



Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0030	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage/Maximum Voltage =4.0 V ; Battery End Point (BEP) =3.7 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 5

## Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.59	4.61	5.33	5.80	<b>PASS</b>
Middle CH	3.54	4.46	4.99	5.77	
Highest CH	3.59	4.64	5.01	6.00	
Mode	LTE Band 5 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.64	6.46	-	-	<b>PASS</b>
Middle CH	6.29	6.41	-	-	
Highest CH	6.55	6.55	-	-	



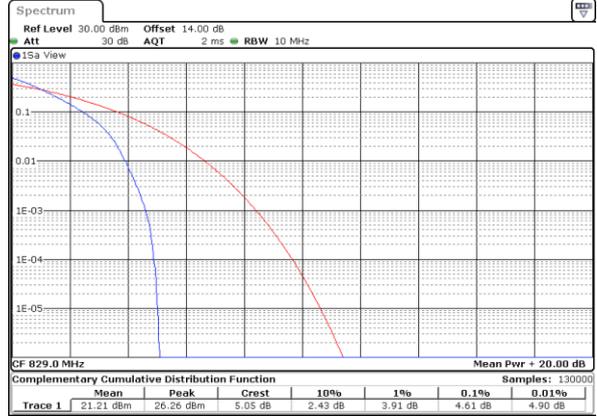
LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 9,SEP,2020 22:49:19

Lowest Channel / Full RB



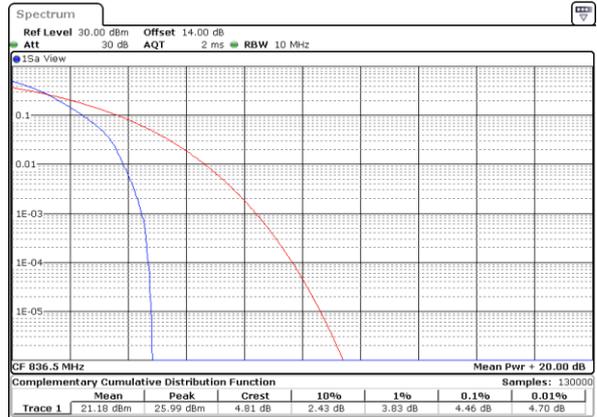
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Middle Channel / 1RB



Date: 9,SEP,2020 22:49:00

Middle Channel / Full RB



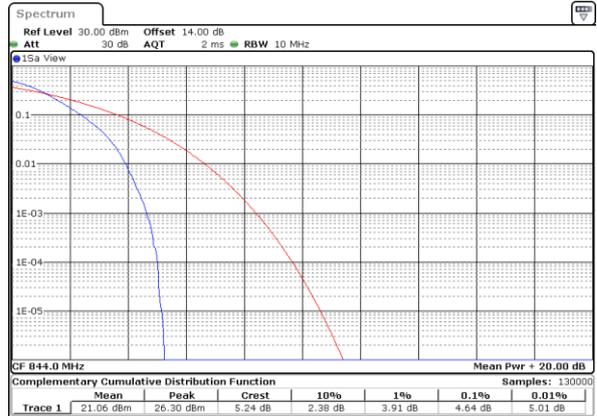
Date: 9,SEP,2020 22:47:36

Highest Channel / 1RB



Date: 9,SEP,2020 22:52:36

Highest Channel / Full RB



Date: 9,SEP,2020 22:51:30



LTE Band 5 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 9,SEP,2020 22:49:40

Lowest Channel / Full RB



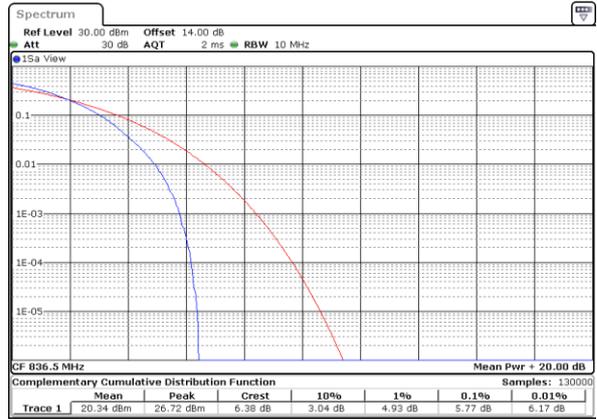
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Middle Channel / 1RB



Date: 9,SEP,2020 22:48:48

Middle Channel / Full RB



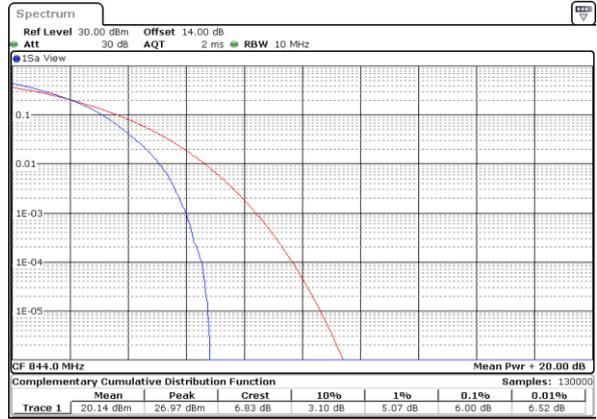
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Highest Channel / 1RB



Date: 9,SEP,2020 22:52:24

Highest Channel / Full RB

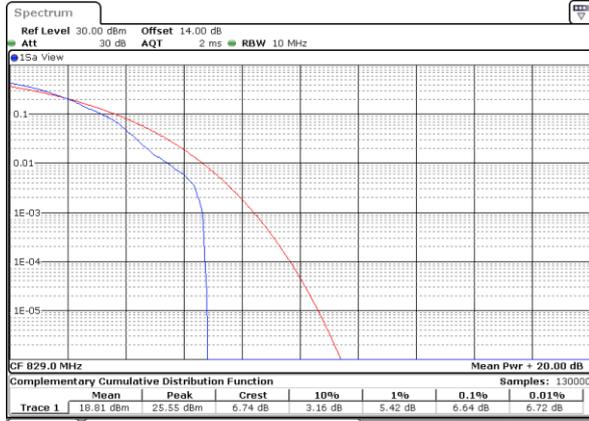


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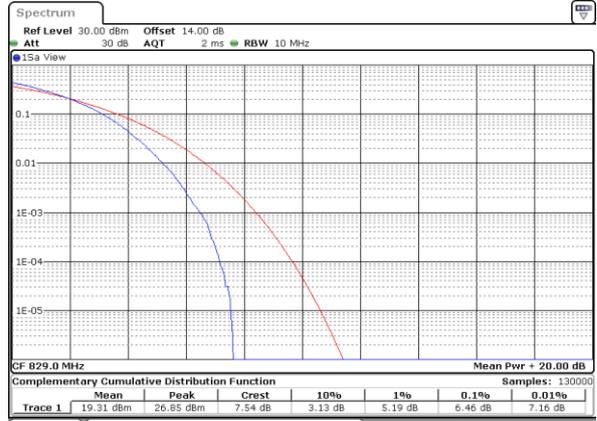
LTE Band 5 / 10MHz / 64QAM

Lowest Channel / 1RB



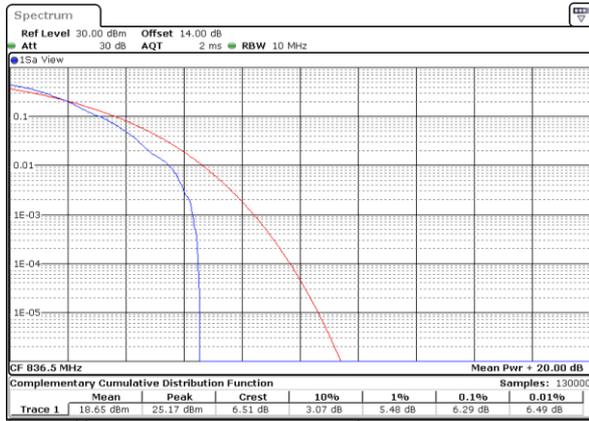
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Lowest Channel / Full RB



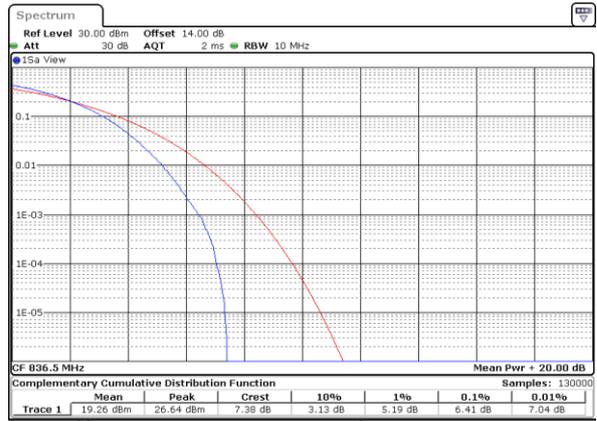
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Middle Channel / 1RB



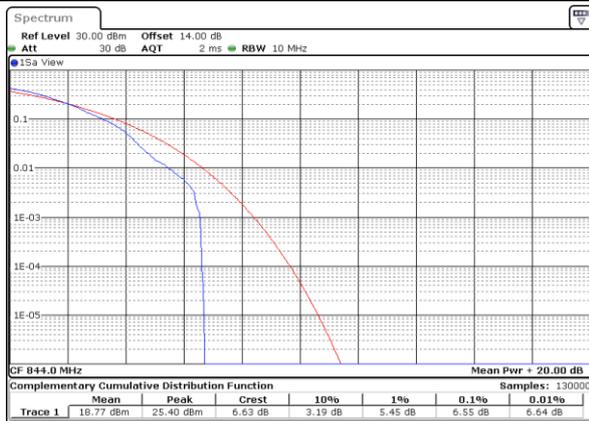
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Middle Channel / Full RB



Date: 9,SEP,2020 22:48:09

Highest Channel / 1RB



Date: 9,SEP,2020 22:52:11

Highest Channel / Full RB



Date: 9,SEP,2020 22:51:55



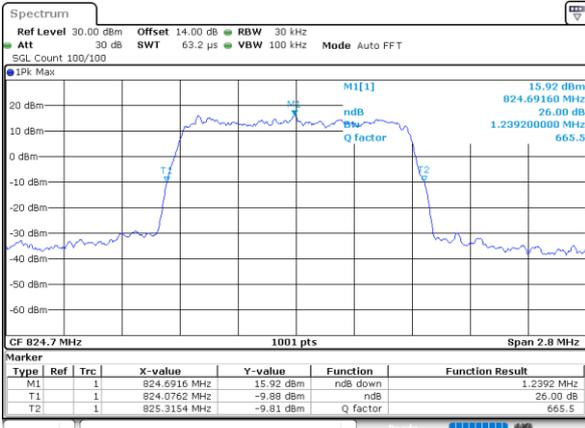
26dB Bandwidth

Mode	LTE Band 5 : 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	1.24	1.22	3.03	3.00	4.97	4.87	9.79	9.77	-	-	-	-
Middle CH	1.23	1.22	3.01	3.02	4.97	4.95	9.71	9.75	-	-	-	-
Highest CH	1.23	1.21	3.03	3.02	4.90	4.91	9.87	9.81	-	-	-	-
Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.21	-	3.05	-	4.93	-	9.73	-	-	-	-	-
Middle CH	1.22	-	3.02	-	4.83	-	9.61	-	-	-	-	-
Highest CH	1.23	-	3.02	-	4.93	-	9.71	-	-	-	-	-



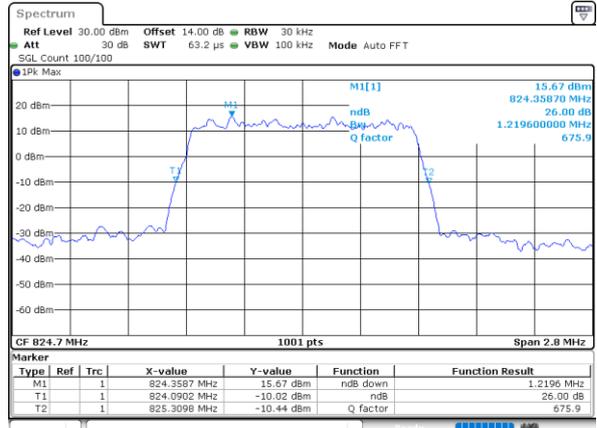
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



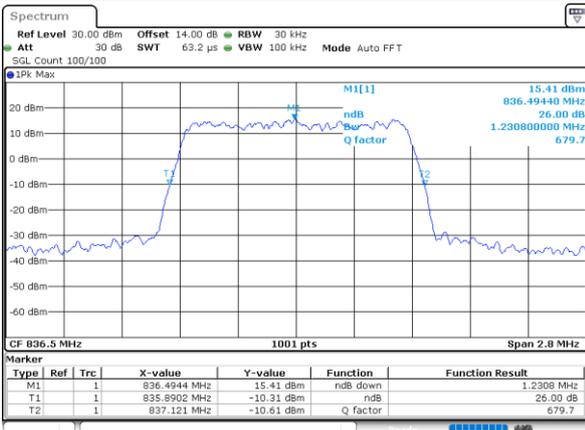
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Lowest Channel / 1.4MHz / 16QAM



