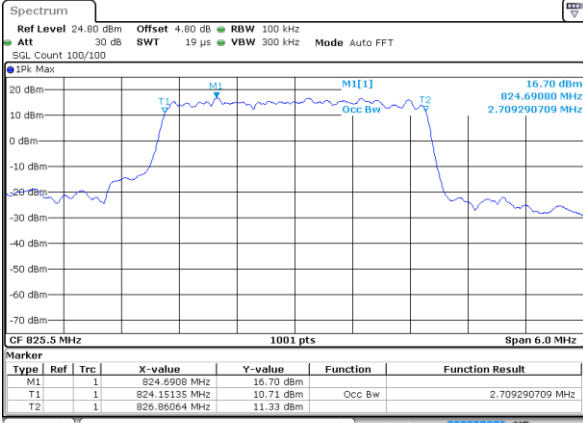




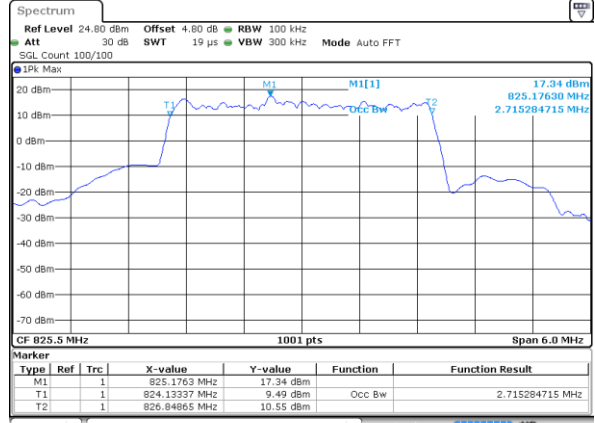
LTE Band 5

Lowest Channel / 3MHz / QPSK



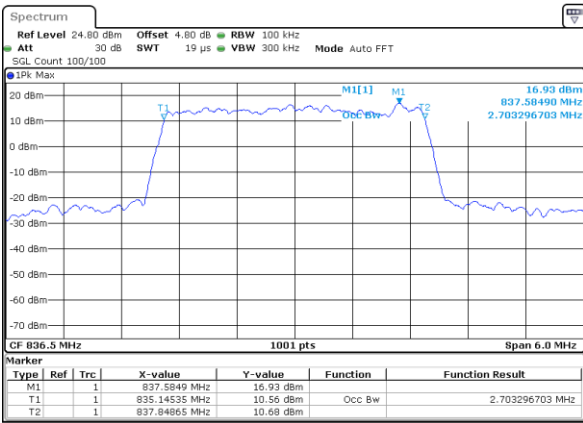
Date: 28 JAN 2020 00:37:01

Lowest Channel / 3MHz / 16QAM



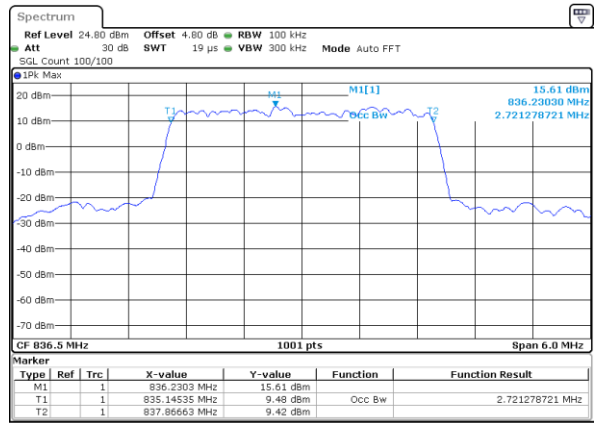
Date: 28 JAN 2020 00:37:11

Middle Channel / 3MHz / QPSK



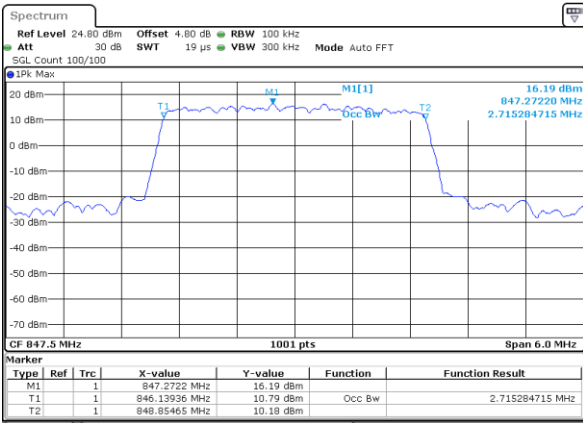
Date: 28 JAN 2020 00:46:00

Middle Channel / 3MHz / 16QAM



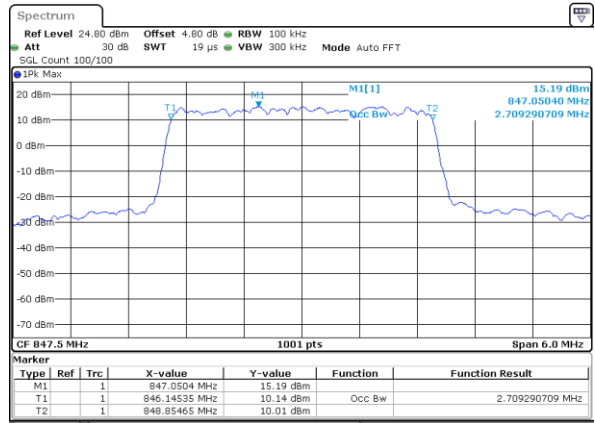
Date: 28 JAN 2020 00:46:10

Highest Channel / 3MHz / QPSK



Date: 28 JAN 2020 00:48:28

Highest Channel / 3MHz / 16QAM

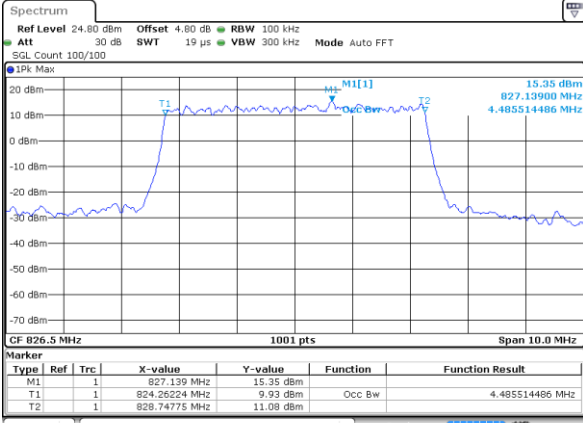


Date: 28 JAN 2020 00:48:38



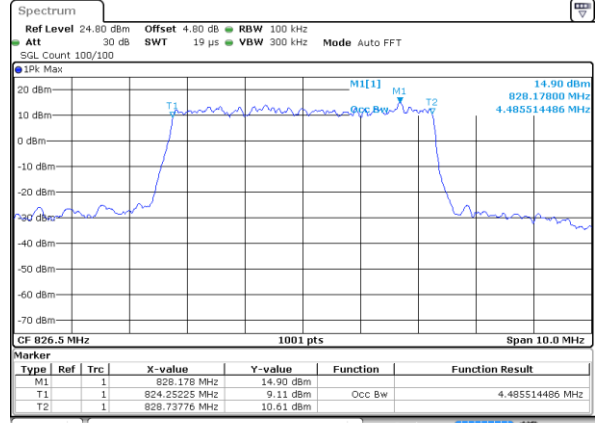
LTE Band 5

Lowest Channel / 5MHz / QPSK



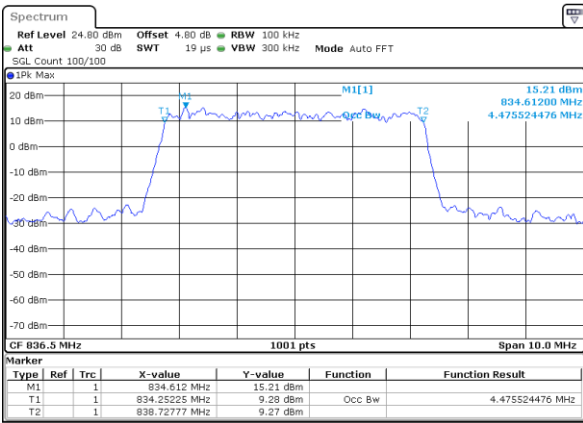
Date: 28 JAN 2020 00:57:27

Lowest Channel / 5MHz / 16QAM



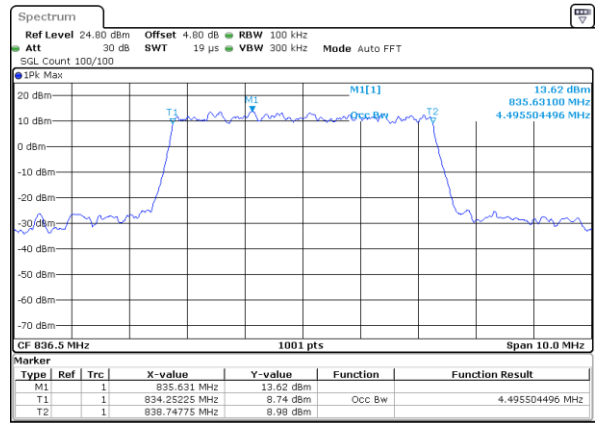
Date: 28 JAN 2020 00:57:37

Middle Channel / 5MHz / QPSK



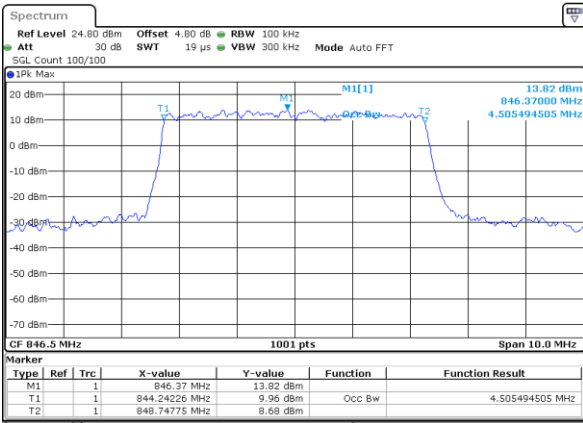
Date: 28 JAN 2020 01:06:25

Middle Channel / 5MHz / 16QAM



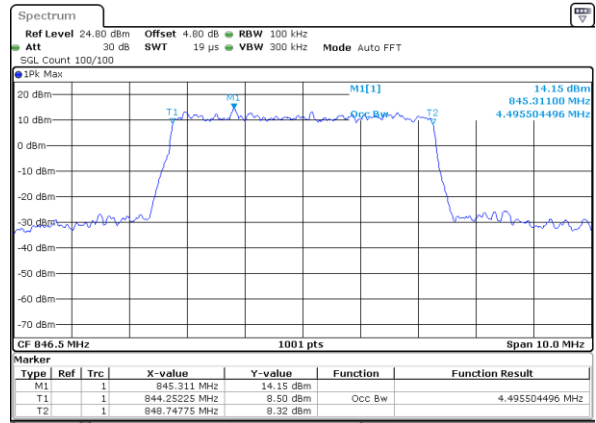
Date: 28 JAN 2020 01:06:35

Highest Channel / 5MHz / QPSK



Date: 28 JAN 2020 01:08:54

Highest Channel / 5MHz / 16QAM

