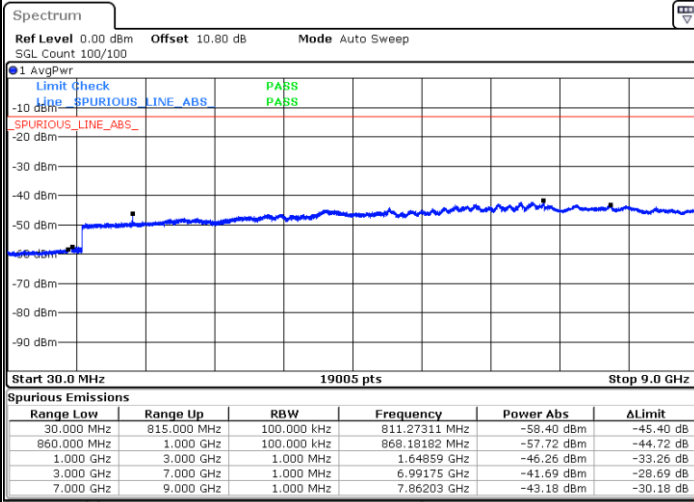




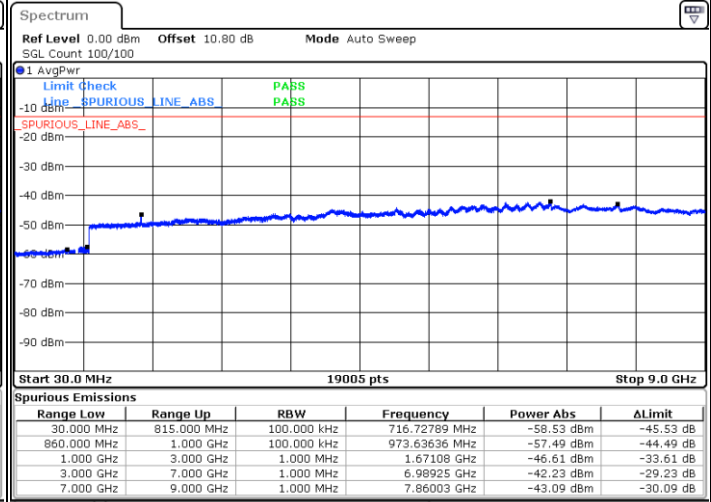
LTE Band 5 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

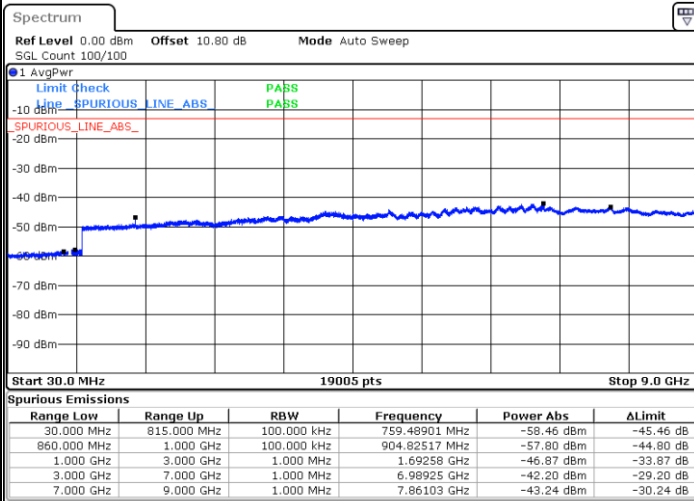


Date: 6.OCT.2017 20:49:39



Date: 6.OCT.2017 20:50:52

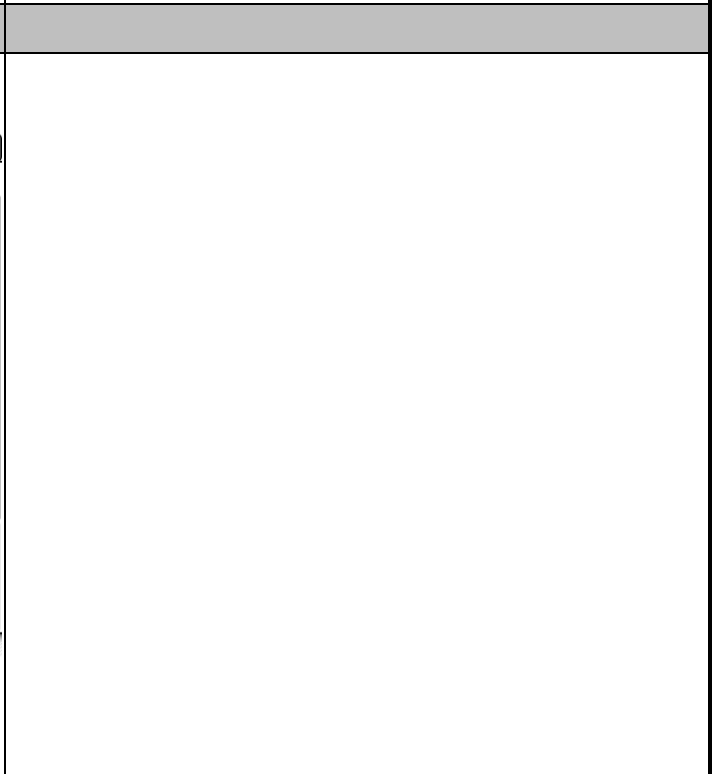
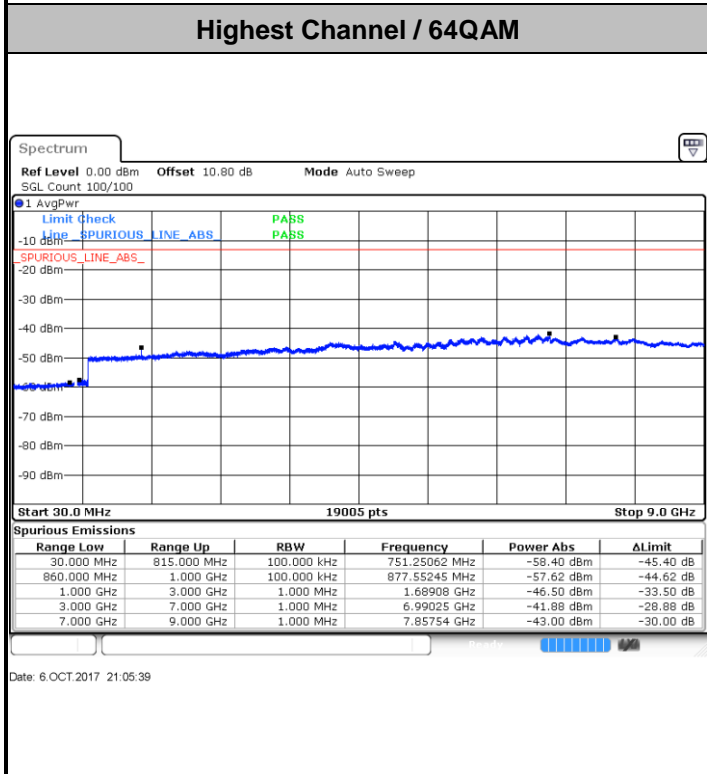
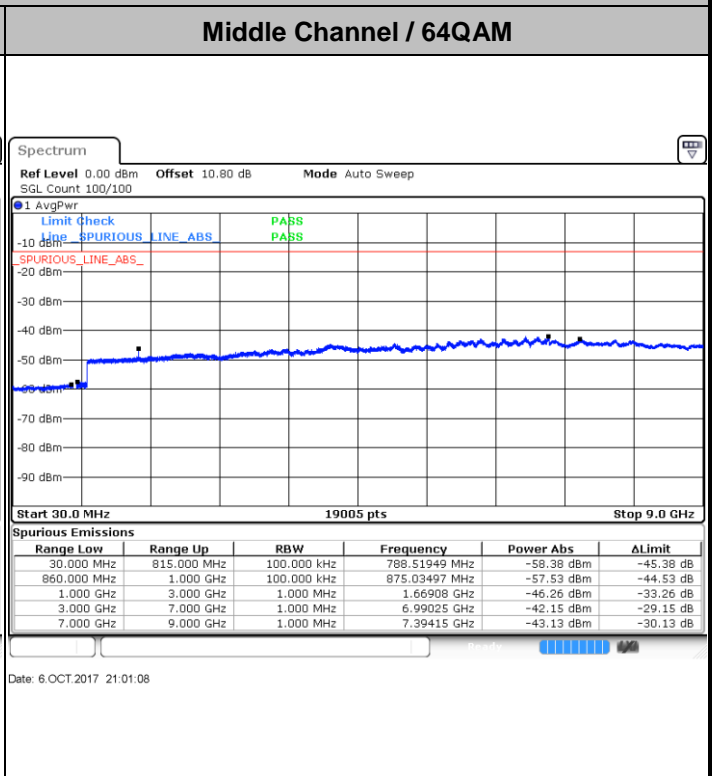
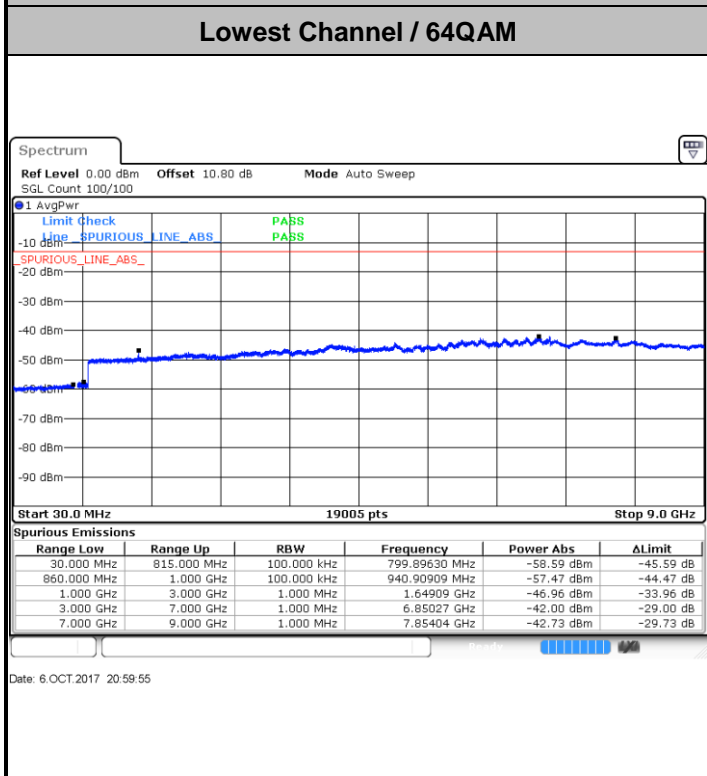
Highest Channel / 64QAM



Date: 6.OCT.2017 20:55:23



**LTE Band 5 / 5MHz**

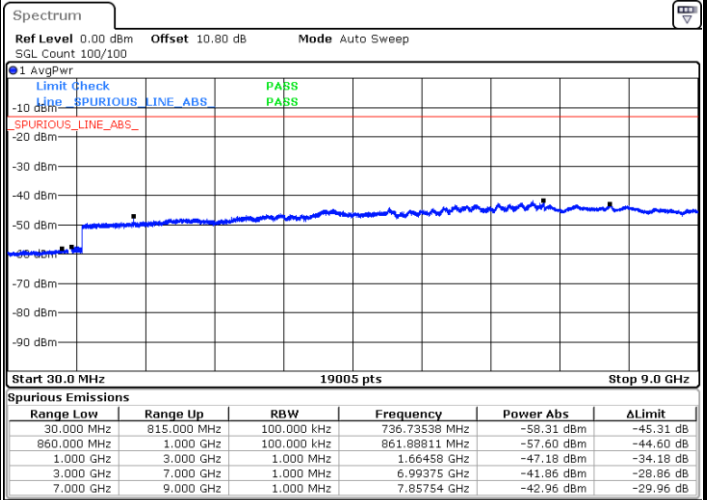
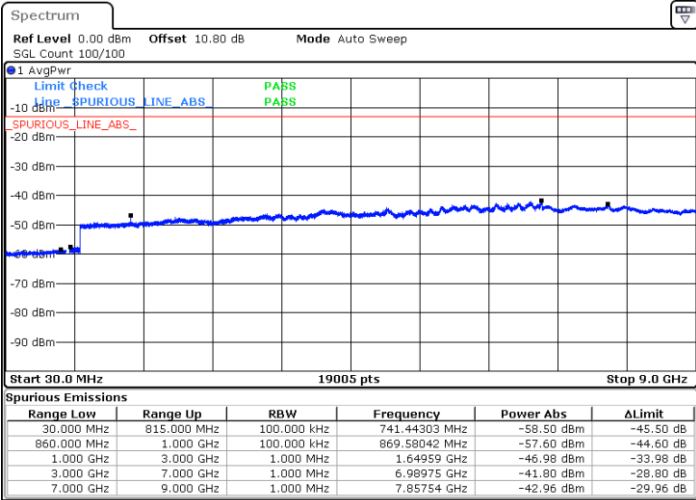




LTE Band 5 / 10MHz

Lowest Channel / 64QAM

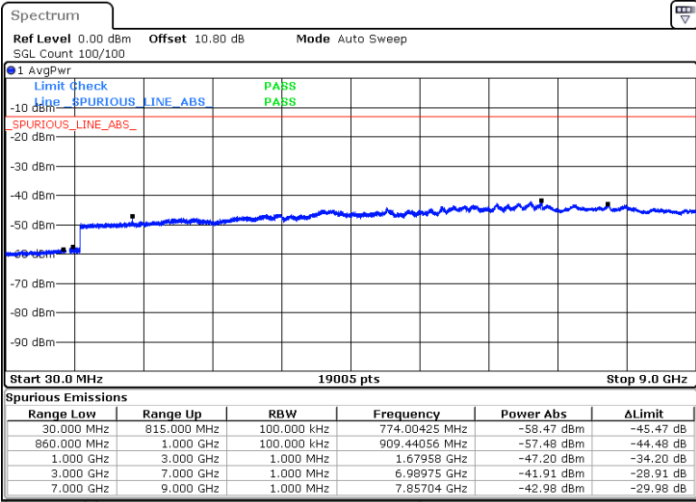
Middle Channel / 64QAM



Date: 6.OCT.2017 21:10:11

Date: 6.OCT.2017 21:11:24

Highest Channel / 64QAM



Date: 6.OCT.2017 21:15:56



**Frequency Stability**

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0071	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0085	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0072	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0079	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 7

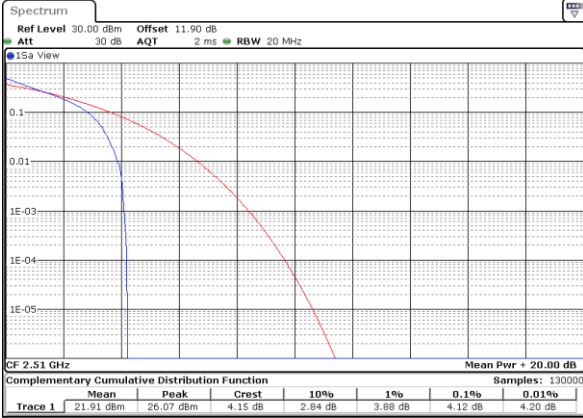
## Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.12	4.9	4.84	6	PASS
Middle CH	4.38	4.99	5.39	6.14	
Highest CH	4.26	4.67	5.07	5.8	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.77	6.43	-	-	PASS
Middle CH	6.26	6.35	-	-	
Highest CH	5.8	6.2	-	-	



LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



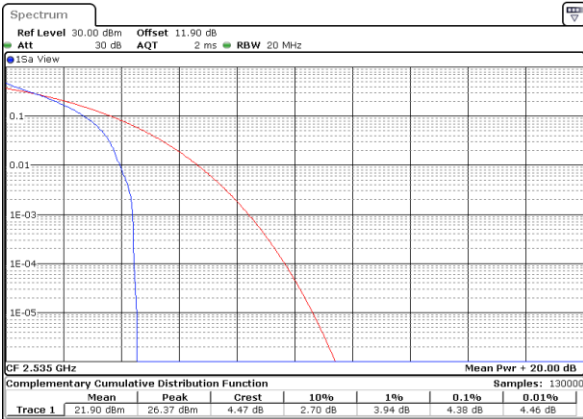
Date: 4 AUG 2017 12:01:32

Lowest Channel / Full RB



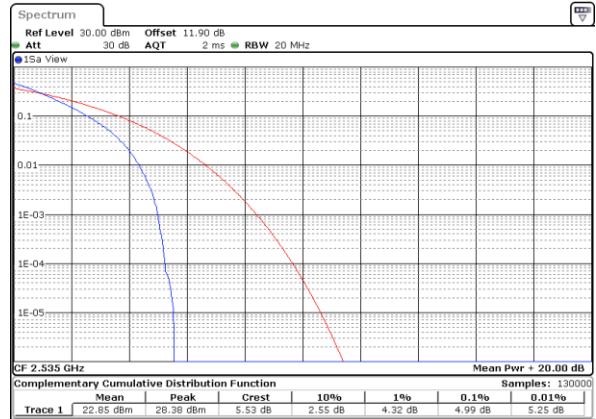
Date: 4 AUG 2017 12:01:45

Middle Channel / 1RB



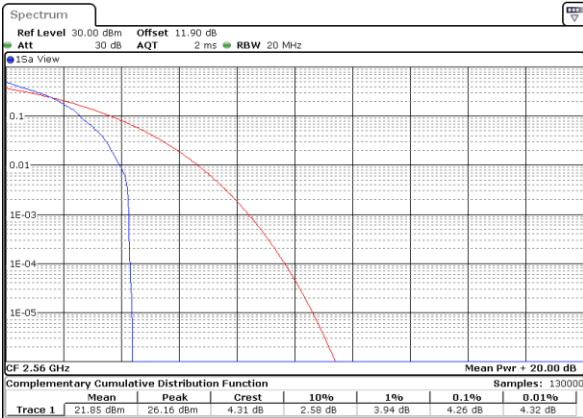
Date: 4 AUG 2017 12:01:58

Middle Channel / Full RB



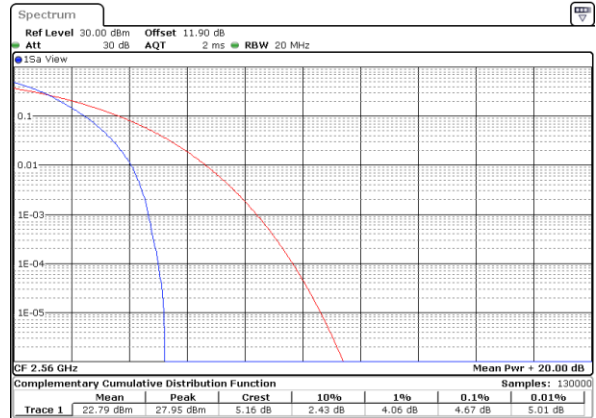
Date: 4 AUG 2017 12:02:08

Highest Channel / 1RB



Date: 4 AUG 2017 12:02:17

Highest Channel / Full RB

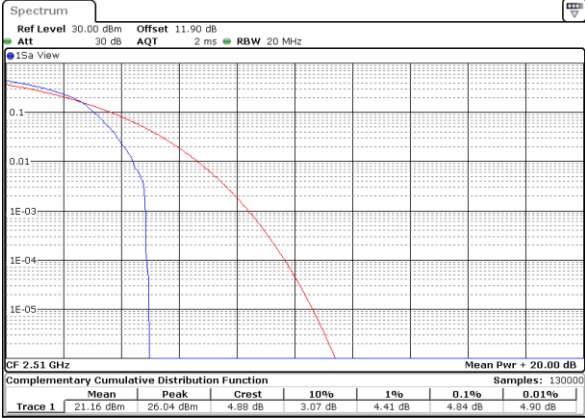


Date: 4 AUG 2017 12:02:27



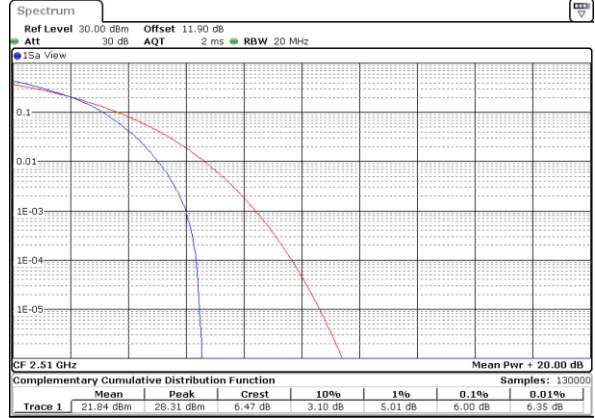
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



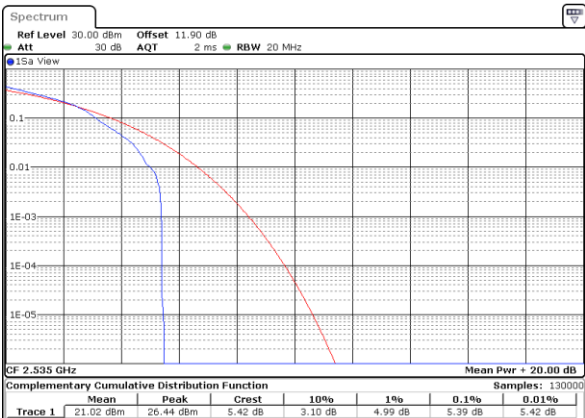
Date: 4 AUG 2017 11:53:40

Lowest Channel / Full RB



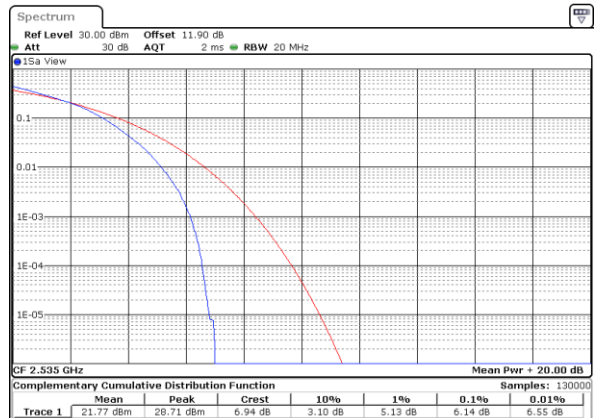
Date: 4 AUG 2017 11:53:50

Middle Channel / 1RB



Date: 4 AUG 2017 11:55:23

Middle Channel / Full RB



Date: 4 AUG 2017 12:00:10

Highest Channel / 1RB



Date: 4 AUG 2017 12:00:58

Highest Channel / Full RB

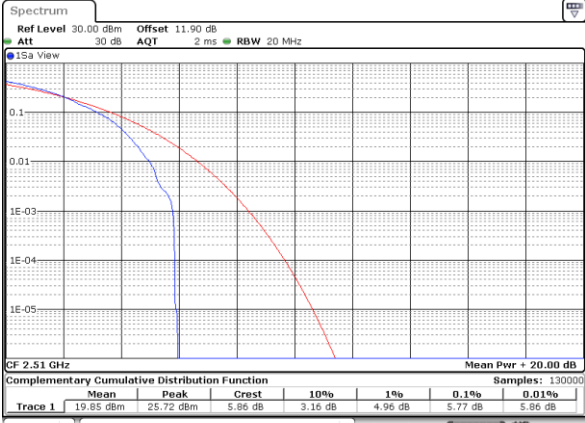


Date: 4 AUG 2017 12:01:16



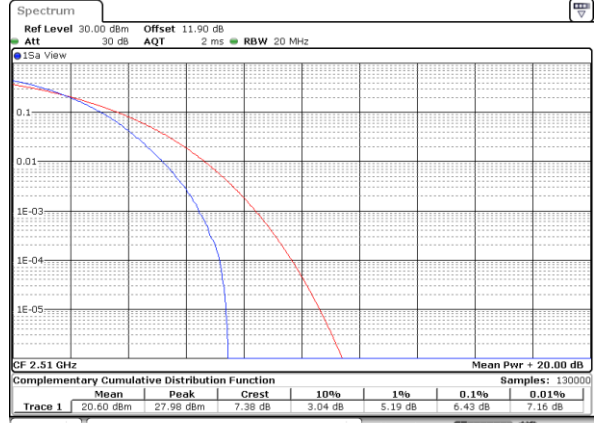
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



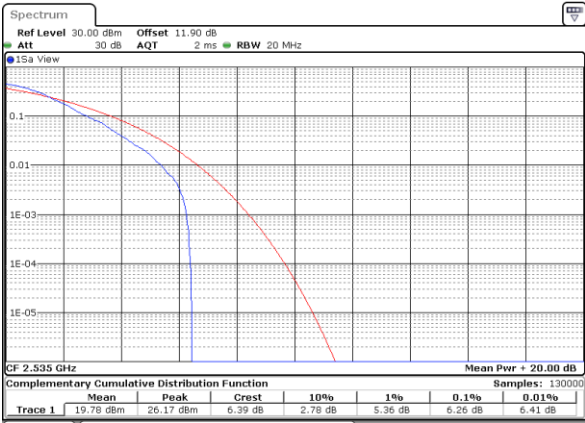
Date: 11.OCT.2017 13:59:40

Lowest Channel / Full RB



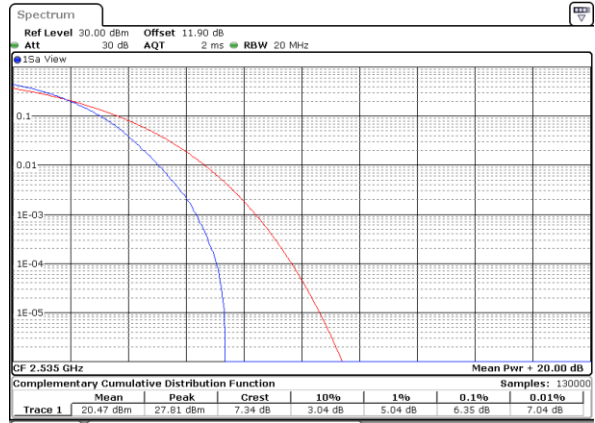
Date: 11.OCT.2017 14:02:23

Middle Channel / 1RB



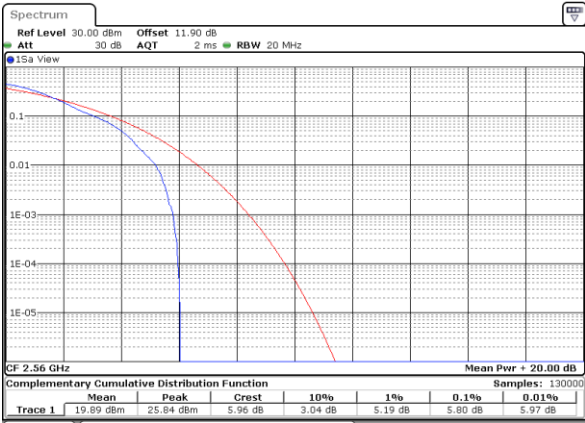
Date: 11.OCT.2017 14:05:52

Middle Channel / Full RB



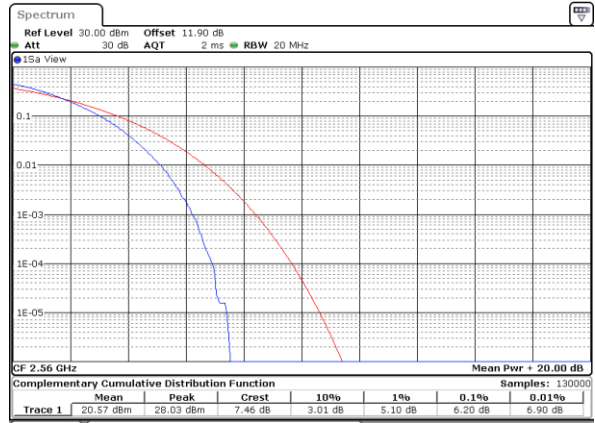
Date: 11.OCT.2017 14:06:02

Highest Channel / 1RB



Date: 11.OCT.2017 14:06:11

Highest Channel / Full RB



Date: 11.OCT.2017 14:06:20





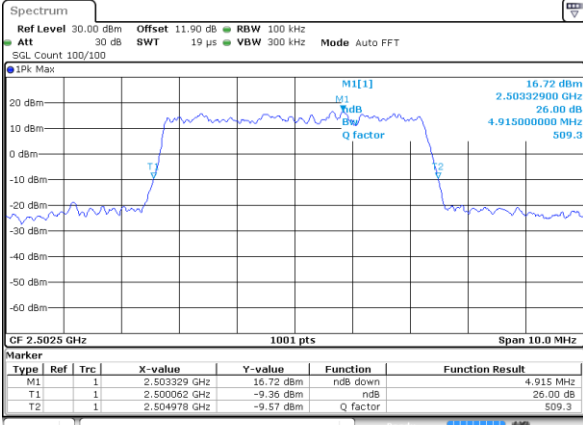
**26dB Bandwidth**

Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.92	4.90	9.81	9.75	14.33	14.36	20.02	20.02
Middle CH	-	-	-	-	4.93	4.91	9.83	9.77	14.27	14.24	20.18	20.14
Highest CH	-	-	-	-	4.87	4.86	9.79	9.69	14.24	14.18	20.14	20.30
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.87	-	9.85	-	14.57	-	20.14	-
Middle CH	-	-	-	-	4.92	-	9.61	-	14.3	-	20.06	-
Highest CH	-	-	-	-	4.82	-	9.87	-	14.18	-	20.1	-



