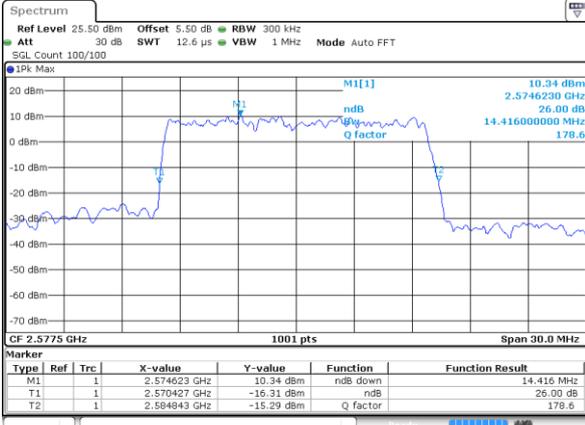




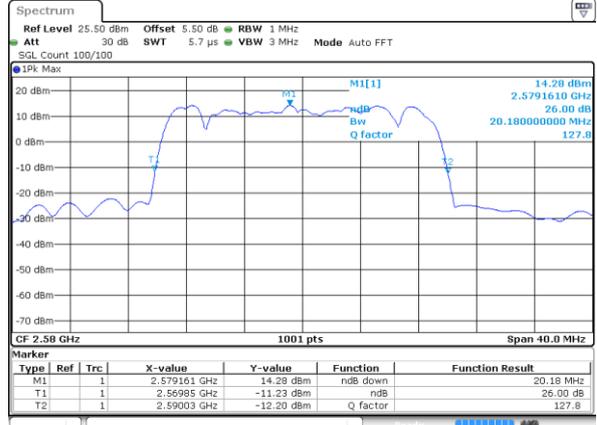
LTE Band 38

Lowest Channel / 15MHz / 64QAM



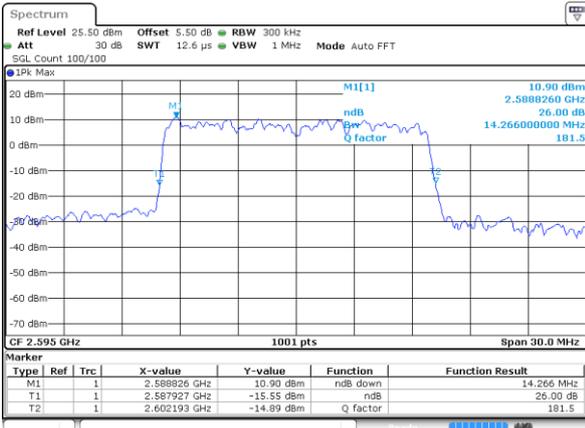
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Lowest Channel / 20MHz / 64QAM



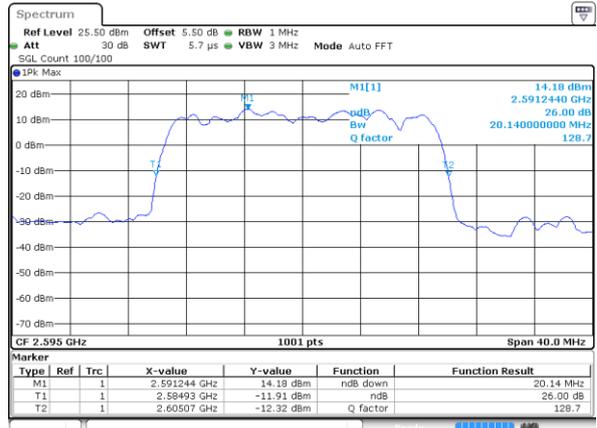
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Middle Channel / 15MHz / 64QAM



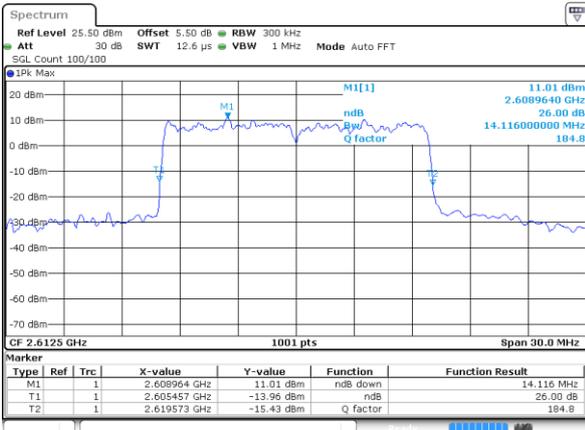
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Middle Channel / 20MHz / 64QAM



Date: 21 DEC 2018 15:58:43

Highest Channel / 15MHz / 64QAM



Date: 21 DEC 2018 15:58:03

Highest Channel / 20MHz / 64QAM



Date: 21 DEC 2018 15:59:03



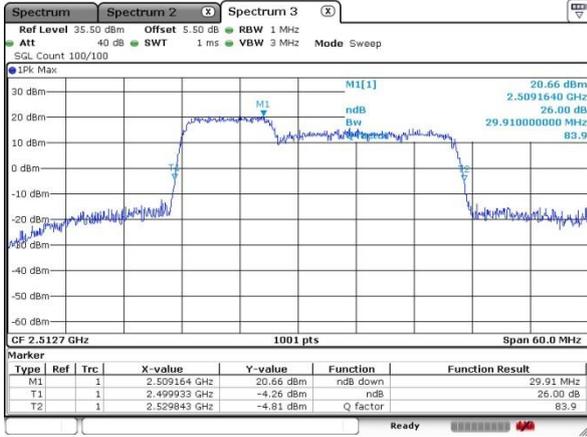
For CA

LTE Band 7

QPSK

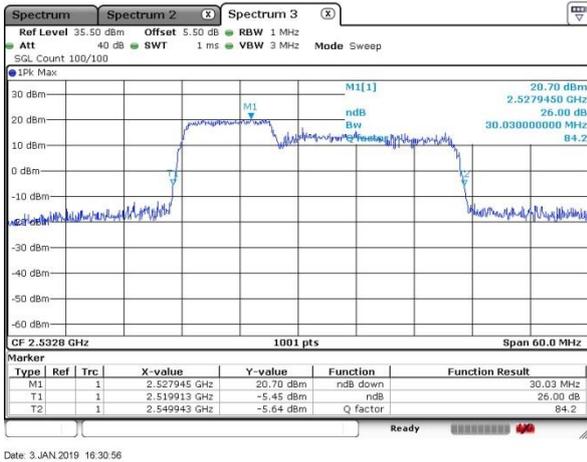
Lowest Channel / 10MHz+20MHz

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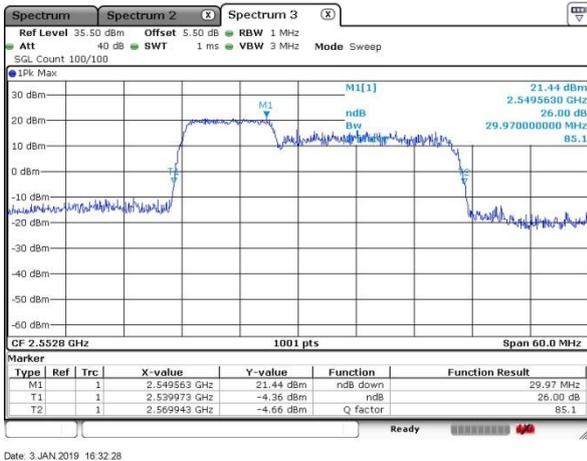
Middle Channel / 10MHz+20MHz

-



Highest Channel / 10MHz+20MHz

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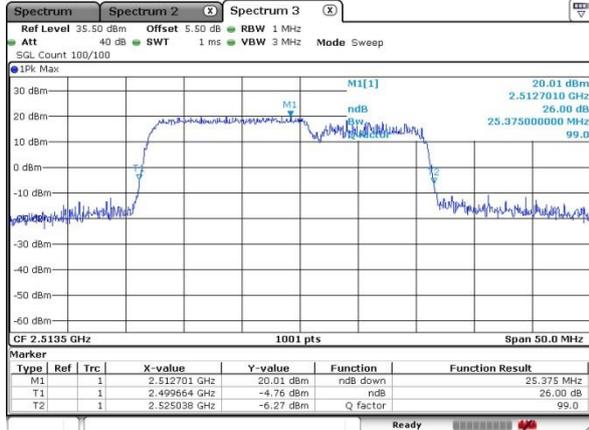




LTE Band 7

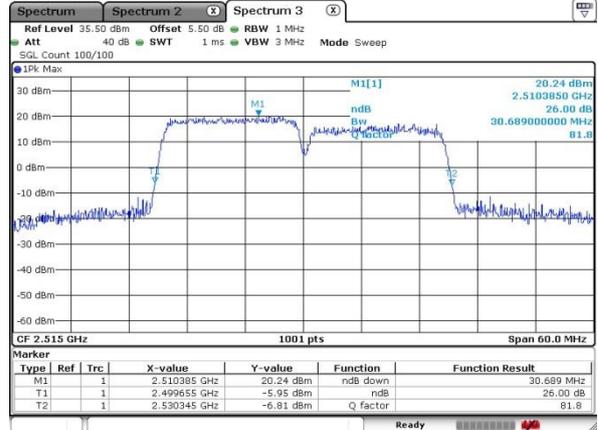
QPSK

Lowest Channel / 15MHz+10MHz



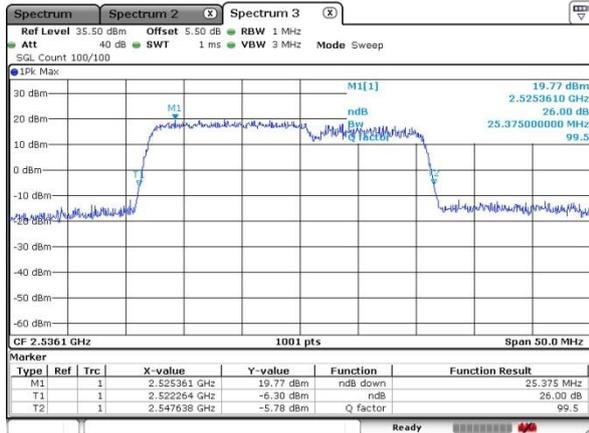
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Lowest Channel / 15MHz+15MHz



