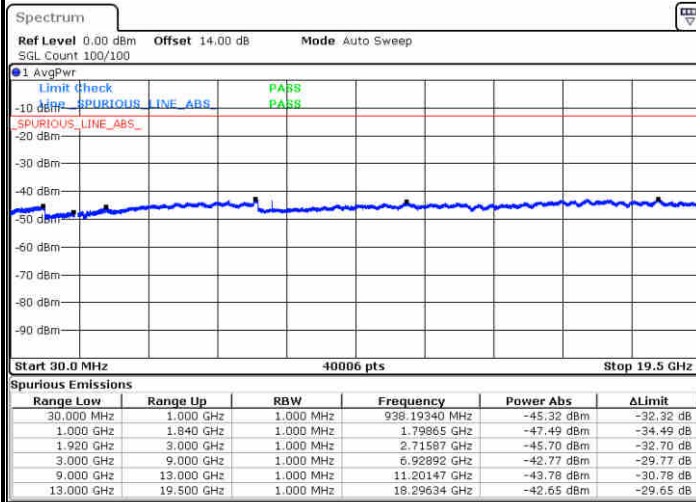




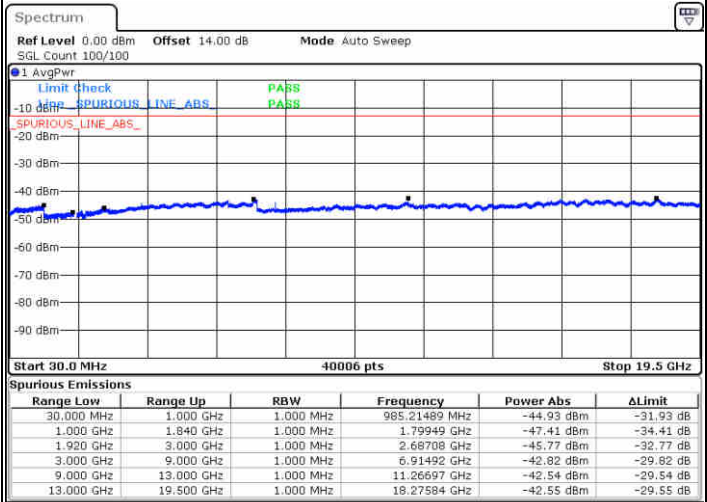
LTE Band 2 / 5MHz

Lowest Channel / 64QAM



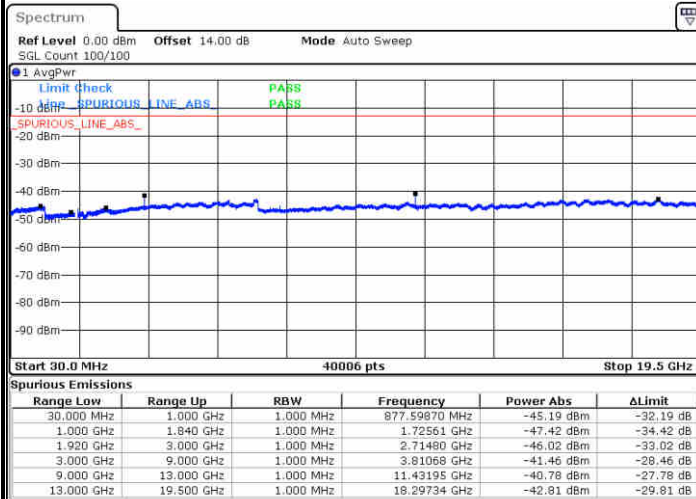
Date: 30 JUN 2020 12:59:46

Middle Channel / 64QAM



Date: 30 JUN 2020 12:58:42

Highest Channel / 64QAM

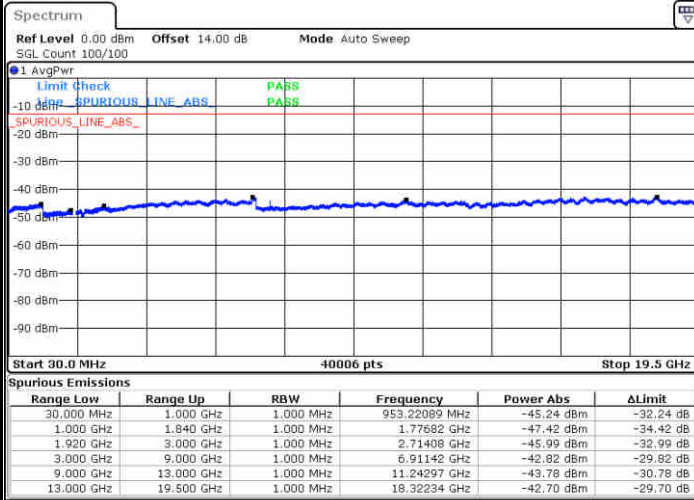


Date: 30 JUN 2020 12:57:41



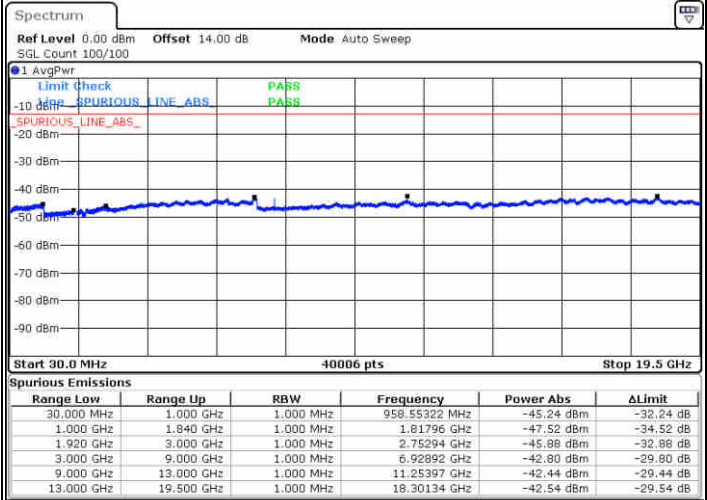
LTE Band 2 / 10MHz

Lowest Channel / 64QAM



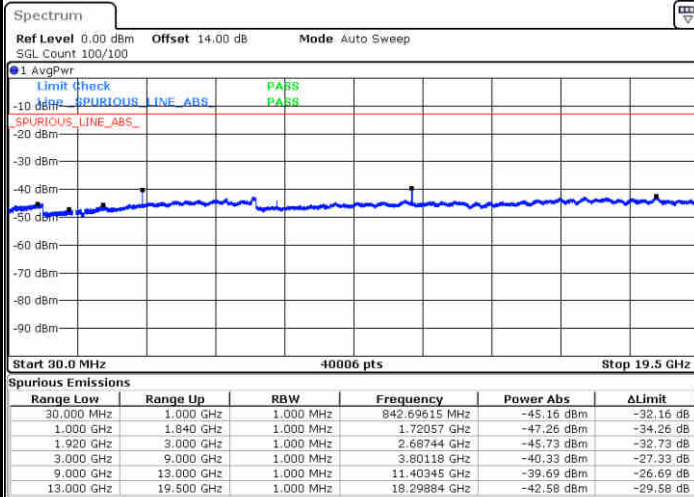
Date: 30 JUN 2020 15:23:40

Middle Channel / 64QAM



Date: 30 JUN 2020 15:22:03

Highest Channel / 64QAM

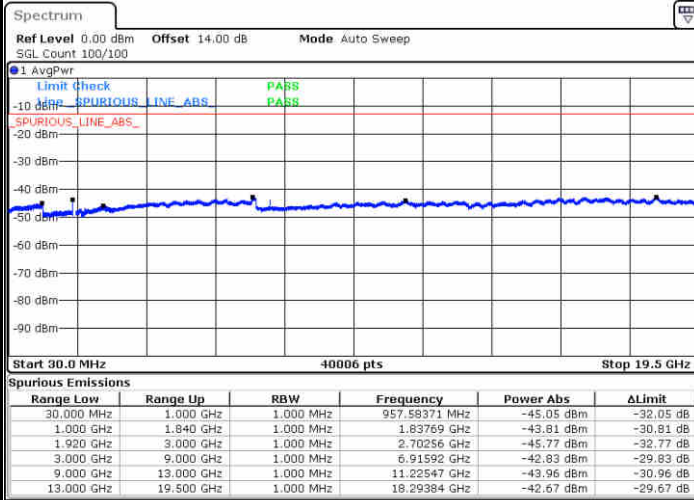


Date: 30 JUN 2020 15:20:33



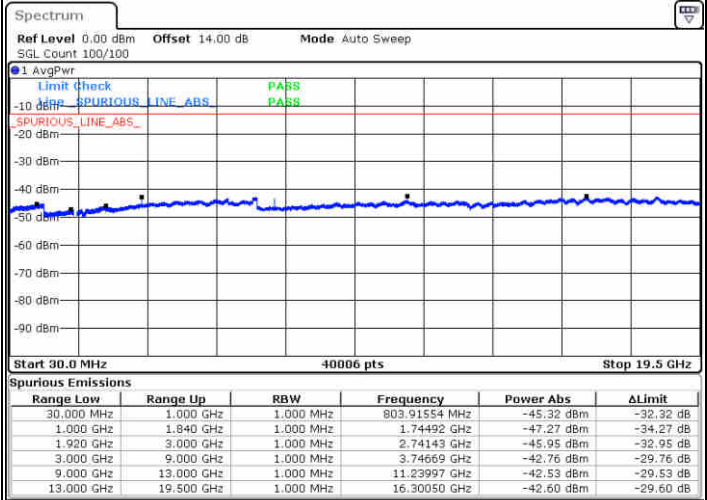
LTE Band 2 / 15MHz

Lowest Channel / 64QAM



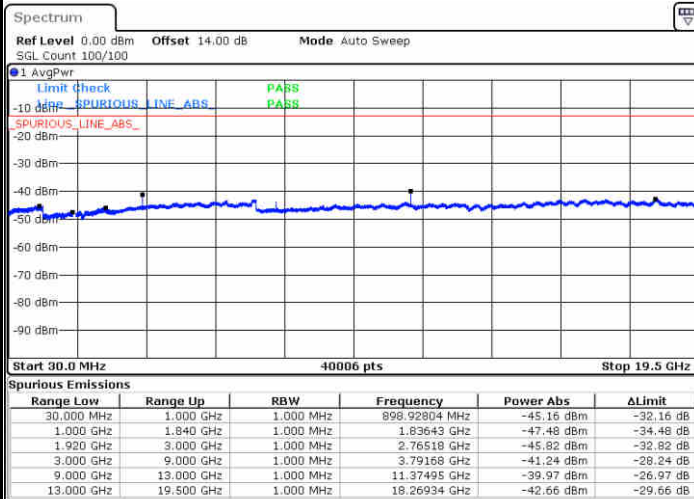
Date: 30 JUN 2020 16:26:58

Middle Channel / 64QAM



Date: 30 JUN 2020 16:25:27

Highest Channel / 64QAM

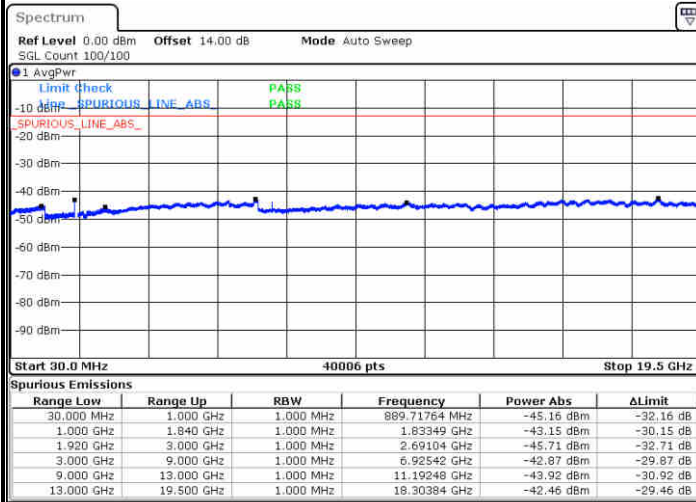


Date: 30 JUN 2020 16:23:57



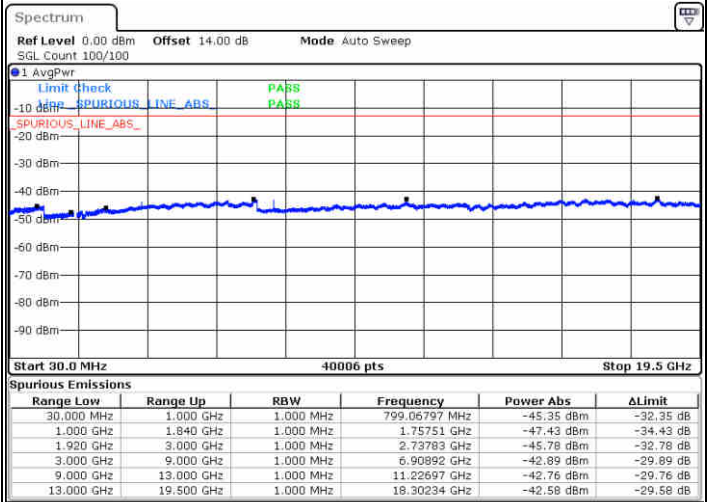
LTE Band 2 / 20MHz

Lowest Channel / 64QAM



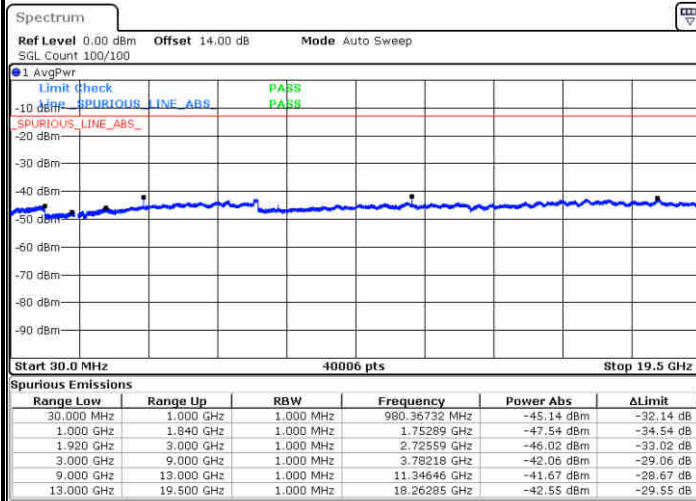
Date: 30 JUN 2020 17:03:08

Middle Channel / 64QAM



Date: 30 JUN 2020 17:01:53

Highest Channel / 64QAM



Date: 30 JUN 2020 17:00:36

**Frequency Stability**

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0005	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.45 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 4

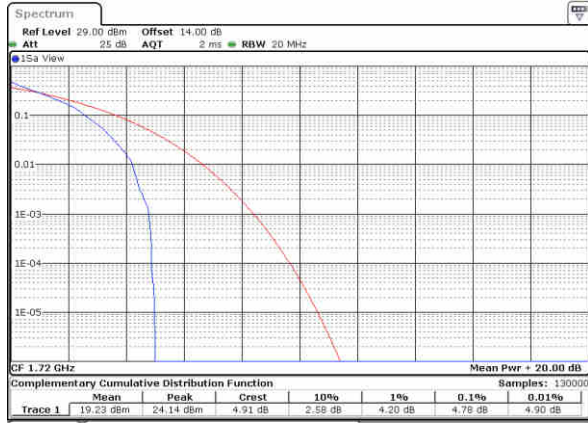
Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.78	5.42	5.57	6.23	PASS
Middle CH	6.32	4.90	7.19	5.91	
Highest CH	4.29	5.25	5.33	6.20	
Mode	LTE Band 4 / 20MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	5.54	6.32	-	-	PASS
Middle CH	6.20	5.86	-	-	
Highest CH	5.45	6.20	-	-	

