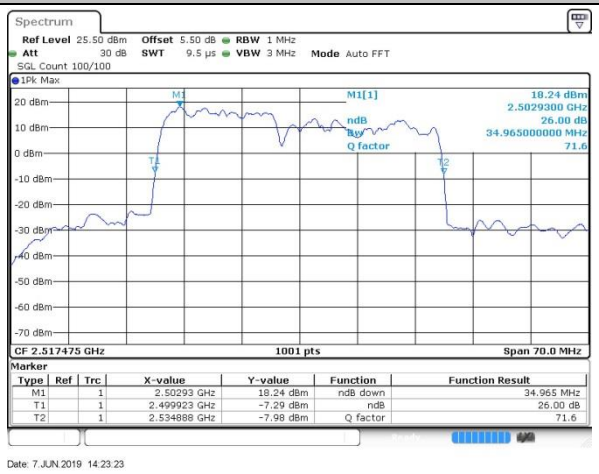
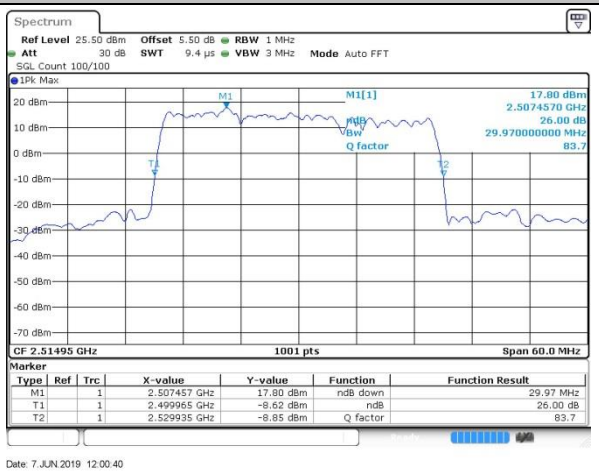
LTE Band 7