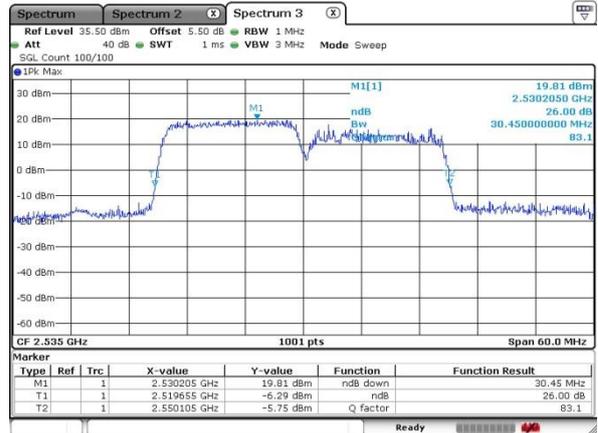
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Middle Channel / 15MHz+10MHz



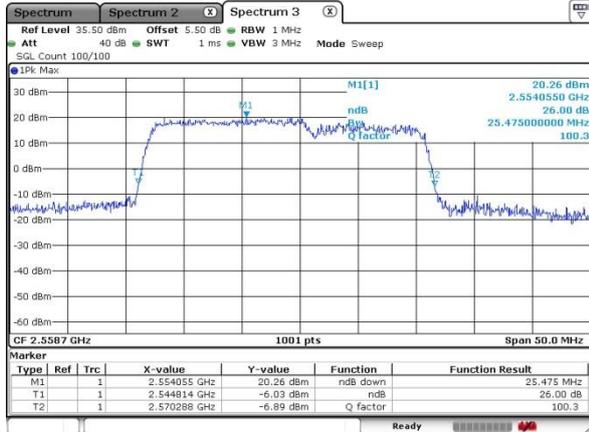
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Middle Channel / 15MHz+15MHz



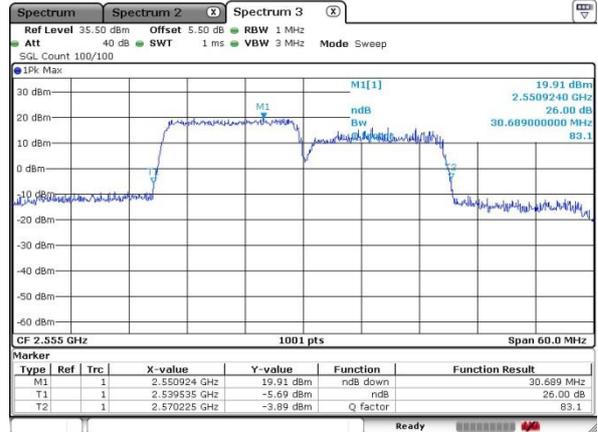
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Highest Channel / 15MHz+10MHz



Date: 3.JAN.2019 19:17:24

Highest Channel / 15MHz+15MHz



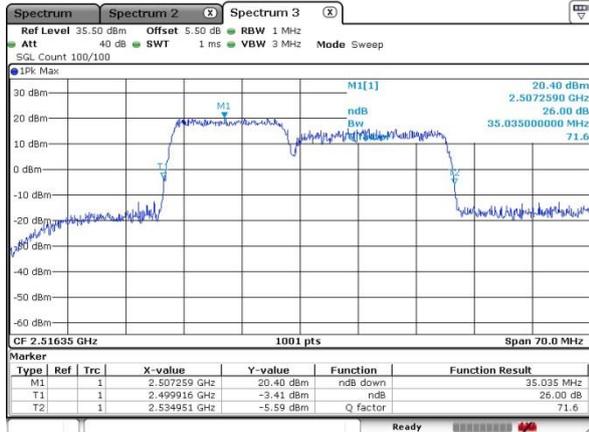
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LTE Band 7

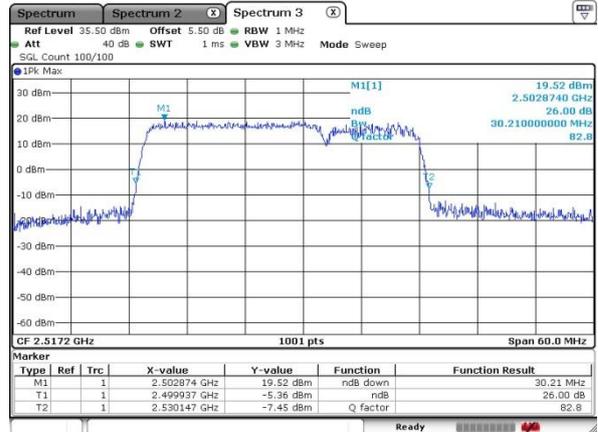
QPSK

Lowest Channel / 15MHz+20MHz



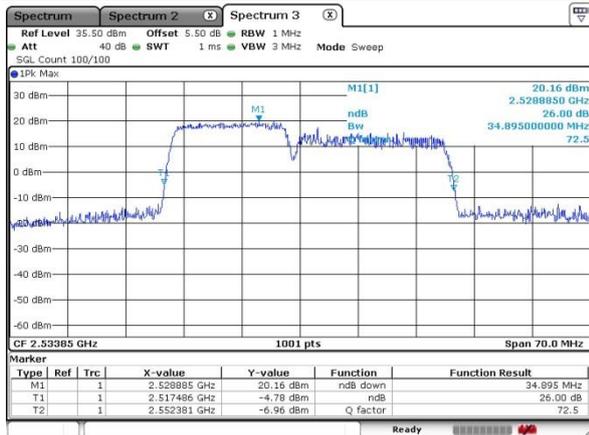
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Lowest Channel / 20MHz+10MHz



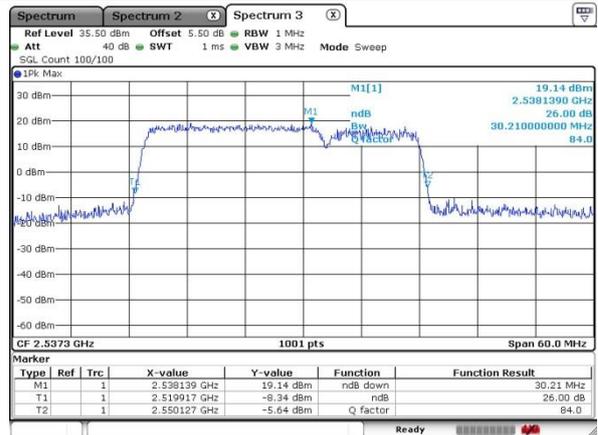
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Middle Channel / 15MHz+20MHz



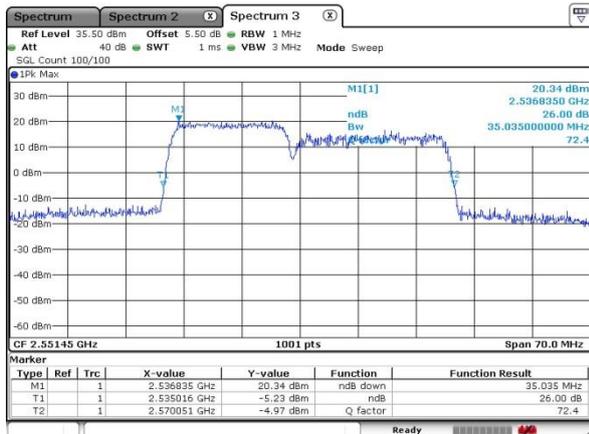
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Middle Channel / 20MHz+10MHz



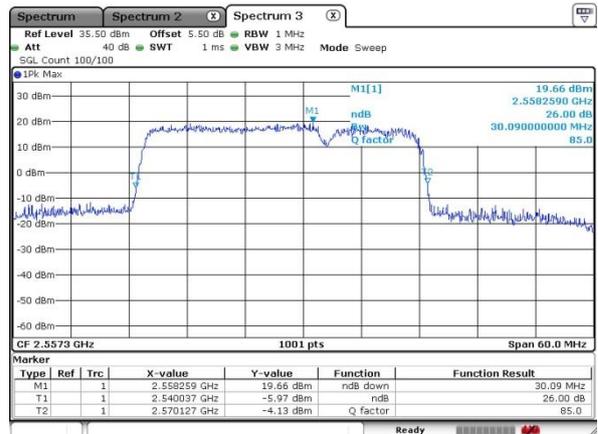
Date: 3.JAN.2019 16:50:33

Highest Channel / 15MHz+20MHz



Date: 3.JAN.2019 18:26:59

Highest Channel / 20MHz+10MHz



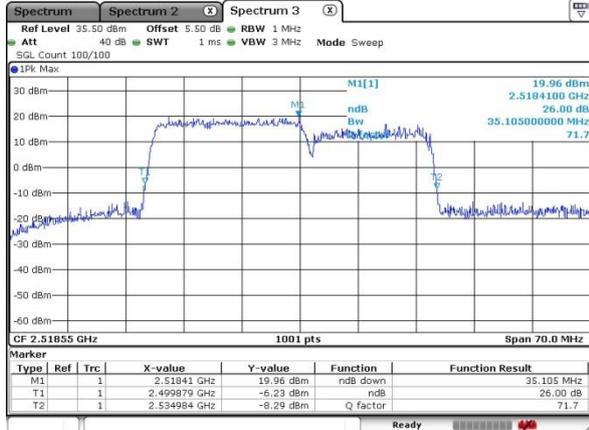
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LTE Band 7

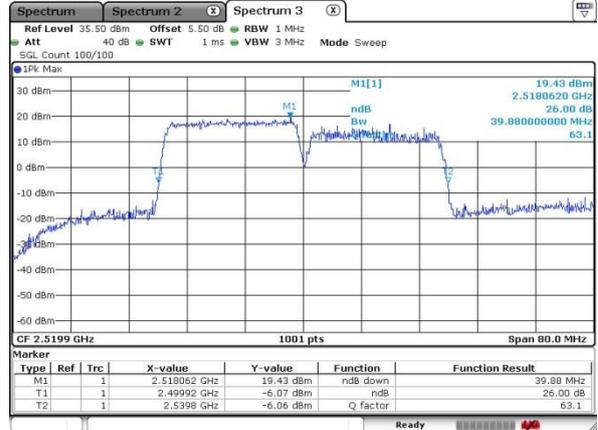
QPSK

Lowest Channel / 20MHz+15MHz



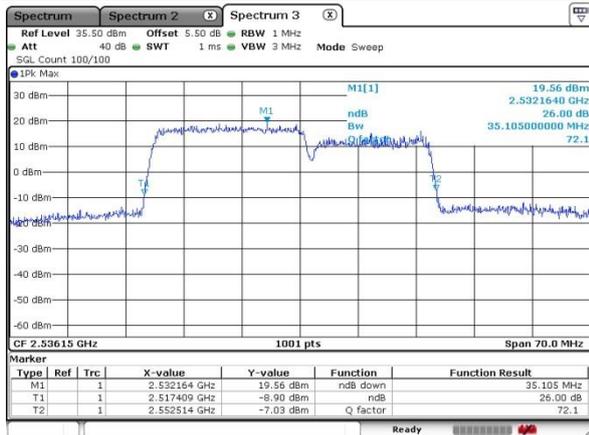
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Lowest Channel / 20MHz+20MHz