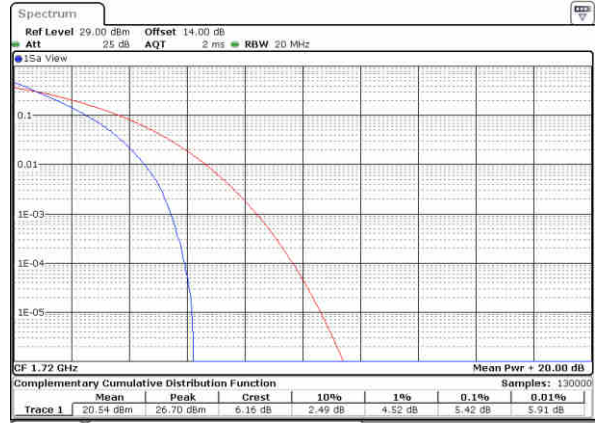


LTE Band 4 / 20MHz / QPSK

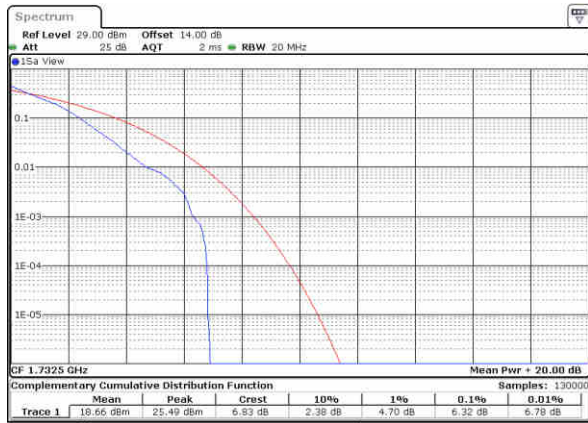
Lowest Channel / 1RB



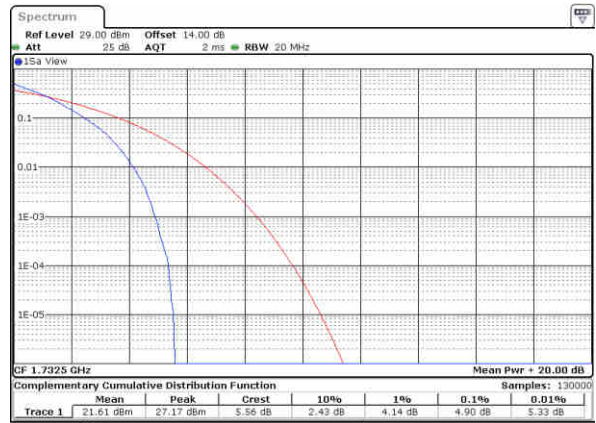
Lowest Channel / Full RB



Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



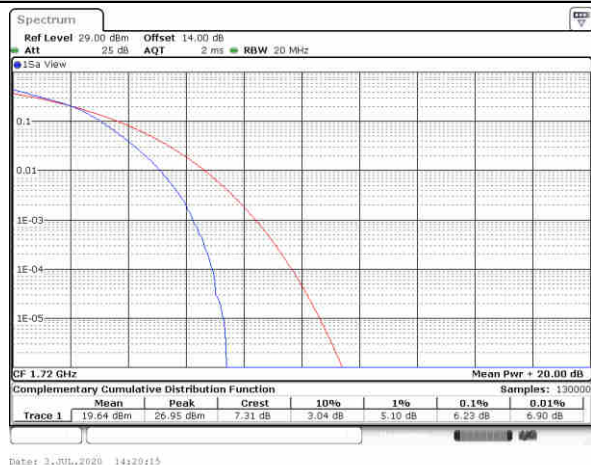


LTE Band 4 / 20MHz / 16QAM

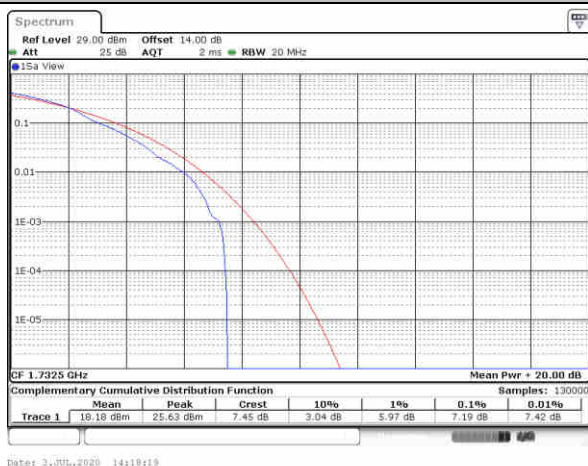
Lowest Channel / 1RB



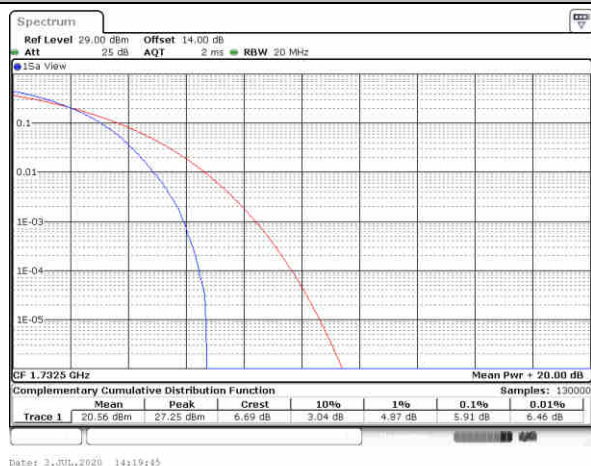
Lowest Channel / Full RB



Middle Channel / 1RB



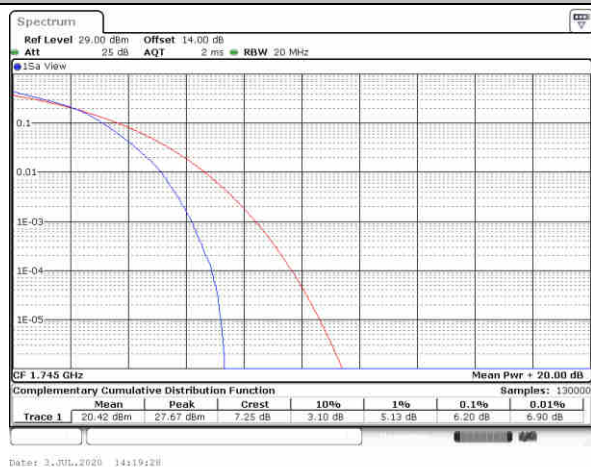
Middle Channel / Full RB



Highest Channel / 1RB



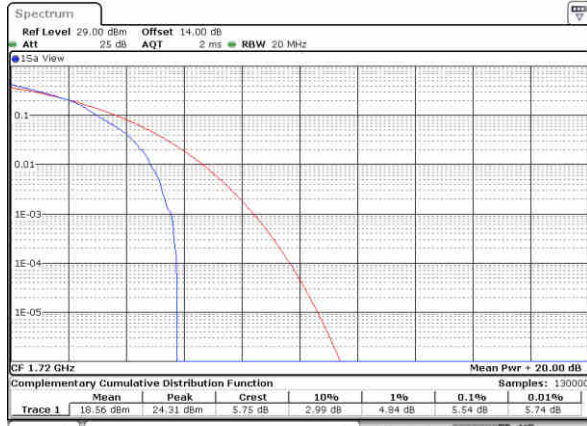
Highest Channel / Full RB



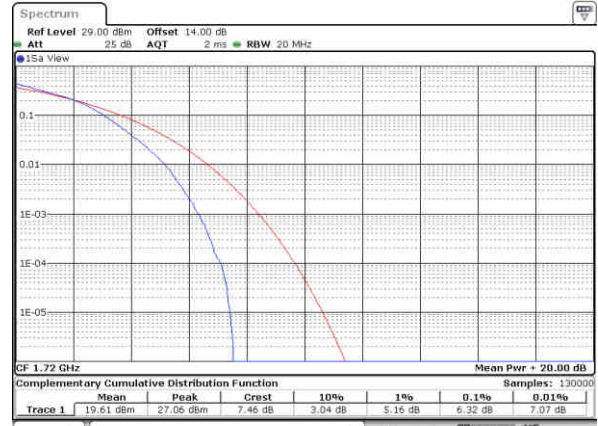


LTE Band 4 / 20MHz / 64QAM

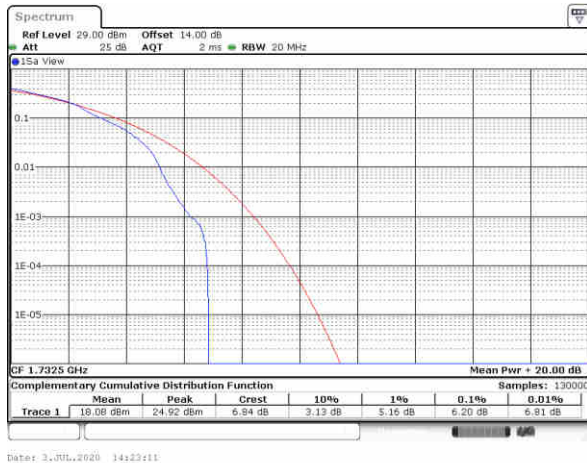
Lowest Channel / 1RB



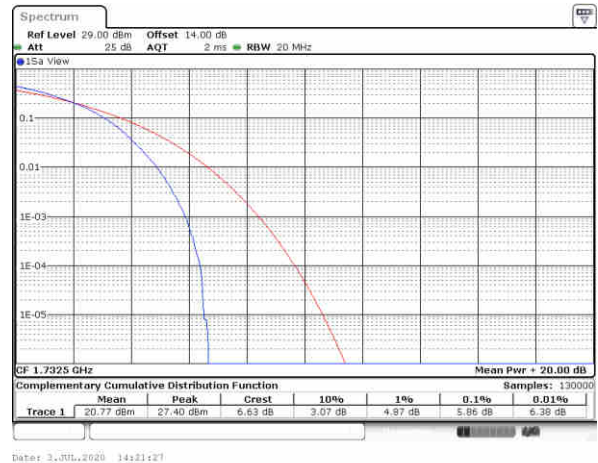
Lowest Channel / Full RB



Middle Channel / 1RB



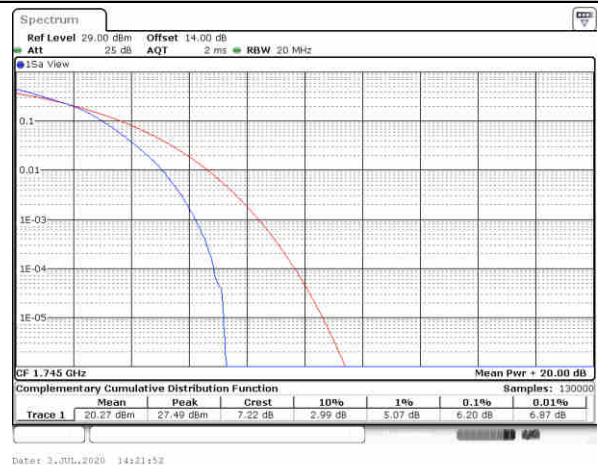
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



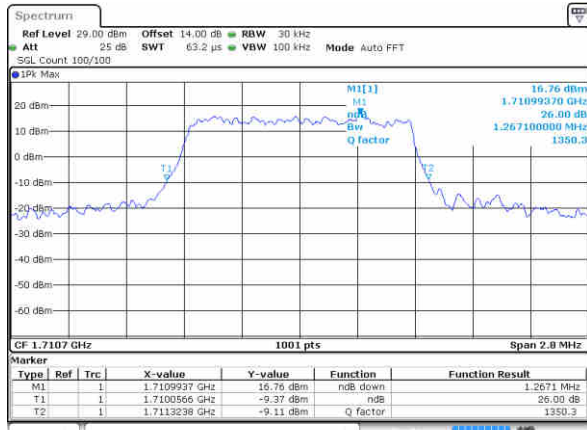
**26dB Bandwidth**

Mode	LTE Band 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	1.27	1.30	3.03	3.02	4.87	4.93	9.71	9.97	14.42	14.36	18.82	19.02
Middle CH	1.28	1.28	3.05	2.99	4.95	4.90	9.89	9.79	14.36	14.45	18.66	18.74
Highest CH	1.29	1.27	2.97	2.99	4.96	4.88	9.73	9.69	14.42	14.33	19.06	18.74
Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.26	-	3.01	-	4.85	-	9.93	-	14.36	-	18.74	-
Middle CH	1.27	-	3.00	-	4.96	-	9.81	-	14.24	-	18.82	-
Highest CH	1.26	-	3.03	-	4.92	-	9.75	-	14.39	-	18.90	-



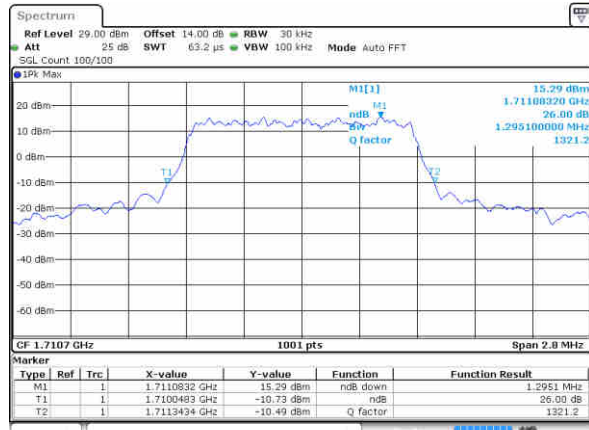
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