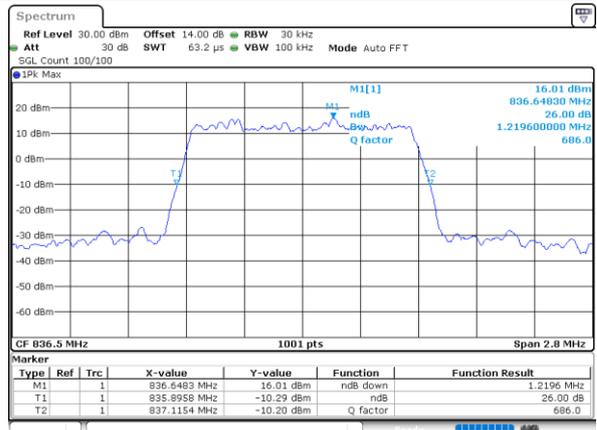
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Middle Channel / 1.4MHz / QPSK



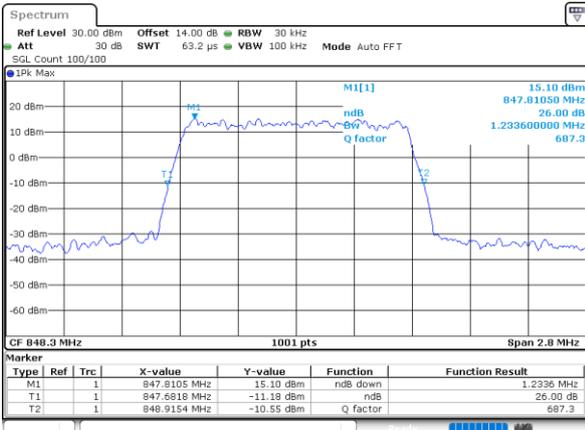
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Middle Channel / 1.4MHz / 16QAM



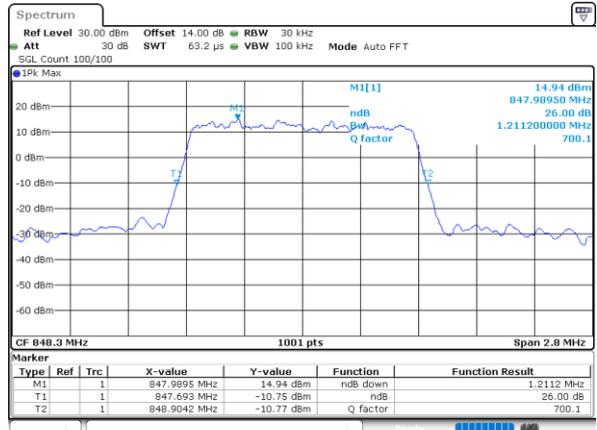
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Highest Channel / 1.4MHz / QPSK



Date: 9,SEP,2020 22:37:40

Highest Channel / 1.4MHz / 16QAM

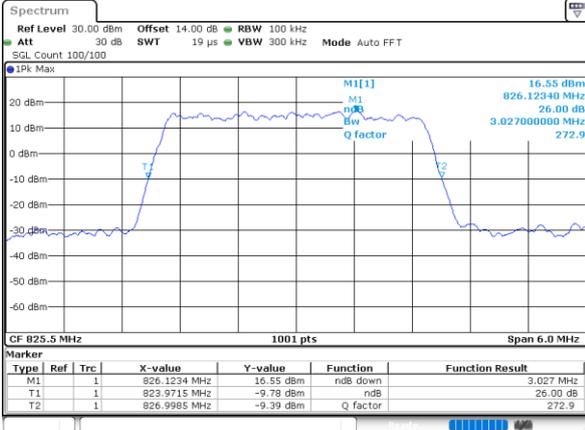


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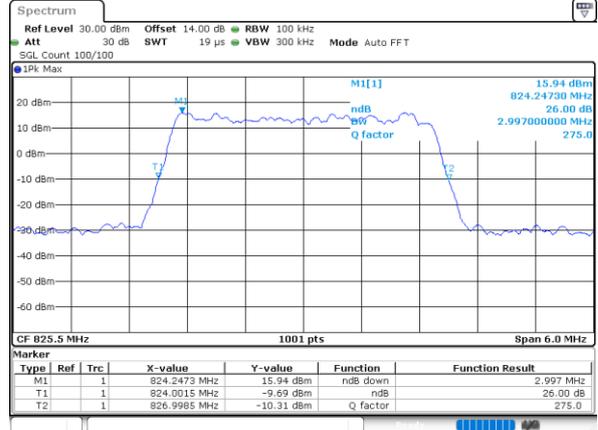
LTE Band 5

Lowest Channel / 3MHz / QPSK



Date: 9,SEP,2020 21:13:24

Lowest Channel / 3MHz / 16QAM



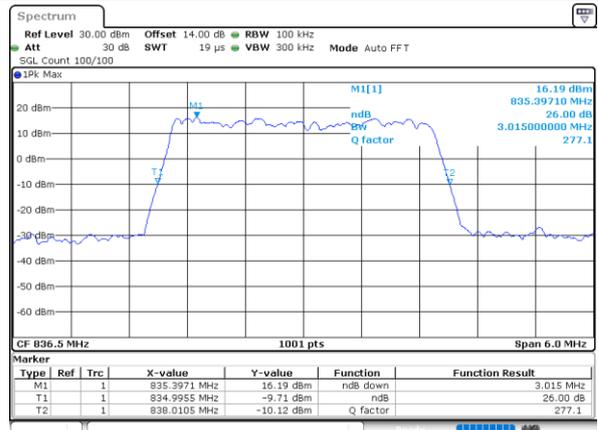
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Middle Channel / 3MHz / QPSK



Date: 9,SEP,2020 20:38:19

Middle Channel / 3MHz / 16QAM



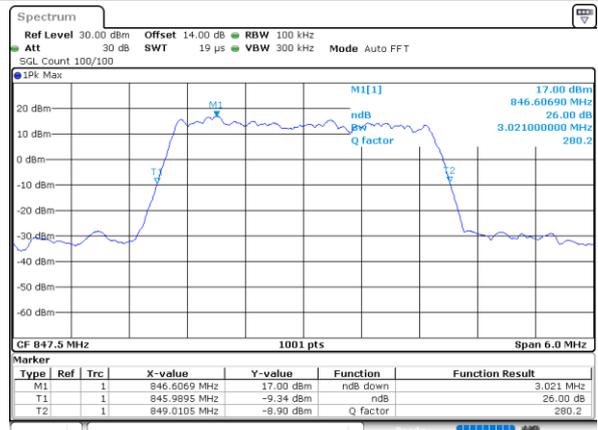
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Highest Channel / 3MHz / QPSK



Date: 9,SEP,2020 21:53:27

Highest Channel / 3MHz / 16QAM

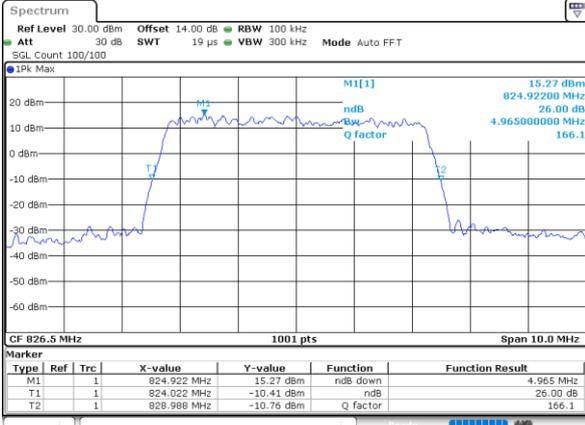


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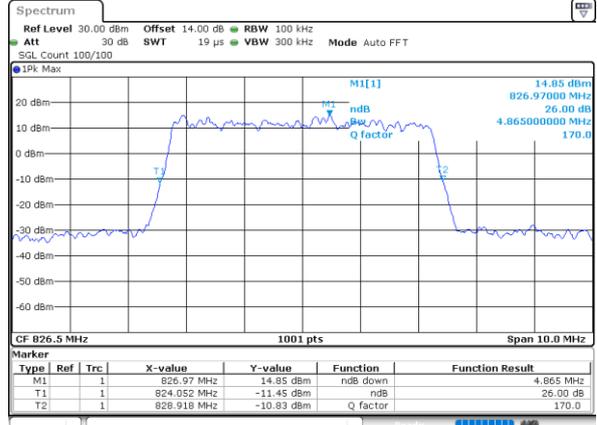
LTE Band 5

Lowest Channel / 5MHz / QPSK



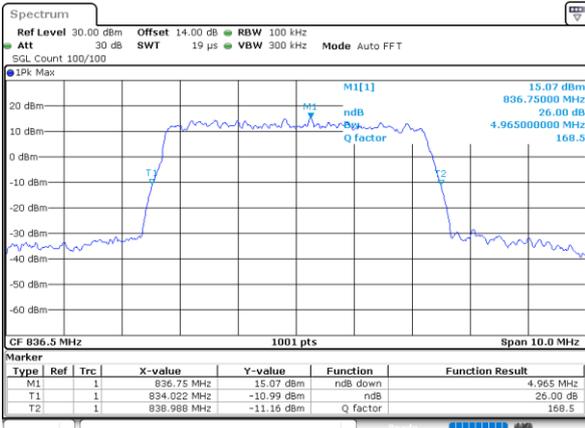
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Lowest Channel / 5MHz / 16QAM



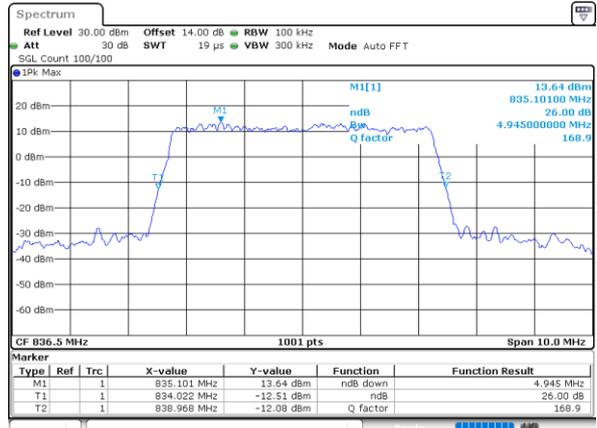
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Middle Channel / 5MHz / QPSK



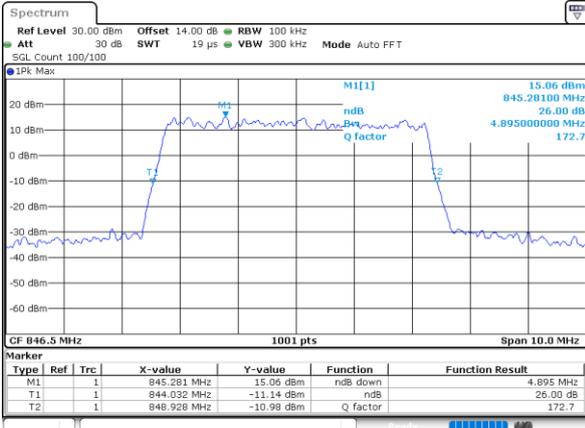
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Middle Channel / 5MHz / 16QAM



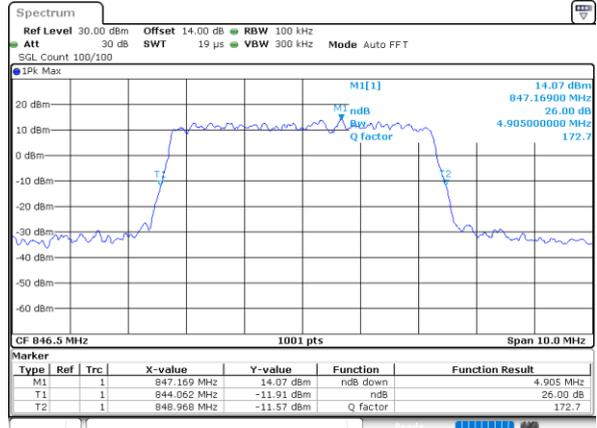
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Highest Channel / 5MHz / QPSK



