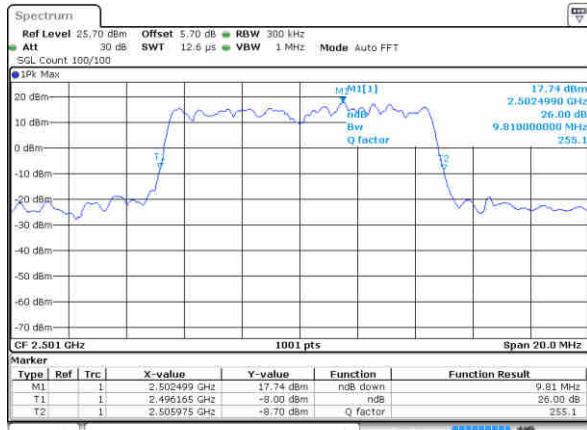


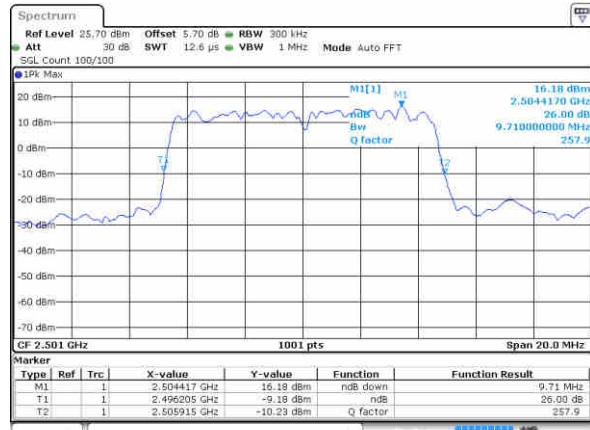


LTE Band 41

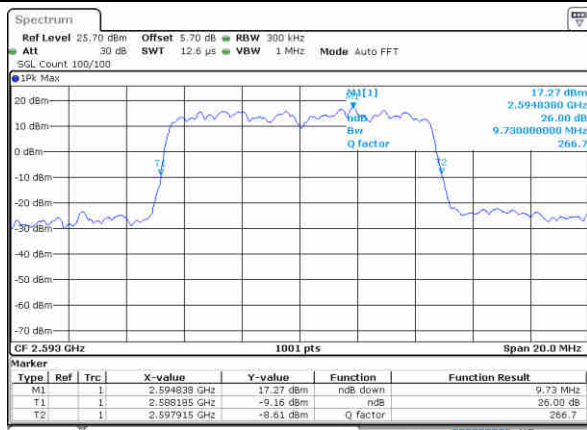
Lowest Channel / 10MHz / QPSK



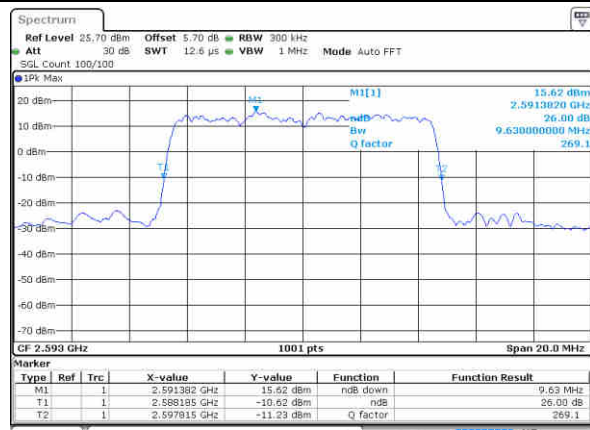
Lowest Channel / 10MHz / 16QAM



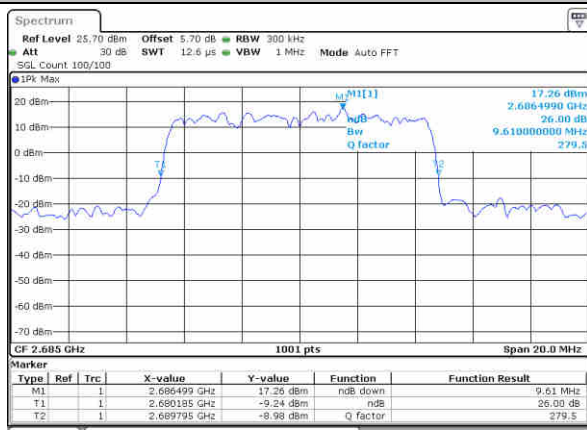
Middle Channel / 10MHz / QPSK



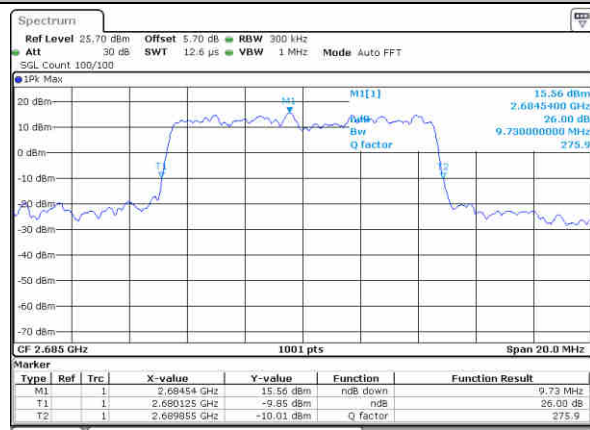
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



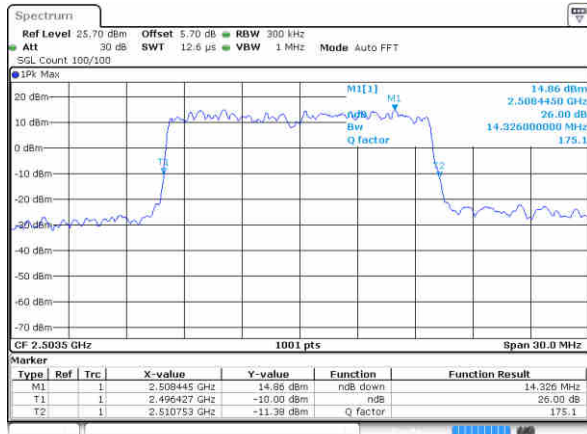
Highest Channel / 10MHz / 16QAM





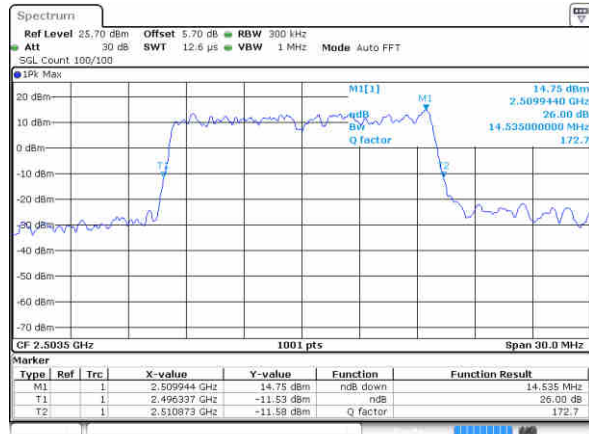
LTE Band 41

Lowest Channel / 15MHz / QPSK



Date: 6 FEB 2019 19:26:50

Lowest Channel / 15MHz / 16QAM



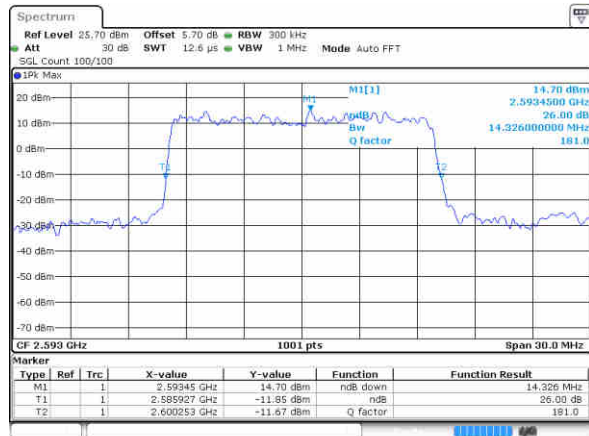
Date: 6 FEB 2019 19:27:01

Middle Channel / 15MHz / QPSK



Date: 6 FEB 2019 19:27:33

Middle Channel / 15MHz / 16QAM



Date: 6 FEB 2019 19:27:44

Highest Channel / 15MHz / QPSK



Date: 6 FEB 2019 19:28:16

Highest Channel / 15MHz / 16QAM

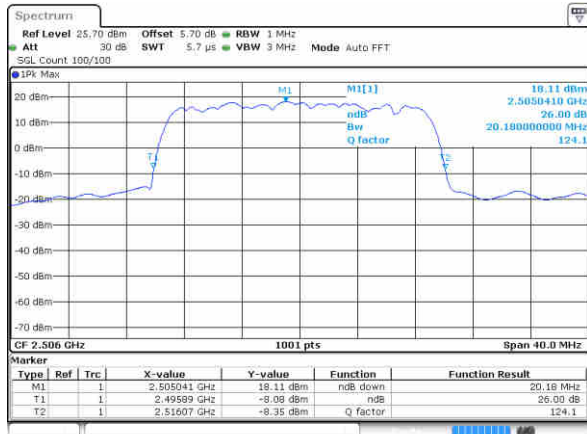


Date: 6 FEB 2019 19:28:27

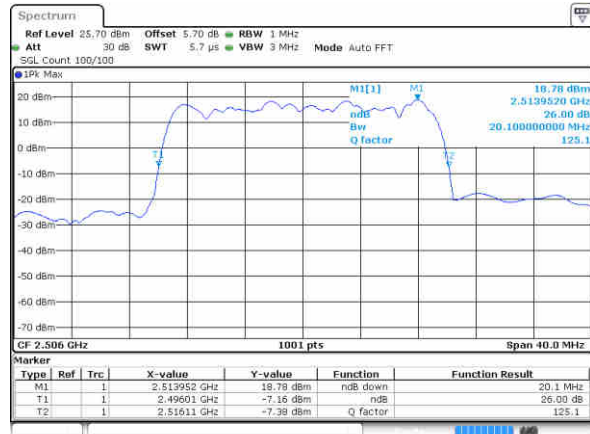


LTE Band 41

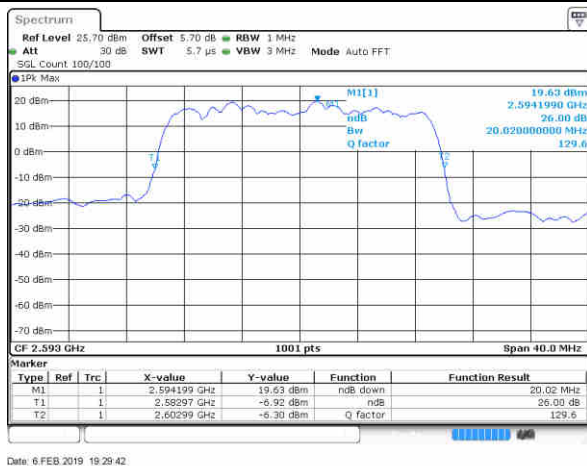
Lowest Channel / 20MHz / QPSK



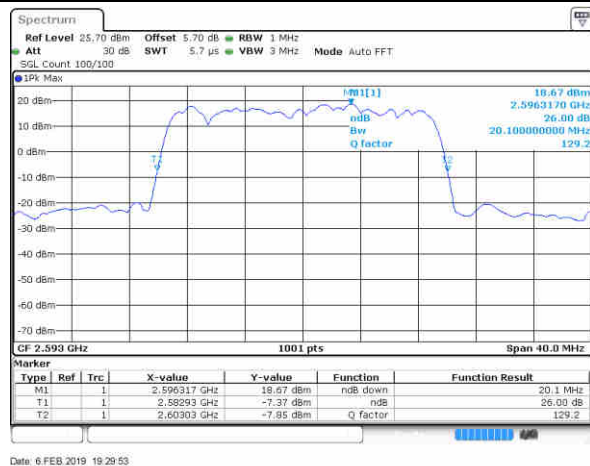
Lowest Channel / 20MHz / 16QAM



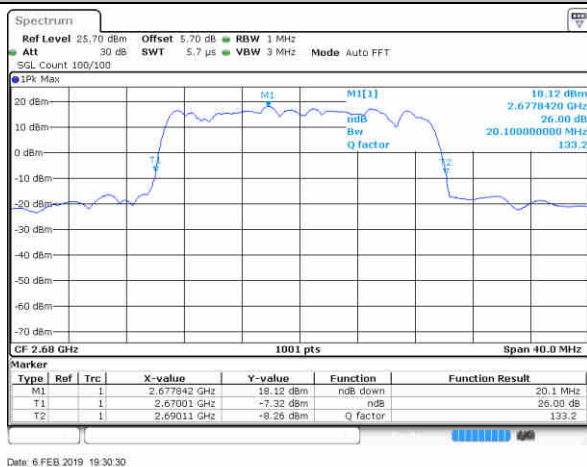
Middle Channel / 20MHz / QPSK



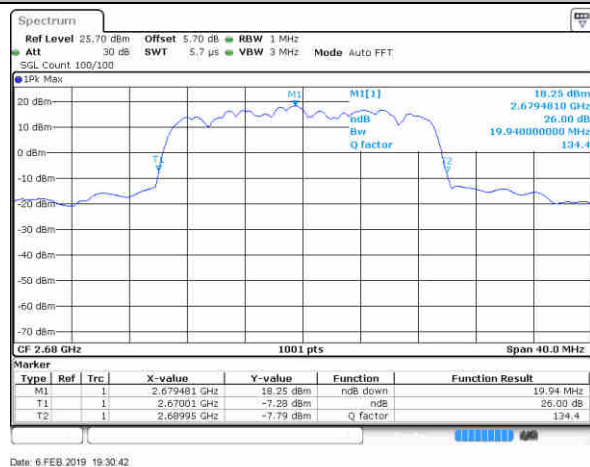
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



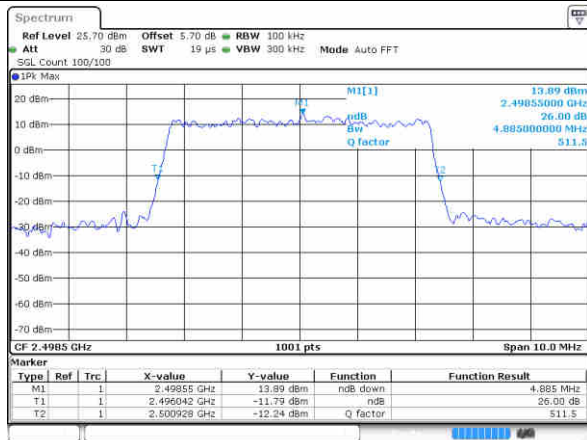
Highest Channel / 20MHz / 16QAM



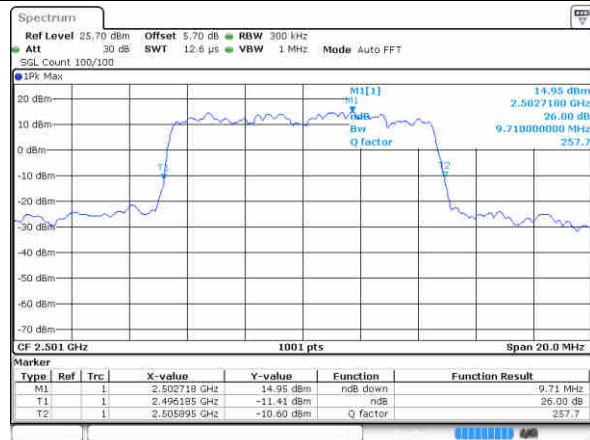


LTE Band 41

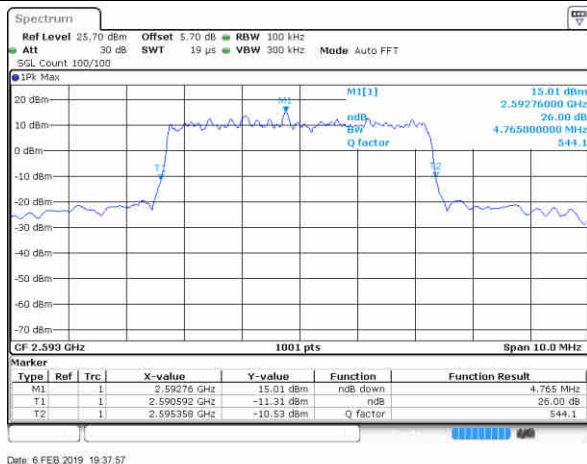
Lowest Channel / 5MHz / 64QAM



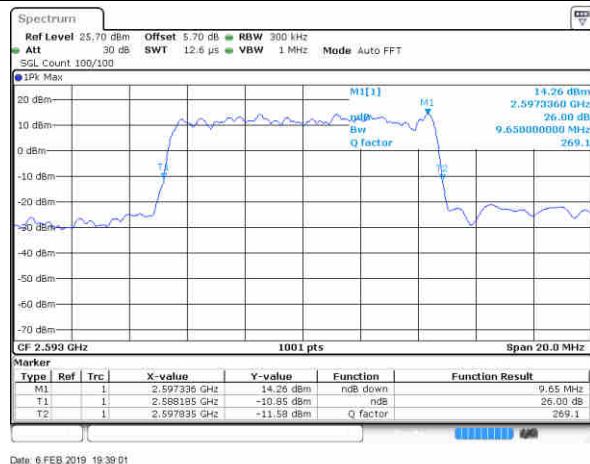
Lowest Channel / 10MHz / 64QAM



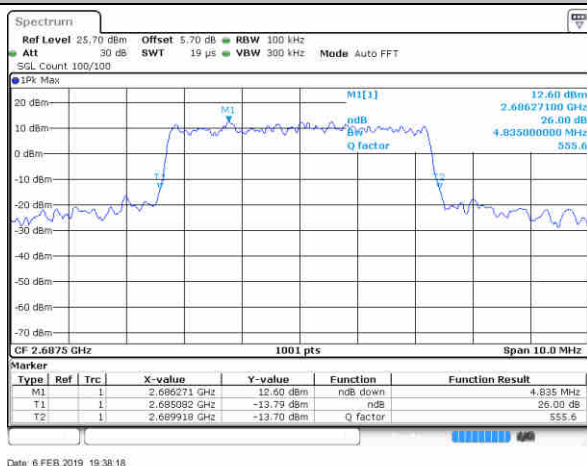
Middle Channel / 5MHz / 64QAM



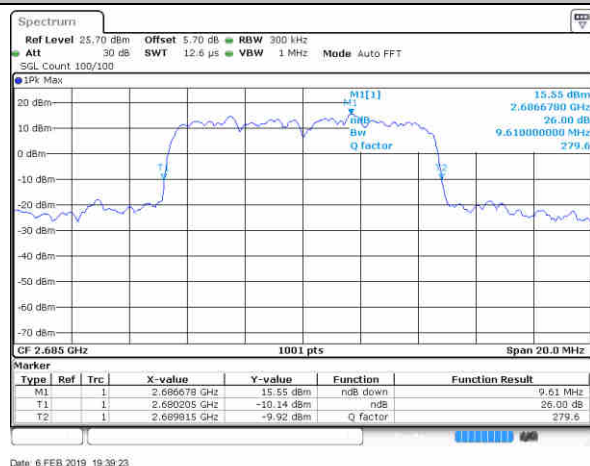
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