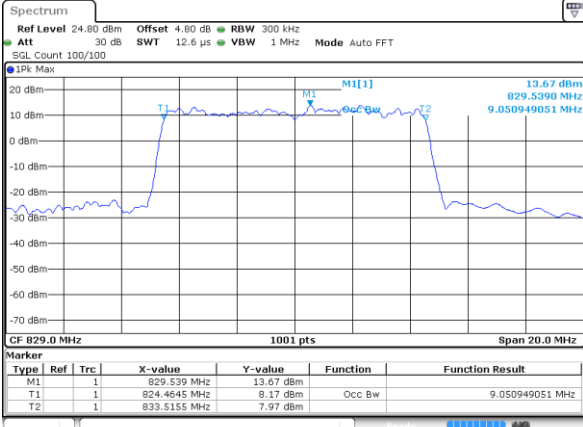


Date: 28 JAN 2020 01:09:04



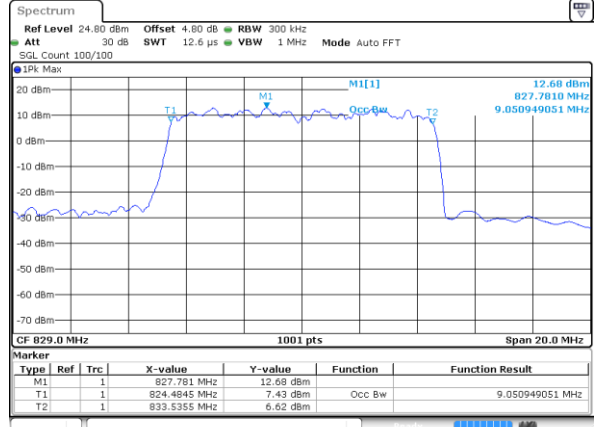
LTE Band 5

Lowest Channel / 10MHz / QPSK



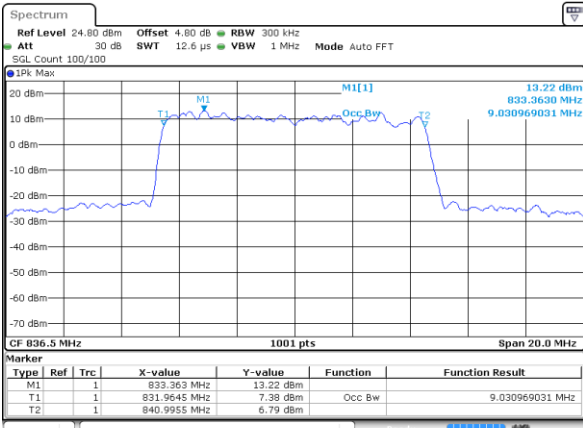
Date: 28 JAN 2020 01:17:52

Lowest Channel / 10MHz / 16QAM



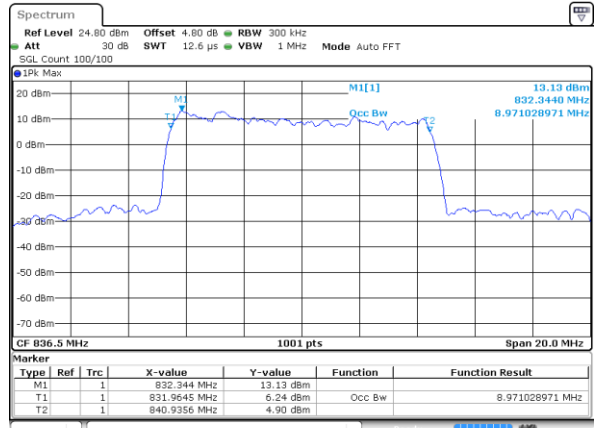
Date: 28 JAN 2020 01:18:02

Middle Channel / 10MHz / QPSK



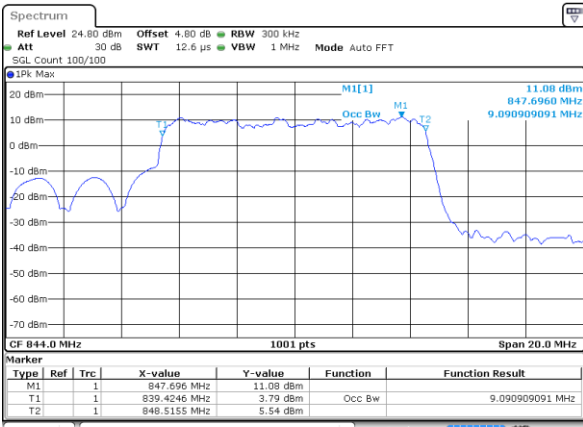
Date: 28 JAN 2020 01:26:50

Middle Channel / 10MHz / 16QAM



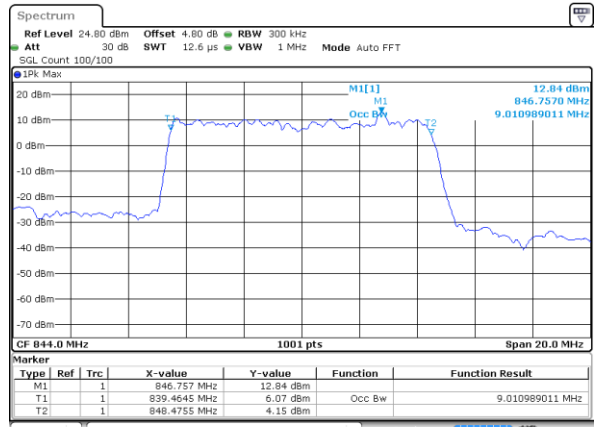
Date: 28 JAN 2020 01:27:00

Highest Channel / 10MHz / QPSK



Date: 28 JAN 2020 01:29:19

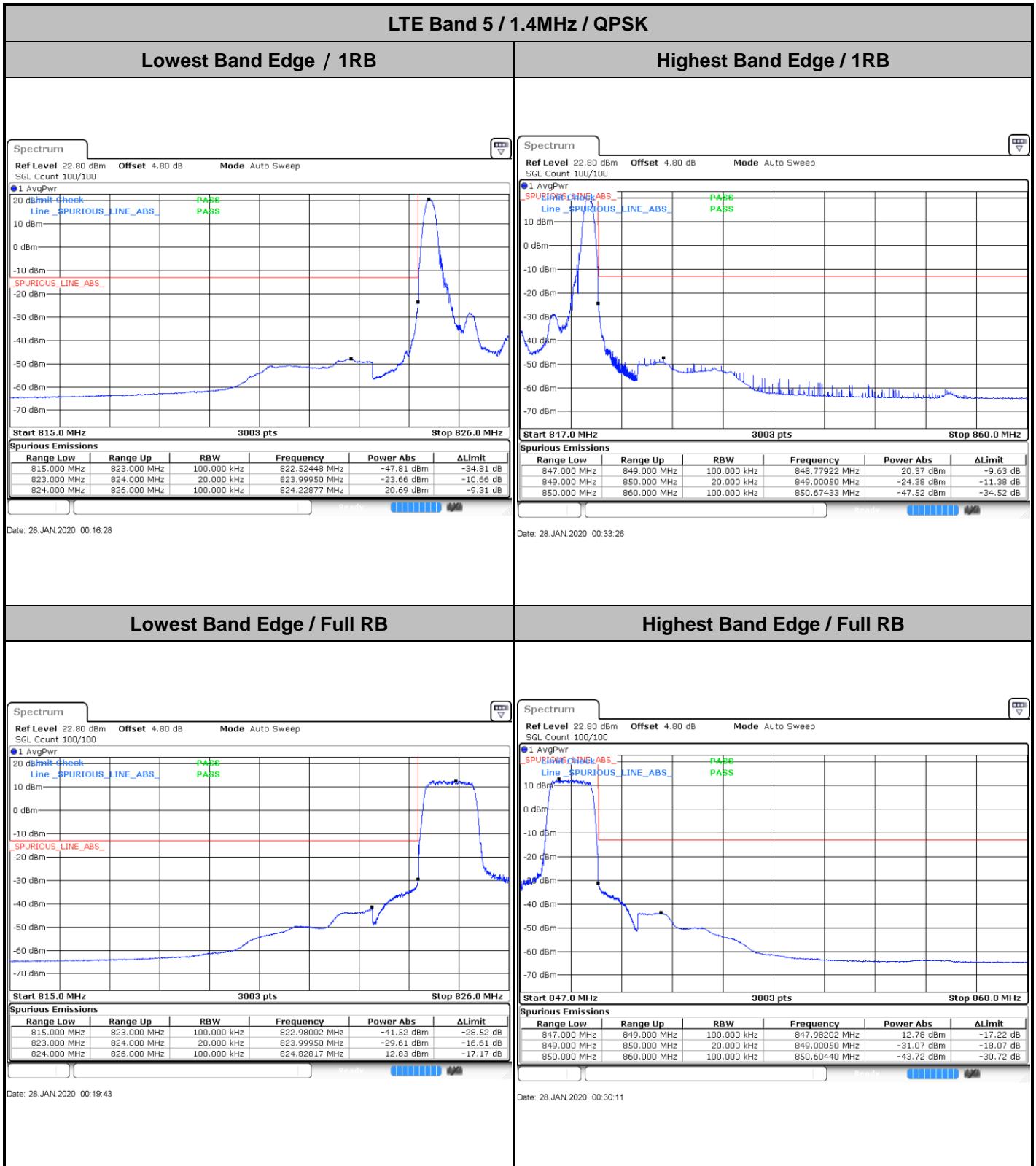
Highest Channel / 10MHz / 16QAM



Date: 28 JAN 2020 01:29:29



# Conducted Band Edge





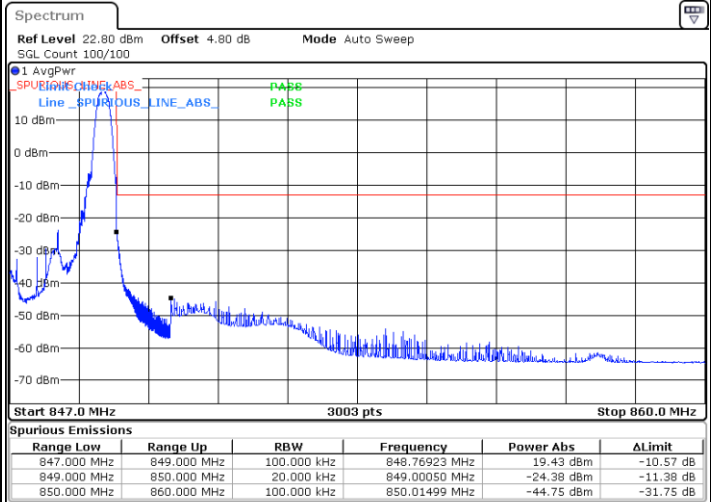
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



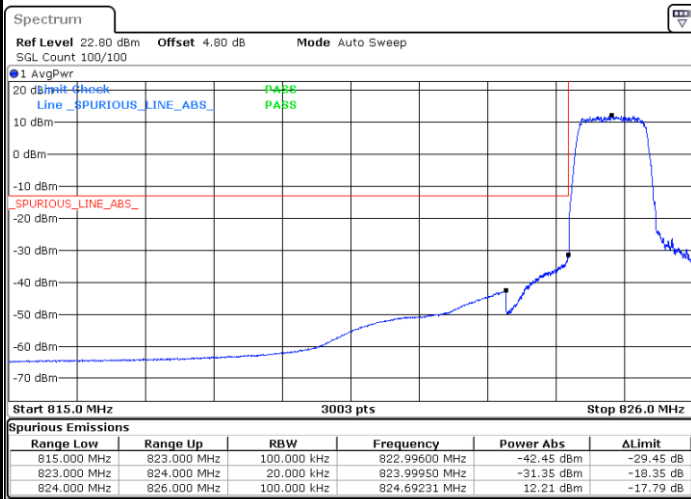
Date: 28. JAN 2020 00:18:06

Highest Band Edge / 1 RB



Date: 28. JAN 2020 00:35:03

Lowest Band Edge / Full RB



Date: 28. JAN 2020 00:21:20

Highest Band Edge / Full RB

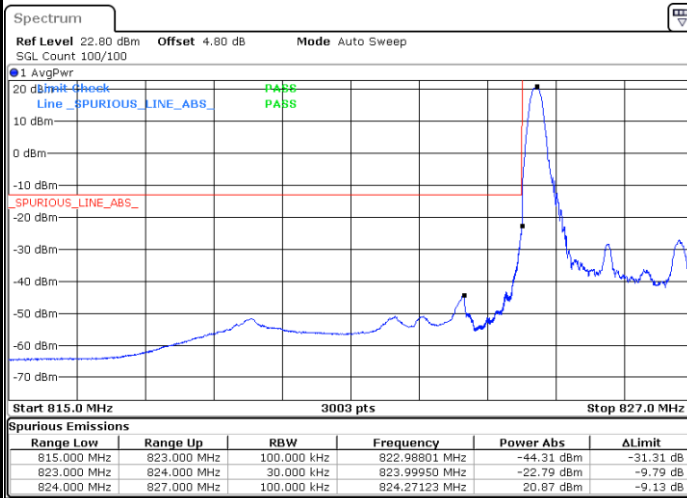


Date: 28. JAN 2020 00:31:48



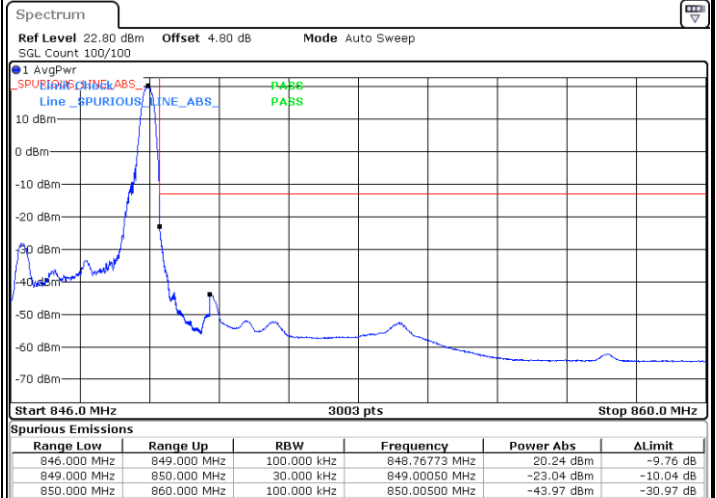
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



