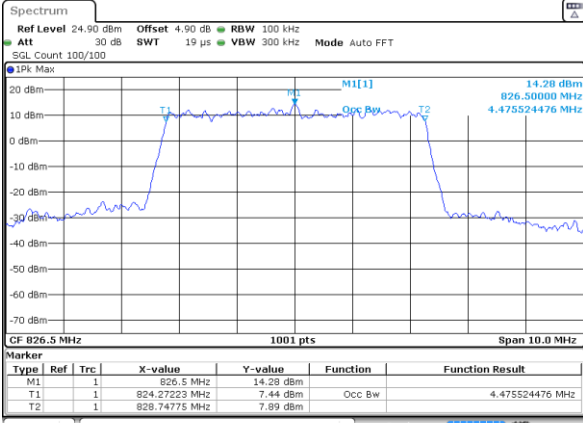




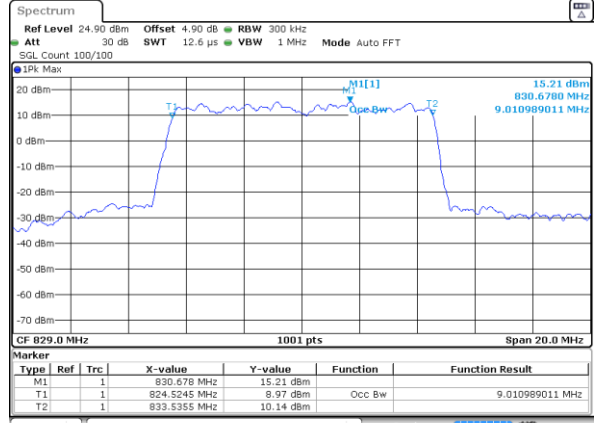
LTE Band 5

Lowest Channel / 5MHz / 64QAM



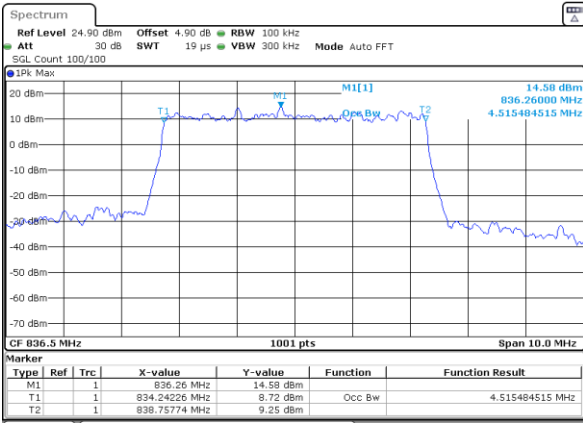
Date: 8 NOV 2019 13:27:53

Lowest Channel / 10MHz / 64QAM



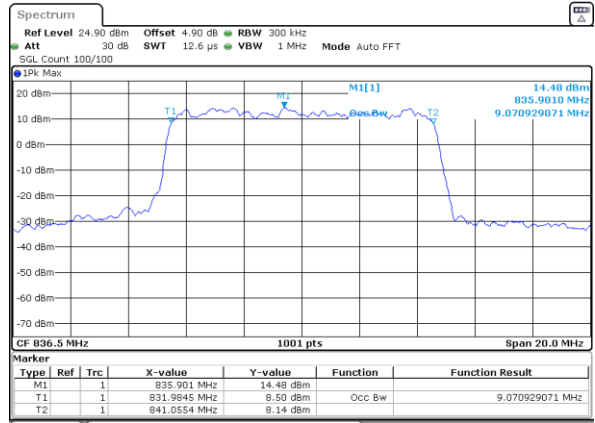
Date: 8 NOV 2019 13:38:06

Middle Channel / 5MHz / 64QAM



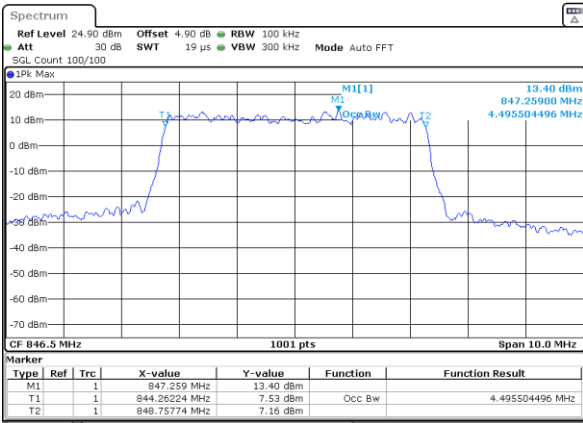
Date: 8 NOV 2019 13:33:16

Middle Channel / 10MHz / 64QAM



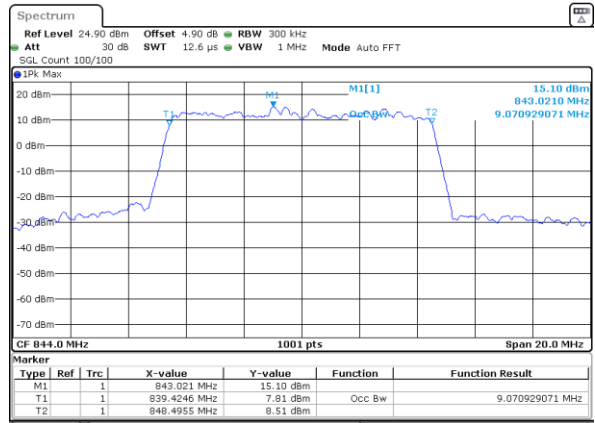
Date: 8 NOV 2019 13:43:29

Highest Channel / 5MHz / 64QAM



Date: 8 NOV 2019 13:33:37

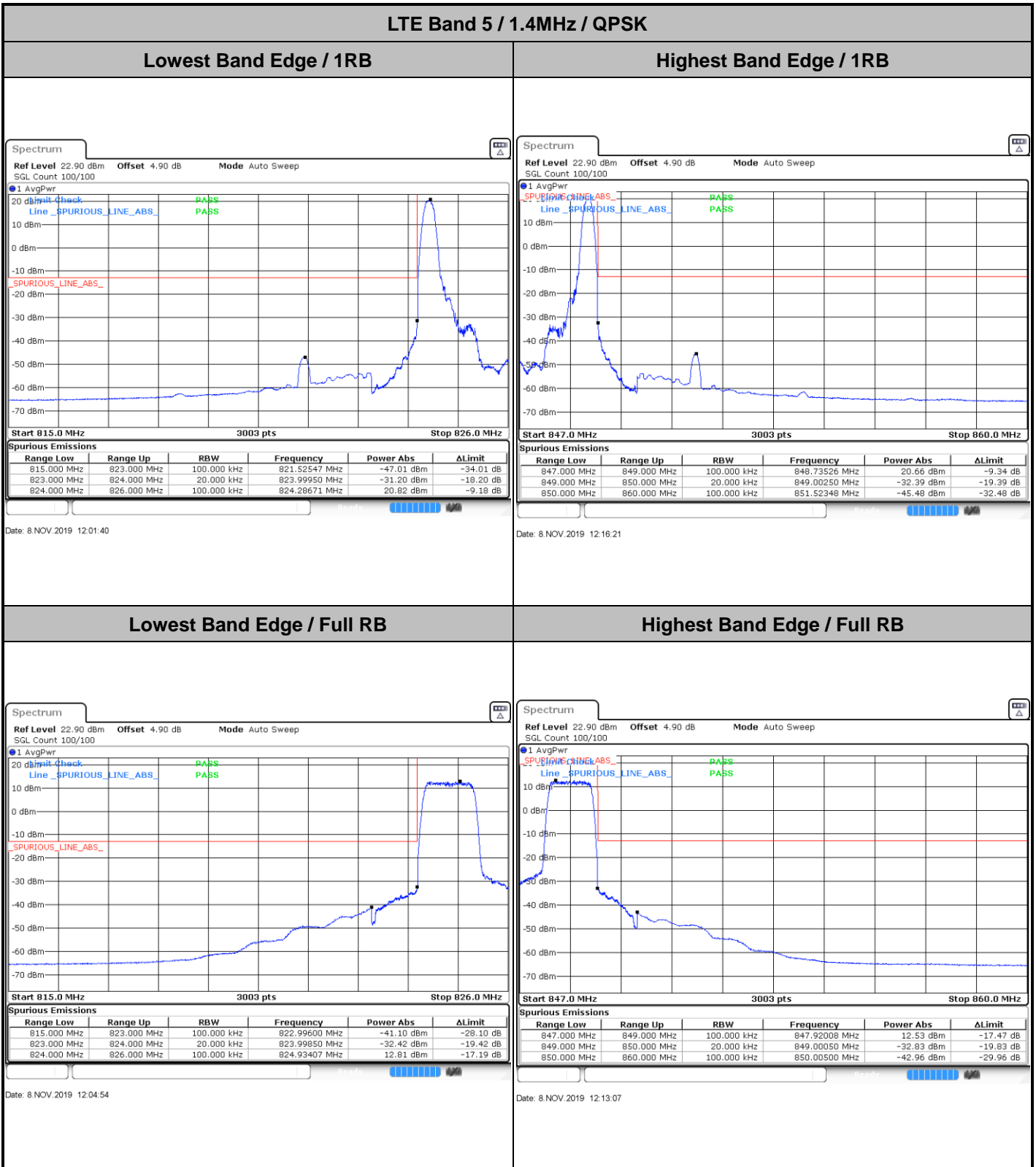
Highest Channel / 10MHz / 64QAM



Date: 8 NOV 2019 13:43:50



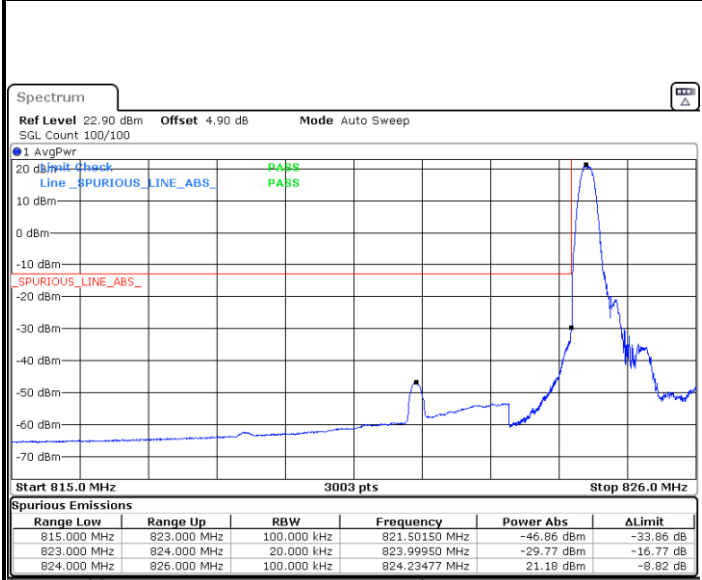
# Conducted Band Edge





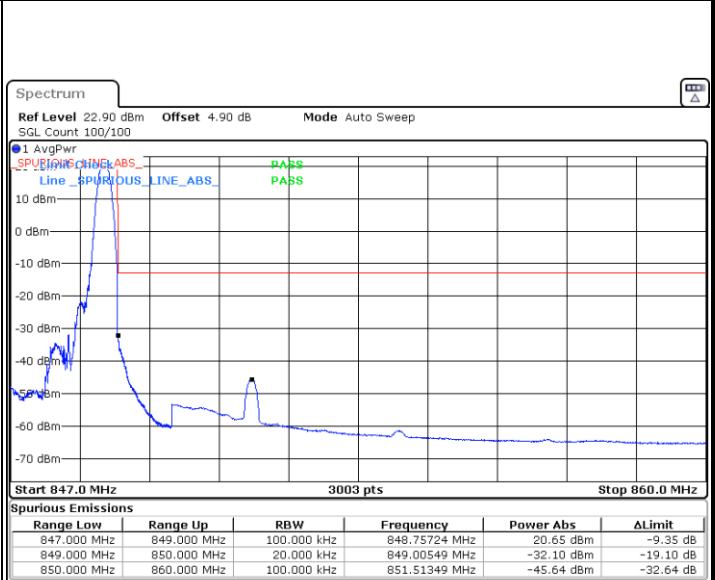
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



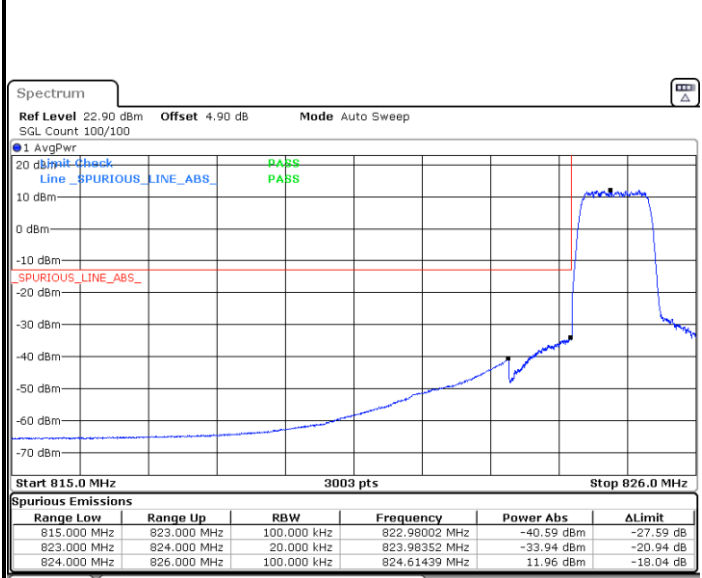
Date: 8 NOV 2019 12:03:17

Highest Band Edge / 1 RB



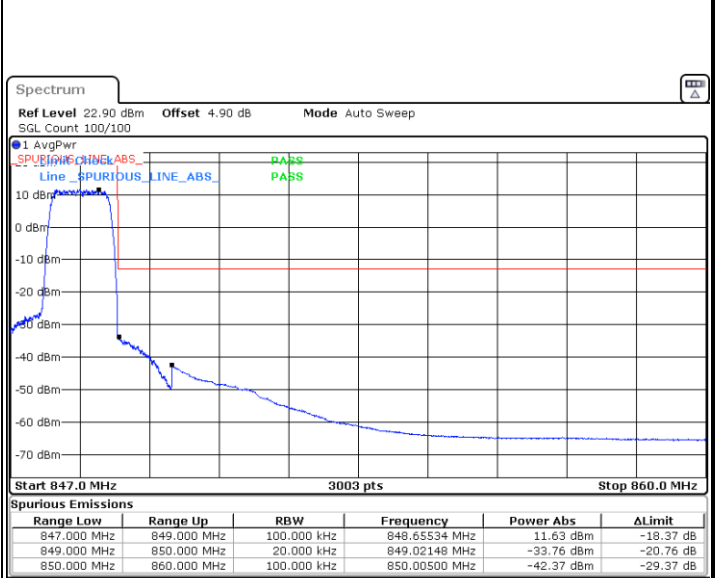
Date: 8 NOV 2019 12:17:59

Lowest Band Edge / Full RB



Date: 8 NOV 2019 12:06:32

Highest Band Edge / Full RB

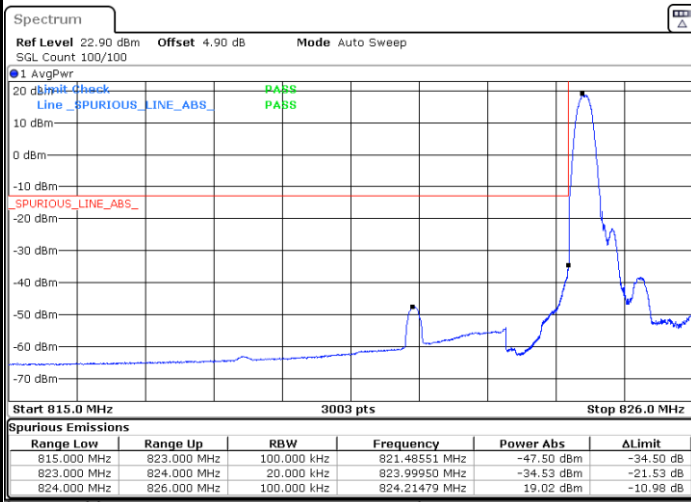


Date: 8 NOV 2019 12:14:44



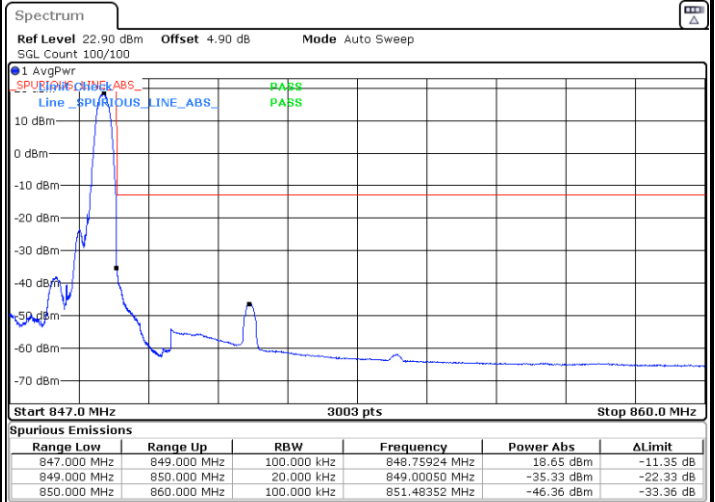
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



