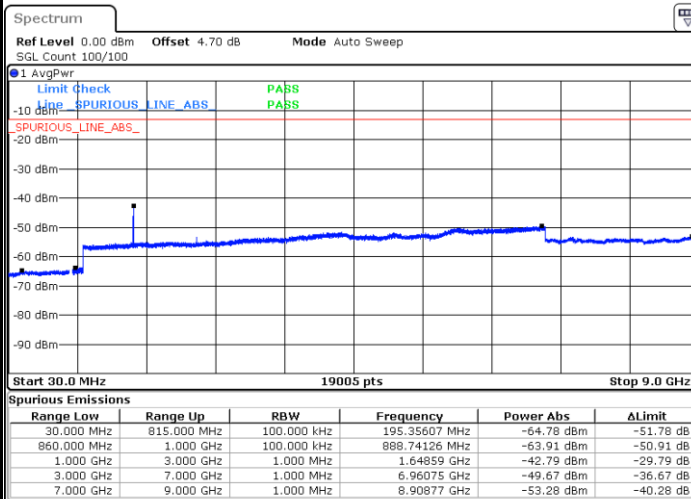
Highest Channel / 16QAM



Date: 30 DEC 2019 10:16:13

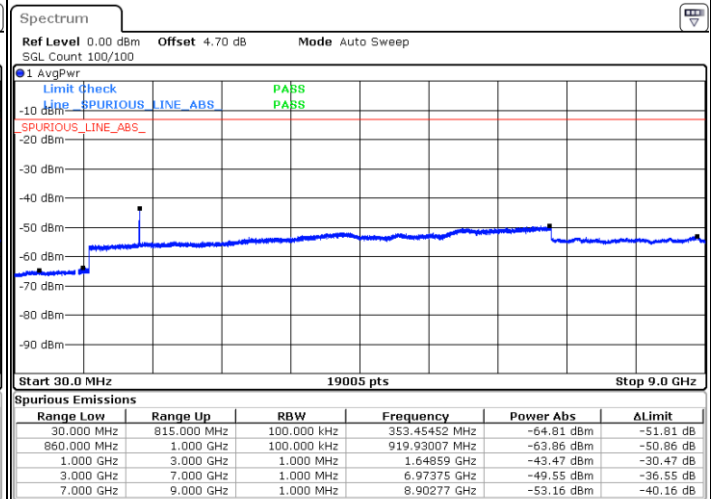
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 30 DEC 2019 10:24:20

Lowest Channel / 16QAM



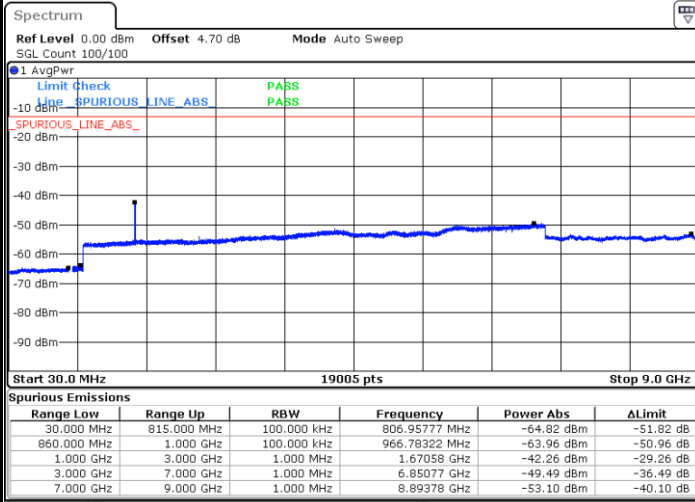
Date: 30 DEC 2019 10:25:14



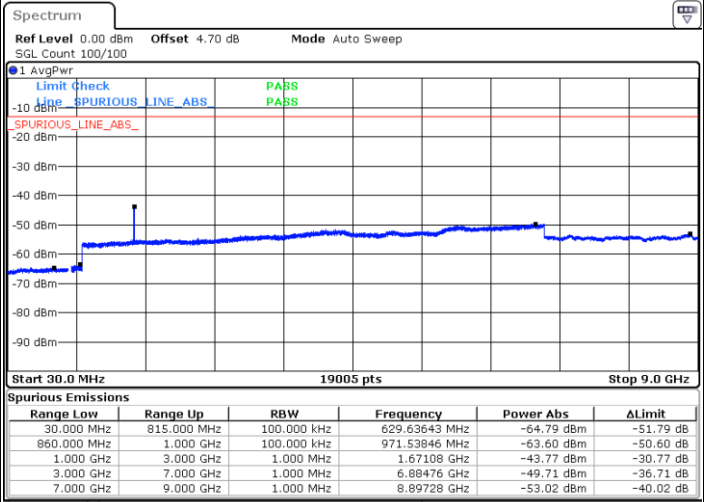
LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