16QAM

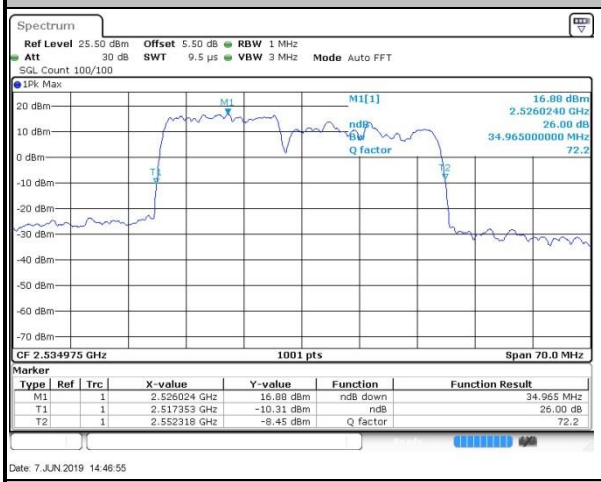
Lowest Channel / 15MHz+20MHz



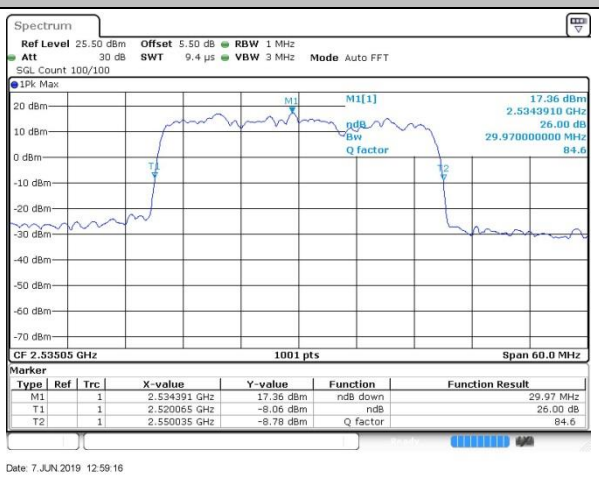
Lowest Channel / 20MHz+10MHz



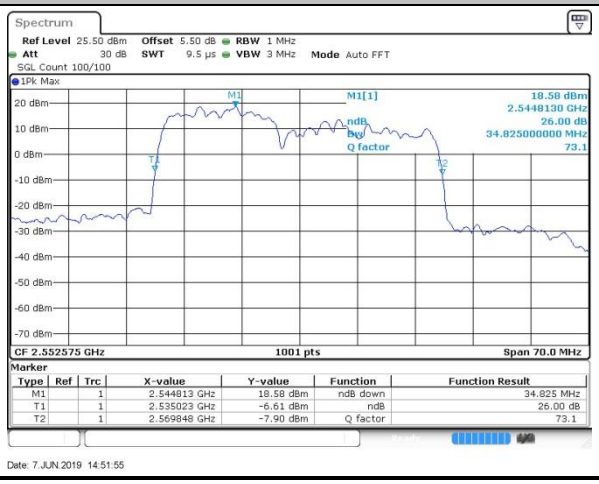
Middle Channel / 15MHz+20MHz



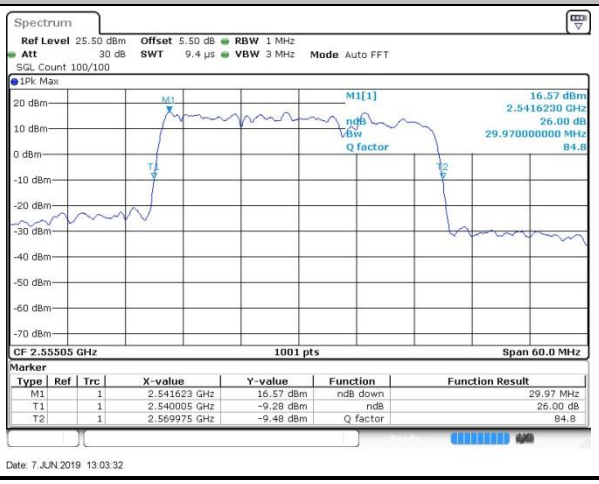
Middle Channel / 20MHz+10MHz



Highest Channel / 15MHz+20MHz



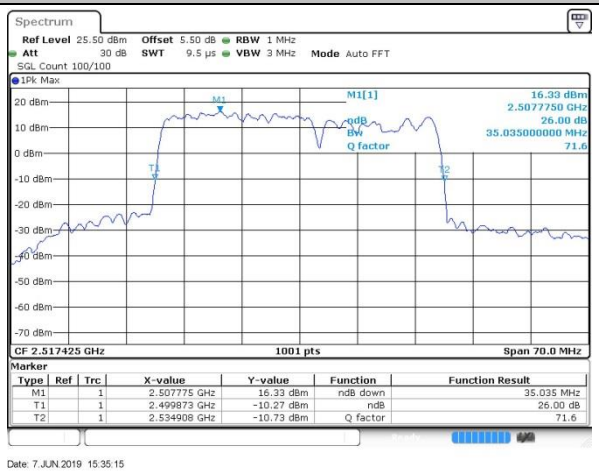
Highest Channel / 20MHz+10MHz



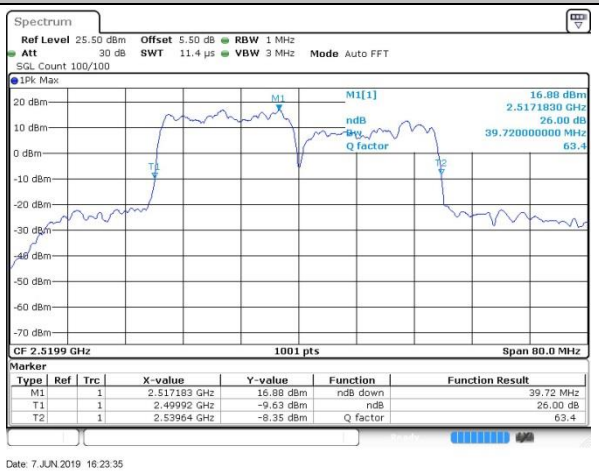
LTE Band 7

16QAM

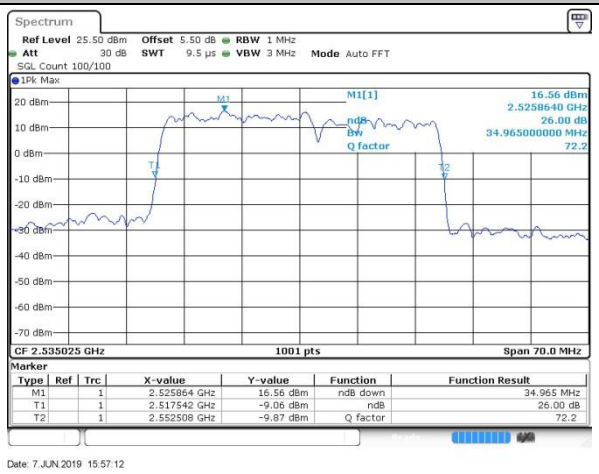
Lowest Channel / 20MHz+15MHz



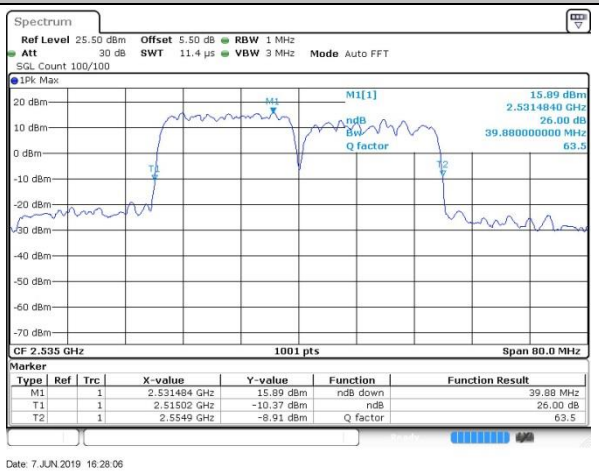
Lowest Channel / 20MHz+20MHz



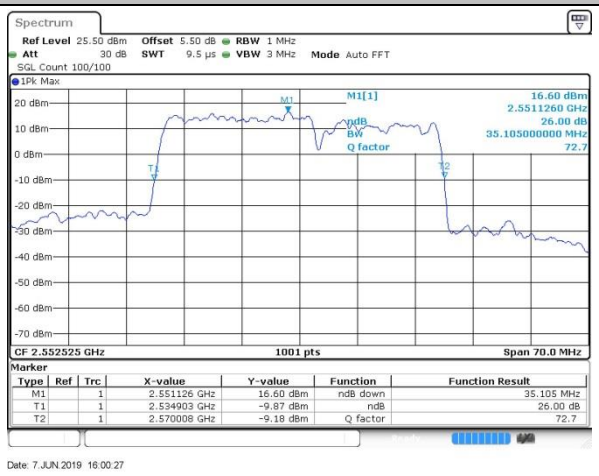
Middle Channel / 20MHz+15MHz



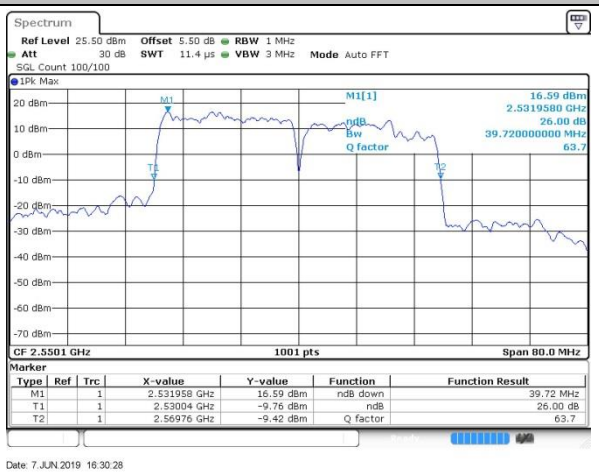
Middle Channel / 20MHz+20MHz



Highest Channel / 20MHz+15MHz



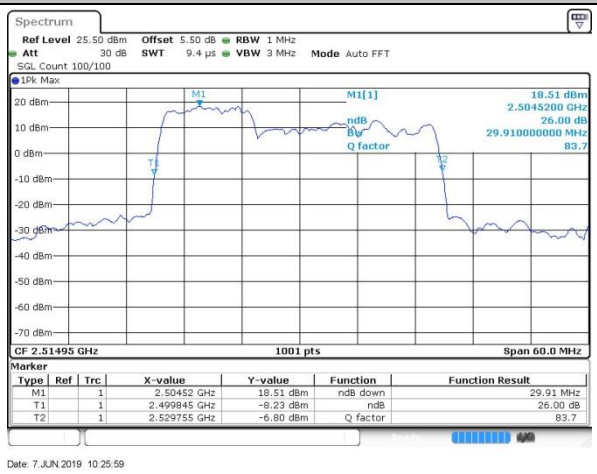
Highest Channel / 20MHz+20MHz



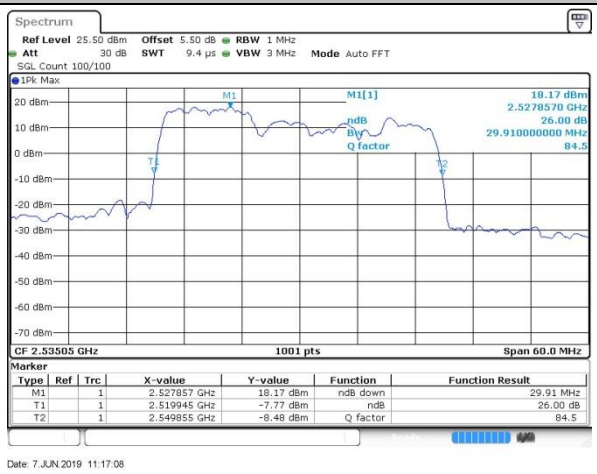
LTE Band 7

64QAM

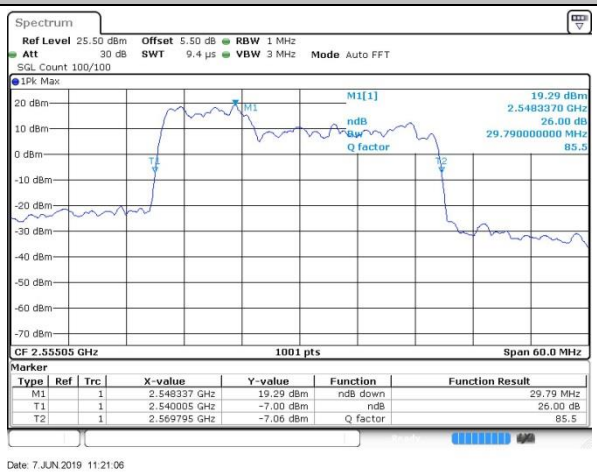
Lowest Channel / 10MHz+20MHz



Middle Channel / 10MHz+20MHz



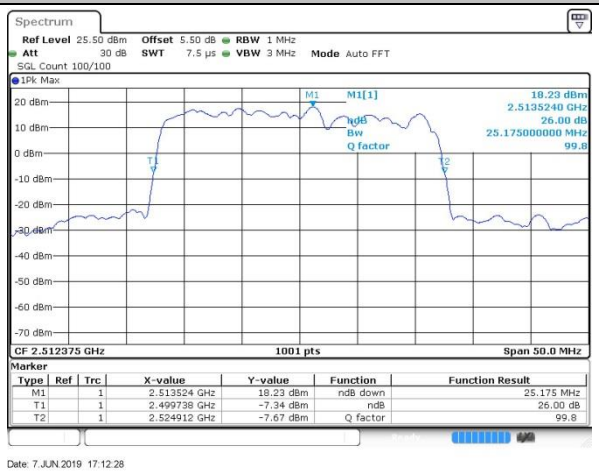
Highest Channel / 10MHz+20MHz



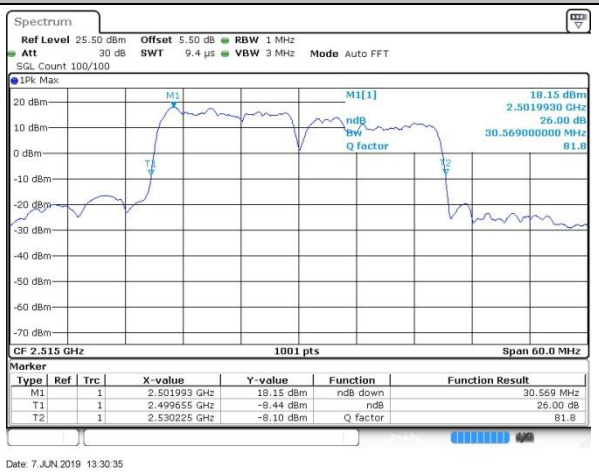
LTE Band 7

64QAM

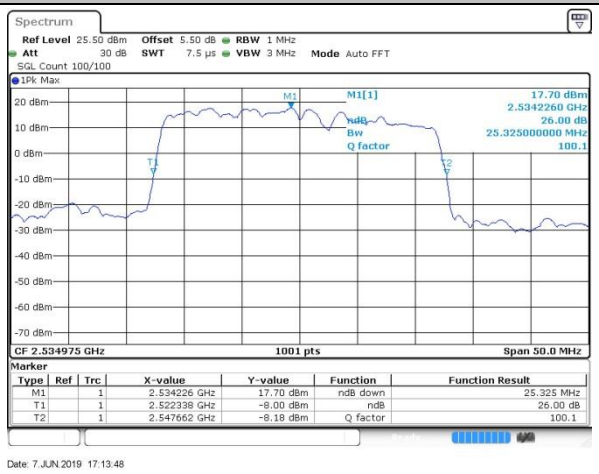
Lowest Channel / 15MHz+10MHz



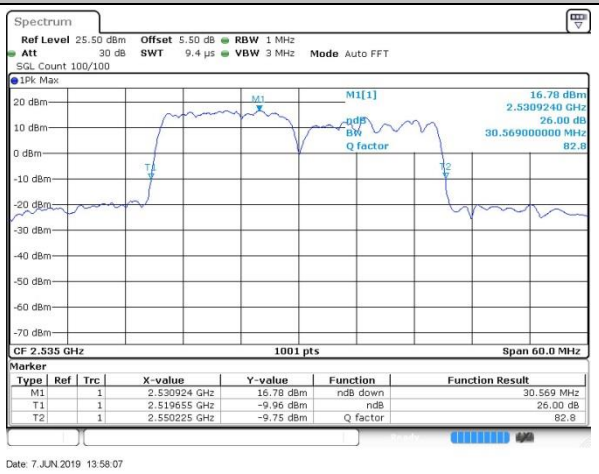
Lowest Channel / 15MHz+15MHz



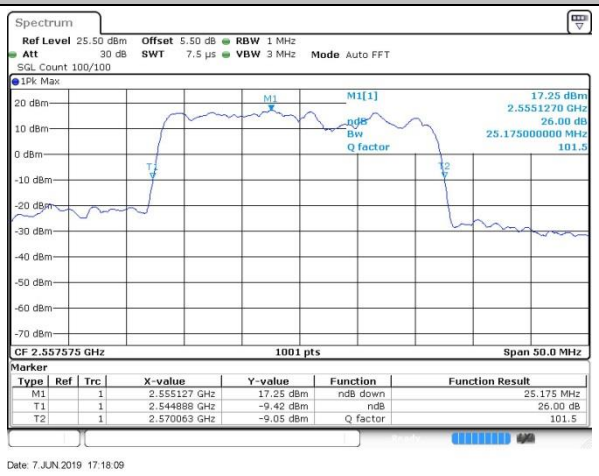
Middle Channel / 15MHz+10MHz



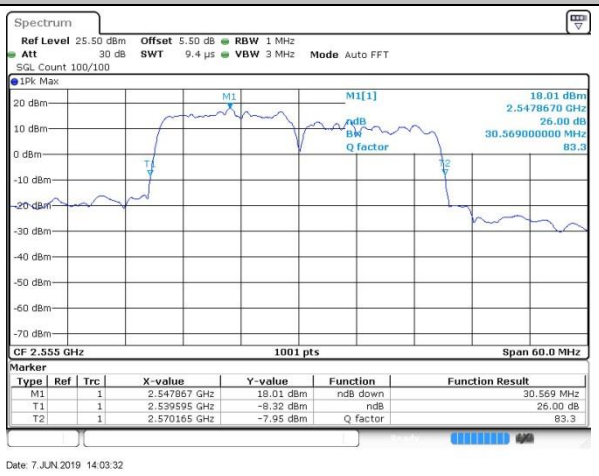
Middle Channel / 15MHz+15MHz



Highest Channel / 15MHz+10MHz



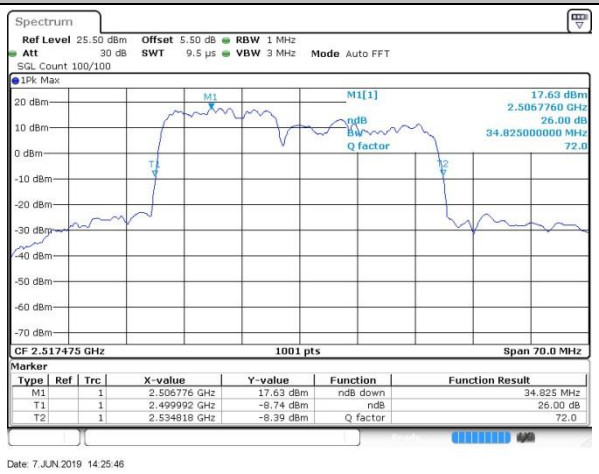
Highest Channel / 15MHz+15MHz



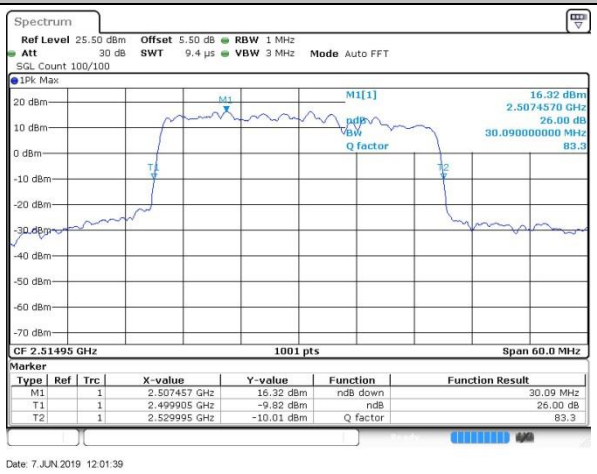
LTE Band 7

64QAM

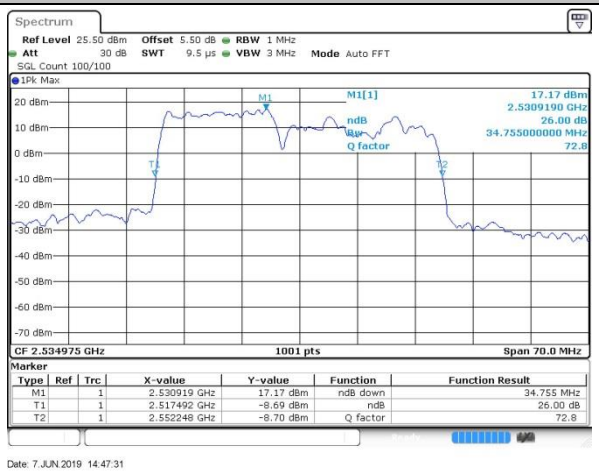
Lowest Channel / 15MHz+20MHz



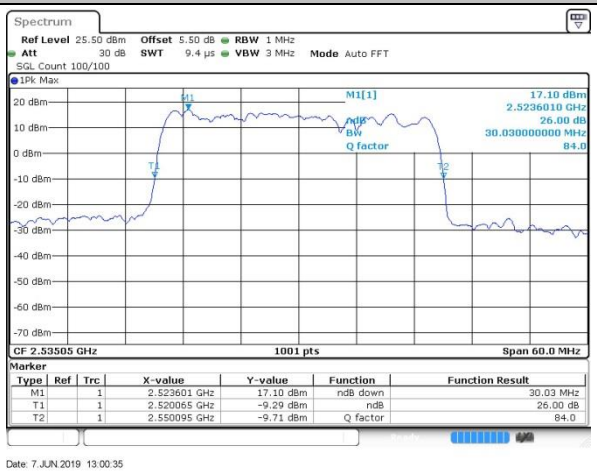
Lowest Channel / 20MHz+10MHz



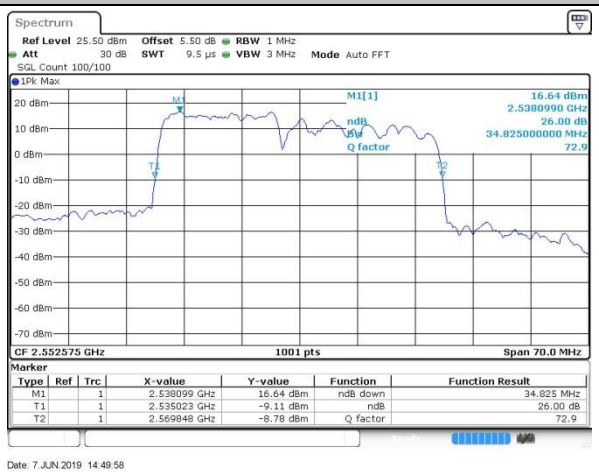
Middle Channel / 15MHz+20MHz



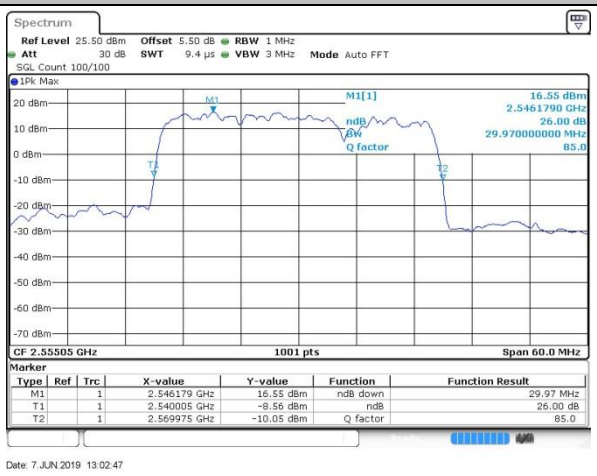
Middle Channel / 20MHz+10MHz



Highest Channel / 15MHz+20MHz



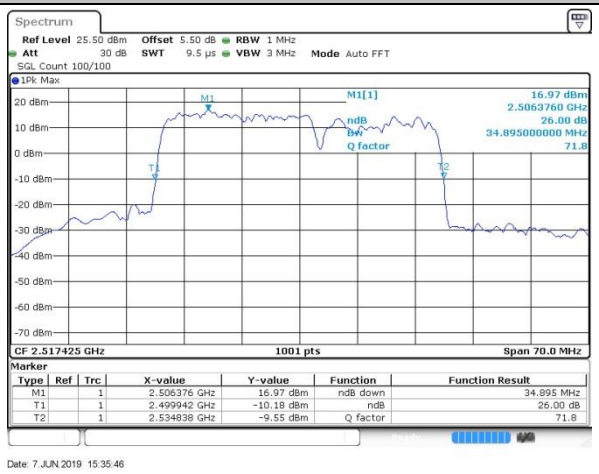
Highest Channel / 20MHz+10MHz



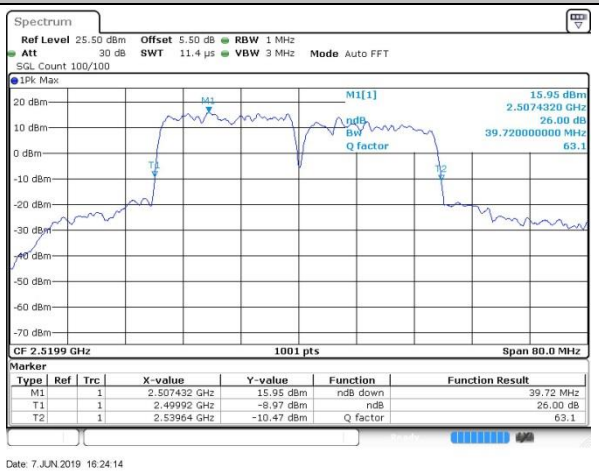
LTE Band 7

64QAM

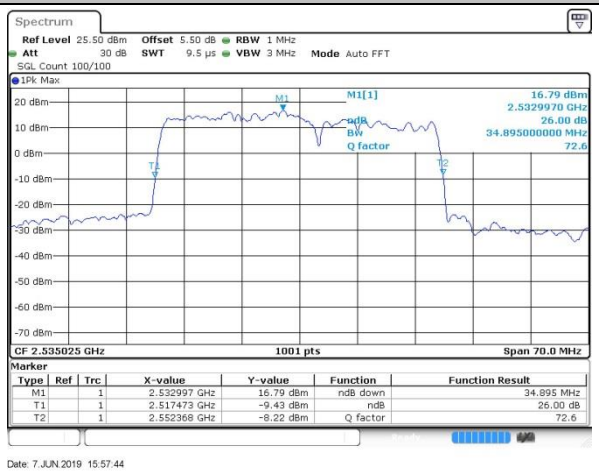
Lowest Channel / 20MHz+15MHz



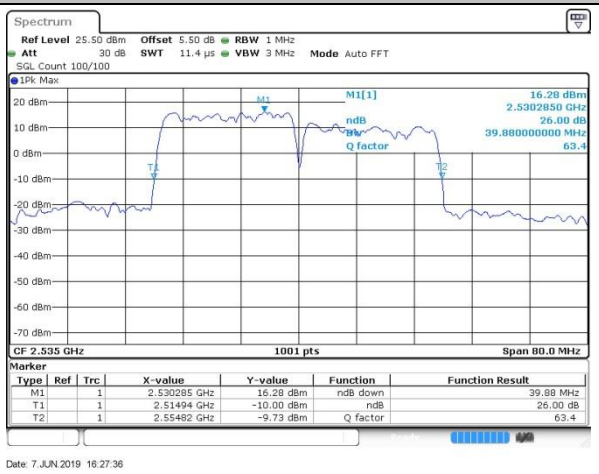
Lowest Channel / 20MHz+20MHz



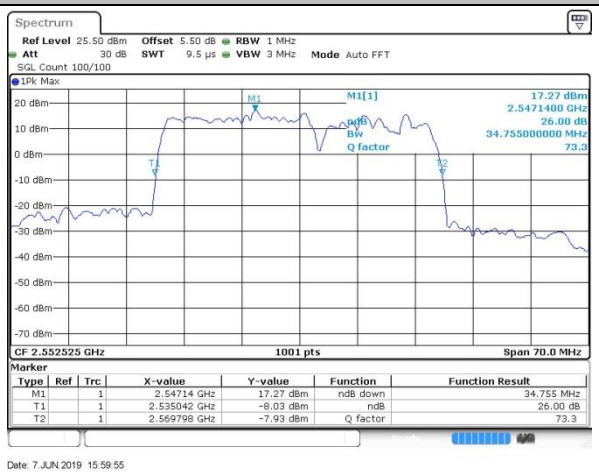
Middle Channel / 20MHz+15MHz



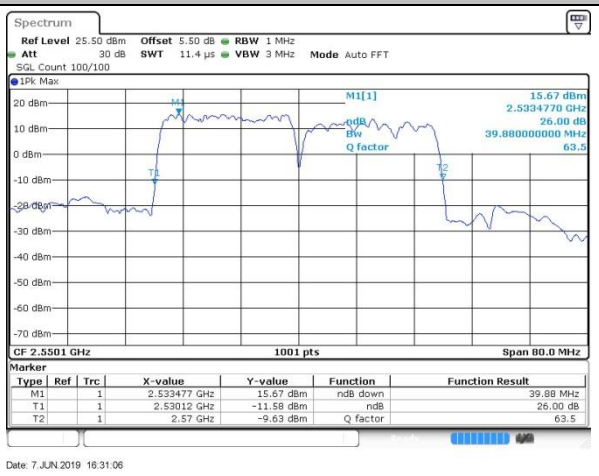
Middle Channel / 20MHz+20MHz



Highest Channel / 20MHz+15MHz