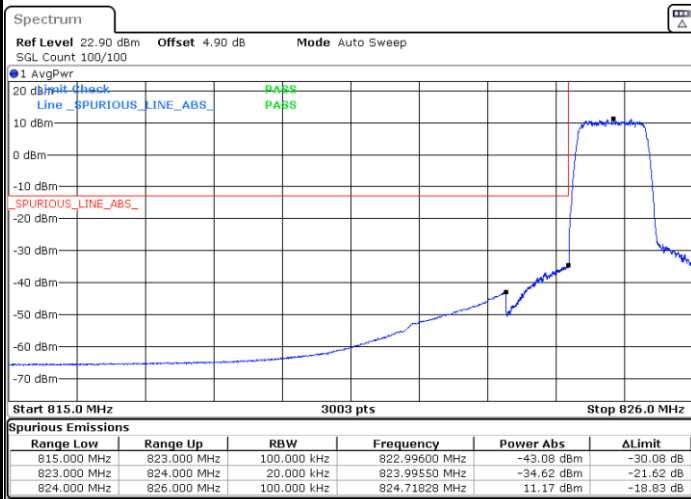
Date: 8 NOV. 2019 13:10:52

Highest Band Edge / 1 RB



Date: 8 NOV. 2019 13:16:36

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 13:09:14

Highest Band Edge / Full RB

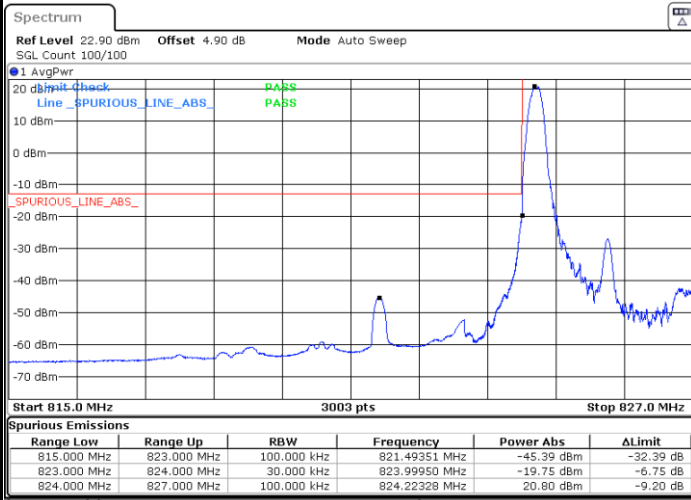


Date: 8 NOV. 2019 13:14:58



LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



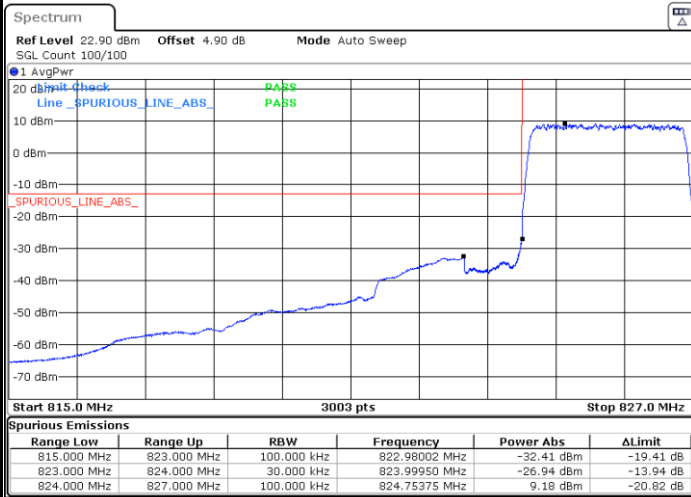
Date: 8 NOV. 2019 14:17:44

Highest Band Edge / 1 RB



Date: 8 NOV. 2019 14:26:43

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 14:20:34

Highest Band Edge / Full RB

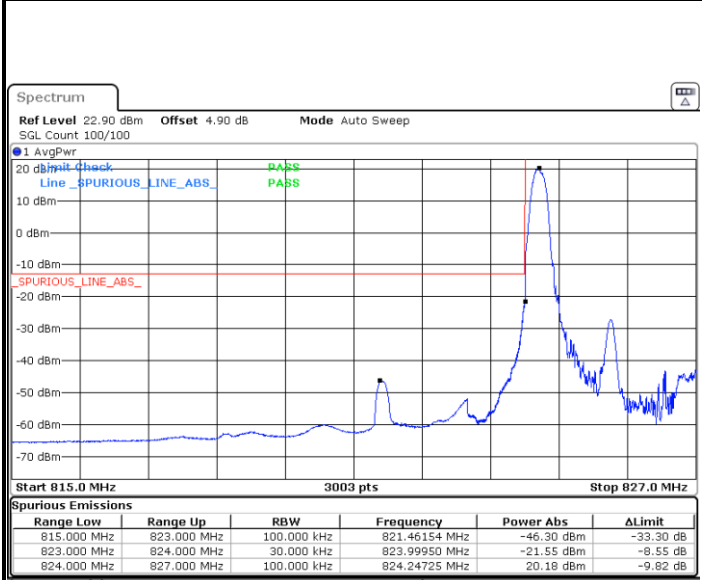


Date: 8 NOV. 2019 14:23:46



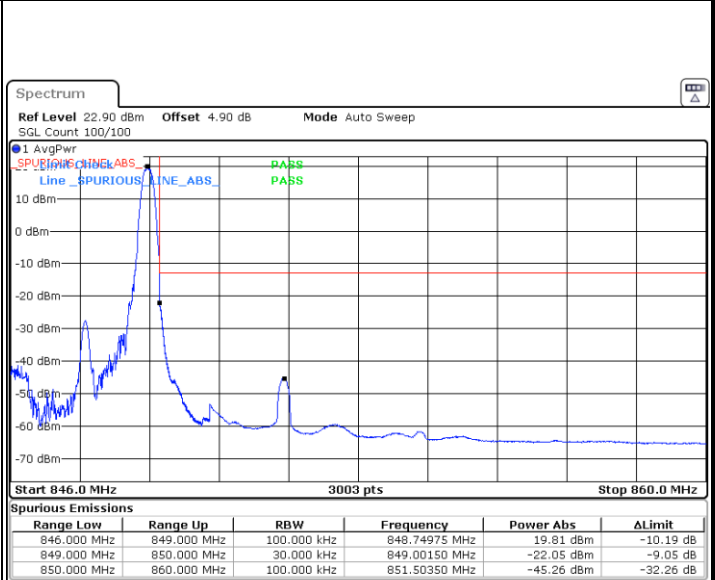
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



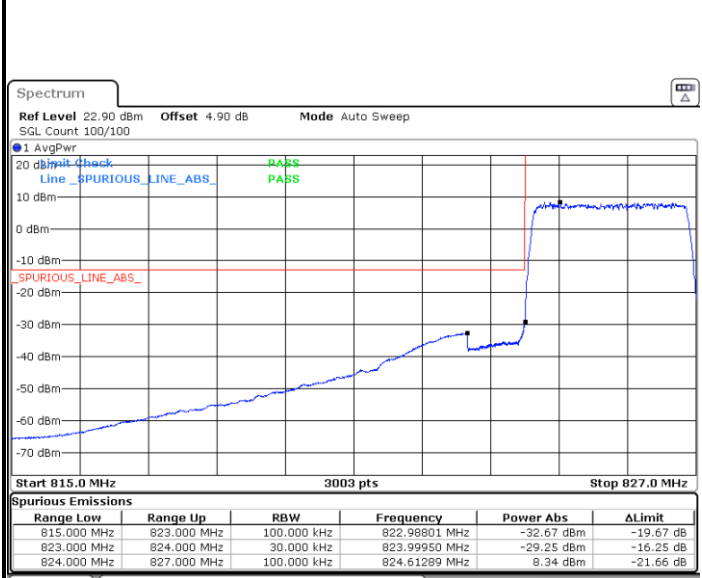
Date: 8 NOV. 2019 14:18:39

Highest Band Edge / 1 RB



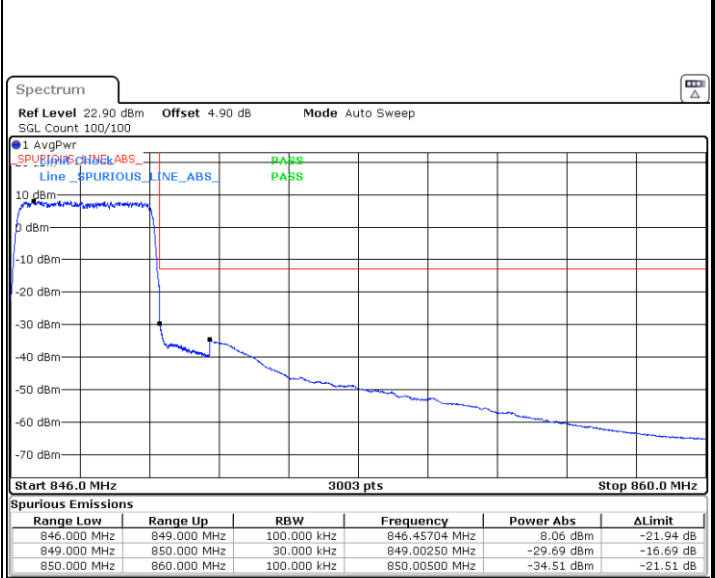
Date: 8 NOV. 2019 14:25:48

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 14:19:42

Highest Band Edge / Full RB

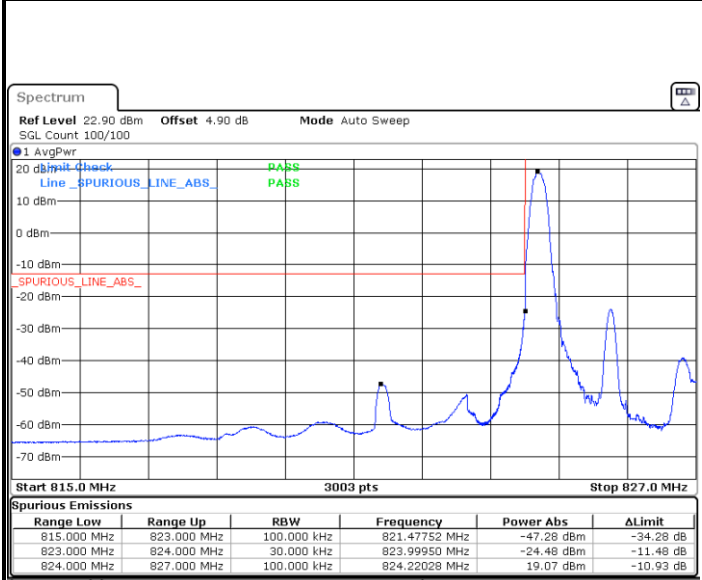


Date: 8 NOV. 2019 14:24:47



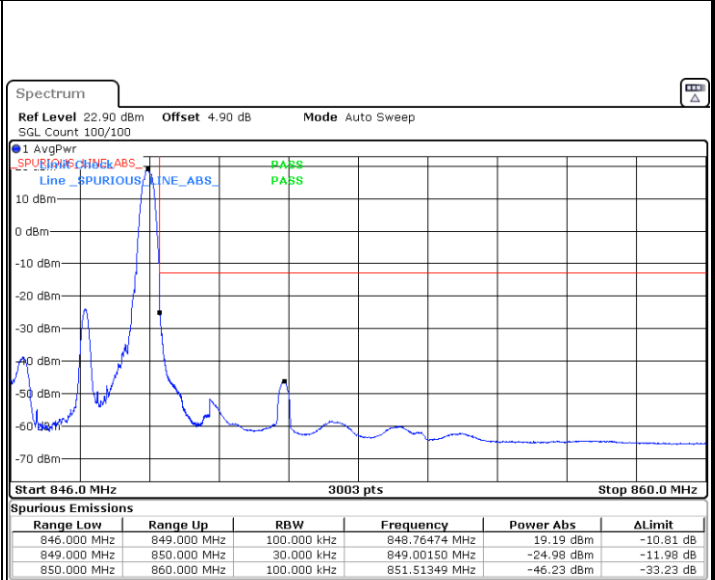
LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