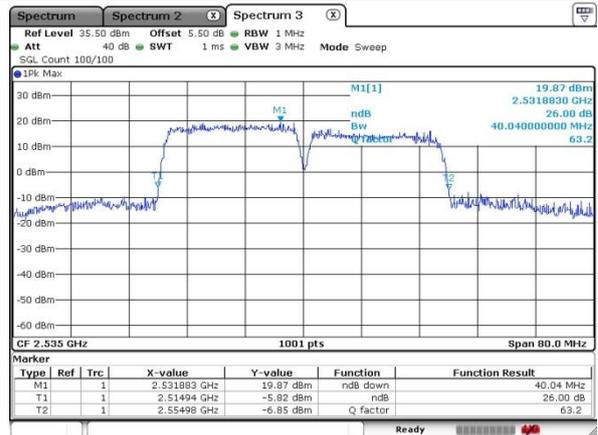
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Middle Channel / 20MHz+15MHz



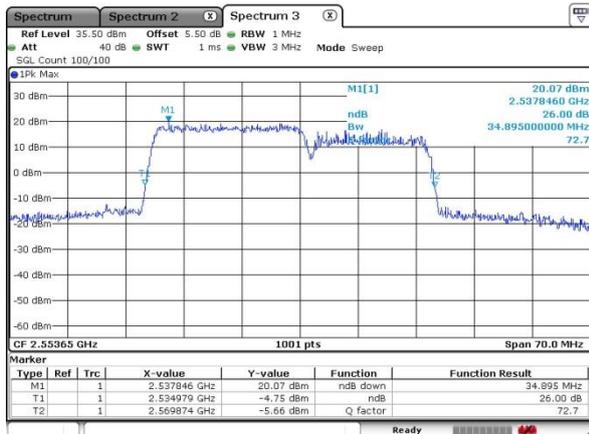
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Middle Channel / 20MHz+20MHz



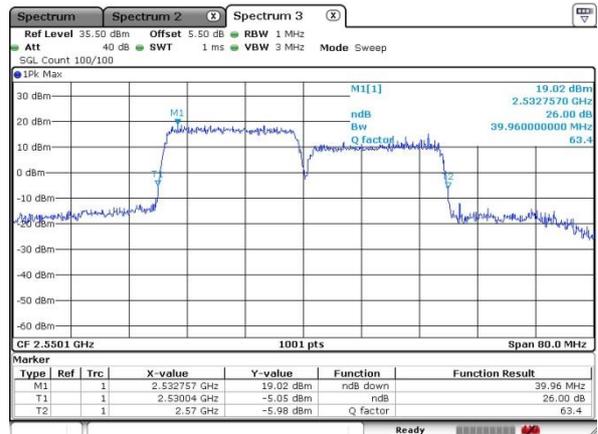
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Highest Channel / 20MHz+15MHz



Date: 3.JAN.2019 18.43.15

Highest Channel / 20MHz+20MHz



Date: 3.JAN.2019 19.01.08

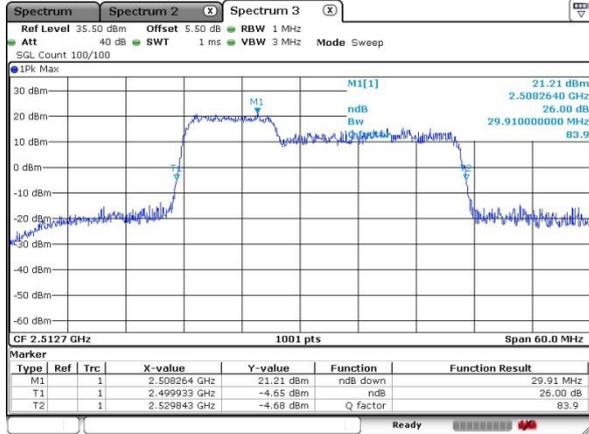


LTE Band 7

16QAM

Lowest Channel / 10MHz+20MHz

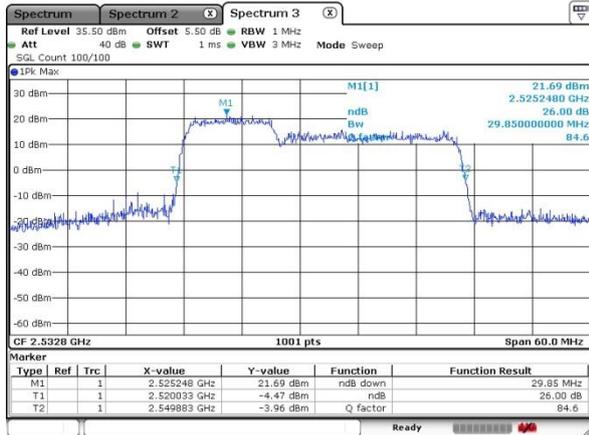
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Date: 3 JAN 2019 16:17:24

Middle Channel / 10MHz+20MHz

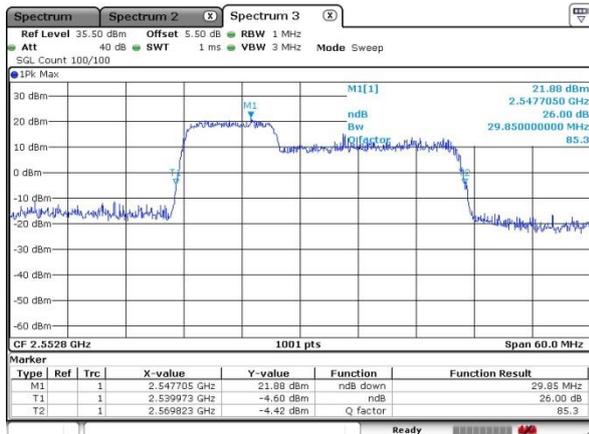
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Date: 3 JAN 2019 16:30:07

Highest Channel / 10MHz+20MHz

-



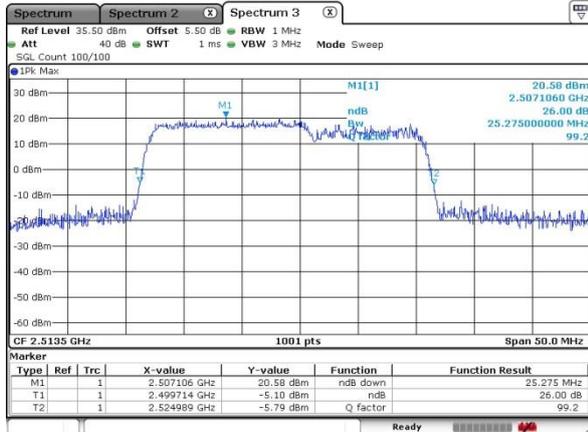
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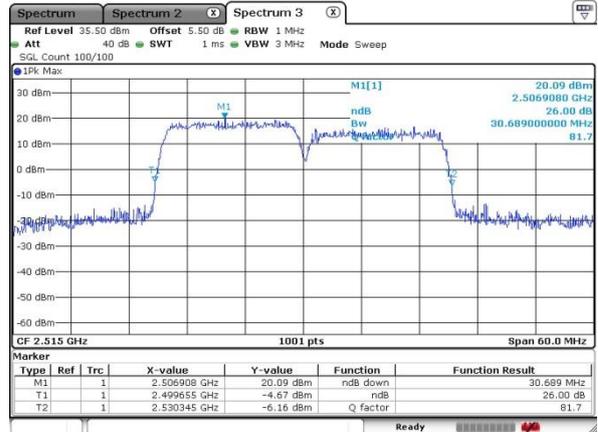
LTE Band 7

