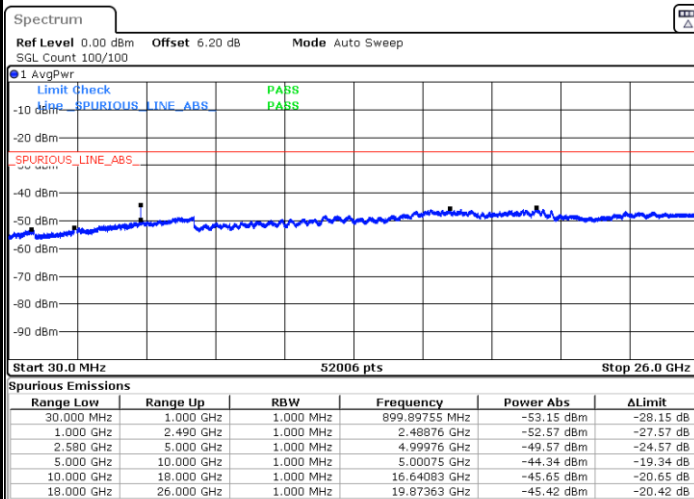




Conducted Spurious Emission

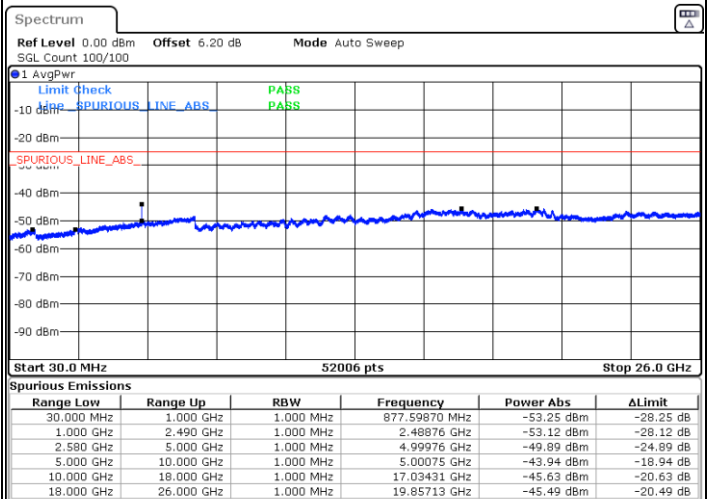
LTE Band 7 / 5MHz

Lowest Channel / QPSK



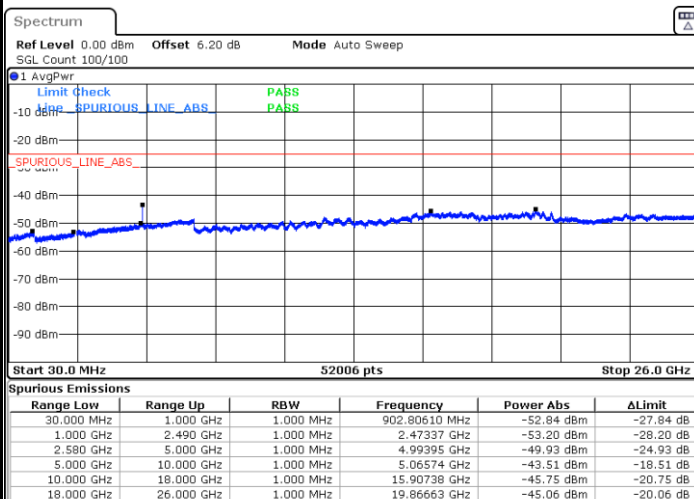
Date: 8 NOV. 2019 10:25:08

Lowest Channel / 16QAM



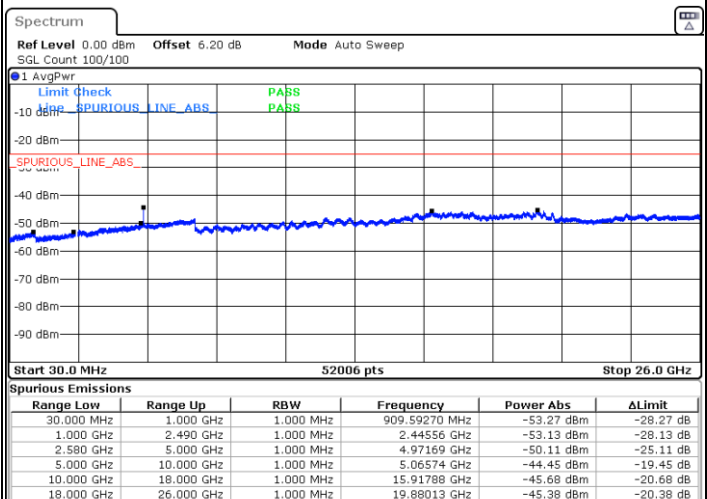
Date: 8 NOV. 2019 10:26:02

Middle Channel / QPSK



Date: 8 NOV. 2019 10:27:49

Middle Channel / 16QAM

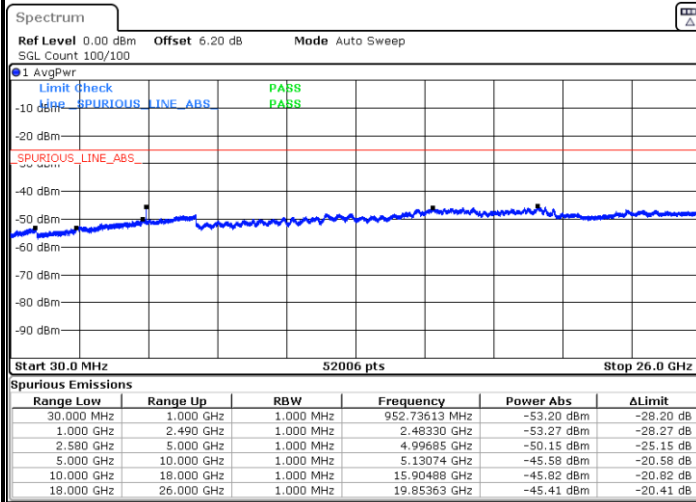


Date: 8 NOV. 2019 10:28:56



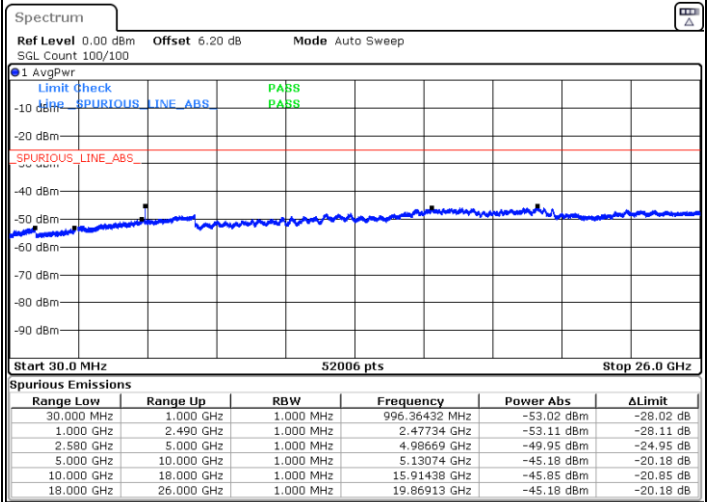
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 8 NOV. 2019 10:28:43

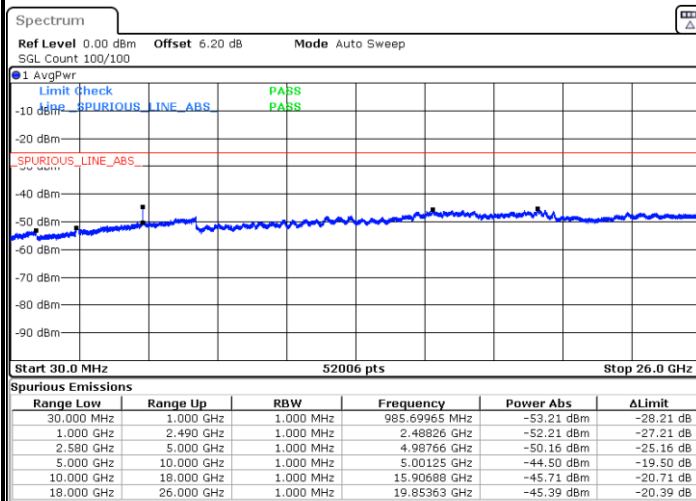
Highest Channel / 16QAM



Date: 8 NOV. 2019 10:29:37

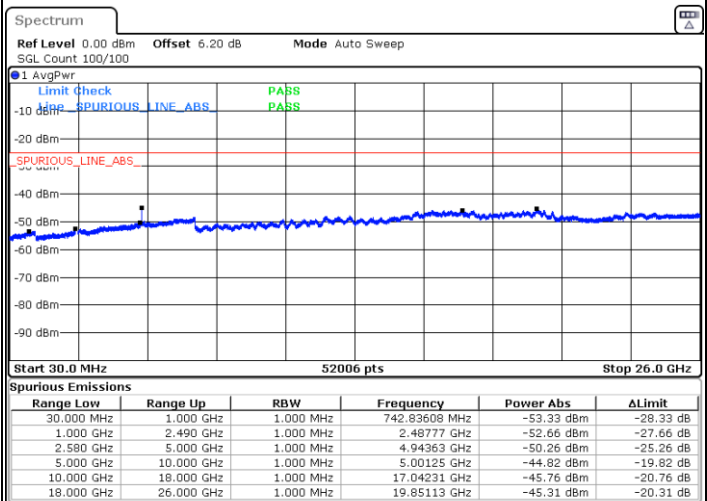
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 8 NOV. 2019 10:42:03

