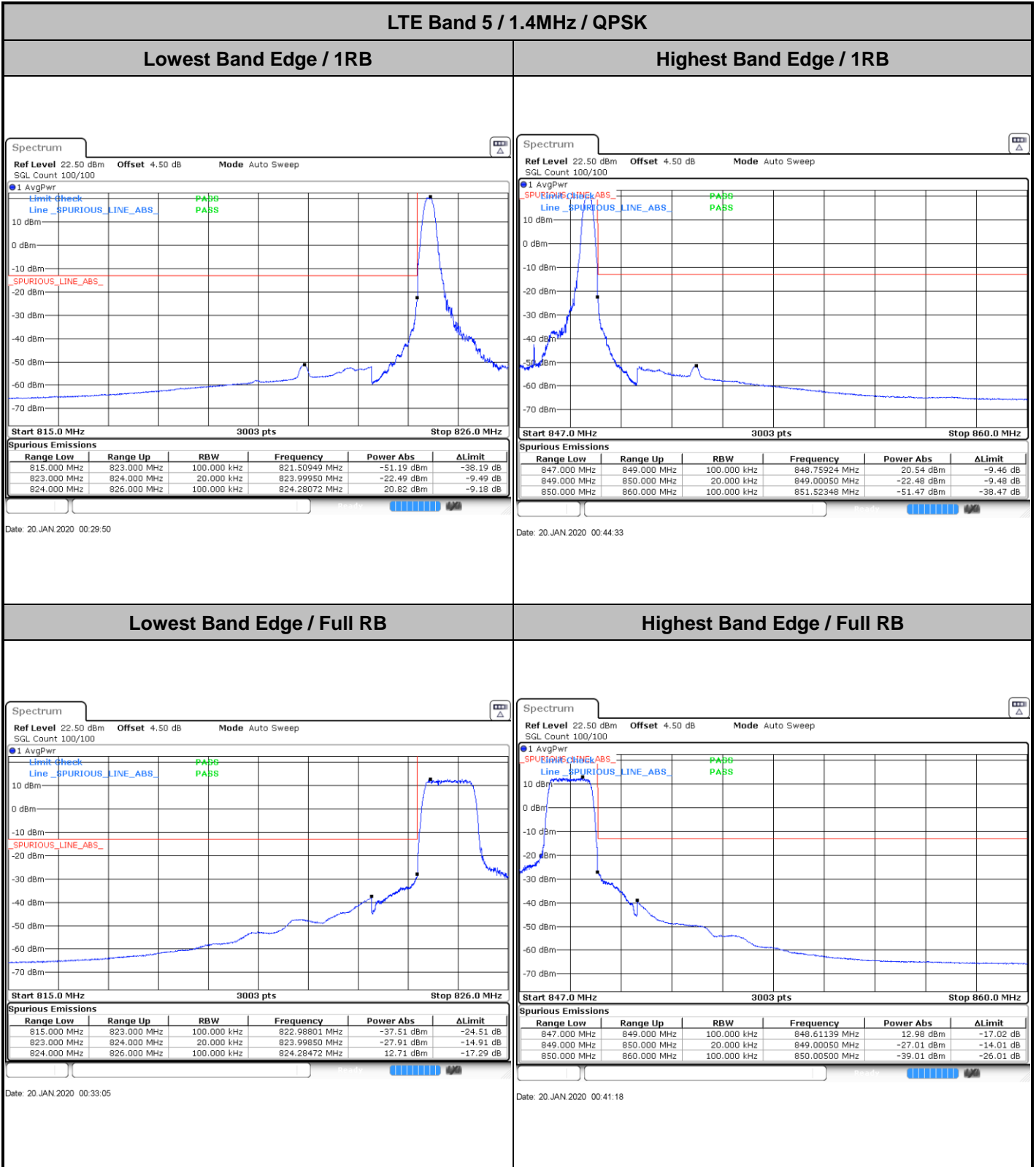




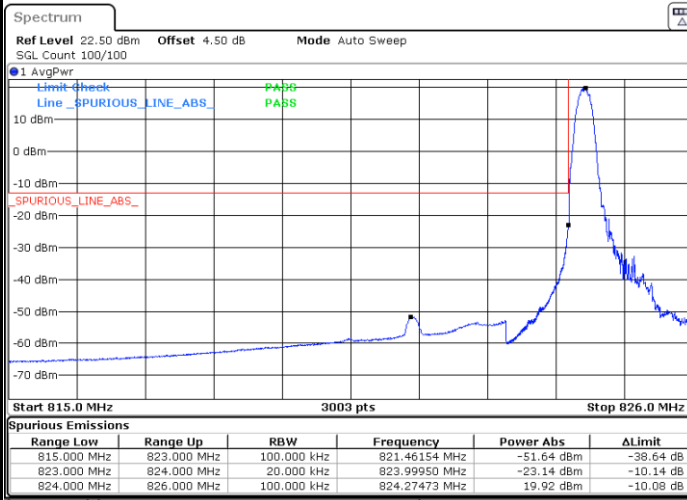
Conducted Band Edge





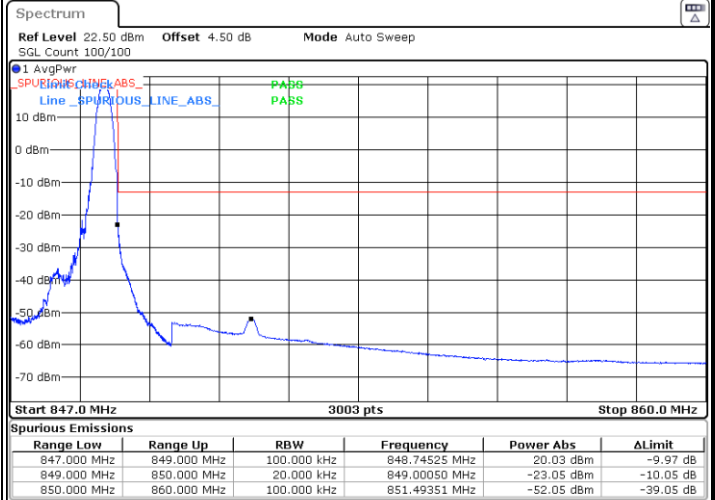
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



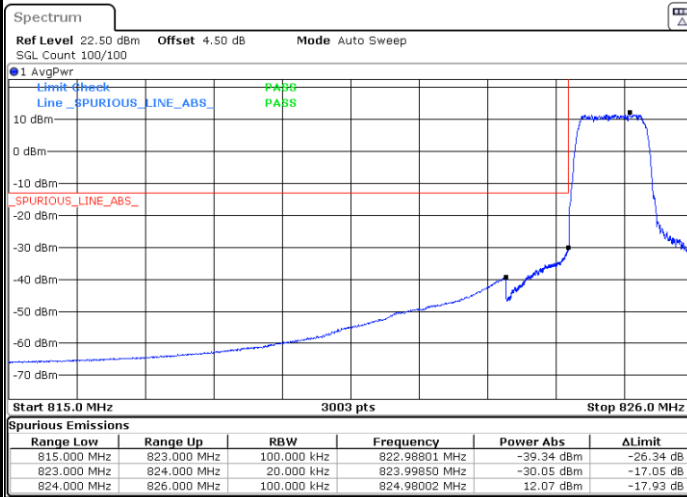
Date: 20 JAN 2020 00:31:27

Highest Band Edge / 1 RB



Date: 20 JAN 2020 00:46:10

Lowest Band Edge / Full RB



Date: 20 JAN 2020 00:34:42

Highest Band Edge / Full RB

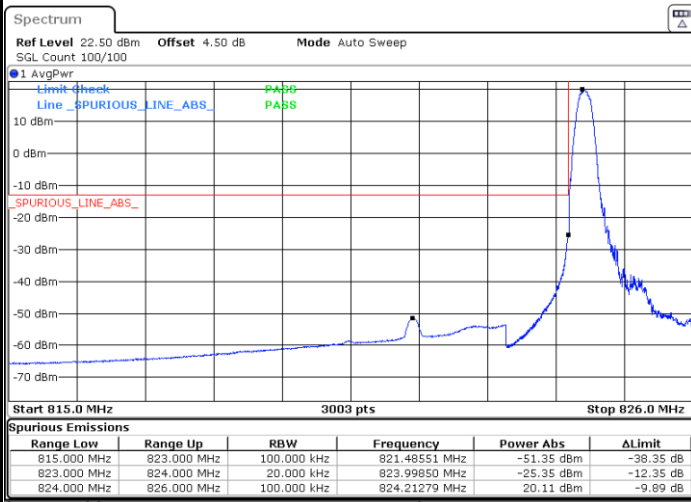


Date: 20 JAN 2020 00:42:55



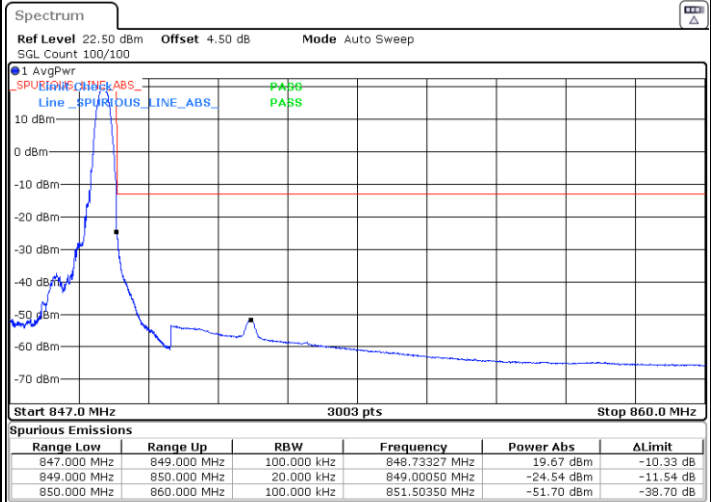
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



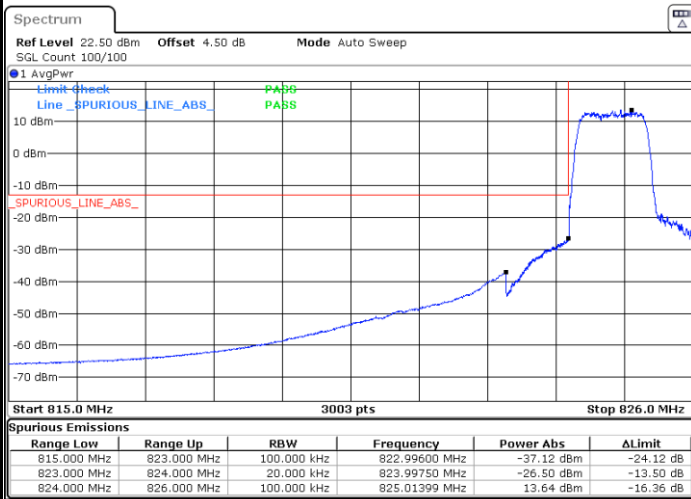
Date: 20 JAN 2020 01:53:53

Highest Band Edge / 1 RB



Date: 20 JAN 2020 01:59:37

Lowest Band Edge / Full RB



Date: 20 JAN 2020 02:48:01

Highest Band Edge / Full RB

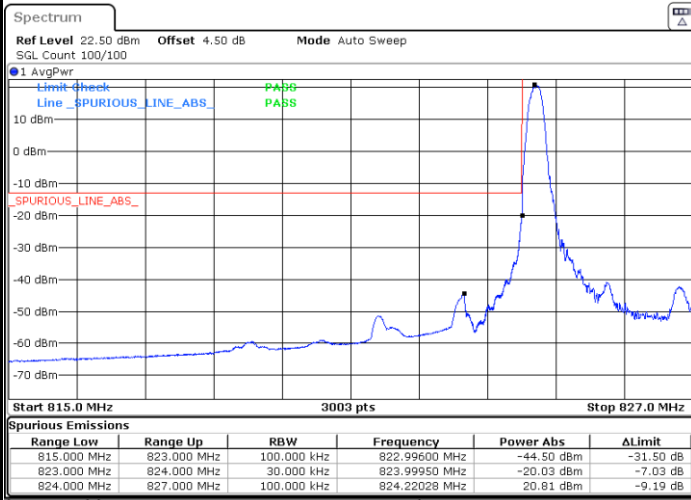


Date: 20 JAN 2020 01:58:00



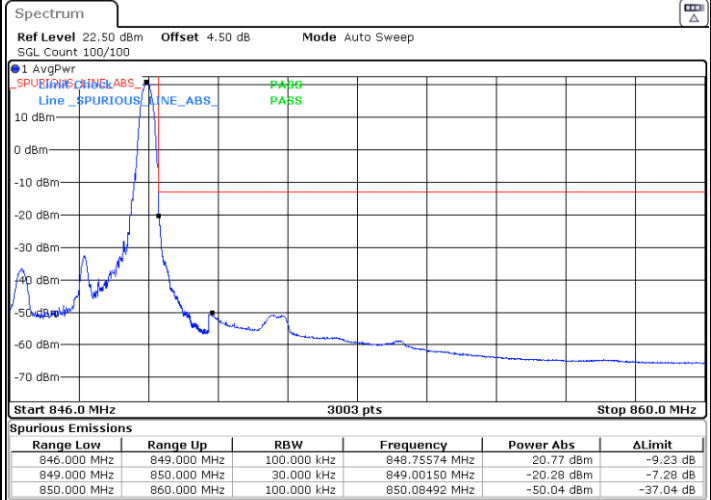
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