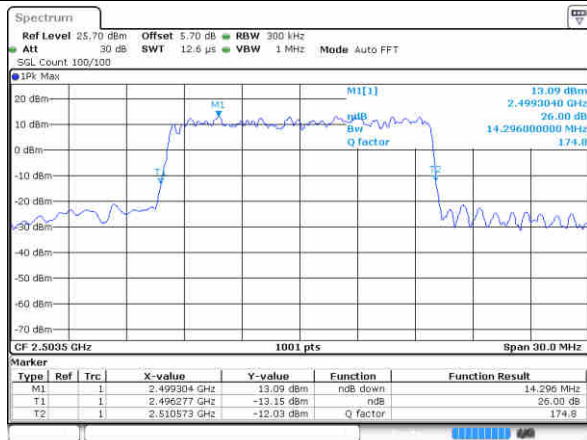
Highest Channel / 10MHz / 64QAM





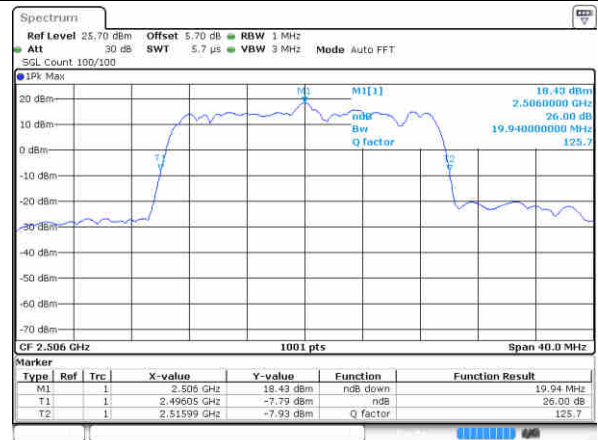
LTE Band 41

Lowest Channel / 15MHz / 64QAM



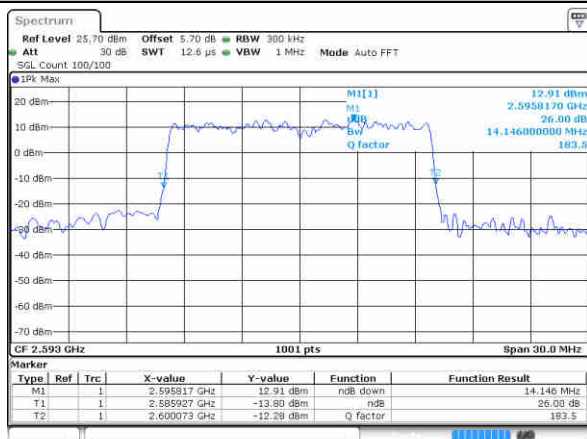
Date: 6 FEB 2019 19:39:44

Lowest Channel / 20MHz / 64QAM



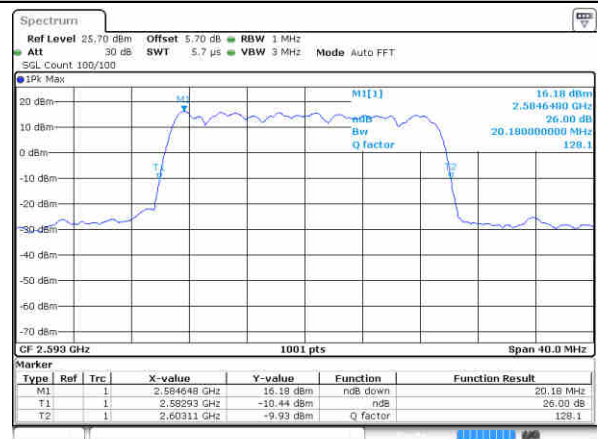
Date: 6 FEB 2019 19:40:52

Middle Channel / 15MHz / 64QAM



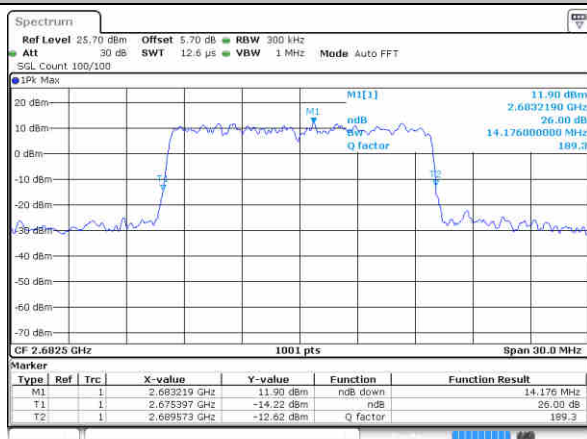
Date: 6 FEB 2019 19:40:05

Middle Channel / 20MHz / 64QAM



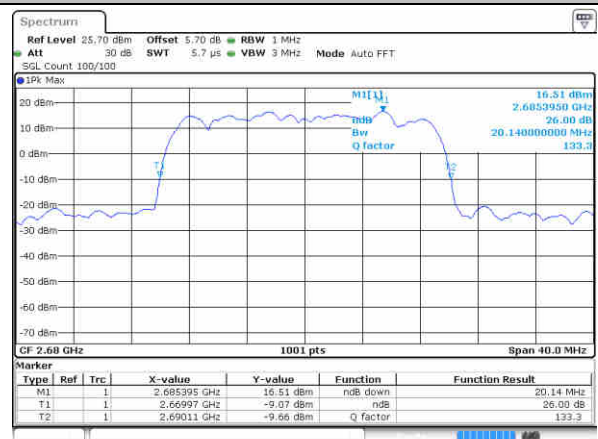
Date: 6 FEB 2019 19:41:16

Highest Channel / 15MHz / 64QAM



Date: 6 FEB 2019 19:40:27

Highest Channel / 20MHz / 64QAM



Date: 6 FEB 2019 19:41:41

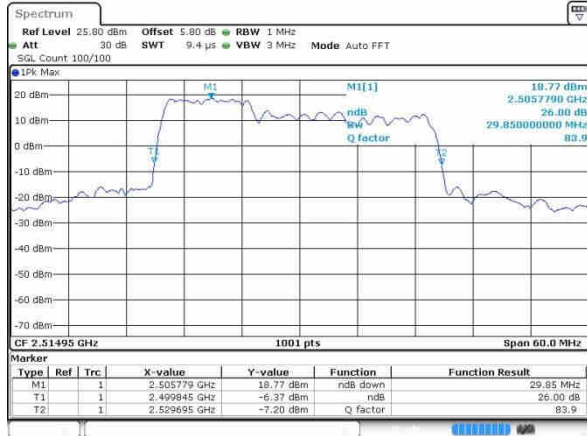


For CA

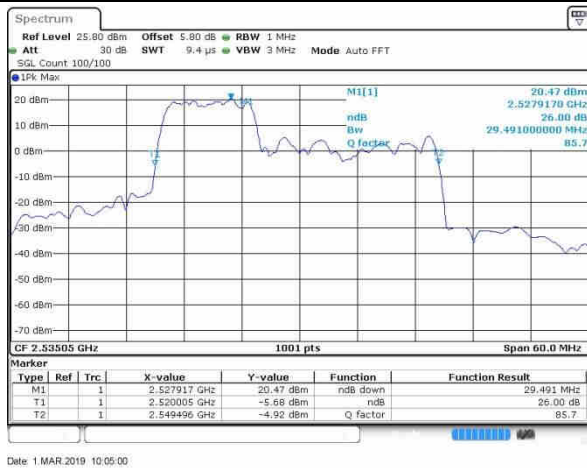
LTE Band 7

QPSK

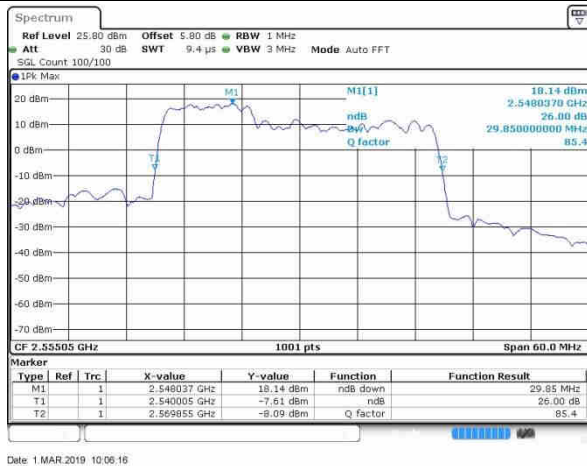
Lowest Channel / 10MHz+20MHz



Middle Channel / 10MHz+20MHz



Highest Channel / 10MHz+20MHz

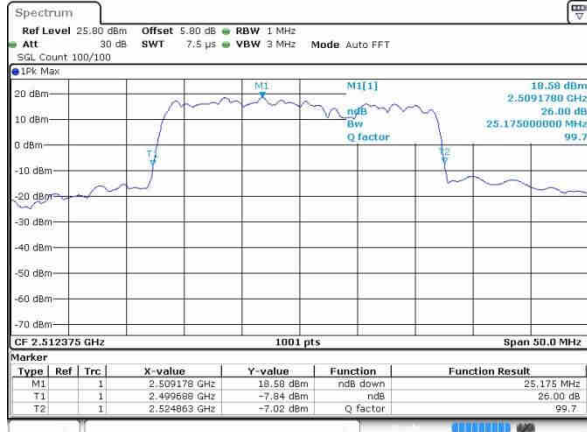




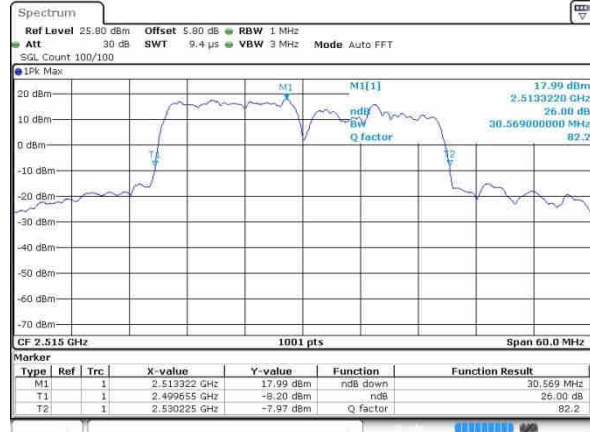
LTE Band 7

QPSK

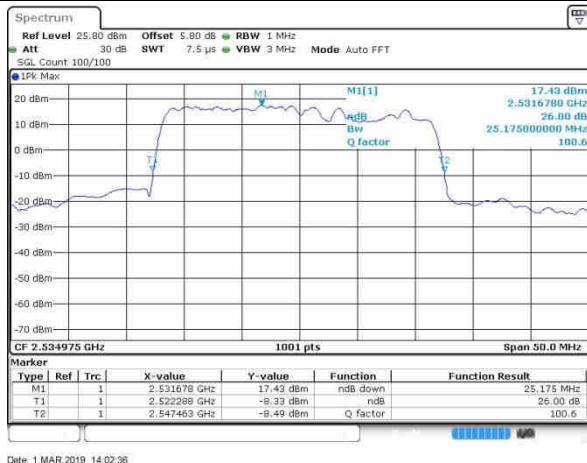
Lowest Channel / 15MHz+10MHz



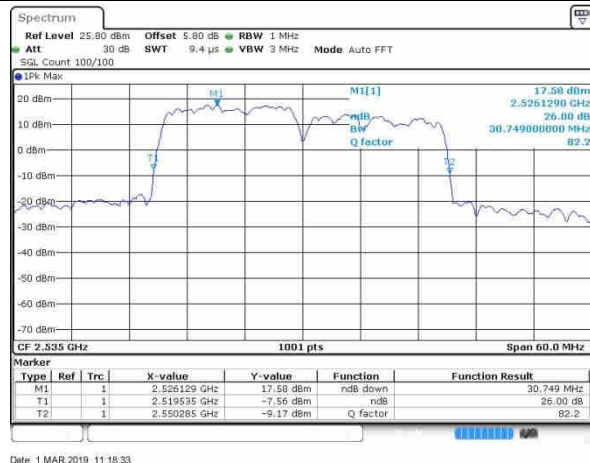
Lowest Channel / 15MHz+15MHz



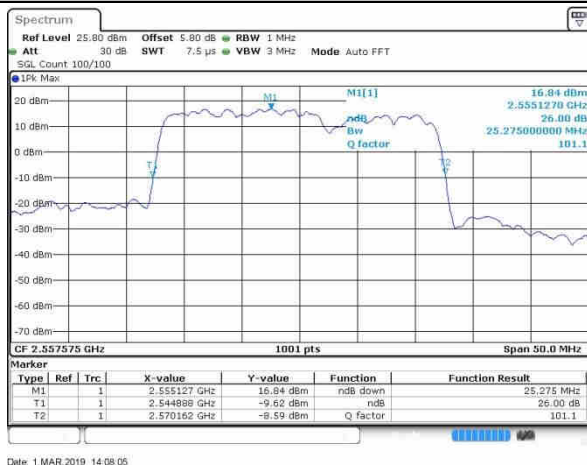
Middle Channel / 15MHz+10MHz



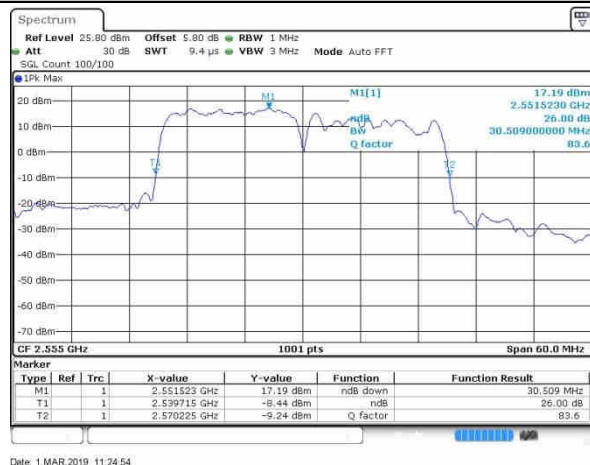
Middle Channel / 15MHz+15MHz



Highest Channel / 15MHz+10MHz



Highest Channel / 15MHz+15MHz

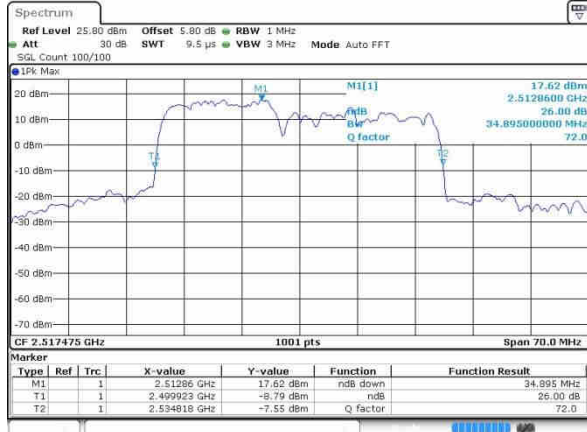




LTE Band 7

QPSK

Lowest Channel / 15MHz+20MHz



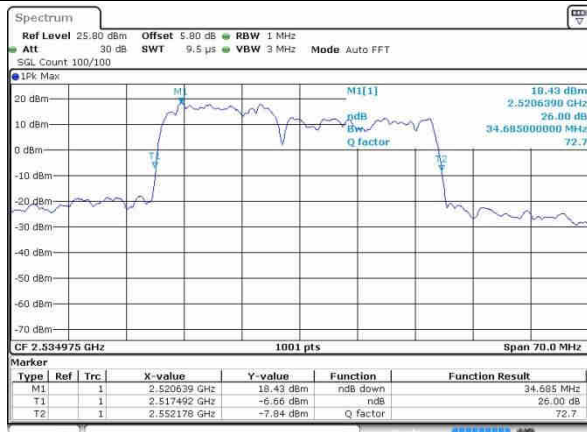
Date 1 MAR 2019 11:34:56

Lowest Channel / 20MHz+10MHz



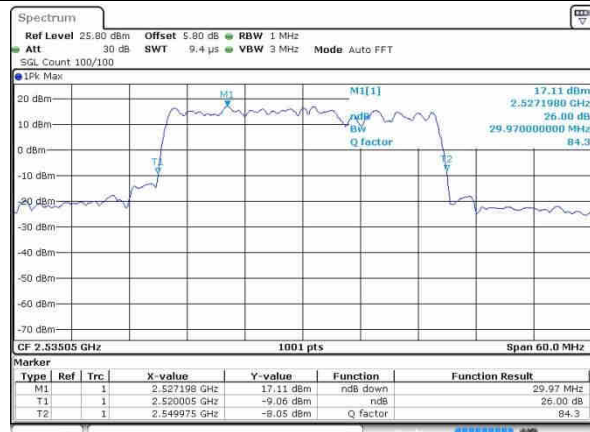
Date 1 MAR 2019 10:23:17

Middle Channel / 15MHz+20MHz



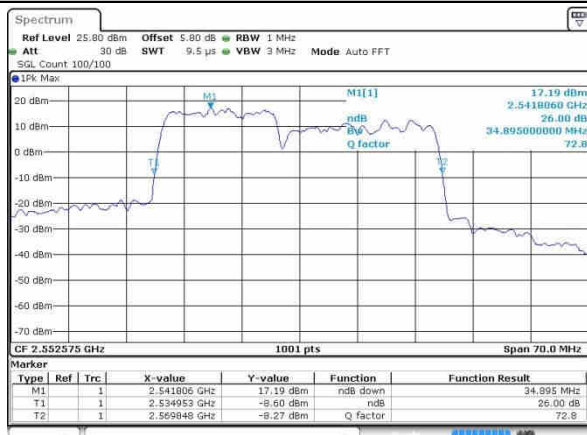
Date 1 MAR 2019 11:43:52

Middle Channel / 20MHz+10MHz



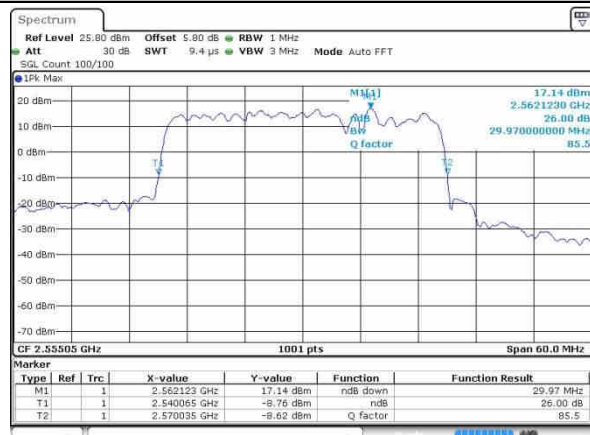
Date 1 MAR 2019 10:41:47