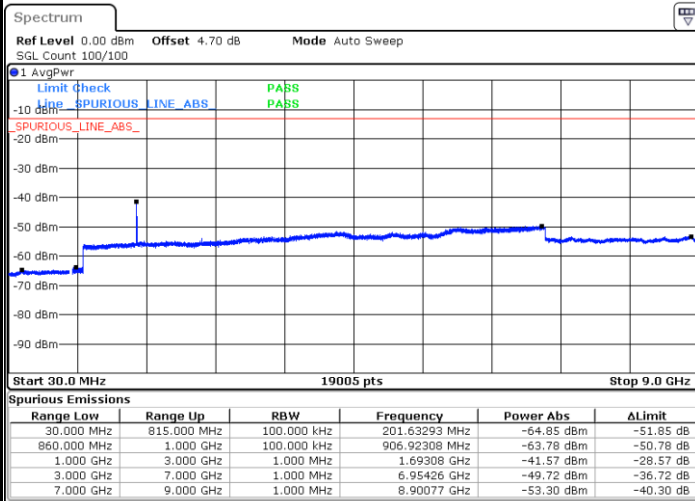
Date: 30 DEC.2019 10:26:47



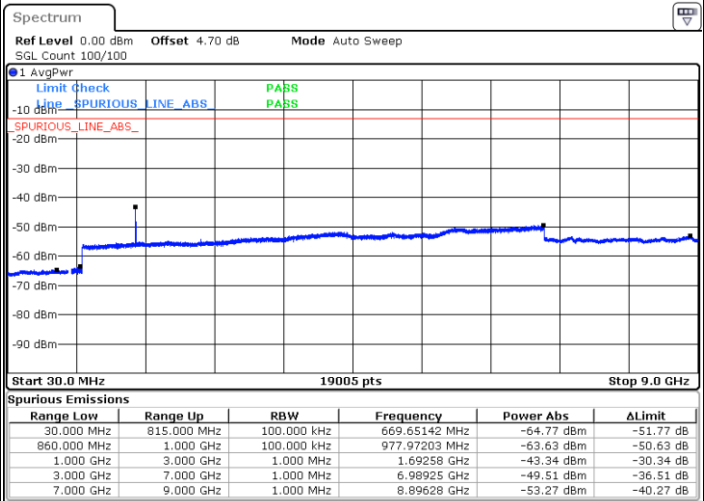
Date: 30 DEC.2019 10:27:41

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30 DEC.2019 10:35:48



Date: 30 DEC.2019 10:36:42

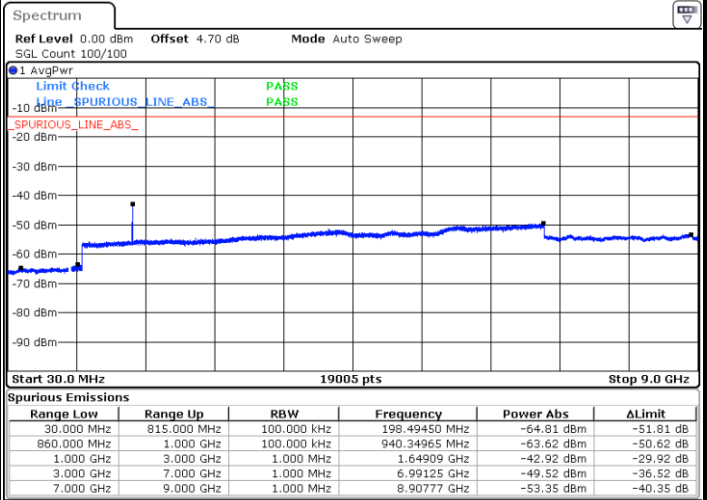
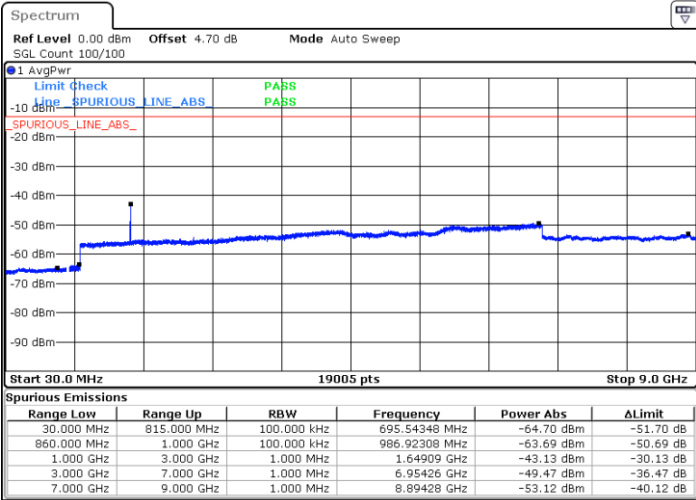




LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

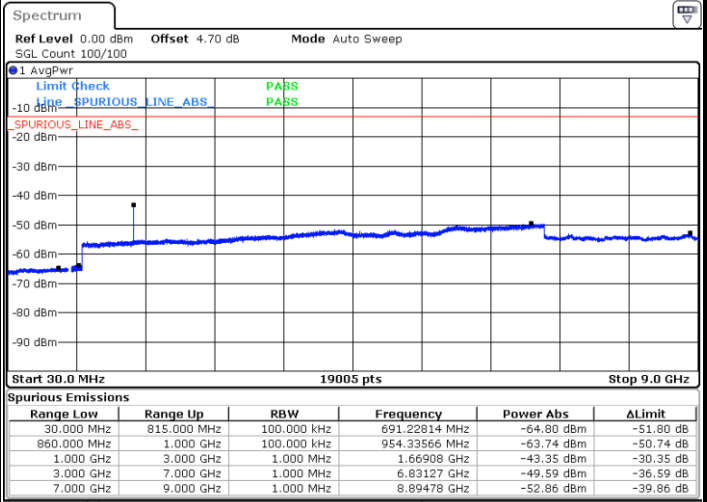
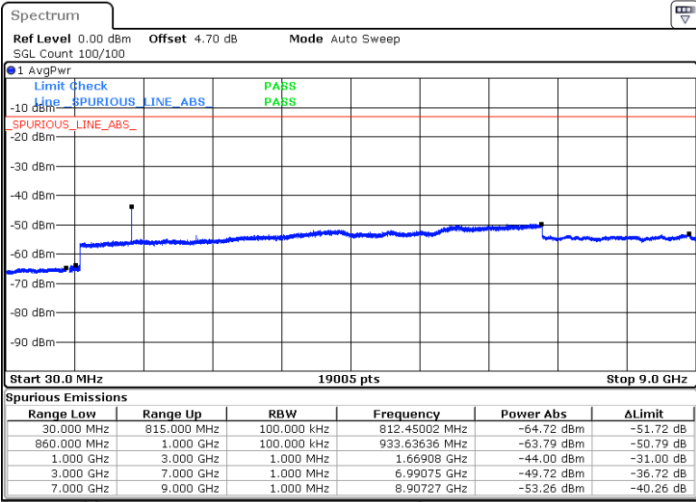