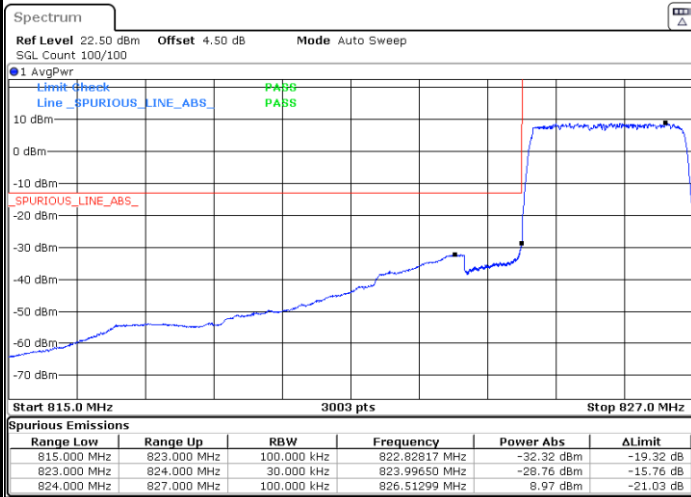
Date: 20 JAN 2020 00:50:16

Highest Band Edge / 1 RB



Date: 20 JAN 2020 01:01:43

Lowest Band Edge / Full RB



Date: 20 JAN 2020 00:53:31

Highest Band Edge / Full RB

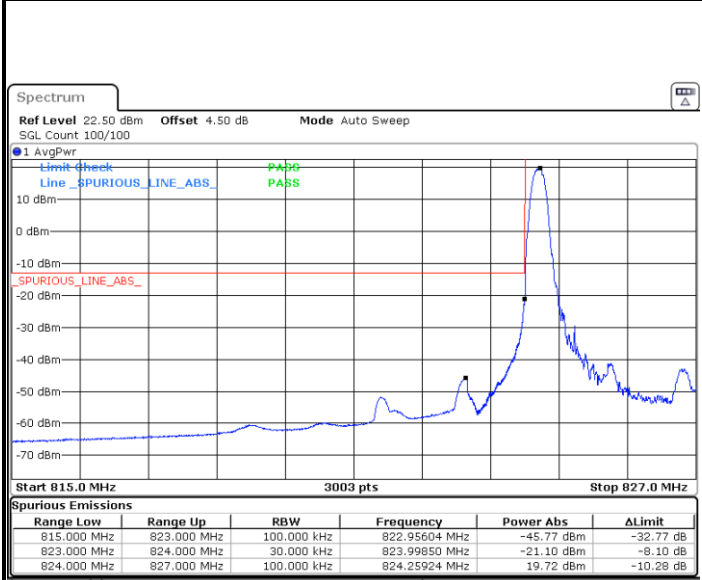


Date: 20 JAN 2020 01:04:58



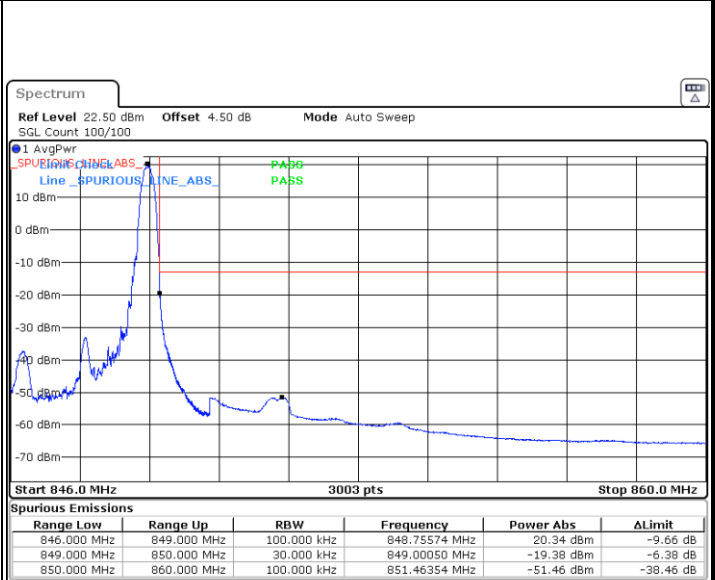
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



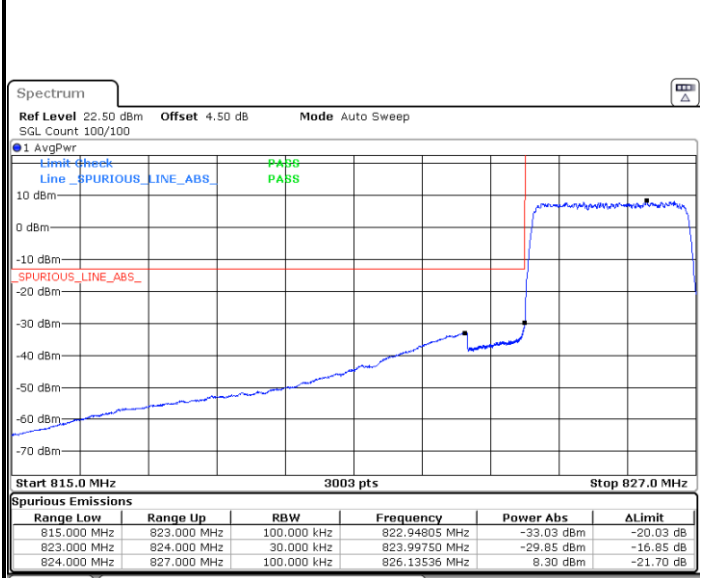
Date: 20 JAN 2020 00:51:53

Highest Band Edge / 1 RB



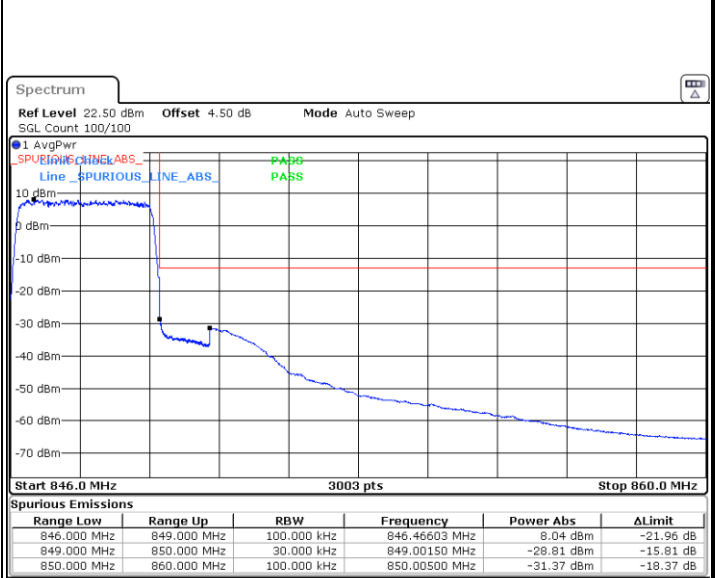
Date: 20 JAN 2020 01:03:21

Lowest Band Edge / Full RB



Date: 20 JAN 2020 00:55:08

Highest Band Edge / Full RB

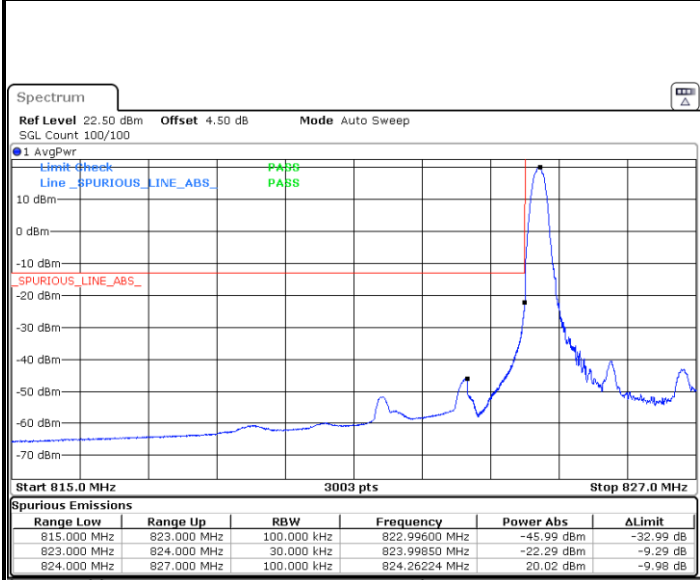


Date: 20 JAN 2020 01:06:35



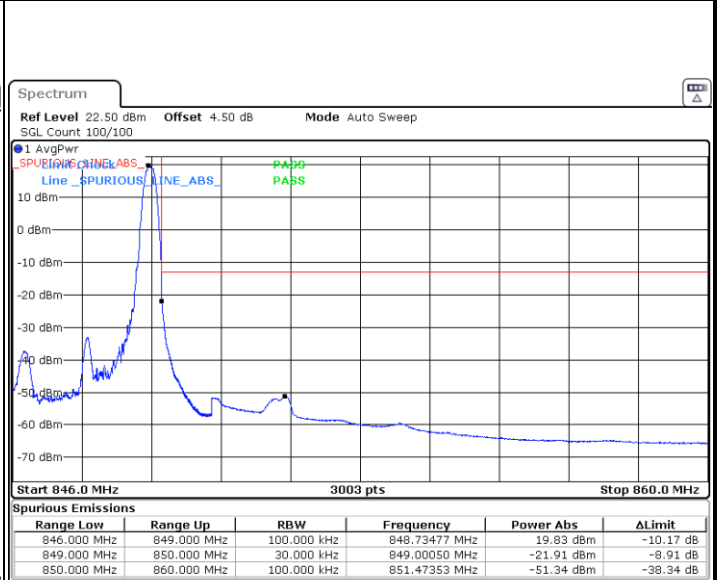
LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



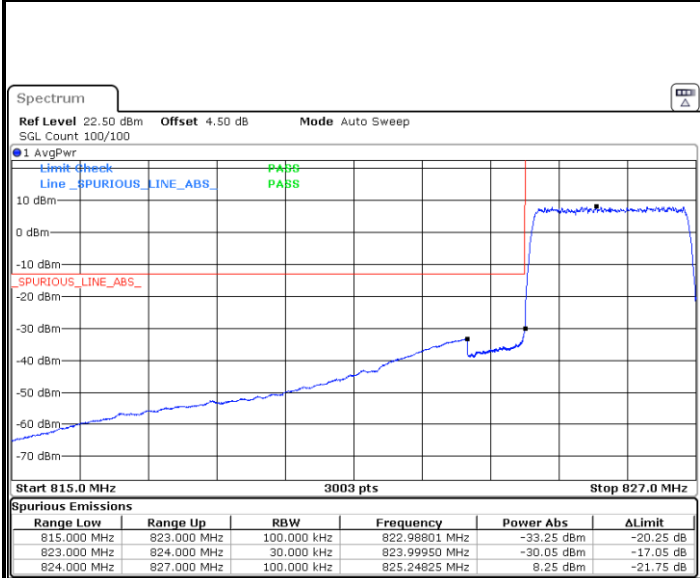
Date: 20 JAN 2020 02:04:06

Highest Band Edge / 1 RB



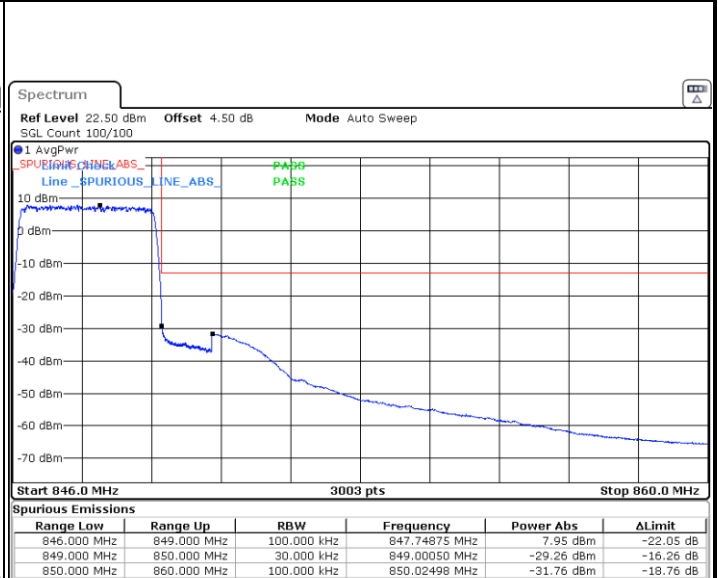
Date: 20 JAN 2020 02:09:50

Lowest Band Edge / Full RB



Date: 20 JAN 2020 02:02:29

Highest Band Edge / Full RB

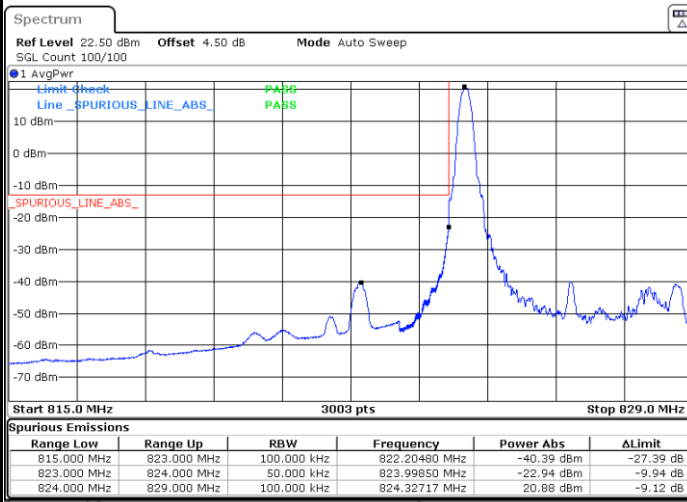


Date: 20 JAN 2020 02:08:12



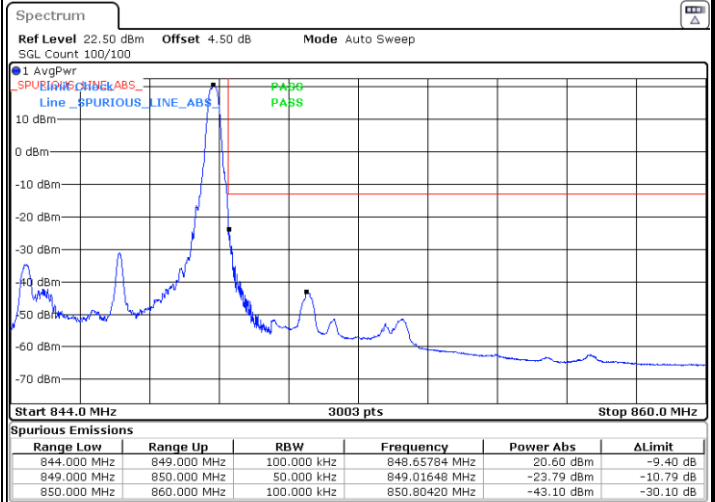
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