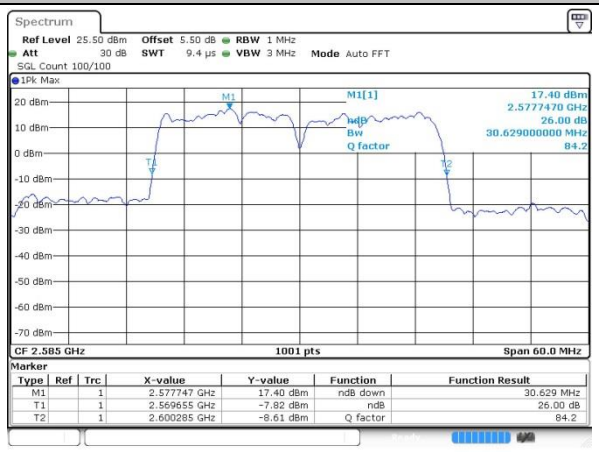
Highest Channel / 20MHz+20MH



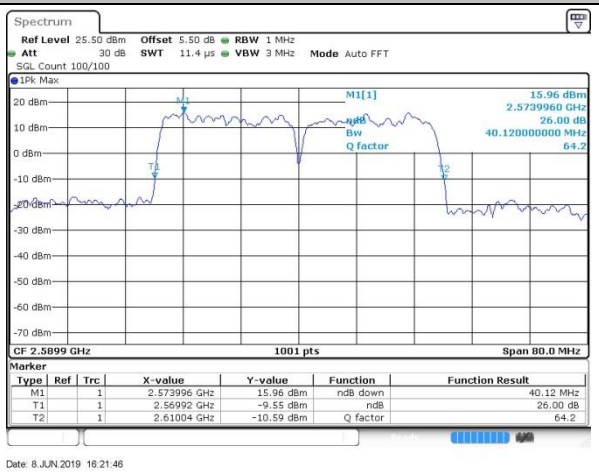
LTE Band 38

QPSK

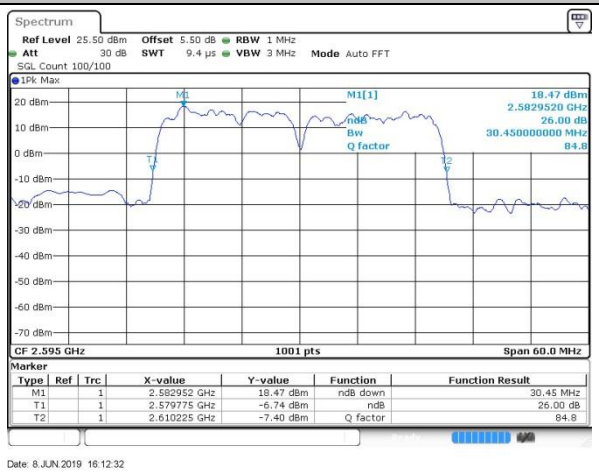
Lowest Channel / 15MHz+15MHz



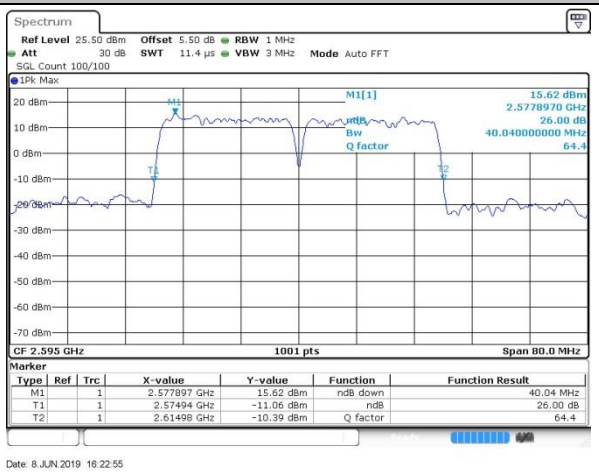
Lowest Channel / 20MHz+20MHz



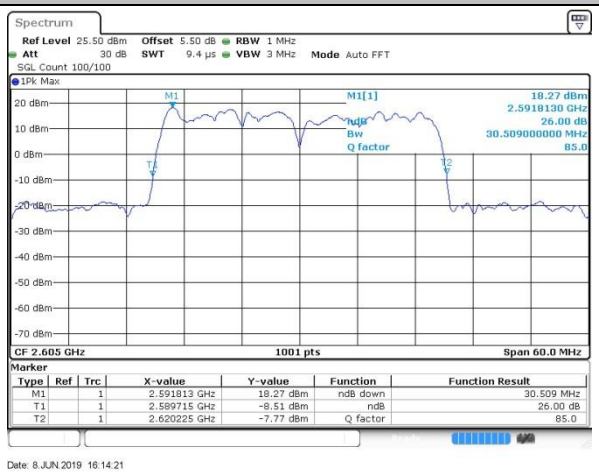
Middle Channel / 15MHz+15MHz



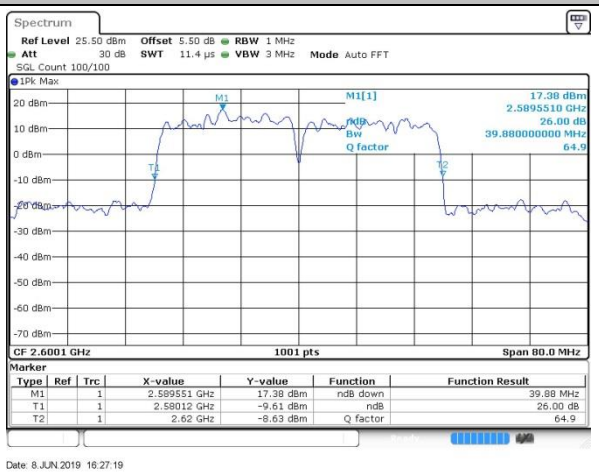
Middle Channel / 20MHz+20MHz



Highest Channel / 15MHz+15MHz



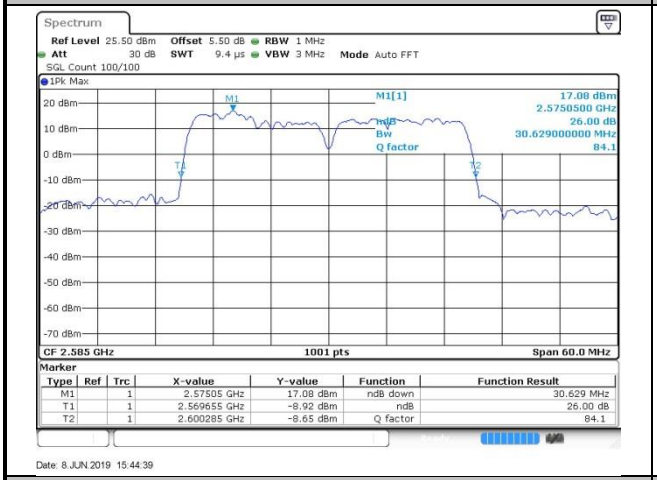
Highest Channel / 20MHz+20MHz



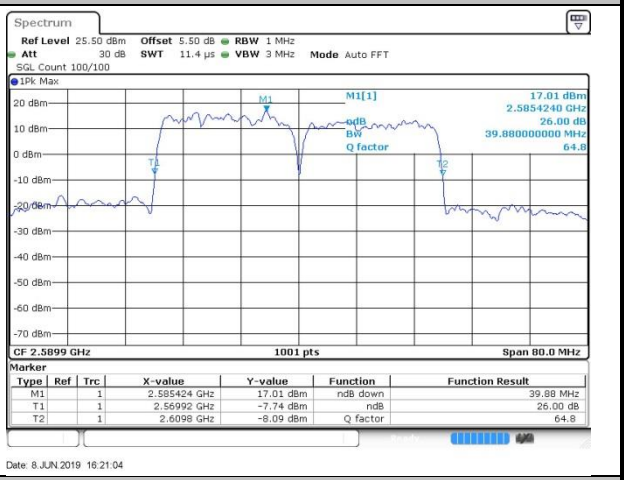
LTE Band 38

16QAM

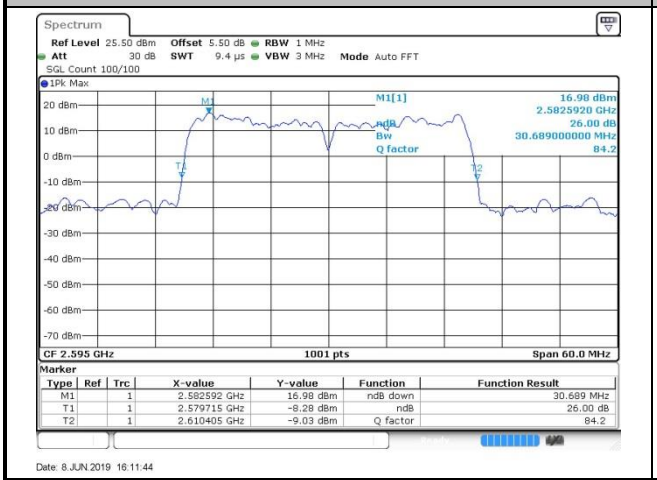
Lowest Channel / 15MHz+15MHz



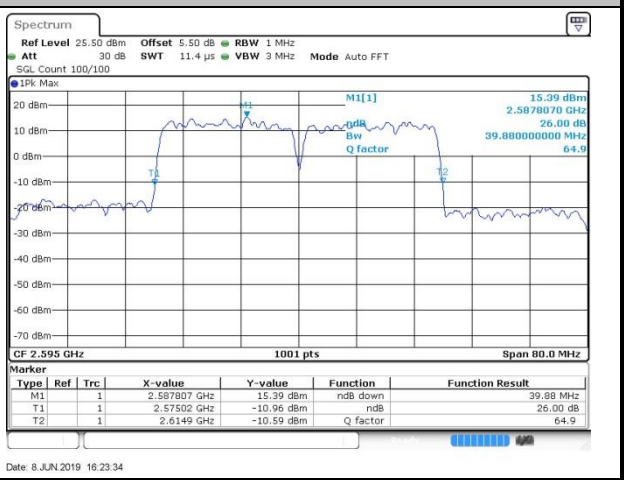
Lowest Channel / 20MHz+20MHz



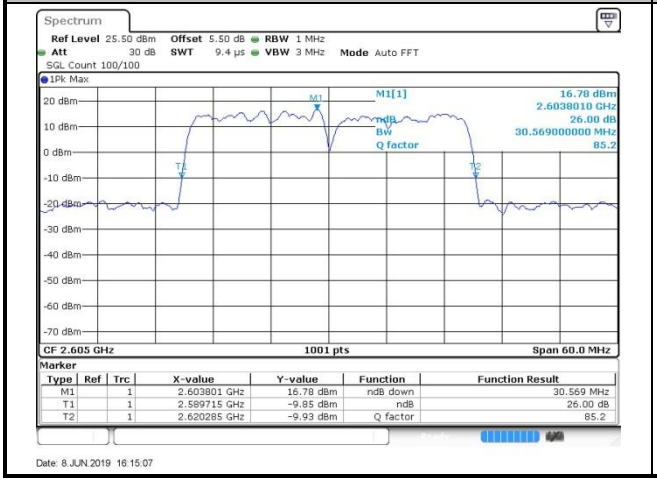
Middle Channel / 15MHz+15MHz



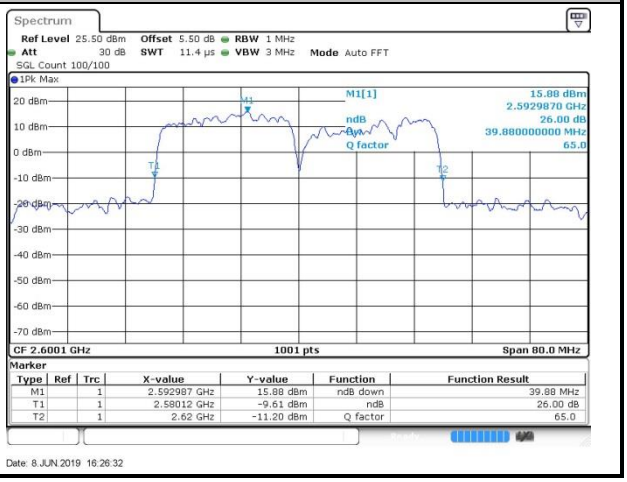
Middle Channel / 20MHz+20MHz



Highest Channel / 15MHz+15MHz



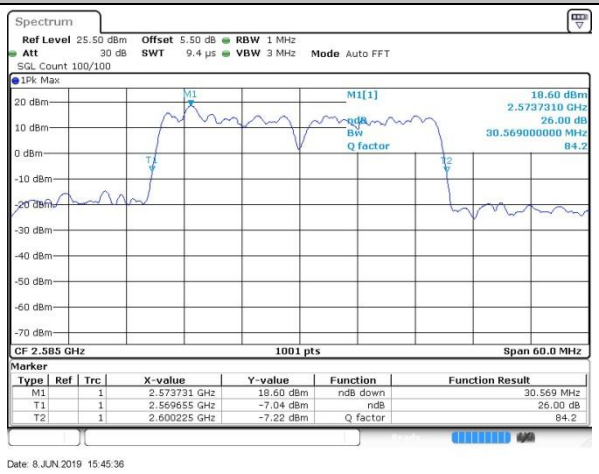
Highest Channel / 20MHz+20MHz



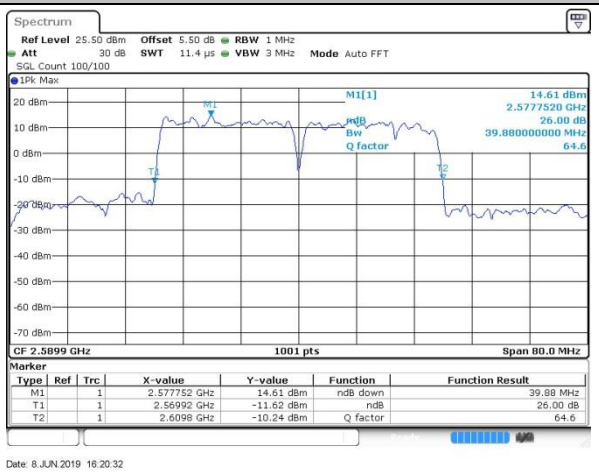
LTE Band 38

64QAM

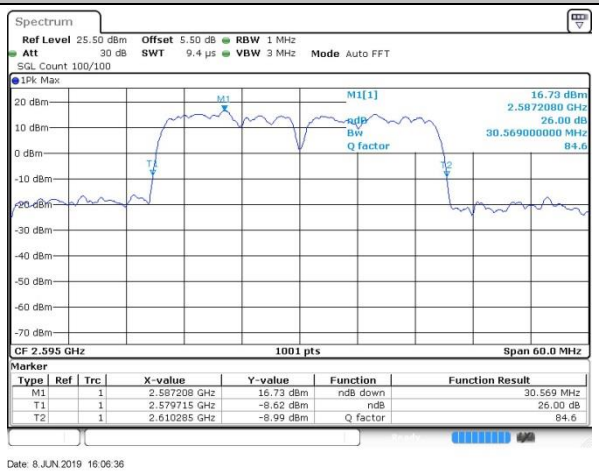
Lowest Channel / 15MHz+15MHz



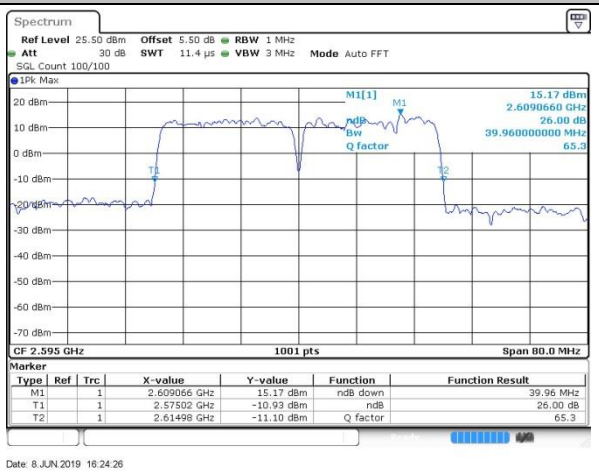
Lowest Channel / 20MHz+20MHz



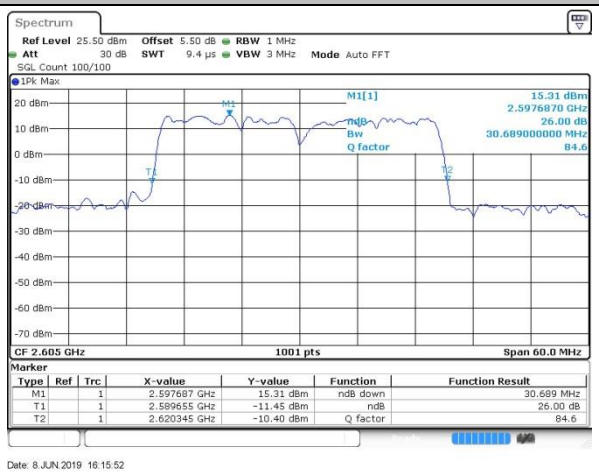
Middle Channel / 15MHz+15MHz



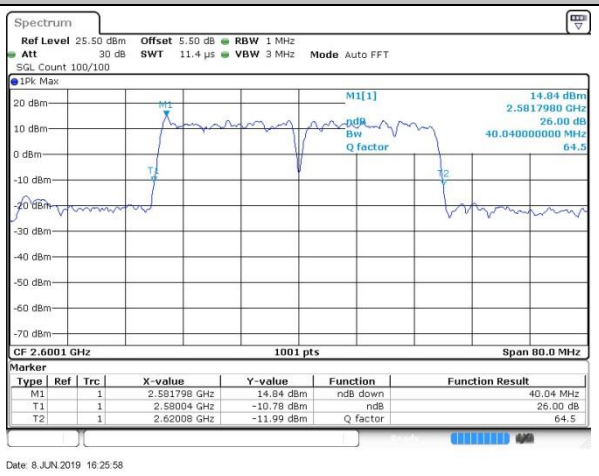
Middle Channel / 20MHz+20MHz



Highest Channel / 15MHz+15MHz



Highest Channel / 20MHz+20MHz



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	2.71	2.70	4.53	4.50	9.03	9.01	13.40	13.49	18.42	18.54
Middle CH	1.09	1.09	2.73	2.72	4.48	4.51	9.05	9.03	13.43	13.43	18.30	18.30
Highest CH	1.10	1.10	2.73	2.73	4.50	4.49	9.07	9.03	13.43	13.43	18.30	18.38
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		4.49		9.05		13.43		18.38	
Middle CH	1.09		2.72		4.51		9.01		13.43		18.34	
Highest CH	1.09		2.71		4.51		9.05		13.49		18.54	

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	1.10	2.72	2.73	4.48	4.50	9.03	9.01	13.46	13.40	18.22	18.38
Middle CH	1.09	1.09	2.72	2.75	4.51	4.51	9.09	9.03	13.46	13.46	18.22	18.46
Highest CH	1.10	1.10	2.73	2.73	4.51	4.49	9.03	9.03	13.46	13.40	18.26	18.30
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.10		2.72		4.50		9.05		13.43		18.30	
Middle CH	1.09		2.72		4.52		9.05		13.46		18.30	
Highest CH	1.10		2.72		4.51		9.03		13.37		18.22	

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	1.08	1.09	2.73	2.73	4.49	4.50	9.05	9.01				
Middle CH	1.09	1.09	2.75	2.71	4.49	4.53	9.01	9.05				