Date: 30 DEC.2019 10:44:50

Date: 30 DEC.2019 10:45:43

Middle Channel / QPSK

Middle Channel / 16QAM



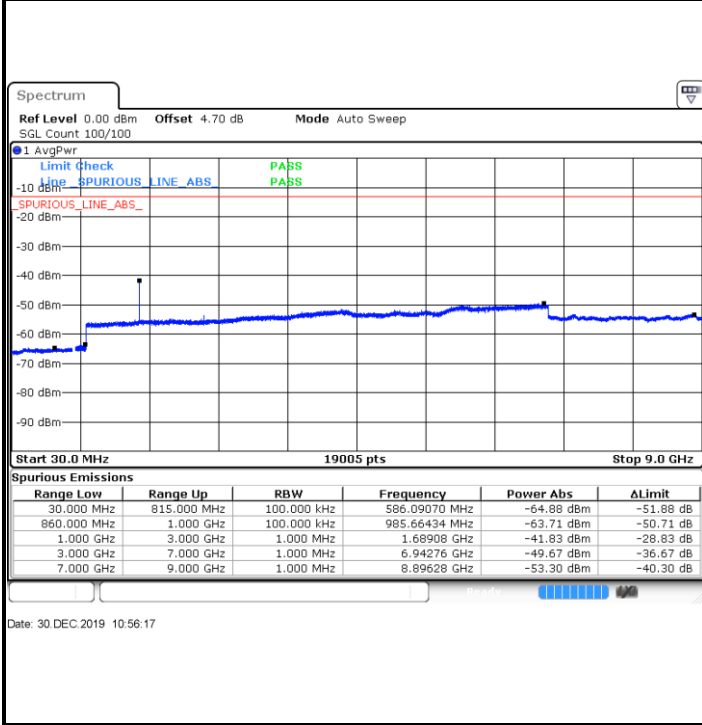
Date: 30 DEC.2019 10:47:16

Date: 30 DEC.2019 10:48:10

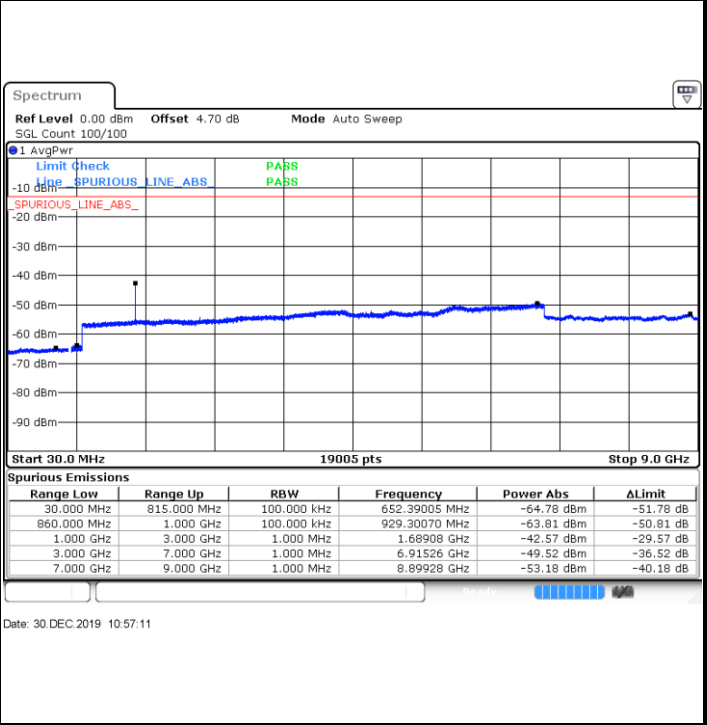


LTE Band 5 / 5MHz

Highest Channel / QPSK

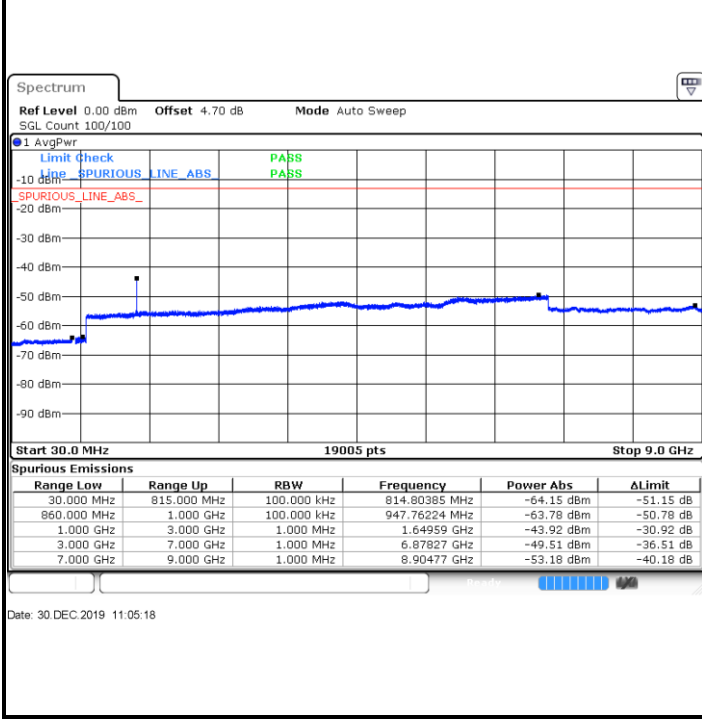


Highest Channel / 16QAM

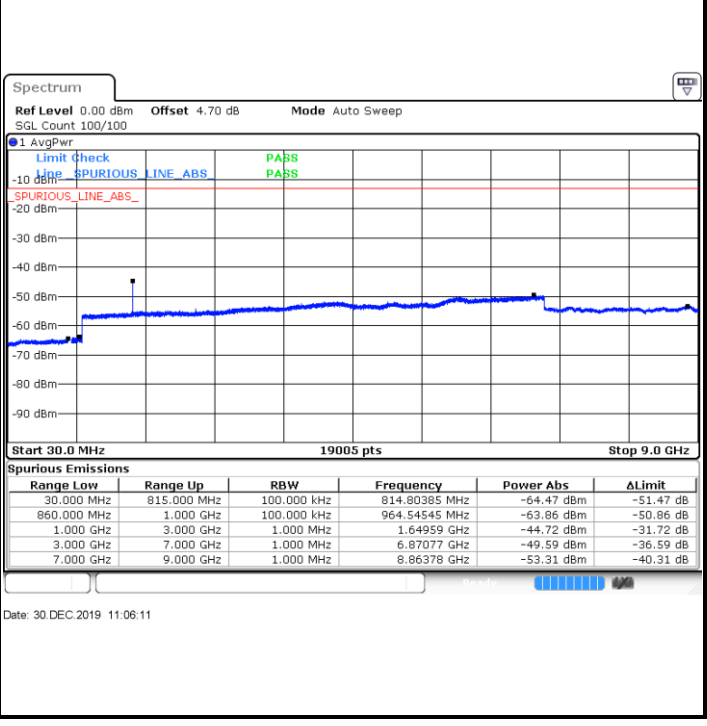


LTE Band 5 / 10MHz

Lowest Channel / QPSK



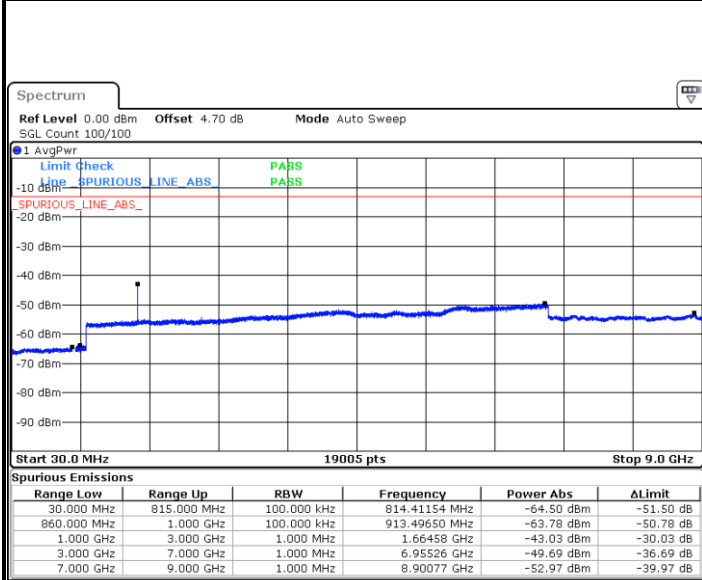
