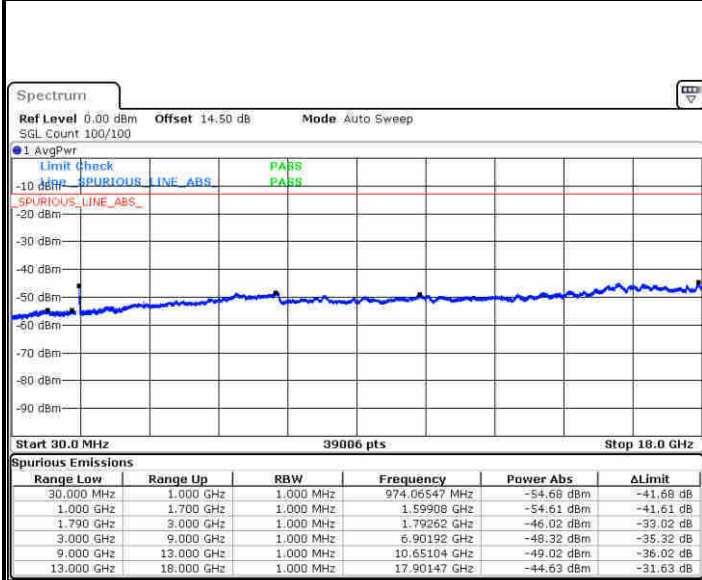




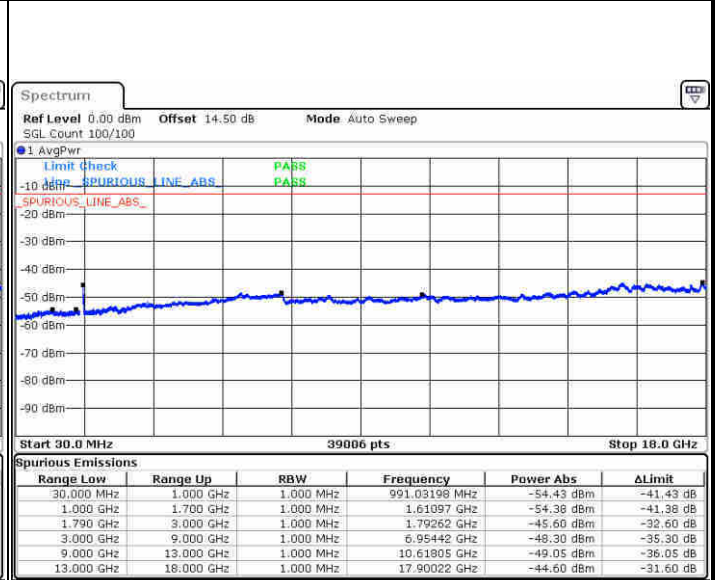
LTE Band 66 / 15MHz

Highest Channel / QPSK



Date: 10 JUN 2020 17:40:03

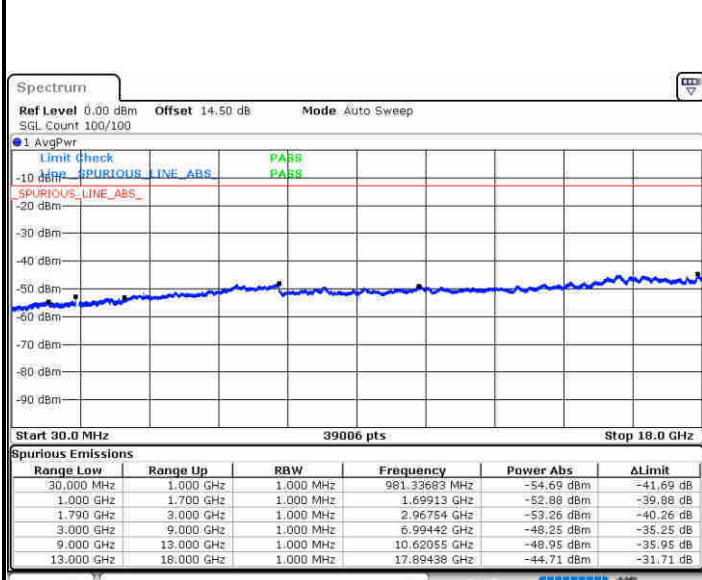
Highest Channel / 16QAM



Date: 10 JUN 2020 17:41:06

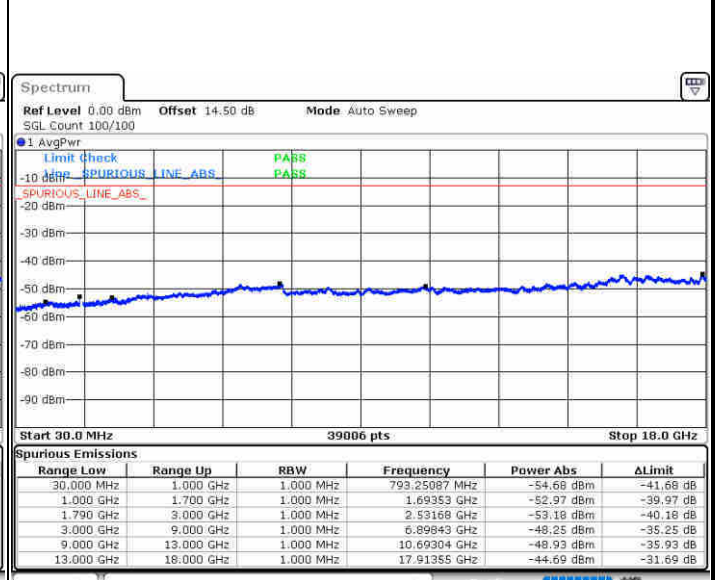
LTE Band 66 / 20MHz

Lowest Channel / QPSK



Date: 10 JUN 2020 17:51:23

Lowest Channel / 16QAM



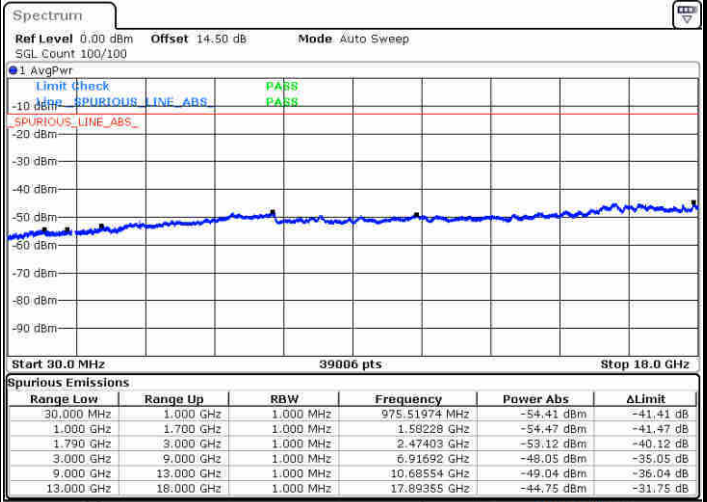
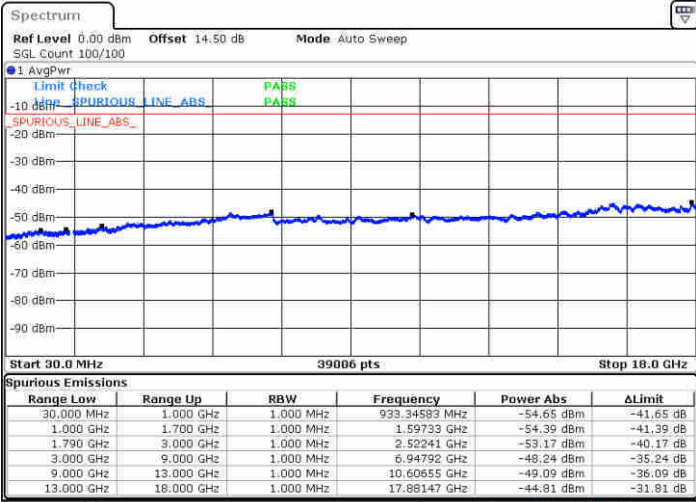
Date: 10 JUN 2020 17:53:35



LTE Band 66 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

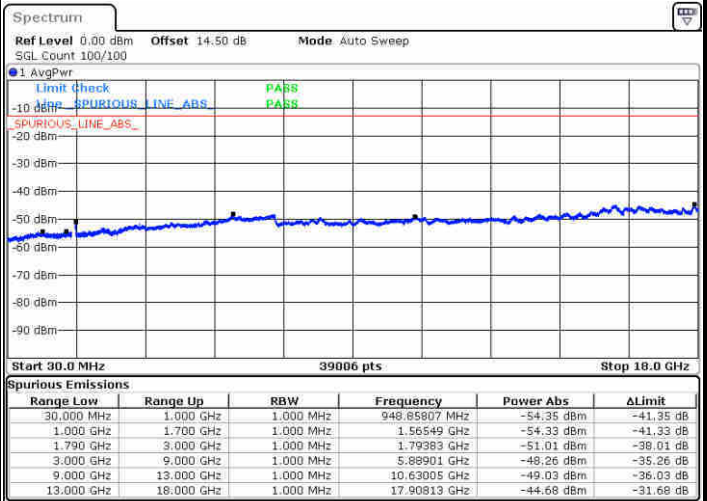
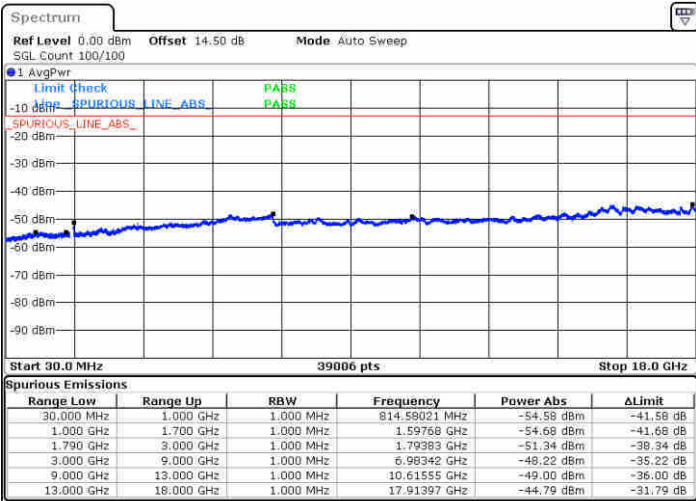


Date: 10 JUN 2020 17:48:58

Date: 10 JUN 2020 17:48:14

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 10 JUN 2020 18:02:19

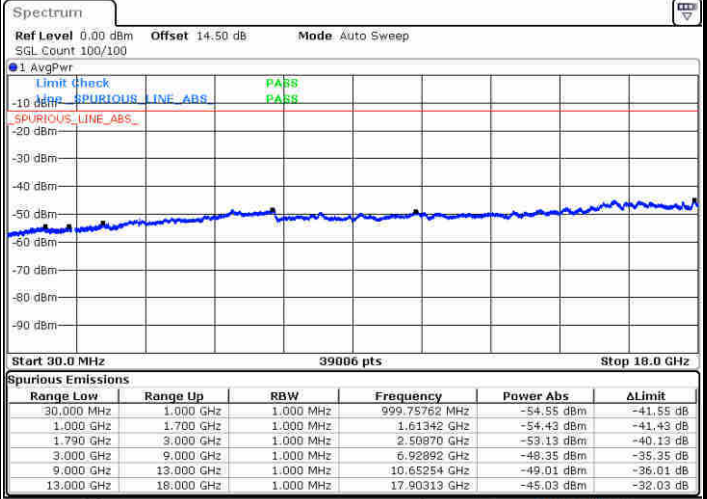
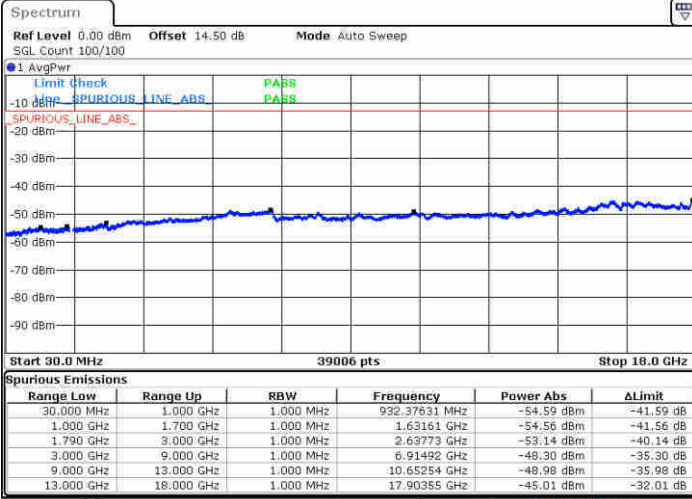
Date: 10 JUN 2020 18:00:57