Highest CH	1.09	1.09	2.73	2.70	4.50	4.48	9.01	8.99				
Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz					
Mod.	64QAM		64QAM		64QAM		64QAM					
Lowest CH	1.08		2.72		4.50		9.03					
Middle CH	1.08		2.72		4.51		9.07					
Highest CH	1.09		2.71		4.52		9.01					

Mode	LTE Band 7 : 99%OBW(MHz)											
BW	5MHz		10MHz		15MHz		20MHz		5MHz	10MHz	15MHz	20MHz
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM	64QAM	64QAM
Lowest CH	4.50	4.50	9.01	9.03	13.43	13.37	18.18	18.22	4.48	8.99	13.40	18.38
Middle CH	4.50	4.50	8.99	9.01	13.49	13.46	18.22	18.38	4.49	8.97	13.40	18.42
Highest CH	4.48	4.50	9.03	9.09	13.49	13.46	18.50	18.38	4.51	8.99	13.46	18.42

Mode	LTE Band 38 : 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					4.48	4.50	9.01	8.99	13.40	13.43	18.38	18.50
Middle CH					4.50	4.47	9.07	9.05	13.43	13.46	18.30	18.26
Highest CH					4.49	4.50	9.03	9.07	13.43	13.43	18.38	18.30
Mode	LTE Band 38 : 99%OBW(MHz)											
BW					5MHz		10MHz		15MHz		20MHz	
Mod.					64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50		9.03		13.37		18.34	
Middle CH	-	-	-	-	4.49		9.01		13.46		18.46	
Highest CH	-	-	-	-	4.49		9.03		13.40		18.26	

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	28.53
Middle CH	27.81		23.18	28.47
Highest CH	27.93		23.43	28.35
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.94	27.93	32.59	37.48
Middle CH	32.73	27.93	32.66	37.24
Highest CH	32.45	27.99	32.73	37.48

Mode	LTE Band 7 : 99%OBW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	28.05		23.38	28.23
Middle CH	28.11		23.28	28.29
Highest CH	27.93		23.53	28.71
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.80	27.99	32.94	37.48
Middle CH	32.66	27.99	32.52	37.56
Highest CH	32.87	27.87	32.73	37.48

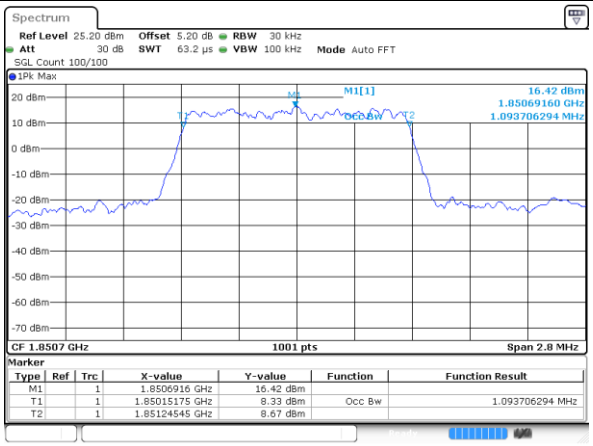
Mode	LTE Band 7 : 99%OBW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	27.81		23.43	28.65
Middle CH	27.93		23.18	28.65
Highest CH	27.99		23.48	28.41
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.73	27.99	32.66	37.40
Middle CH	32.66	27.51	32.73	37.32
Highest CH	32.80	27.99	32.52	37.56

Mode	LTE Band 38 : 99%OBW(MHz)			
Mod.	QPSK		16QAM	
BW	15MHz+15MHz	20MHz+20MHz	15MHz+15MHz	20MHz+20MHz
Lowest CH	28.71	37.80	28.77	37.72
Middle CH	28.71	37.96	28.53	37.88
Highest CH	28.71	37.80	28.71	37.88

Mode	LTE Band 38 : 99%OBW(MHz)			
Mod.	64QAM		-	
BW	15MHz+15MHz	20MHz+20MHz	-	-
Lowest CH	28.65	37.88	-	-
Middle CH	28.53	37.80	-	-
Highest CH	28.65	38.04	-	--