Lowest Channel / 16QAM

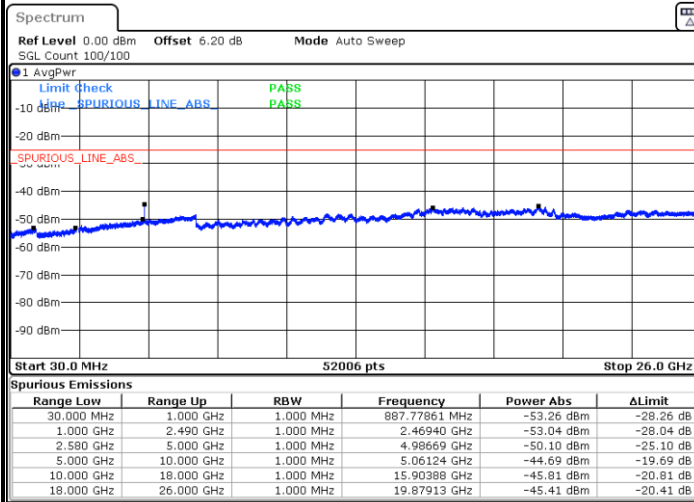


Date: 8 NOV. 2019 10:42:57



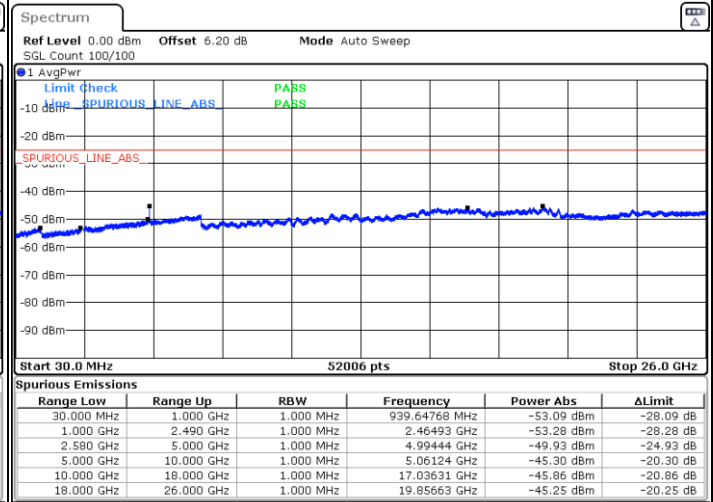
LTE Band 7 / 10MHz

Middle Channel / QPSK



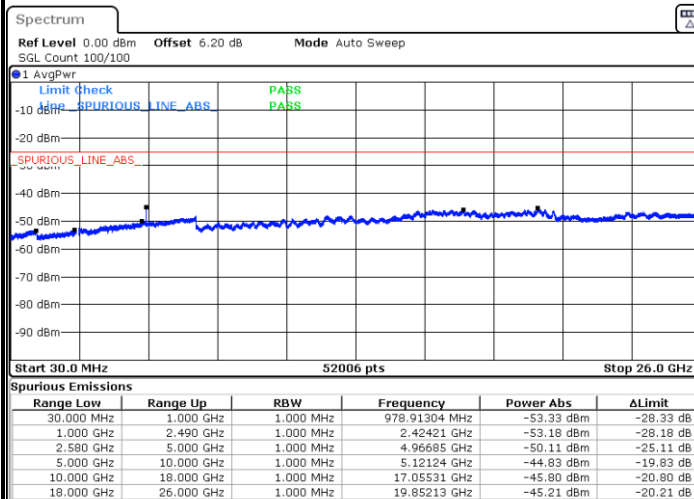
Date: 8 NOV. 2019 10:44:45

Middle Channel / 16QAM



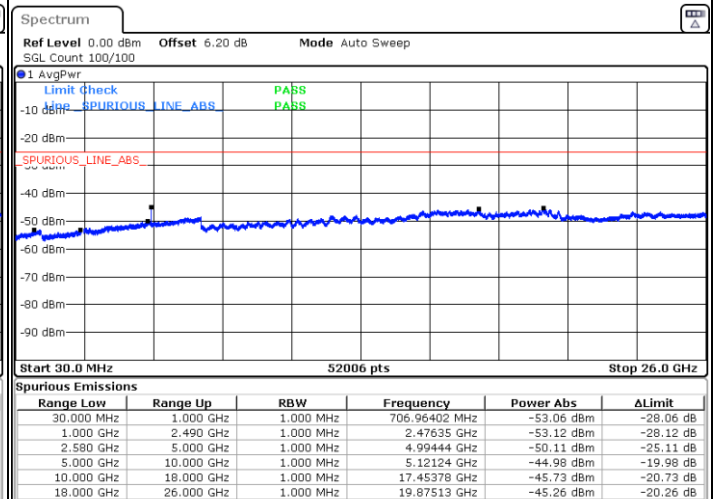
Date: 8 NOV. 2019 10:43:51

Highest Channel / QPSK



Date: 8 NOV. 2019 10:45:38

Highest Channel / 16QAM

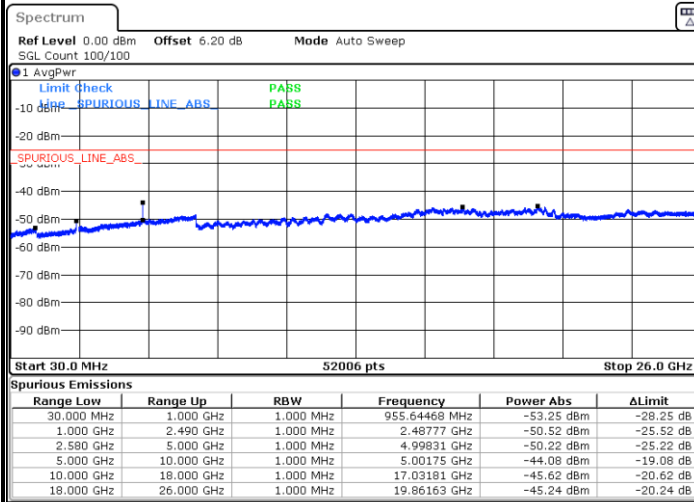


Date: 8 NOV. 2019 10:46:32



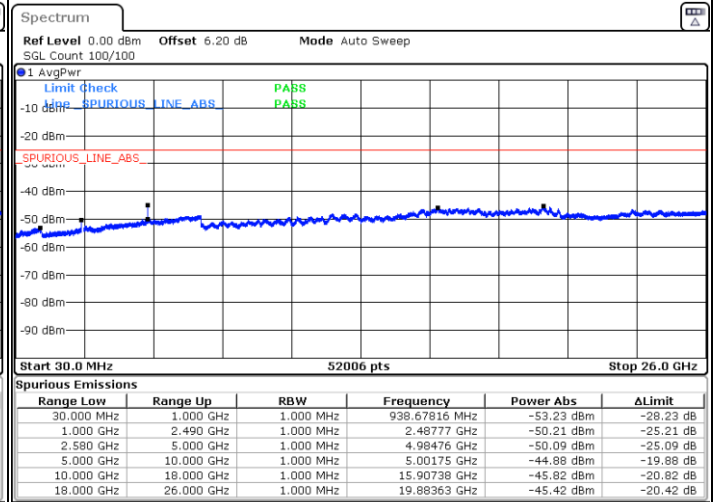
LTE Band 7 / 15MHz

Lowest Channel / QPSK



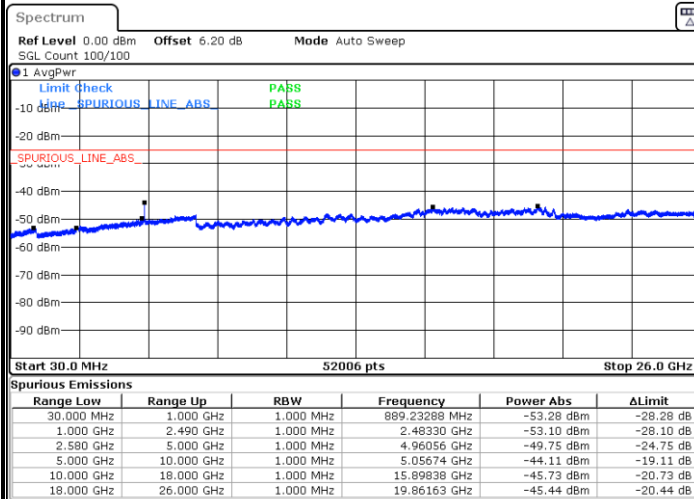
Date: 8 NOV. 2019 10:58:32

Lowest Channel / 16QAM



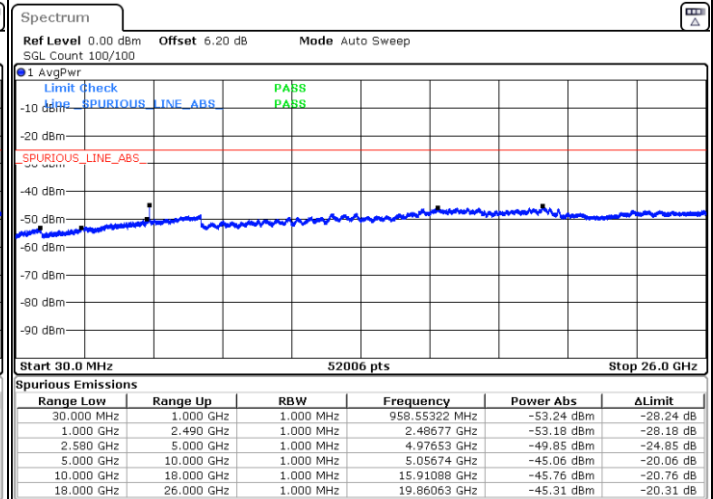
Date: 8 NOV. 2019 10:59:25

Middle Channel / QPSK



Date: 8 NOV. 2019 11:01:13

Middle Channel / 16QAM

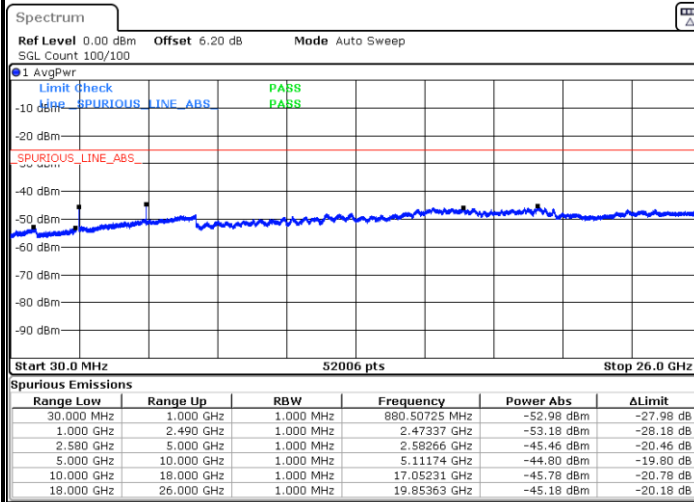


Date: 8 NOV. 2019 11:00:19



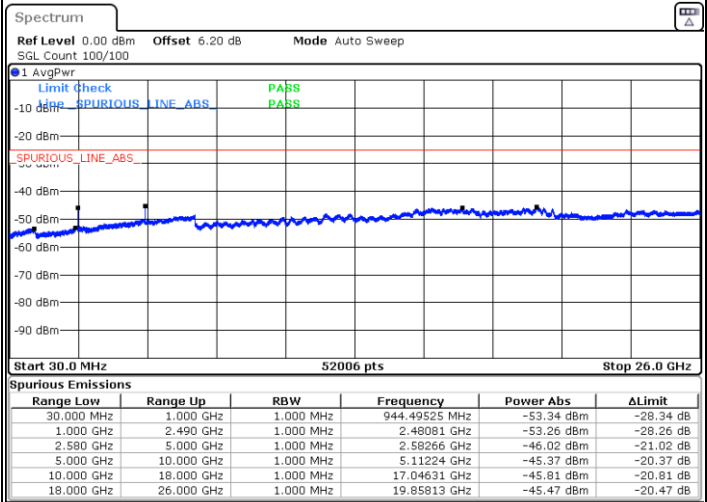
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 8 NOV. 2019 11:02:06

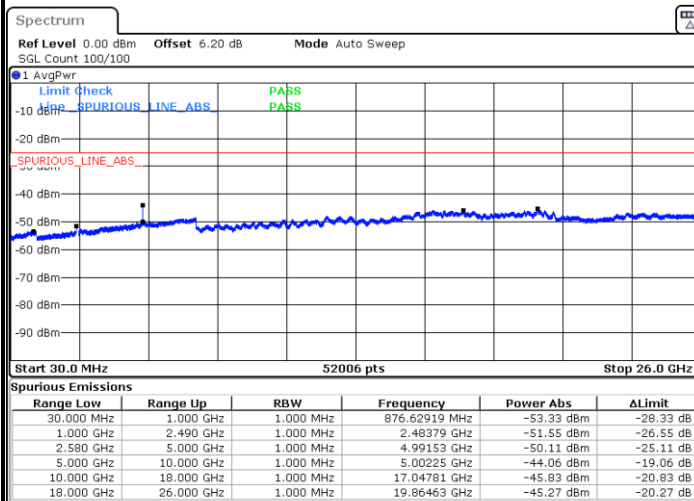
Highest Channel / 16QAM



Date: 8 NOV. 2019 11:03:00

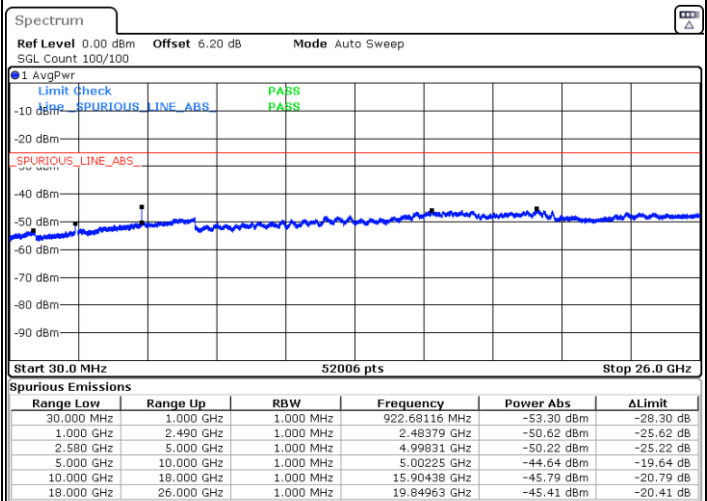
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 8 NOV. 2019 11:14:59