Highest Channel / 15MHz+20MHz



Date 1 MAR 2019 11:48:17

Highest Channel / 20MHz+10MHz



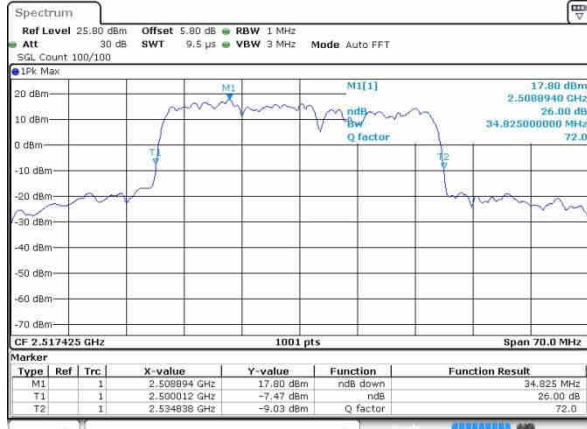
Date 1 MAR 2019 10:45:10



LTE Band 7

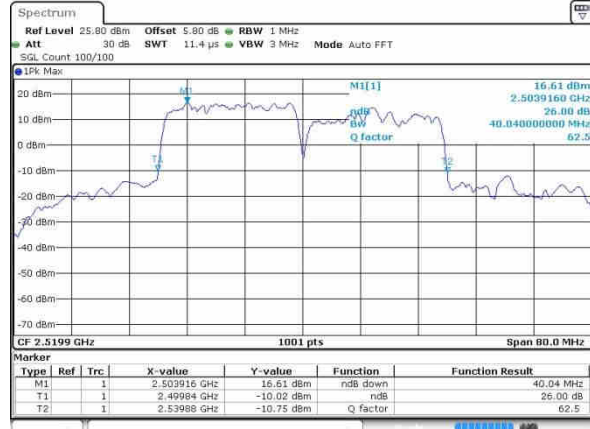
QPSK

Lowest Channel / 20MHz+15MHz



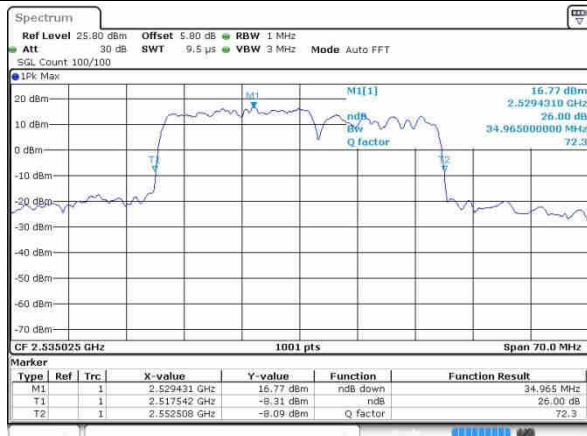
Date 1 MAR 2019 14:17:45

Lowest Channel / 20MHz+20MHz



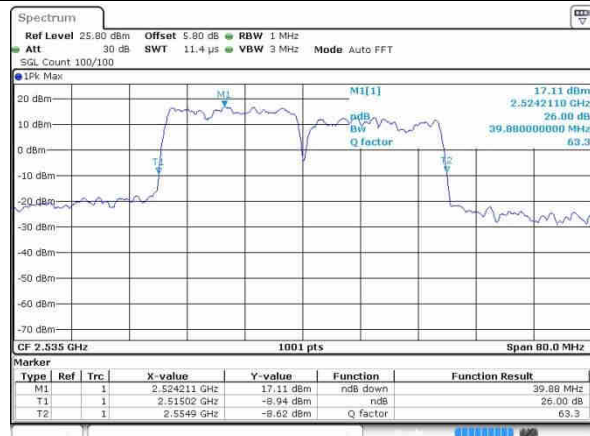
Date 1 MAR 2019 14:46:10

Middle Channel / 20MHz+15MHz



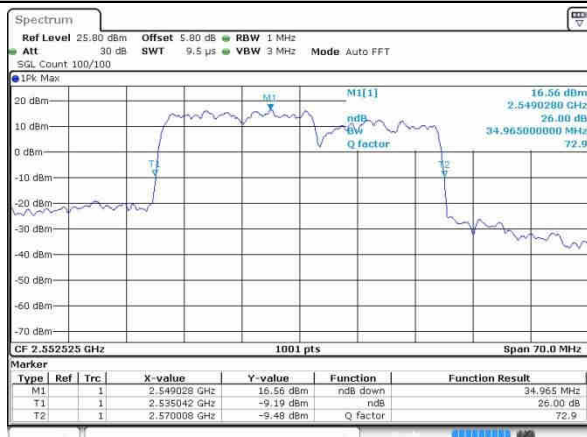
Date 1 MAR 2019 14:27:38

Middle Channel / 20MHz+20MHz



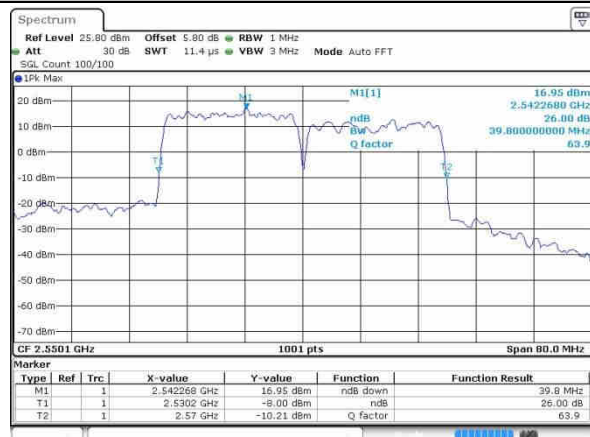
Date 1 MAR 2019 15:05:46

Highest Channel / 20MHz+15MHz



Date 1 MAR 2019 14:36:21

Highest Channel / 20MHz+20MHz



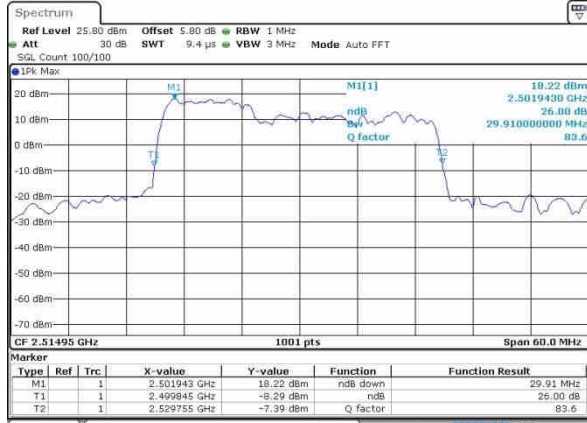
Date 1 MAR 2019 15:13:24



LTE Band 7

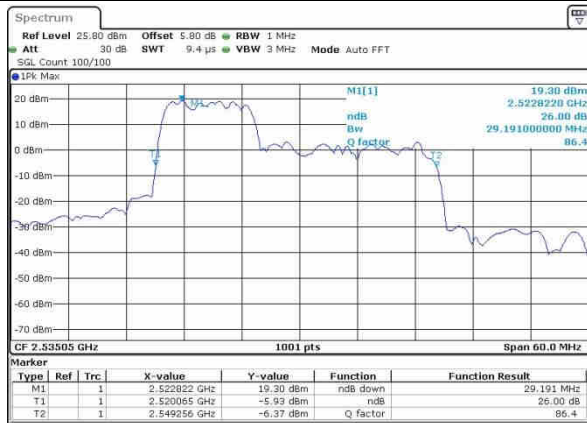
16QAM

Lowest Channel / 10MHz+20MHz



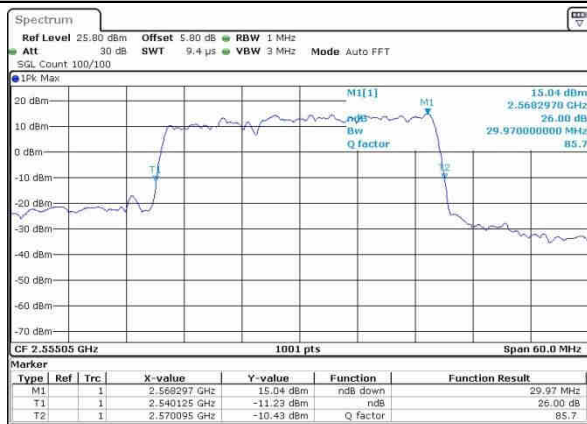
Date 1.MAR.2019 09:51:46

Middle Channel / 10MHz+20MHz



Date 1.MAR.2019 10:04:23

Highest Channel / 10MHz+20MHz



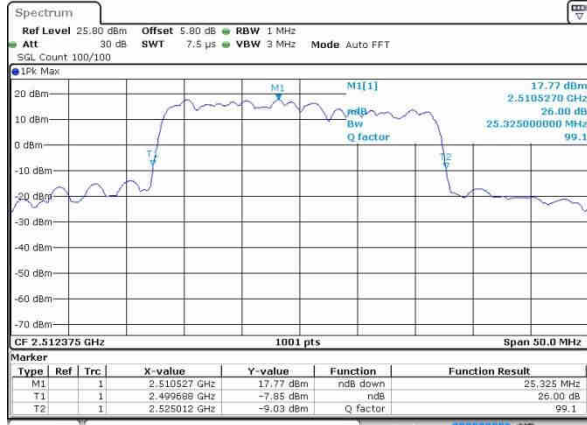
Date 1.MAR.2019 10:06:48



LTE Band 7

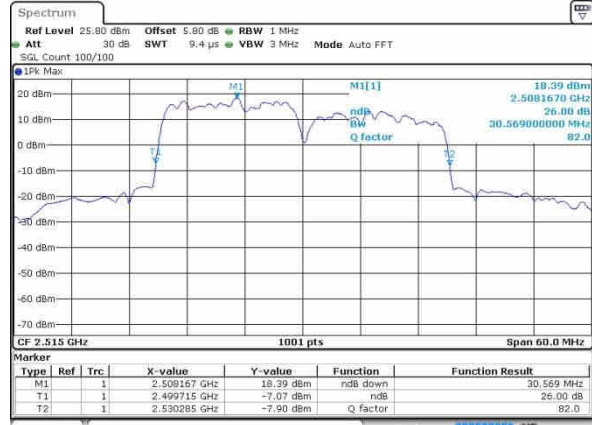
16QAM

Lowest Channel / 15MHz+10MHz



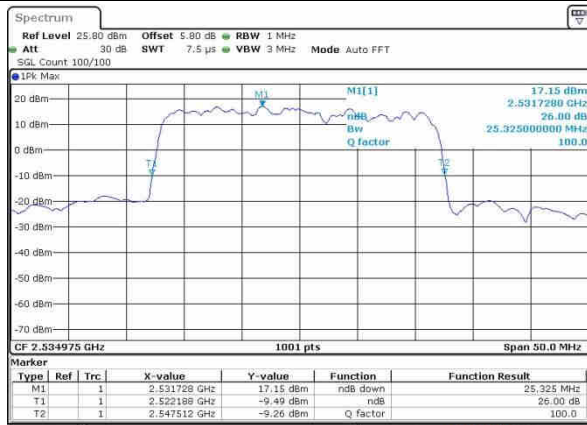
Date 1 MAR 2019 13:54:04

Lowest Channel / 15MHz+15MHz



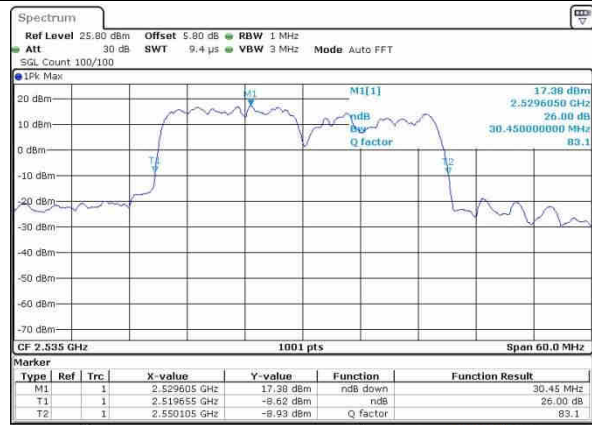
Date 1 MAR 2019 11:05:29

Middle Channel / 15MHz+10MHz



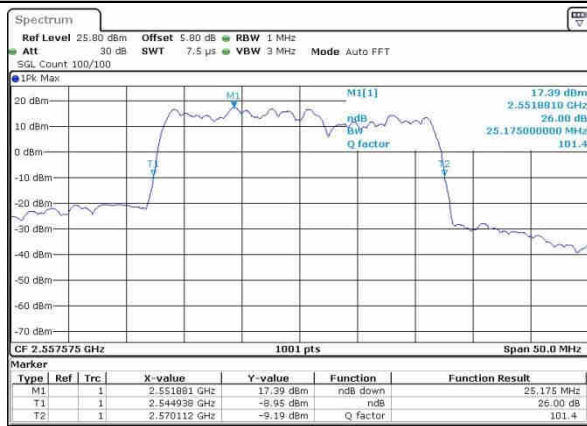
Date 1 MAR 2019 14:03:06

Middle Channel / 15MHz+15MHz



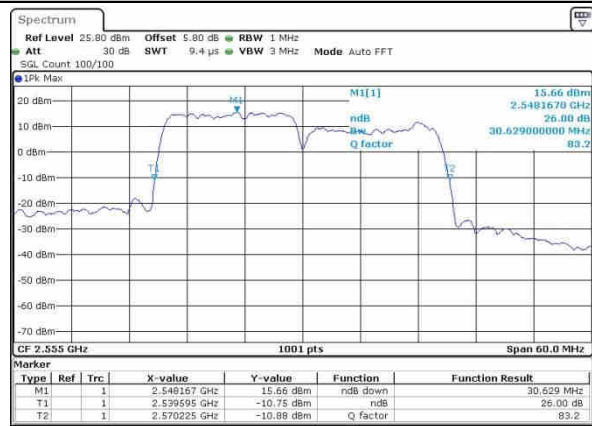
Date 1 MAR 2019 11:17:45

Highest Channel / 15MHz+10MHz



Date 1 MAR 2019 14:08:35

Highest Channel / 15MHz+15MHz



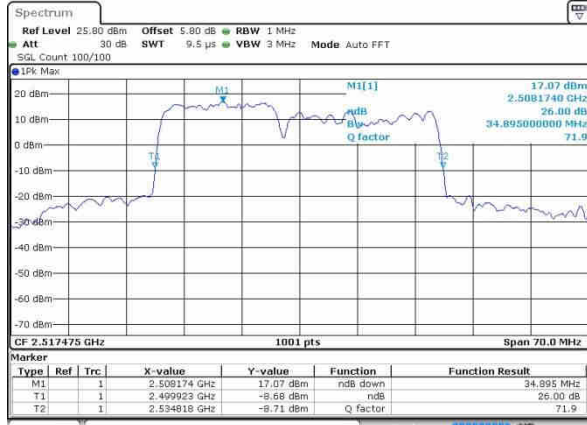
Date 1 MAR 2019 11:24:13



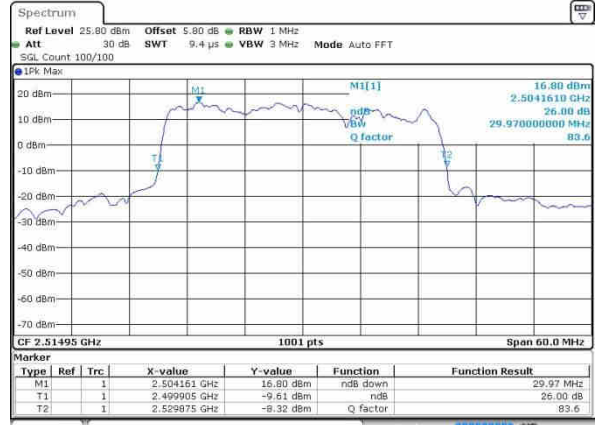
LTE Band 7

16QAM

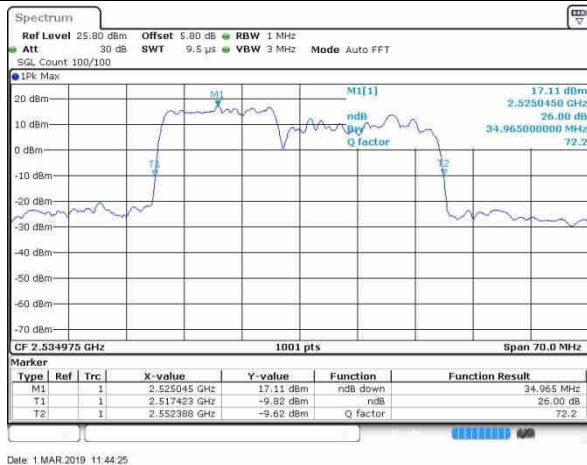
Lowest Channel / 15MHz+20MHz