16QAM

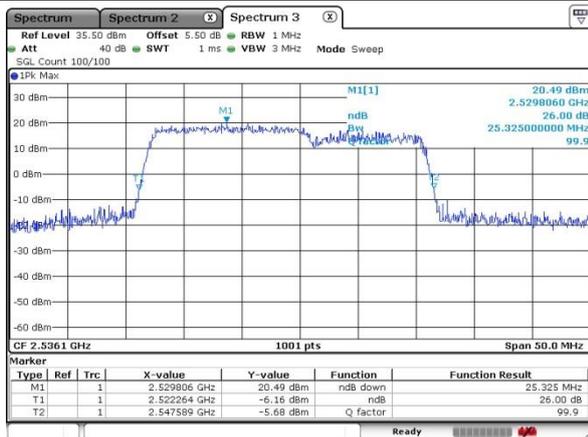
Lowest Channel / 15MHz+10MHz



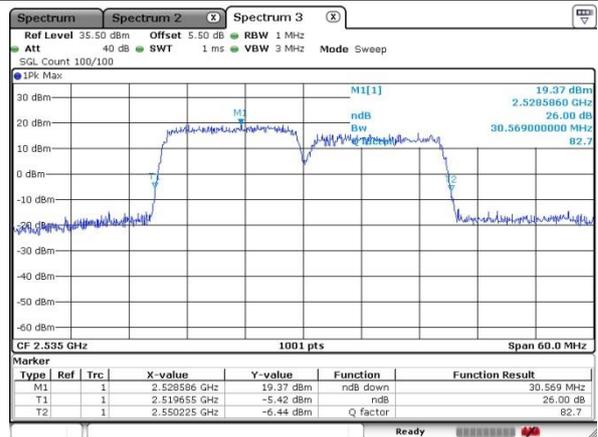
Lowest Channel / 15MHz+15MHz



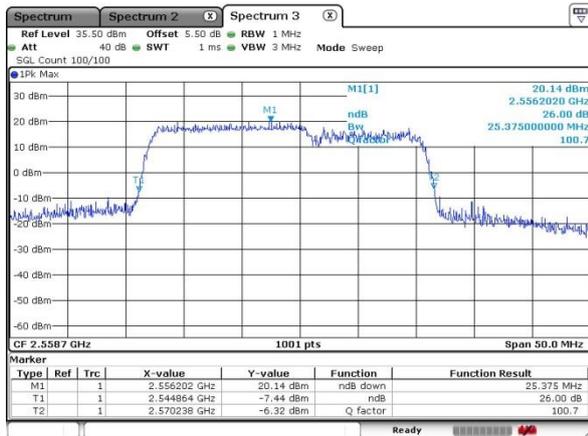
Middle Channel / 15MHz+10MHz



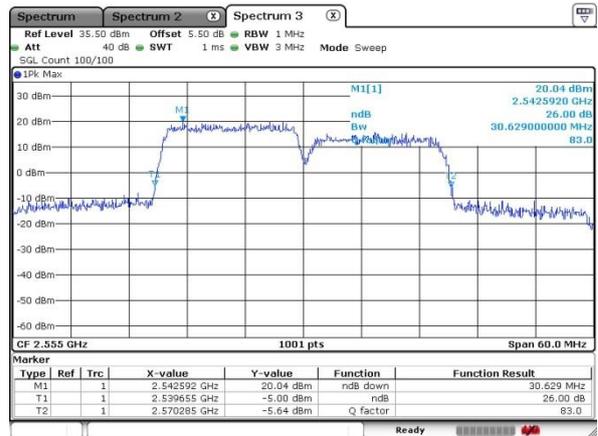
Middle Channel / 15MHz+15MHz



Highest Channel / 15MHz+10MHz



Highest Channel / 15MHz+15MHz

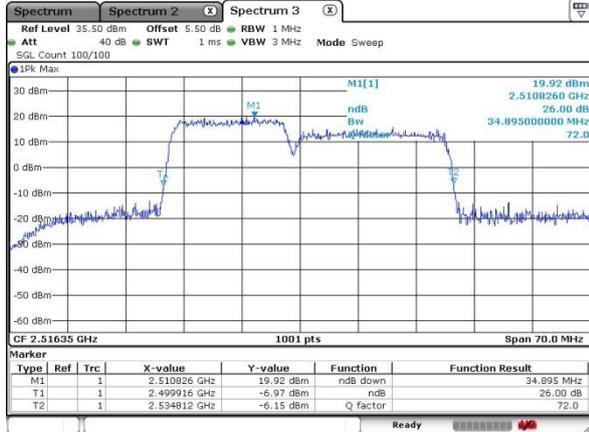




LTE Band 7

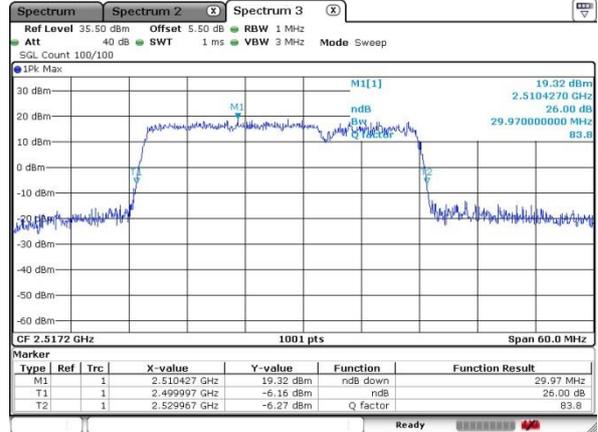
16QAM

Lowest Channel / 15MHz+20MHz



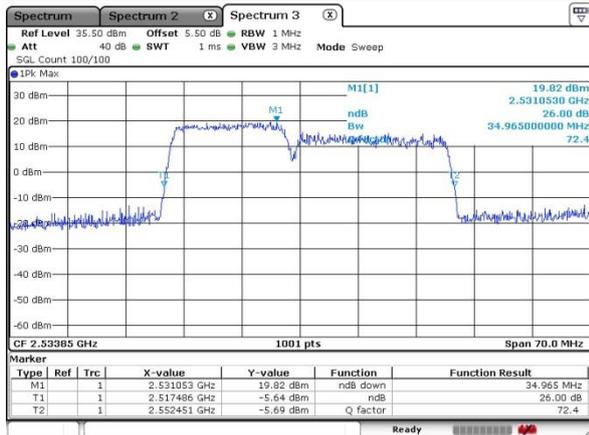
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Lowest Channel / 20MHz+10MHz



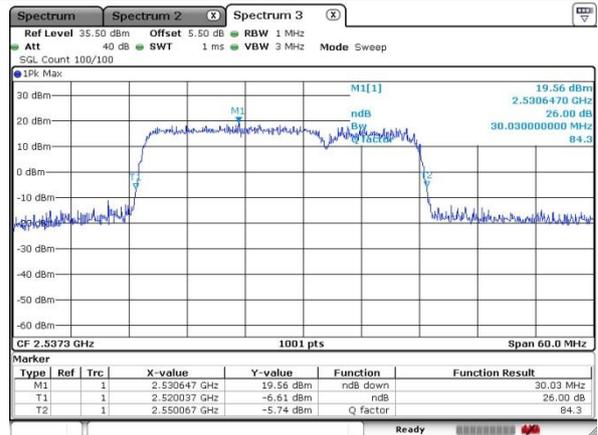
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Middle Channel / 15MHz+20MHz



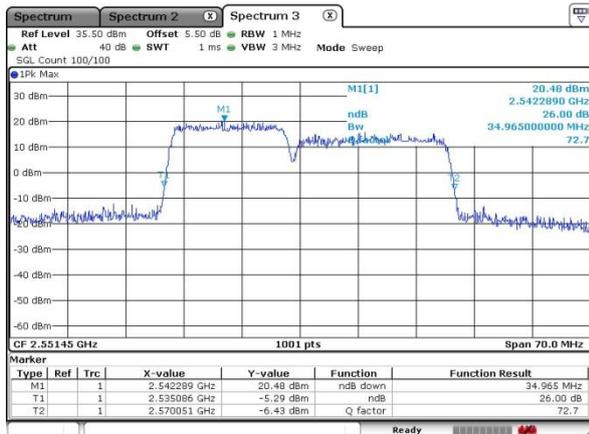
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Middle Channel / 20MHz+10MHz



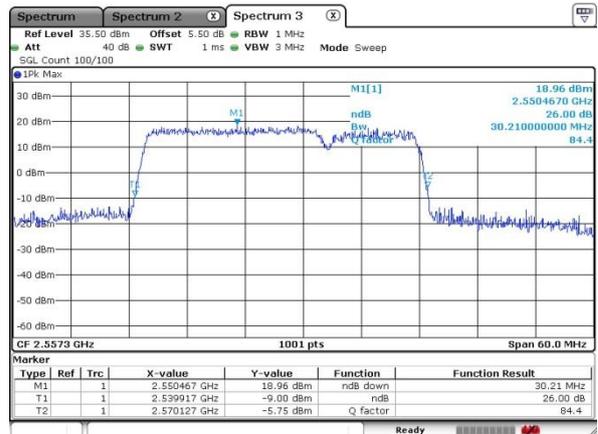
Date: 3.JAN.2019 16.49.30

Highest Channel / 15MHz+20MHz



Date: 3.JAN.2019 18.27.22

Highest Channel / 20MHz+10MHz



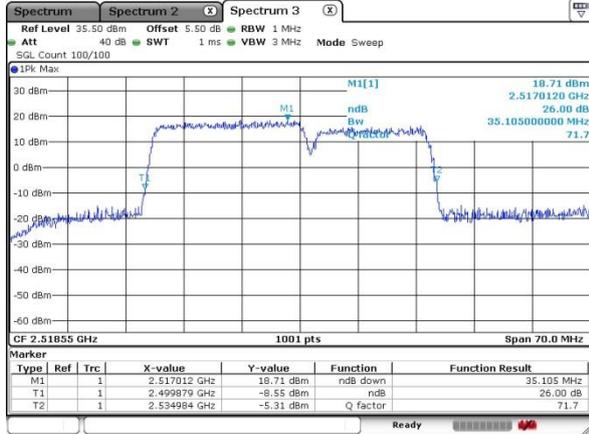
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LTE Band 7

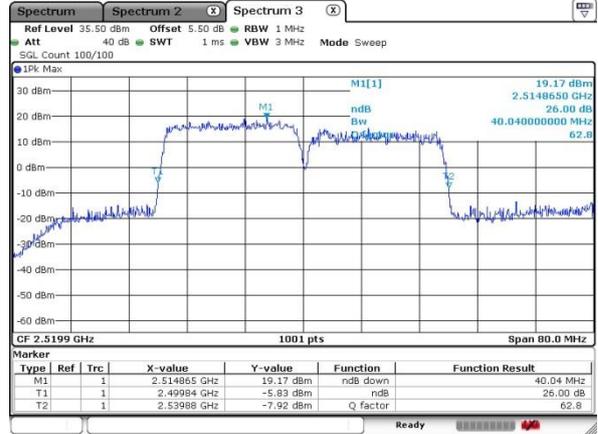
16QAM

Lowest Channel / 20MHz+15MHz



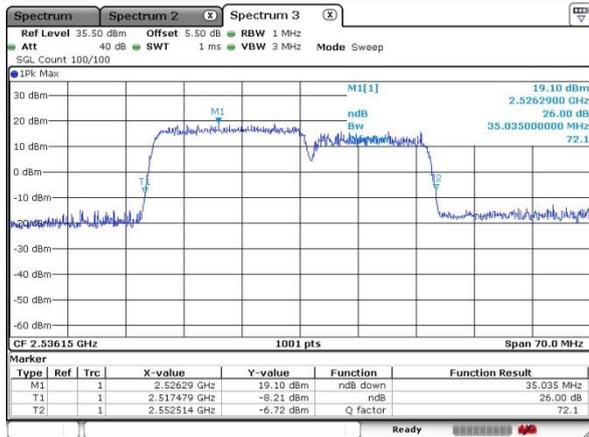
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Lowest Channel / 20MHz+20MHz