Date: 9,SEP,2020 20:29:41

Highest Channel / 5MHz / 16QAM

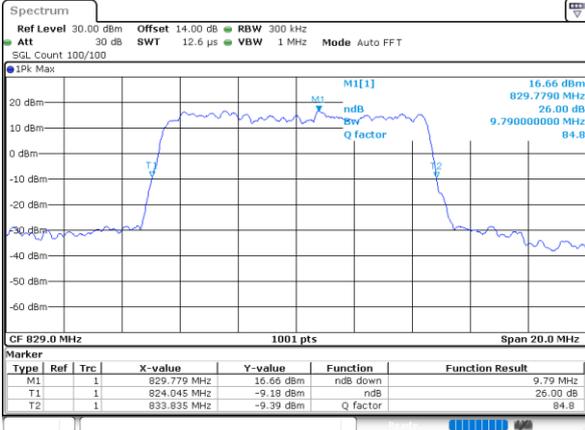


Date: 9,SEP,2020 20:28:27



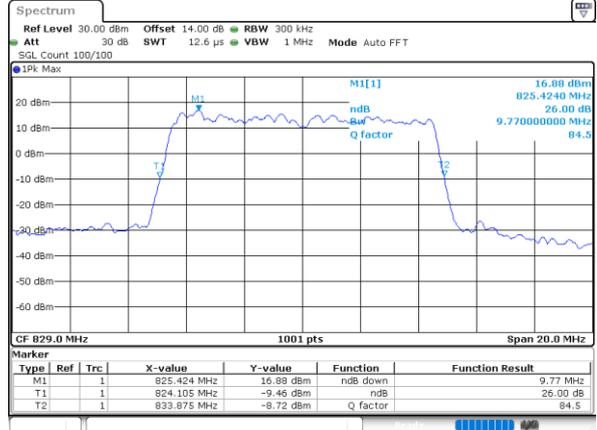
LTE Band 5

Lowest Channel / 10MHz / QPSK



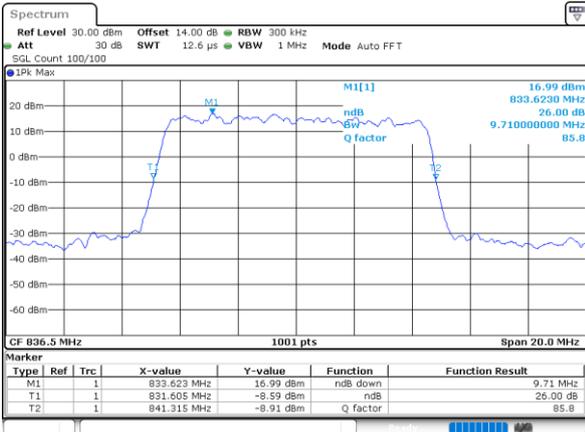
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Lowest Channel / 10MHz / 16QAM



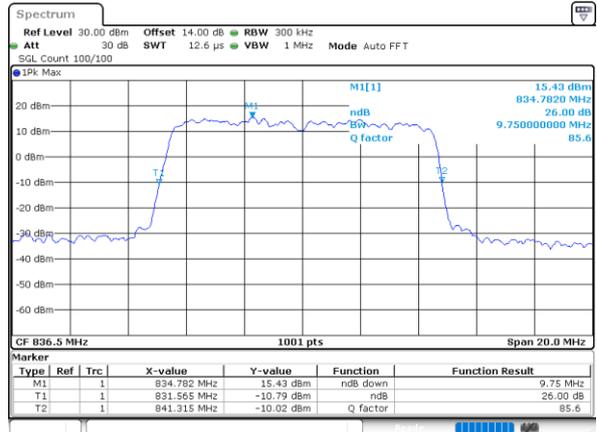
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Middle Channel / 10MHz / QPSK



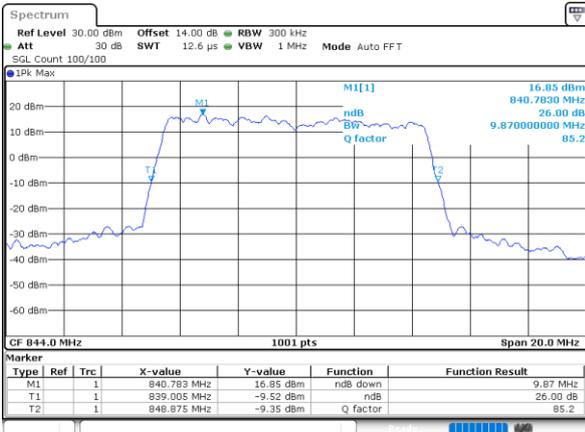
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Middle Channel / 10MHz / 16QAM



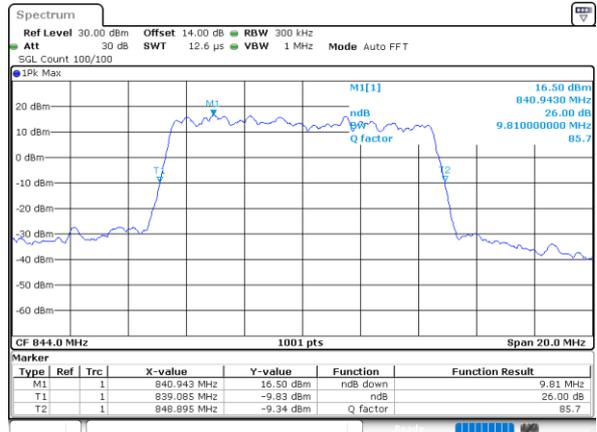
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Highest Channel / 10MHz / QPSK



Date: 9,SEP,2020 20:01:32

Highest Channel / 10MHz / 16QAM

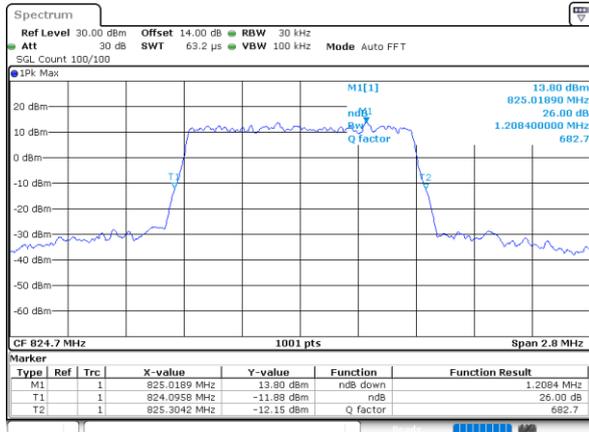


Date: 9,SEP,2020 20:01:03



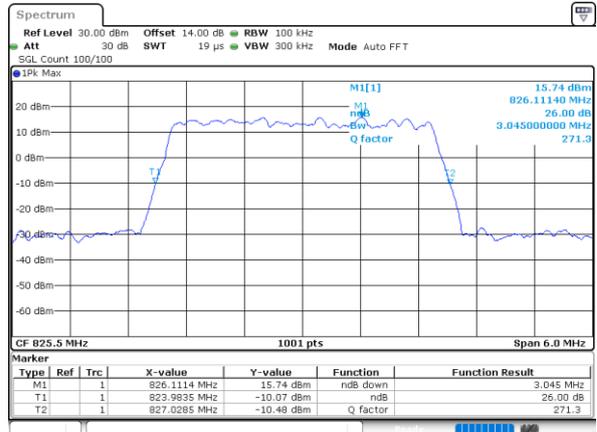
LTE Band 5

Lowest Channel / 1.4MHz / 64QAM



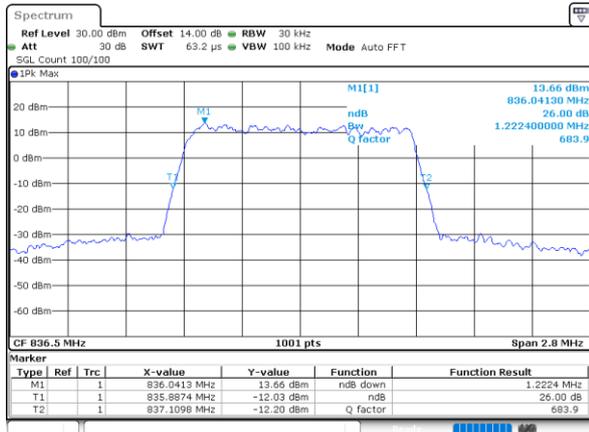
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Lowest Channel / 3MHz / 64QAM



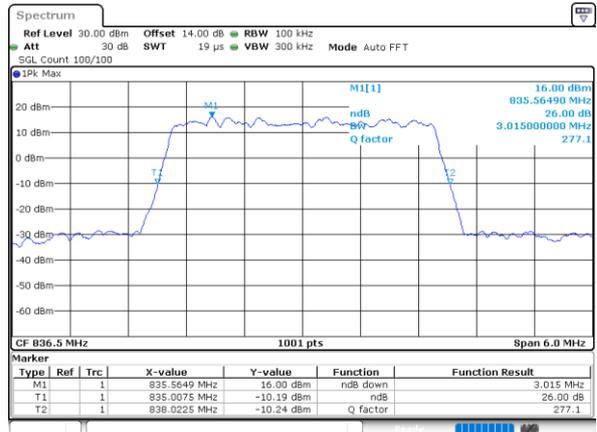
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Middle Channel / 1.4MHz / 64QAM



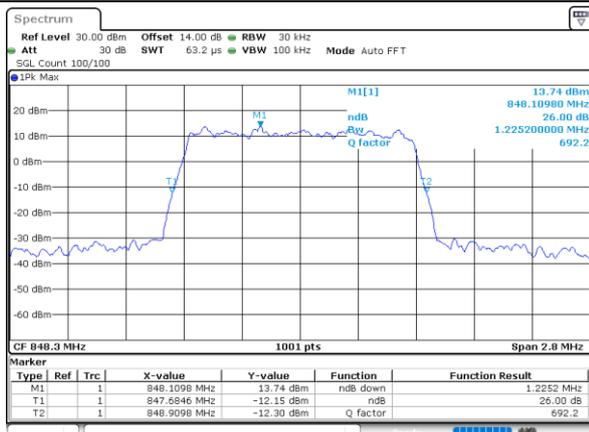
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Middle Channel / 3MHz / 64QAM



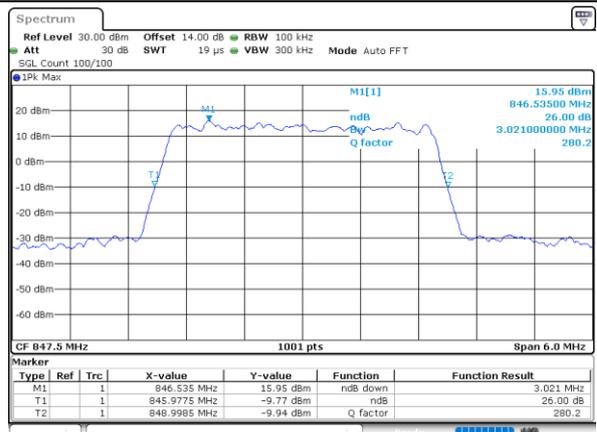
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Highest Channel / 1.4MHz / 64QAM



Date: 9,SEP,2020 22:30:02

Highest Channel / 3MHz / 64QAM

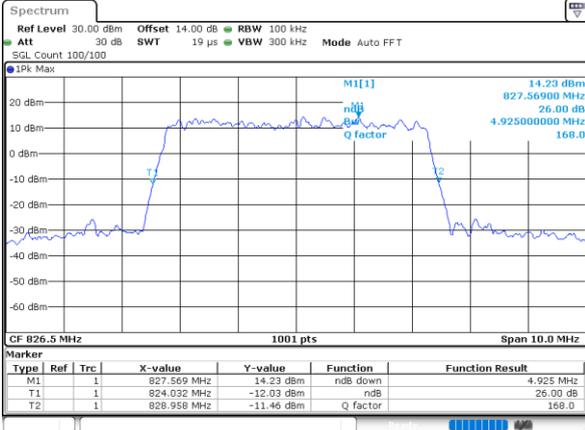


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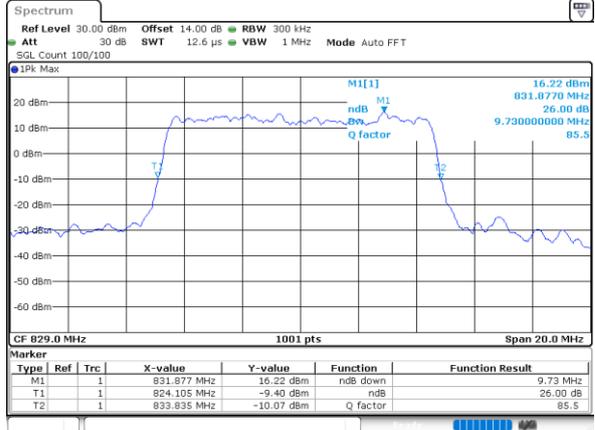
LTE Band 5

Lowest Channel / 5MHz / 64QAM



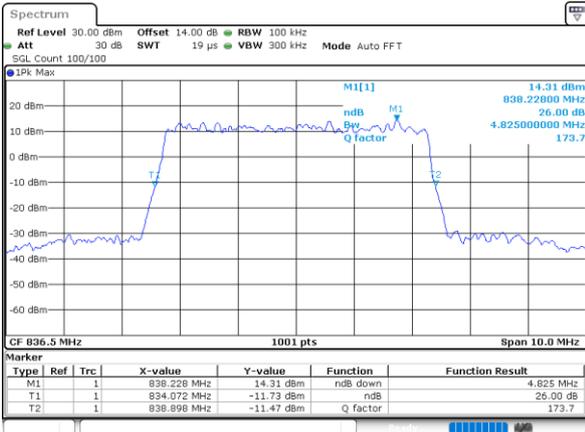
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Lowest Channel / 10MHz / 64QAM