LTE Band 66 / 1.4MHz

Lowest Channel / 64QAM

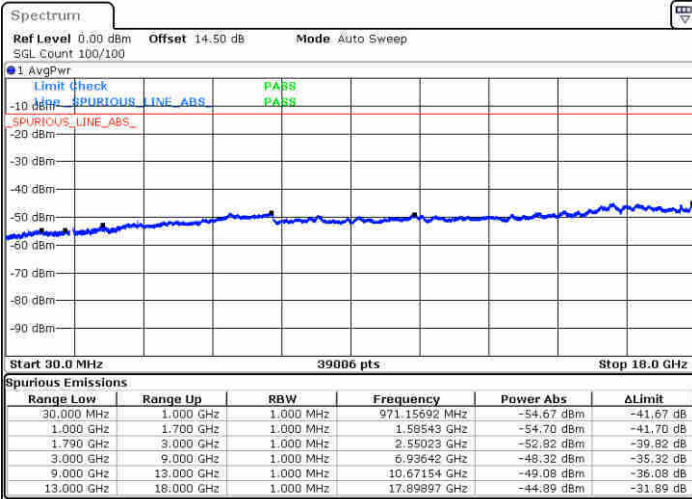
Middle Channel / 64QAM



Date: 10 JUN 2020 16:31:37

Date: 10 JUN 2020 16:21:57

Highest Channel / 64QAM

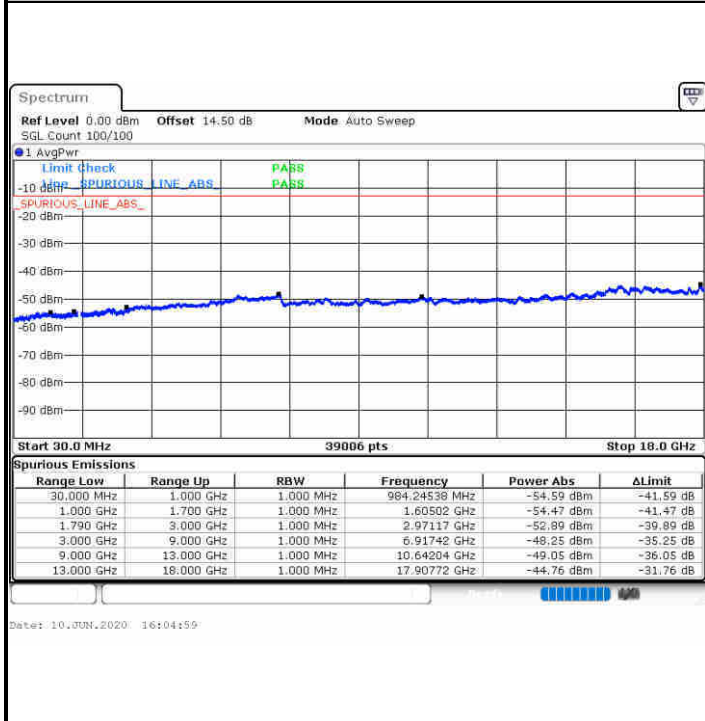


Date: 10 JUN 2020 16:43:36

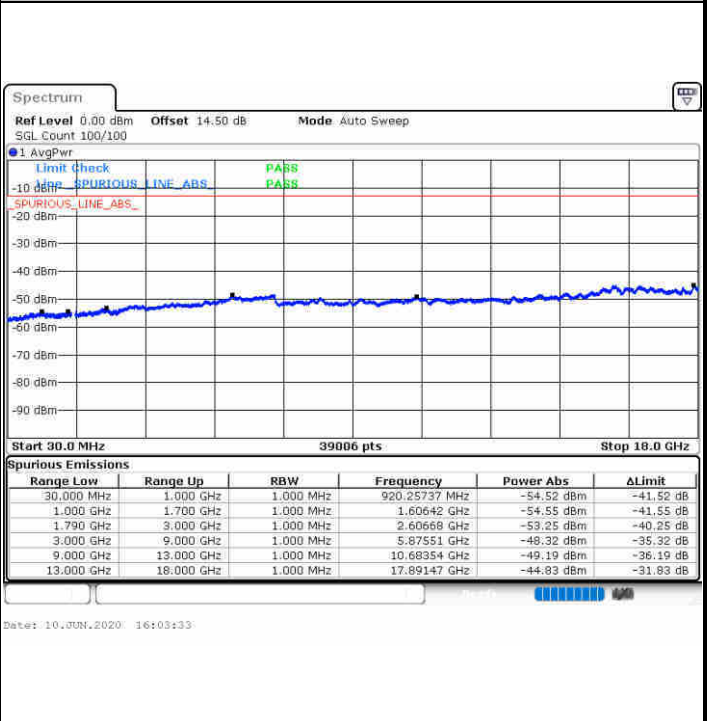


**LTE Band 66 / 3MHz**

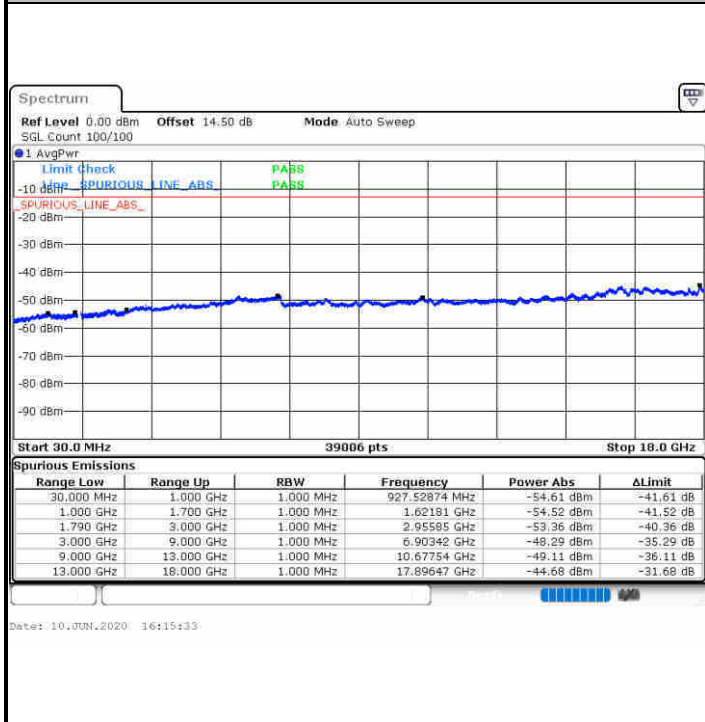
**Lowest Channel / 64QAM**



**Middle Channel / 64QAM**



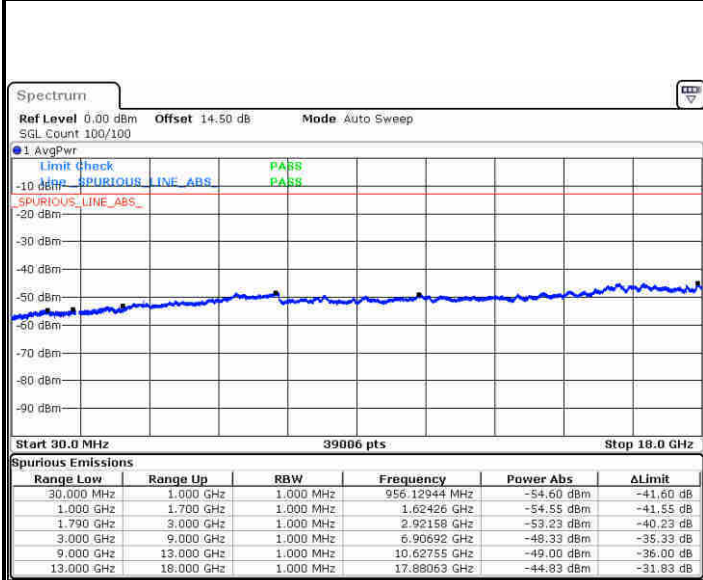
**Highest Channel / 64QAM**





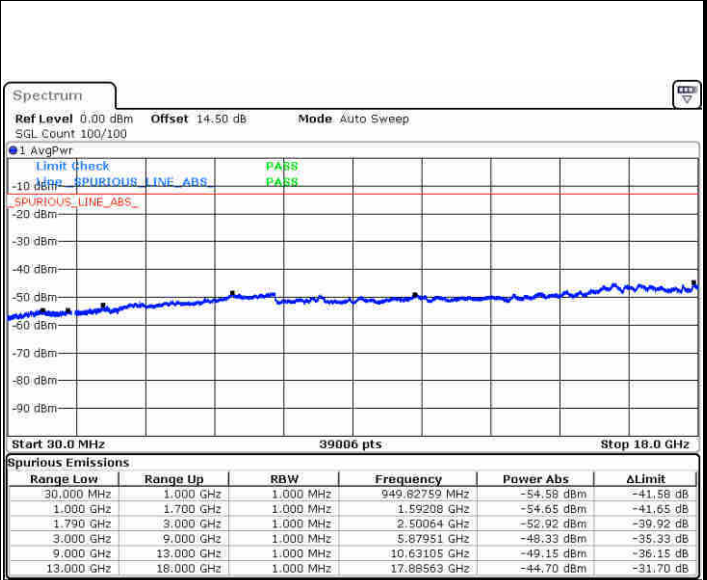
**LTE Band 66 / 5MHz**

**Lowest Channel / 64QAM**



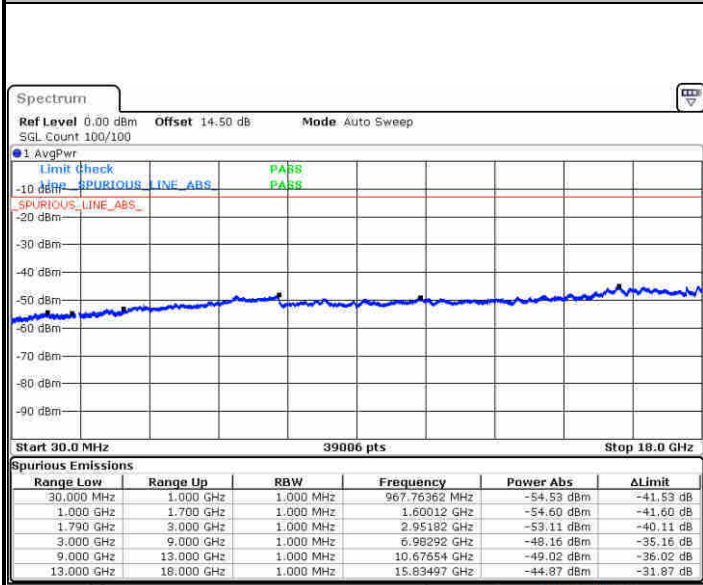
Date: 10 JUN 2020 15:38:49

**Middle Channel / 64QAM**



Date: 10 JUN 2020 15:33:31

**Highest Channel / 64QAM**



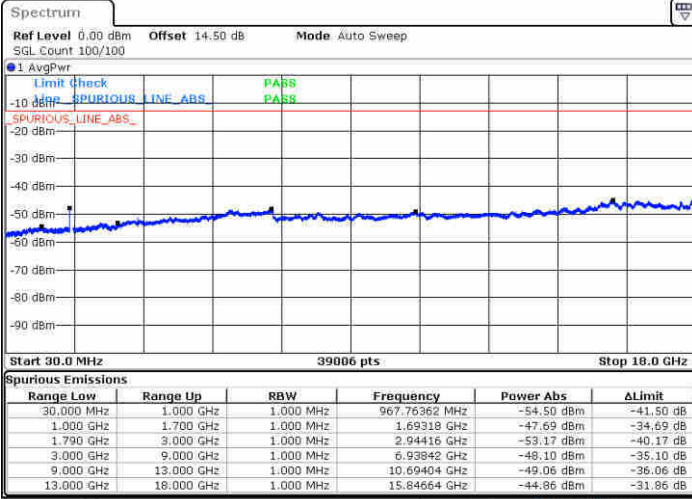
Date: 10 JUN 2020 15:45:23



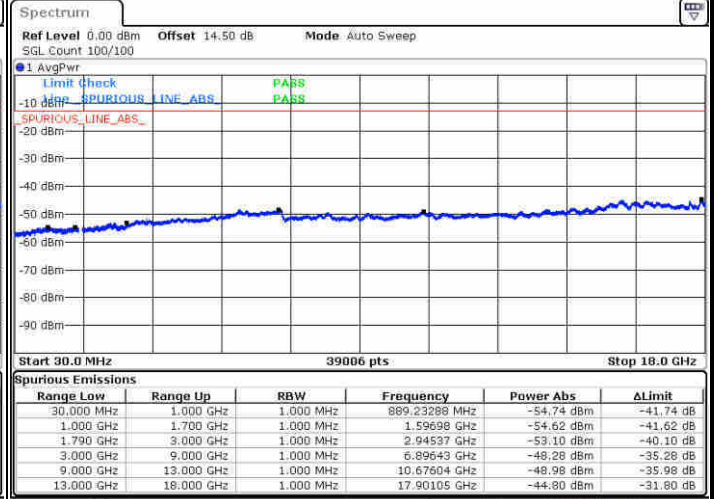
LTE Band 66 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

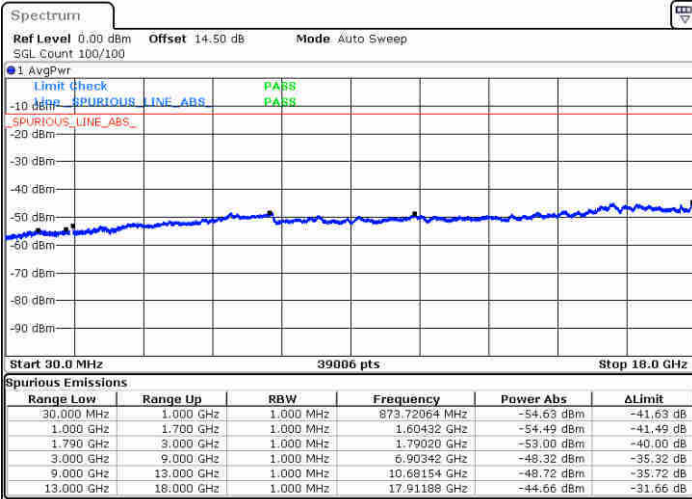


Date: 10 JUN 2020 16:56:52



Date: 10 JUN 2020 16:55:03

Highest Channel / 64QAM



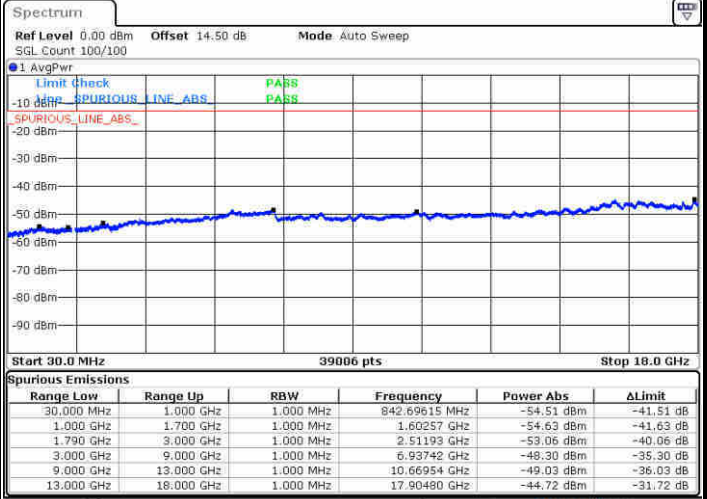
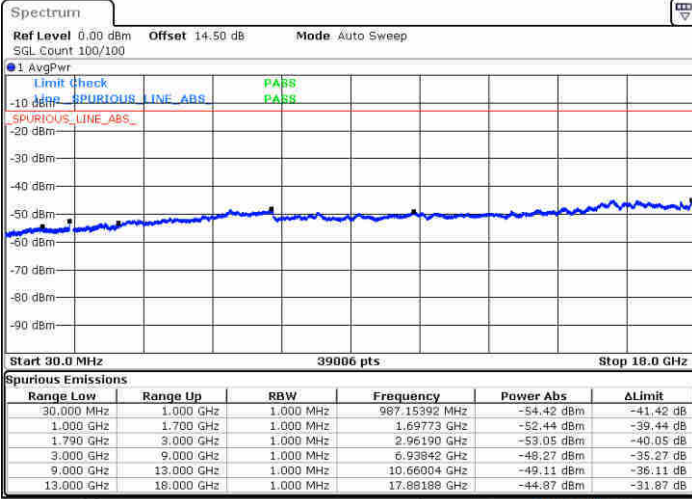
Date: 10 JUN 2020 17:07:33



LTE Band 66 / 15MHz

Lowest Channel / 64QAM

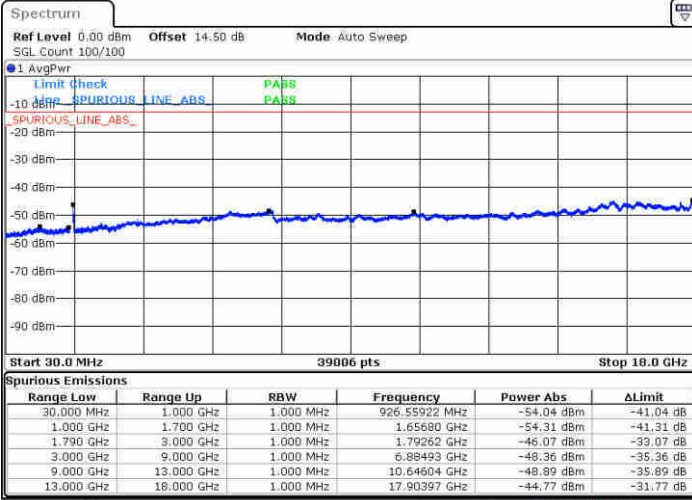
Middle Channel / 64QAM



Date: 10 JUN 2020 17:23:44

Date: 10 JUN 2020 17:22:40

Highest Channel / 64QAM



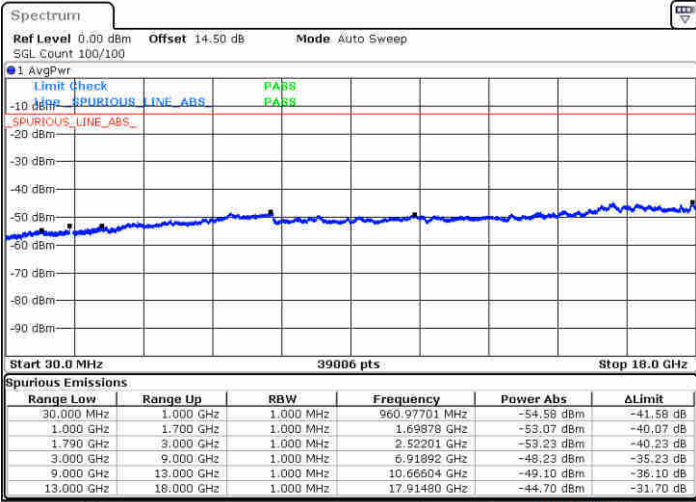
Date: 10 JUN 2020 17:42:01



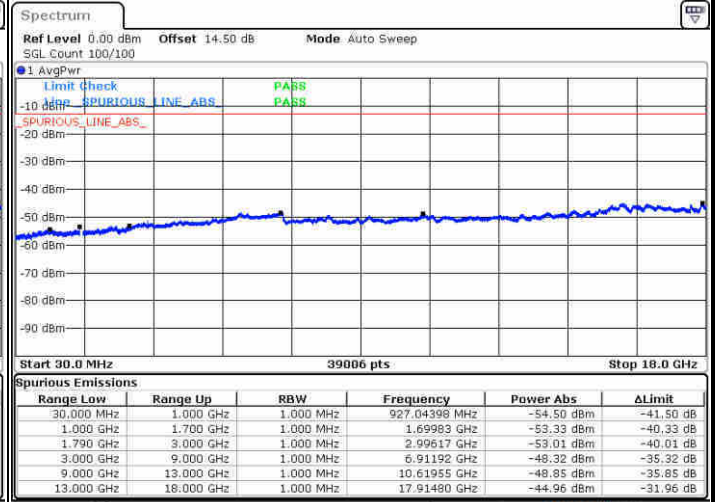
LTE Band 66 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

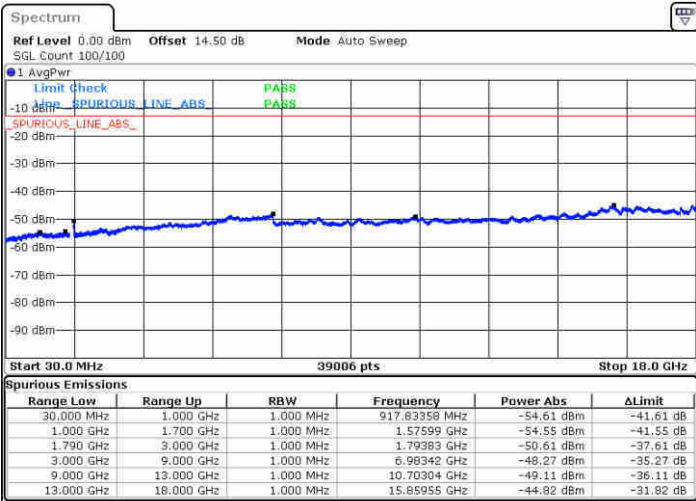


Date: 10 JUN 2020 17:55:46



Date: 10 JUN 2020 17:45:47

Highest Channel / 64QAM



Date: 10 JUN 2020 18:00:17





Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

- 11. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
- 12. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 7CA

## 26dB Bandwidth

Mode	LTE Band 7C : 26dB BW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Lowest CH	29.79	25.33	30.51	34.69
Middle CH	29.61	25.03	30.27	34.55
Highest CH	29.79	25.08	30.51	34.69
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	29.91	35.04	40.04	-
Middle CH	29.73	34.83	39.56	-
Highest CH	29.73	34.90	39.80	-

Mode	LTE Band 7C : 26dB BW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Lowest CH	29.73	25.33	30.39	34.90
Middle CH	29.49	24.83	30.15	34.62
Highest CH	29.85	25.08	30.33	34.76
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	29.85	35.11	41.48	-
Middle CH	29.97	34.76	39.56	-
Highest CH	29.91	34.90	39.88	-

Mode	LTE Band 7C : 26dB BW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Lowest CH	29.49	25.23	30.39	34.76
Middle CH	29.25	25.13	30.33	34.20
Highest CH	29.49	25.13	30.45	34.62
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	29.97	35.04	39.96	-
Middle CH	29.85	34.97	39.32	-
Highest CH	29.73	34.97	39.80	-



