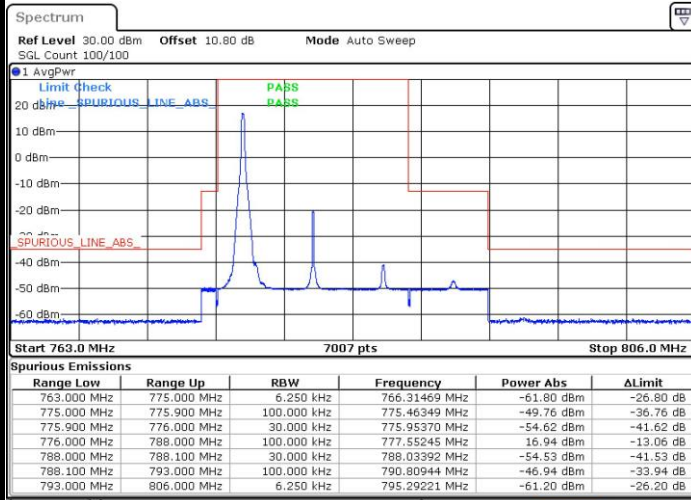




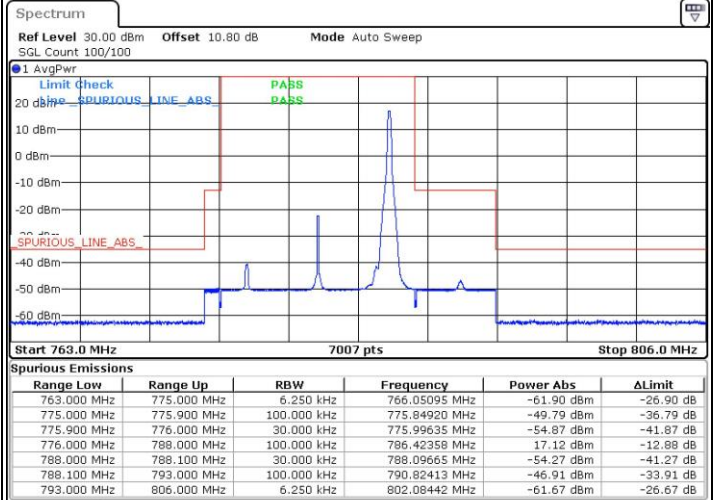
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



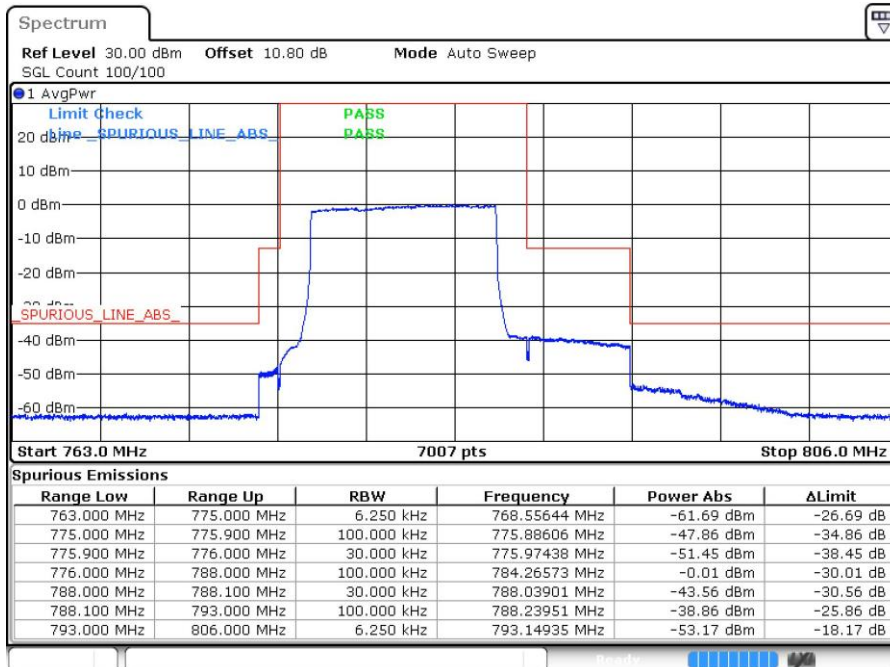
Date: 4 FEB 2019 16:53:45

Highest Band Edge / 1 RB



Date: 4 FEB 2019 16:55:26

Band Edge / Full RB



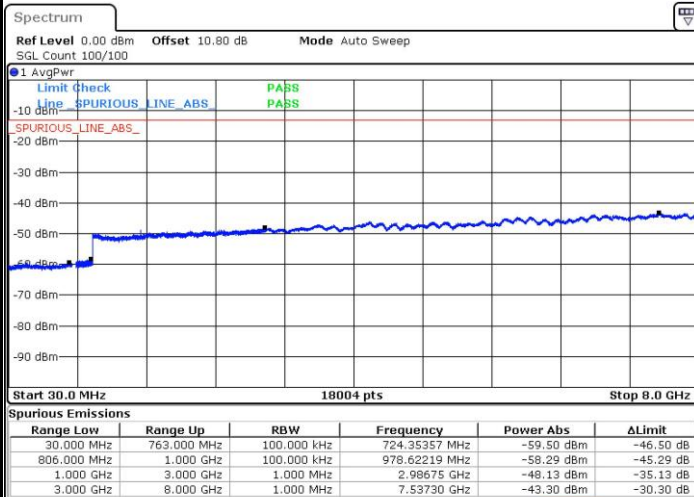
Date: 4 FEB 2019 16:52:05



Conducted Spurious Emission

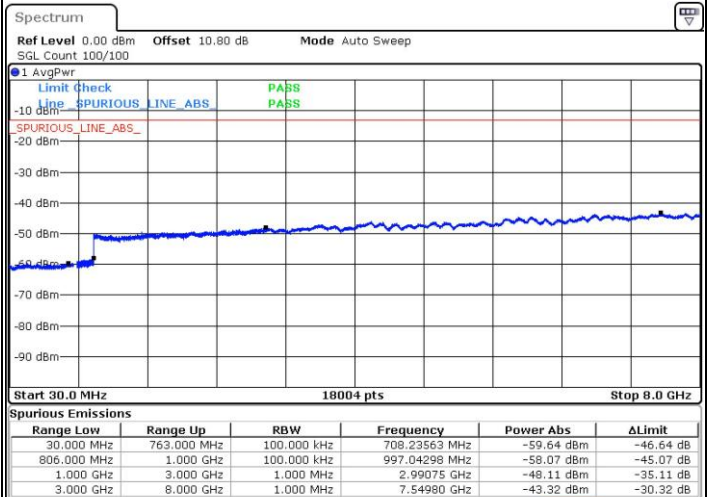
LTE Band 13 / 5MHz

Lowest Channel / QPSK



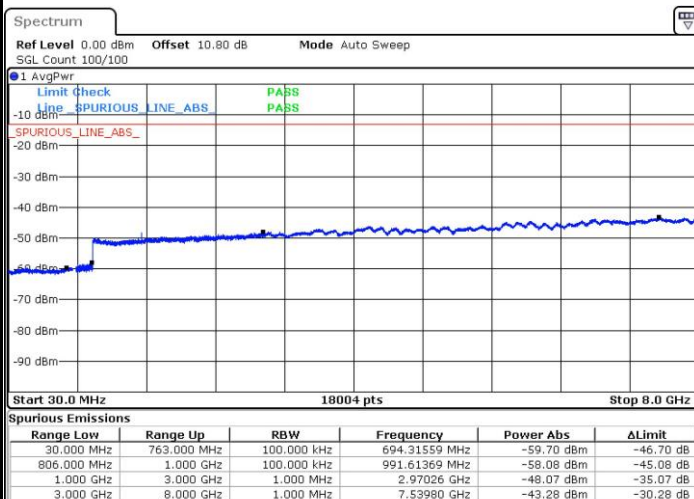
Date: 4.FEB.2019 16:16:32

Lowest Channel / 16QAM



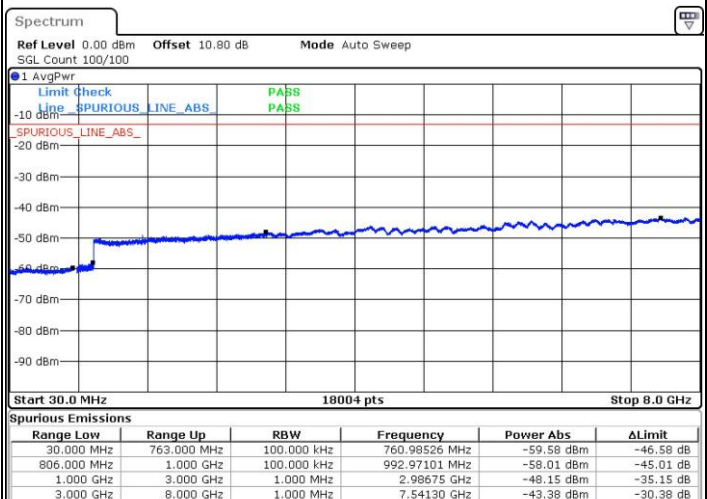
Date: 4.FEB.2019 16:17:12

Middle Channel / QPSK



Date: 4.FEB.2019 16:18:31

Middle Channel / 16QAM

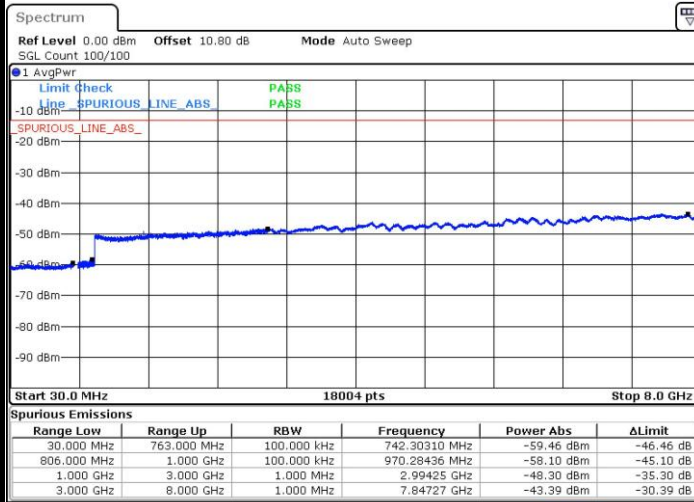


Date: 4.FEB.2019 16:17:52



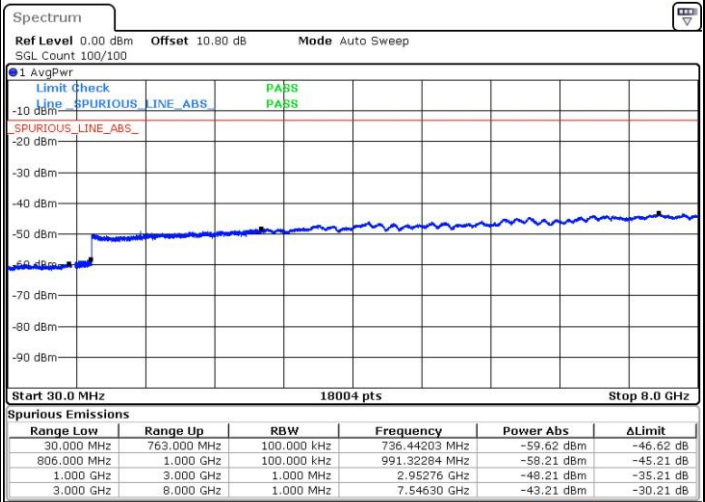
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 4 FEB 2019 16:27:24