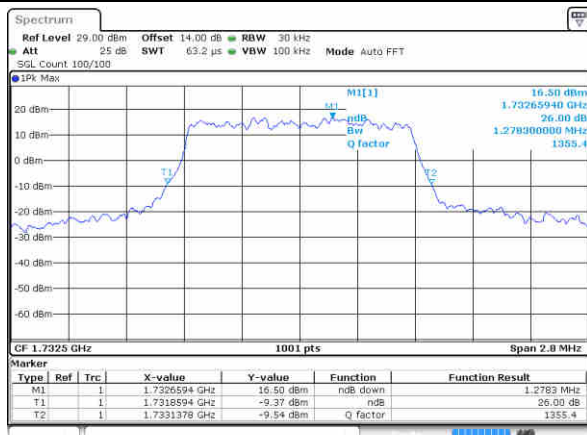
Date: 1 JUL 2020 11:54:51

Lowest Channel / 1.4MHz / 16QAM



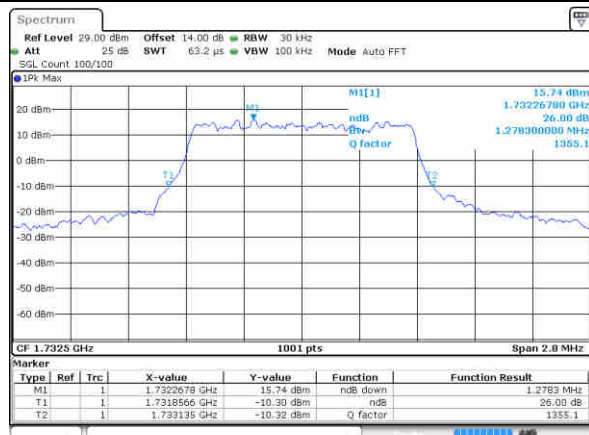
Date: 1 JUL 2020 12:10:25

Middle Channel / 1.4MHz / QPSK



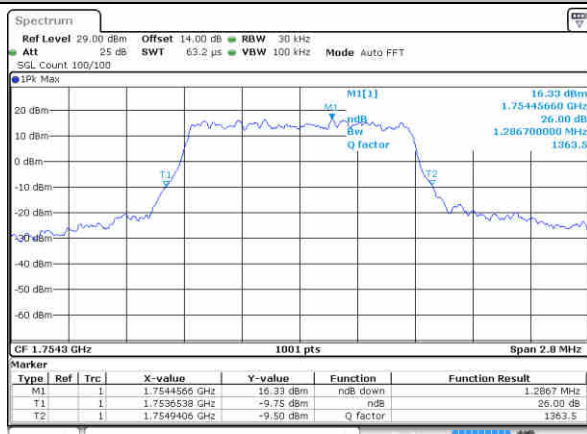
Date: 1 JUL 2020 11:59:31

Middle Channel / 1.4MHz / 16QAM



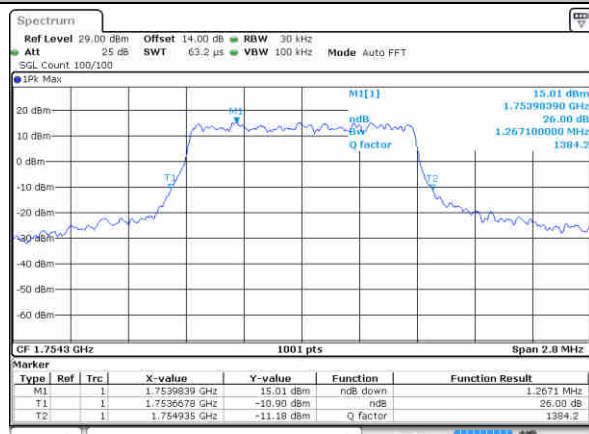
Date: 1 JUL 2020 12:12:28

Highest Channel / 1.4MHz / QPSK



Date: 1 JUL 2020 12:00:05

Highest Channel / 1.4MHz / 16QAM

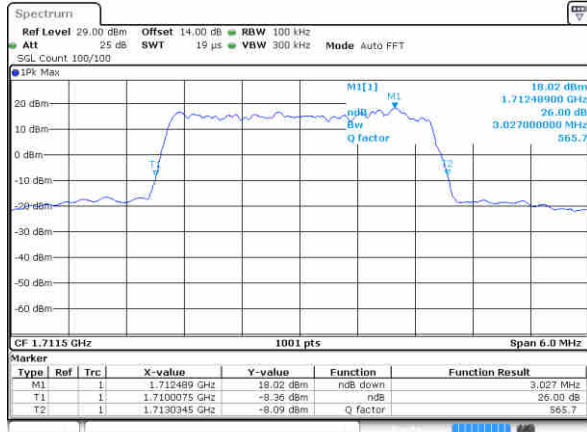


Date: 1 JUL 2020 12:13:53

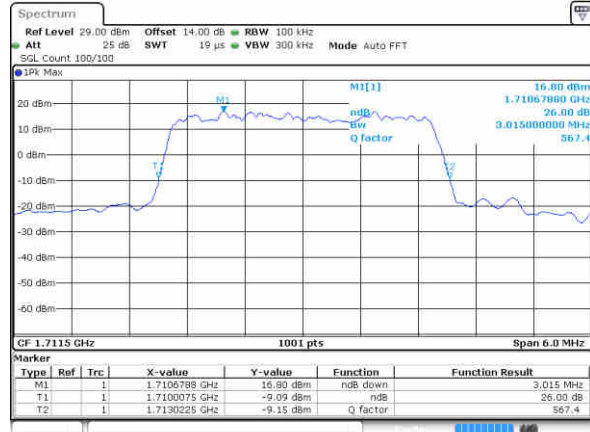


LTE Band 4

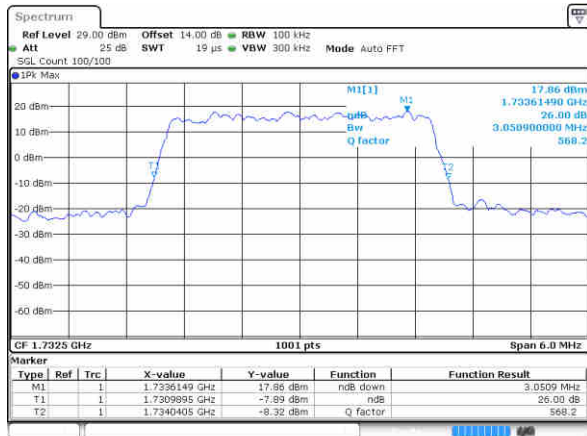
Lowest Channel / 3MHz / QPSK



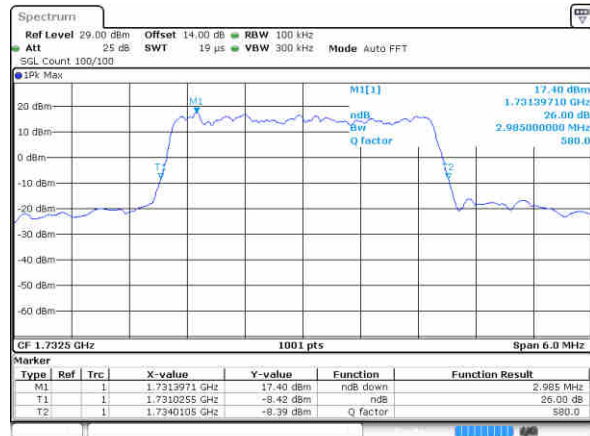
Lowest Channel / 3MHz / 16QAM



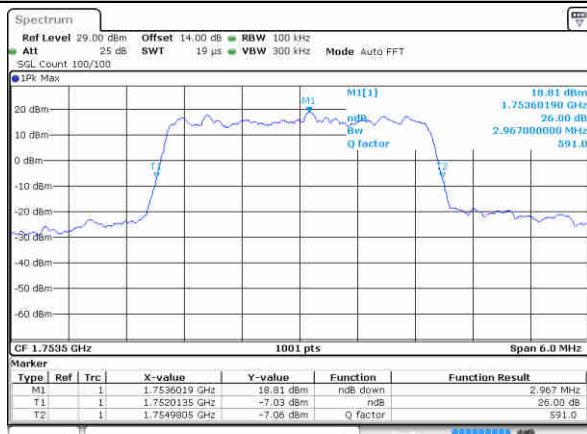
Middle Channel / 3MHz / QPSK



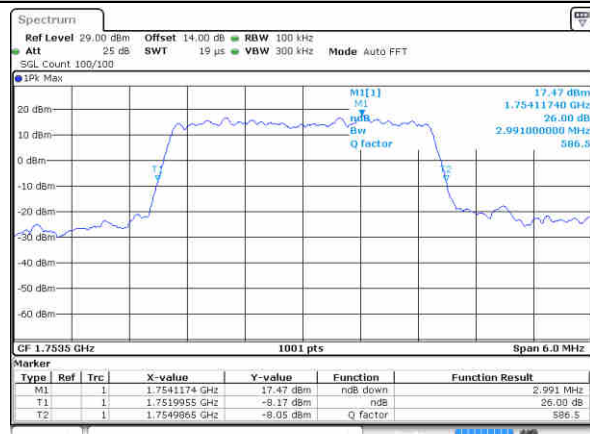
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



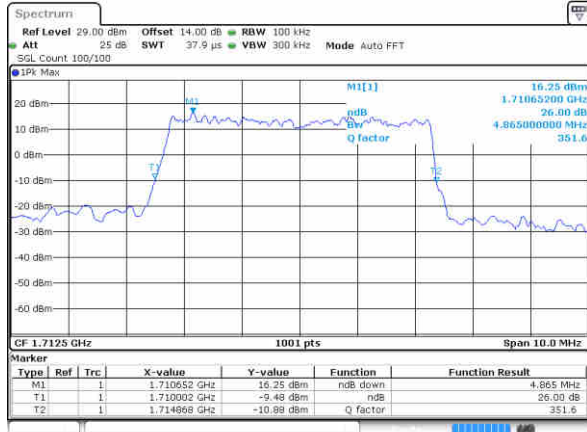
Highest Channel / 3MHz / 16QAM





LTE Band 4

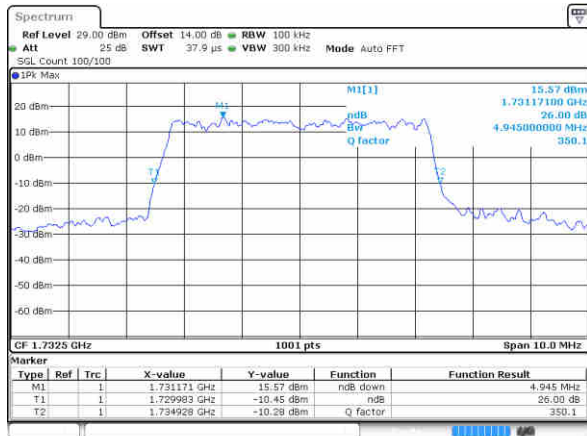
Lowest Channel / 5MHz / QPSK



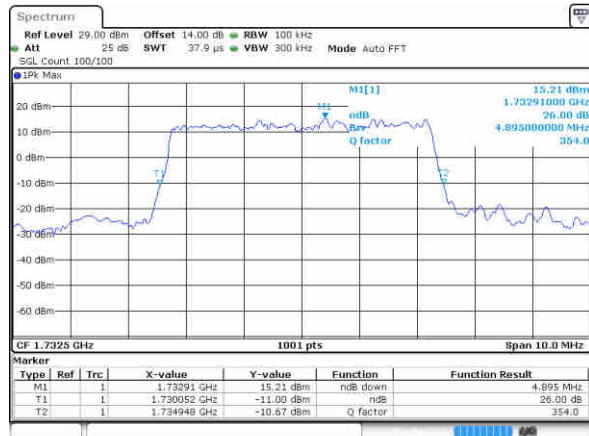
Lowest Channel / 5MHz / 16QAM



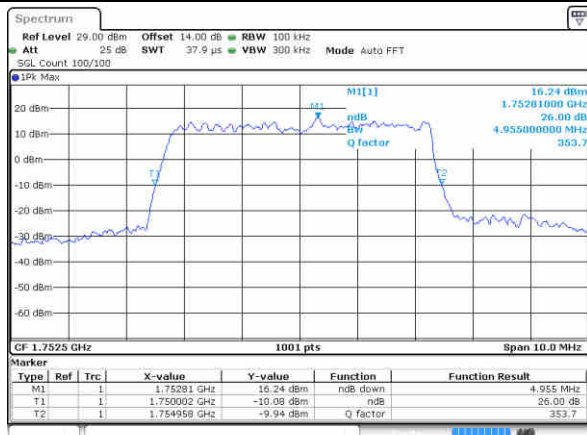
Middle Channel / 5MHz / QPSK



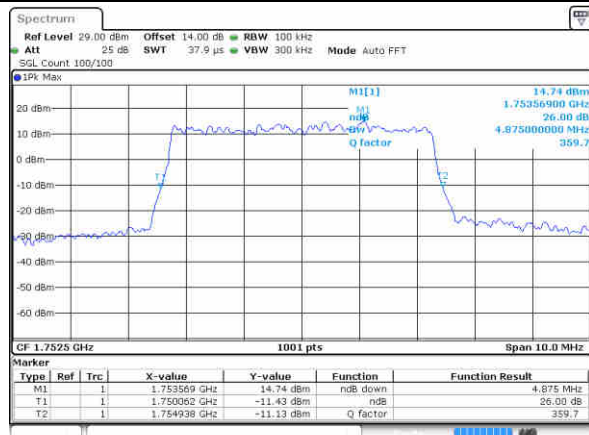
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



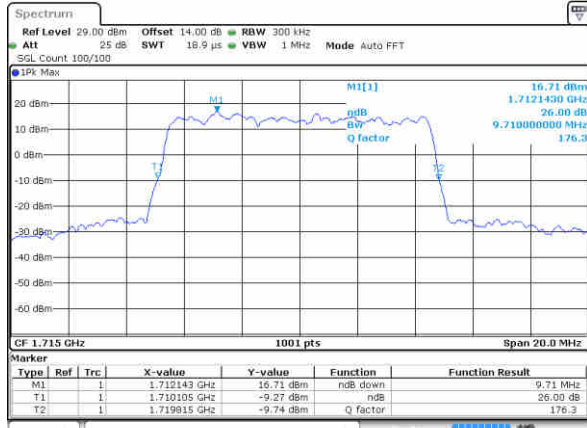
Highest Channel / 5MHz / 16QAM



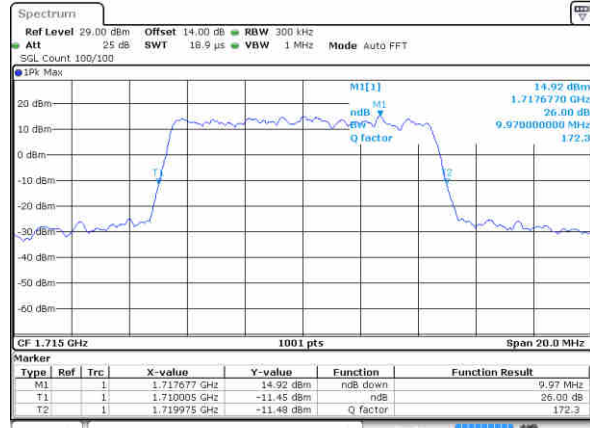


LTE Band 4

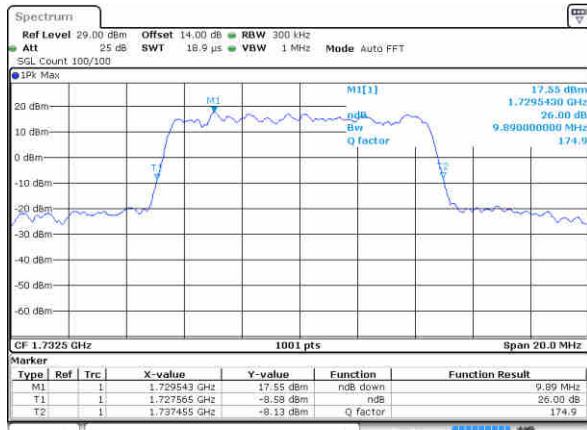
Lowest Channel / 10MHz / QPSK



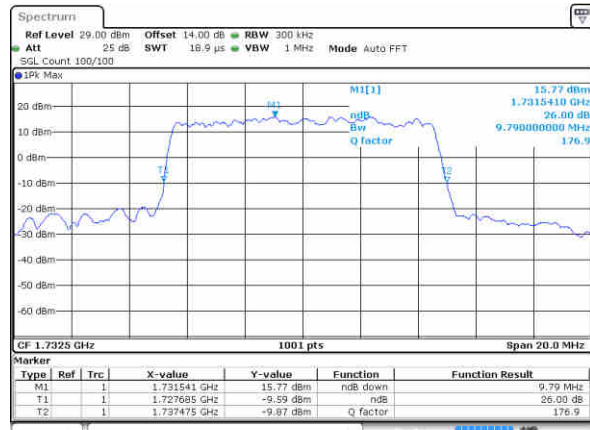
Lowest Channel / 10MHz / 16QAM



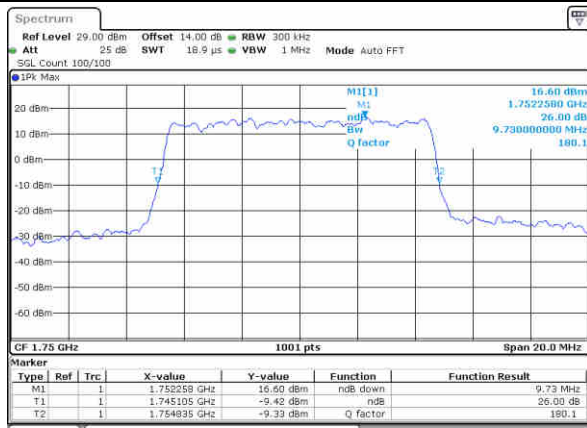
Middle Channel / 10MHz / QPSK



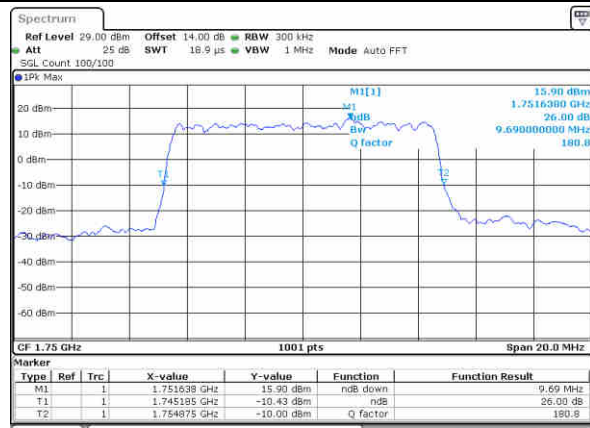
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