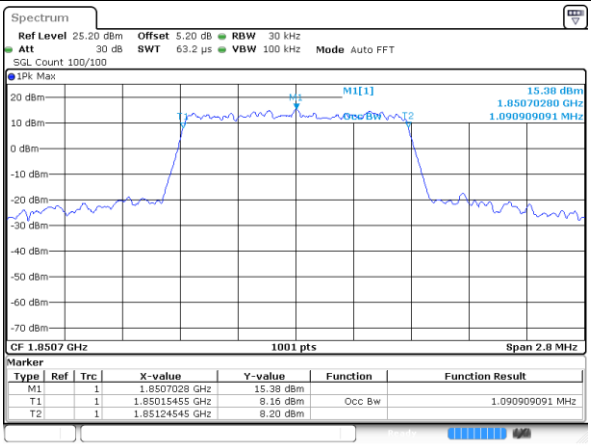
LTE Band 2

Lowest Channel / 1.4MHz / QPSK



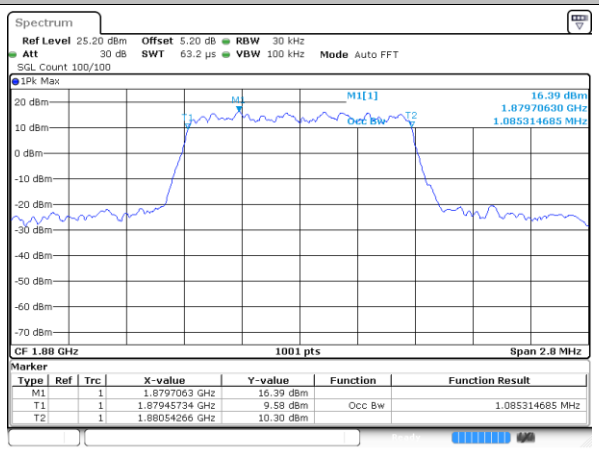
Date: 25.MAY.2019 01:12:28

Lowest Channel / 1.4MHz / 16QAM



Date: 25.MAY.2019 01:12:38

Middle Channel / 1.4MHz / QPSK



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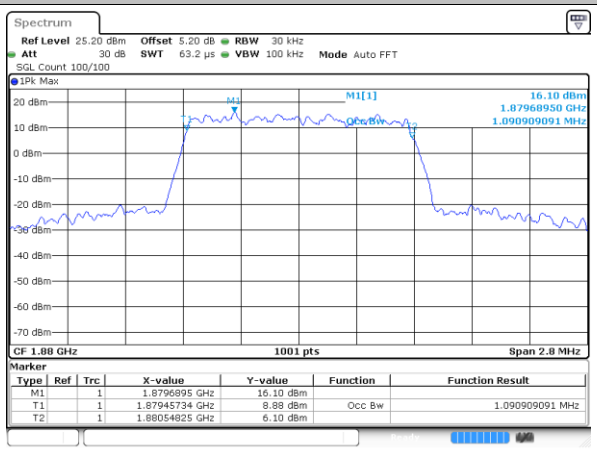
Middle Channel / 1.4MHz / 16QAM



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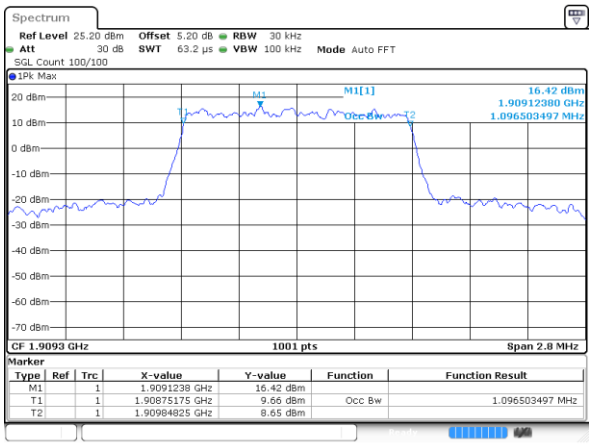
Highest Channel / 1.4MHz / QPSK



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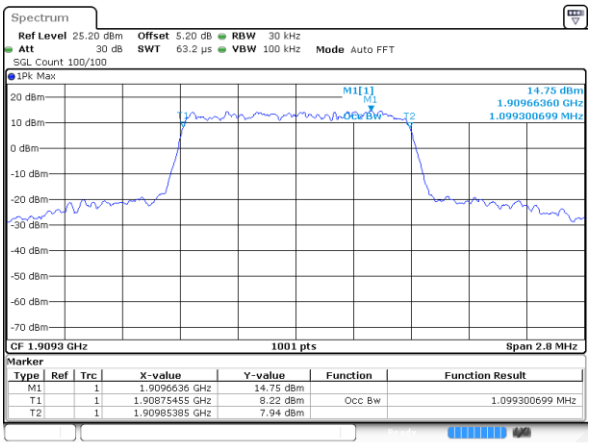
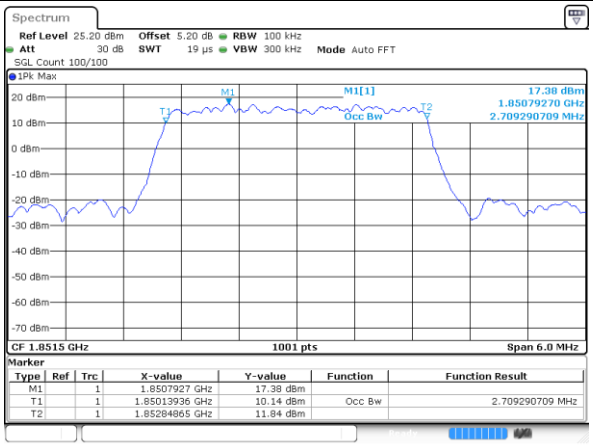
Highest Channel / 1.4MHz / 16QAM



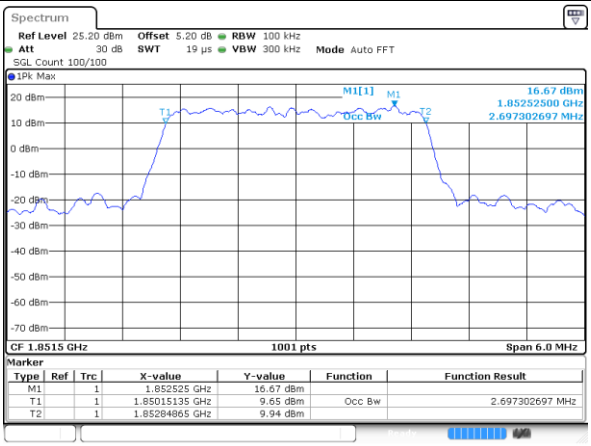
Date: 25.MAY.2019 01:24:38

LTE Band 2

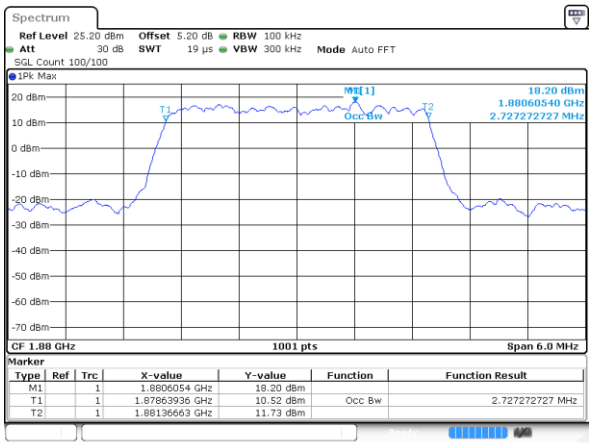
Lowest Channel / 3MHz / QPSK



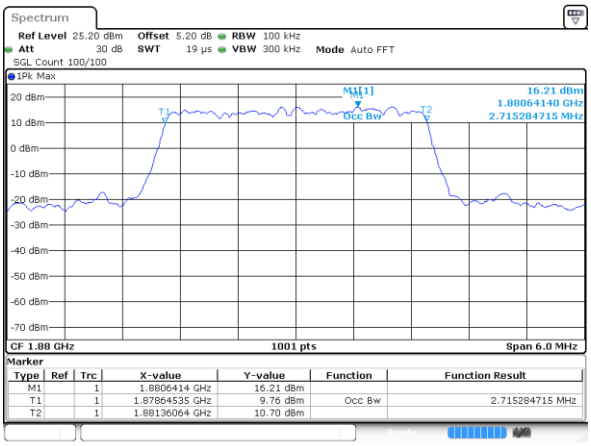
Lowest Channel / 3MHz / 16QAM



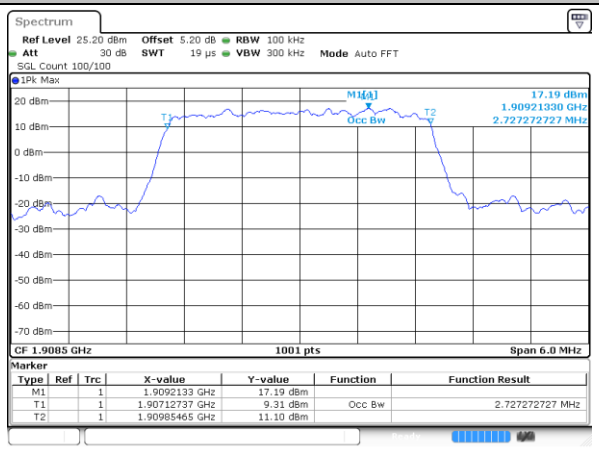
Middle Channel / 3MHz / QPSK



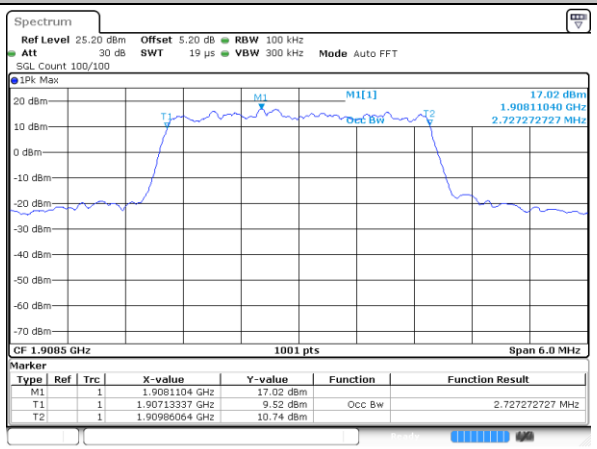
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

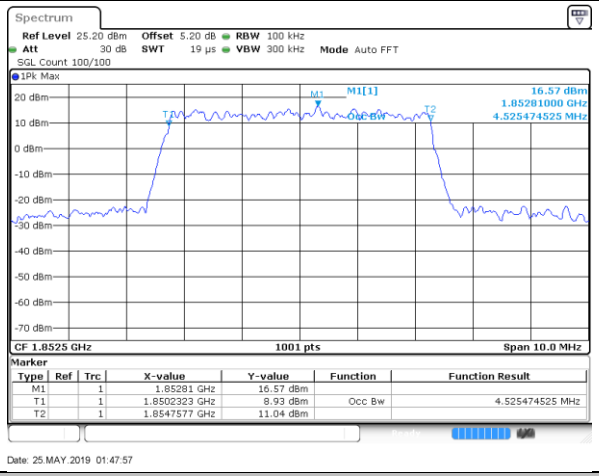


Highest Channel / 3MHz / 16QAM

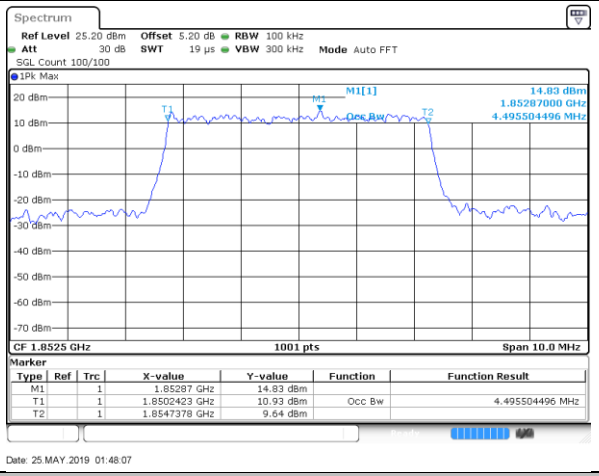


LTE Band 2

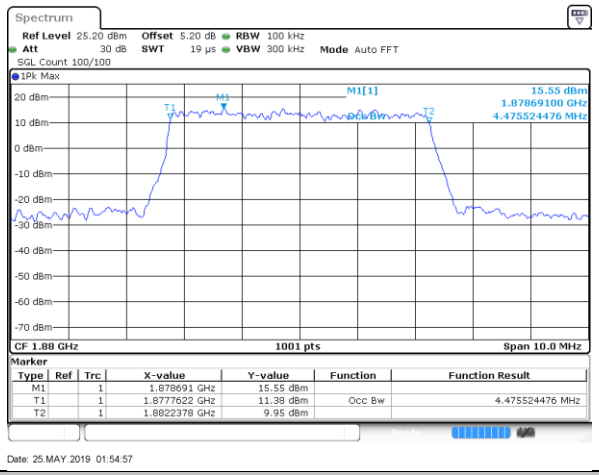
Lowest Channel / 5MHz / QPSK



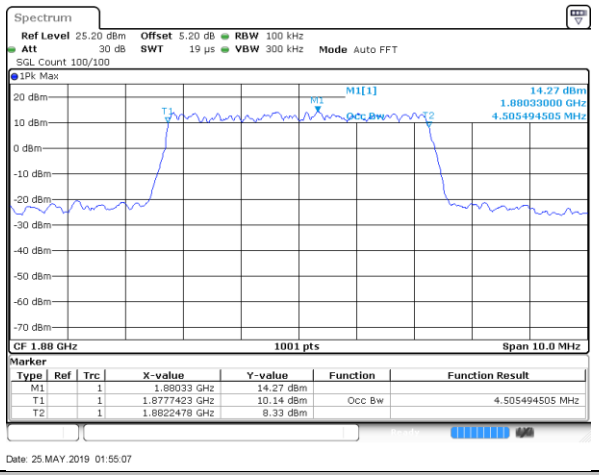
Lowest Channel / 5MHz / 16QAM



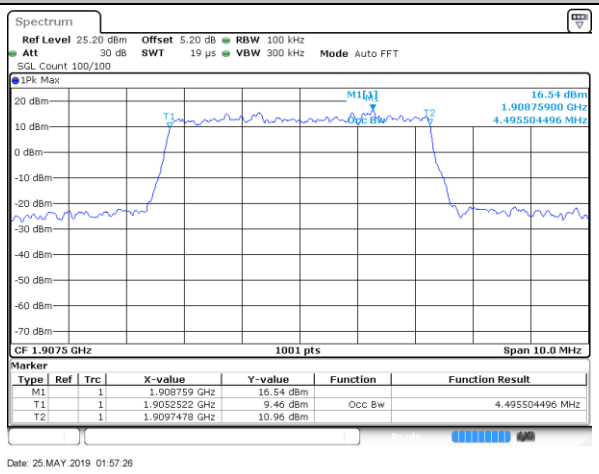
Middle Channel / 5MHz / QPSK



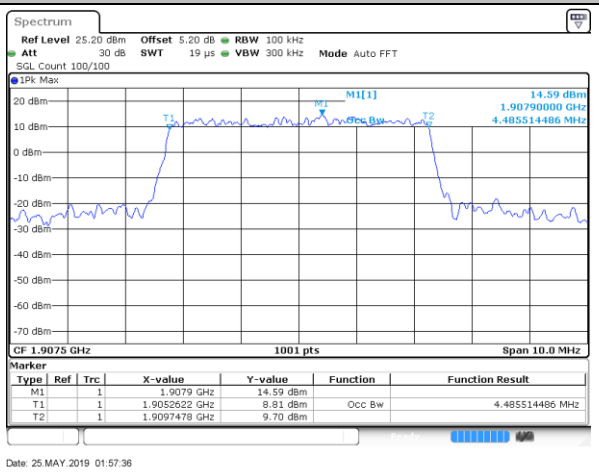
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