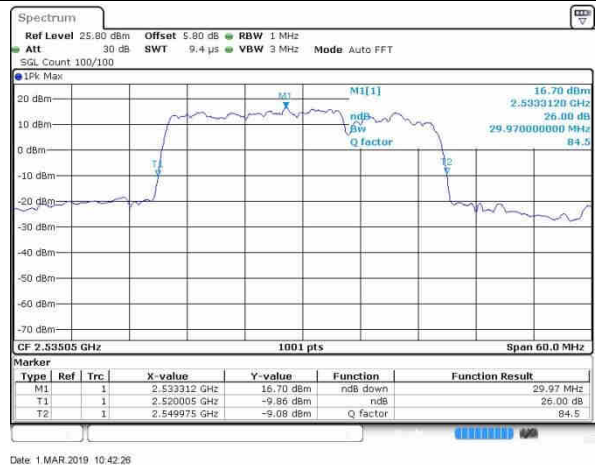
Lowest Channel / 20MHz+10MHz



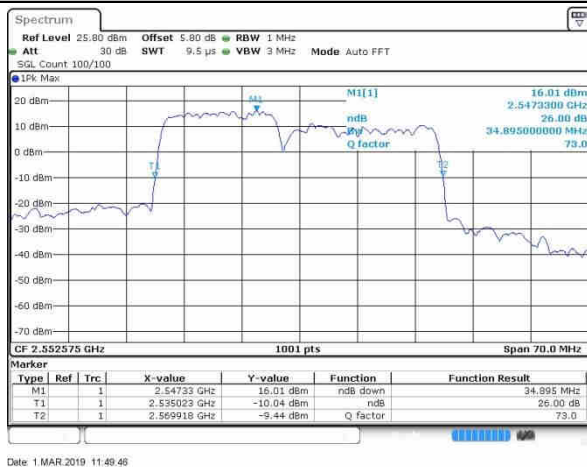
Middle Channel / 15MHz+20MHz



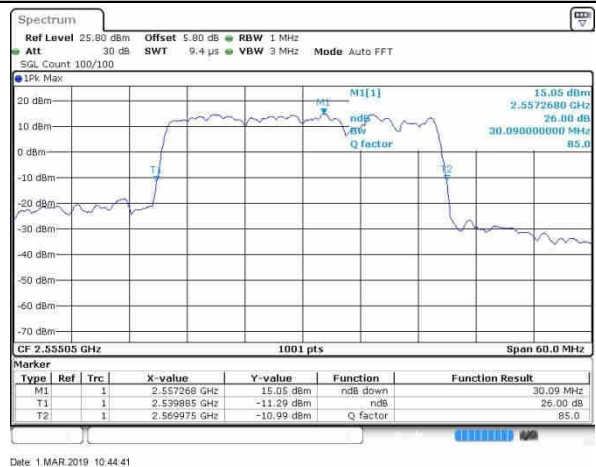
Middle Channel / 20MHz+10MHz



Highest Channel / 15MHz+20MHz



Highest Channel / 20MHz+10MHz

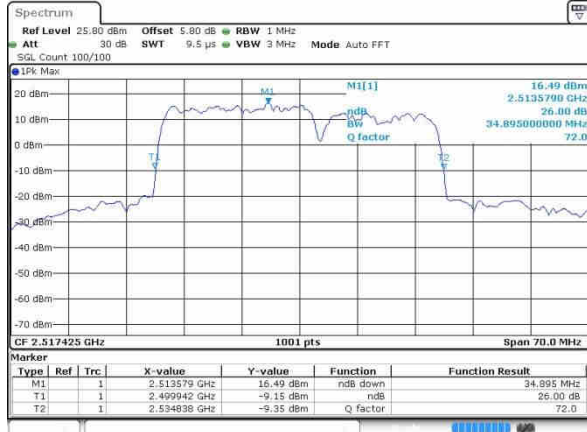




LTE Band 7

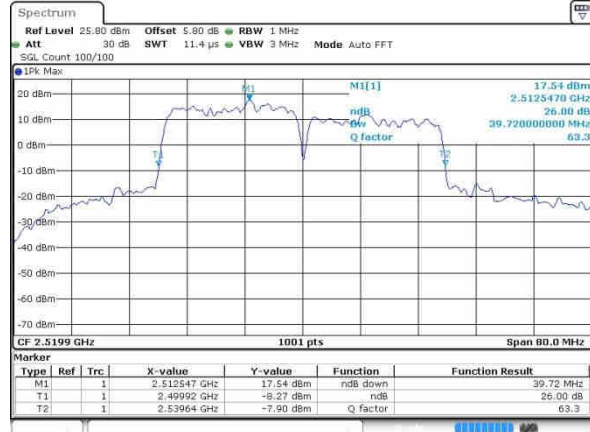
16QAM

Lowest Channel / 20MHz+15MHz



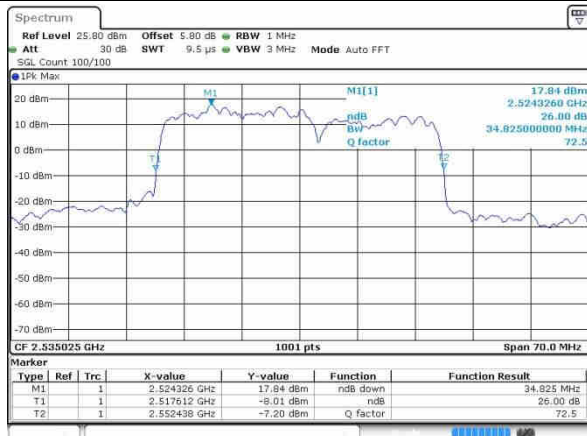
Date 1 MAR 2019 14:18:17

Lowest Channel / 20MHz+20MHz



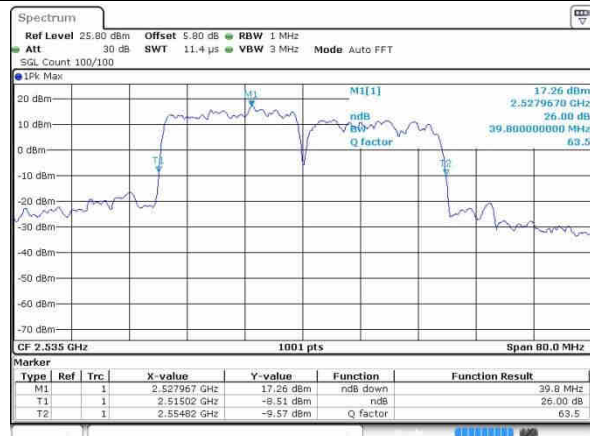
Date 1 MAR 2019 14:40:45

Middle Channel / 20MHz+15MHz



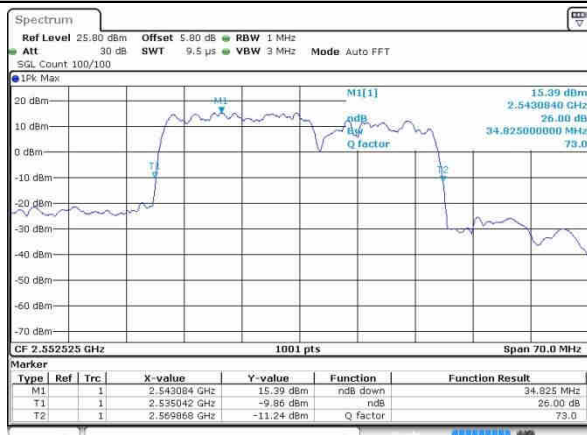
Date 1 MAR 2019 14:28:13

Middle Channel / 20MHz+20MHz



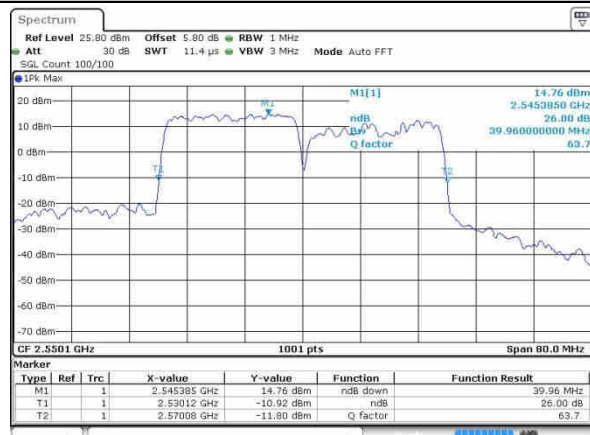
Date 1 MAR 2019 15:06:27

Highest Channel / 20MHz+15MHz



Date 1 MAR 2019 14:35:57

Highest Channel / 20MHz+20MHz



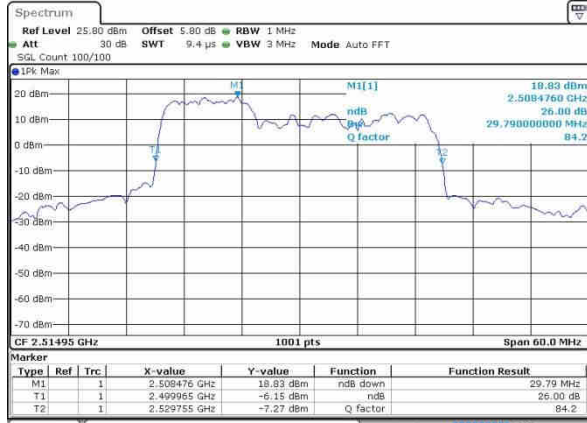
Date 1 MAR 2019 15:13:55



LTE Band 7

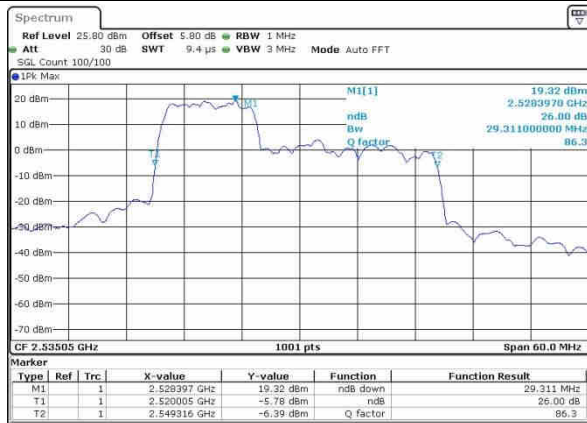
64QAM

Lowest Channel / 10MHz+20MHz



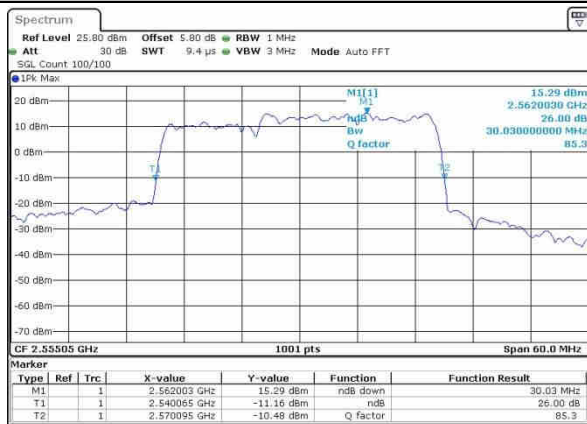
Date 1.MAR.2019 09:53:22

Middle Channel / 10MHz+20MHz



Date 1.MAR.2019 10:03:53

Highest Channel / 10MHz+20MHz



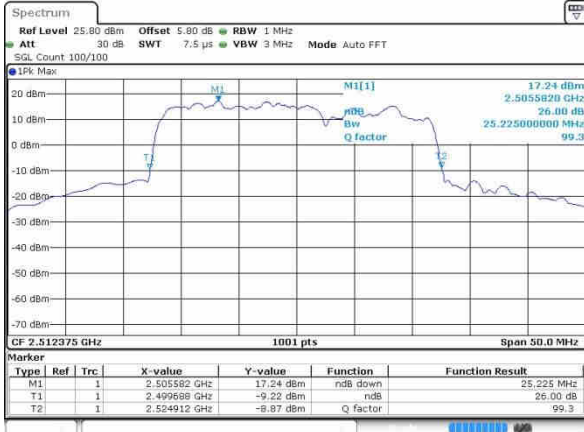
Date 1.MAR.2019 10:07:31



LTE Band 7

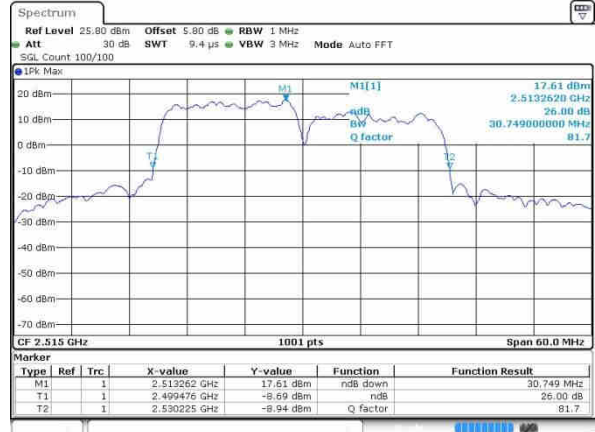
64QAM

Lowest Channel / 15MHz+10MHz



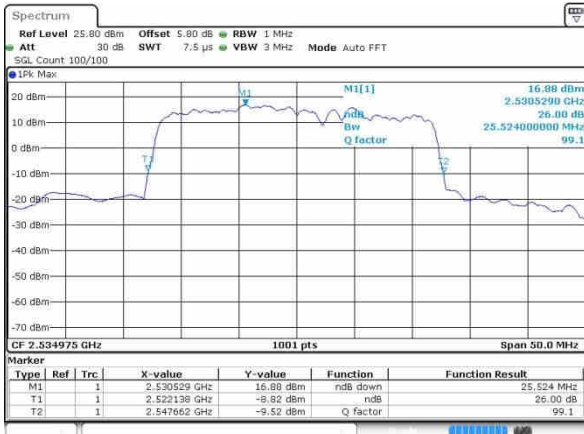
Date 1 MAR 2019 13:54:37

Lowest Channel / 15MHz+15MHz



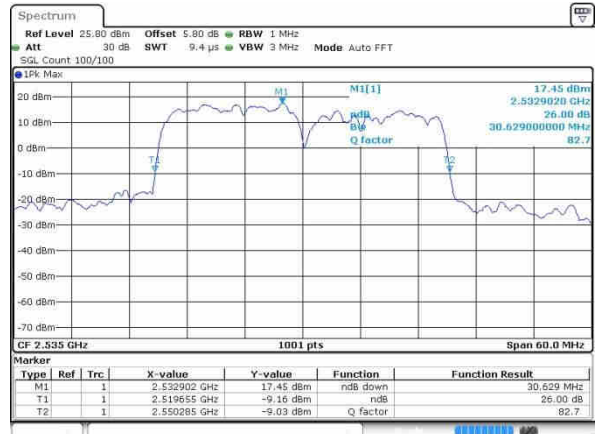
Date 1 MAR 2019 11:06:06

Middle Channel / 15MHz+10MHz



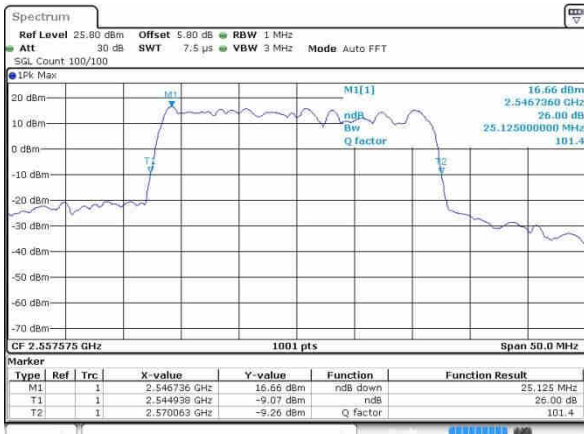
Date 1 MAR 2019 14:03:44

Middle Channel / 15MHz+15MHz



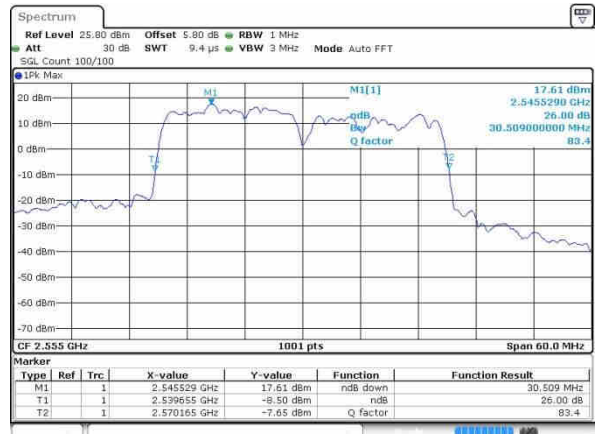
Date 1 MAR 2019 11:10:09

Highest Channel / 15MHz+10MHz



Date 1 MAR 2019 14:08:58

Highest Channel / 15MHz+15MHz



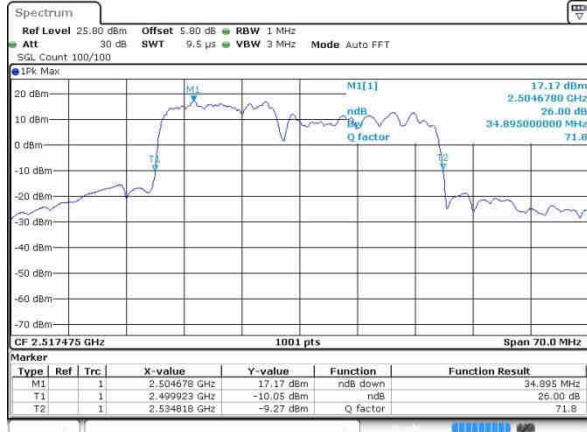