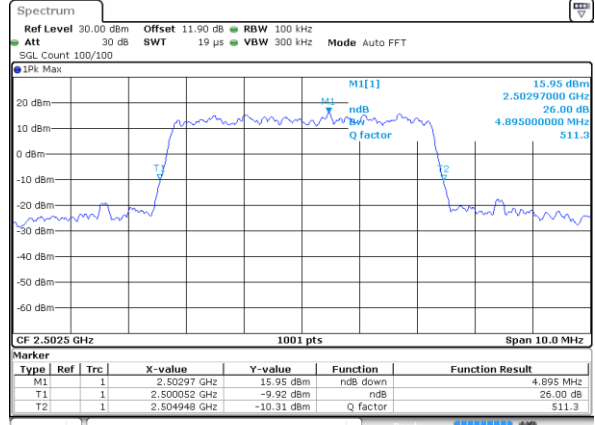
LTE Band 7

Lowest Channel / 5MHz / QPSK



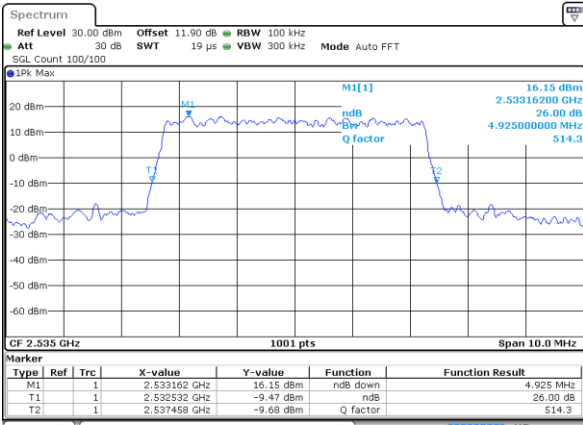
Date: 4 AUG 2017 10:39:43

Lowest Channel / 5MHz / 16QAM



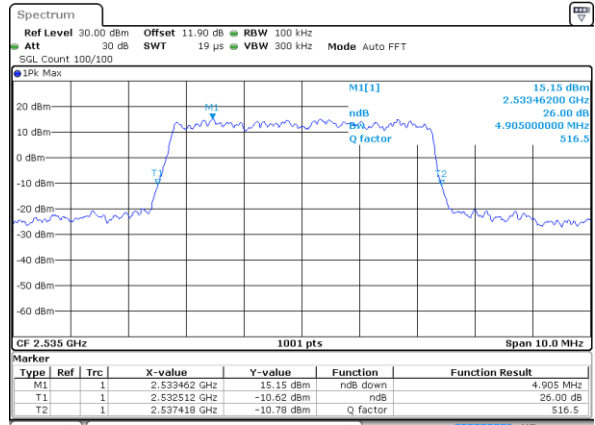
Date: 4 AUG 2017 10:39:53

Middle Channel / 5MHz / QPSK



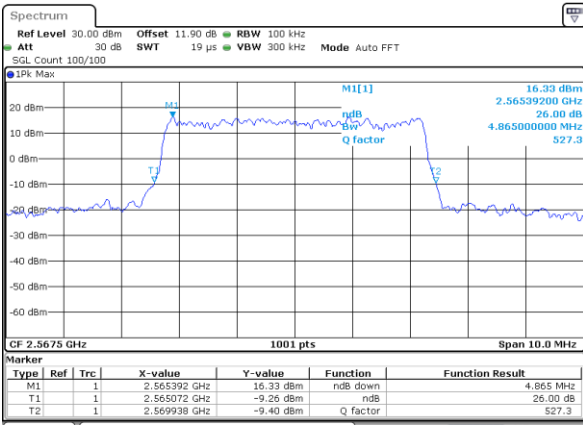
Date: 4 AUG 2017 10:46:46

Middle Channel / 5MHz / 16QAM



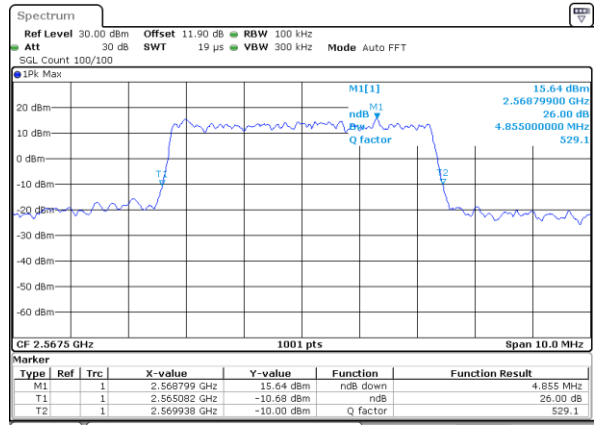
Date: 4 AUG 2017 10:46:56

Highest Channel / 5MHz / QPSK



Date: 4 AUG 2017 10:49:13

Highest Channel / 5MHz / 16QAM

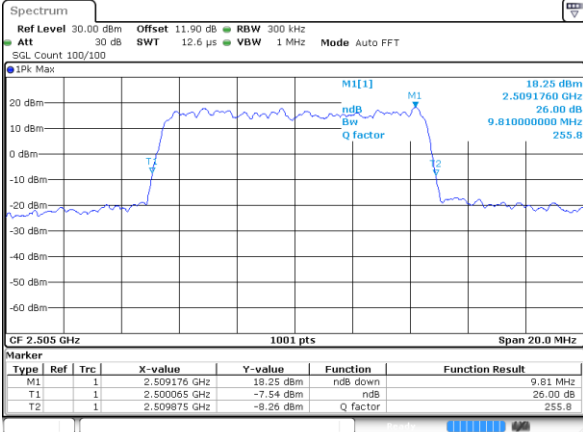


Date: 4 AUG 2017 10:49:23



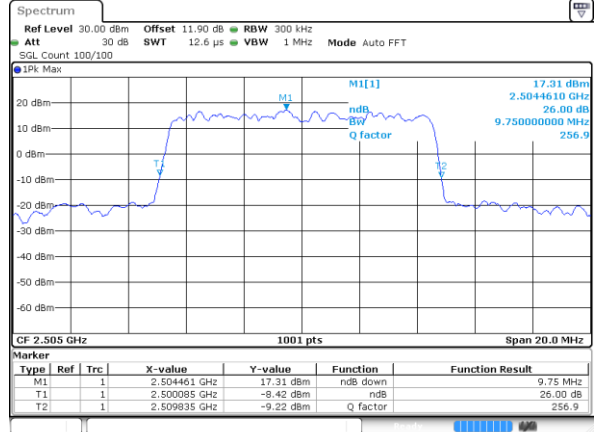
LTE Band 7

Lowest Channel / 10MHz / QPSK



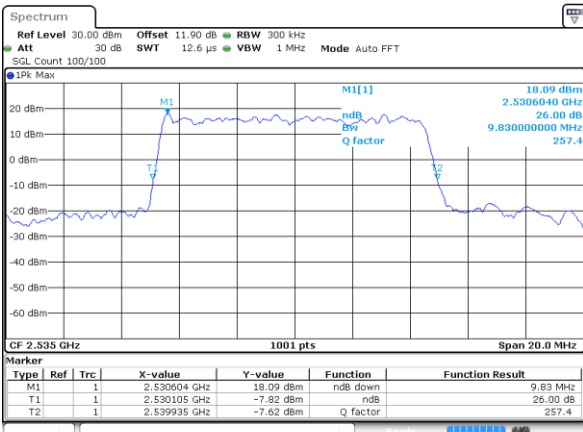
Date: 4 AUG 2017 10:56:17

Lowest Channel / 10MHz / 16QAM



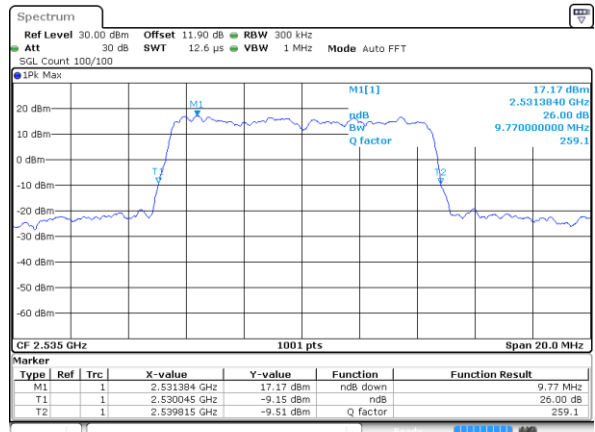
Date: 4 AUG 2017 10:56:27

Middle Channel / 10MHz / QPSK



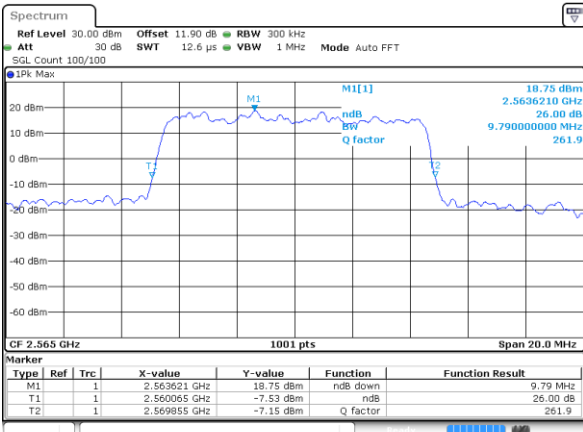
Date: 4 AUG 2017 11:03:20

Middle Channel / 10MHz / 16QAM



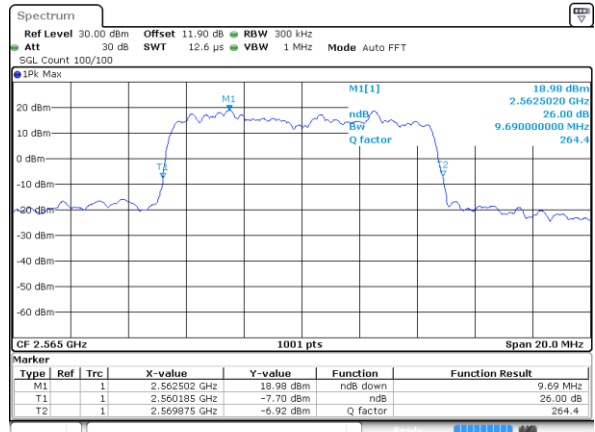
Date: 4 AUG 2017 11:03:30

Highest Channel / 10MHz / QPSK



Date: 4 AUG 2017 11:05:47

Highest Channel / 10MHz / 16QAM

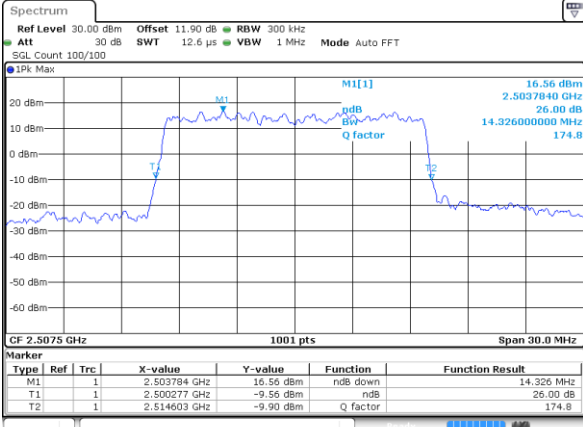


Date: 4 AUG 2017 11:05:57



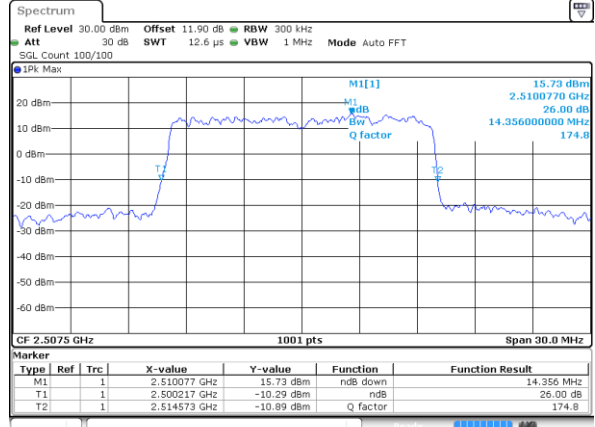
LTE Band 7

Lowest Channel / 15MHz / QPSK



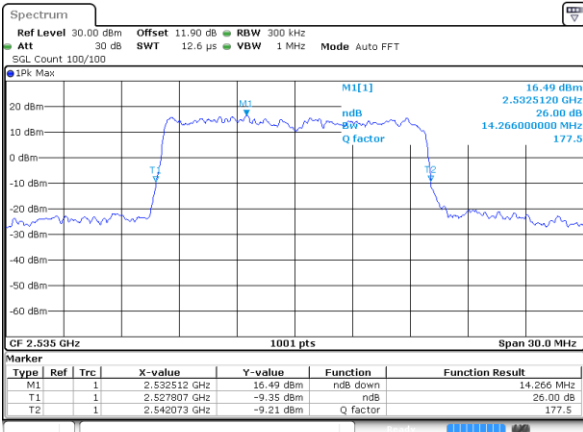
Date: 4 AUG 2017 11:12:50

Lowest Channel / 15MHz / 16QAM



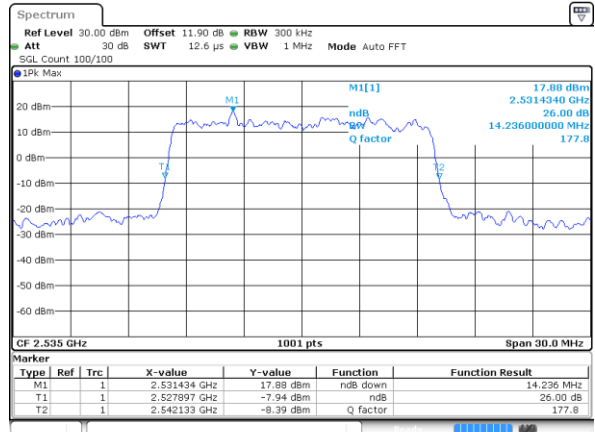
Date: 4 AUG 2017 11:13:00

Middle Channel / 15MHz / QPSK



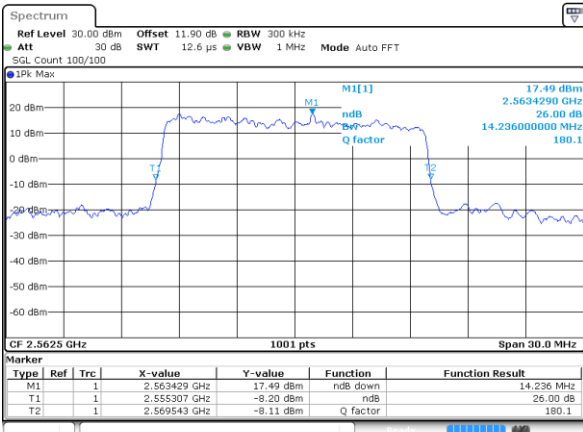
Date: 4 AUG 2017 11:19:54

Middle Channel / 15MHz / 16QAM



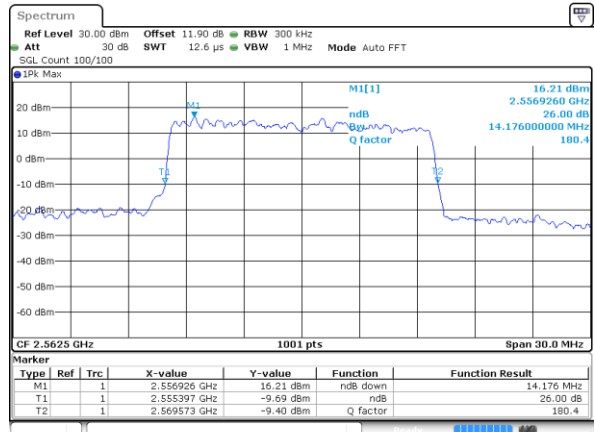
Date: 4 AUG 2017 11:20:04

Highest Channel / 15MHz / QPSK



Date: 4 AUG 2017 11:22:20

Highest Channel / 15MHz / 16QAM

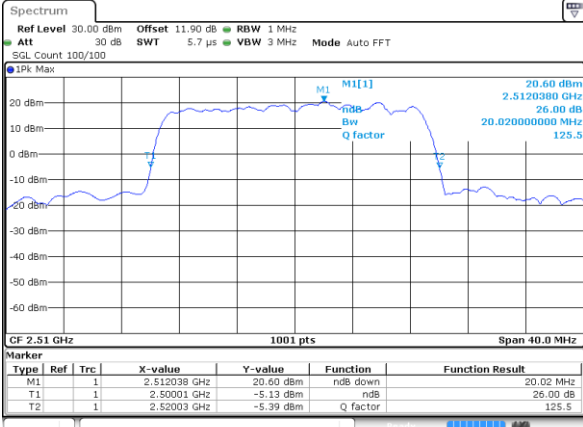


Date: 4 AUG 2017 11:22:30



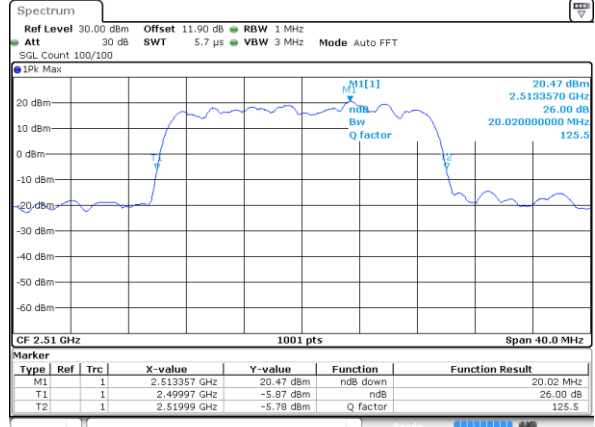
LTE Band 7

Lowest Channel / 20MHz / QPSK



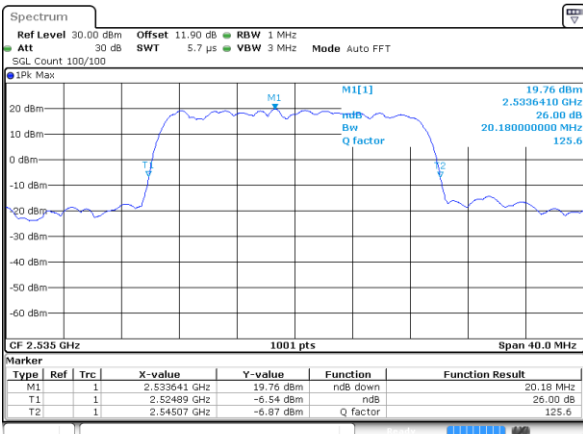
Date: 4 AUG 2017 11:31:38

Lowest Channel / 20MHz / 16QAM



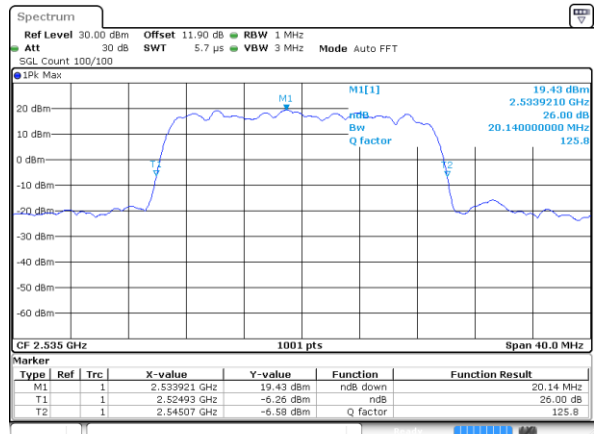