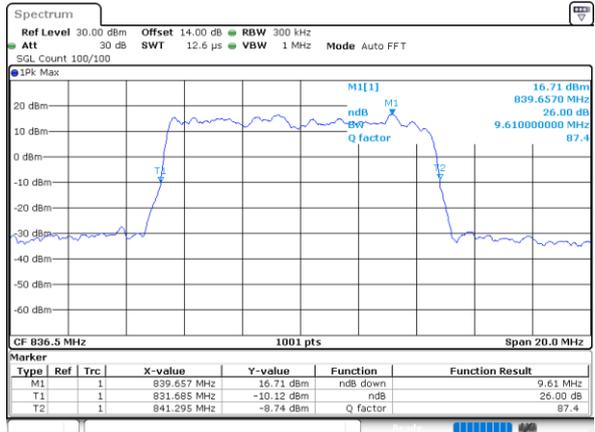
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Middle Channel / 5MHz / 64QAM



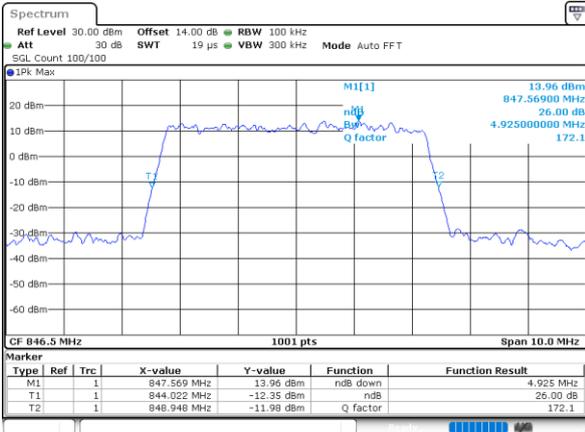
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Middle Channel / 10MHz / 64QAM



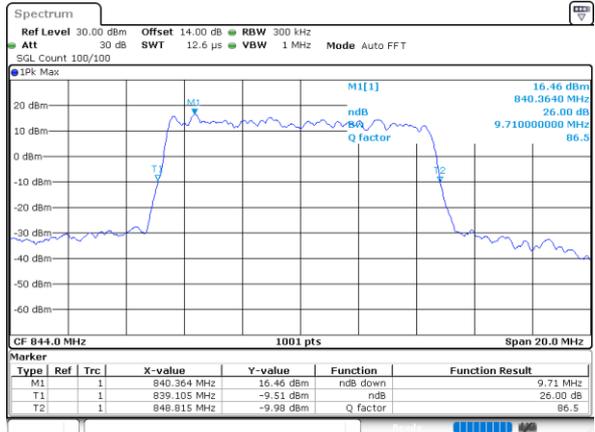
Date: 9,SEP,2020 19:47:26

Highest Channel / 5MHz / 64QAM



Date: 9,SEP,2020 20:27:09

Highest Channel / 10MHz / 64QAM



Date: 9,SEP,2020 20:00:05



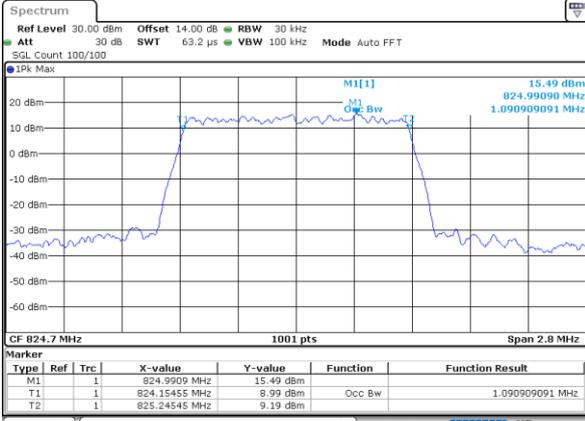
**Occupied Bandwidth**

Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.71	2.72	4.49	4.49	9.01	9.05	-	-	-	-
Middle CH	1.09	1.09	2.72	2.72	4.47	4.49	8.99	8.99	-	-	-	-
Highest CH	1.09	1.09	2.72	2.70	4.48	4.47	9.07	8.95	-	-	-	-
Mode	LTE Band 5 : 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	-	8.91	-	-	-	-	-
Middle CH	1.09	-	2.72	-	4.49	-	8.99	-	-	-	-	-
Highest CH	1.09	-	2.72	-	4.47	-	8.99	-	-	-	-	-



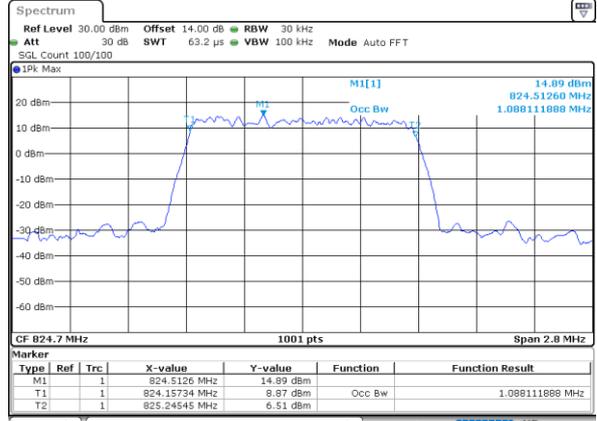
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



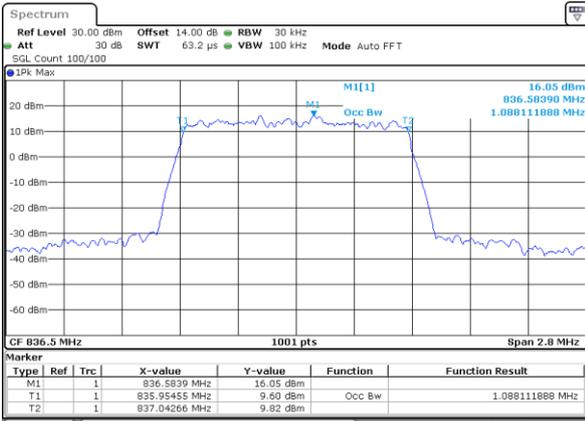
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Lowest Channel / 1.4MHz / 16QAM



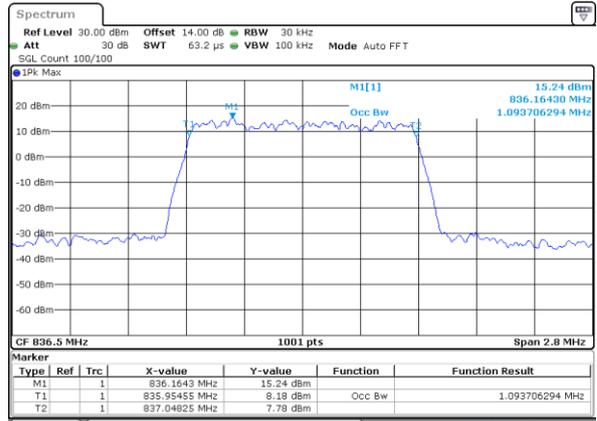
Date: 9,SEP,2020 22:25:20

Middle Channel / 1.4MHz / QPSK



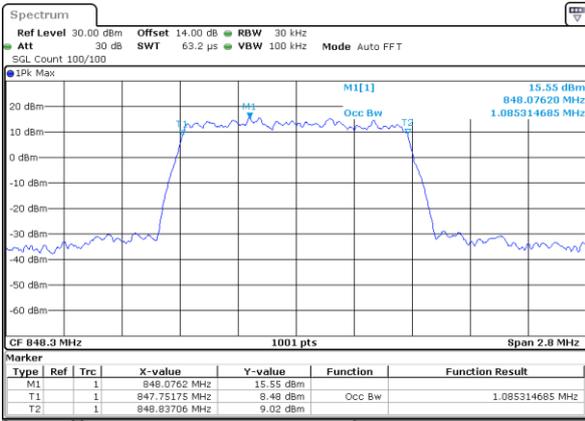
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Middle Channel / 1.4MHz / 16QAM



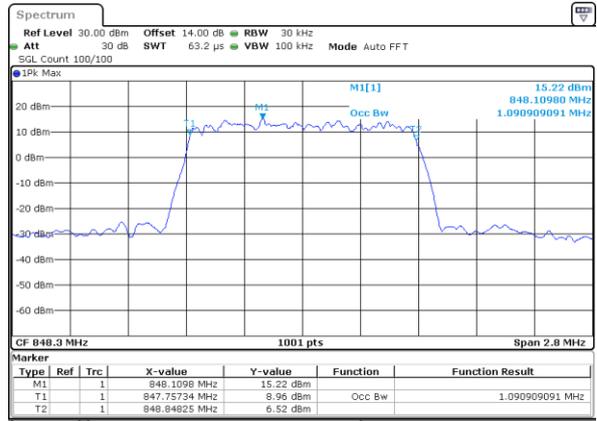
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Highest Channel / 1.4MHz / QPSK



Date: 9,SEP,2020 22:13:33

Highest Channel / 1.4MHz / 16QAM

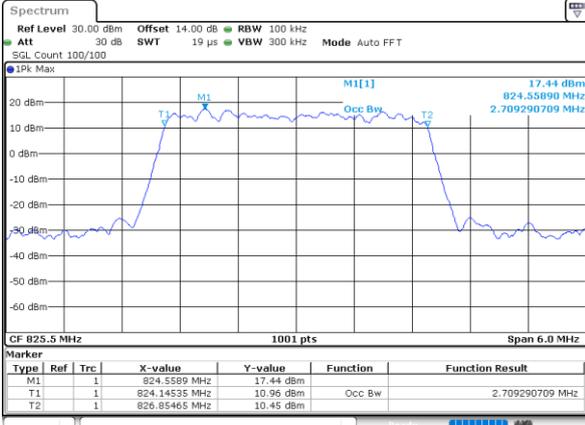


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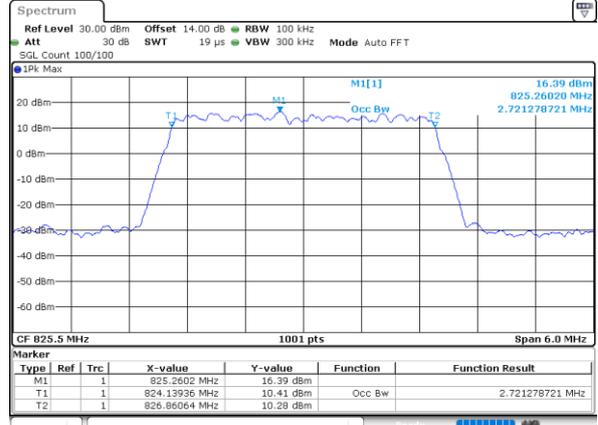
LTE Band 5

Lowest Channel / 3MHz / QPSK



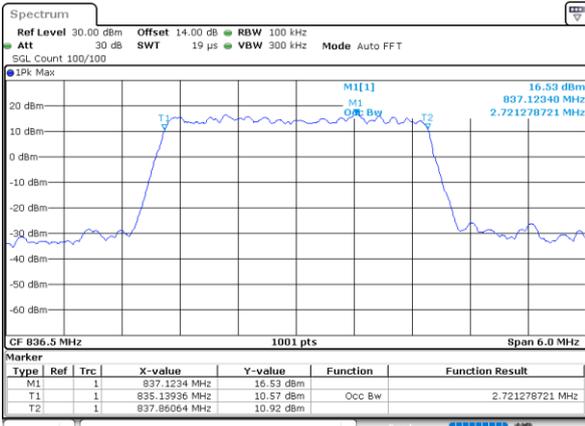
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Lowest Channel / 3MHz / 16QAM



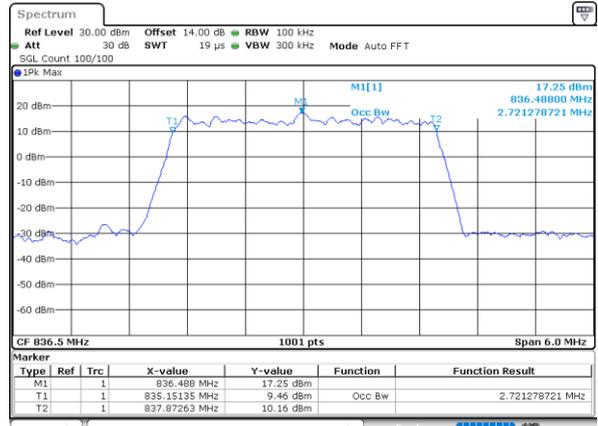
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Middle Channel / 3MHz / QPSK