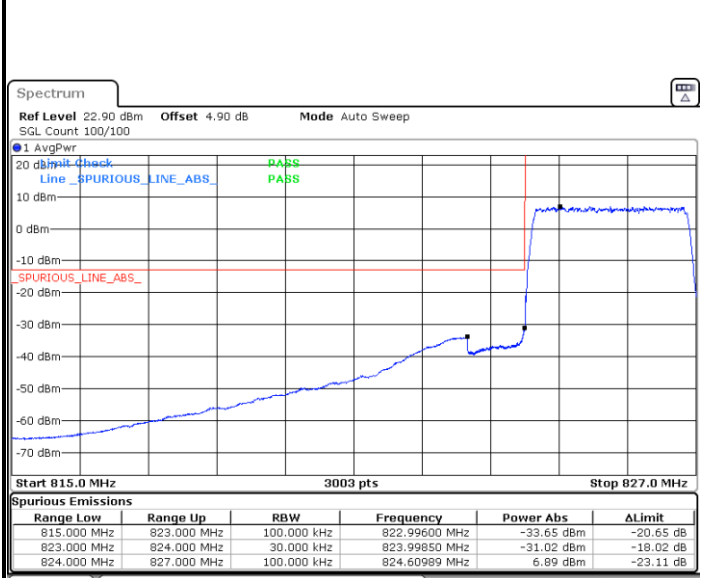
Date: 8 NOV. 2019 13:21:06

Highest Band Edge / 1 RB



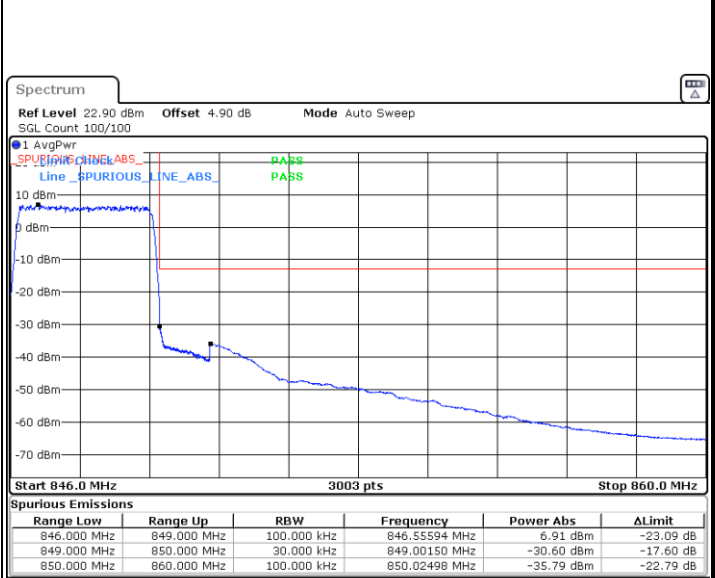
Date: 8 NOV. 2019 13:26:49

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 13:19:28

Highest Band Edge / Full RB

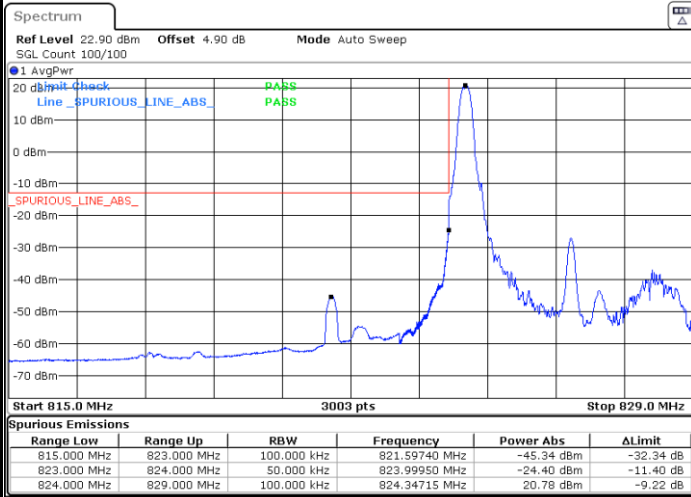


Date: 8 NOV. 2019 13:25:12



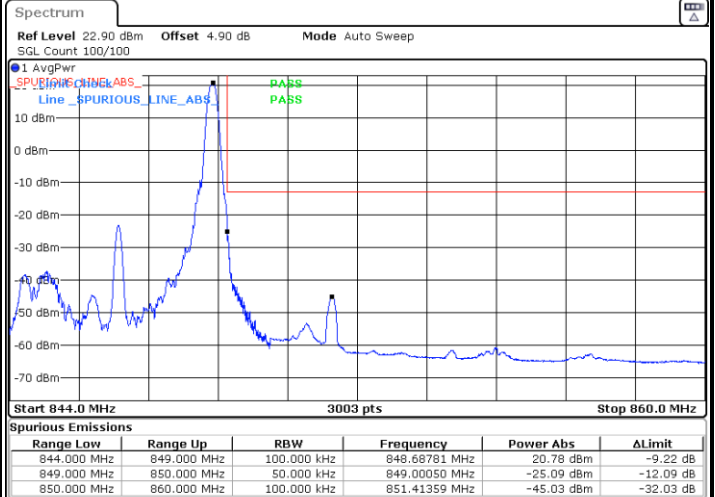
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



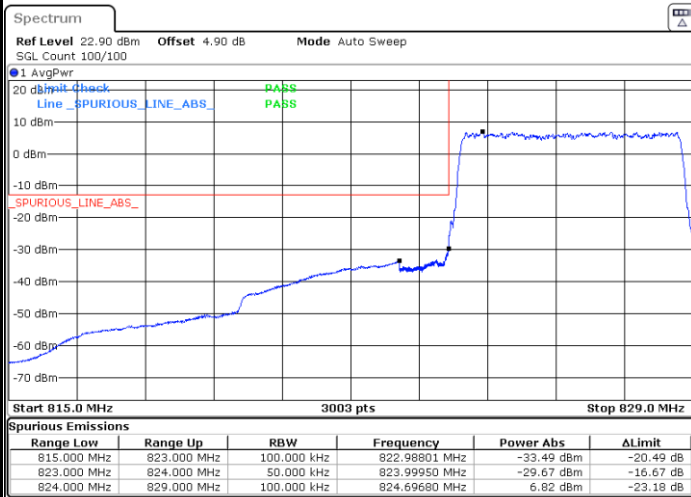
Date: 8 NOV. 2019 14:37:01

Highest Band Edge / 1 RB



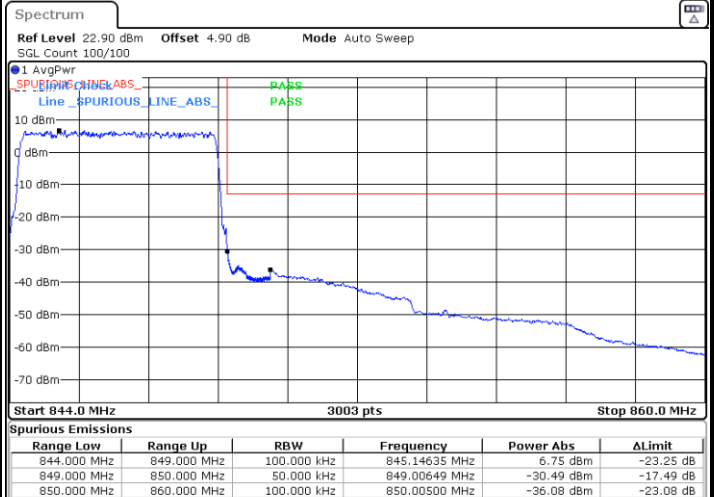
Date: 8 NOV. 2019 12:26:08

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 14:34:51

Highest Band Edge / Full RB



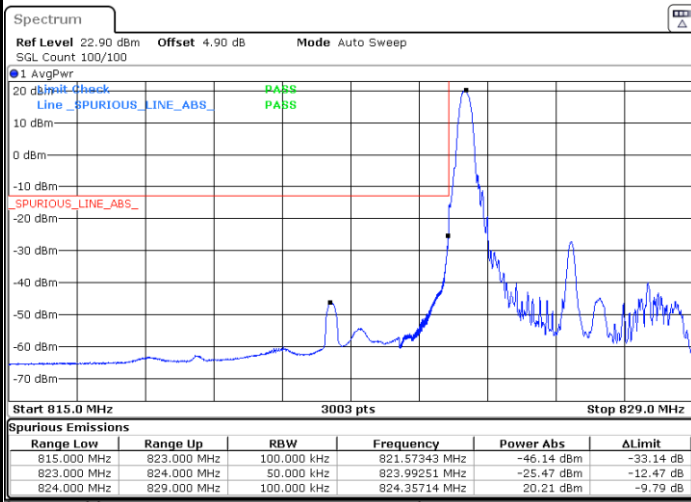
Date: 8 NOV. 2019 12:29:23





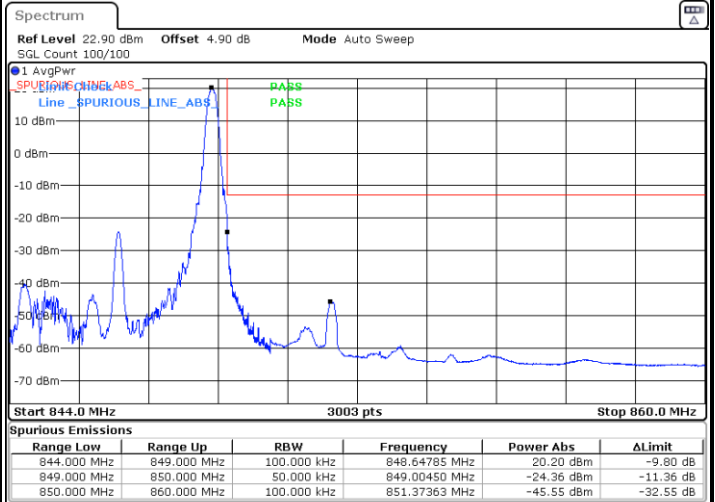
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



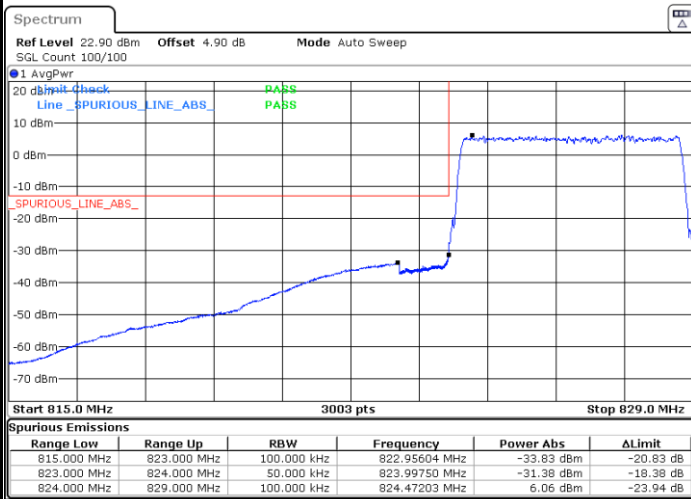
Date: 8 NOV. 2019 14:36:22

Highest Band Edge / 1 RB



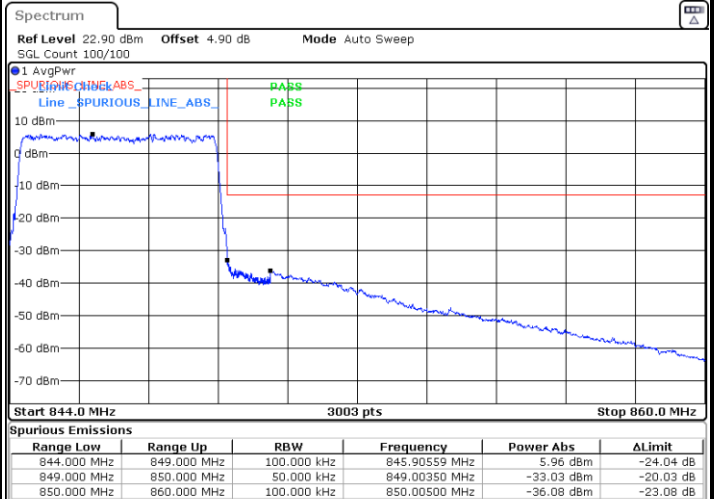
Date: 8 NOV. 2019 12:27:46

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 14:35:39

Highest Band Edge / Full RB

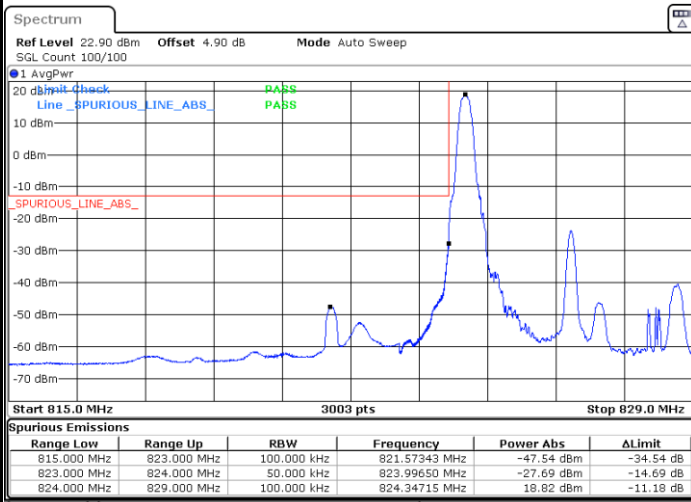


Date: 8 NOV. 2019 12:31:00



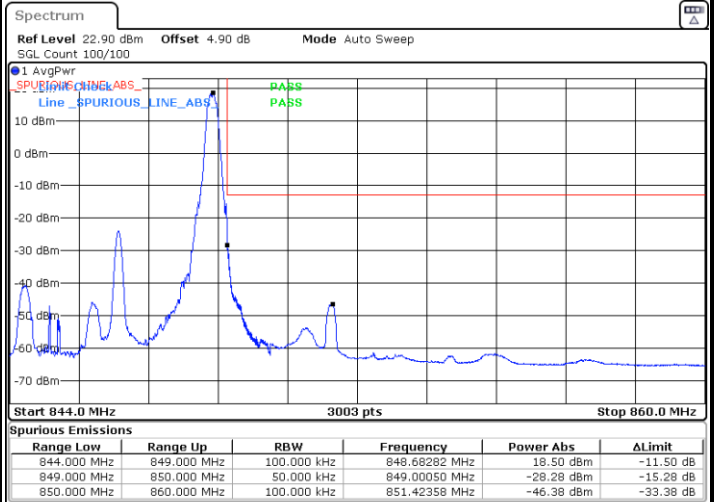
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / 1RB