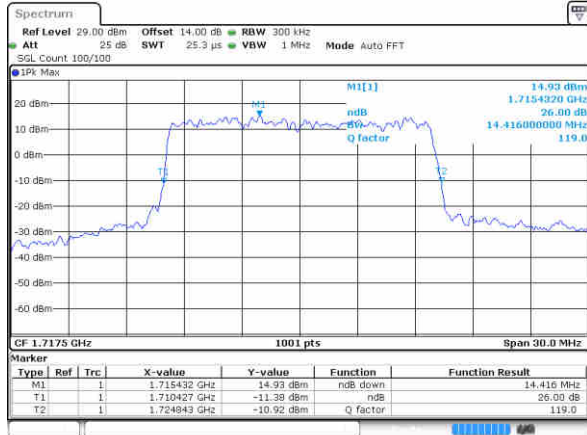
Highest Channel / 10MHz / 16QAM





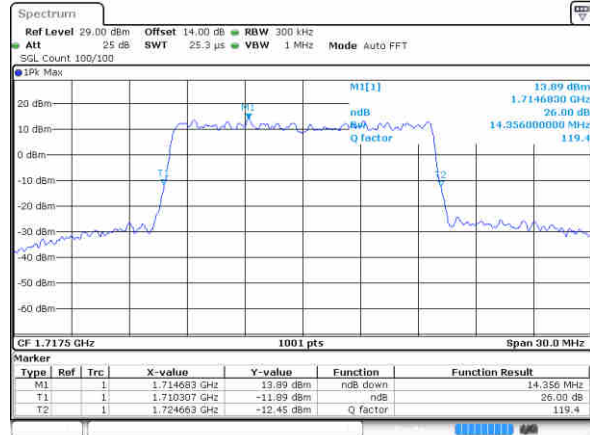
LTE Band 4

Lowest Channel / 15MHz / QPSK



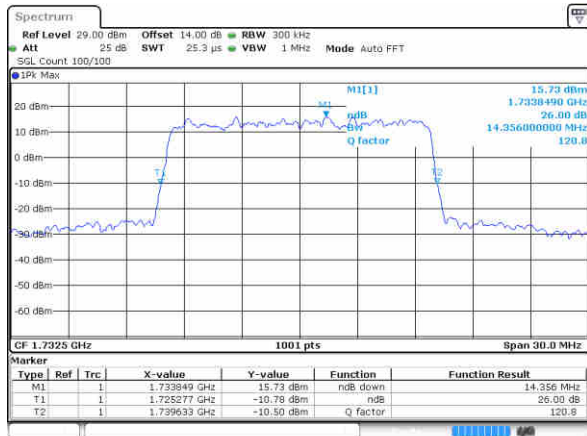
Date: 1 JUL 2020 16:27:00

Lowest Channel / 15MHz / 16QAM



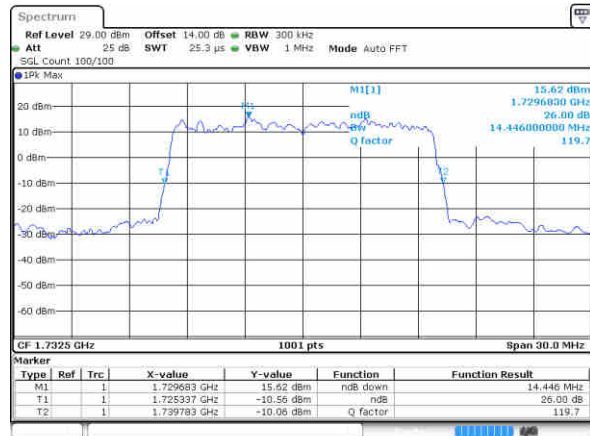
Date: 1 JUL 2020 16:34:35

Middle Channel / 15MHz / QPSK



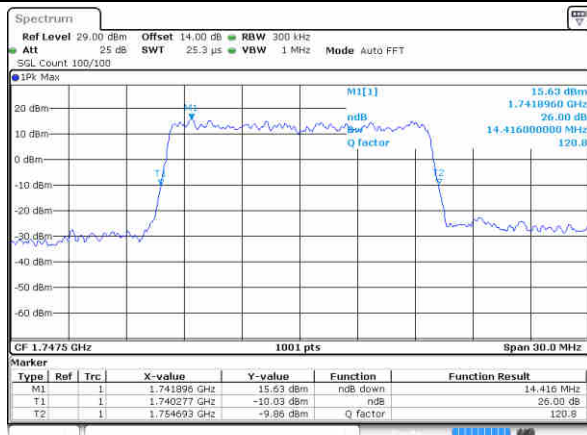
Date: 1 JUL 2020 16:28:06

Middle Channel / 15MHz / 16QAM



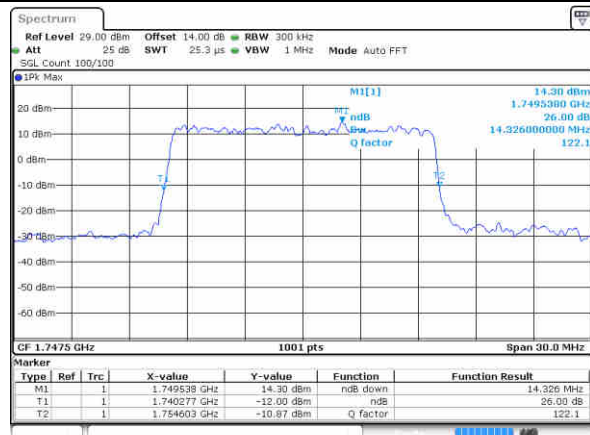
Date: 1 JUL 2020 16:36:32

Highest Channel / 15MHz / QPSK



Date: 1 JUL 2020 16:28:35

Highest Channel / 15MHz / 16QAM

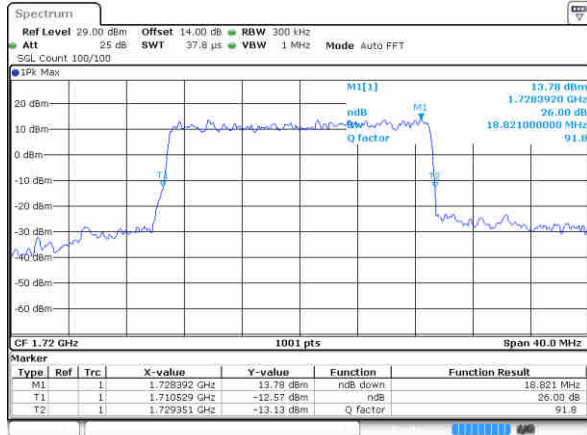


Date: 1 JUL 2020 16:37:05



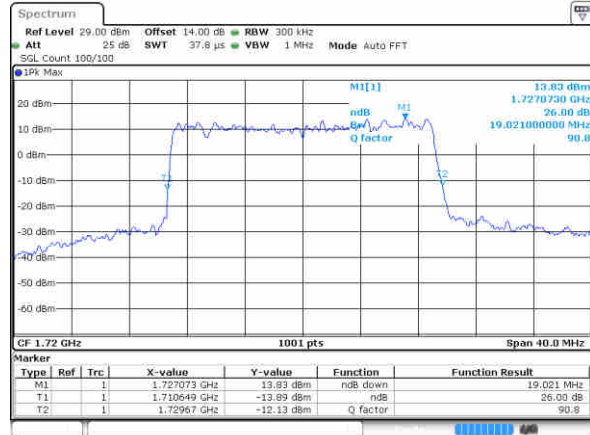
LTE Band 4

Lowest Channel / 20MHz / QPSK



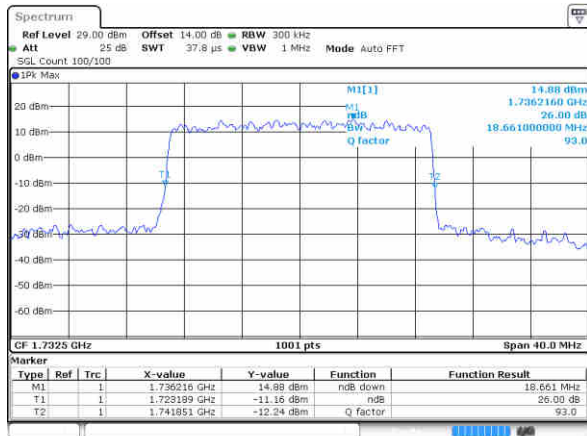
Date: 1 JUL 2020 16:57:05

Lowest Channel / 20MHz / 16QAM



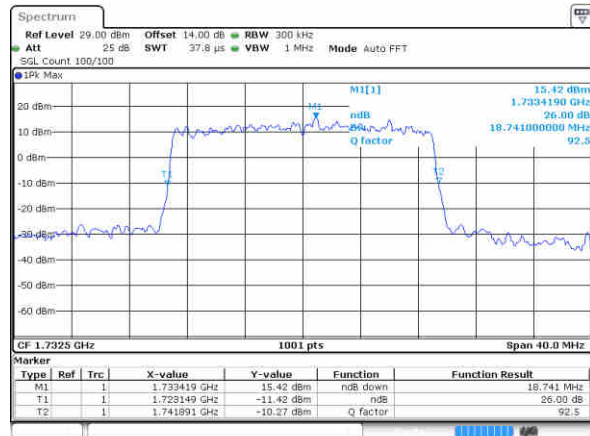
Date: 1 JUL 2020 17:03:01

Middle Channel / 20MHz / QPSK



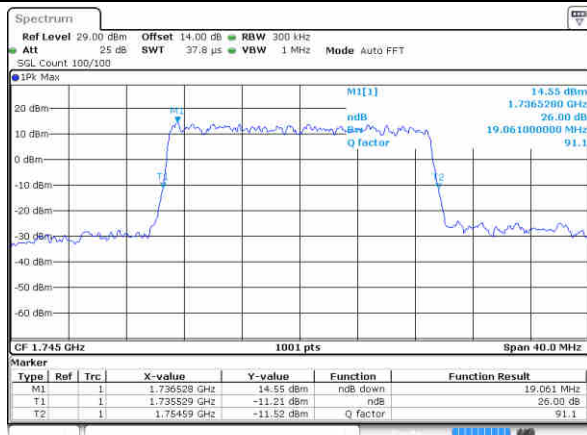
Date: 1 JUL 2020 16:57:43

Middle Channel / 20MHz / 16QAM



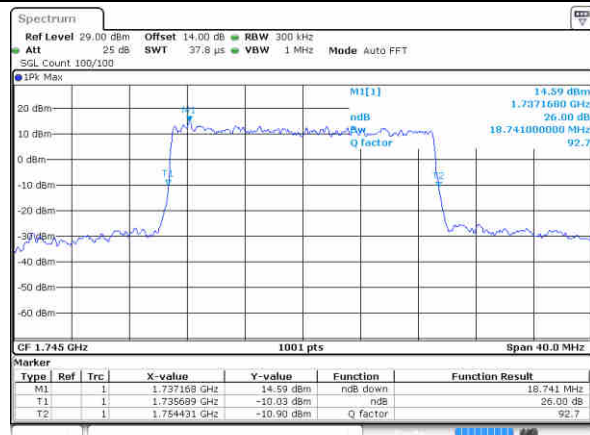
Date: 1 JUL 2020 17:03:46

Highest Channel / 20MHz / QPSK



Date: 1 JUL 2020 16:58:09

Highest Channel / 20MHz / 16QAM

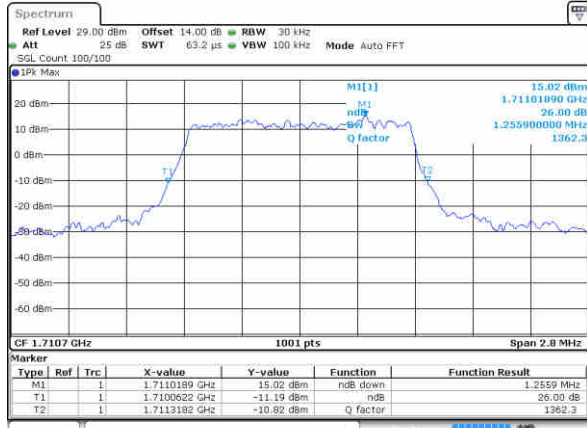


Date: 1 JUL 2020 17:04:17

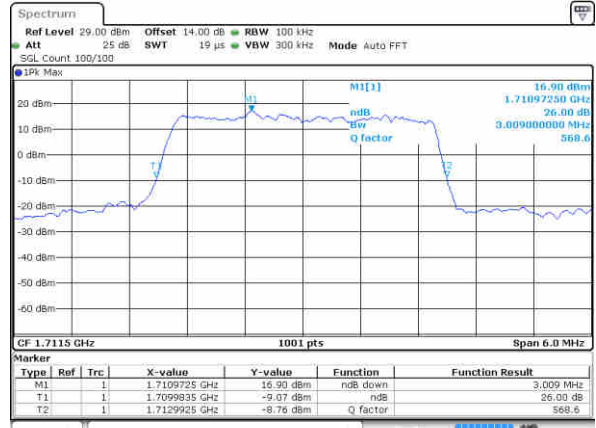


LTE Band 4

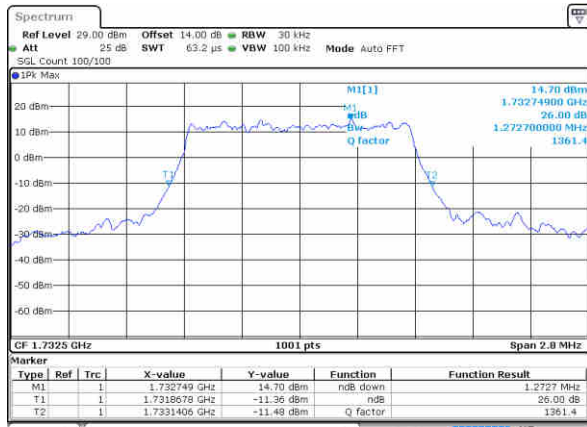
Lowest Channel / 1.4MHz / 64QAM



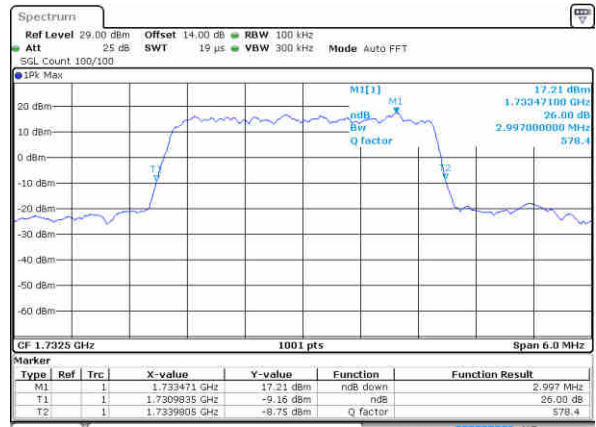
Lowest Channel / 3MHz / 64QAM



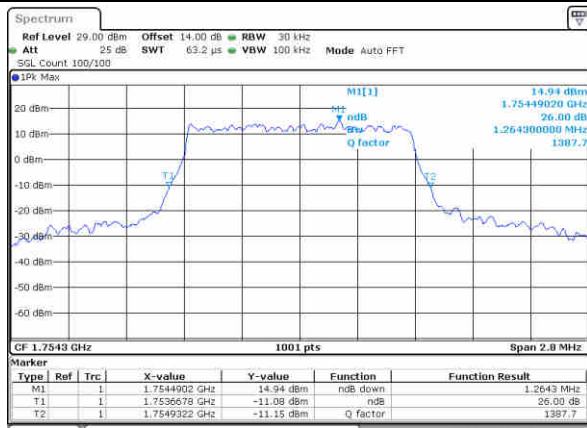
Middle Channel / 1.4MHz / 64QAM



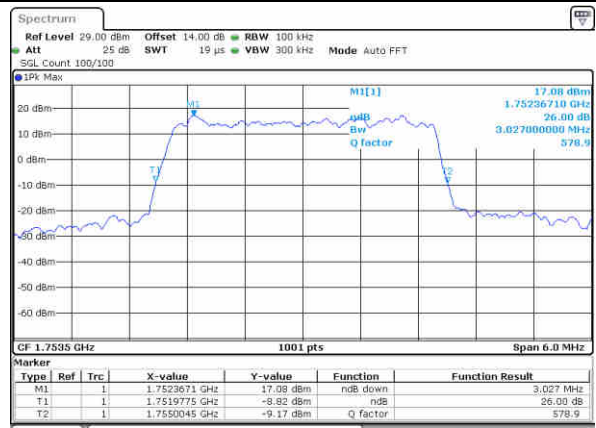
Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



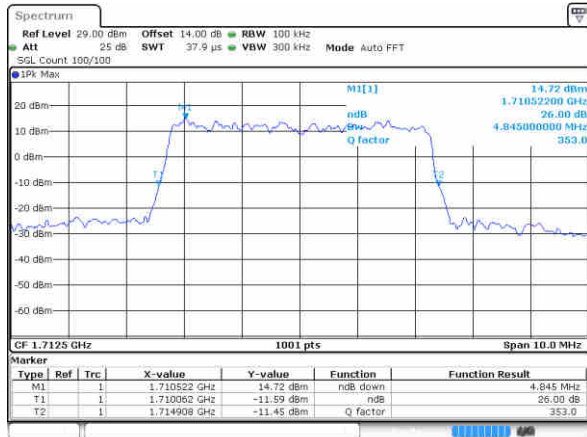
Highest Channel / 3MHz / 64QAM



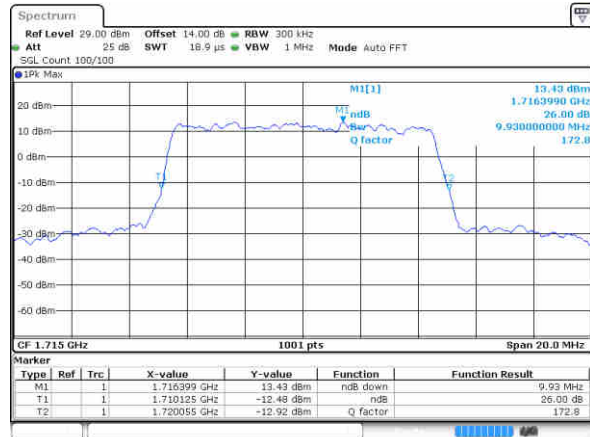


LTE Band 4

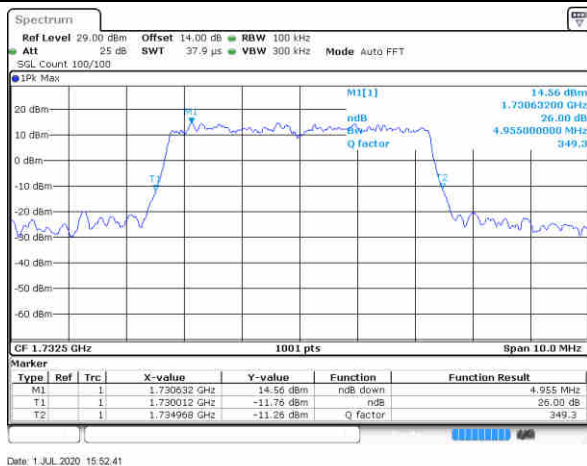
Lowest Channel / 5MHz / 64QAM



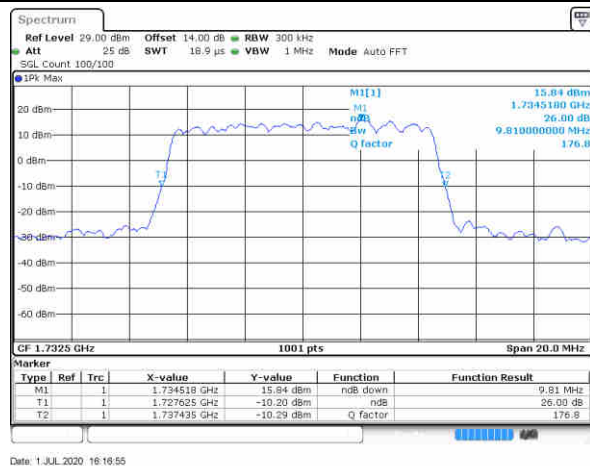
Lowest Channel / 10MHz / 64QAM



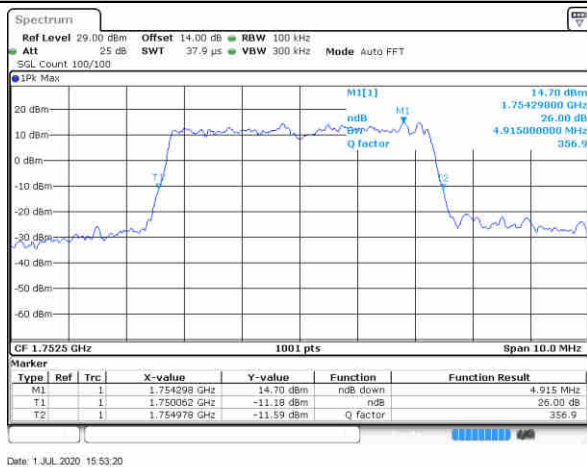
Middle Channel / 5MHz / 64QAM



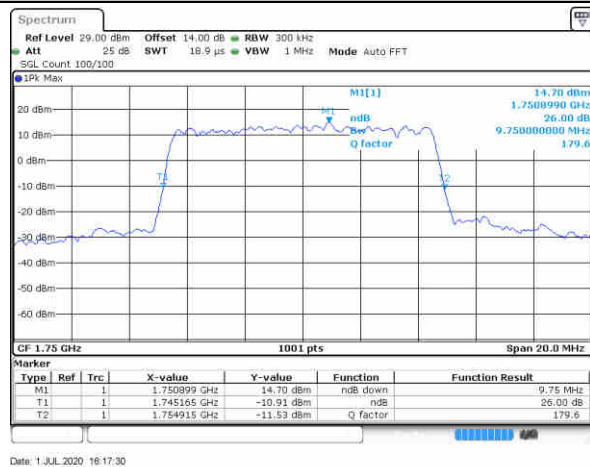
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