Date: 4 AUG 2017 11:31:48

Middle Channel / 20MHz / QPSK



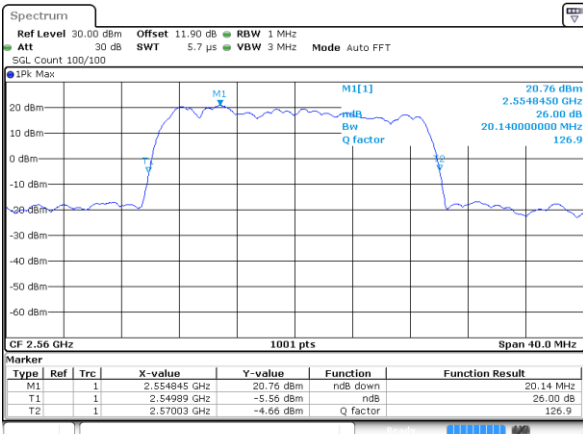
Date: 4 AUG 2017 11:38:42

Middle Channel / 20MHz / 16QAM



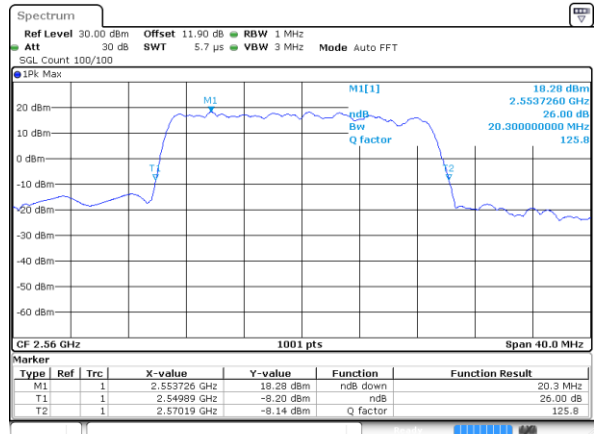
Date: 4 AUG 2017 11:38:52

Highest Channel / 20MHz / QPSK



Date: 4 AUG 2017 11:41:08

Highest Channel / 20MHz / 16QAM

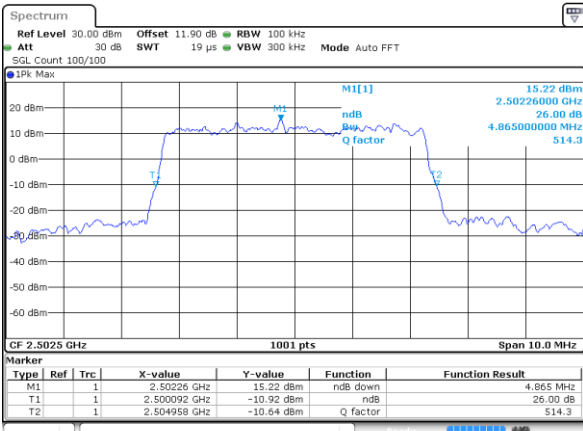


Date: 4 AUG 2017 11:41:18



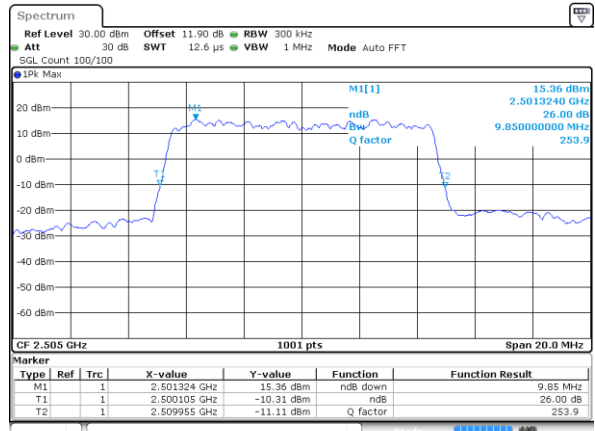
LTE Band 7

Lowest Channel / 5MHz / 64QAM



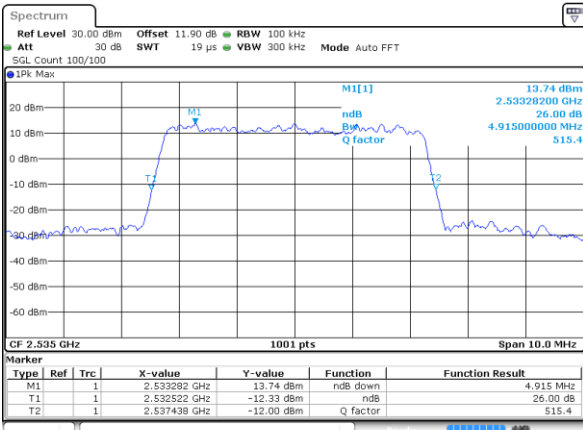
Date: 11.OCT.2017 13:22:45

Lowest Channel / 10MHz / 64QAM



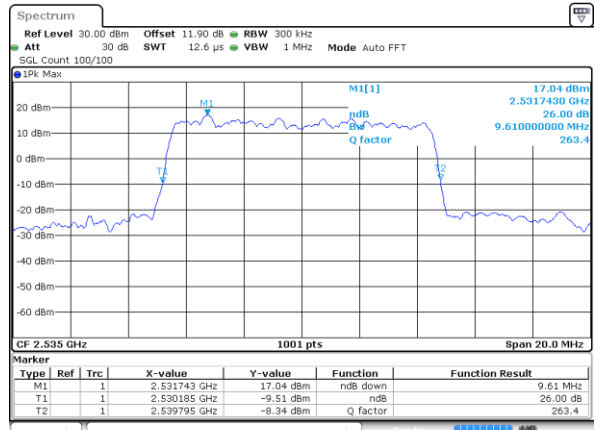
Date: 11.OCT.2017 13:31:02

Middle Channel / 5MHz / 64QAM



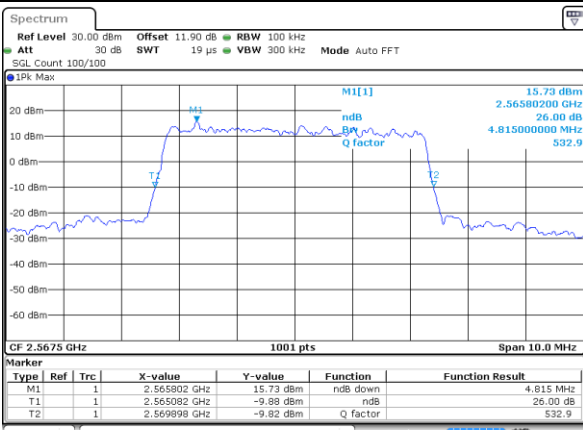
Date: 11.OCT.2017 13:26:17

Middle Channel / 10MHz / 64QAM



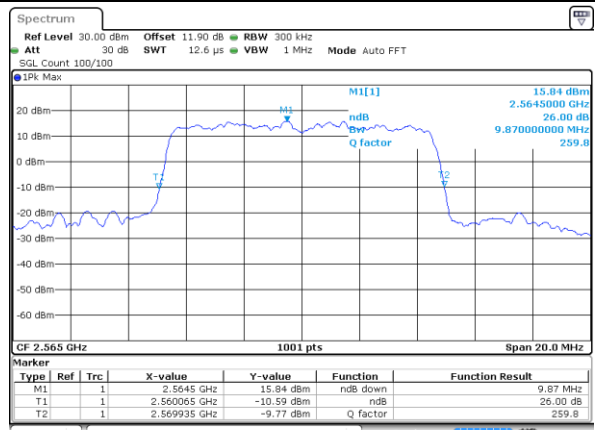
Date: 11.OCT.2017 13:34:33

Highest Channel / 5MHz / 64QAM



Date: 11.OCT.2017 13:27:30

Highest Channel / 10MHz / 64QAM

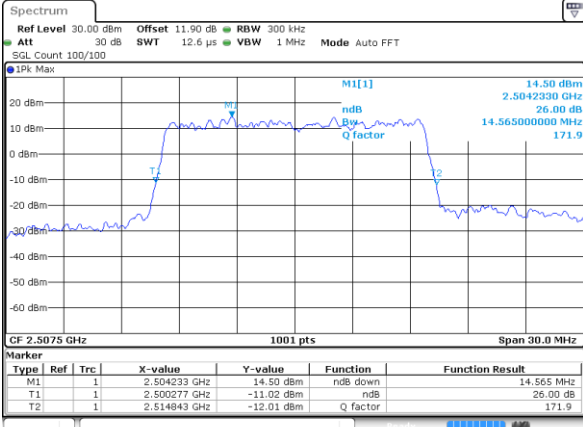


Date: 11.OCT.2017 13:35:47



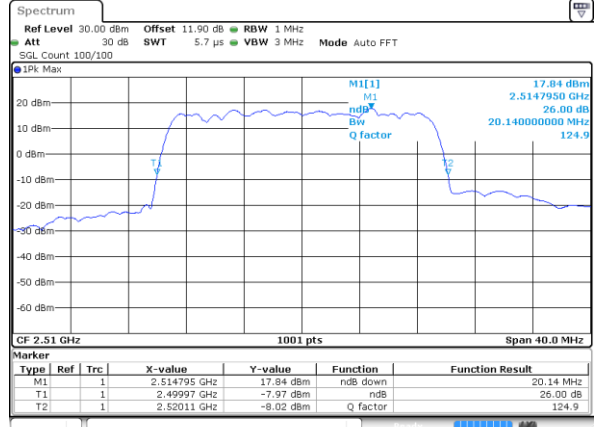
LTE Band 7

Lowest Channel / 15MHz / 64QAM



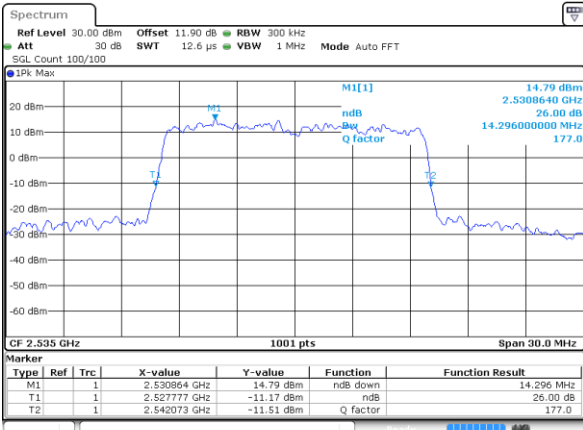
Date: 11.OCT.2017 13:39:19

Lowest Channel / 20MHz / 64QAM



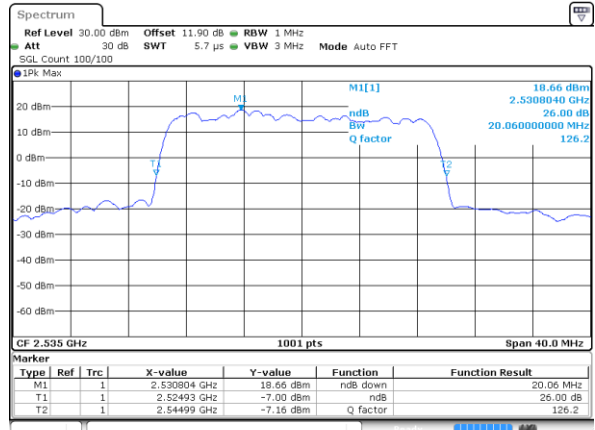
Date: 11.OCT.2017 13:47:35

Middle Channel / 15MHz / 64QAM



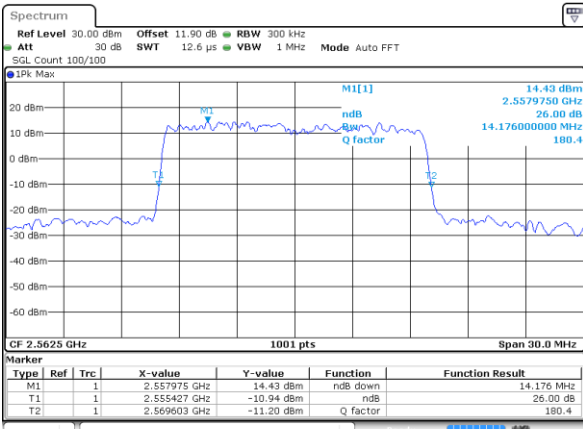
Date: 11.OCT.2017 13:42:50

Middle Channel / 20MHz / 64QAM



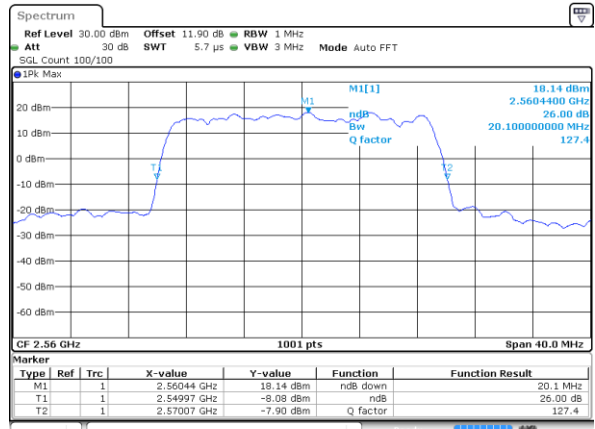
Date: 11.OCT.2017 13:51:07

Highest Channel / 15MHz / 64QAM



Date: 11.OCT.2017 13:44:03

Highest Channel / 20MHz / 64QAM



Date: 11.OCT.2017 13:52:20



**Occupied Bandwidth**

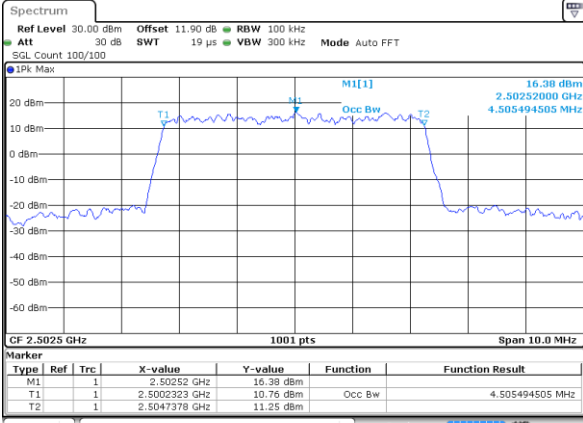
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.51	4.52	9.01	9.05	13.43	13.49	18.26	18.38
Middle CH	-	-	-	-	4.5	4.5	9.03	9.01	13.55	13.49	18.3	18.38
Highest CH	-	-	-	-	4.5	4.49	9.01	9.01	13.43	13.43	18.3	18.34
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.51	-	9.05	-	13.43	-	18.42	-
Middle CH	-	-	-	-	4.5	-	9.03	-	13.37	-	18.34	-
Highest CH	-	-	-	-	4.49	-	8.99	-	13.46	-	18.3	-