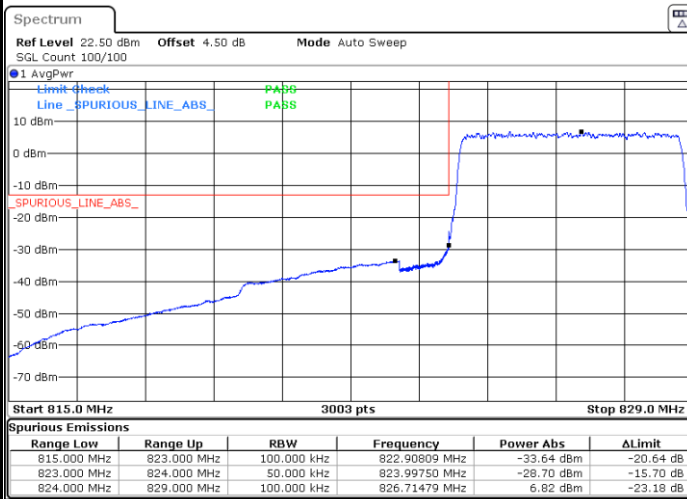
Date: 20 JAN 2020 01:10:42

Highest Band Edge / 1 RB



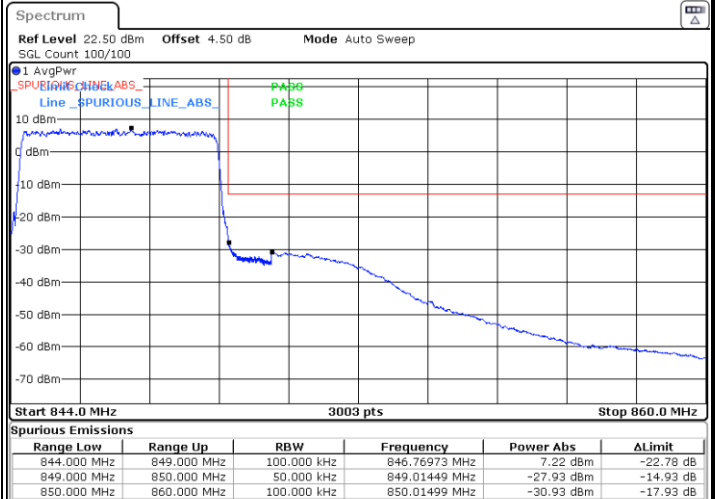
Date: 20 JAN 2020 01:22:09

Lowest Band Edge / Full RB



Date: 20 JAN 2020 01:13:57

Highest Band Edge / Full RB

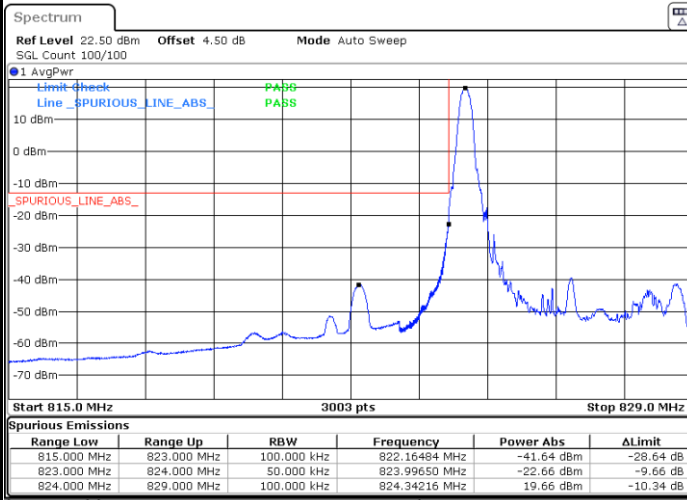


Date: 20 JAN 2020 01:25:23



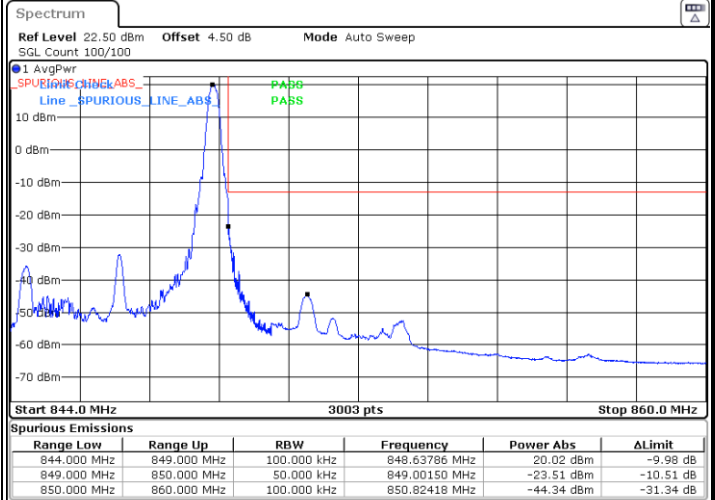
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



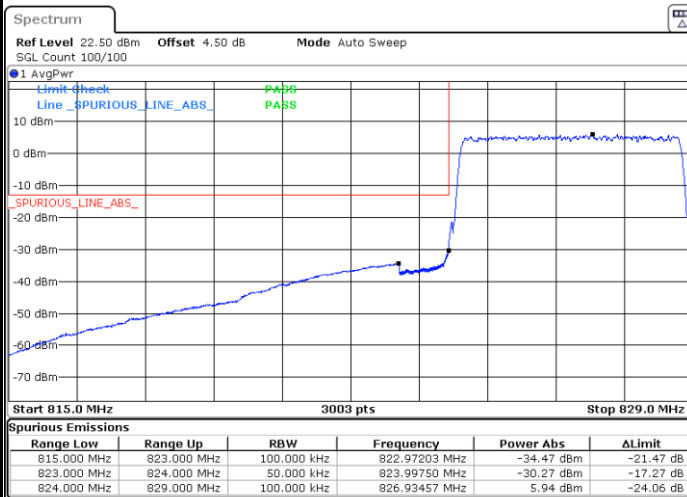
Date: 20 JAN 2020 01:12:19

Highest Band Edge / 1 RB



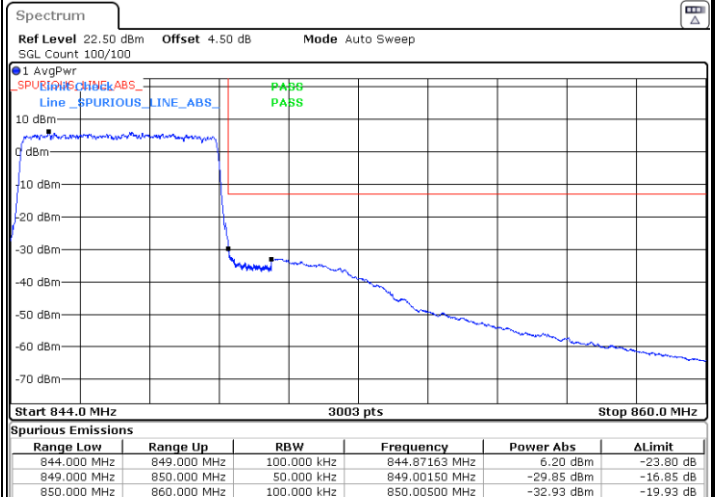
Date: 20 JAN 2020 01:23:46

Lowest Band Edge / Full RB



Date: 20 JAN 2020 01:15:34

Highest Band Edge / Full RB

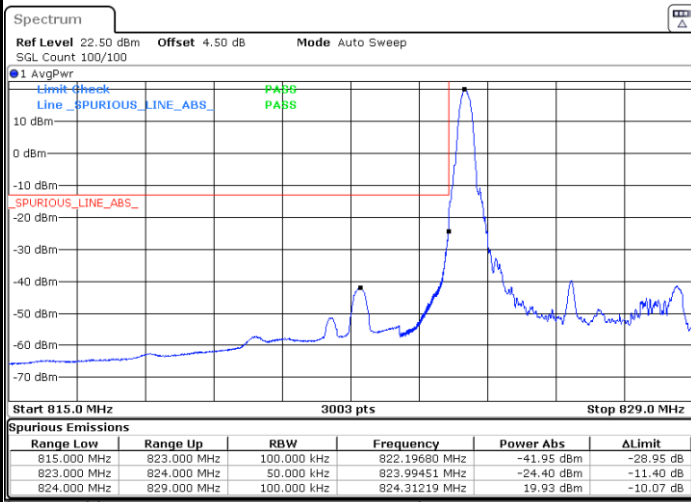


Date: 20 JAN 2020 01:27:01



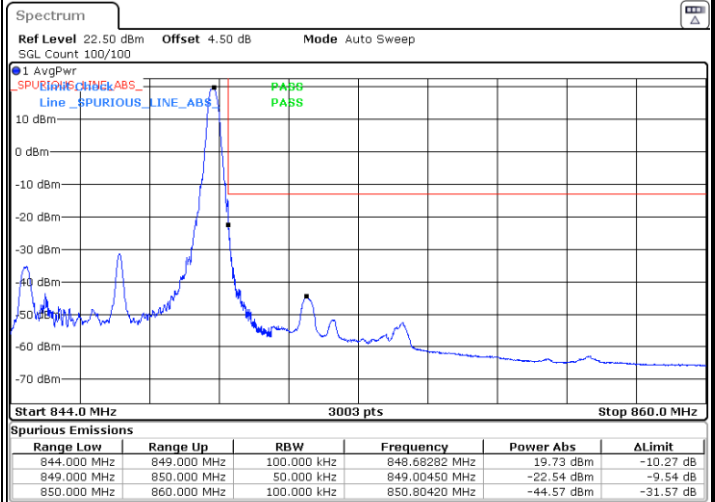
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / 1RB



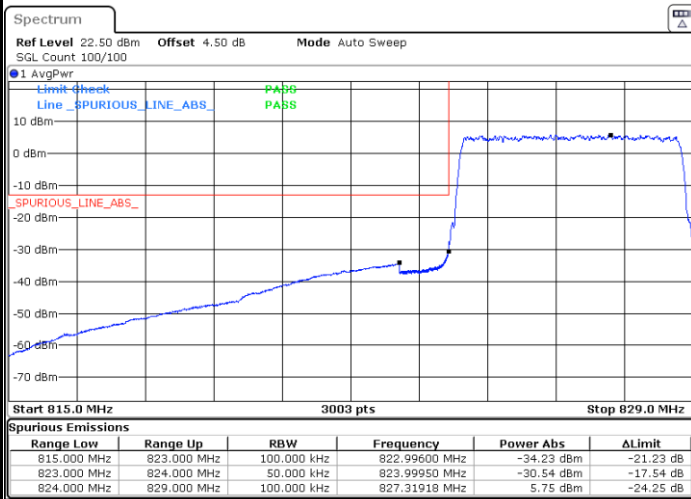
Date: 20 JAN 2020 02:14:19

Highest Band Edge / 1 RB



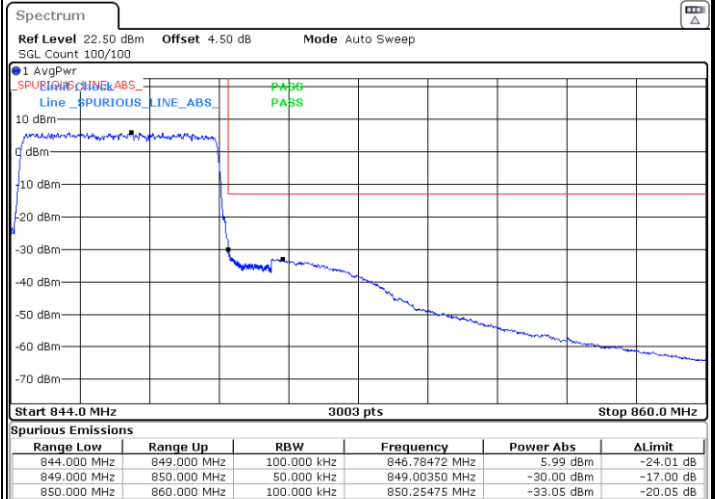
Date: 20 JAN 2020 02:20:03

Lowest Band Edge / Full RB



Date: 20 JAN 2020 02:12:42

Highest Band Edge / Full RB

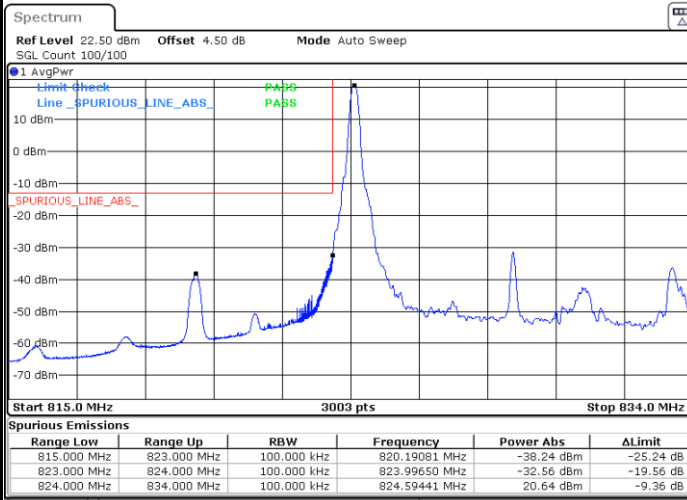


Date: 20 JAN 2020 02:18:26



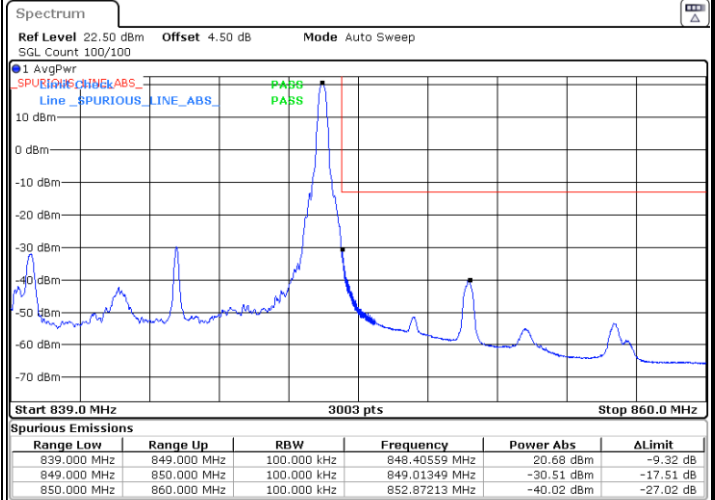
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



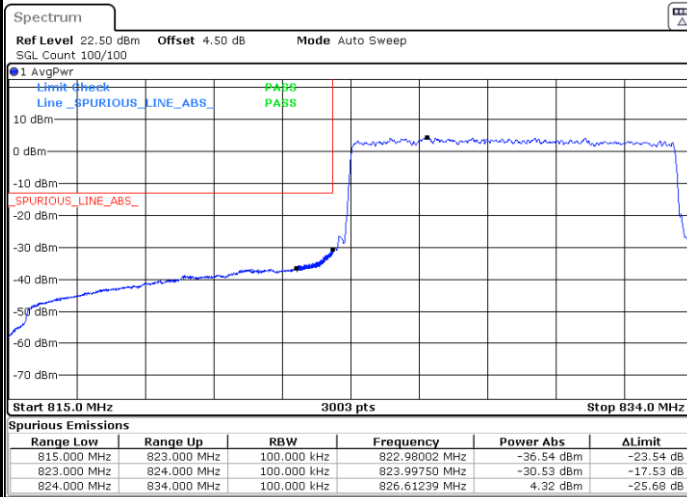
Date: 20 JAN 2020 01:31:07

Highest Band Edge / 1 RB



Date: 20 JAN 2020 01:42:34

Lowest Band Edge / Full RB



Date: 20 JAN 2020 01:34:22

Highest Band Edge / Full RB

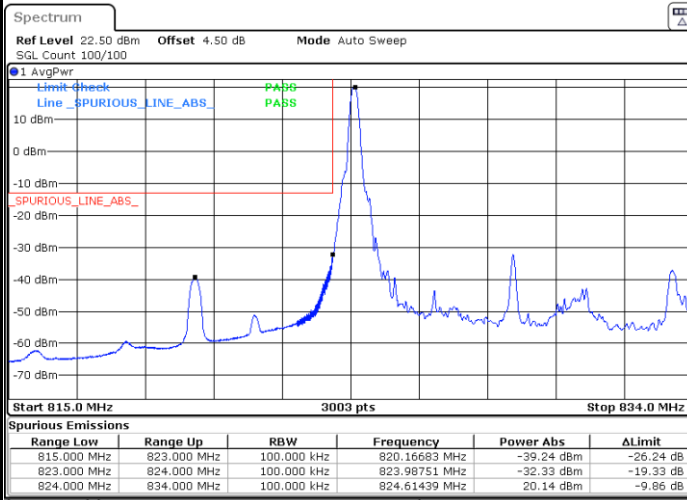


Date: 20 JAN 2020 01:45:49



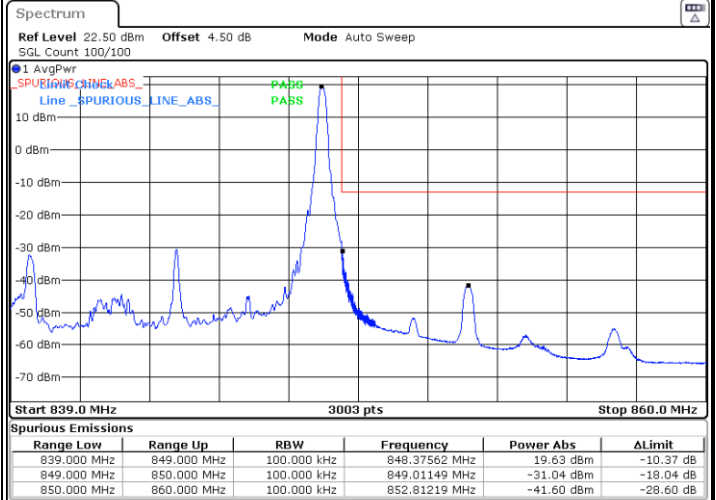
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