Date 1 MAR 2019 11:23:36



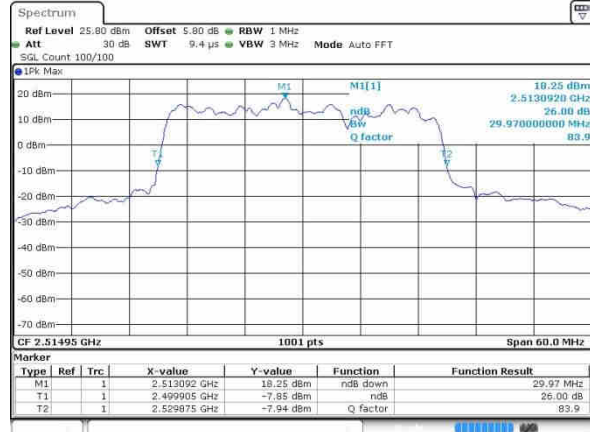
LTE Band 7

64QAM

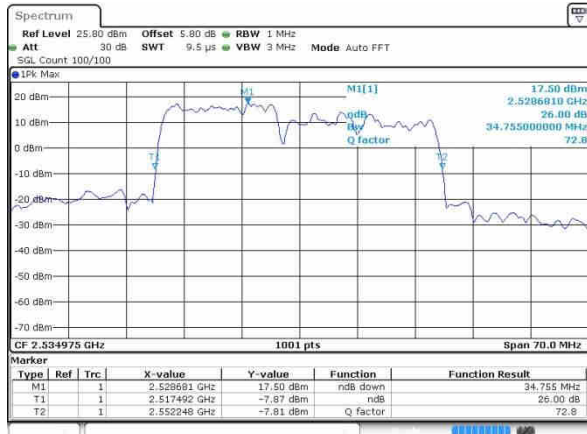
Lowest Channel / 15MHz+20MHz



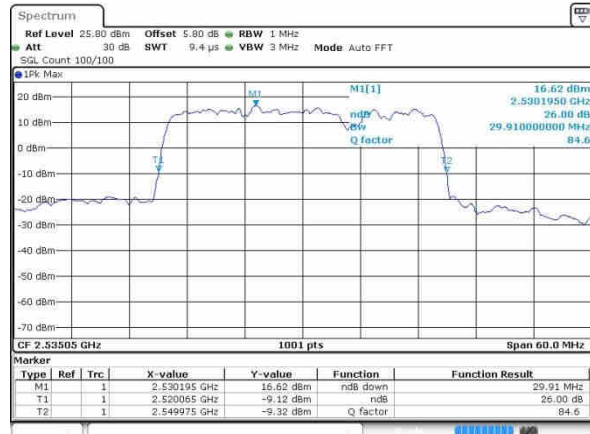
Lowest Channel / 20MHz+10MHz



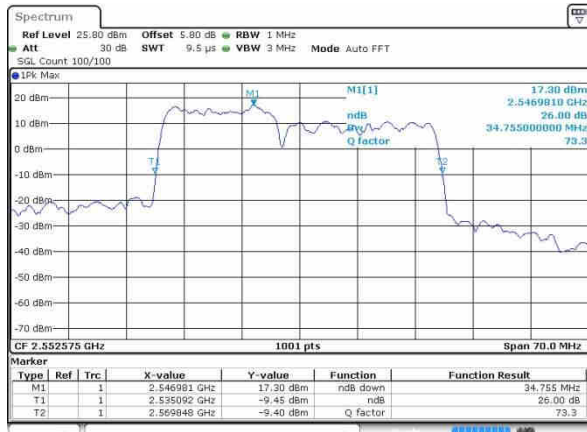
Middle Channel / 15MHz+20MHz



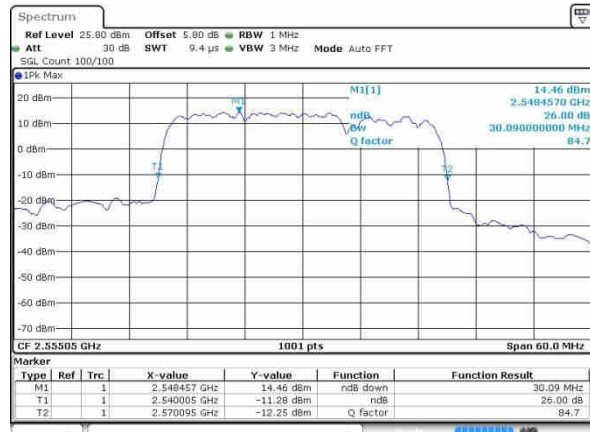
Middle Channel / 20MHz+10MHz



Highest Channel / 15MHz+20MHz



Highest Channel / 20MHz+10MHz

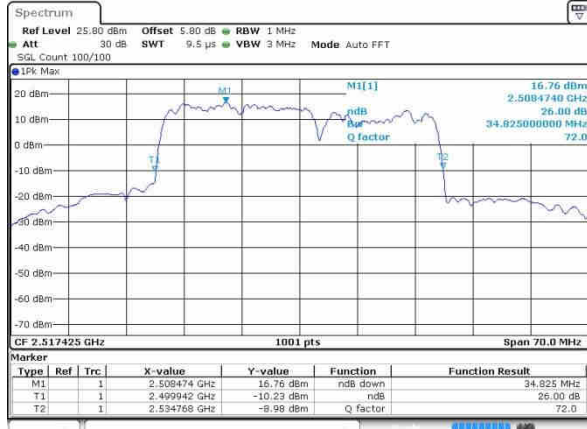




LTE Band 7

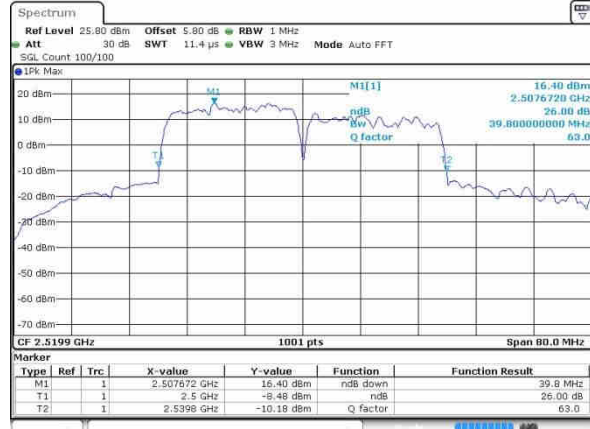
64QAM

Lowest Channel / 20MHz+15MHz



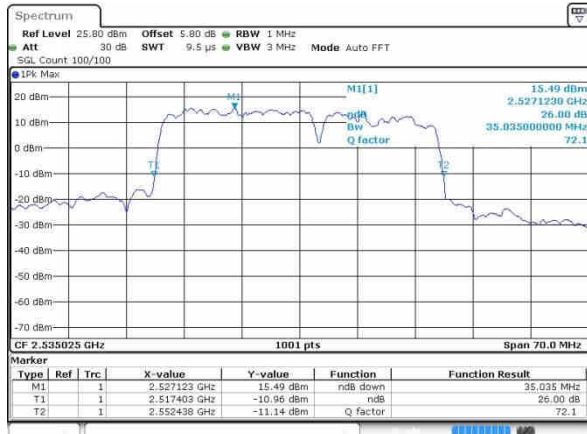
Date 1 MAR 2019 14:18:46

Lowest Channel / 20MHz+20MHz



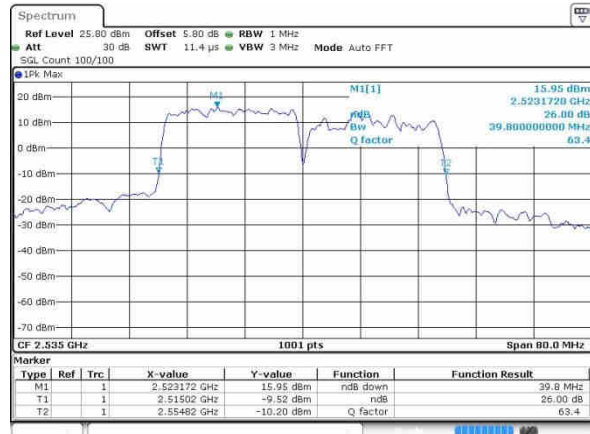
Date 1 MAR 2019 14:47:42

Middle Channel / 20MHz+15MHz



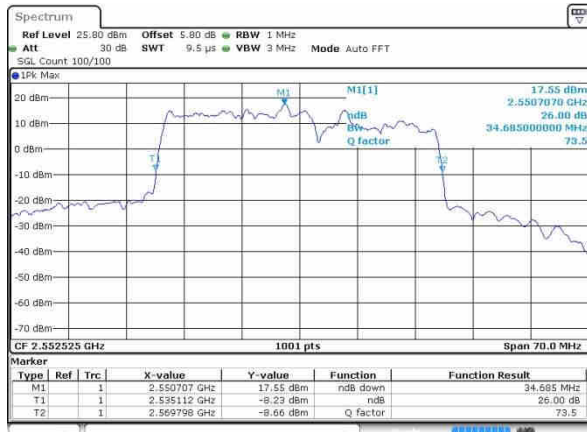
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Middle Channel / 20MHz+20MHz



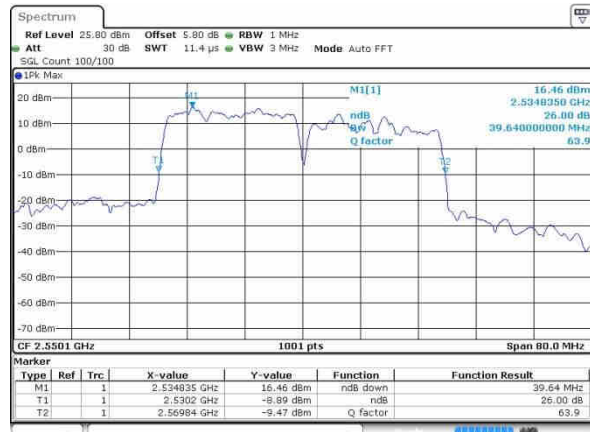
Date 1 MAR 2019 15:07:07

Highest Channel / 20MHz+15MHz



Date 1 MAR 2019 14:35:32

Highest Channel / 20MHz+20MHz



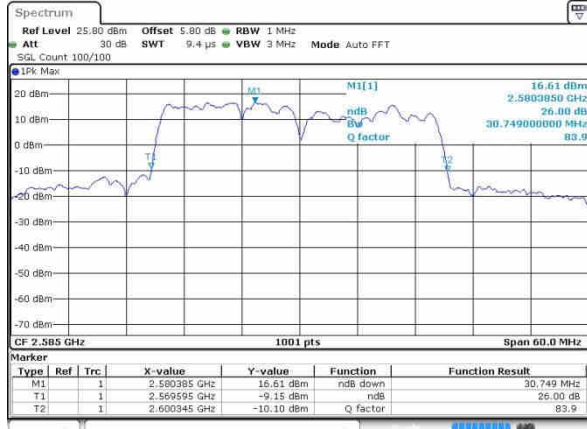
Date 1 MAR 2019 15:14:29



LTE Band 38

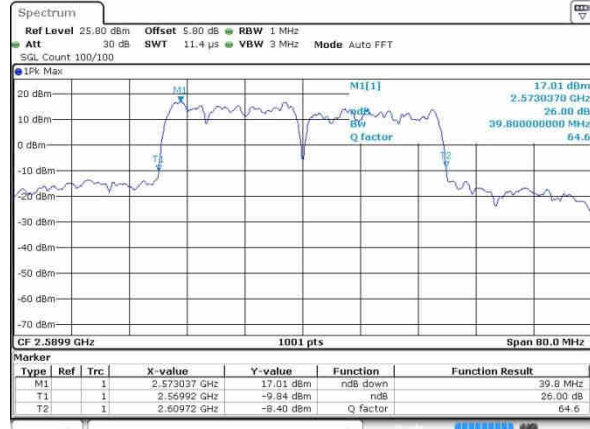
QPSK

Lowest Channel / 15MHz+15MHz



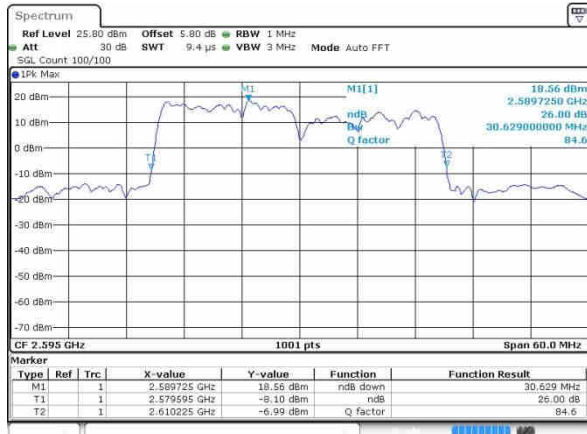
Date 1 MAR 2019 15:38:11

Lowest Channel / 20MHz+20MHz



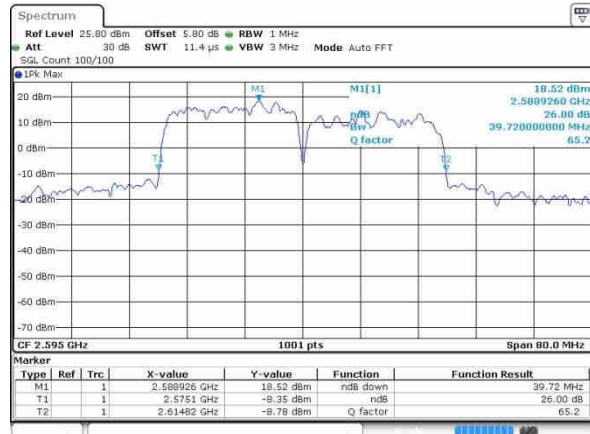
Date 1 MAR 2019 16:08:35

Middle Channel / 15MHz+15MHz



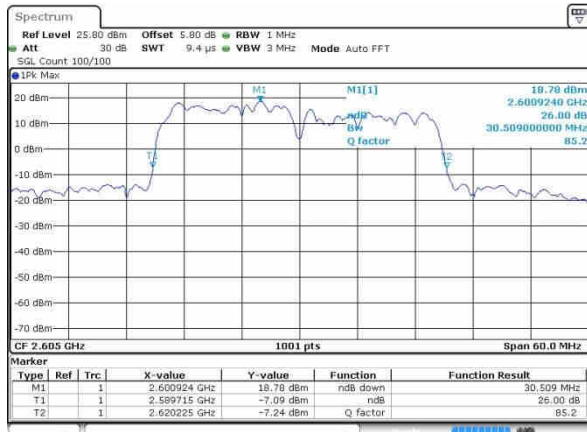
Date 1 MAR 2019 15:53:31

Middle Channel / 20MHz+20MHz



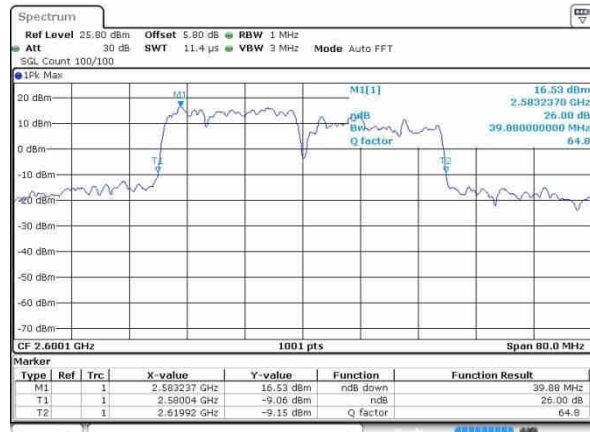
Date 1 MAR 2019 16:11:21

Highest Channel / 15MHz+15MHz



Date 1 MAR 2019 15:54:58

Highest Channel / 20MHz+20MHz



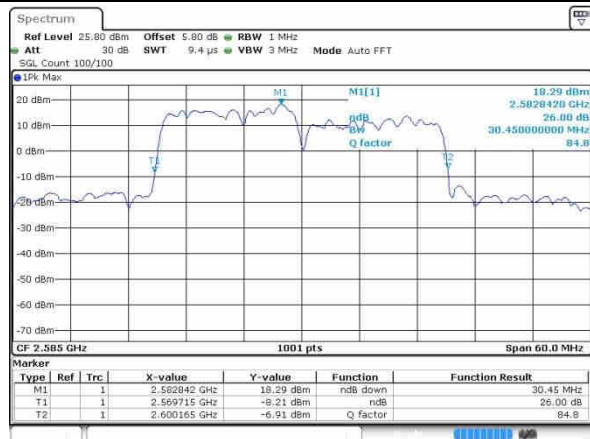
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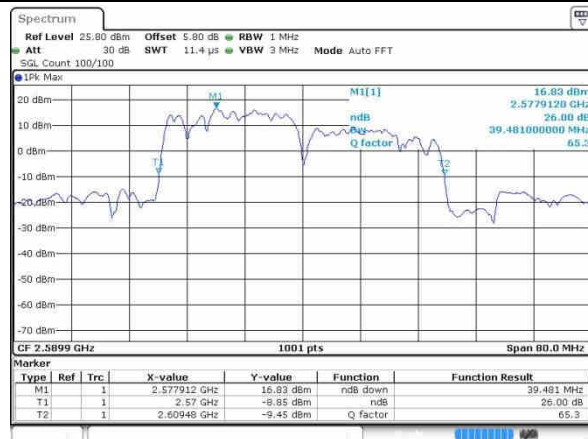
LTE Band 38