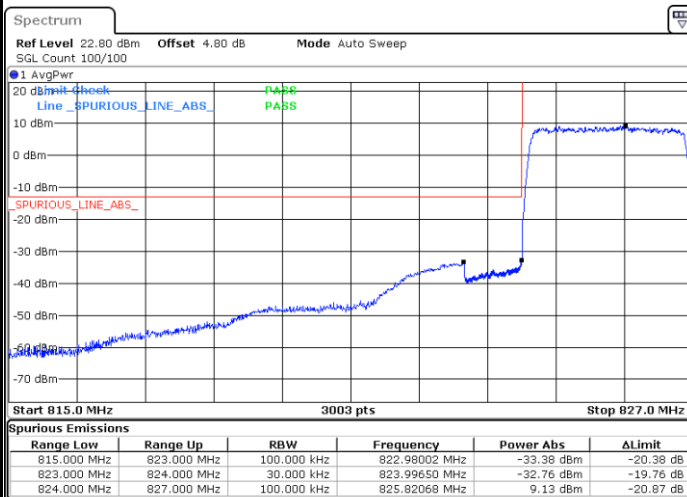
Date: 28 JAN 2020 00:39:09

Highest Band Edge / 1 RB



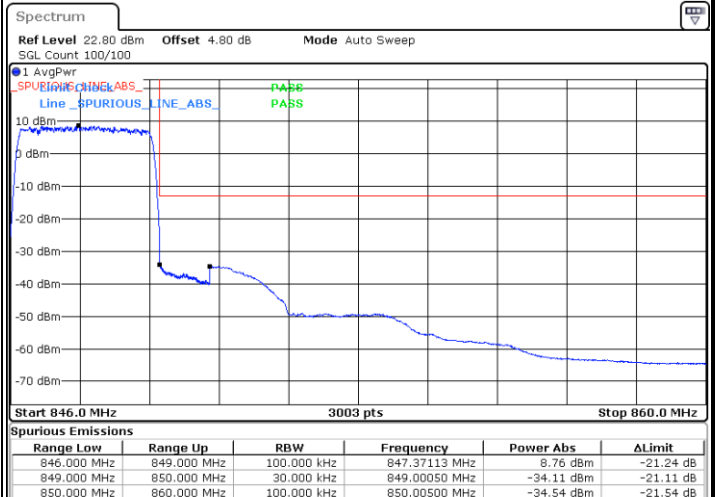
Date: 28 JAN 2020 00:50:36

Lowest Band Edge / Full RB



Date: 28 JAN 2020 00:42:24

Highest Band Edge / Full RB

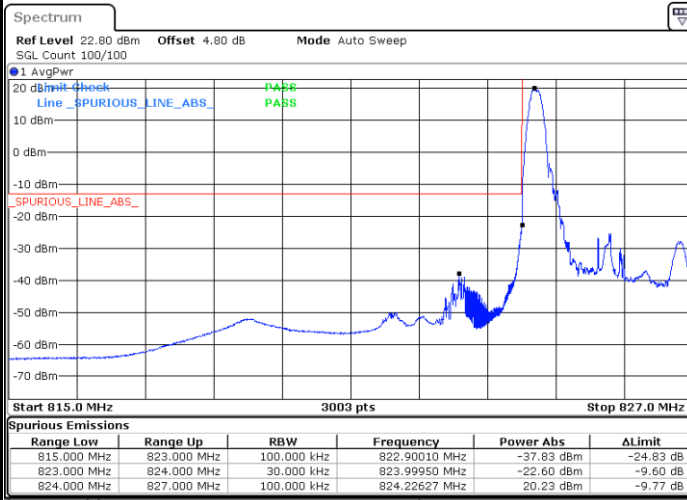


Date: 28 JAN 2020 00:53:51



LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



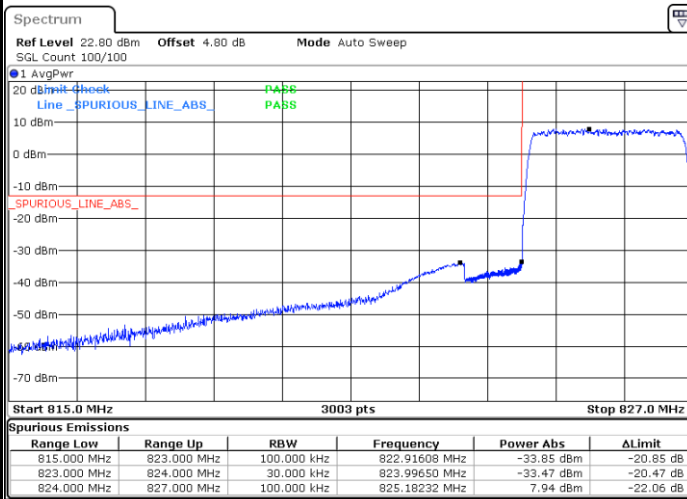
Date: 28. JAN 2020 00:40:47

Highest Band Edge / 1 RB



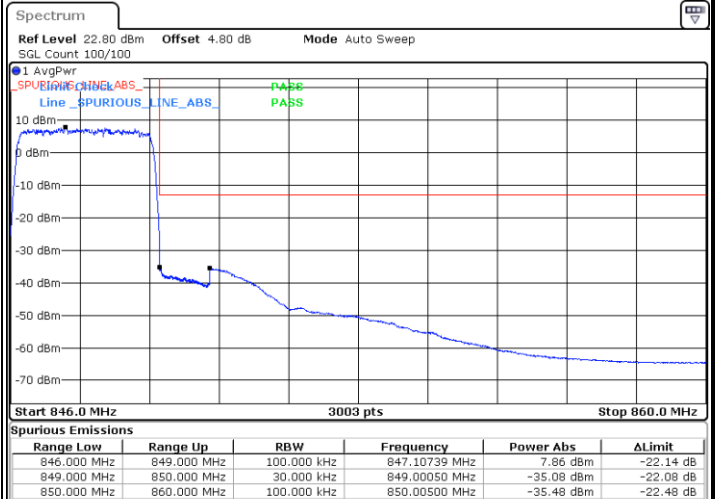
Date: 28. JAN 2020 00:52:14

Lowest Band Edge / Full RB



Date: 28. JAN 2020 00:44:01

Highest Band Edge / Full RB

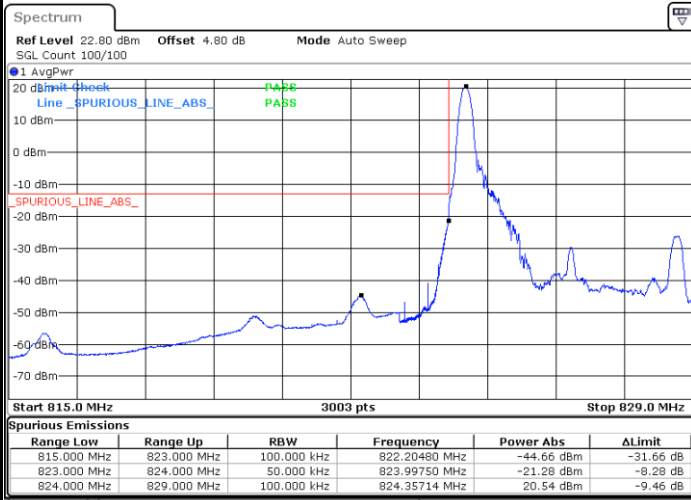


Date: 28. JAN 2020 00:55:28



LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



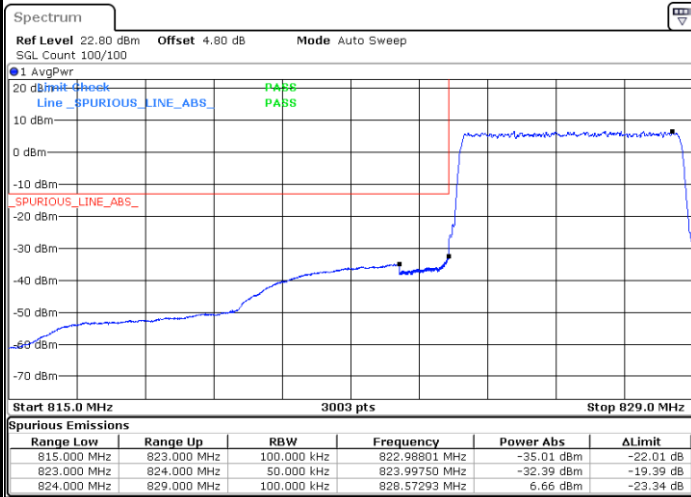
Date: 28. JAN 2020 00:59:35

Highest Band Edge / 1 RB



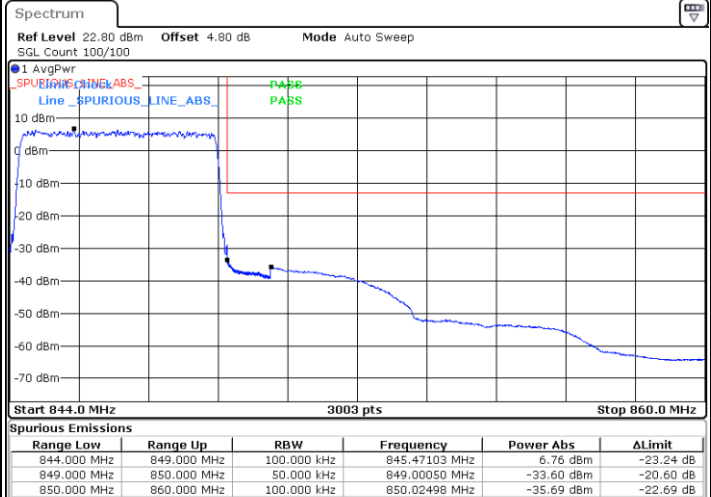
Date: 28. JAN 2020 01:11:01

Lowest Band Edge / Full RB



Date: 28. JAN 2020 01:02:49

Highest Band Edge / Full RB



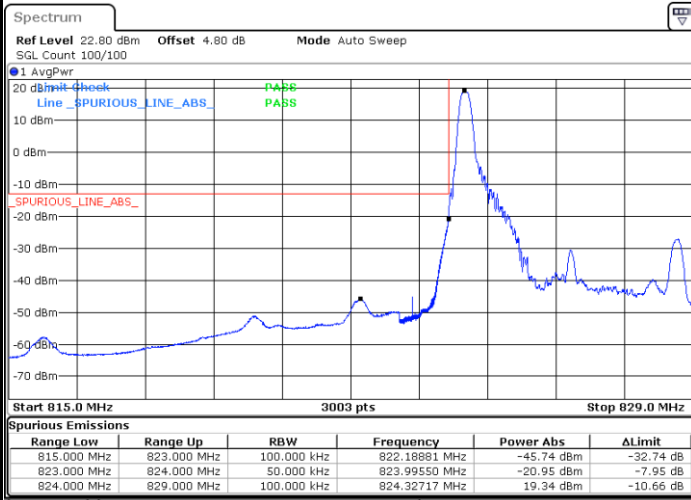
Date: 28. JAN 2020 01:14:16





LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



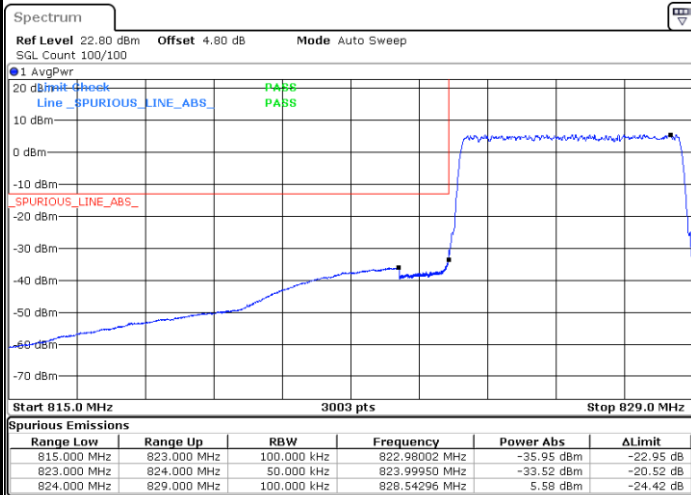
Date: 28. JAN 2020 01:01:12

Highest Band Edge / 1 RB



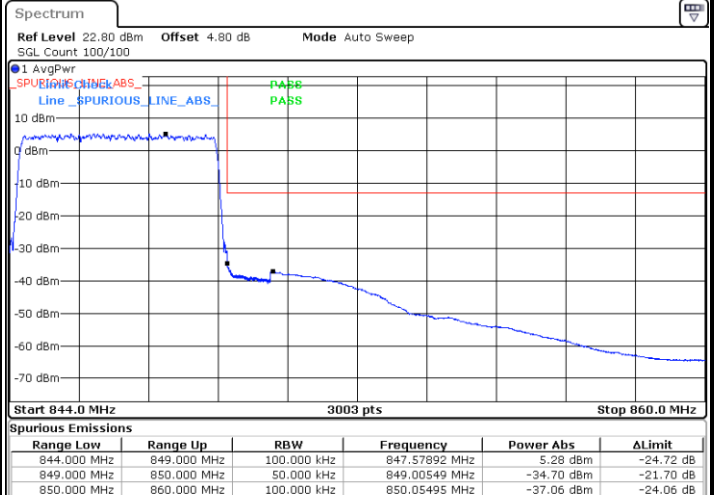
Date: 28. JAN 2020 01:12:39

Lowest Band Edge / Full RB



Date: 28. JAN 2020 01:04:27

Highest Band Edge / Full RB

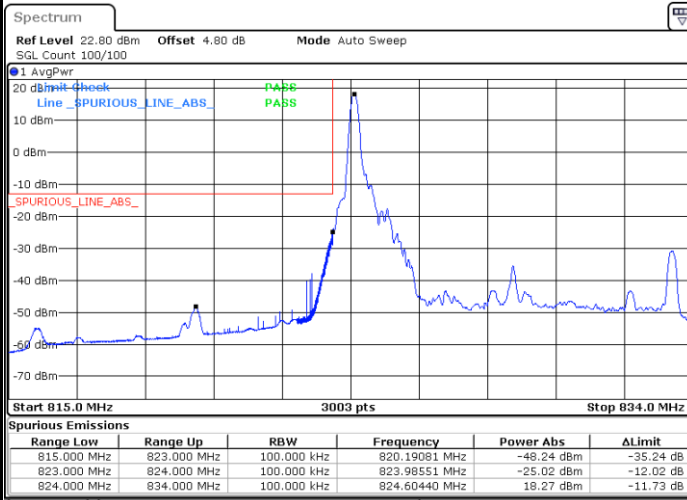


Date: 28. JAN 2020 01:15:54



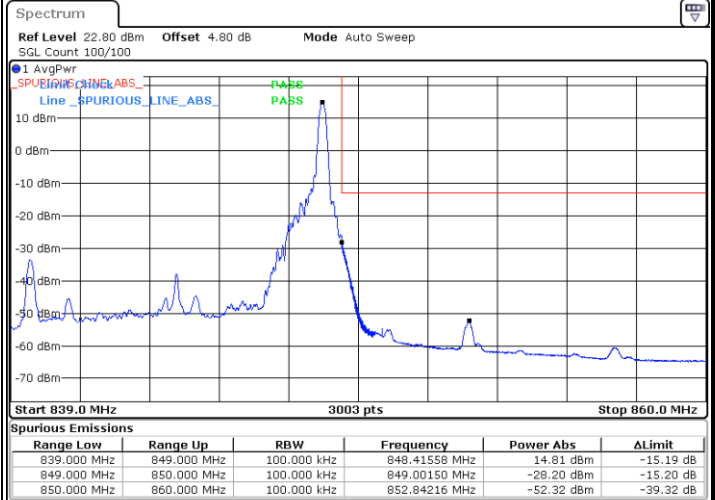
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