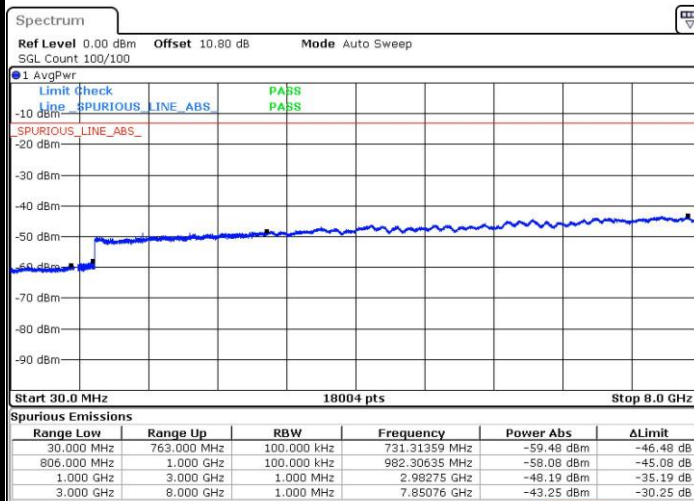
Highest Channel / 16QAM



Date: 4 FEB 2019 16:28:04

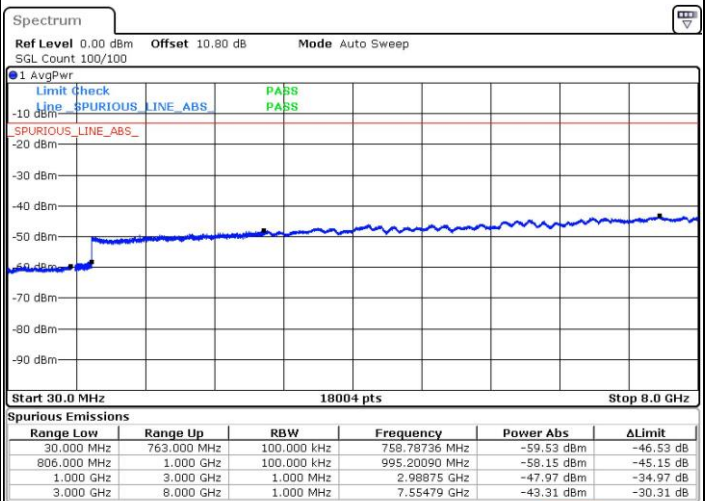
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 4 FEB 2019 16:50:02

Middle Channel / 16QAM

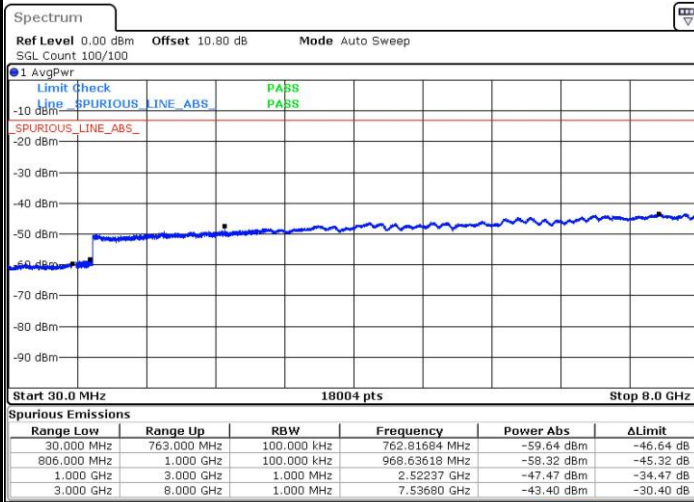


Date: 4 FEB 2019 16:49:22



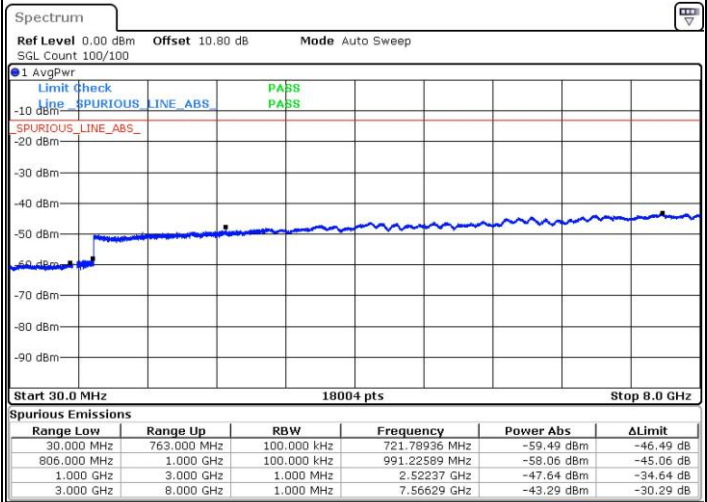
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



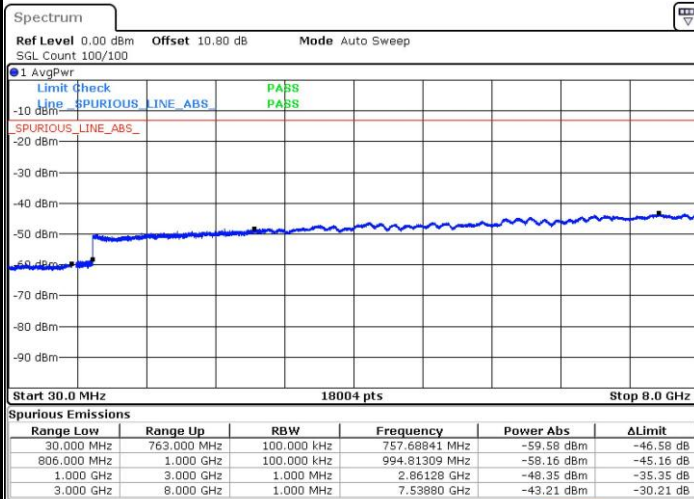
Date: 4.FEB.2019 16:32:28

Middle Channel / 64QAM



Date: 4.FEB.2019 16:33:08

Highest Channel / 64QAM

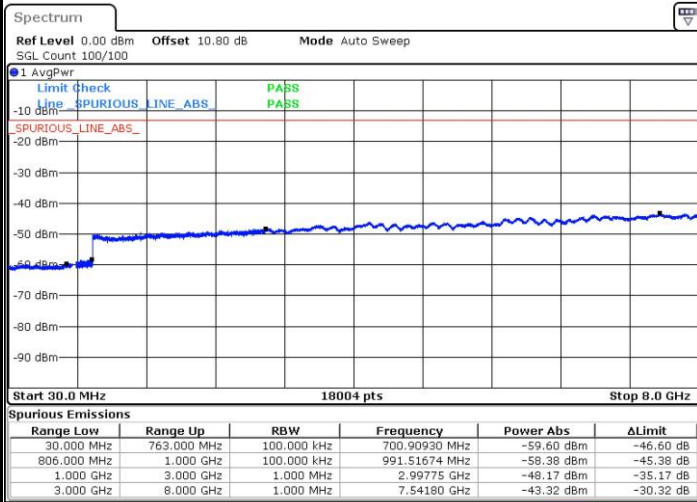


Date: 4.FEB.2019 16:37:54



LTE Band 13 / 10MHz

Middle Channel / 64QAM



Date: 4.FEB.2019 16:56:05

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0083	PASS
40	Normal Voltage	0.0093	
30	Normal Voltage	0.0061	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0087	
0	Normal Voltage	0.0072	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0073	
-30	Normal Voltage	0.0084	
20	Maximum Voltage	0.0064	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0092	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 66

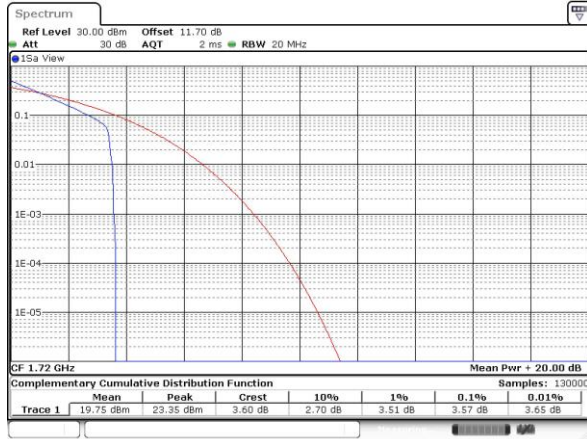
Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.57	4.58	4	5.88	PASS
Middle CH	3.57	4.61	4.35	5.94	
Highest CH	3.54	4.61	5.22	6	
Mode	LTE Band 66 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	7.16	6.49	-	-	PASS
Middle CH	5.54	6.55	-	-	
Highest CH	6.93	6.52	-	-	