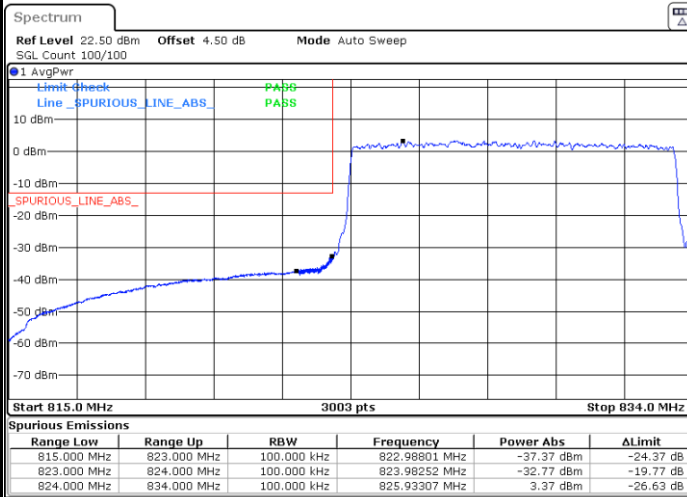
Date: 20 JAN 2020 01:32:44

Highest Band Edge / 1 RB



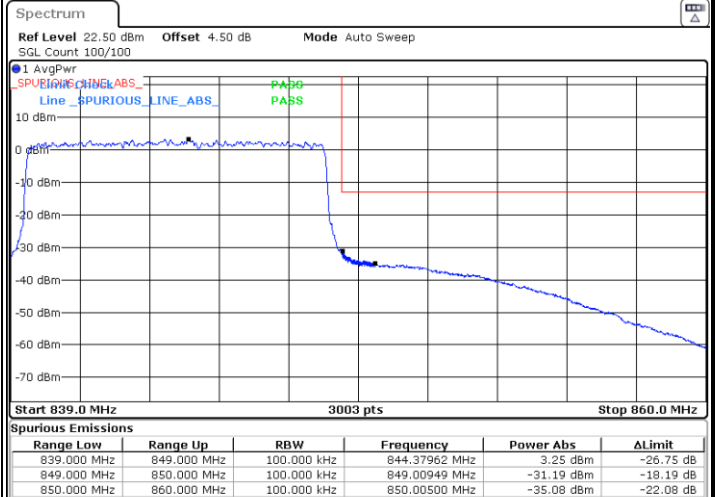
Date: 20 JAN 2020 01:44:12

Lowest Band Edge / Full RB



Date: 20 JAN 2020 01:35:59

Highest Band Edge / Full RB

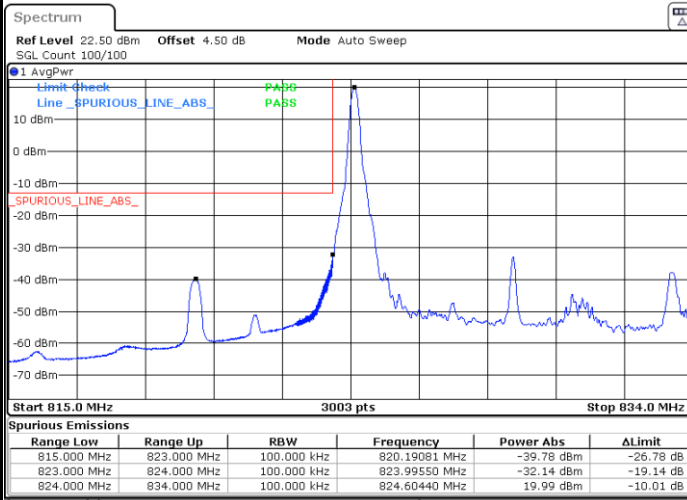


Date: 20 JAN 2020 01:47:27



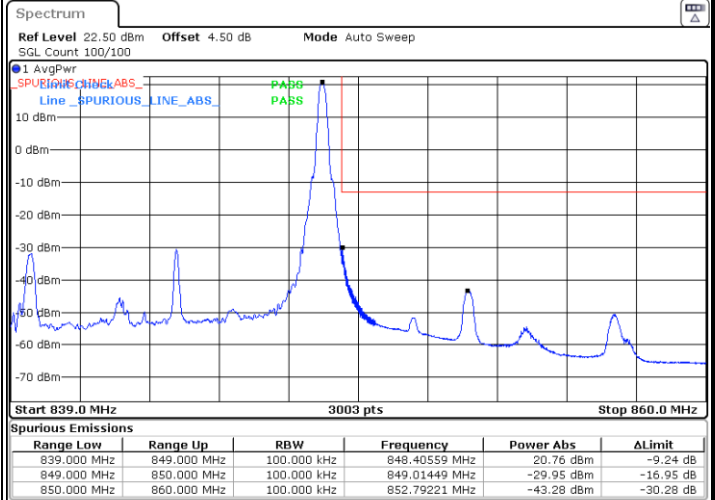
LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



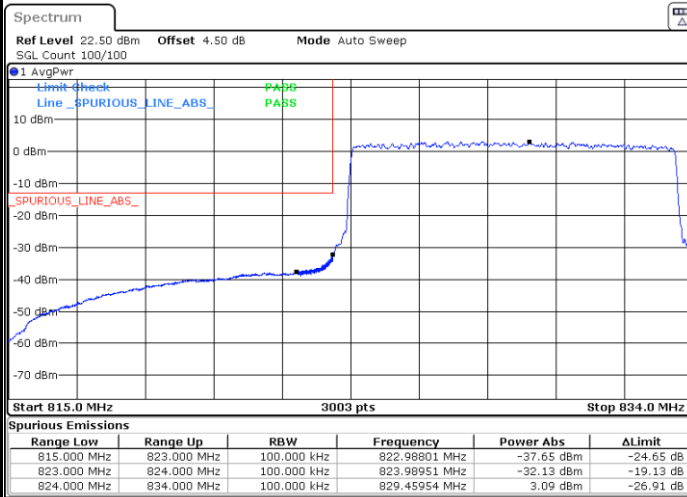
Date: 20 JAN 2020 02:24:33

Highest Band Edge / 1 RB



Date: 20 JAN 2020 02:36:52

Lowest Band Edge / Full RB



Date: 20 JAN 2020 02:22:55

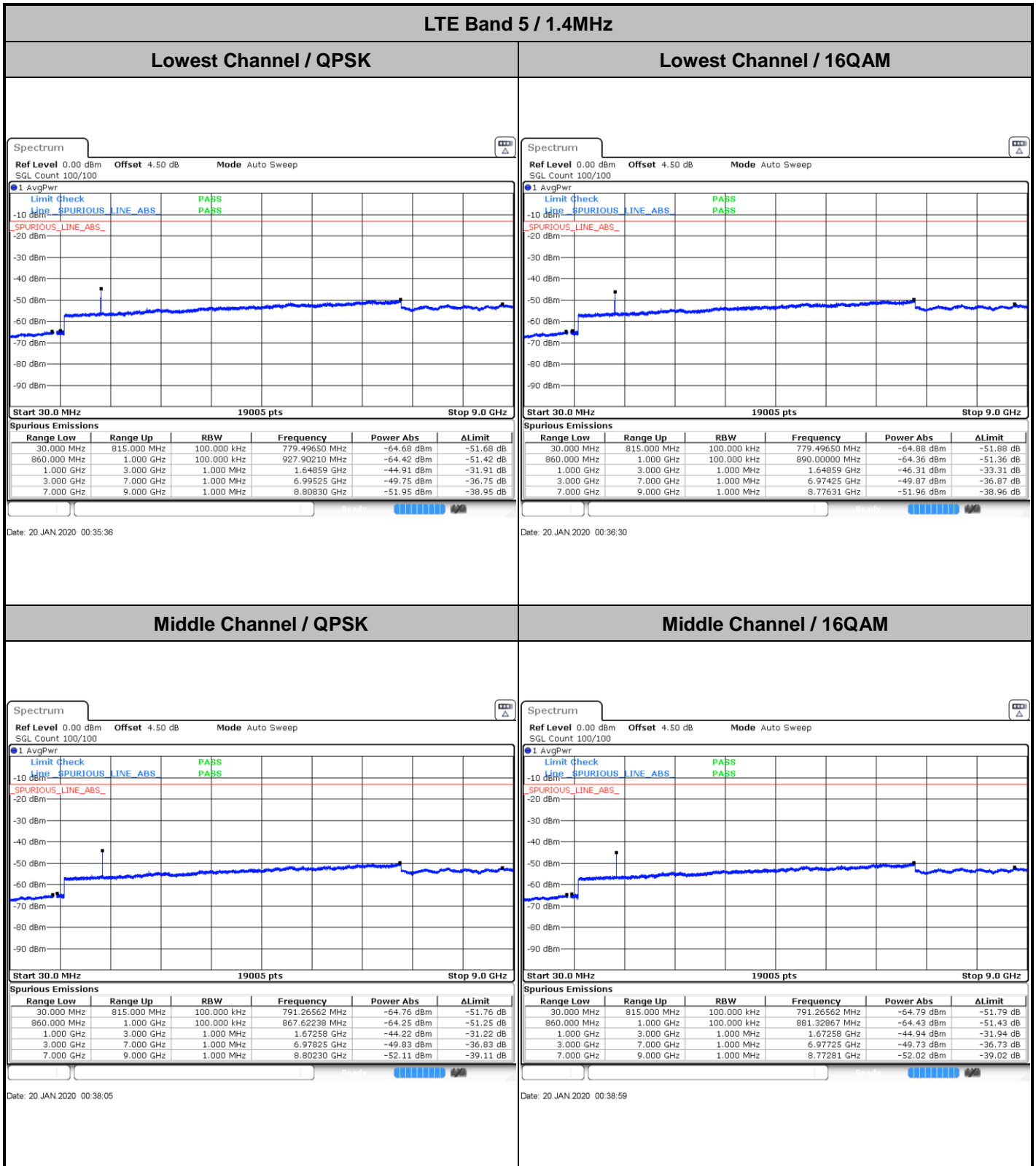
Highest Band Edge / Full RB



Date: 20 JAN 2020 02:35:15



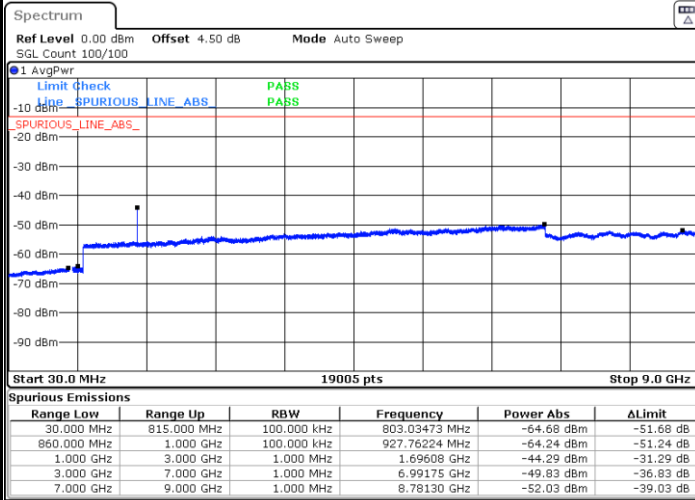
Conducted Spurious Emission





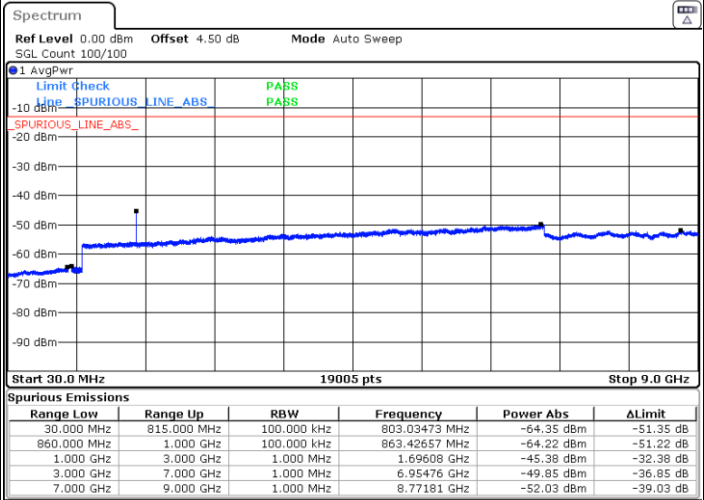
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 20 JAN 2020 00:47:03

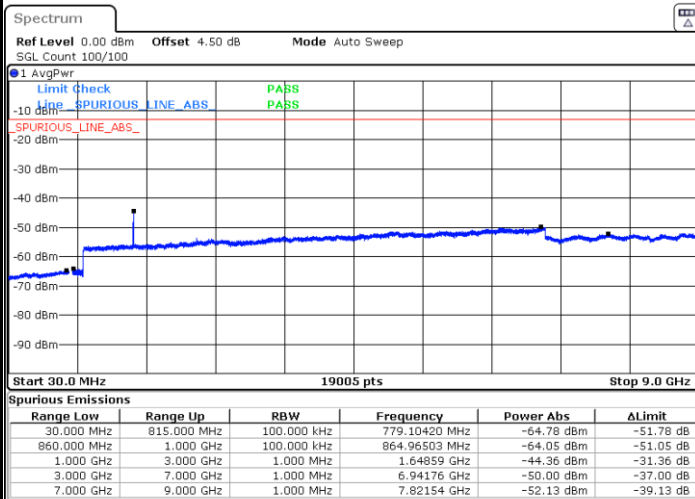
Highest Channel / 16QAM



Date: 20 JAN 2020 00:47:58

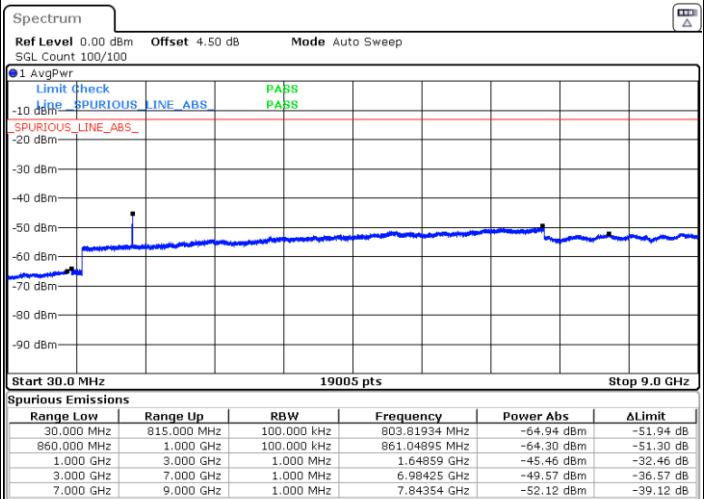
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 20 JAN 2020 00:56:02