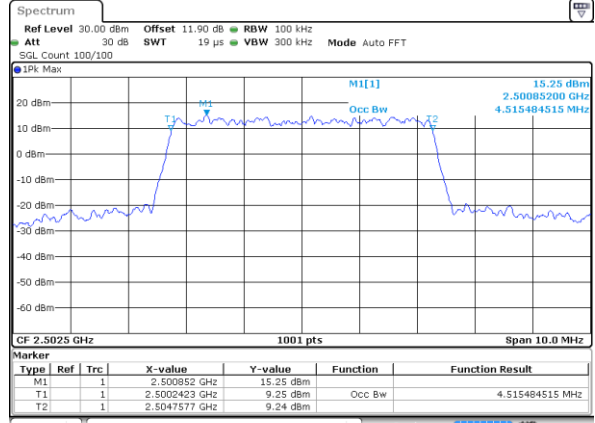
LTE Band 7

Lowest Channel / 5MHz / QPSK



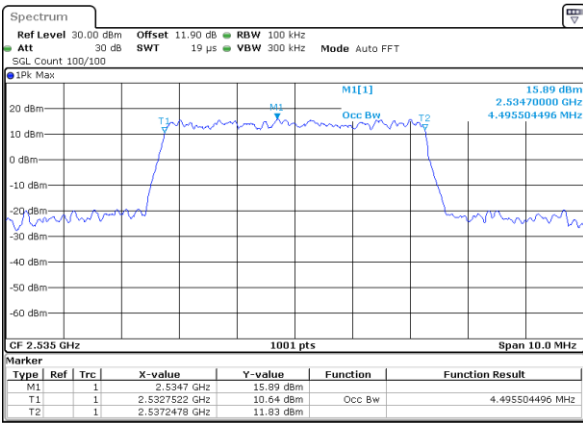
Date: 4 AUG 2017 10:39:22

Lowest Channel / 5MHz / 16QAM



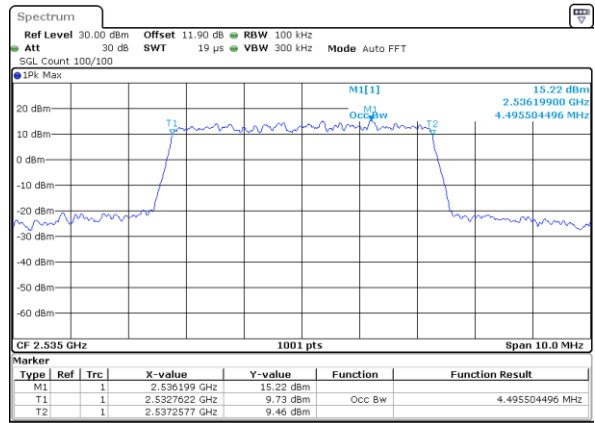
Date: 4 AUG 2017 10:39:33

Middle Channel / 5MHz / QPSK



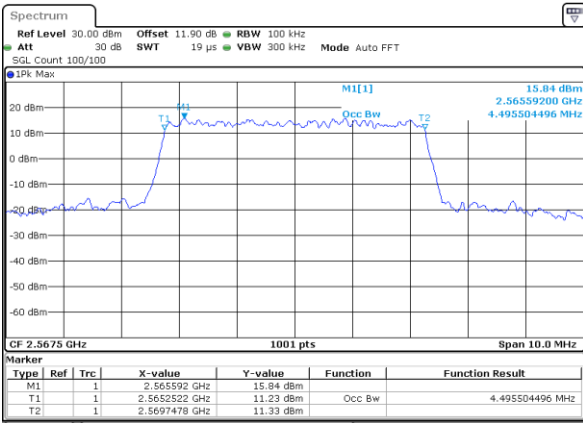
Date: 4 AUG 2017 10:46:26

Middle Channel / 5MHz / 16QAM



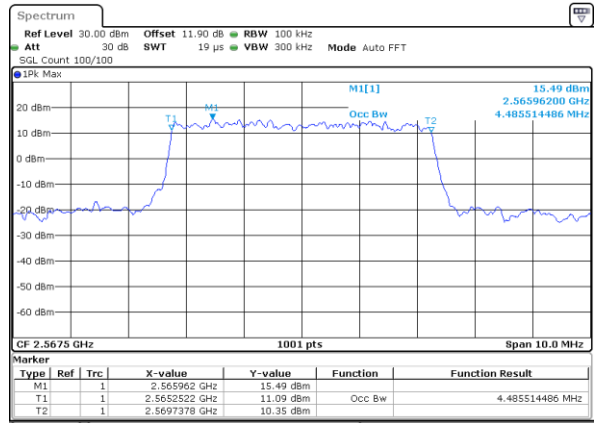
Date: 4 AUG 2017 10:46:36

Highest Channel / 5MHz / QPSK



Date: 4 AUG 2017 10:48:53

Highest Channel / 5MHz / 16QAM

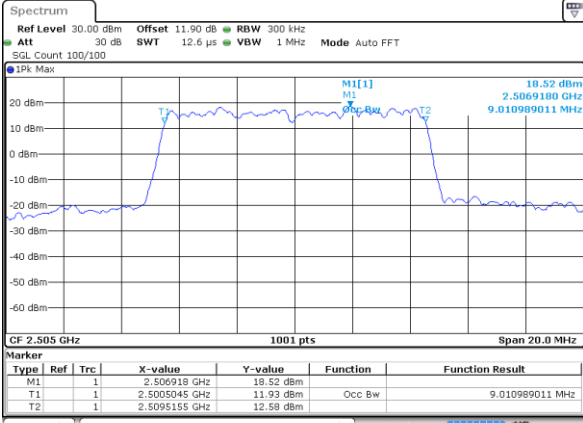


Date: 4 AUG 2017 10:49:03



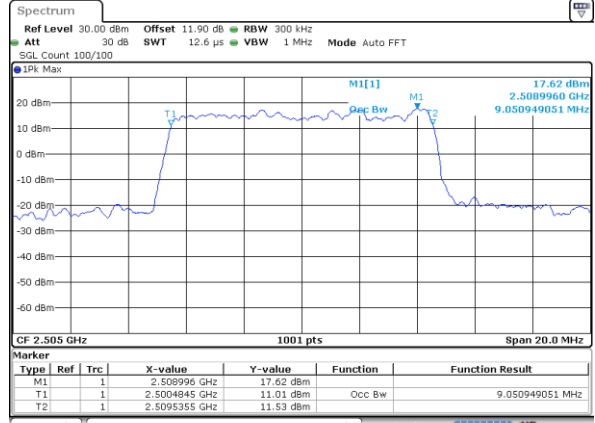
LTE Band 7

Lowest Channel / 10MHz / QPSK



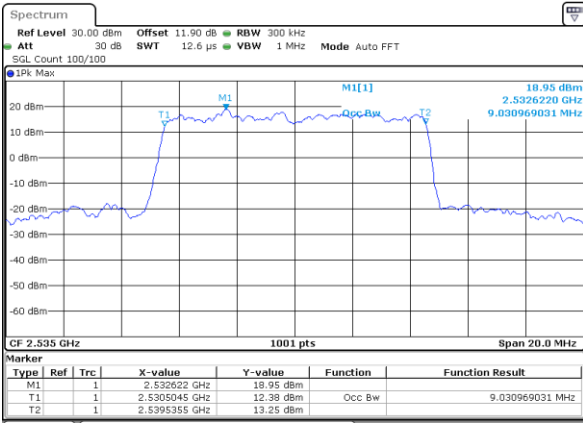
Date: 4 AUG 2017 10:55:57

Lowest Channel / 10MHz / 16QAM



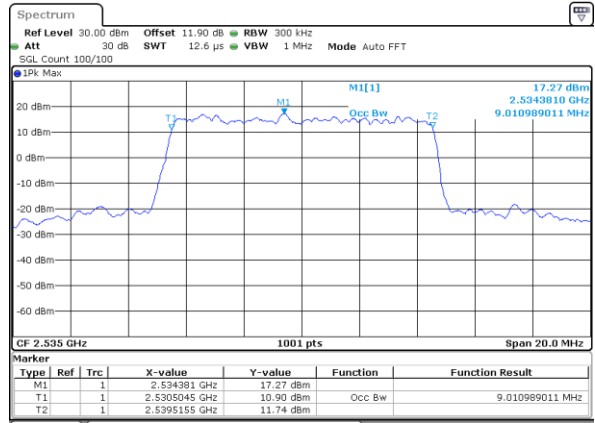
Date: 4 AUG 2017 10:56:07

Middle Channel / 10MHz / QPSK



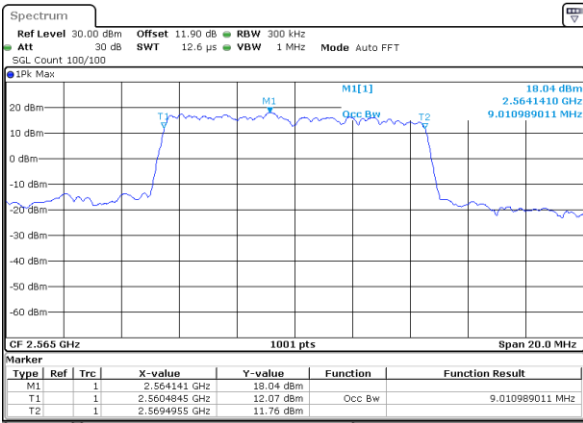
Date: 4 AUG 2017 11:03:00

Middle Channel / 10MHz / 16QAM



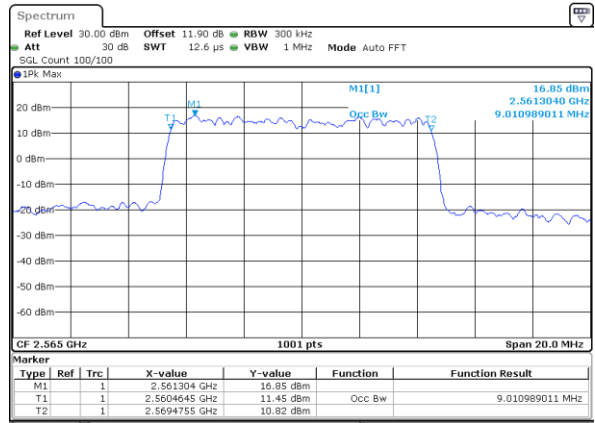
Date: 4 AUG 2017 11:03:10

Highest Channel / 10MHz / QPSK



Date: 4 AUG 2017 11:05:27

Highest Channel / 10MHz / 16QAM

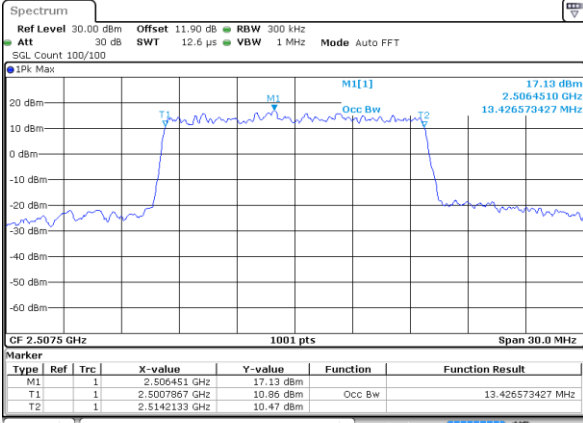


Date: 4 AUG 2017 11:05:37



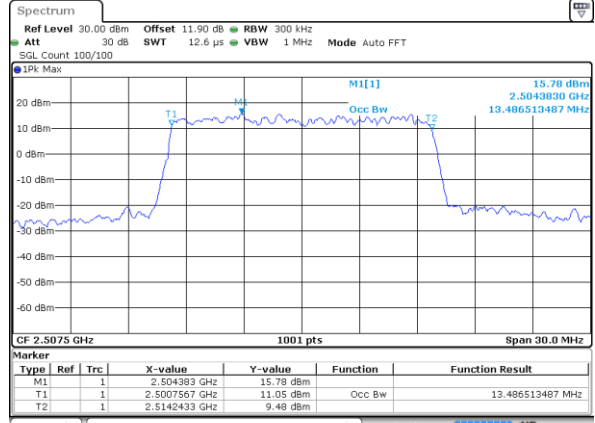
LTE Band 7

Lowest Channel / 15MHz / QPSK



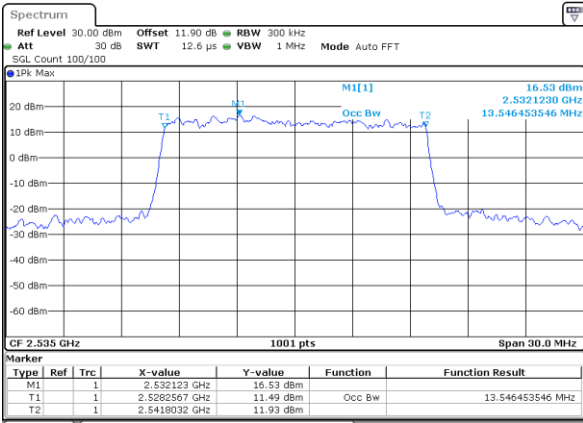
Date: 4 AUG 2017 11:12:30

Lowest Channel / 15MHz / 16QAM