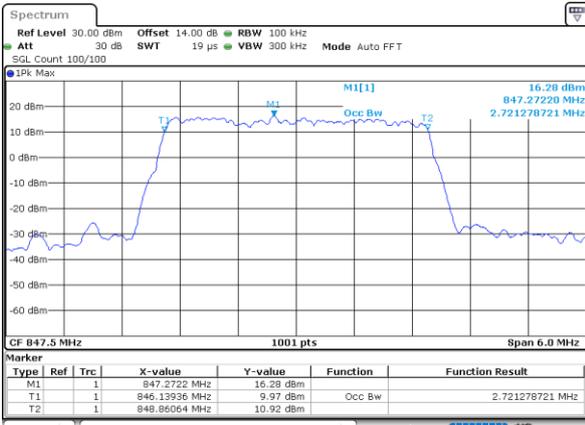
Date: 9,SEP,2020 20:38:11

Middle Channel / 3MHz / 16QAM



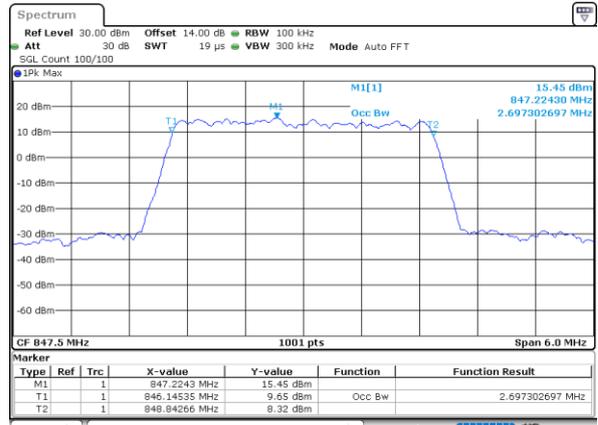
Date: 9,SEP,2020 20:38:38

Highest Channel / 3MHz / QPSK



Date: 9,SEP,2020 21:53:21

Highest Channel / 3MHz / 16QAM

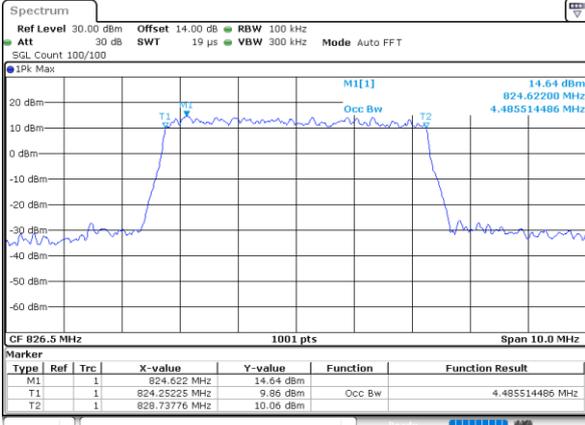


Date: 9,SEP,2020 21:54:35



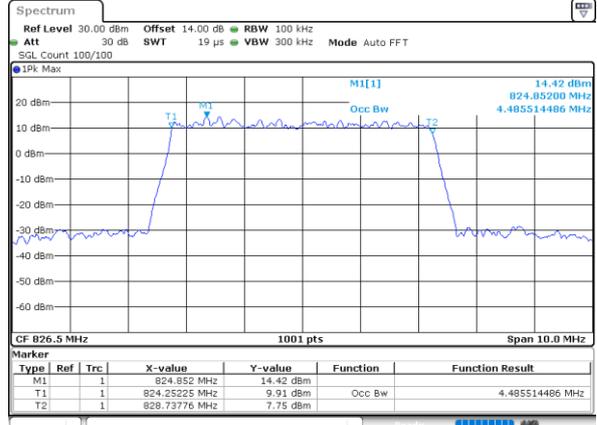
LTE Band 5

Lowest Channel / 5MHz / QPSK



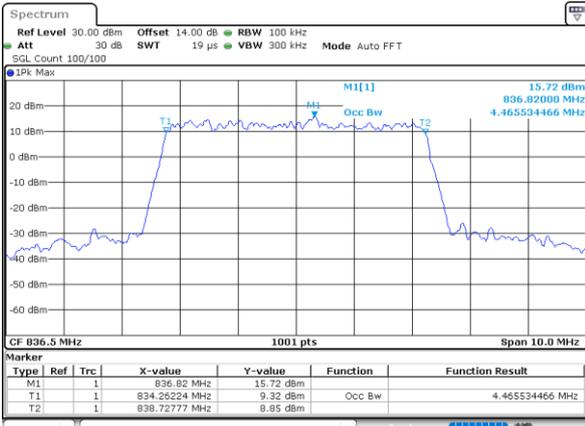
Date: 9,SEP,2020 20:23:47

Lowest Channel / 5MHz / 16QAM



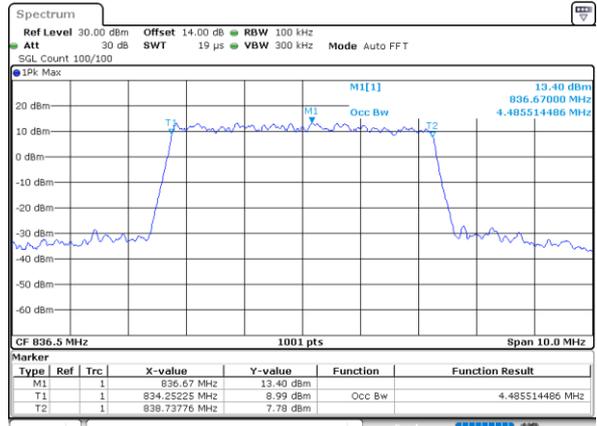
Date: 9,SEP,2020 20:24:09

Middle Channel / 5MHz / QPSK



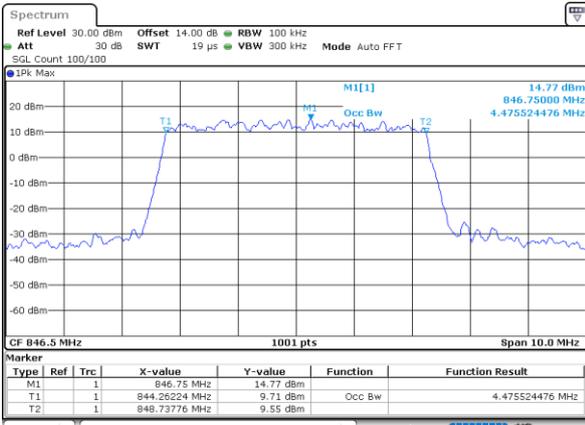
Date: 9,SEP,2020 20:17:35

Middle Channel / 5MHz / 16QAM



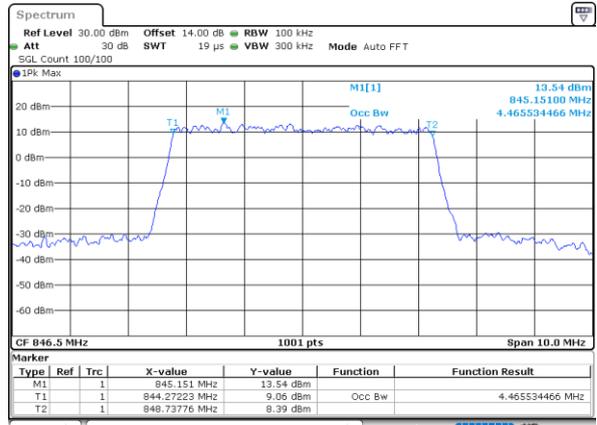
Date: 9,SEP,2020 20:17:16

Highest Channel / 5MHz / QPSK



Date: 9,SEP,2020 20:29:34

Highest Channel / 5MHz / 16QAM

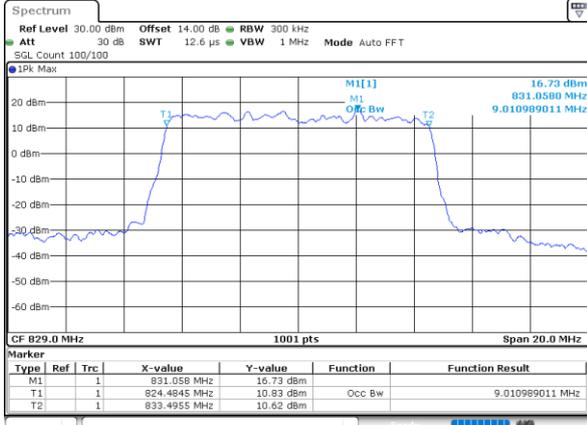


Date: 9,SEP,2020 20:28:20



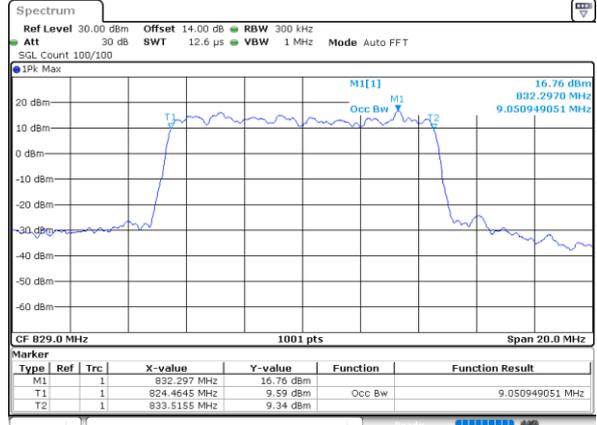
LTE Band 5

Lowest Channel / 10MHz / QPSK



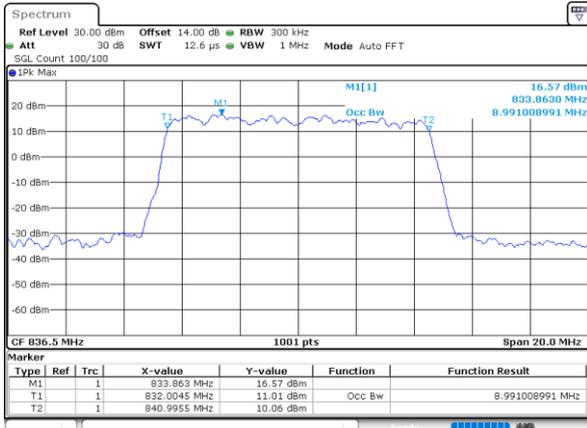
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Lowest Channel / 10MHz / 16QAM



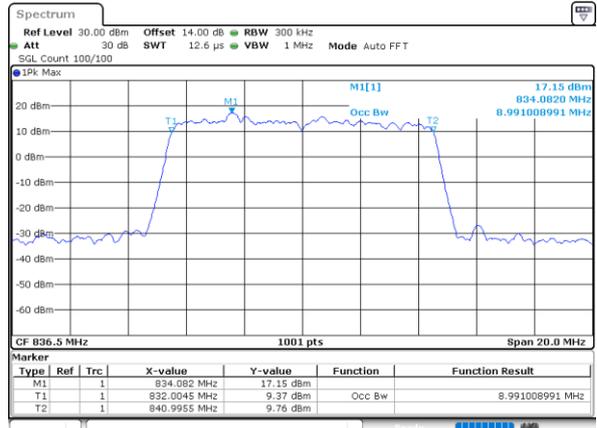
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Middle Channel / 10MHz / QPSK



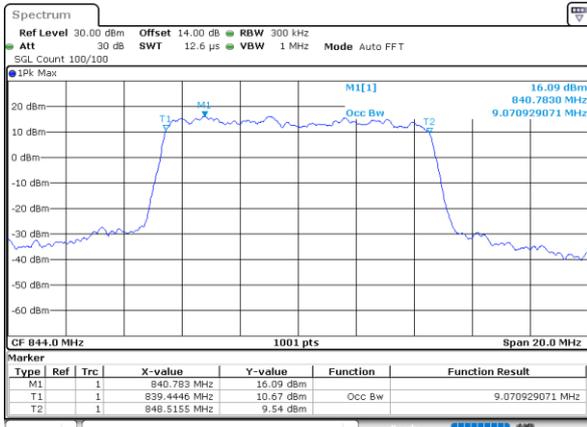
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Middle Channel / 10MHz / 16QAM