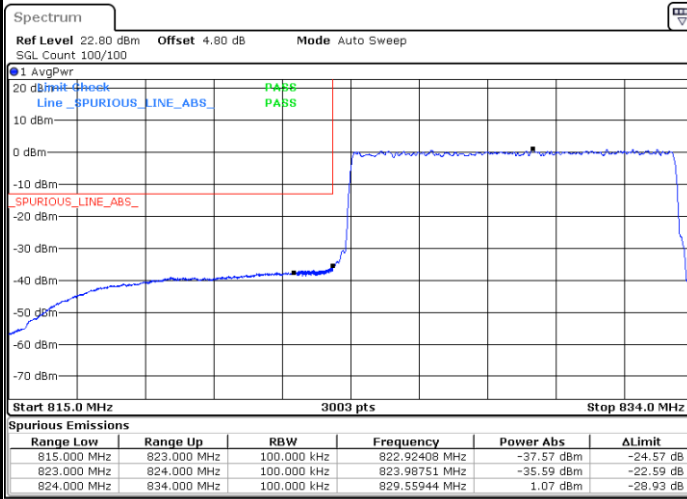
Date: 28. JAN 2020 01:20:00

Highest Band Edge / 1 RB



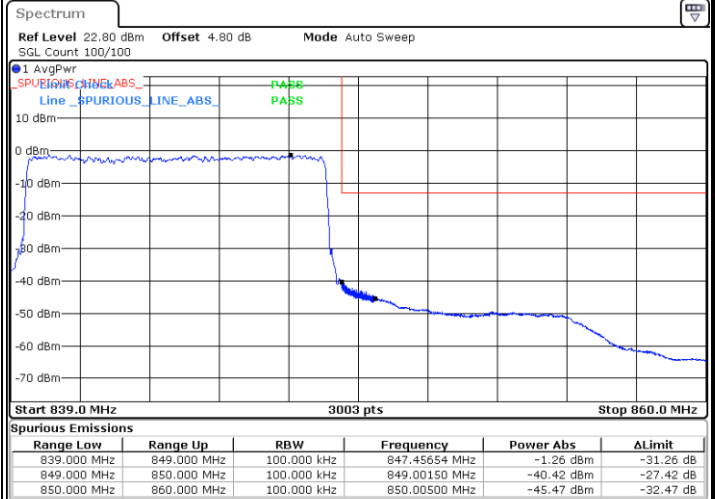
Date: 28. JAN 2020 01:31:26

Lowest Band Edge / Full RB



Date: 28. JAN 2020 01:23:15

Highest Band Edge / Full RB

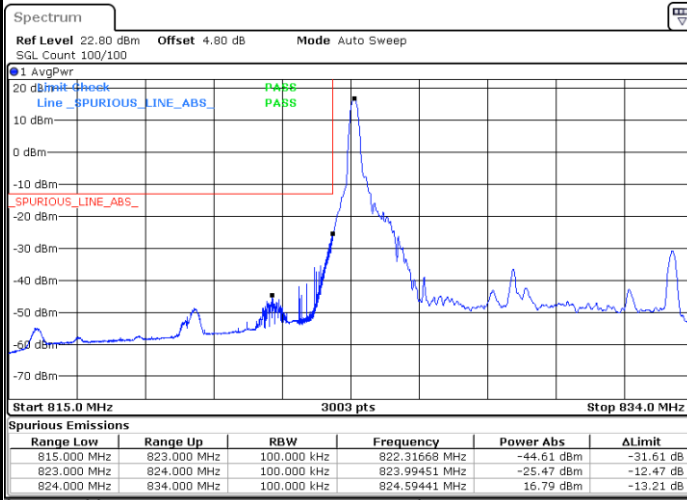


Date: 28. JAN 2020 01:34:41



LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



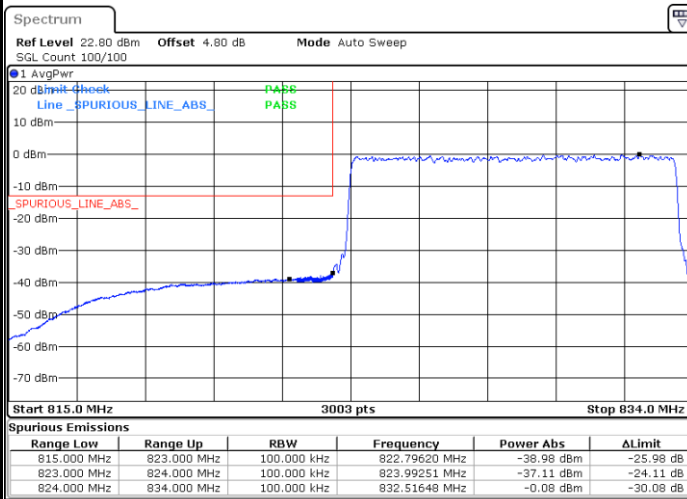
Date: 28. JAN 2020 01:21:37

Highest Band Edge / 1 RB



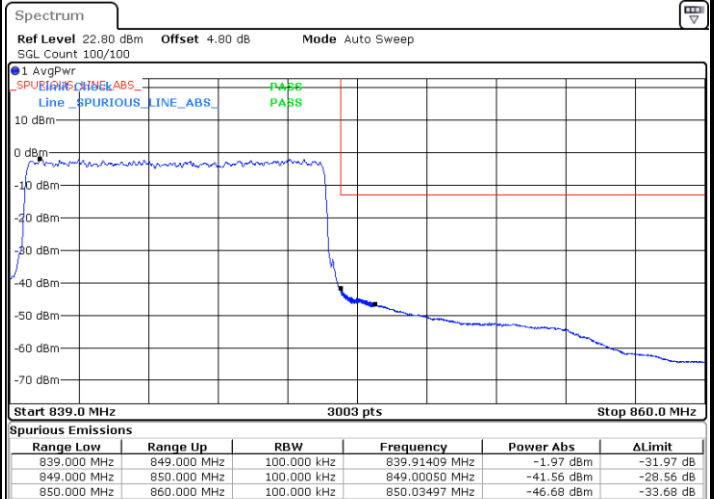
Date: 28. JAN 2020 01:33:04

Lowest Band Edge / Full RB



Date: 28. JAN 2020 01:24:52

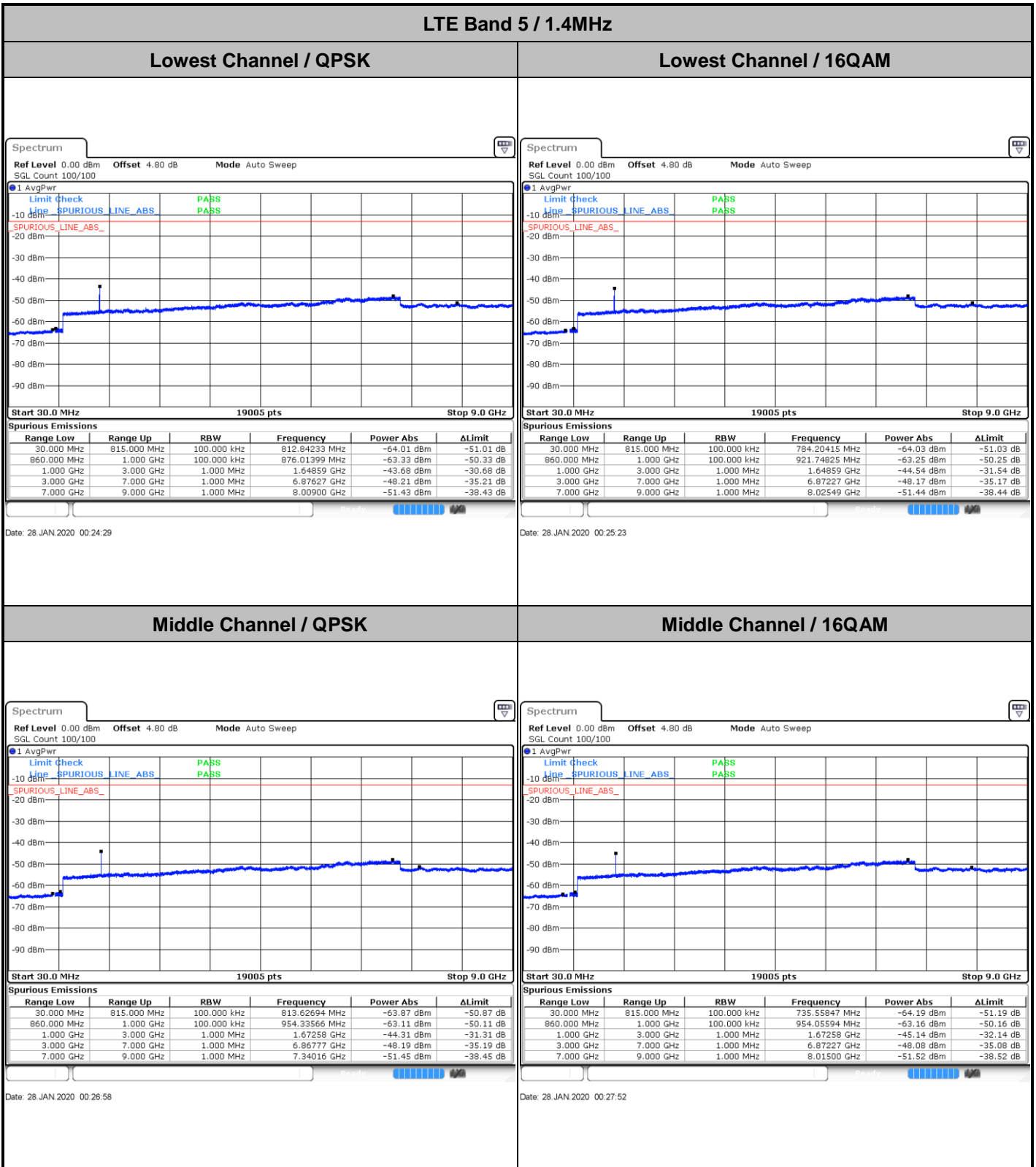
Highest Band Edge / Full RB



Date: 28. JAN 2020 01:36:19



# Conducted Spurious Emission

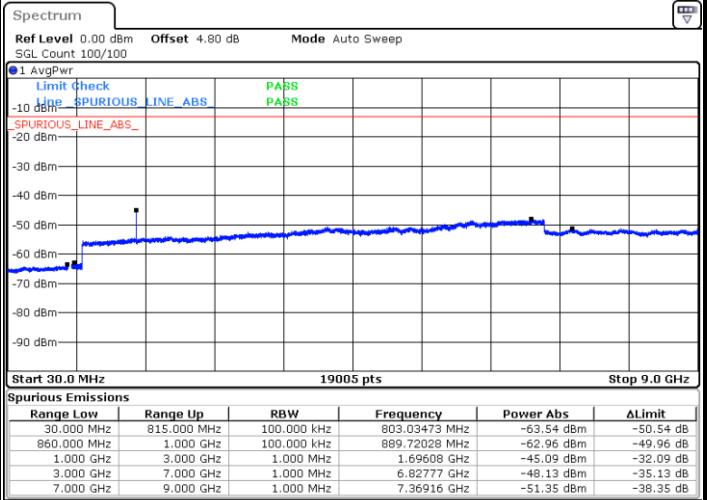
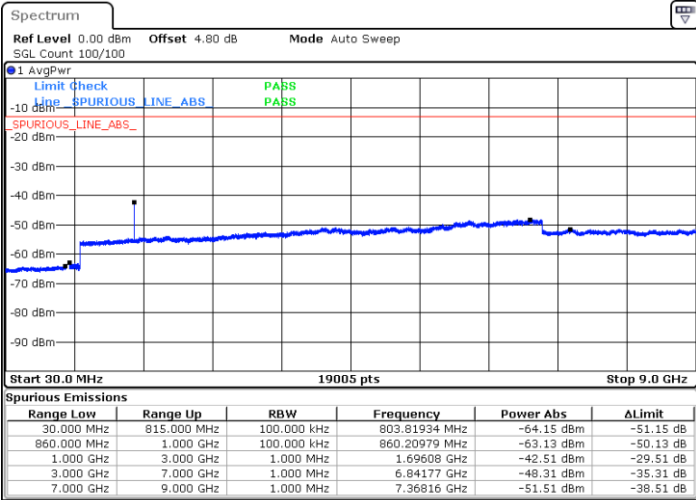




LTE Band 5 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



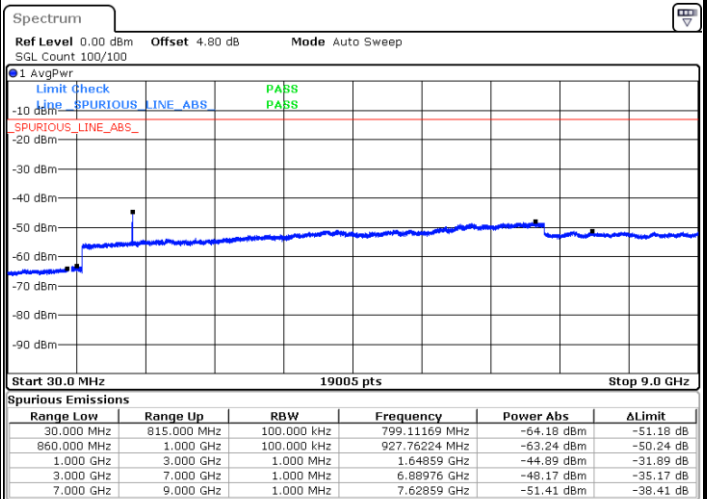
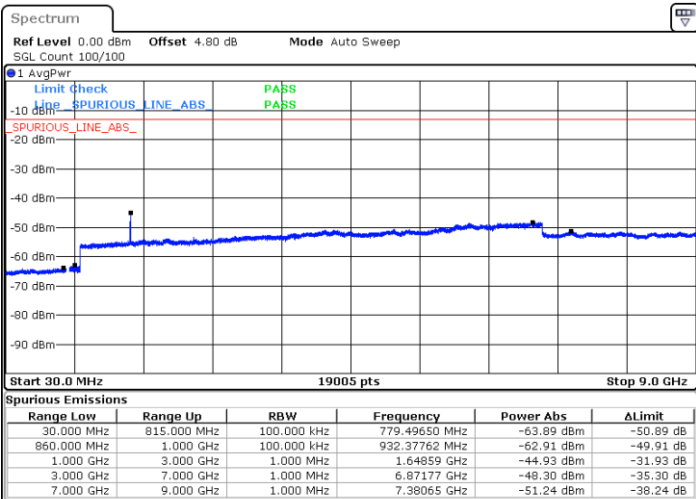
Date: 28 JAN 2020 00:35:57

Date: 28 JAN 2020 00:36:51

LTE Band 5 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 28 JAN 2020 00:44:55

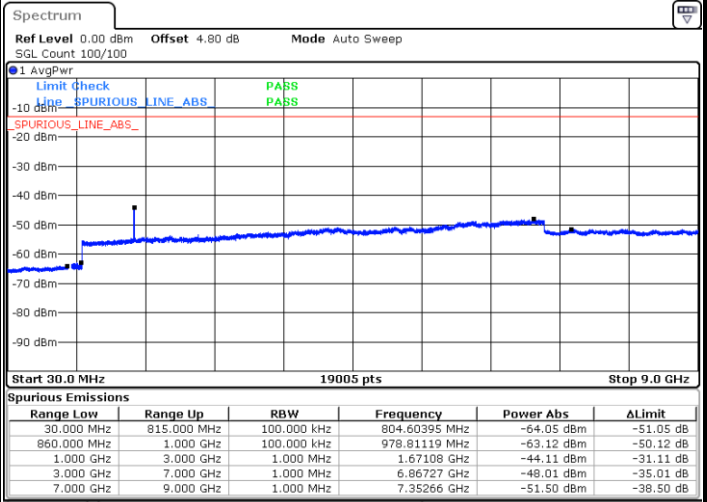
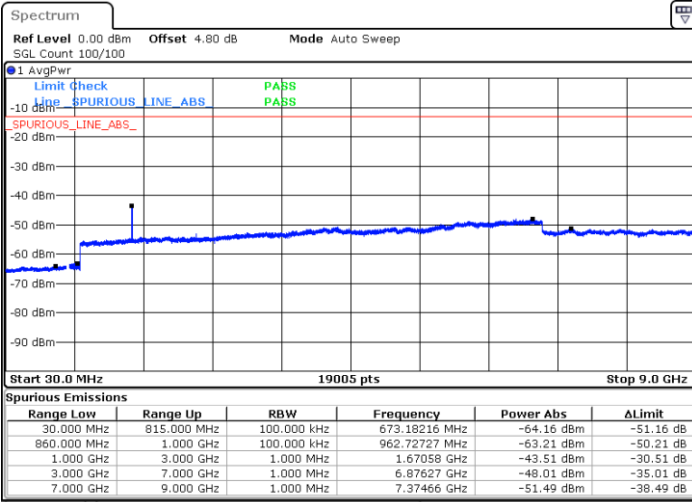
Date: 28 JAN 2020 00:45:49



