26dB Bandwidth

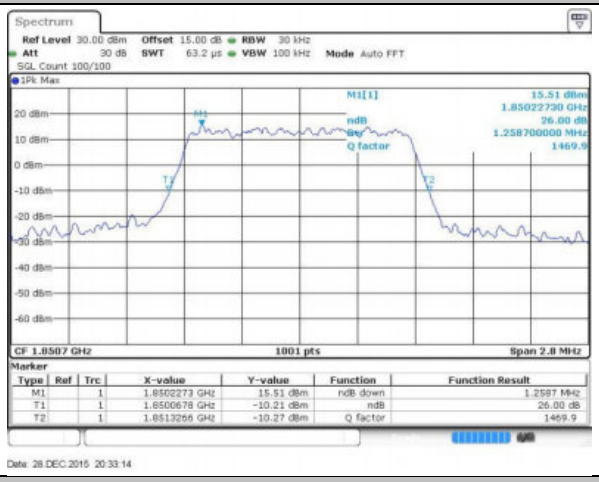
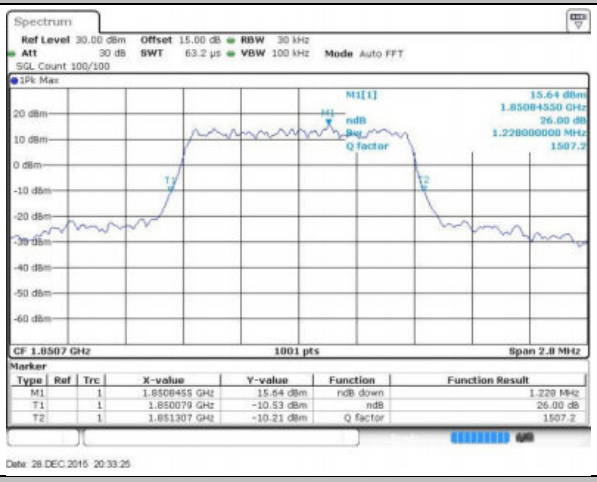
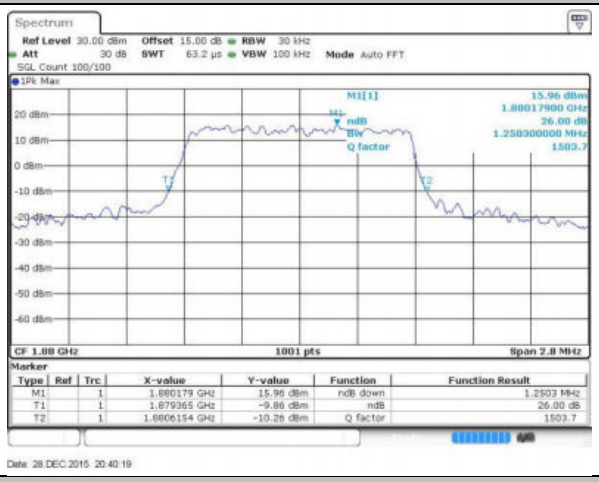
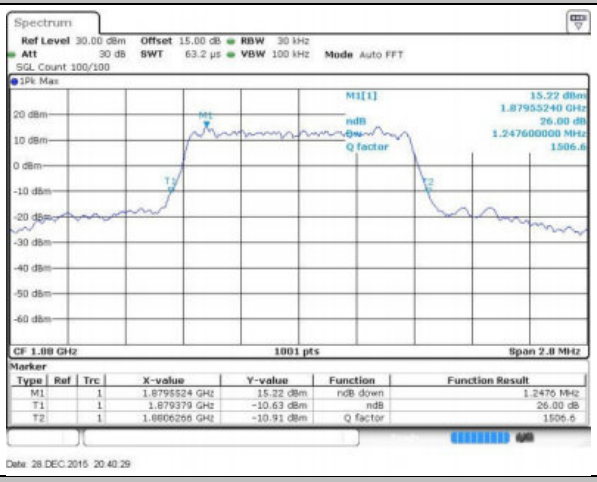
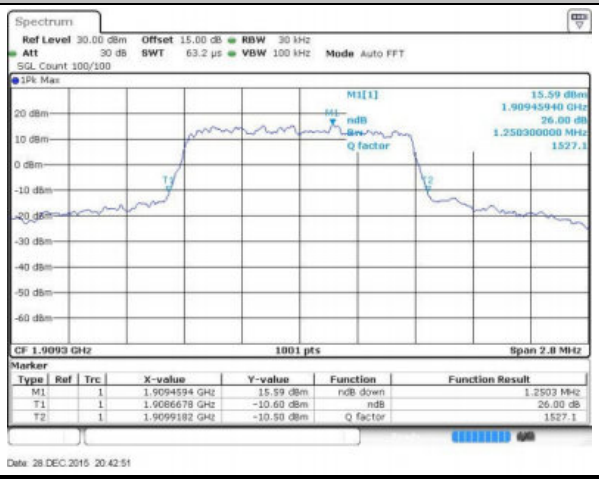
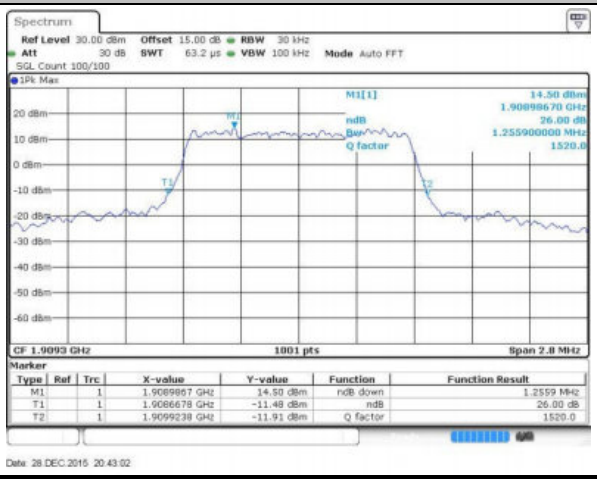
Mode	LTE Band 2 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.26	1.23	3.00	3.03	4.91	4.99	9.65	9.81	14.60	14.57	20.22	20.30
Middle CH	1.25	1.25	2.99	2.98	4.95	5.02	9.87	9.75	14.51	14.27	20.22	20.34
Highest CH	1.25	1.26	3.00	3.04	4.99	4.96	9.91	9.75	14.30	14.45	20.30	20.10

Mode	LTE Band 4 : 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	1.26	1.27	3.02	2.99	4.98	4.98	10.03	9.87	14.72	14.42	20.18	20.30
Middle CH	1.26	1.26	2.99	2.99	4.93	4.94	9.73	9.85	14.42	14.54	20.18	20.22
Highest CH	1.24	1.26	2.99	2.98	5.02	4.93	9.83	9.83	14.54	14.66	20.10	20.14

Mode	LTE Band 7 : 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	-	-	-	-	4.84	4.95	9.75	9.73	14.48	14.45	20.14	20.26
Middle CH	-	-	-	-	4.95	4.99	9.71	10.11	14.24	14.33	20.14	20.14
Highest CH	-	-	-	-	4.97	4.96	9.75	9.95	14.45	14.63	20.22	20.30

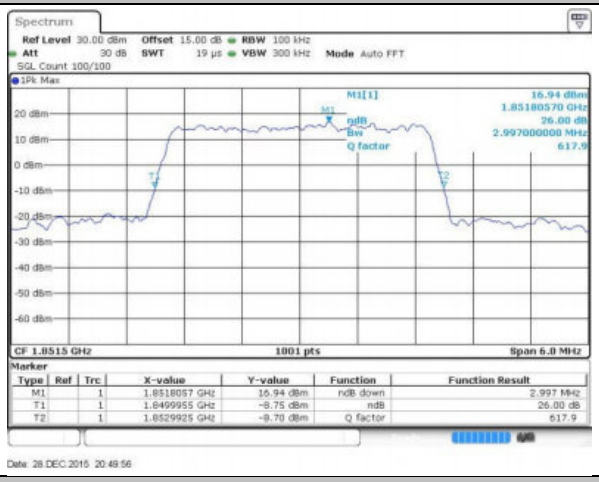
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.25	1.24	2.99	3.00	4.99	4.93	9.69	9.99	-	-	-	-
Middle CH	1.26	1.26	3.03	2.99	5.05	4.94	9.81	9.73	-	-	-	-
Highest CH	1.25	1.23	3.00	2.99	5.05	4.98	9.69	9.77	-	-	-	-

Mode	LTE Band 17 : 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	-	-	-	-	4.94	4.84	9.83	9.91	-	-	-	-
Middle CH	-	-	-	-	5.05	4.95	9.81	10.01	-	-	-	-
Highest CH	-	-	-	-	5.06	5.13	9.83	9.83	-	-	-	-

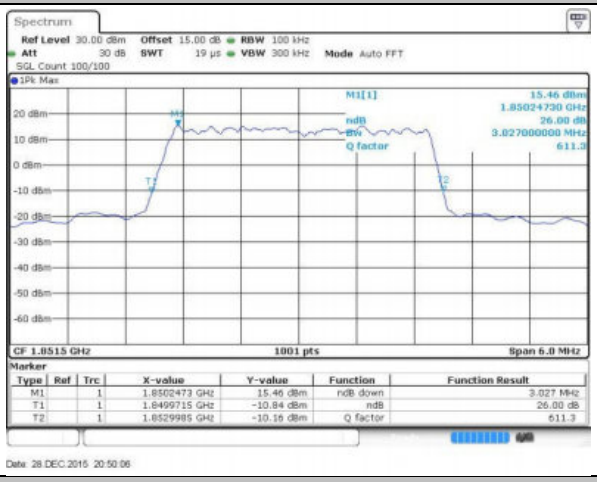
LTE Band 2	
Lowest Channel / 1.4MHz / QPSK	Lowest Channel / 1.4MHz / 16QAM
	
Middle Channel / 1.4MHz / QPSK	Middle Channel / 1.4MHz / 16QAM
	
Highest Channel / 1.4MHz / QPSK	Highest Channel / 1.4MHz / 16QAM
	

LTE Band 2

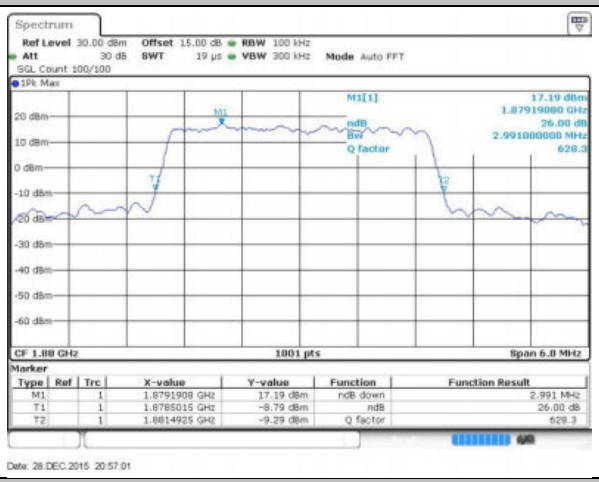
Lowest Channel / 3MHz / QPSK



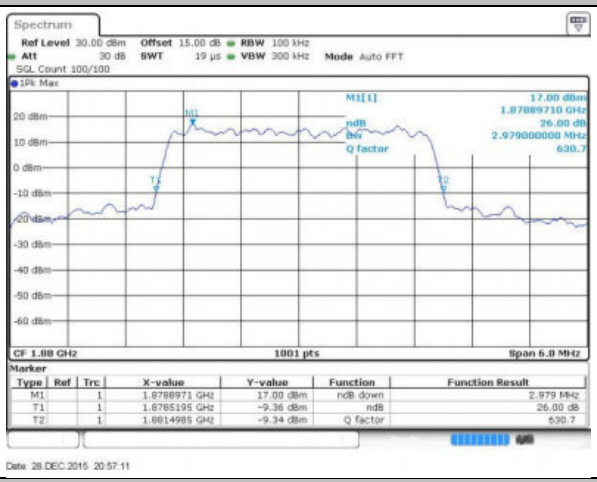
Lowest Channel / 3MHz / 16QAM



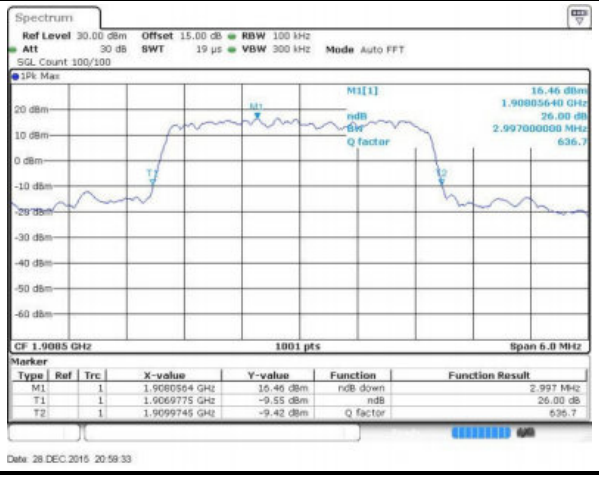
Middle Channel / 3MHz / QPSK



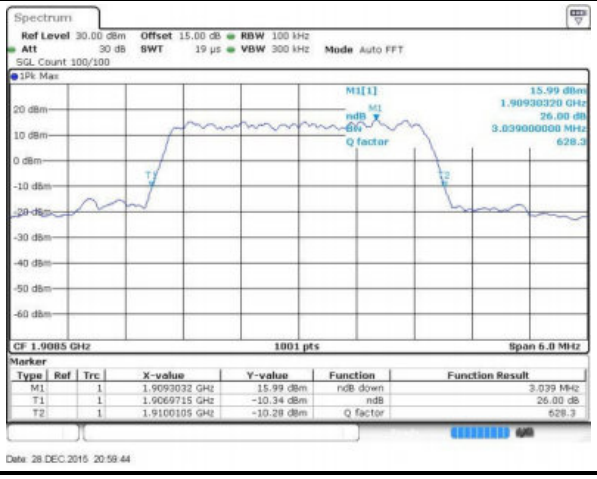
Middle Channel /3MHz / 16QAM

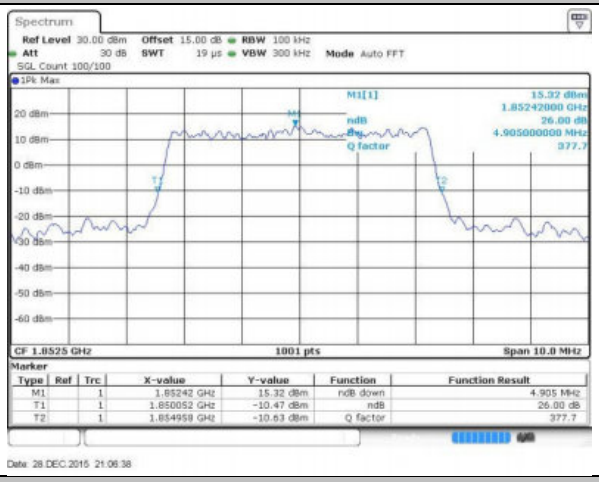
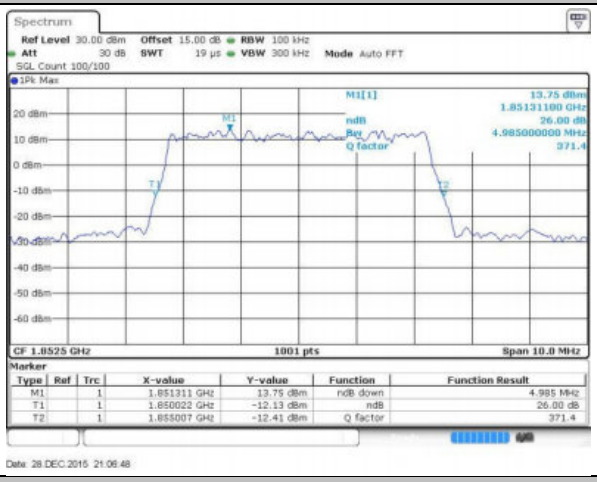
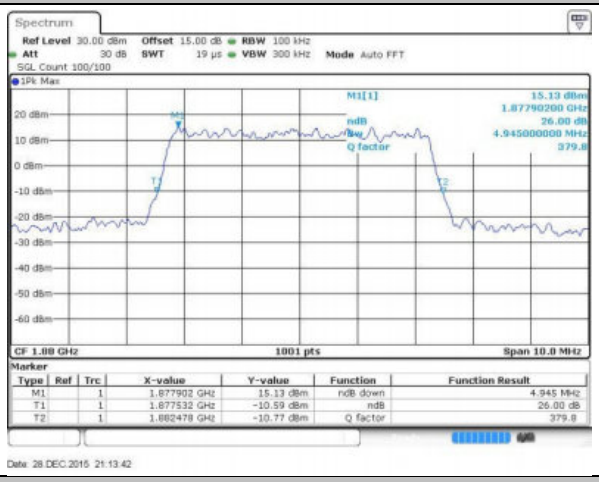
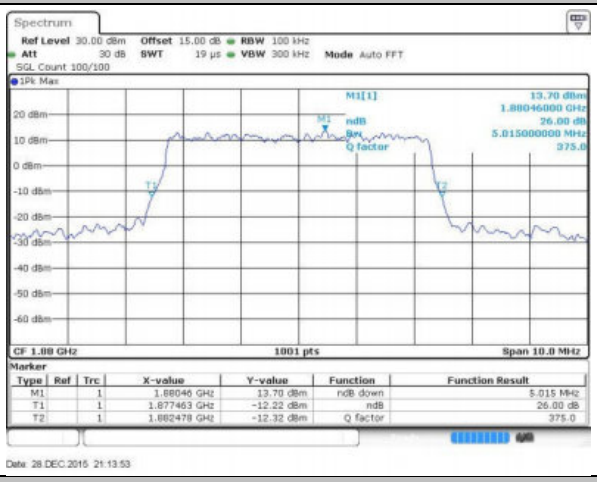
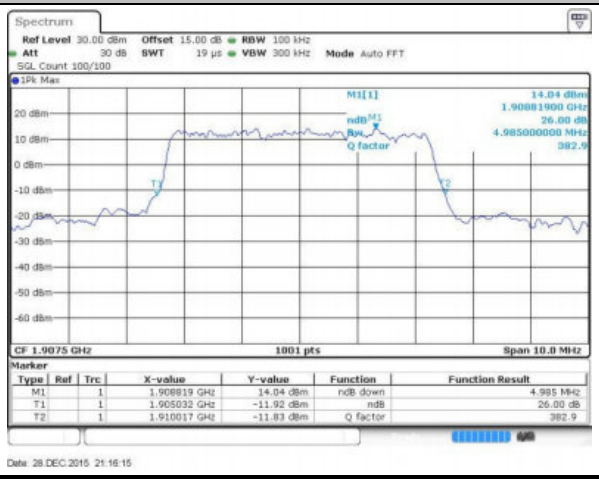
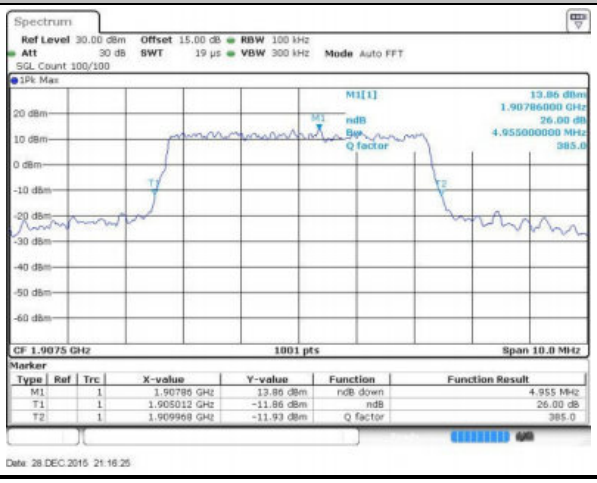