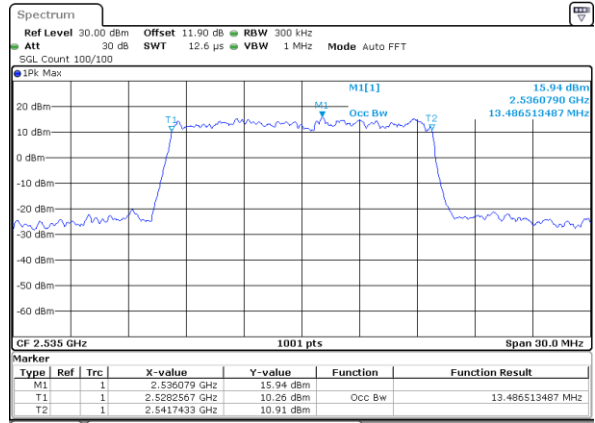
Date: 4 AUG 2017 11:12:40

Middle Channel / 15MHz / QPSK



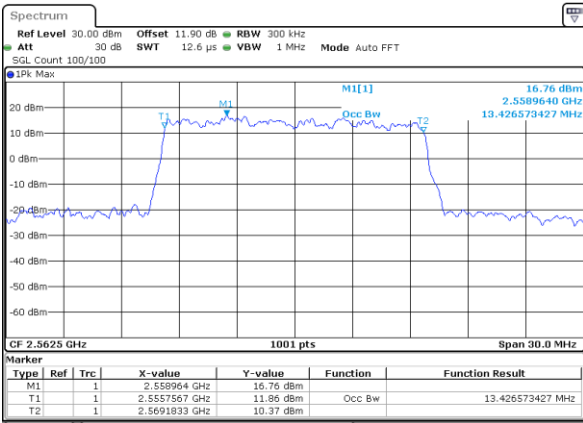
Date: 4 AUG 2017 11:19:34

Middle Channel / 15MHz / 16QAM



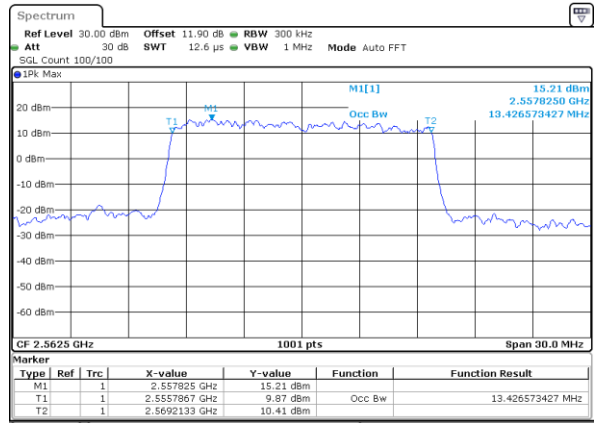
Date: 4 AUG 2017 11:19:44

Highest Channel / 15MHz / QPSK



Date: 4 AUG 2017 11:22:00

Highest Channel / 15MHz / 16QAM

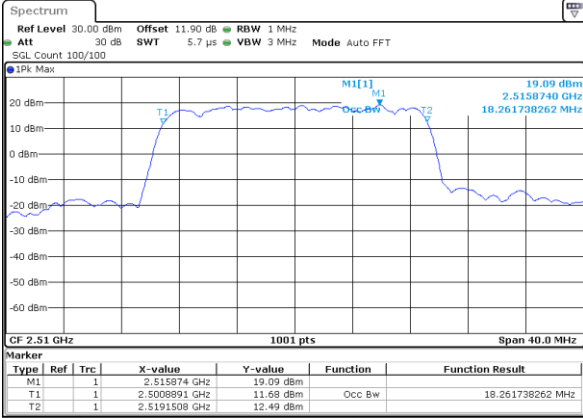


Date: 4 AUG 2017 11:22:10



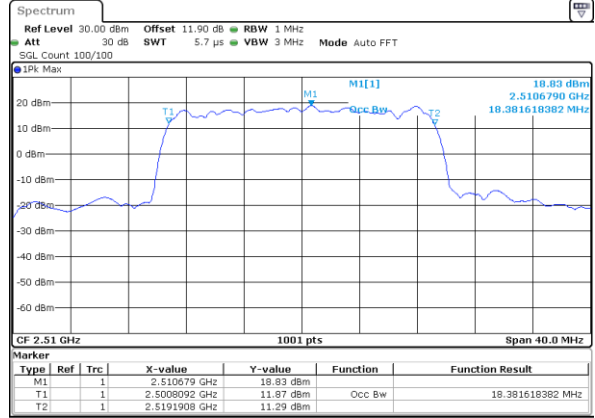
LTE Band 7

Lowest Channel / 20MHz / QPSK



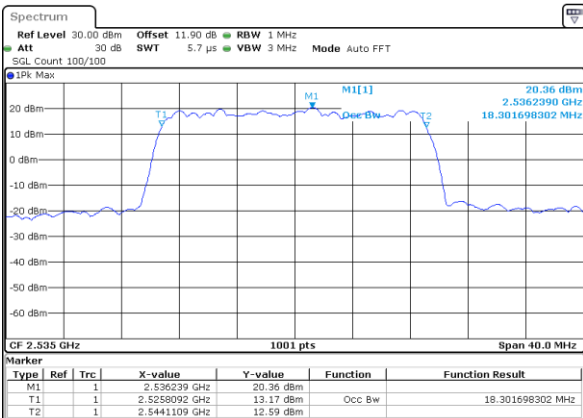
Date: 4 AUG 2017 11:31:18

Lowest Channel / 20MHz / 16QAM



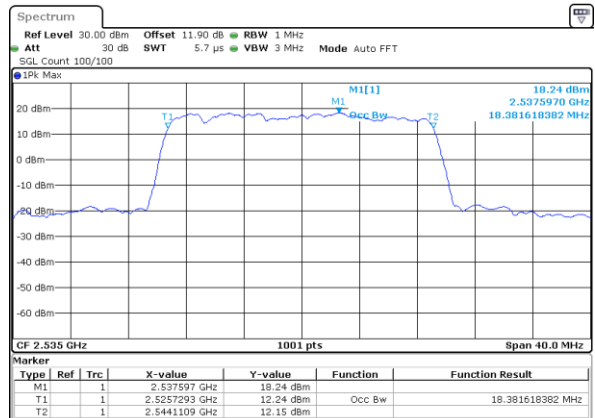
Date: 4 AUG 2017 11:31:28

Middle Channel / 20MHz / QPSK



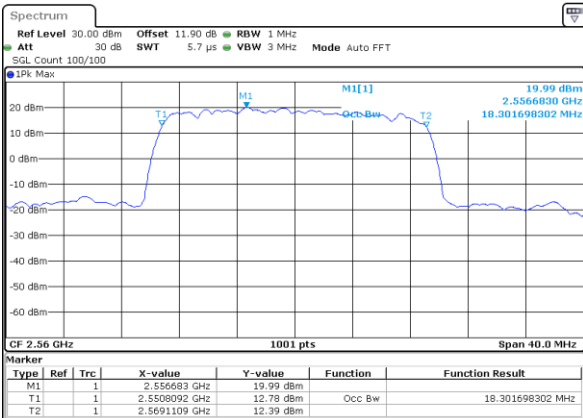
Date: 4 AUG 2017 11:38:22

Middle Channel / 20MHz / 16QAM



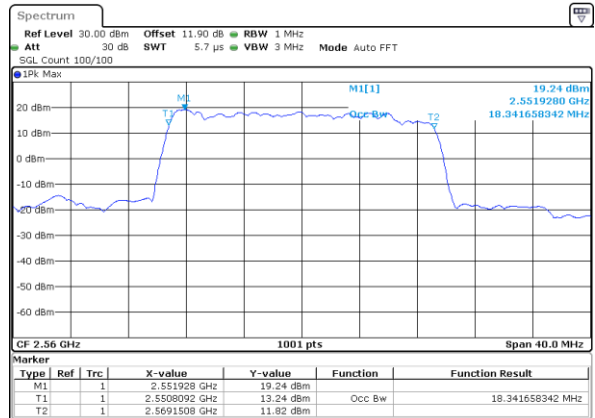
Date: 4 AUG 2017 11:38:32

Highest Channel / 20MHz / QPSK



Date: 4 AUG 2017 11:40:48

Highest Channel / 20MHz / 16QAM

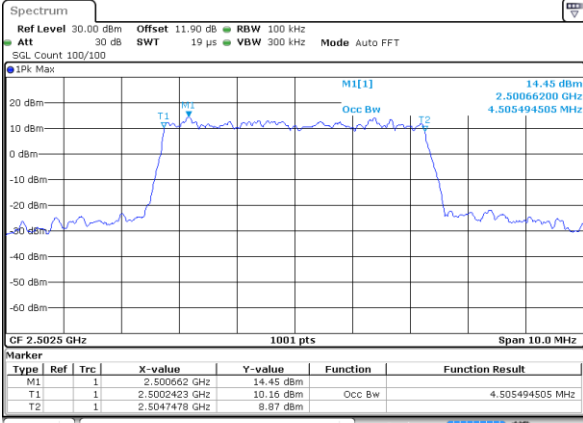


Date: 4 AUG 2017 11:40:58



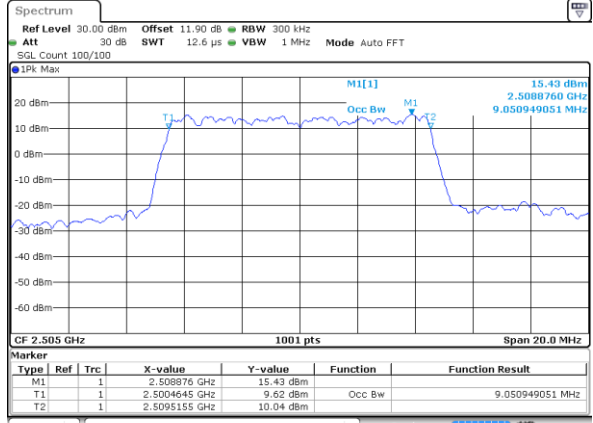
LTE Band 7

Lowest Channel / 5MHz / 64QAM



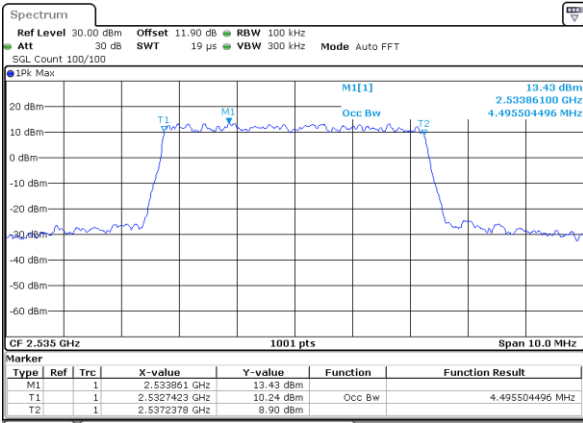
Date: 11.OCT.2017 13:22:35

Lowest Channel / 10MHz / 64QAM



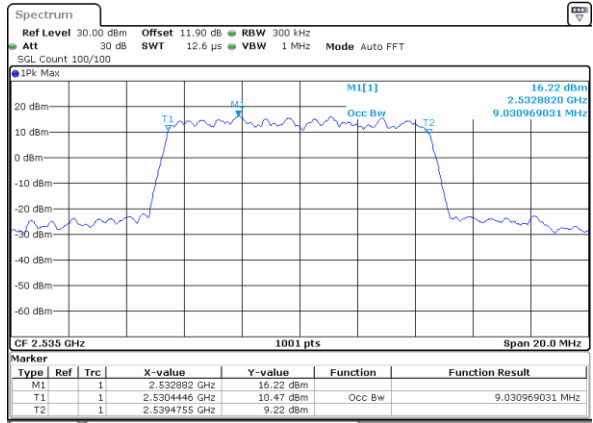
Date: 11.OCT.2017 13:30:52

Middle Channel / 5MHz / 64QAM



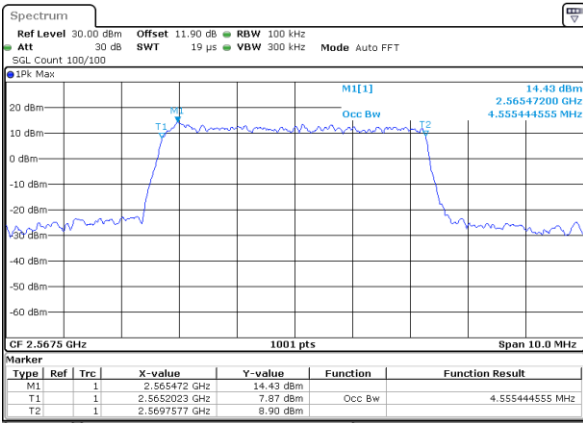
Date: 11.OCT.2017 13:26:07