16QAM

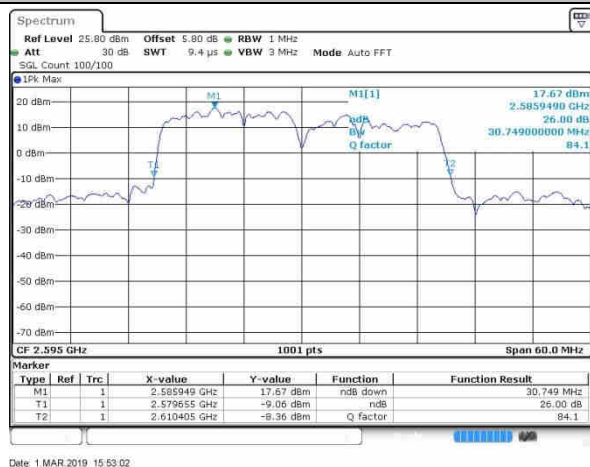
Lowest Channel / 15MHz+15MHz



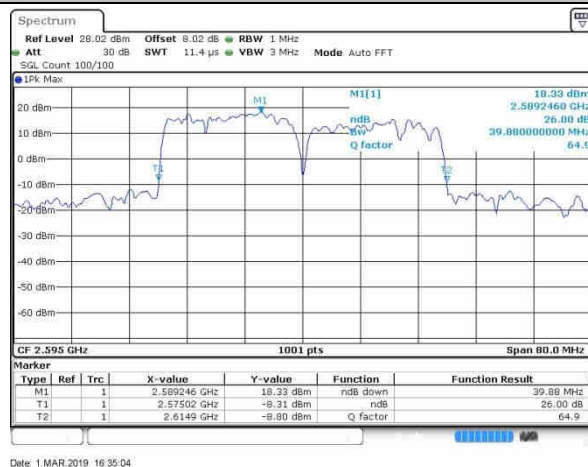
Lowest Channel / 20MHz+20MHz



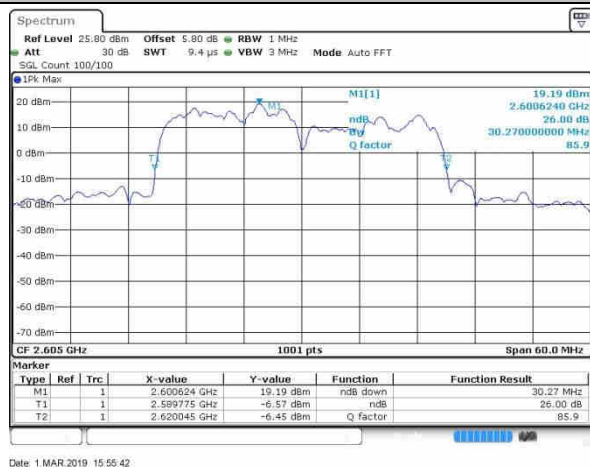
Middle Channel / 15MHz+15MHz



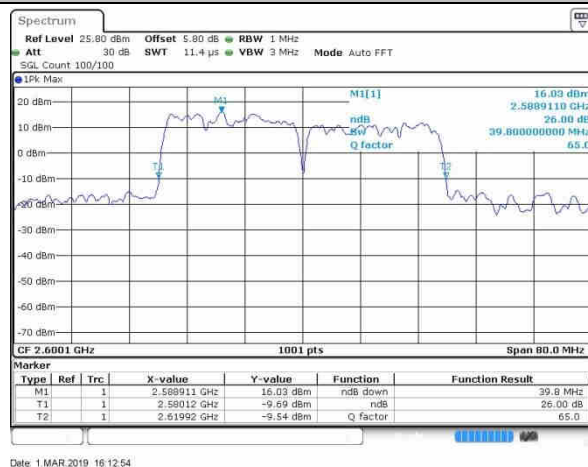
Middle Channel / 20MHz+20MHz



Highest Channel / 15MHz+15MHz



Highest Channel / 20MHz+20MHz

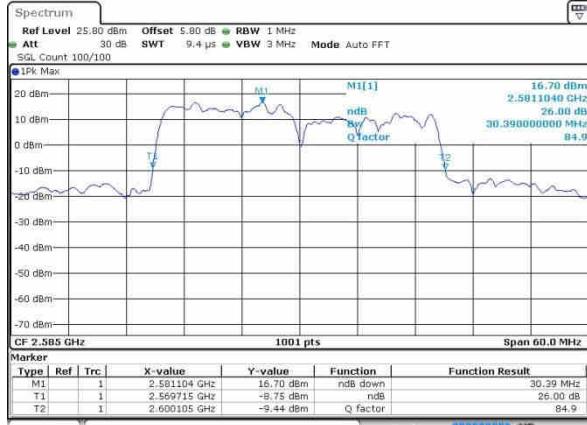




LTE Band 38

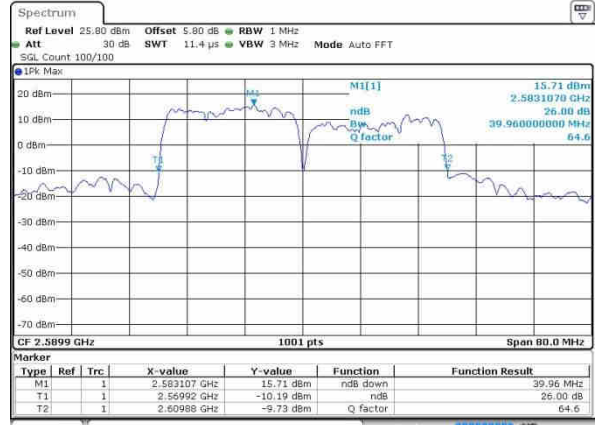
64QAM

Lowest Channel / 15MHz+15MHz



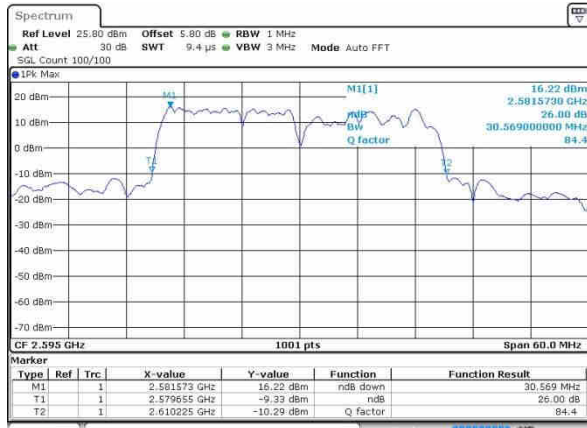
Date 1 MAR 2019 15:39:52

Lowest Channel / 20MHz+20MHz



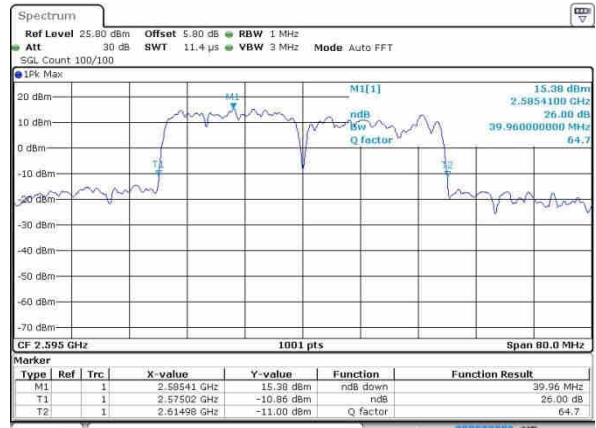
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Middle Channel / 15MHz+15MHz



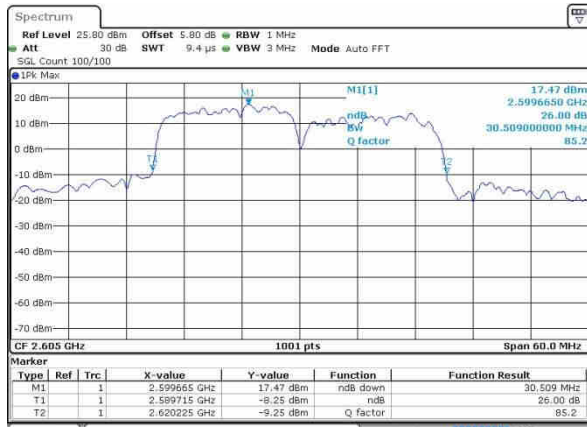
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Middle Channel / 20MHz+20MHz



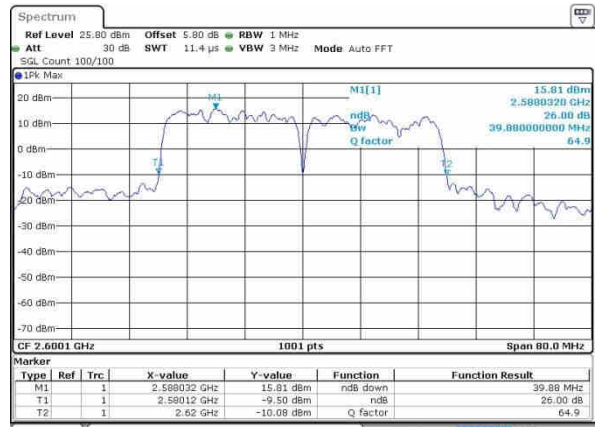
Date 1 MAR 2019 16:10:30

Highest Channel / 15MHz+15MHz



Date 1 MAR 2019 15:56:30

Highest Channel / 20MHz+20MHz



Date 1 MAR 2019 16:13:44



Occupied Bandwidth

Mode	LTE Band 2 : 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	1.09	2.73	2.73	4.49	4.49	9.01	9.07	13.43	13.43	18.38	18.34
Middle CH	1.09	1.09	2.7	2.72	4.49	4.49	9.01	8.95	13.4	13.43	18.3	18.38
Highest CH	1.08	1.09	2.72	2.7	4.49	4.47	8.99	9.01	13.46	13.46	18.5	18.5
Mode	LTE Band 2 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09		2.73		4.47		9.05		13.49		18.46	
Middle CH	1.1		2.75		4.49		9.03		13.37		18.26	
Highest CH	1.08		2.72		4.48		9.05		13.43		18.46	

Mode	LTE Band 4 : 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	1.1	2.72	2.75	4.51	4.49	9.01	9.03	13.43	13.43	18.22	18.54
Middle CH	1.09	1.1	2.73	2.72	4.49	4.49	9.07	9.07	13.4	13.4	18.3	18.34
Highest CH	1.09	1.08	2.72	2.7	4.49	4.49	9.01	9.05	13.46	13.49	18.34	18.42
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09		2.71		4.5		8.99		13.52		18.38	
Middle CH	1.09		2.73		4.5		8.99		13.46		18.26	
Highest CH	1.09		2.73		4.5		8.97		13.46		18.26	



Mode	LTE Band 5 : 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	1.1	2.72	2.72	4.49	4.48	9.03	9.01	-	-	-	-
Middle CH	1.09	1.09	2.72	2.71	4.49	4.47	9.01	9.03	-	-	-	-
Highest CH	1.09	1.09	2.72	2.7	4.5	4.49	9.07	9.07	-	-	-	-
Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz					
Mod.	64QAM		64QAM		64QAM		64QAM					
Lowest CH	1.09		2.72		4.5		9.01					
Middle CH	1.09		2.72		4.49		9.03					
Highest CH	1.09		2.73		4.49		9.03					

Mode	LTE Band 7 : 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	-	-	-	-	4.5	4.52	9.03	8.95	13.43	13.49	18.42	18.38
Middle CH	-	-	-	-	4.49	4.5	9.03	9.03	13.4	13.4	18.3	18.3
Highest CH	-	-	-	-	4.5	4.51	9.01	8.97	13.43	13.46	18.38	18.3
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	5MHz		10MHz		15MHz		20MHz					
Mod.	64QAM		64QAM		64QAM		64QAM					
Lowest CH	4.48		8.97		13.46		18.22					
Middle CH	4.51		9.07		13.49		18.34					
Highest CH	4.49		8.99		13.43		18.42					

Mode	LTE Band 41 : 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	-	-	-	-	4.5	4.49	9.01	9.09	13.4	13.52	18.22	18.34
Middle CH	-	-	-	-	4.5	4.49	9.01	9.03	13.46	13.46	18.38	18.42
Highest CH	-	-	-	-	4.48	4.48	9.01	9.01	13.34	13.37	18.3	18.34
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH					4.5		9.01		13.4		18.22	
Middle CH					4.49		9.05		13.47		18.42	
Highest CH					4.5		9.03		13.43		18.34	



For CA

Mode	LTE Band 7 : 99%OBW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	27.93		23.38	28.47
Middle CH	26.25		23.38	28.77
Highest CH	28.11		23.38	28.65
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.73	28.23	32.73	37.56
Middle CH	33.01	27.87	32.87	37.64
Highest CH	32.59	27.99	32.87	37.64

Mode	LTE Band 7 : 99%OBW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	27.81		23.48	28.41
Middle CH	26.49		23.23	28.41
Highest CH	28.05		23.38	28.41
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	33.22	28.11	32.94	37.64
Middle CH	32.45	28.05	32.80	37.24
Highest CH	32.52	27.99	32.66	37.72

Mode	LTE Band 7 : 99%OBW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	27.69		23.33	28.35
Middle CH	25.89		23.13	28.23
Highest CH	28.05		23.23	28.29
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.59	27.81	32.94	37.32
Middle CH	32.73	27.93	32.59	37.48
Highest CH	32.59	27.87	32.80	37.72



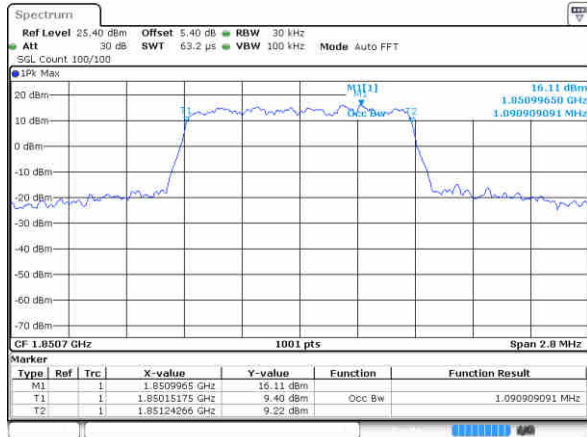
Mode	LTE Band 38 : 99%OBW(MHz)			
Mod.	QPSK		16QAM	
BW	15MHz+15MHz	20MHz+20MHz	15MHz+15MHz	20MHz+20MHz
Lowest CH	28.47	37.48	28.41	37.48
Middle CH	28.71	37.80	28.71	37.56
Highest CH	28.65	37.80	28.89	37.72

Mode	LTE Band 38 : 99%OBW(MHz)			
Mod.	64QAM		-	
BW	15MHz+15MHz	20MHz+20MHz	-	-
Lowest CH	28.65	37.40	-	-
Middle CH	28.53	37.40	-	-
Highest CH	28.41	37.80	-	--