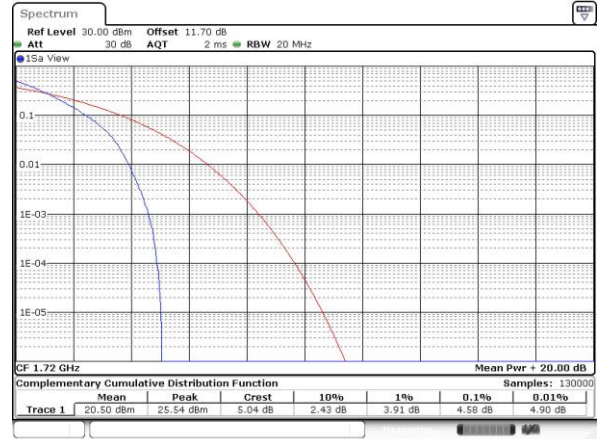


LTE Band 66 / 20MHz / QPSK

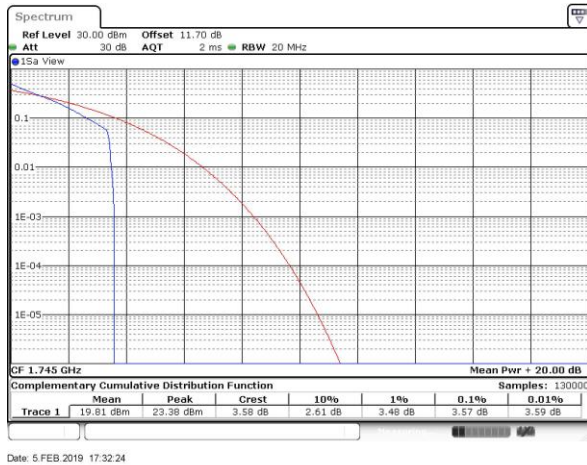
Lowest Channel / 1RB



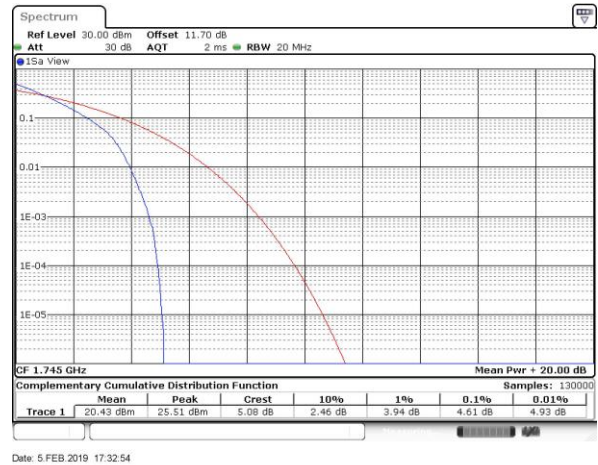
Lowest Channel / Full RB



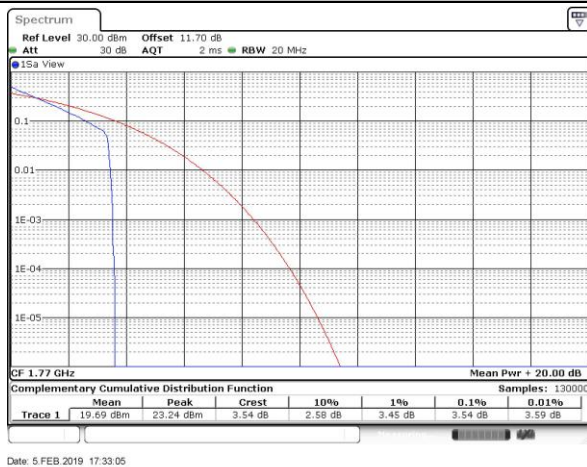
Middle Channel / 1RB



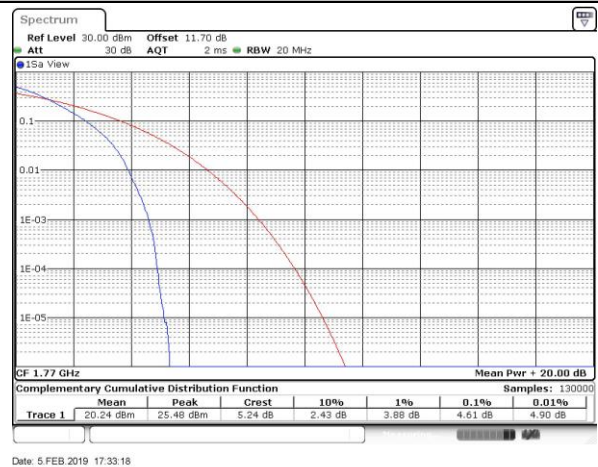
Middle Channel / Full RB



Highest Channel / 1RB

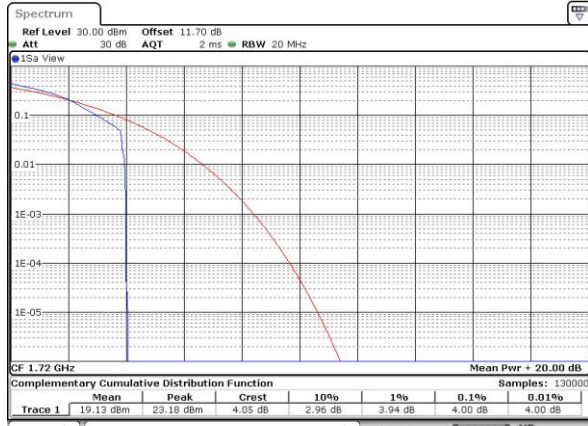


Highest Channel / Full RB



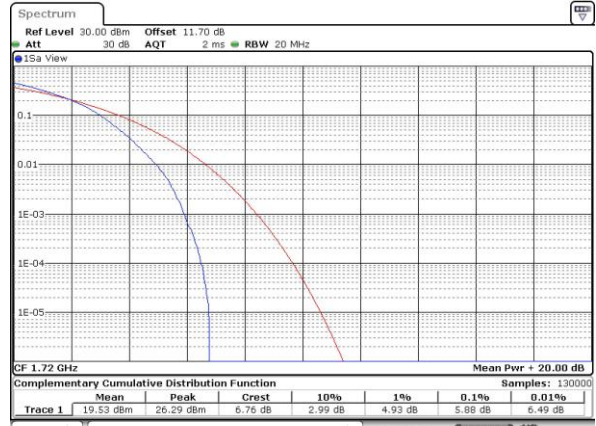
LTE Band 66 / 20MHz / 16QAM

Lowest Channel / 1RB



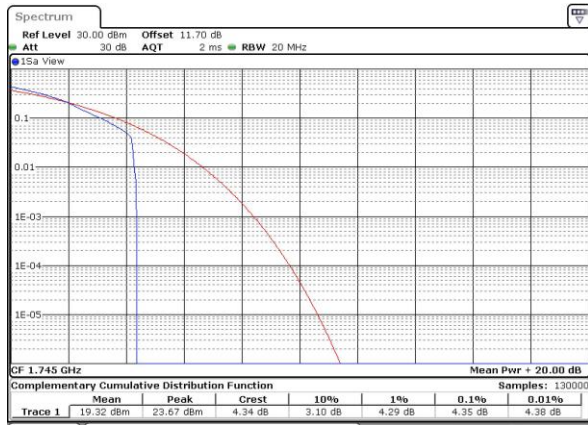
Date: 5 FEB 2019 17:23:14

Lowest Channel / Full RB



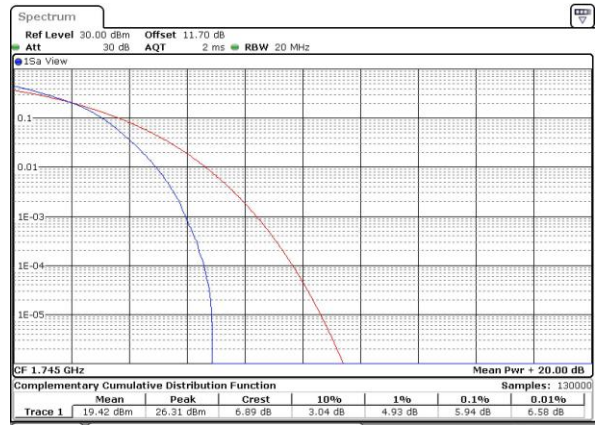
Date: 5 FEB 2019 17:23:31

Middle Channel / 1RB



Date: 5 FEB 2019 17:23:42

Middle Channel / Full RB



Date: 5 FEB 2019 17:23:52

Highest Channel / 1RB



Date: 5 FEB 2019 17:24:10

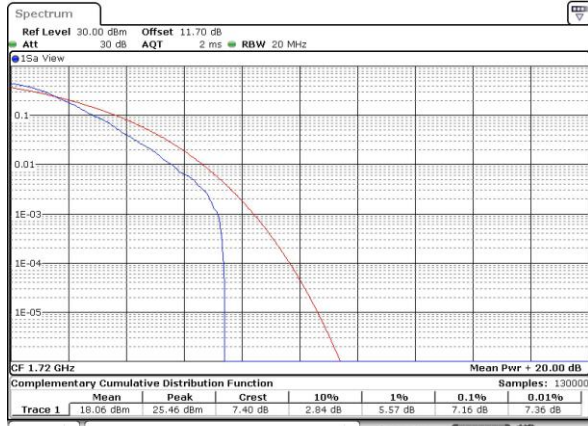
Highest Channel / Full RB



Date: 5 FEB 2019 17:24:24

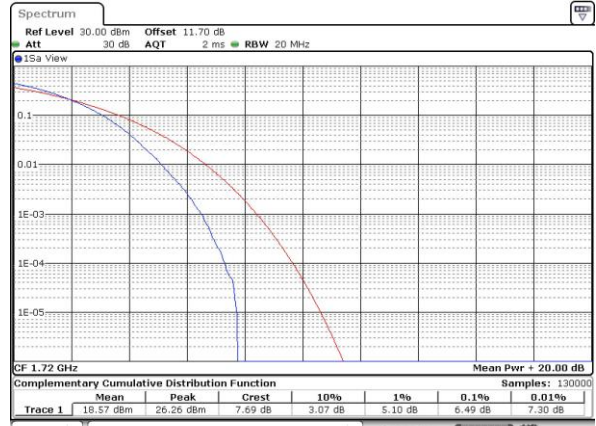
LTE Band 66 / 20MHz / 64QAM

Lowest Channel / 1RB



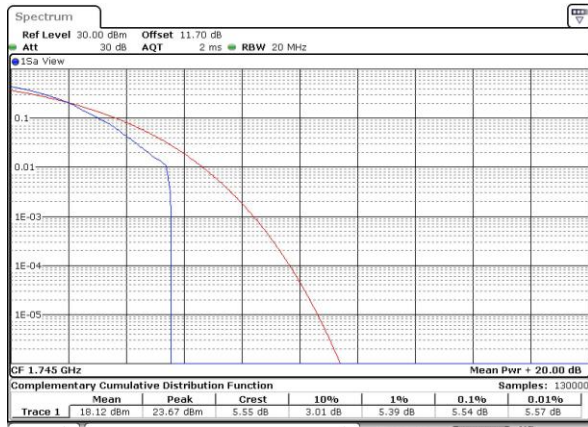
Date: 5 FEB 2019 17:37:45

Lowest Channel / Full RB



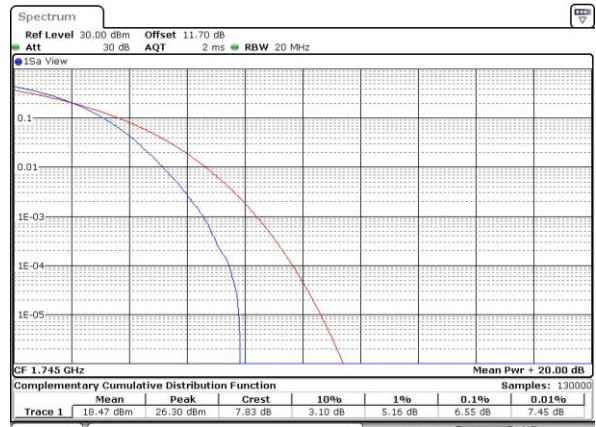
Date: 5 FEB 2019 17:37:56

Middle Channel / 1RB



Date: 5 FEB 2019 17:38:07

Middle Channel / Full RB



Date: 5 FEB 2019 17:38:21

Highest Channel / 1RB



Date: 5 FEB 2019 17:38:43

Highest Channel / Full RB



Date: 5 FEB 2019 17:38:54

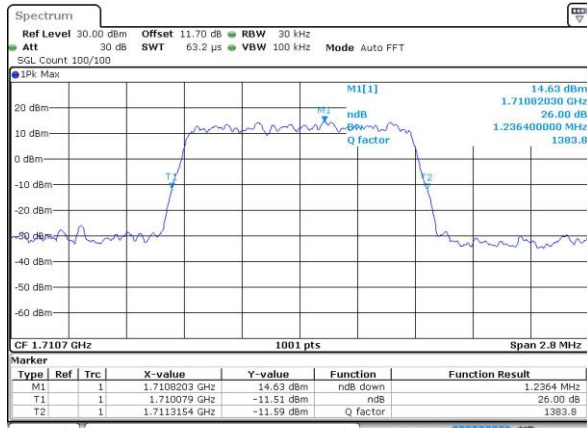
**26dB Bandwidth**

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	1.24	1.24	3.05	3.00	4.94	4.93	9.93	9.67	14.27	14.30	20.06	20.34
Middle CH	1.23	1.23	2.96	2.99	4.88	4.88	9.81	9.75	14.39	14.33	20.10	20.18
Highest CH	1.22	1.23	2.97	3.02	4.84	4.84	9.99	9.65	14.36	14.30	20.18	20.30
Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.23	-	2.97	-	4.92	-	9.71	-	14.45	-	20.38	-
Middle CH	1.21	-	3.01	-	4.88	-	9.73	-	14.27	-	20.02	-
Highest CH	1.22	-	2.98	-	4.88	-	9.79	-	14.33	-	20.34	-