Lowest Channel / 16QAM

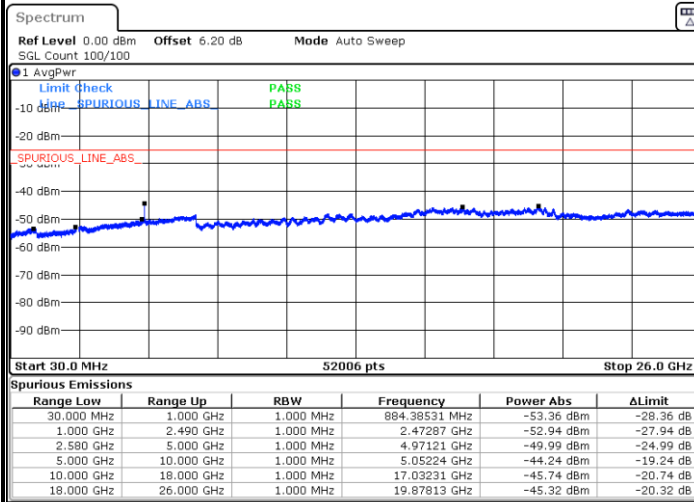


Date: 8 NOV. 2019 11:15:53



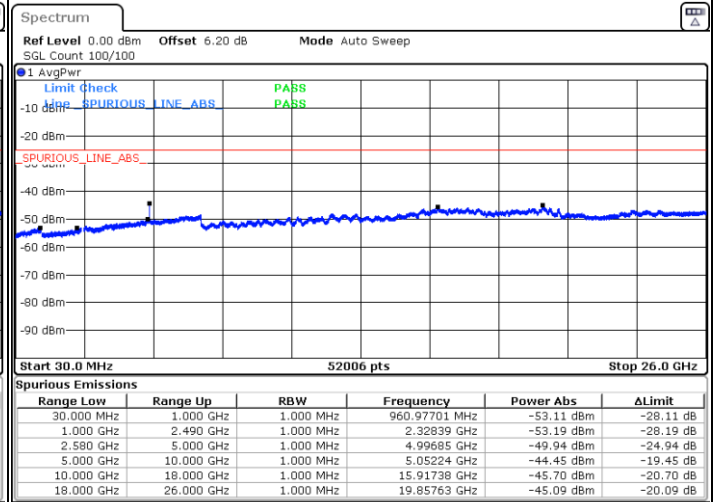
LTE Band 7 / 20MHz

Middle Channel / QPSK



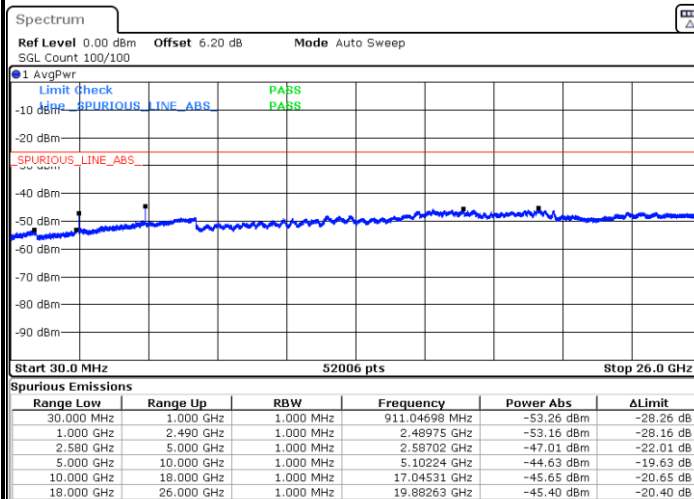
Date: 8 NOV. 2019 11:17:41

Middle Channel / 16QAM



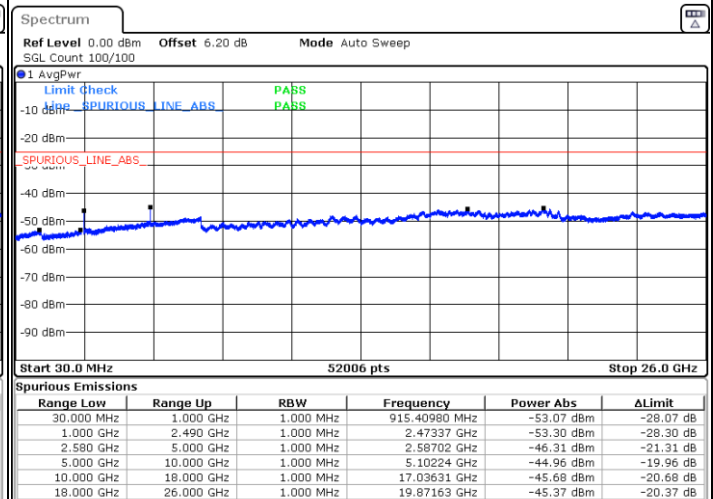
Date: 8 NOV. 2019 11:16:47

Highest Channel / QPSK



Date: 8 NOV. 2019 11:18:34

Highest Channel / 16QAM

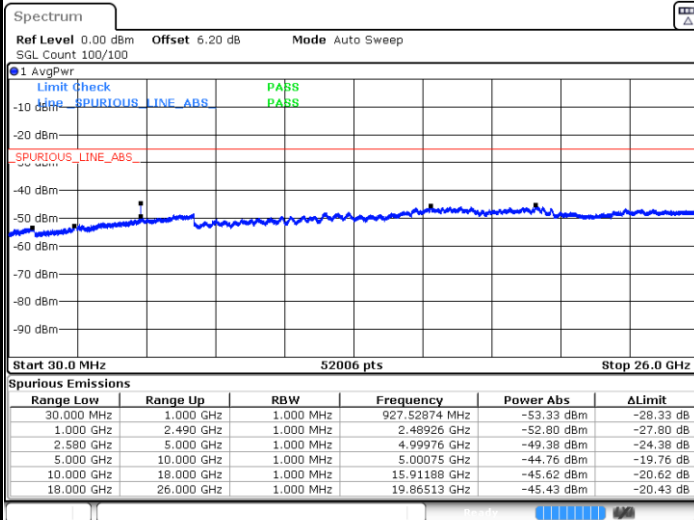


Date: 8 NOV. 2019 11:19:28



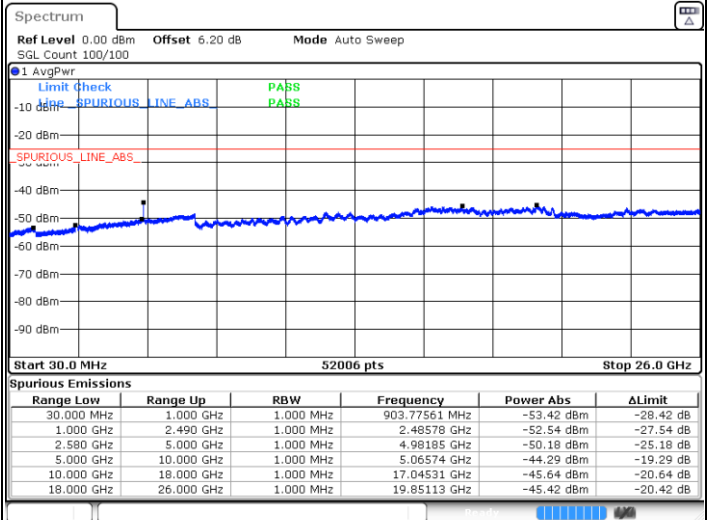
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



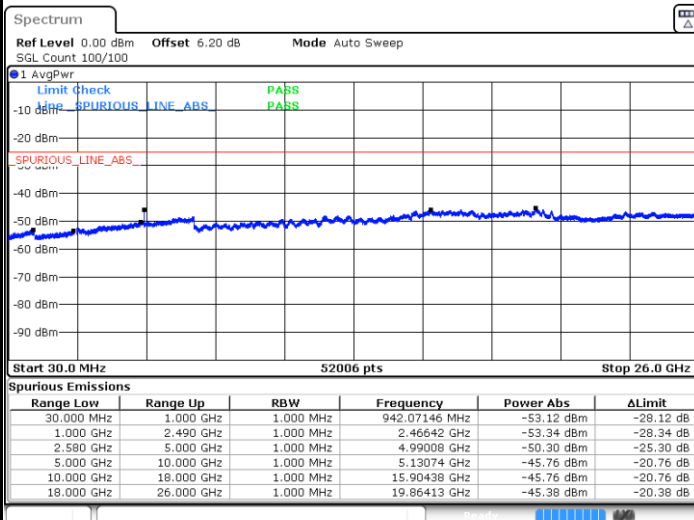
Date: 8 NOV. 2019 11:23:35

Middle Channel / 64QAM



Date: 8 NOV. 2019 11:24:29

Highest Channel / 64QAM

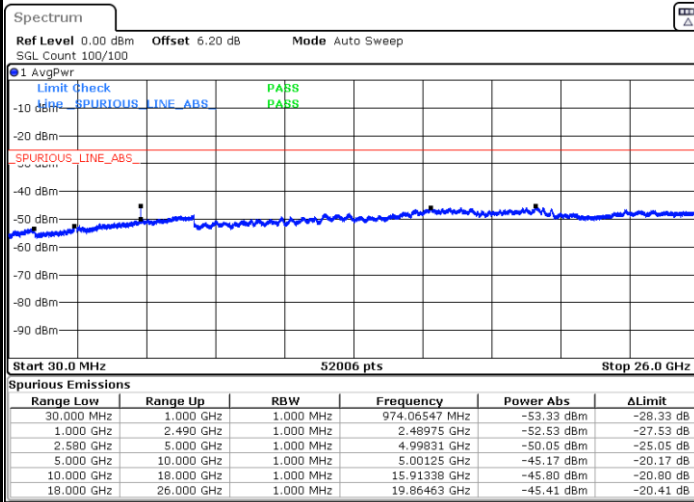


Date: 8 NOV. 2019 11:25:23



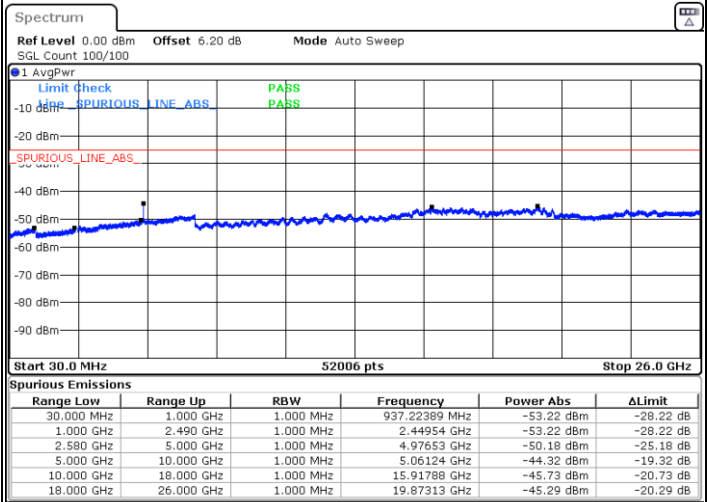
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



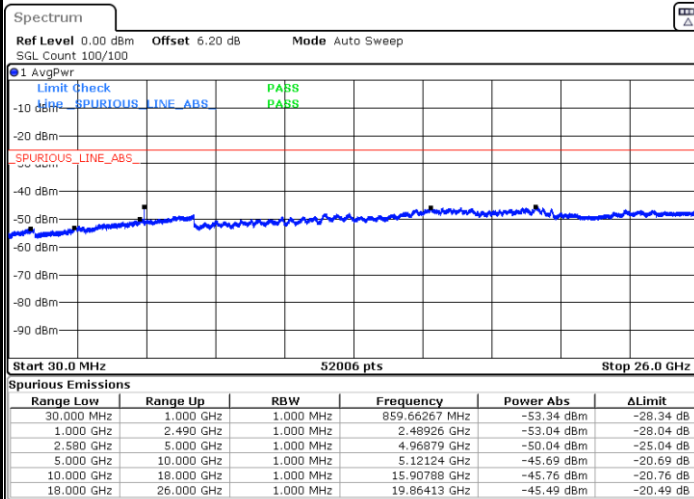
Date: 8 NOV. 2019 11:29:33

Middle Channel / 64QAM



Date: 8 NOV. 2019 11:30:27

Highest Channel / 64QAM

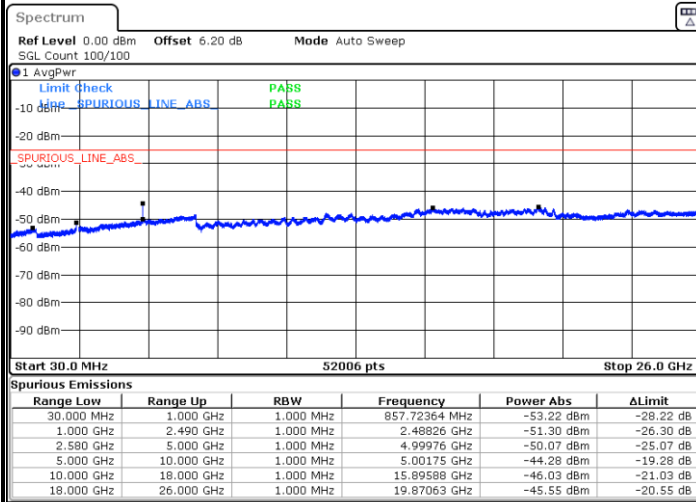


Date: 8 NOV. 2019 11:31:21



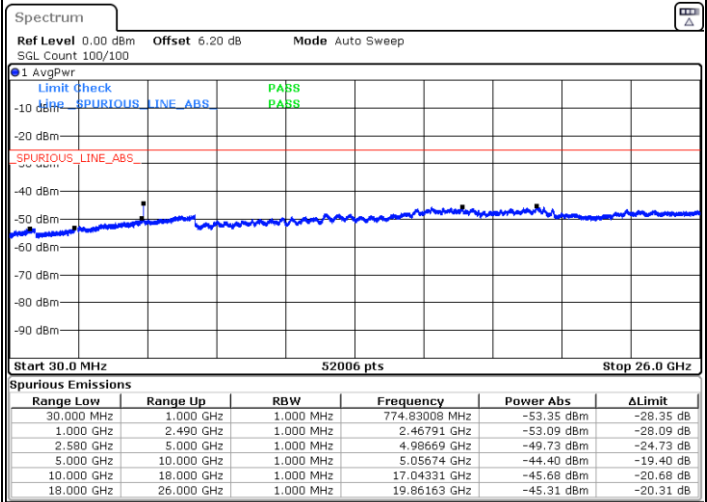
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



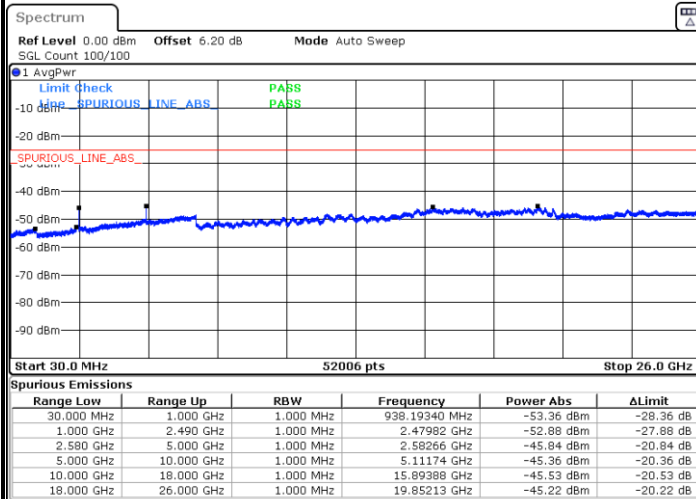
Date: 8 NOV. 2019 11:37:47

Middle Channel / 64QAM



Date: 8 NOV. 2019 11:38:40

Highest Channel / 64QAM

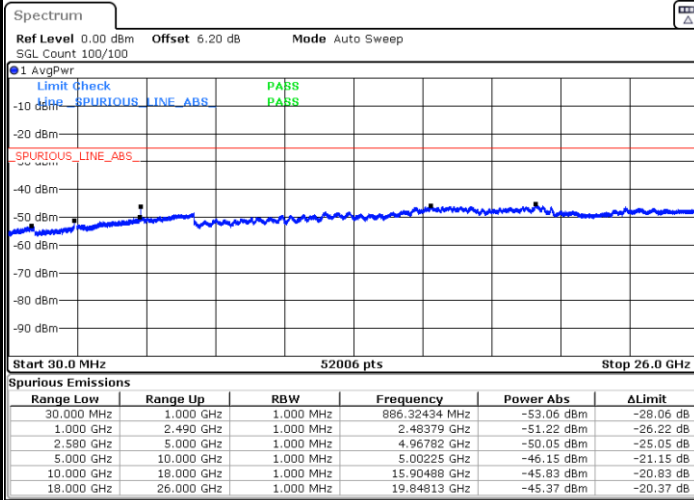


Date: 8 NOV. 2019 11:39:34



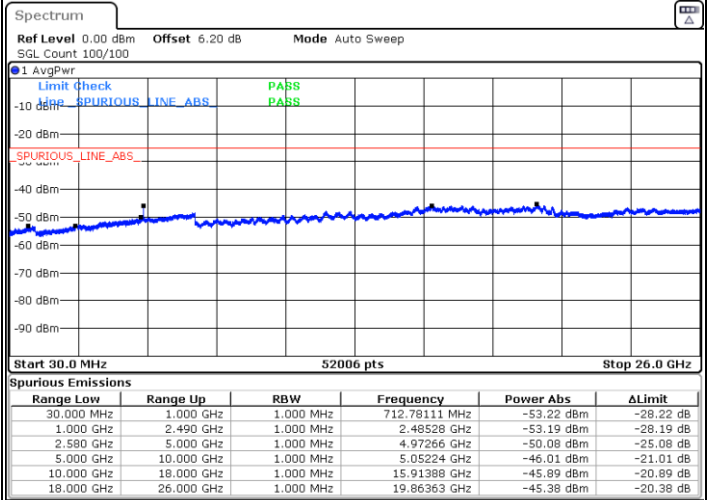
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



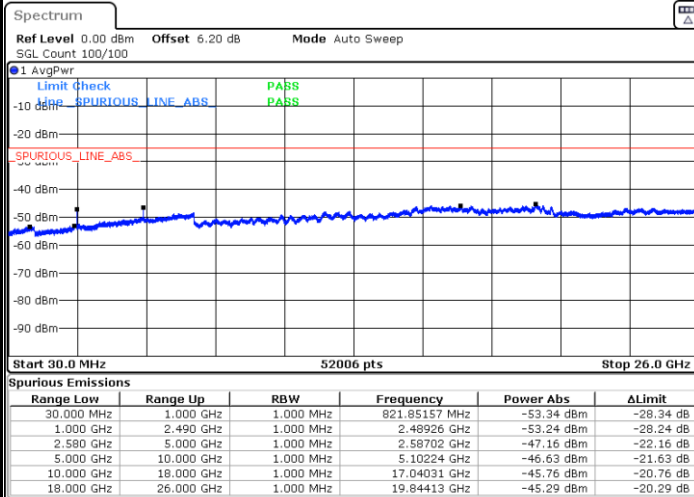
Date: 8.NOV.2019 11:44:10

Middle Channel / 64QAM



Date: 8.NOV.2019 11:45:04

Highest Channel / 64QAM



Date: 8.NOV.2019 11:45:57

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0052	PASS
40	Normal Voltage	0.0045	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0067	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0059	
-30	Normal Voltage	0.0040	
20	Maximum Voltage	0.0021	
20	Normal Voltage	0.0014	
20	Battery End Point	0.0038	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 66