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

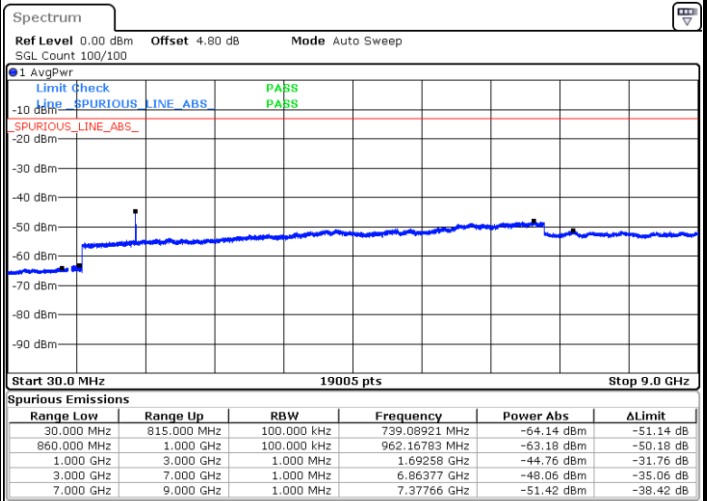
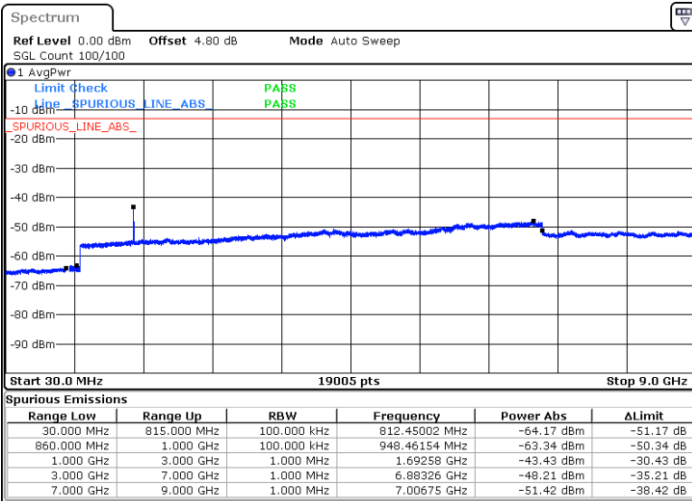


Date: 28 JAN 2020 00:47:23

Date: 28 JAN 2020 00:48:18

Highest Channel / QPSK

Highest Channel / 16QAM



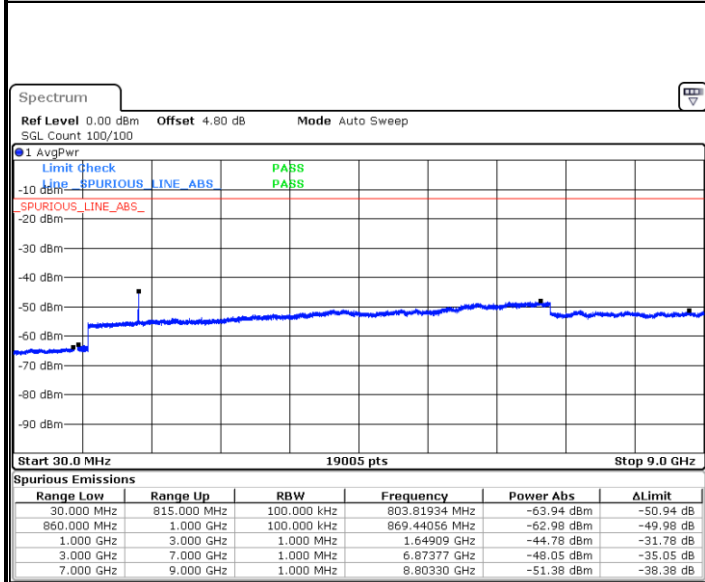
Date: 28 JAN 2020 00:56:22

Date: 28 JAN 2020 00:57:16



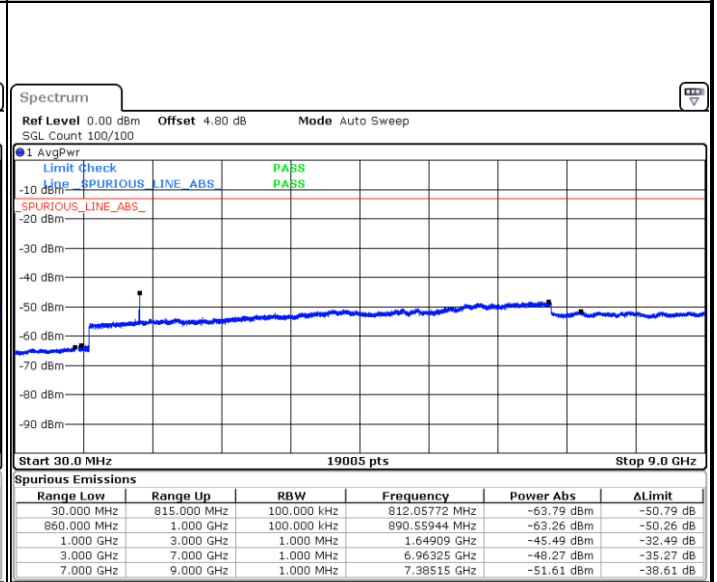
LTE Band 5 / 5MHz

Lowest Channel / QPSK



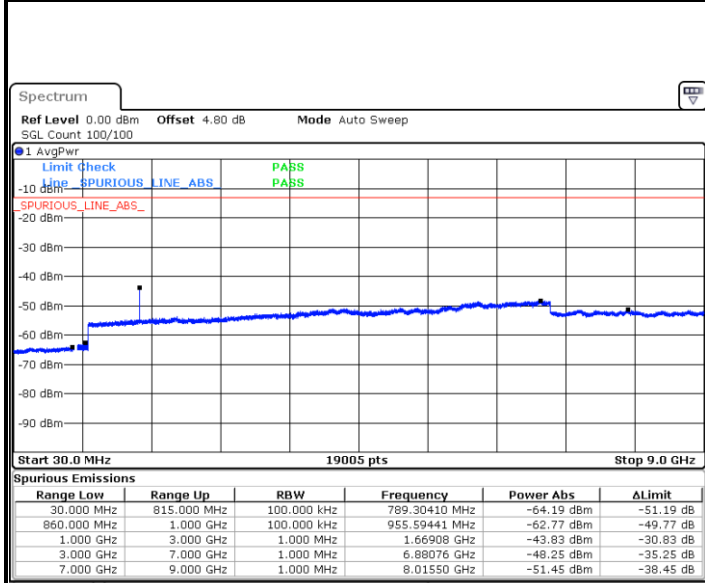
Date: 28 JAN 2020 01:05:20

Lowest Channel / 16QAM



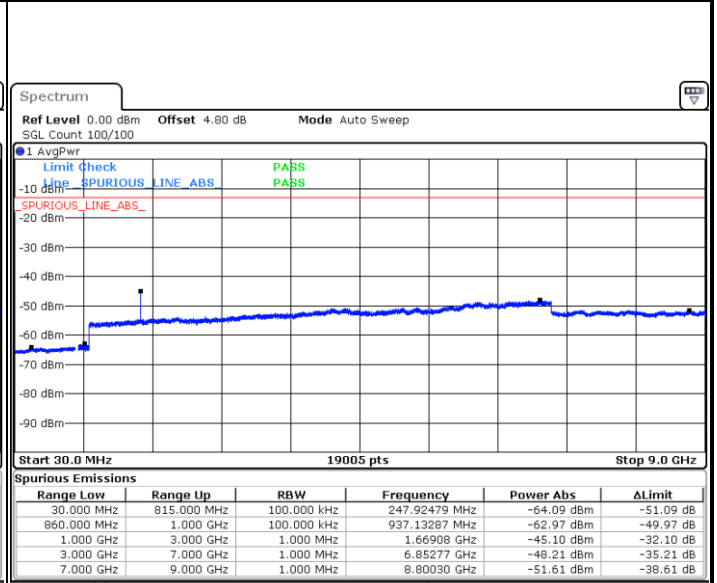
Date: 28 JAN 2020 01:06:15

Middle Channel / QPSK



Date: 28 JAN 2020 01:07:49

Middle Channel / 16QAM

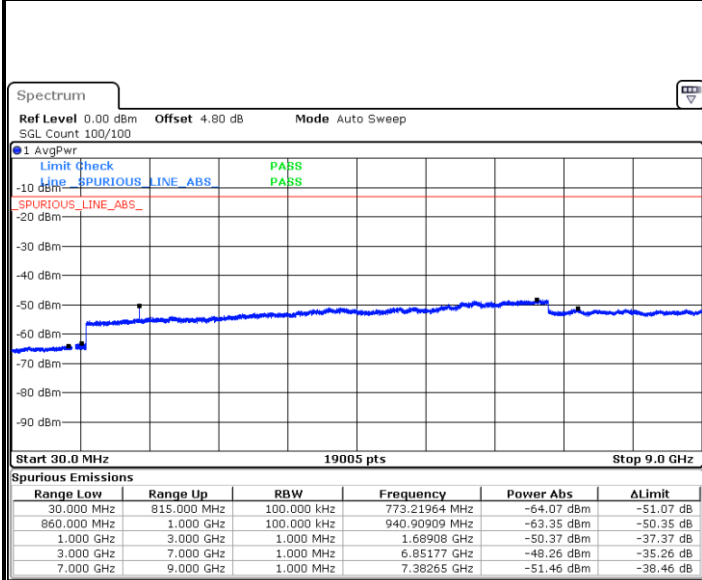


Date: 28 JAN 2020 01:08:43



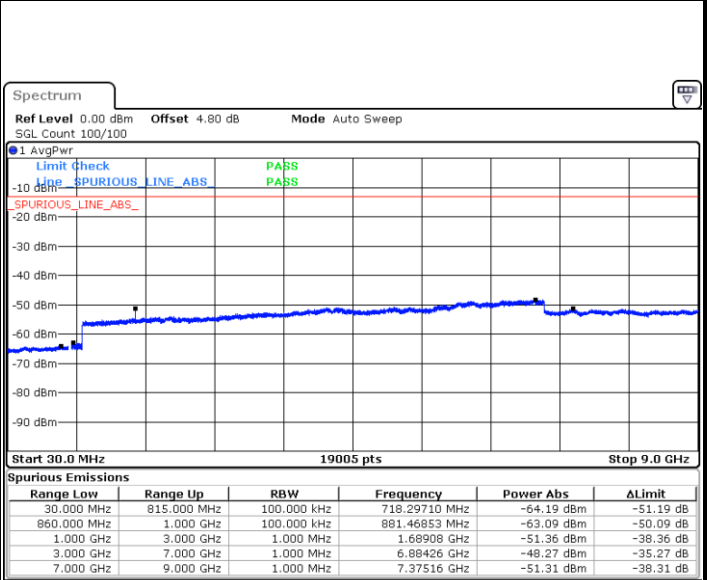
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 28 JAN 2020 01:16:47

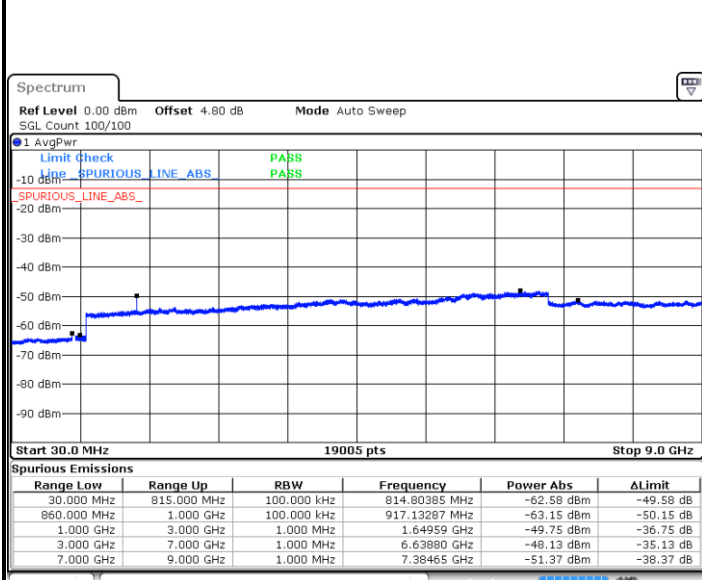
Highest Channel / 16QAM



Date: 28 JAN 2020 01:17:41

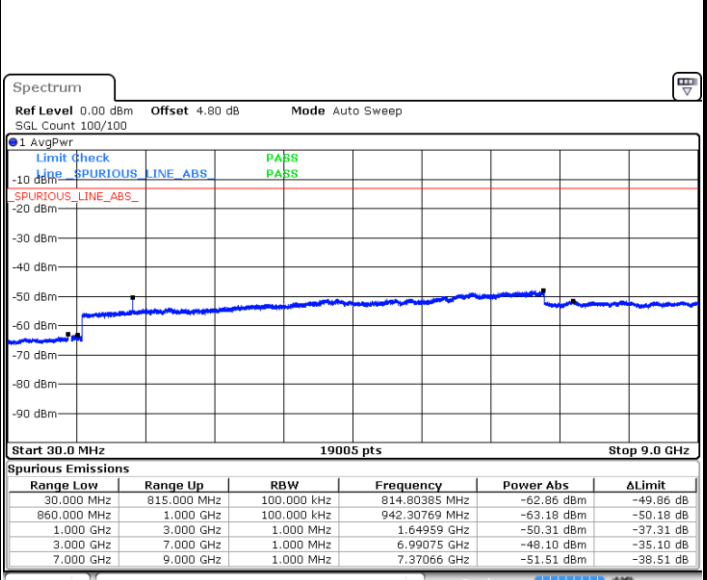
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 28 JAN 2020 01:25:45