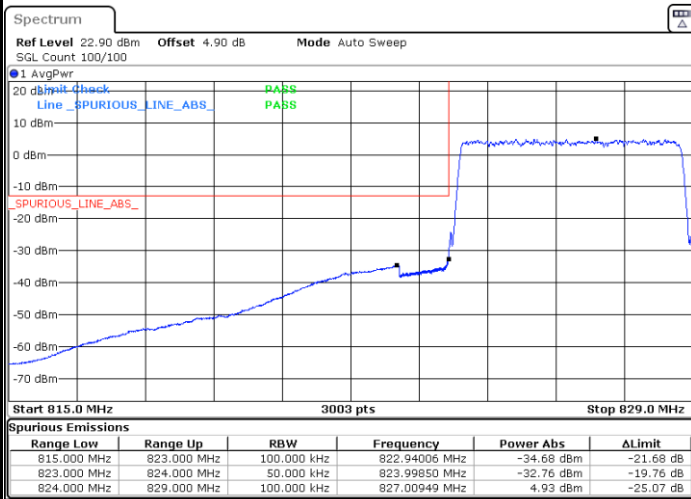
Date: 8 NOV. 2019 13:31:19

Highest Band Edge / 1 RB



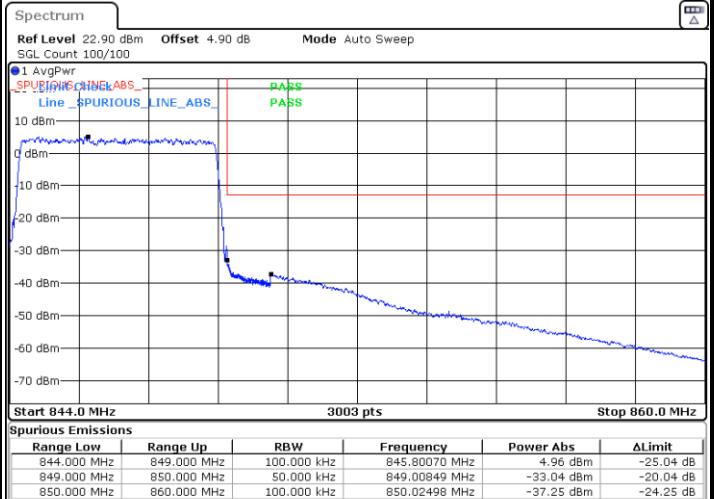
Date: 8 NOV. 2019 13:37:02

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 13:29:41

Highest Band Edge / Full RB

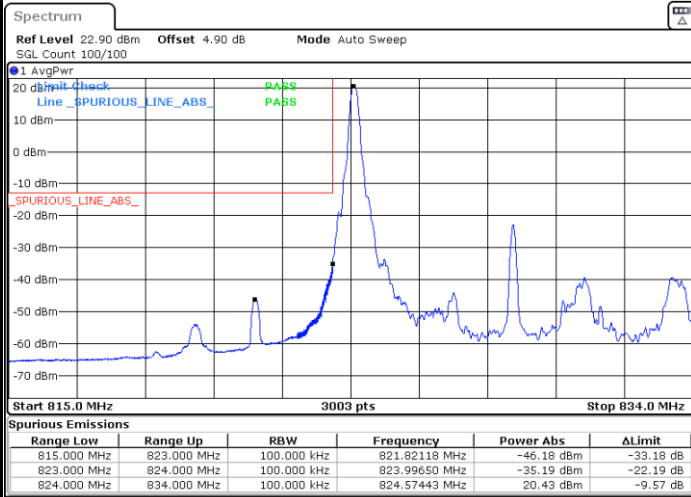


Date: 8 NOV. 2019 13:35:25



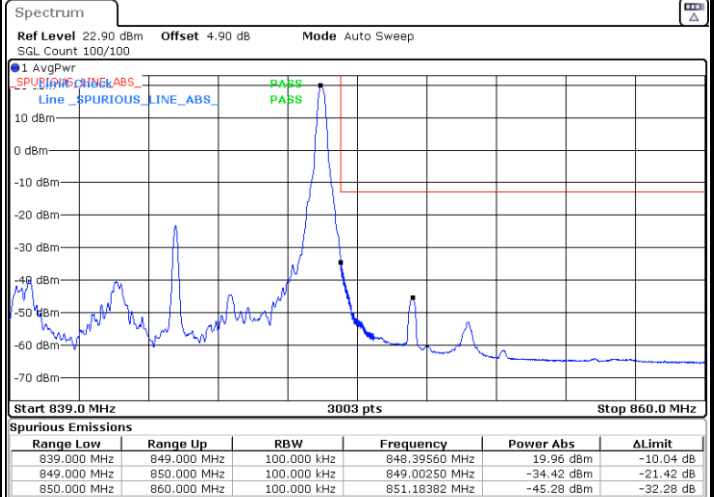
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



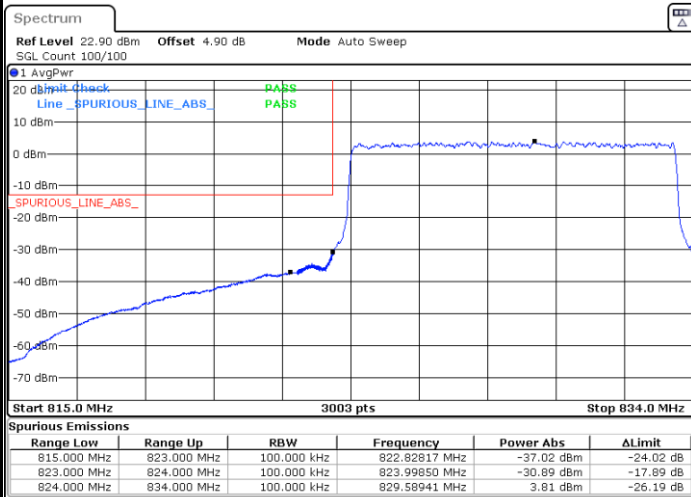
Date: 8 NOV. 2019 12:35:06

Highest Band Edge / 1 RB



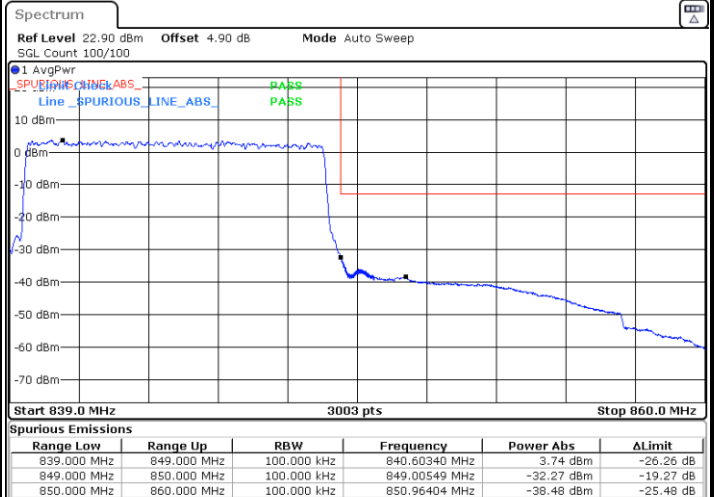
Date: 8 NOV. 2019 12:46:33

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 12:38:21

Highest Band Edge / Full RB

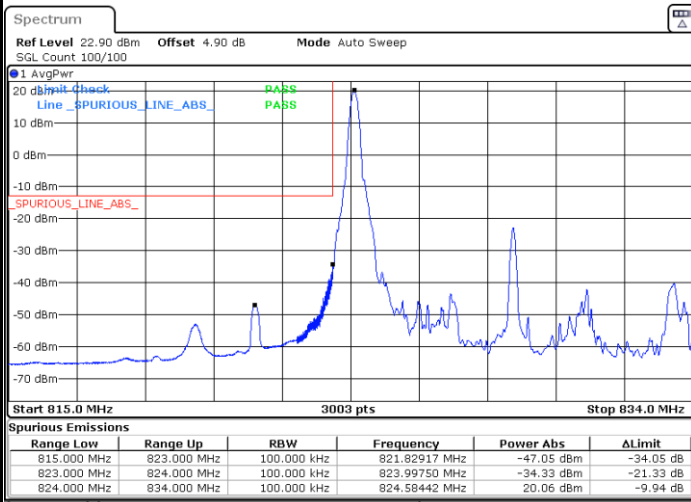


Date: 8 NOV. 2019 12:49:48



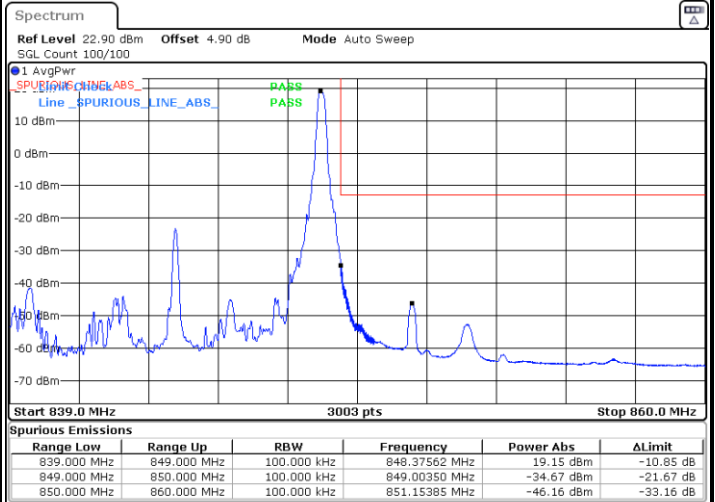
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



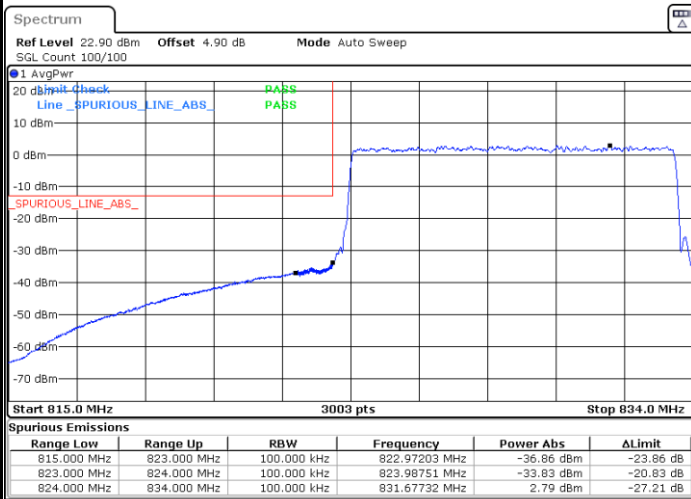
Date: 8 NOV. 2019 12:36:44

Highest Band Edge / 1 RB



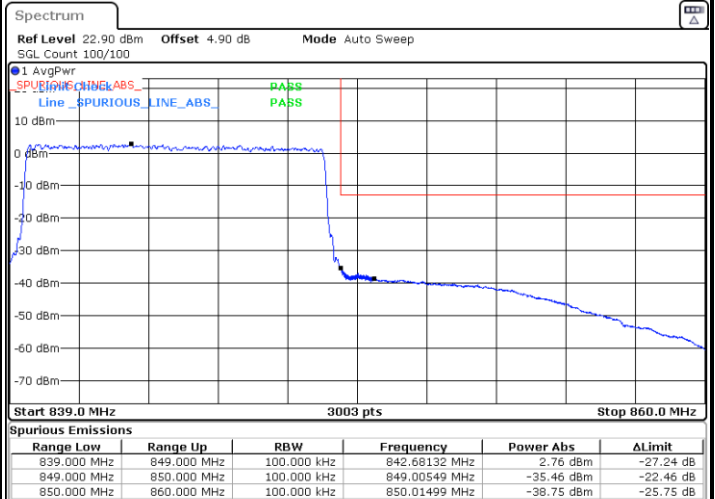
Date: 8 NOV. 2019 12:48:10

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 12:39:58

Highest Band Edge / Full RB

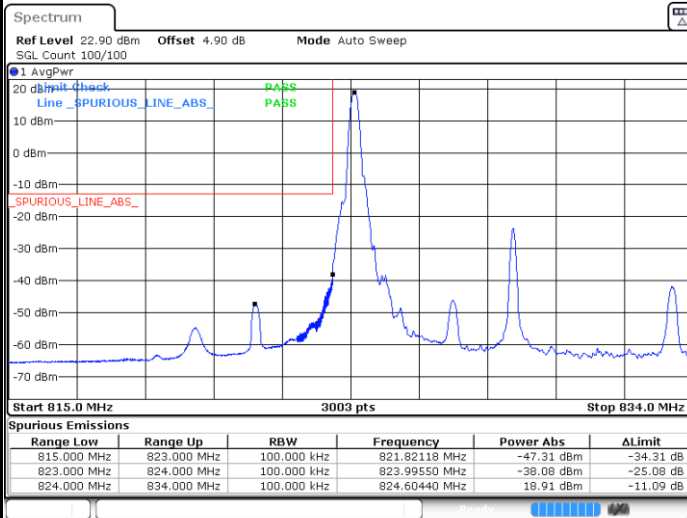


Date: 8 NOV. 2019 12:51:25



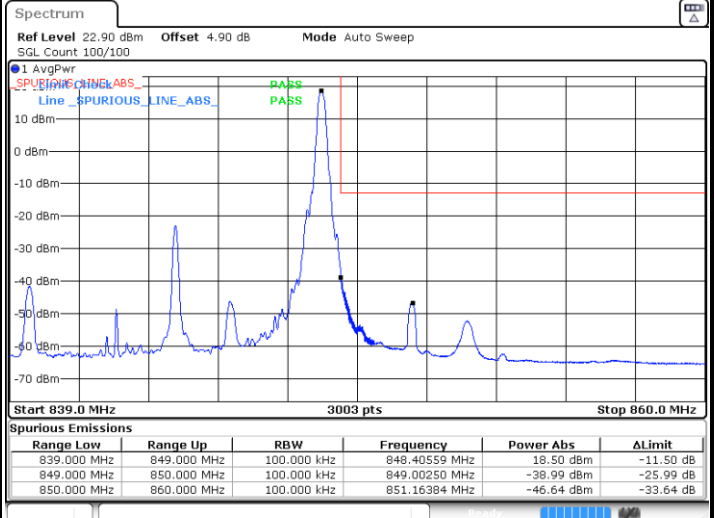
LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