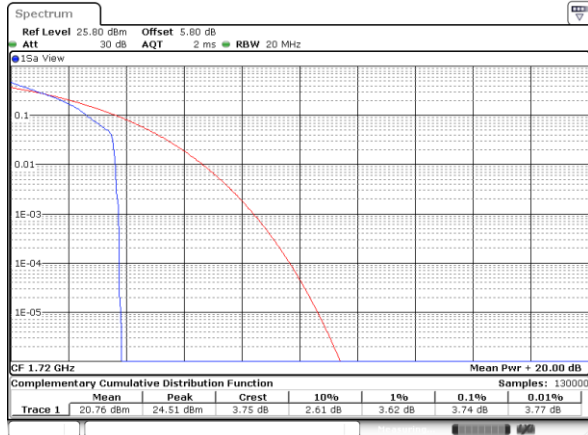
Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.74	4.75	5.13	6.20	PASS
Middle CH	3.65	4.72	5.42	6.09	
Highest CH	3.74	4.61	5.25	5.97	
Mode	LTE Band 66 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.84	6.81			PASS
Middle CH	6.23	6.61			
Highest CH	6.70	6.61			

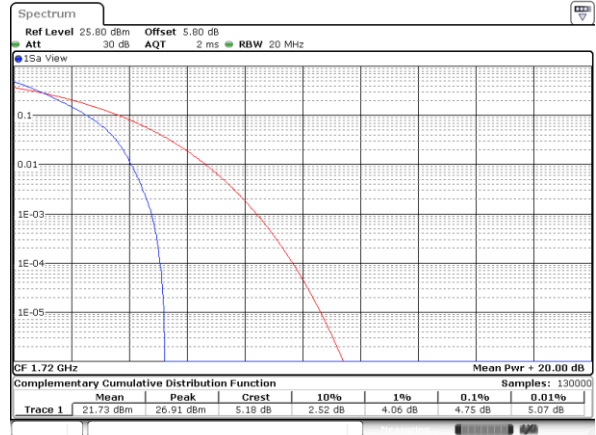


LTE Band 66 / 20MHz / QPSK

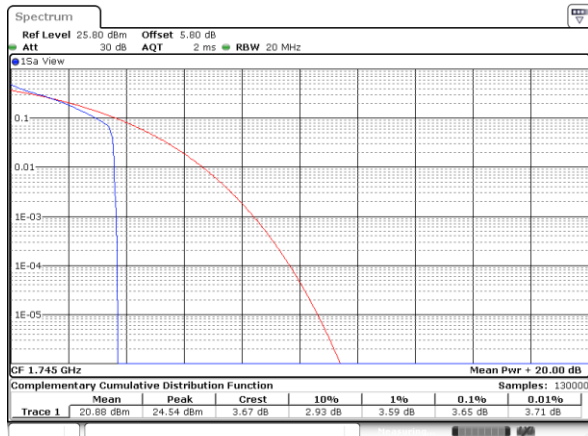
Lowest Channel / 1RB



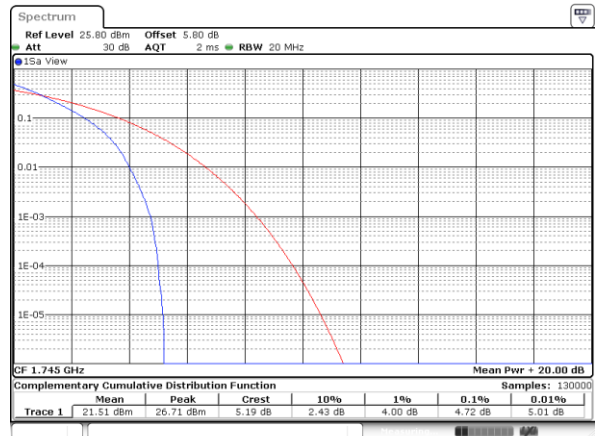
Lowest Channel / Full RB



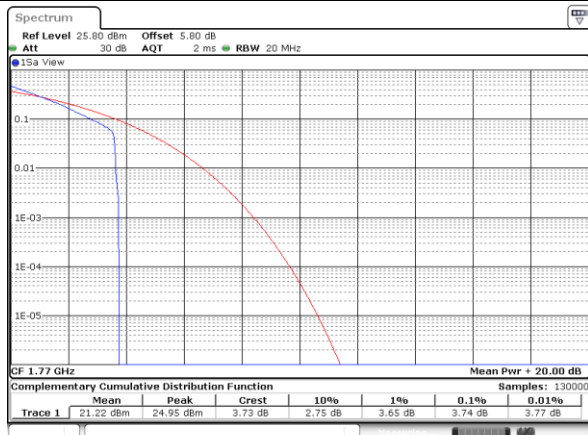
Middle Channel / 1RB



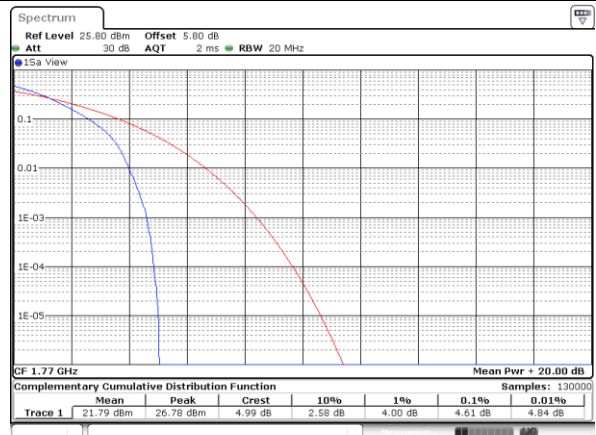
Middle Channel / Full RB



Highest Channel / 1RB



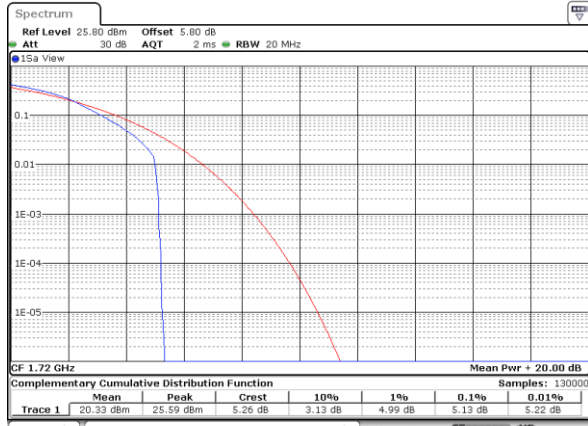
Highest Channel / Full RB



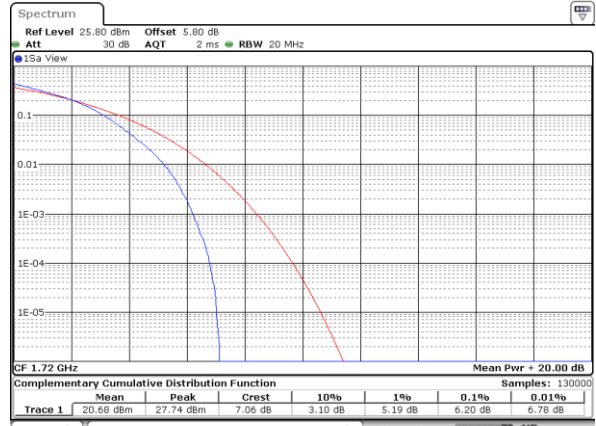


LTE Band 66 / 20MHz / 16QAM

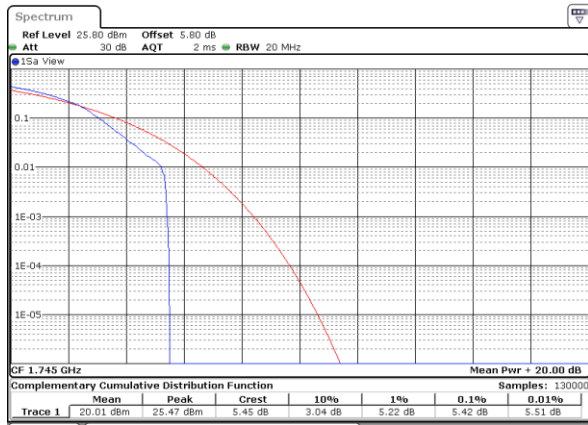
Lowest Channel / 1RB



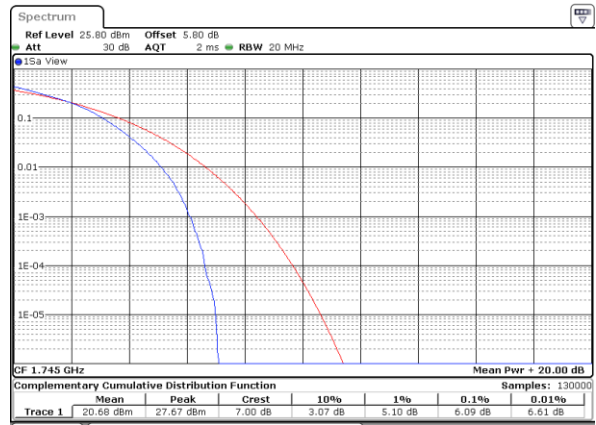
Lowest Channel / Full RB



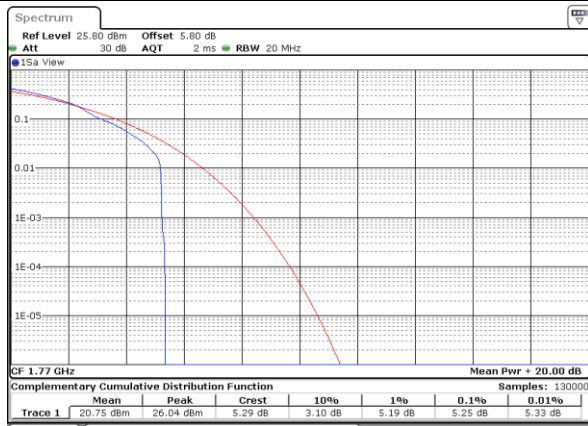
Middle Channel / 1RB



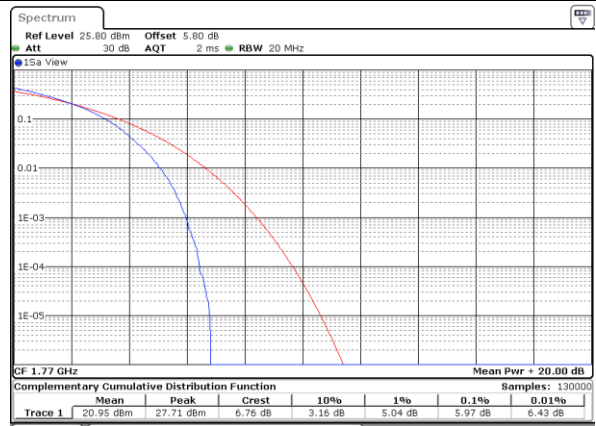
Middle Channel / Full RB

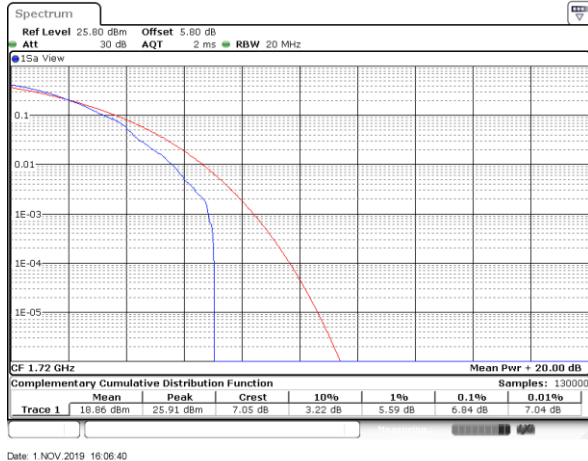
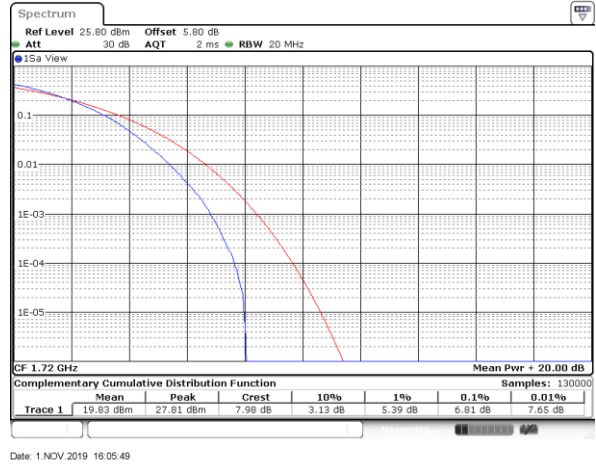
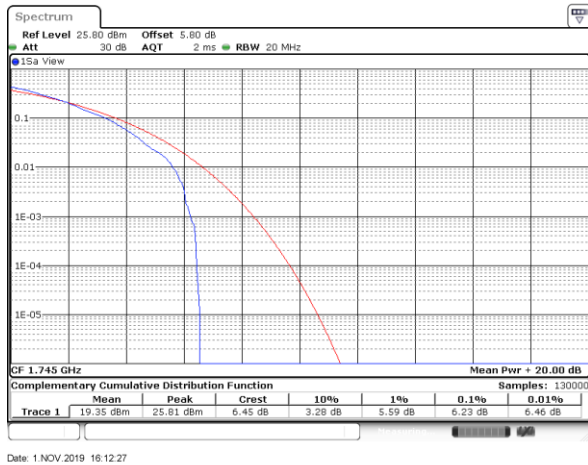
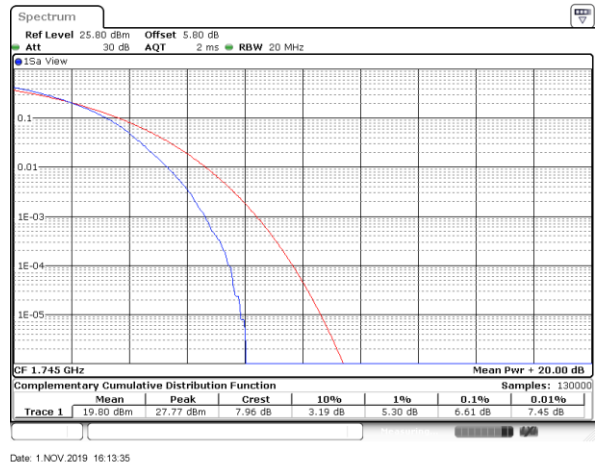
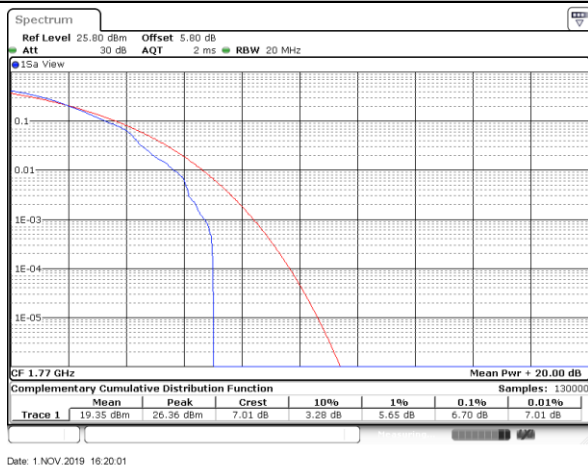
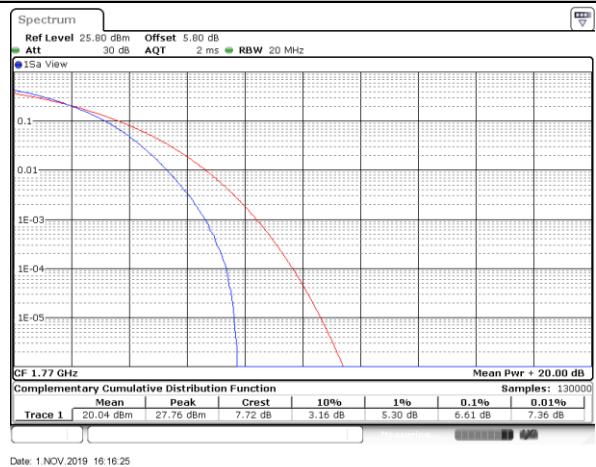