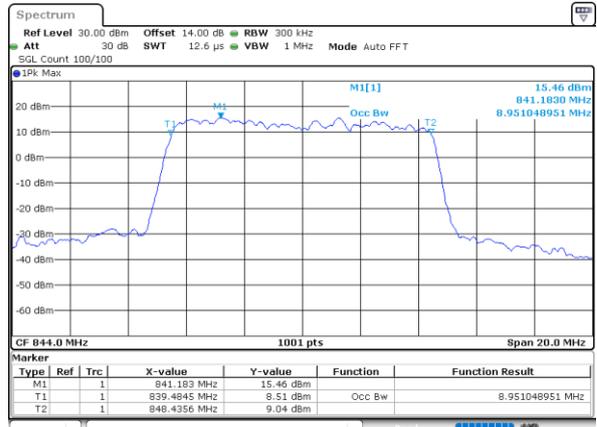
Date: 9,SEP,2020 19:47:02

Highest Channel / 10MHz / QPSK



Date: 9,SEP,2020 20:01:26

Highest Channel / 10MHz / 16QAM

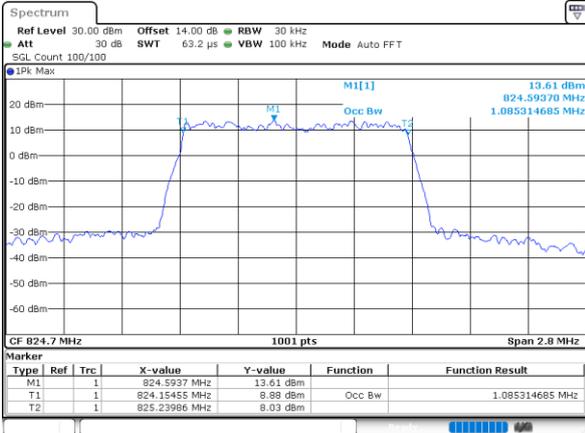


Date: 9,SEP,2020 20:01:10



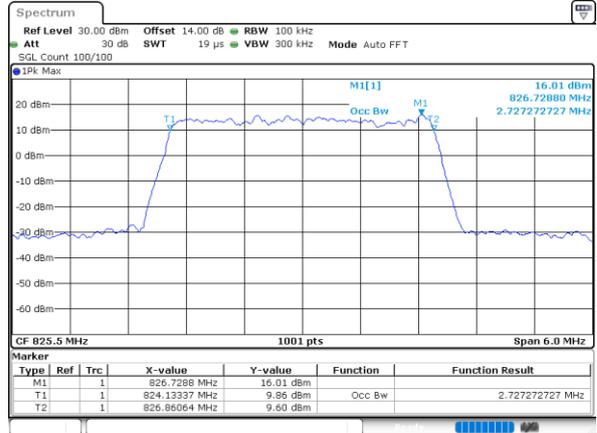
LTE Band 5

Lowest Channel / 1.4MHz / 64QAM



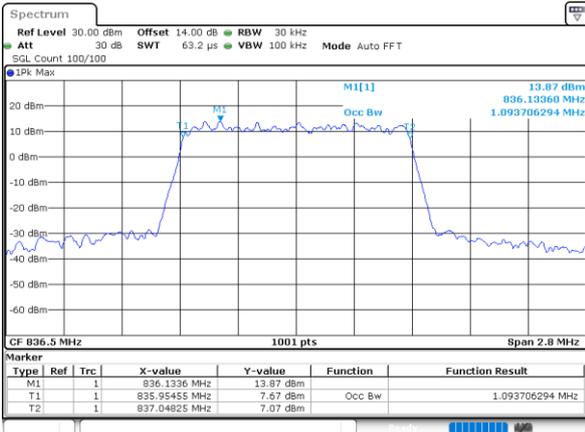
Date: 9,SEP,2020 22:27:44

Lowest Channel / 3MHz / 64QAM



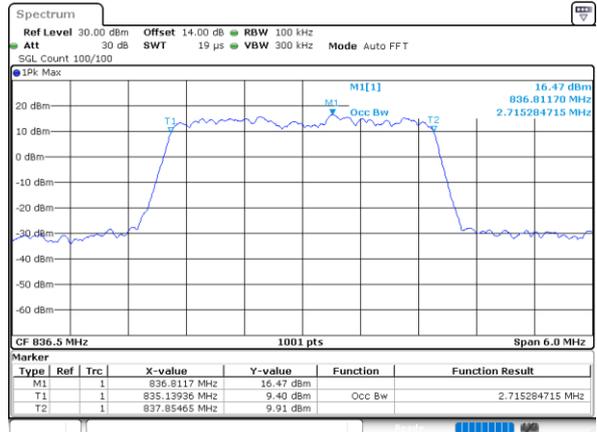
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Middle Channel / 1.4MHz / 64QAM



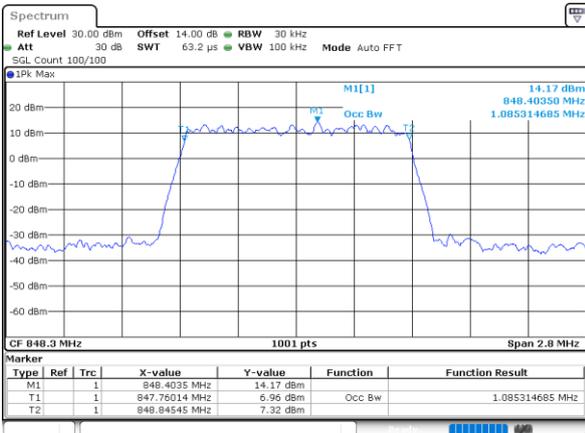
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Middle Channel / 3MHz / 64QAM



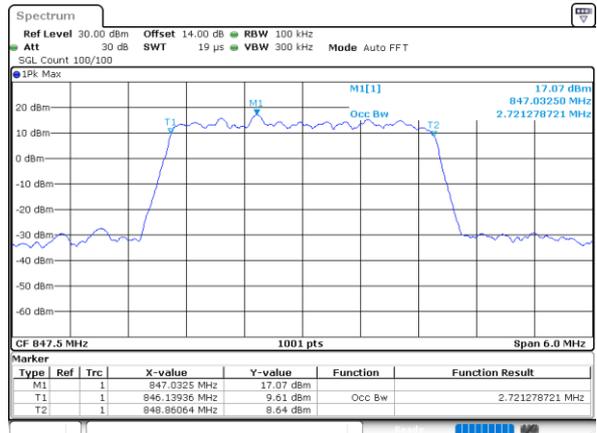
Date: 9,SEP,2020 20:39:00

Highest Channel / 1.4MHz / 64QAM



Date: 9,SEP,2020 22:29:55

Highest Channel / 3MHz / 64QAM

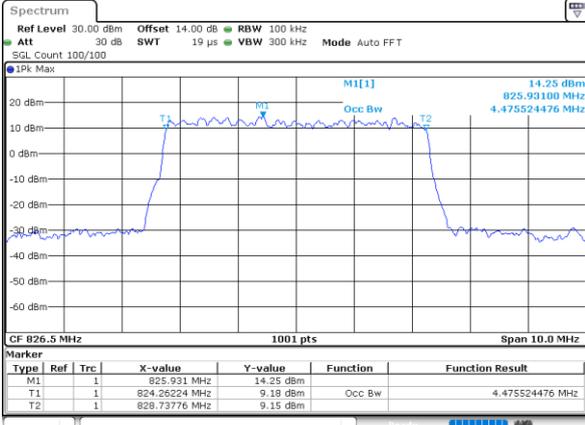


Date: 9,SEP,2020 21:57:37



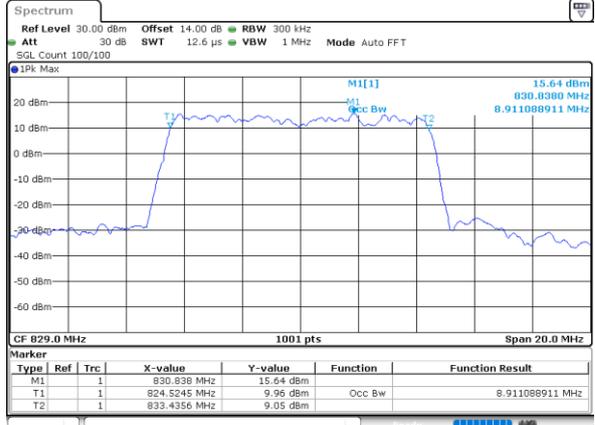
LTE Band 5

Lowest Channel / 5MHz / 64QAM



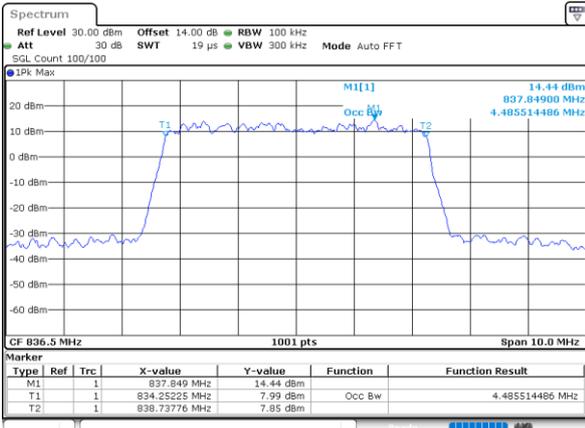
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Lowest Channel / 10MHz / 64QAM



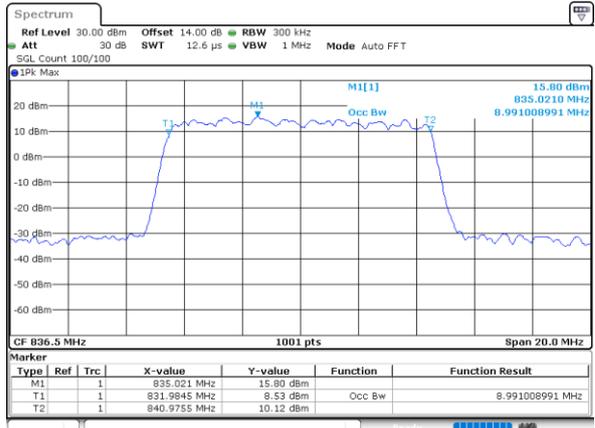
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Middle Channel / 5MHz / 64QAM