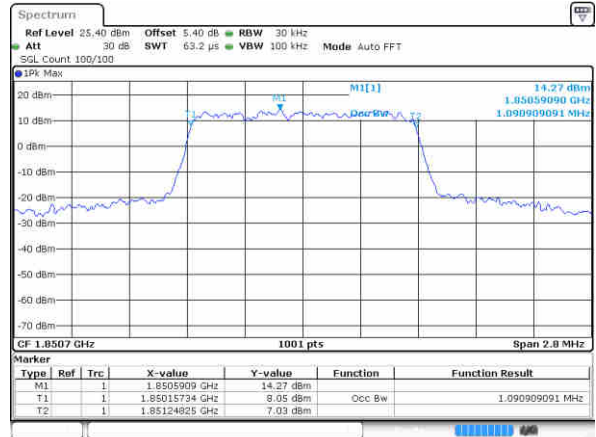


LTE Band 2

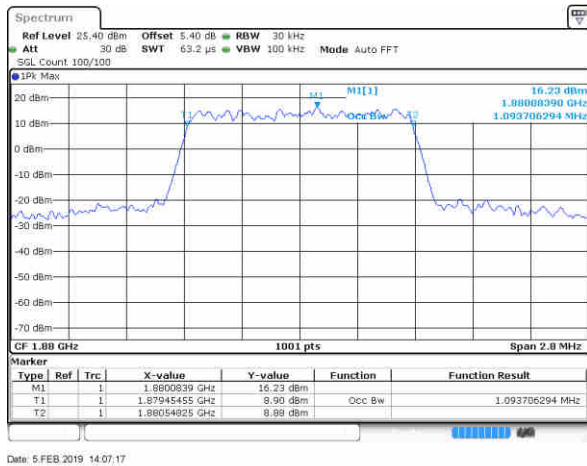
Lowest Channel / 1.4MHz / QPSK



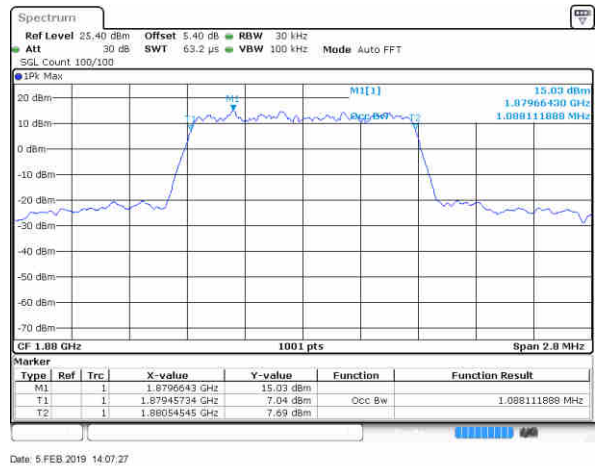
Lowest Channel / 1.4MHz / 16QAM



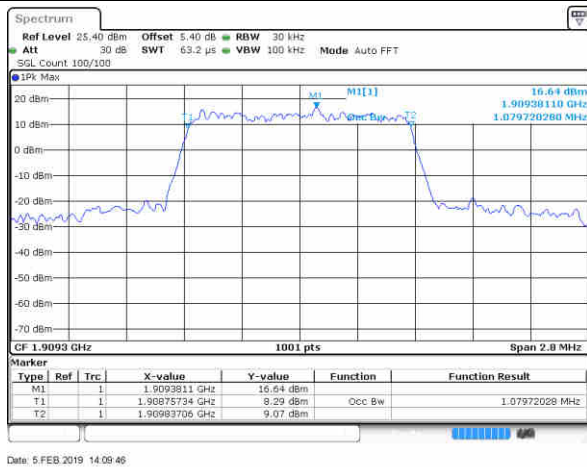
Middle Channel / 1.4MHz / QPSK



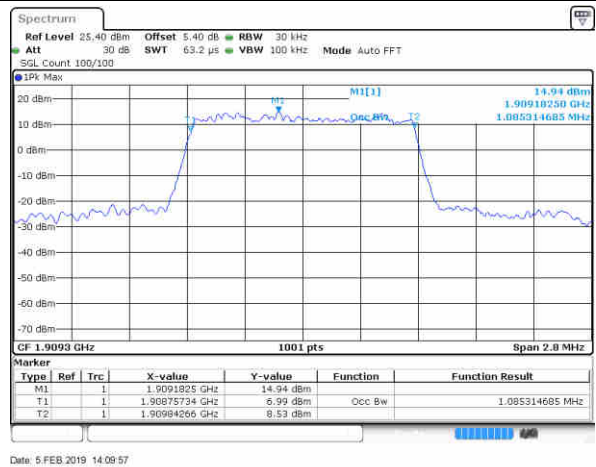
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



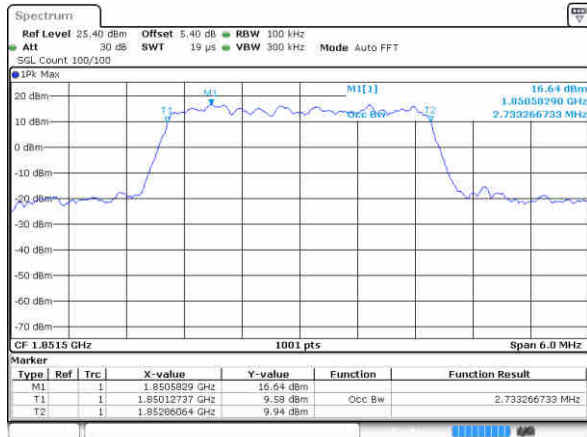
Highest Channel / 1.4MHz / 16QAM



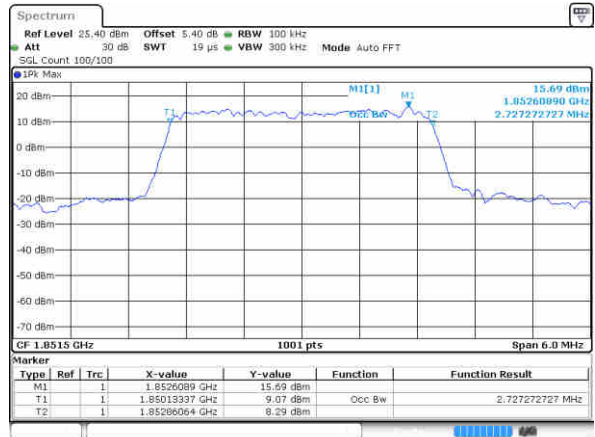


LTE Band 2

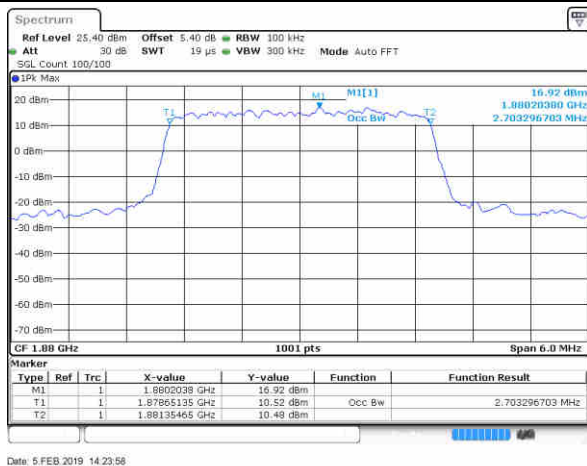
Lowest Channel / 3MHz / QPSK



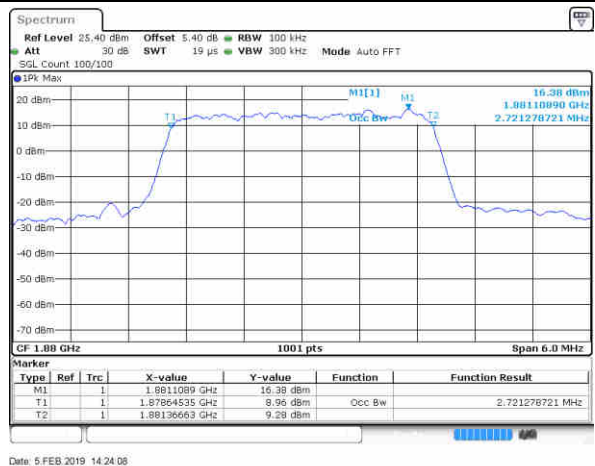
Lowest Channel / 3MHz / 16QAM



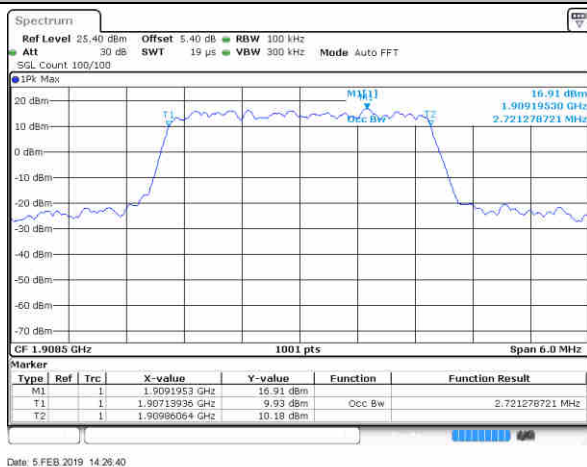
Middle Channel / 3MHz / QPSK



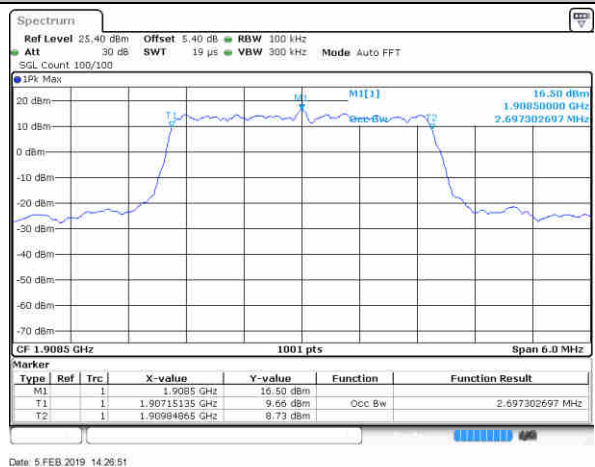
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



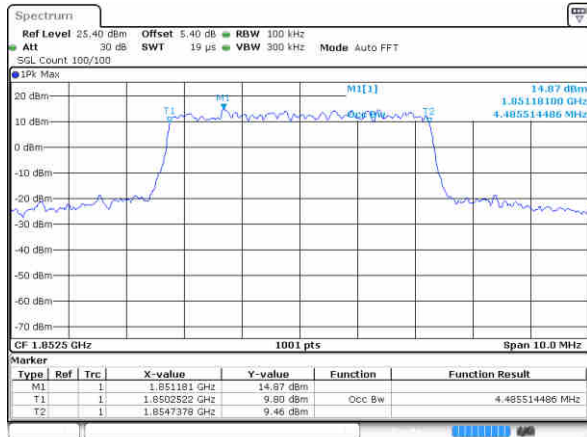
Highest Channel / 3MHz / 16QAM



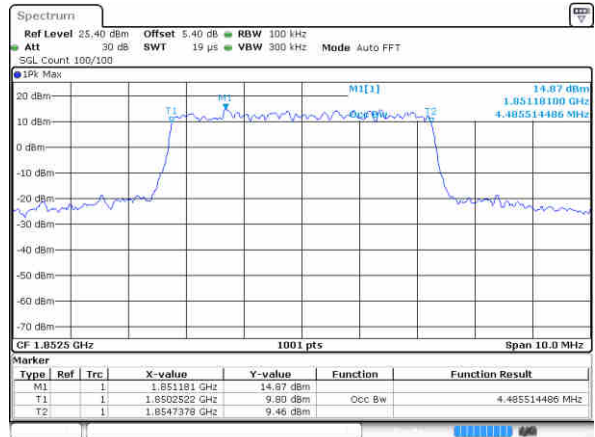


LTE Band 2

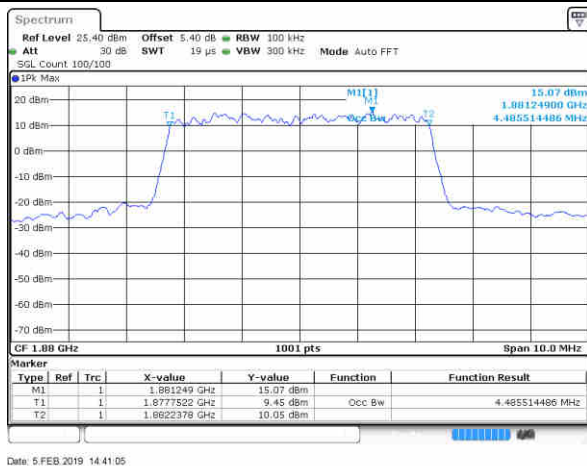
Lowest Channel / 5MHz / QPSK



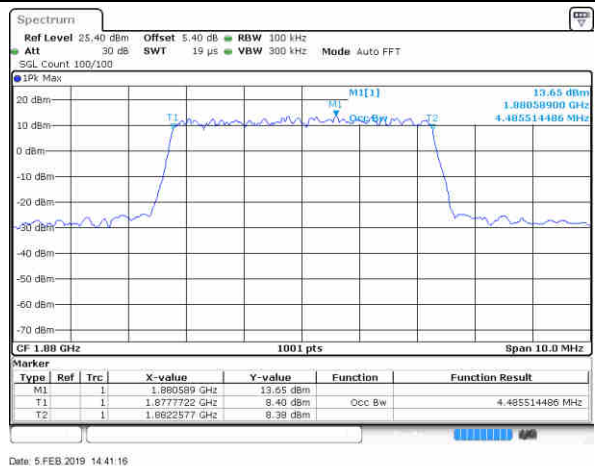
Lowest Channel / 5MHz / 16QAM



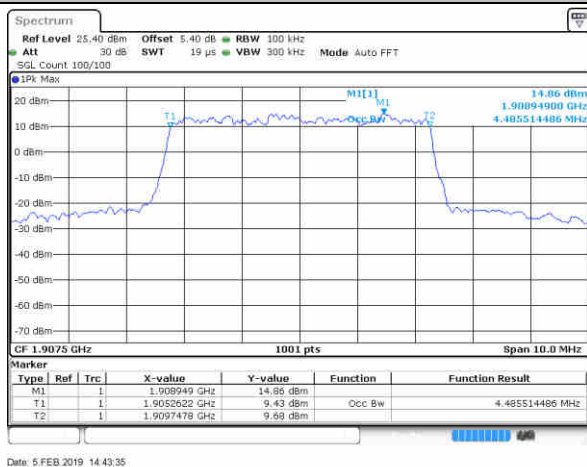
Middle Channel / 5MHz / QPSK



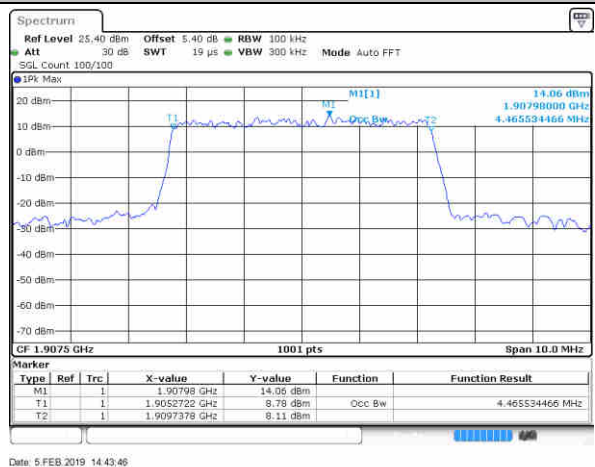
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



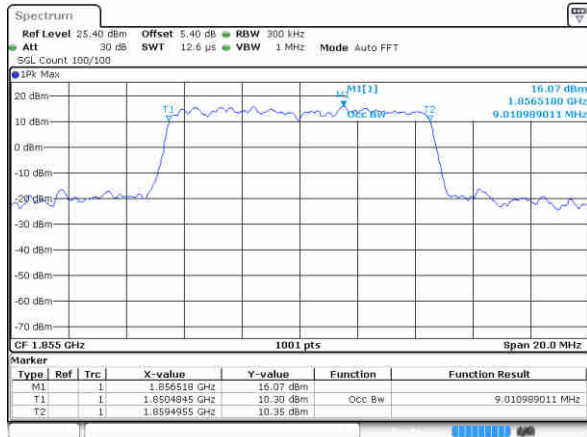
Highest Channel / 5MHz / 16QAM



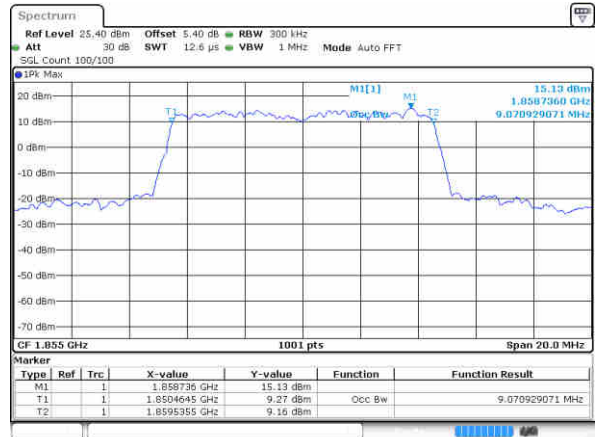


LTE Band 2

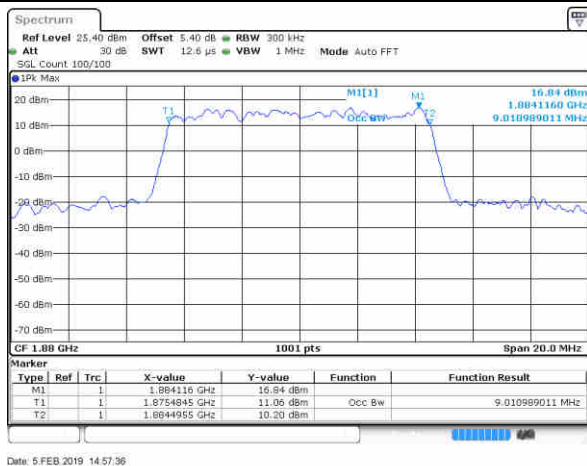
Lowest Channel / 10MHz / QPSK



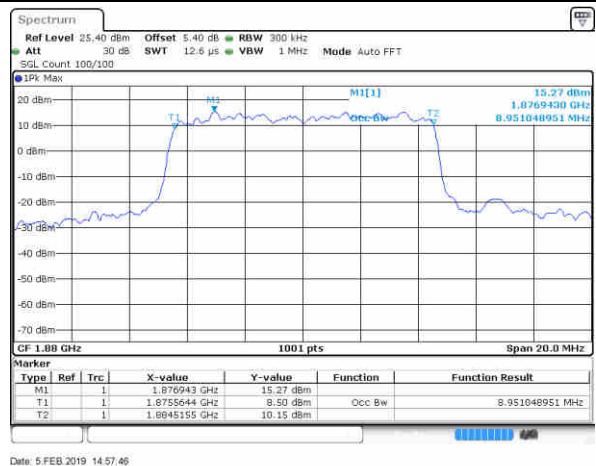
Lowest Channel / 10MHz / 16QAM



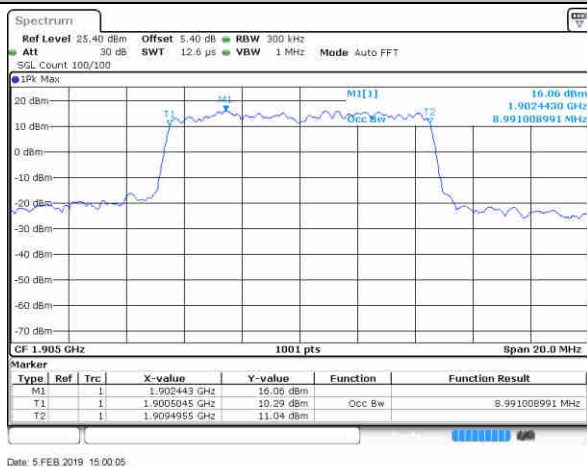
Middle Channel / 10MHz / QPSK



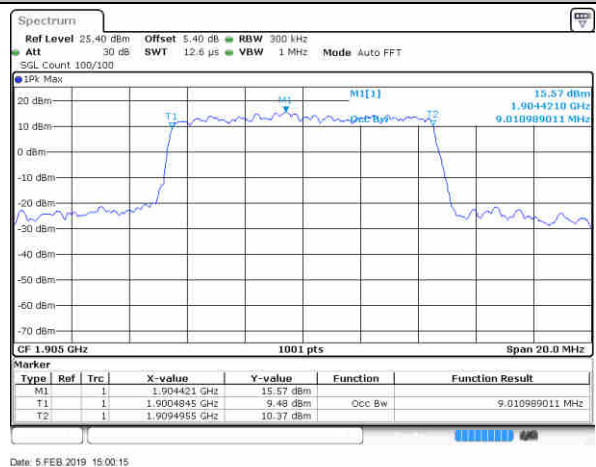
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