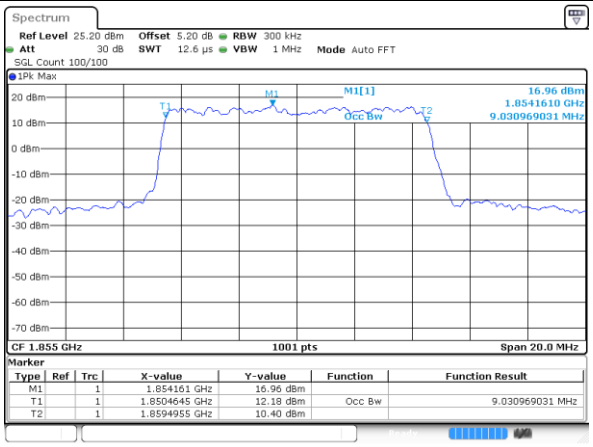


Highest Channel / 5MHz / 16QAM

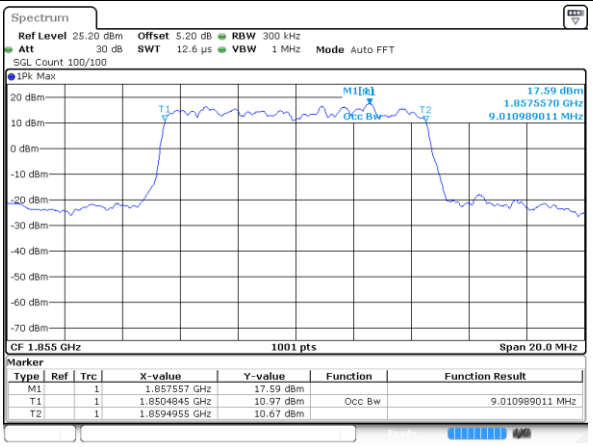


LTE Band 2

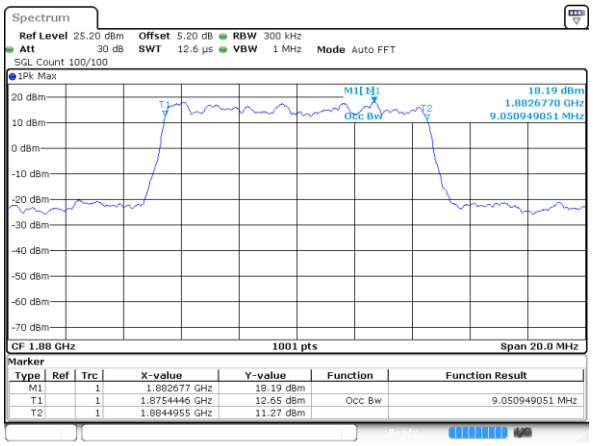
Lowest Channel / 10MHz / QPSK



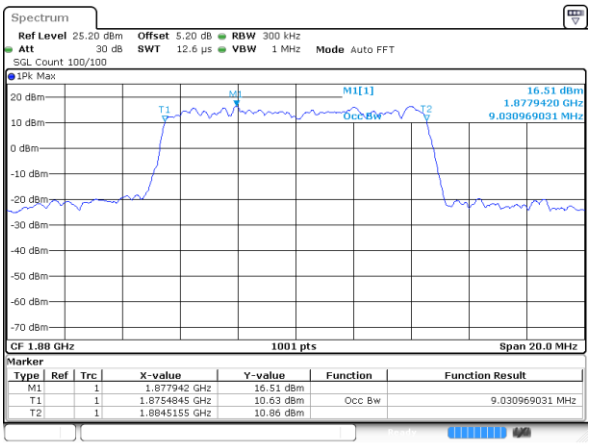
Lowest Channel / 10MHz / 16QAM



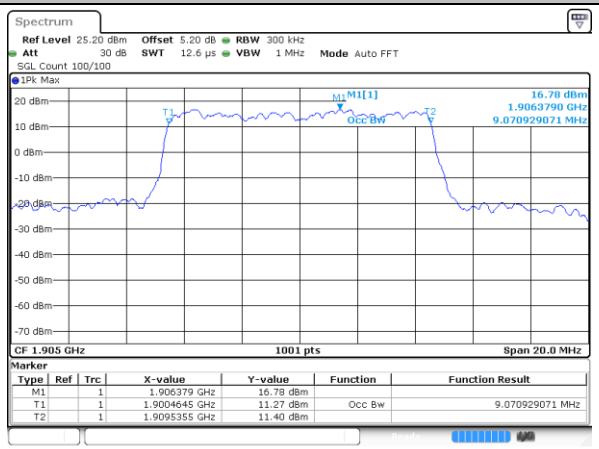
Middle Channel / 10MHz / QPSK



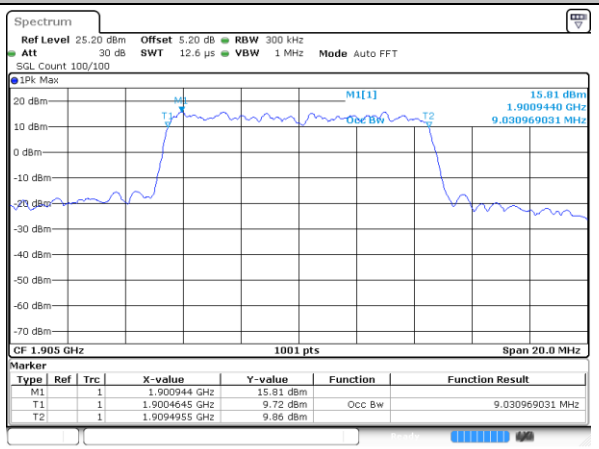
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

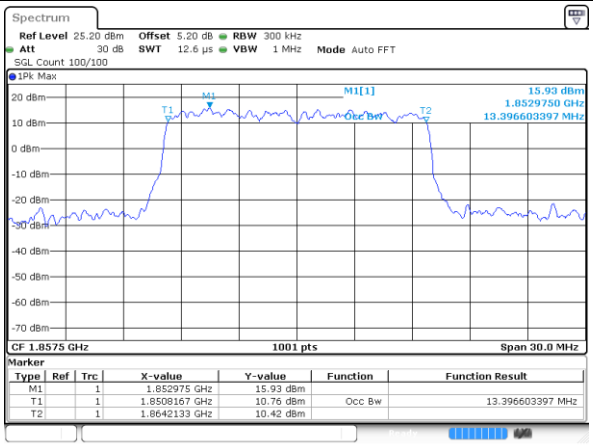


Highest Channel / 10MHz / 16QAM

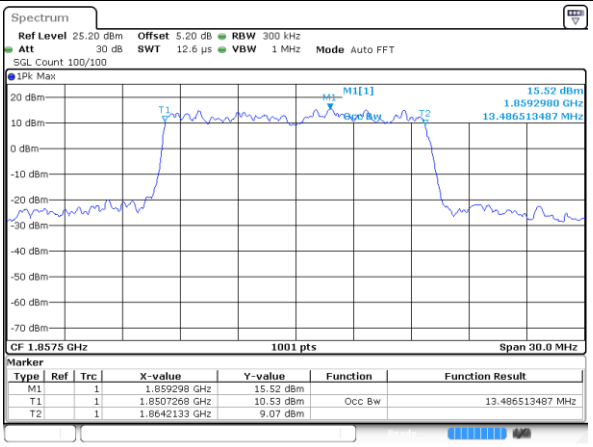


LTE Band 2

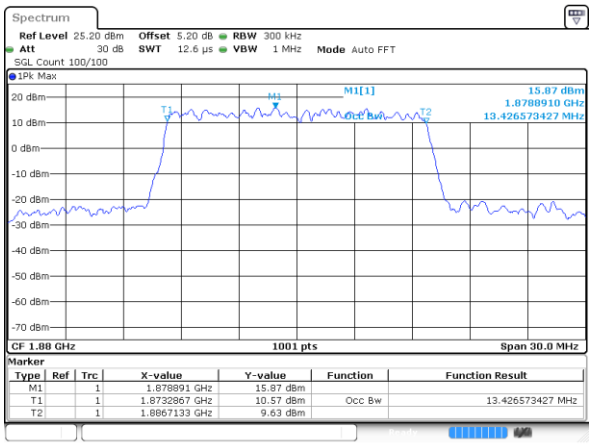
Lowest Channel / 15MHz / QPSK



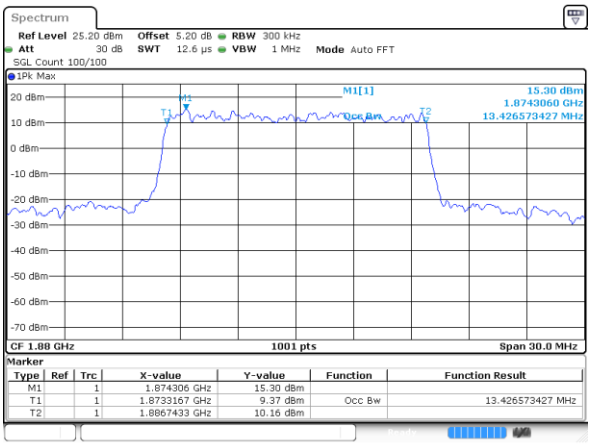
Lowest Channel / 15MHz / 16QAM



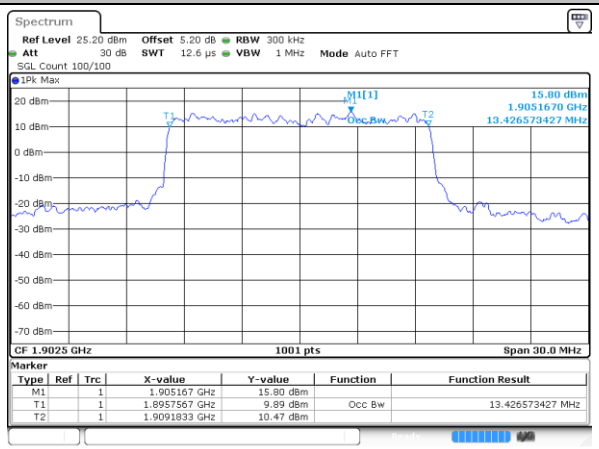
Middle Channel / 15MHz / QPSK



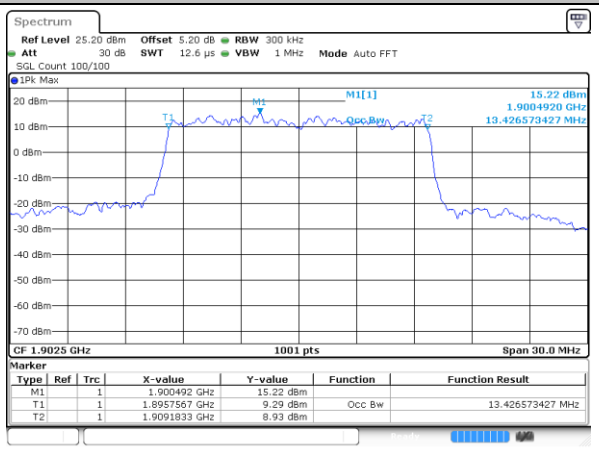
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