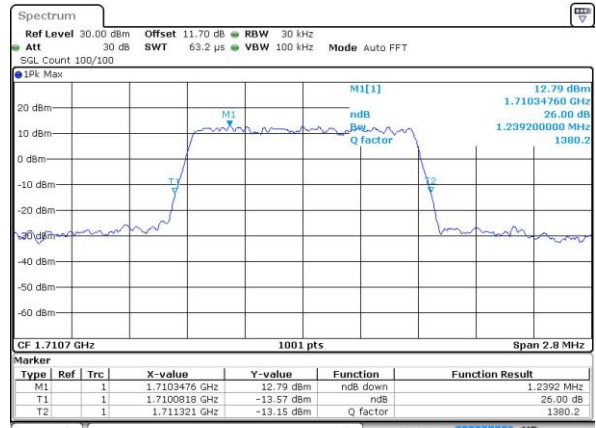
LTE Band 66

Lowest Channel / 1.4MHz / QPSK



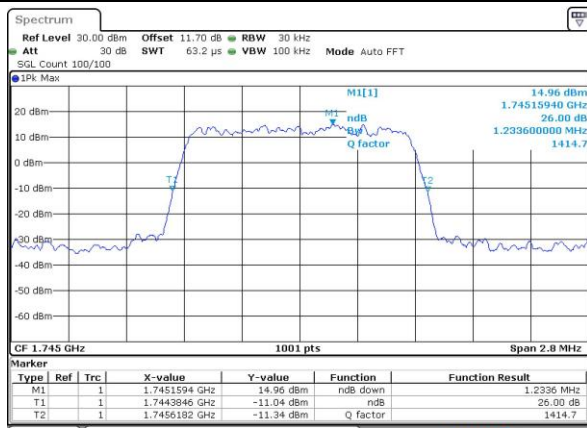
Date: 5 FEB 2019 15:03:49

Lowest Channel / 1.4MHz / 16QAM



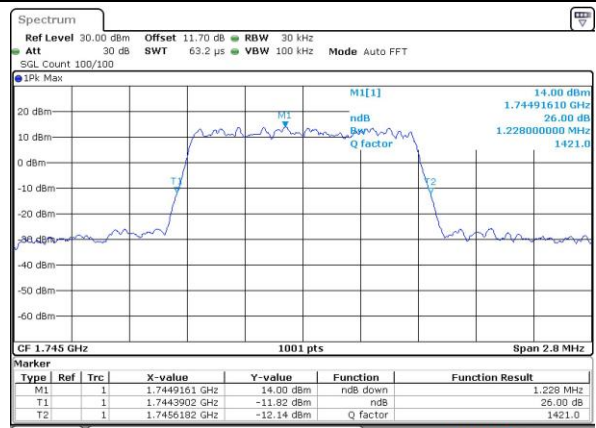
Date: 5 FEB 2019 15:04:01

Middle Channel / 1.4MHz / QPSK



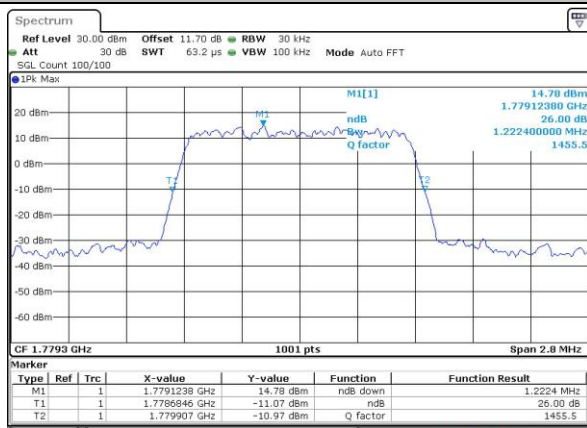
Date: 5 FEB 2019 15:10:11

Middle Channel / 1.4MHz / 16QAM



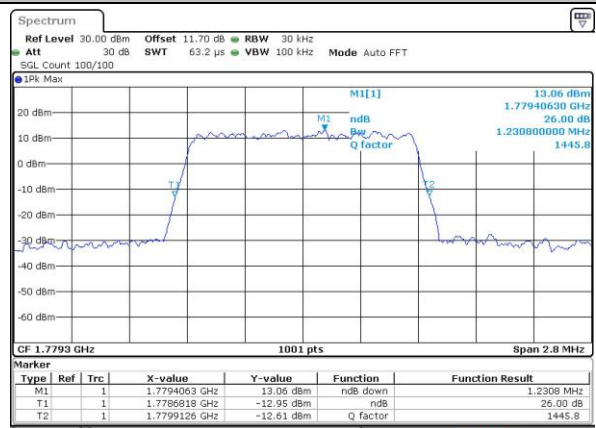
Date: 5 FEB 2019 15:10:23

Highest Channel / 1.4MHz / QPSK



Date: 5 FEB 2019 15:12:19

Highest Channel / 1.4MHz / 16QAM

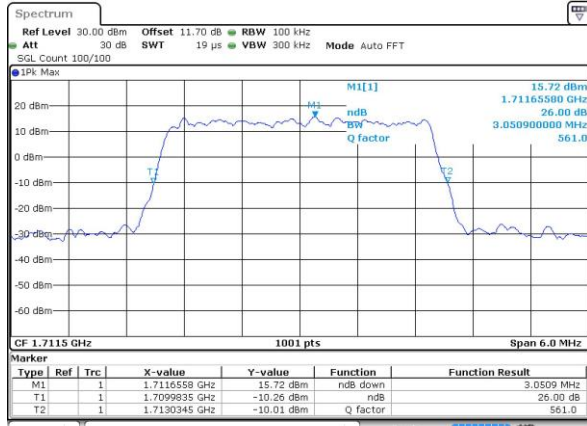


Date: 5 FEB 2019 15:12:31



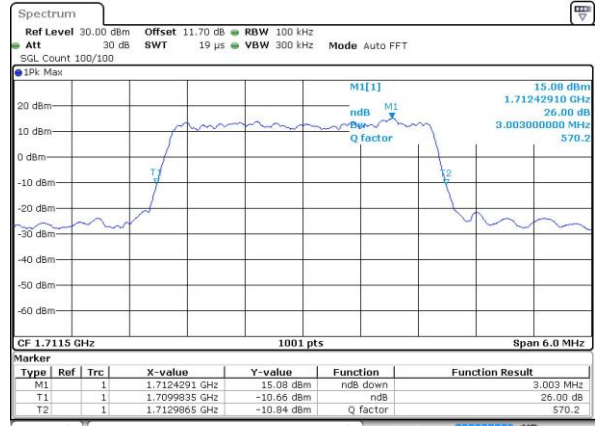
LTE Band 66

Lowest Channel / 3MHz / QPSK



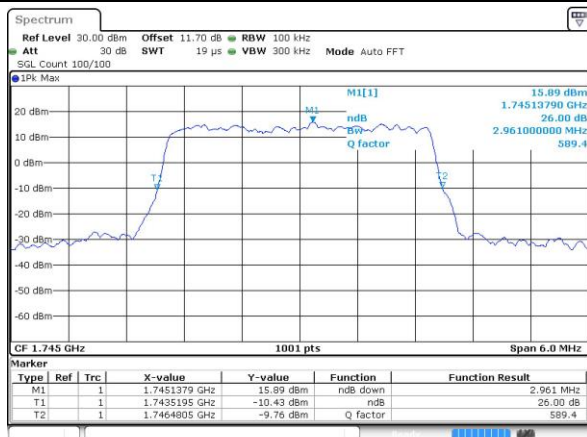
Date: 5 FEB 2019 15:26:05

Lowest Channel / 3MHz / 16QAM



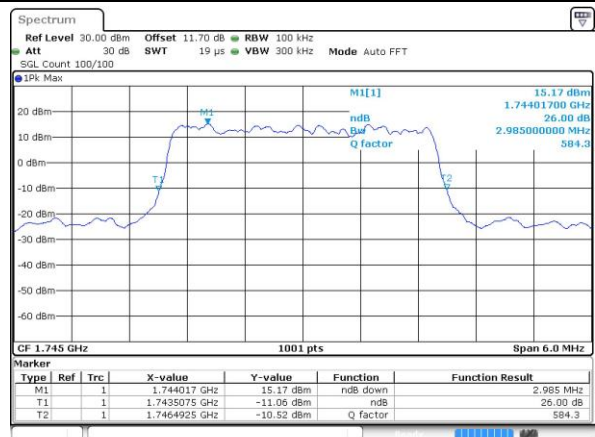
Date: 5 FEB 2019 15:26:16

Middle Channel / 3MHz / QPSK



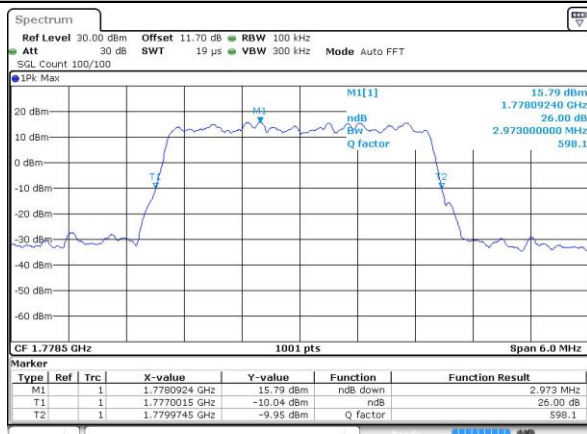
Date: 5 FEB 2019 15:32:13

Middle Channel / 3MHz / 16QAM



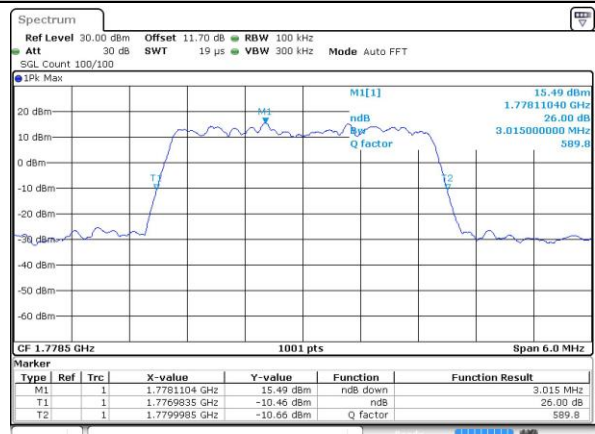
Date: 5 FEB 2019 15:32:25

Highest Channel / 3MHz / QPSK



Date: 5 FEB 2019 15:34:21

Highest Channel / 3MHz / 16QAM