Highest Channel / 1RB



Highest Channel / Full RB



LTE Band 66 / 20MHz / 64QAM
Lowest Channel / 1RB

Lowest Channel / Full RB

Middle Channel / 1RB

Middle Channel / Full RB

Highest Channel / 1RB

Highest Channel / Full RB


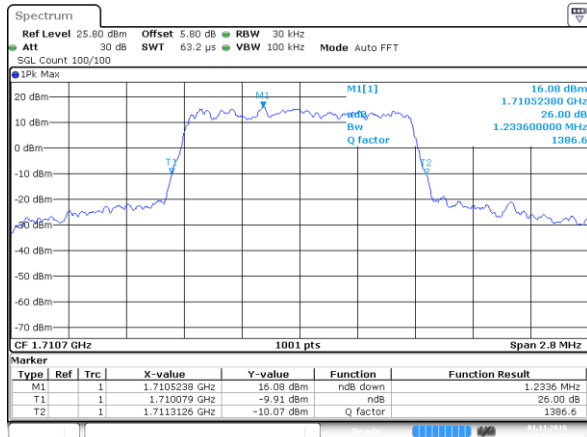
**26dB Bandwidth**

Mode	LTE Band 66 : 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	1.2336	1.2336	3.027	3.021	4.985	4.855	9.67	9.83	14.505	14.446	20.18	20.22
Middle CH	1.2392	1.2252	3.051	3.009	4.905	4.955	9.83	9.87	14.565	14.386	20.10	20.18
Highest CH	1.2308	1.2336	3.039	3.063	4.945	4.855	9.93	9.93	14.296	14.176	20.10	20.10
Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.2252		2.991		4.925		9.77		14.446		20.10	
Middle CH	1.2196		3.063		4.915		9.77		14.416		20.06	
Highest CH	1.2056		3.027		4.905		9.81		14.326		20.22	



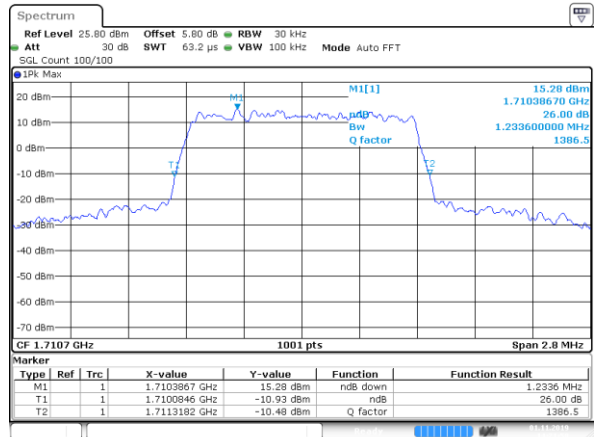
LTE Band 66

Lowest Channel / 1.4MHz / QPSK



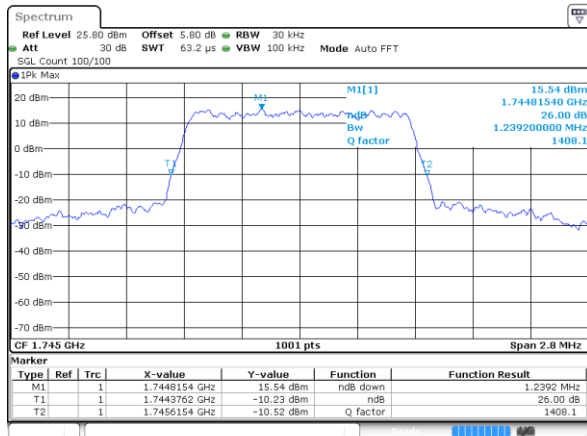
Date: 1 NOV 2019 14:20:29

Lowest Channel / 1.4MHz / 16QAM



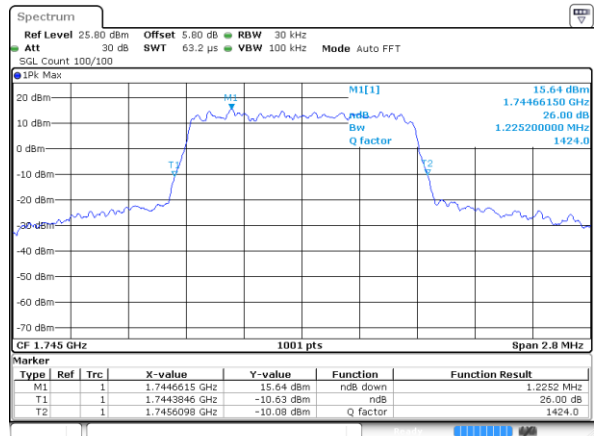
Date: 1 NOV 2019 14:21:59

Middle Channel / 1.4MHz / QPSK



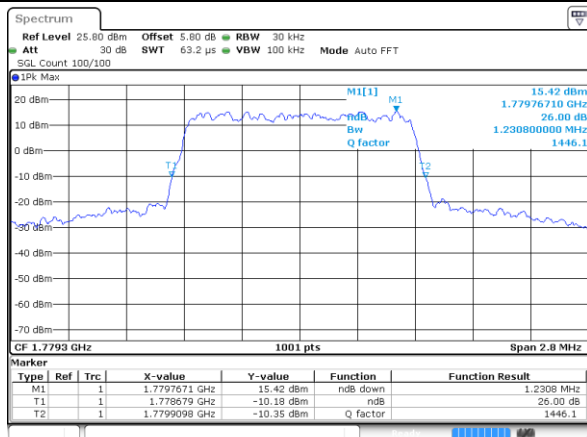
Date: 1 NOV 2019 14:38:52

Middle Channel / 1.4MHz / 16QAM



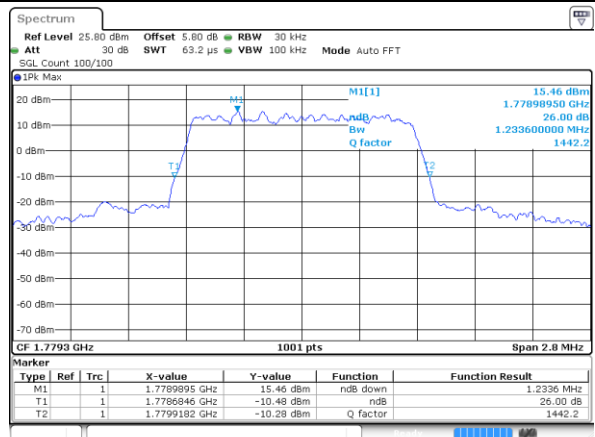
Date: 1 NOV 2019 14:39:18

Highest Channel / 1.4MHz / QPSK



Date: 1 NOV 2019 14:43:16

Highest Channel / 1.4MHz / 16QAM

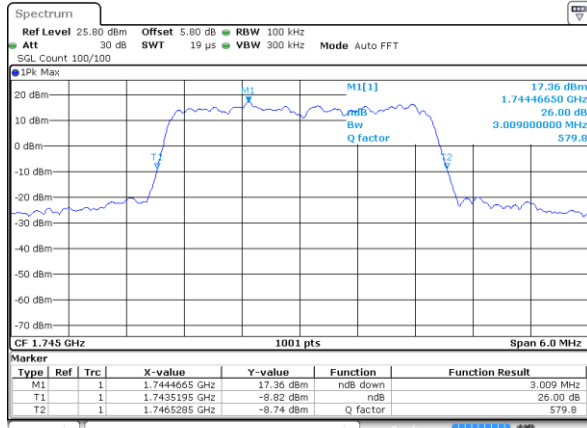


Date: 1 NOV 2019 14:41:49

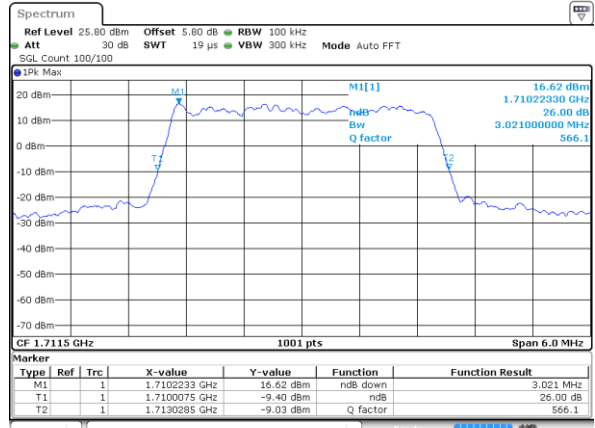


LTE Band 66

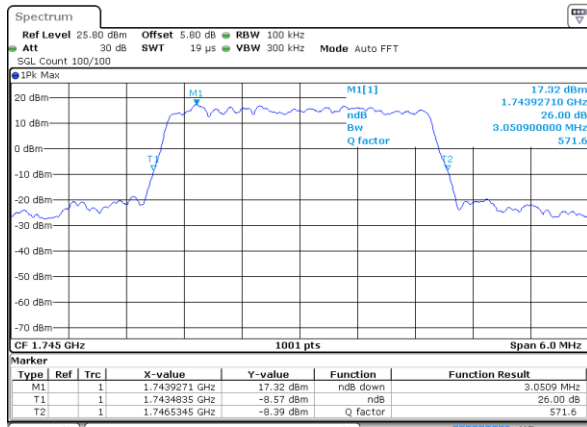
Lowest Channel / 3MHz / QPSK



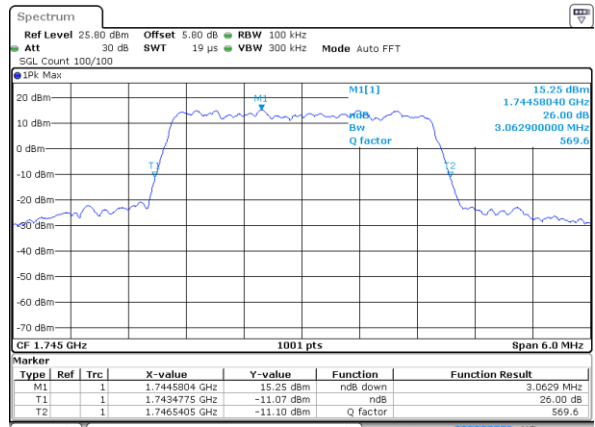
Lowest Channel / 3MHz / 16QAM



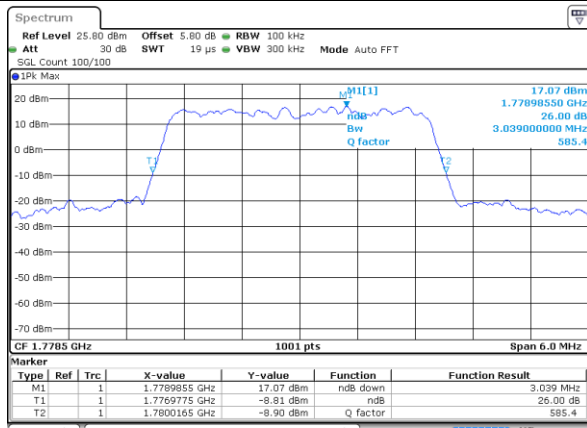
Middle Channel / 3MHz / QPSK



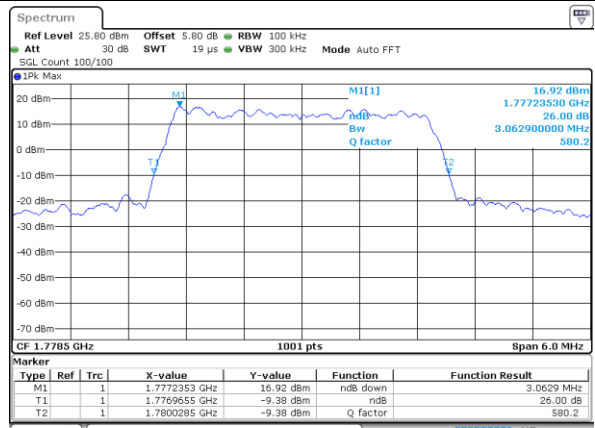
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