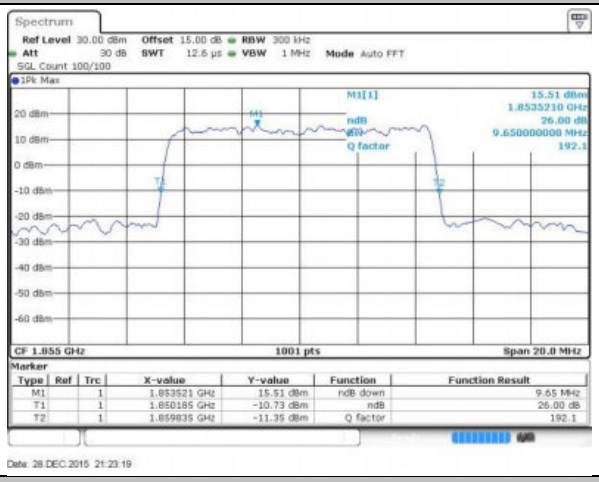
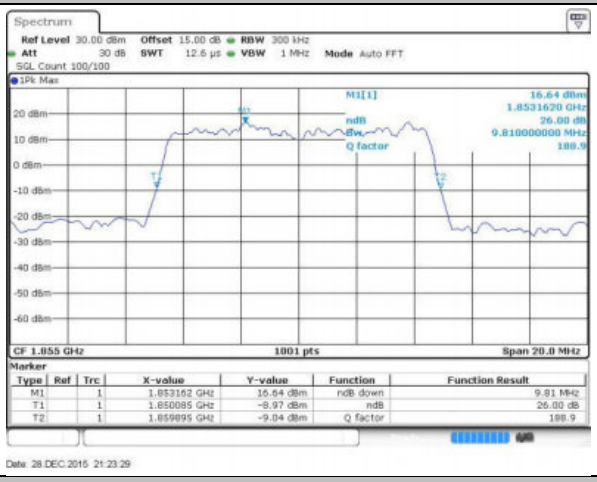
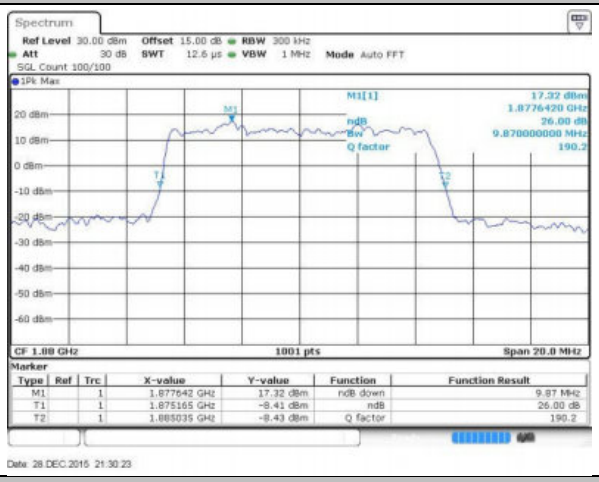
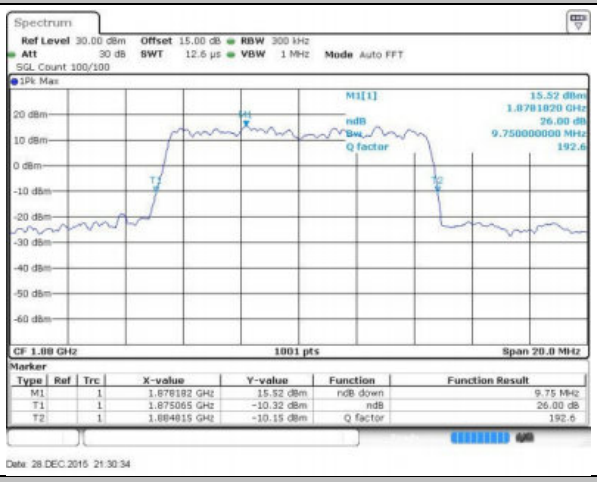
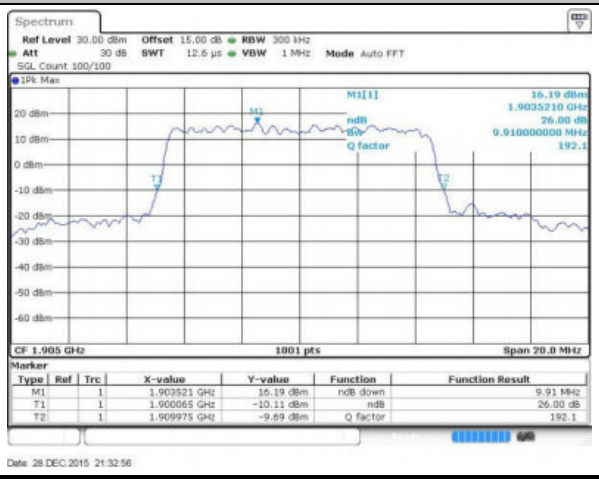
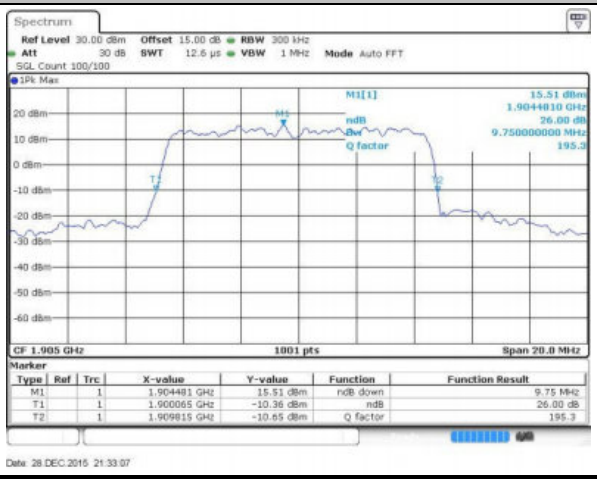
Highest Channel /3MHz / QPSK



Highest Channel /3MHz / 16QAM

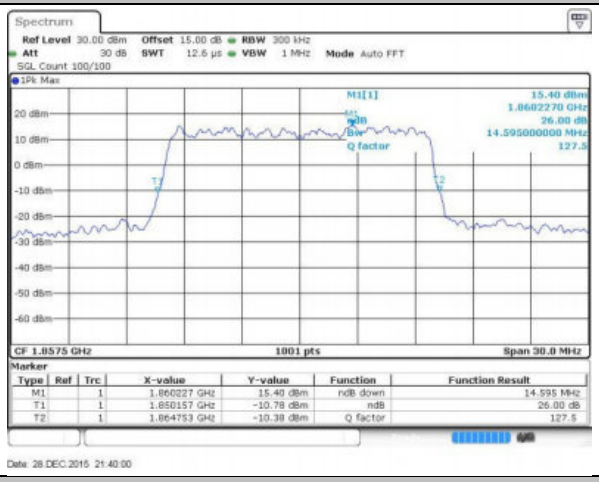


LTE Band 2	
Lowest Channel / 5MHz / QPSK	Lowest Channel / 5MHz / 16QAM
	
Middle Channel / 5MHz / QPSK	Middle Channel / 5MHz / 16QAM
	
Highest Channel / 5MHz / QPSK	Highest Channel / 5MHz / 16QAM
	

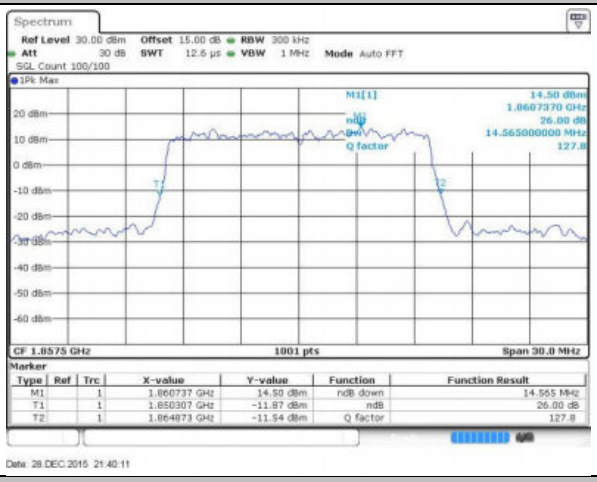
LTE Band 2	
Lowest Channel / 10MHz / QPSK	**Lowest Channel / 10MHz / 16QAM**
	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	
Highest Channel / 10MHz / QPSK	**Highest Channel / 10MHz / 16QAM**
	

LTE Band 2

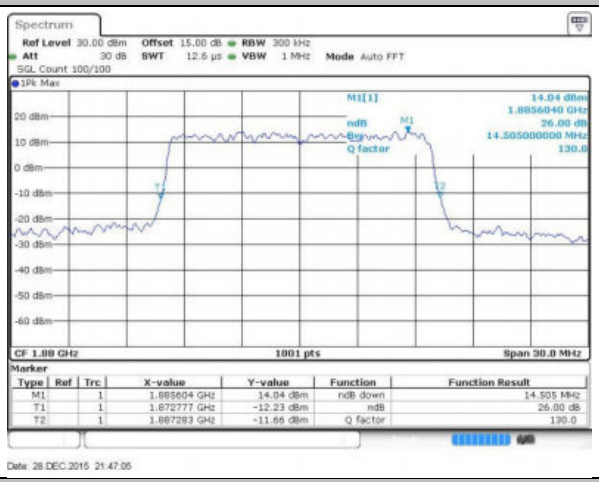
Lowest Channel / 15MHz / QPSK



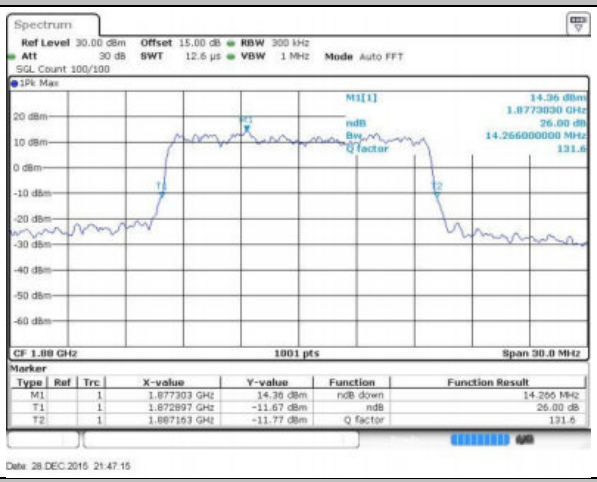
Lowest Channel / 15MHz / 16QAM



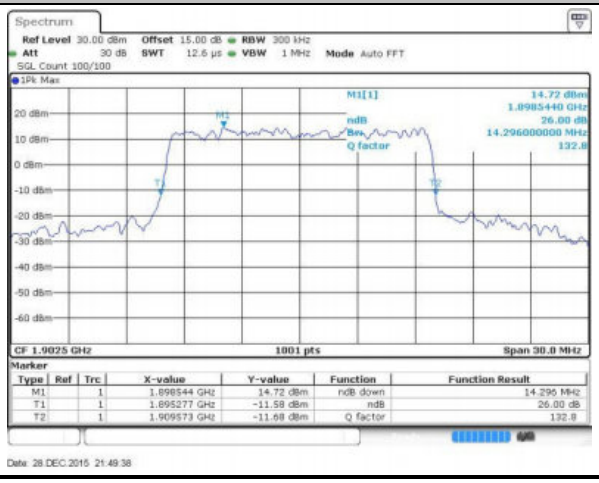
Middle Channel / 15MHz / QPSK



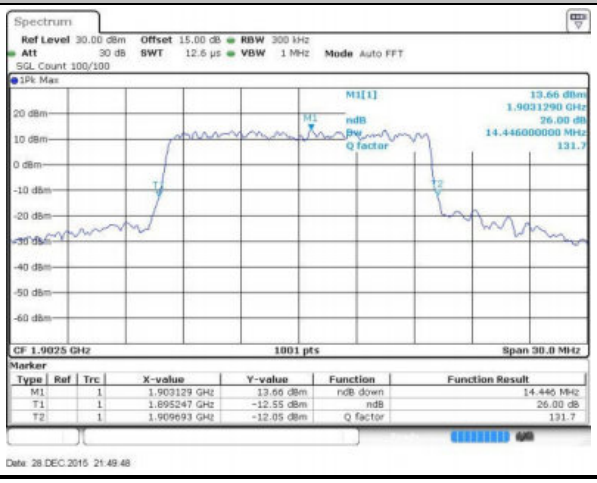
Middle Channel / 15MHz / 16QAM

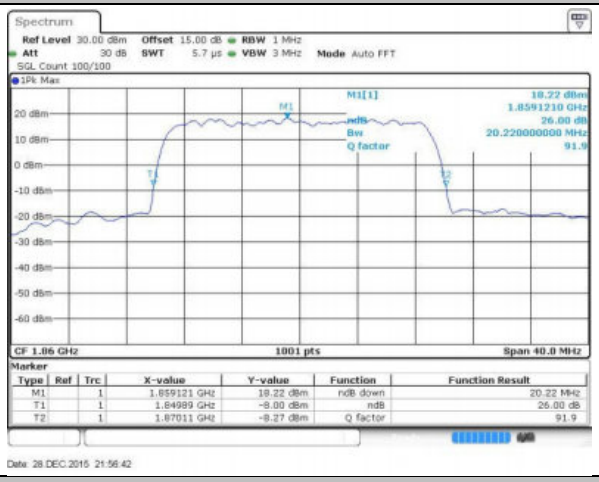
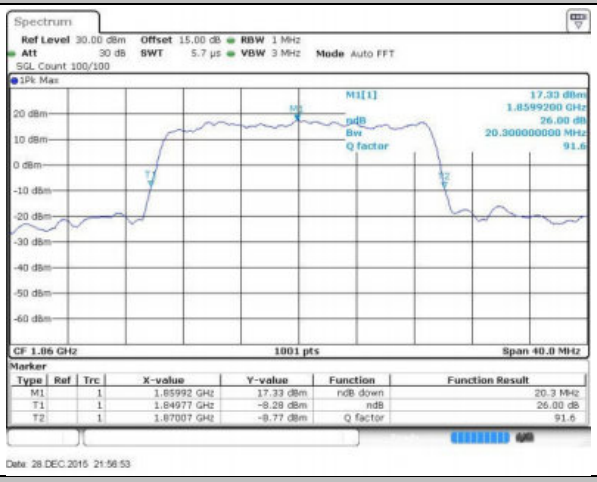
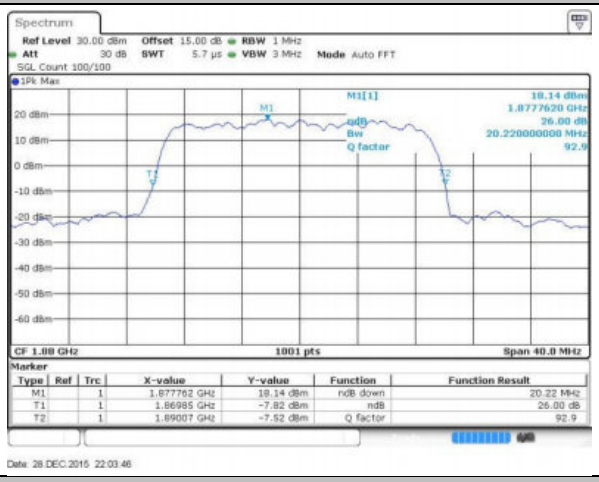
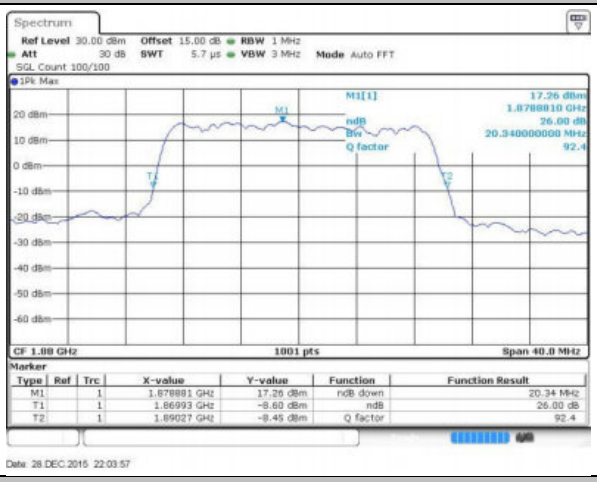
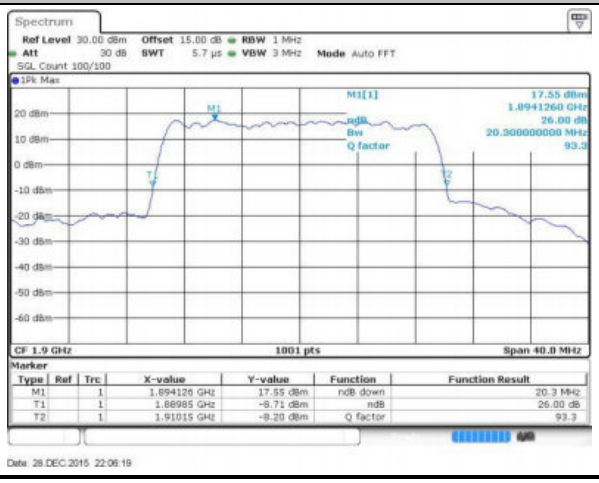
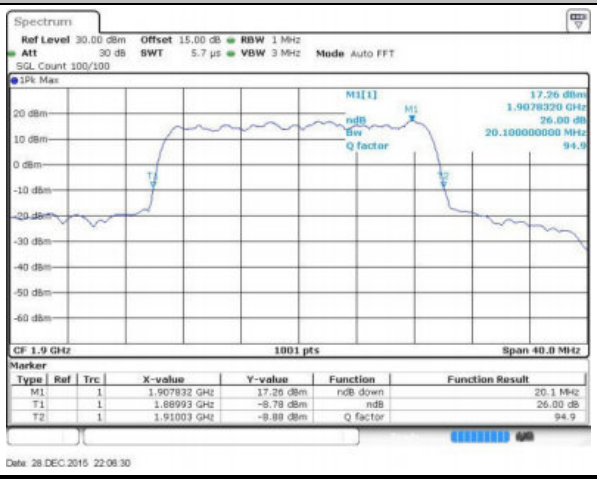


Highest Channel / 15MHz / QPSK



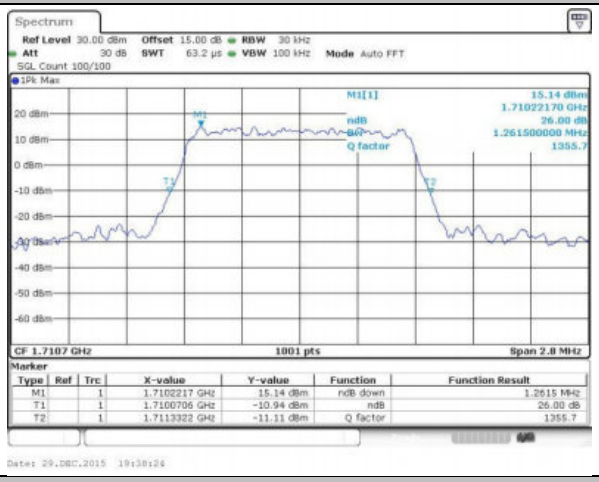
Highest Channel / 15MHz / 16QAM



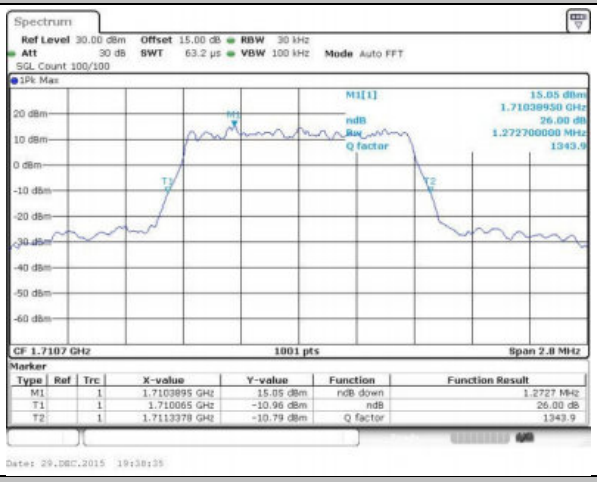
LTE Band 2	
Lowest Channel / 20MHz / QPSK	Lowest Channel / 20MHz / 16QAM
	
Middle Channel / 20MHz / QPSK	Middle Channel / 20MHz / 16QAM
	
Highest Channel / 20MHz / QPSK	Highest Channel / 20MHz / 16QAM
	

LTE Band 4

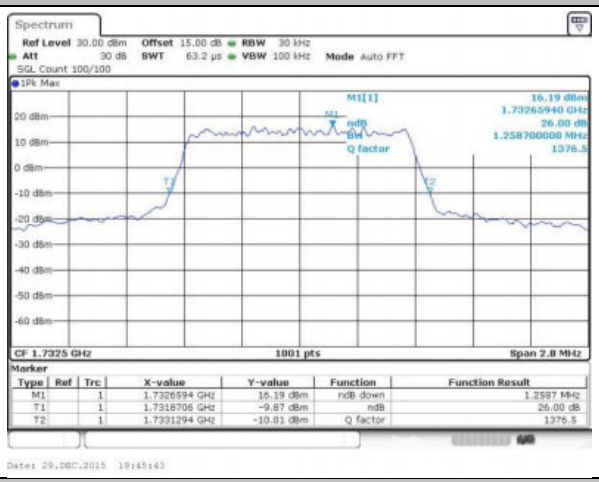
Lowest Channel / 1.4MHz / QPSK



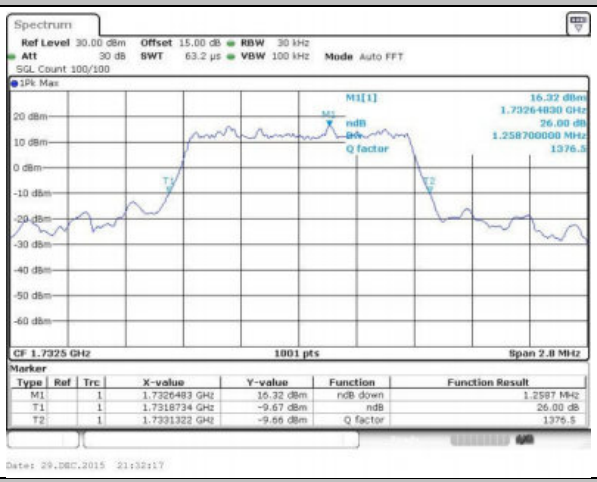
Lowest Channel / 1.4MHz / 16QAM



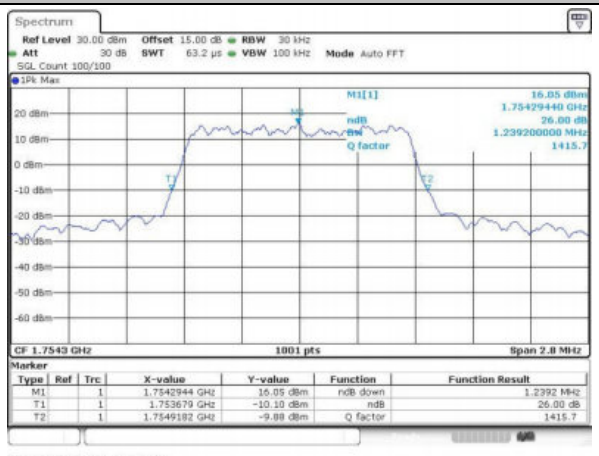
Middle Channel / 1.4MHz / QPSK



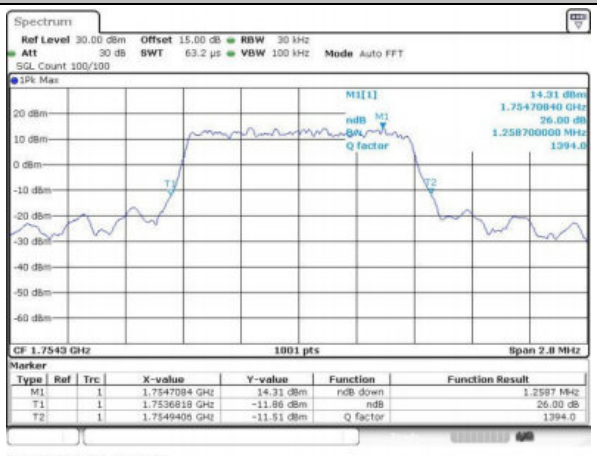
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