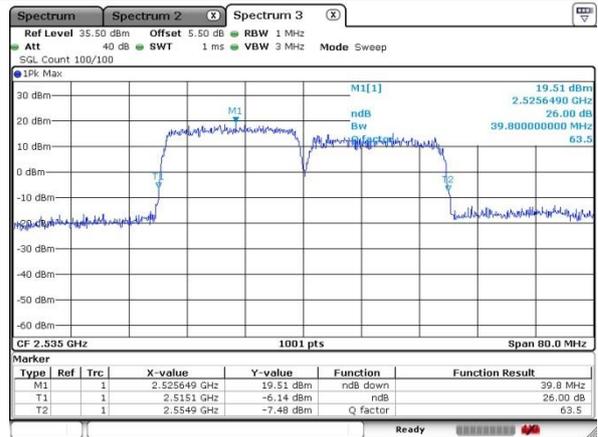
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Middle Channel / 20MHz+15MHz



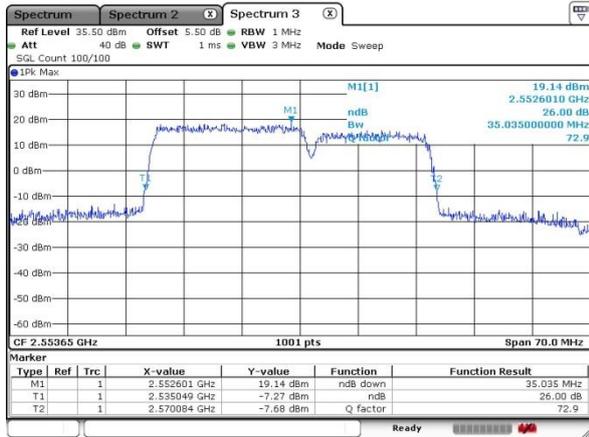
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Middle Channel / 20MHz+20MHz



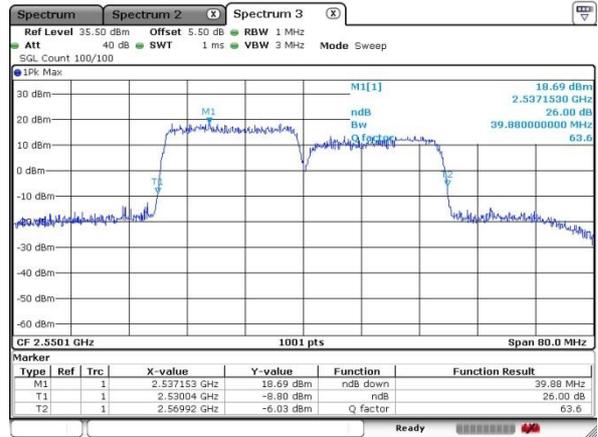
Date: 3.JAN.2019 18:56:48

Highest Channel / 20MHz+15MHz



Date: 3.JAN.2019 18:43:36

Highest Channel / 20MHz+20MHz



Date: 3.JAN.2019 19:01:31

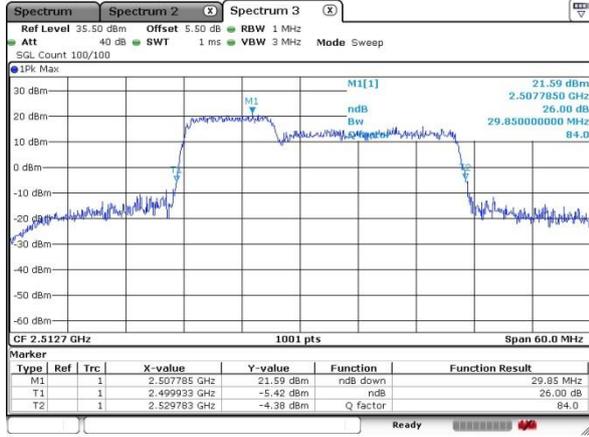


LTE Band 7

64QAM

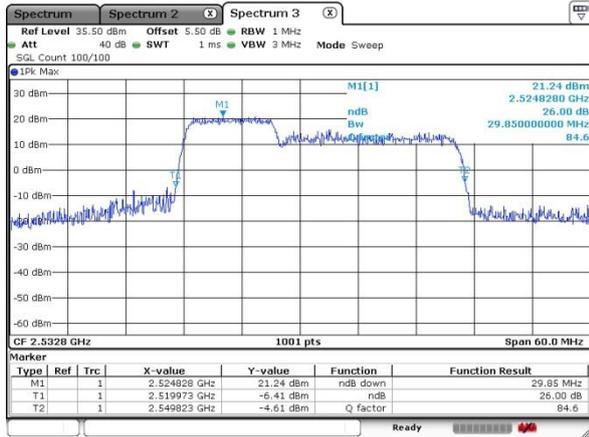
Lowest Channel / 10MHz+20MHz

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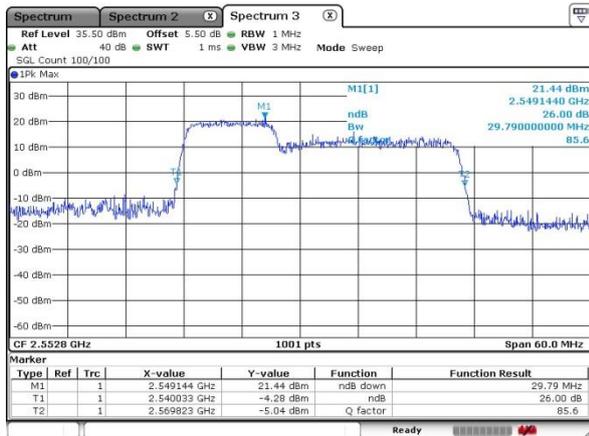
Middle Channel / 10MHz+20MHz

-



Highest Channel / 10MHz+20MHz

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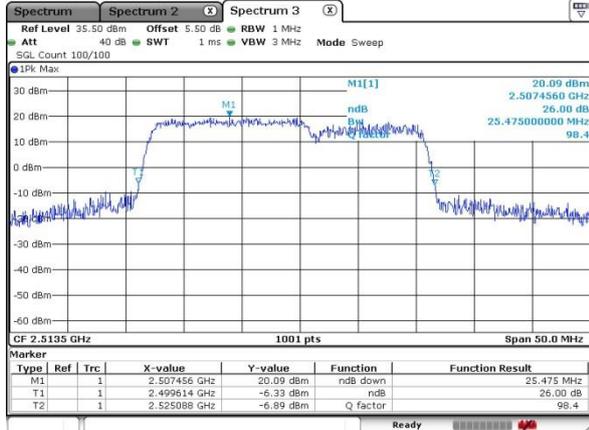




LTE Band 7

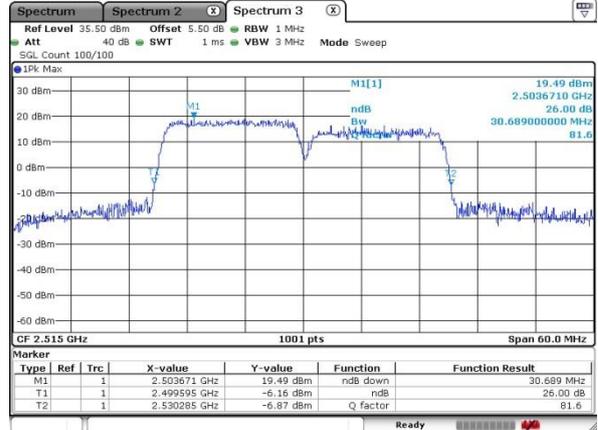
64QAM

Lowest Channel / 15MHz+10MHz



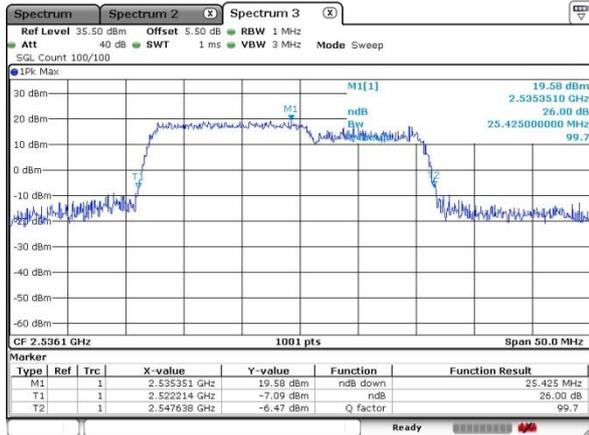
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Lowest Channel / 15MHz+15MHz



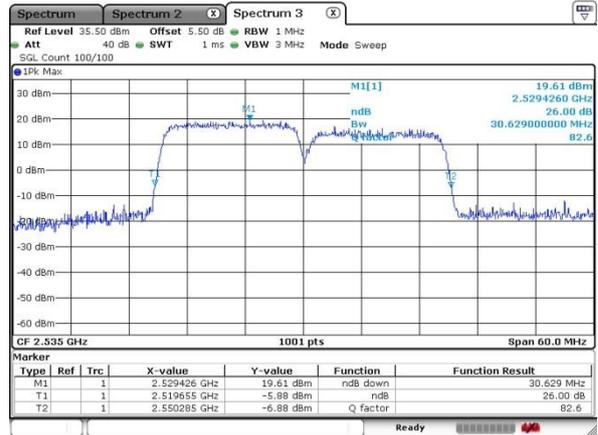
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Middle Channel / 15MHz+10MHz



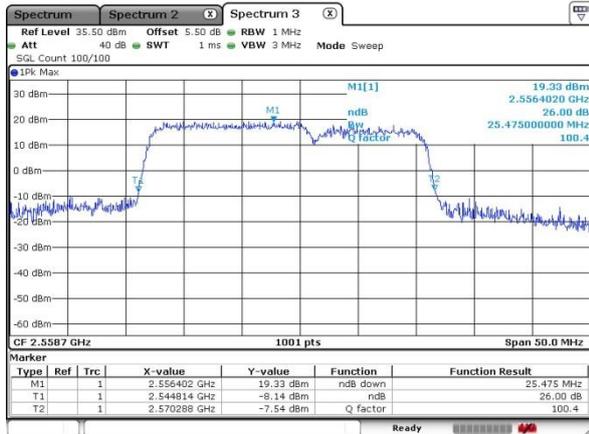
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Middle Channel / 15MHz+15MHz