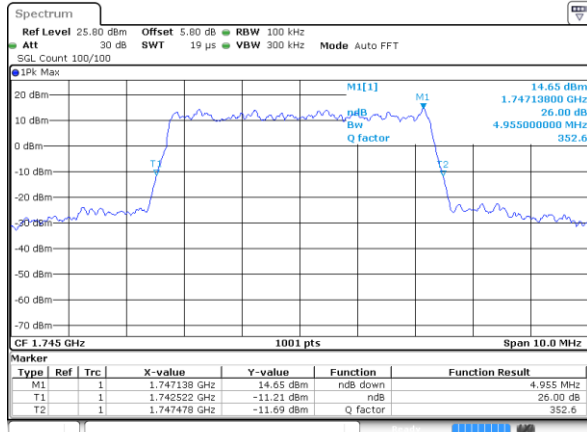
Highest Channel / 3MHz / 16QAM





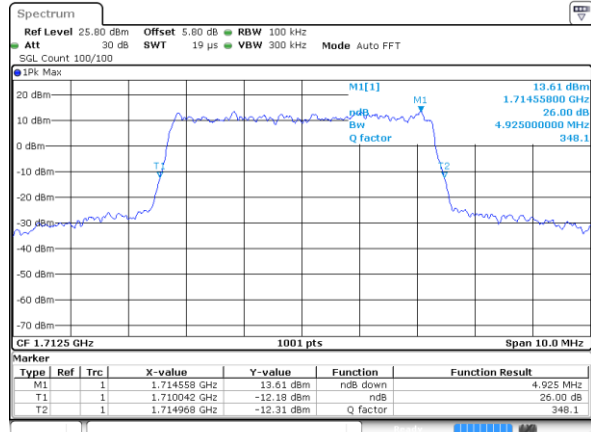
LTE Band 66

Lowest Channel / 5MHz / QPSK



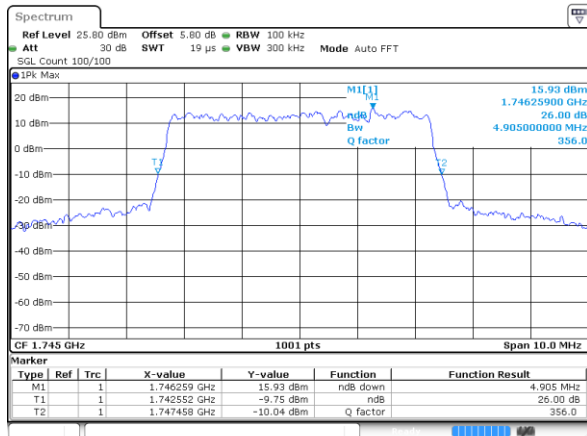
Date: 1 NOV 2019 15:24:06

Lowest Channel / 5MHz / 16QAM



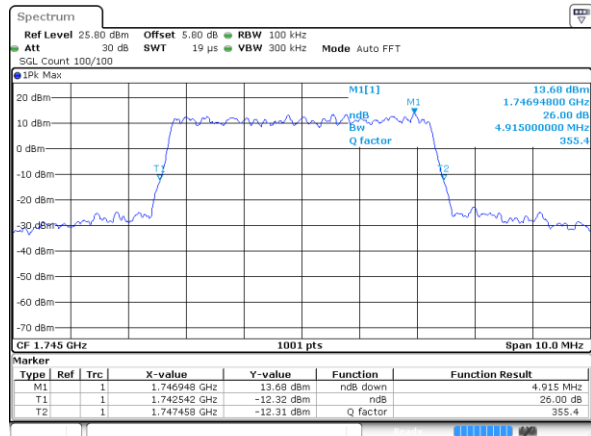
Date: 1 NOV 2019 15:16:42

Middle Channel / 5MHz / QPSK



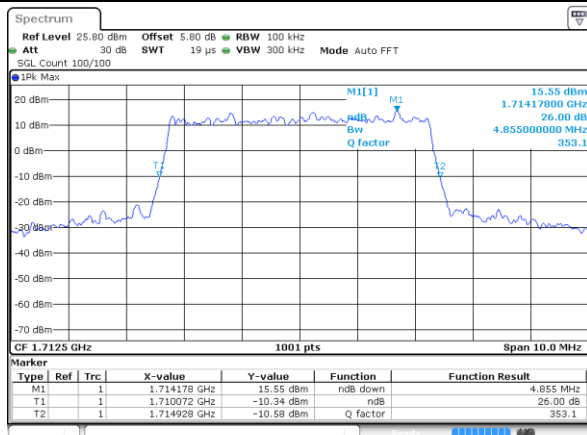
Date: 1 NOV 2019 15:24:41

Middle Channel / 5MHz / 16QAM



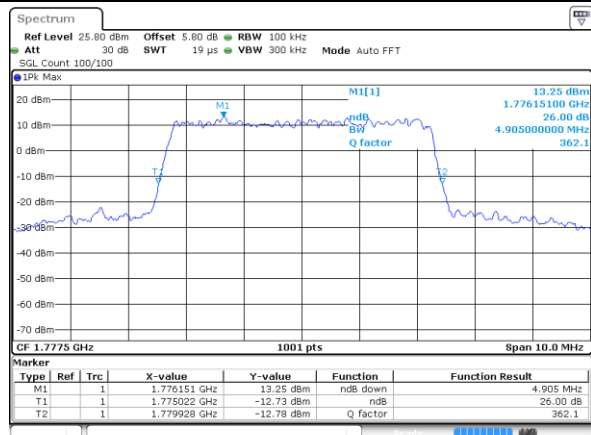
Date: 1 NOV 2019 15:23:43

Highest Channel / 5MHz / QPSK



Date: 1 NOV 2019 15:16:02

Highest Channel / 5MHz / 16QAM

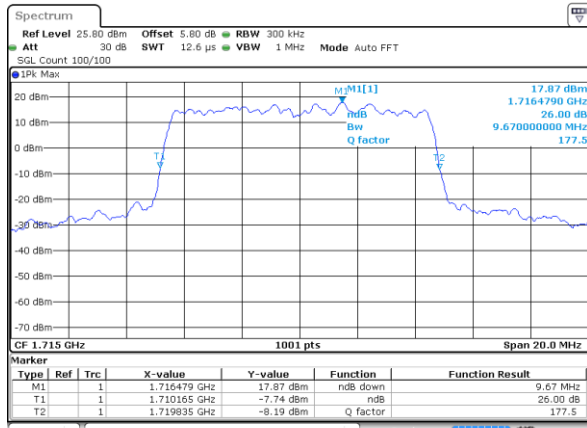


Date: 1 NOV 2019 15:26:59



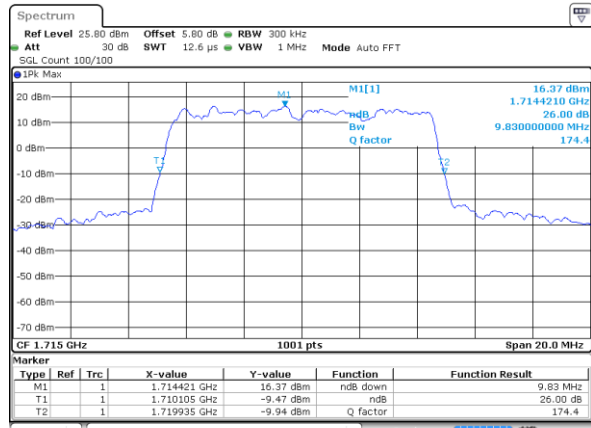
LTE Band 66

Lowest Channel / 10MHz / QPSK



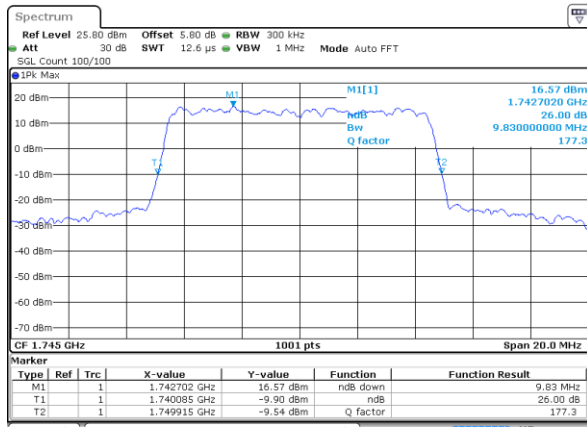
Date: 1 NOV 2019 15:41:56

Lowest Channel / 10MHz / 16QAM



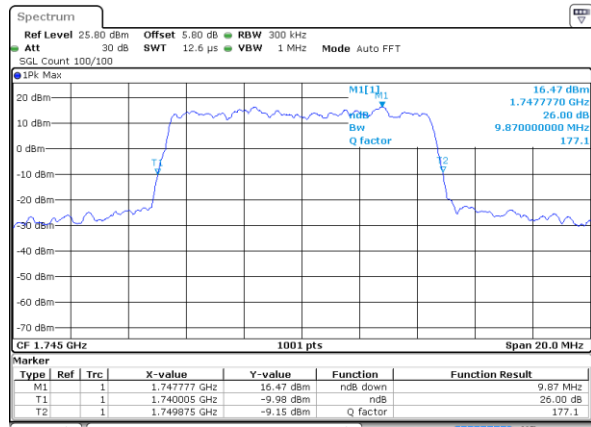
Date: 1 NOV 2019 15:41:08

Middle Channel / 10MHz / QPSK



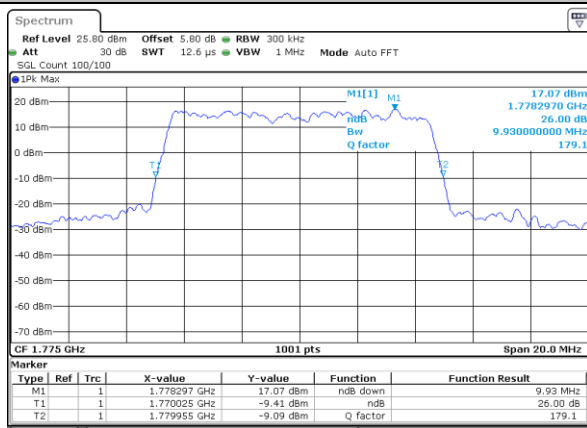
Date: 1 NOV 2019 15:32:40

Middle Channel / 10MHz / 16QAM



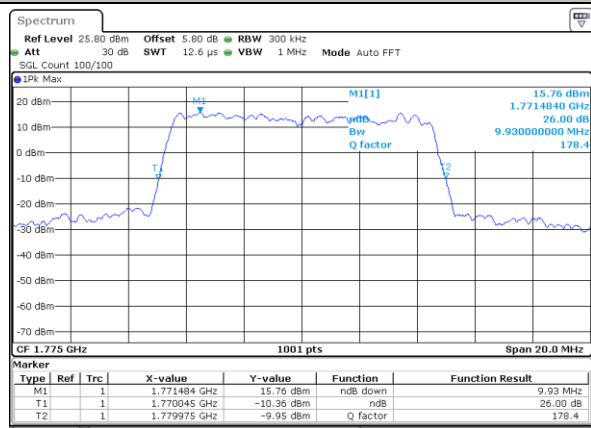
Date: 1 NOV 2019 15:33:00

Highest Channel / 10MHz / QPSK



Date: 1 NOV 2019 15:42:46

Highest Channel / 10MHz / 16QAM

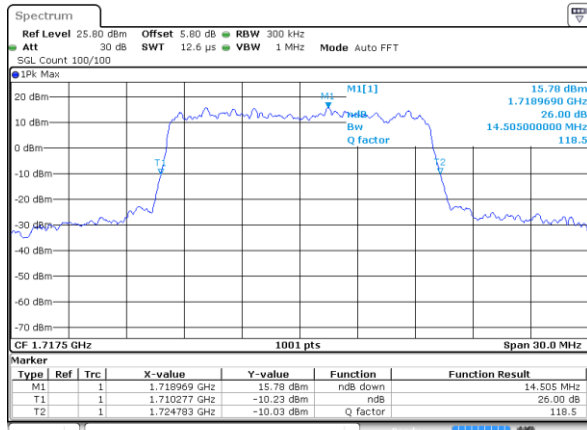


Date: 1 NOV 2019 15:43:24



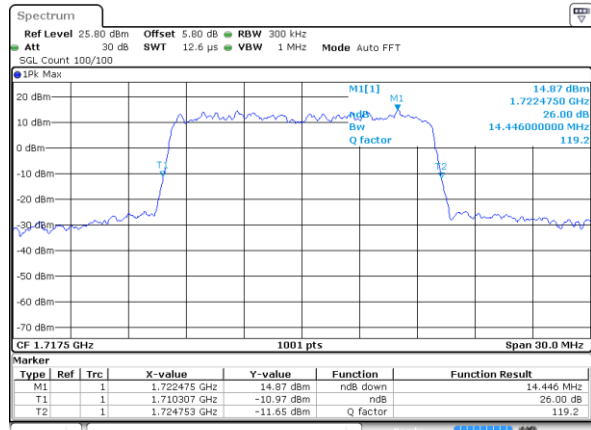
LTE Band 66

Lowest Channel / 15MHz / QPSK



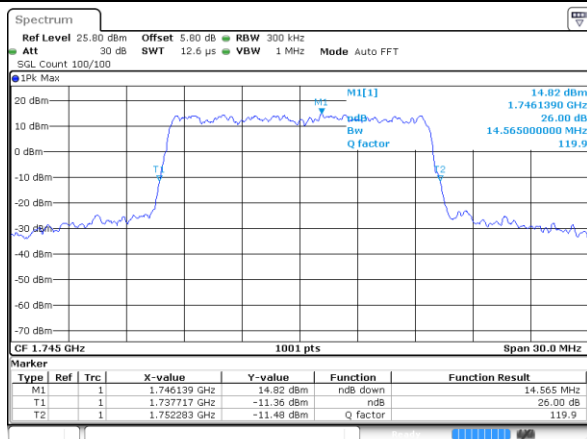
Date: 1 NOV 2019 15:53:38

Lowest Channel / 15MHz / 16QAM



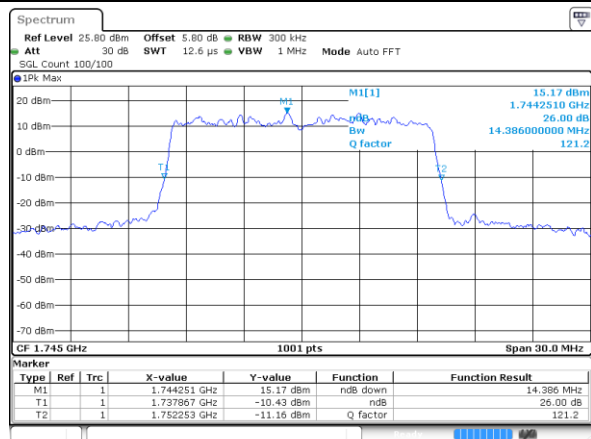
Date: 1 NOV 2019 15:52:58

Middle Channel / 15MHz / QPSK



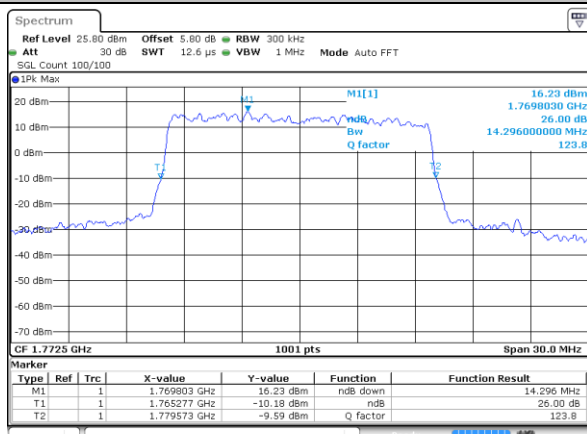
Date: 1 NOV 2019 15:50:54

Middle Channel / 15MHz / 16QAM



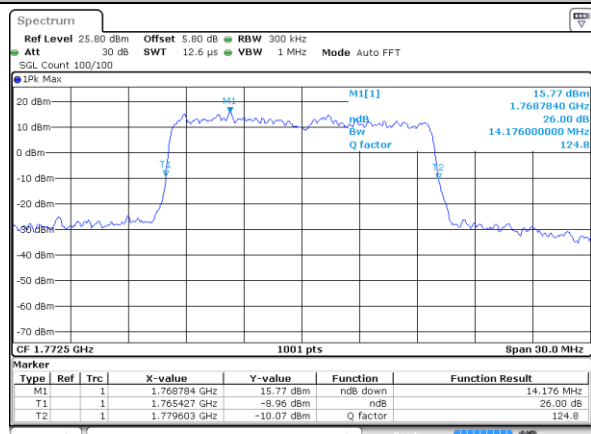