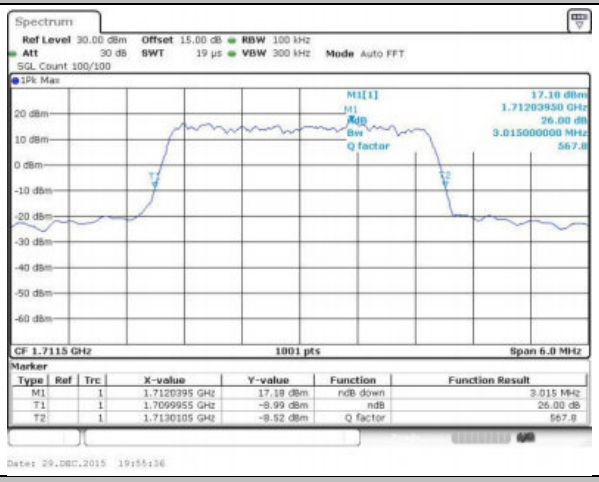


Highest Channel / 1.4MHz / 16QAM

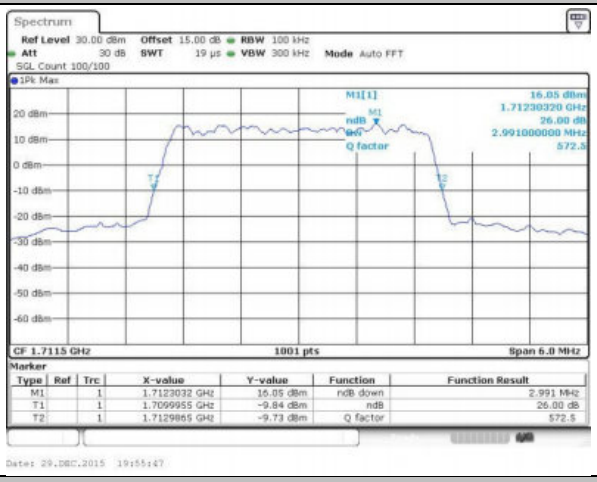


LTE Band 4

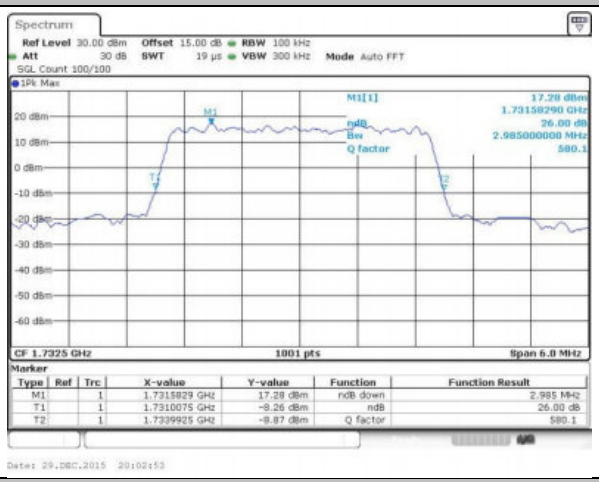
Lowest Channel / 3MHz / QPSK



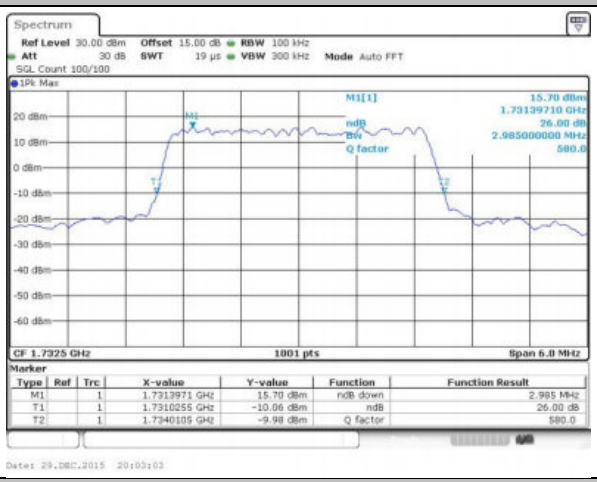
Lowest Channel / 3MHz / 16QAM



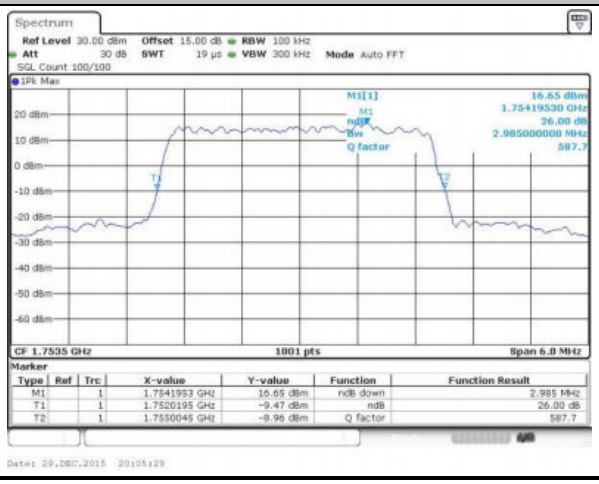
Middle Channel / 3MHz / QPSK



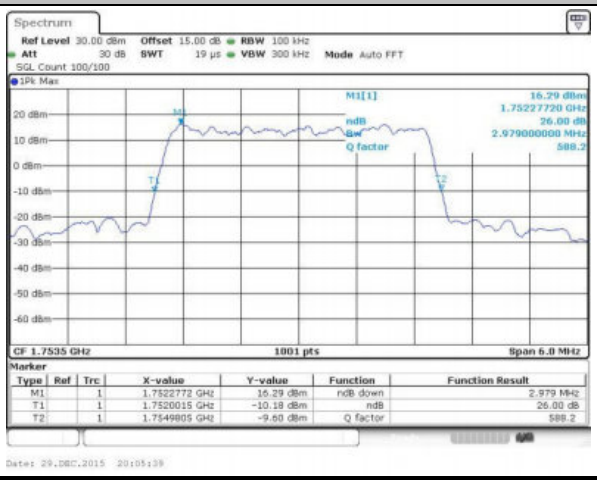
Middle Channel /3MHz / 16QAM

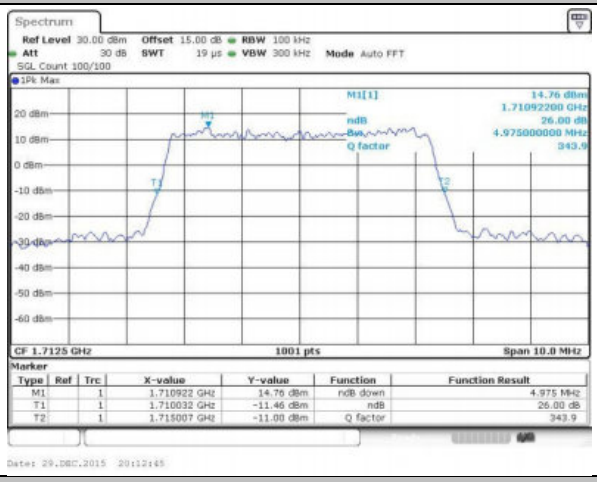
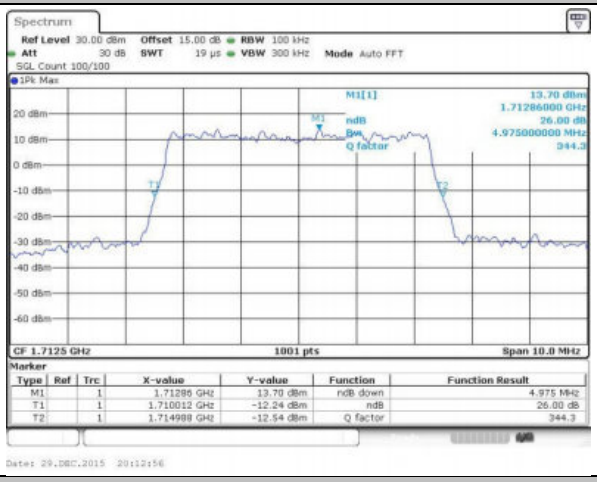
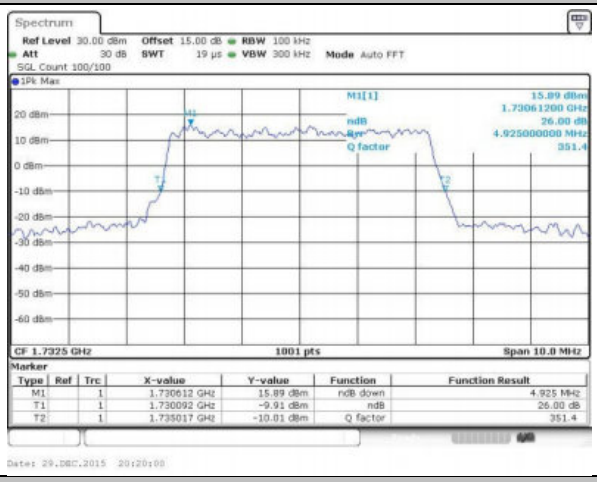
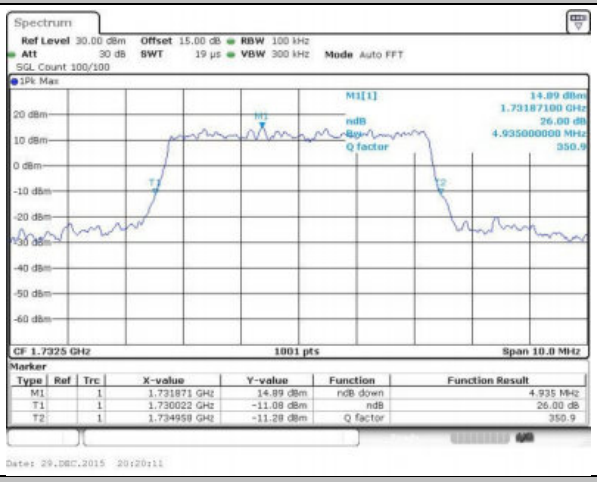
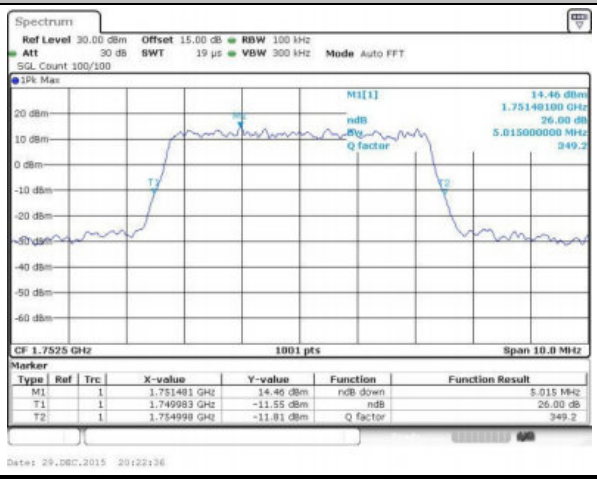
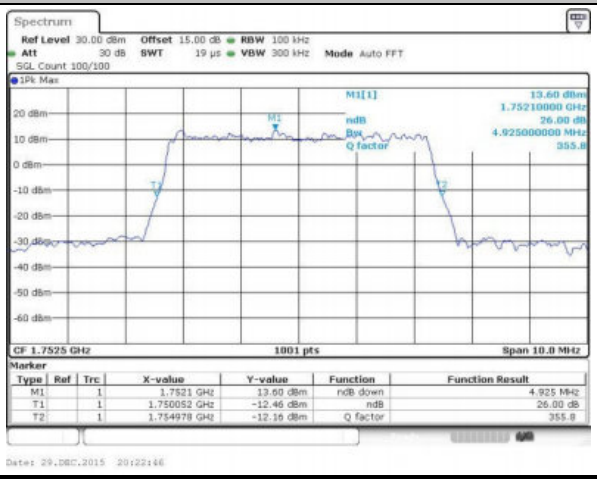


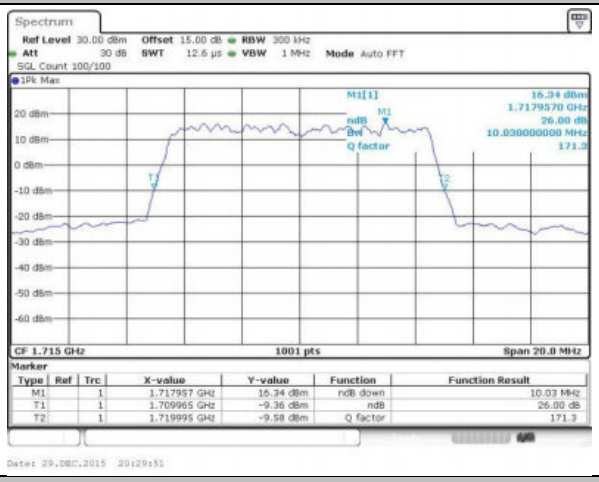
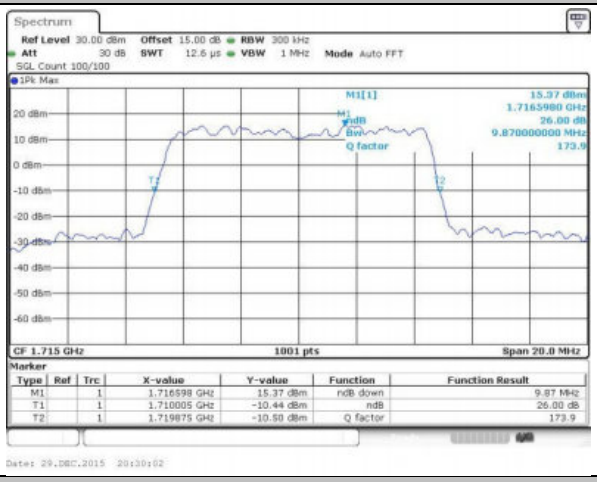
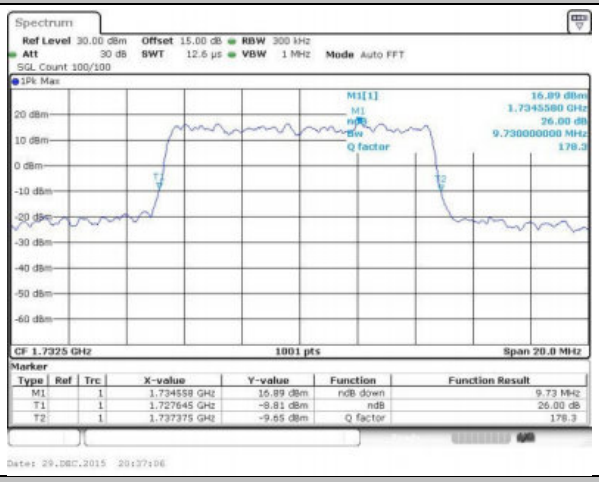
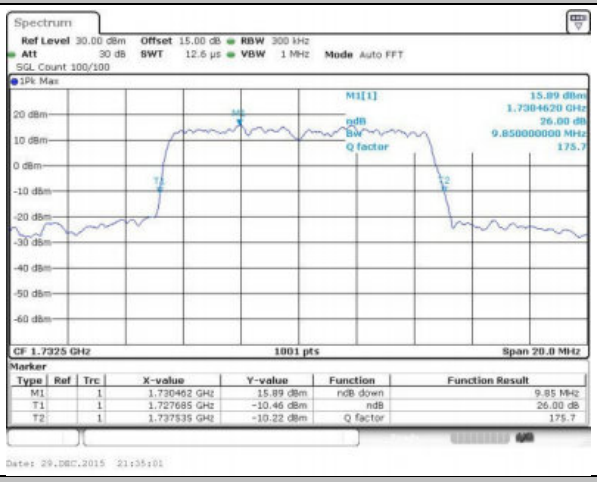
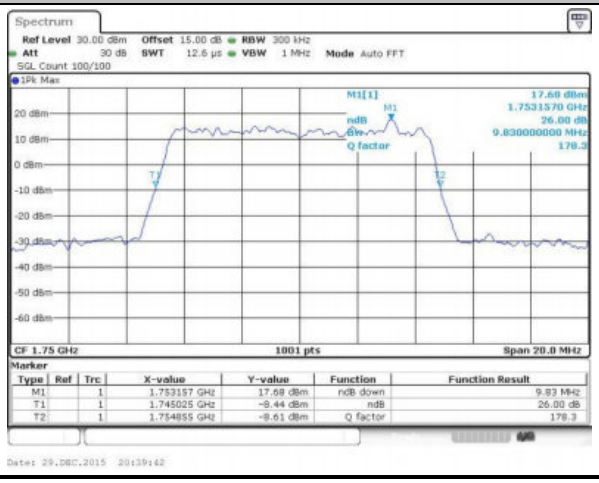
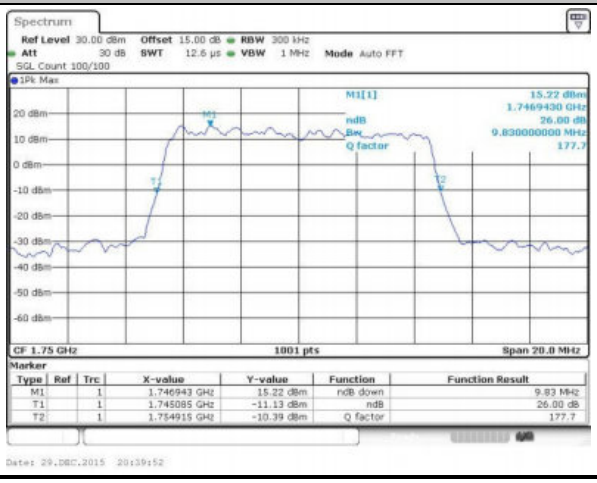
Highest Channel /3MHz / QPSK