Lowest Channel / 16QAM





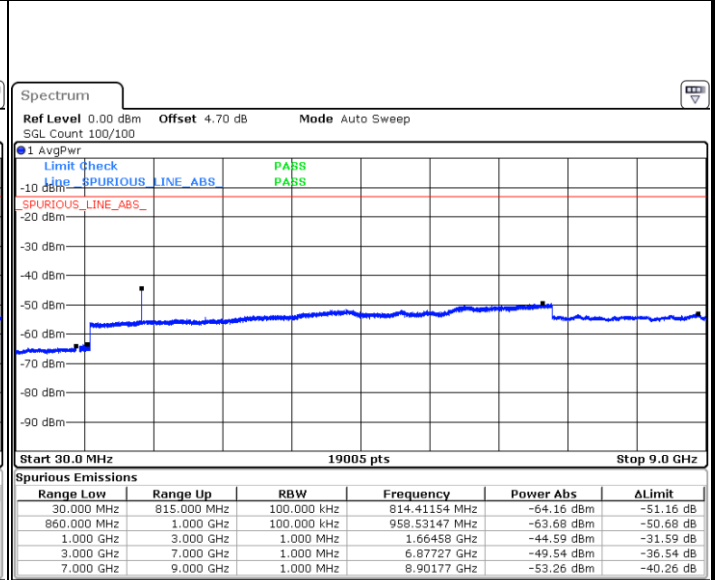
LTE Band 5 / 10MHz

Middle Channel / QPSK



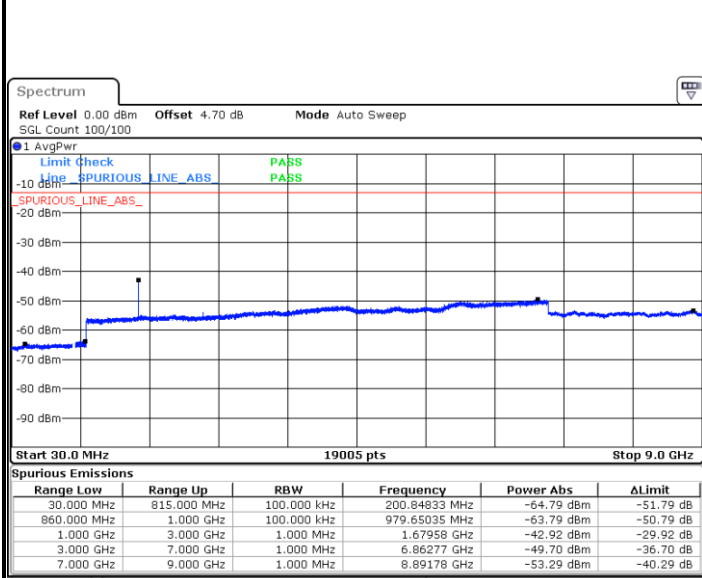
Date: 30 DEC 2019 11:07:45

Middle Channel / 16QAM



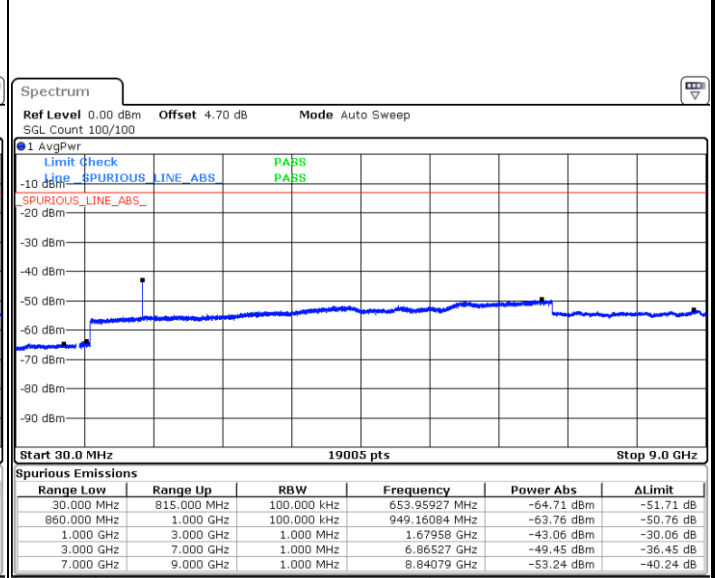
Date: 30 DEC 2019 11:08:38

Highest Channel / QPSK



Date: 30 DEC 2019 11:16:46

Highest Channel / 16QAM



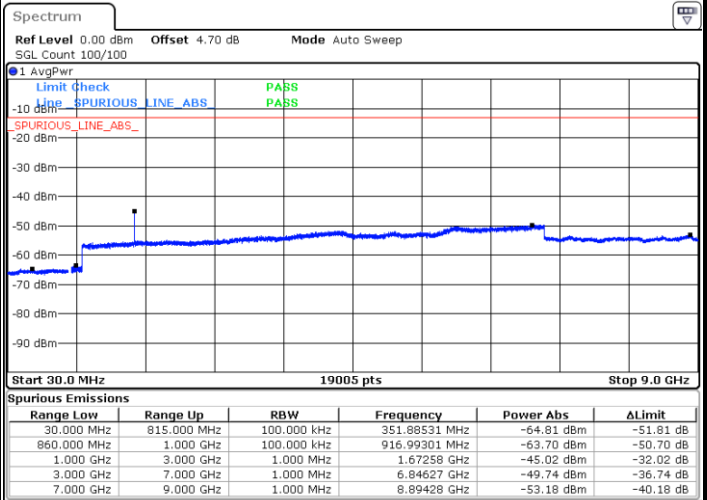
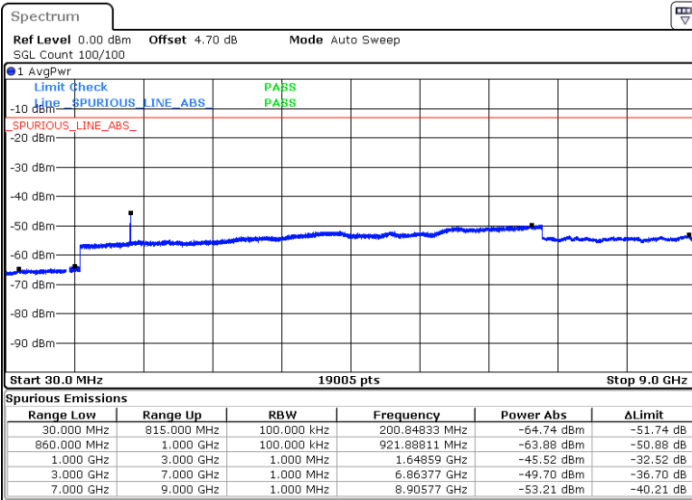
Date: 30 DEC 2019 11:17:39



LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM

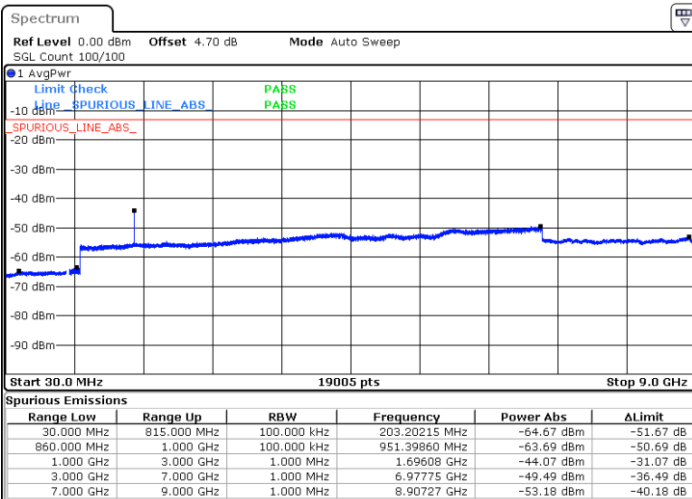
Middle Channel / 64QAM



Date: 30 DEC.2019 11:23:55

Date: 30 DEC.2019 11:24:48

Highest Channel / 64QAM



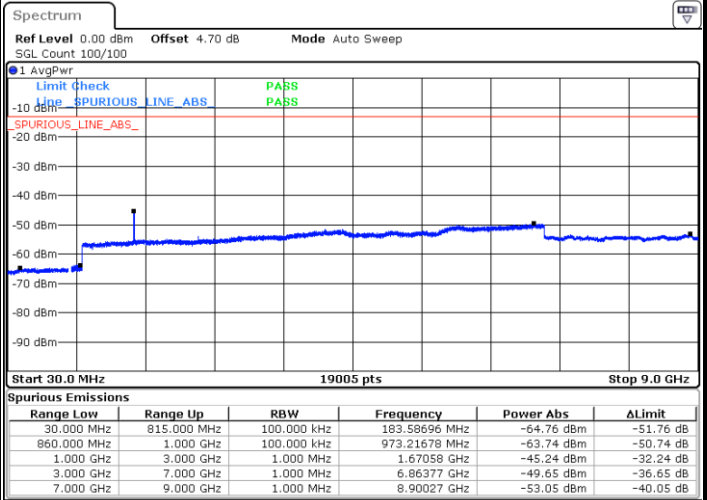
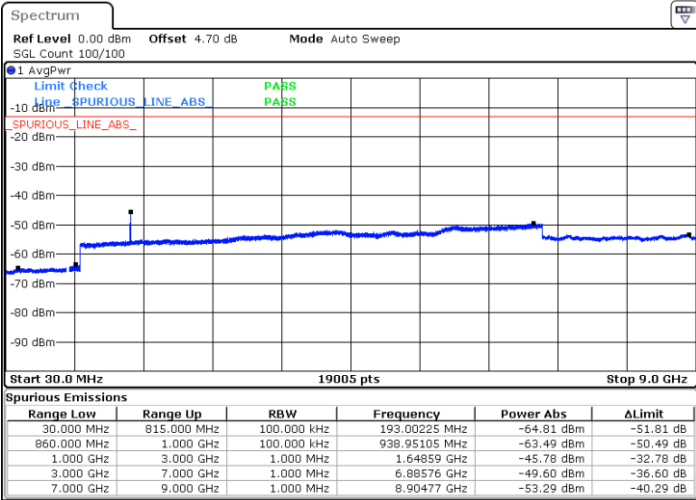
Date: 30 DEC.2019 11:29:39