Date: 1 NOV 2019 15:51:17

Highest Channel / 15MHz / QPSK



Date: 1 NOV 2019 16:03:05

Highest Channel / 15MHz / 16QAM

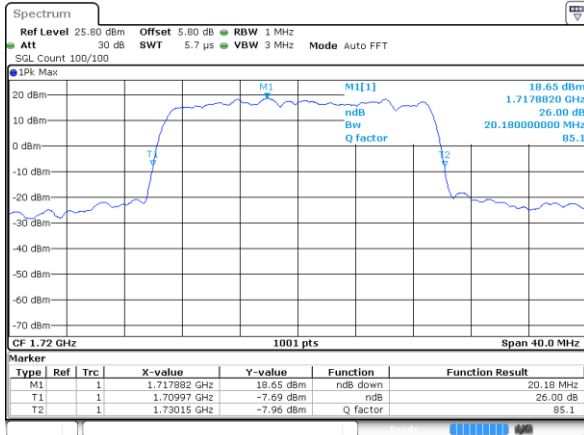


Date: 1 NOV 2019 16:02:29



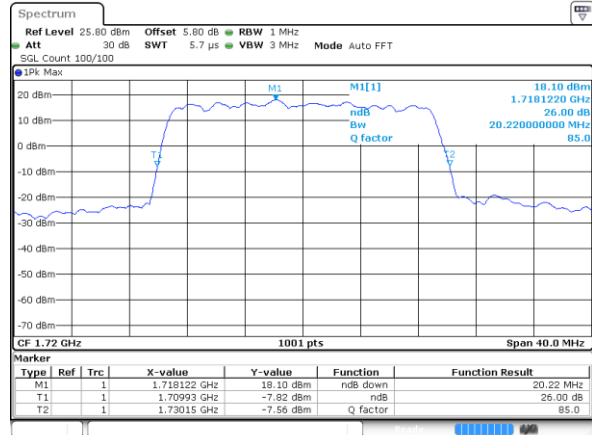
LTE Band 66

Lowest Channel / 20MHz / QPSK



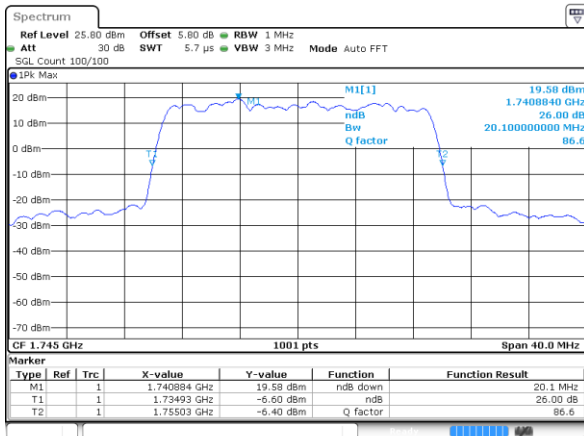
Date: 1 NOV 2019 16:04:22

Lowest Channel / 20MHz / 16QAM



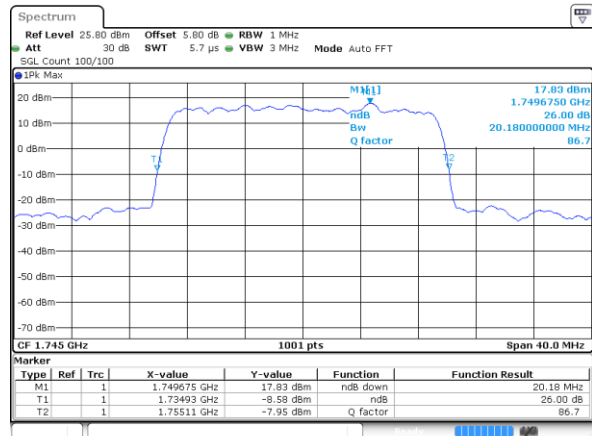
Date: 1 NOV 2019 16:05:18

Middle Channel / 20MHz / QPSK



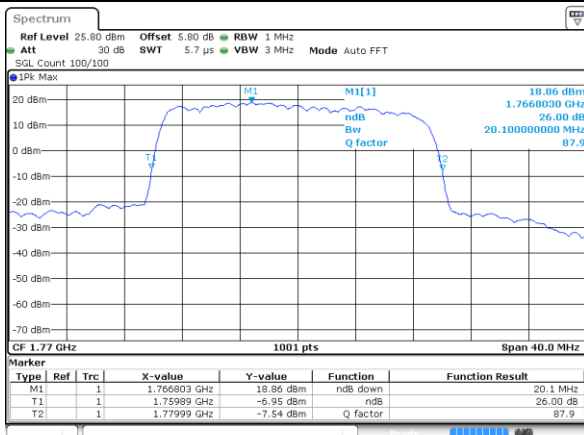
Date: 1 NOV 2019 16:14:31

Middle Channel / 20MHz / 16QAM



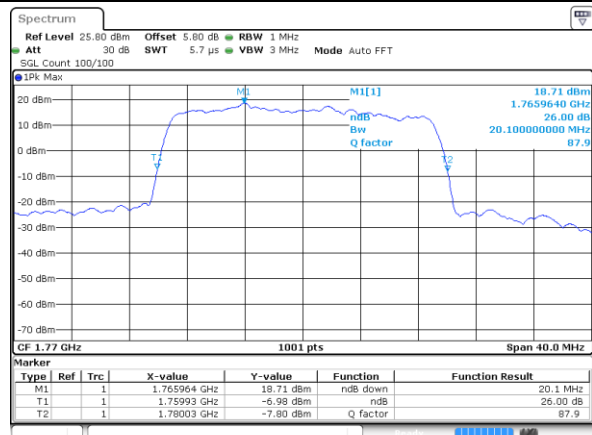
Date: 1 NOV 2019 16:14:03

Highest Channel / 20MHz / QPSK



Date: 1 NOV 2019 16:15:13

Highest Channel / 20MHz / 16QAM

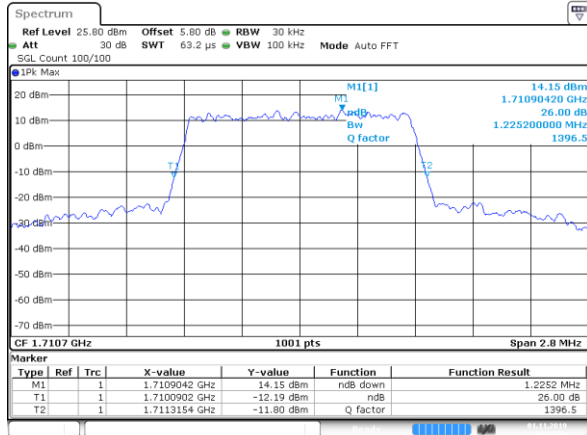


Date: 1 NOV 2019 16:15:54



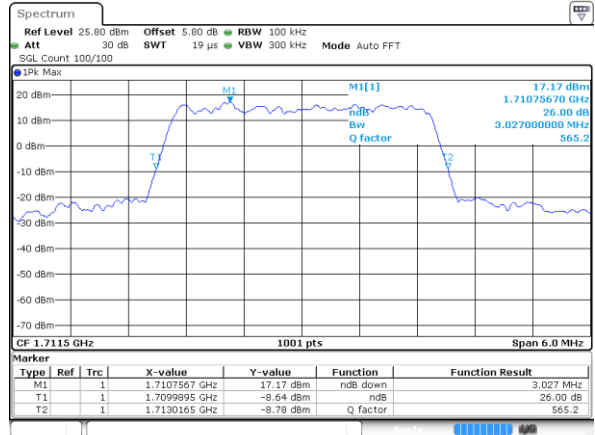
LTE Band 66

Lowest Channel / 1.4MHz / 64QAM



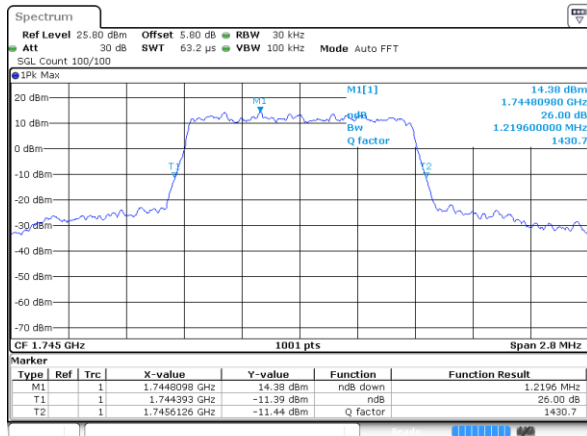
Date: 1 NOV 2019 14:27:53

Lowest Channel / 3MHz / 64QAM



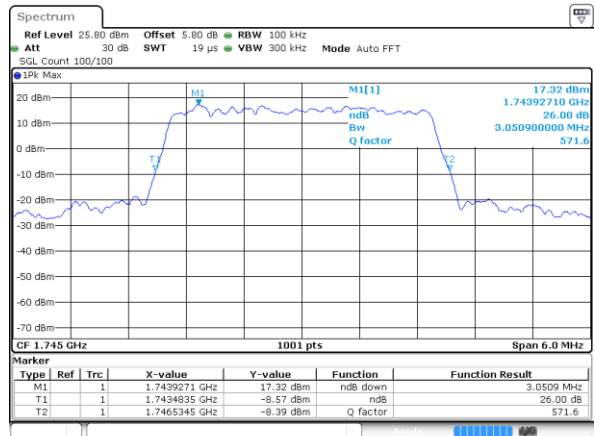
Date: 1 NOV 2019 14:51:43

Middle Channel / 20MHz / 64QAM



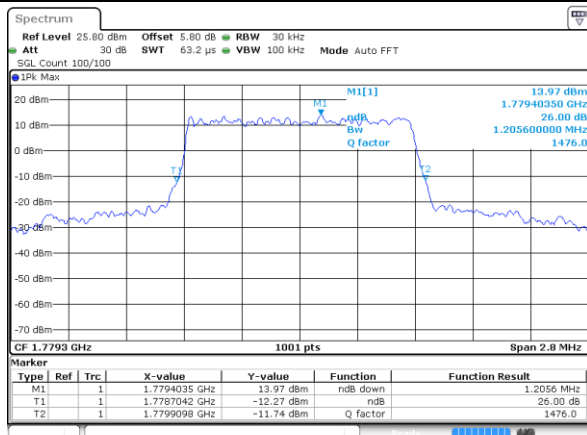
Date: 1 NOV 2019 14:39:43

Middle Channel / 3MHz / 64QAM



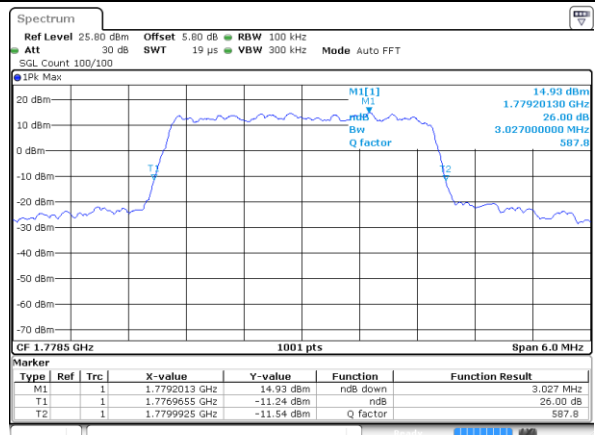
Date: 1 NOV 2019 15:02:24

Highest Channel / 20MHz / 64QAM



Date: 1 NOV 2019 14:40:21

Highest Channel / 3MHz / 64QAM

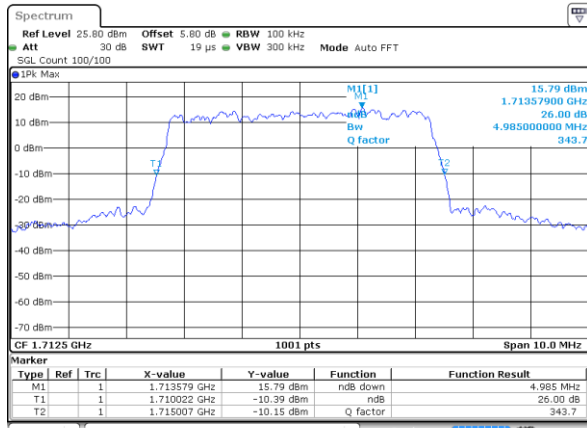


Date: 1 NOV 2019 15:05:18



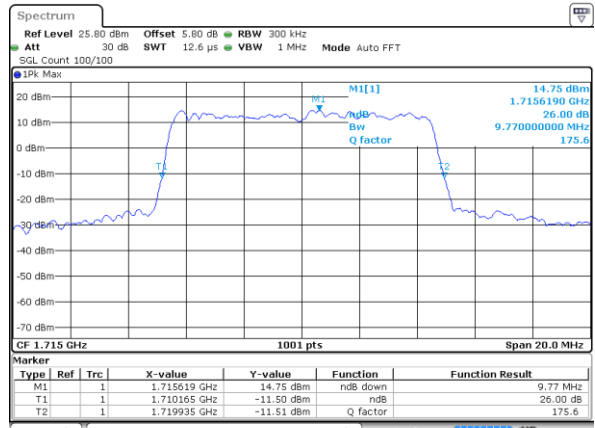
LTE Band 66

Lowest Channel / 5MHz / 64QAM



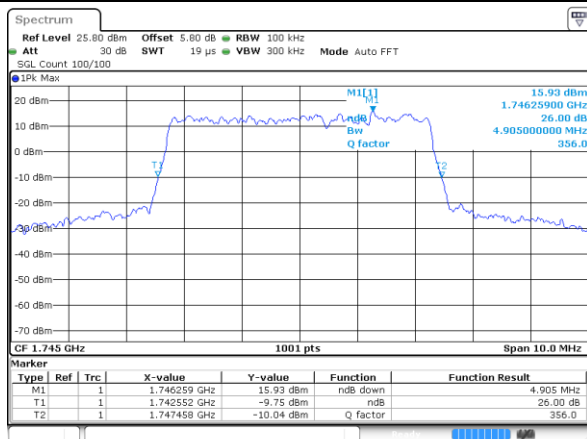
Date: 1 NOV 2019 15:15:19

Lowest Channel / 10MHz / 64QAM



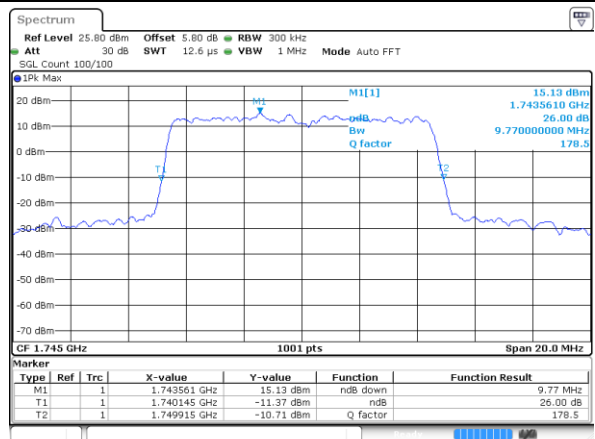
Date: 1 NOV 2019 15:40:34

Middle Channel / 5MHz / 64QAM



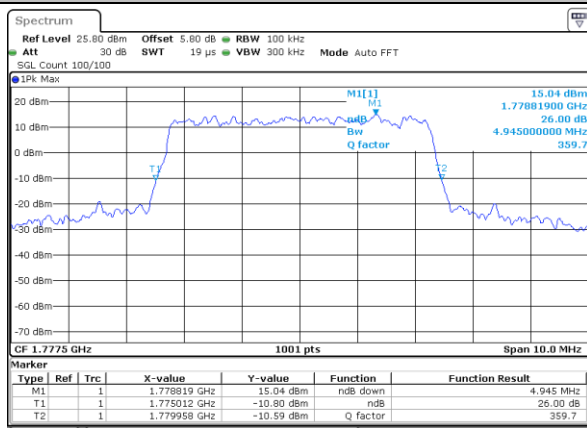