Lowest Channel / 16QAM



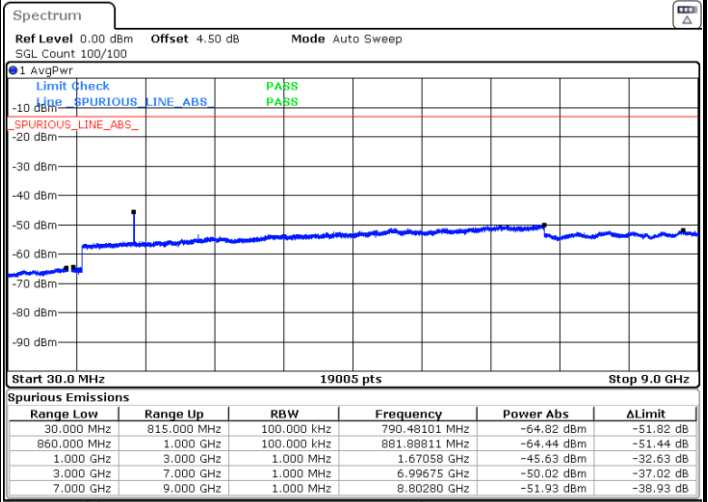
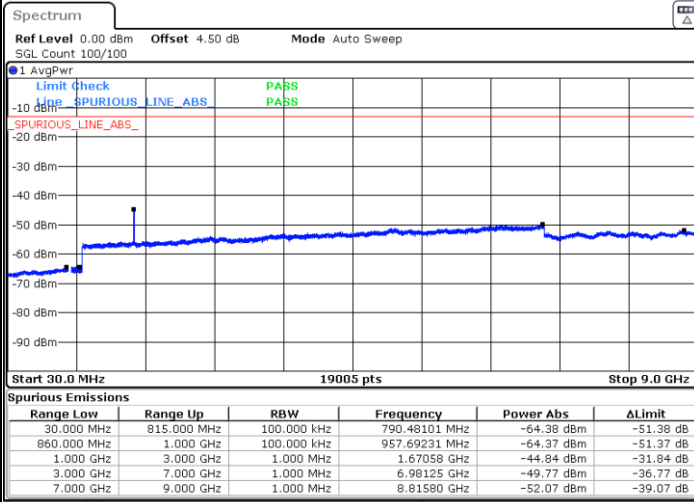
Date: 20 JAN 2020 00:56:56



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

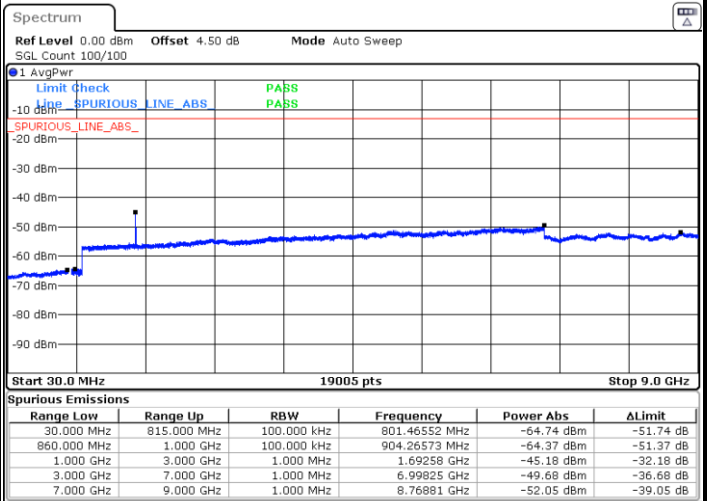
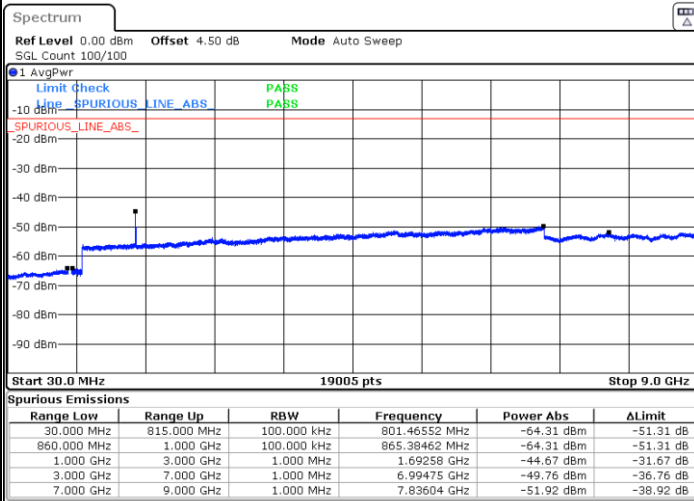


Date: 20 JAN 2020 00:58:30

Date: 20 JAN 2020 00:59:25

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 20 JAN 2020 01:07:29

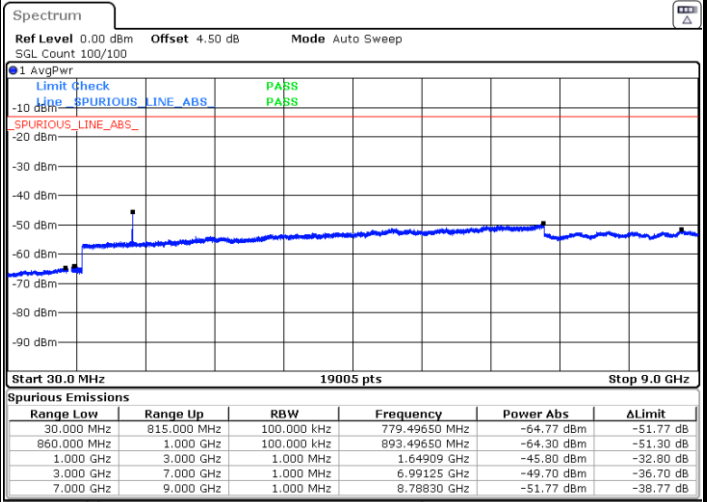
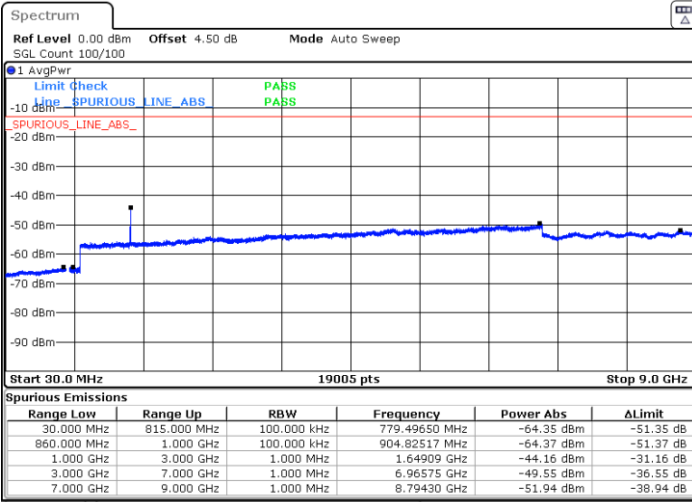
Date: 20 JAN 2020 01:08:23



LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

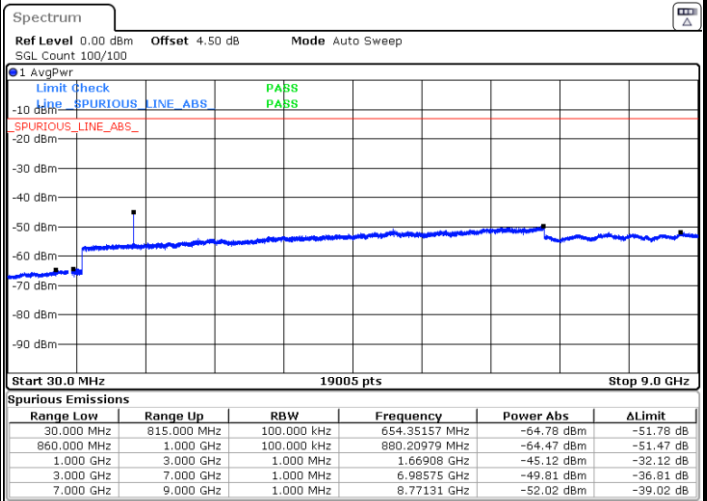
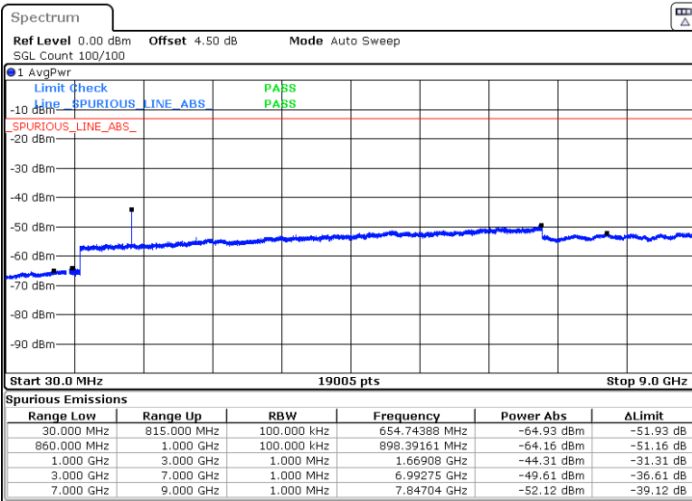


Date: 20 JAN 2020 01:16:27

Date: 20 JAN 2020 01:17:21

Middle Channel / QPSK

Middle Channel / 16QAM



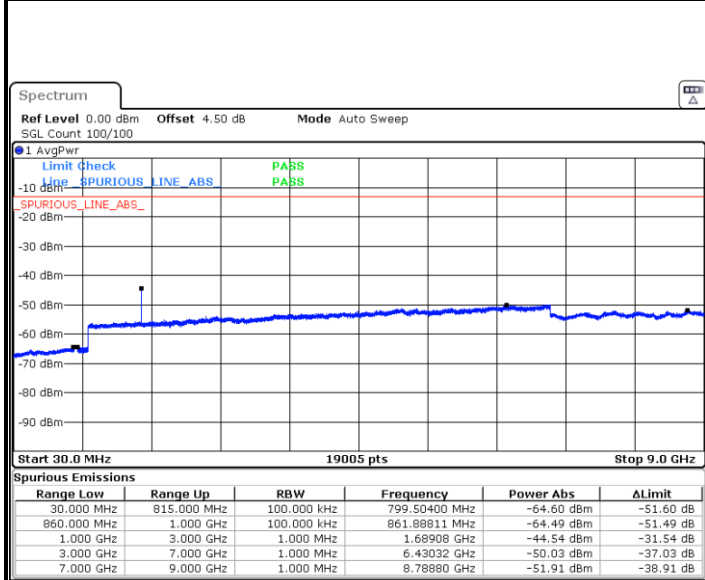
Date: 20 JAN 2020 01:18:56

Date: 20 JAN 2020 01:19:50



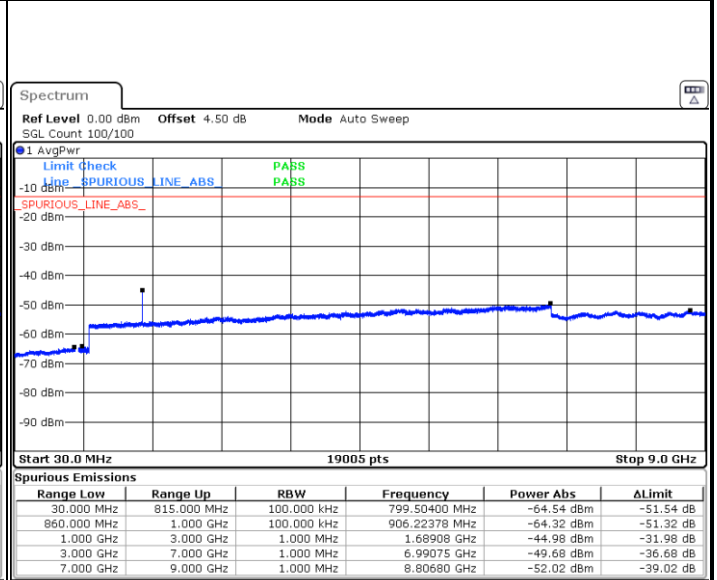
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 20 JAN 2020 01:27:54

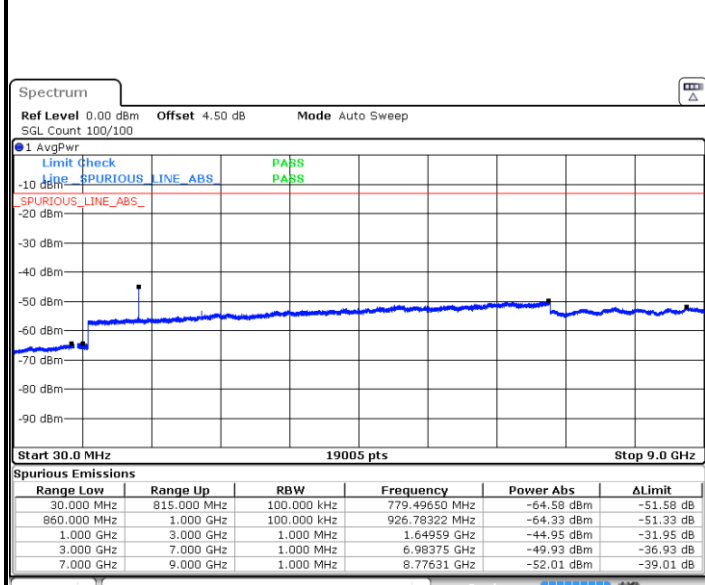
Highest Channel / 16QAM



Date: 20 JAN 2020 01:28:48

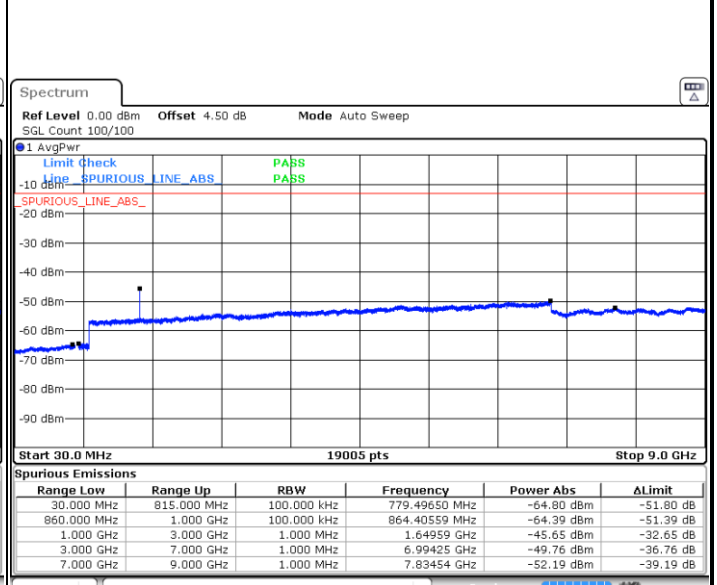
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 20 JAN 2020 01:36:53