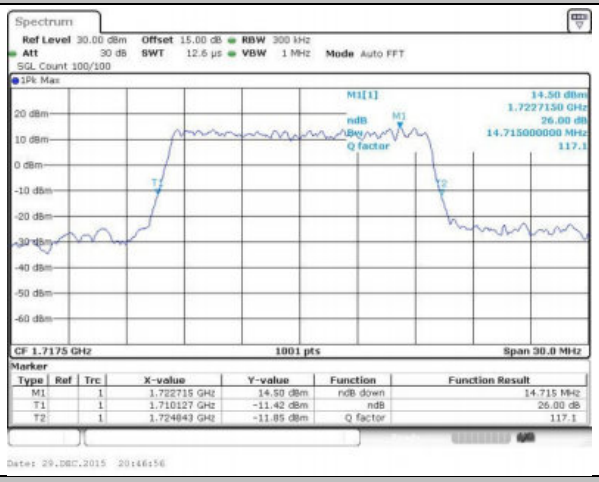
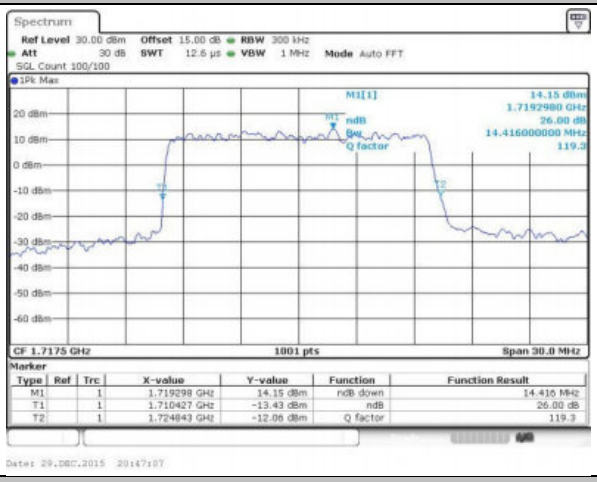
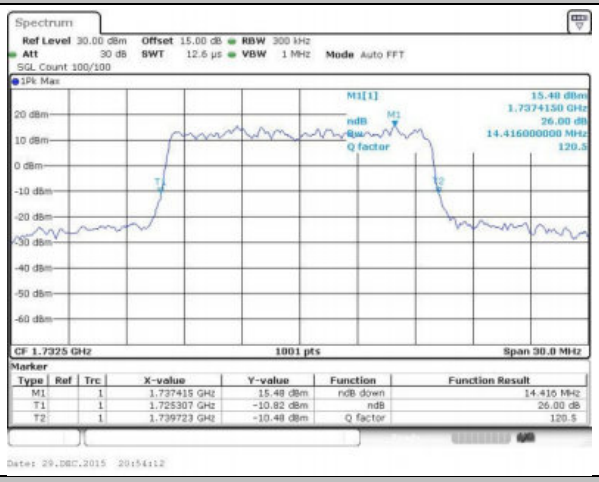
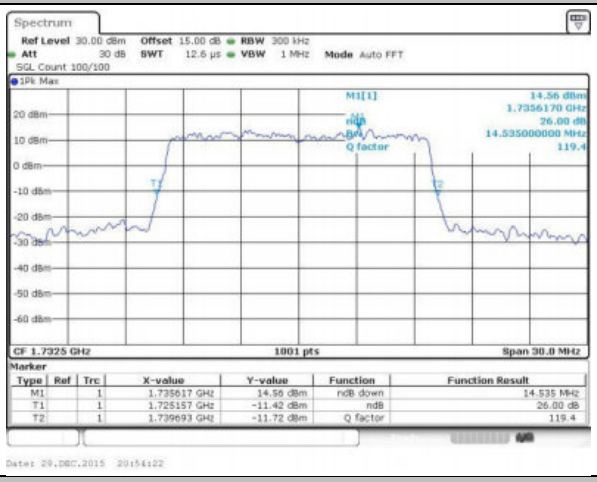
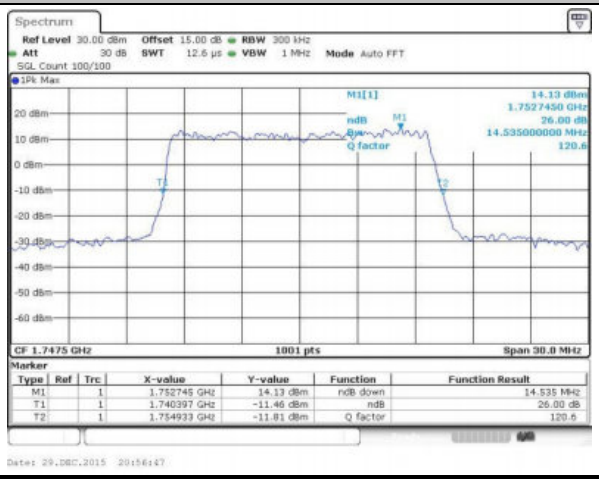
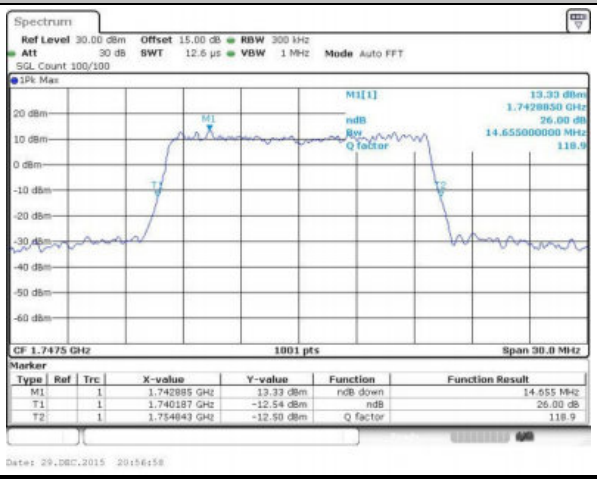


Highest Channel /3MHz / 16QAM



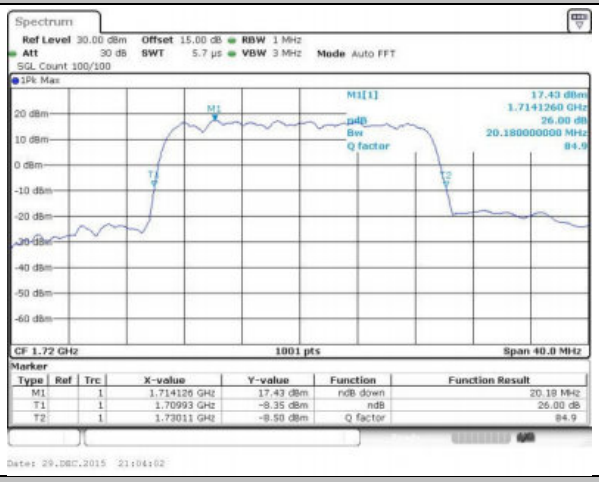
LTE Band 4	
Lowest Channel / 5MHz / QPSK	Lowest Channel / 5MHz / 16QAM
	
Middle Channel / 5MHz / QPSK	Middle Channel / 5MHz / 16QAM
	
Highest Channel / 5MHz / QPSK	Highest Channel / 5MHz / 16QAM
	

LTE Band 4	
Lowest Channel / 10MHz / QPSK	Lowest Channel / 10MHz / 16QAM
	
Middle Channel / 10MHz / QPSK	Middle Channel / 10MHz / 16QAM
	
Highest Channel / 10MHz / QPSK	Highest Channel / 10MHz / 16QAM
	

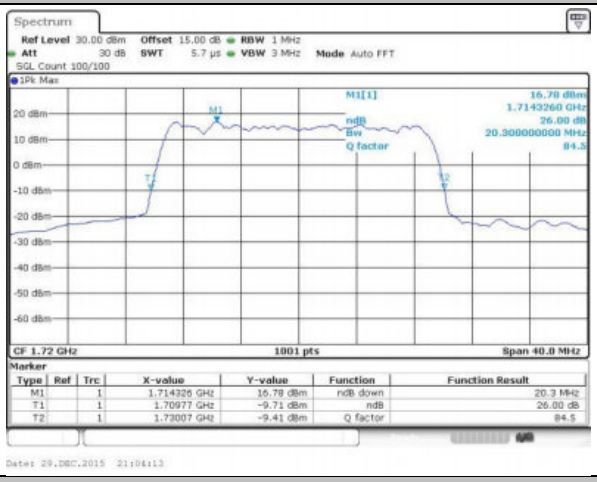
LTE Band 4	
Lowest Channel / 15MHz / QPSK	Lowest Channel / 15MHz / 16QAM
	
Middle Channel / 15MHz / QPSK	Middle Channel / 15MHz / 16QAM
	
Highest Channel / 15MHz / QPSK	Highest Channel / 15MHz / 16QAM
	

LTE Band 4

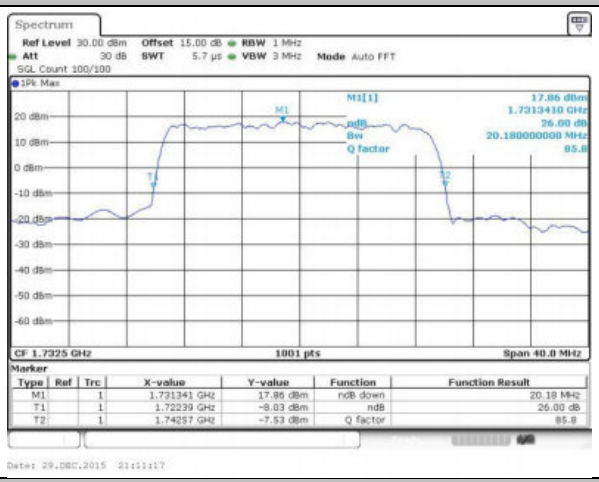
Lowest Channel / 20MHz / QPSK



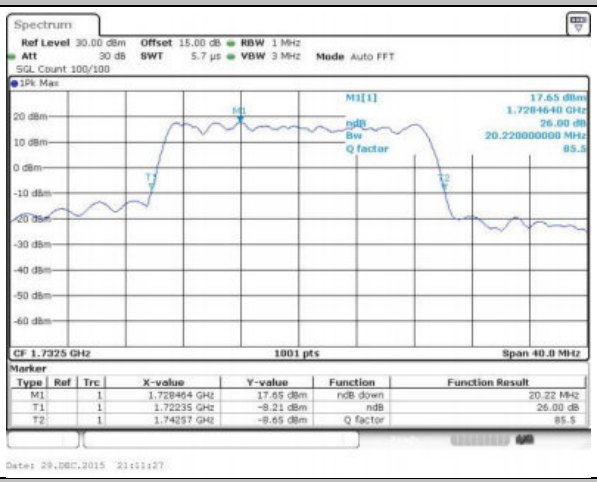
Lowest Channel / 20MHz / 16QAM



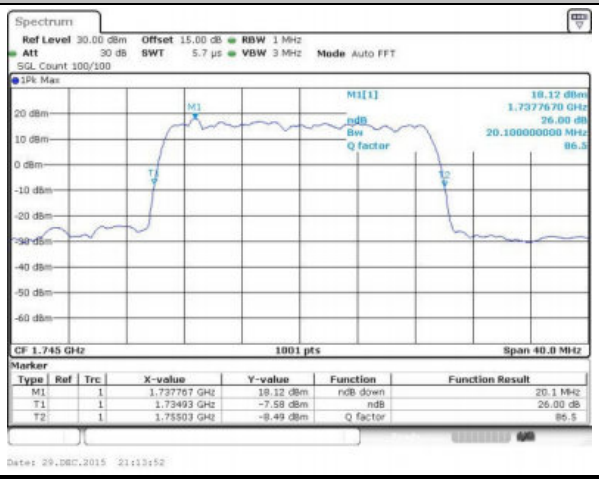
Middle Channel / 20MHz / QPSK



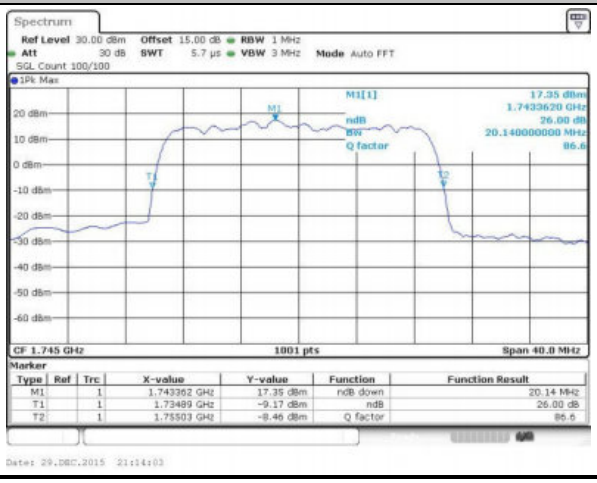
Middle Channel / 20MHz / 16QAM

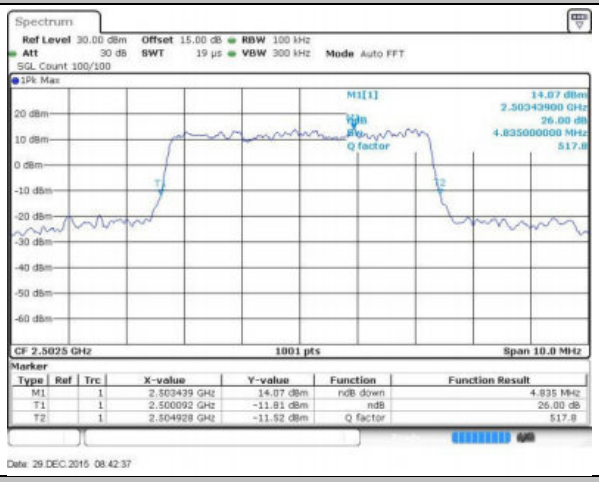
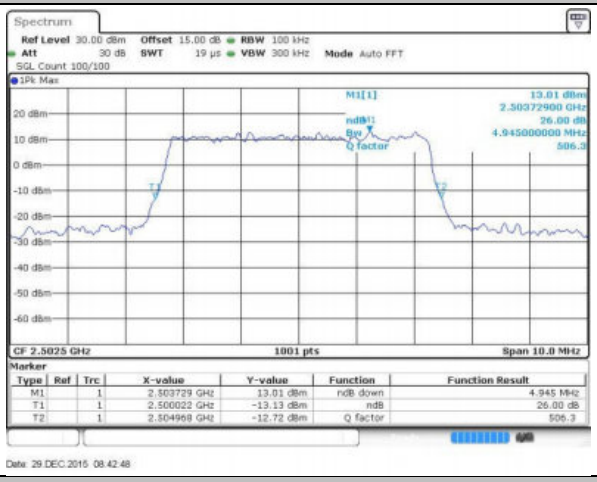
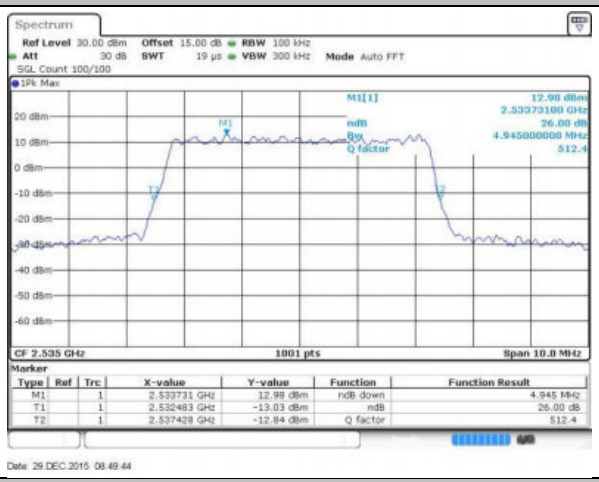
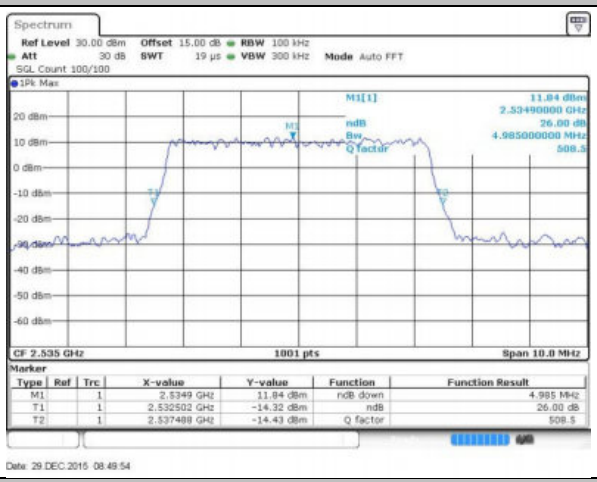
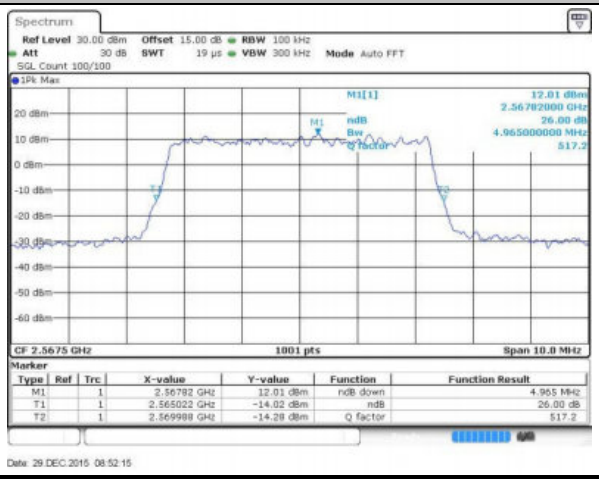
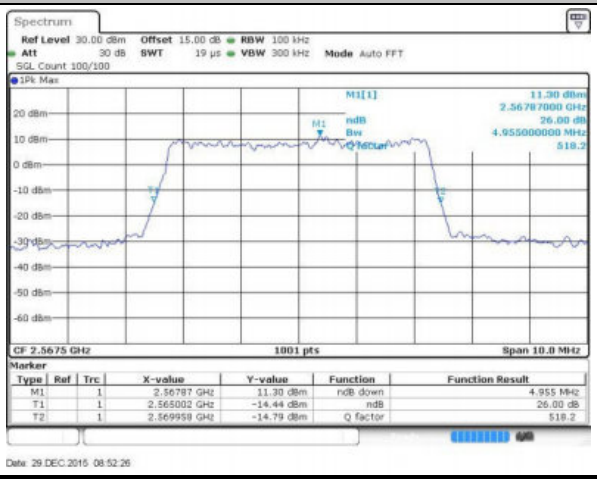


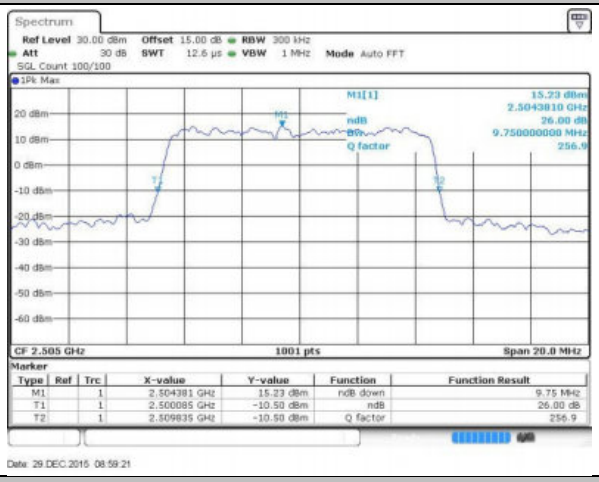
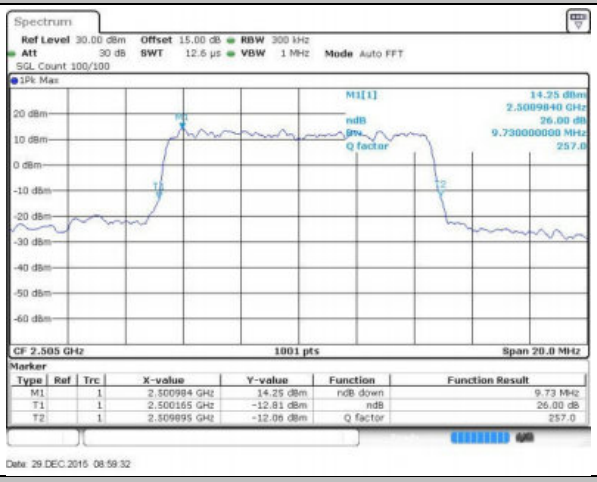
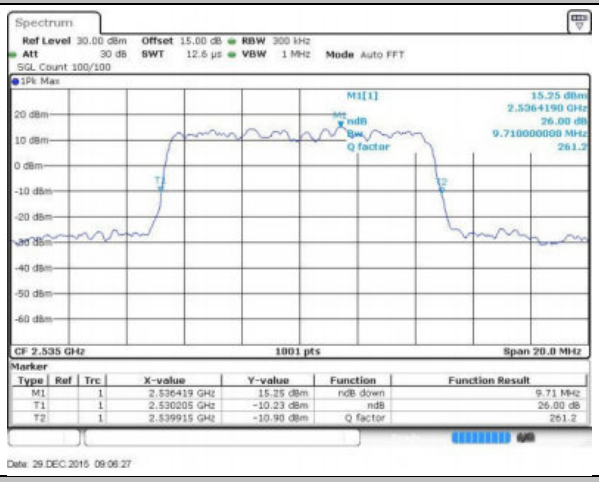
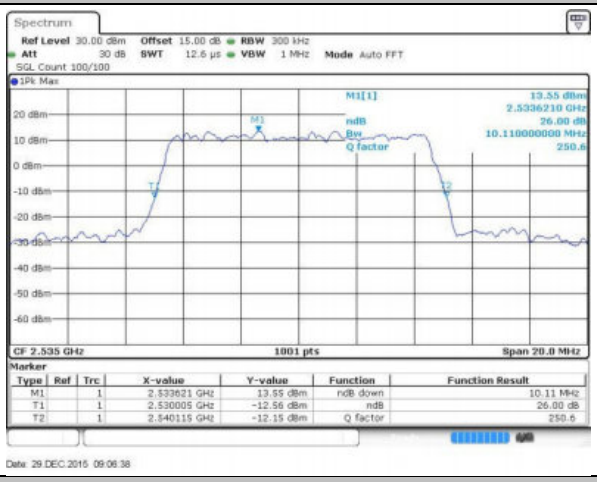
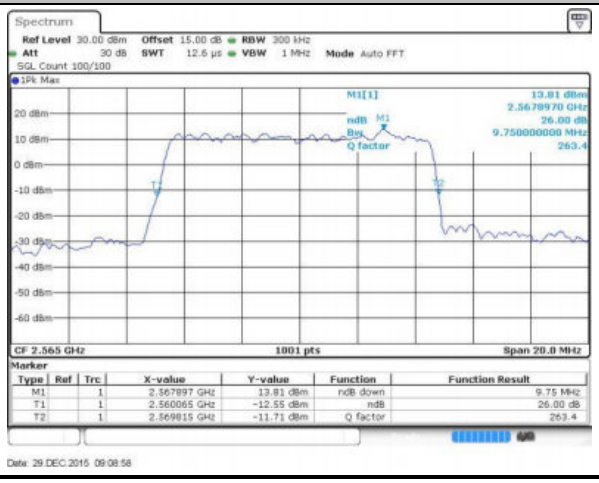
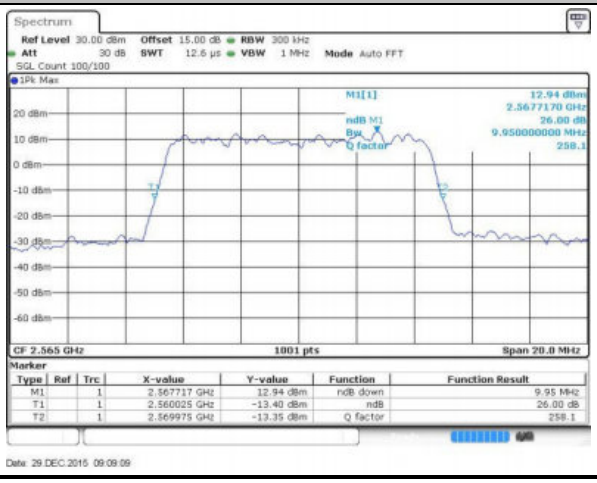
Highest Channel / 20MHz / QPSK