Date: 1 NOV 2019 15:24:41

Middle Channel / 10MHz / 64QAM



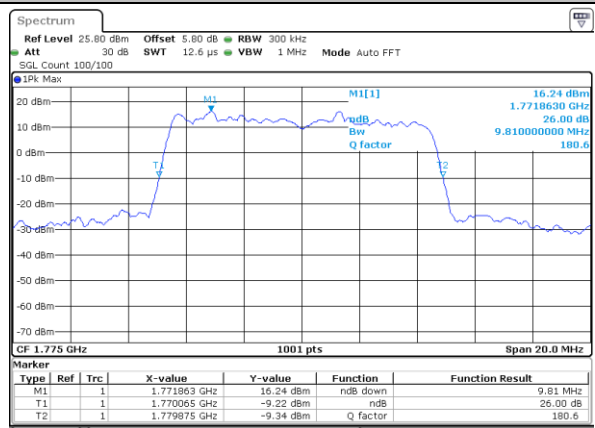
Date: 1 NOV 2019 15:33:25

Highest Channel / 5MHz / 64QAM



Date: 1 NOV 2019 15:25:36

Highest Channel / 10MHz / 64QAM

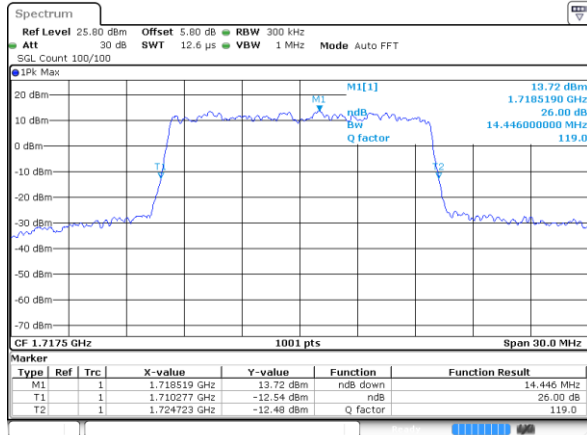


Date: 1 NOV 2019 15:44:04



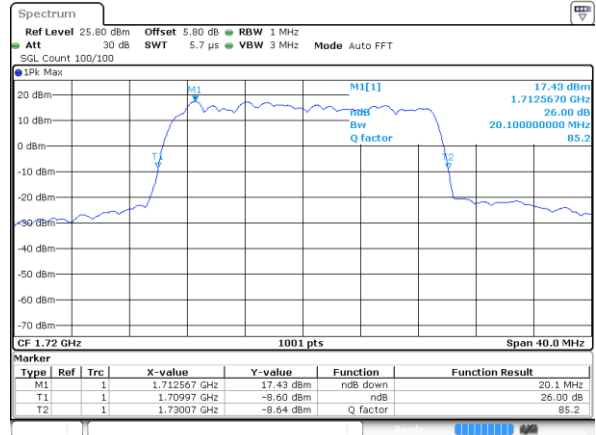
LTE Band 66

Lowest Channel / 15MHz / 64QAM



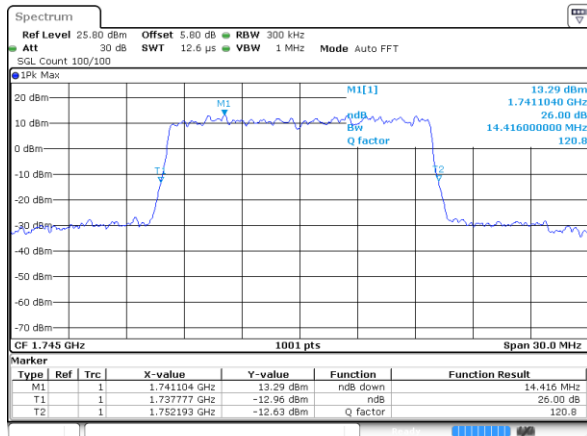
Date: 1 NOV 2019 15:52:25

Lowest Channel / 20MHz / 64QAM



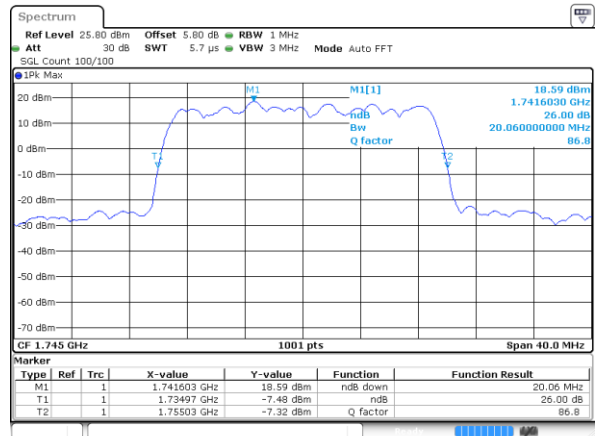
Date: 1 NOV 2019 16:06:06

Middle Channel / 15MHz / 64QAM



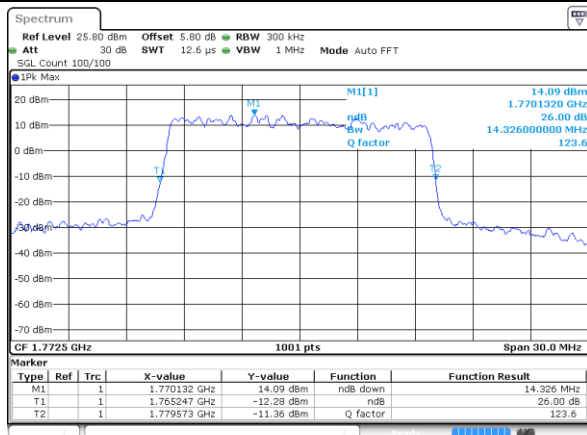
Date: 1 NOV 2019 15:51:39

Middle Channel / 20MHz / 64QAM



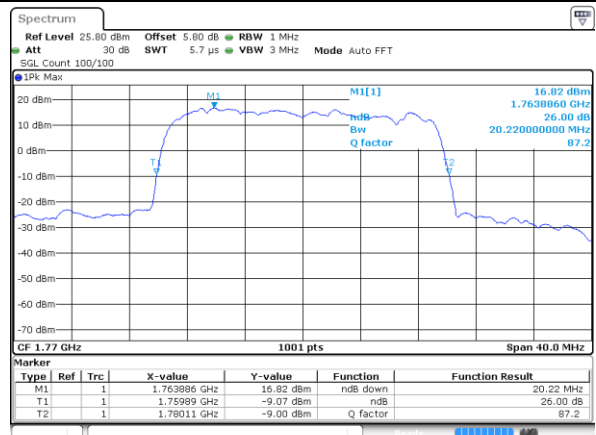
Date: 1 NOV 2019 16:13:27

Highest Channel / 15MHz / 64QAM



Date: 1 NOV 2019 16:01:54

Highest Channel / 20MHz / 64QAM



Date: 1 NOV 2019 16:16:41

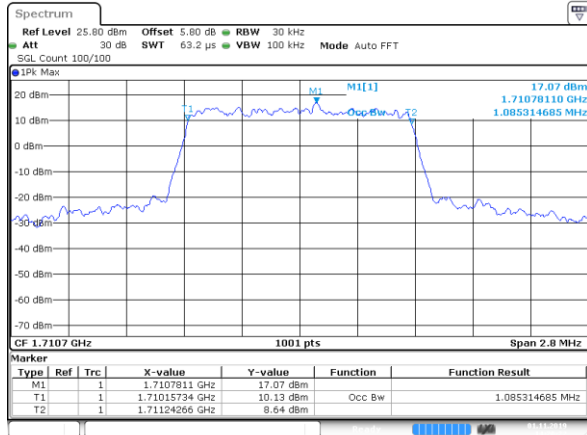
**Occupied Bandwidth**

Mode	LTE Band 66 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.10	2.73	2.72	4.48	4.49	9.01	8.97	13.40	13.40	18.30	18.38
Middle CH	1.09	1.10	2.71	2.72	4.50	4.48	9.07	9.07	13.43	13.49	18.38	18.26
Highest CH	1.09	1.09	2.73	2.72	4.50	4.51	9.03	9.03	13.40	13.40	18.26	18.18
Mode	LTE Band 66 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09		2.71		4.50		9.01		13.43		18.18	
Middle CH	1.09		2.70		4.49		9.05		13.40		18.26	
Highest CH	1.09		2.72		4.51		8.95		13.37		18.18	

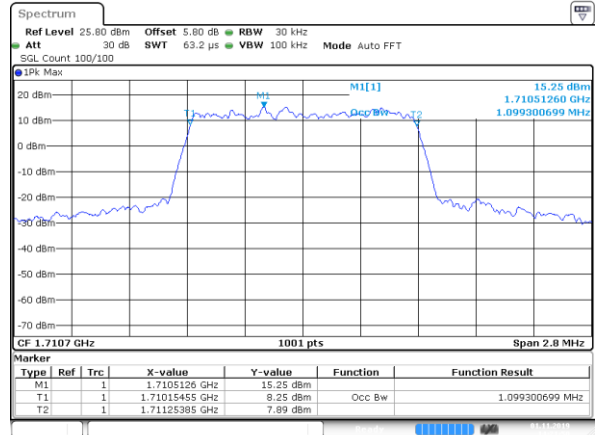


LTE Band 66

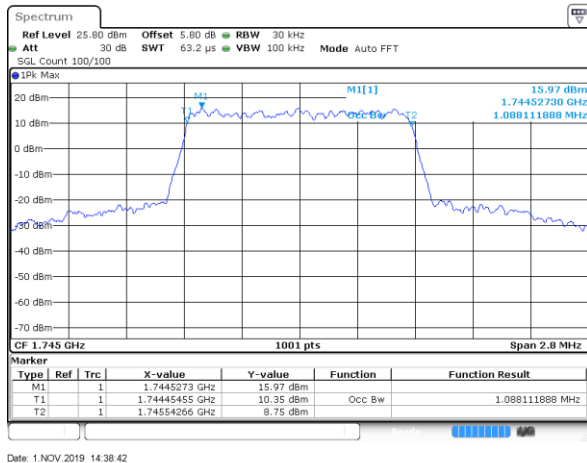
Lowest Channel / 1.4MHz / QPSK



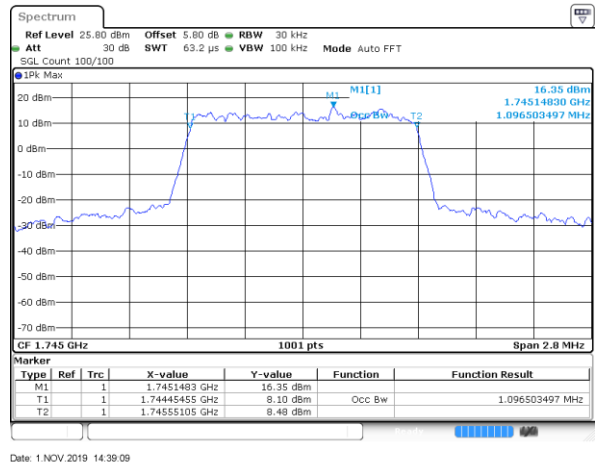
Lowest Channel / 1.4MHz / 16QAM



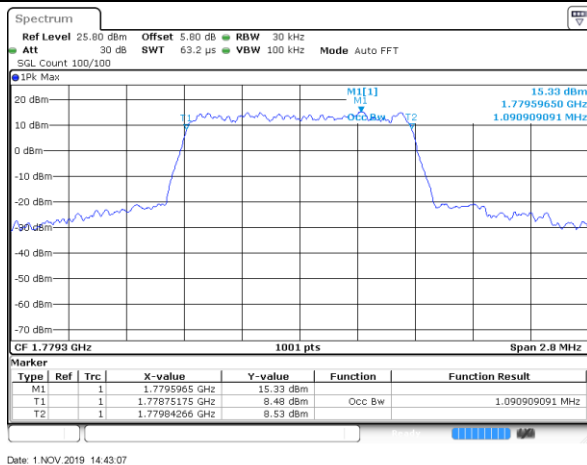
Middle Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



Highest Channel / 1.4MHz / 16QAM