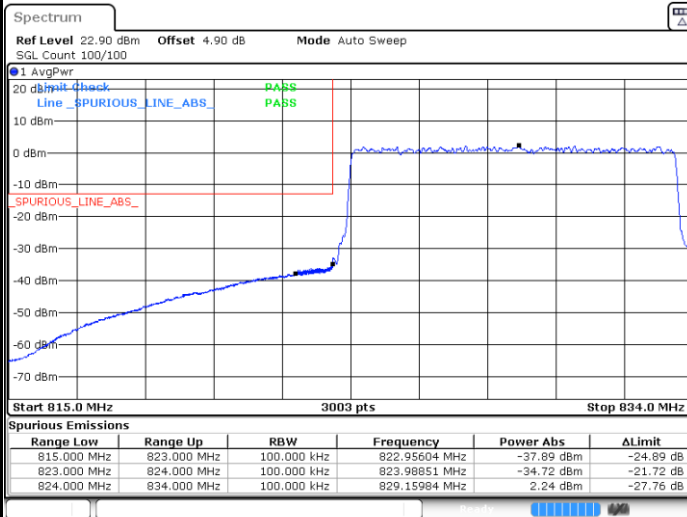
Date: 8 NOV. 2019 13:41:32

Highest Band Edge / 1 RB



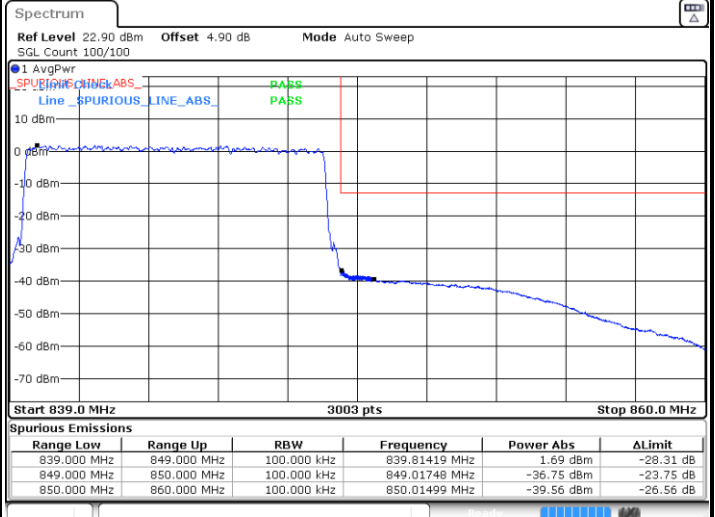
Date: 8 NOV. 2019 13:47:15

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 13:39:54

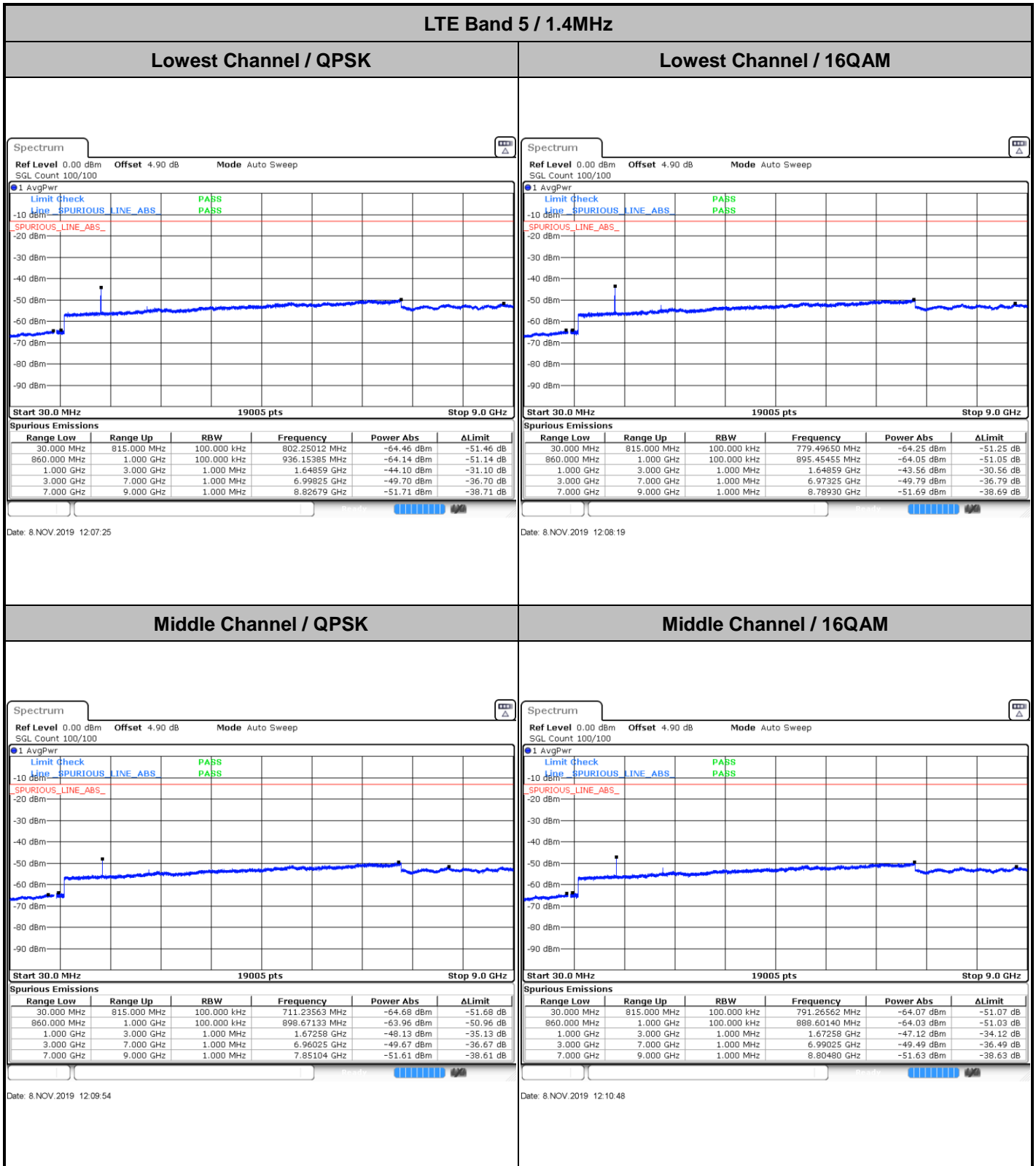
Highest Band Edge / Full RB



Date: 8 NOV. 2019 13:45:38



# Conducted Spurious Emission

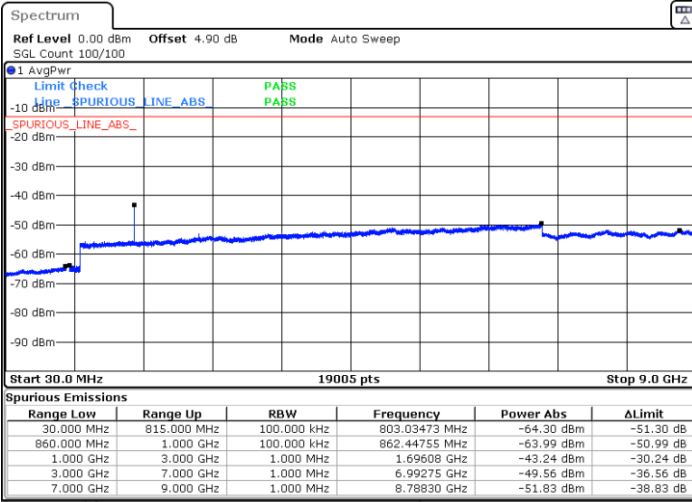




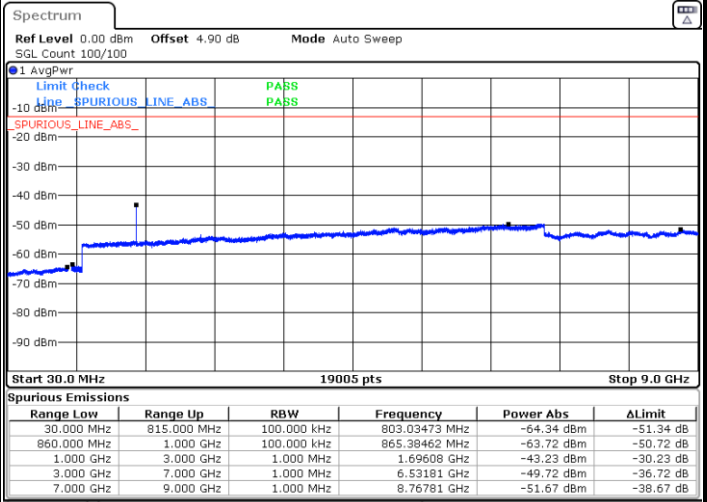
LTE Band 5 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 NOV. 2019 12:18:52

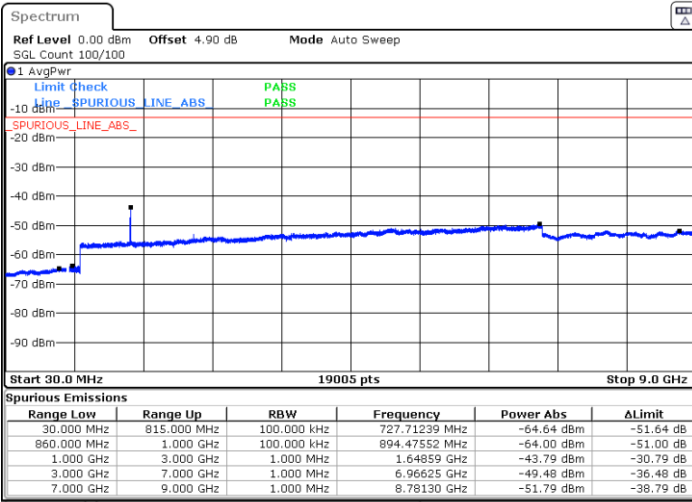


Date: 8 NOV. 2019 12:19:46

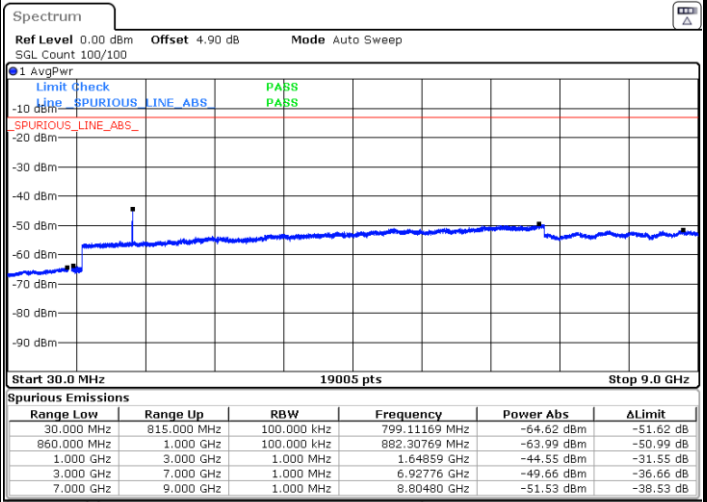
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 8 NOV. 2019 14:28:29



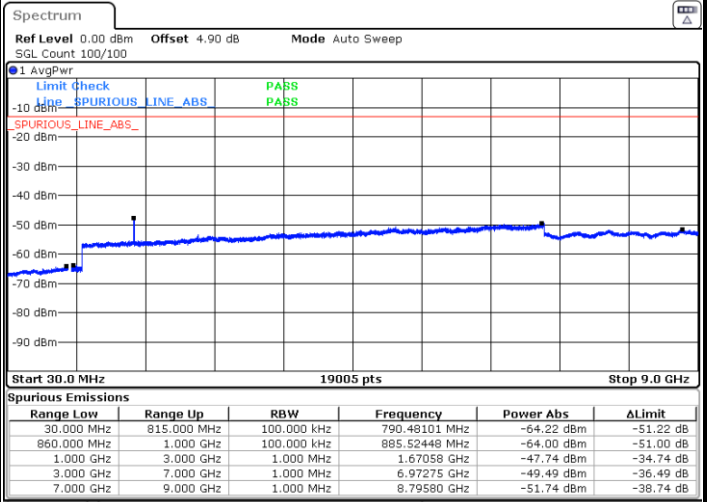
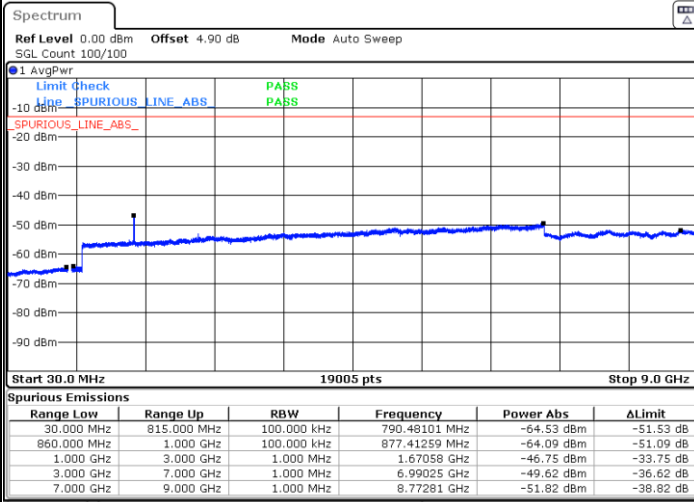
Date: 8 NOV. 2019 14:30:03



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

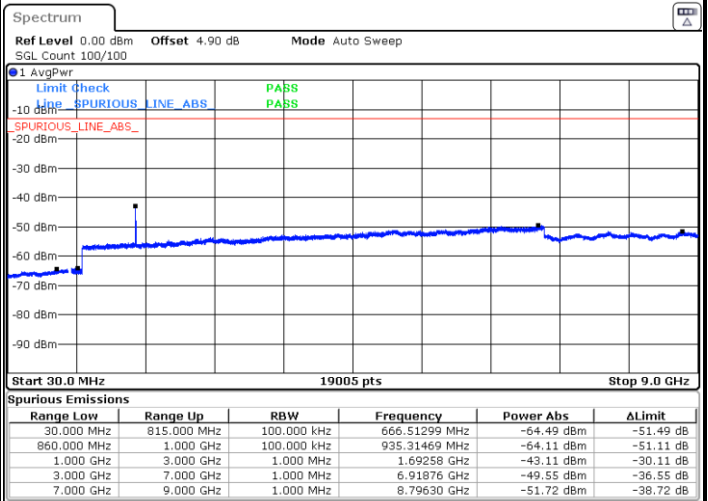
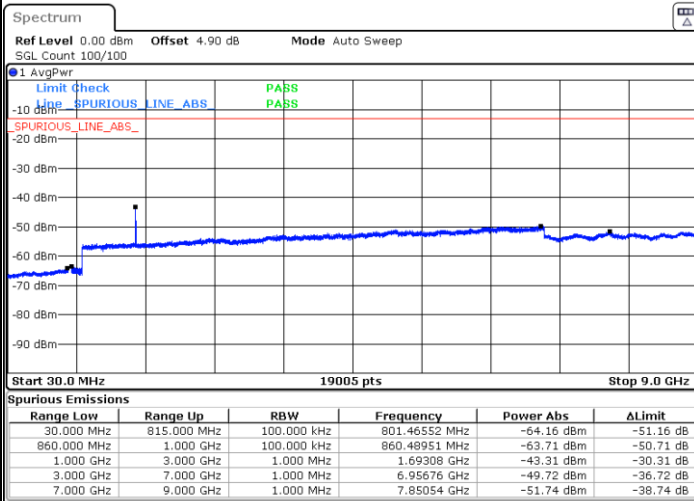


Date: 8 NOV.2019 14:31:00

Date: 8 NOV.2019 14:30:36

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 NOV.2019 14:31:27

Date: 8 NOV.2019 14:32:05

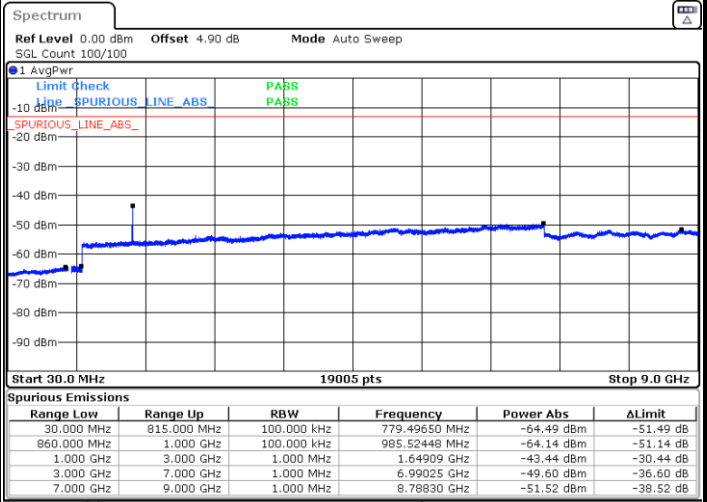
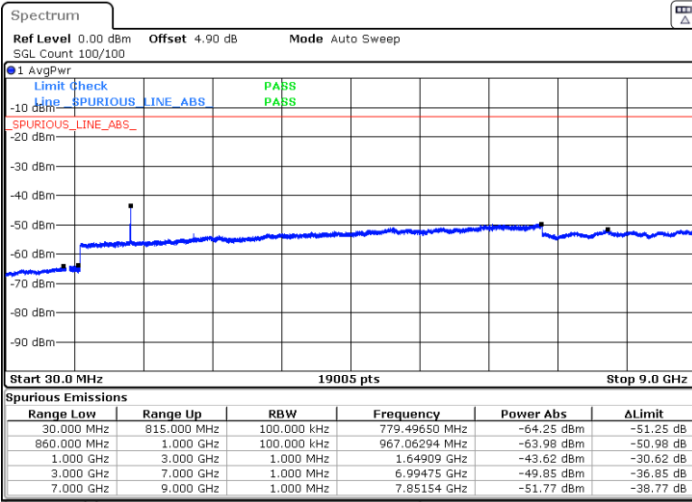




LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

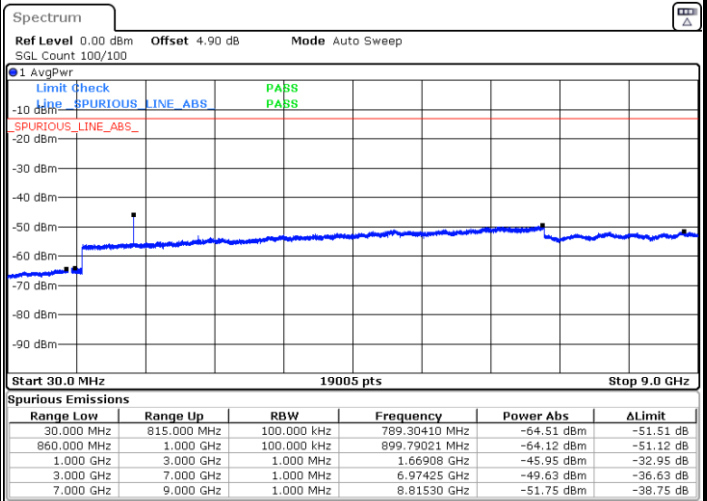
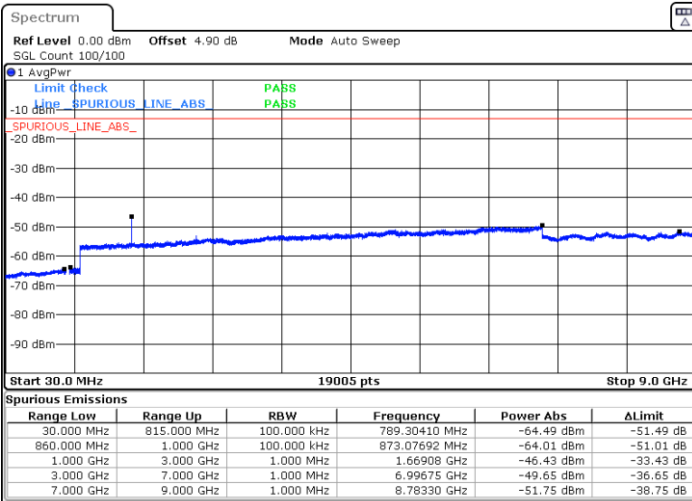


Date: 8 NOV.2019 14:37:25

Date: 8 NOV.2019 12:21:21

Middle Channel / QPSK

Middle Channel / 16QAM



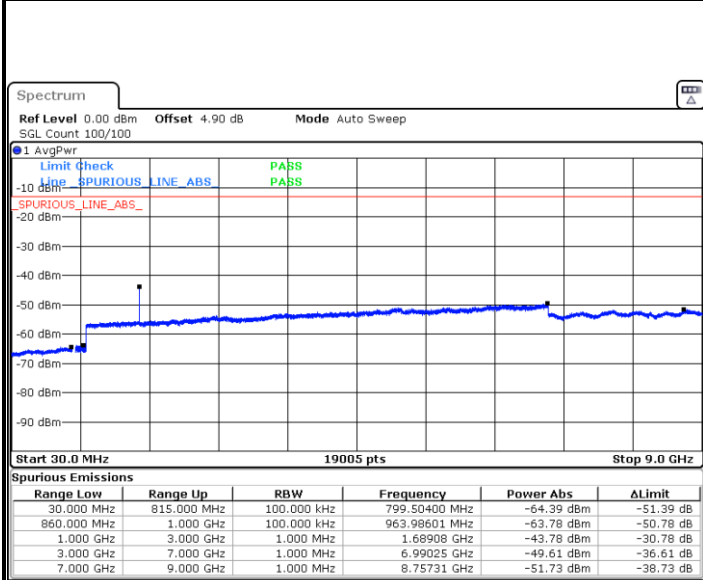
Date: 8 NOV.2019 12:22:56

Date: 8 NOV.2019 12:23:50



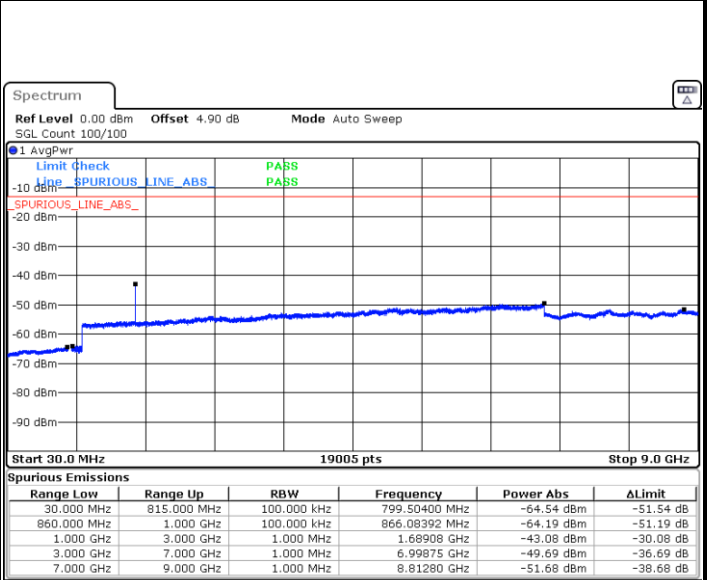
**LTE Band 5 / 5MHz**

**Highest Channel / QPSK**



Date: 8 NOV.2019 12:31:54

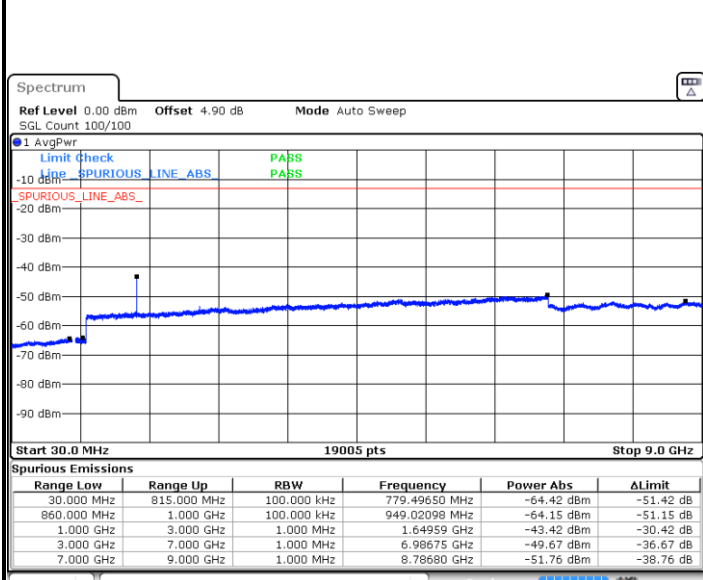
**Highest Channel / 16QAM**



Date: 8 NOV.2019 12:32:48

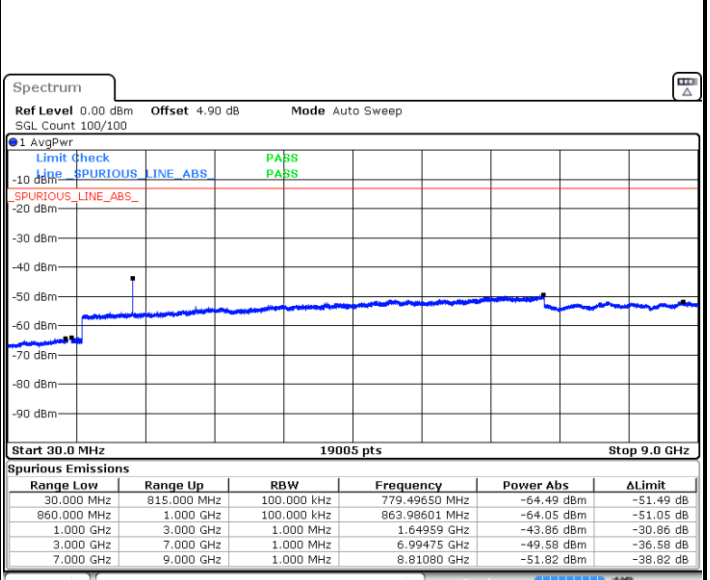
**LTE Band 5 / 10MHz**

**Lowest Channel / QPSK**



Date: 8 NOV.2019 12:40:52

**Lowest Channel / 16QAM**



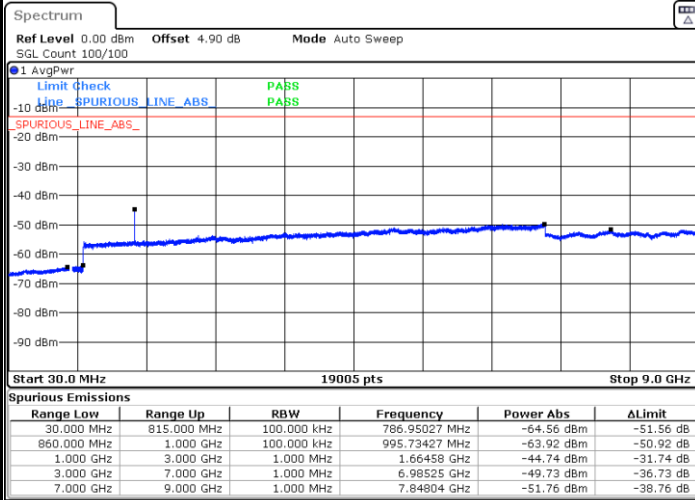
Date: 8 NOV.2019 12:41:46



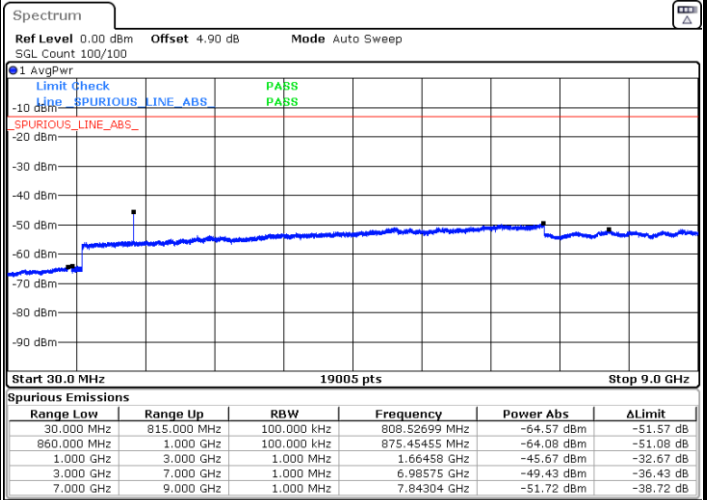
LTE Band 5 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