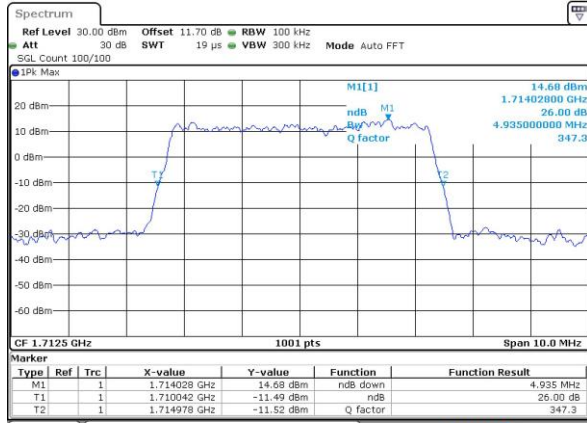


Date: 5 FEB 2019 15:34:33



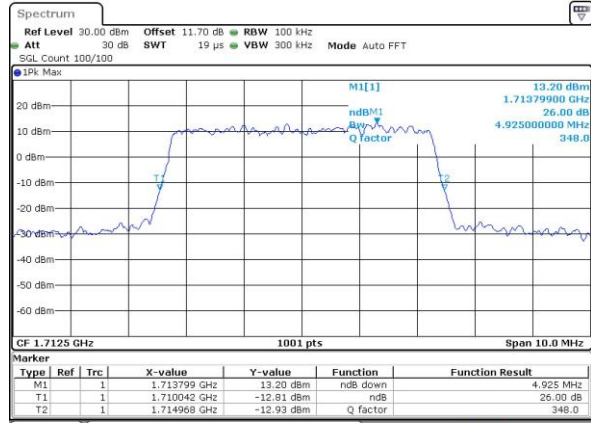
LTE Band 66

Lowest Channel / 5MHz / QPSK



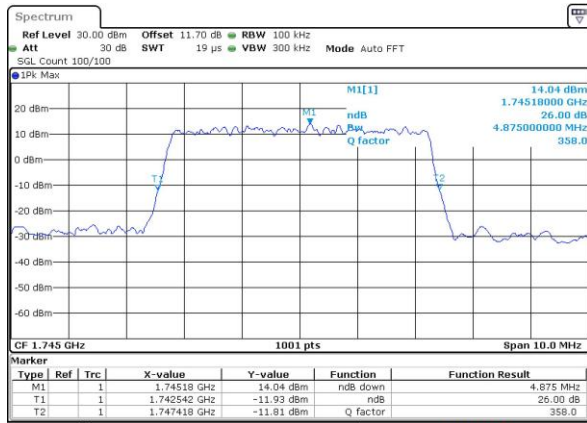
Date: 5 FEB 2019 15:40:30

Lowest Channel / 5MHz / 16QAM



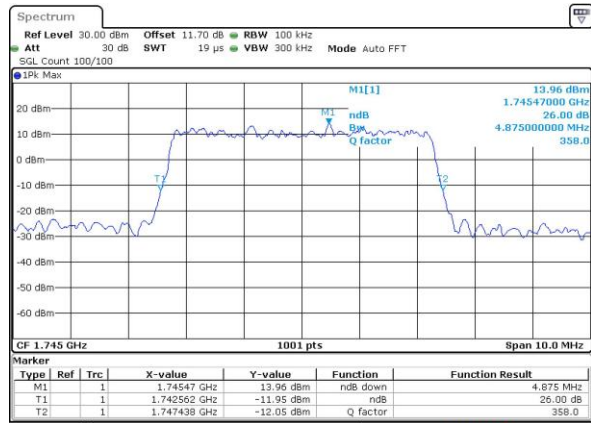
Date: 5 FEB 2019 15:40:41

Middle Channel / 5MHz / QPSK



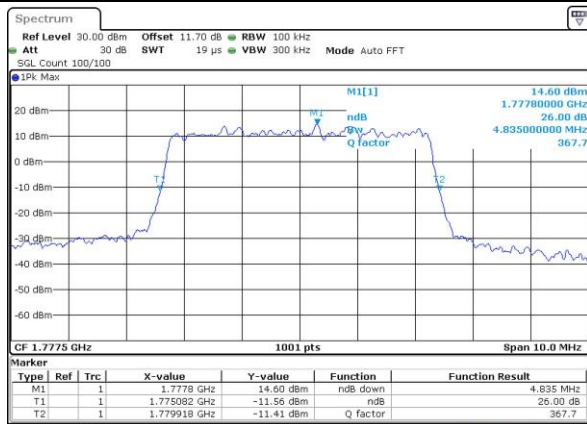
Date: 5 FEB 2019 15:46:38

Middle Channel / 5MHz / 16QAM



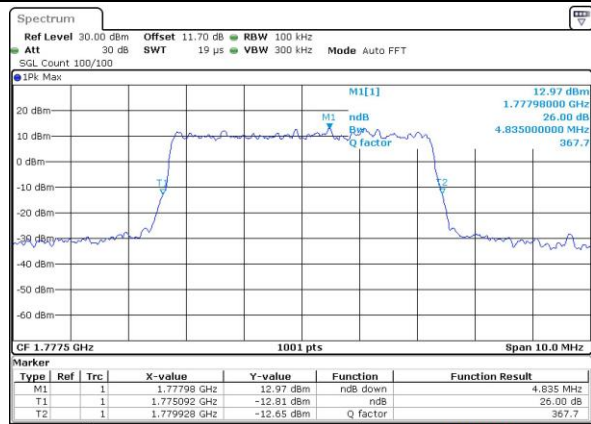
Date: 5 FEB 2019 15:46:49

Highest Channel / 5MHz / QPSK



Date: 5 FEB 2019 15:48:46

Highest Channel / 5MHz / 16QAM

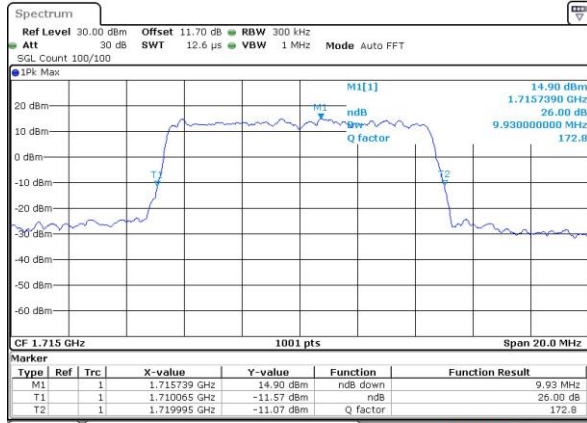


Date: 5 FEB 2019 15:48:57



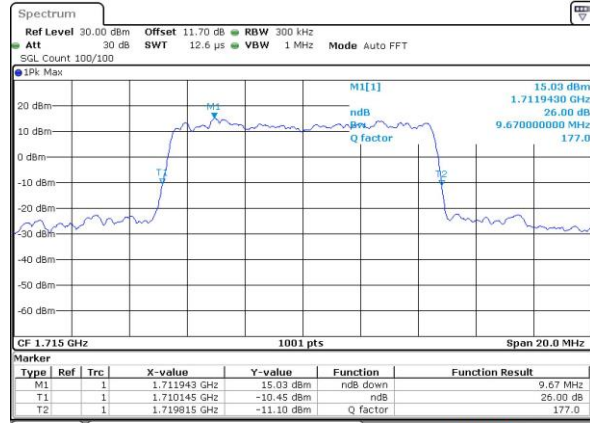
LTE Band 66

Lowest Channel / 10MHz / QPSK



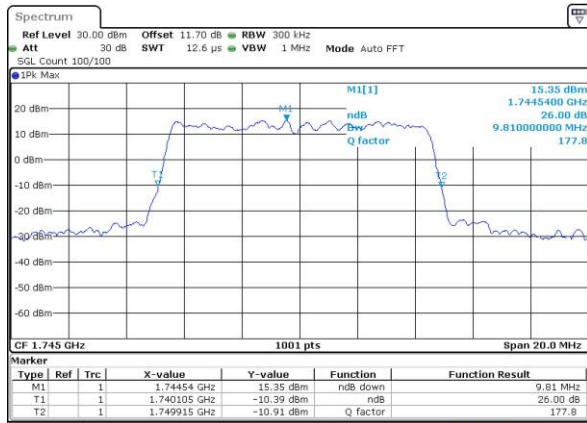
Date: 5 FEB 2019 15:54:55

Lowest Channel / 10MHz / 16QAM



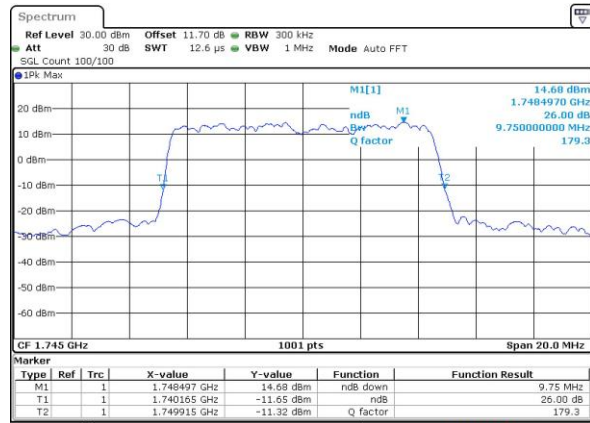
Date: 5 FEB 2019 15:55:06

Middle Channel / 10MHz / QPSK



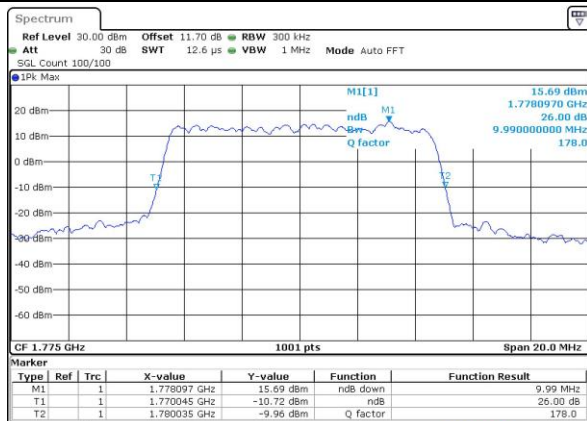
Date: 5 FEB 2019 16:01:03

Middle Channel / 10MHz / 16QAM



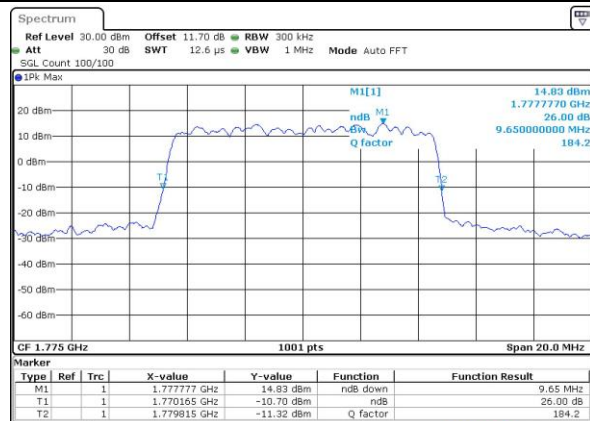
Date: 5 FEB 2019 16:01:15

Highest Channel / 10MHz / QPSK