LTE Band 7C

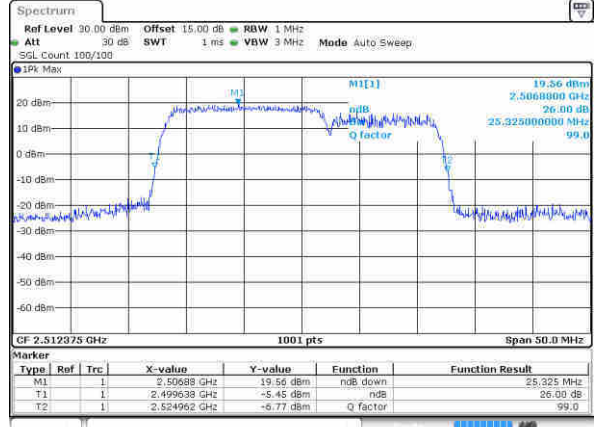
QPSK

Lowest Channel / 10MHz+20MHz



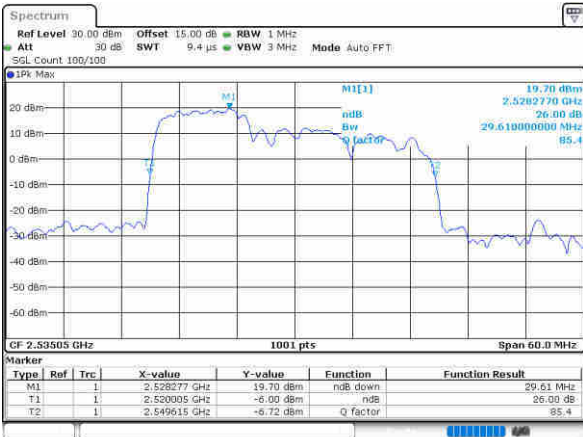
Date: 20 JUN 2020 09:49:05

Lowest Channel / 15MHz+10MHz



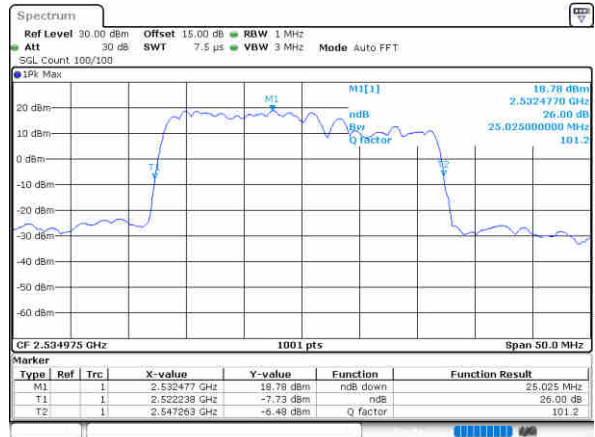
Date: 21 JUN 2020 15:42:25

Middle Channel / 10MHz+20MHz



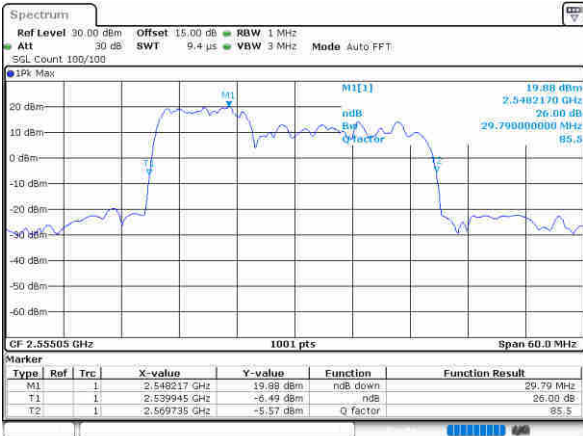
Date: 20 JUN 2020 10:28:12

Middle Channel / 15MHz+10MHz



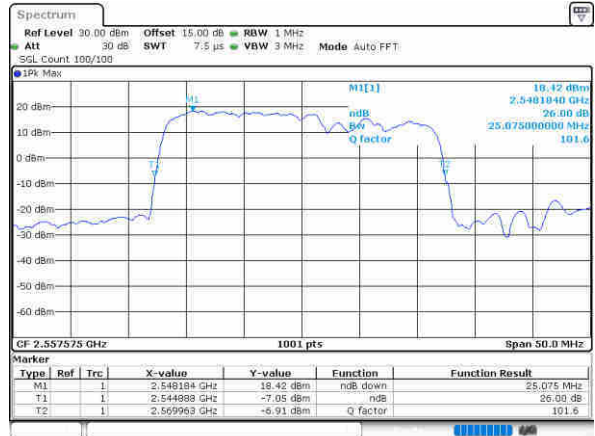
Date: 21 JUN 2020 15:25:05

Highest Channel / 10MHz+20MHz



Date: 20 JUN 2020 10:43:11

Highest Channel / 15MHz+10MHz



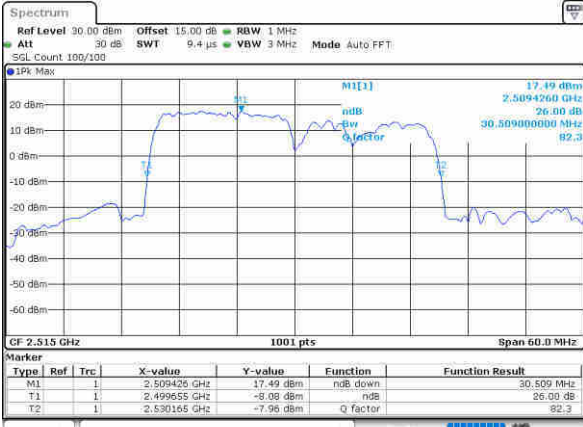
Date: 21 JUN 2020 16:31:25



LTE Band 7C

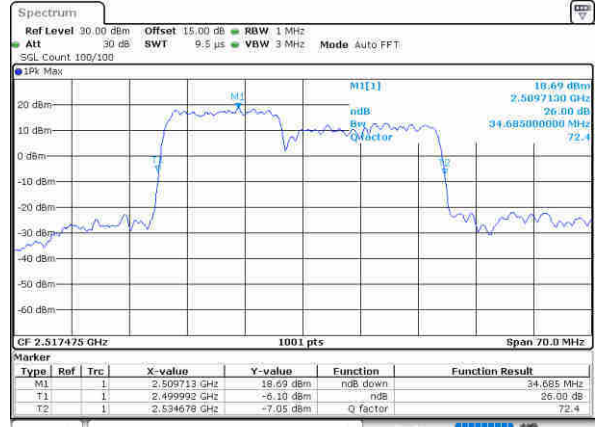
QPSK

Lowest Channel / 15MHz+15MHz



Date: 20\_07\_2020 14:45:22

Lowest Channel / 15MHz+20MHz



Date: 20\_07\_2020 17:19:28

Middle Channel / 15MHz+15MHz



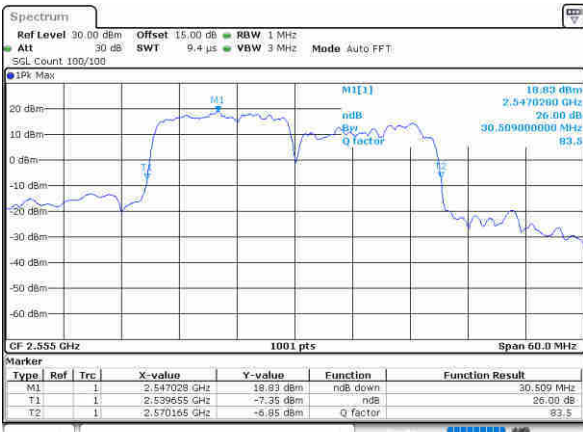
Date: 20\_07\_2020 15:53:11

Middle Channel / 15MHz+20MHz



Date: 20\_07\_2020 17:42:41

Highest Channel / 15MHz+15MHz



Date: 20\_07\_2020 16:38:05

Highest Channel / 15MHz+20MHz



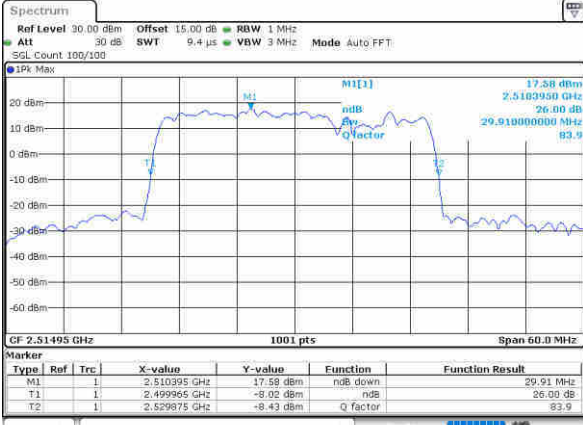
Date: 20\_07\_2020 17:53:32



LTE Band 7C

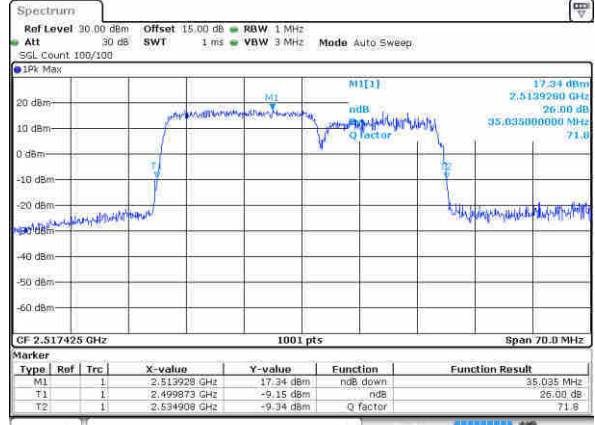
QPSK

Lowest Channel / 20MHz+10MHz



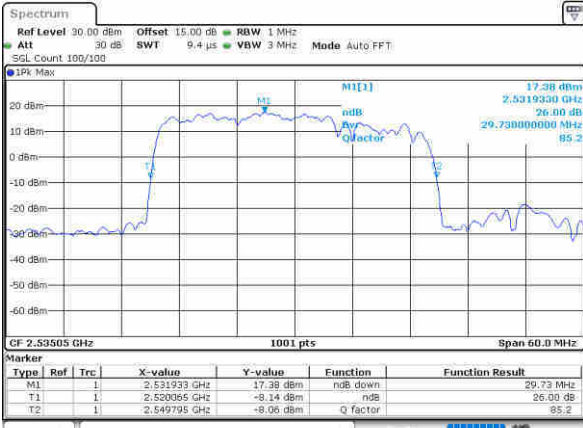
Date: 20 JUN 2020 12:53:01

Lowest Channel / 20MHz+15MHz



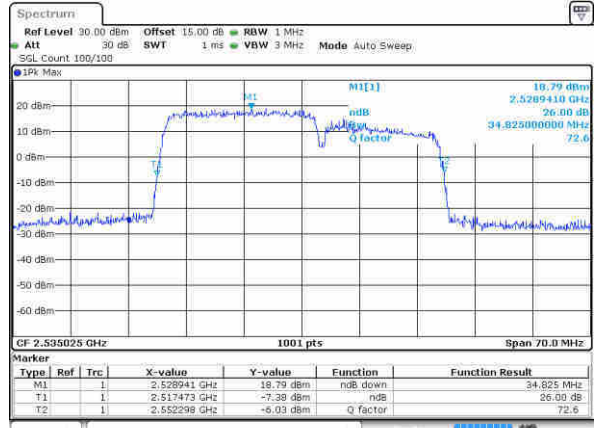
Date: 21 JUN 2020 10:22:21

Middle Channel / 20MHz+10MHz



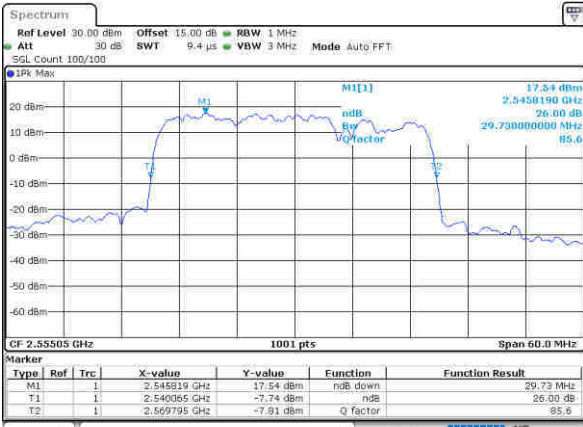
Date: 20 JUN 2020 13:59:21

Middle Channel / 20MHz+15MHz



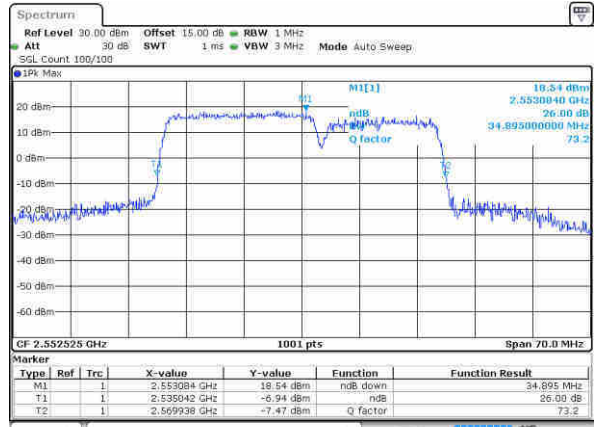
Date: 21 JUN 2020 11:46:26

Highest Channel / 20MHz+10MHz



Date: 20 JUN 2020 14:08:32

Highest Channel / 20MHz+15MHz



Date: 21 JUN 2020 12:09:53

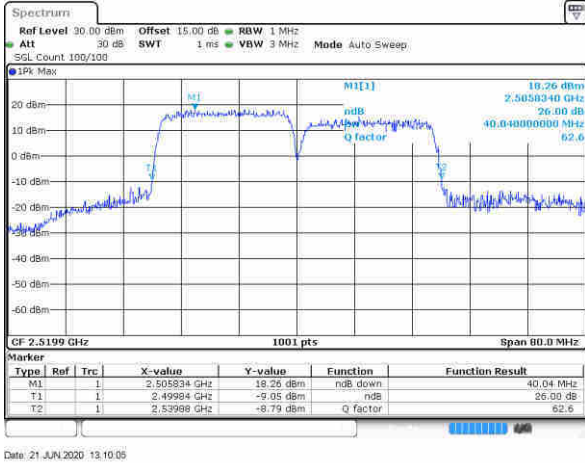


LTE Band 7C

QPSK

Lowest Channel / 20MHz+20MHz

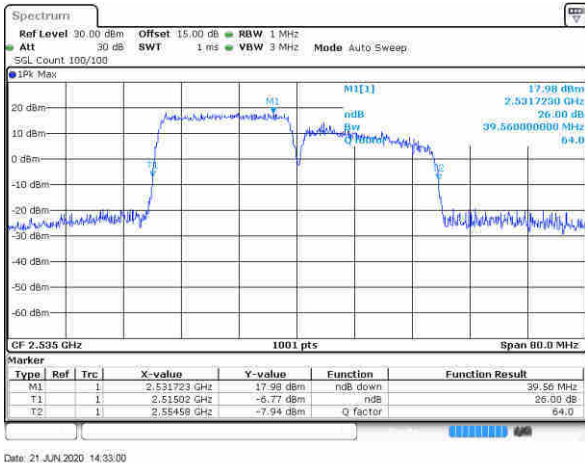
N/A



Date: 21 JUN 2020 13:10:05

Middle Channel / 20MHz+20MHz

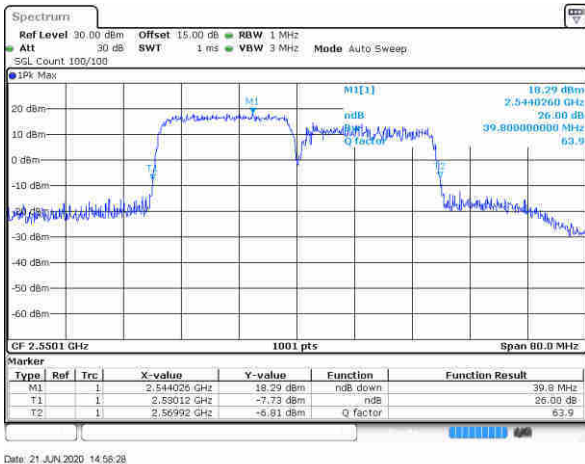
N/A



Date: 21 JUN 2020 14:33:00

Highest Channel / 20MHz+20MHz

N/A



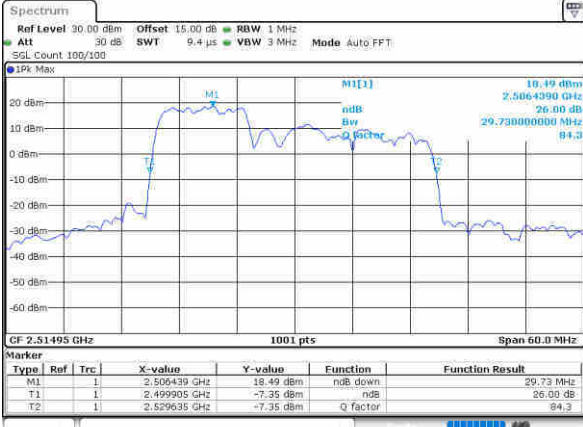
Date: 21 JUN 2020 14:56:28



LTE Band 7C

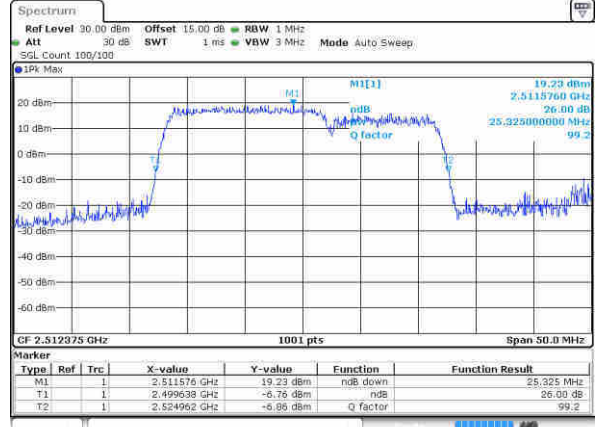
16QAM

Lowest Channel / 10MHz+20MHz



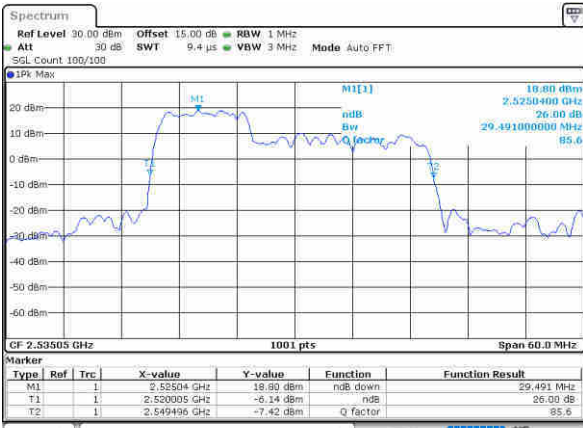
Date: 20 JUN 2020 09:59:12

Lowest Channel / 15MHz+10MHz



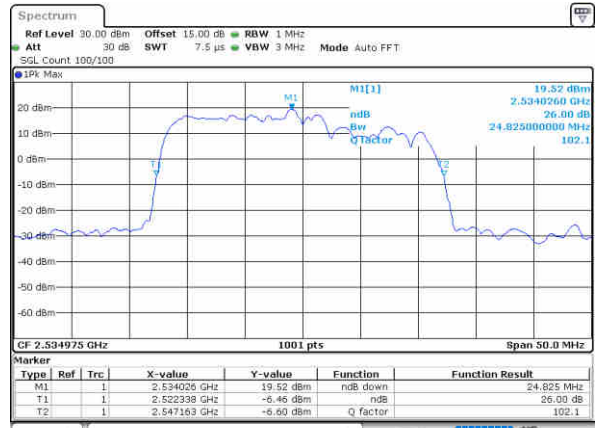
Date: 21 JUN 2020 15:47:00

Middle Channel / 10MHz+20MHz