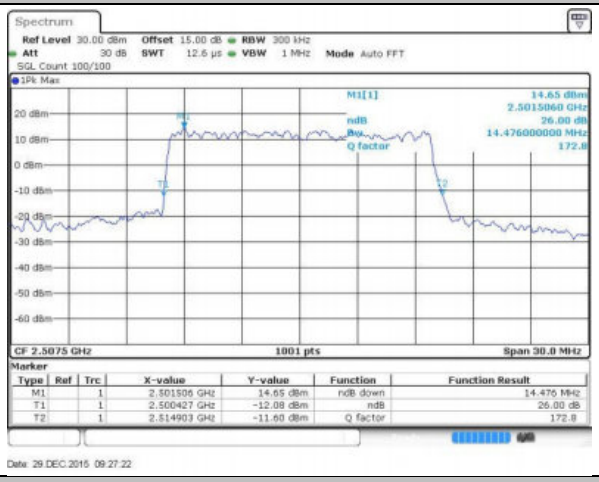
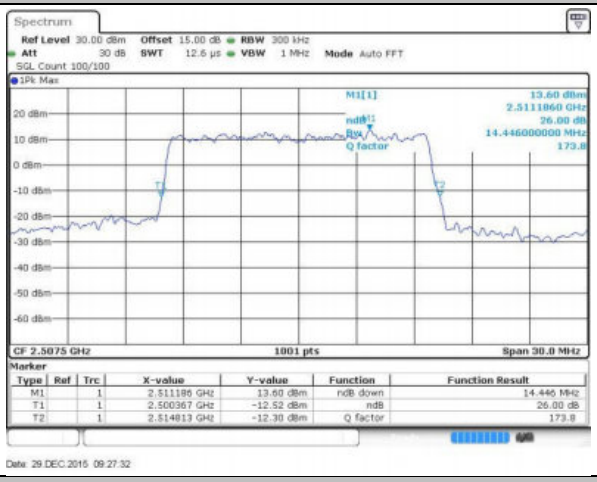
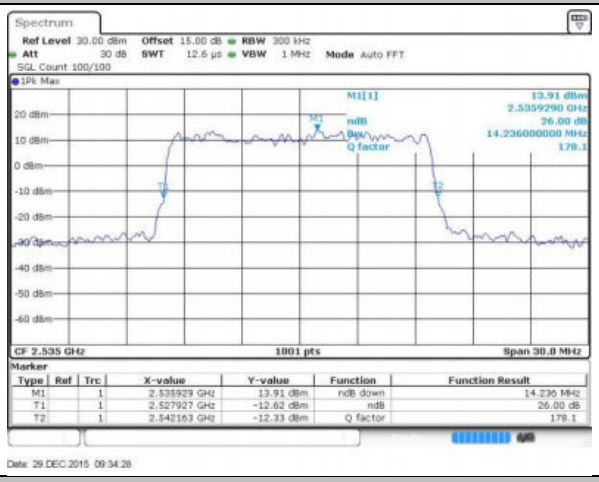
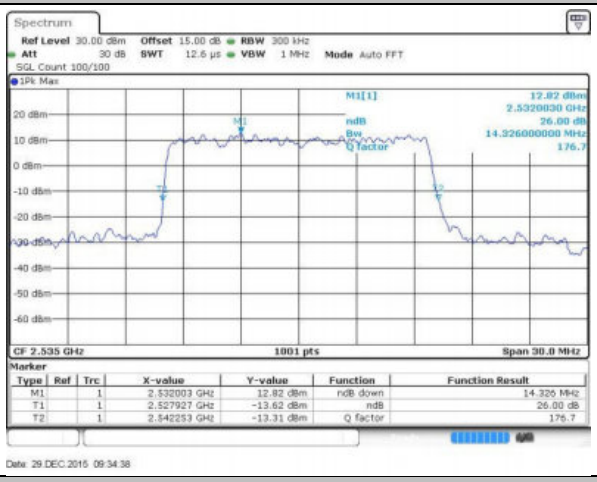
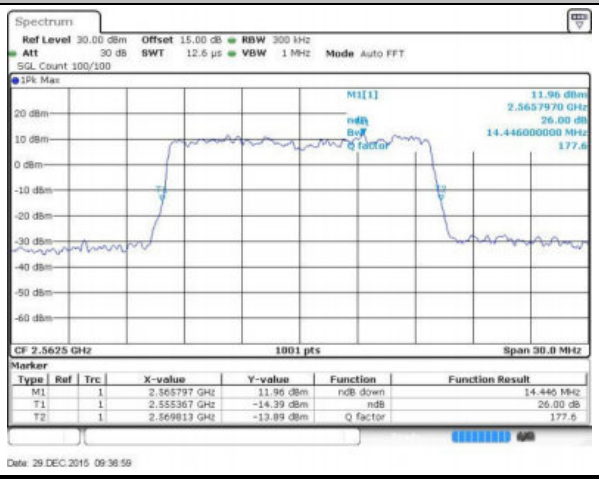
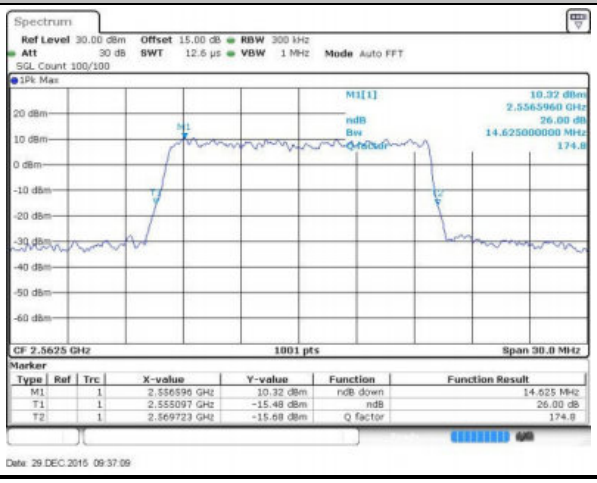


Highest Channel / 20MHz / 16QAM



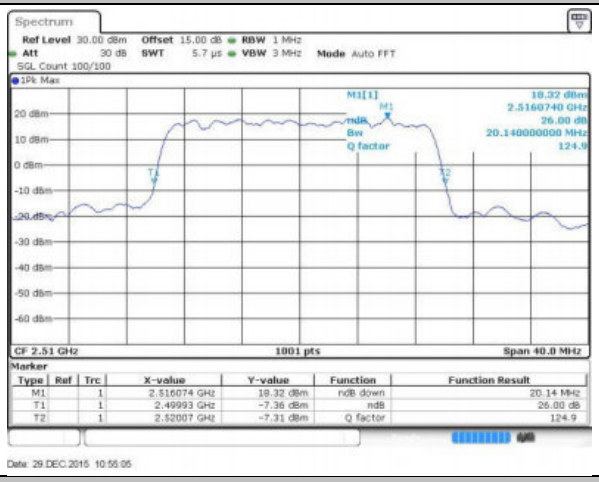
LTE Band 7	
Lowest Channel / 5MHz / QPSK	**Lowest Channel / 5MHz / 16QAM**
	
Middle Channel / 5MHz / QPSK	**Middle Channel / 5MHz / 16QAM**
	
Highest Channel / 5MHz / QPSK	**Highest Channel / 5MHz / 16QAM**
	

LTE Band 7	
Lowest Channel / 10MHz / QPSK	**Lowest Channel / 10MHz / 16QAM**
	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	
Highest Channel / 10MHz / QPSK	**Highest Channel / 10MHz / 16QAM**
	

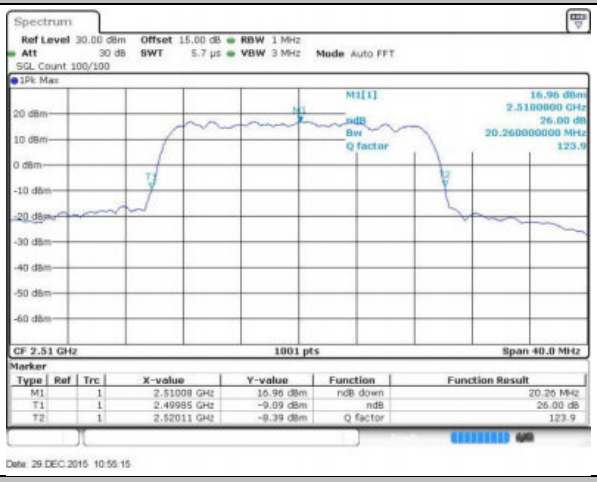
LTE Band 7	
Lowest Channel / 15MHz / QPSK	Lowest Channel / 15MHz / 16QAM
	
Middle Channel / 15MHz / QPSK	Middle Channel / 15MHz / 16QAM
	
Highest Channel / 15MHz / QPSK	Highest Channel / 15MHz / 16QAM
	

LTE Band 7

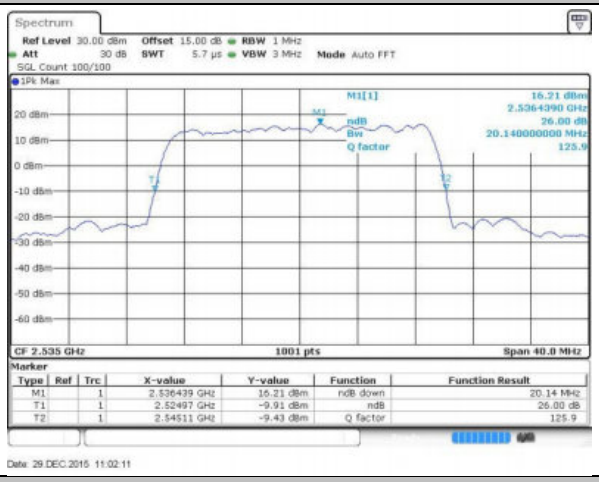
Lowest Channel / 20MHz / QPSK



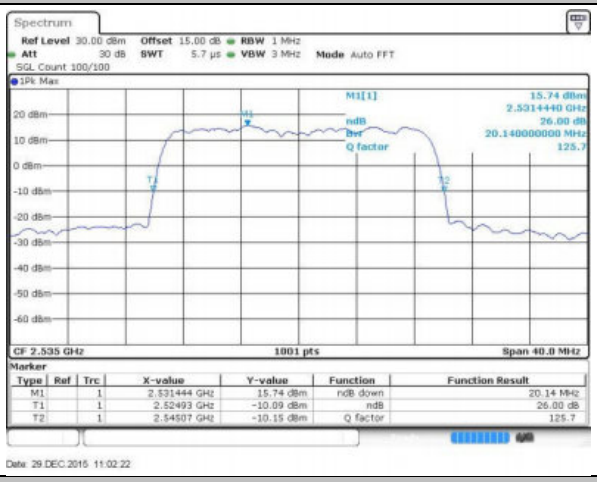
Lowest Channel / 20MHz / 16QAM



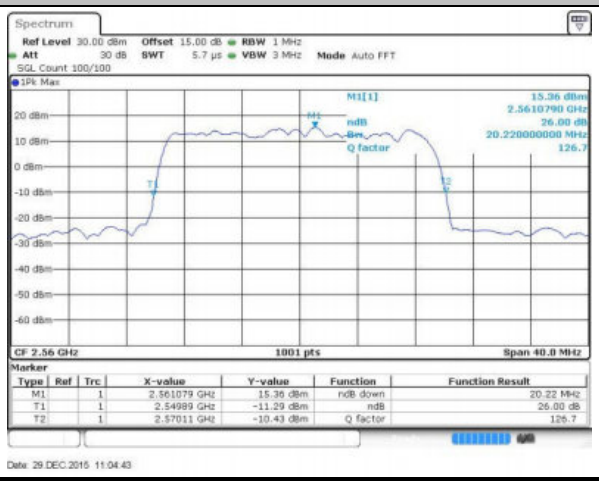
Middle Channel / 20MHz / QPSK



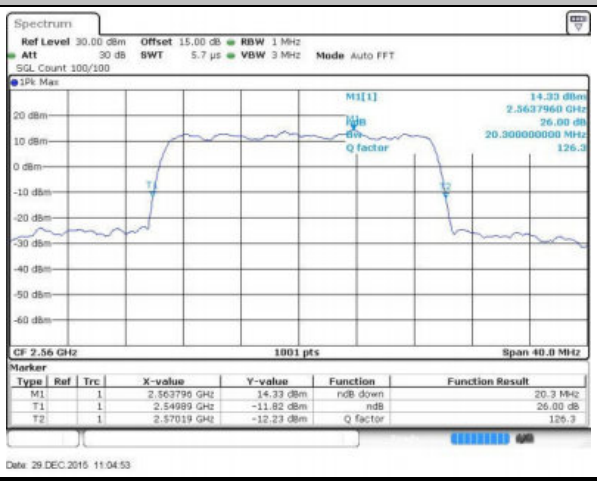
Middle Channel / 20MHz / 16QAM

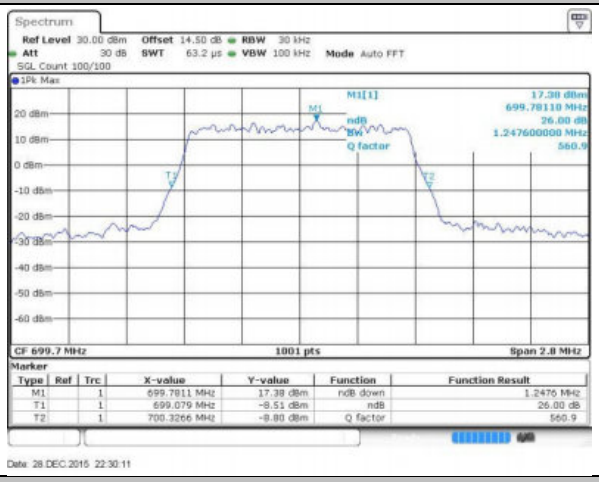
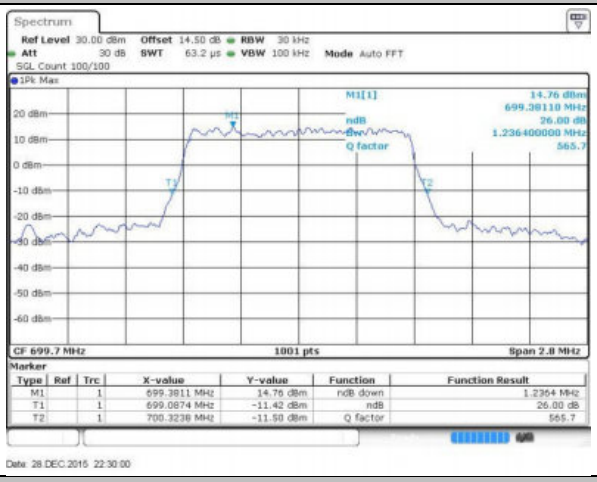
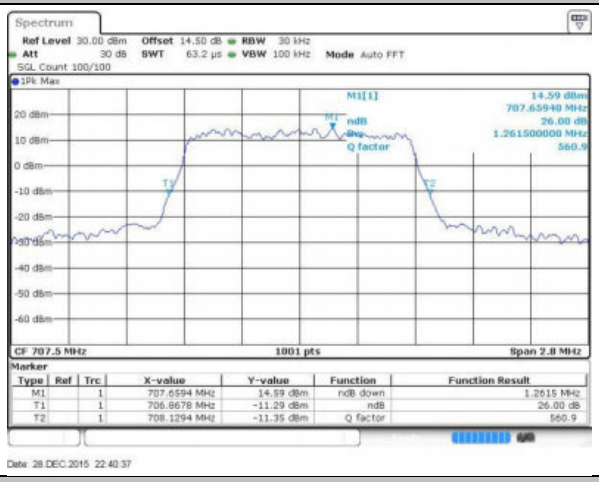
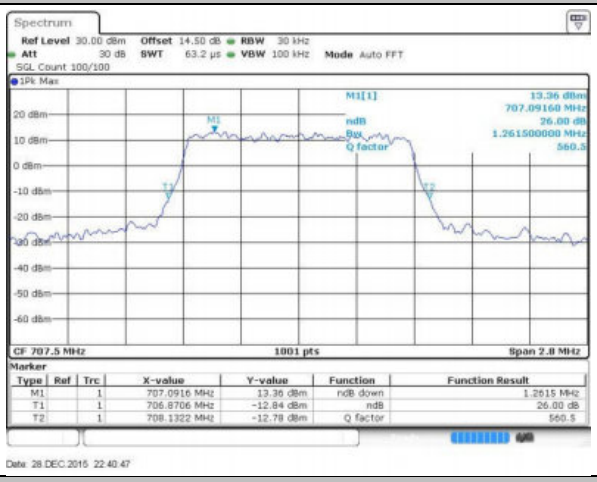
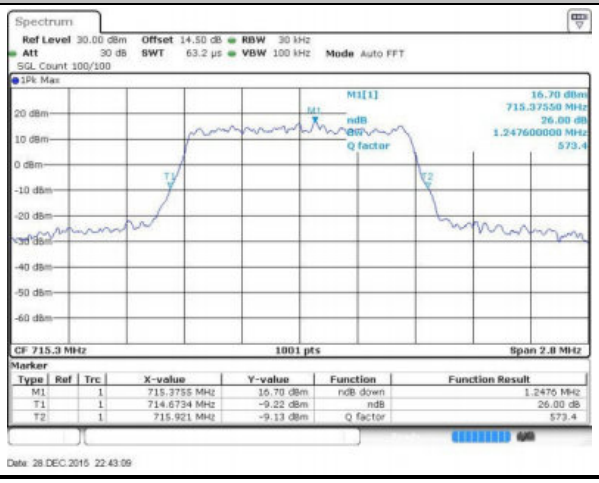
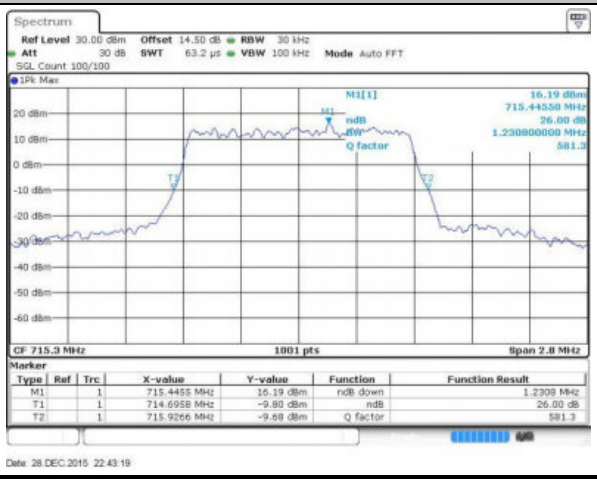