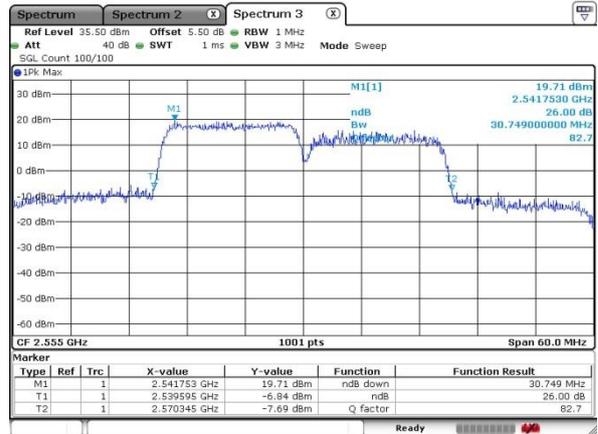
Date: 4.JAN.2019 19:11:44

Highest Channel / 15MHz+10MHz



Date: 3.JAN.2019 19:18:44

Highest Channel / 15MHz+15MHz



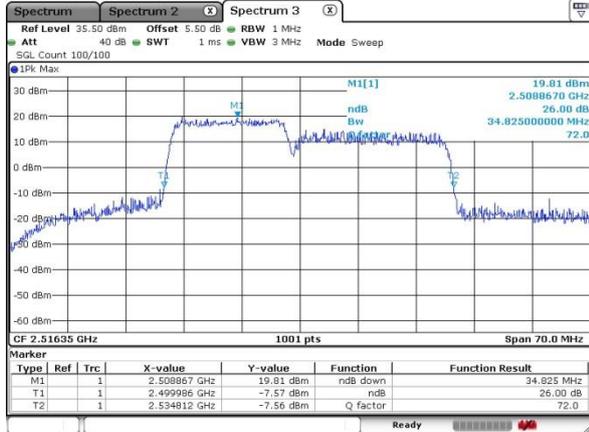
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LTE Band 7

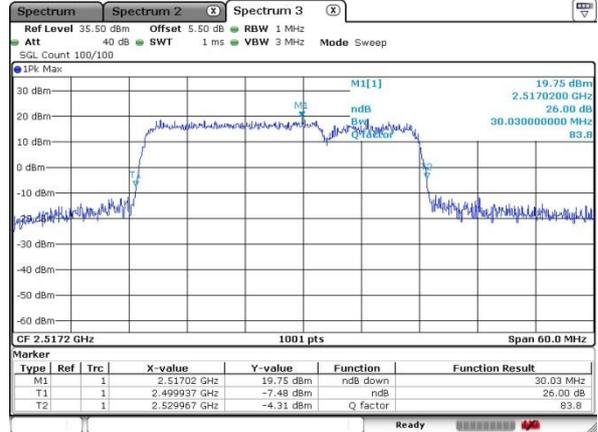
64QAM

Lowest Channel / 15MHz+20MHz



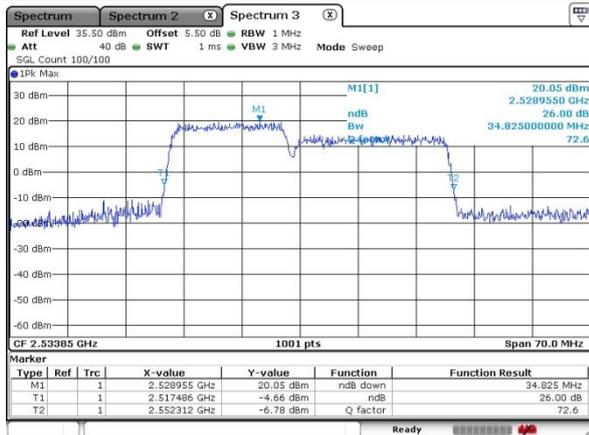
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Lowest Channel / 20MHz+10MHz



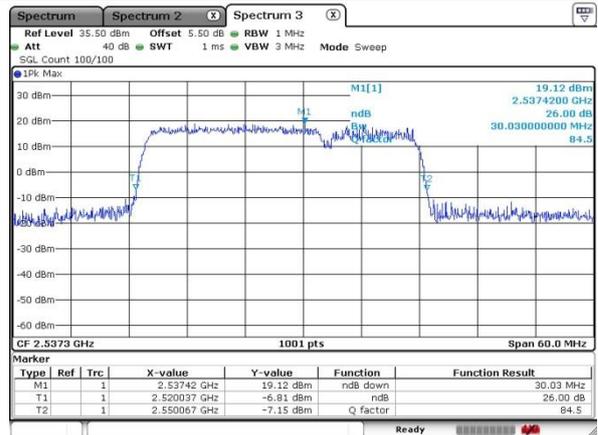
Date: 3.JAN.2019 16:41:28

Middle Channel / 15MHz+20MHz



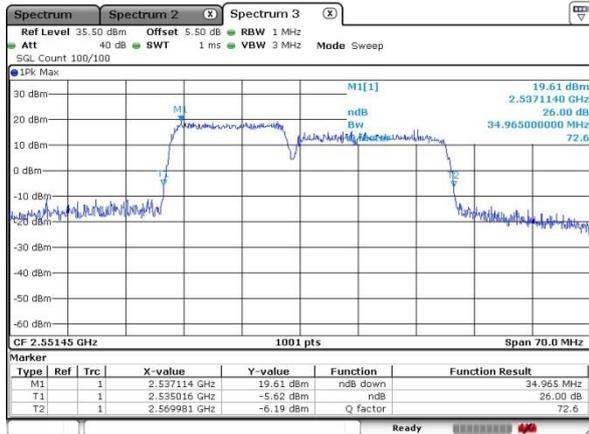
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Middle Channel / 20MHz+10MHz



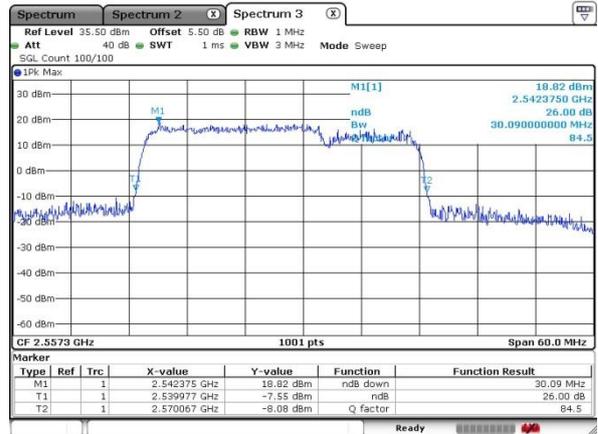
Date: 3.JAN.2019 16:48:03

Highest Channel / 15MHz+20MHz



Date: 3.JAN.2019 18:28:04

Highest Channel / 20MHz+10MHz



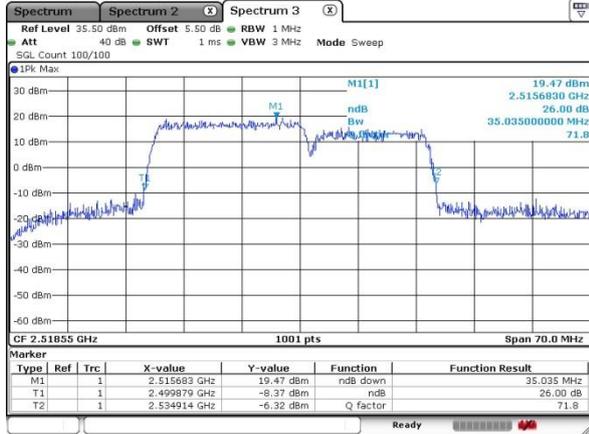
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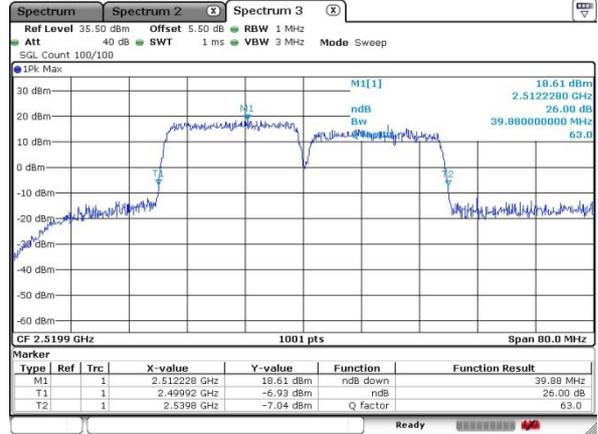
LTE Band 7