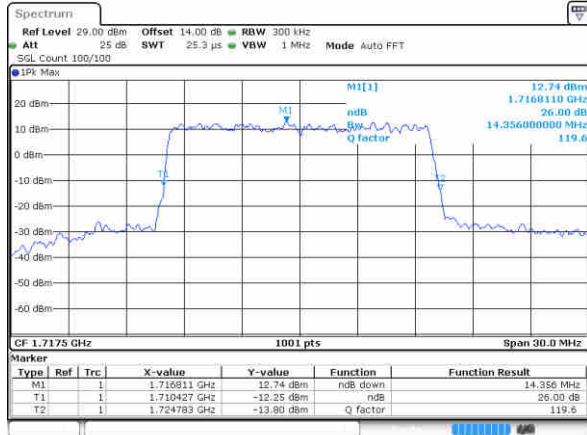
Highest Channel / 10MHz / 64QAM



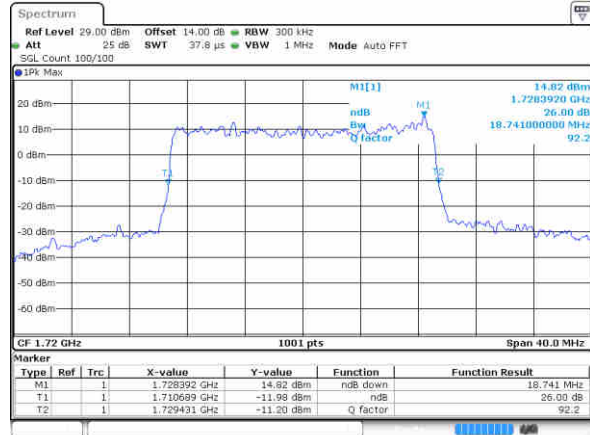


LTE Band 4

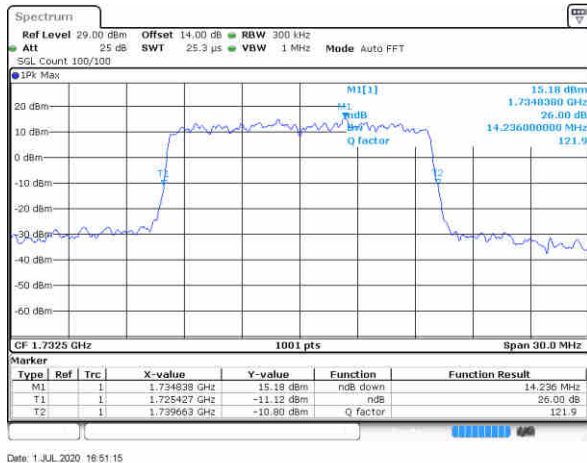
Lowest Channel / 15MHz / 64QAM



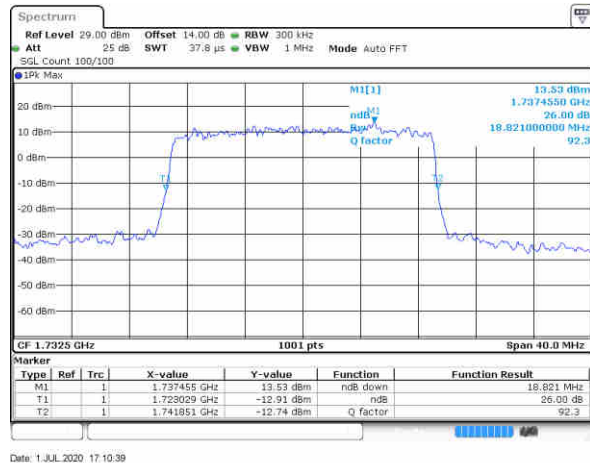
Lowest Channel / 20MHz / 64QAM



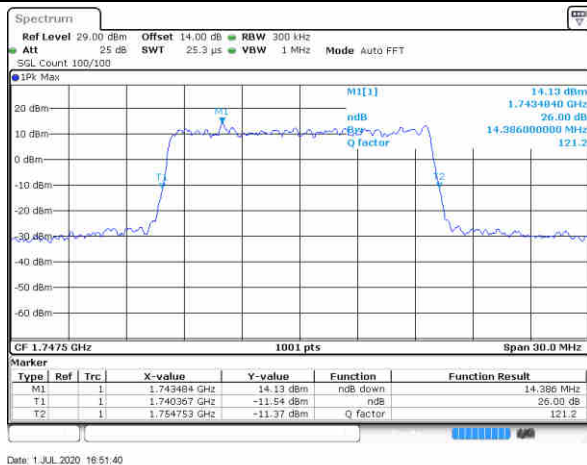
Middle Channel / 15MHz / 64QAM



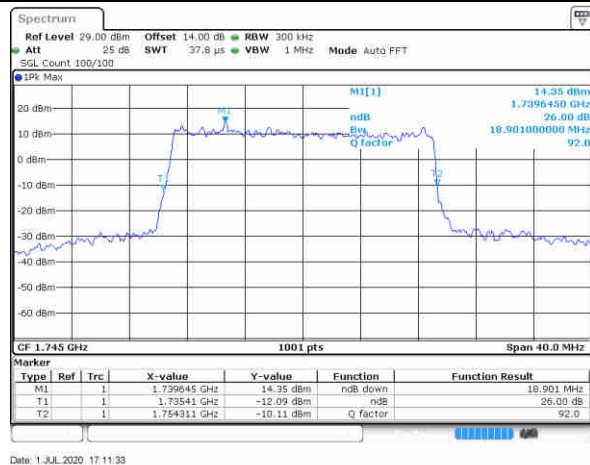
Middle Channel / 20MHz / 64QAM



Highest Channel / 15MHz / 64QAM



Highest Channel / 20MHz / 64QAM



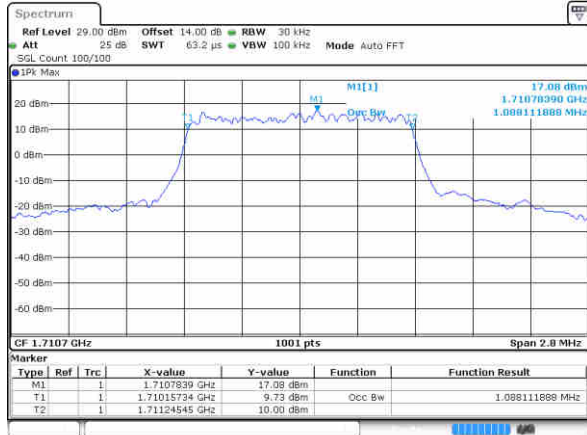
**Occupied Bandwidth**

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	2.72	2.73	4.50	4.49	9.03	8.99	13.49	13.49	17.98	17.90
Middle CH	1.10	1.10	2.73	2.73	4.50	4.48	9.03	9.09	13.40	13.43	17.82	17.74
Highest CH	1.09	1.09	2.73	2.75	4.51	4.50	9.03	9.07	13.43	13.40	17.98	17.90
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09	-	2.72	-	4.49	-	9.03	-	13.46	-	18.02	-
Middle CH	1.10	-	2.73	-	4.50	-	9.03	-	13.40	-	17.78	-
Highest CH	1.10	-	2.73	-	4.49	-	9.03	-	13.46	-	17.94	-

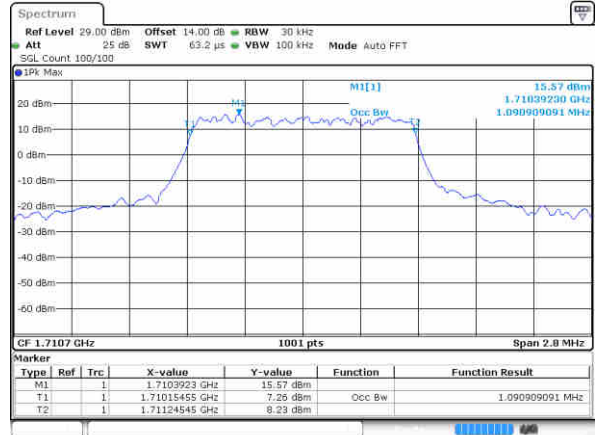


LTE Band 4

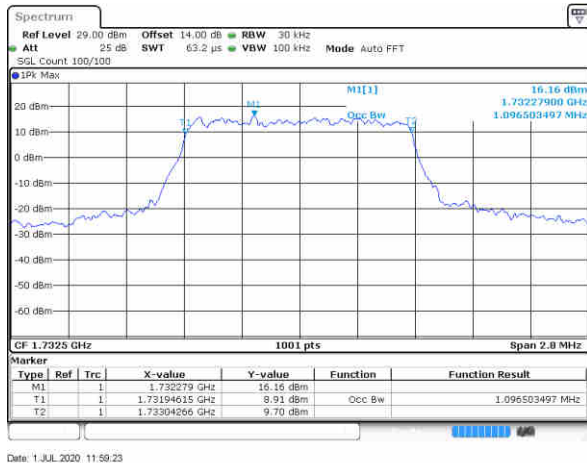
Lowest Channel / 1.4MHz / QPSK



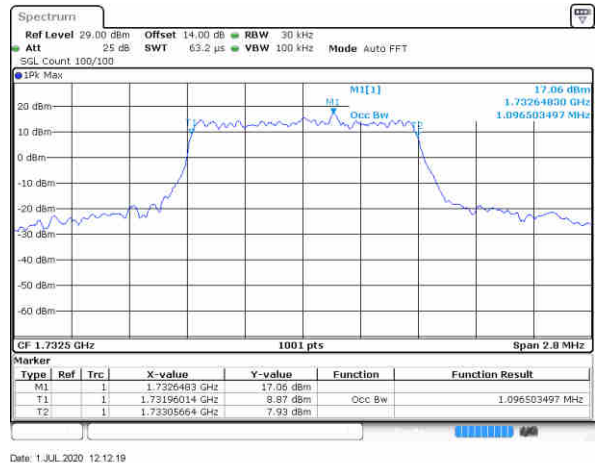
Lowest Channel / 1.4MHz / 16QAM



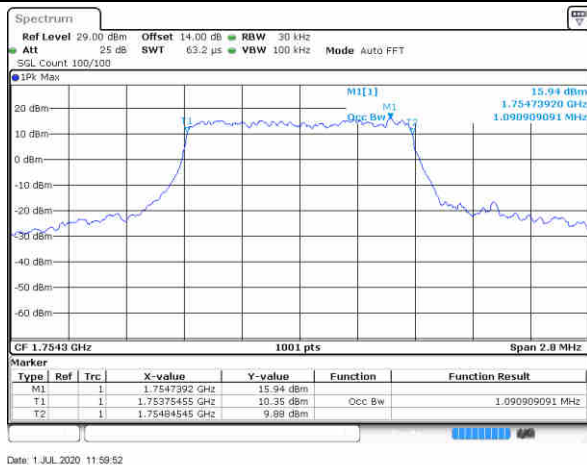
Middle Channel / 1.4MHz / QPSK



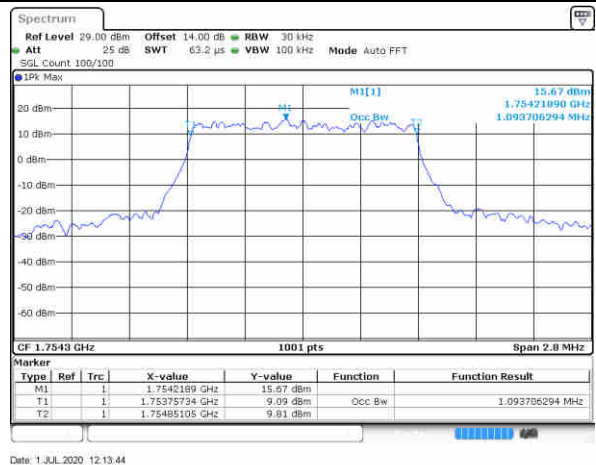
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



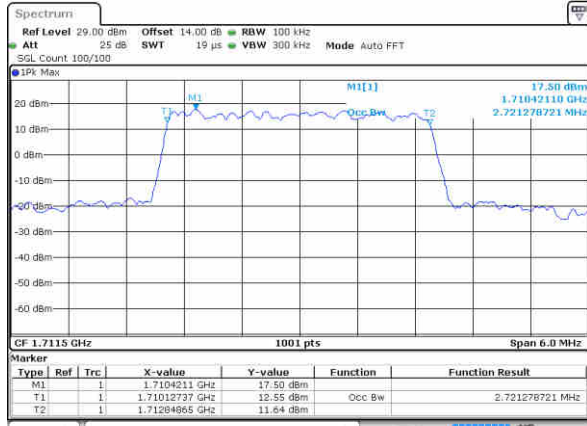
Highest Channel / 1.4MHz / 16QAM



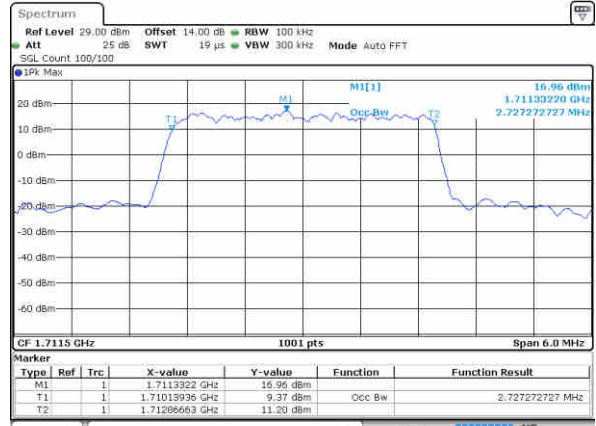


LTE Band 4

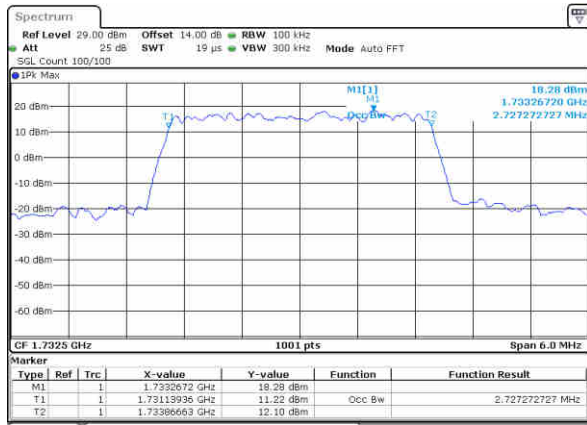
Lowest Channel / 3MHz / QPSK



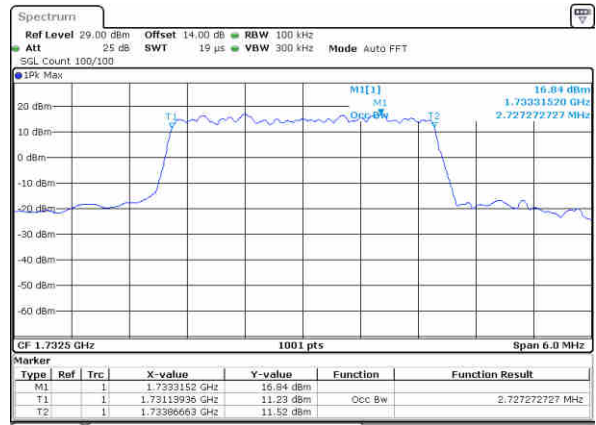
Lowest Channel / 3MHz / 16QAM



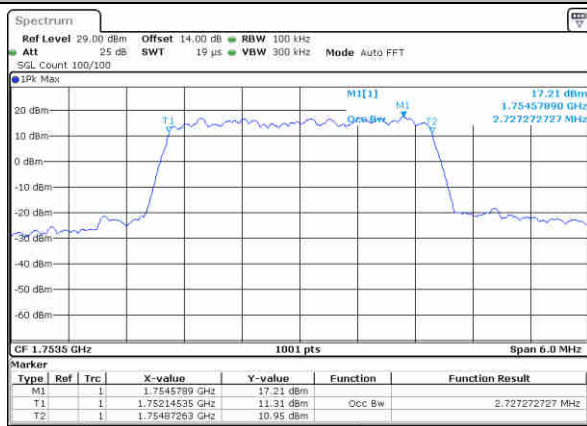
Middle Channel / 3MHz / QPSK



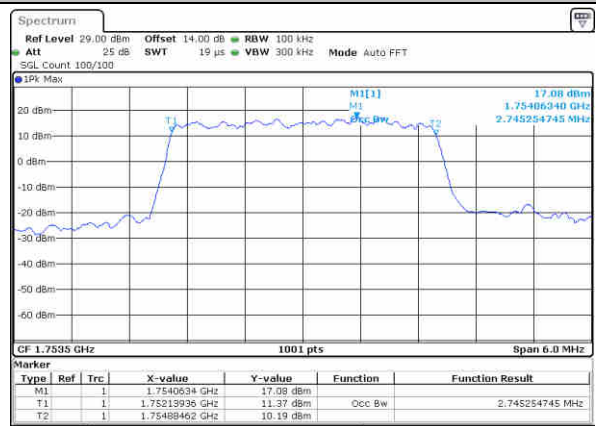
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