LTE Band 5 / 3MHz

Lowest Channel / 64QAM

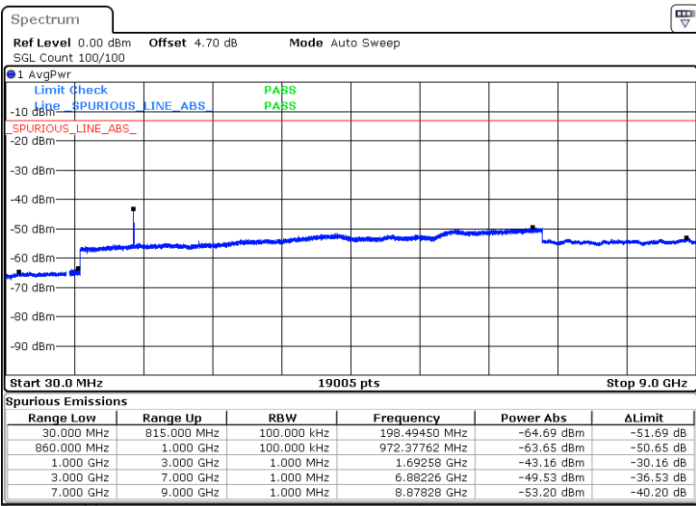
Middle Channel / 64QAM



Date: 30 DEC 2019 11:34:09

Date: 30 DEC 2019 11:35:03

Highest Channel / 64QAM

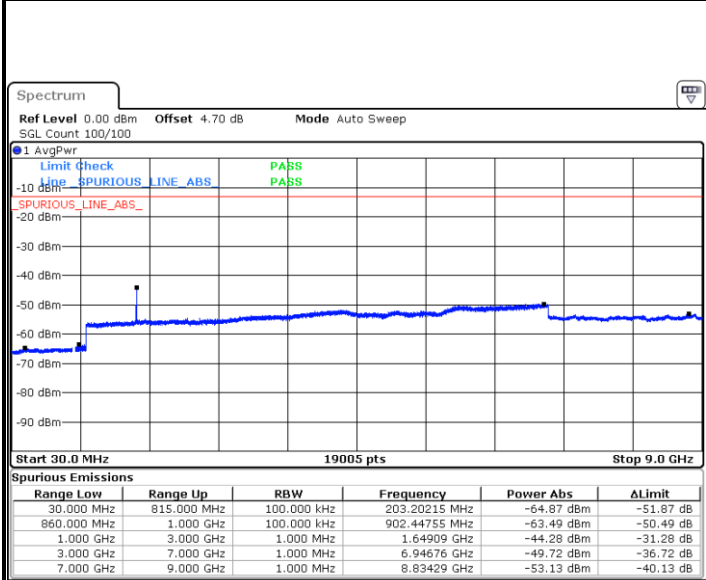


Date: 30 DEC 2019 11:39:53



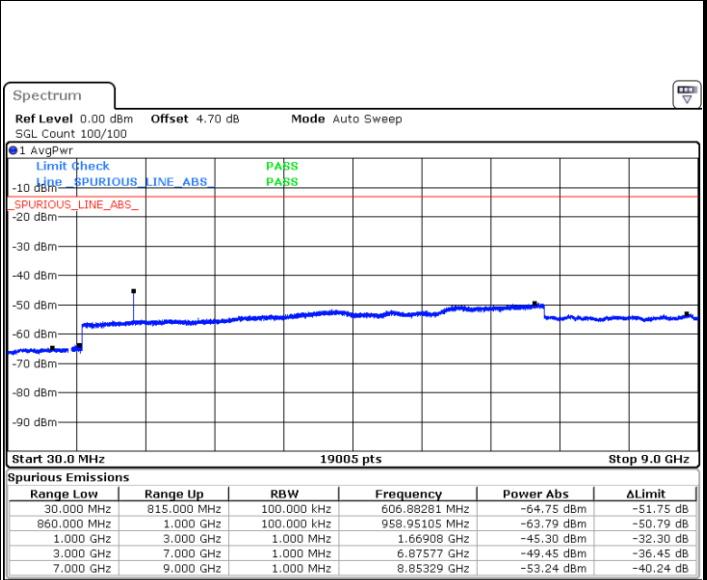
**LTE Band 5 / 5MHz**

**Lowest Channel / 64QAM**



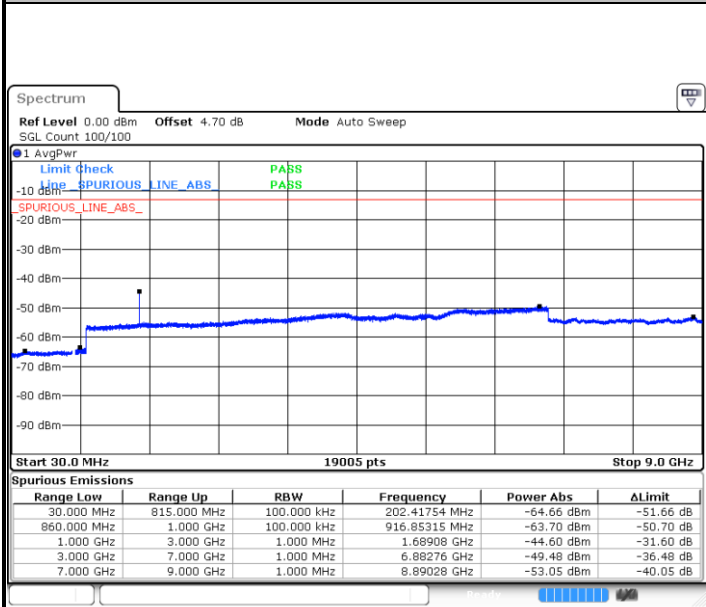
Date: 30 DEC 2019 11:44:24

**Middle Channel / 64QAM**



Date: 30 DEC 2019 11:45:17

**Highest Channel / 64QAM**



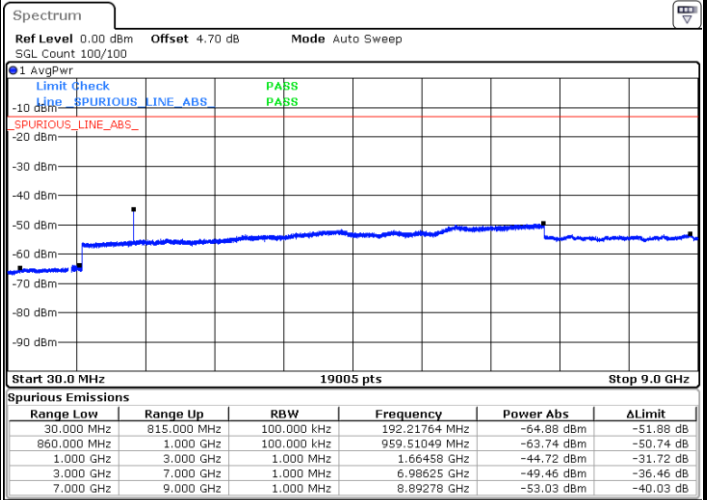
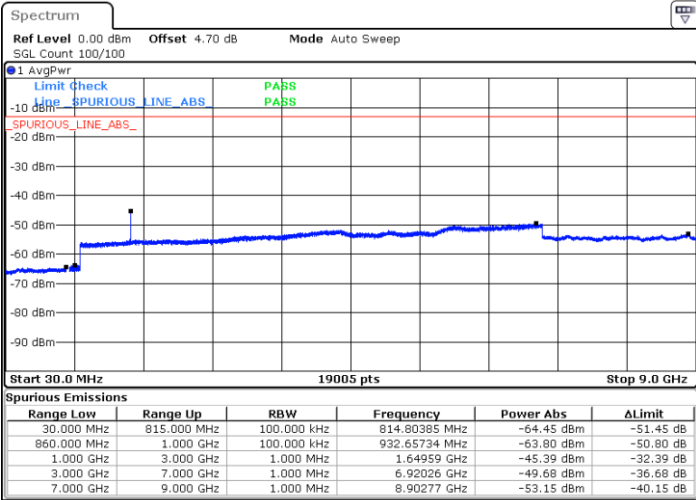
Date: 30 DEC 2019 11:50:07



LTE Band 5 / 10MHz

Lowest Channel / 64QAM

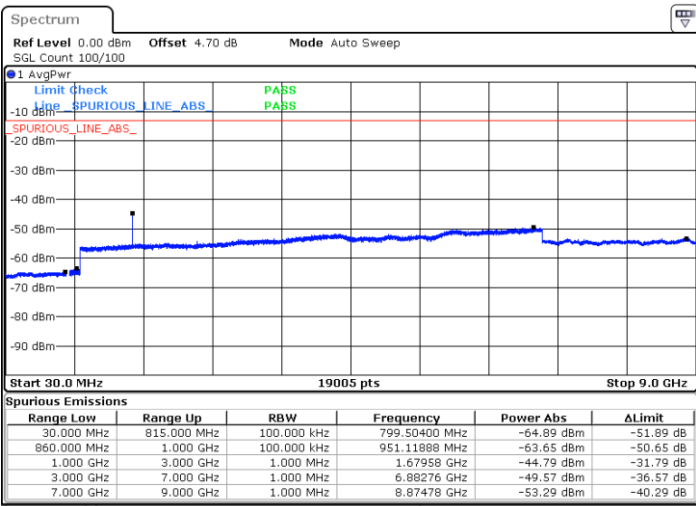
Middle Channel / 64QAM



Date: 30 DEC 2019 11:54:38

Date: 30 DEC 2019 11:55:32

Highest Channel / 64QAM



Date: 30 DEC 2019 11:59:52



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0030	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0056	
0	Normal Voltage	0.0059	
-10	Normal Voltage	0.0041	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0051	
20	Normal Voltage	0.0060	
20	Battery End Point	0.0012	

Note: Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.





# LTE Band 7

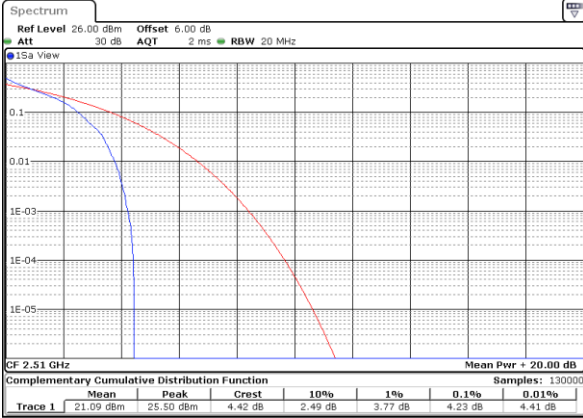
## Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.23	4.81	5.54	5.80	<b>PASS</b>
Middle CH	5.13	5.39	6.23	6.29	
Highest CH	4.70	5.30	5.45	6.26	
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH	6.03	6.17	<b>PASS</b>		
Middle CH	6.58	6.52			
Highest CH	6.32	6.46			



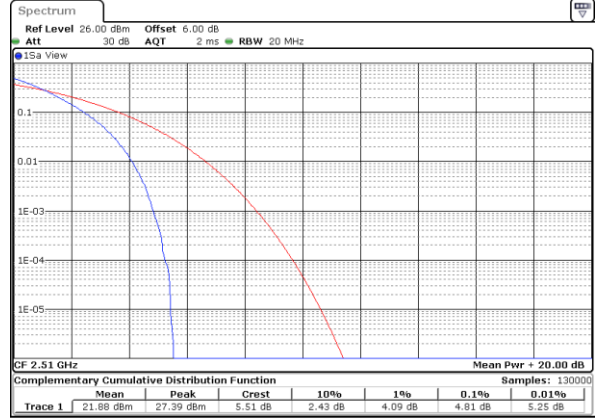
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