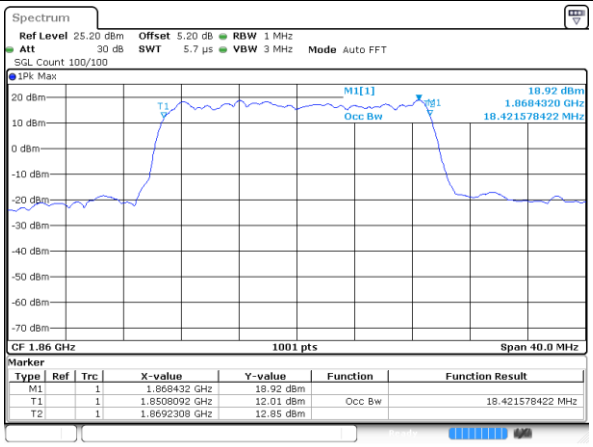


Highest Channel / 15MHz / 16QAM



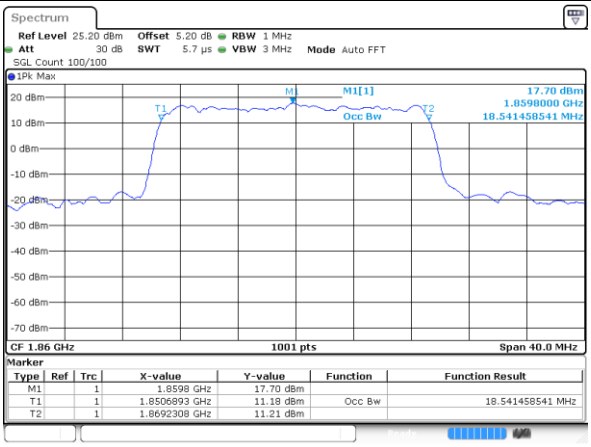
LTE Band 2

Lowest Channel / 20MHz / QPSK



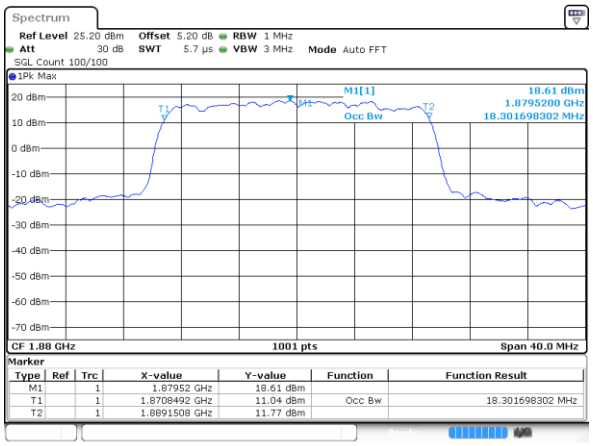
Date: 25.MAY.2019 02:37:24

Lowest Channel / 20MHz / 16QAM



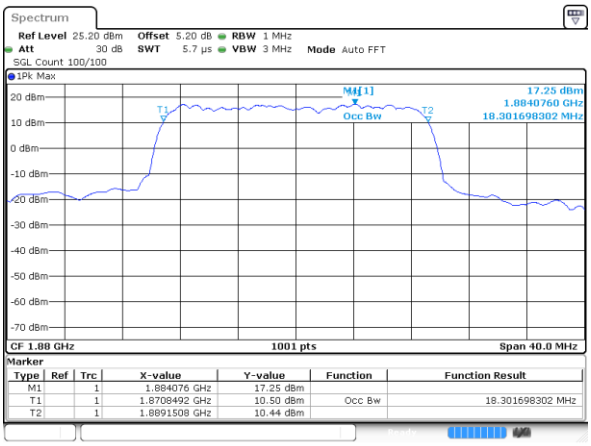
Date: 25.MAY.2019 02:37:34

Middle Channel / 20MHz / QPSK



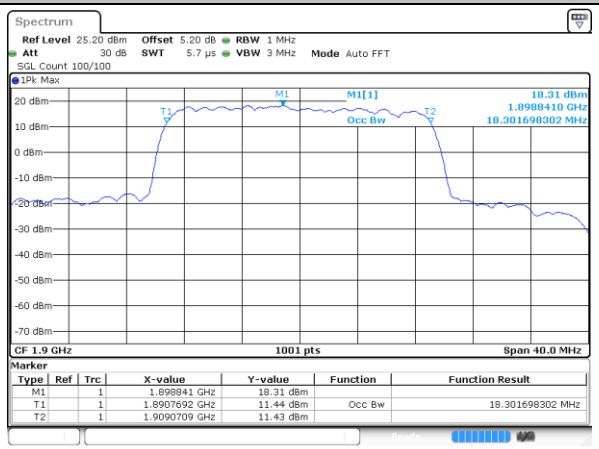
Date: 25.MAY.2019 02:44:24

Middle Channel / 20MHz / 16QAM



Date: 25.MAY.2019 02:44:34

Highest Channel / 20MHz / QPSK



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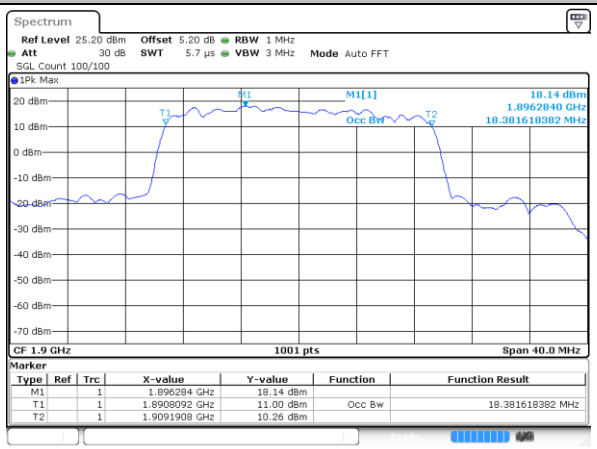
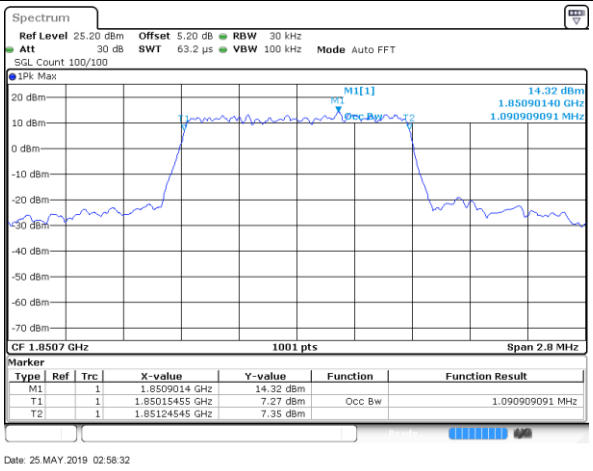
Highest Channel / 20MHz / 16QAM