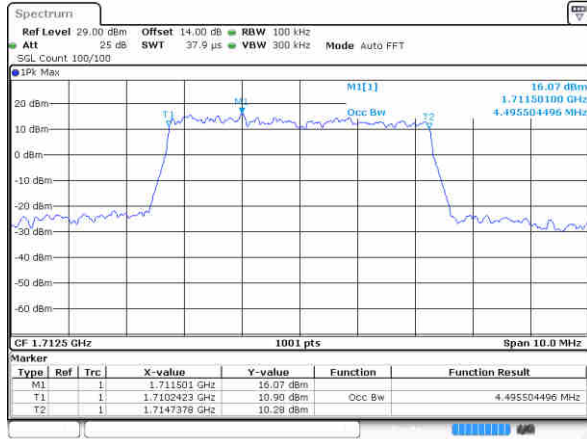
Highest Channel / 3MHz / 16QAM



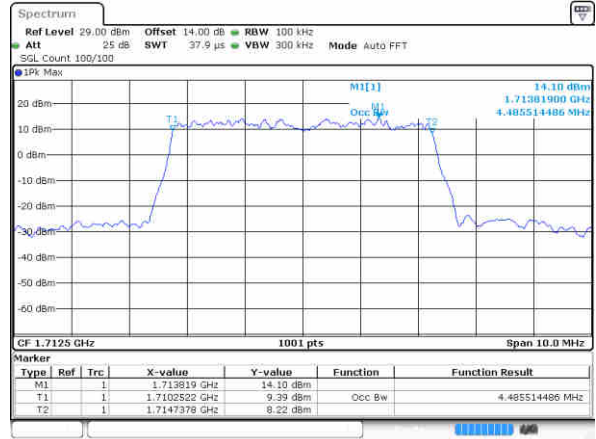


LTE Band 4

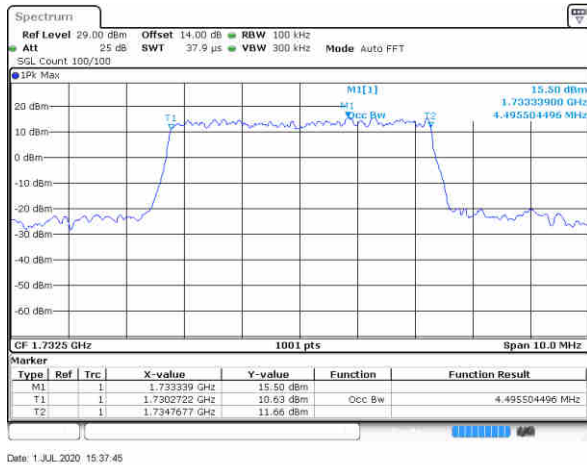
Lowest Channel / 5MHz / QPSK



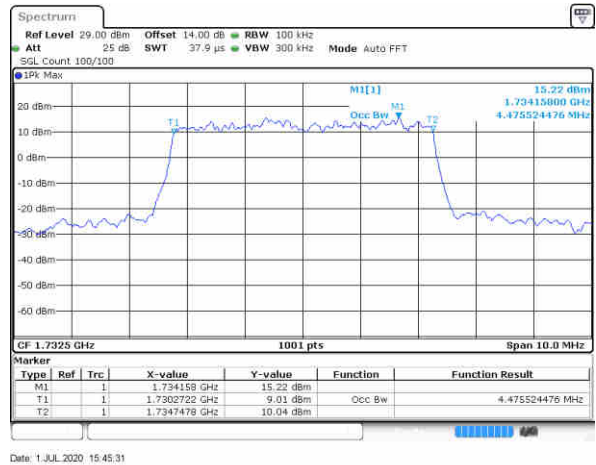
Lowest Channel / 5MHz / 16QAM



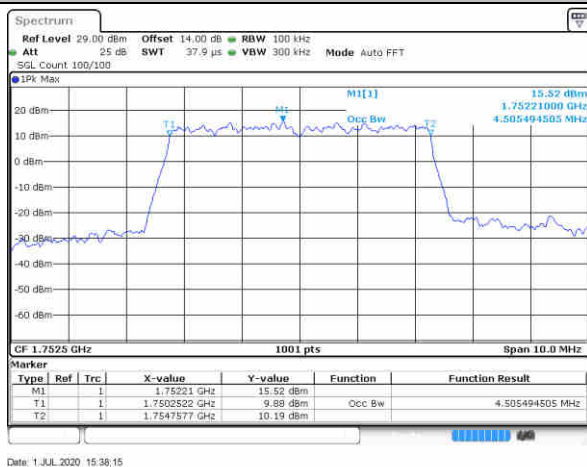
Middle Channel / 5MHz / QPSK



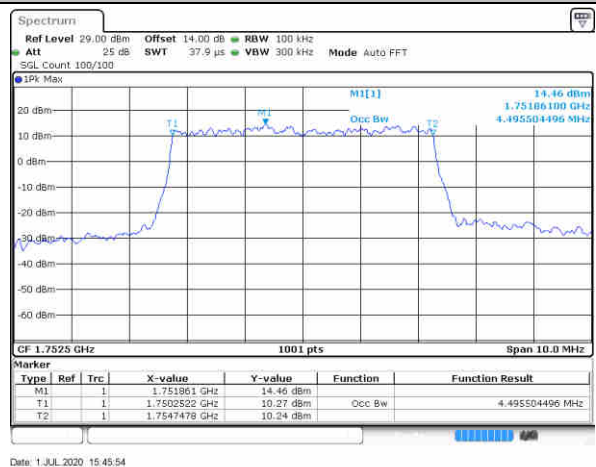
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



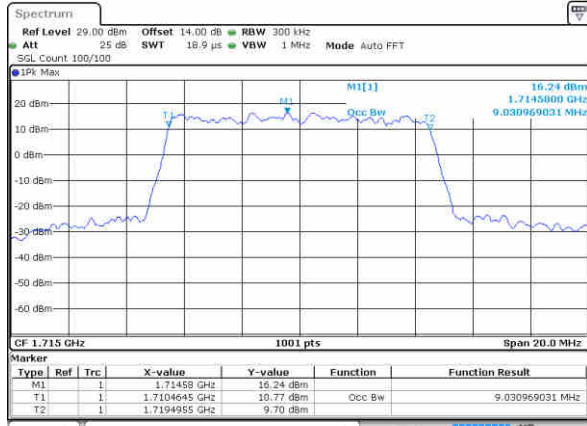
Highest Channel / 5MHz / 16QAM





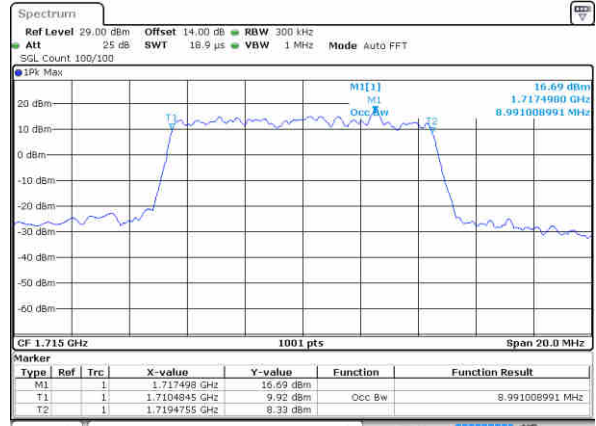
LTE Band 4

Lowest Channel / 10MHz / QPSK



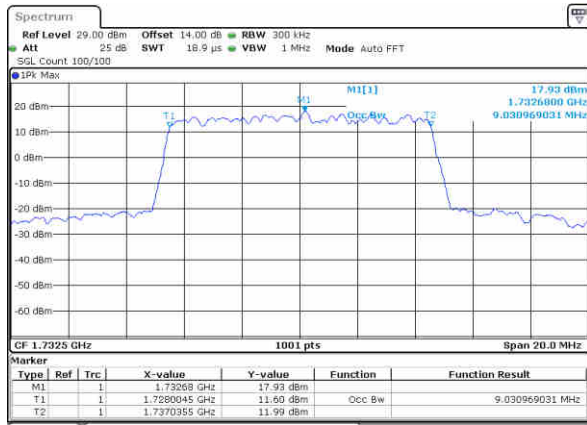
Date: 1 JUL 2020 15:59:59

Lowest Channel / 10MHz / 16QAM



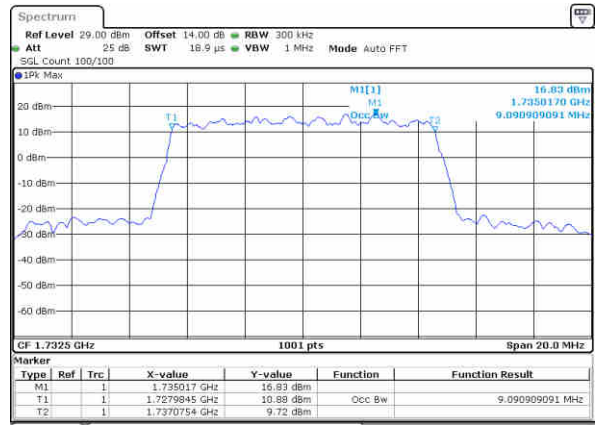
Date: 1 JUL 2020 16:08:47

Middle Channel / 10MHz / QPSK



Date: 1 JUL 2020 16:02:06

Middle Channel / 10MHz / 16QAM



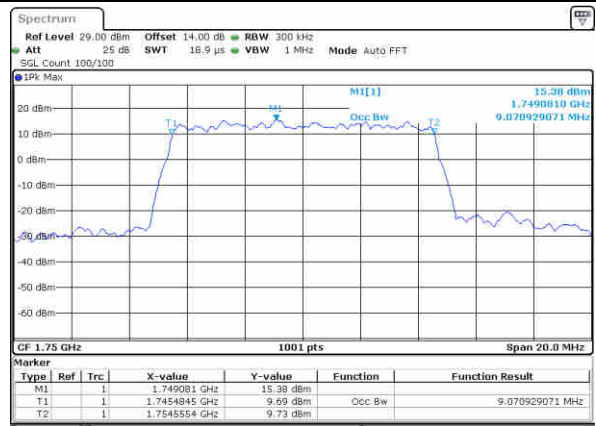
Date: 1 JUL 2020 16:09:40

Highest Channel / 10MHz / QPSK



Date: 1 JUL 2020 16:02:41

Highest Channel / 10MHz / 16QAM

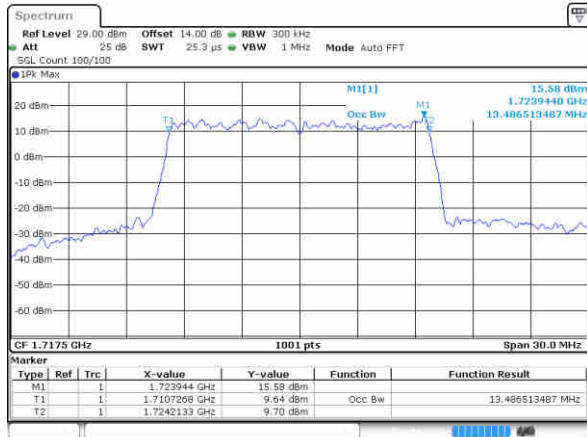


Date: 1 JUL 2020 16:10:07

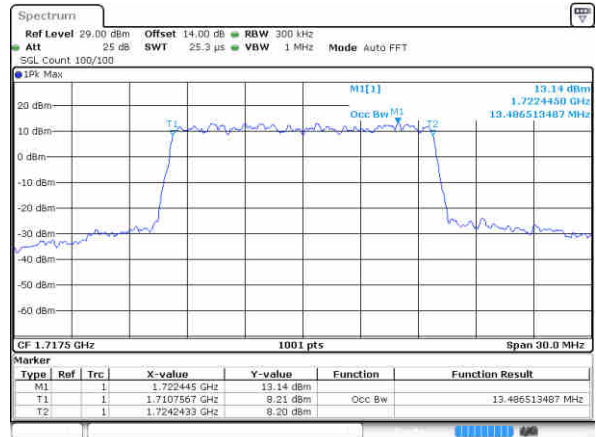


LTE Band 4

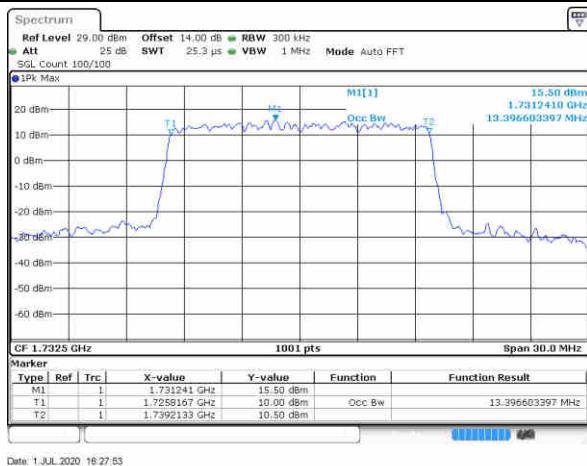
Lowest Channel / 15MHz / QPSK



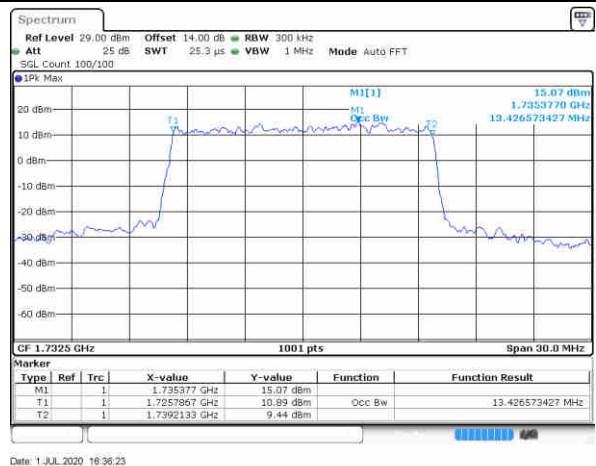
Lowest Channel / 15MHz / 16QAM



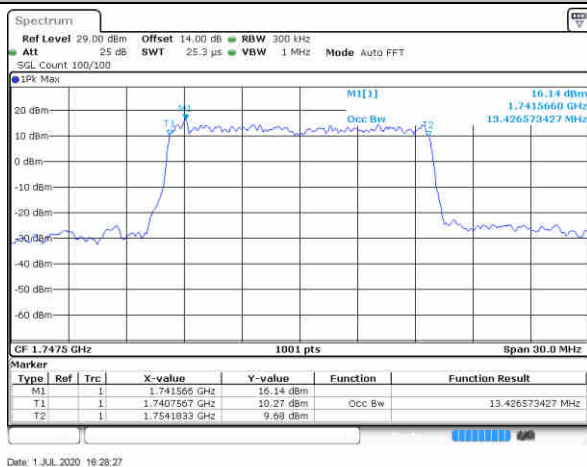
Middle Channel / 15MHz / QPSK



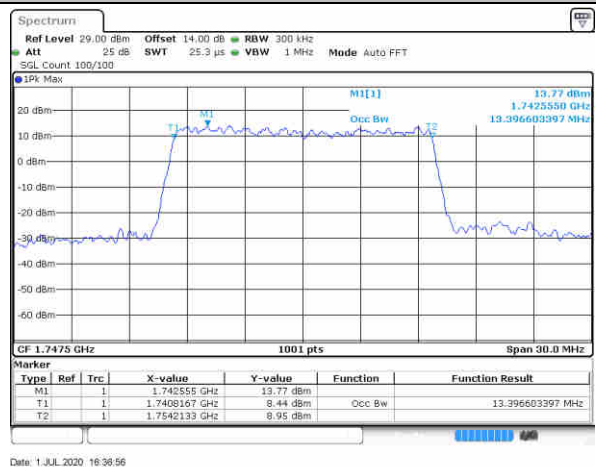
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



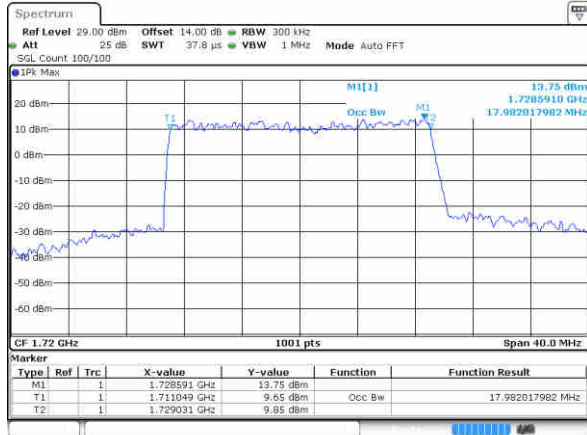
Highest Channel / 15MHz / 16QAM



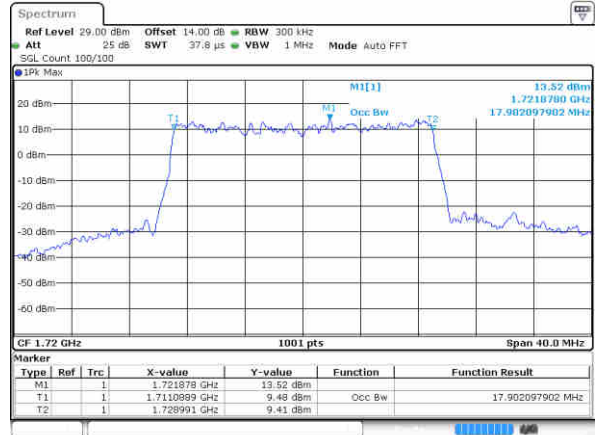


LTE Band 4

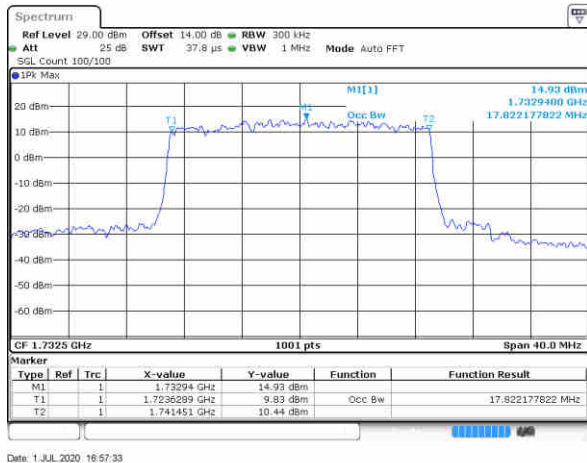
Lowest Channel / 20MHz / QPSK



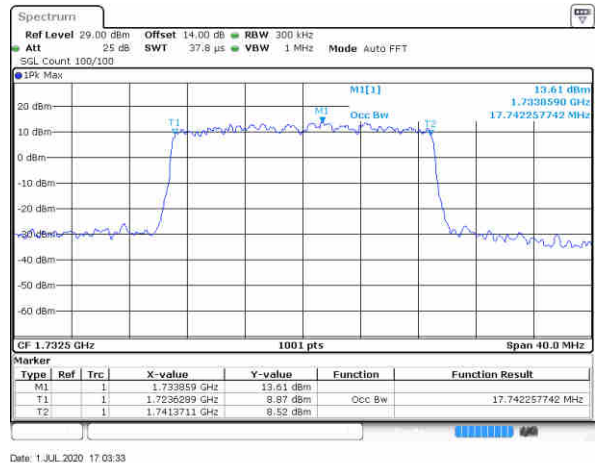
Lowest Channel / 20MHz / 16QAM



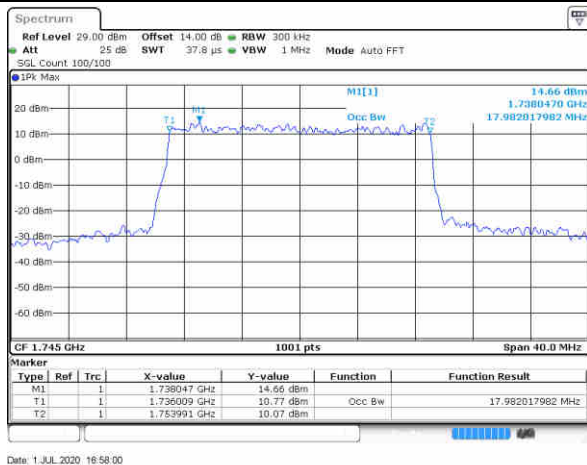
Middle Channel / 20MHz / QPSK



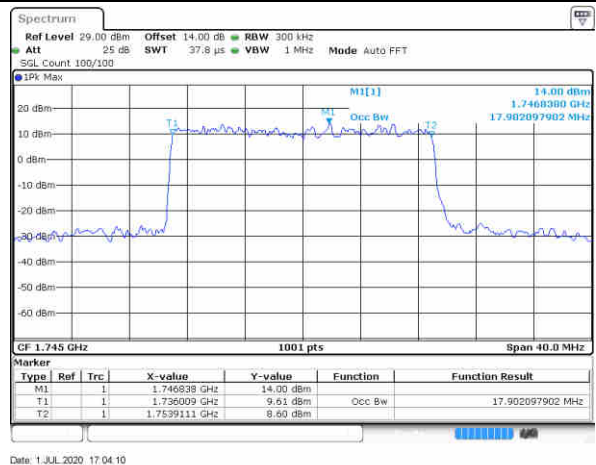
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