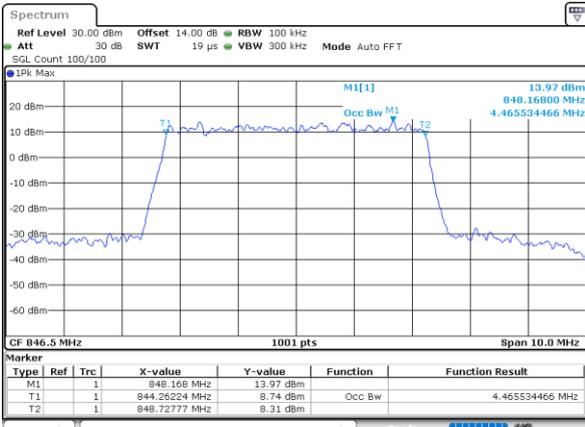
Date: 9,SEP,2020 20:16:23

Middle Channel / 10MHz / 64QAM



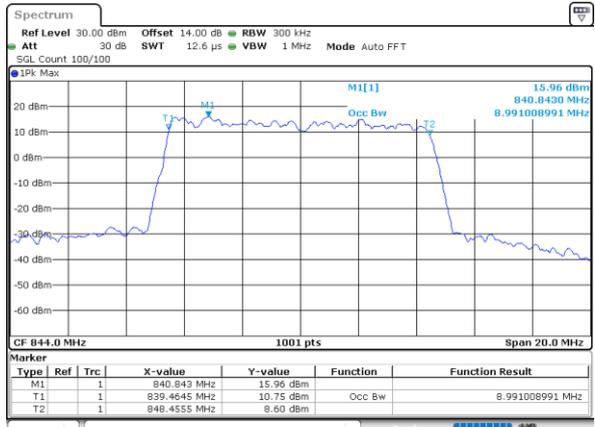
Date: 9,SEP,2020 19:47:21

Highest Channel / 5MHz / 64QAM



Date: 9,SEP,2020 20:27:03

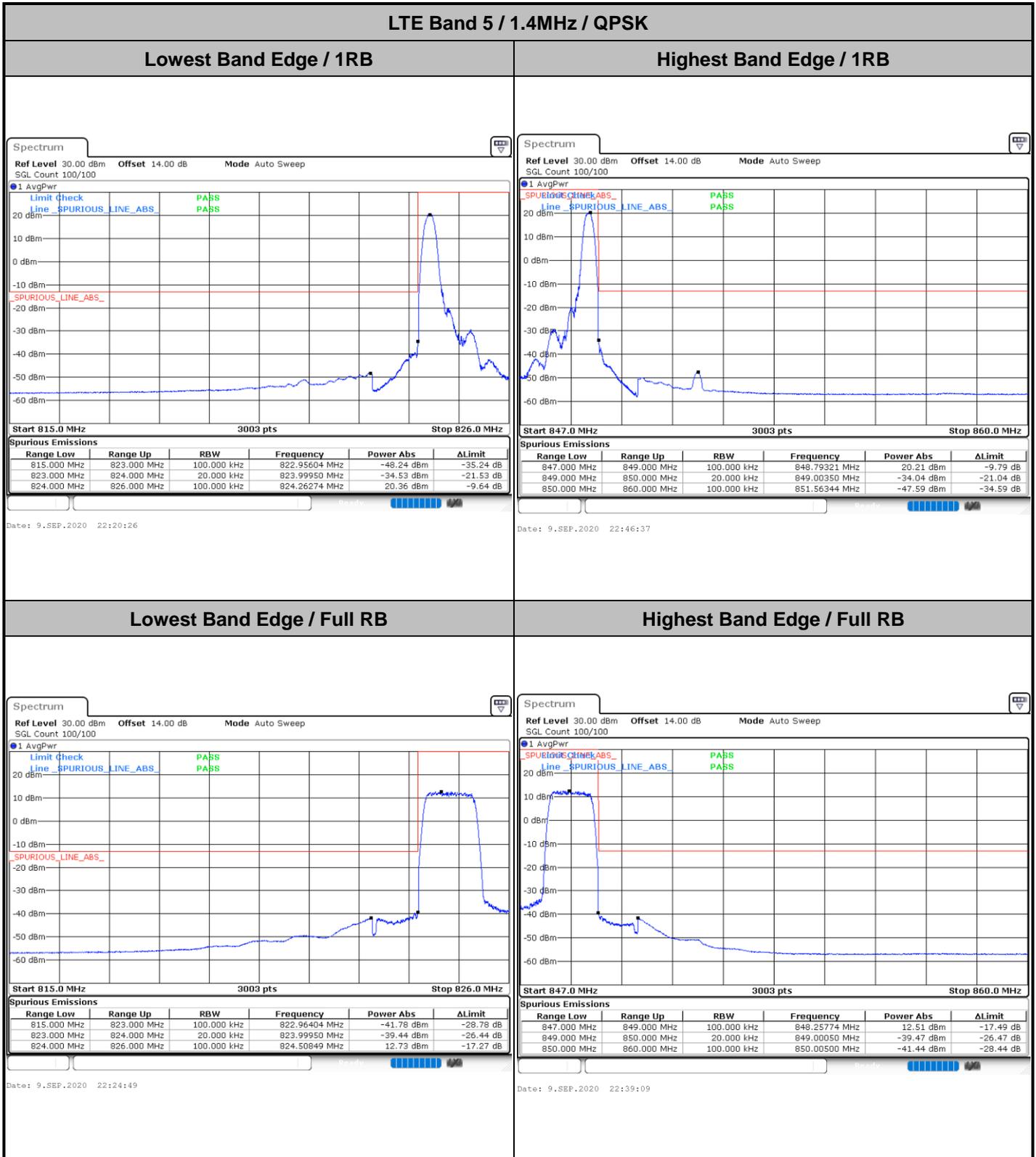
Highest Channel / 10MHz / 64QAM



Date: 9,SEP,2020 20:00:12

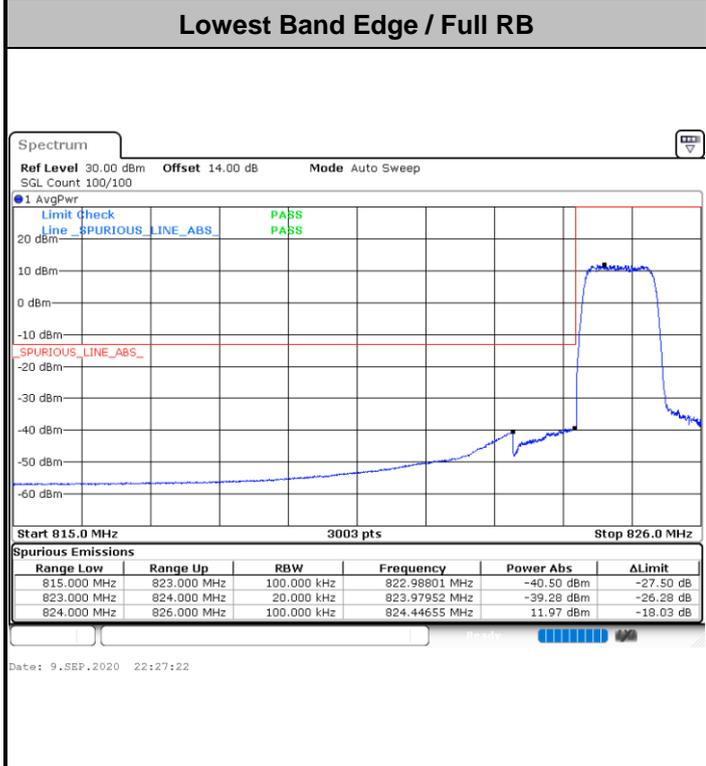
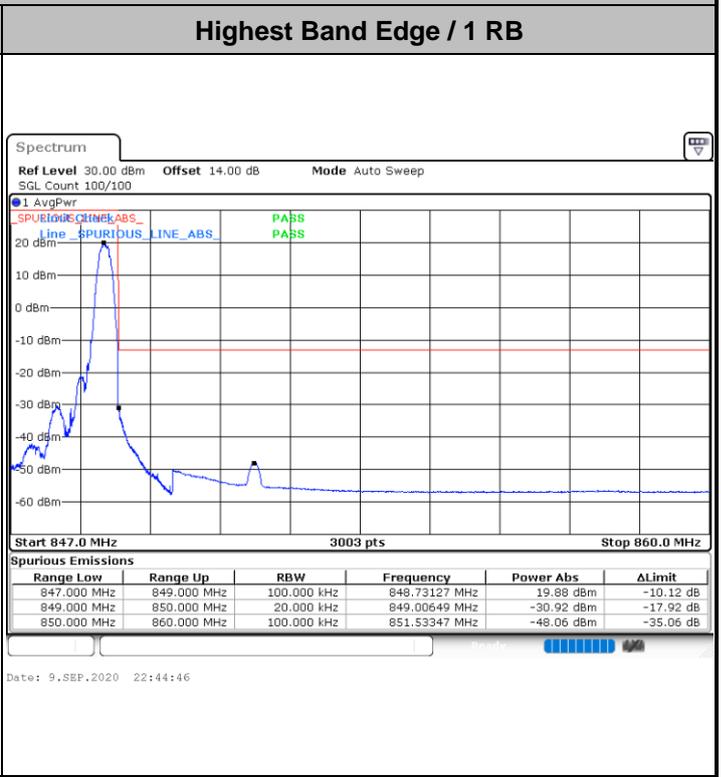
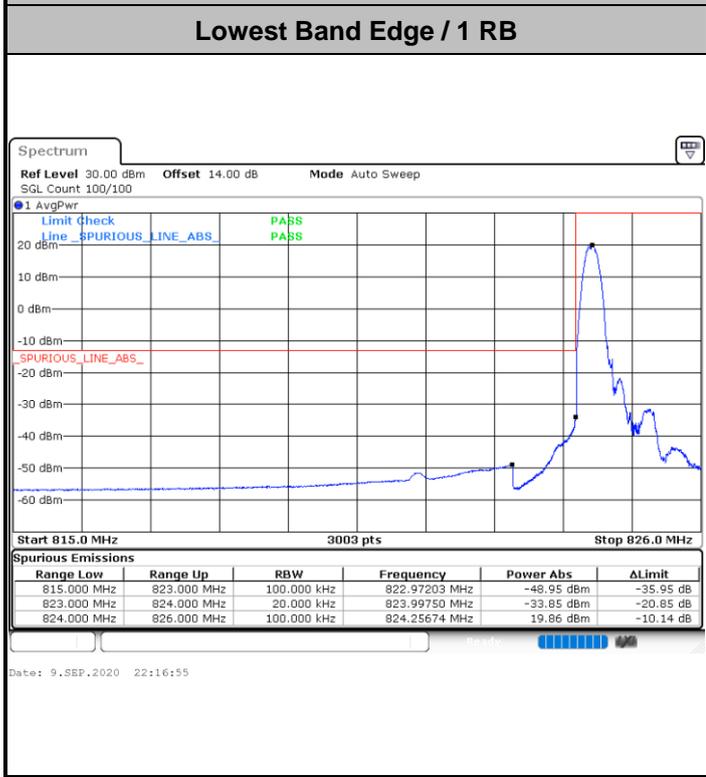


# Conducted Band Edge



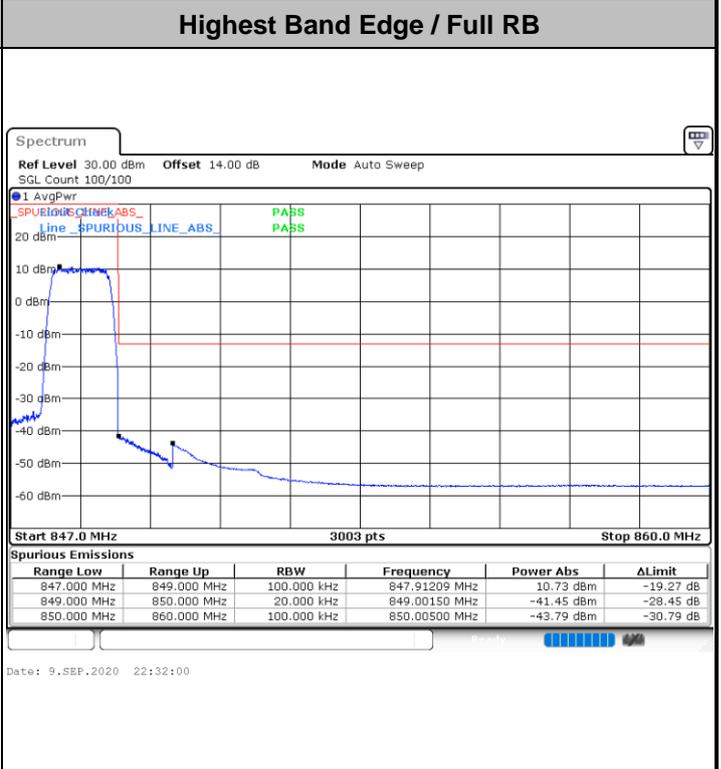
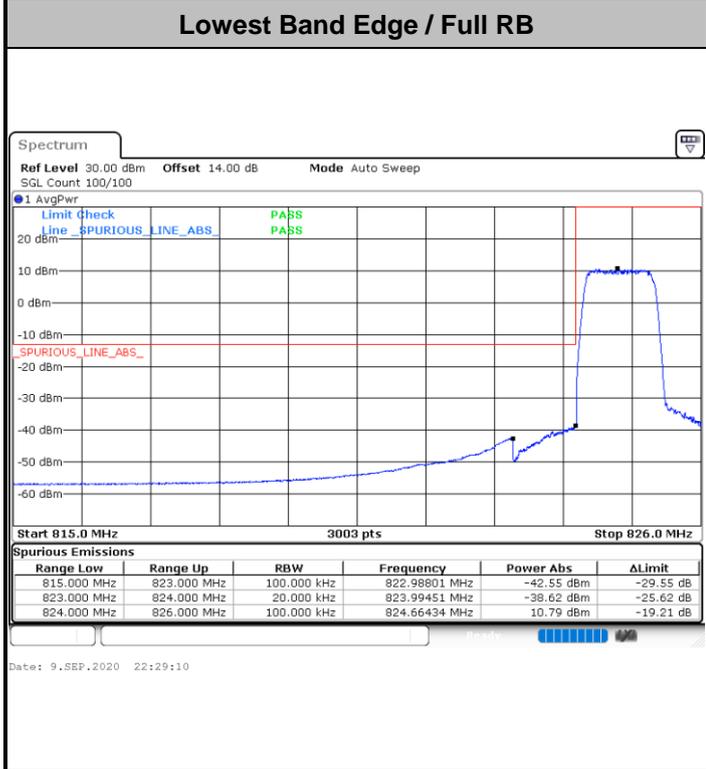
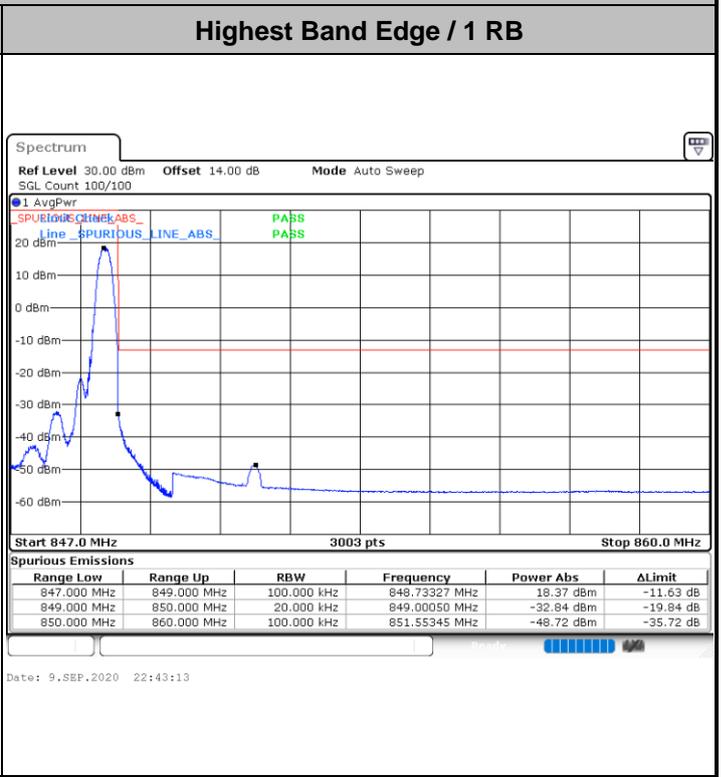
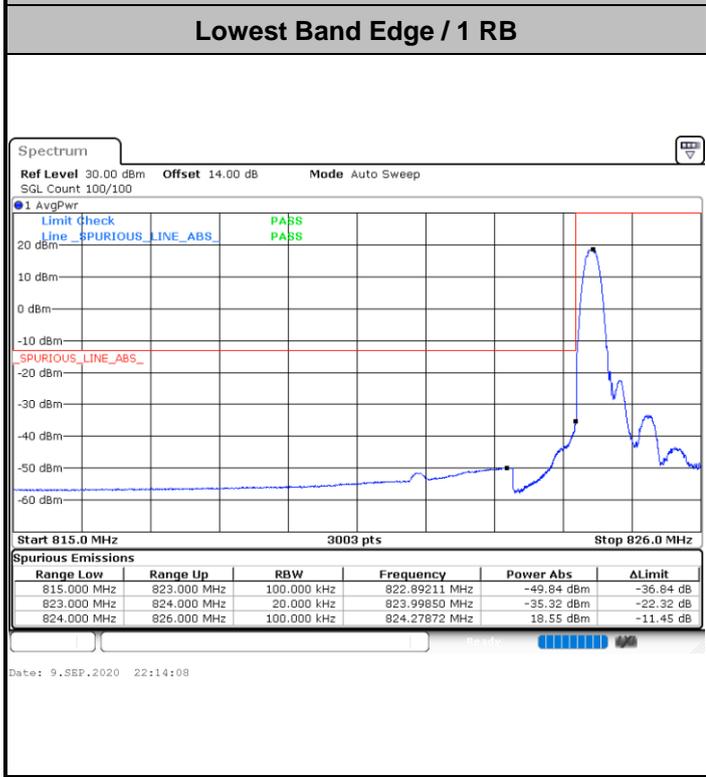