Date: 21 JUN 2020 16:59:04

Middle Channel / 15MHz+10MHz



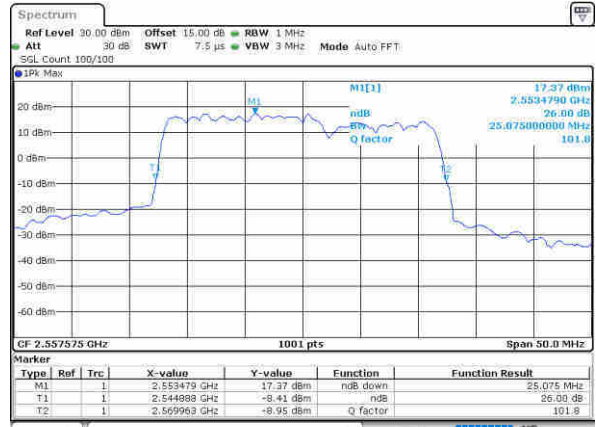
Date: 21 JUN 2020 15:24:40

Highest Channel / 10MHz+20MHz



Date: 20 JUN 2020 10:45:20

Highest Channel / 15MHz+10MHz



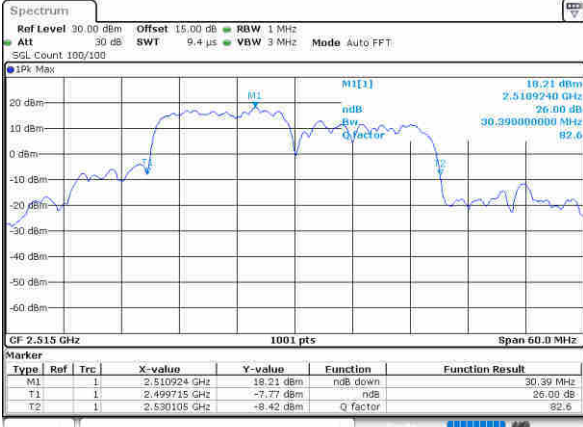
Date: 21 JUN 2020 16:34:24



LTE Band 7C

16QAM

Lowest Channel / 15MHz+15MHz



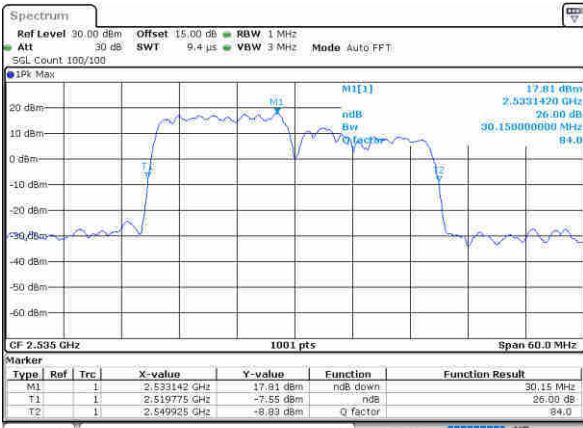
Date: 20\_07\_2020 14:47:38

Lowest Channel / 15MHz+20MHz



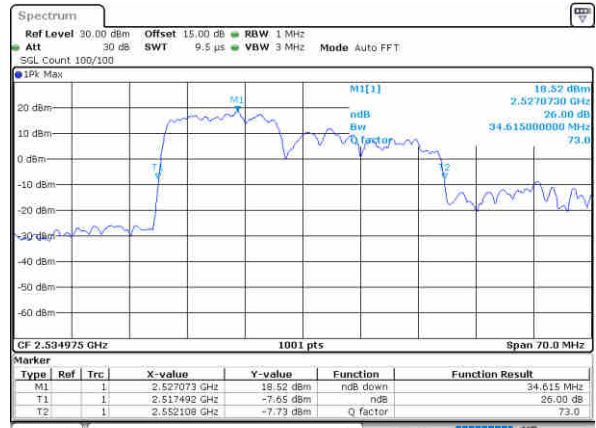
Date: 20\_07\_2020 17:09:32

Middle Channel / 15MHz+15MHz



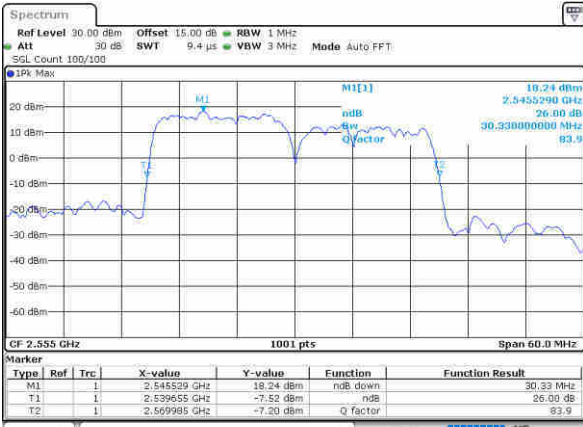
Date: 20\_07\_2020 15:40:47

Middle Channel / 15MHz+20MHz



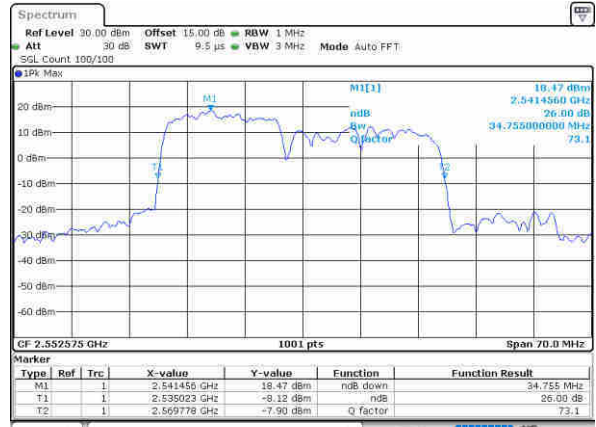
Date: 20\_07\_2020 17:41:02

Highest Channel / 15MHz+15MHz



Date: 20\_07\_2020 16:31:57

Highest Channel / 15MHz+20MHz



Date: 20\_07\_2020 17:55:32

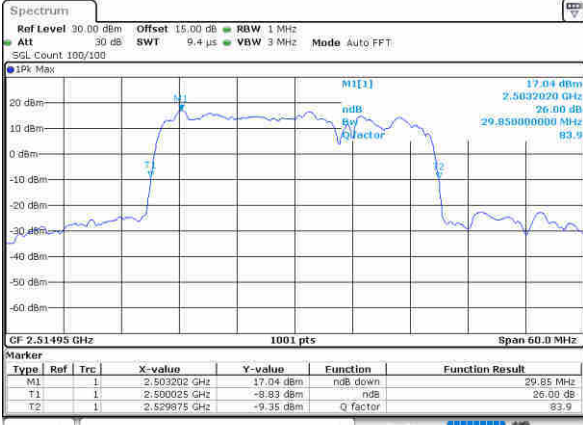




LTE Band 7C

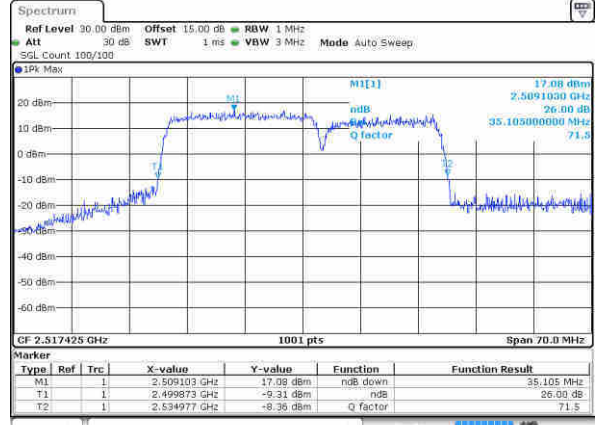
16QAM

Lowest Channel / 20MHz+10MHz



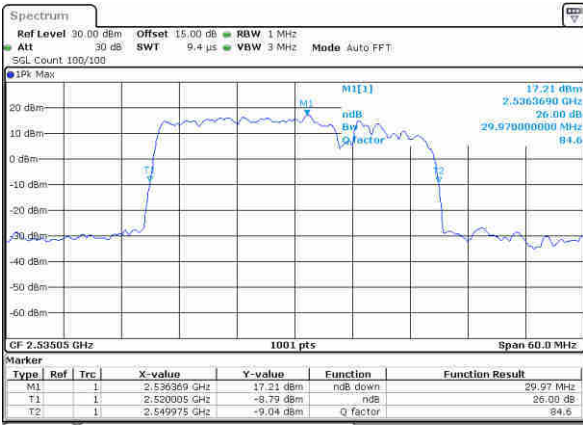
Date: 20 JUN 2020 12:55:34

Lowest Channel / 20MHz+15MHz



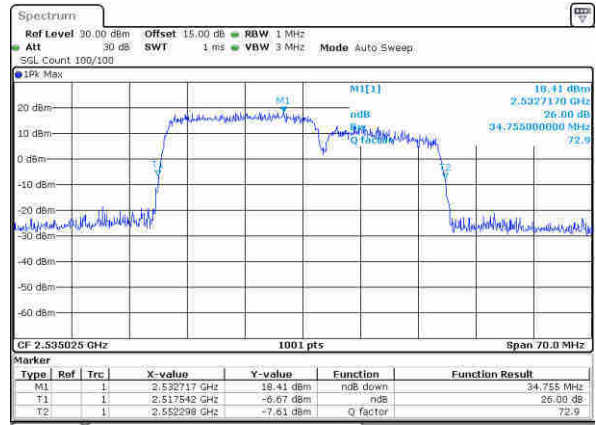
Date: 21 JUN 2020 10:25:31

Middle Channel / 20MHz+10MHz



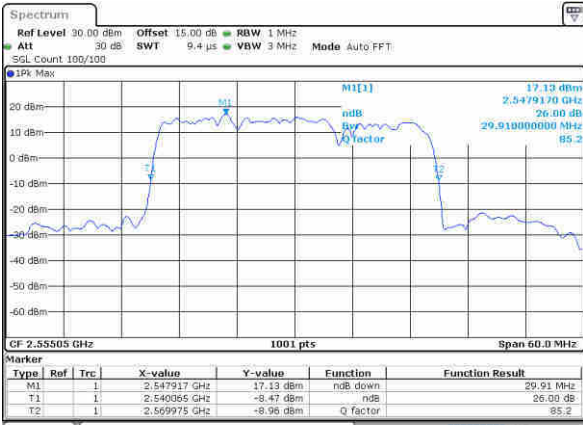
Date: 20 JUN 2020 13:51:28

Middle Channel / 20MHz+15MHz



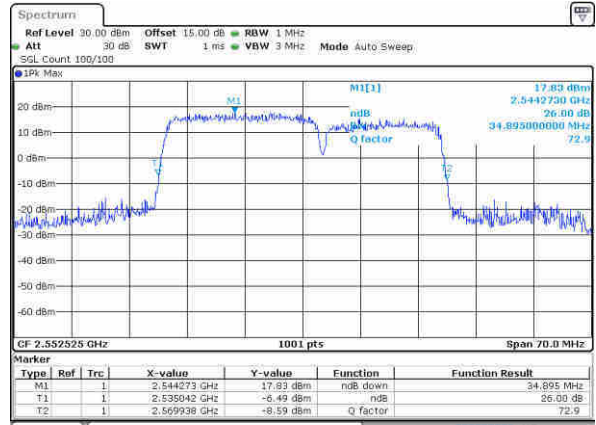
Date: 21 JUN 2020 11:48:28

Highest Channel / 20MHz+10MHz



Date: 20 JUN 2020 14:19:15

Highest Channel / 20MHz+15MHz



Date: 21 JUN 2020 12:19:43

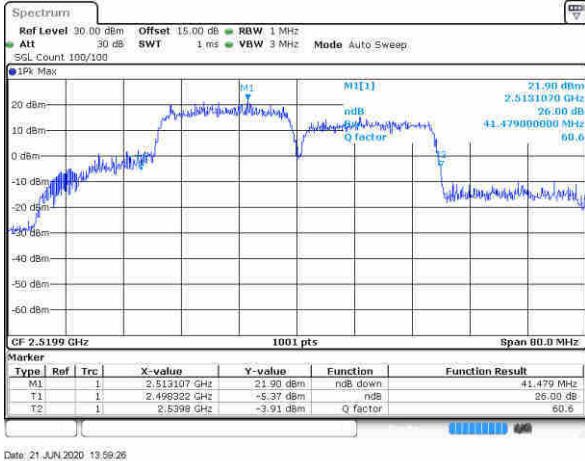


LTE Band 7C

16QAM

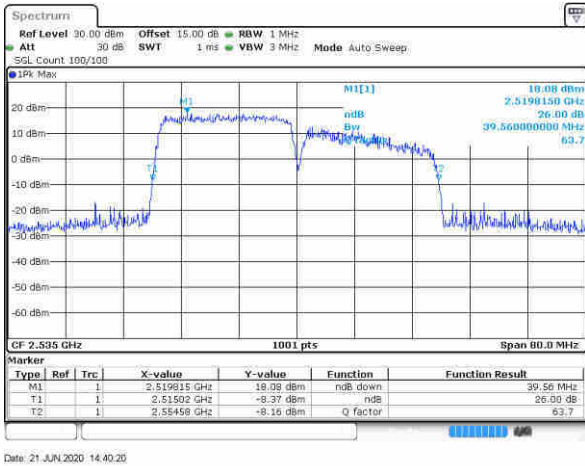
Lowest Channel / 20MHz+20MHz

N/A



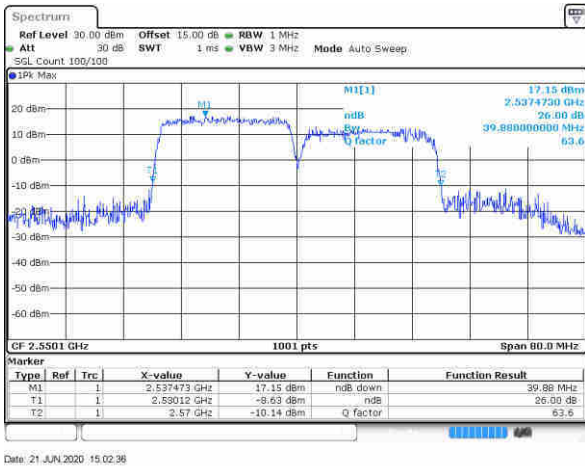
Middle Channel / 20MHz+20MHz

N/A



Highest Channel / 20MHz+20MHz

N/A





LTE Band 7C

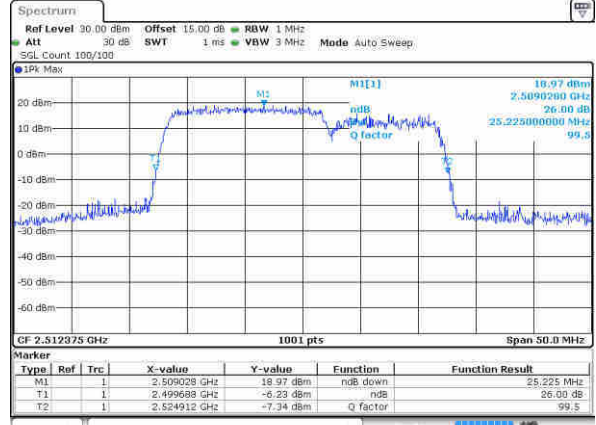
64QAM

Lowest Channel / 10MHz+20MHz



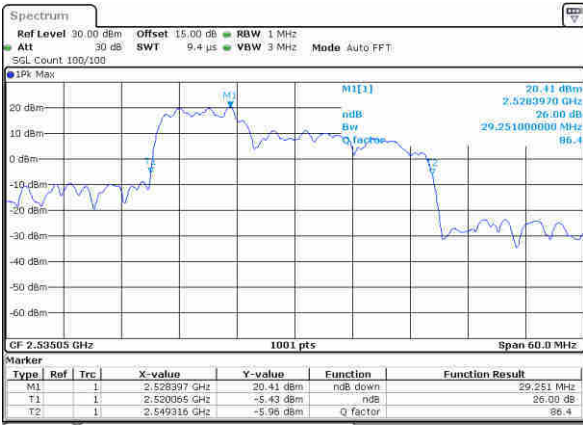
Date: 20\_JUN,2020 09:52:33

Lowest Channel / 15MHz+10MHz



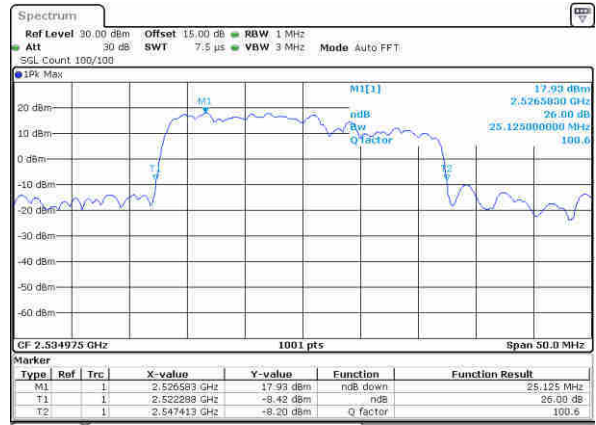
Date: 21 JUN,2020 15:53:41

Middle Channel / 10MHz+20MHz



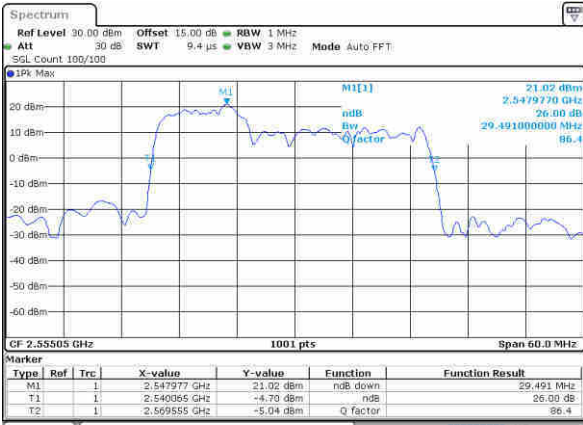
Date: 20\_JUN,2020 10:30:44

Middle Channel / 15MHz+10MHz



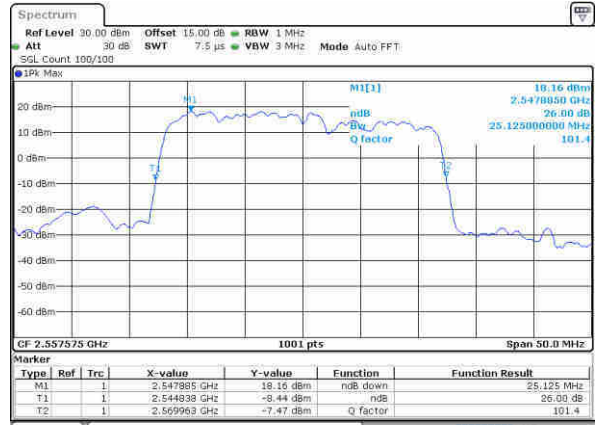
Date: 21 JUN,2020 15:53:06

Highest Channel / 10MHz+20MHz



Date: 20\_JUN,2020 10:47:14

Highest Channel / 15MHz+10MHz



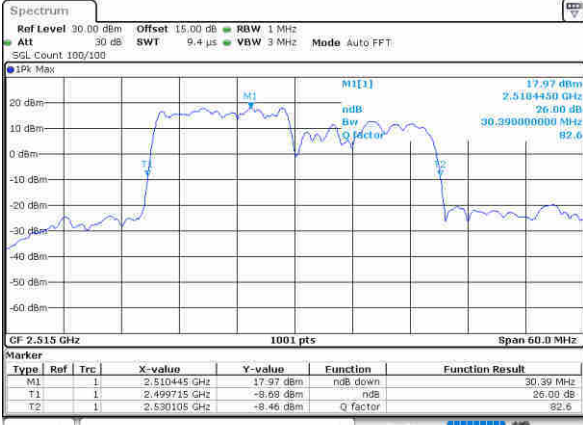
Date: 21 JUN,2020 16:24:55



LTE Band 7C

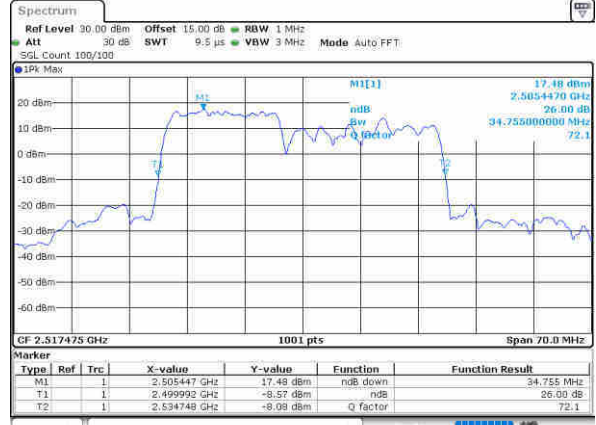