64QAM

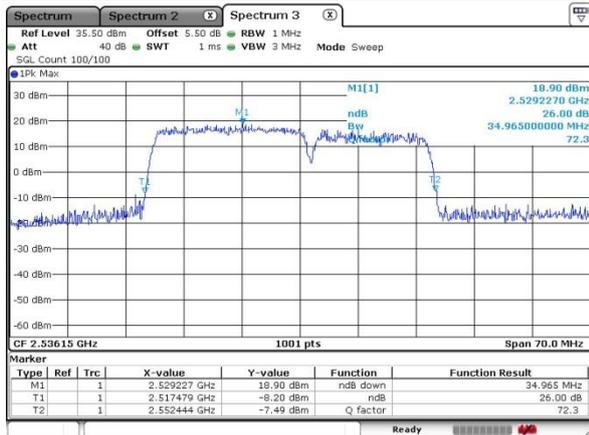
Lowest Channel / 20MHz+15MHz



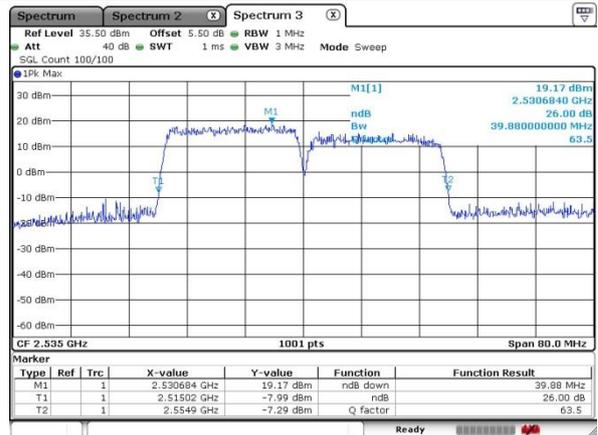
Lowest Channel / 20MHz+20MHz



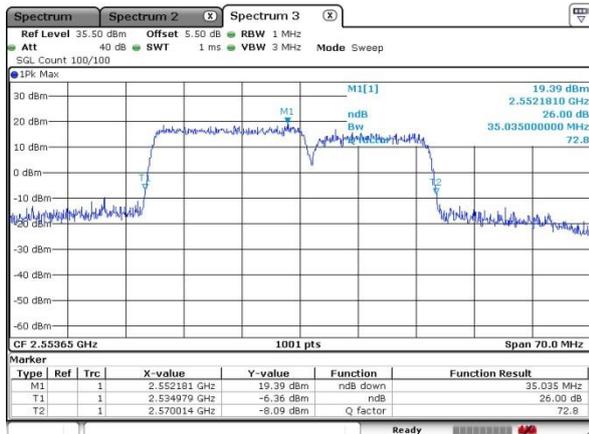
Middle Channel / 20MHz+15MHz



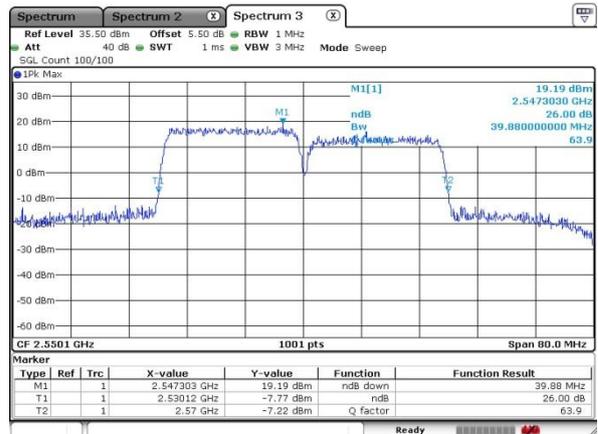
Middle Channel / 20MHz+20MHz



Highest Channel / 20MHz+15MHz



Highest Channel / 20MHz+20MHz

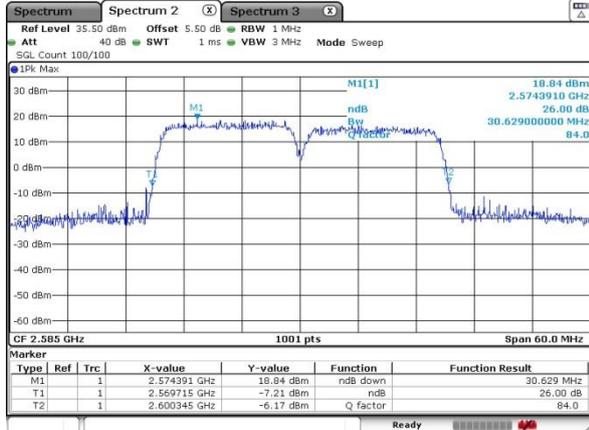




LTE Band 38

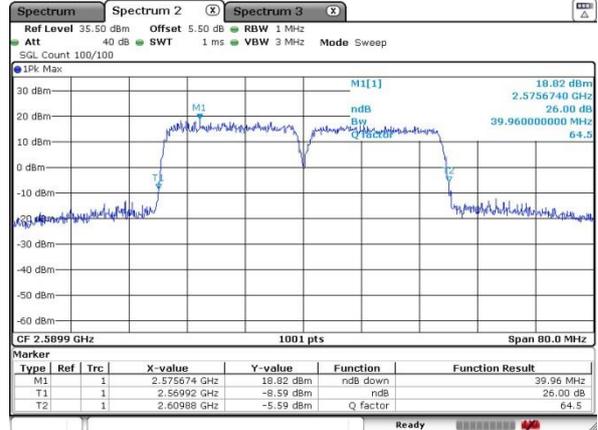
QPSK

Lowest Channel / 15MHz+15MHz



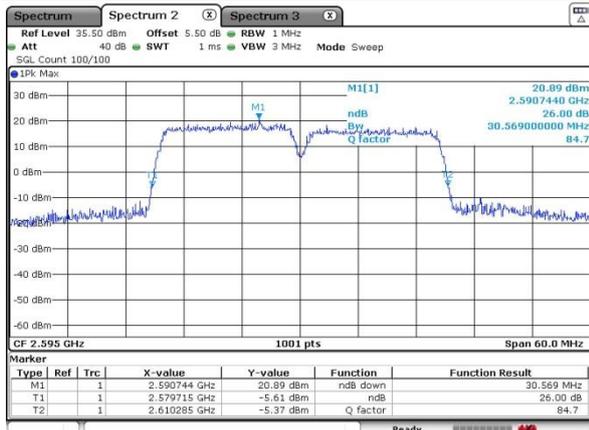
Date: 28 DEC 2018 18:18:28

Lowest Channel / 20MHz+20MHz



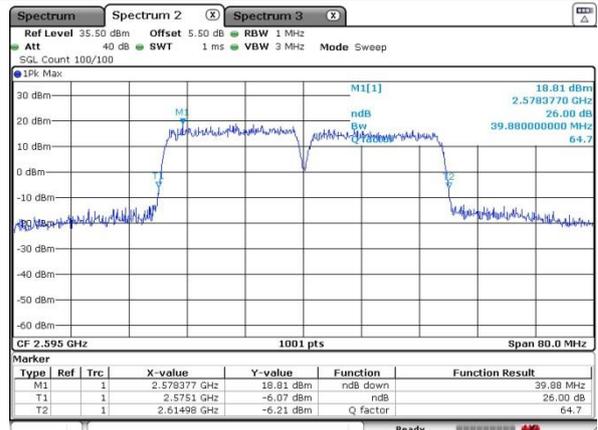
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Middle Channel / 15MHz+15MHz



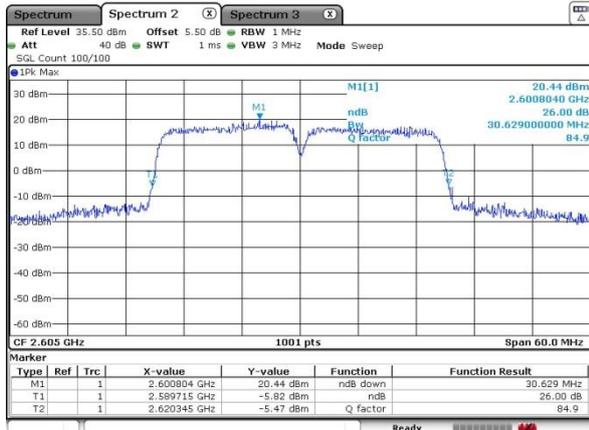
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Middle Channel / 20MHz+20MHz



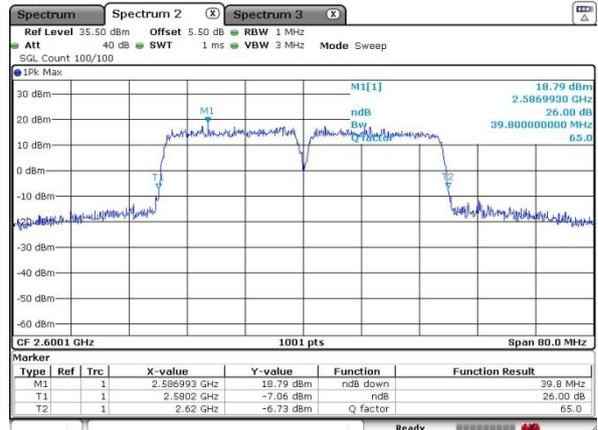
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Highest Channel / 15MHz+15MHz



Date: 28 DEC 2018 18:29:36

Highest Channel / 20MHz+20MHz



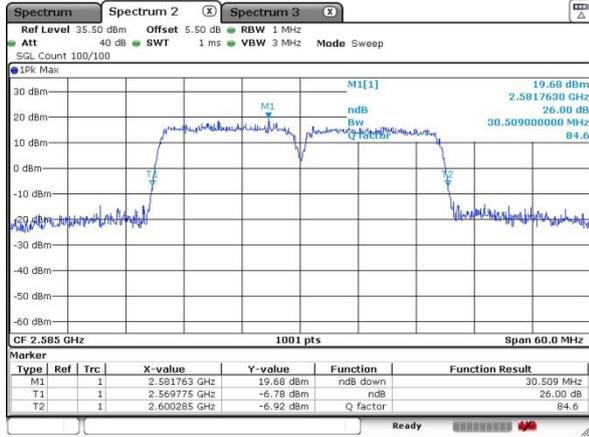
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LTE Band 38

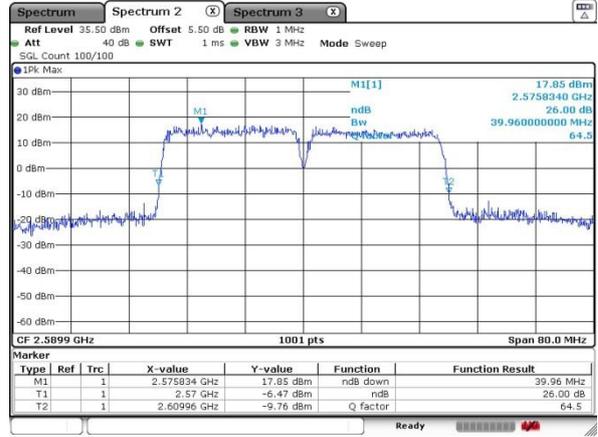
16QAM

Lowest Channel / 15MHz+15MHz



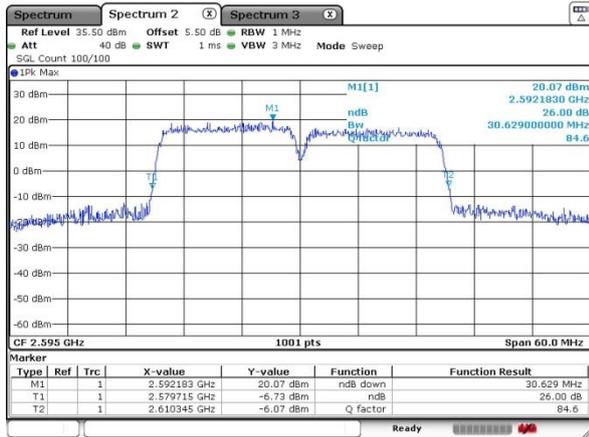
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Lowest Channel / 20MHz+20MHz