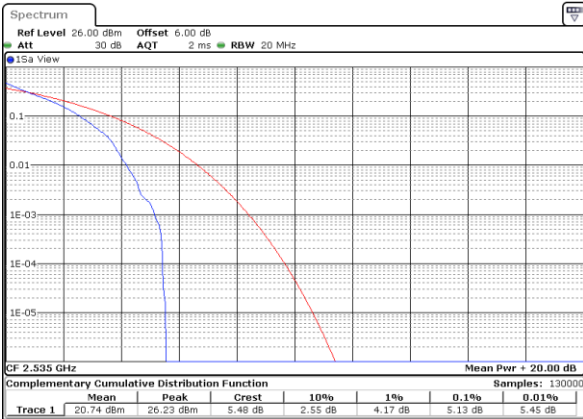
Date: 30 DEC 2019 14:47:19

Lowest Channel / Full RB



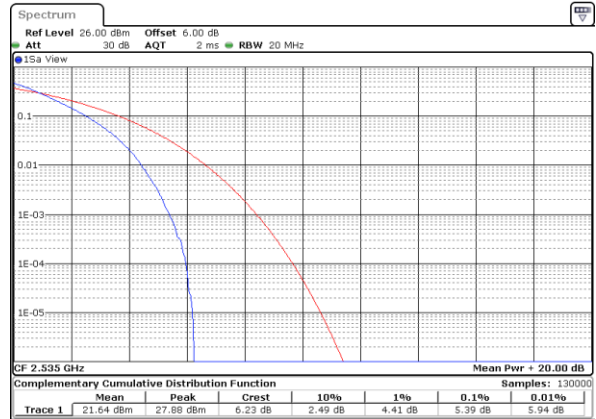
Date: 30 DEC 2019 14:47:28

Middle Channel / 1RB



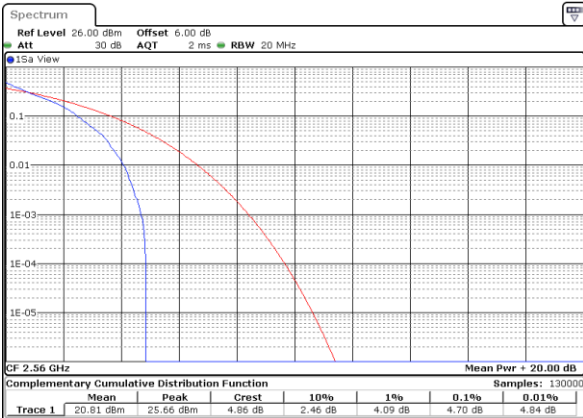
Date: 30 DEC 2019 14:48:03

Middle Channel / Full RB



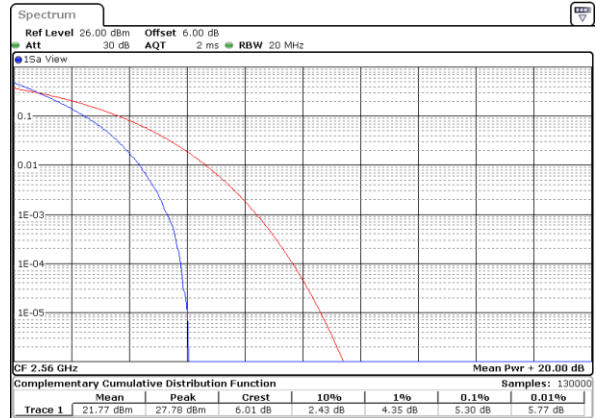
Date: 30 DEC 2019 14:47:55

Highest Channel / 1RB



Date: 30 DEC 2019 14:48:33

Highest Channel / Full RB

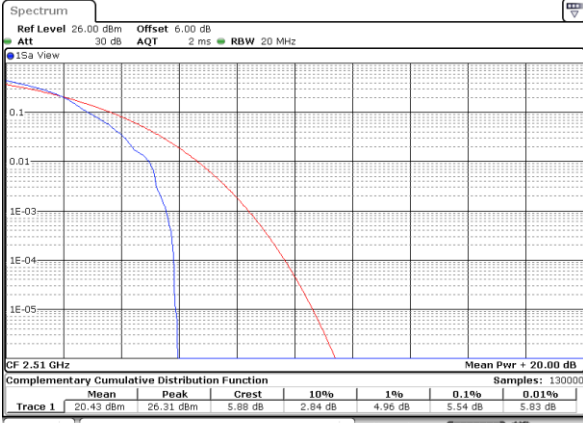


Date: 30 DEC 2019 14:48:43



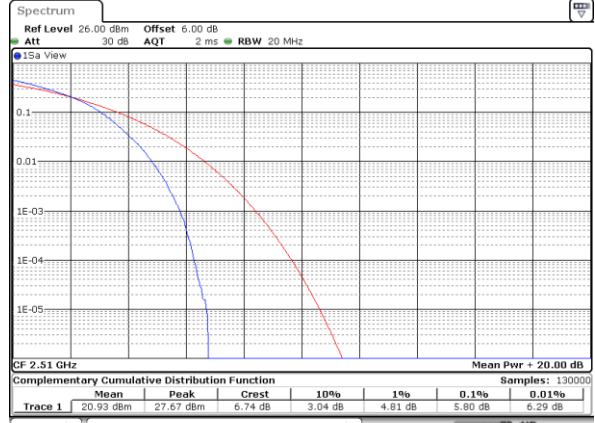
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