Date: 5 FEB 2019 16:03:11

Highest Channel / 10MHz / 16QAM

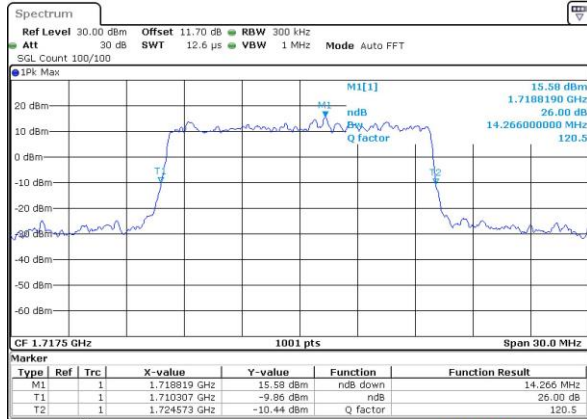


Date: 5 FEB 2019 16:03:22



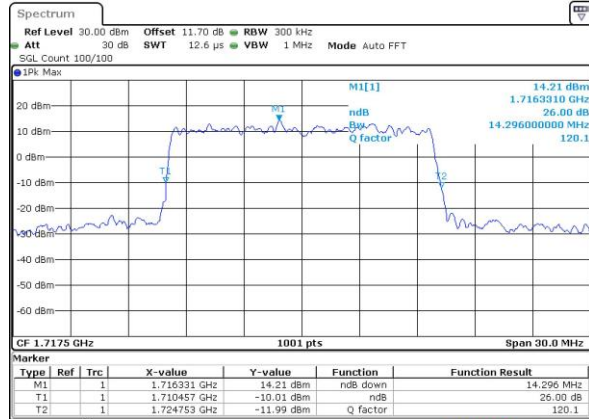
LTE Band 66

Lowest Channel / 15MHz / QPSK



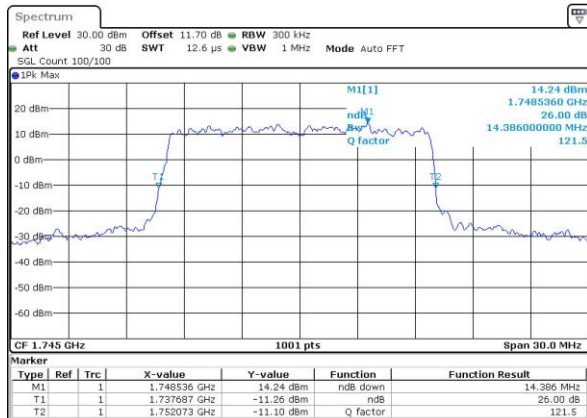
Date: 5 FEB 2019 16:09:20

Lowest Channel / 15MHz / 16QAM



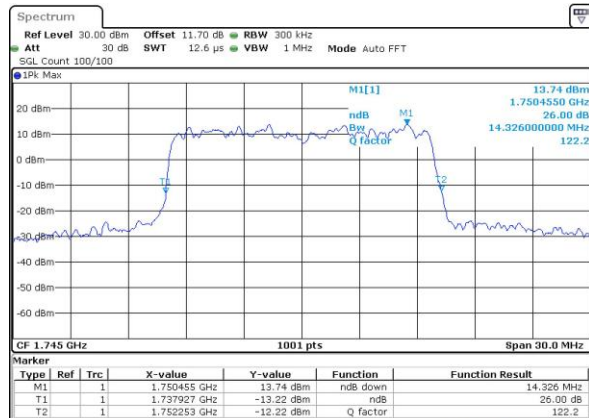
Date: 5 FEB 2019 16:09:31

Middle Channel / 15MHz / QPSK



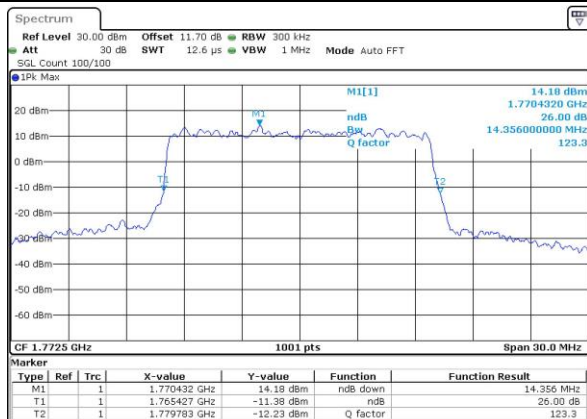
Date: 5 FEB 2019 16:15:28

Middle Channel / 15MHz / 16QAM



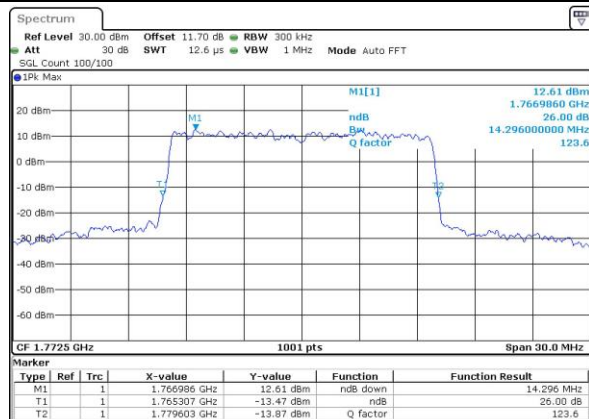
Date: 5 FEB 2019 16:15:40

Highest Channel / 15MHz / QPSK



Date: 5 FEB 2019 16:17:36

Highest Channel / 15MHz / 16QAM

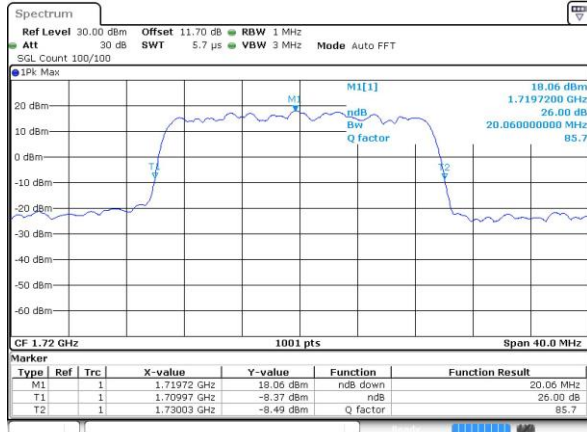


Date: 5 FEB 2019 16:17:48



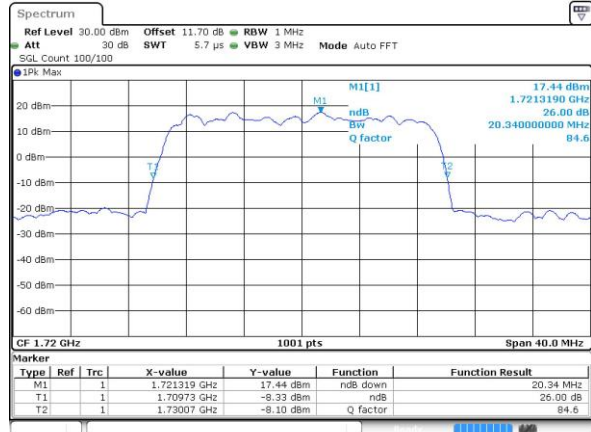
LTE Band 66

Lowest Channel / 20MHz / QPSK



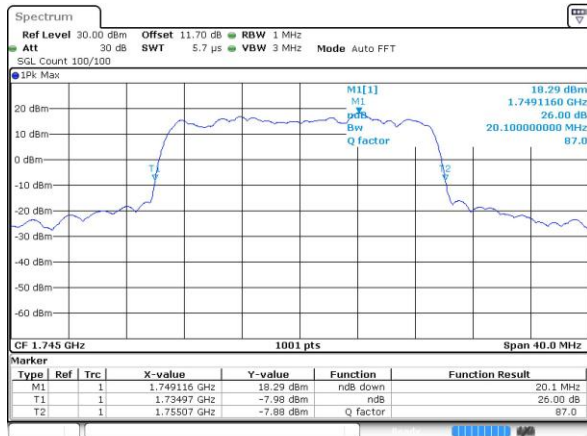
Date: 5 FEB 2019 16:23:45

Lowest Channel / 20MHz / 16QAM



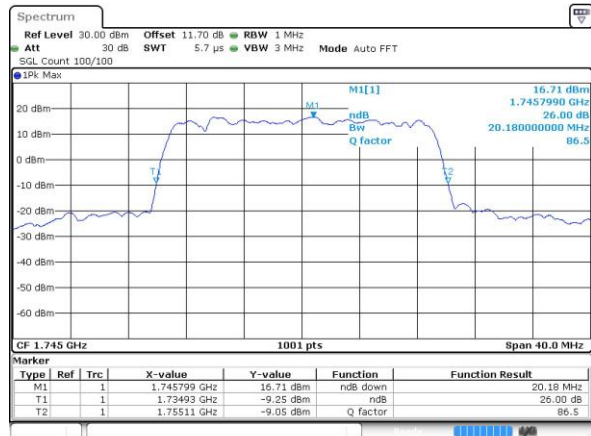
Date: 5 FEB 2019 16:23:56

Middle Channel / 20MHz / QPSK



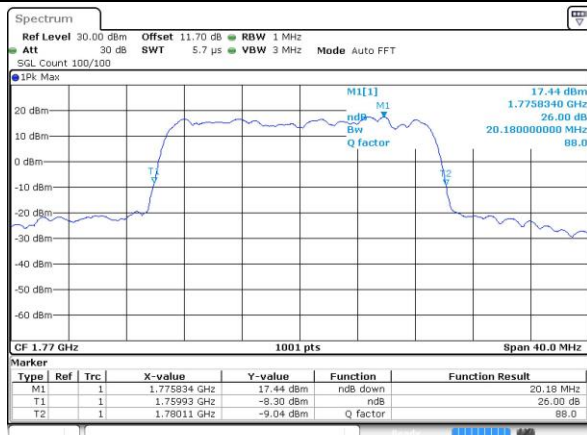
Date: 5 FEB 2019 16:29:53

Middle Channel / 20MHz / 16QAM