Middle Channel / 10MHz / 64QAM



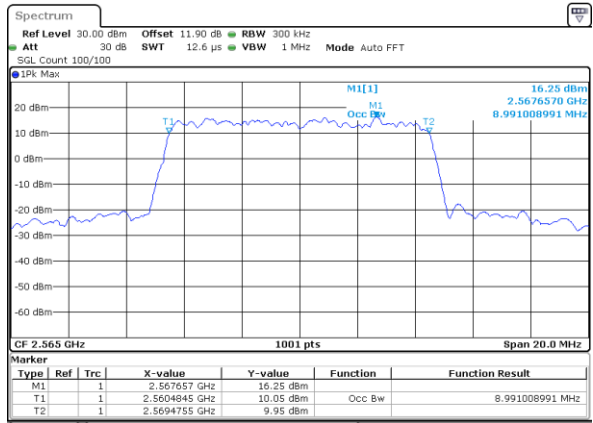
Date: 11.OCT.2017 13:34:23

Highest Channel / 5MHz / 64QAM



Date: 11.OCT.2017 13:27:20

Highest Channel / 10MHz / 64QAM

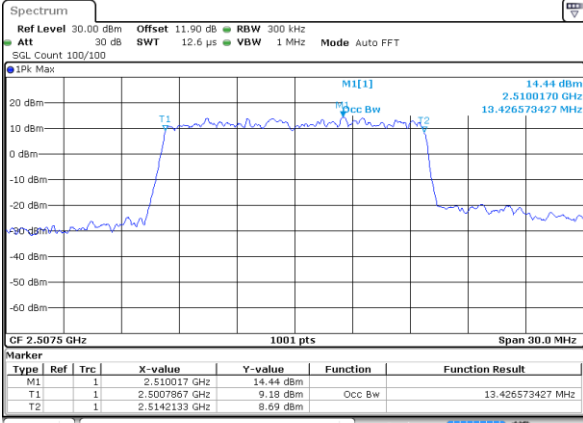


Date: 11.OCT.2017 13:35:37



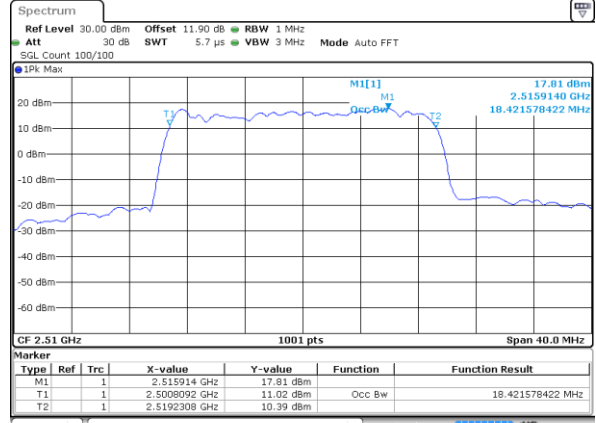
LTE Band 7

Lowest Channel / 15MHz / 64QAM



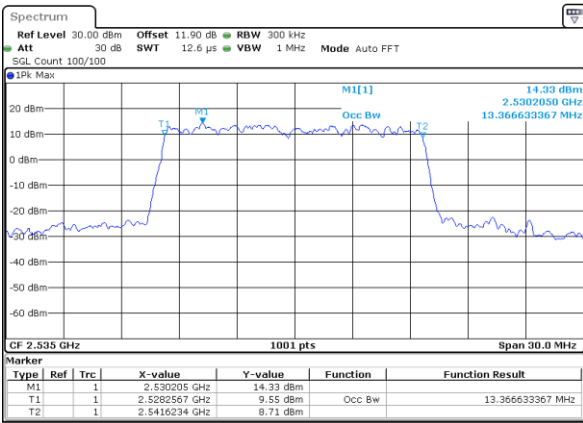
Date: 11.OCT.2017 13:39:09

Lowest Channel / 20MHz / 64QAM



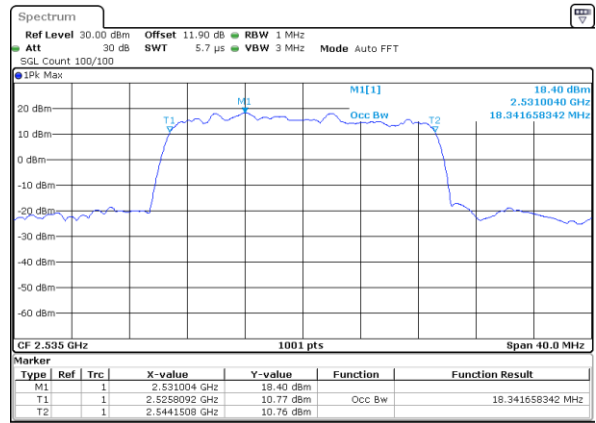
Date: 11.OCT.2017 13:47:25

Middle Channel / 15MHz / 64QAM



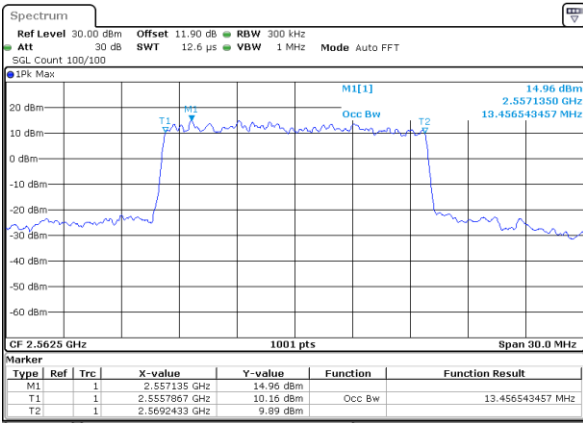
Date: 11.OCT.2017 13:42:40

Middle Channel / 20MHz / 64QAM



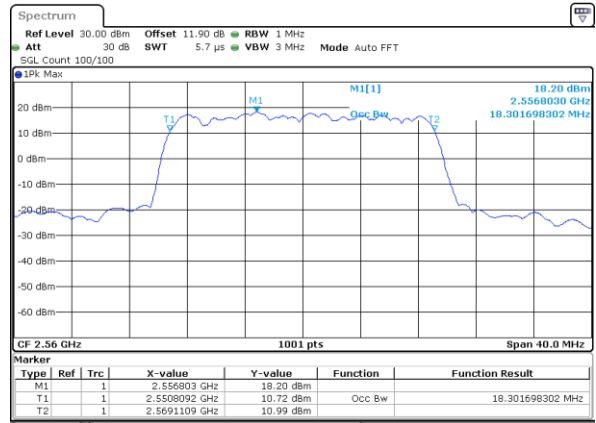
Date: 11.OCT.2017 13:50:57

Highest Channel / 15MHz / 64QAM



Date: 11.OCT.2017 13:43:53

Highest Channel / 20MHz / 64QAM



Date: 11.OCT.2017 13:52:10

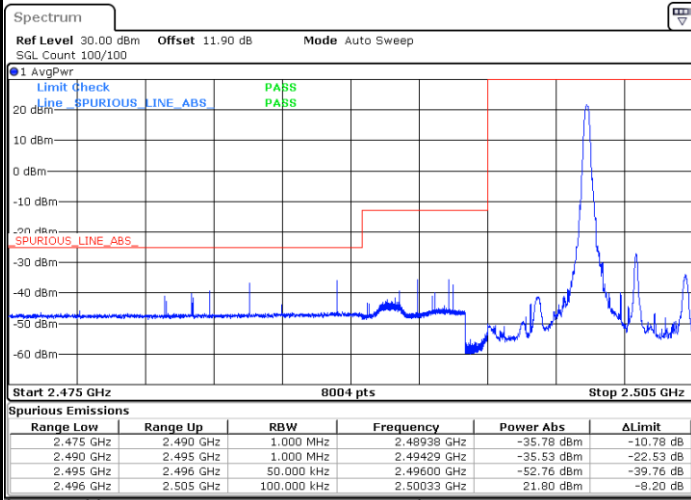


**Conducted Band Edge**



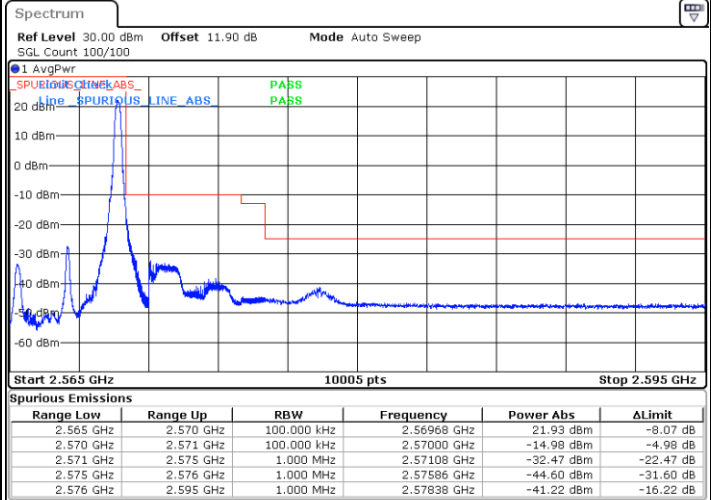
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



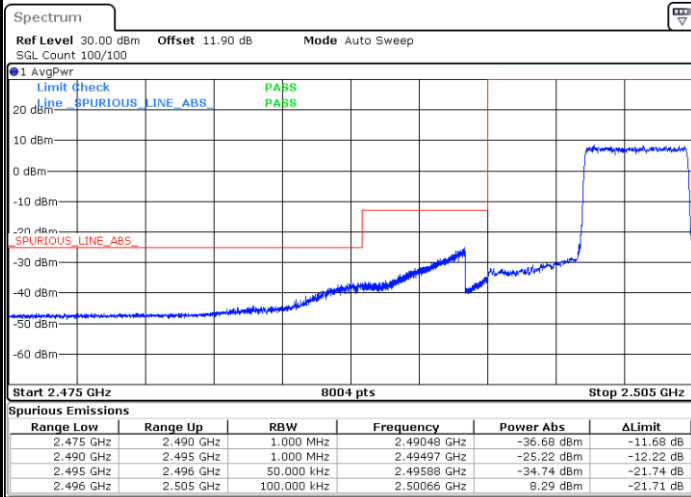
Date: 4 AUG 2017 10:41:01

Highest Band Edge / 1 RB



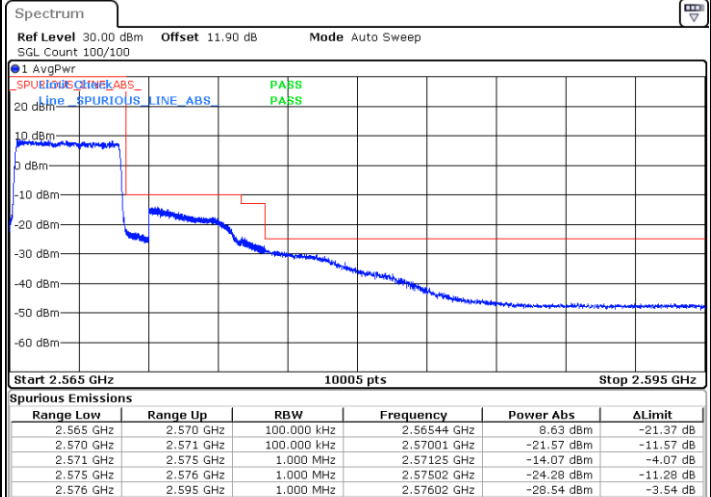
Date: 4 AUG 2017 10:50:32

Lowest Band Edge / Full RB



Date: 4 AUG 2017 10:43:20

Highest Band Edge / Full RB



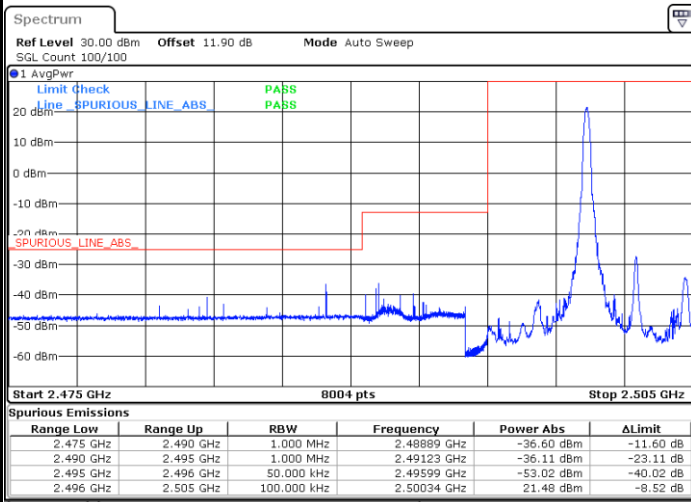
Date: 4 AUG 2017 10:52:50





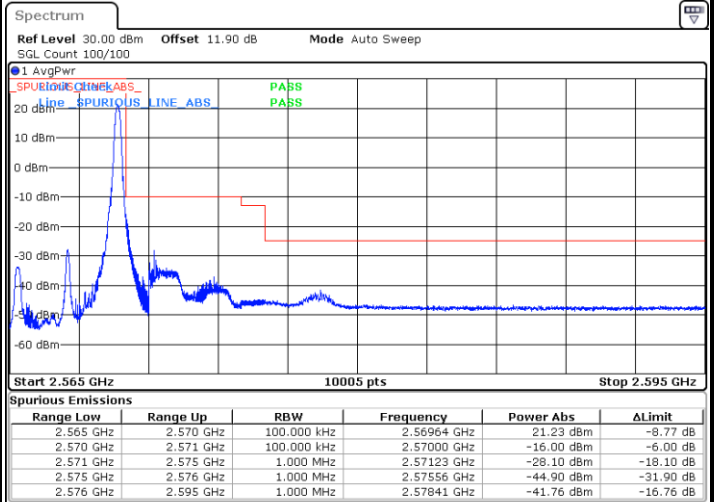
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