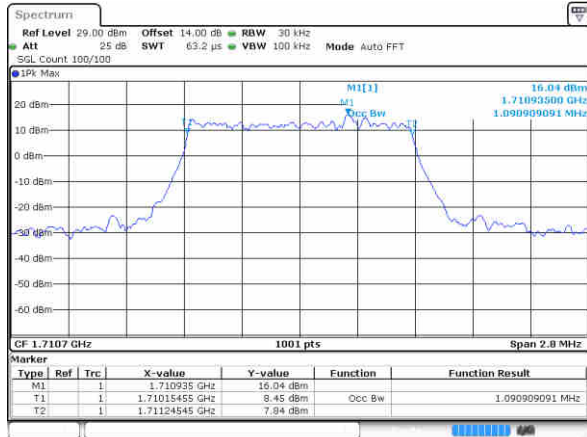
Highest Channel / 20MHz / 16QAM



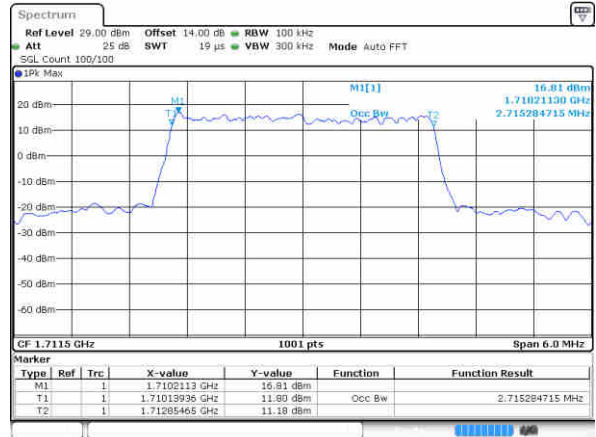


LTE Band 4

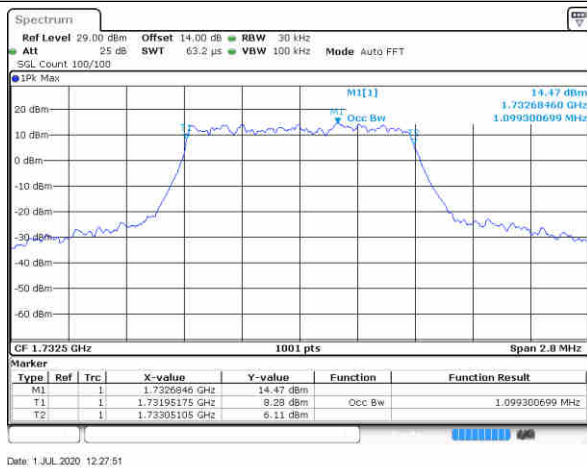
Lowest Channel / 1.4MHz / 64QAM



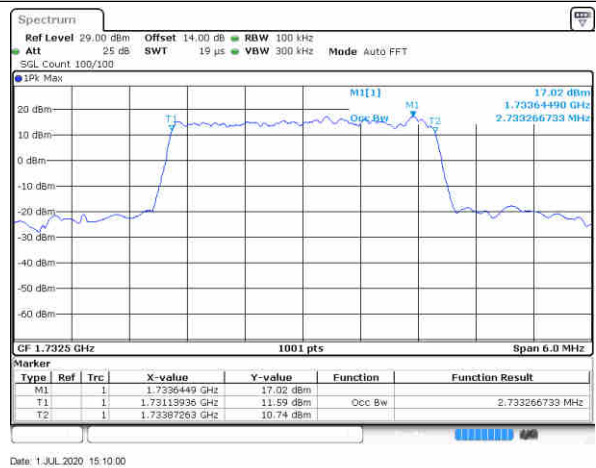
Lowest Channel / 3MHz / 64QAM



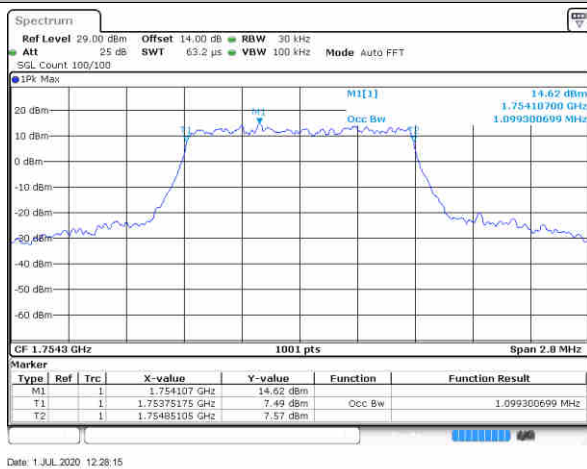
Middle Channel / 1.4MHz / 64QAM



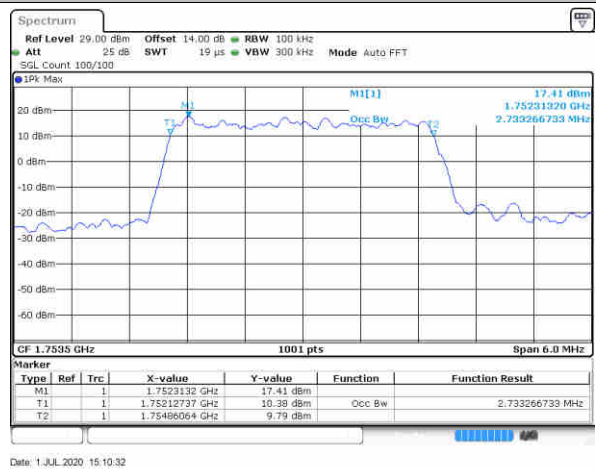
Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