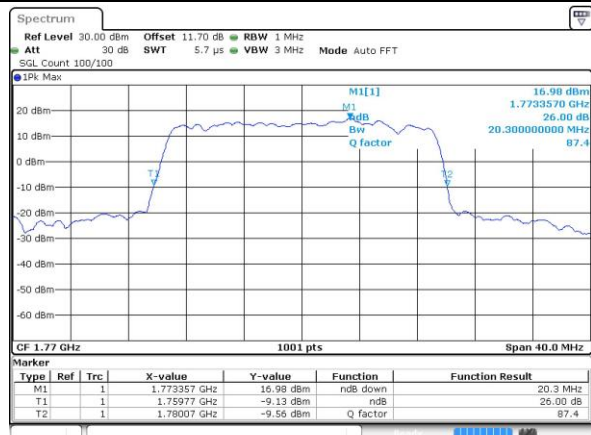
Date: 5 FEB 2019 16:30:05

Highest Channel / 20MHz / QPSK



Date: 5 FEB 2019 16:32:02

Highest Channel / 20MHz / 16QAM

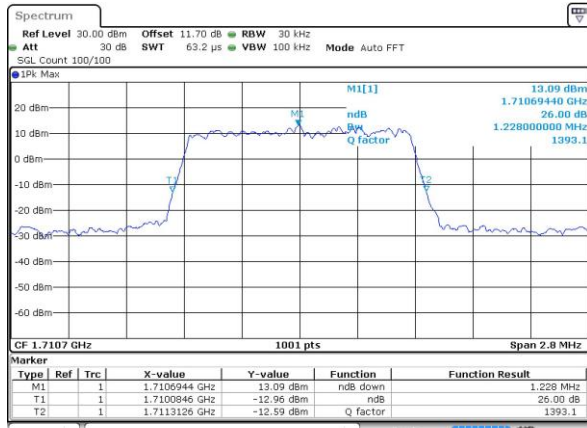


Date: 5 FEB 2019 16:32:13



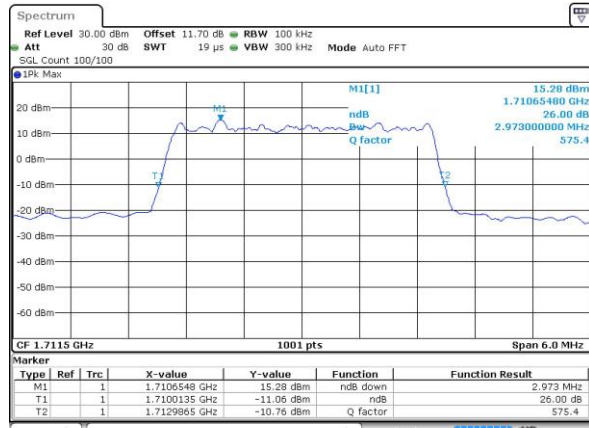
LTE Band 66

Lowest Channel / 1.4MHz / 64QAM



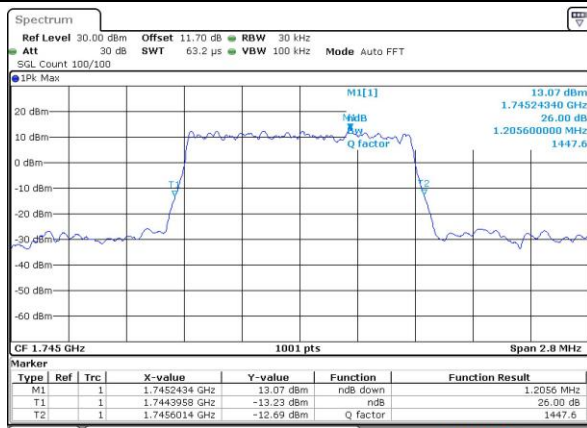
Date: 5 FEB 2019 15:18:28

Lowest Channel / 3MHz / 64QAM



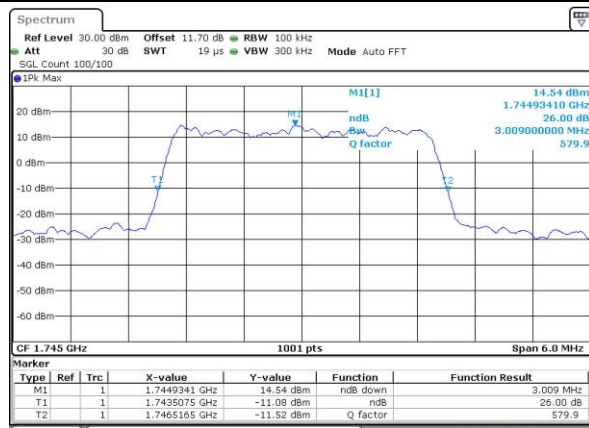
Date: 5 FEB 2019 16:37:58

Middle Channel / 20MHz / 64QAM



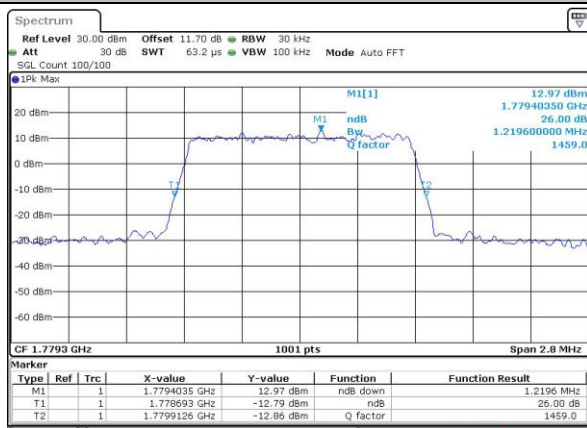
Date: 5 FEB 2019 15:21:39

Middle Channel / 3MHz / 64QAM



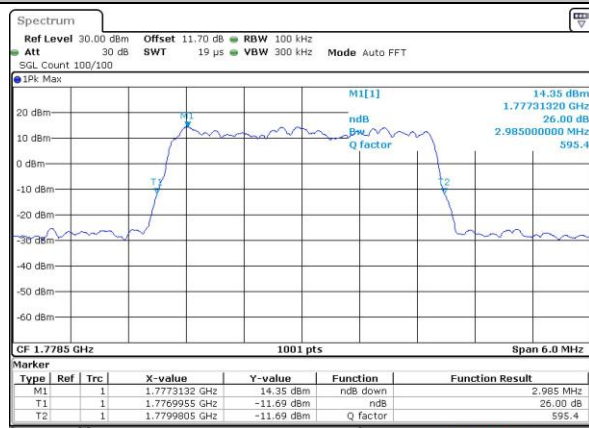
Date: 5 FEB 2019 16:41:03

Highest Channel / 20MHz / 64QAM



Date: 5 FEB 2019 15:22:43

Highest Channel / 3MHz / 64QAM

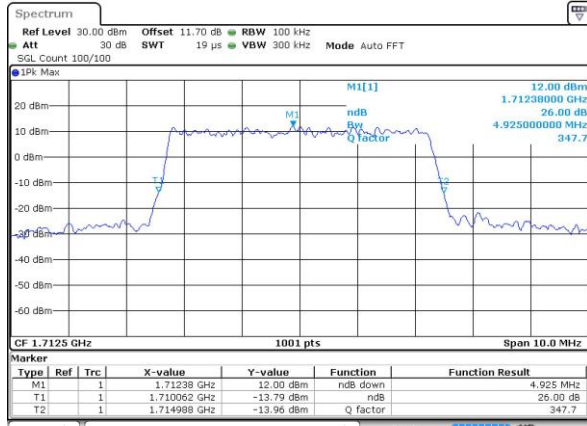


Date: 5 FEB 2019 16:42:07

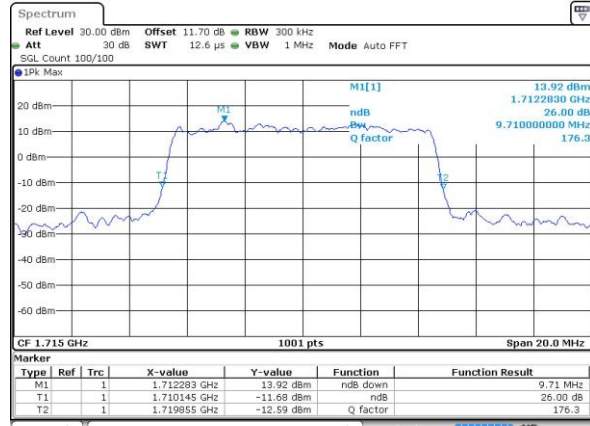


LTE Band 66

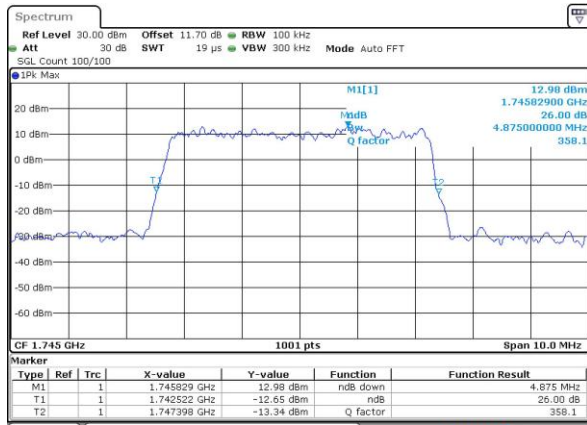
Lowest Channel / 5MHz / 64QAM



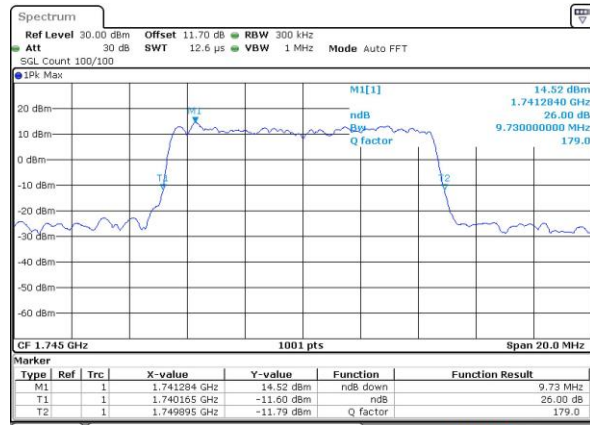
Lowest Channel / 10MHz / 64QAM



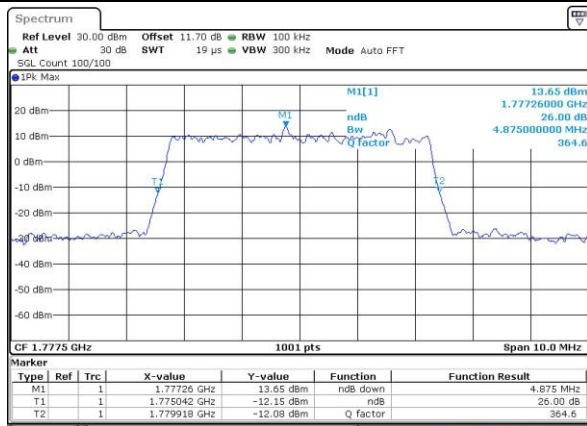
Middle Channel / 5MHz / 64QAM



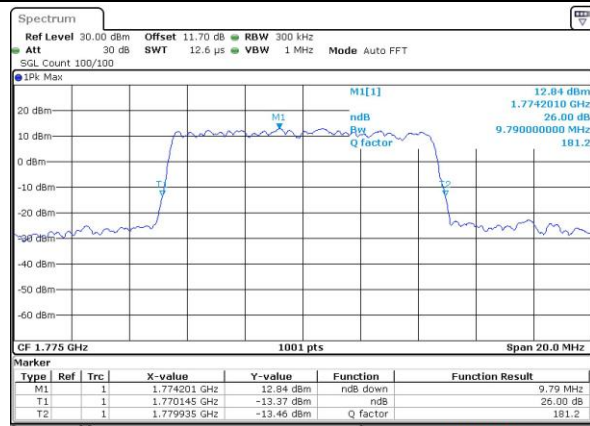