Lowest Channel / 16QAM

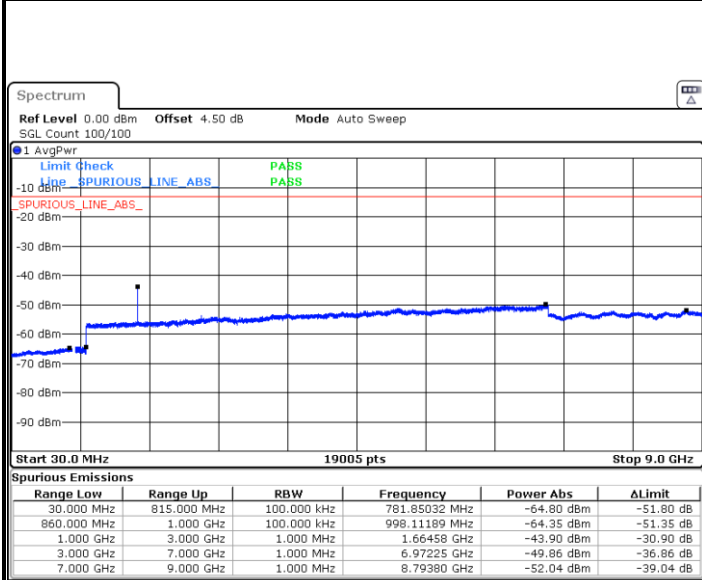


Date: 20 JAN 2020 01:37:47



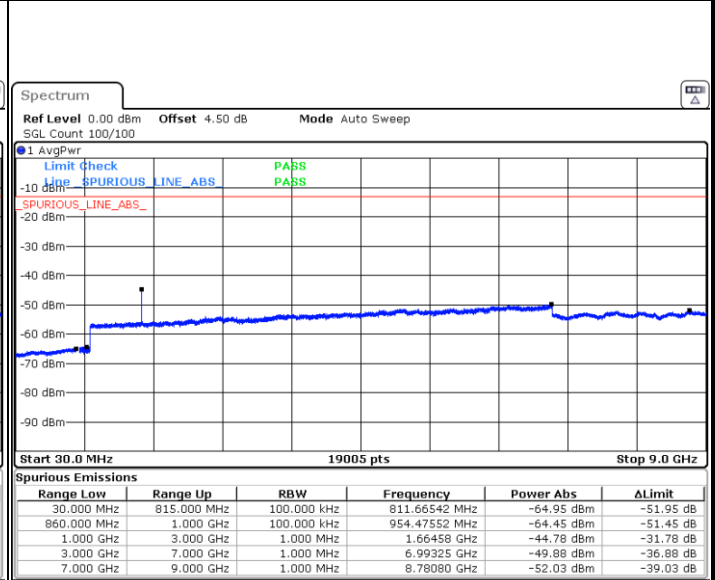
LTE Band 5 / 10MHz

Middle Channel / QPSK



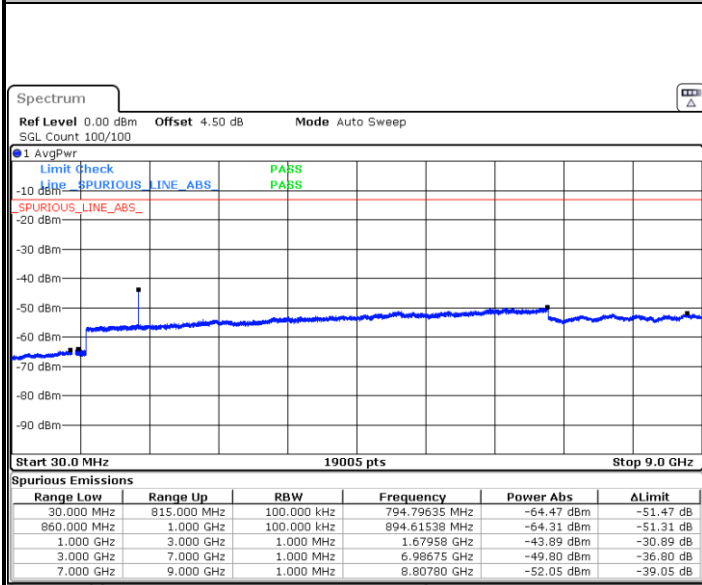
Date: 20 JAN 2020 01:39:21

Middle Channel / 16QAM



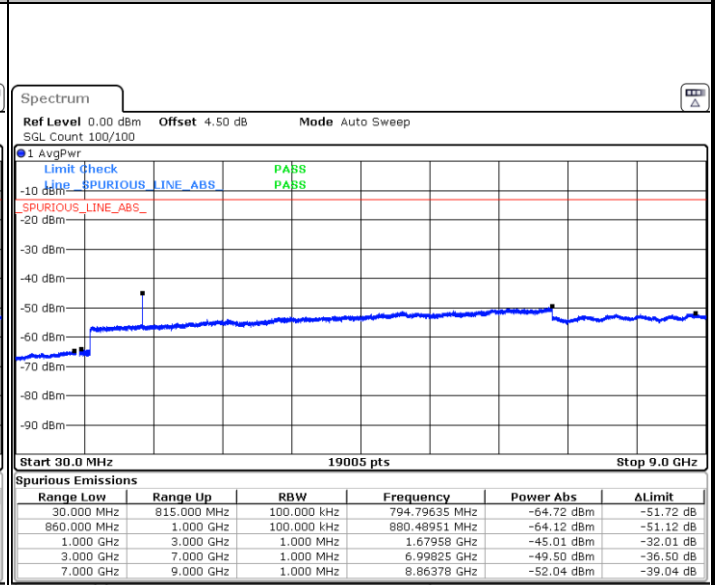
Date: 20 JAN 2020 01:40:16

Highest Channel / QPSK



Date: 20 JAN 2020 01:48:20

Highest Channel / 16QAM



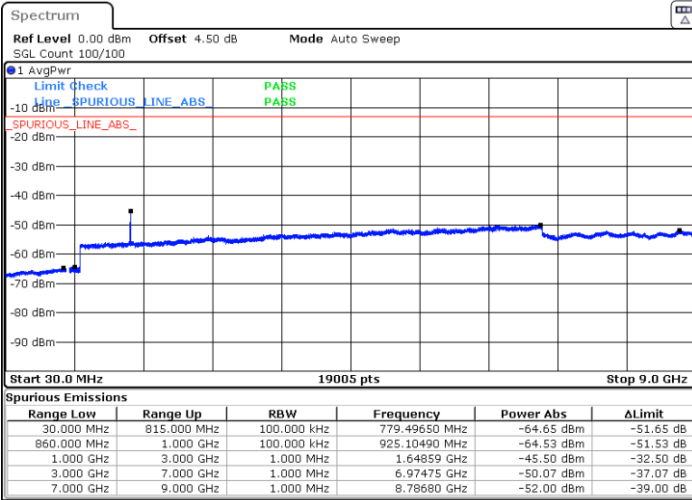
Date: 20 JAN 2020 01:49:14



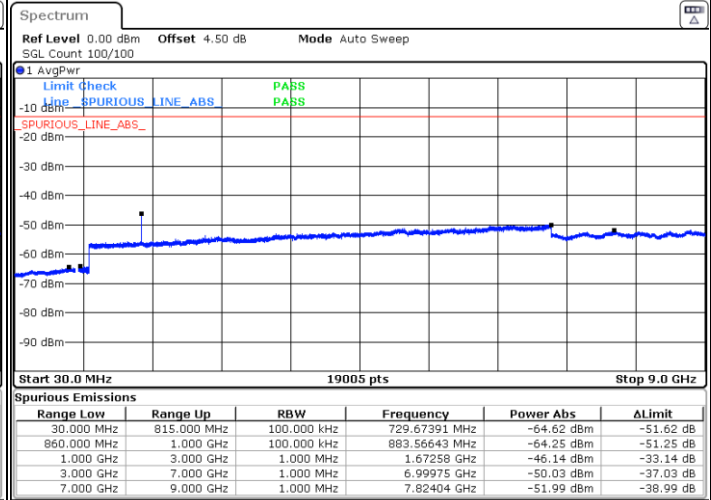
LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

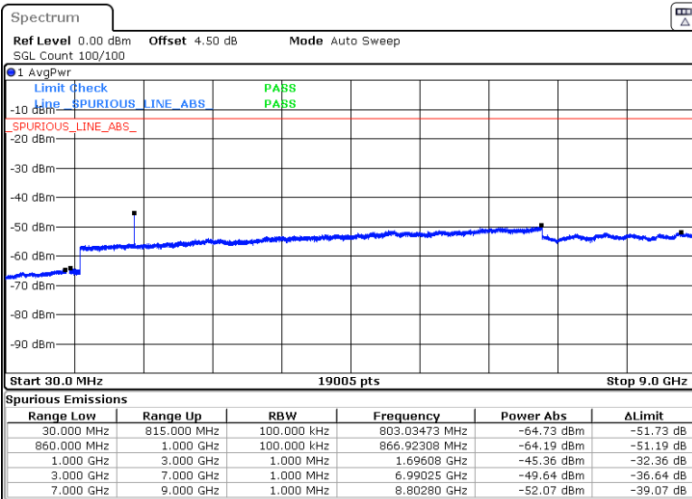


Date: 20 JAN 2020 01:54:47



Date: 20 JAN 2020 01:55:41

Highest Channel / 64QAM



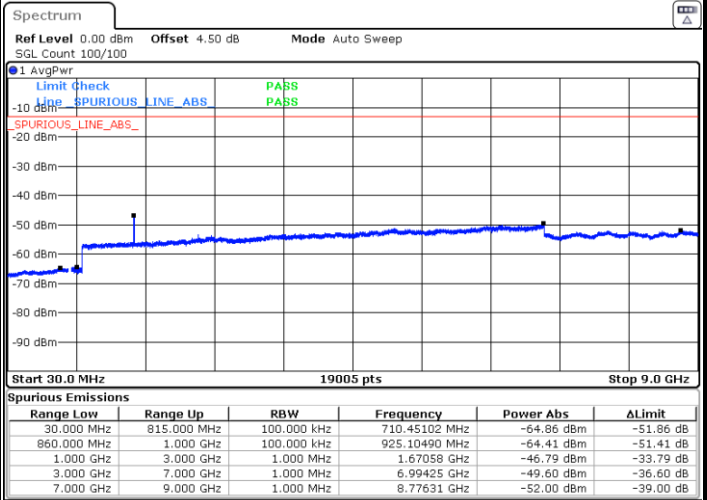
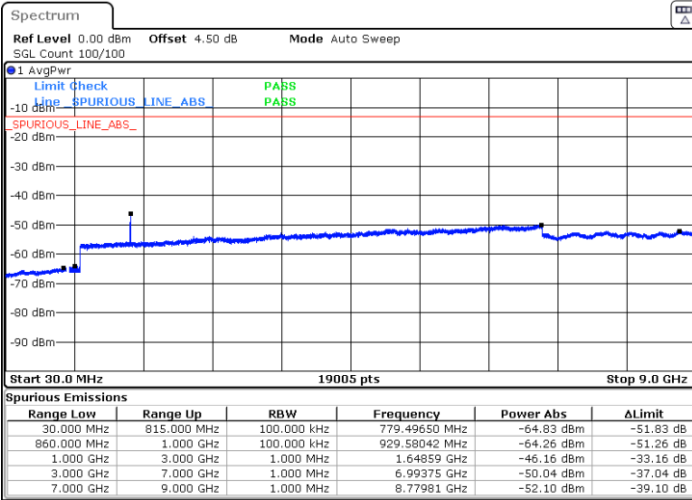
Date: 20 JAN 2020 02:00:30



LTE Band 5 / 3MHz

Lowest Channel / 64QAM

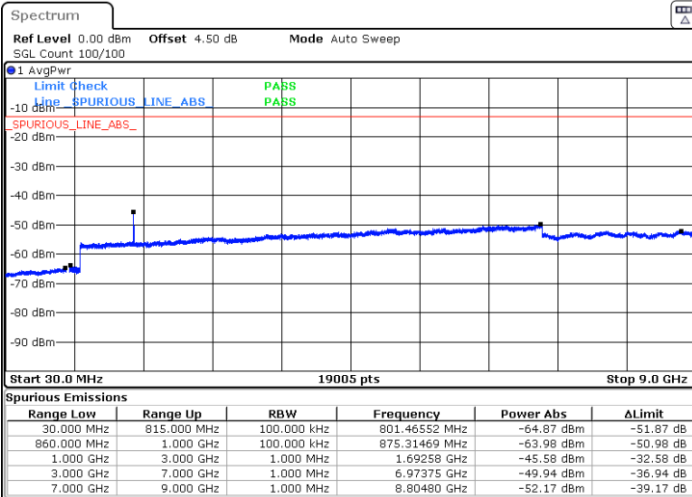
Middle Channel / 64QAM



Date: 20 JAN 2020 02:05:00

Date: 20 JAN 2020 02:05:54

Highest Channel / 64QAM

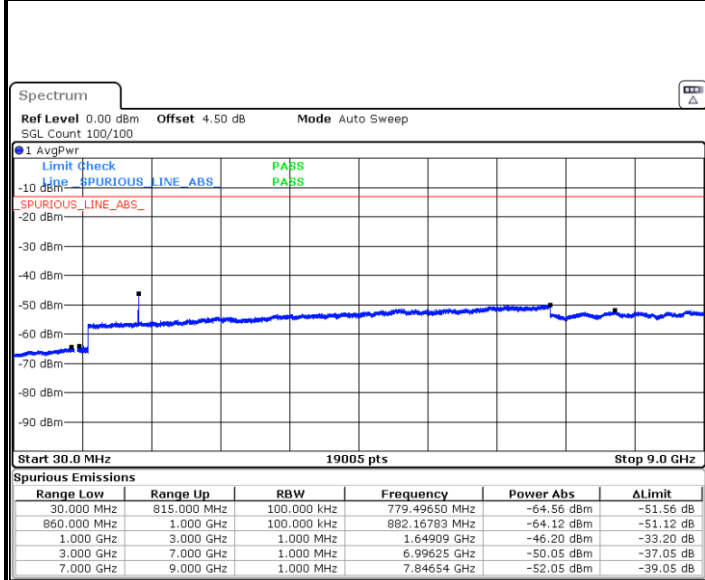


Date: 20 JAN 2020 02:10:43



LTE Band 5 / 5MHz

Lowest Channel / 64QAM

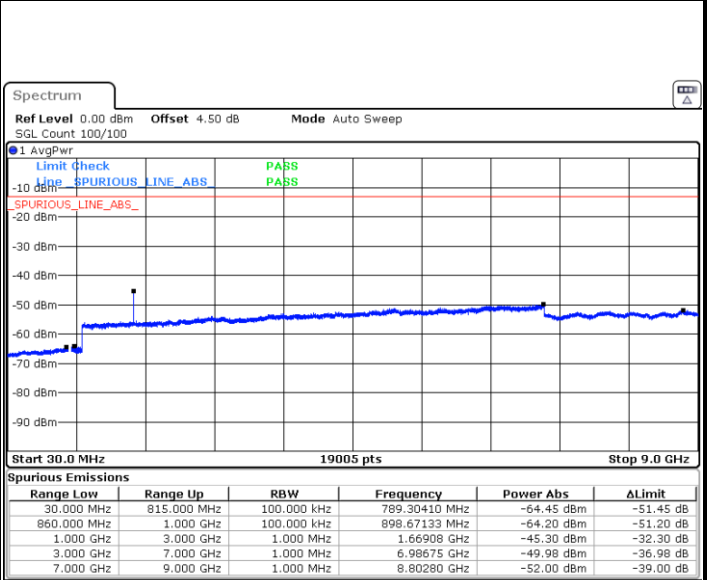


Start 30.0 MHz 19005 pts Stop 9.0 GHz

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	779.49650 MHz	-64.56 dBm	-51.56 dB
860.000 MHz	1.000 GHz	100.000 kHz	882.16783 MHz	-64.12 dBm	-51.12 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.64909 GHz	-46.20 dBm	-33.20 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99625 GHz	-50.05 dBm	-37.05 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.84654 GHz	-52.05 dBm	-39.05 dB