Date: 25.MAY.2019 02:47:03

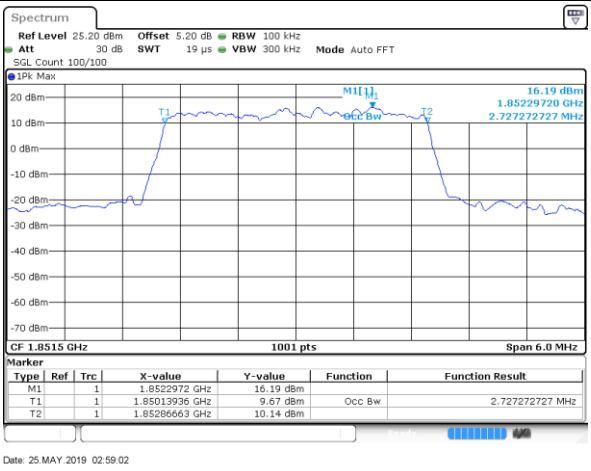
LTE Band 2

Lowest Channel / 1.4MHz / 64QAM



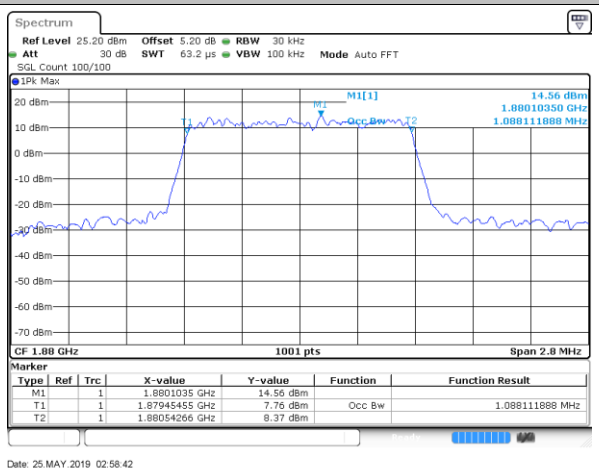
Date: 25.MAY.2019 02:58:32

Lowest Channel / 3MHz / 64QAM



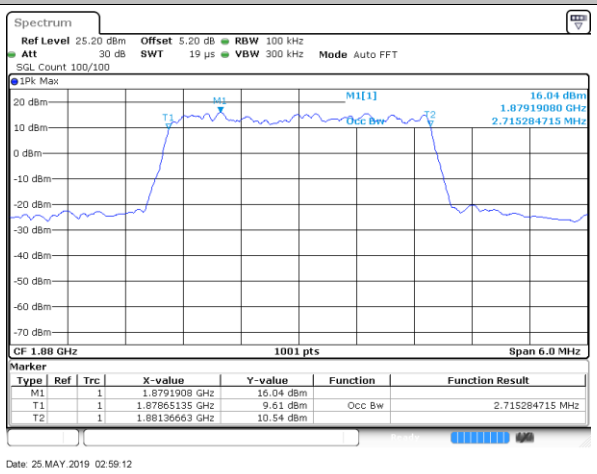
Date: 25.MAY.2019 02:59:02

Middle Channel / 1.4MHz / 64QAM



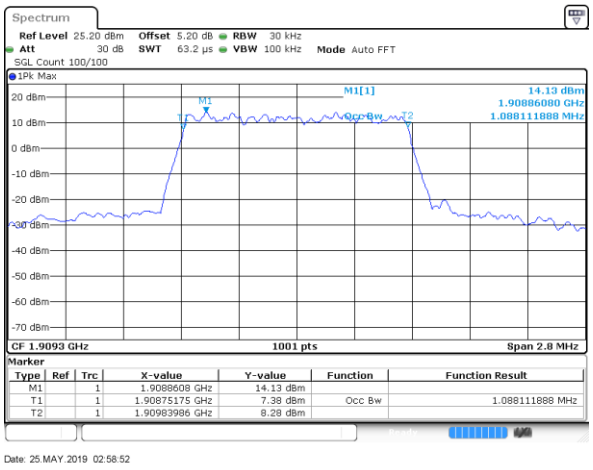
Date: 25.MAY.2019 02:58:42

Middle Channel / 3MHz / 64QAM



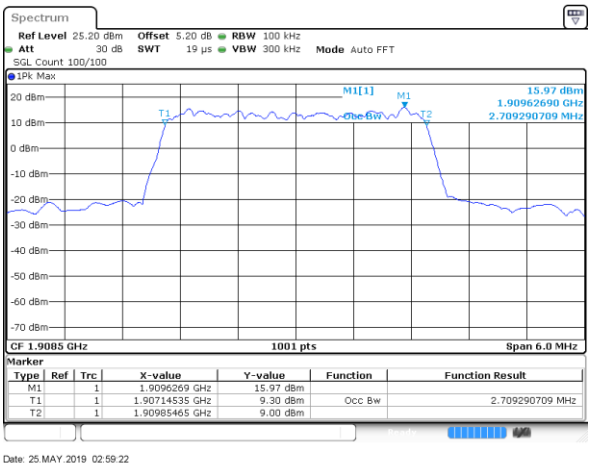
Date: 25.MAY.2019 02:59:12

Highest Channel / 1.4MHz / 64QAM



Date: 25.MAY.2019 02:58:52

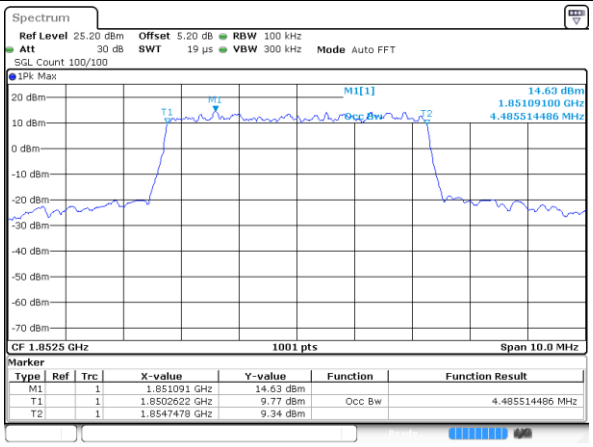
Highest Channel / 3MHz / 64QAM



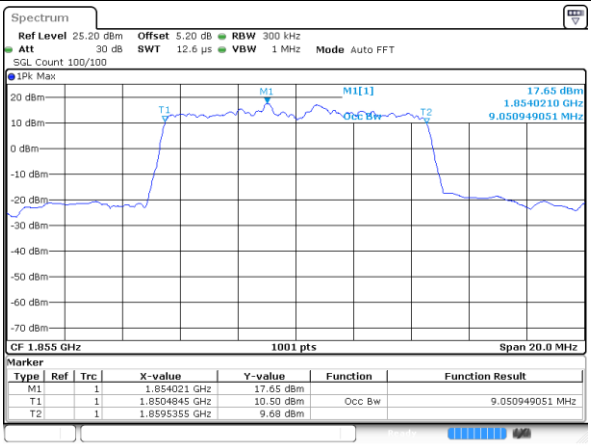
Date: 25.MAY.2019 02:59:22

LTE Band 2

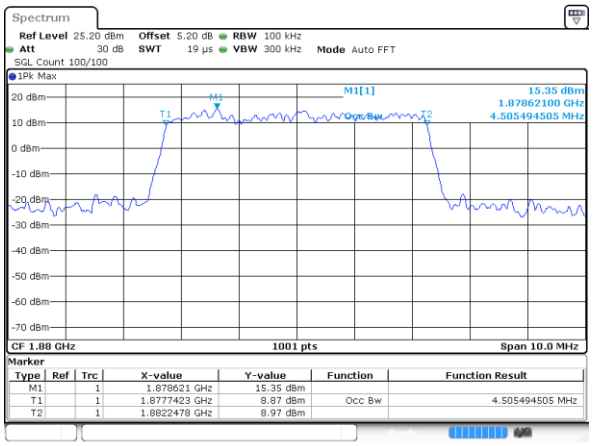
Lowest Channel / 5MHz / 64QAM



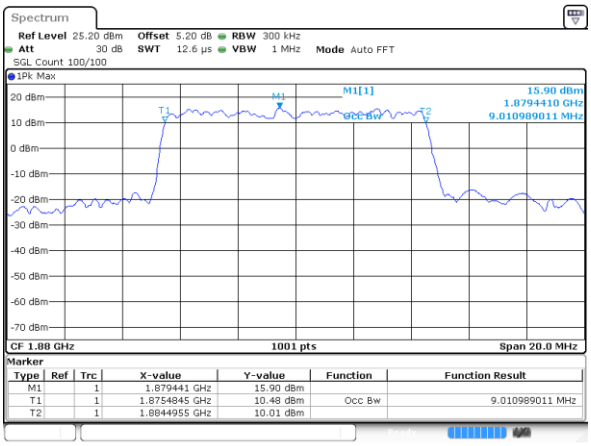
Lowest Channel / 10MHz / 64QAM



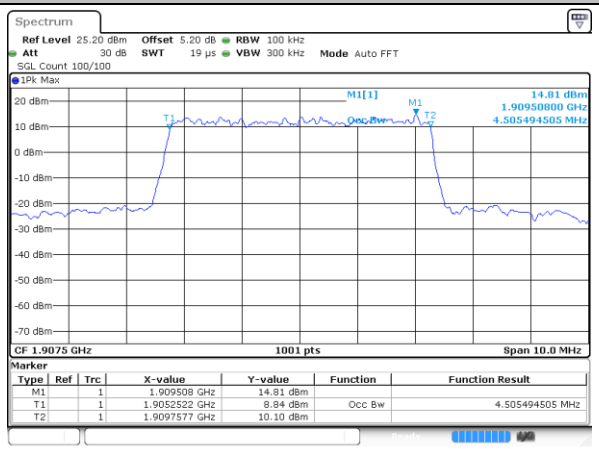
Middle Channel / 5MHz / 64QAM



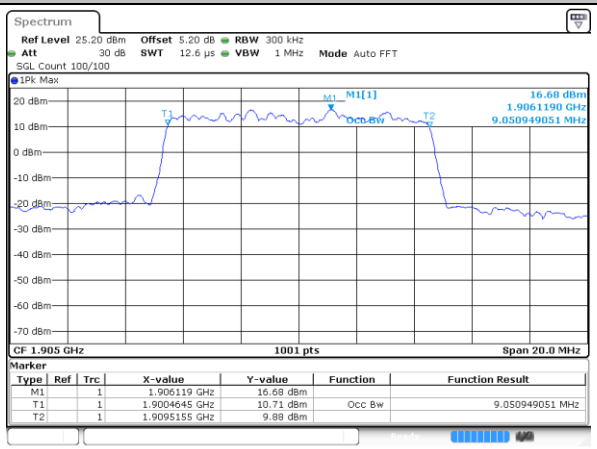
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

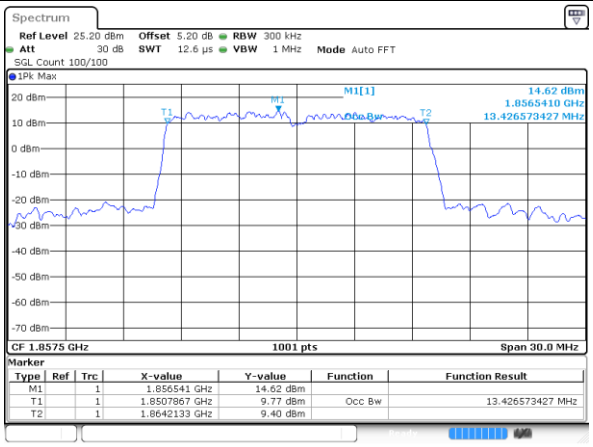


Highest Channel / 10MHz / 64QAM



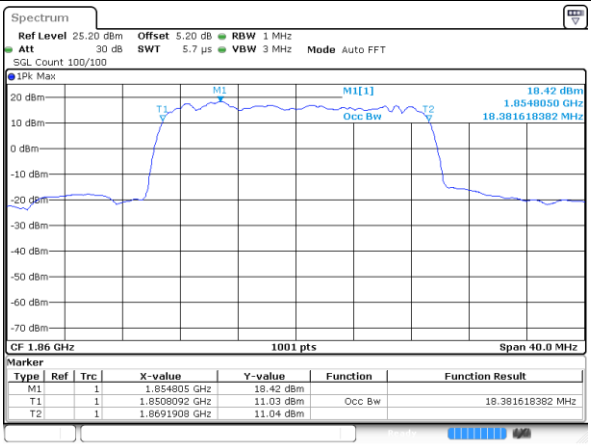
LTE Band 2

Lowest Channel / 15MHz / 64QAM



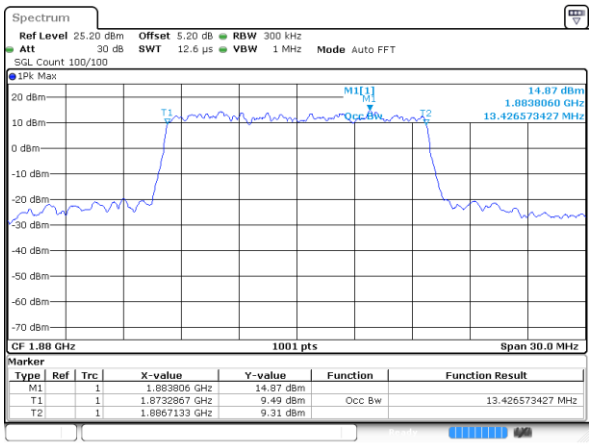
Date: 25.MAY.2019 03:00:32

Lowest Channel / 20MHz / 64QAM



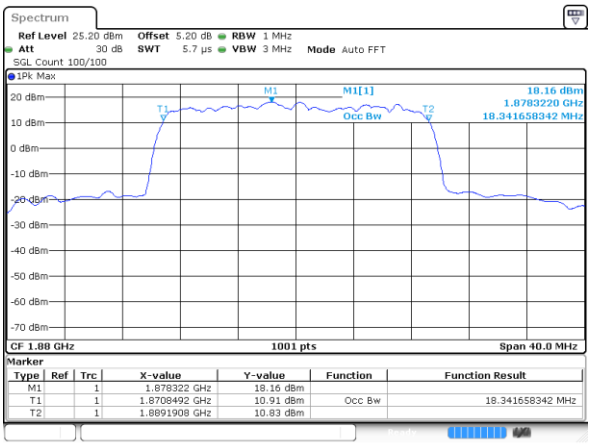
Date: 25.MAY.2019 03:01:03

Middle Channel / 15MHz / 64QAM



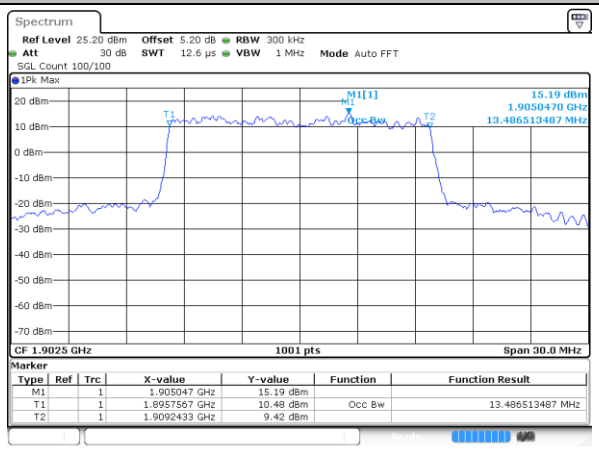
Date: 25.MAY.2019 03:00:43

Middle Channel / 20MHz / 64QAM



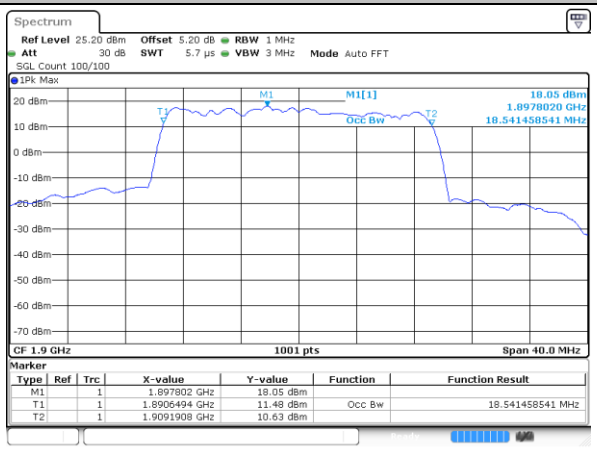
Date: 25.MAY.2019 03:01:13

Highest Channel / 15MHz / 64QAM



Date: 25.MAY.2019 03:00:53

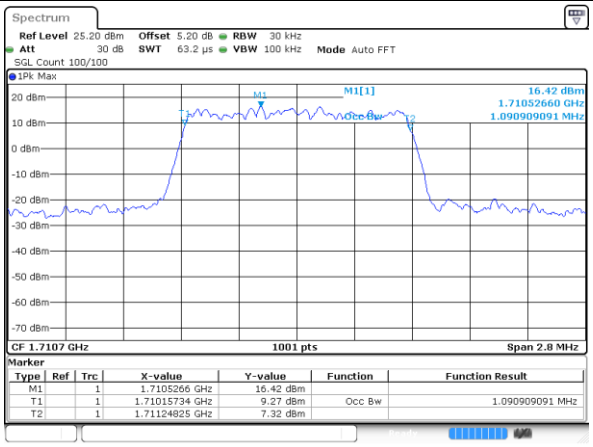
Highest Channel / 20MHz / 64QAM



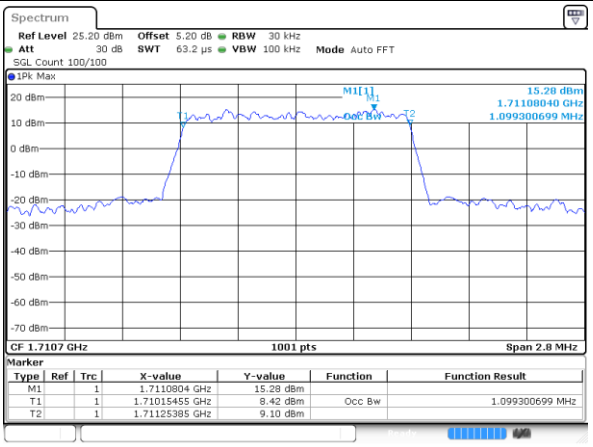
Date: 25.MAY.2019 03:01:23

LTE Band 4

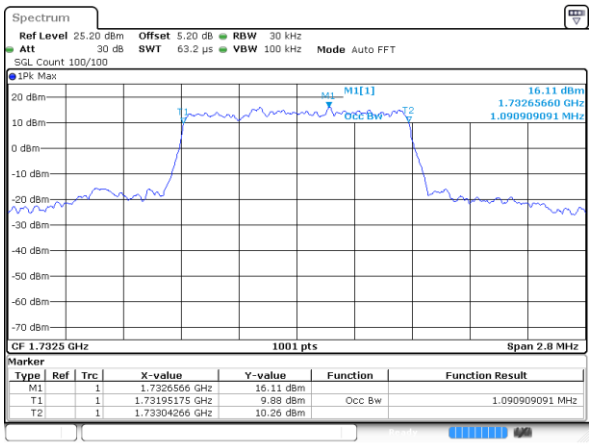
Lowest Channel / 1.4MHz / QPSK



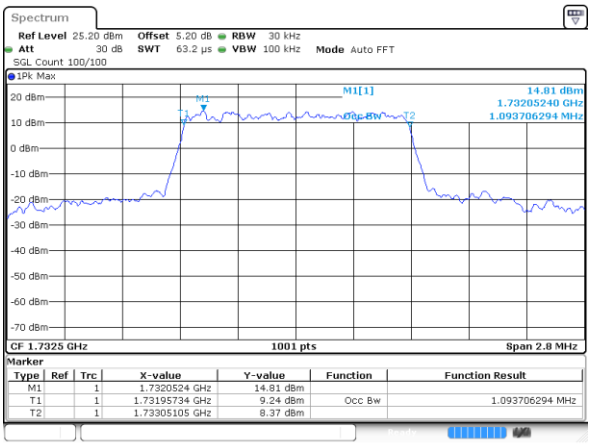
Lowest Channel / 1.4MHz / 16QAM



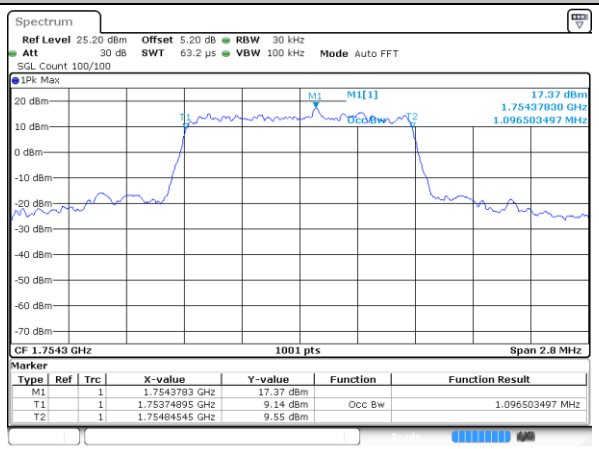
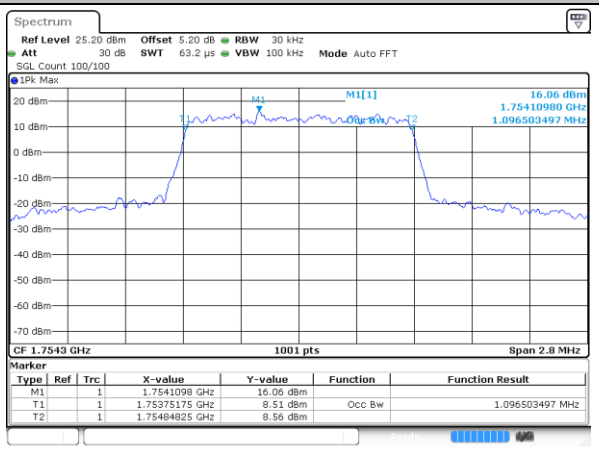
Middle Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



Highest Channel / 1.4MHz / 16QAM