Lowest Channel / 16QAM



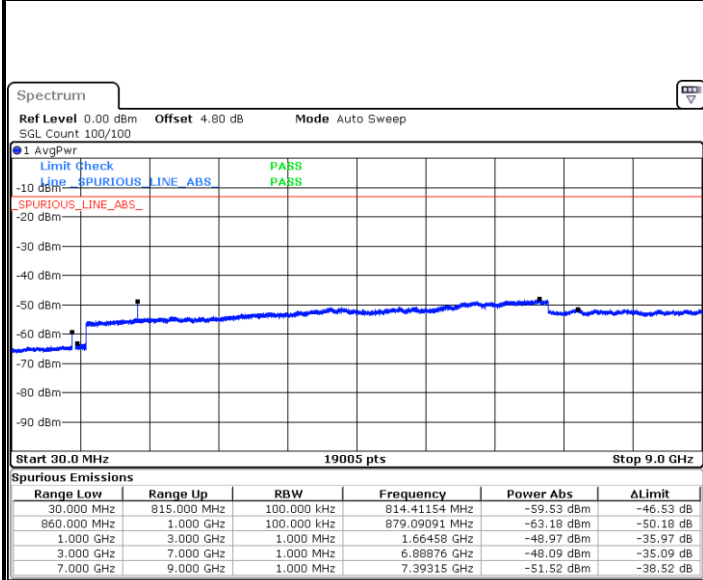
Date: 28 JAN 2020 01:26:40





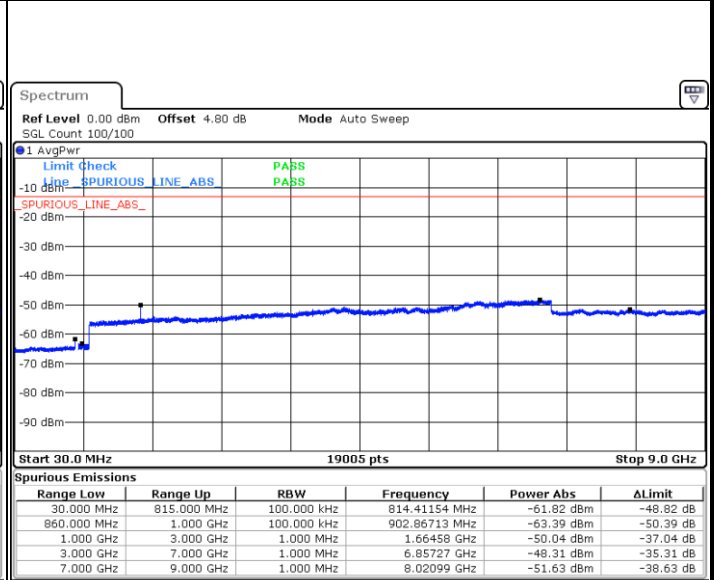
LTE Band 5 / 10MHz

Middle Channel / QPSK



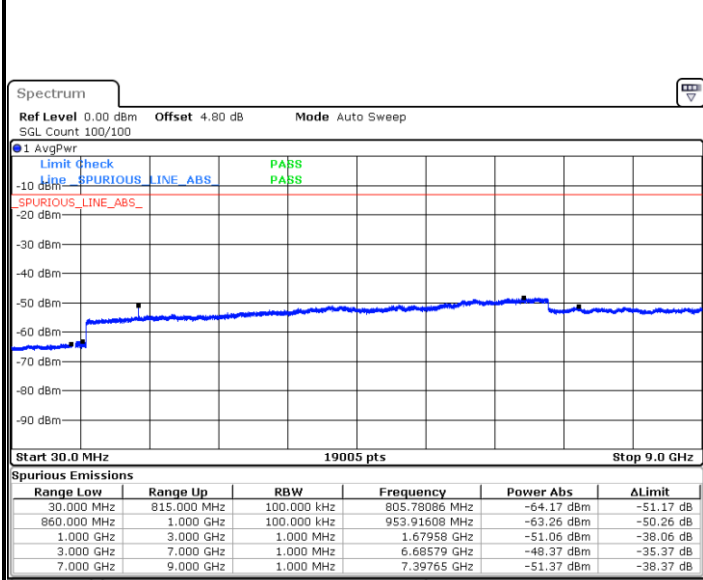
Date: 28 JAN 2020 01:28:14

Middle Channel / 16QAM



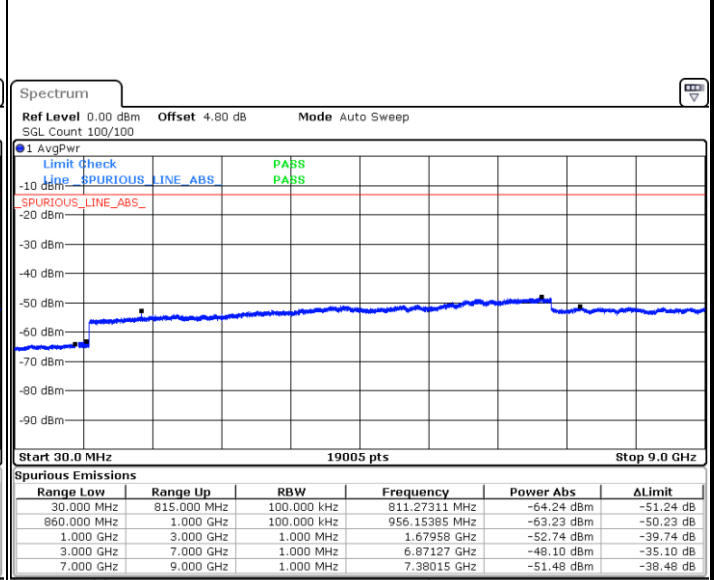
Date: 28 JAN 2020 01:29:08

Highest Channel / QPSK



Date: 28 JAN 2020 01:37:12

Highest Channel / 16QAM



Date: 28 JAN 2020 01:38:07



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	0.0056	
0	Normal Voltage	0.0059	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0060	
20	Maximum Voltage	0.0051	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note: Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.



## LTE Band 12

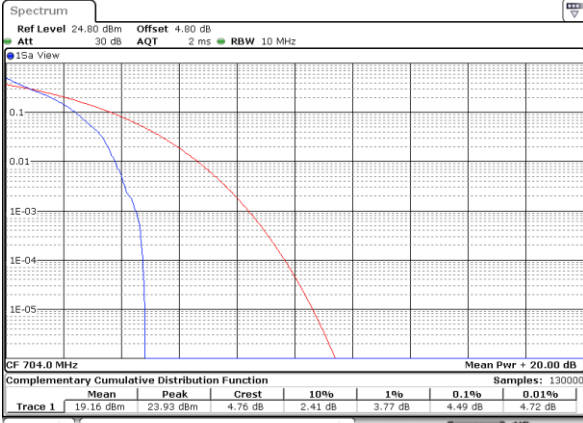
### Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.49	5.28	5.65	5.94	<b>PASS</b>
Middle CH	4.72	5.04	5.48	5.88	
Highest CH	5.07	4.93	6.00	5.77	



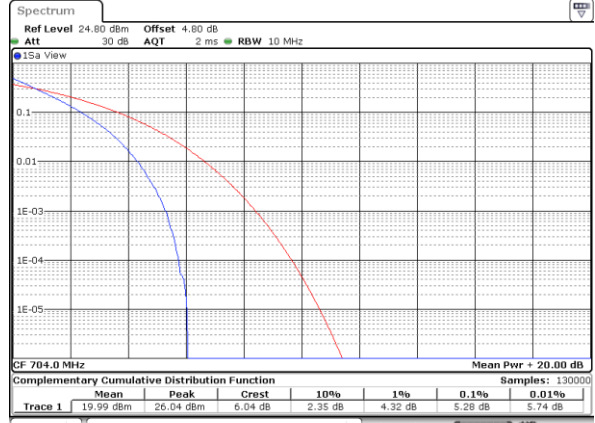
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



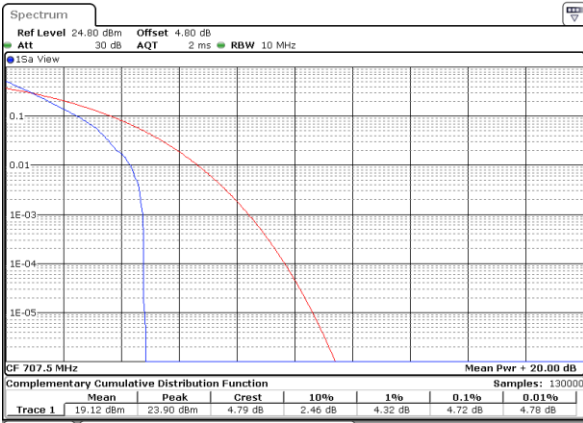
Date: 28 JAN 2020 06:08:55

Lowest Channel / Full RB



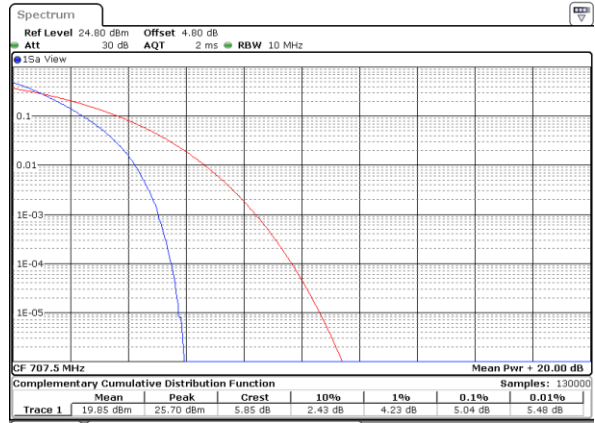
Date: 28 JAN 2020 06:09:47

Middle Channel / 1RB



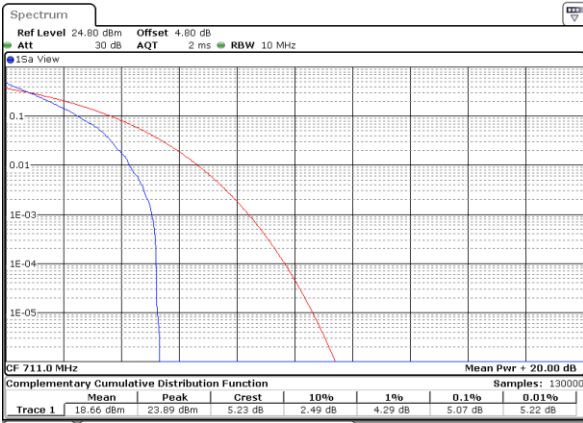
Date: 28 JAN 2020 06:15:36

Middle Channel / Full RB



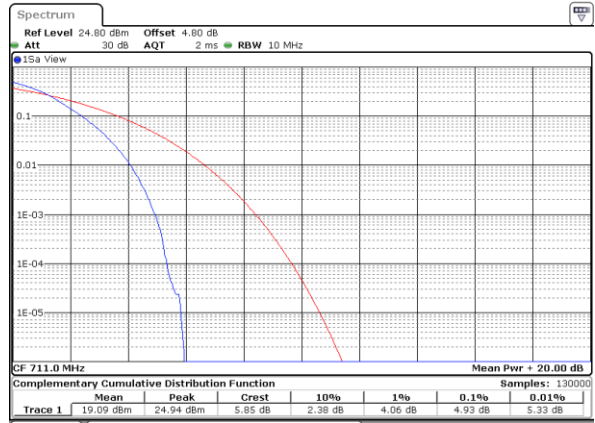
Date: 28 JAN 2020 06:13:10

Highest Channel / 1RB



Date: 28 JAN 2020 06:22:13

Highest Channel / Full RB

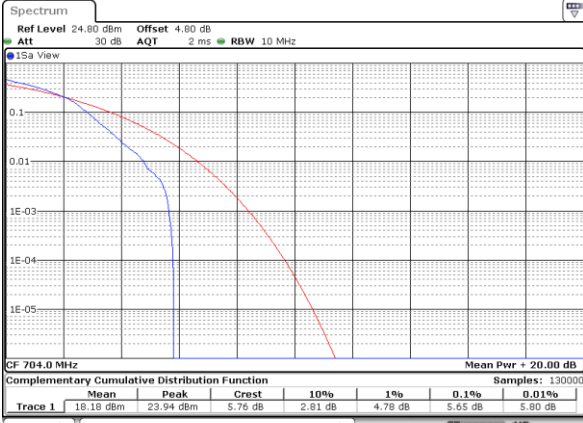


Date: 28 JAN 2020 06:27:28



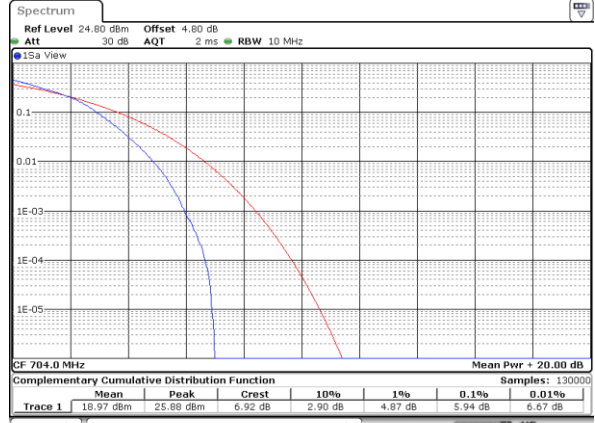
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



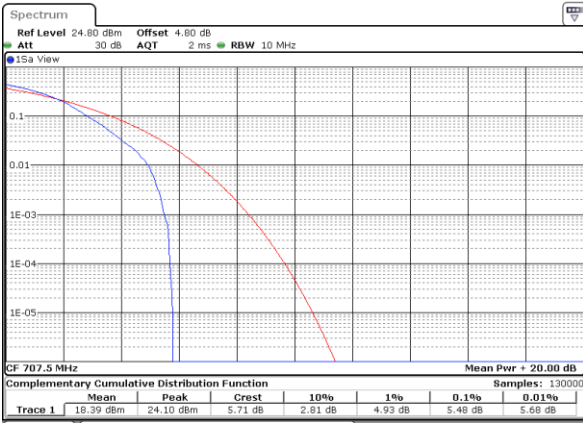
Date: 28 JAN 2020 06:03:54

Lowest Channel / Full RB



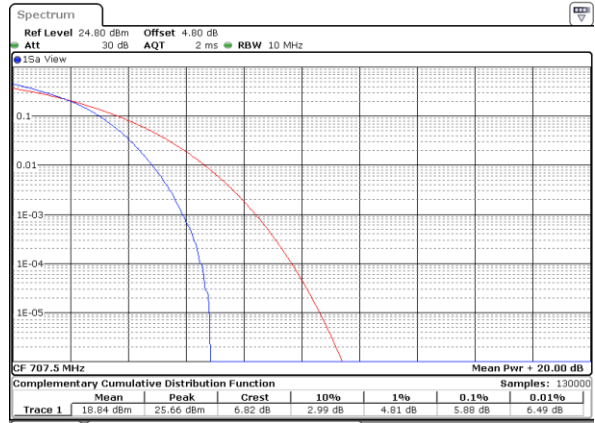
Date: 28 JAN 2020 06:12:34

Middle Channel / 1RB



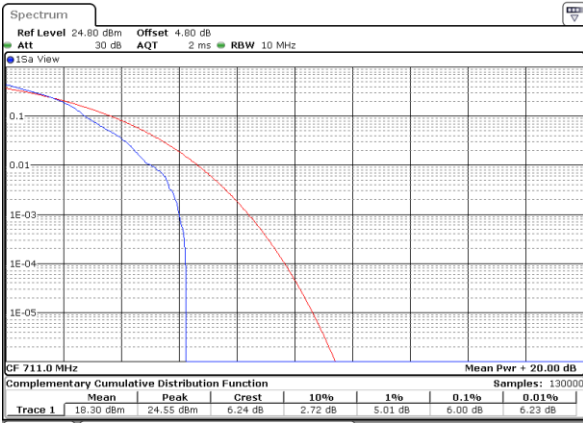
Date: 28 JAN 2020 06:17:47

Middle Channel / Full RB



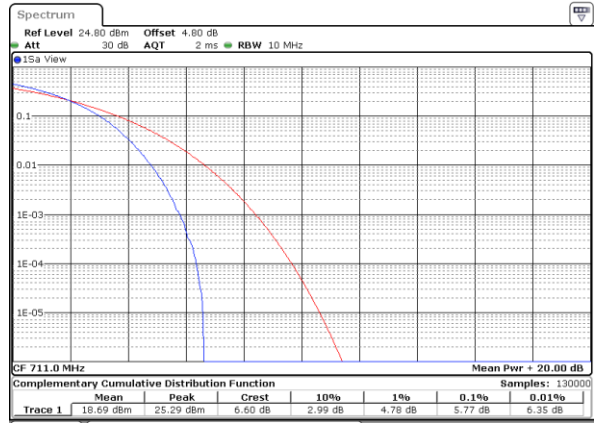
Date: 28 JAN 2020 06:12:46

Highest Channel / 1RB



Date: 28 JAN 2020 06:18:41

Highest Channel / Full RB



Date: 28 JAN 2020 07:01:23



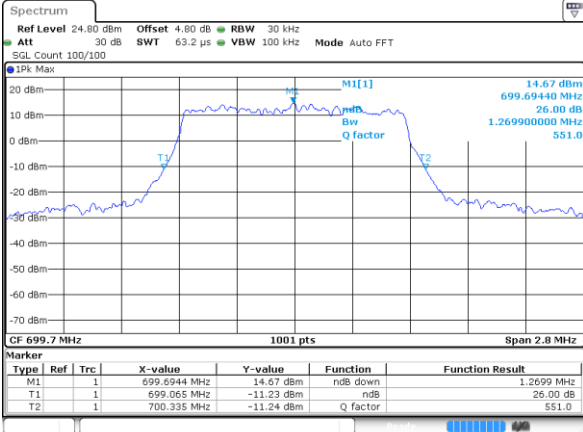
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)							
	1.4MHz		3MHz		5MHz		10MHz	
BW								
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.270	1.295	2.925	2.961	4.925	5.075	10.15	9.75
Middle CH	1.264	1.278	2.949	2.961	5.015	4.935	9.91	9.85
Highest CH	1.287	1.278	2.949	2.961	4.975	4.895	9.85	9.95