Date: 20 JAN 2020 02:15:13

Middle Channel / 64QAM

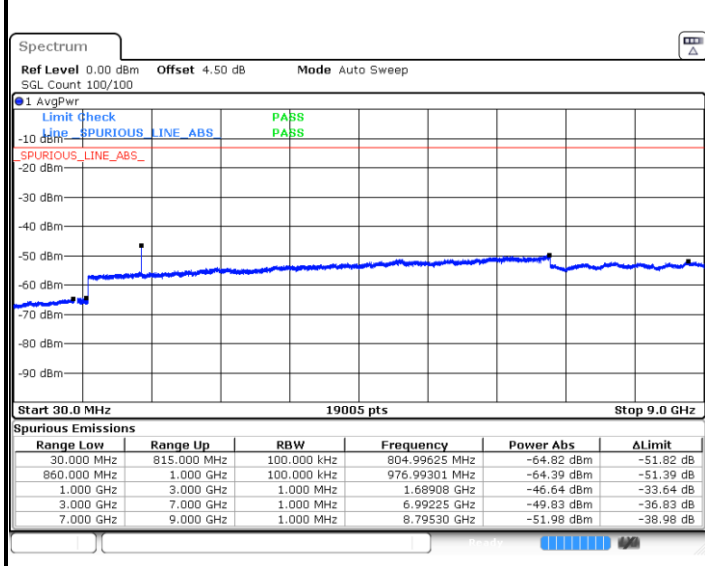


Start 30.0 MHz 19005 pts Stop 9.0 GHz

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	789.30410 MHz	-64.45 dBm	-51.45 dB
860.000 MHz	1.000 GHz	100.000 kHz	898.67133 MHz	-64.20 dBm	-51.20 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.66908 GHz	-45.30 dBm	-32.30 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98675 GHz	-49.98 dBm	-36.98 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.80280 GHz	-52.00 dBm	-39.00 dB

Date: 20 JAN 2020 02:16:07

Highest Channel / 64QAM



Start 30.0 MHz 19005 pts Stop 9.0 GHz

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	804.99625 MHz	-64.82 dBm	-51.82 dB
860.000 MHz	1.000 GHz	100.000 kHz	976.99301 MHz	-64.39 dBm	-51.39 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.68908 GHz	-46.64 dBm	-33.64 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99225 GHz	-49.83 dBm	-36.83 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.79530 GHz	-51.98 dBm	-38.98 dB

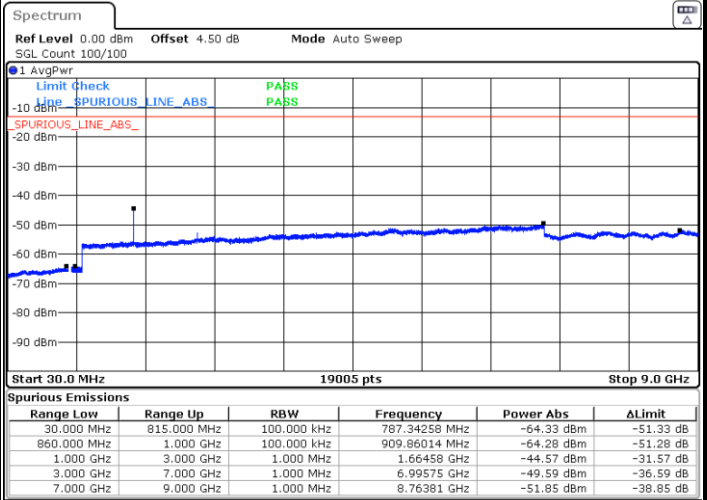
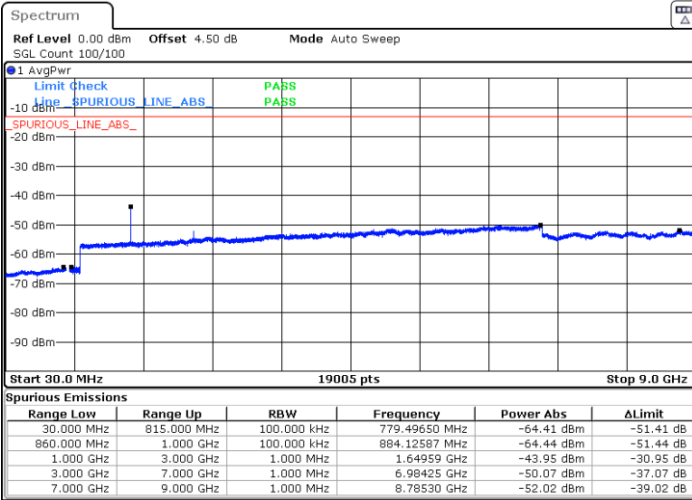
Date: 20 JAN 2020 02:20:57



LTE Band 5 / 10MHz

Lowest Channel / 64QAM

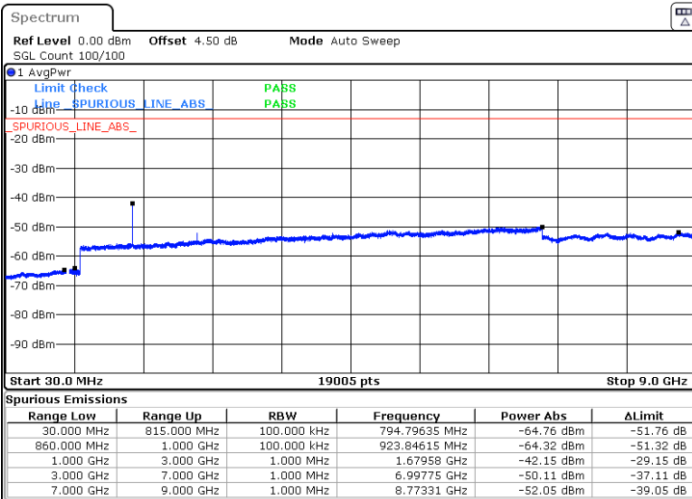
Middle Channel / 64QAM



Date: 20 JAN 2020 02:32:02

Date: 20 JAN 2020 02:32:56

Highest Channel / 64QAM



Date: 20 JAN 2020 02:37:46



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	0.0001	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0050	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0053	
0	Normal Voltage	0.0052	
-10	Normal Voltage	0.0059	
-20	Normal Voltage	0.0026	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0060	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note: Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.4 V.



LTE Band 13

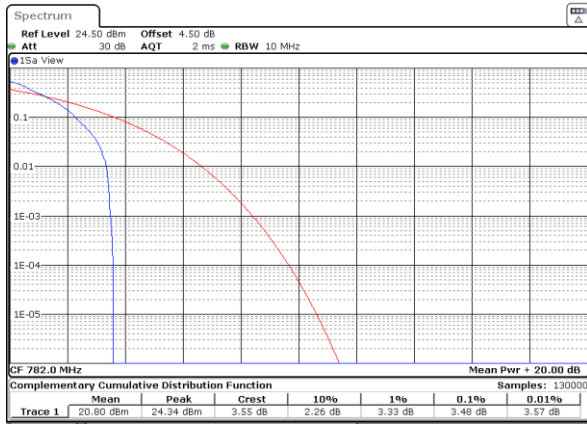
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH					PASS
Middle CH	3.48	4.99	4.29	5.88	
Highest CH					
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH			PASS		
Middle CH	3.91	6.03			
Highest CH					



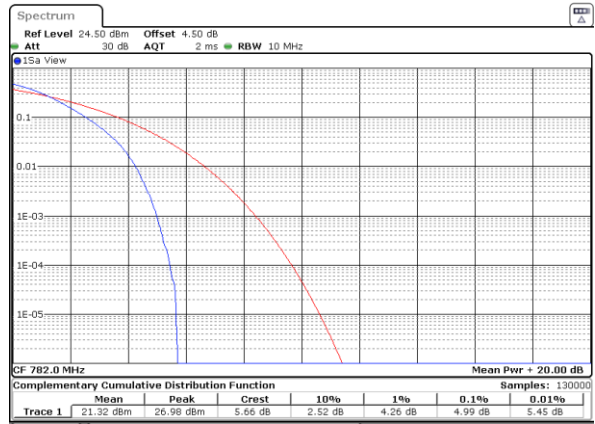
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 20 JAN 2020 03:35:01

Middle Channel / Full RB



Date: 20 JAN 2020 03:35:27

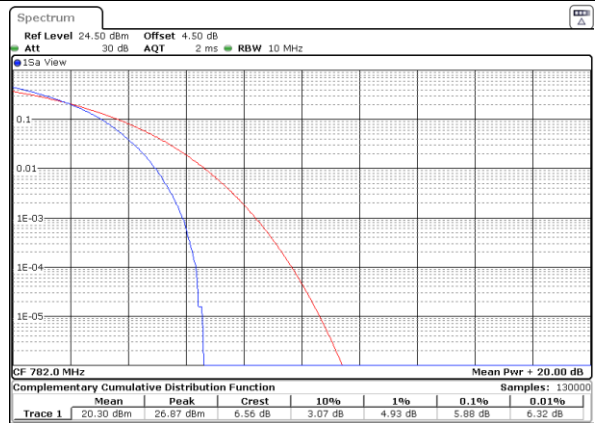
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 20 JAN 2020 03:35:09

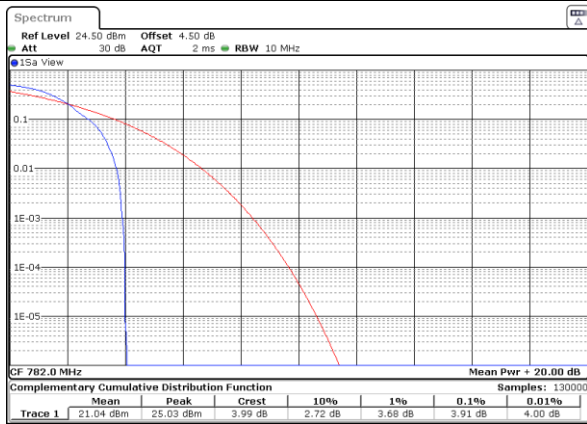
Middle Channel / Full RB



Date: 20 JAN 2020 03:35:19

LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 20 JAN 2020 03:56:54

Middle Channel / Full RB



Date: 20 JAN 2020 03:59:28



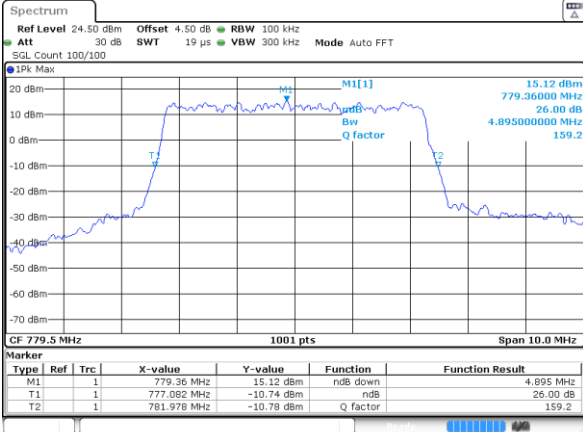
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
	5MHz		10MHz		5MHz	10MHz						
Mod.	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM						
Lowest CH	4.895	4.885			4.775							
Middle CH	4.975	4.915	9.87	9.85	4.945	9.97						
Highest CH	4.945	4.865			4.945							