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



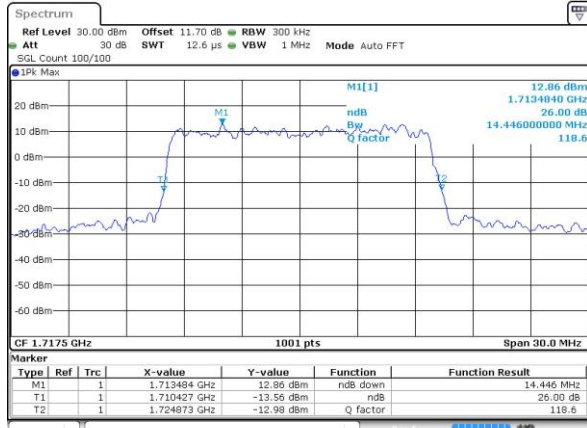
Highest Channel / 10MHz / 64QAM





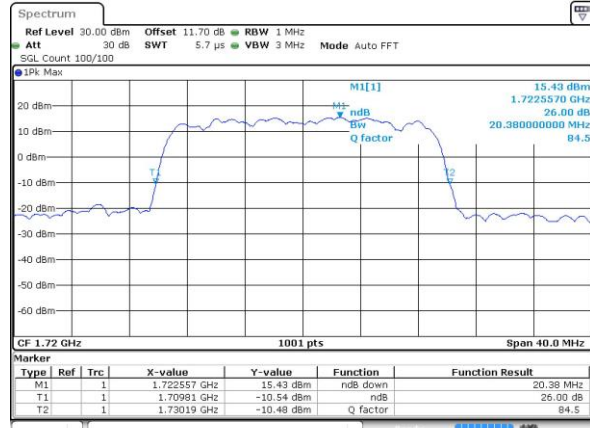
LTE Band 66

Lowest Channel / 15MHz / 64QAM



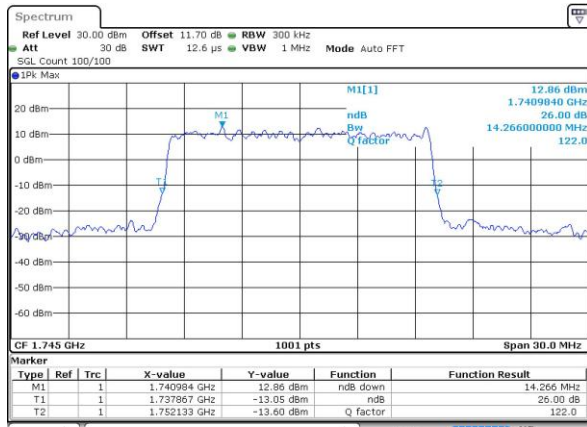
Date: 5 FEB 2019 16:59:36

Lowest Channel / 20MHz / 64QAM



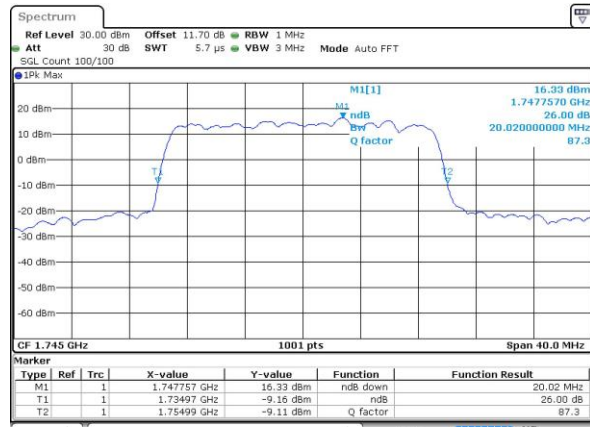
Date: 5 FEB 2019 17:06:48

Middle Channel / 15MHz / 64QAM



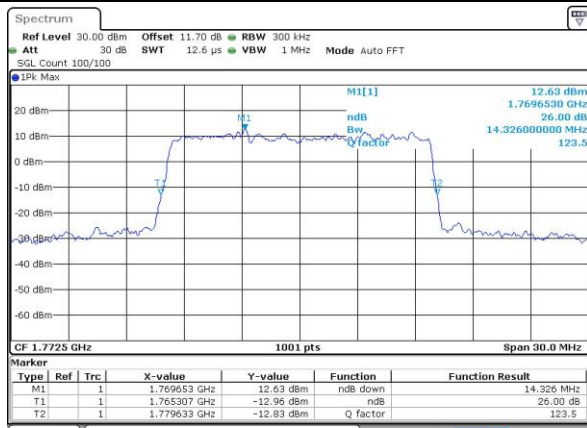
Date: 5 FEB 2019 17:02:40

Middle Channel / 20MHz / 64QAM



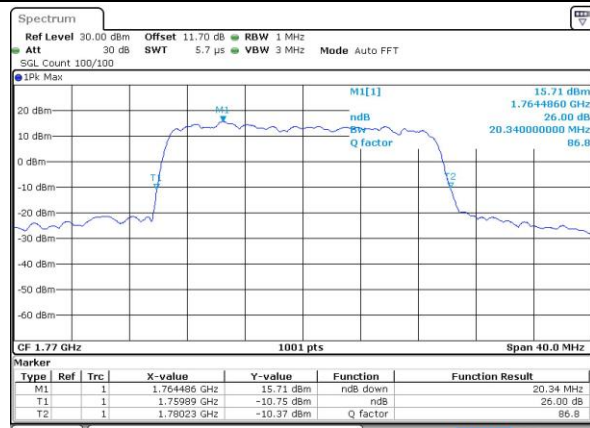
Date: 5 FEB 2019 17:09:53

Highest Channel / 15MHz / 64QAM



Date: 5 FEB 2019 17:03:44

Highest Channel / 20MHz / 64QAM



Date: 5 FEB 2019 17:10:57

**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	1.08	2.7	2.71	4.51	4.51	8.99	8.95	13.4	13.46	18.34	18.38
Middle CH	1.09	1.09	2.7	2.73	4.49	4.51	9.05	9.01	13.4	13.46	18.34	18.38
Highest CH	1.09	1.08	2.73	2.72	4.51	4.5	9.03	9.05	13.46	13.4	18.38	18.14
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	-	2.72	-	4.48	-	9.01	-	13.40	-	18.38	-
Middle CH	1.09	-	2.73	-	4.47	-	9.11	-	13.40	-	18.30	-
Highest CH	1.09	-	2.71	-	4.49	-	9.01	-	13.43	-	18.18	-