64QAM

Lowest Channel / 15MHz+15MHz



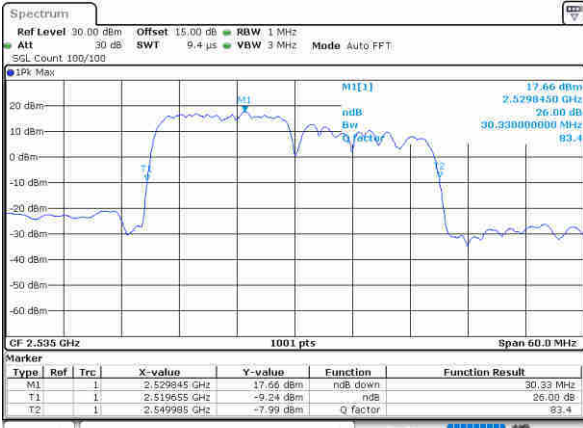
Date: 20\_07\_2020 14:51:36

Lowest Channel / 15MHz+20MHz



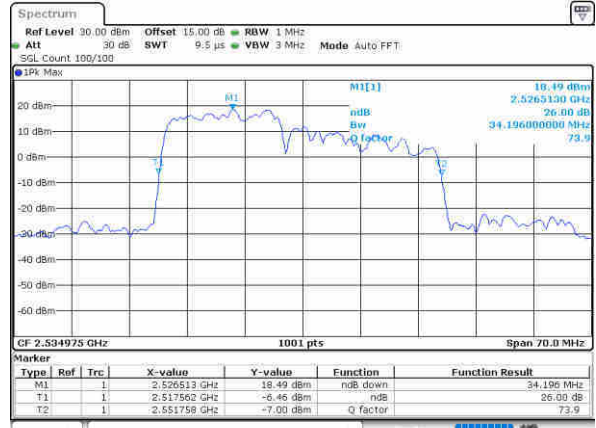
Date: 20\_07\_2020 17:19:08

Middle Channel / 15MHz+15MHz



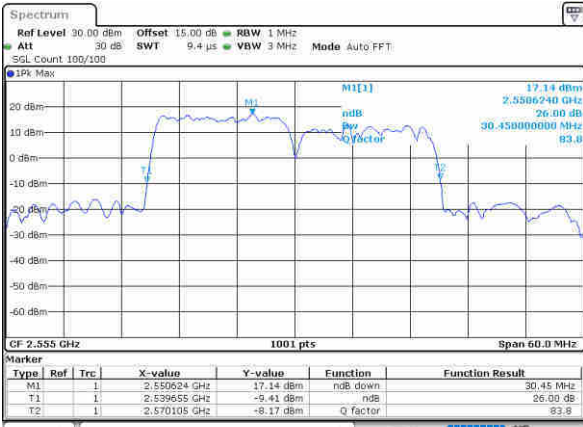
Date: 20\_07\_2020 15:42:24

Middle Channel / 15MHz+20MHz



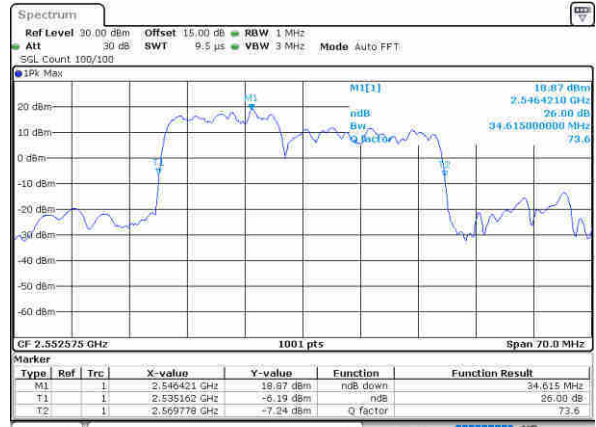
Date: 20\_07\_2020 17:45:43

Highest Channel / 15MHz+15MHz



Date: 20\_07\_2020 16:33:43

Highest Channel / 15MHz+20MHz



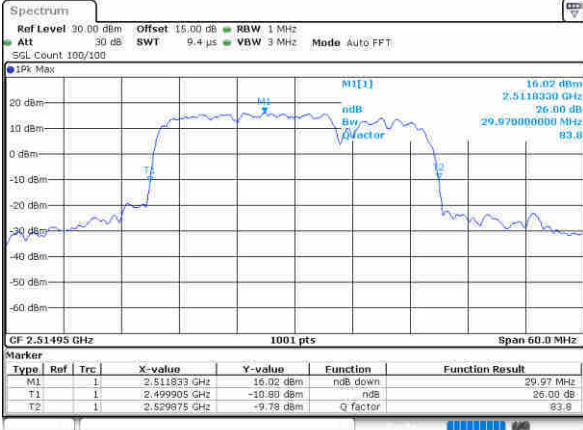
Date: 20\_07\_2020 18:02:20



LTE Band 7C

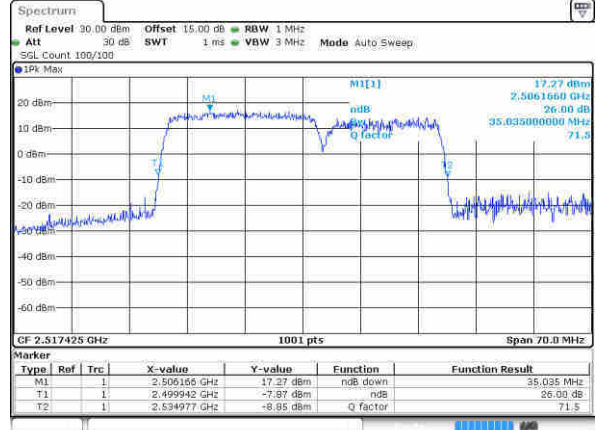
64QAM

Lowest Channel / 20MHz+10MHz



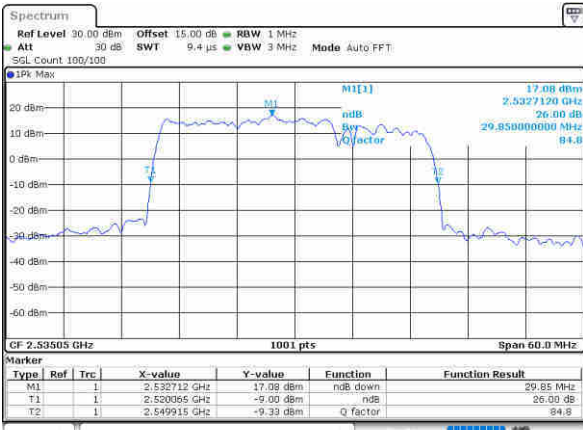
Date: 20 JUN 2020 12:57:50

Lowest Channel / 20MHz+15MHz



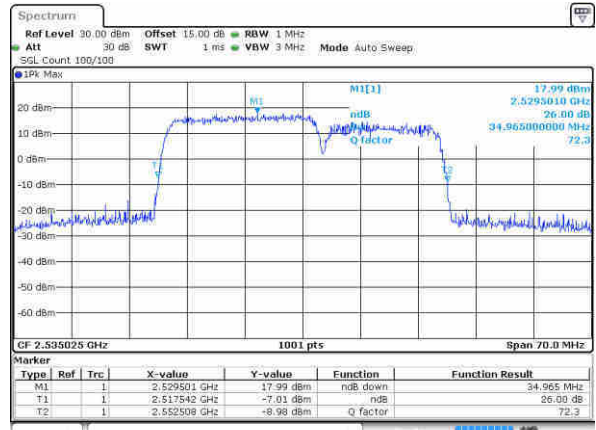
Date: 21 JUN 2020 10:27:37

Middle Channel / 20MHz+10MHz



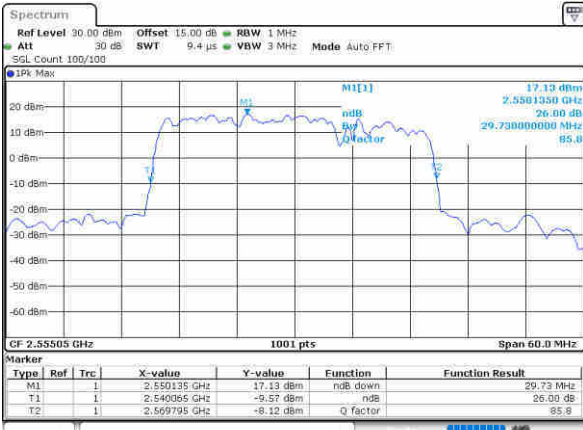
Date: 20 JUN 2020 13:46:22

Middle Channel / 20MHz+15MHz



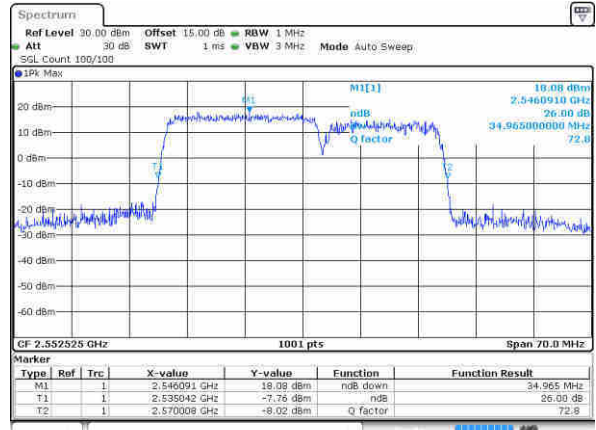
Date: 21 JUN 2020 11:51:12

Highest Channel / 20MHz+10MHz



Date: 20 JUN 2020 14:15:04

Highest Channel / 20MHz+15MHz



Date: 21 JUN 2020 12:16:03

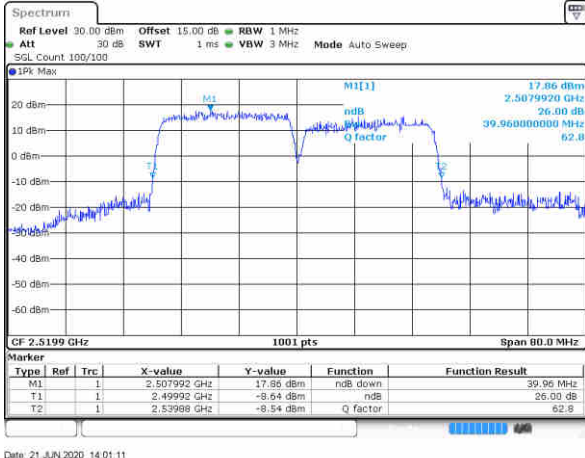


LTE Band 7C

64QAM

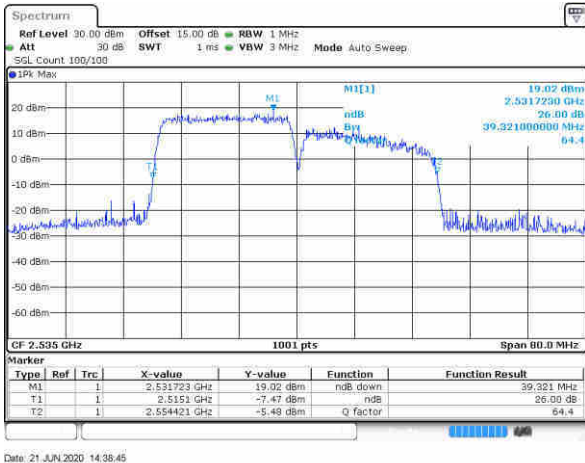
Lowest Channel / 20MHz+20MHz

N/A



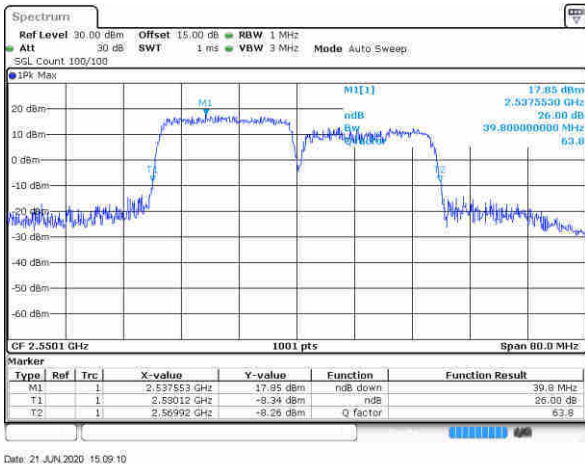
Middle Channel / 20MHz+20MHz

N/A



Highest Channel / 20MHz+20MH

N/A





## Occupied Bandwidth

Mode	LTE Band 7C : 99%OBW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Lowest CH	27.87	23.38	28.53	32.59
Middle CH	27.75	23.23	27.81	31.75
Highest CH	28.05	23.23	28.53	32.73
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	27.63	32.80	37.48	-
Middle CH	27.33	31.96	36.36	-
Highest CH	28.11	32.73	37.56	-

Mode	LTE Band 7C : 99%OBW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Lowest CH	27.45	23.33	28.65	32.80
Middle CH	26.61	22.73	28.17	31.68
Highest CH	27.87	23.13	28.47	32.52
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	28.05	32.94	37.88	-
Middle CH	27.27	32.17	36.28	-
Highest CH	27.69	32.80	37.64	-

Mode	LTE Band 7C : 99%OBW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Lowest CH	27.57	23.23	28.47	32.73
Middle CH	26.37	23.18	27.99	30.84
Highest CH	27.93	23.23	28.17	32.73
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	27.81	32.80	37.64	-
Middle CH	27.93	32.66	35.88	-
Highest CH	27.99	32.66	37.32	-



LTE Band 7C

QPSK

Lowest Channel / 10MHz+20MHz



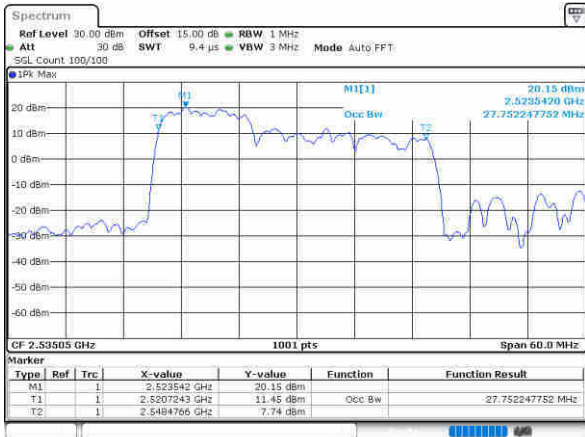
Date: 20 JUN 2020 09:48:51

Lowest Channel / 15MHz+10MHz



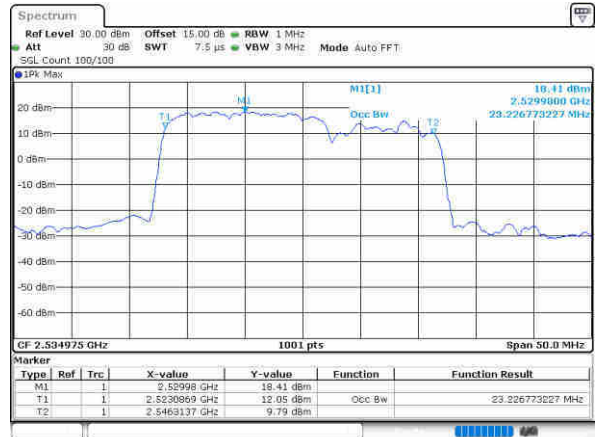
Date: 21 JUN 2020 15:42:18

Middle Channel / 10MHz+20MHz



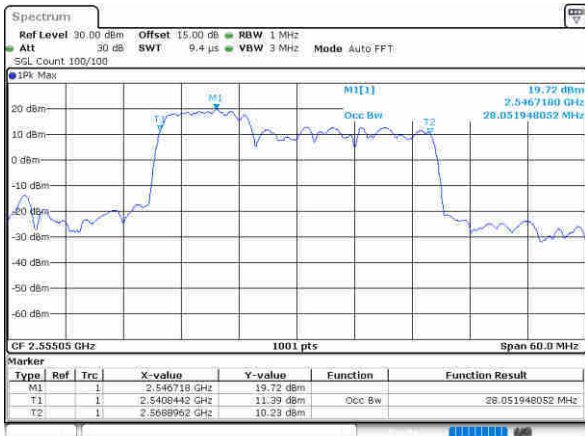
Date: 20 JUN 2020 10:28:05

Middle Channel / 15MHz+10MHz



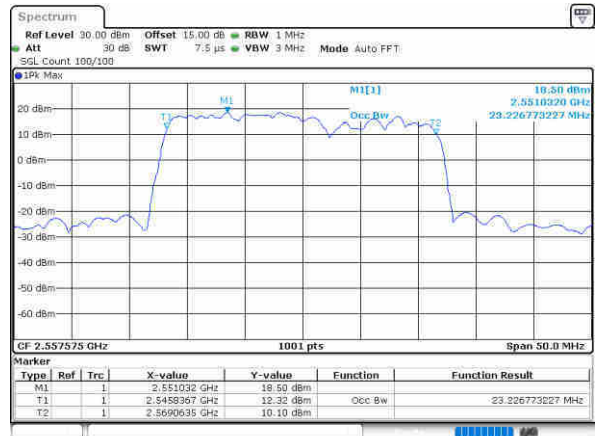
Date: 21 JUN 2020 15:24:58

Highest Channel / 10MHz+20MHz



Date: 20 JUN 2020 10:43:01

Highest Channel / 15MHz+10MHz



Date: 21 JUN 2020 16:21:16

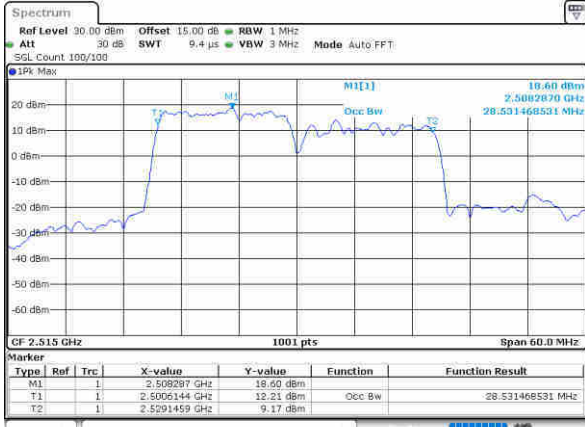




LTE Band 7C

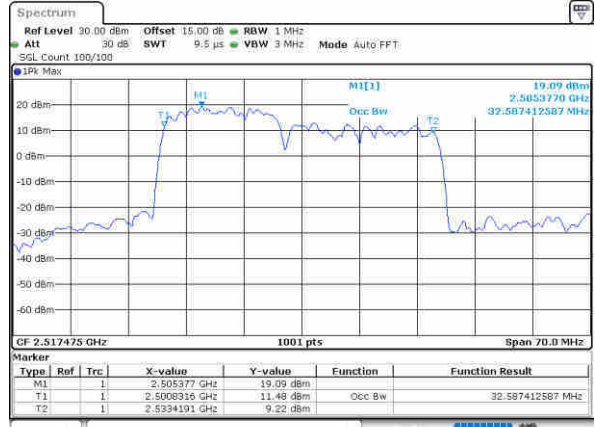
QPSK

Lowest Channel / 15MHz+15MHz



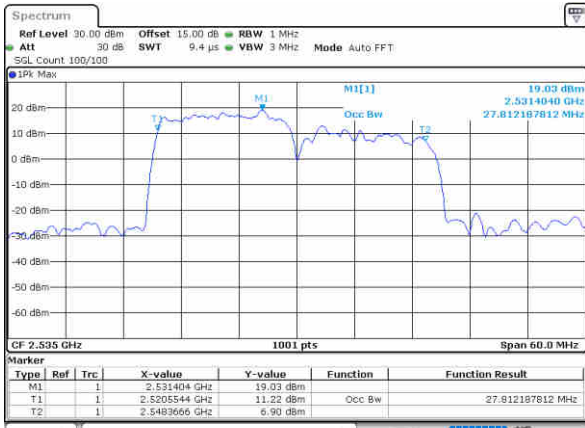
Date: 20\_07\_2020 14:45:15

Lowest Channel / 15MHz+20MHz



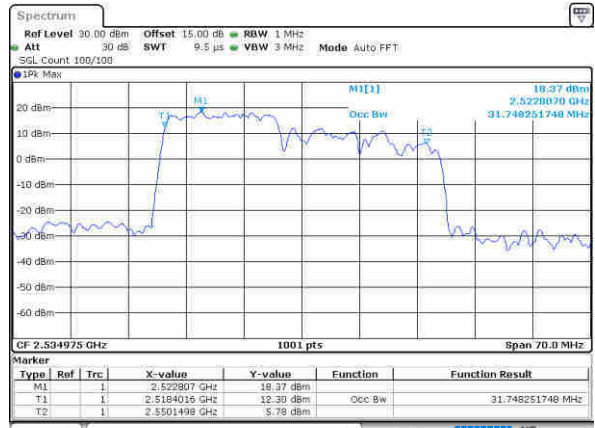
Date: 20\_07\_2020 17:19:20

Middle Channel / 15MHz+15MHz



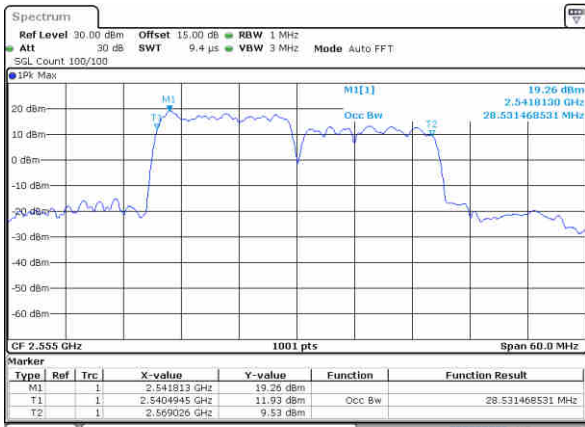
Date: 20\_07\_2020 15:27:05

Middle Channel / 15MHz+20MHz



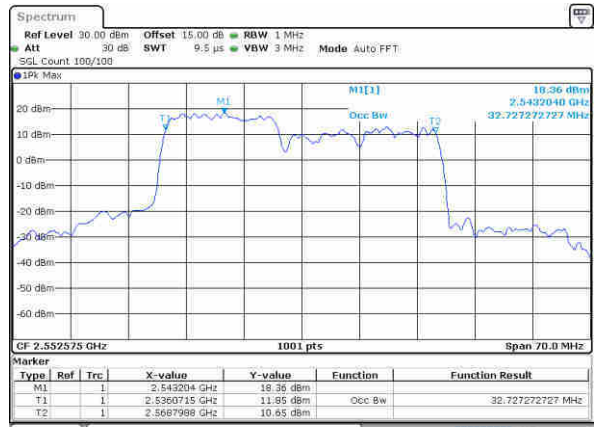
Date: 20\_07\_2020 17:45:15

Highest Channel / 15MHz+15MHz



Date: 20\_07\_2020 16:29:56

Highest Channel / 15MHz+20MHz



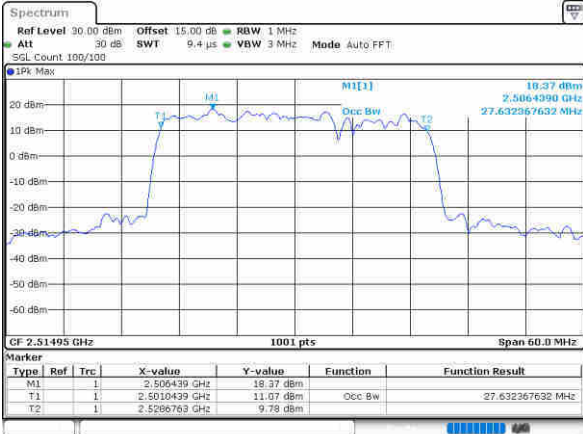
Date: 20\_07\_2020 17:15:26



LTE Band 7C

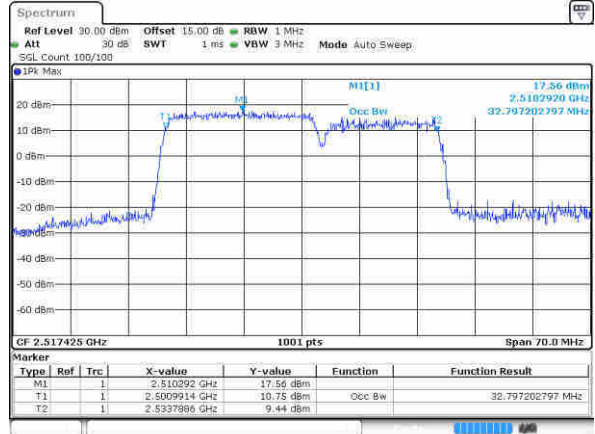
QPSK

Lowest Channel / 20MHz+10MHz



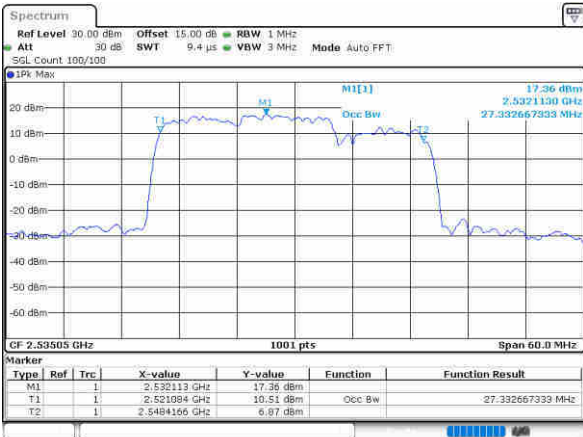
Date: 20 JUN 2020 12:52:11

Lowest Channel / 20MHz+15MHz



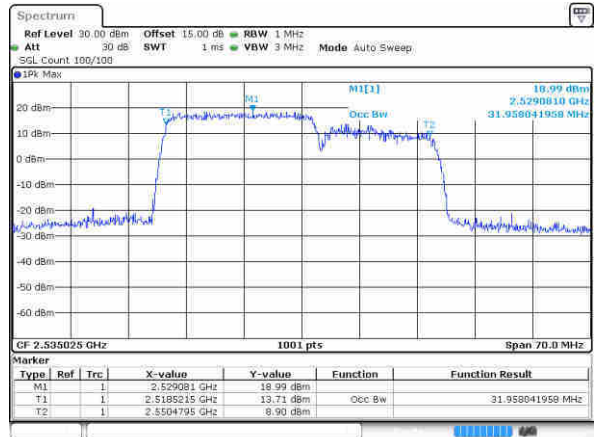
Date: 21 JUN 2020 10:22:14

Middle Channel / 20MHz+10MHz



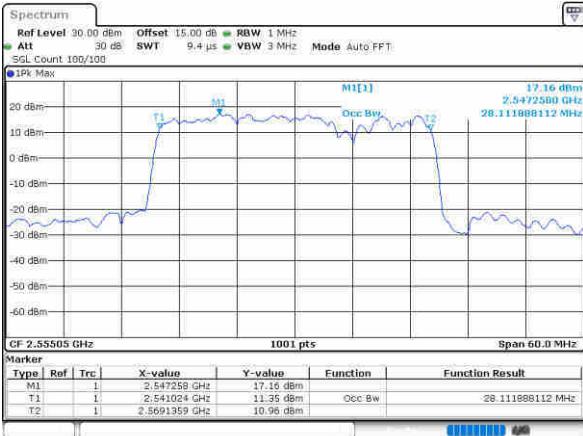
Date: 20 JUN 2020 13:59:12

Middle Channel / 20MHz+15MHz



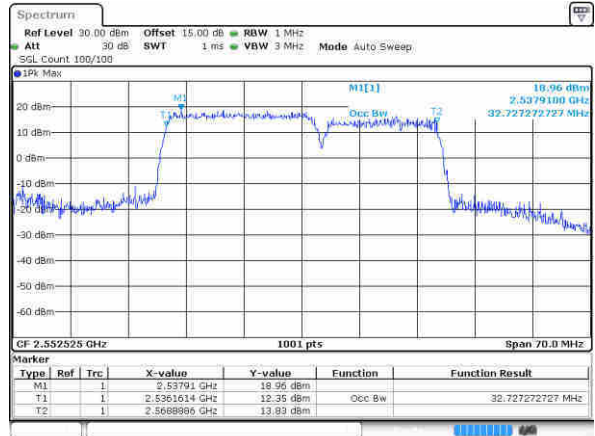
Date: 21 JUN 2020 11:48:18

Highest Channel / 20MHz+10MHz



Date: 20 JUN 2020 14:08:09

Highest Channel / 20MHz+15MHz



Date: 21 JUN 2020 12:09:46

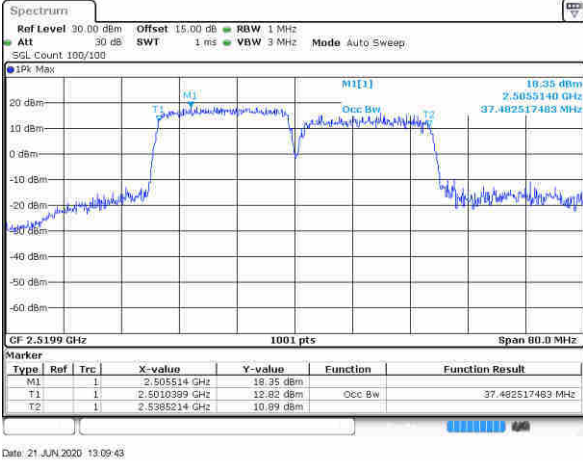


LTE Band 7C

QPSK

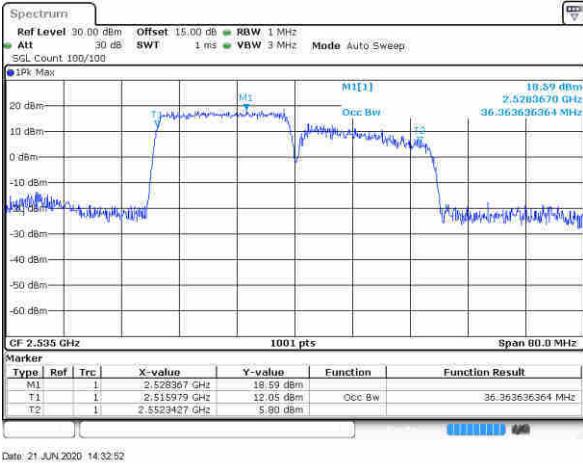
Lowest Channel / 20MHz+20MHz

N/A



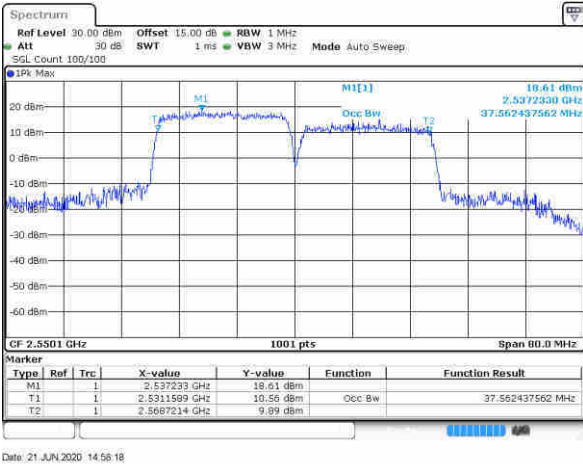
Middle Channel / 20MHz+20MHz

N/A



Highest Channel / 20MHz+20MHz

N/A

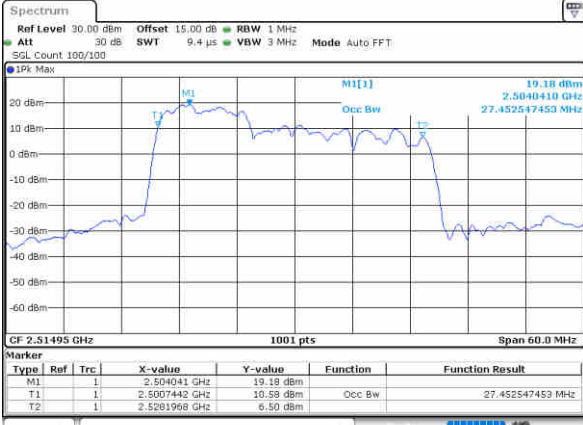




LTE Band 7C

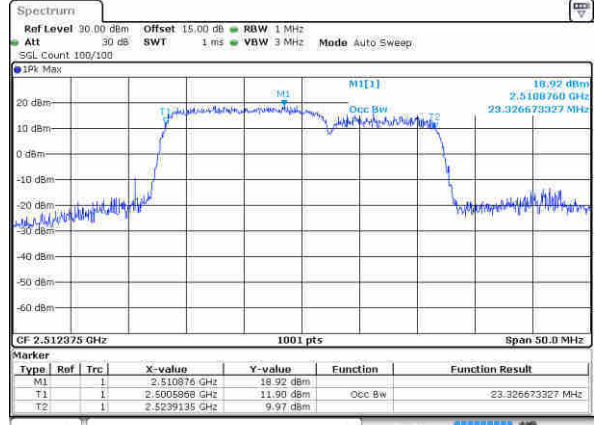
16QAM

Lowest Channel / 10MHz+20MHz



Date: 20 JUN 2020 09:59:04

Lowest Channel / 15MHz+10MHz



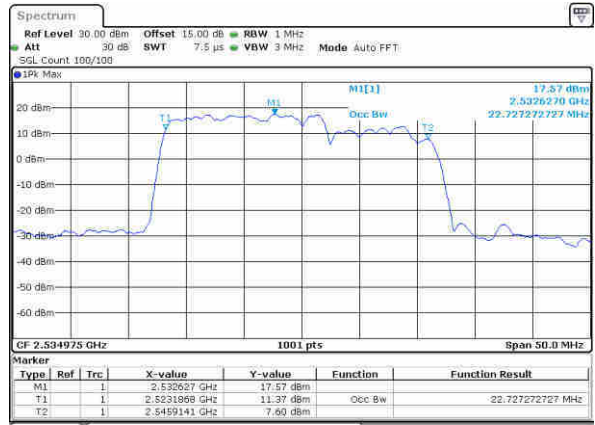
Date: 21 JUN 2020 15:46:53

Middle Channel / 10MHz+20MHz



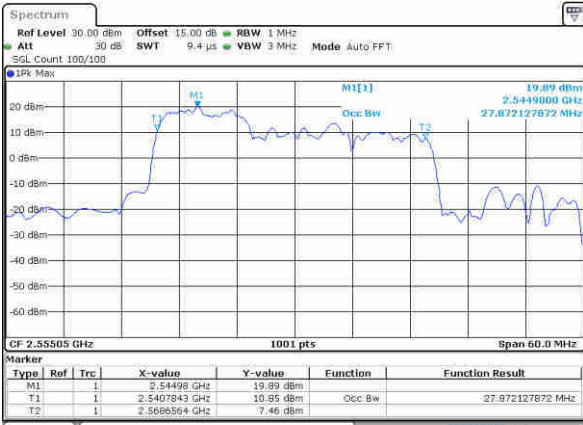
Date: 21 JUN 2020 16:49:27

Middle Channel / 15MHz+10MHz



Date: 21 JUN 2020 15:24:32

Highest Channel / 10MHz+20MHz



Date: 20 JUN 2020 10:45:10

Highest Channel / 15MHz+10MHz



Date: 21 JUN 2020 16:34:16



LTE Band 7C

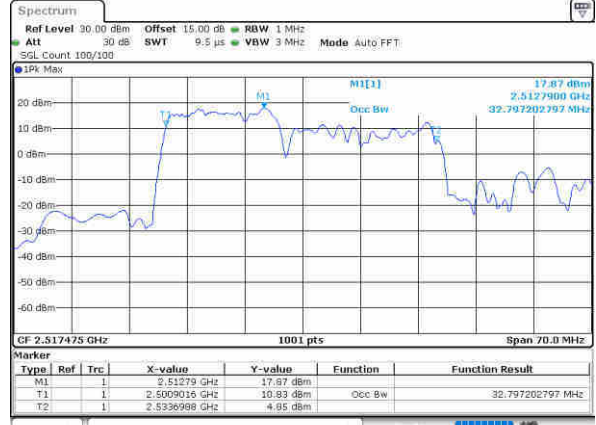
16QAM

Lowest Channel / 15MHz+15MHz



Date: 20\_07\_2020 14:47:24

Lowest Channel / 15MHz+20MHz



Date: 20\_07\_2020 17:10:25

Middle Channel / 15MHz+15MHz



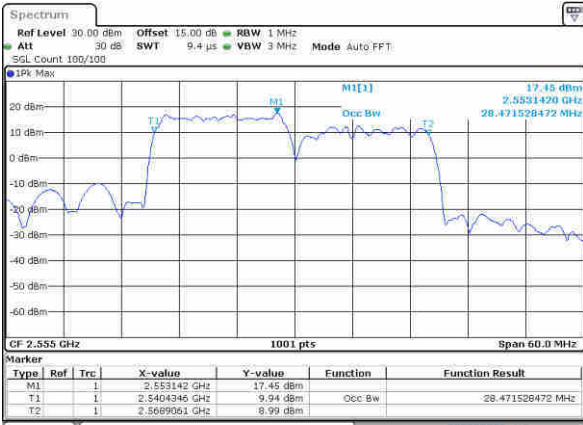
Date: 20\_07\_2020 15:40:34

Middle Channel / 15MHz+20MHz



Date: 20\_07\_2020 17:40:55

Highest Channel / 15MHz+15MHz



Date: 20\_07\_2020 16:31:50

Highest Channel / 15MHz+20MHz



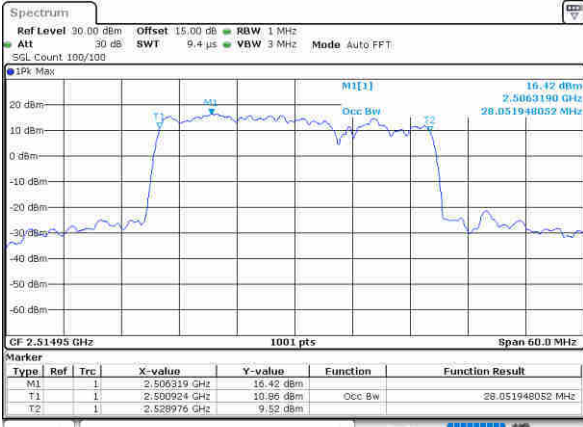
Date: 20\_07\_2020 17:55:25



LTE Band 7C

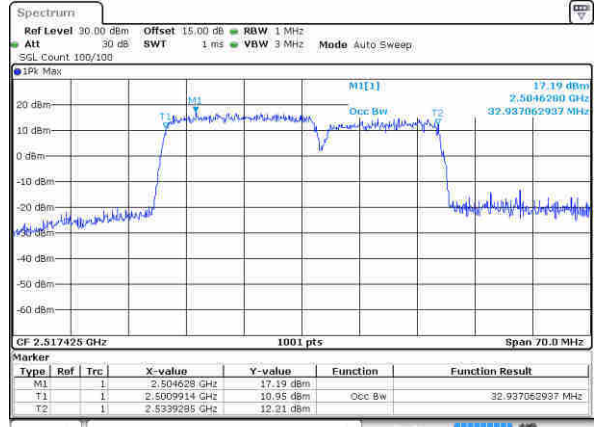
16QAM

Lowest Channel / 20MHz+10MHz



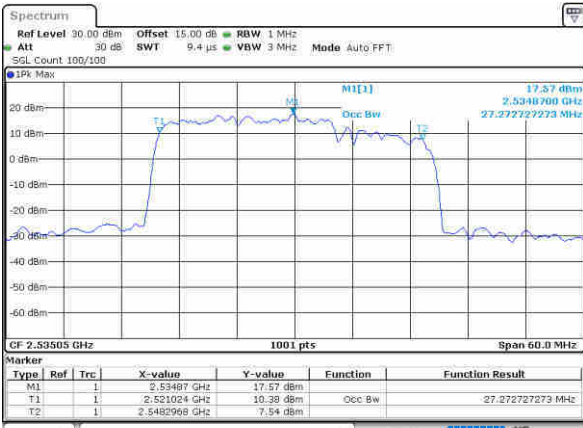
Date: 20 JUN 2020 12:53:19

Lowest Channel / 20MHz+15MHz



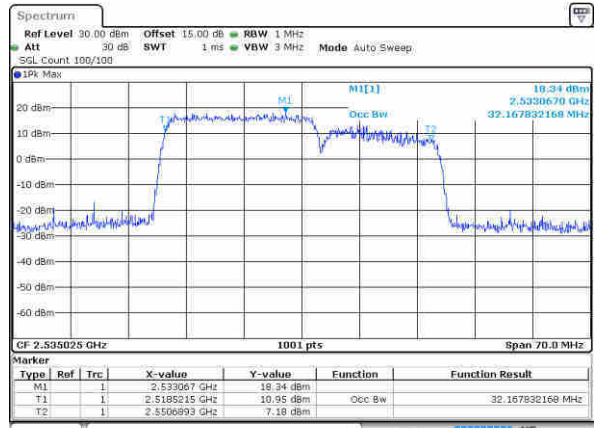
Date: 21 JUN 2020 10:25:22

Middle Channel / 20MHz+10MHz



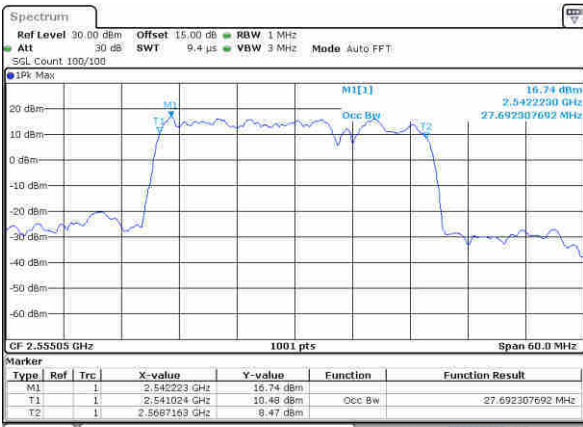
Date: 20 JUN 2020 13:51:20

Middle Channel / 20MHz+15MHz



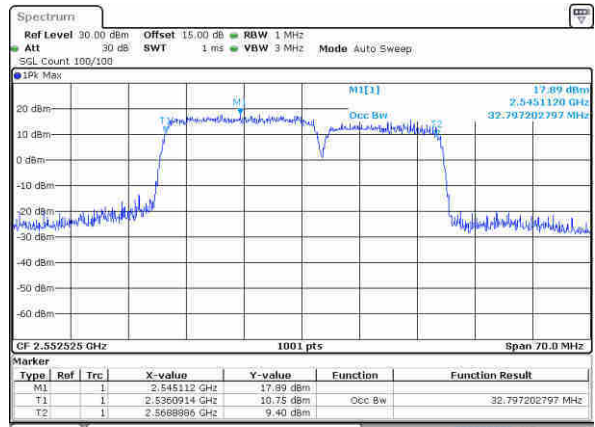
Date: 21 JUN 2020 11:49:13

Highest Channel / 20MHz+10MHz



Date: 20 JUN 2020 14:19:08

Highest Channel / 20MHz+15MHz



Date: 21 JUN 2020 12:19:34

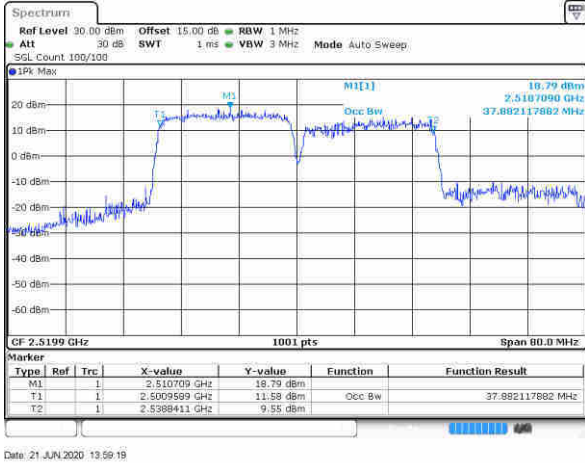


LTE Band 7C

16QAM

Lowest Channel / 20MHz+20MHz

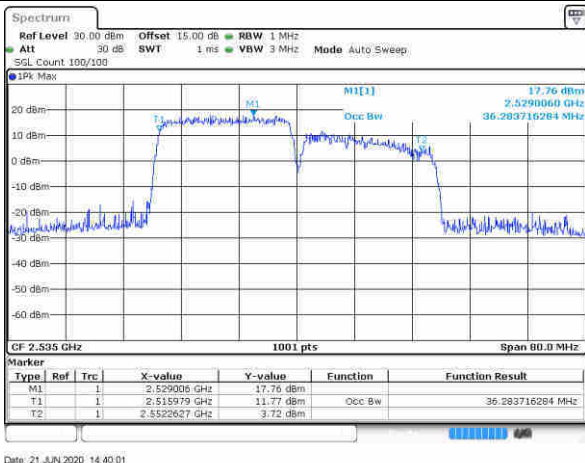
N/A



Date: 21 JUN 2020 13:59:19

Middle Channel / 20MHz+20MHz

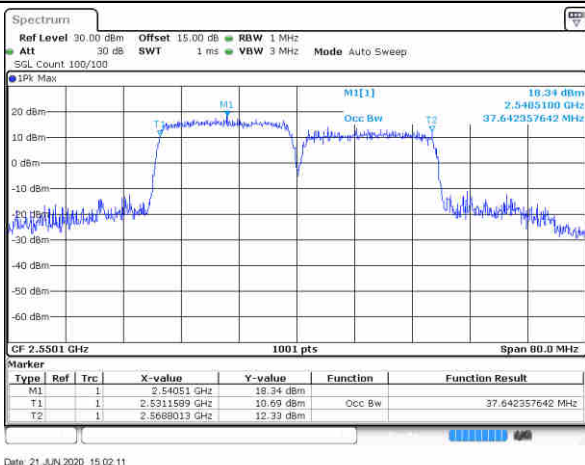
N/A



Date: 21 JUN 2020 14:40:01

Highest Channel / 20MHz+20MHz

N/A



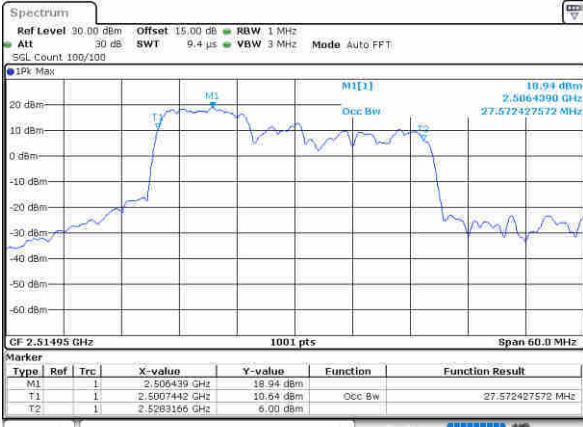
Date: 21 JUN 2020 15:02:11



LTE Band 7C

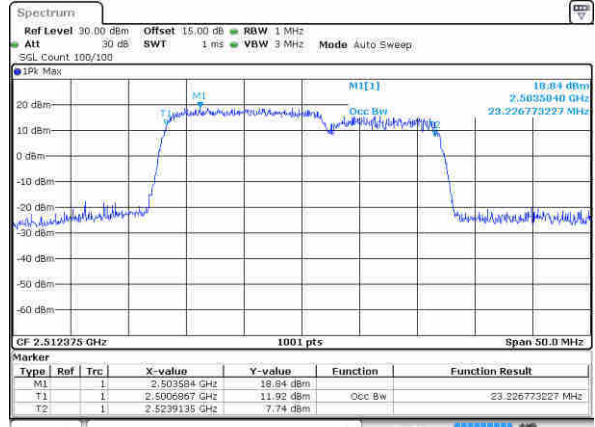
64QAM

Lowest Channel / 10MHz+20MHz



Date: 20 JUN 2020 09:52:18

Lowest Channel / 15MHz+10MHz



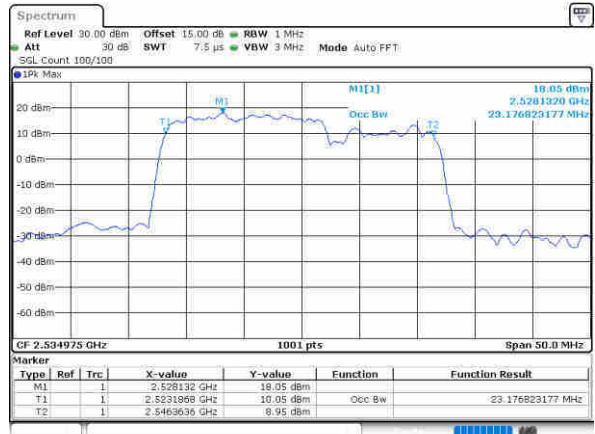
Date: 21 JUN 2020 15:53:10

Middle Channel / 10MHz+20MHz



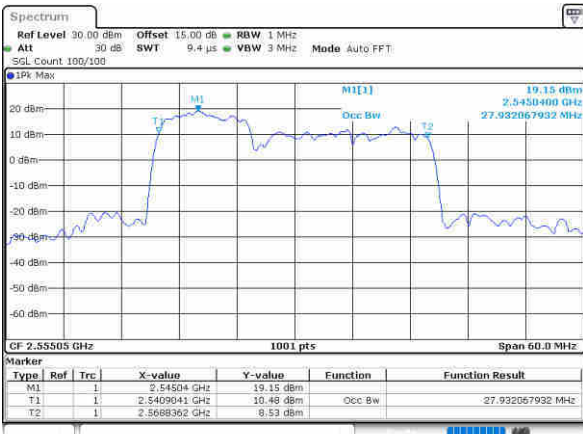
Date: 20 JUN 2020 10:30:32

Middle Channel / 15MHz+10MHz



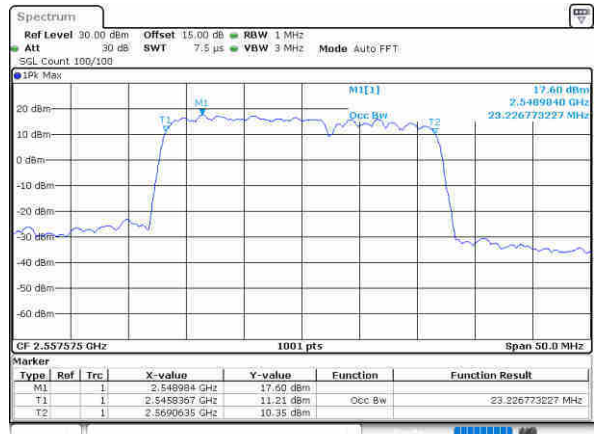
Date: 21 JUN 2020 15:52:57

Highest Channel / 10MHz+20MHz



Date: 20 JUN 2020 10:47:06

Highest Channel / 15MHz+10MHz



Date: 21 JUN 2020 16:24:45

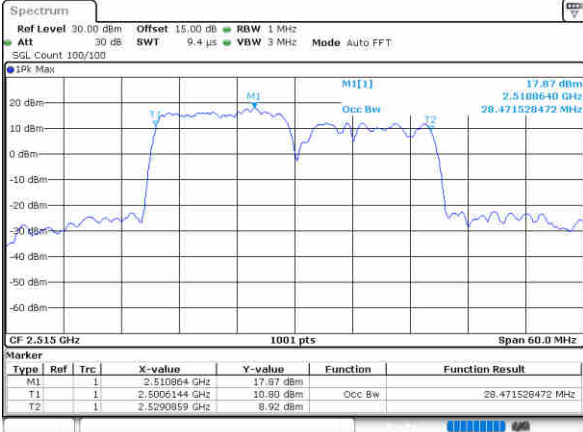




LTE Band 7C

64QAM

Lowest Channel / 15MHz+15MHz



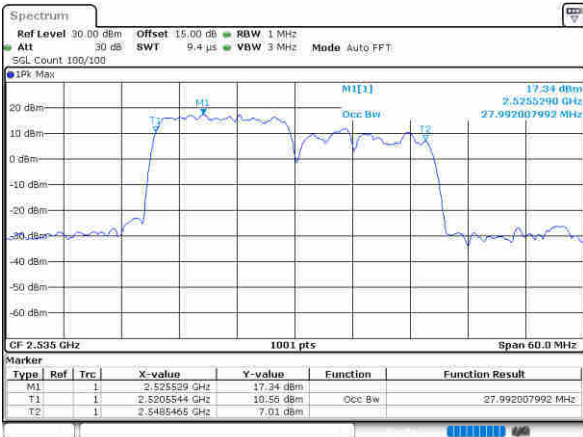
Date: 20\_07\_2020 14:51:29

Lowest Channel / 15MHz+20MHz



Date: 20\_07\_2020 17:19:00

Middle Channel / 15MHz+15MHz



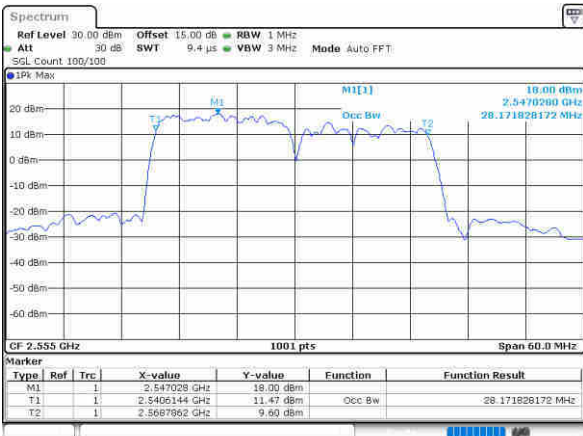
Date: 20\_07\_2020 15:42:07

Middle Channel / 15MHz+20MHz



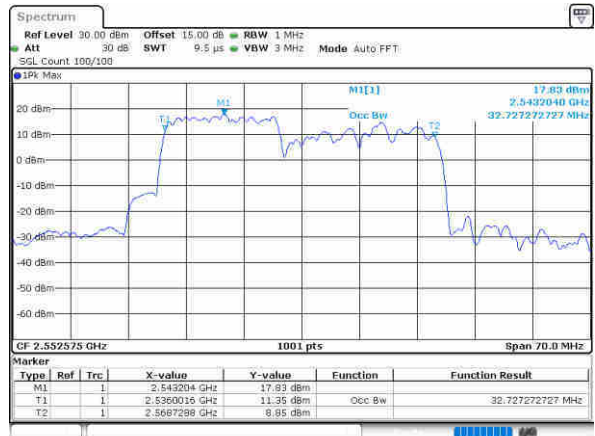
Date: 20\_07\_2020 17:45:33

Highest Channel / 15MHz+15MHz



Date: 20\_07\_2020 16:33:28

Highest Channel / 15MHz+20MHz



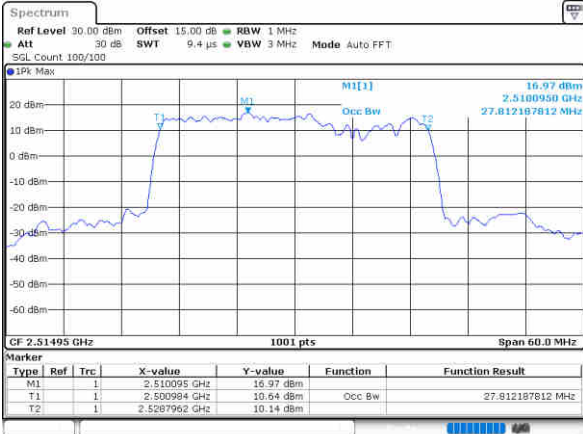
Date: 20\_07\_2020 18:02:13



LTE Band 7C

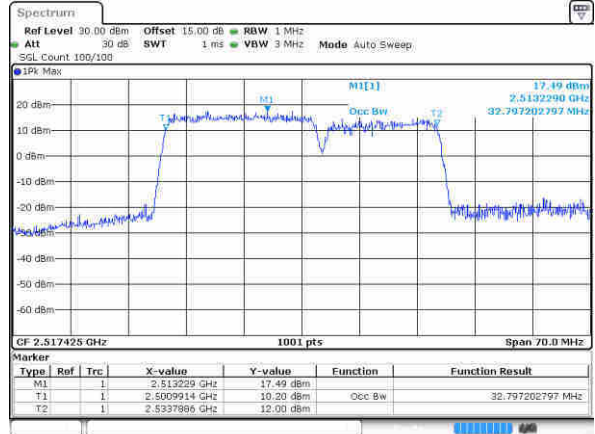
64QAM

Lowest Channel / 20MHz+10MHz



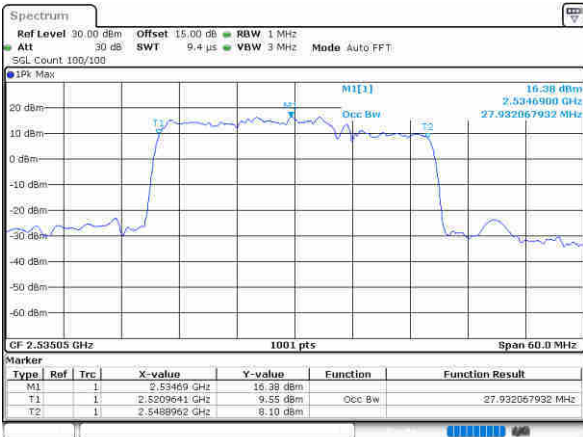
Date: 20 JUN 2020 12:57:42

Lowest Channel / 20MHz+15MHz



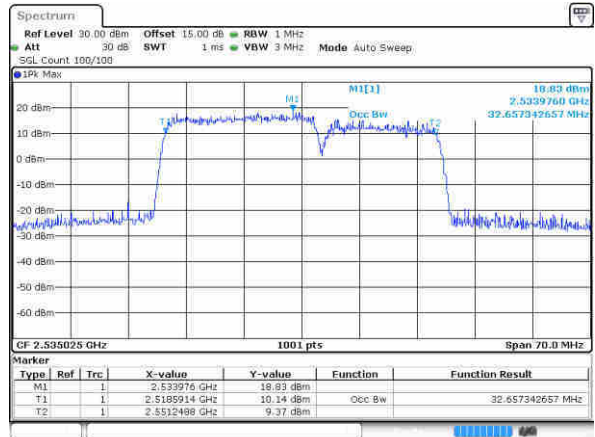
Date: 21 JUN 2020 10:27:20

Middle Channel / 20MHz+10MHz



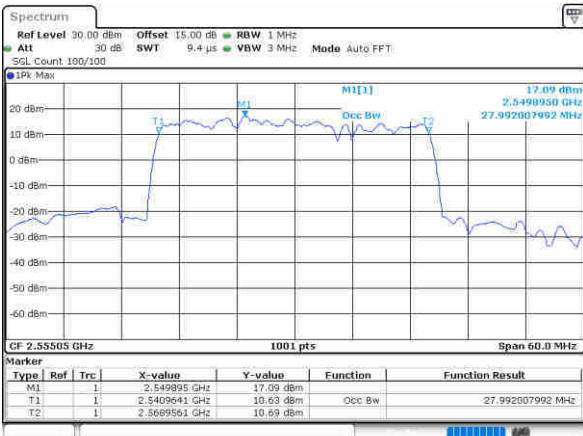
Date: 20 JUN 2020 13:59:23

Middle Channel / 20MHz+15MHz



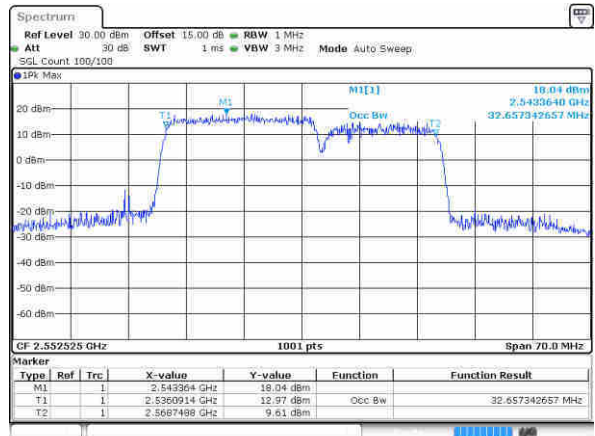
Date: 21 JUN 2020 11:51:05

Highest Channel / 20MHz+10MHz



Date: 20 JUN 2020 14:14:56

Highest Channel / 20MHz+15MHz



Date: 21 JUN 2020 12:17:54

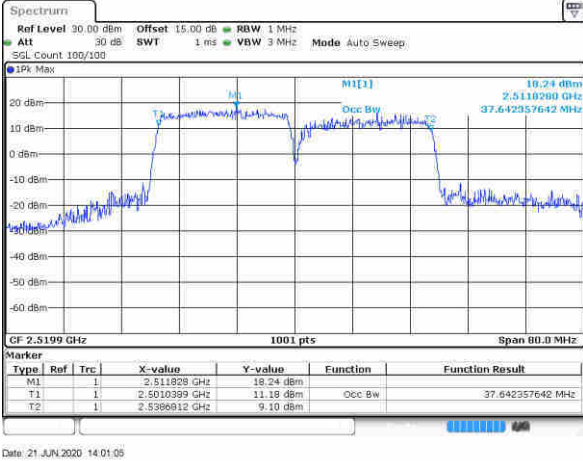


LTE Band 7C

64QAM

Lowest Channel / 20MHz+20MHz

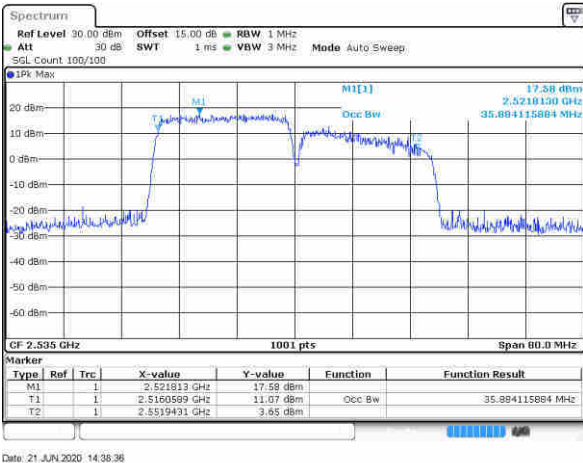
N/A



Date: 21 JUN 2020 14:01:09

Middle Channel / 20MHz+20MHz

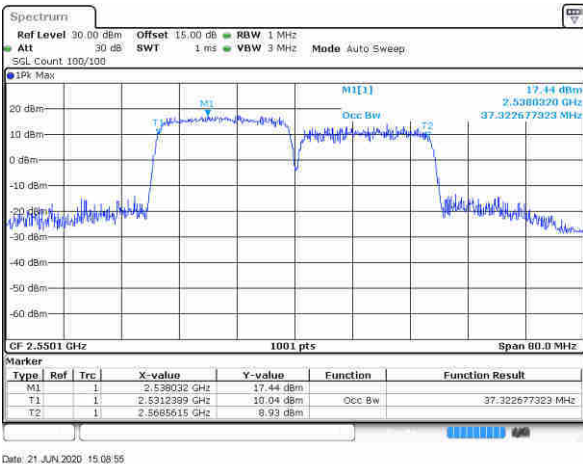
N/A



Date: 21 JUN 2020 14:38:38

Highest Channel / 20MHz+20MHz

N/A



Date: 21 JUN 2020 15:08:55



**Conducted Band Edge**

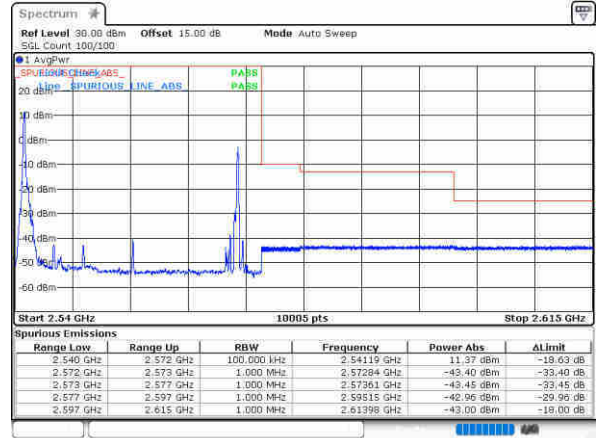
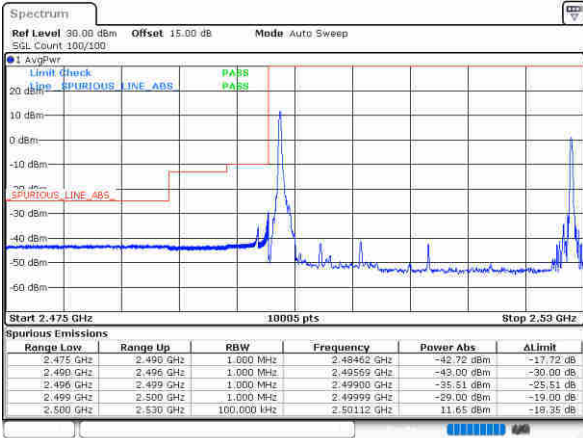


LTE Band 7C / 10MHz+20MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB9

Highest Band Edge / 1RB0 and 1RB9

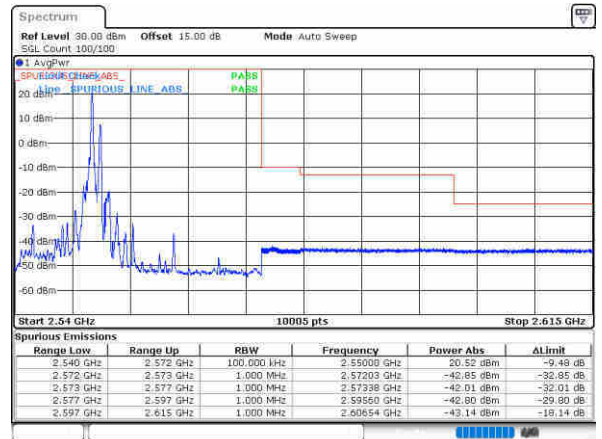
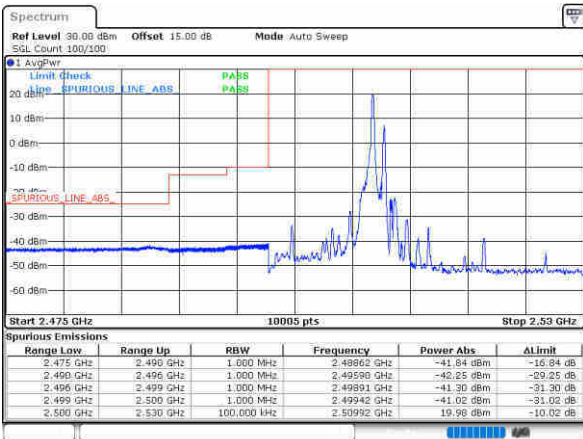


Date: 20\_07\_2020 10:06:36

Date: 20\_07\_2020 11:52:01

Lowest Band Edge / 1RB49 and 1RB0

Highest Band Edge / 1RB49 and 1RB0

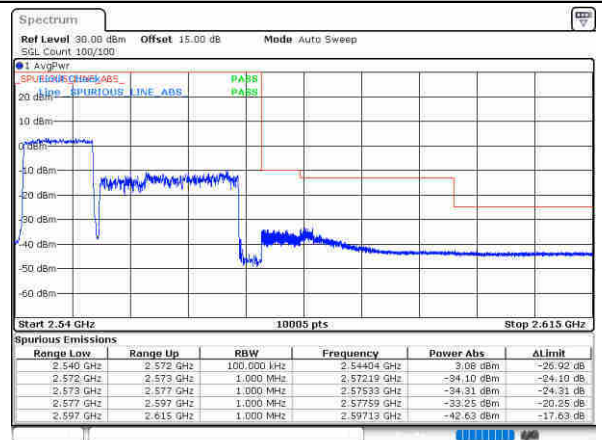
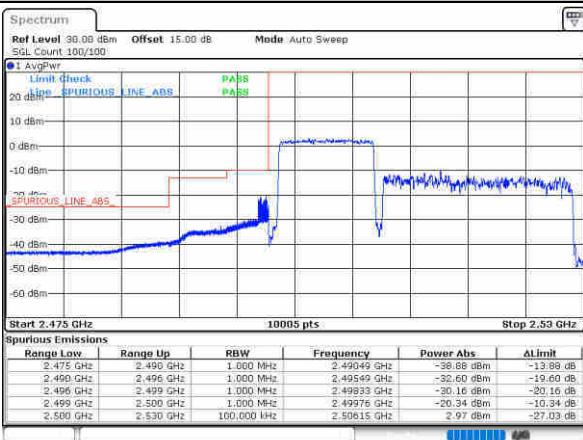


Date: 20\_07\_2020 10:04:58

Date: 20\_07\_2020 11:59:43

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 20\_07\_2020 09:43:33

Date: 20\_07\_2020 10:43:28