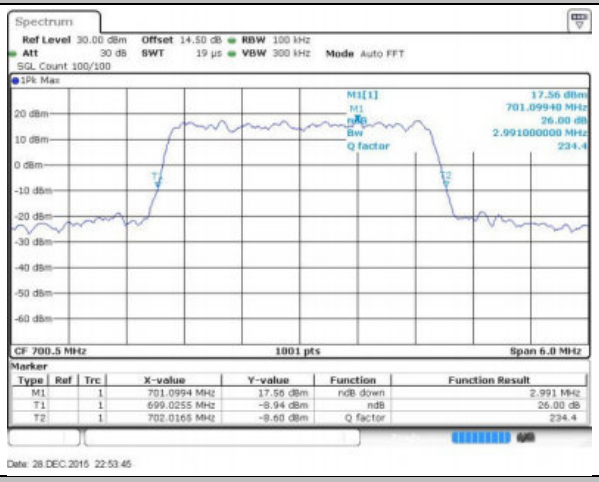
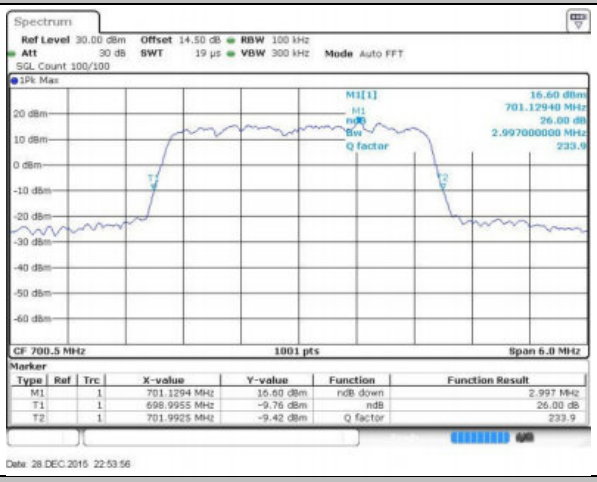
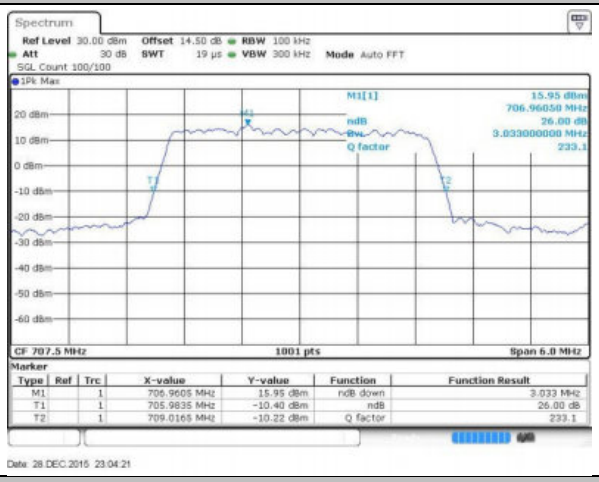
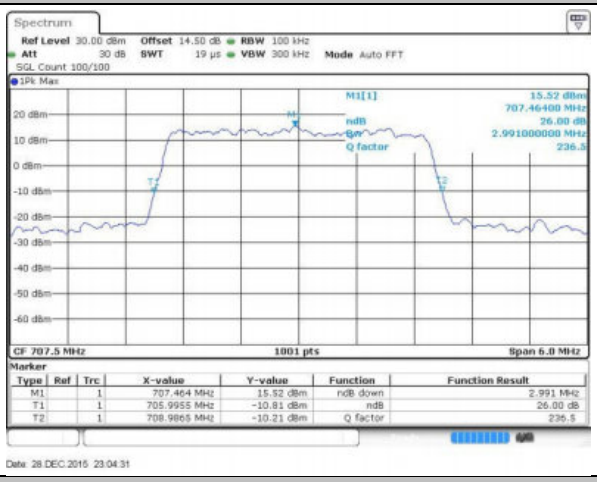
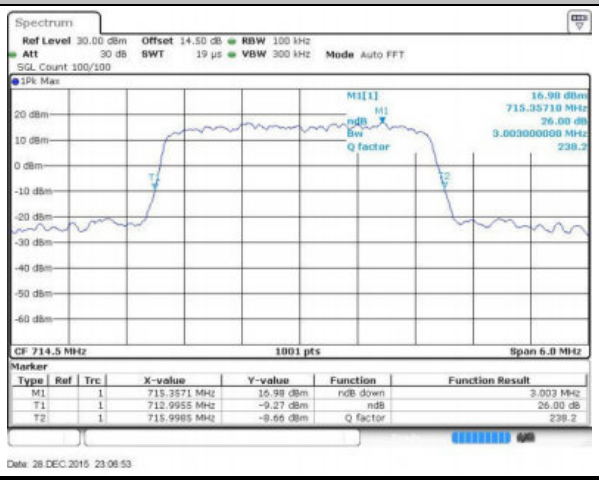
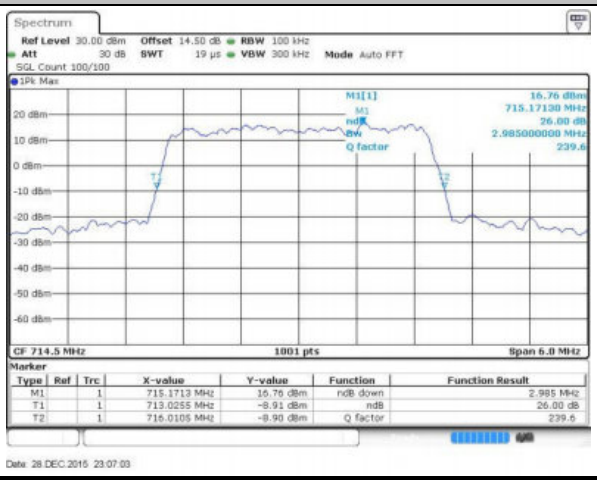
Highest Channel / 20MHz / QPSK

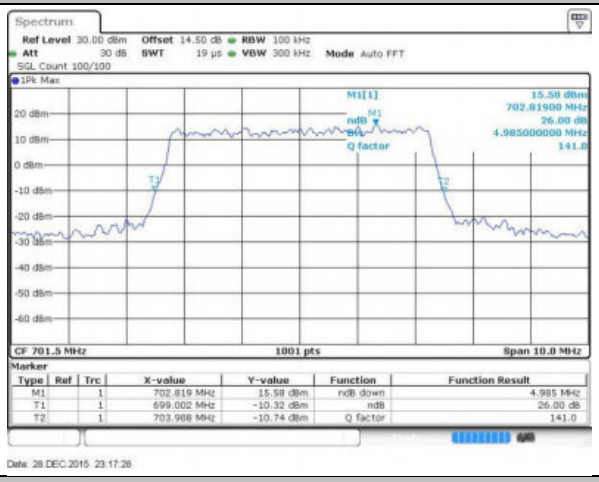
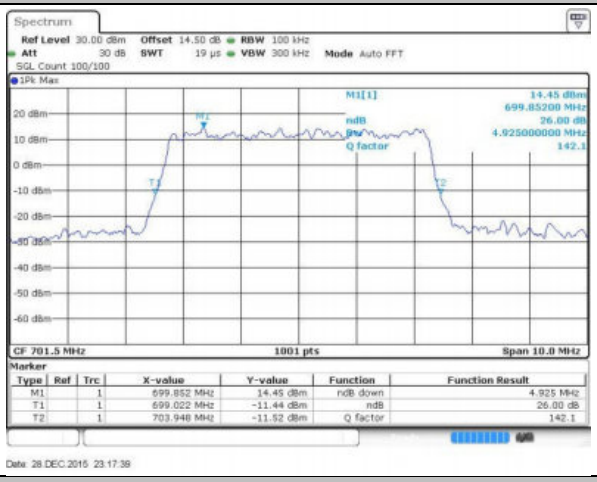
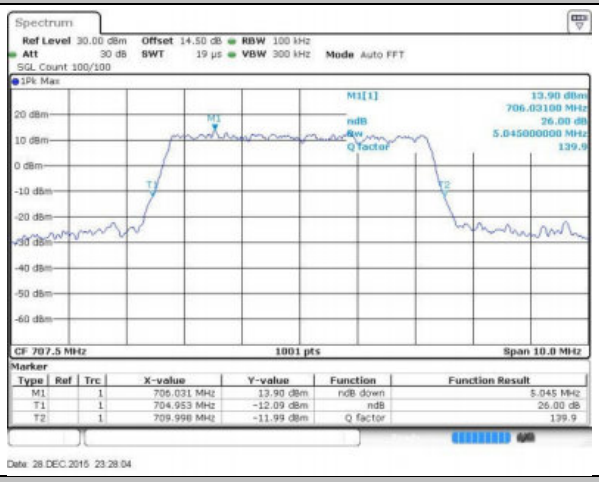
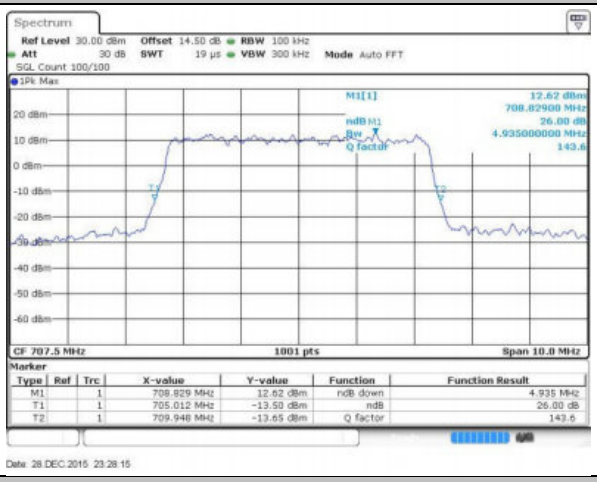
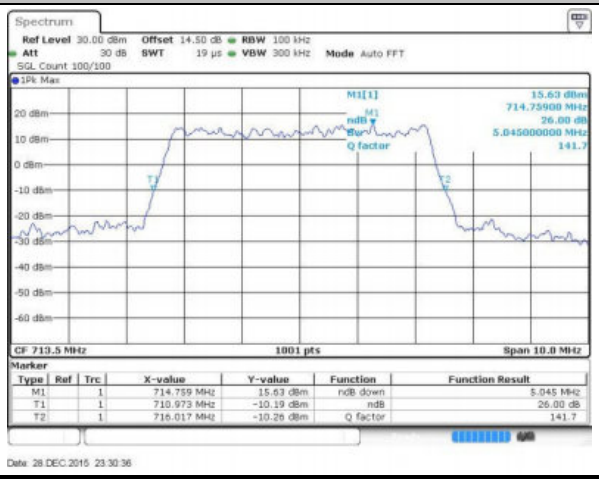
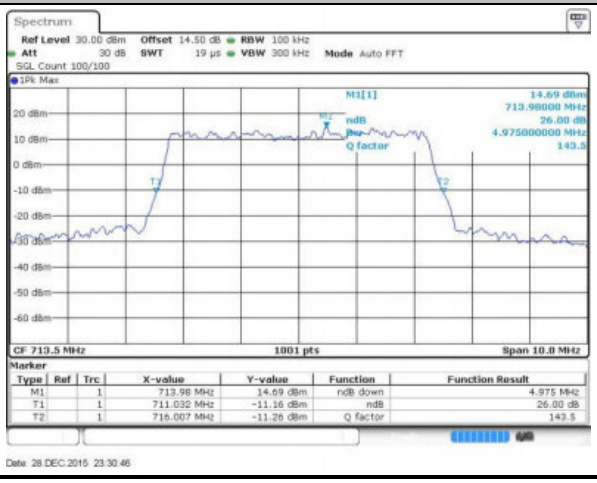


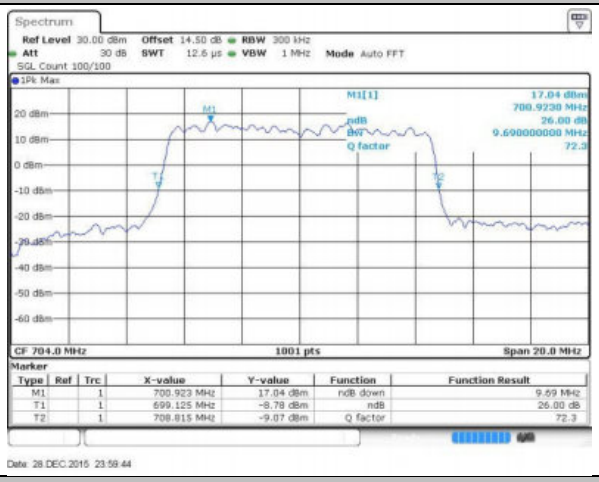
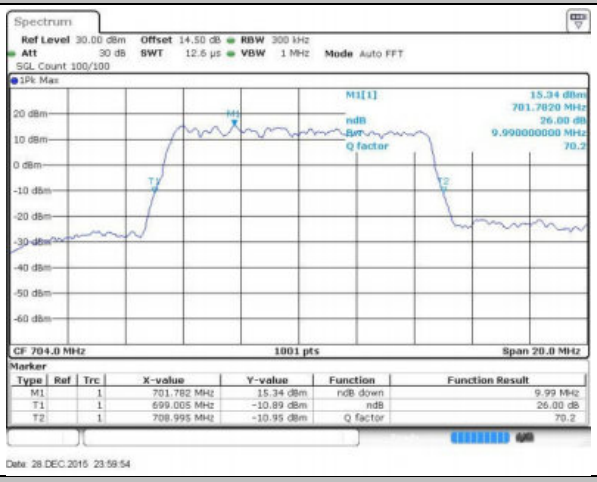
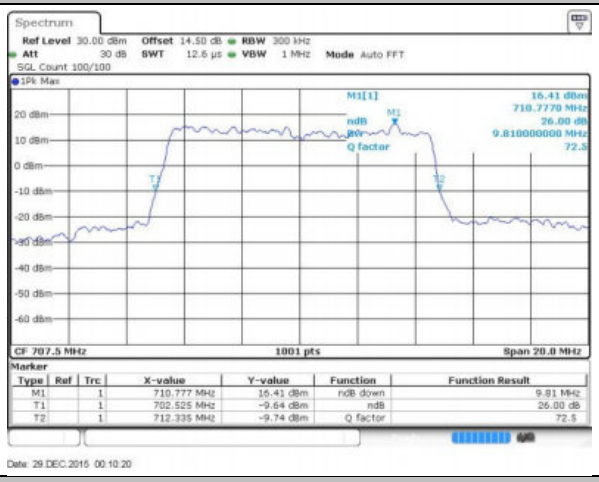
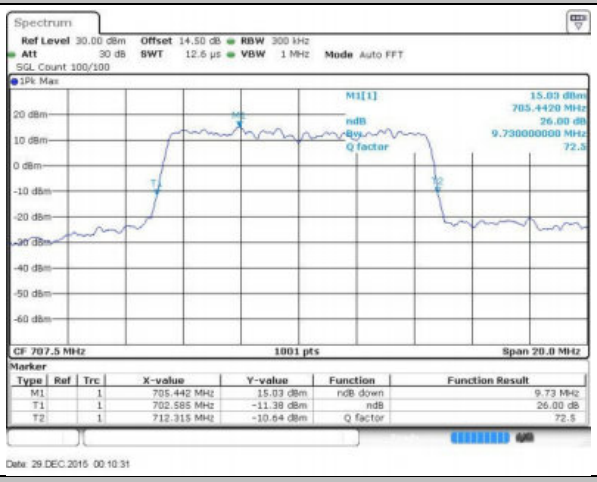
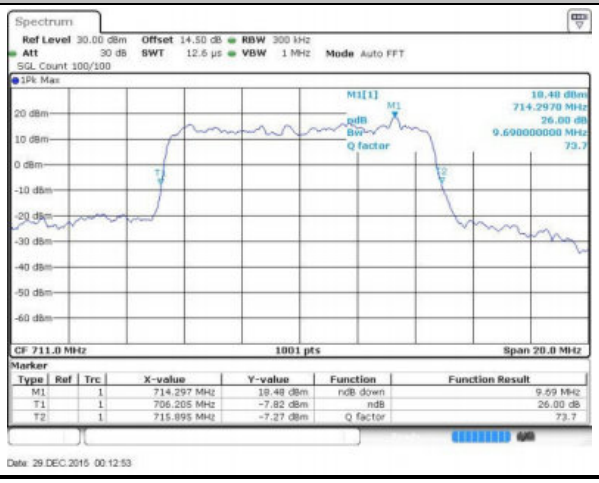
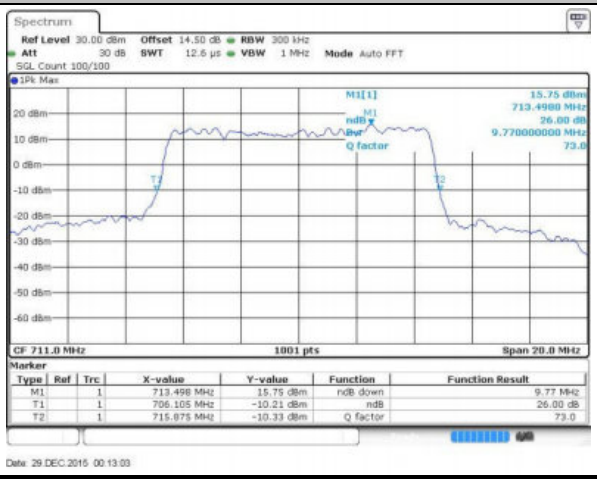
Highest Channel / 20MHz / 16QAM



LTE Band 12	
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
	

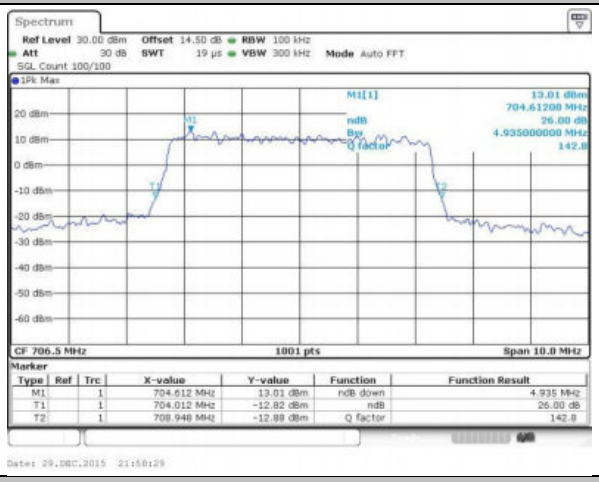
LTE Band 12	
Lowest Channel / 3MHz / QPSK	Lowest Channel / 3MHz / 16QAM
	
Middle Channel / 3MHz / QPSK	Middle Channel /3MHz / 16QAM
	
Highest Channel /3MHz / QPSK	Highest Channel /3MHz / 16QAM
	

LTE Band 12	
Lowest Channel / 5MHz / QPSK	Lowest Channel / 5MHz / 16QAM
	
Middle Channel / 5MHz / QPSK	Middle Channel / 5MHz / 16QAM
	
Highest Channel / 5MHz / QPSK	Highest Channel / 5MHz / 16QAM
	

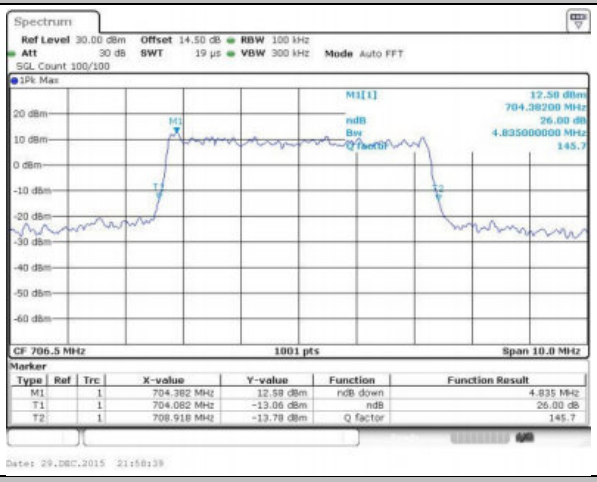
LTE Band 12	
Lowest Channel / 10MHz / QPSK	**Lowest Channel / 10MHz / 16QAM**
	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	
Highest Channel / 10MHz / QPSK	**Highest Channel / 10MHz / 16QAM**
	

LTE Band 17

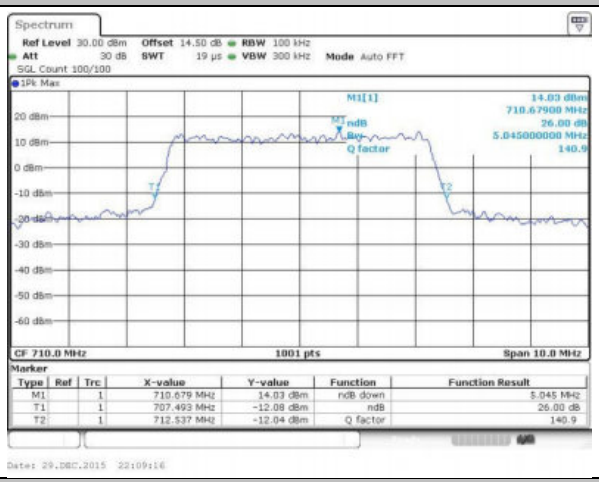
Lowest Channel / 5MHz / QPSK



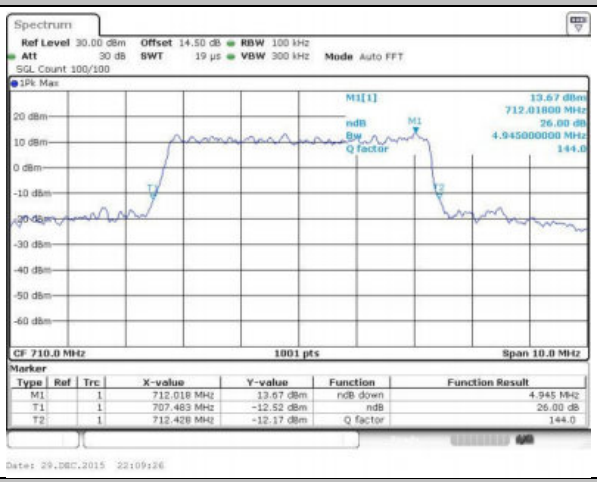
Lowest Channel / 5MHz / 16QAM



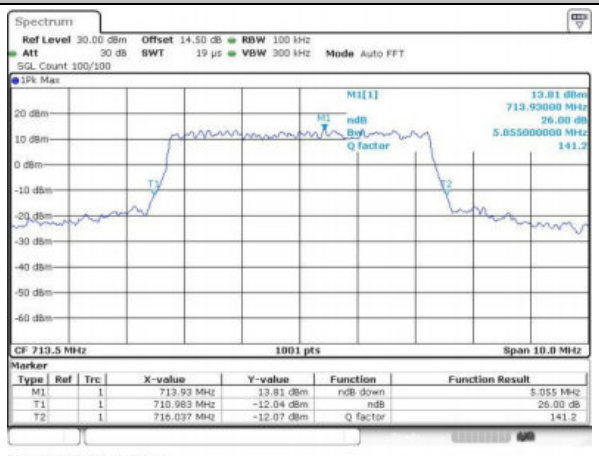
Middle Channel / 5MHz / QPSK



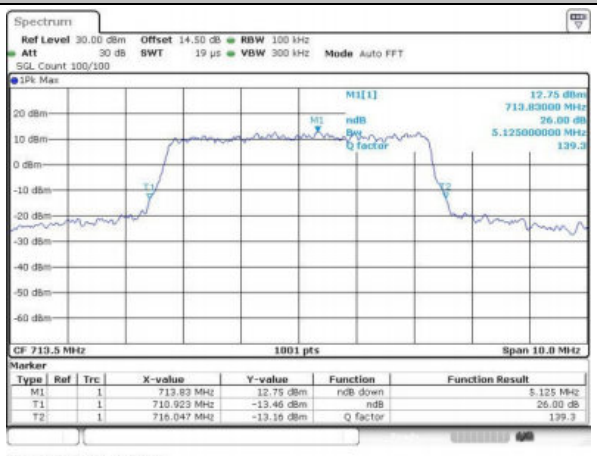
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