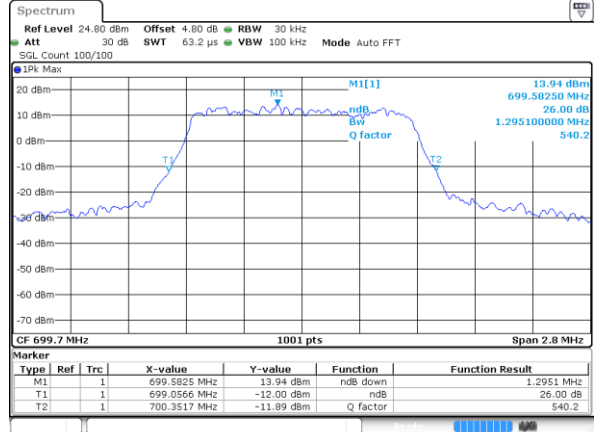
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



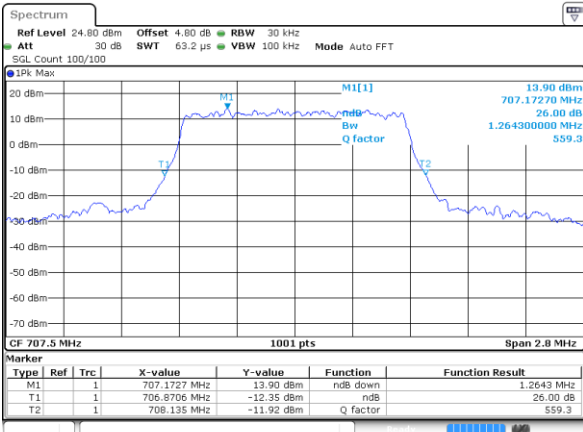
Date: 28 JAN 2020 02:55:55

Lowest Channel / 1.4MHz / 16QAM



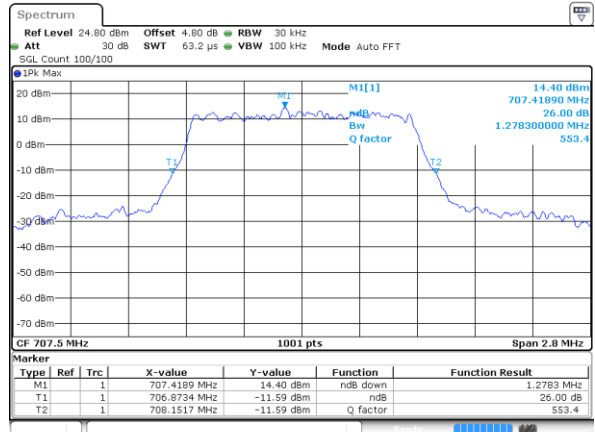
Date: 28 JAN 2020 02:55:46

Middle Channel / 1.4MHz / QPSK



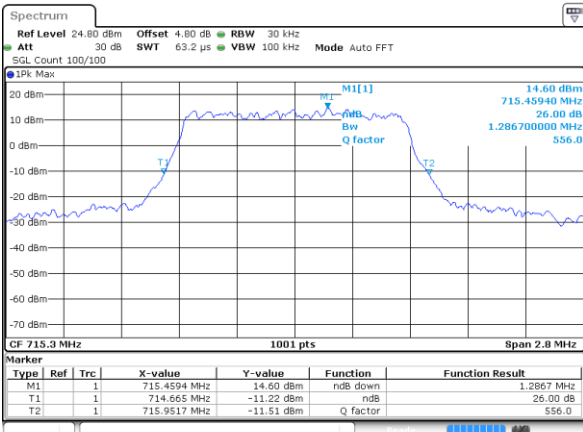
Date: 28 JAN 2020 02:55:26

Middle Channel / 1.4MHz / 16QAM



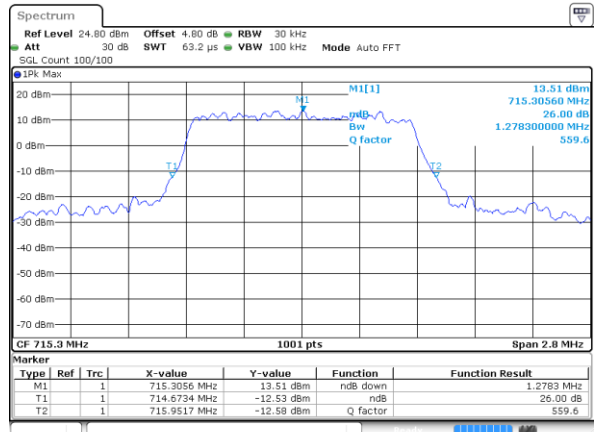
Date: 28 JAN 2020 02:55:36

Highest Channel / 1.4MHz / QPSK



Date: 28 JAN 2020 02:55:16

Highest Channel / 1.4MHz / 16QAM

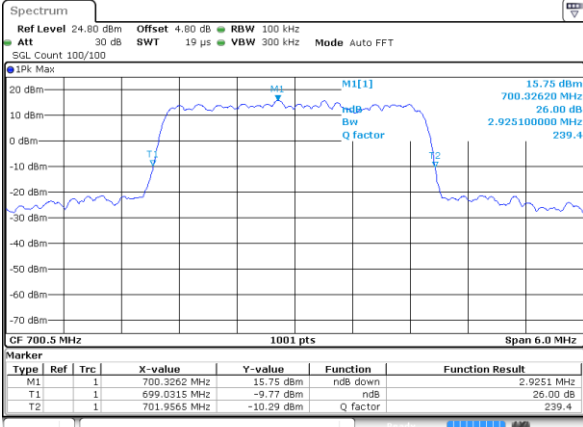


Date: 28 JAN 2020 02:55:06



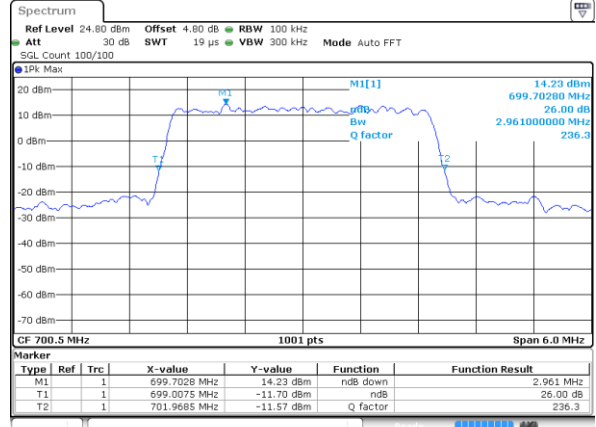
LTE Band 12

Lowest Channel / 3MHz / QPSK



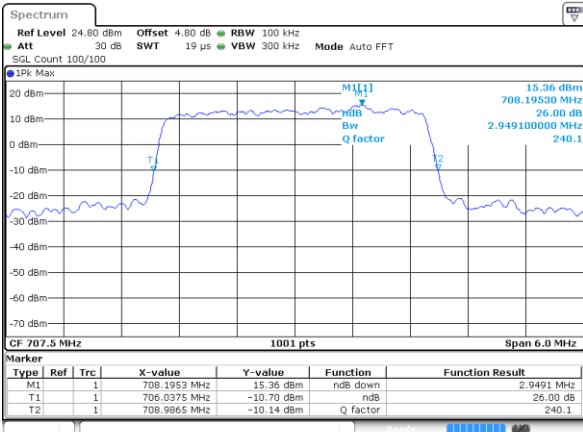
Date: 28 JAN 2020 04:12:34

Lowest Channel / 3MHz / 16QAM



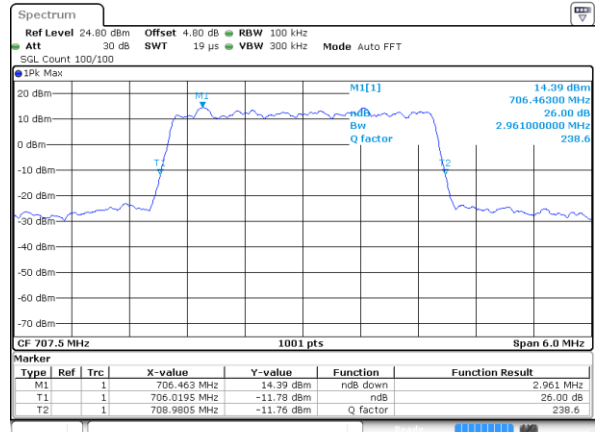
Date: 28 JAN 2020 04:12:25

Middle Channel / 3MHz / QPSK



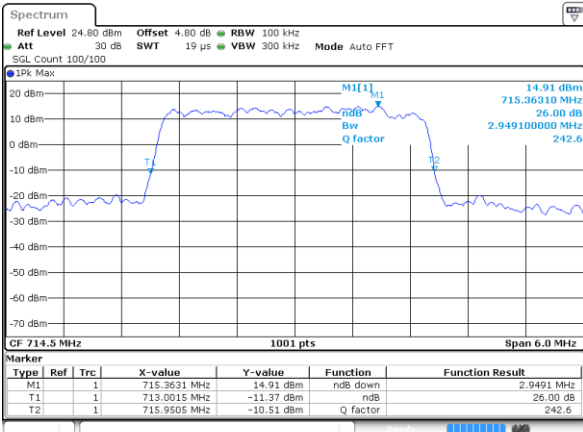
Date: 28 JAN 2020 04:12:05

Middle Channel / 3MHz / 16QAM



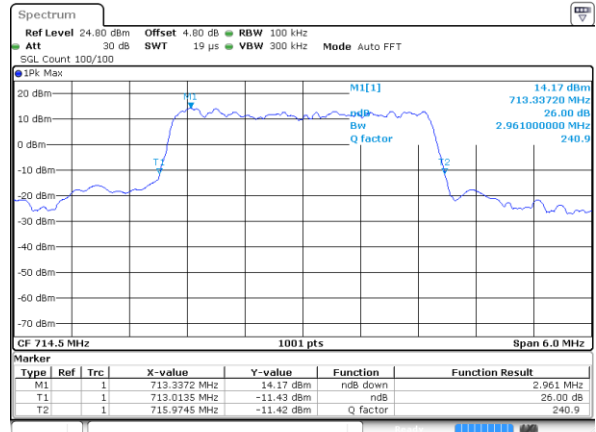
Date: 28 JAN 2020 04:12:15

Highest Channel / 3MHz / QPSK



Date: 28 JAN 2020 04:11:55

Highest Channel / 3MHz / 16QAM



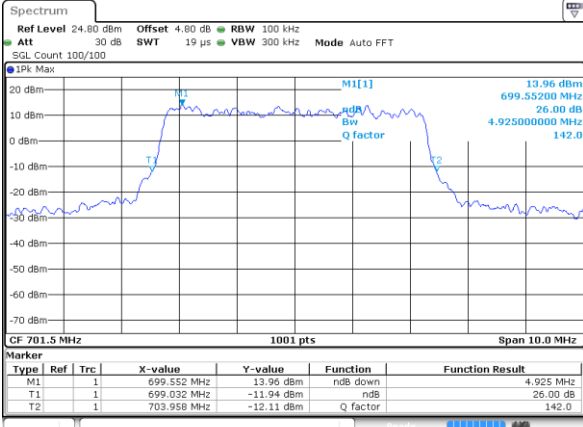
Date: 28 JAN 2020 04:11:45





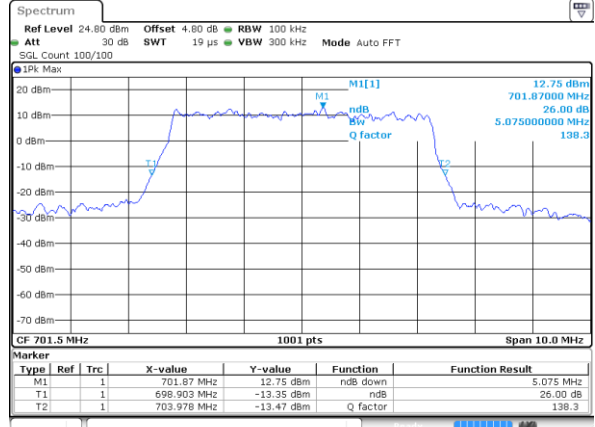
LTE Band 12

Lowest Channel / 5MHz / QPSK



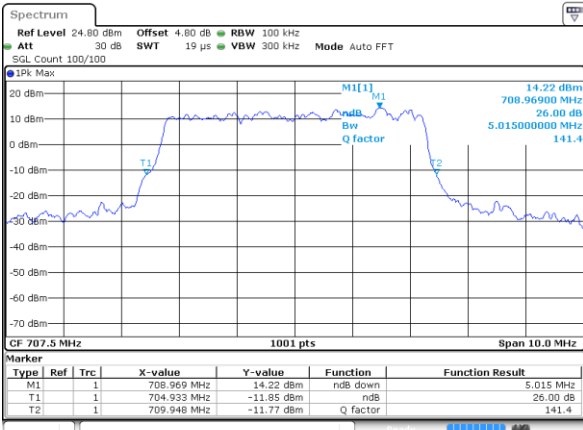
Date: 28 JAN 2020 04:29:00

Lowest Channel / 5MHz / 16QAM



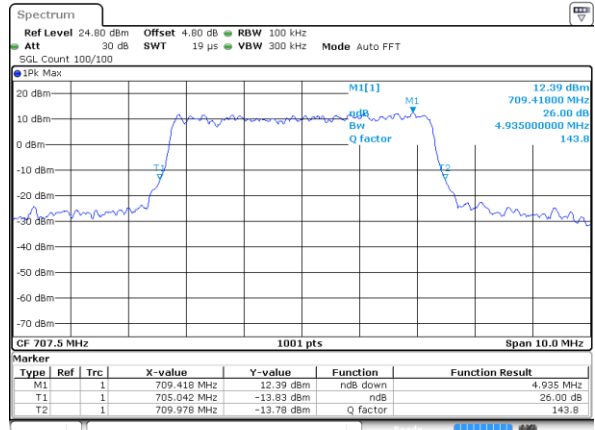
Date: 28 JAN 2020 04:28:50

Middle Channel / 5MHz / QPSK



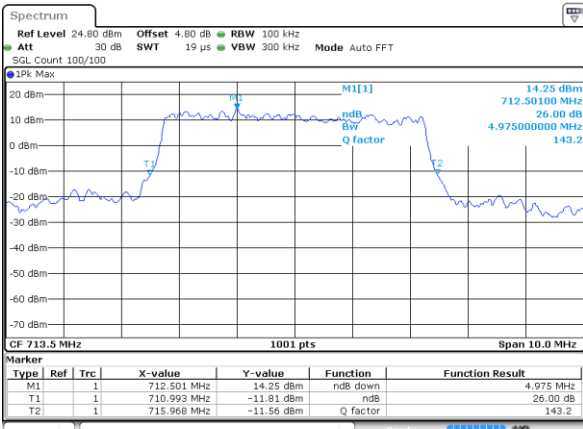
Date: 28 JAN 2020 04:28:30

Middle Channel / 5MHz / 16QAM



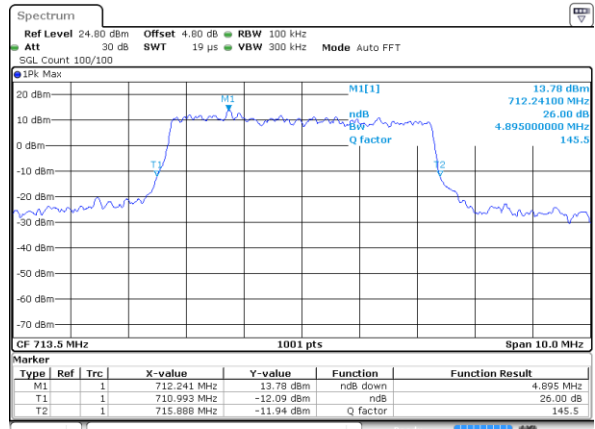
Date: 28 JAN 2020 04:28:40