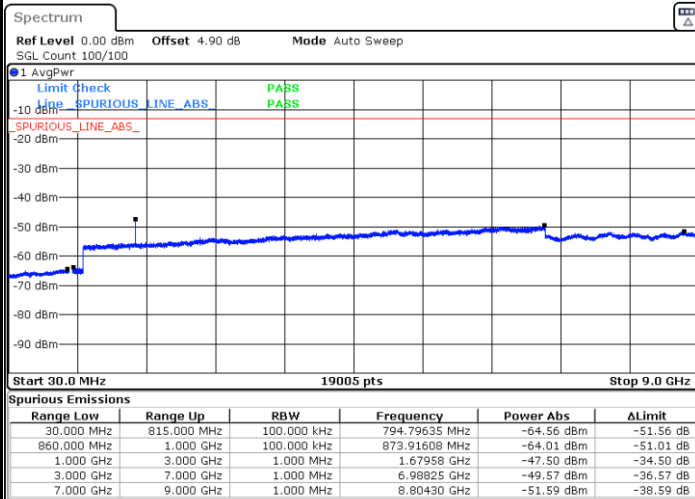
Date: 8 NOV.2019 12:43:20



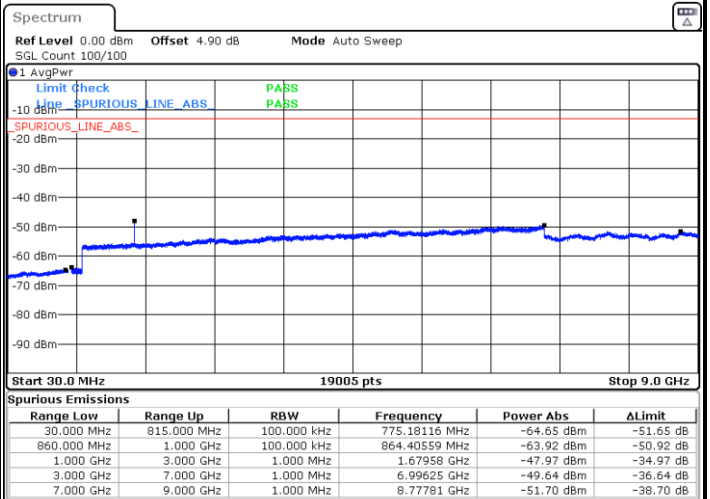
Date: 8 NOV.2019 12:44:14

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 NOV.2019 12:52:18

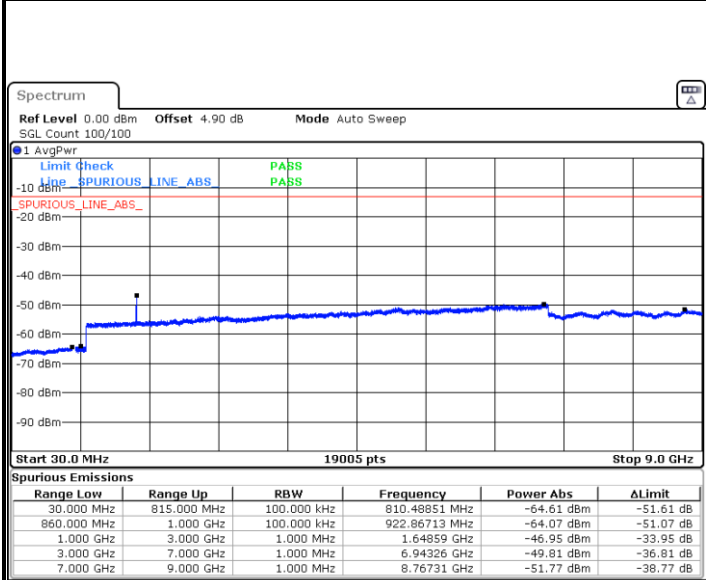


Date: 8 NOV.2019 12:53:12



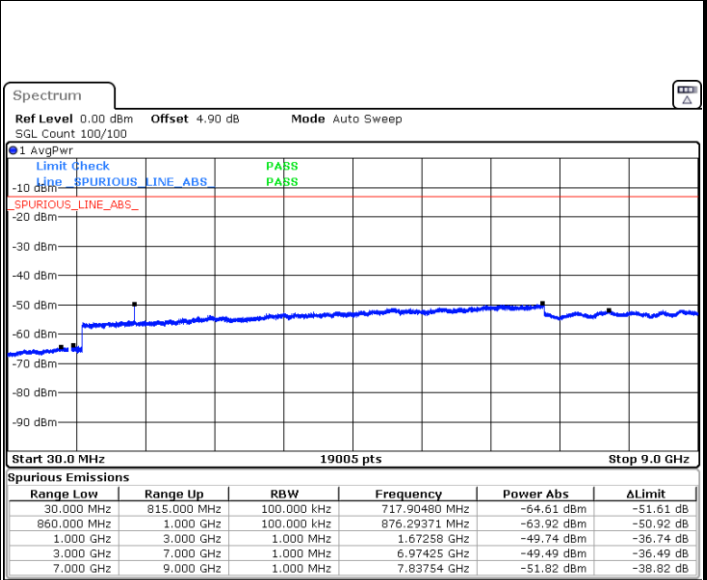
**LTE Band 5 / 1.4MHz**

**Lowest Channel / 64QAM**



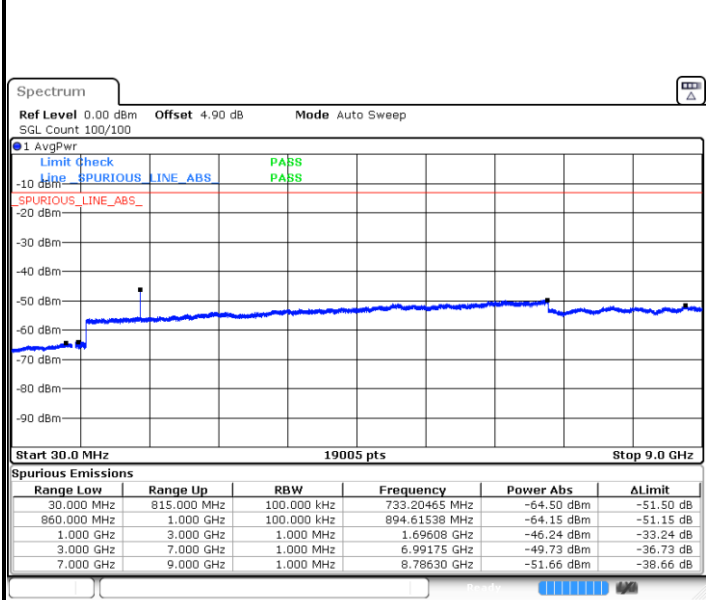
Date: 8.NOV.2019 13:11:45

**Middle Channel / 64QAM**



Date: 8.NOV.2019 13:12:39

**Highest Channel / 64QAM**



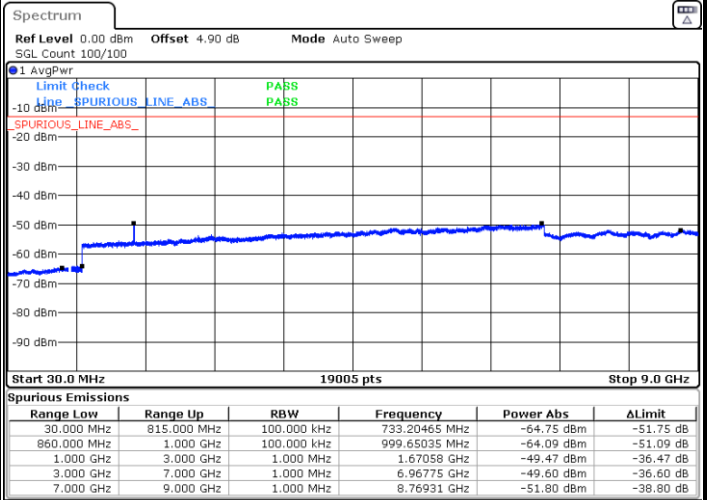
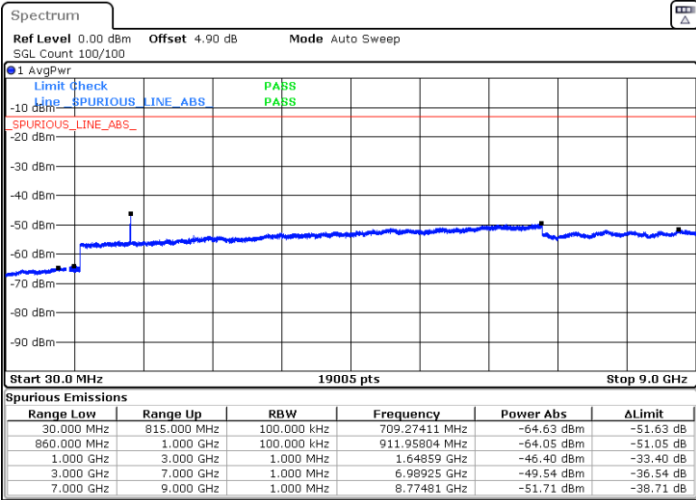
Date: 8.NOV.2019 13:17:29



LTE Band 5 / 3MHz

Lowest Channel / 64QAM

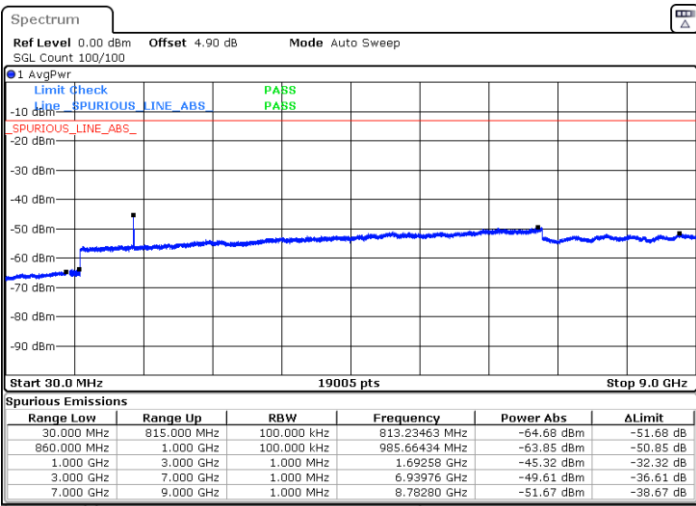
Middle Channel / 64QAM



Date: 8.NOV.2019 13:21:59

Date: 8.NOV.2019 13:22:53

Highest Channel / 64QAM



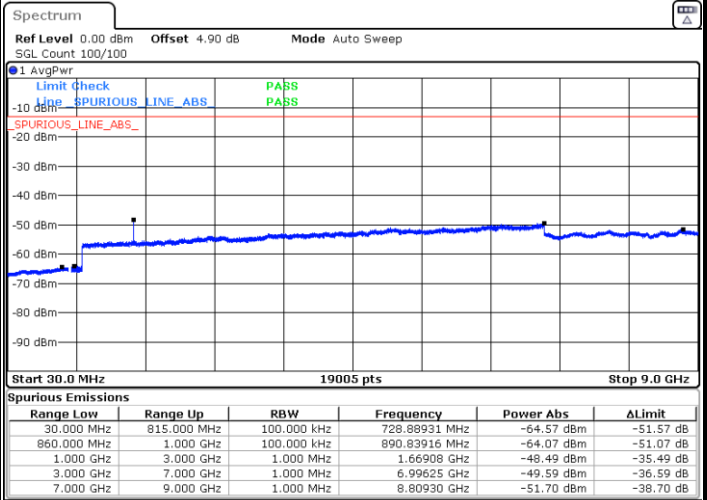
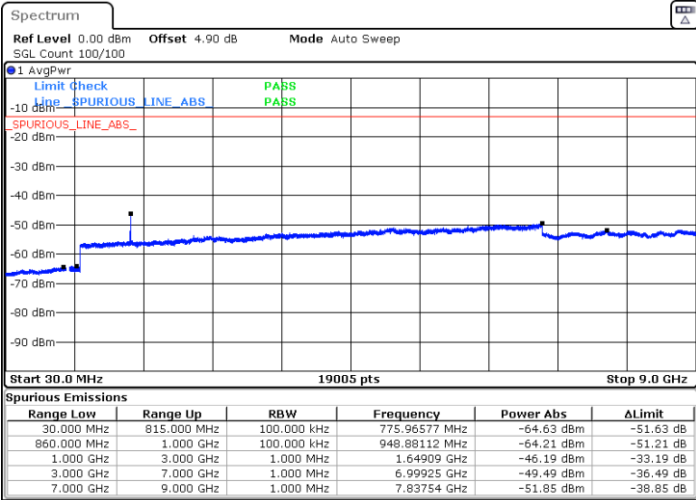
Date: 8.NOV.2019 13:27:43



LTE Band 5 / 5MHz

Lowest Channel / 64QAM

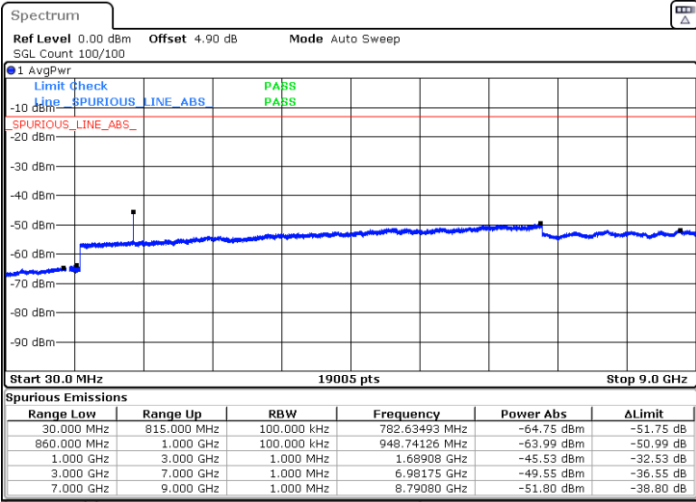
Middle Channel / 64QAM



Date: 8.NOV.2019 13:32:12

Date: 8.NOV.2019 13:33:06

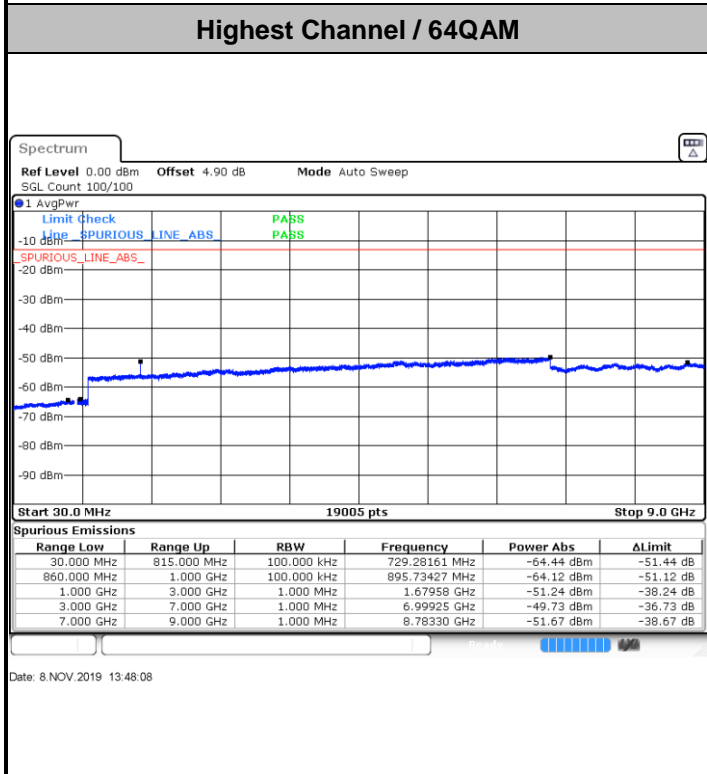
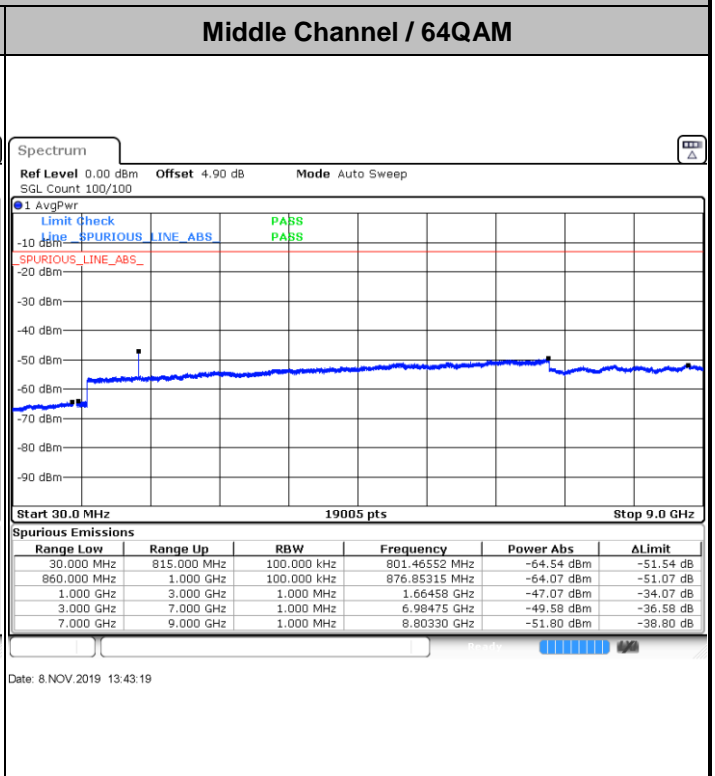
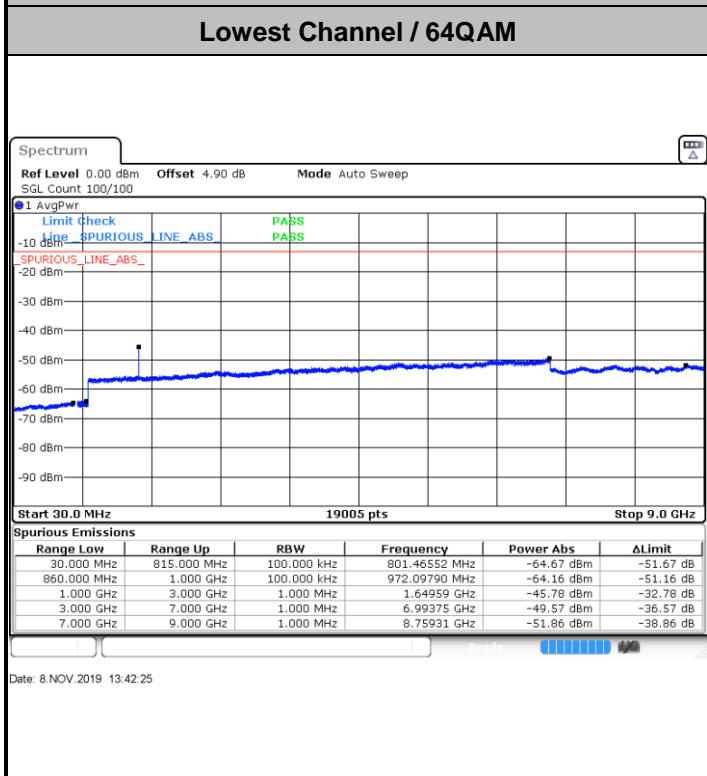
Highest Channel / 64QAM



Date: 8.NOV.2019 13:37:56



**LTE Band 5 / 10MHz**





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	0.0012	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0033	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0056	
0	Normal Voltage	0.0059	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0045	
20	Normal Voltage	0.0050	
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

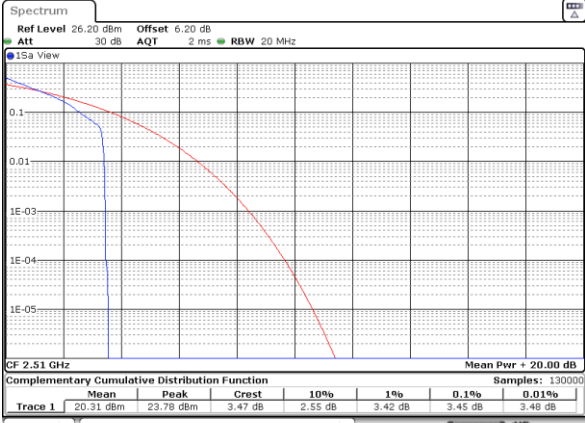
## Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.45	4.52	5.25	5.86	<b>PASS</b>
Middle CH	3.51	4.49	5.33	5.86	
Highest CH	3.36	4.49	4.87	5.77	
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.88	6.41			<b>PASS</b>
Middle CH	6.49	6.46			
Highest CH	6.17	6.52			