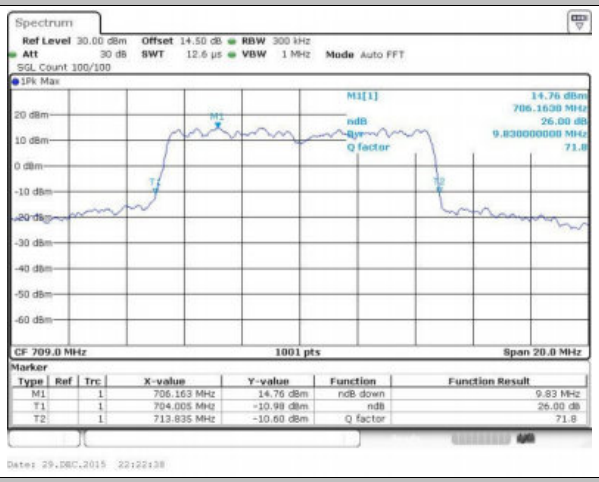


Highest Channel / 5MHz / 16QAM

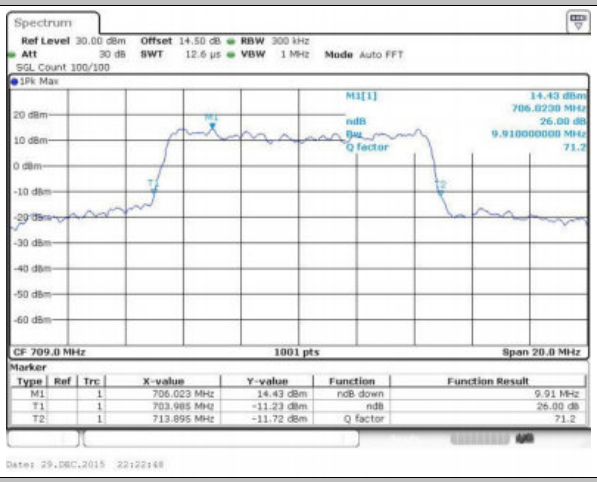


LTE Band 17

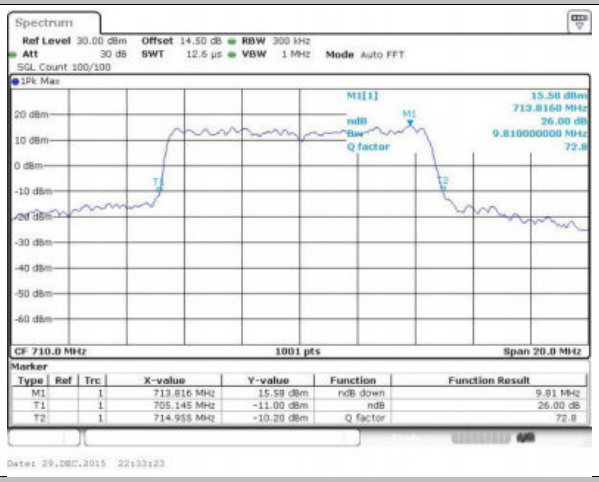
Lowest Channel / 10MHz / QPSK



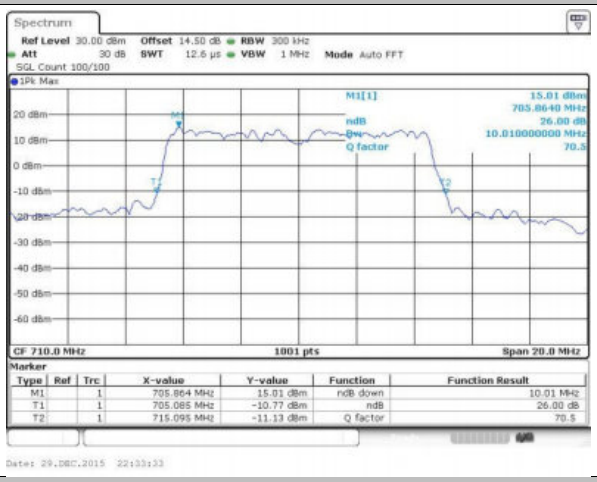
Lowest Channel / 10MHz / 16QAM



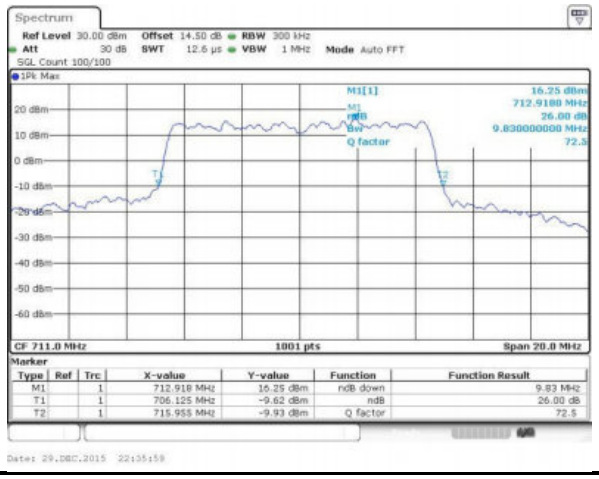
Middle Channel / 10MHz / QPSK



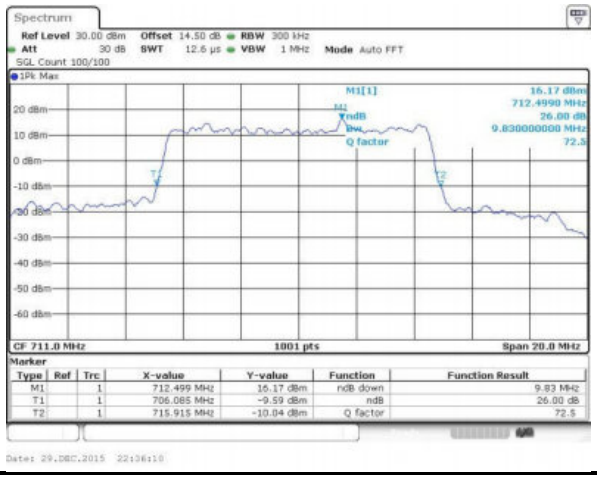
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



Occupied Bandwidth

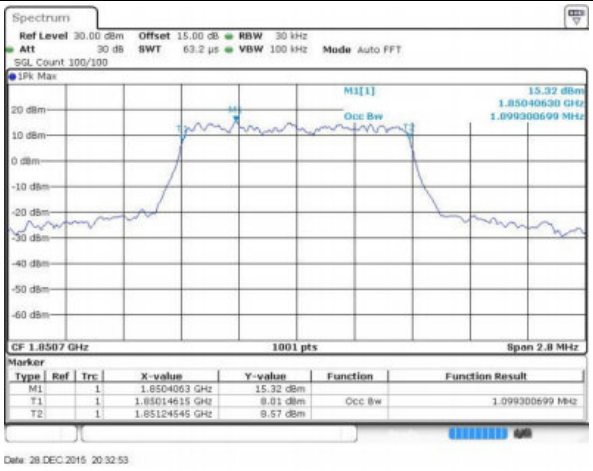
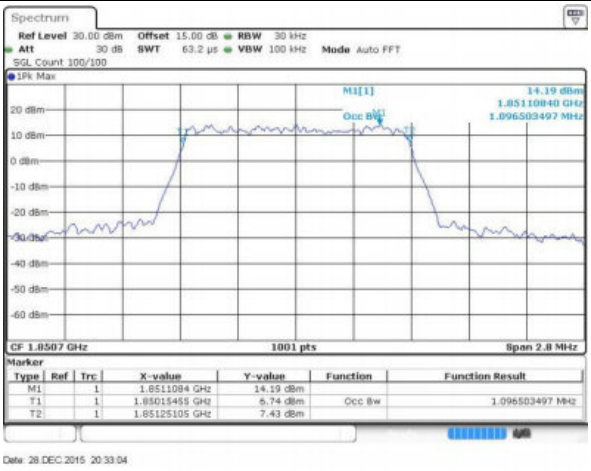
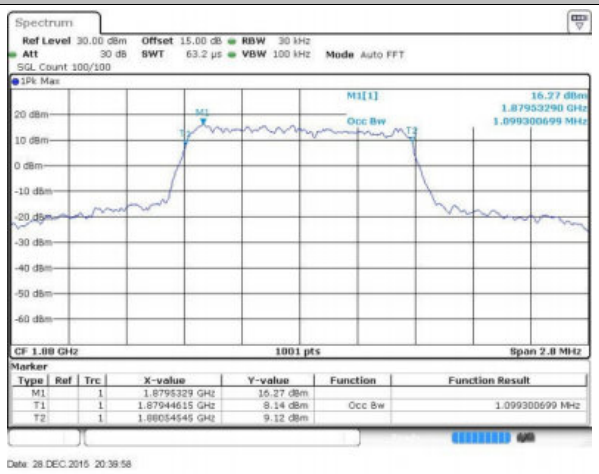
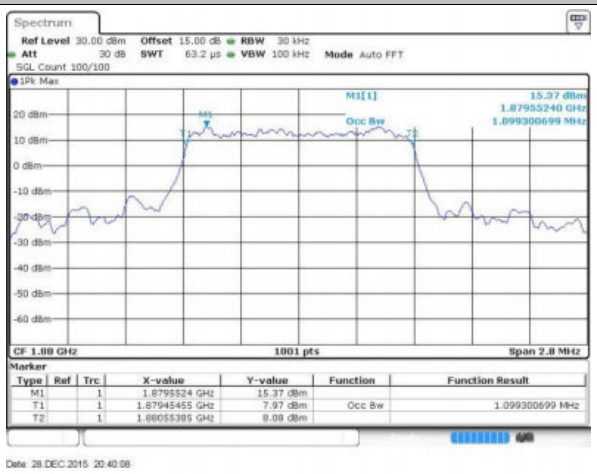
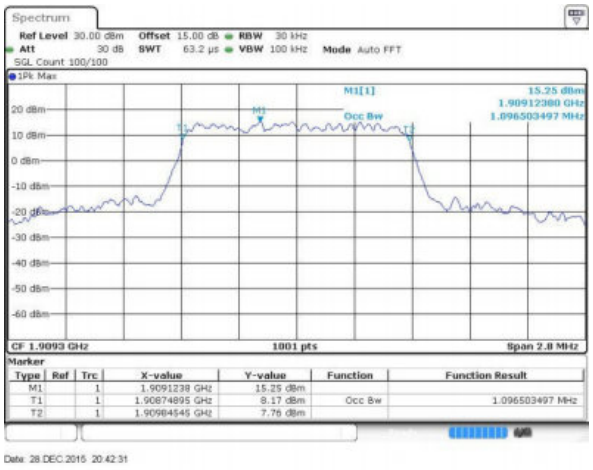
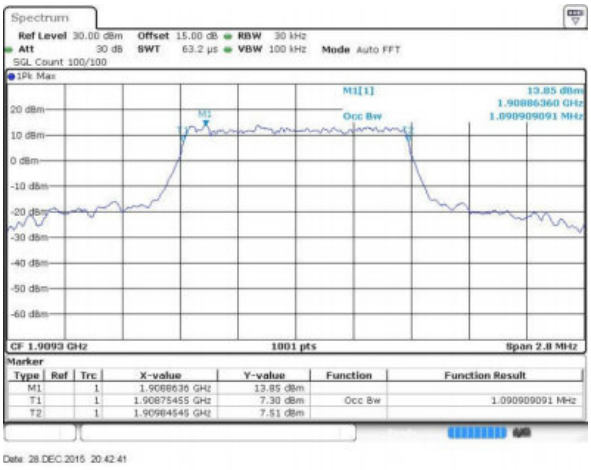
Mode	LTE Band 2 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.10	1.10	2.73	2.71	4.50	4.50	9.07	9.07	13.46	13.43	18.34	18.34
Middle CH	1.10	1.10	2.71	2.72	4.52	4.51	9.07	9.03	13.46	13.43	18.42	18.54
Highest CH	1.10	1.09	2.73	2.71	4.51	4.50	8.99	9.05	13.43	13.43	18.38	18.38

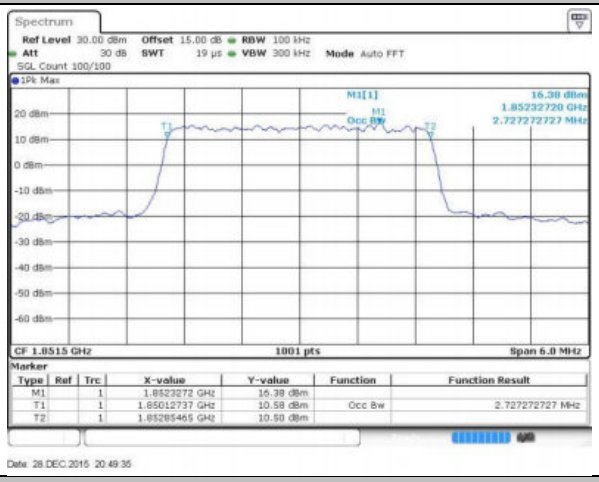
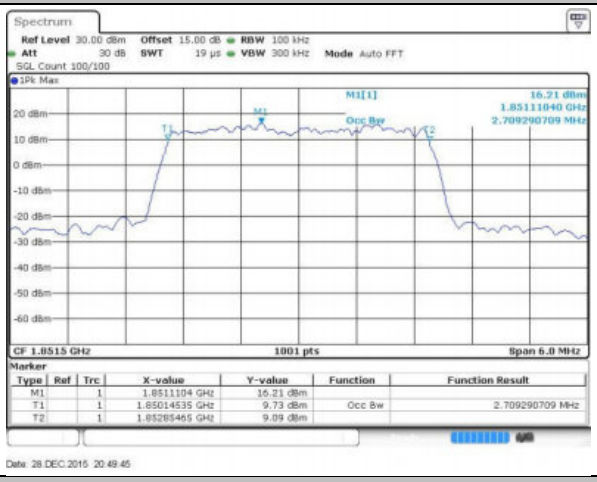
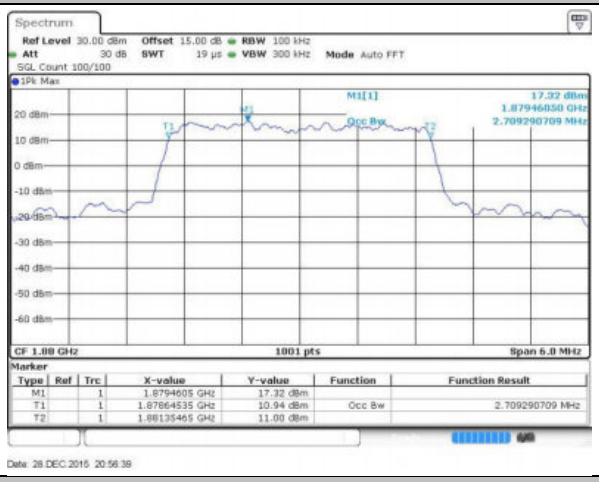
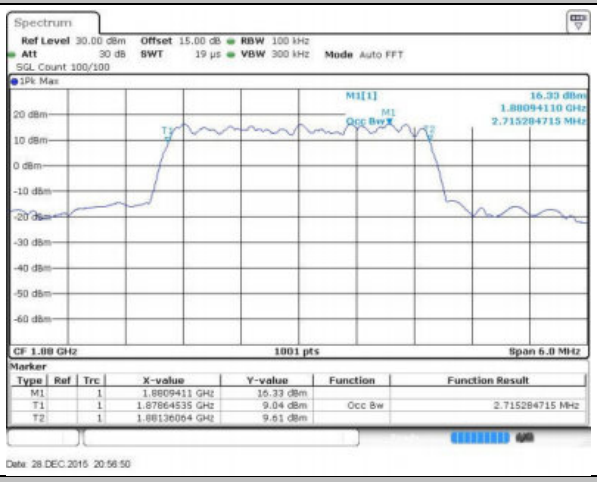
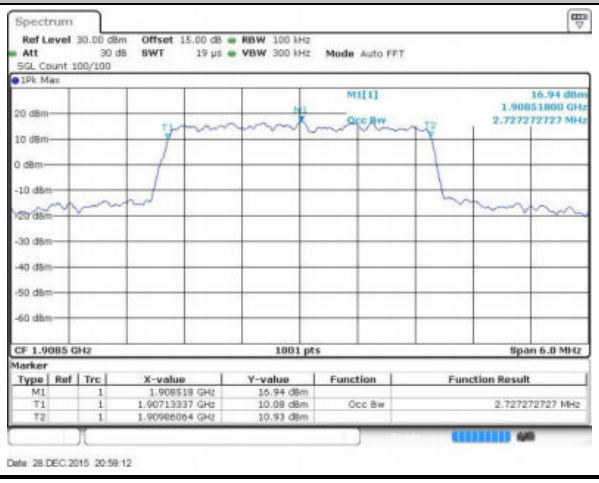
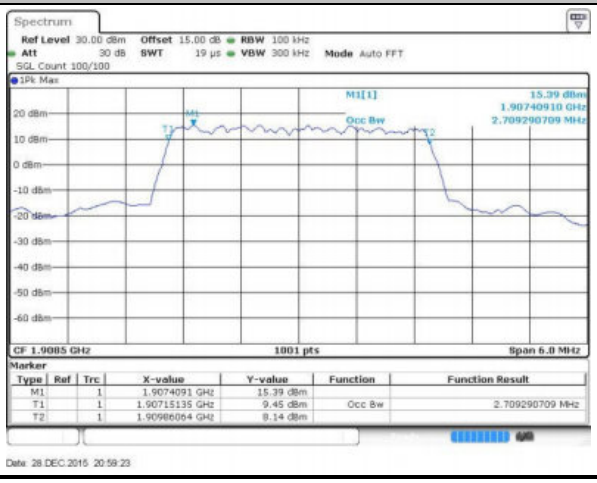
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.70	2.72	4.50	4.50	8.99	9.03	13.46	13.43	18.26	18.34
Middle CH	1.09	1.10	2.72	2.72	4.49	4.50	9.01	9.07	13.52	13.49	18.34	18.30
Highest CH	1.09	1.09	2.72	2.71	4.53	4.51	9.03	9.05	13.46	13.46	18.30	18.34

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	-	-	-	-	4.50	4.49	9.07	9.03	13.40	13.46	18.30	18.30
Middle CH	-	-	-	-	4.49	4.50	9.05	8.99	13.55	13.46	18.42	18.26
Highest CH	-	-	-	-	4.49	4.49	9.07	9.01	13.52	13.49	18.54	18.54

Mode	LTE Band 12 : 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	2.75	4.51	4.50	9.01	8.97	-	-	-	-
Middle CH	1.09	1.09	2.72	2.70	4.52	4.49	9.09	9.07	-	-	-	-
Highest CH	1.09	1.09	2.71	2.71	4.52	4.50	9.07	9.13	-	-	-	-

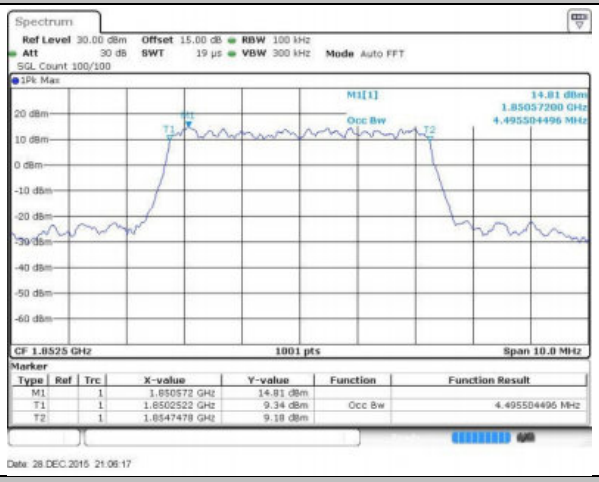
Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.52	4.50	9.07	8.97	-	-	-	-
Middle CH	-	-	-	-	4.50	4.53	9.13	9.09	-	-	-	-
Highest CH	-	-	-	-	4.51	4.51	9.15	9.07	-	-	-	-

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**
	

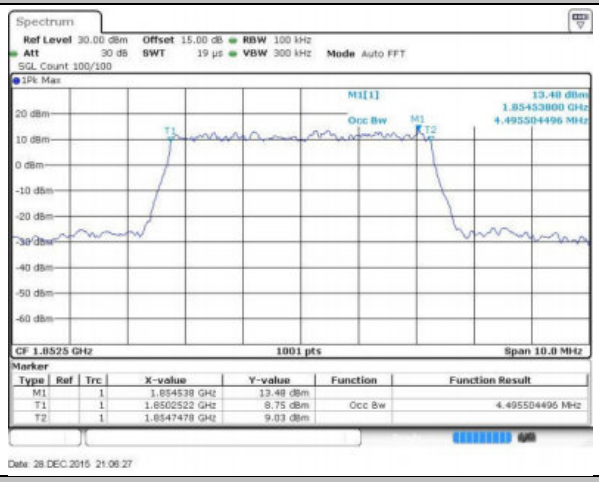
LTE Band 2	
Lowest Channel / 3MHz / QPSK	Lowest Channel / 3MHz / 16QAM
	