Highest Channel / 5MHz / QPSK



Date: 28 JAN 2020 04:28:20

Highest Channel / 5MHz / 16QAM

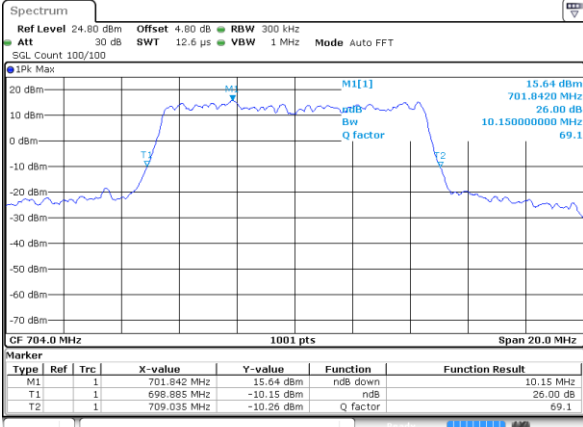


Date: 28 JAN 2020 04:28:10



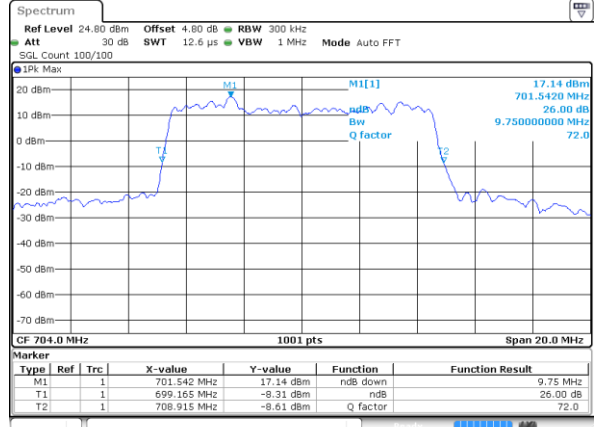
LTE Band 12

Lowest Channel / 10MHz / QPSK



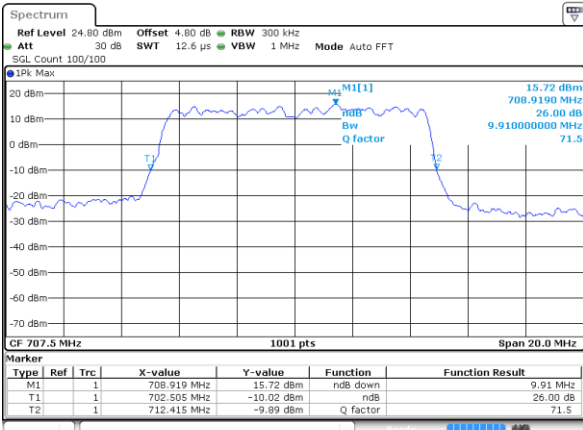
Date: 28 JAN 2020 04:45:25

Lowest Channel / 10MHz / 16QAM



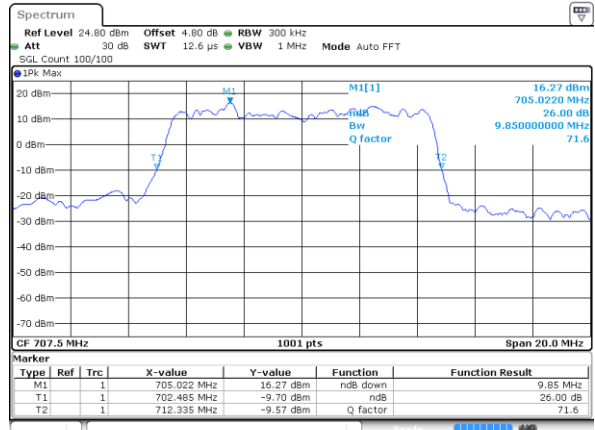
Date: 28 JAN 2020 04:45:15

Middle Channel / 10MHz / QPSK



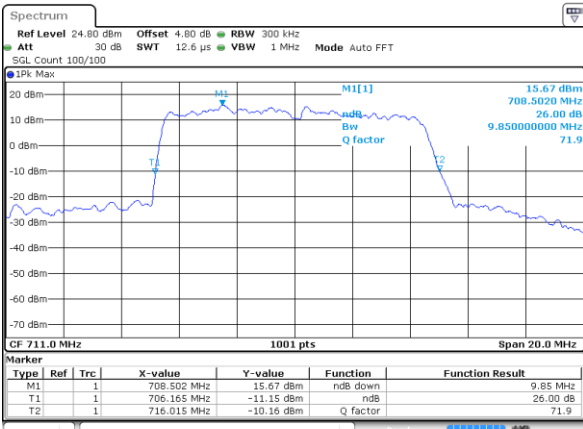
Date: 28 JAN 2020 04:44:55

Middle Channel / 10MHz / 16QAM



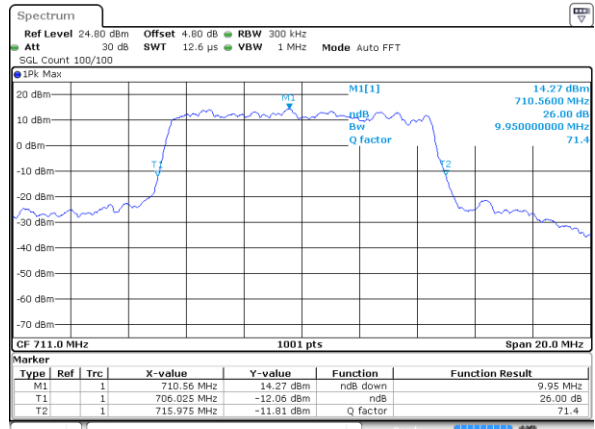
Date: 28 JAN 2020 04:45:05

Highest Channel / 10MHz / QPSK



Date: 28 JAN 2020 04:44:45

Highest Channel / 10MHz / 16QAM



Date: 28 JAN 2020 04:44:35



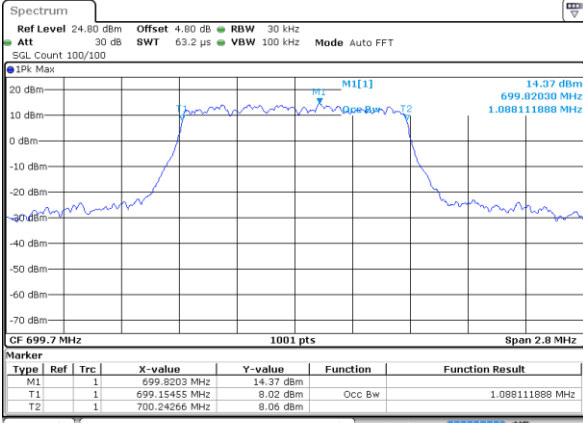
### Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)							
	1.4MHz		3MHz		5MHz		10MHz	
BW								
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.088	1.088	2.715	2.691	4.496	4.476	9.111	9.071
Middle CH	1.094	1.091	2.715	2.715	4.525	4.496	9.051	8.991
Highest CH	1.085	1.083	2.709	2.709	4.496	4.505	9.011	9.031



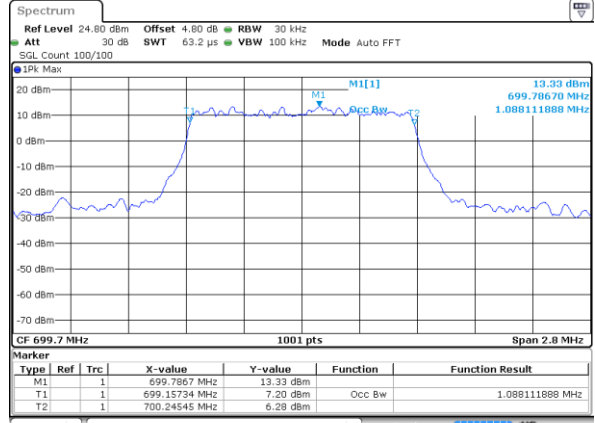
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



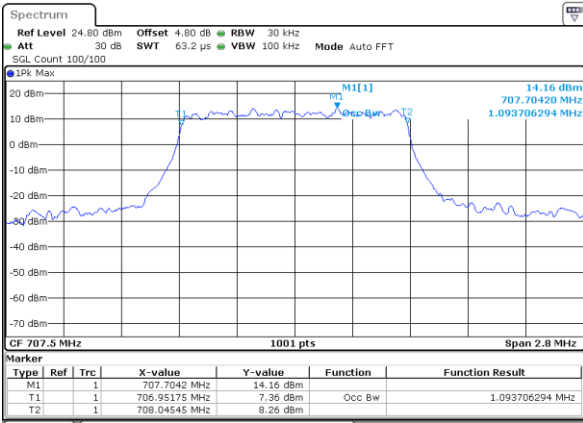
Date: 28 JAN 2020 02:54:06

Lowest Channel / 1.4MHz / 16QAM



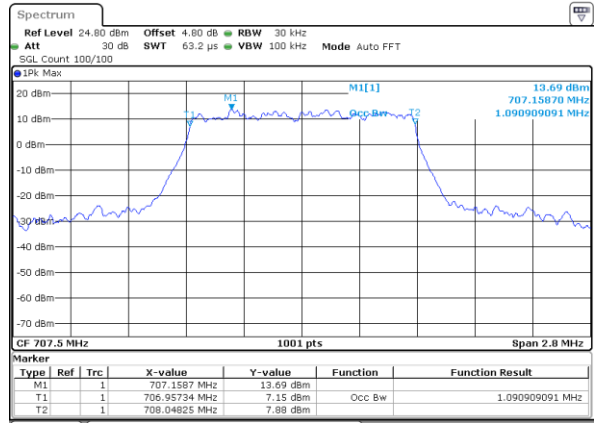
Date: 28 JAN 2020 02:54:16

Middle Channel / 1.4MHz / QPSK



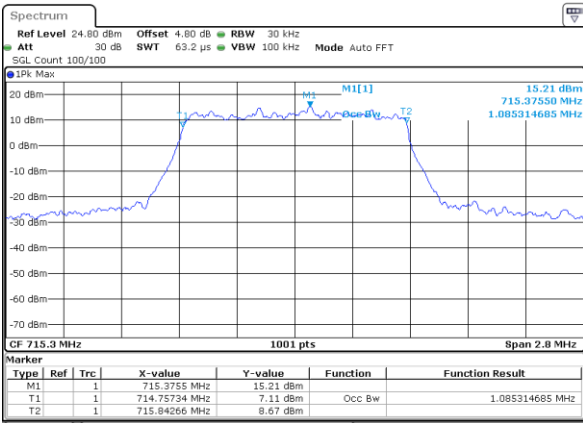
Date: 28 JAN 2020 02:54:36

Middle Channel / 1.4MHz / 16QAM



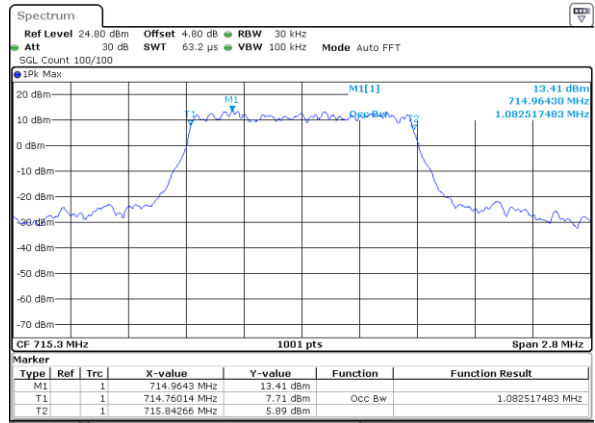
Date: 28 JAN 2020 02:54:26

Highest Channel / 1.4MHz / QPSK



Date: 28 JAN 2020 02:54:46

Highest Channel / 1.4MHz / 16QAM



Date: 28 JAN 2020 02:54:56