**LTE Band 5 / 1.4MHz / 16QAM**





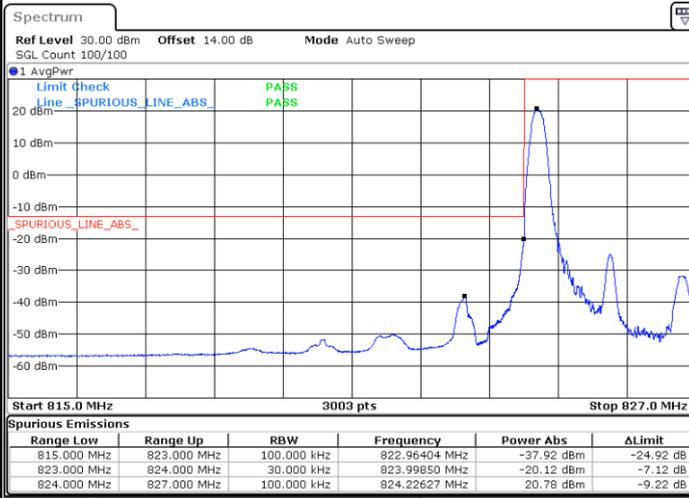
**LTE Band 5 / 1.4MHz / 64QAM**





LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



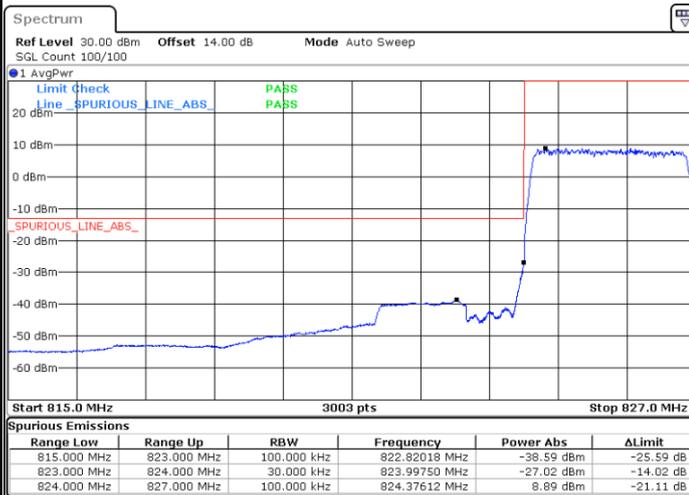
Date: 9.SEP.2020 20:42:32

Highest Band Edge / 1 RB



Date: 9.SEP.2020 22:05:18

Lowest Band Edge / Full RB



Date: 9.SEP.2020 21:24:38

Highest Band Edge / Full RB

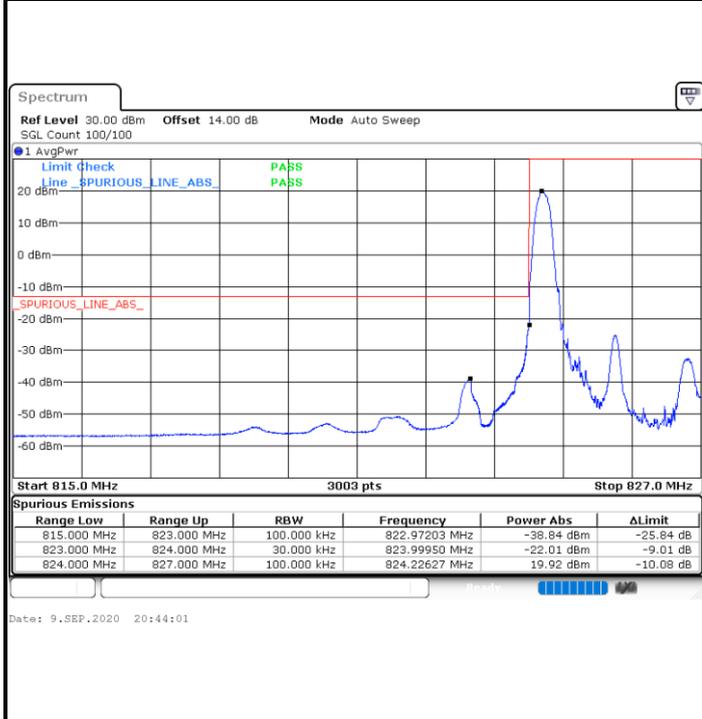


Date: 9.SEP.2020 21:54:21

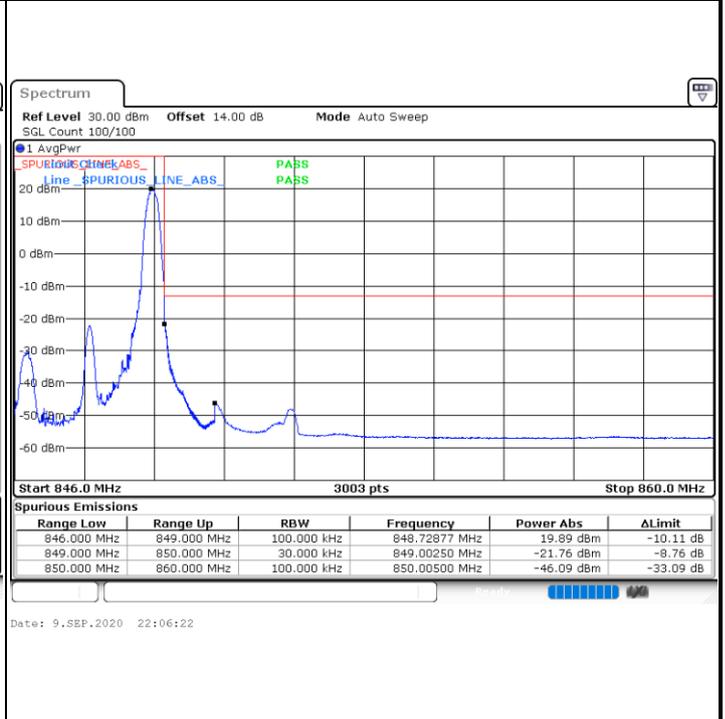


**LTE Band 5 / 3MHz / 16QAM**

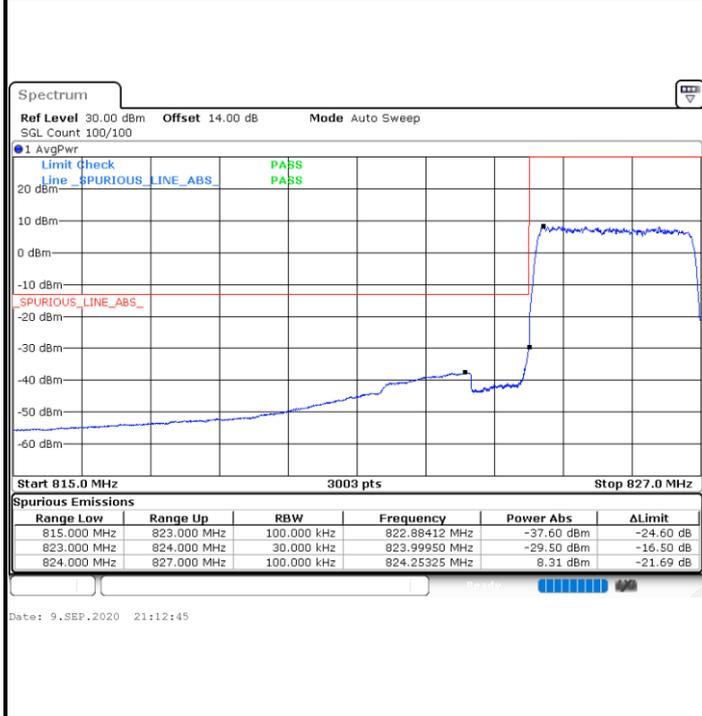
**Lowest Band Edge / 1 RB**



**Highest Band Edge / 1 RB**



**Lowest Band Edge / Full RB**



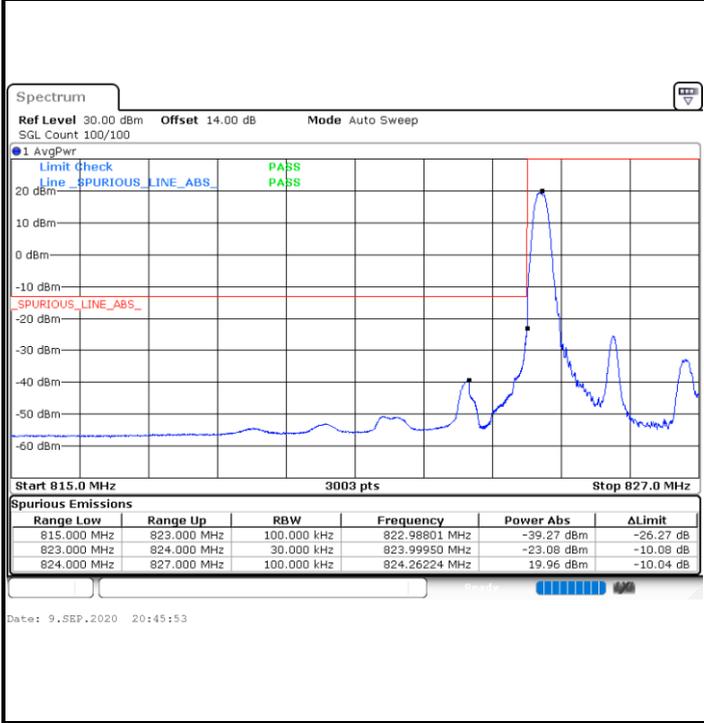
**Highest Band Edge / Full RB**



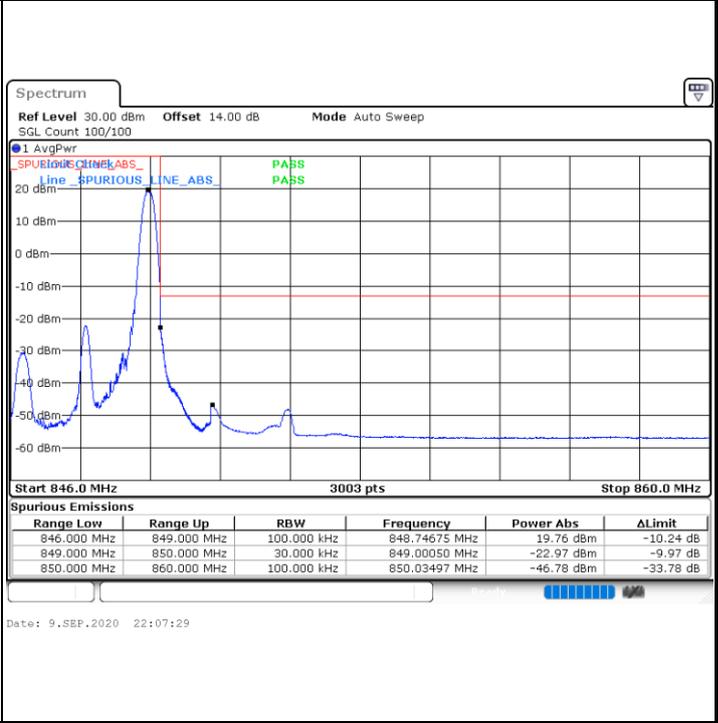


LTE Band 5 / 3MHz / 64QAM

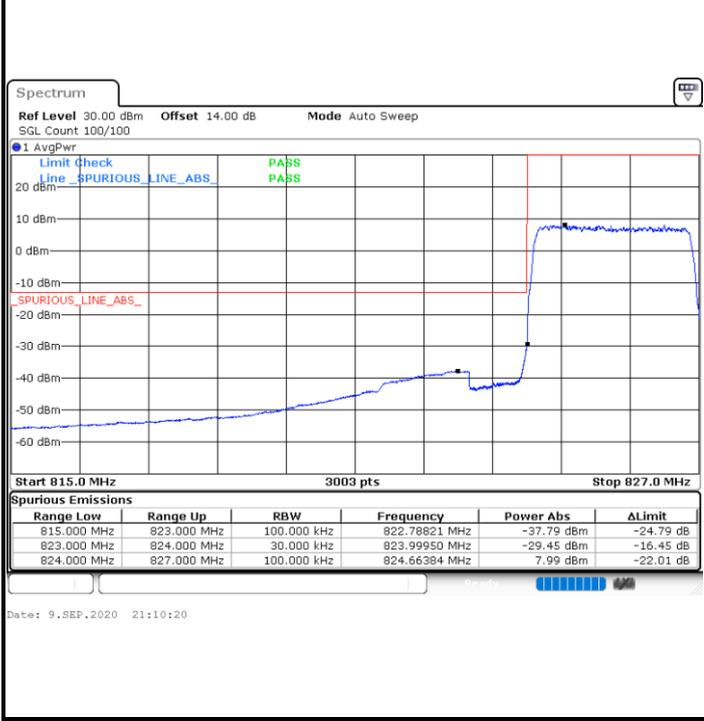
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