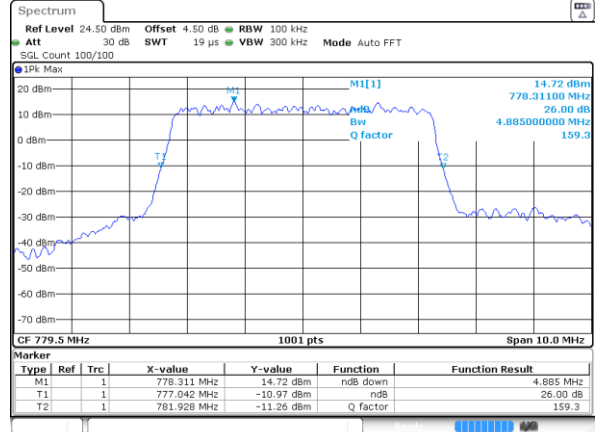
LTE Band 13

Lowest Channel / 5MHz / QPSK



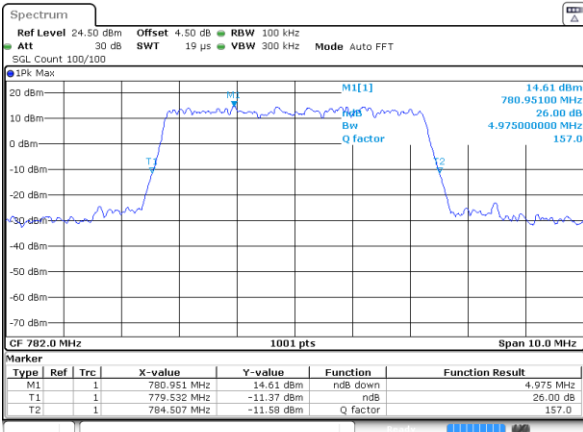
Date: 20 JAN 2020 02:59:13

Lowest Channel / 5MHz / 16QAM



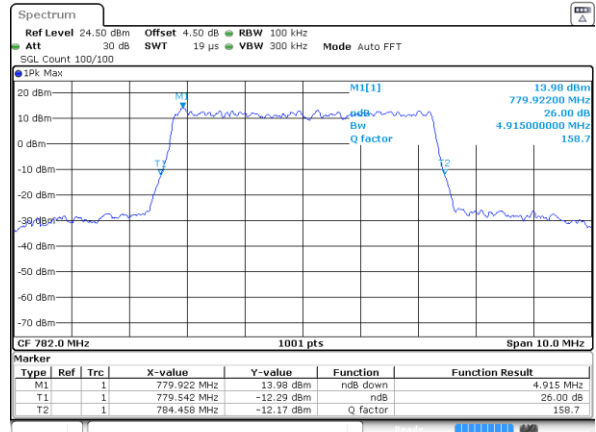
Date: 20 JAN 2020 02:59:23

Middle Channel / 5MHz / QPSK



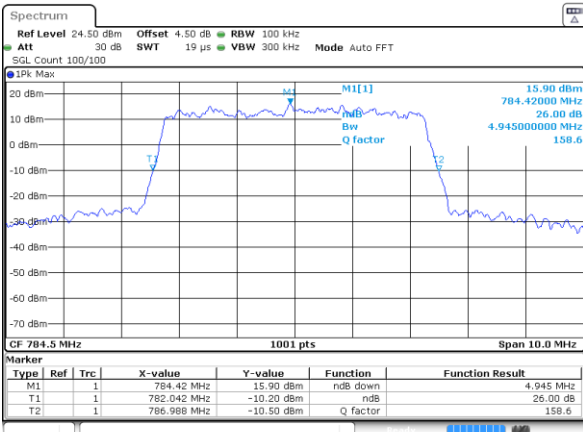
Date: 20 JAN 2020 03:08:12

Middle Channel / 5MHz / 16QAM



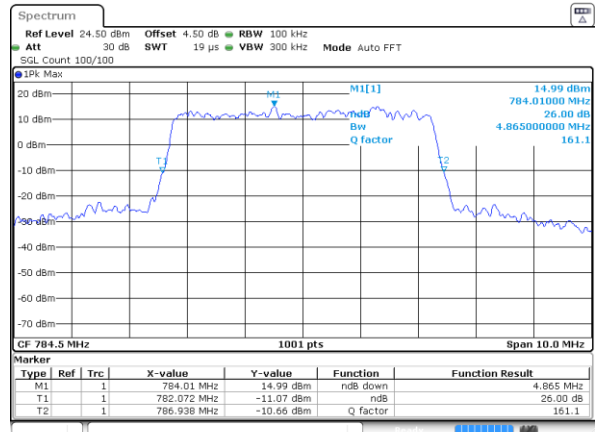
Date: 20 JAN 2020 03:08:22

Highest Channel / 5MHz / QPSK



Date: 20 JAN 2020 03:10:50

Highest Channel / 5MHz / 16QAM

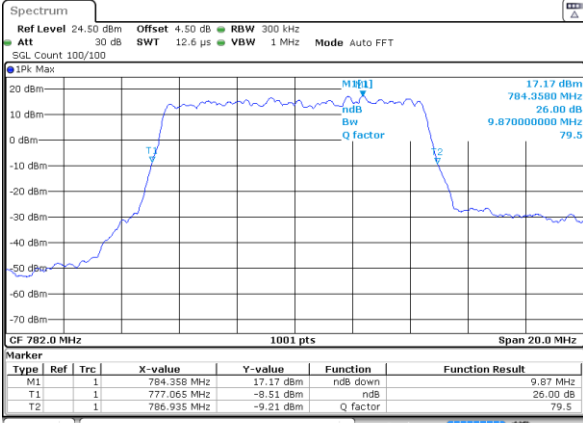


Date: 20 JAN 2020 03:10:40



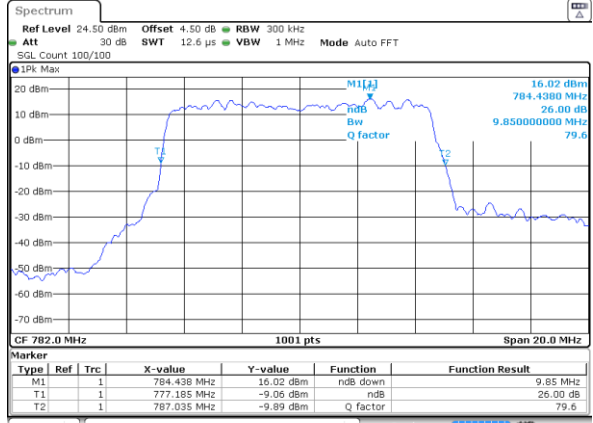
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 20 JAN 2020 03:21:37

Middle Channel / 10MHz / 16QAM

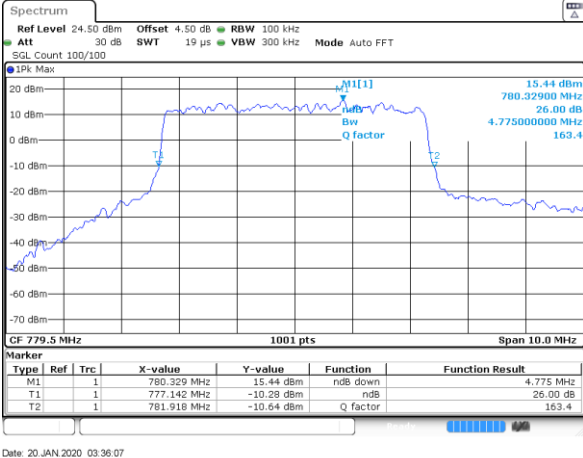


Date: 20 JAN 2020 03:21:27



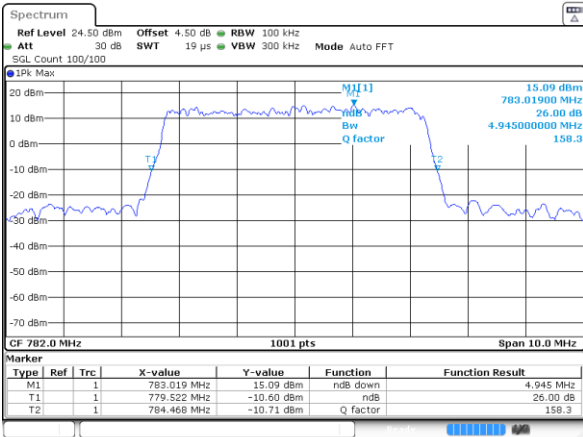
LTE Band 13

Lowest Channel / 5MHz / 64QAM



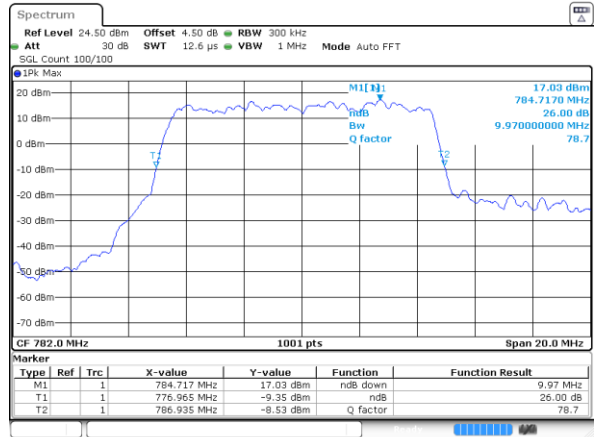
Date: 20 JAN 2020 03:36:07

Middle Channel / 5MHz / 64QAM



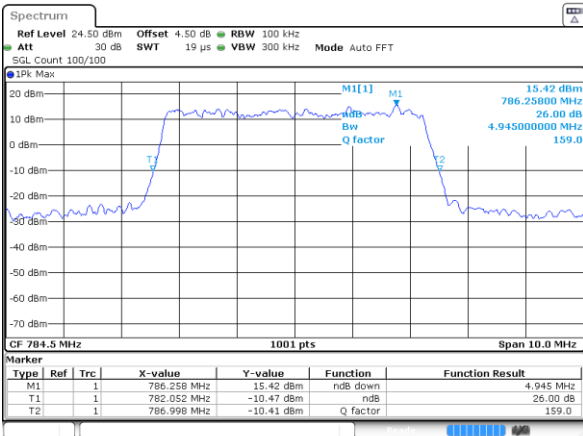
Date: 20 JAN 2020 03:36:17

Middle Channel / 10MHz / 64QAM



Date: 20 JAN 2020 03:46:00

Highest Channel / 5MHz / 64QAM



Date: 20 JAN 2020 03:36:27



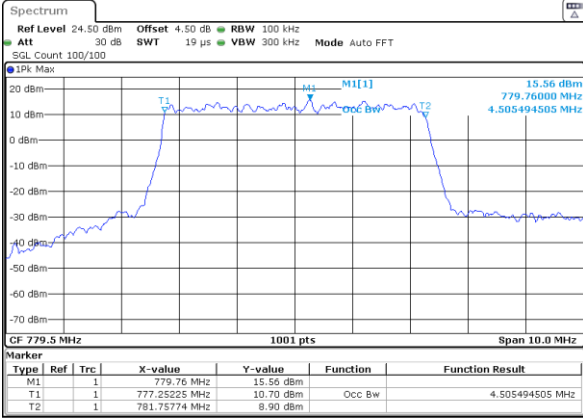
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
	5MHz		10MHz		5MHz	10MHz						
BW	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM						
Lowest CH	4.51	4.49			4.50							
Middle CH	4.49	4.50	9.01	8.99	4.48	9.05						
Highest CH	4.50	4.49			4.48							



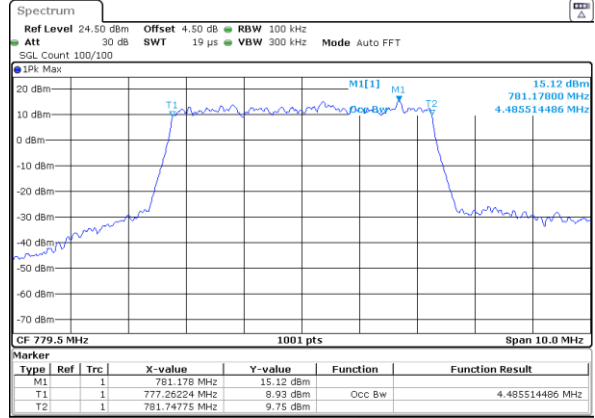
LTE Band 13

Lowest Channel / 5MHz / QPSK



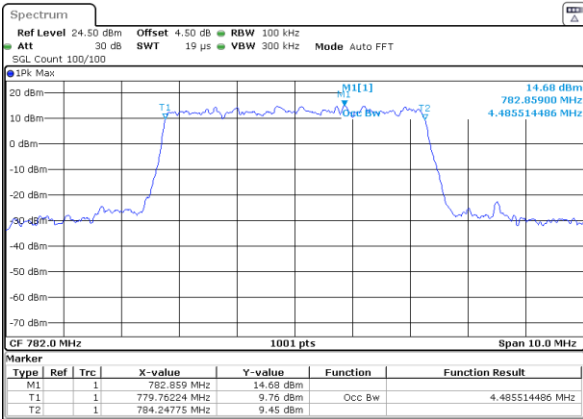
Date: 20 JAN 2020 02:59:43

Lowest Channel / 5MHz / 16QAM



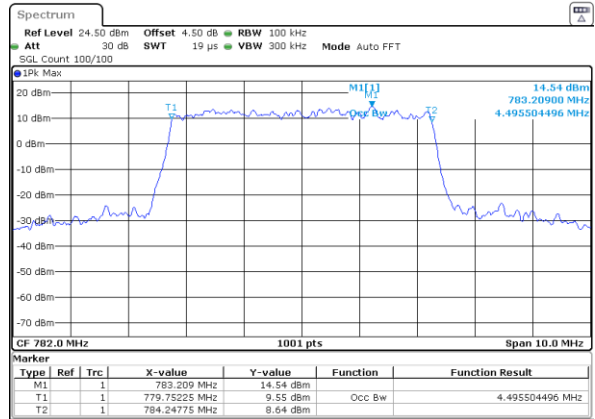
Date: 20 JAN 2020 02:59:33

Middle Channel / 5MHz / QPSK



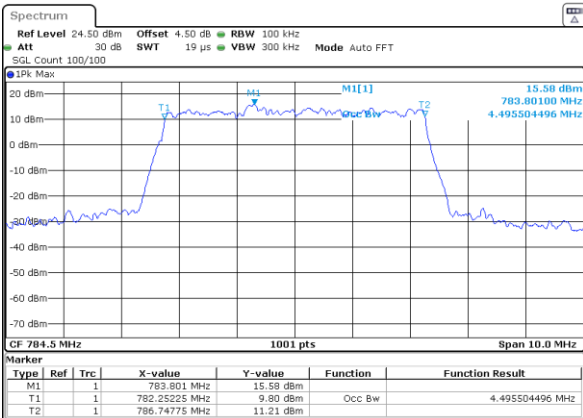
Date: 20 JAN 2020 03:08:32

Middle Channel / 5MHz / 16QAM



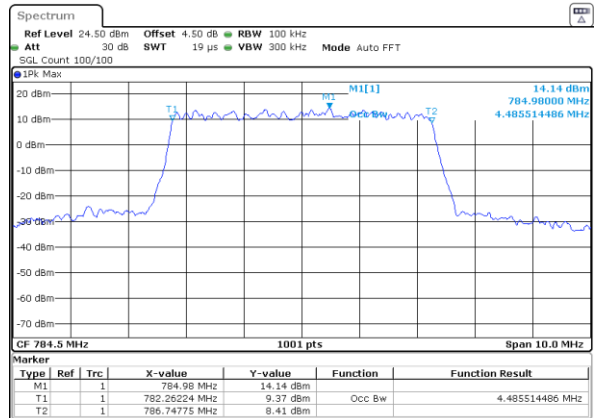
Date: 20 JAN 2020 03:08:42

Highest Channel / 5MHz / QPSK



Date: 20 JAN 2020 03:11:00

Highest Channel / 5MHz / 16QAM

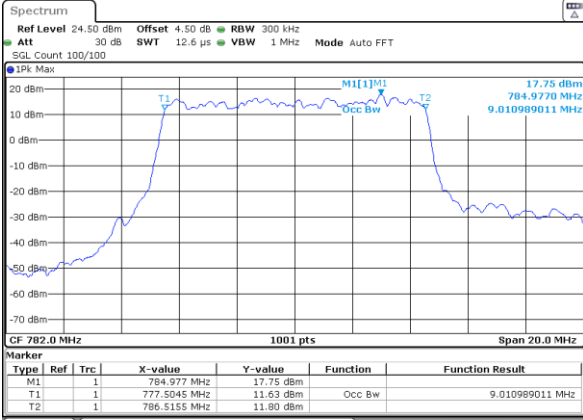


Date: 20 JAN 2020 03:11:10



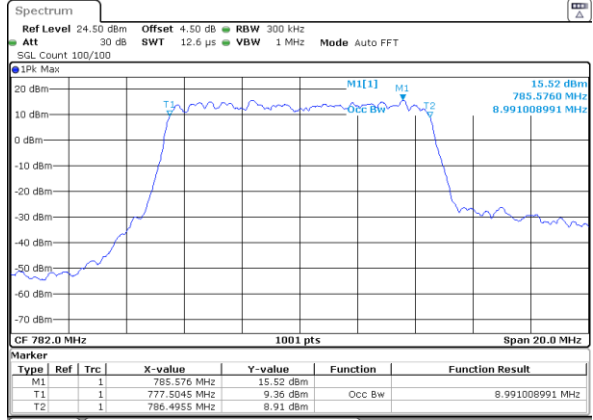
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 20 JAN 2020 03:21:47

Middle Channel / 10MHz / 16QAM



Date: 20 JAN 2020 03:21:57