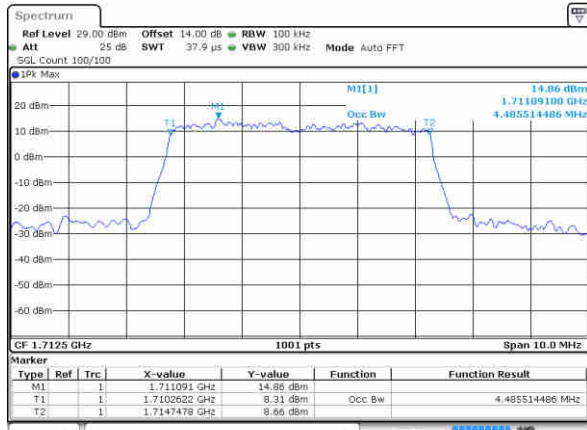
Highest Channel / 3MHz / 64QAM





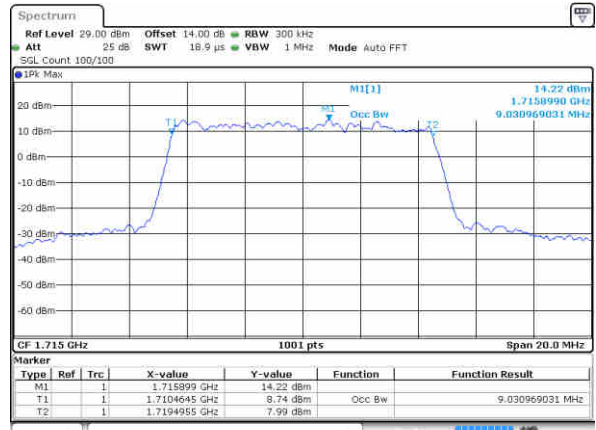
LTE Band 4

Lowest Channel / 5MHz / 64QAM



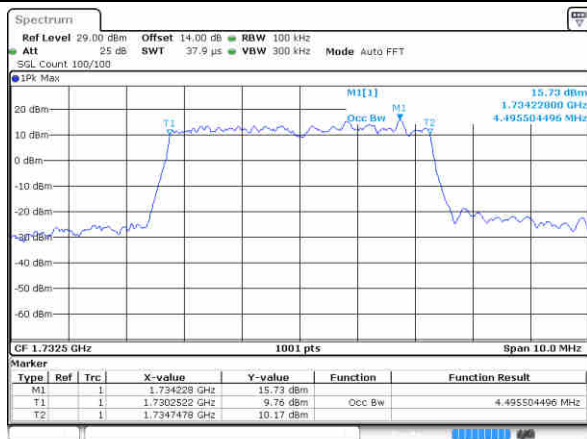
Date: 1 JUL 2020 15:51:25

Lowest Channel / 10MHz / 64QAM



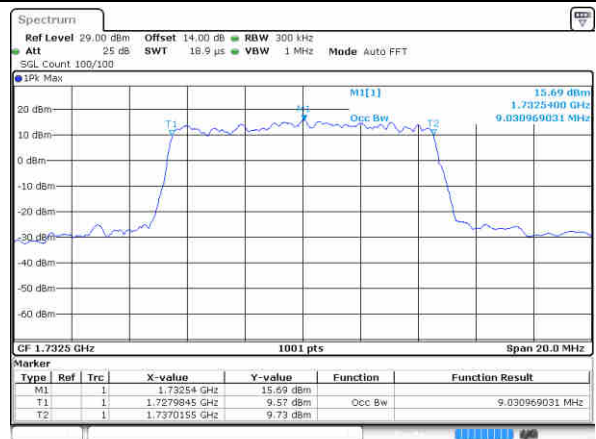
Date: 1 JUL 2020 16:15:00

Middle Channel / 5MHz / 64QAM



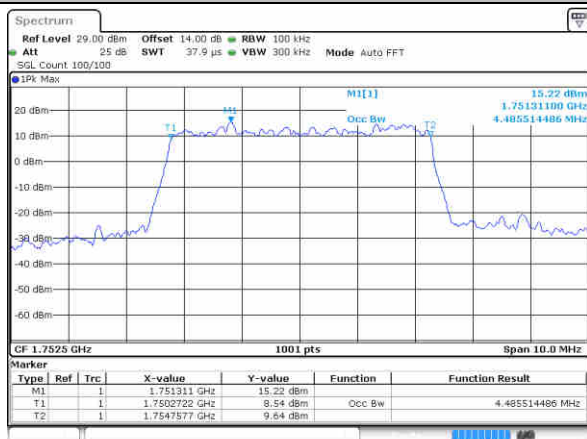
Date: 1 JUL 2020 15:52:29

Middle Channel / 10MHz / 64QAM



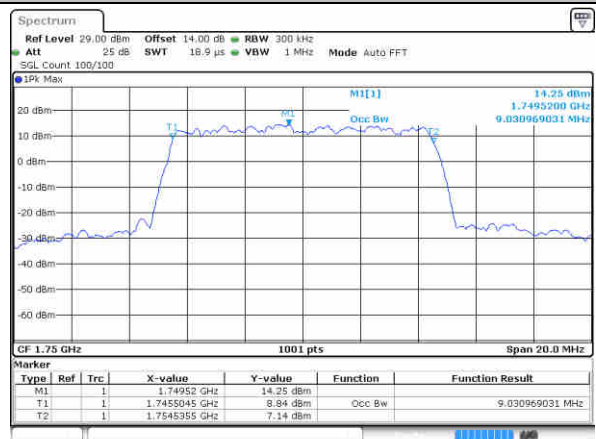
Date: 1 JUL 2020 16:16:27

Highest Channel / 5MHz / 64QAM



Date: 1 JUL 2020 15:53:04

Highest Channel / 10MHz / 64QAM

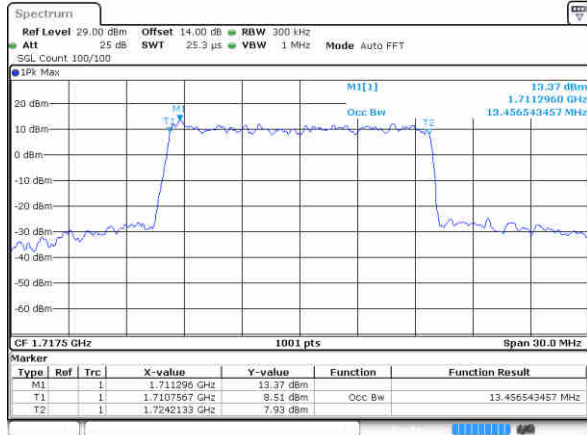


Date: 1 JUL 2020 16:17:16

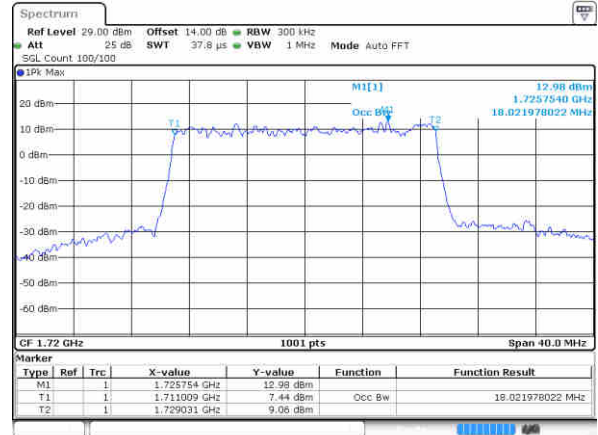


LTE Band 4

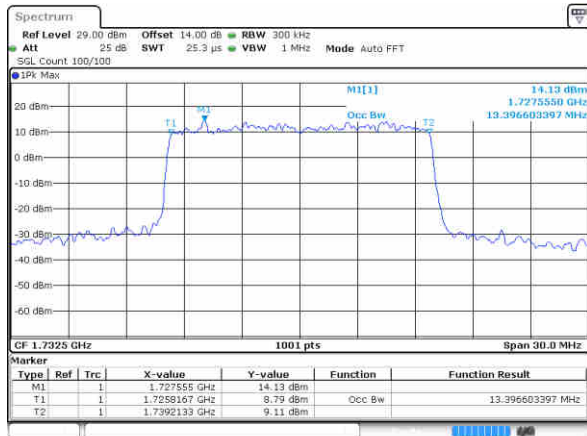
Lowest Channel / 15MHz / 64QAM



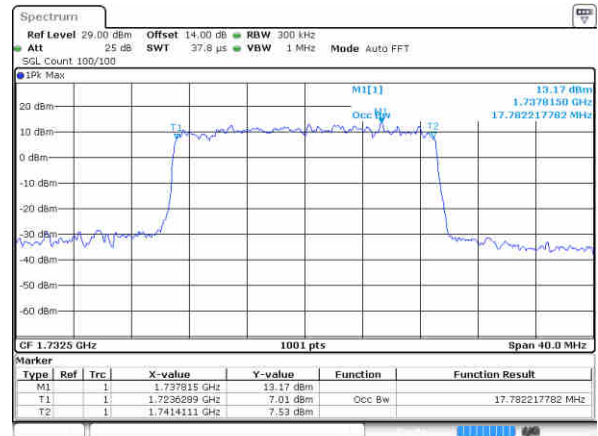
Lowest Channel / 20MHz / 64QAM



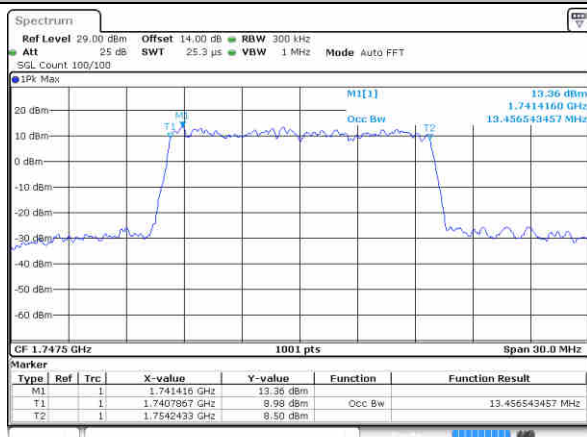
Middle Channel / 15MHz / 64QAM



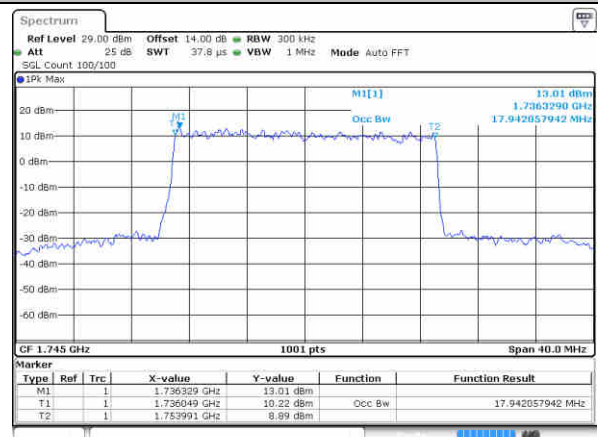
Middle Channel / 20MHz / 64QAM

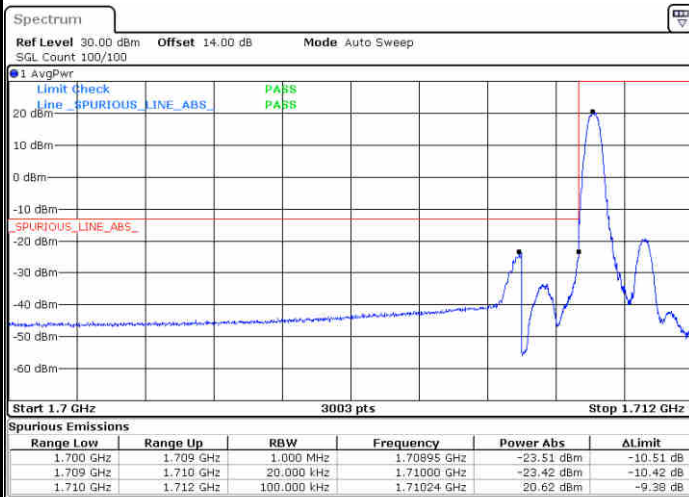
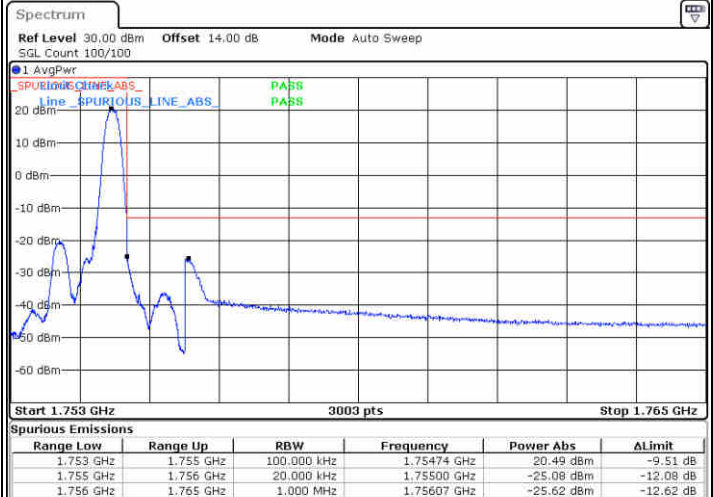


Highest Channel / 15MHz / 64QAM



Highest Channel / 20MHz / 64QAM

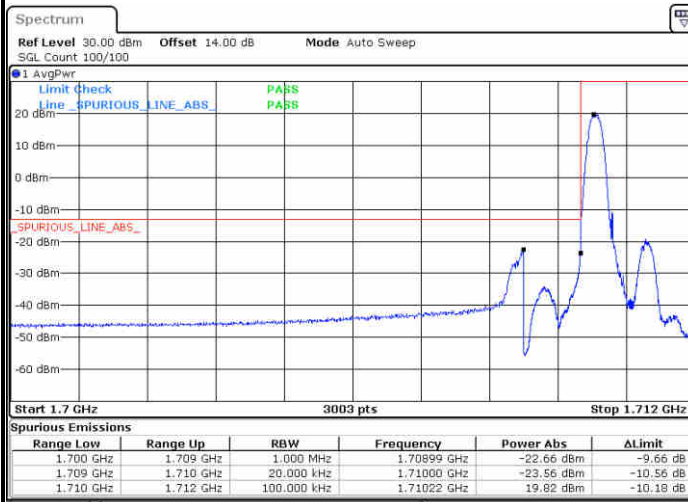


**Conducted Band Edge****LTE Band 4 / 1.4MHz / QPSK****Lowest Band Edge / 1RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

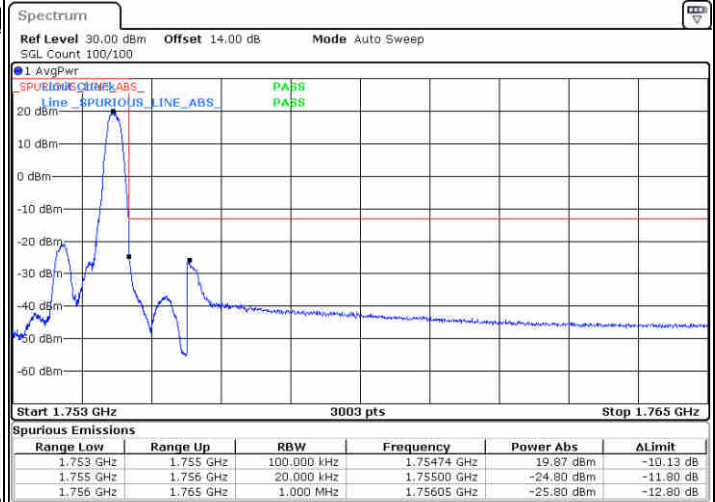


LTE Band 4 / 1.4MHz / 16QAM

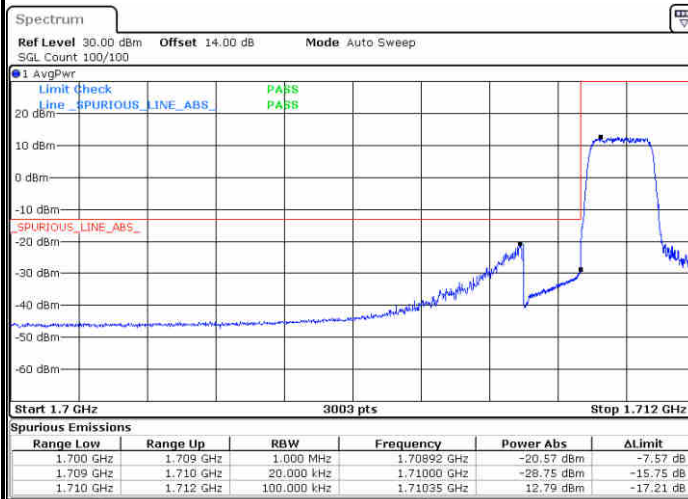
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



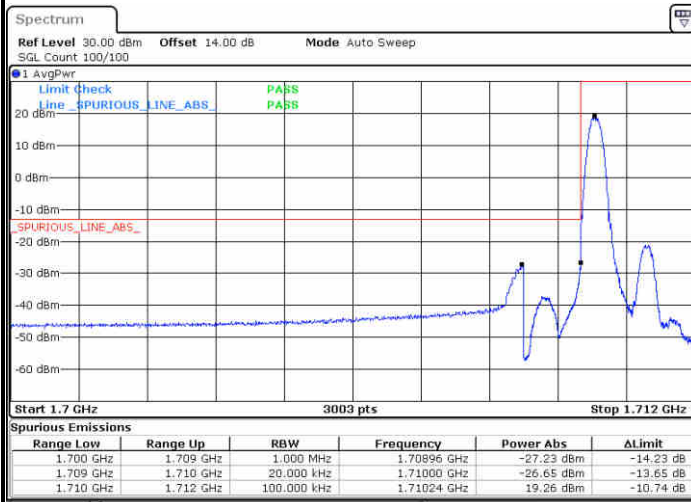
Highest Band Edge / Full RB



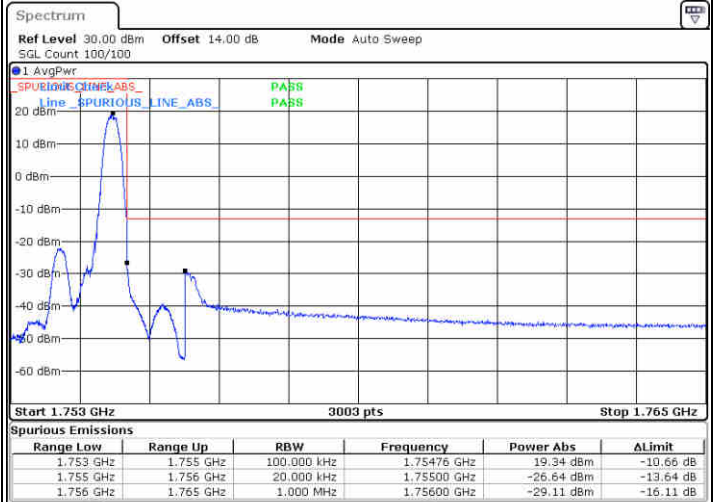


LTE Band 4 / 1.4MHz / 64QAM

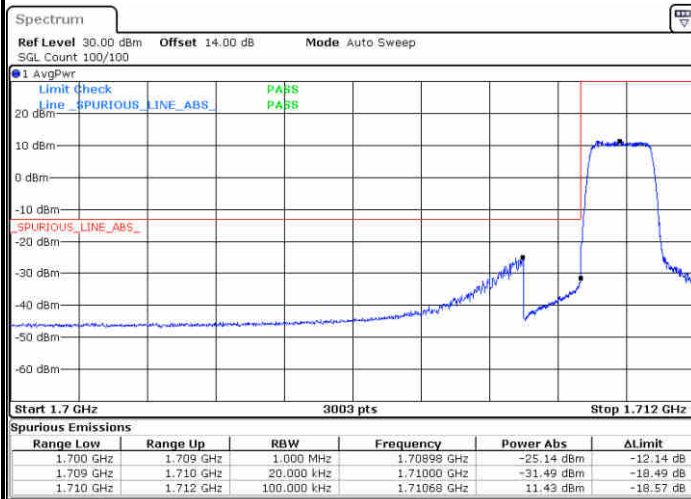
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



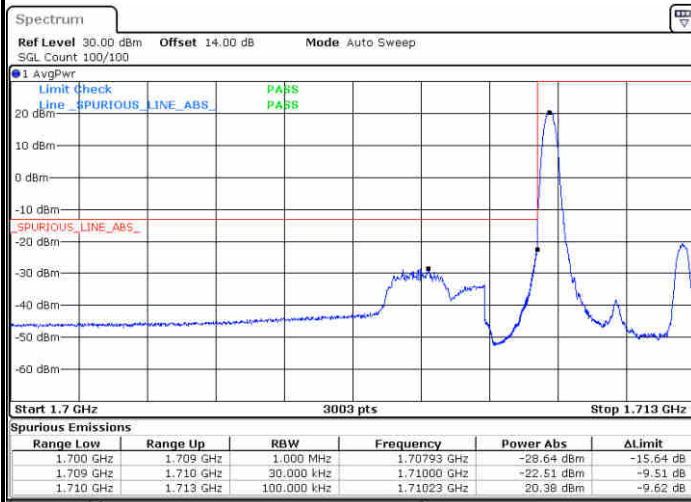
Highest Band Edge / Full RB





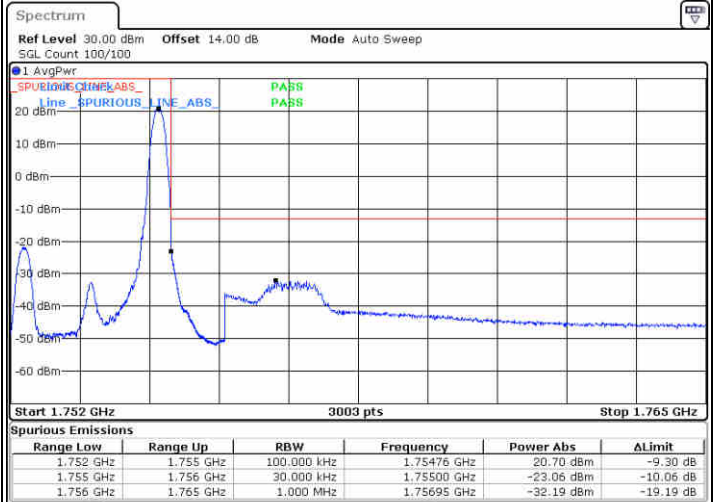
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



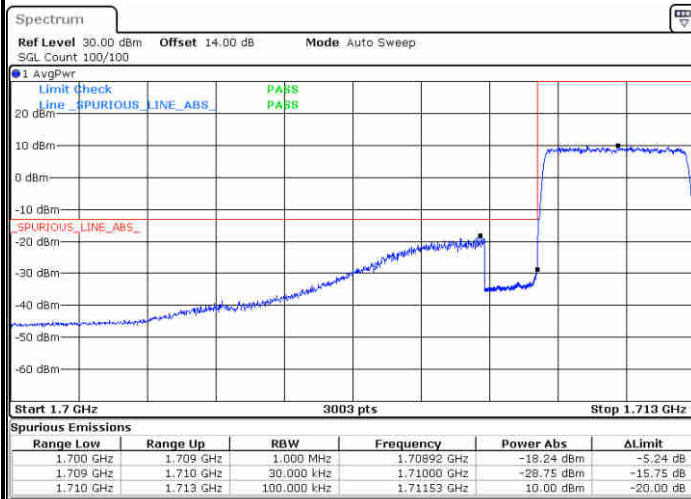
Date: 1 JUL 2020 13:17:09

Highest Band Edge / 1 RB



Date: 1 JUL 2020 13:13:01

Lowest Band Edge / Full RB



Date: 1 JUL 2020 13:10:09

Highest Band Edge / Full RB

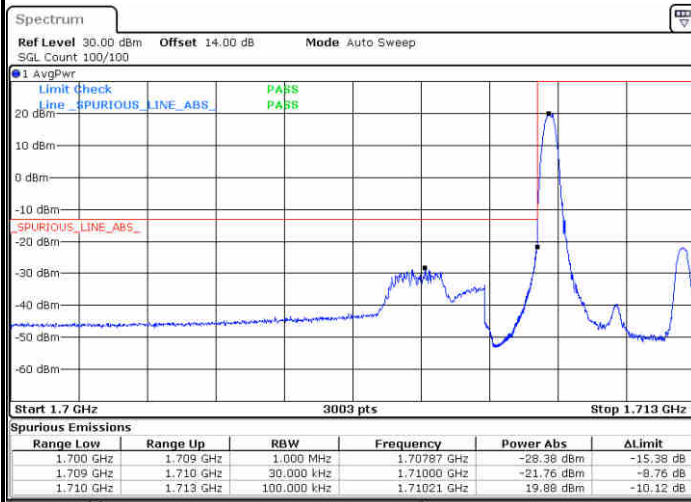


Date: 1 JUL 2020 13:11:51

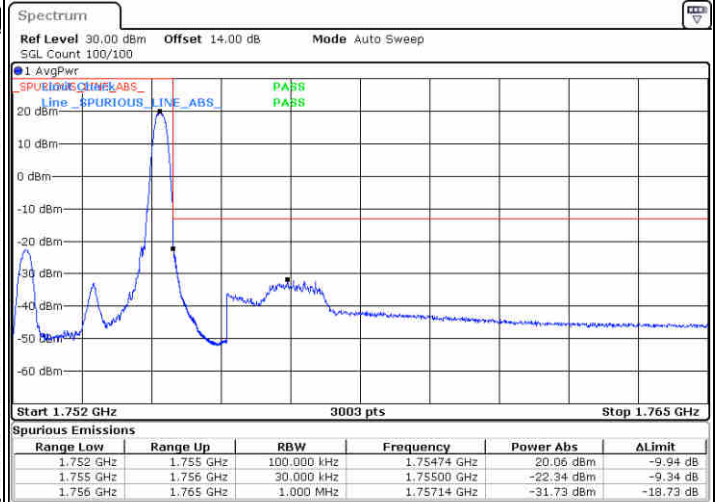


LTE Band 4 / 3MHz / 16QAM

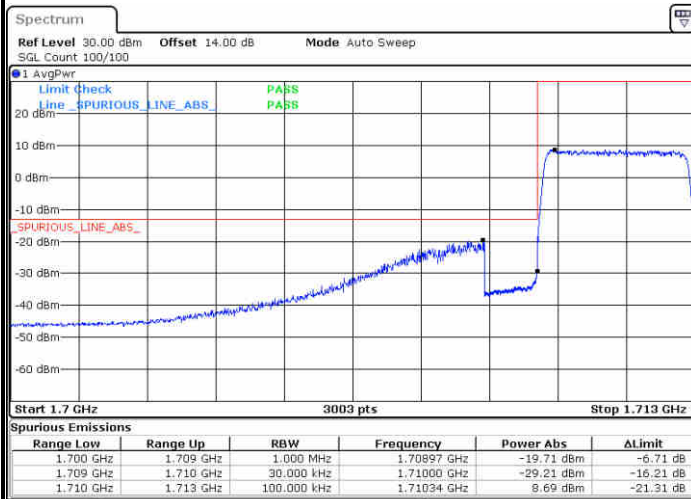
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