Middle Channel / 3MHz / QPSK	Middle Channel / 3MHz / 16QAM
	
Highest Channel / 3MHz / QPSK	Highest Channel / 3MHz / 16QAM
	

LTE Band 2

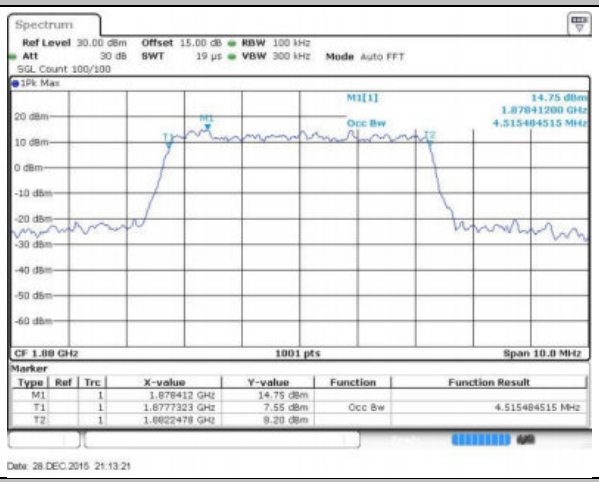
Lowest Channel / 5MHz / QPSK



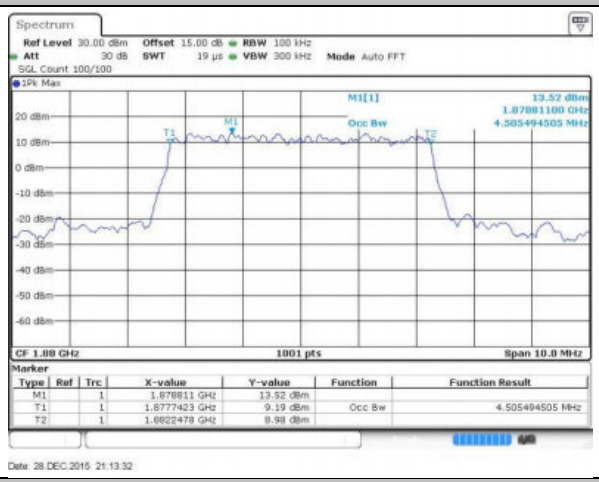
Lowest Channel / 5MHz / 16QAM



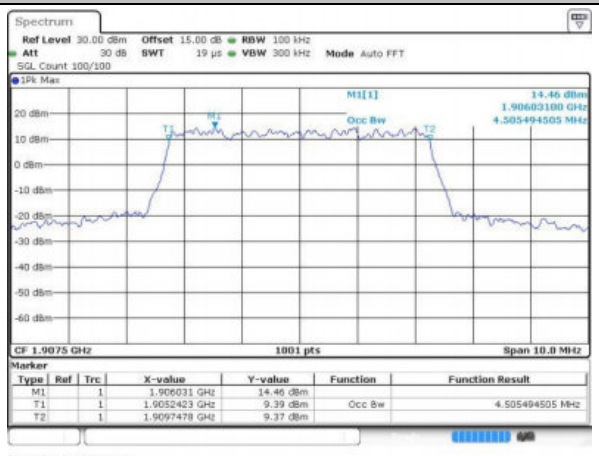
Middle Channel / 5MHz / QPSK



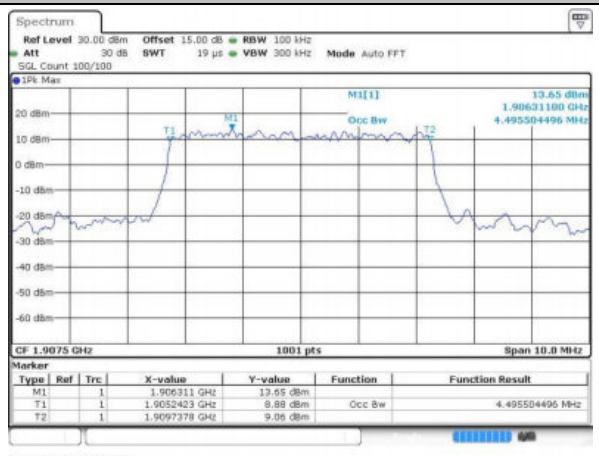
Middle Channel / 5MHz / 16QAM

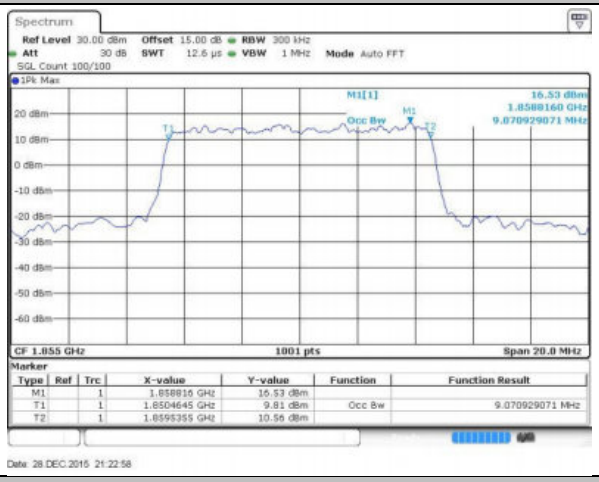
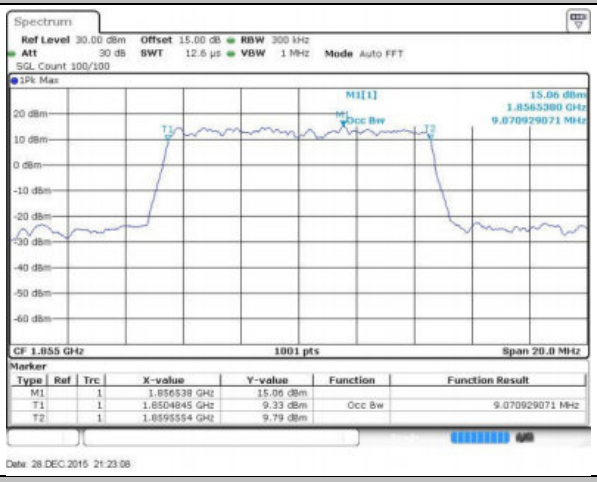
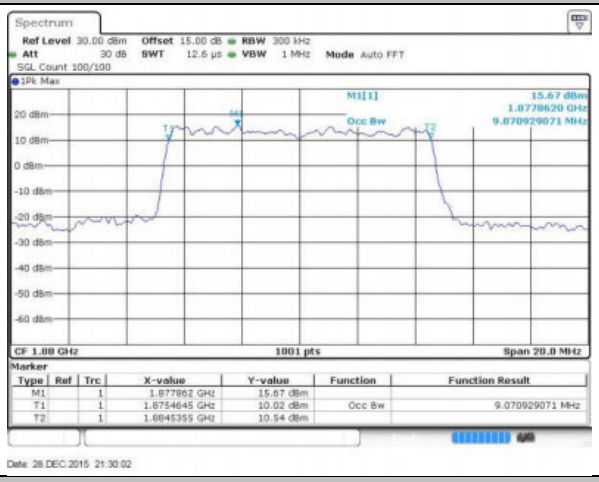
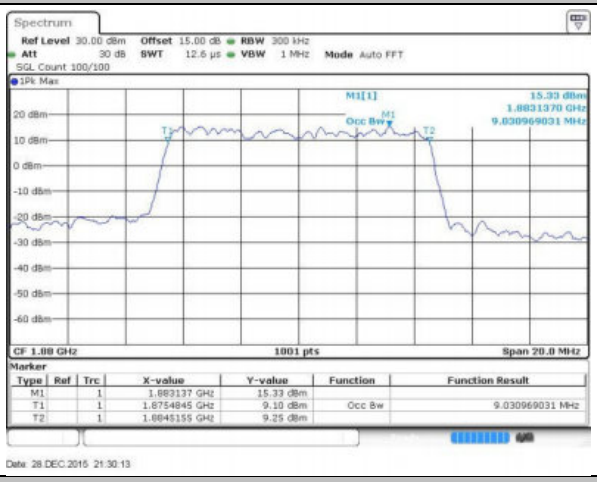
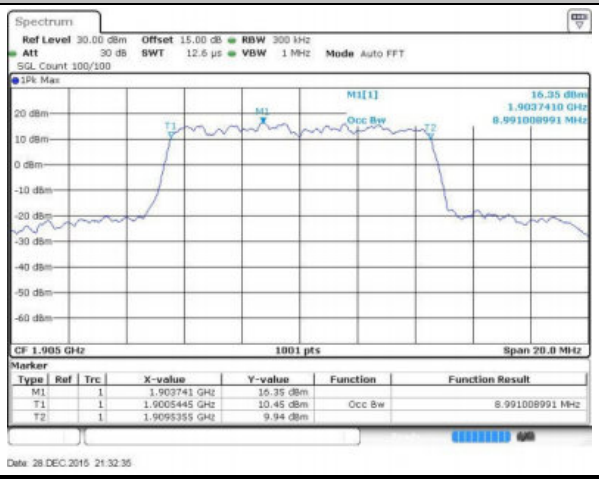
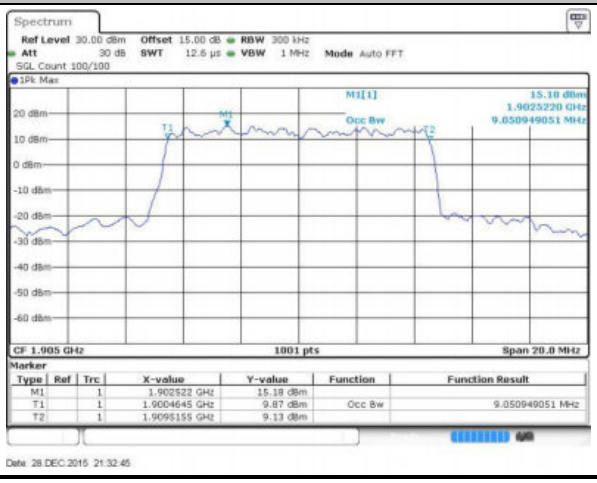


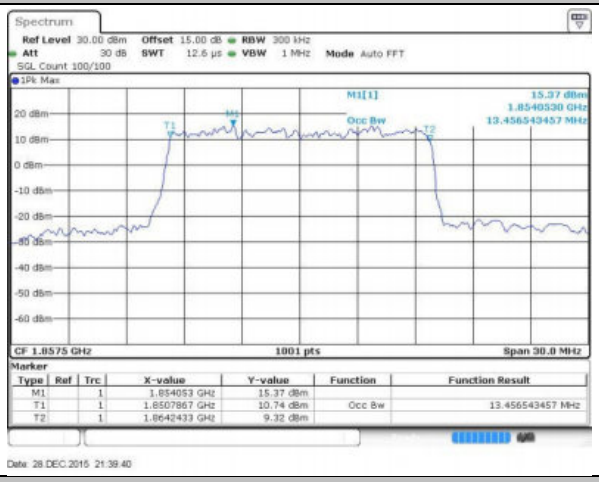
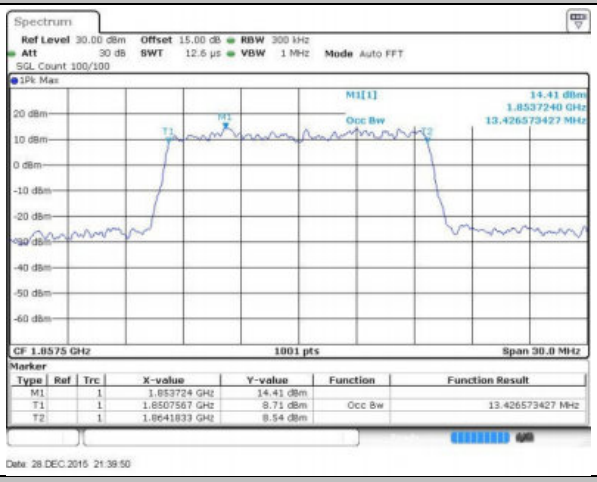
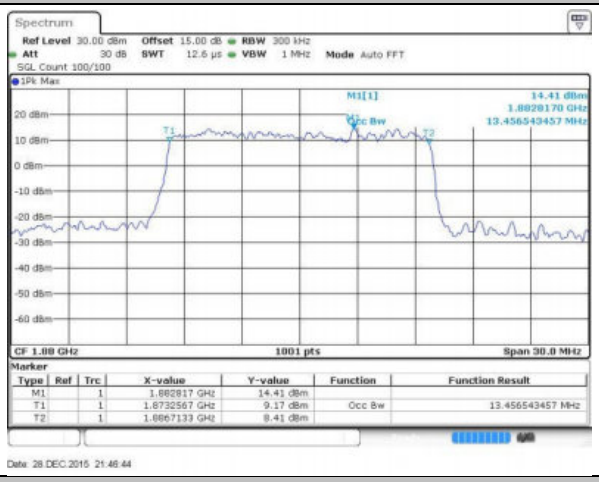
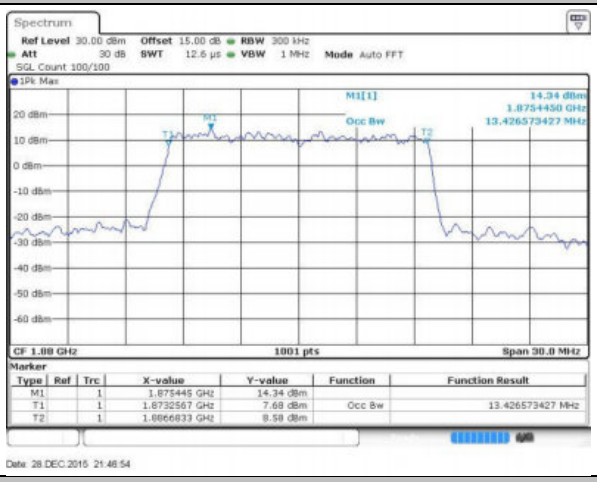
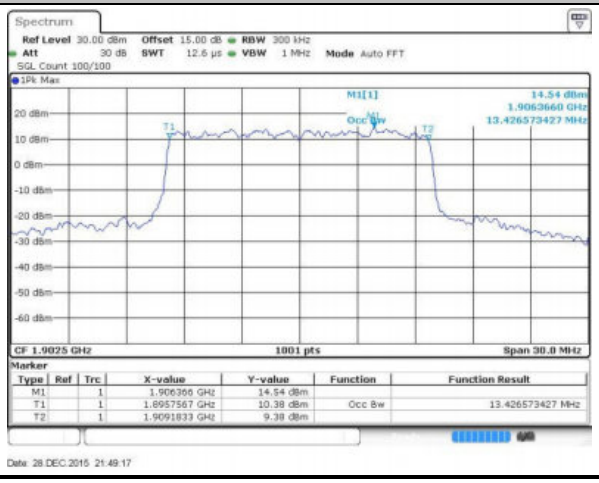
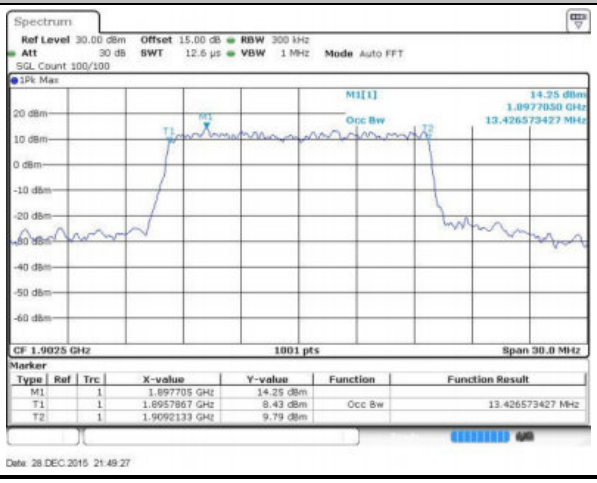
Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM

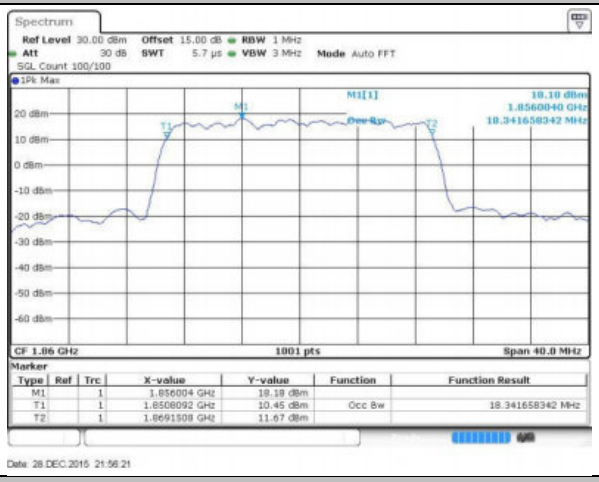


LTE Band 2	
Lowest Channel / 10MHz / QPSK	Lowest Channel / 10MHz / 16QAM
	
Middle Channel / 10MHz / QPSK	Middle Channel / 10MHz / 16QAM
	
Highest Channel / 10MHz / QPSK	Highest Channel / 10MHz / 16QAM
	

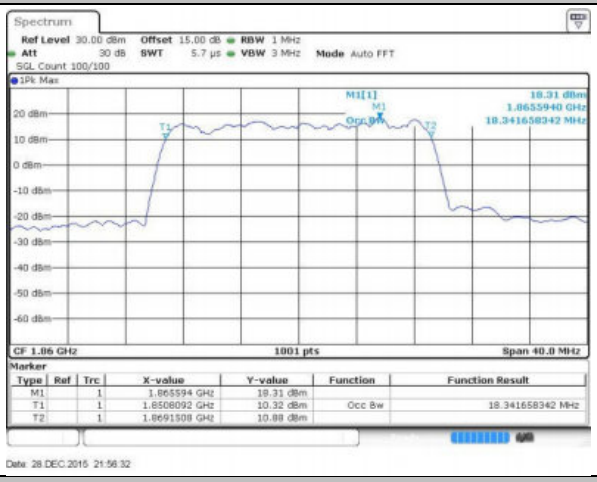
LTE Band 2	
Lowest Channel / 15MHz / QPSK	Lowest Channel / 15MHz / 16QAM
	
Middle Channel / 15MHz / QPSK	Middle Channel / 15MHz / 16QAM
	
Highest Channel / 15MHz / QPSK	Highest Channel / 15MHz / 16QAM
	

LTE Band 2

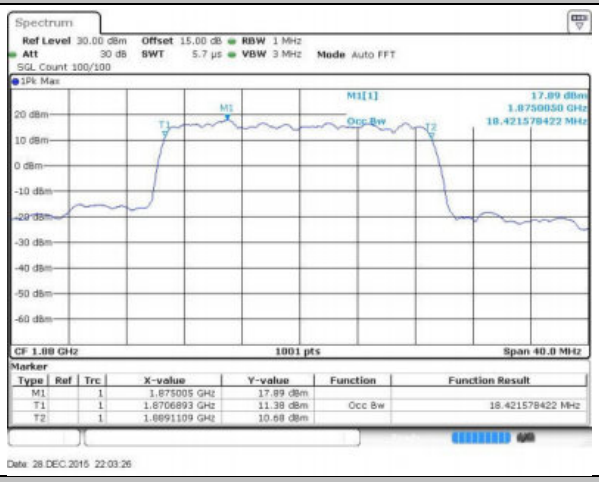
Lowest Channel / 20MHz / QPSK



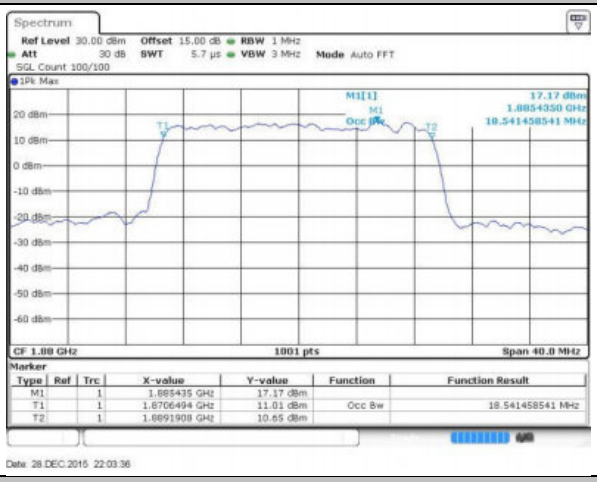
Lowest Channel / 20MHz / 16QAM



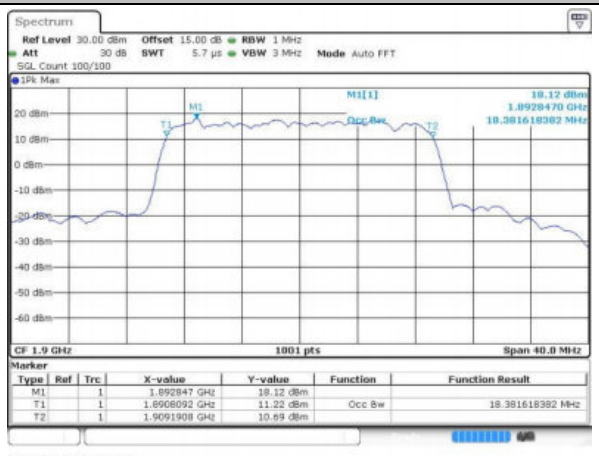
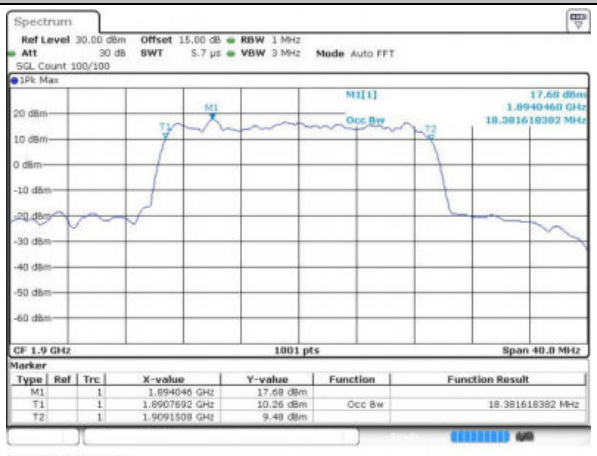
Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM