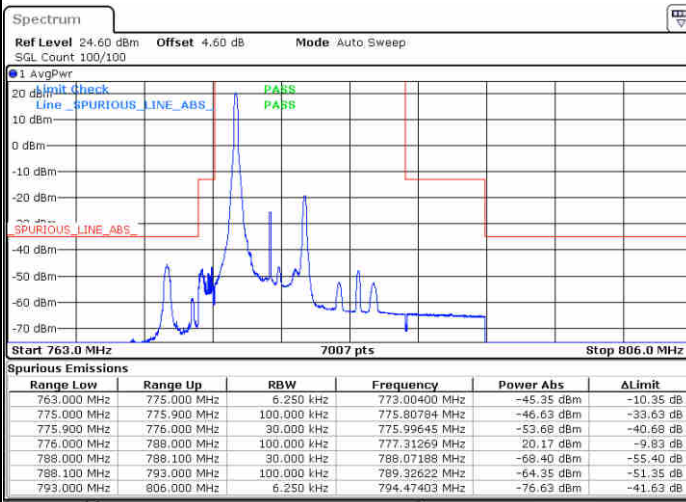




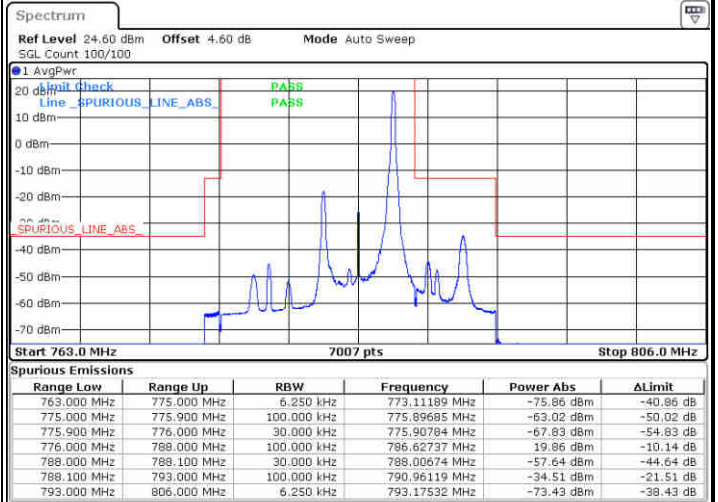
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



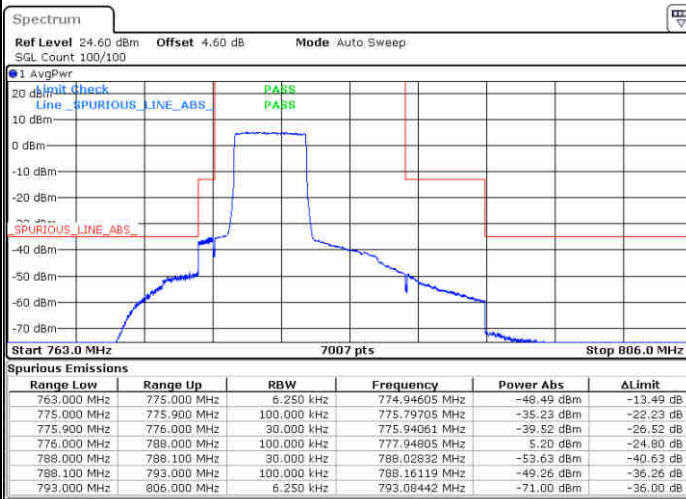
Date: 16 JAN 2020 16:32:22



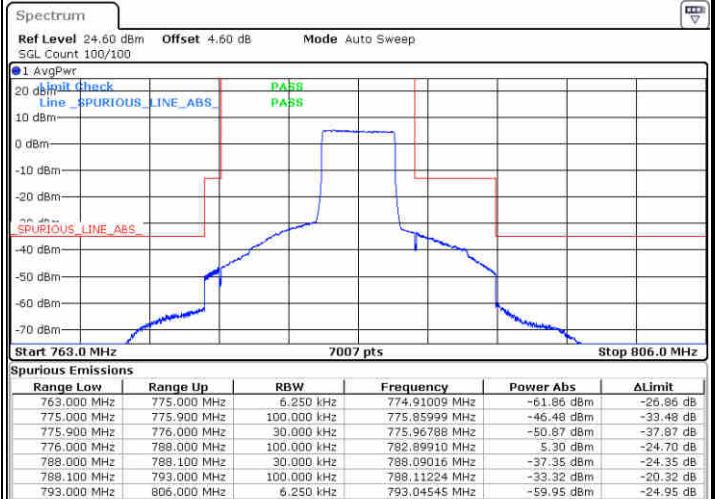
Date: 16 JAN 2020 16:43:48

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2020 16:27:29



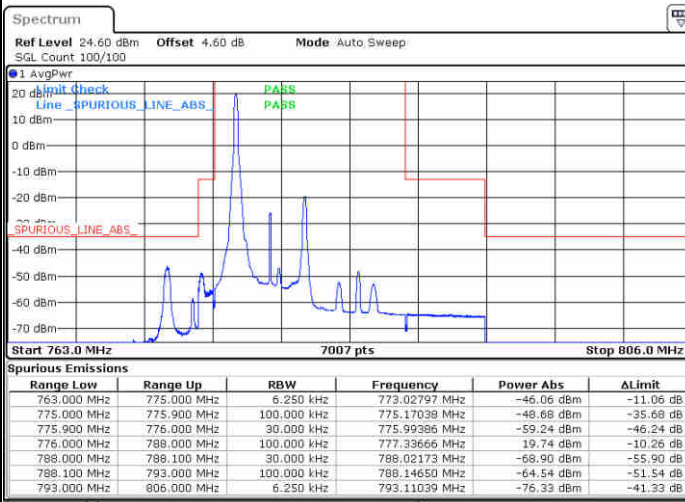
Date: 16 JAN 2020 16:38:56



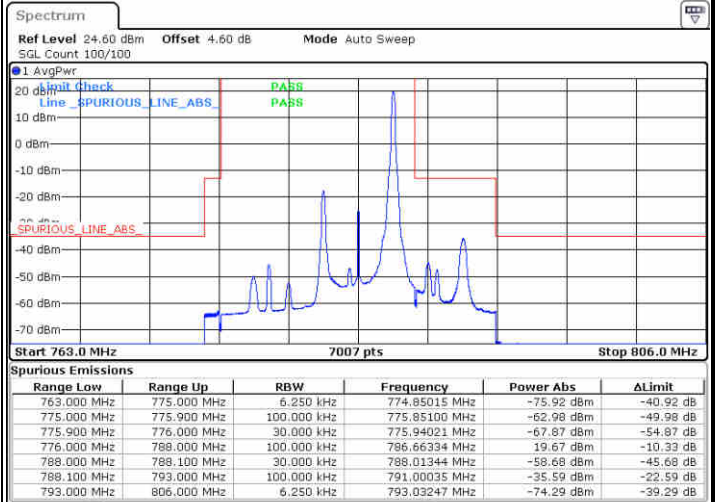
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



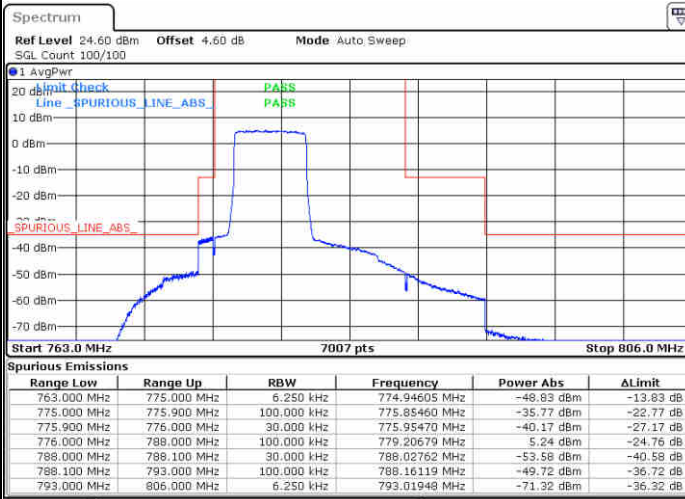
Date: 16 JAN 2020 17:00:39



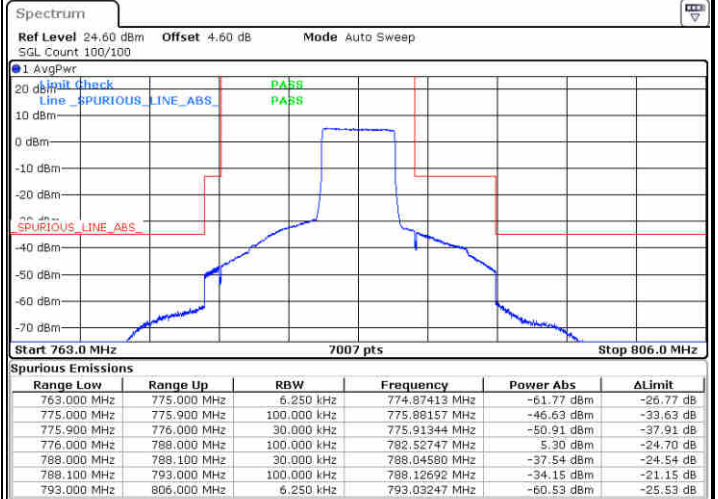
Date: 16 JAN 2020 17:05:32

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2020 17:02:16

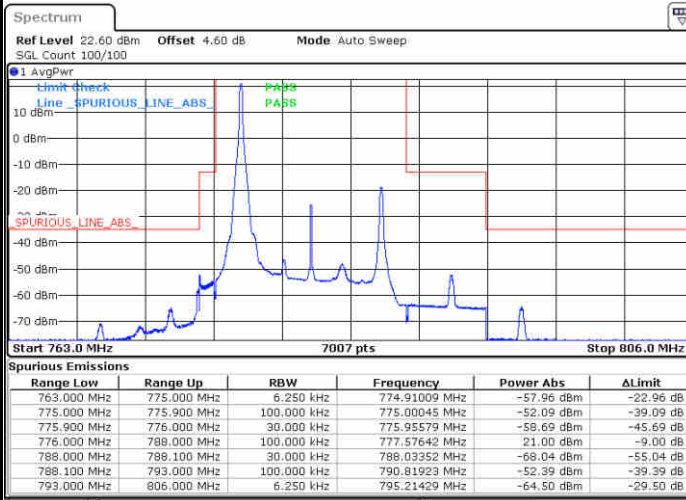


Date: 16 JAN 2020 17:03:54



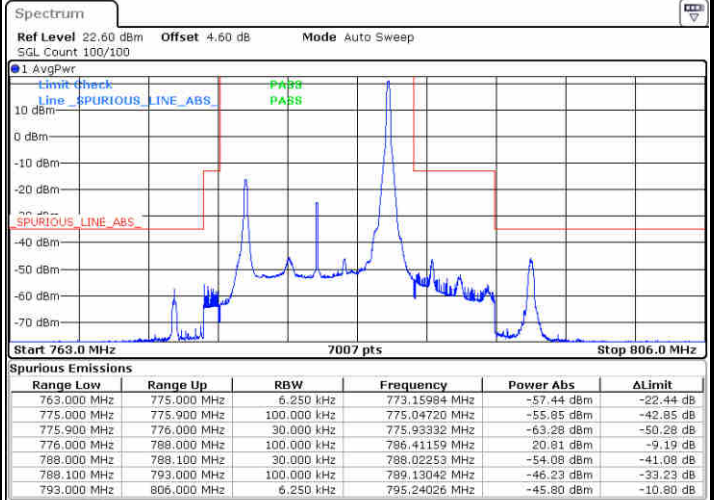
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



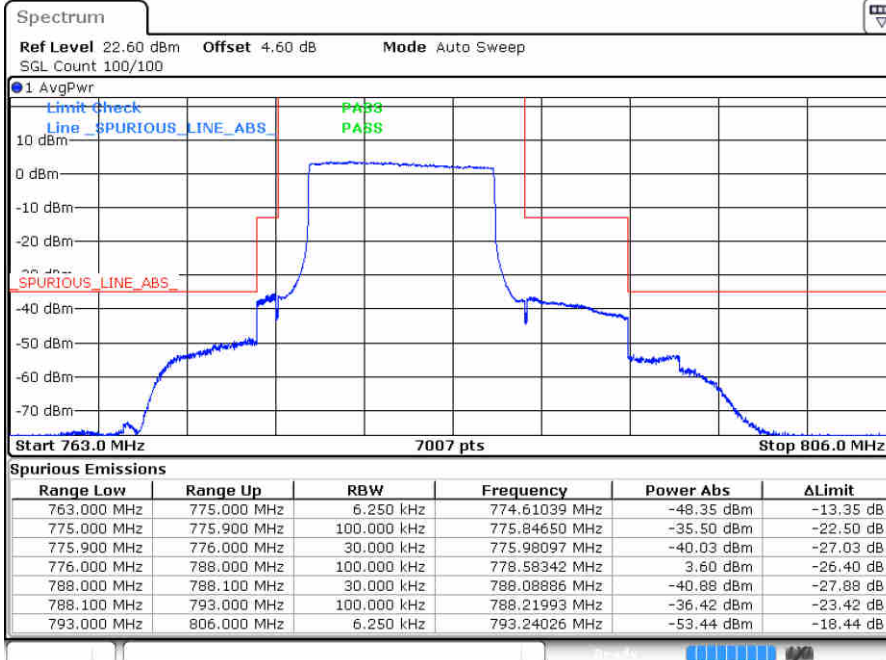
Date: 16.JAN.2020 16:49:32

Highest Band Edge / 1 RB



Date: 16.JAN.2020 16:56:02

Band Edge / Full RB

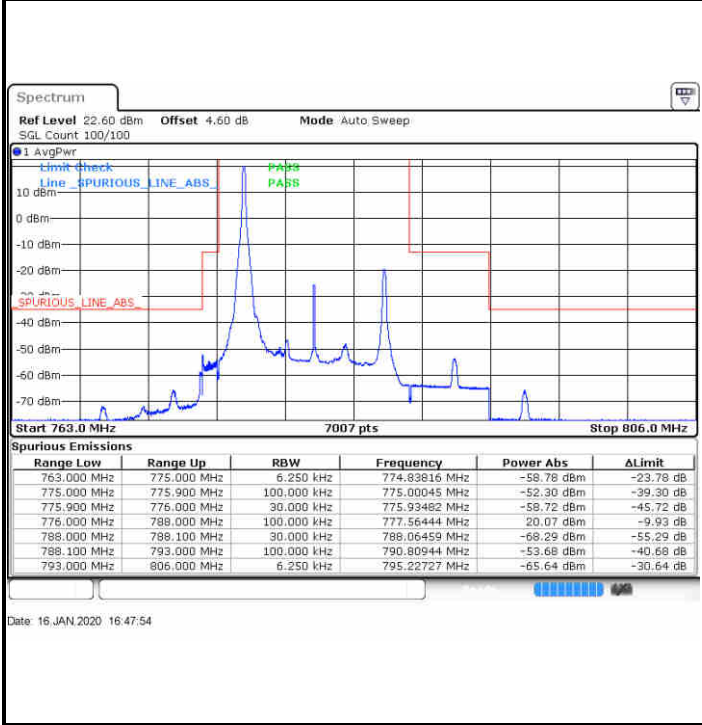


Date: 16.JAN.2020 16:51:09

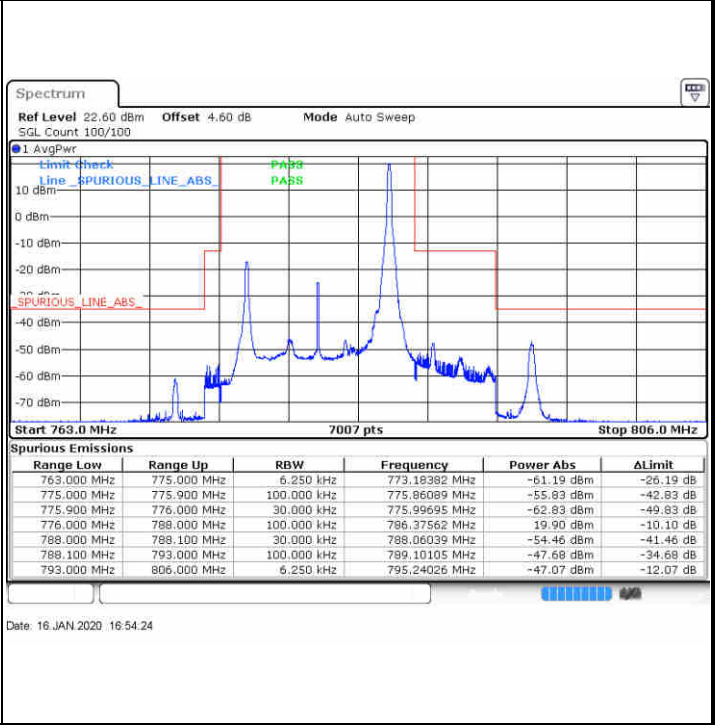


LTE Band 13 / 10MHz / 16QAM

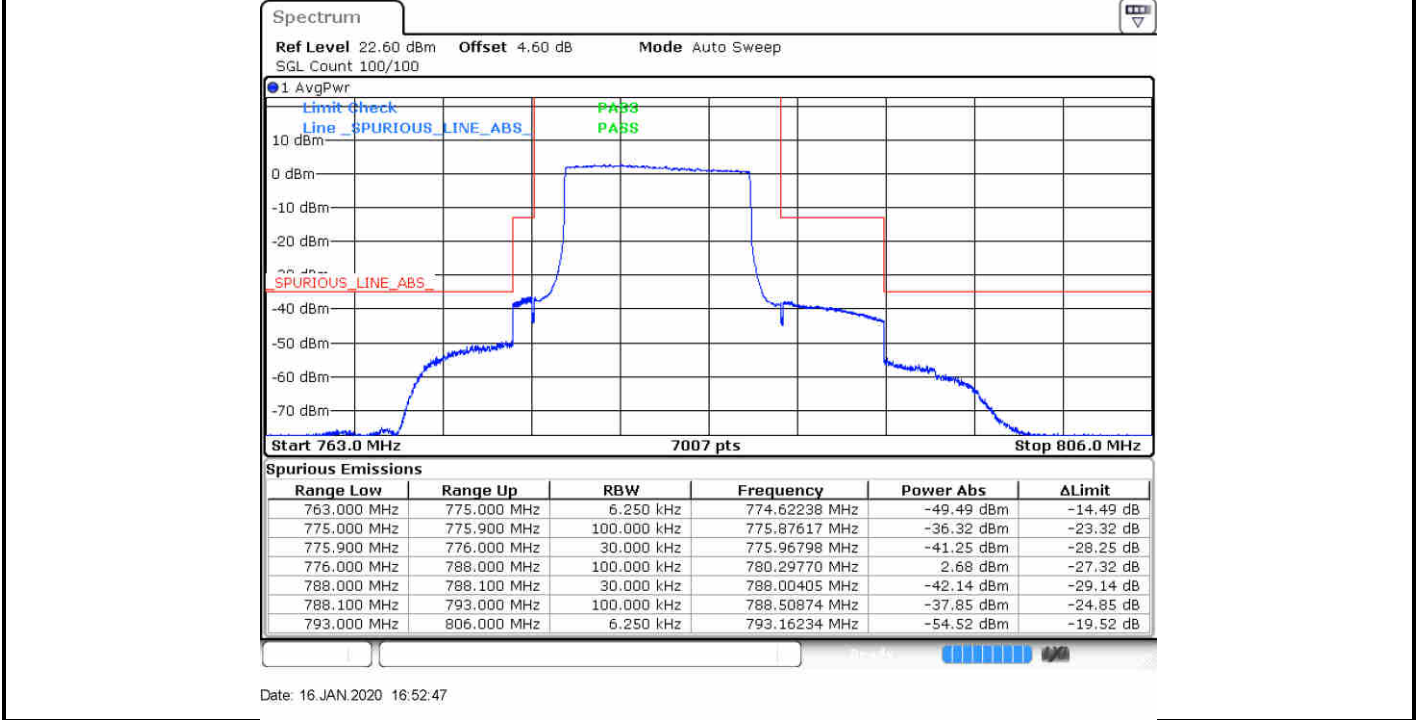
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



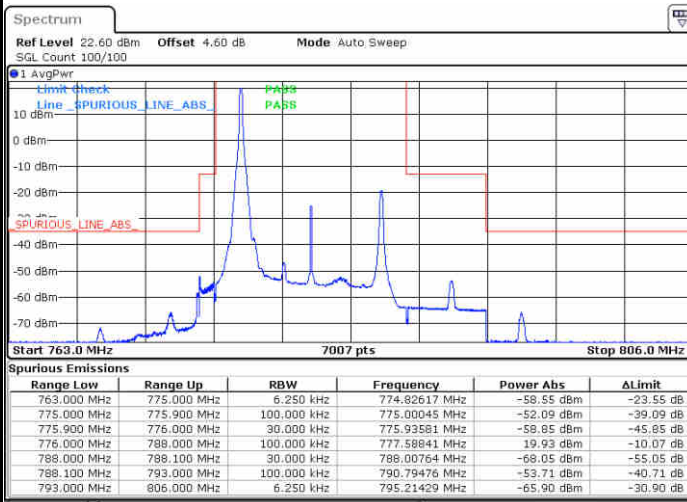
Band Edge / Full RB





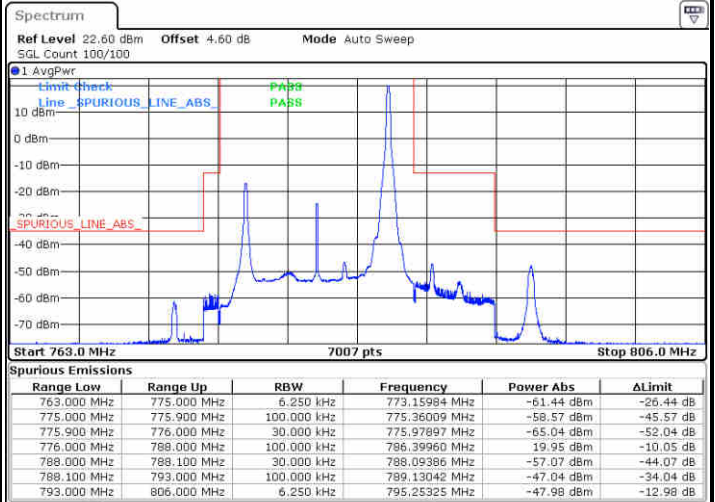
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



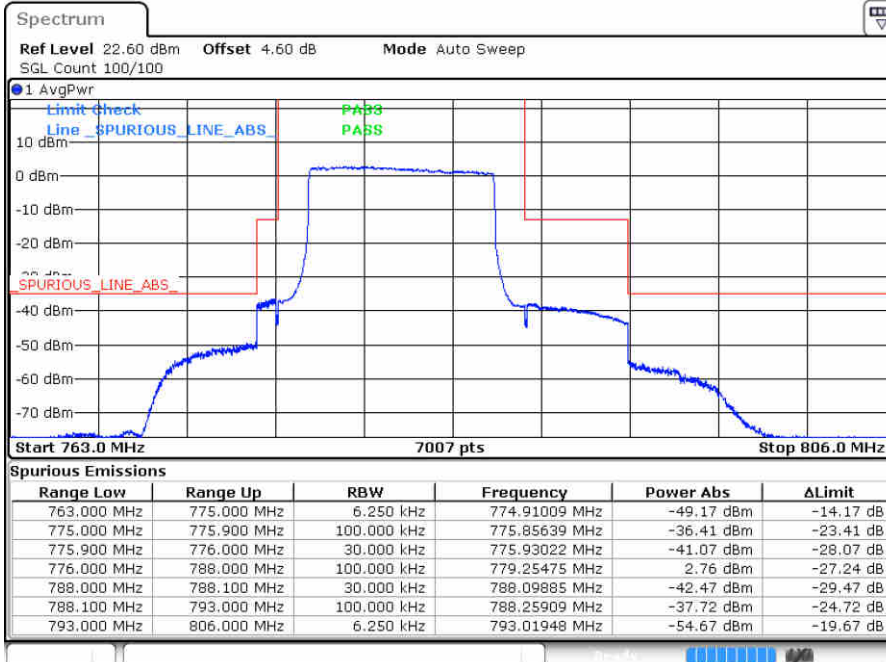
Date: 16.JAN.2020 17:10:11

Highest Band Edge / 1 RB



Date: 16.JAN.2020 17:11:49

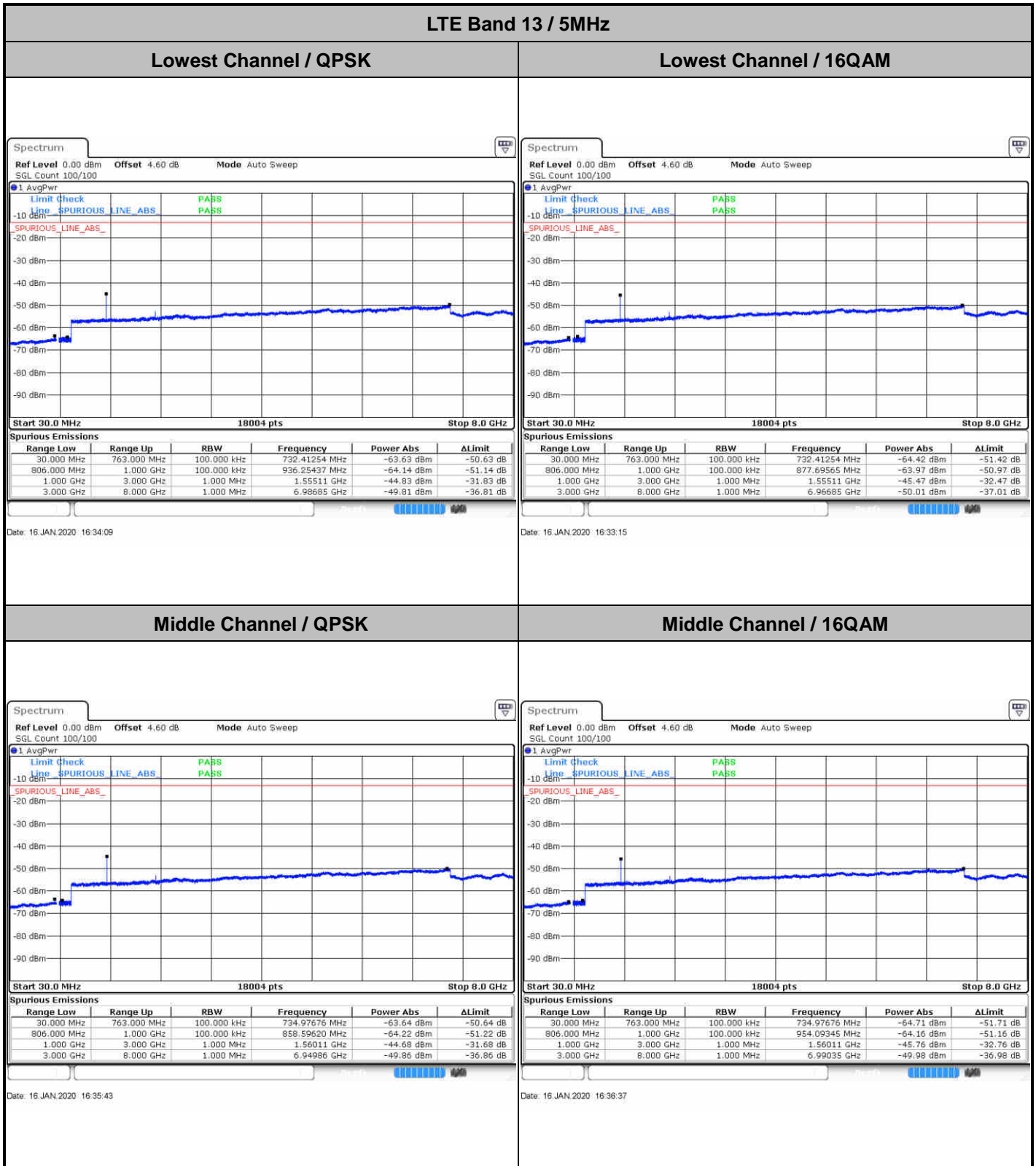
Band Edge / Full RB



Date: 16.JAN.2020 17:13:26



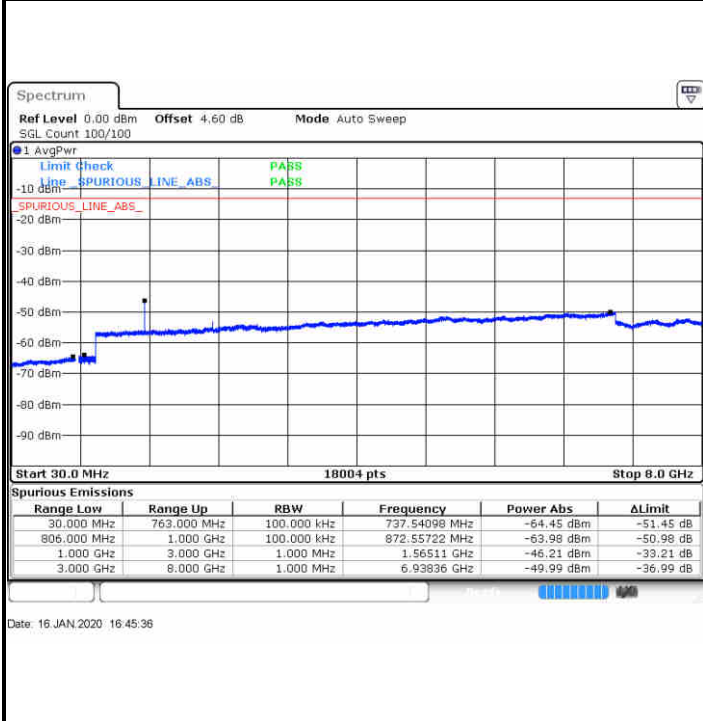
Conducted Spurious Emission



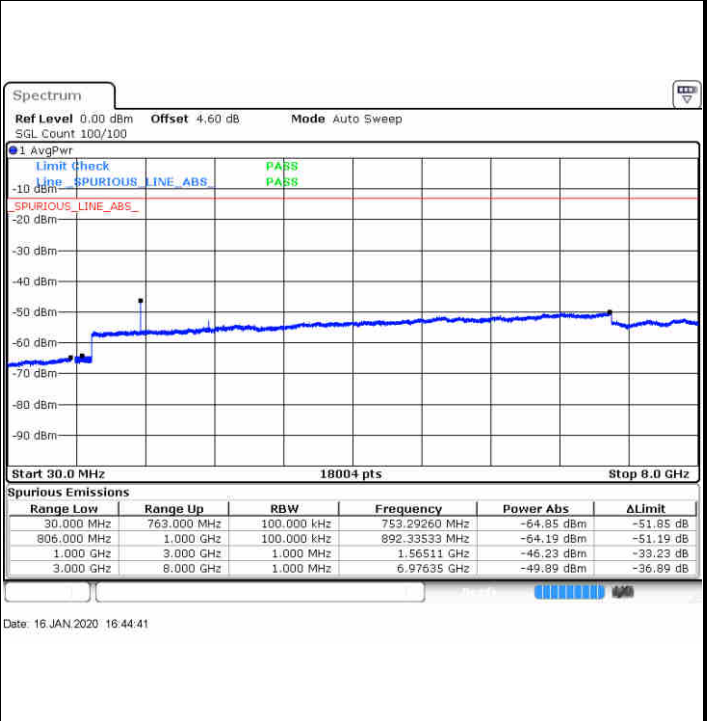


LTE Band 13 / 5MHz

Highest Channel / QPSK

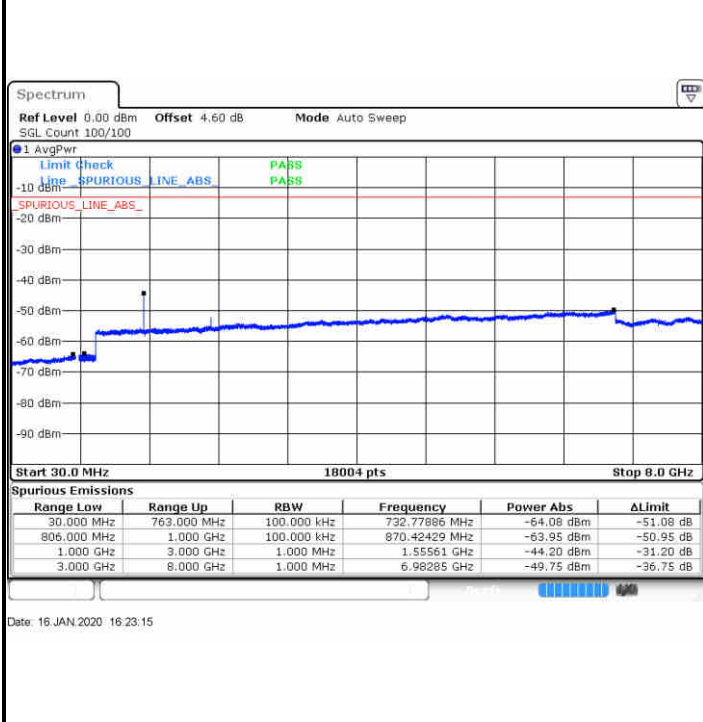


Highest Channel / 16QAM

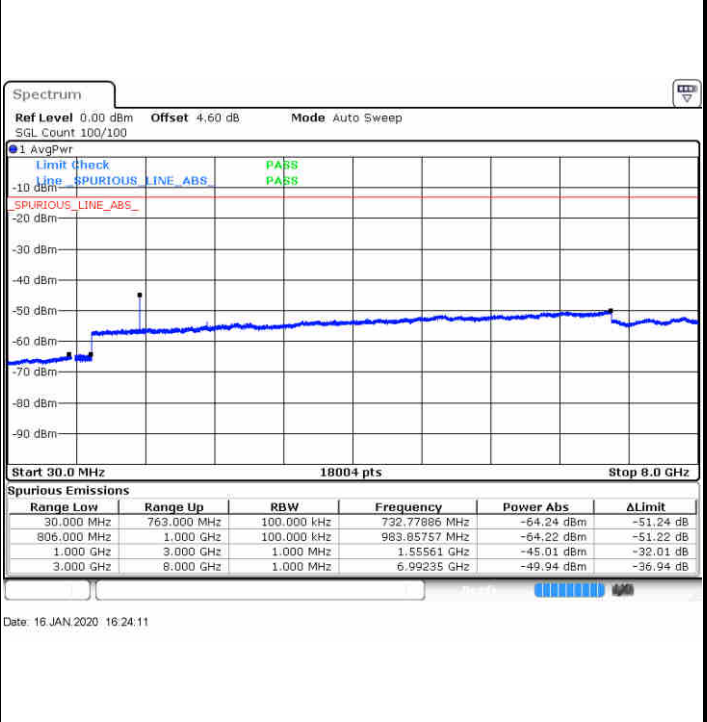


LTE Band 13 / 10MHz

Middle Channel / QPSK



Middle Channel / 16QAM

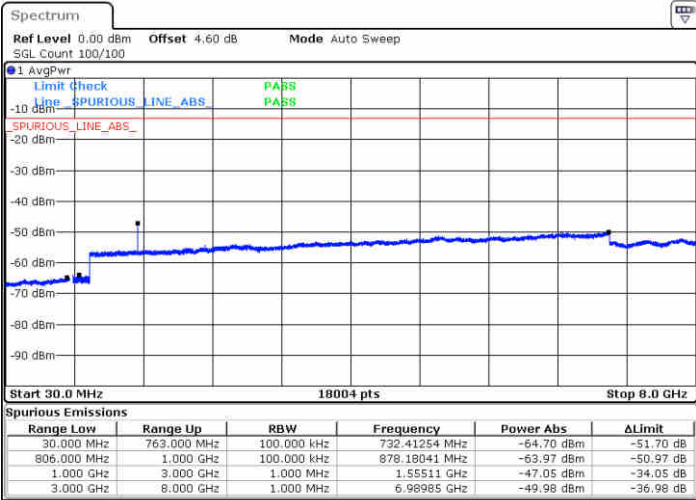




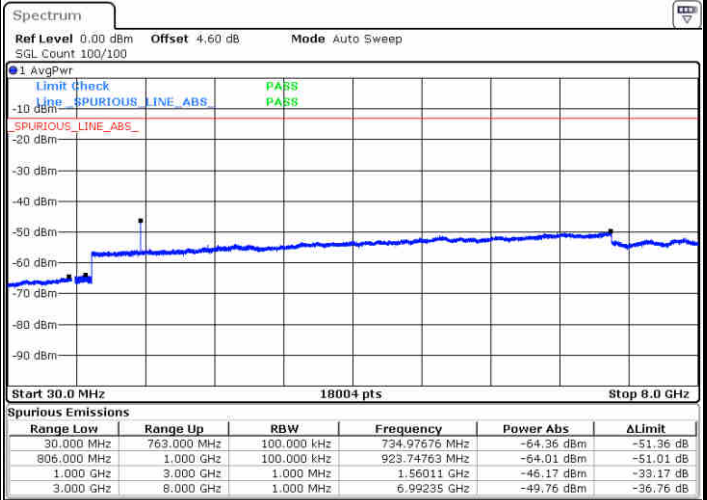
LTE Band 13 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

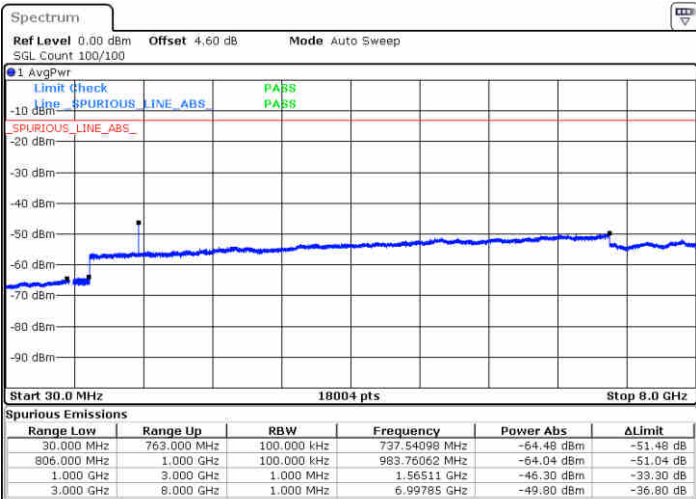


Date: 16 JAN 2020 17:06:25



Date: 16 JAN 2020 17:07:19

Highest Channel / 64QAM

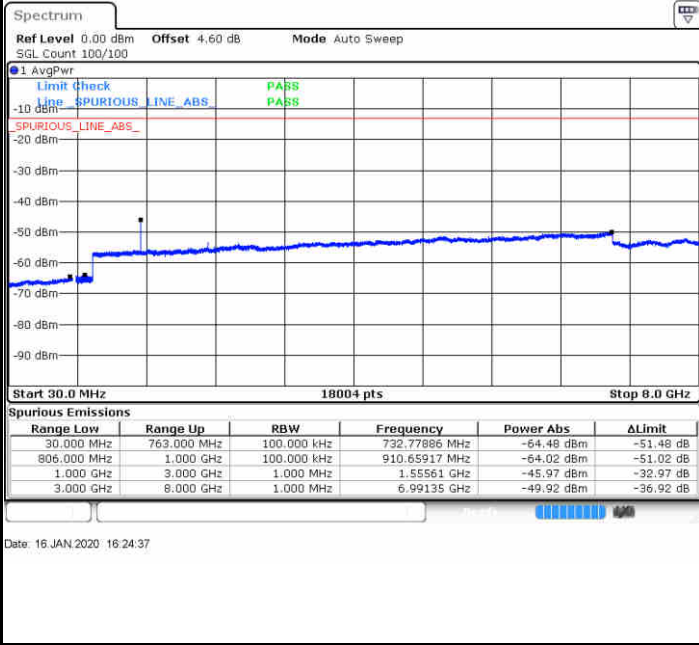


Date: 16 JAN 2020 17:08:13



LTE Band 13 / 10MHz

Middle Channel / 64QAM





Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0034	
30	Normal Voltage	0.0067	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0054	
0	Normal Voltage	0.0063	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0058	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0046	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.40 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.43	5.07	5.36	6.00	PASS
Middle CH	4.70	4.99	5.48	5.91	
Highest CH	4.67	4.96	5.28	5.97	
Mode	LTE Band 25 / 20MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	5.33	6.03	-	-	PASS
Middle CH	5.36	5.94	-	-	
Highest CH	5.45	5.88	-	-	



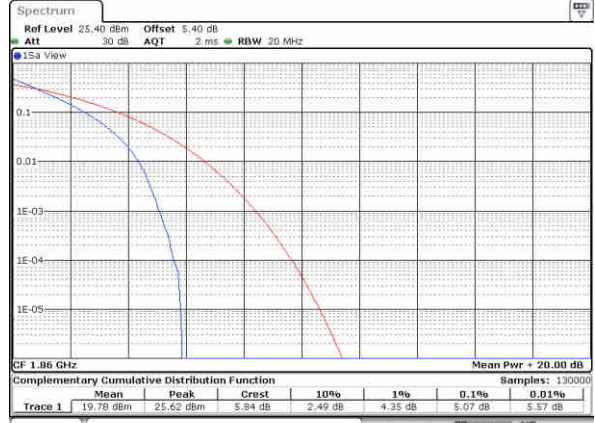
LTE Band 25 / 20MHz / QPSK

Lowest Channel / 1RB



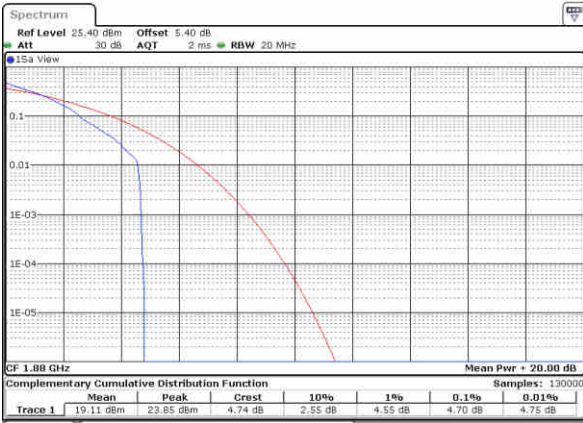
Date: 16 JAN 2020 15:20:32

Lowest Channel / Full RB



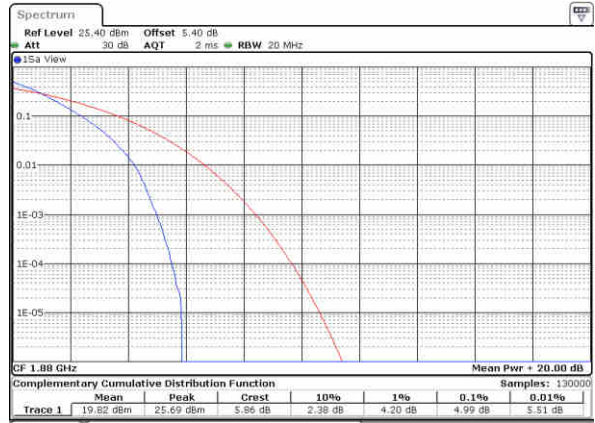
Date: 16 JAN 2020 15:21:19

Middle Channel / 1RB



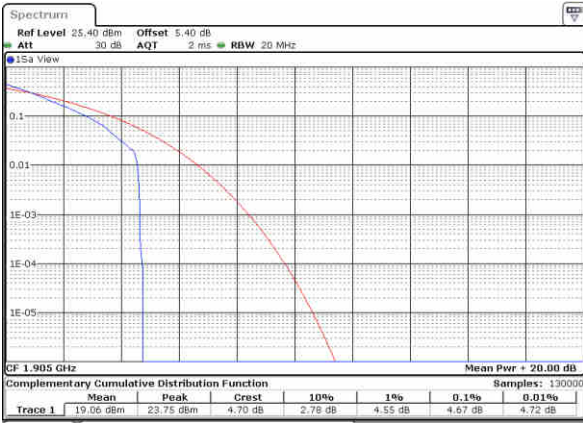
Date: 16 JAN 2020 15:22:20

Middle Channel / Full RB



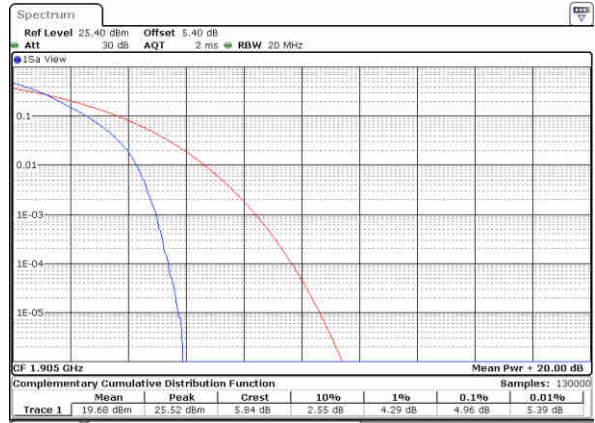
Date: 16 JAN 2020 15:21:28

Highest Channel / 1RB



Date: 16 JAN 2020 15:22:29

Highest Channel / Full RB

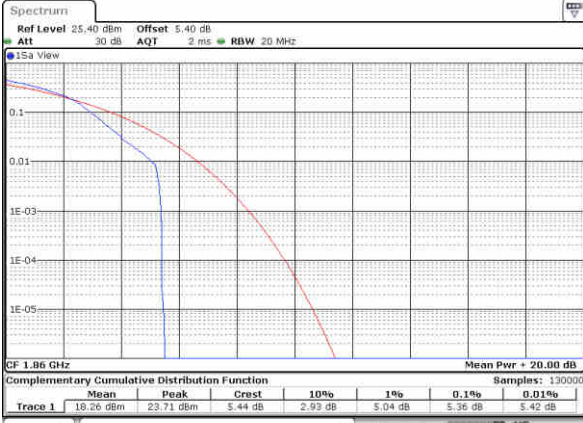


Date: 16 JAN 2020 15:24:33



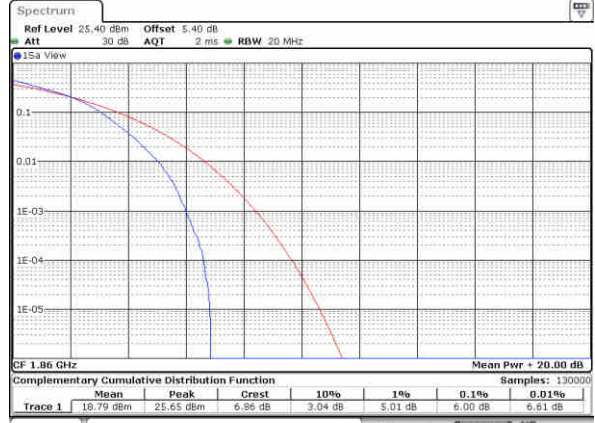
LTE Band 25 / 20MHz / 16QAM

Lowest Channel / 1RB



Date: 16 JAN 2020 15:20:42

Lowest Channel / Full RB



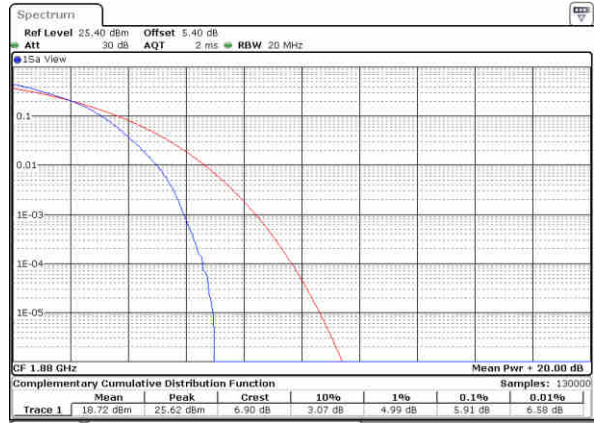
Date: 16 JAN 2020 15:21:10

Middle Channel / 1RB



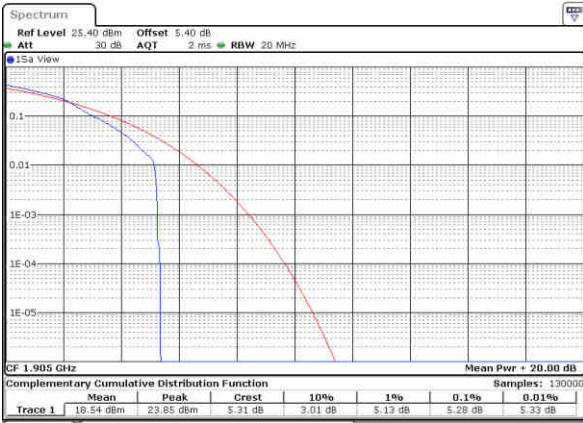
Date: 16 JAN 2020 15:22:11

Middle Channel / Full RB



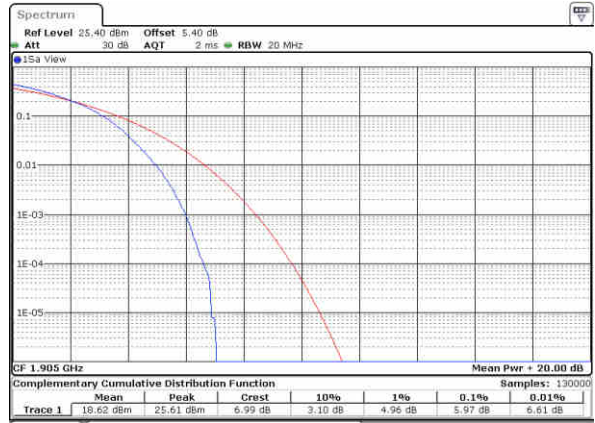
Date: 16 JAN 2020 15:21:44

Highest Channel / 1RB



Date: 16 JAN 2020 15:23:50

Highest Channel / Full RB

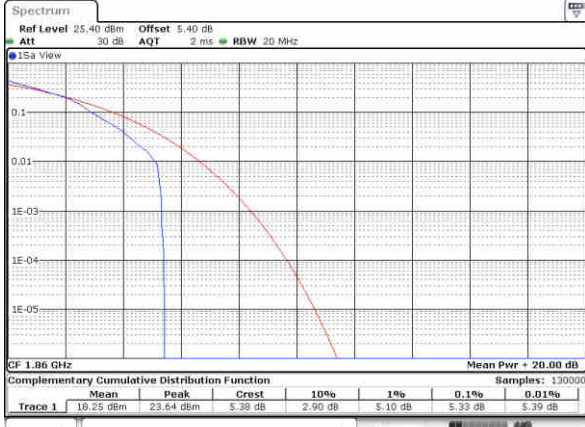


Date: 16 JAN 2020 15:24:23



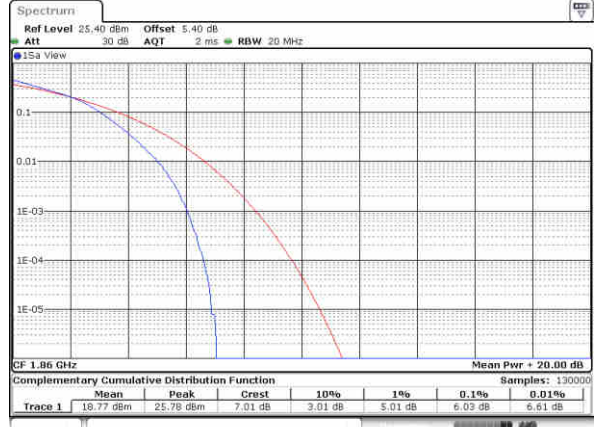
LTE Band 25 / 20MHz / 64QAM

Lowest Channel / 1RB



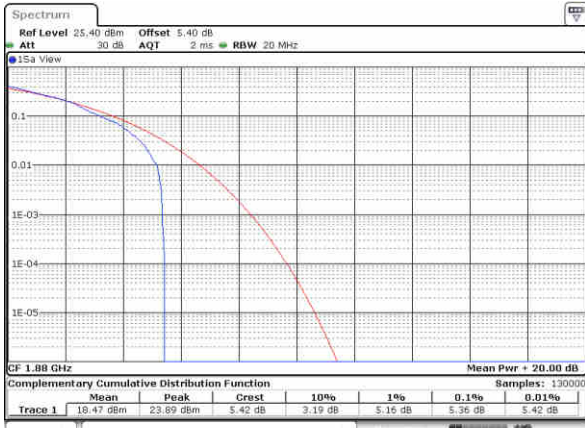
Date: 16 JAN 2020 15:20:52

Lowest Channel / Full RB



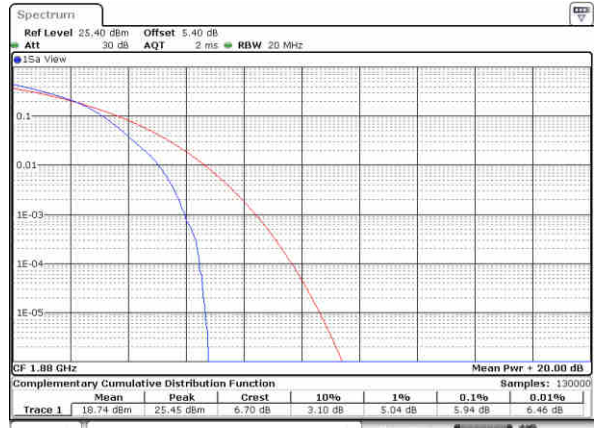
Date: 16 JAN 2020 15:21:01

Middle Channel / 1RB



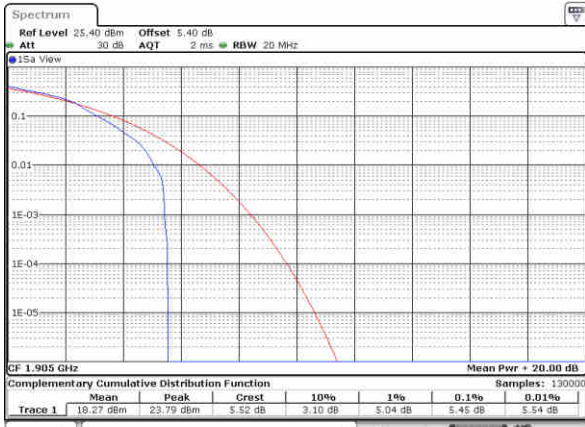
Date: 16 JAN 2020 15:22:02

Middle Channel / Full RB



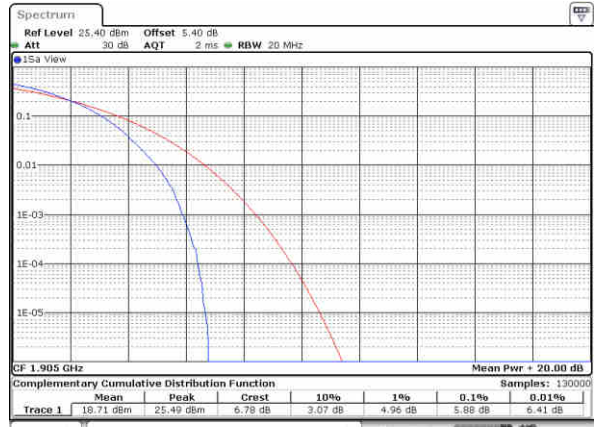
Date: 16 JAN 2020 15:21:53

Highest Channel / 1RB



Date: 16 JAN 2020 15:24:02

Highest Channel / Full RB



Date: 16 JAN 2020 15:24:12



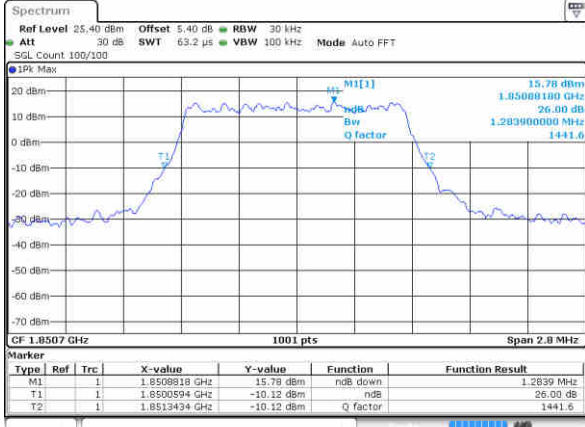
26dB Bandwidth

Mode	LTE Band 25 : 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	1.28	1.26	2.96	3.00	4.92	4.85	9.99	9.87	14.57	14.57	20.18	20.26
Middle CH	1.24	1.29	3.03	3.00	4.90	4.95	9.79	9.79	14.60	14.57	20.14	20.18
Highest CH	1.27	1.29	3.01	2.98	4.90	4.96	9.87	10.05	14.36	14.72	20.14	20.38
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Lowest CH	1.28	-	3.02	-	4.86	-	9.71	-	14.45	-	20.50	-
Middle CH	1.29	-	2.99	-	4.84	-	9.83	-	14.33	-	20.06	-
Highest CH	1.26	-	2.99	-	4.95	-	9.65	-	14.42	-	20.18	-



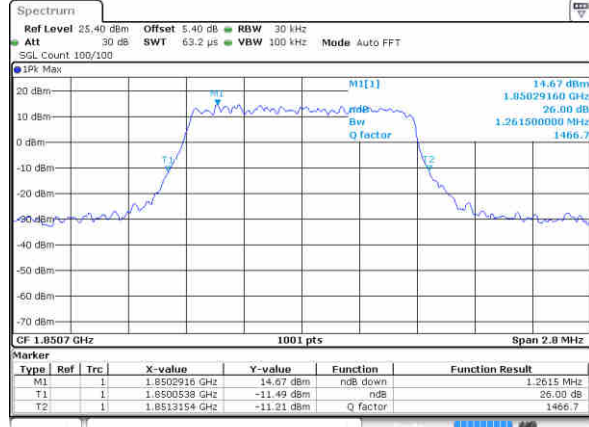
LTE Band 25

Lowest Channel / 1.4MHz / QPSK



Date: 16 JAN 2020 11:54:22

Lowest Channel / 1.4MHz / 16QAM



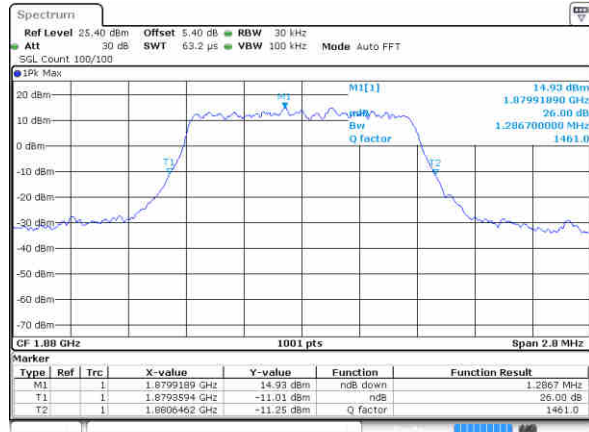
Date: 16 JAN 2020 11:54:42

Middle Channel / 1.4MHz / QPSK



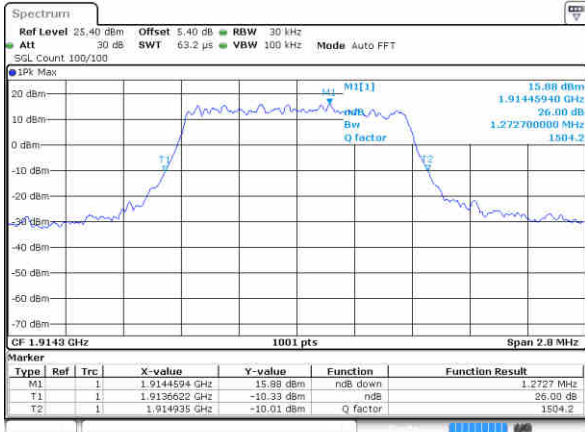
Date: 16 JAN 2020 11:55:22

Middle Channel / 1.4MHz / 16QAM



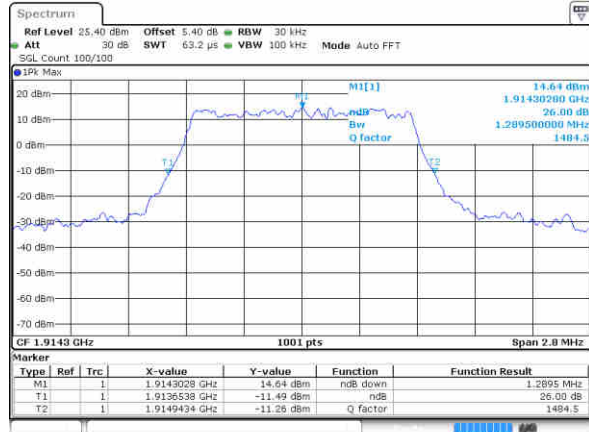
Date: 16 JAN 2020 11:55:42

Highest Channel / 1.4MHz / QPSK



Date: 16 JAN 2020 11:56:22

Highest Channel / 1.4MHz / 16QAM

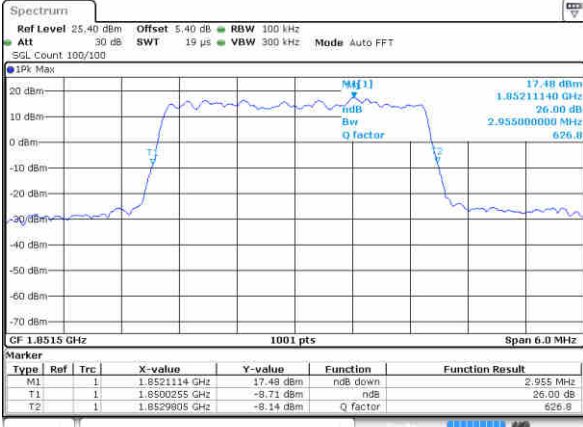


Date: 16 JAN 2020 11:56:42



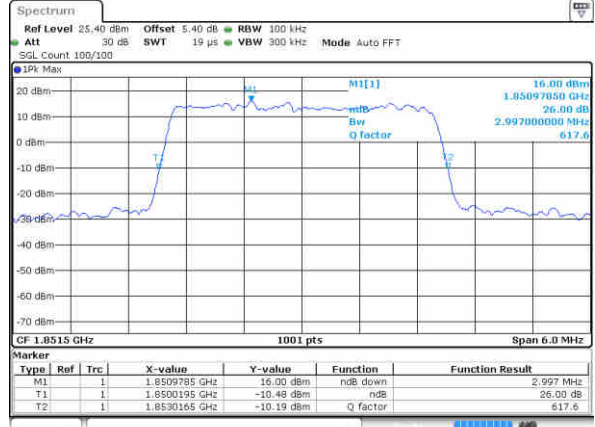
LTE Band 25

Lowest Channel / 3MHz / QPSK



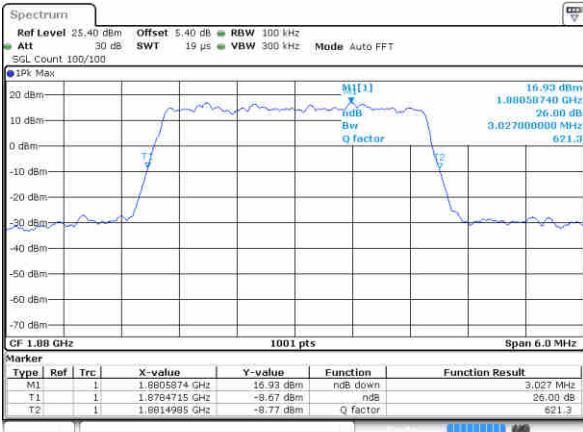
Date: 16 JAN 2020 12:19:02

Lowest Channel / 3MHz / 16QAM



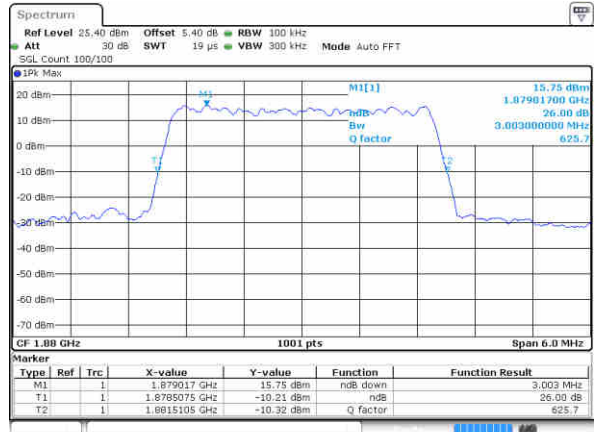
Date: 16 JAN 2020 12:19:22

Middle Channel / 3MHz / QPSK



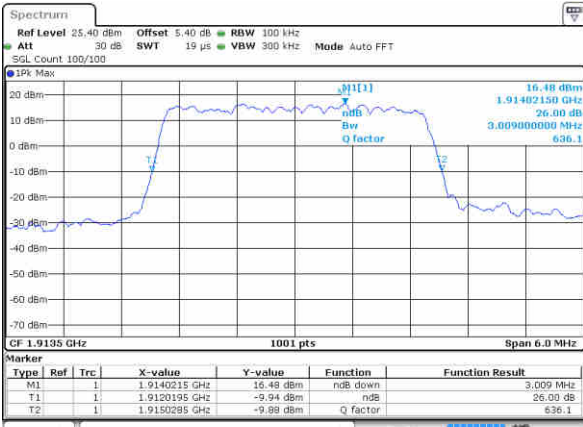
Date: 16 JAN 2020 12:20:02

Middle Channel / 3MHz / 16QAM



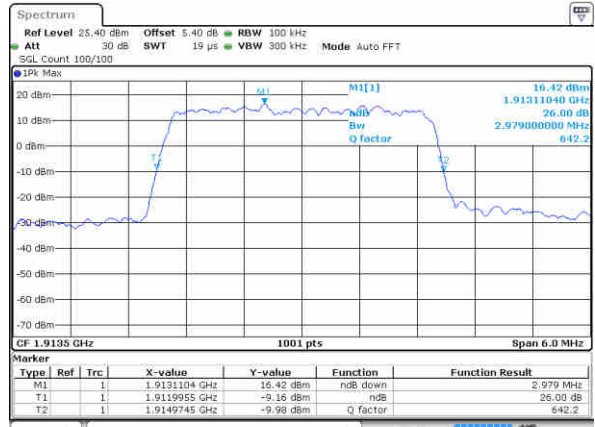
Date: 16 JAN 2020 12:20:22

Highest Channel / 3MHz / QPSK



Date: 16 JAN 2020 12:21:02

Highest Channel / 3MHz / 16QAM

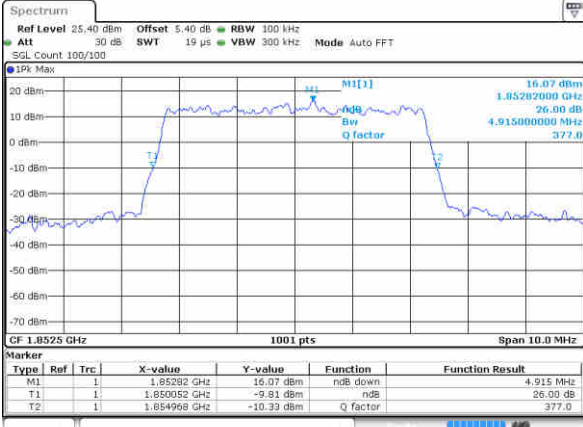


Date: 16 JAN 2020 12:21:22



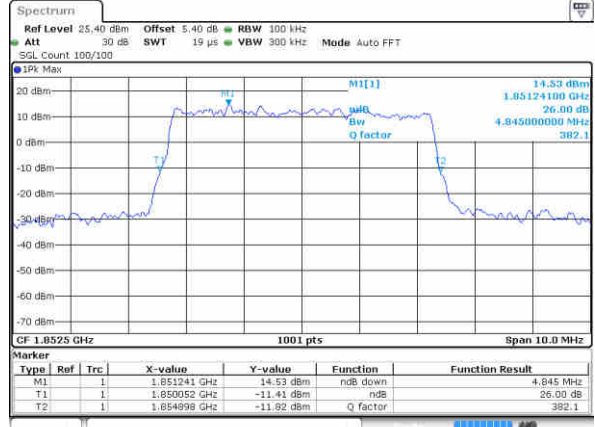
LTE Band 25

Lowest Channel / 5MHz / QPSK



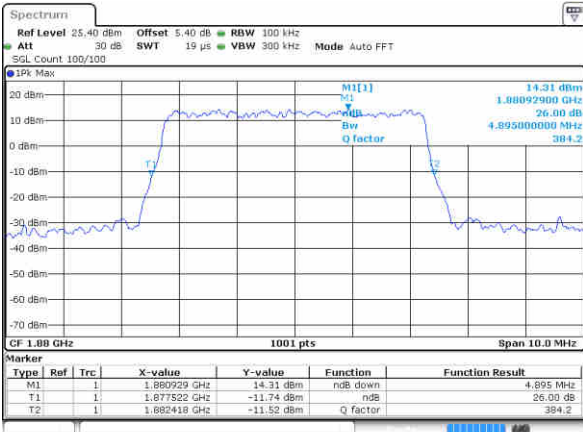
Date: 16 JAN 2020 12:43:43

Lowest Channel / 5MHz / 16QAM



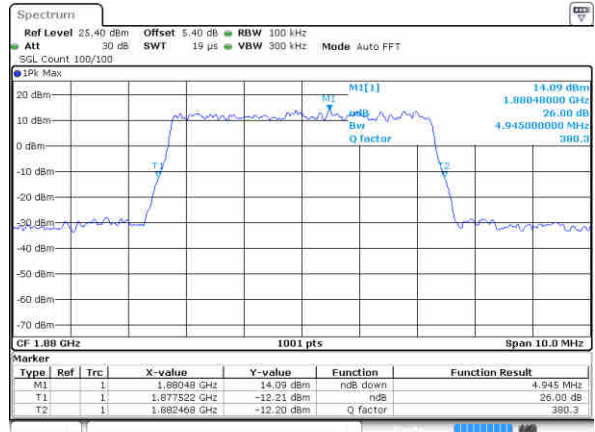
Date: 16 JAN 2020 12:44:03

Middle Channel / 5MHz / QPSK



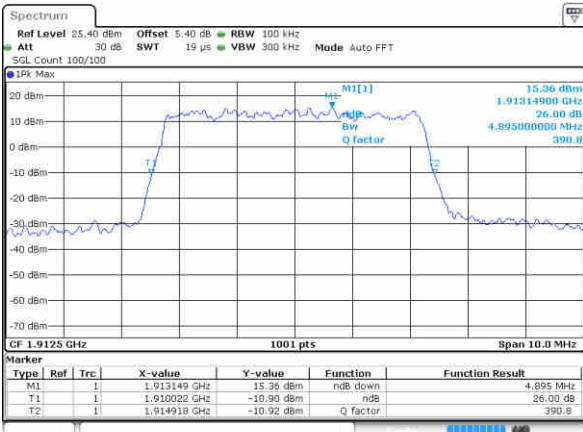
Date: 16 JAN 2020 12:57:35

Middle Channel / 5MHz / 16QAM



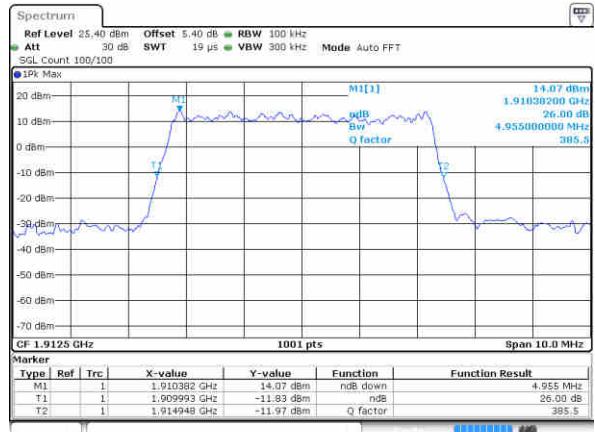
Date: 16 JAN 2020 12:57:15

Highest Channel / 5MHz / QPSK



Date: 16 JAN 2020 12:57:55

Highest Channel / 5MHz / 16QAM

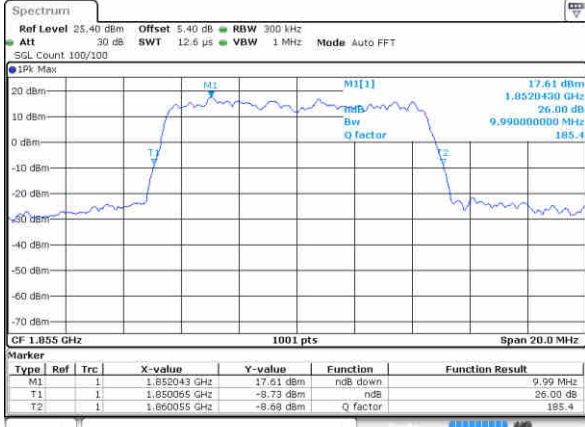


Date: 16 JAN 2020 12:58:15



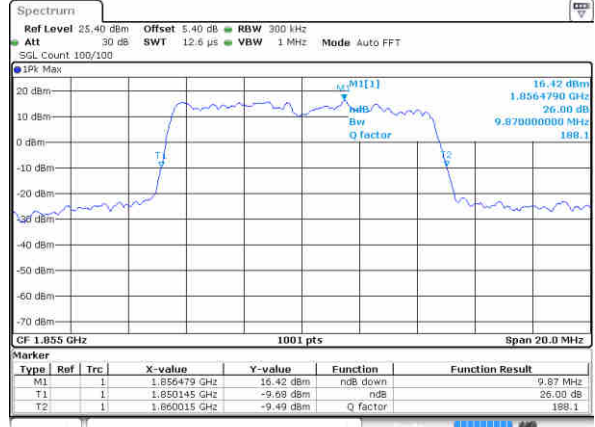
LTE Band 25

Lowest Channel / 10MHz / QPSK



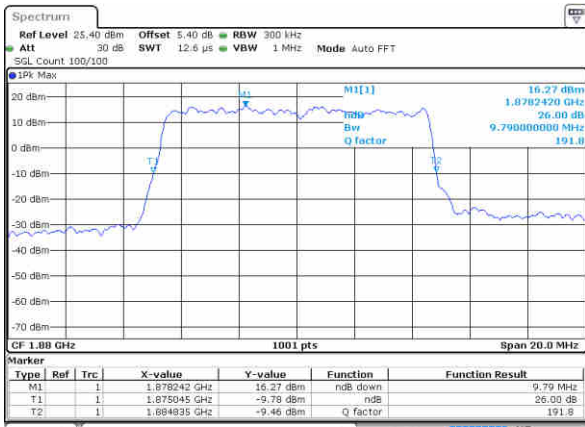
Date: 16 JAN 2020 14:02:37

Lowest Channel / 10MHz / 16QAM



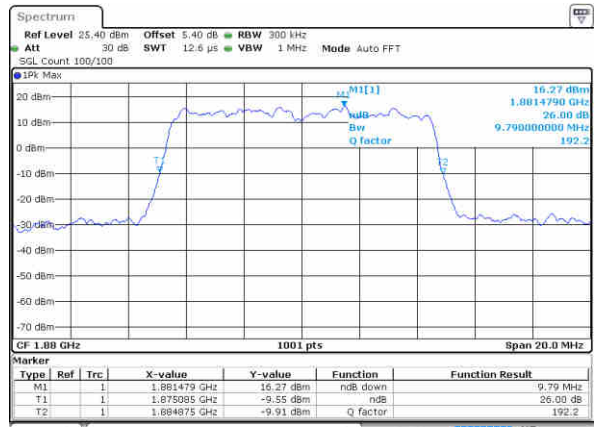
Date: 16 JAN 2020 14:02:57

Middle Channel / 10MHz / QPSK



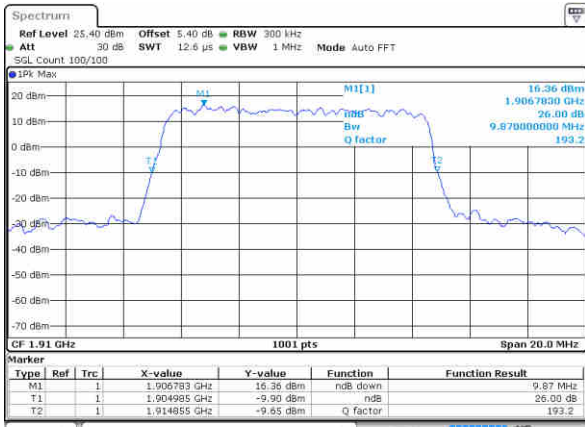
Date: 16 JAN 2020 14:16:29

Middle Channel / 10MHz / 16QAM



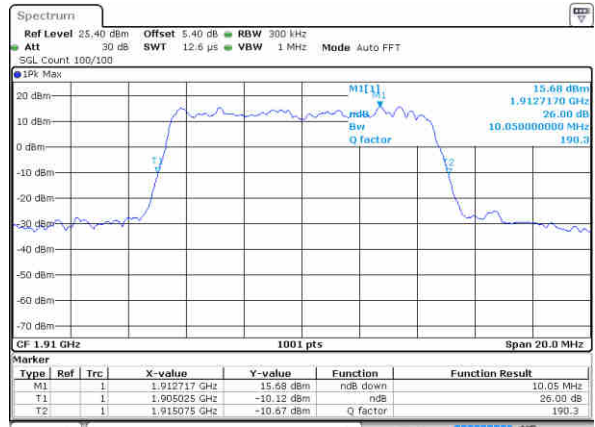
Date: 16 JAN 2020 14:16:09

Highest Channel / 10MHz / QPSK



Date: 16 JAN 2020 14:16:49

Highest Channel / 10MHz / 16QAM

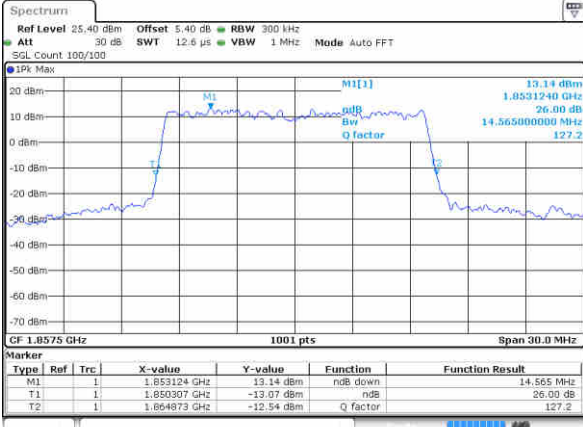


Date: 16 JAN 2020 14:17:09



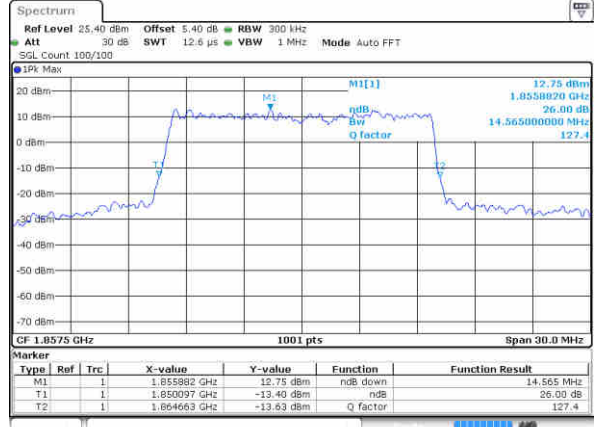
LTE Band 25

Lowest Channel / 15MHz / QPSK



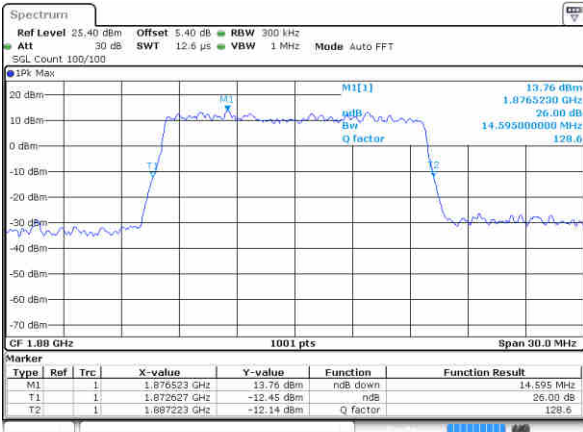
Date: 16 JAN 2020 14:27:18

Lowest Channel / 15MHz / 16QAM



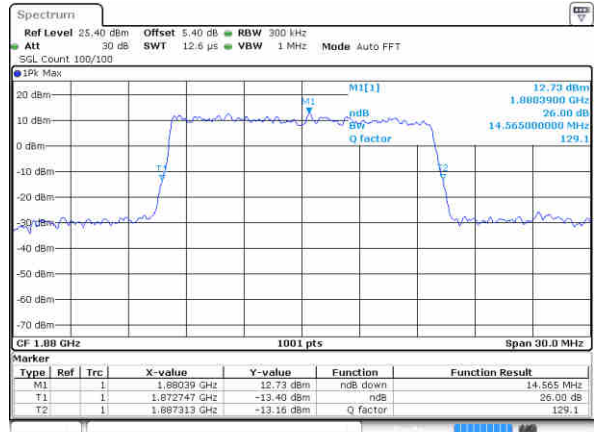
Date: 16 JAN 2020 14:27:38

Middle Channel / 15MHz / QPSK



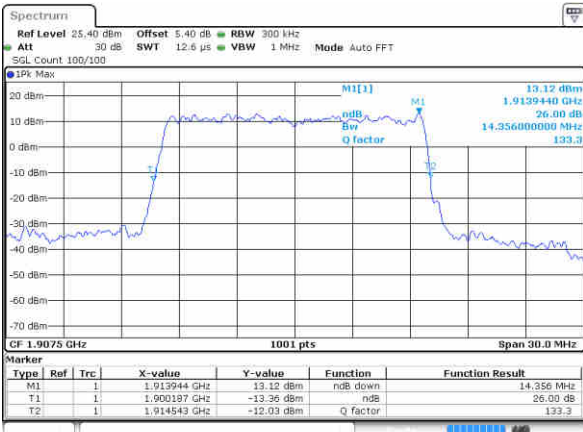
Date: 16 JAN 2020 14:41:09

Middle Channel / 15MHz / 16QAM



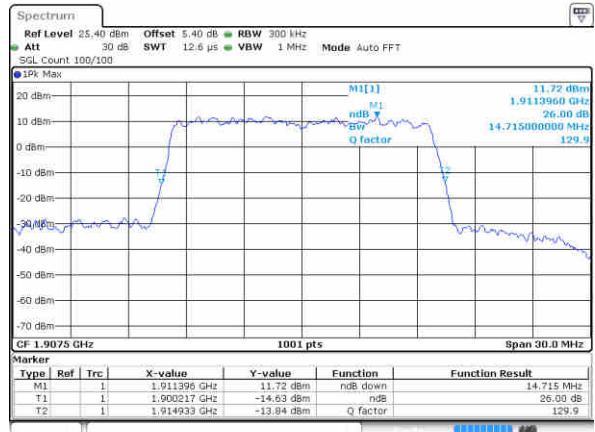
Date: 16 JAN 2020 14:40:49

Highest Channel / 15MHz / QPSK



Date: 16 JAN 2020 14:41:29

Highest Channel / 15MHz / 16QAM

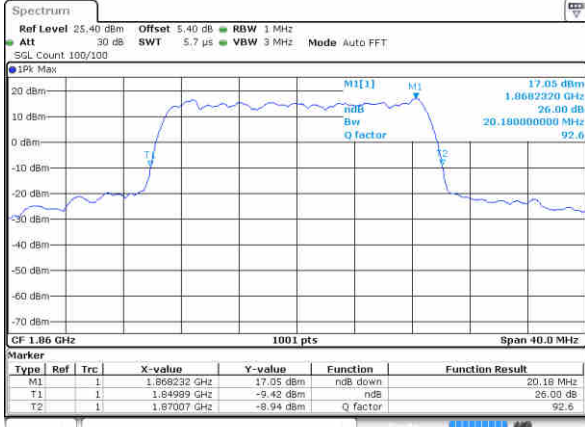


Date: 16 JAN 2020 14:41:49



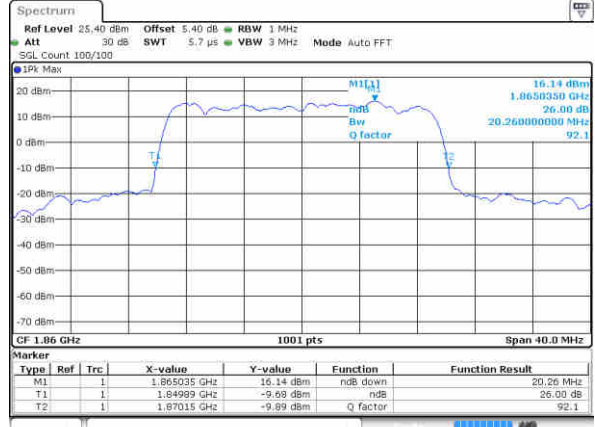
LTE Band 25

Lowest Channel / 20MHz / QPSK



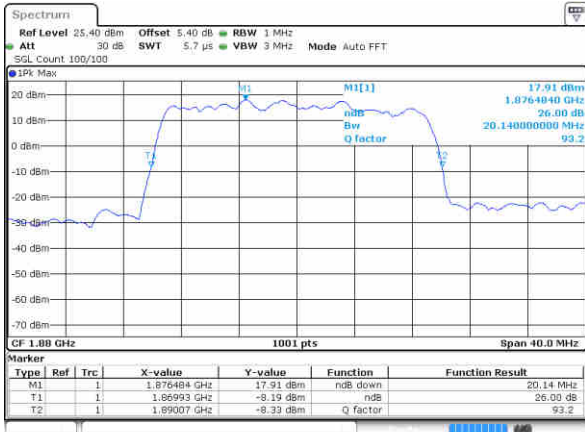
Date: 16 JAN 2020 14:51:58

Lowest Channel / 20MHz / 16QAM



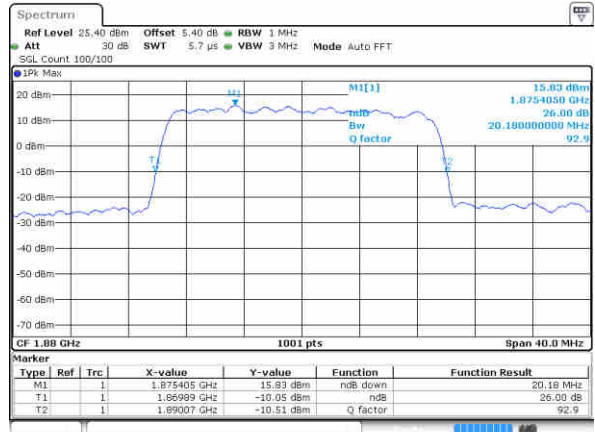
Date: 16 JAN 2020 14:52:18

Middle Channel / 20MHz / QPSK



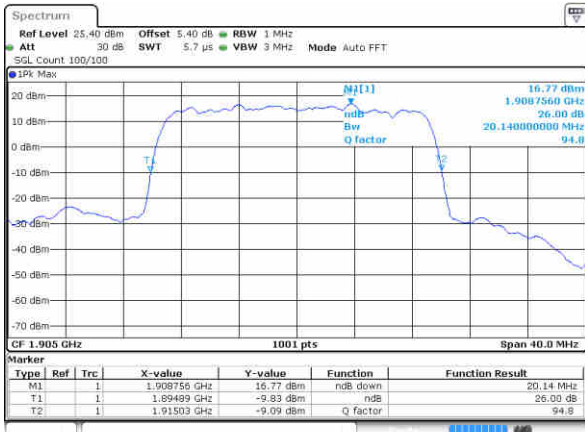
Date: 16 JAN 2020 15:05:49

Middle Channel / 20MHz / 16QAM



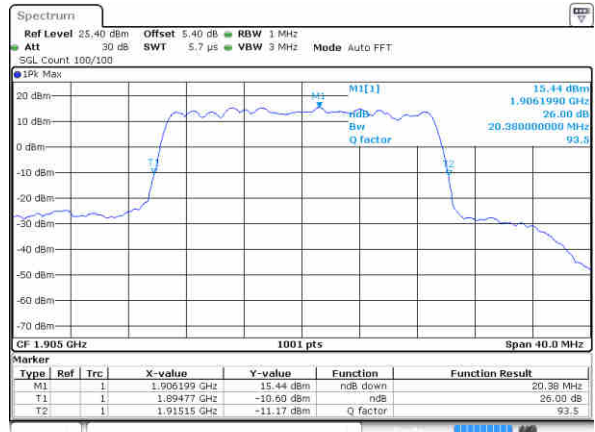
Date: 16 JAN 2020 15:05:29

Highest Channel / 20MHz / QPSK



Date: 16 JAN 2020 15:06:09

Highest Channel / 20MHz / 16QAM

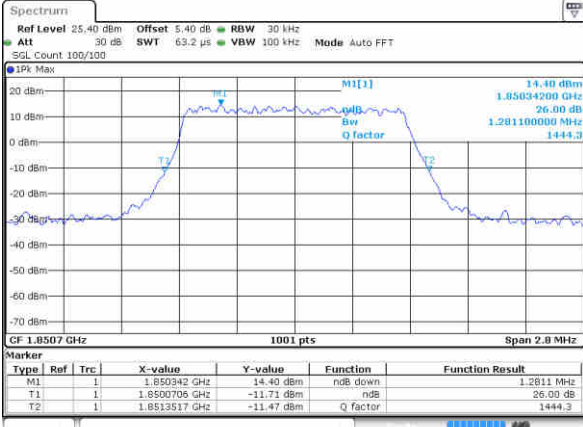


Date: 16 JAN 2020 15:06:29



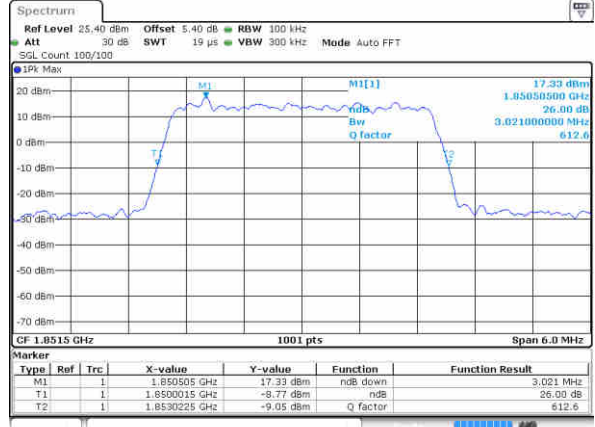
LTE Band 25

Lowest Channel / 1.4MHz / 64QAM



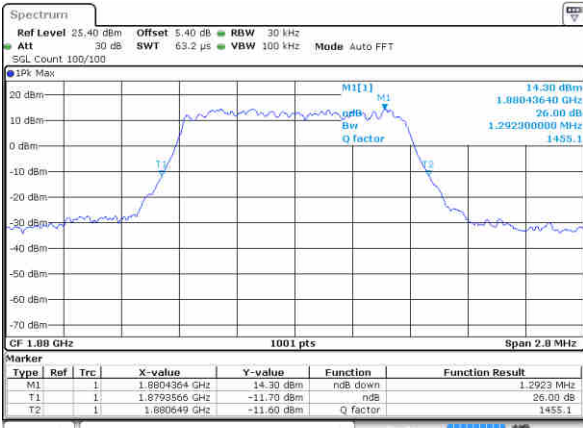
Date: 16 JAN 2020 11:55:02

Lowest Channel / 3MHz / 64QAM



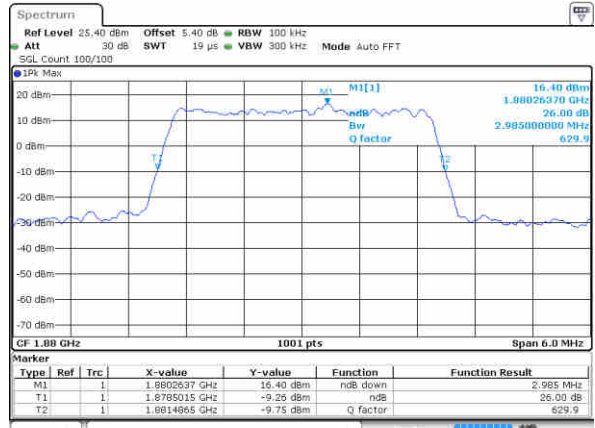
Date: 16 JAN 2020 12:19:42

Middle Channel / 1.4MHz / 64QAM



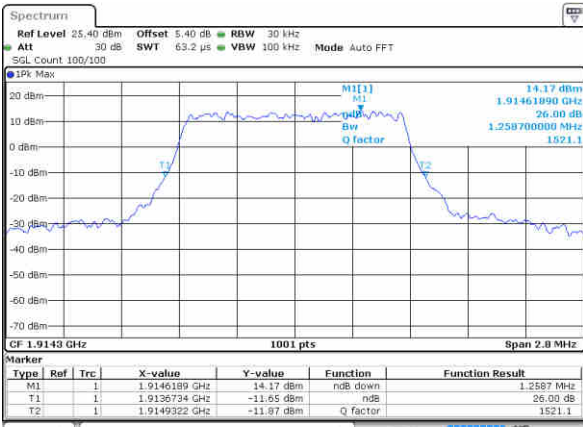
Date: 16 JAN 2020 11:56:02

Middle Channel / 3MHz / 64QAM



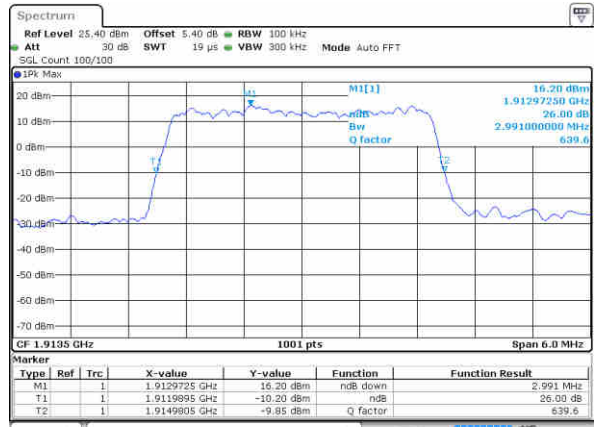
Date: 16 JAN 2020 12:20:42

Highest Channel / 1.4MHz / 64QAM



Date: 16 JAN 2020 11:57:02

Highest Channel / 3MHz / 64QAM

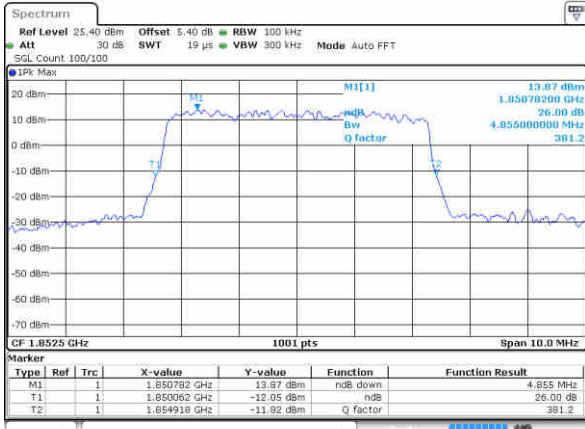


Date: 16 JAN 2020 12:21:42



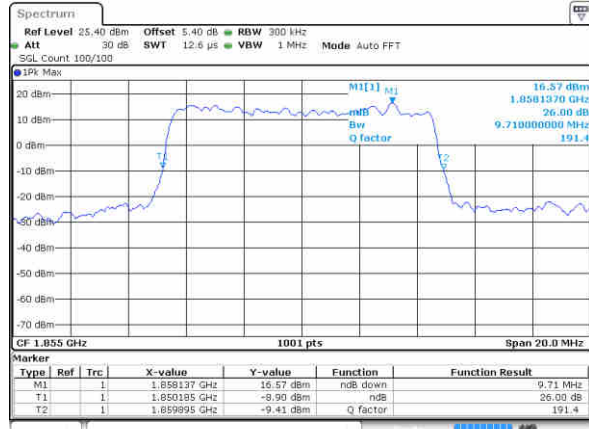
LTE Band 25

Lowest Channel / 5MHz / 64QAM



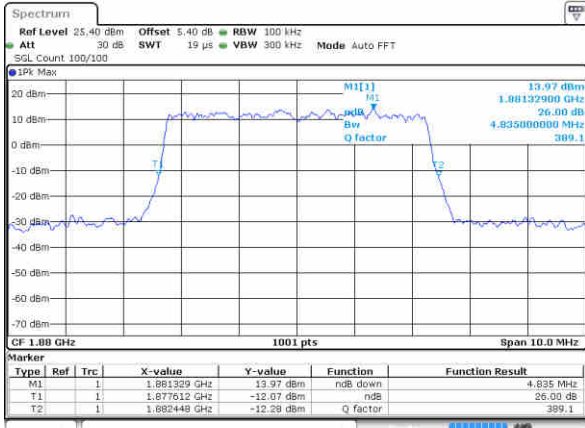
Date: 16 JAN 2020 12:44:23

Lowest Channel / 10MHz / 64QAM



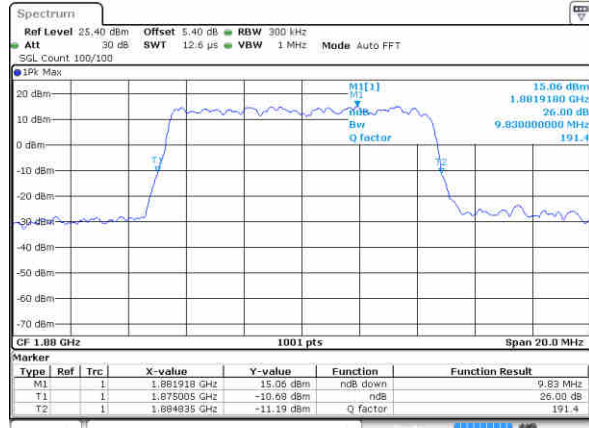
Date: 16 JAN 2020 14:03:17

Middle Channel / 5MHz / 64QAM



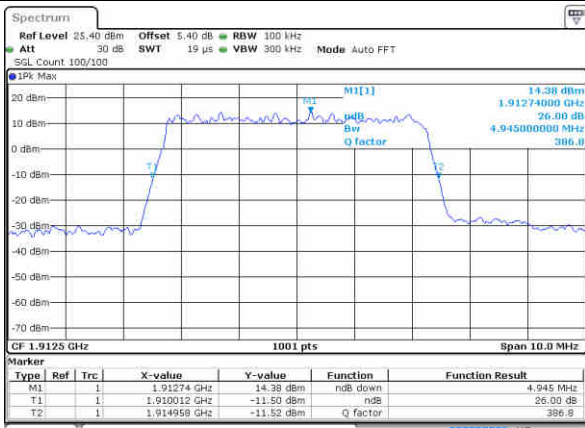
Date: 16 JAN 2020 12:58:55

Middle Channel / 10MHz / 64QAM



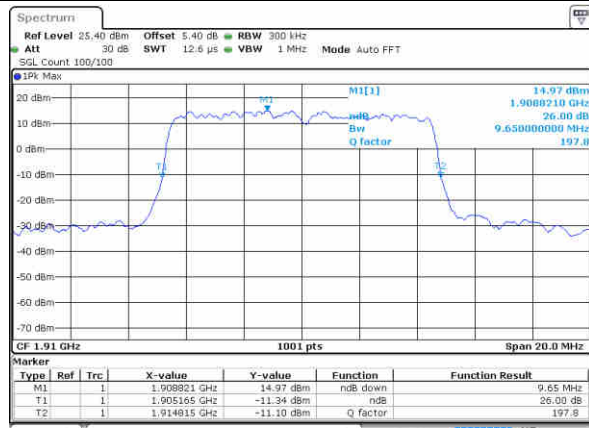
Date: 16 JAN 2020 14:15:49

Highest Channel / 5MHz / 64QAM



Date: 16 JAN 2020 12:58:35

Highest Channel / 10MHz / 64QAM

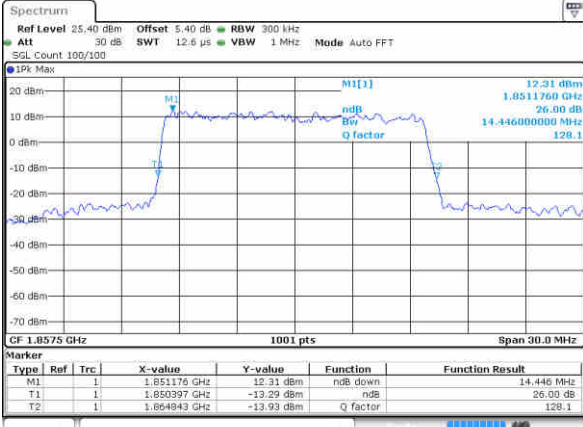


Date: 16 JAN 2020 14:17:29



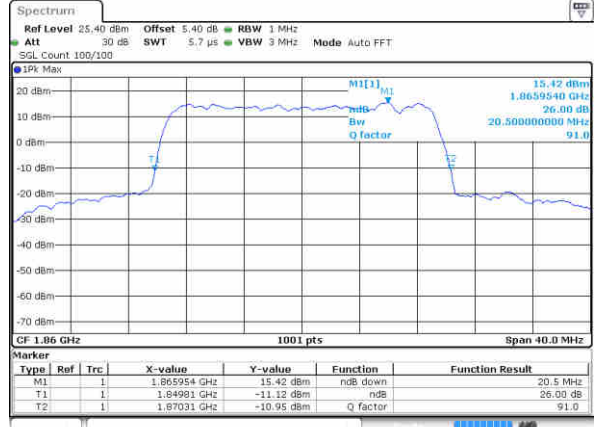
LTE Band 25

Lowest Channel / 15MHz / 64QAM



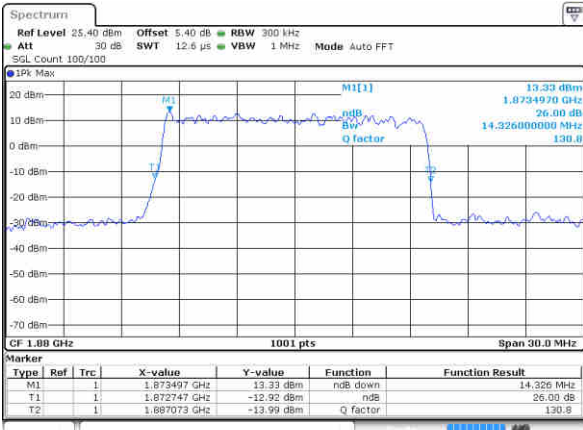
Date: 16 JAN 2020 14:27:58

Lowest Channel / 20MHz / 64QAM



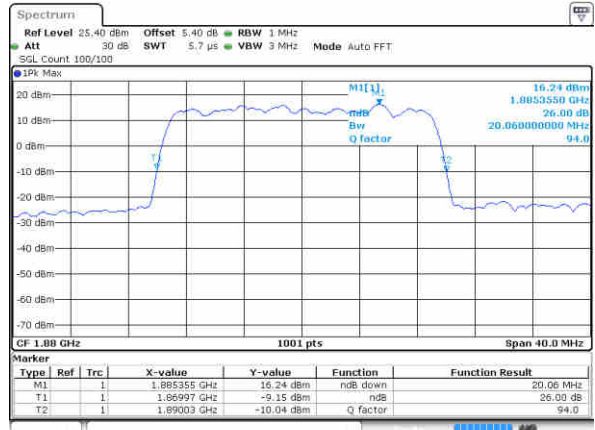
Date: 16 JAN 2020 14:52:37

Middle Channel / 15MHz / 64QAM



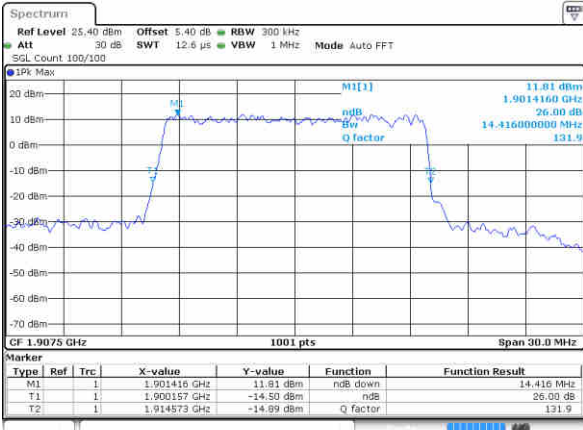
Date: 16 JAN 2020 14:40:30

Middle Channel / 20MHz / 64QAM



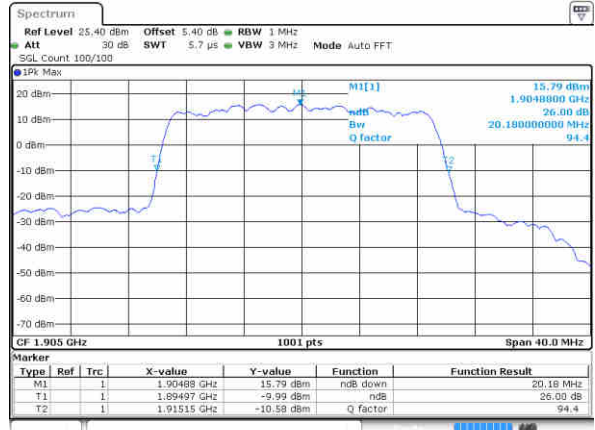
Date: 16 JAN 2020 15:05:10

Highest Channel / 15MHz / 64QAM



Date: 16 JAN 2020 14:42:09

Highest Channel / 20MHz / 64QAM



Date: 16 JAN 2020 15:06:49



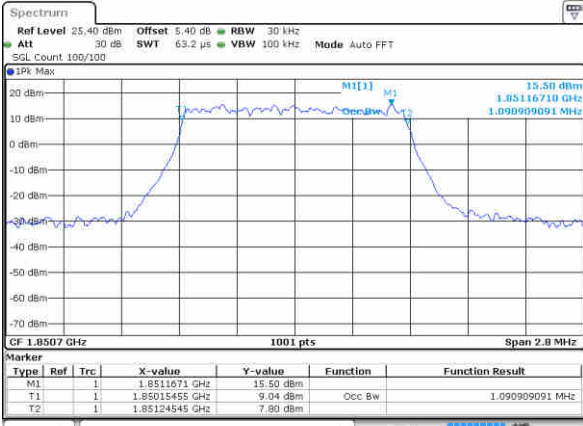
Occupied Bandwidth

Mode	LTE Band 25 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.10	2.70	2.73	4.49	4.49	8.99	9.07	13.55	13.43	18.38	18.66
Middle CH	1.09	1.09	2.73	2.72	4.49	4.49	9.01	9.03	13.37	13.52	18.46	18.30
Highest CH	1.09	1.10	2.71	2.72	4.49	4.49	9.01	9.01	13.40	13.43	18.26	18.26
Mode	LTE Band 25 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Lowest CH	1.09	-	2.73	-	4.48	-	9.07	-	13.40	-	18.50	-
Middle CH	1.09	-	2.73	-	4.48	-	9.01	-	13.49	-	18.42	-
Highest CH	1.09	-	2.72	-	4.48	-	8.97	-	13.43	-	18.38	-

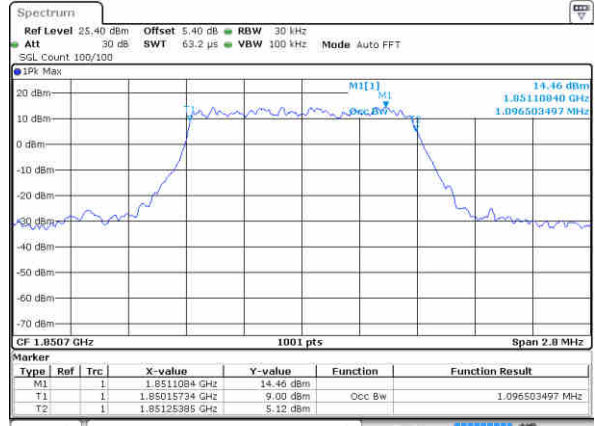


LTE Band 25

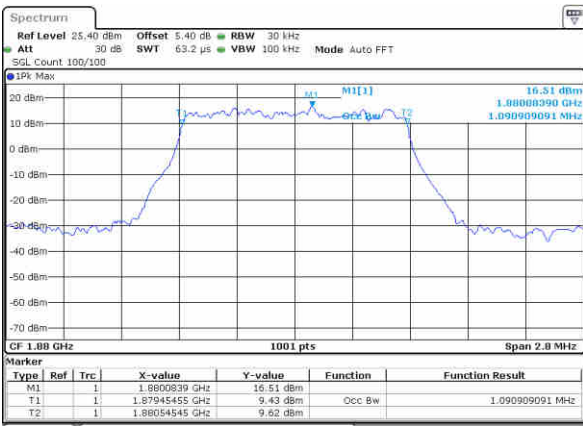
Lowest Channel / 1.4MHz / QPSK



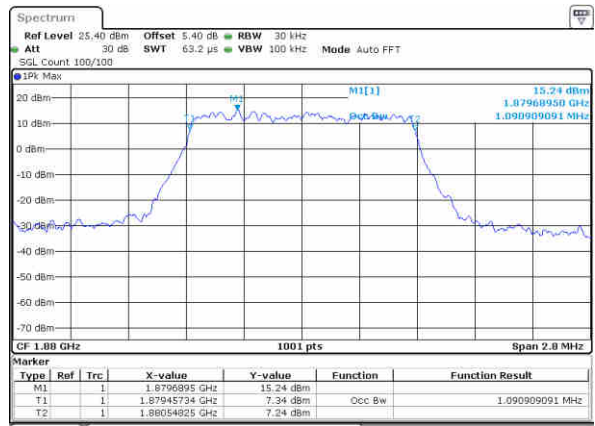
Lowest Channel / 1.4MHz / 16QAM



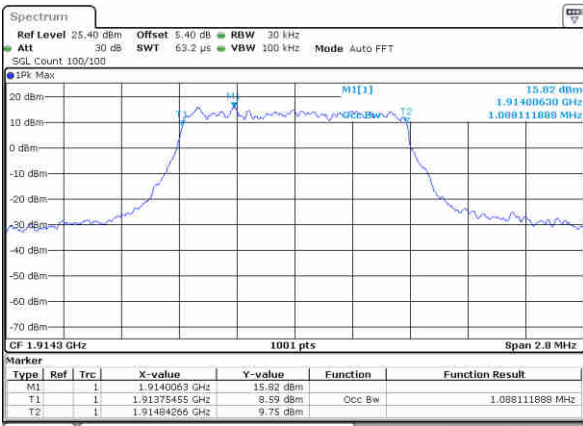
Middle Channel / 1.4MHz / QPSK



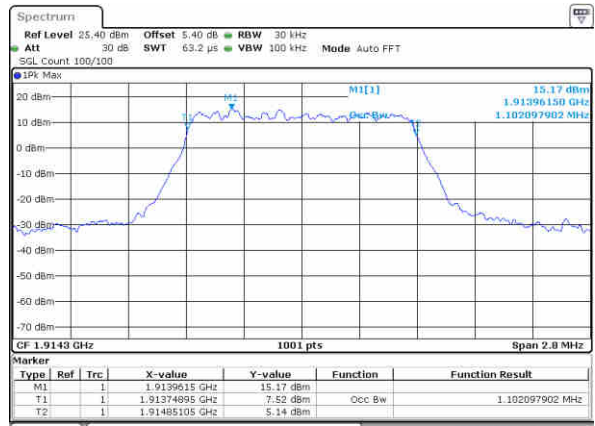
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



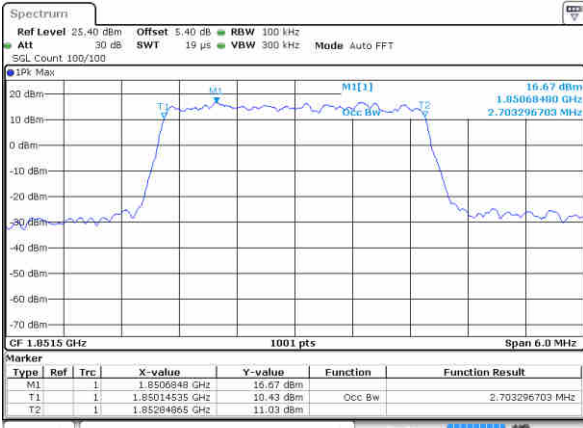
Highest Channel / 1.4MHz / 16QAM





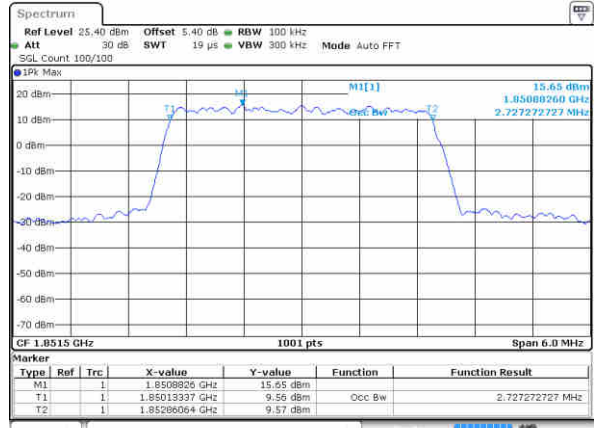
LTE Band 25

Lowest Channel / 3MHz / QPSK



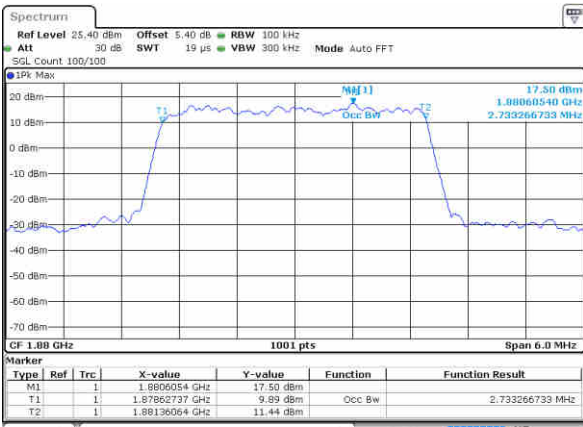
Date: 16 JAN 2020 12:18:52

Lowest Channel / 3MHz / 16QAM



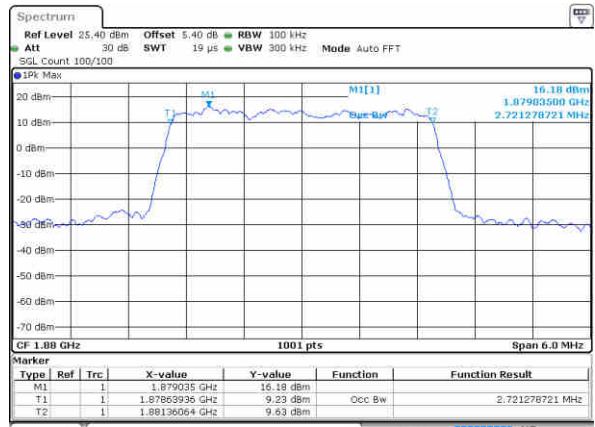
Date: 16 JAN 2020 12:19:12

Middle Channel / 3MHz / QPSK



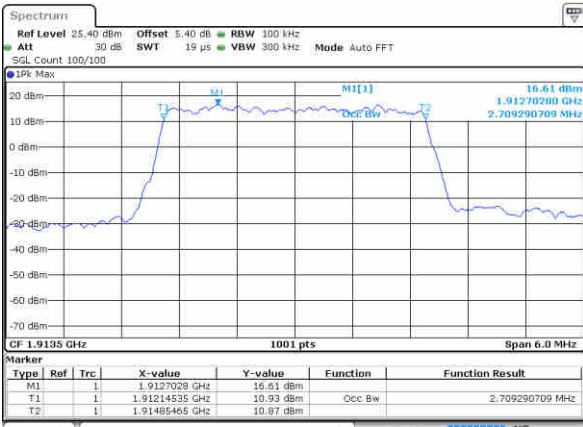
Date: 16 JAN 2020 12:19:52

Middle Channel / 3MHz / 16QAM



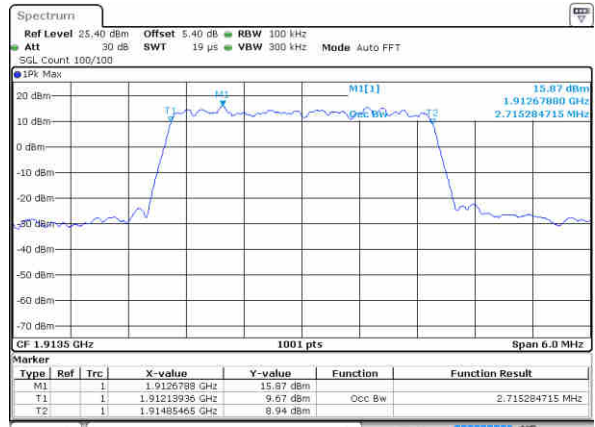
Date: 16 JAN 2020 12:20:12

Highest Channel / 3MHz / QPSK



Date: 16 JAN 2020 12:20:52

Highest Channel / 3MHz / 16QAM

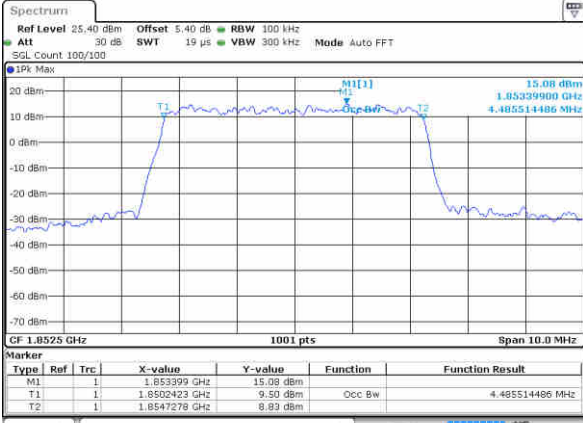


Date: 16 JAN 2020 12:21:12



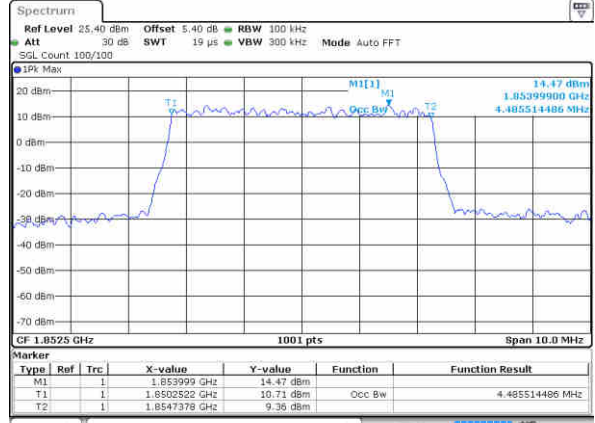
LTE Band 25

Lowest Channel / 5MHz / QPSK



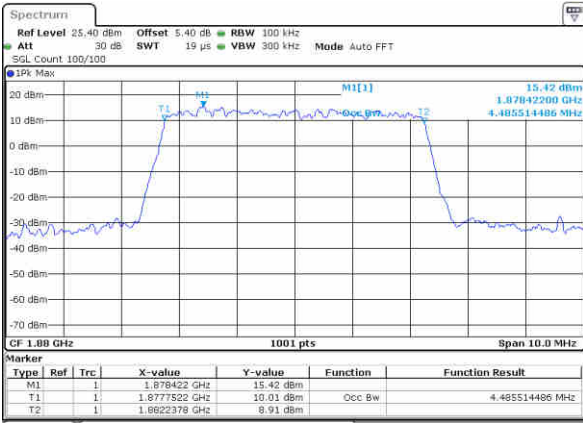
Date: 16 JAN 2020 12:43:33

Lowest Channel / 5MHz / 16QAM



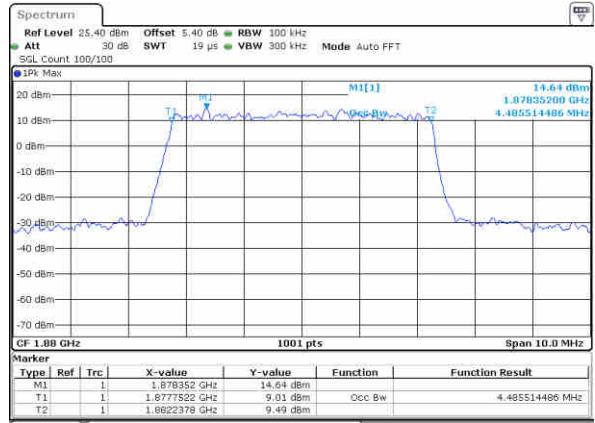
Date: 16 JAN 2020 12:43:53

Middle Channel / 5MHz / QPSK



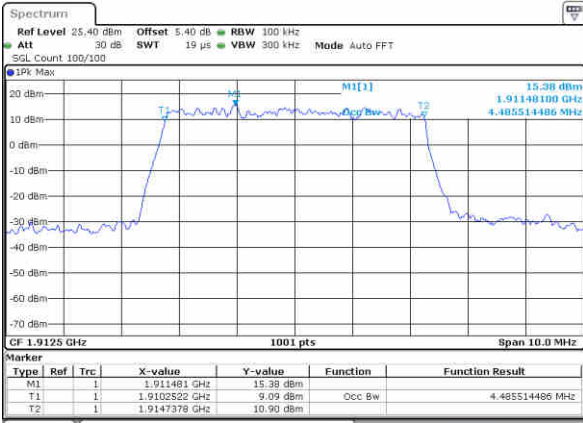
Date: 16 JAN 2020 12:57:25

Middle Channel / 5MHz / 16QAM



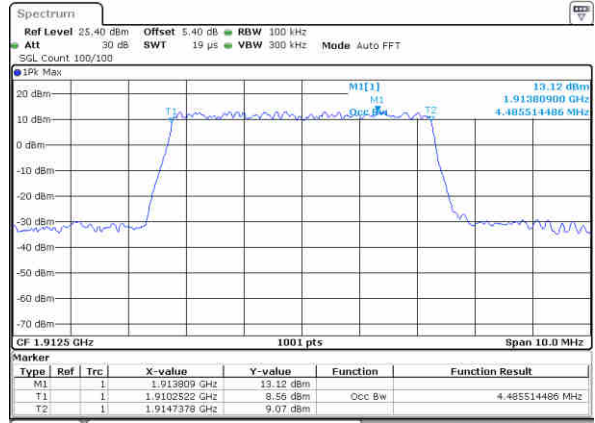
Date: 16 JAN 2020 12:57:05

Highest Channel / 5MHz / QPSK



Date: 16 JAN 2020 12:57:45

Highest Channel / 5MHz / 16QAM

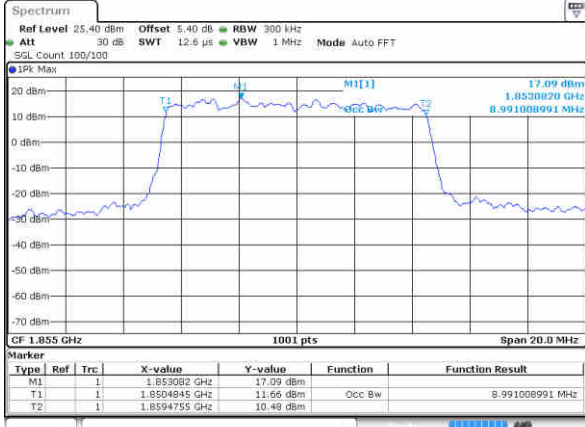


Date: 16 JAN 2020 12:58:05



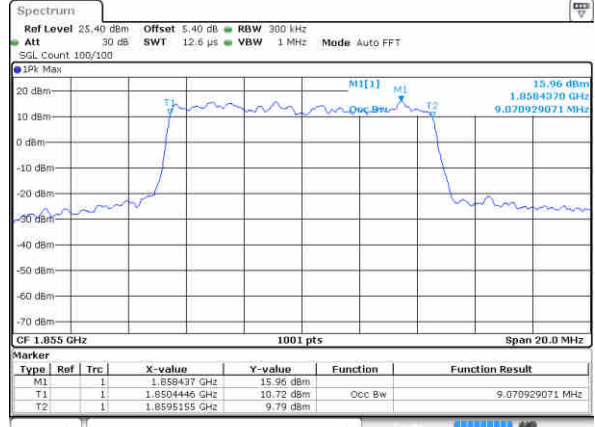
LTE Band 25

Lowest Channel / 10MHz / QPSK



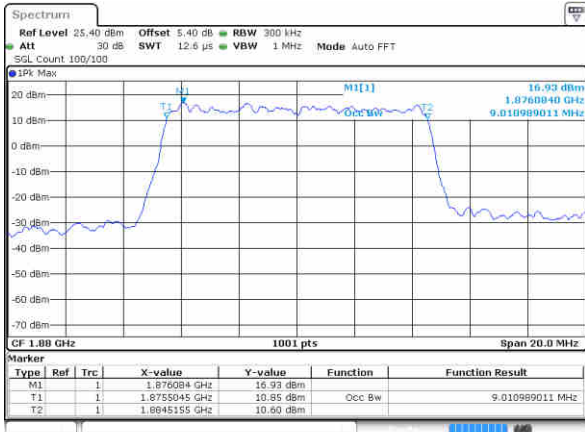
Date: 16 JAN 2020 14:02:27

Lowest Channel / 10MHz / 16QAM



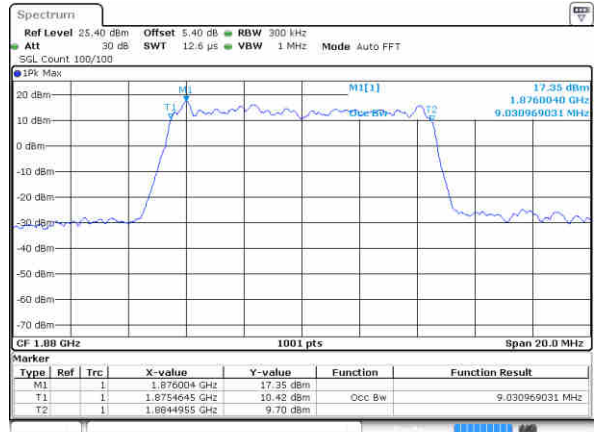
Date: 16 JAN 2020 14:02:47

Middle Channel / 10MHz / QPSK



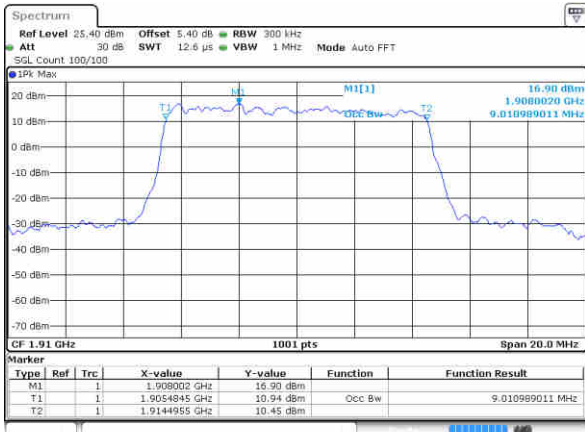
Date: 16 JAN 2020 14:16:19

Middle Channel / 10MHz / 16QAM



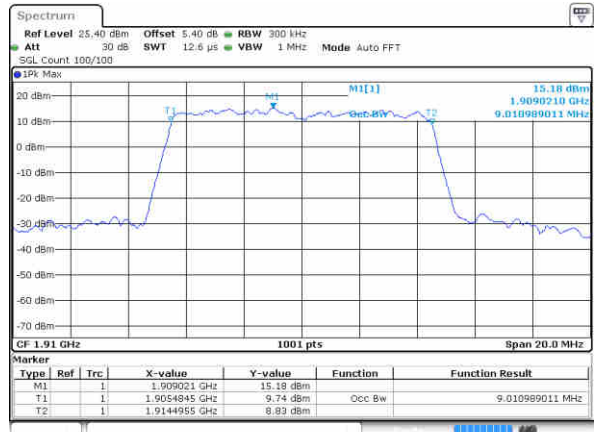
Date: 16 JAN 2020 14:15:59

Highest Channel / 10MHz / QPSK



Date: 16 JAN 2020 14:16:39

Highest Channel / 10MHz / 16QAM

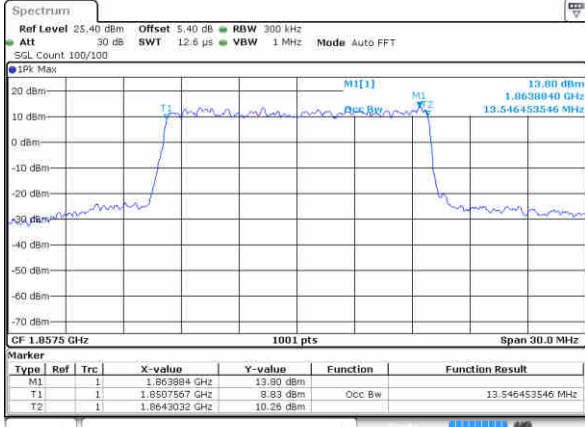


Date: 16 JAN 2020 14:16:59



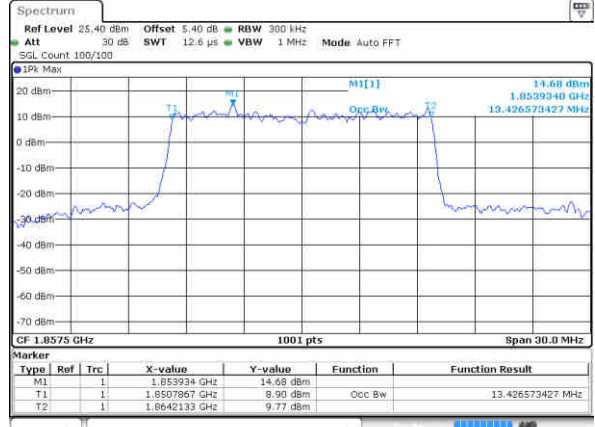
LTE Band 25

Lowest Channel / 15MHz / QPSK



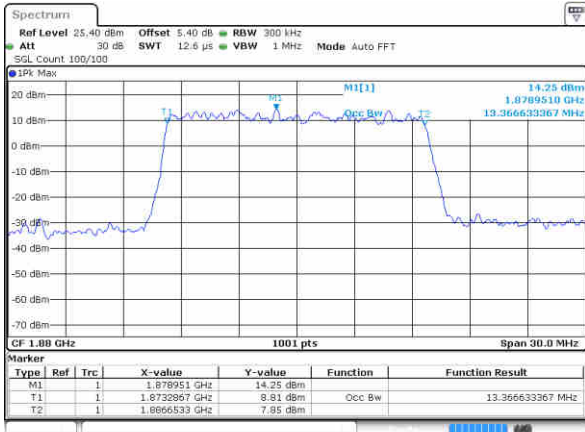
Date: 16 JAN 2020 14:27:08

Lowest Channel / 15MHz / 16QAM



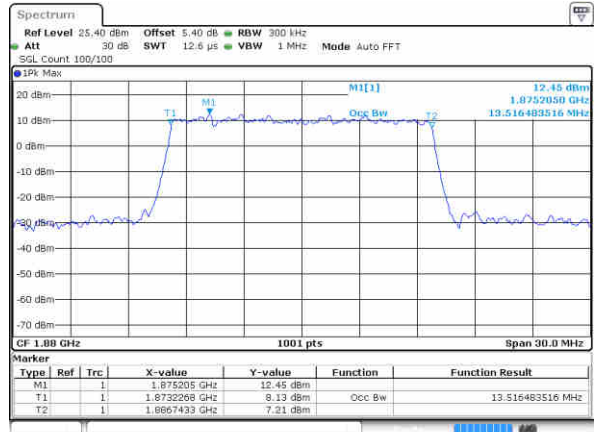
Date: 16 JAN 2020 14:27:28

Middle Channel / 15MHz / QPSK



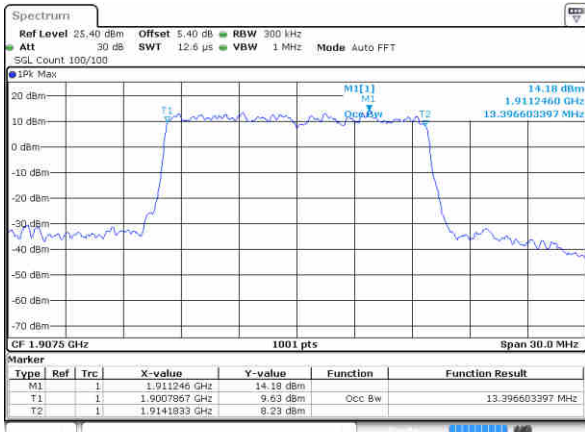
Date: 16 JAN 2020 14:41:00

Middle Channel / 15MHz / 16QAM



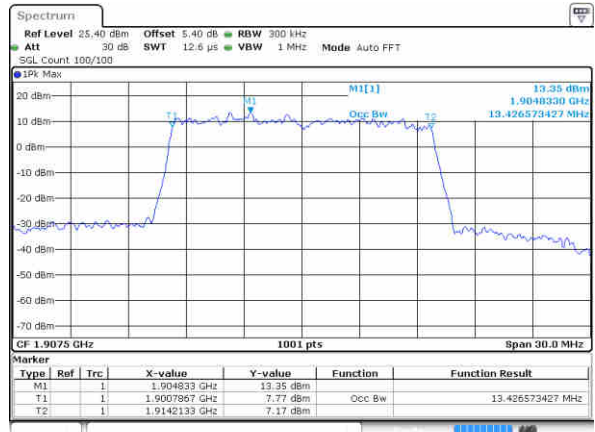
Date: 16 JAN 2020 14:40:39

Highest Channel / 15MHz / QPSK



Date: 16 JAN 2020 14:41:19

Highest Channel / 15MHz / 16QAM

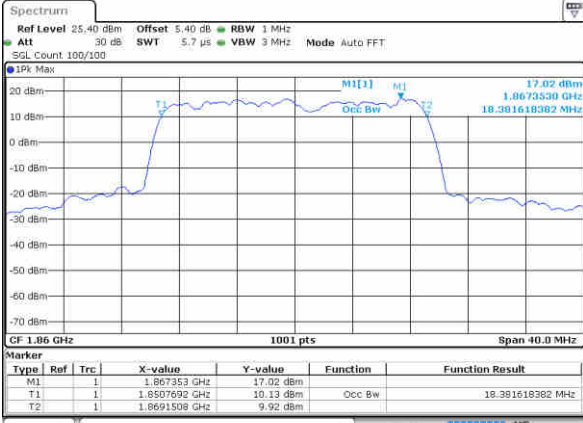


Date: 16 JAN 2020 14:41:39



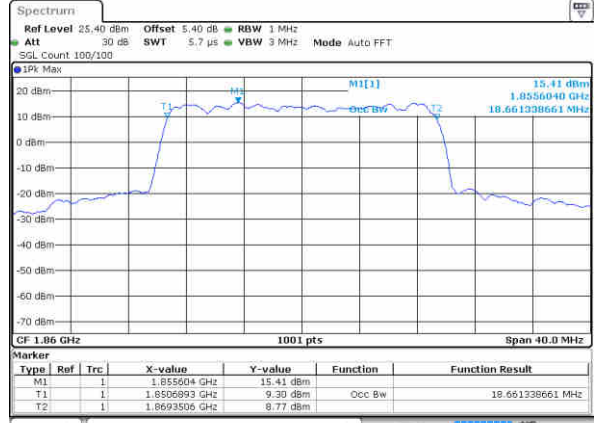
LTE Band 25

Lowest Channel / 20MHz / QPSK



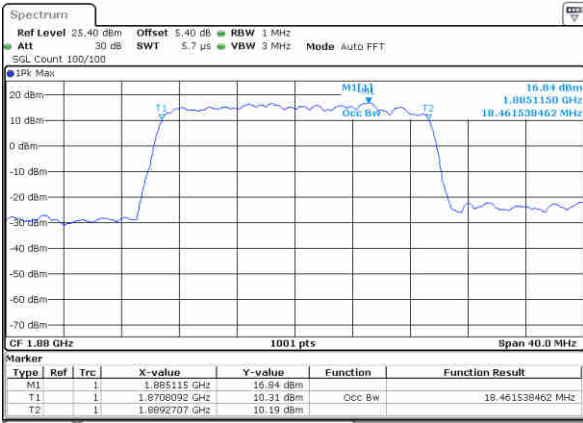
Date: 16 JAN 2020 14:51:48

Lowest Channel / 20MHz / 16QAM



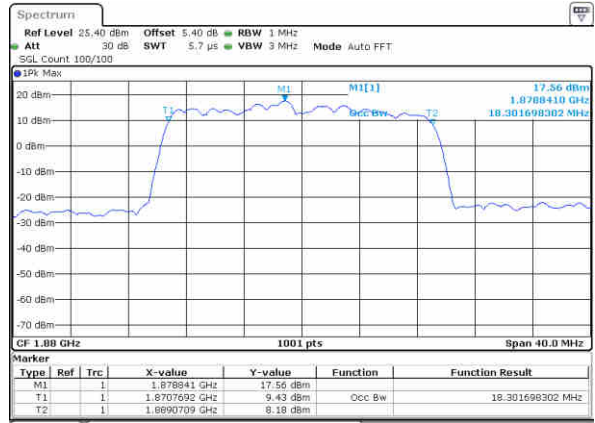
Date: 16 JAN 2020 14:52:08

Middle Channel / 20MHz / QPSK



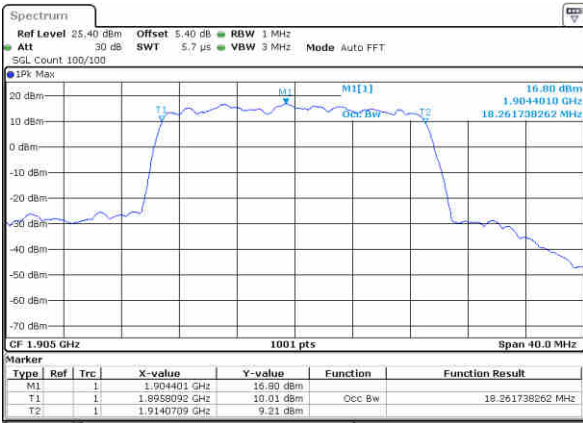
Date: 16 JAN 2020 15:05:39

Middle Channel / 20MHz / 16QAM



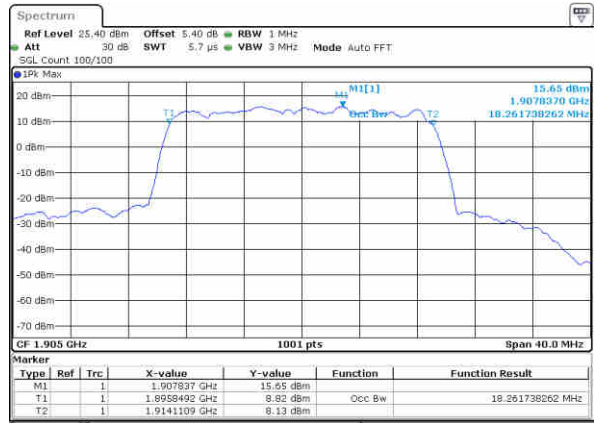
Date: 16 JAN 2020 15:05:20

Highest Channel / 20MHz / QPSK



Date: 16 JAN 2020 15:05:59

Highest Channel / 20MHz / 16QAM

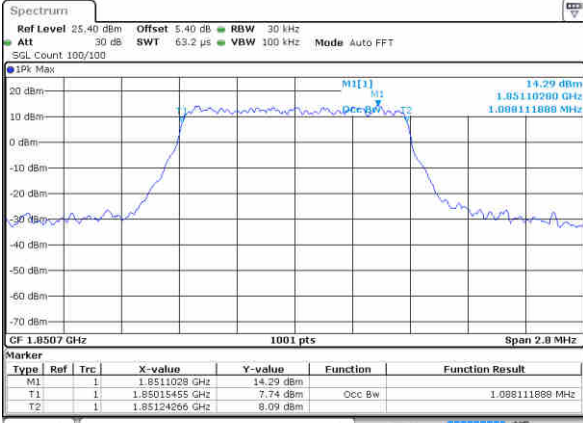


Date: 16 JAN 2020 15:06:19



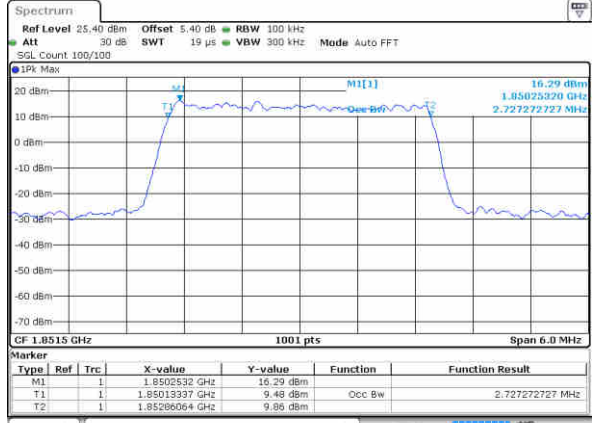
LTE Band 25

Lowest Channel / 1.4MHz / 64QAM



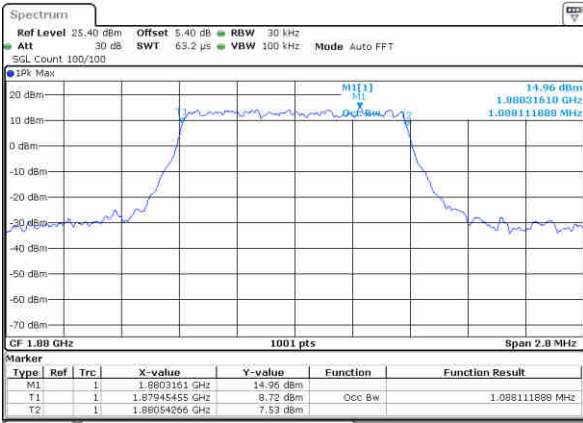
Date: 16 JAN 2020 11:54:52

Lowest Channel / 3MHz / 64QAM



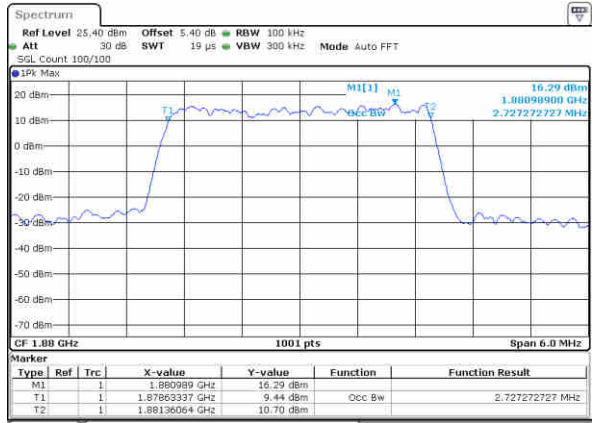
Date: 16 JAN 2020 12:19:32

Middle Channel / 1.4MHz / 64QAM



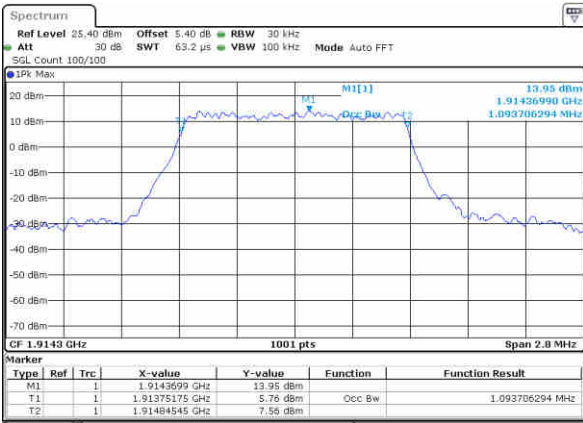
Date: 16 JAN 2020 11:55:52

Middle Channel / 3MHz / 64QAM



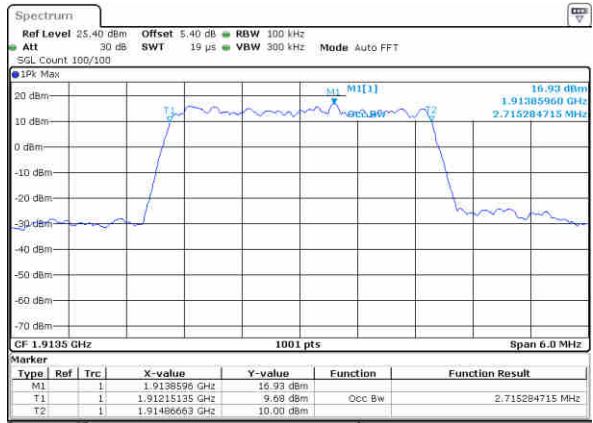
Date: 16 JAN 2020 12:20:32

Highest Channel / 1.4MHz / 64QAM



Date: 16 JAN 2020 11:56:52

Highest Channel / 3MHz / 64QAM

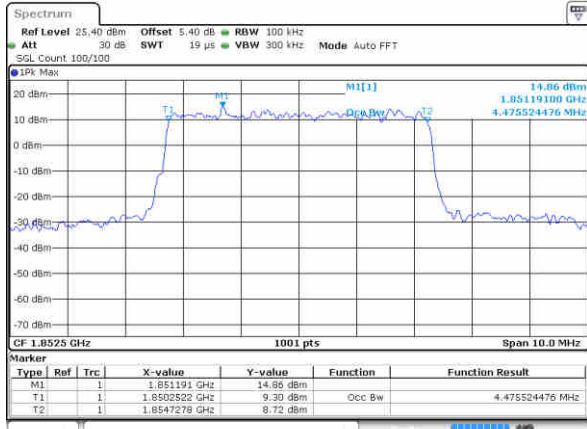


Date: 16 JAN 2020 12:21:32



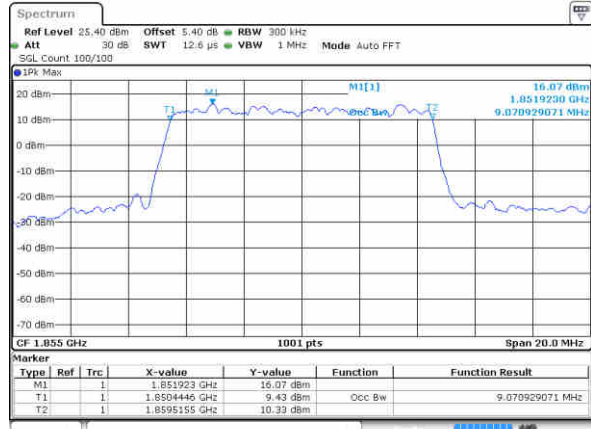
LTE Band 25

Lowest Channel / 5MHz / 64QAM



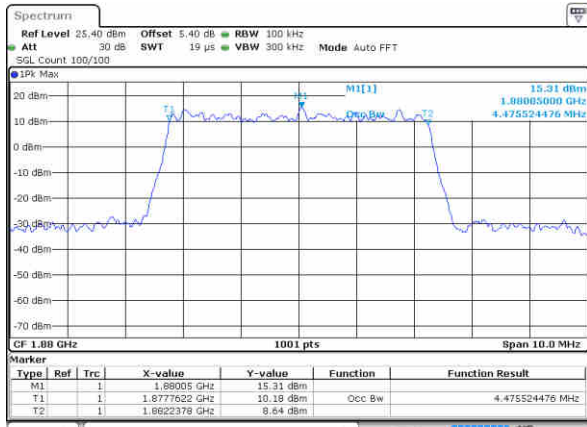
Date: 16 JAN 2020 12:44:13

Lowest Channel / 10MHz / 64QAM



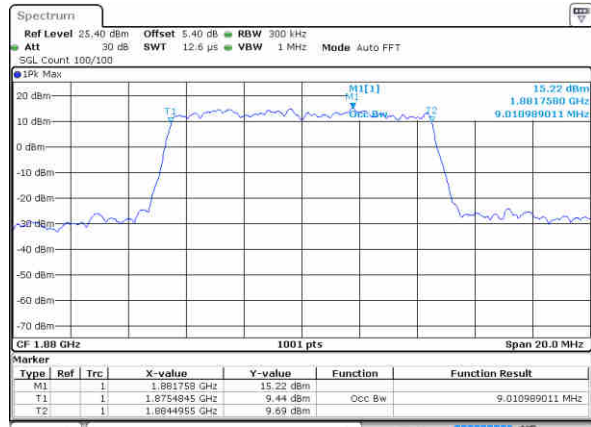
Date: 16 JAN 2020 14:03:07

Middle Channel / 5MHz / 64QAM



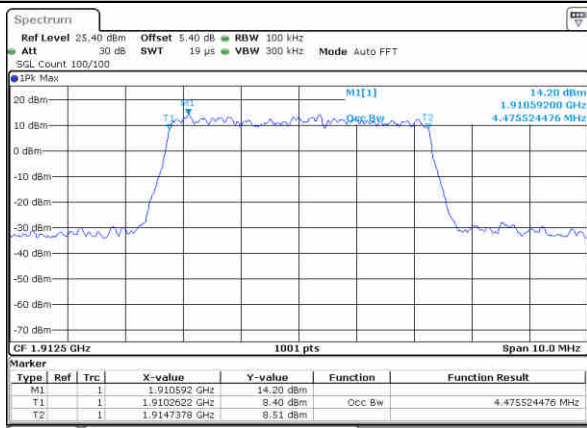
Date: 16 JAN 2020 12:56:45

Middle Channel / 10MHz / 64QAM



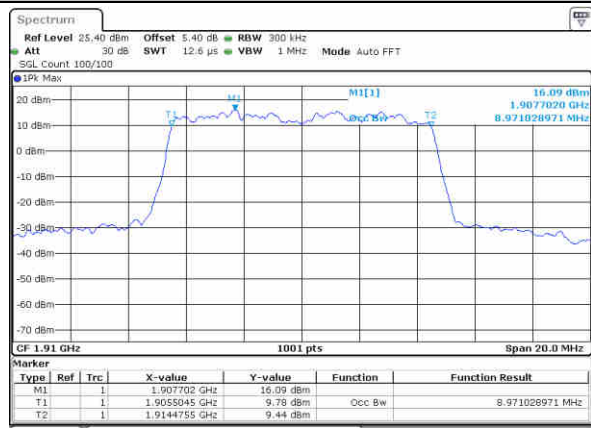
Date: 16 JAN 2020 14:15:39

Highest Channel / 5MHz / 64QAM



Date: 16 JAN 2020 12:56:25

Highest Channel / 10MHz / 64QAM

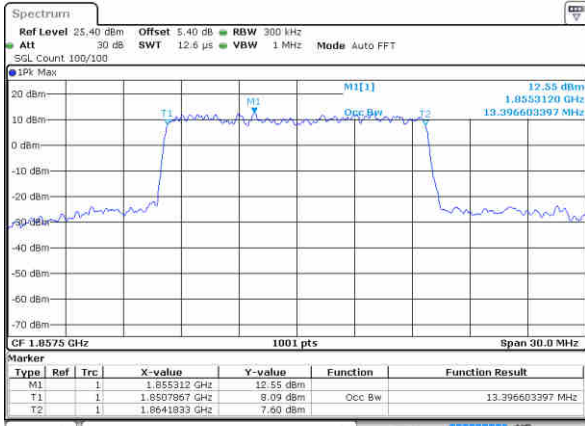


Date: 16 JAN 2020 14:17:19



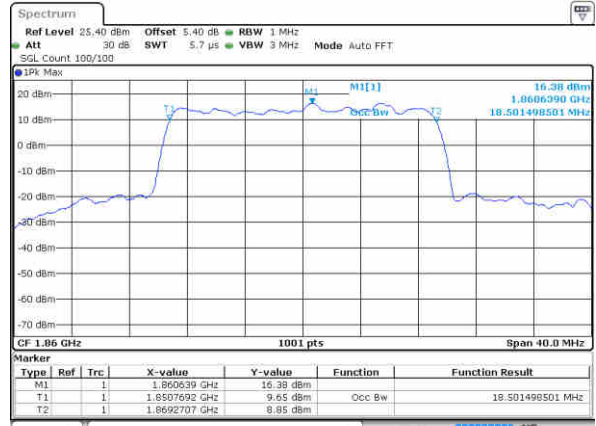
LTE Band 25

Lowest Channel / 15MHz / 64QAM



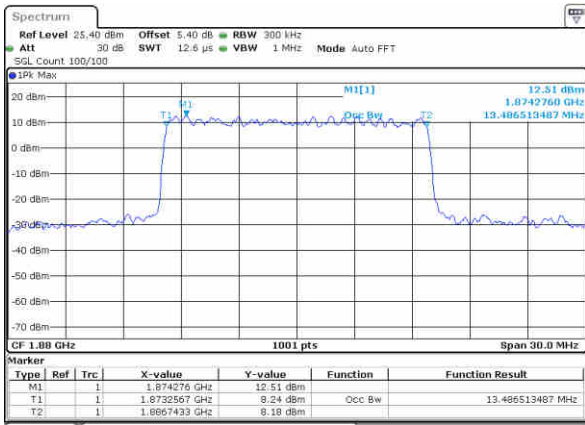
Date: 16 JAN 2020 14:27:48

Lowest Channel / 20MHz / 64QAM



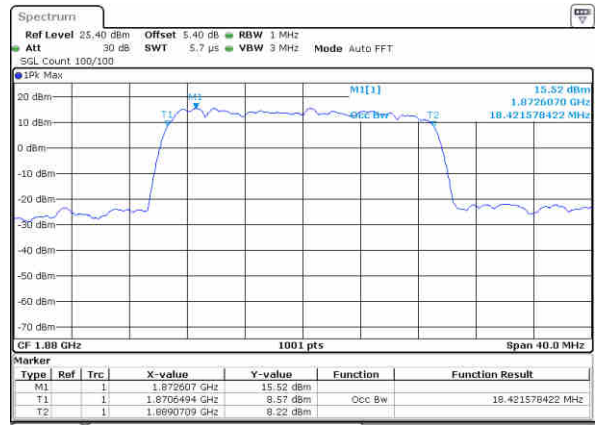
Date: 16 JAN 2020 14:52:27

Middle Channel / 15MHz / 64QAM



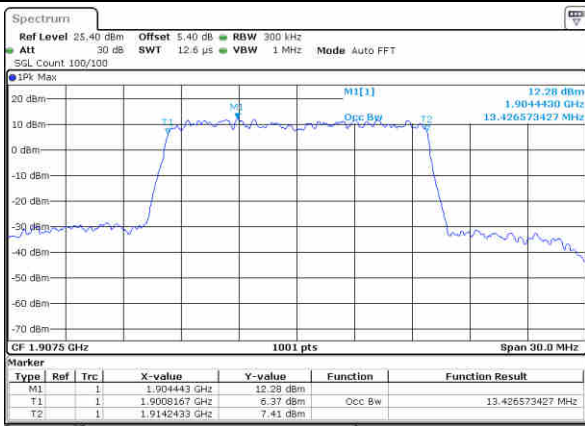
Date: 16 JAN 2020 14:40:20

Middle Channel / 20MHz / 64QAM



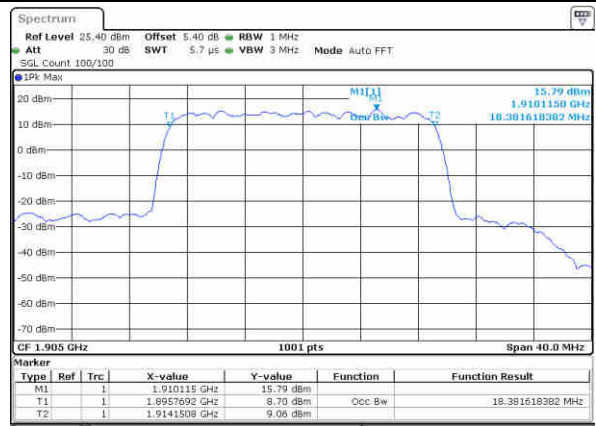
Date: 16 JAN 2020 15:05:00

Highest Channel / 15MHz / 64QAM



Date: 16 JAN 2020 14:41:59

Highest Channel / 20MHz / 64QAM



Date: 16 JAN 2020 15:06:39