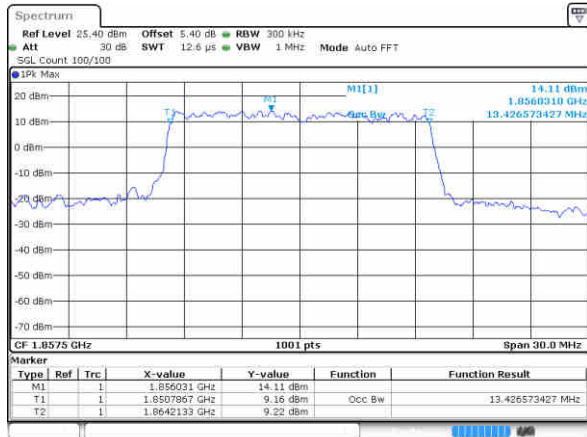
Highest Channel / 10MHz / 16QAM



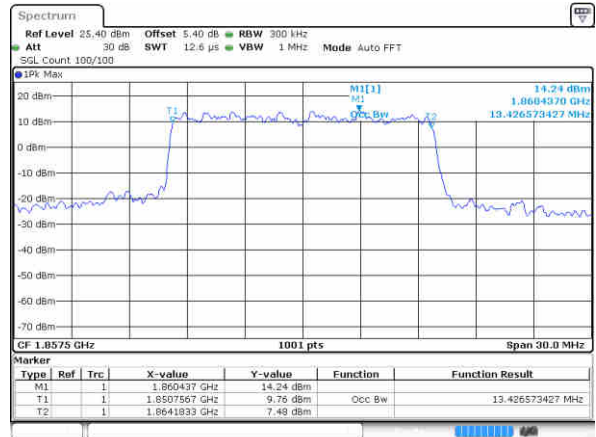


LTE Band 2

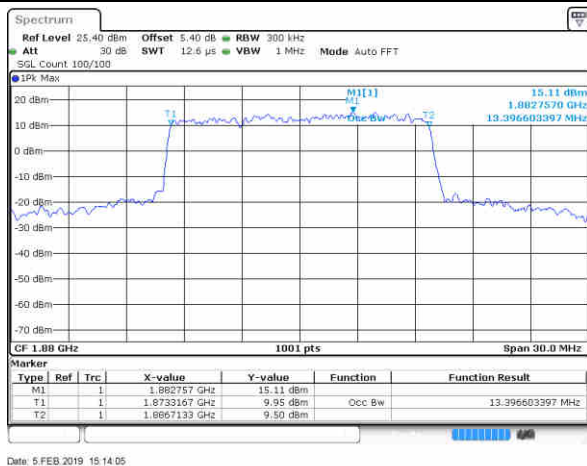
Lowest Channel / 15MHz / QPSK



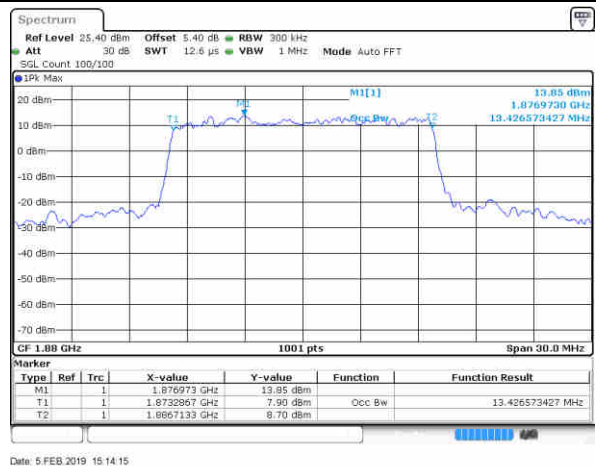
Lowest Channel / 15MHz / 16QAM



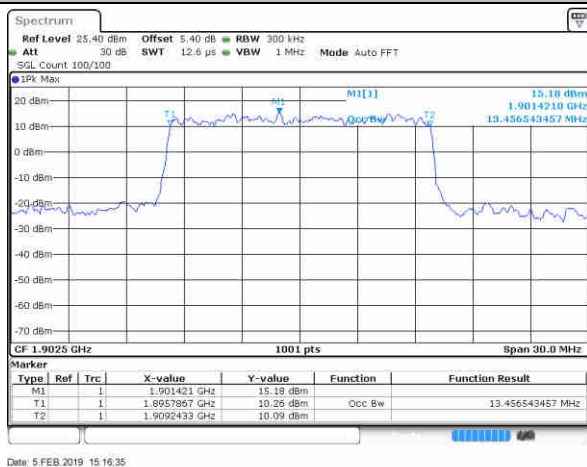
Middle Channel / 15MHz / QPSK



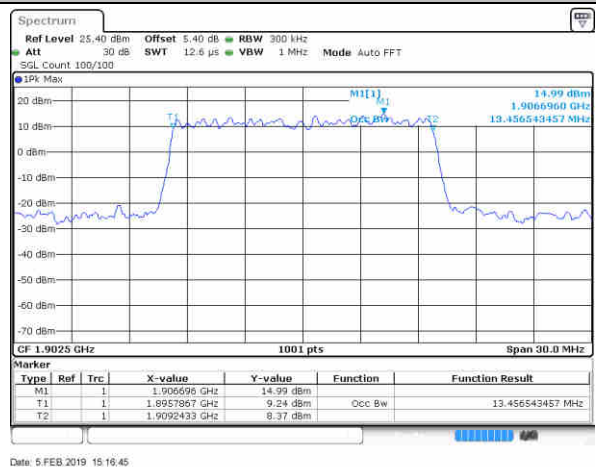
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



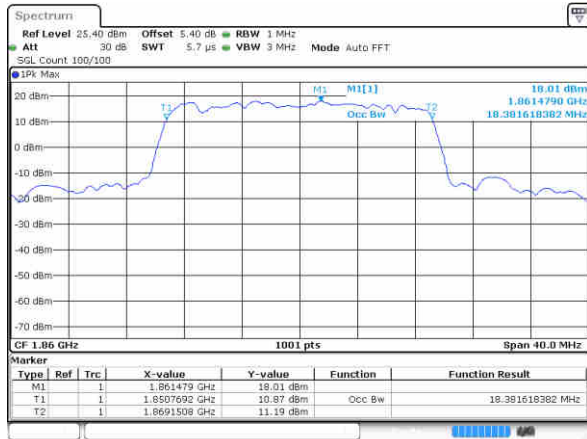
Highest Channel / 15MHz / 16QAM



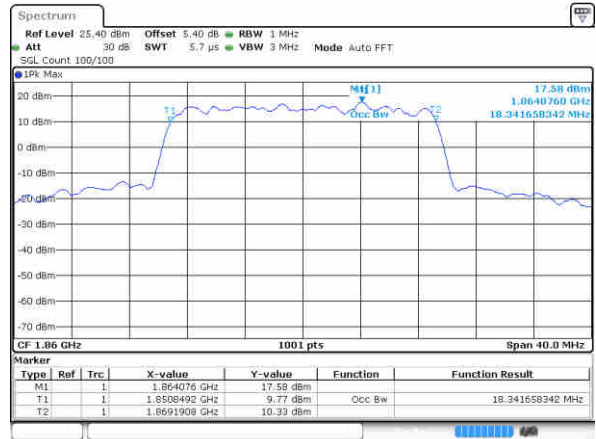


LTE Band 2

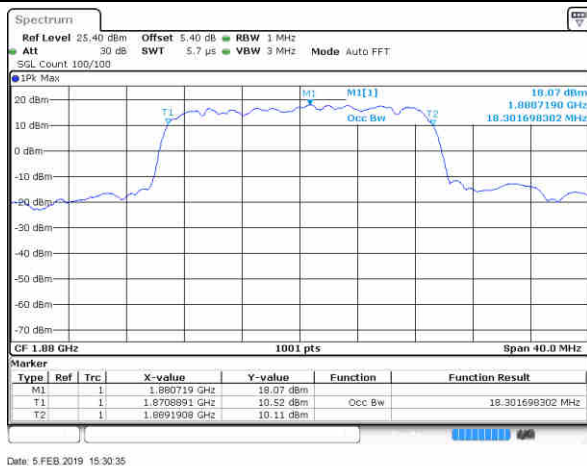
Lowest Channel / 20MHz / QPSK



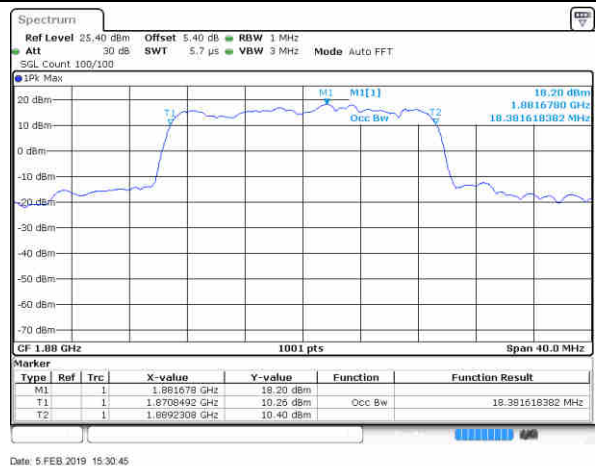
Lowest Channel / 20MHz / 16QAM



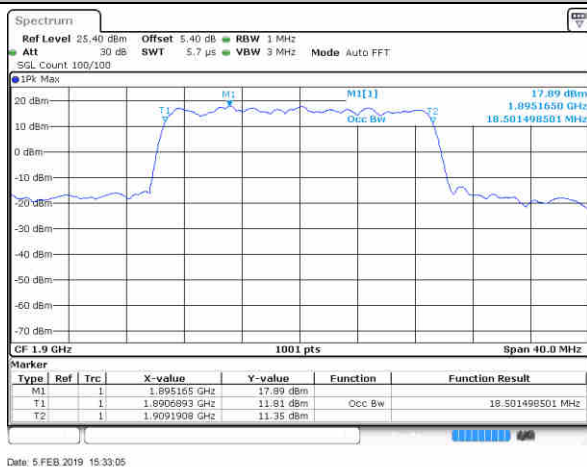
Middle Channel / 20MHz / QPSK



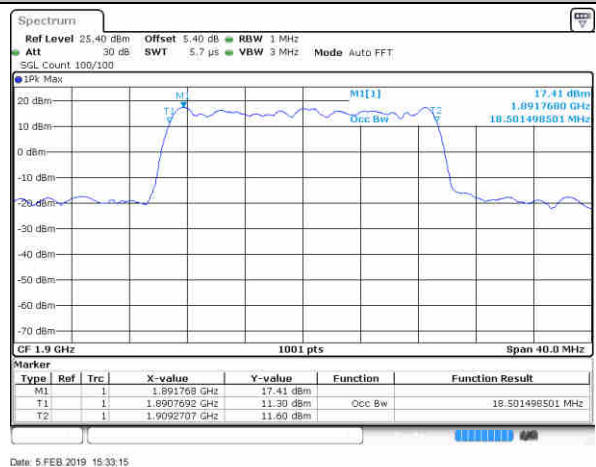
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



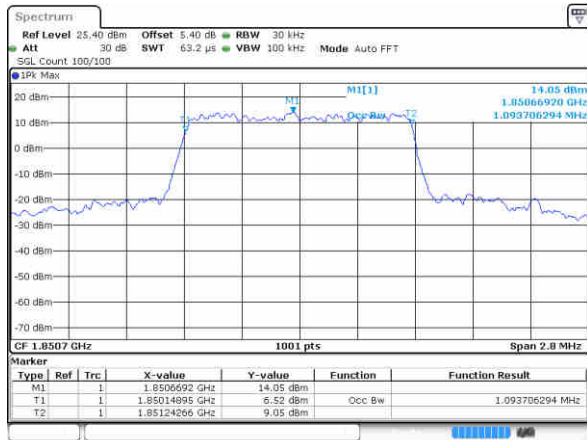
Highest Channel / 20MHz / 16QAM





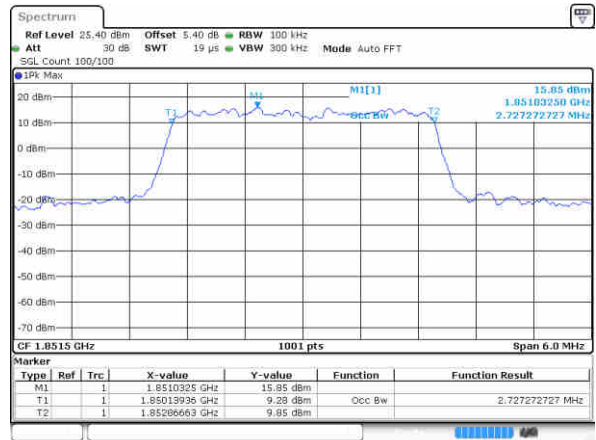
LTE Band 2

Lowest Channel / 1.4MHz / 64QAM



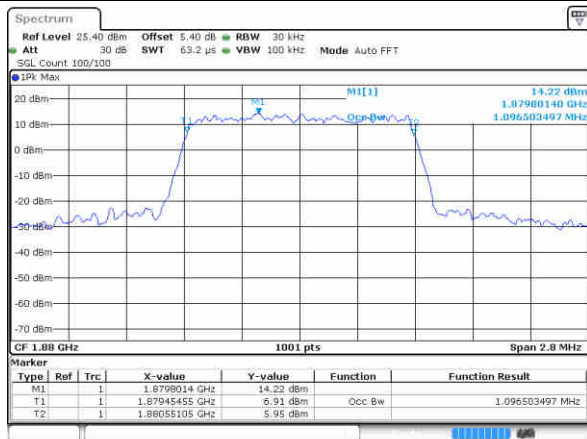
Date: 5 FEB 2019 15:41:06

Lowest Channel / 3MHz / 64QAM



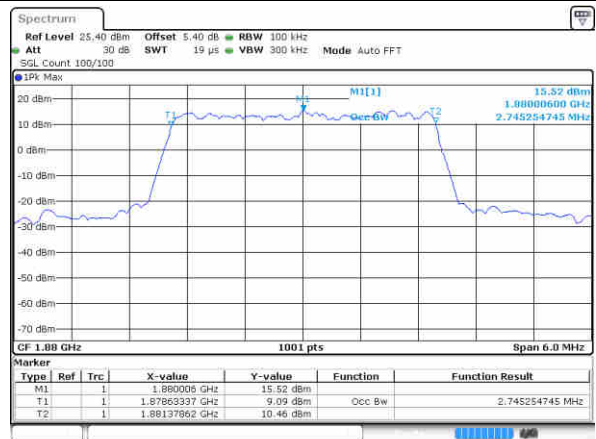
Date: 5 FEB 2019 15:41:36

Middle Channel / 1.4MHz / 64QAM



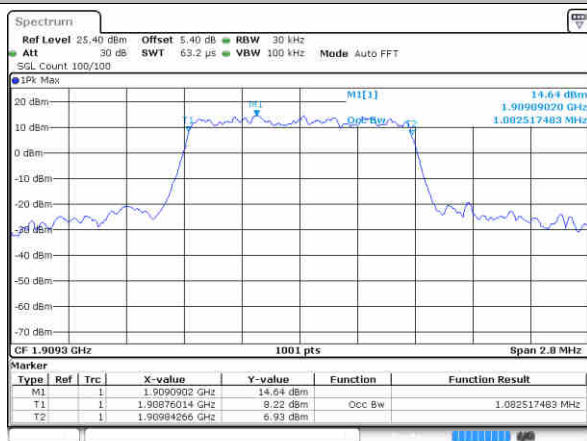
Date: 5 FEB 2019 15:41:16

Middle Channel / 3MHz / 64QAM



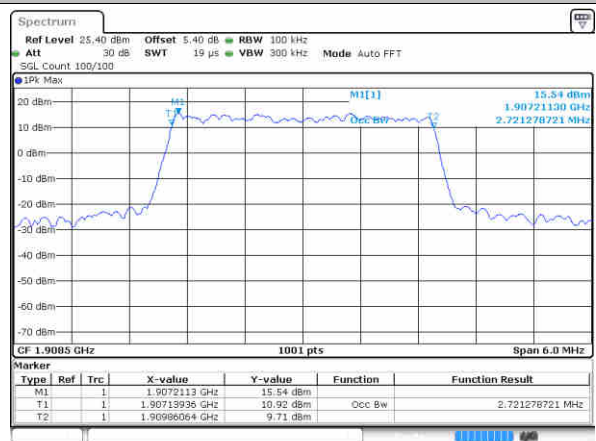
Date: 5 FEB 2019 15:41:46

Highest Channel / 1.4MHz / 64QAM



Date: 5 FEB 2019 15:41:26

Highest Channel / 3MHz / 64QAM



Date: 5 FEB 2019 15:41:56