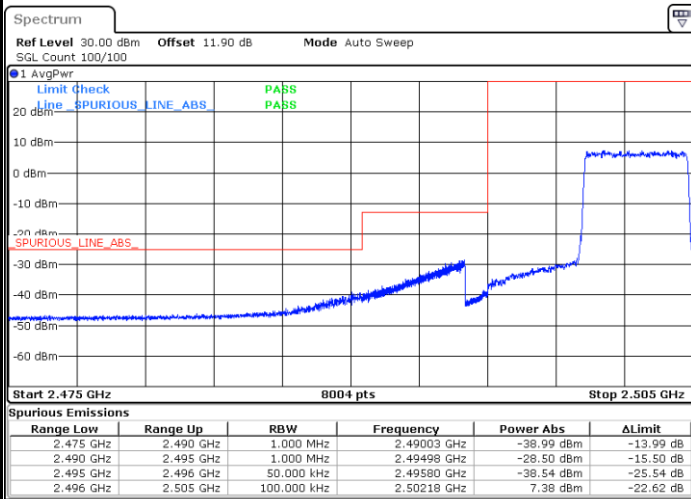
Date: 4 AUG 2017 10:42:11

Highest Band Edge / 1 RB



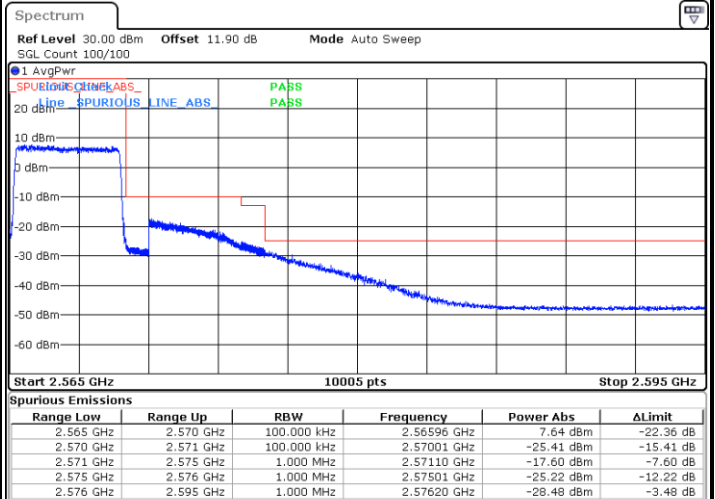
Date: 4 AUG 2017 10:51:41

Lowest Band Edge / Full RB



Date: 4 AUG 2017 10:44:29

Highest Band Edge / Full RB



Date: 4 AUG 2017 10:54:00



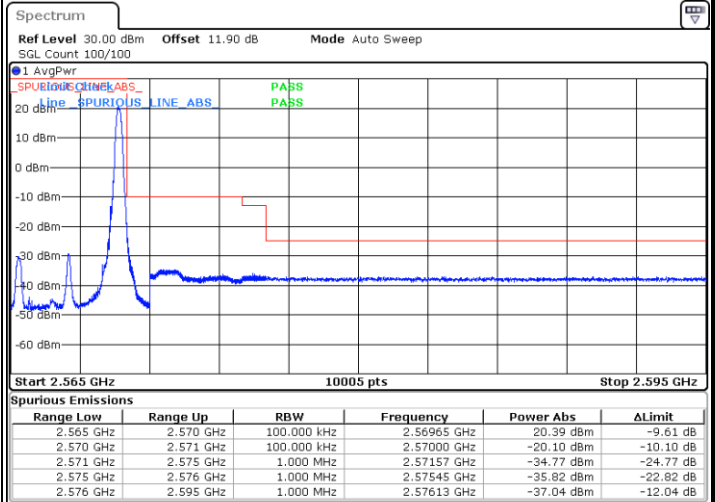
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



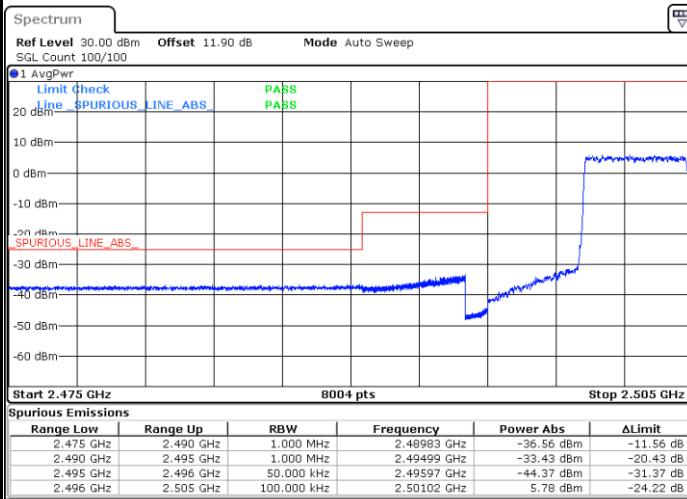
Date: 11.OCT.2017 13:23:54

Highest Band Edge / 1 RB



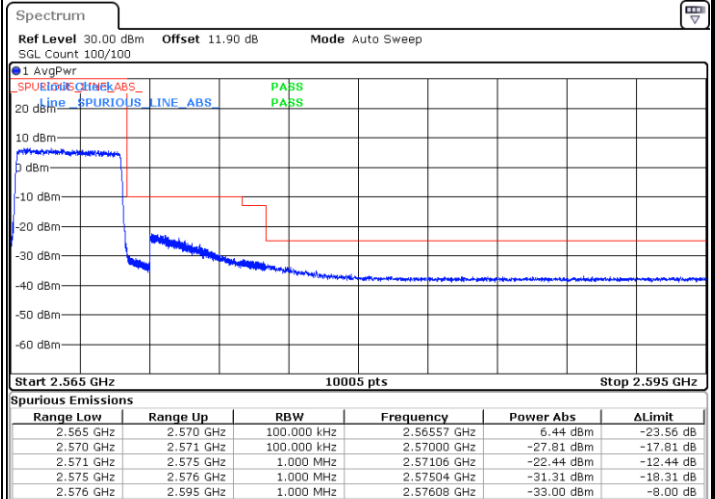
Date: 11.OCT.2017 13:28:39

Lowest Band Edge / Full RB



Date: 11.OCT.2017 13:25:03

Highest Band Edge / Full RB

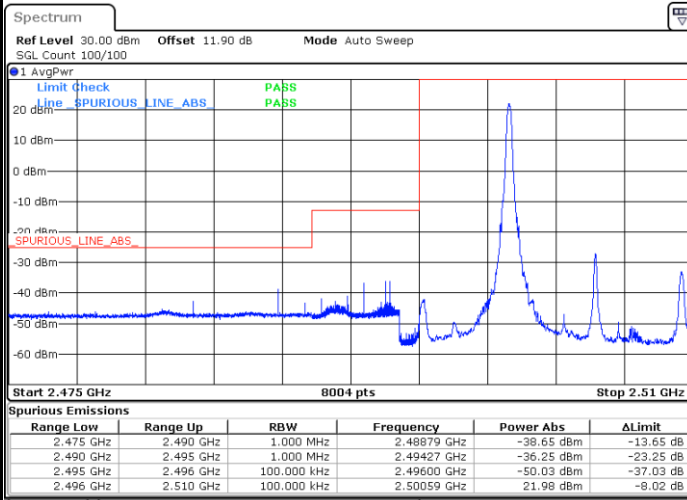


Date: 11.OCT.2017 13:29:48



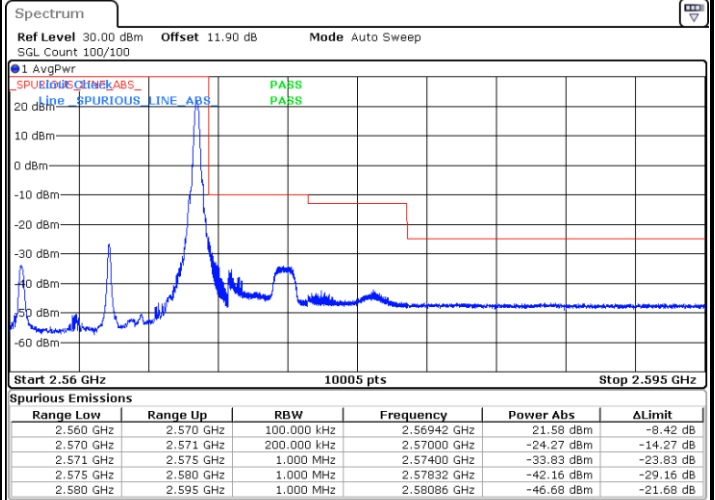
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



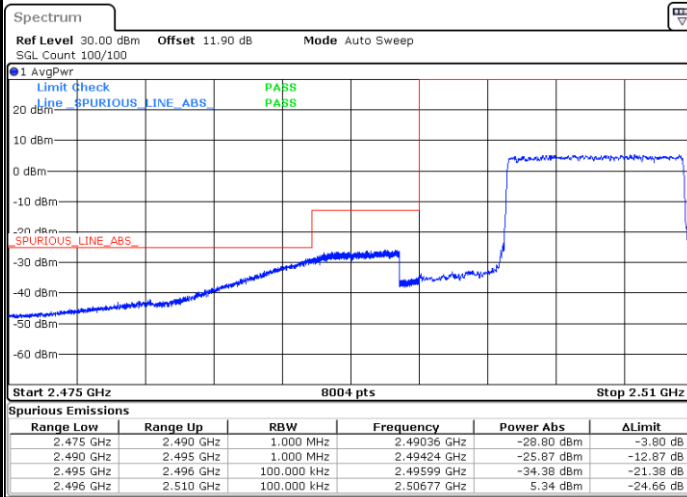
Date: 4 AUG 2017 10:57:35

Highest Band Edge / 1 RB



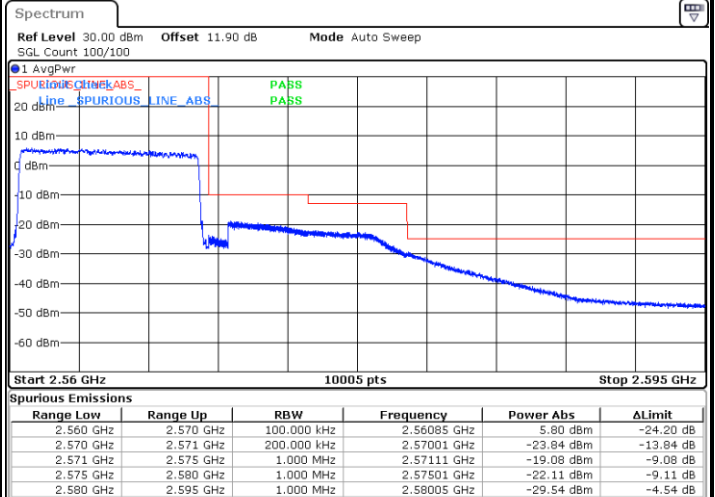
Date: 4 AUG 2017 11:07:06

Lowest Band Edge / Full RB



Date: 4 AUG 2017 10:59:54

Highest Band Edge / Full RB

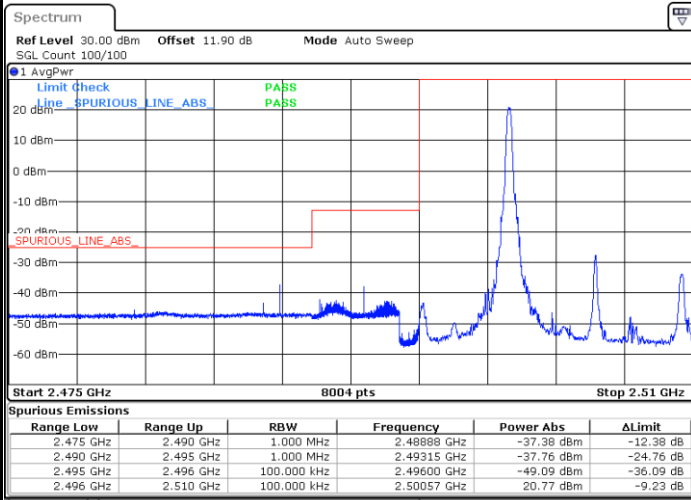


Date: 4 AUG 2017 11:09:24



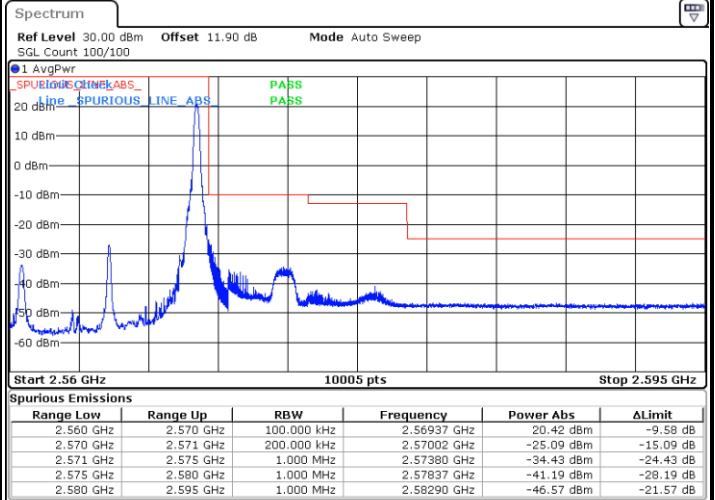
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



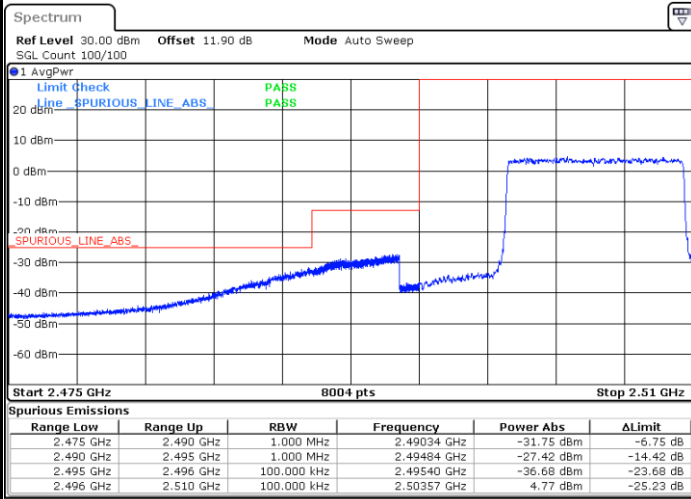
Date: 4 AUG 2017 10:58:45

Highest Band Edge / 1 RB



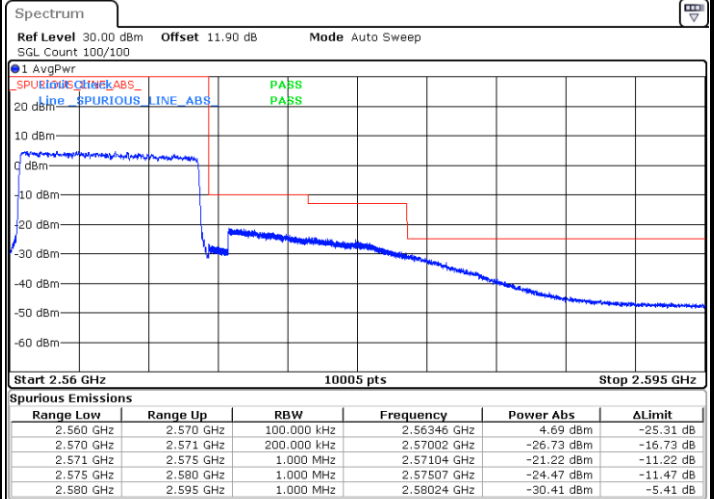
Date: 4 AUG 2017 11:08:15

Lowest Band Edge / Full RB



Date: 4 AUG 2017 11:01:03

Highest Band Edge / Full RB



Date: 4 AUG 2017 11:10:33