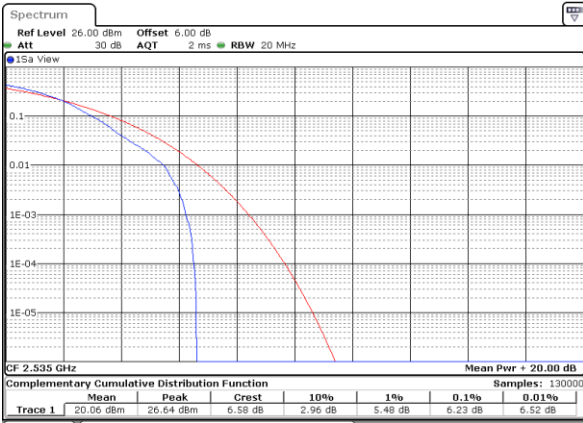
Date: 30 DEC 2019 14:47:09

Lowest Channel / Full RB



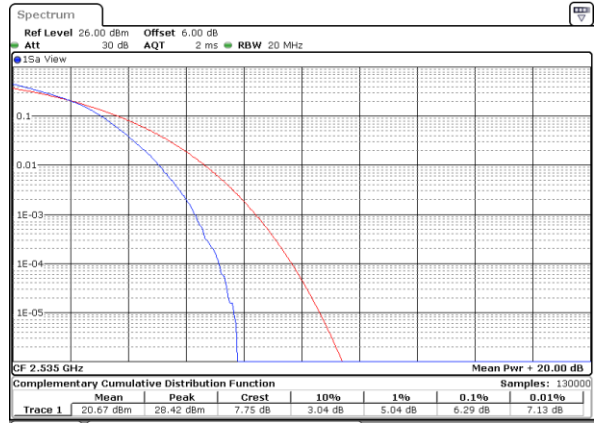
Date: 30 DEC 2019 14:47:36

Middle Channel / 1RB



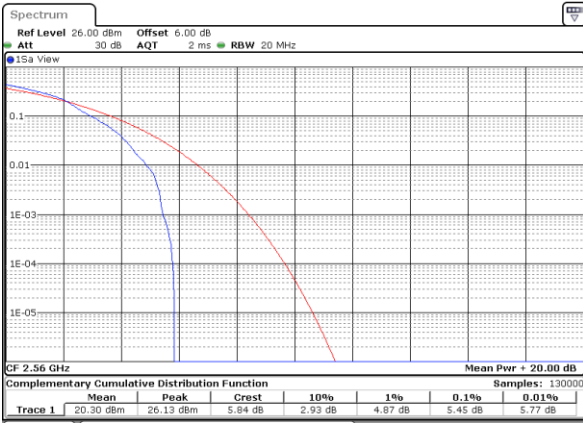
Date: 30 DEC 2019 14:48:12

Middle Channel / Full RB



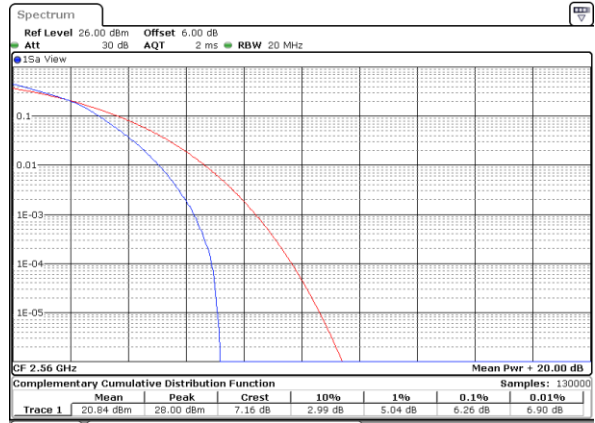
Date: 30 DEC 2019 14:47:45

Highest Channel / 1RB



Date: 30 DEC 2019 14:48:21

Highest Channel / Full RB

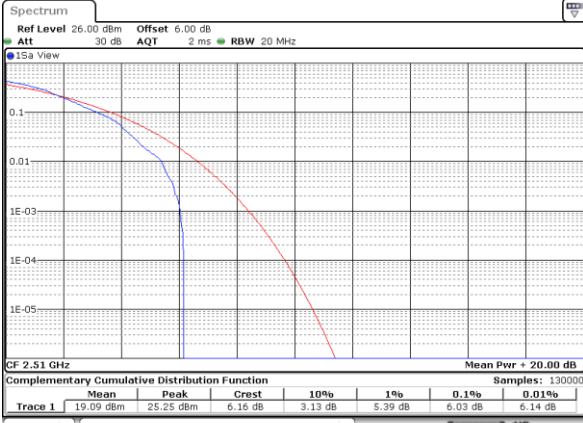


Date: 30 DEC 2019 14:48:56



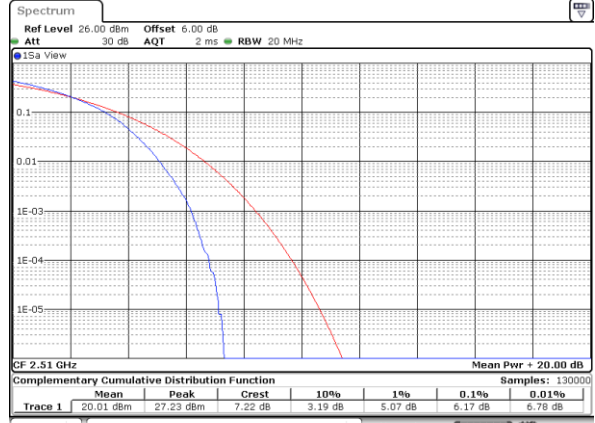
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



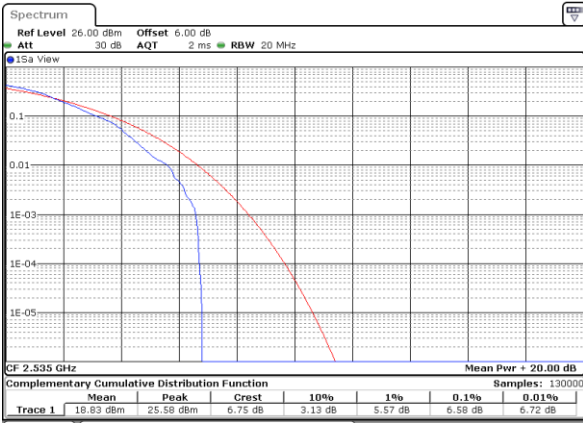
Date: 30 DEC 2019 14:55:43

Lowest Channel / Full RB



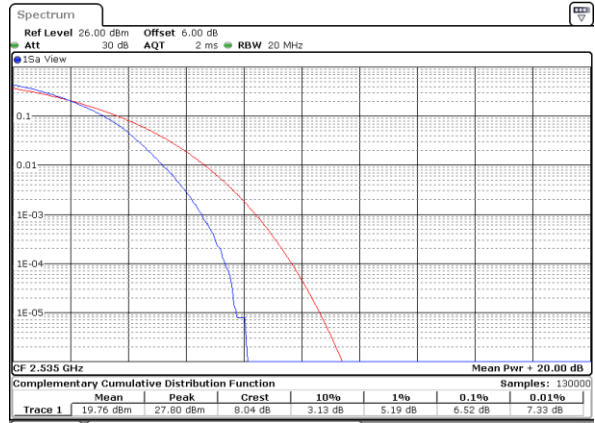
Date: 30 DEC 2019 14:55:52

Middle Channel / 1RB



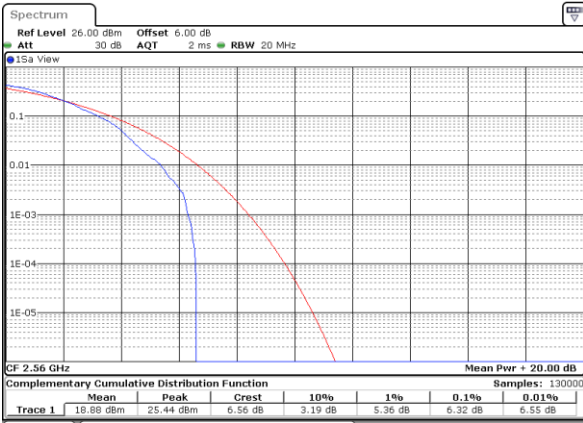
Date: 30 DEC 2019 14:56:13

Middle Channel / Full RB



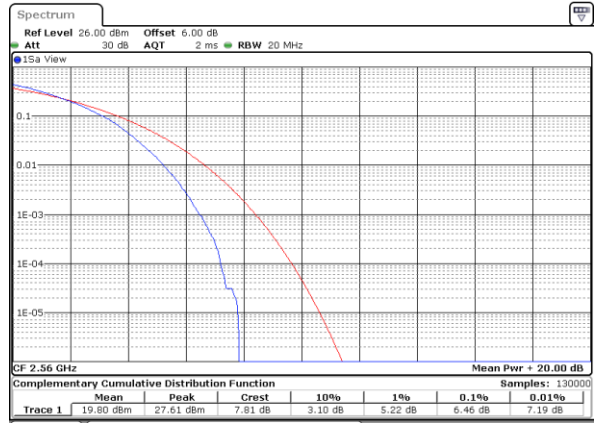
Date: 30 DEC 2019 14:56:04

Highest Channel / 1RB



Date: 30 DEC 2019 14:56:22

Highest Channel / Full RB



Date: 30 DEC 2019 14:56:31



26dB Bandwidth

Mode												
BW	5MHz		10MHz		15MHz		20MHz		5MHz	10MHz	15MHz	20MHz
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM	64QAM	64QAM
Lowest CH	4.845	4.885	9.81	9.67	14.236	14.266	20.1	19.98	4.865	9.83	14.416	20.18
Middle CH	4.845	4.825	9.65	9.73	14.356	14.206	20.22	20.1	4.815	9.73	14.296	20.1
Highest CH	4.815	4.845	9.67	9.85	14.416	14.446	20.22	20.14	4.855	9.77	14.236	20.1