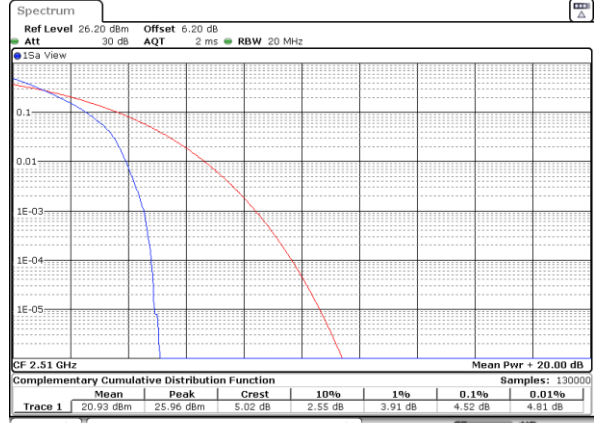
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



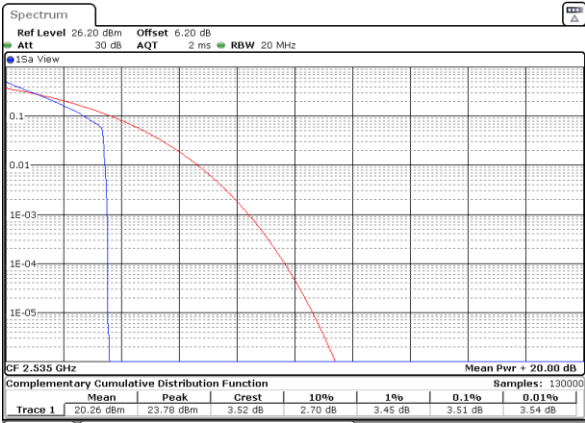
Date: 8 NOV 2019 11:19:56

Lowest Channel / Full RB



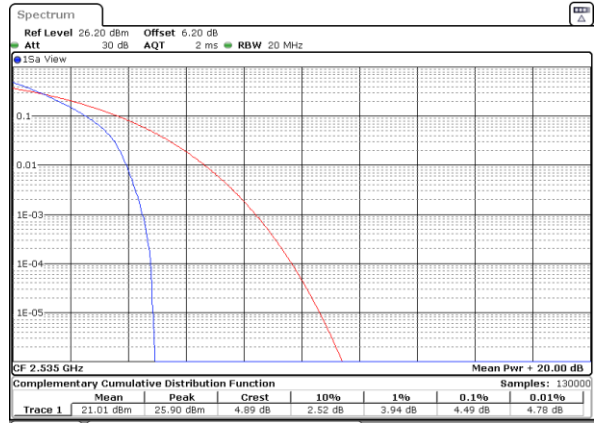
Date: 8 NOV 2019 11:20:05

Middle Channel / 1RB



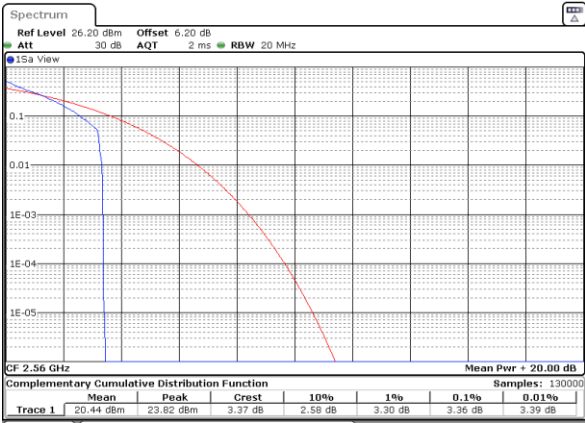
Date: 8 NOV 2019 11:20:43

Middle Channel / Full RB



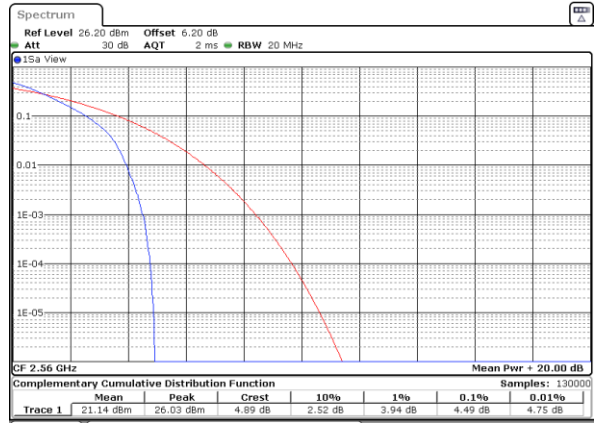
Date: 8 NOV 2019 11:20:34

Highest Channel / 1RB



Date: 8 NOV 2019 11:21:10

Highest Channel / Full RB

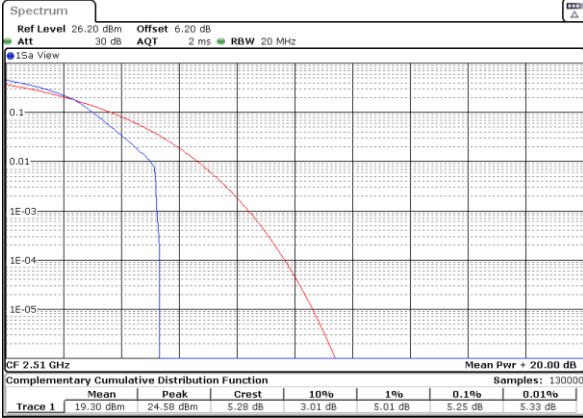


Date: 8 NOV 2019 11:21:19



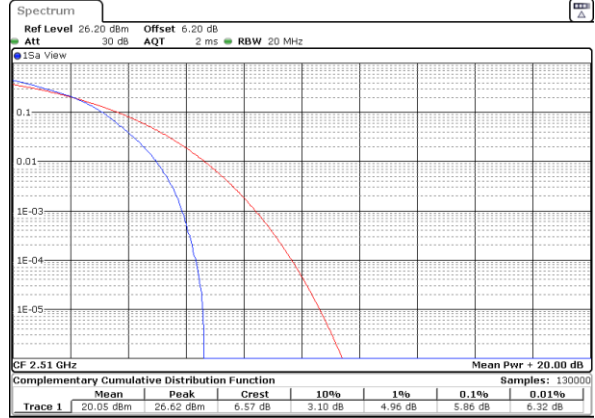
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



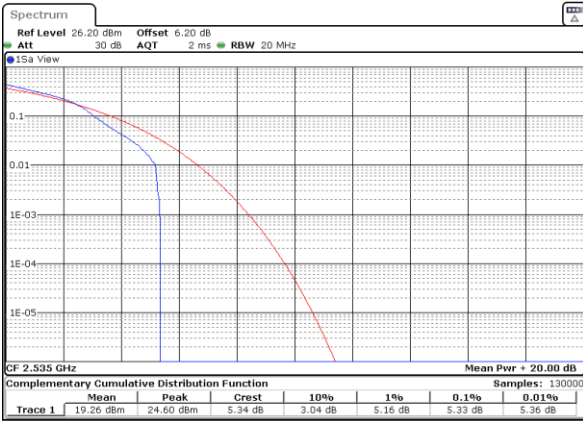
Date: 8 NOV 2019 11:19:46

Lowest Channel / Full RB



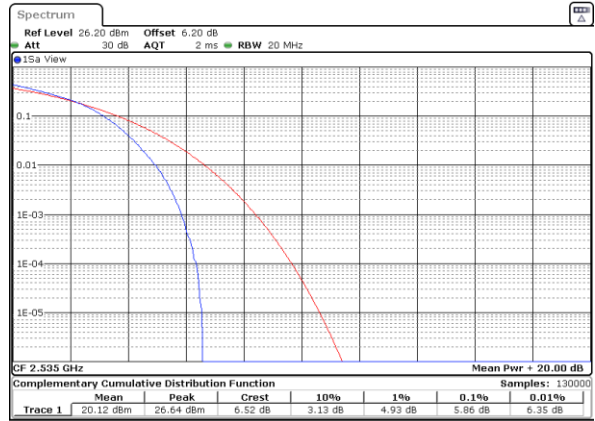
Date: 8 NOV 2019 11:20:14

Middle Channel / 1RB



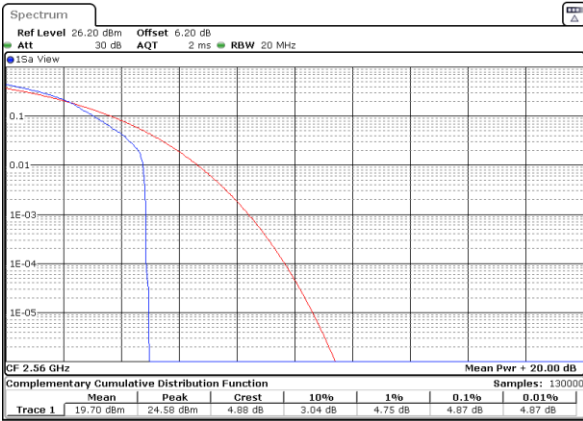
Date: 8 NOV 2019 11:20:52

Middle Channel / Full RB



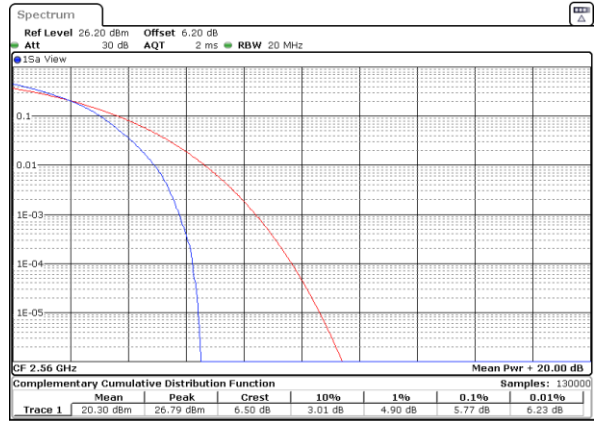
Date: 8 NOV 2019 11:20:25

Highest Channel / 1RB



Date: 8 NOV 2019 11:21:01

Highest Channel / Full RB

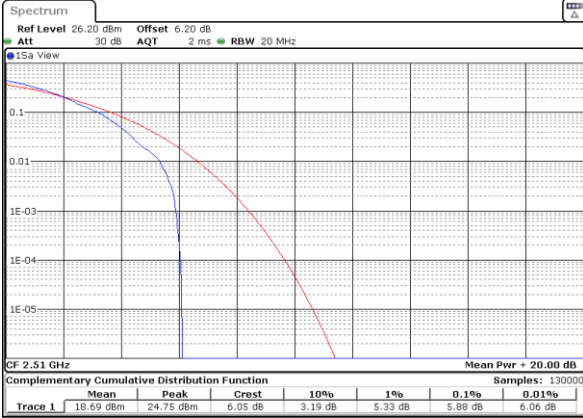


Date: 8 NOV 2019 11:21:28



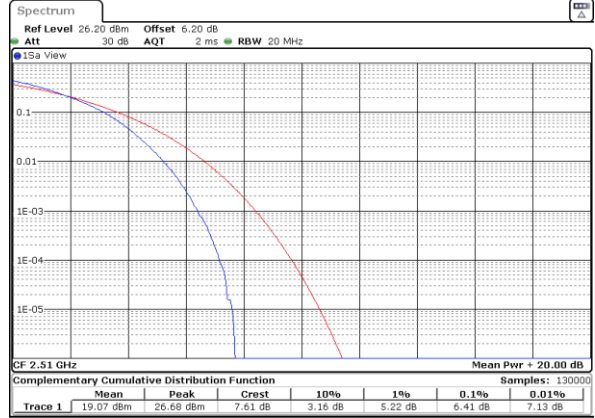
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



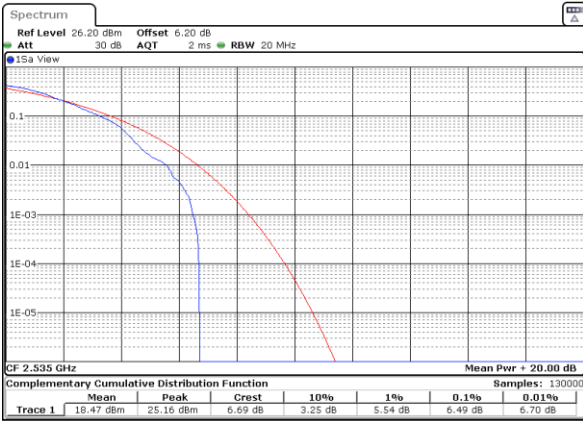
Date: 8 NOV 2019 11:46:20

Lowest Channel / Full RB



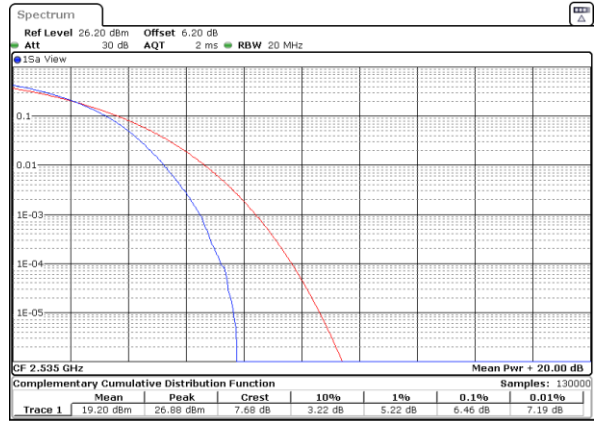
Date: 8 NOV 2019 11:46:44

Middle Channel / 1RB



Date: 8 NOV 2019 11:47:07

Middle Channel / Full RB



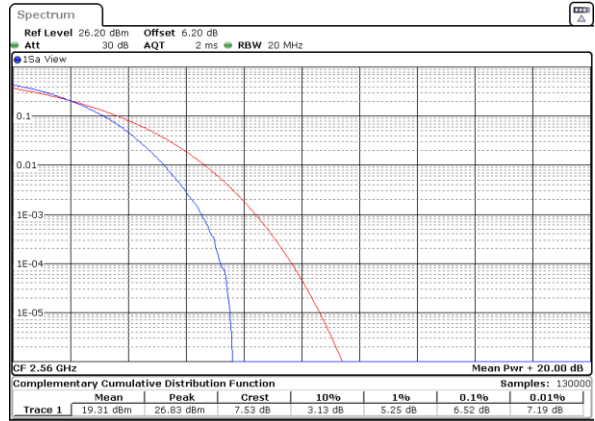
Date: 8 NOV 2019 11:46:54

Highest Channel / 1RB



Date: 8 NOV 2019 11:47:20

Highest Channel / Full RB



Date: 8 NOV 2019 11:47:28



26dB Bandwidth

Mode	LTE Band 7 : 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					4.935	4.915	9.87	9.61	14.505	14.326	20.18	20.18
Middle CH					4.915	4.865	9.79	9.91	14.416	14.565	20.18	20.18
Highest CH					4.985	4.855	9.91	9.85	14.416	14.206	20.30	20.18
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.					64QAM		64QAM		64QAM		64QAM	
Lowest CH					4.885		9.77		14.296		20.22	
Middle CH					4.855		9.89		14.565		20.22	
Highest CH					4.895		9.69		14.505		20.22	