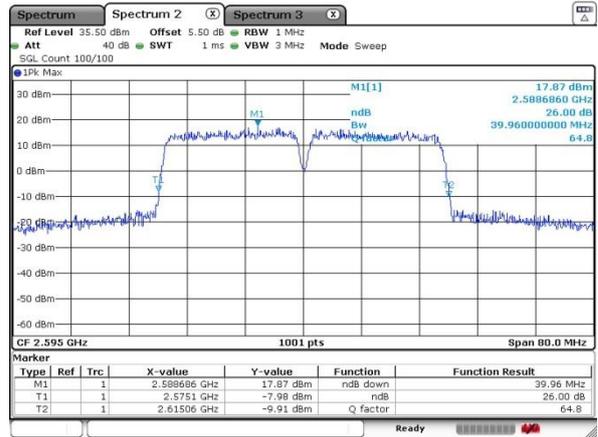
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Middle Channel / 15MHz+15MHz



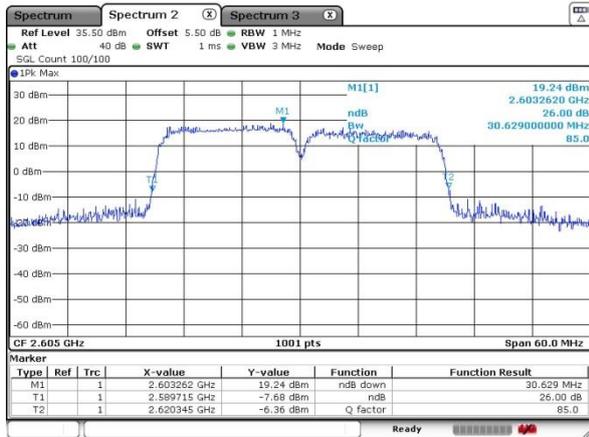
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Middle Channel / 20MHz+20MHz



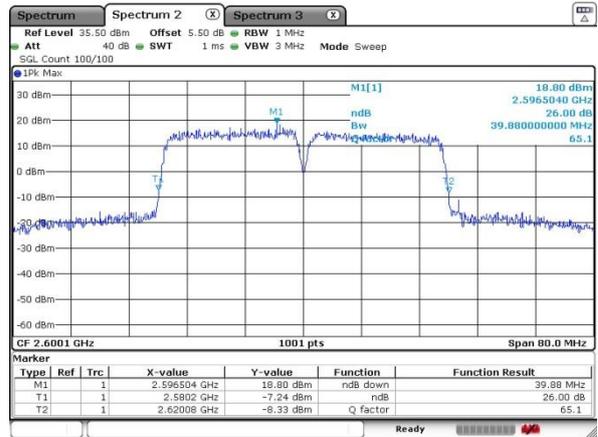
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Highest Channel / 15MHz+15MHz



Date: 28 DEC 2018 18:30:29

Highest Channel / 20MHz+20MHz



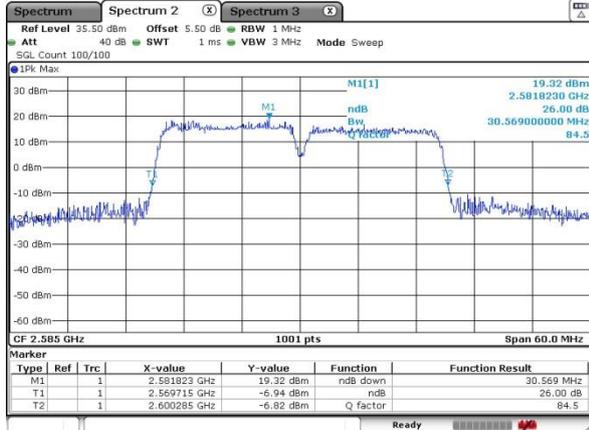
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LTE Band 38

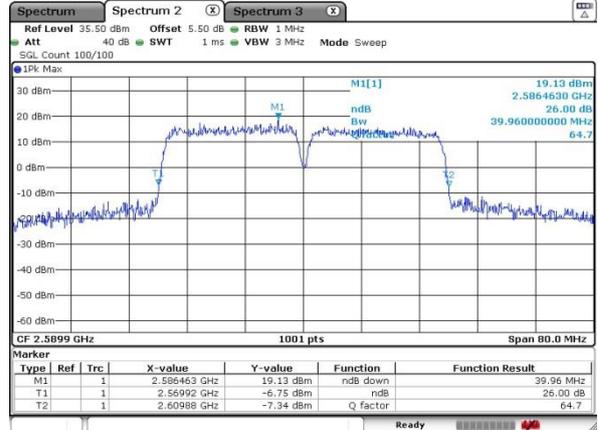
64QAM

Lowest Channel / 15MHz+15MHz



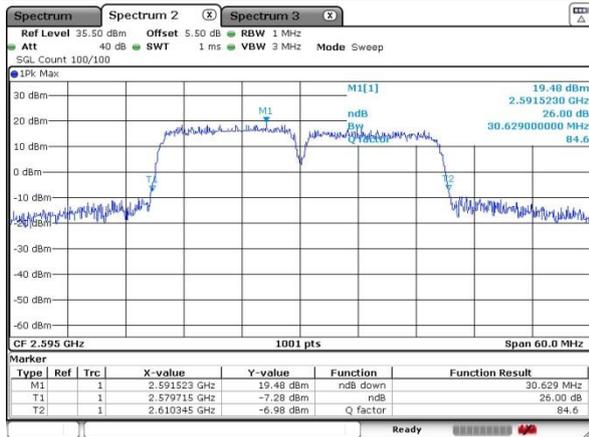
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Lowest Channel / 20MHz+20MHz



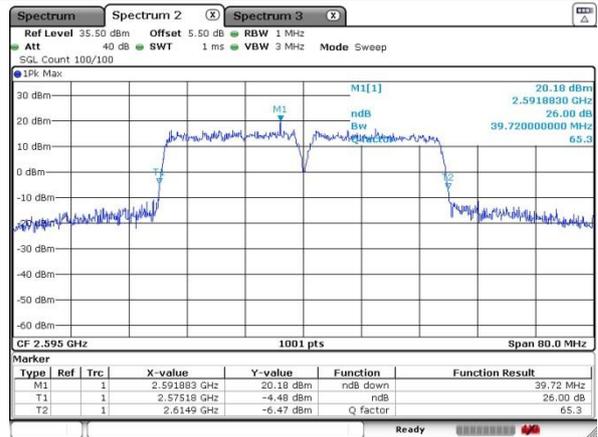
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Middle Channel / 15MHz+15MHz



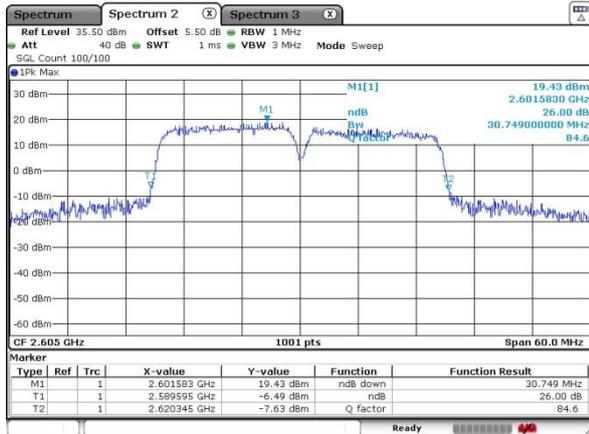
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Middle Channel / 20MHz+20MHz



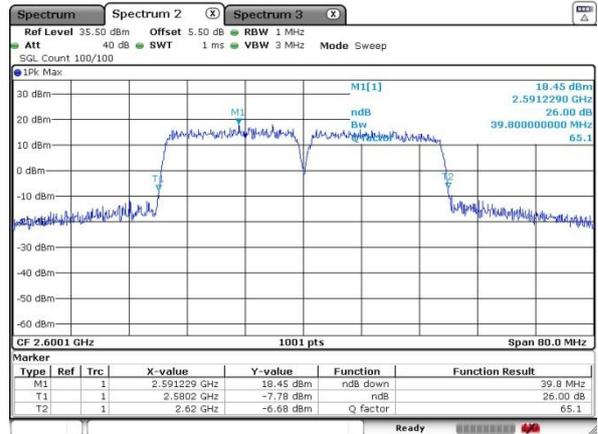
Date: 28 DEC 2018 17:29:54

Highest Channel / 15MHz+15MHz



Date: 28 DEC 2018 18:31:01

Highest Channel / 20MHz+20MHz



Date: 28 DEC 2018 18:12:28



Occupied Bandwidth

Mode	LTE Band 2 : 99%OBW(MHz)											
	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	2.70	2.71	4.50	4.49	9.07	9.01	13.46	13.40	18.34	18.26
Middle CH	1.09	1.09	2.72	2.73	4.49	4.50	9.03	9.05	13.52	13.49	18.38	18.30
Highest CH	1.09	1.09	2.70	2.73	4.48	4.51	9.03	9.01	13.43	13.40	18.46	18.46
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09		2.72		4.49		9.01		13.46		18.42	
Middle CH	1.09		2.73		4.50		9.05		13.43		18.50	
Highest CH	1.09		2.73		4.48		9.05		13.46		18.34	

Mode	LTE Band 4 : 99%OBW(MHz)											
	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	2.75	2.70	4.47	4.48	9.09	9.01	13.46	13.40	18.30	18.38
Middle CH	1.10	1.09	2.81	2.73	4.51	4.49	9.17	8.99	13.52	13.49	18.46	18.30
Highest CH	1.10	1.09	2.73	2.72	4.49	4.52	8.99	9.03	13.43	13.49	18.26	18.38
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09		2.72		4.50		8.99		13.40		18.46	
Middle CH	1.09		2.73		4.50		8.99		13.40		18.46	
Highest CH	1.09		2.73		4.49		9.03		13.43		18.38	

Mode	LTE Band 5 : 99%OBW(MHz)											
	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	2.73	4.50	4.50	8.99	9.01				
Middle CH	1.10	1.10	2.72	2.73	4.49	4.49	9.03	8.99				
Highest CH	1.10	1.09	2.72	2.72	4.51	4.49	8.99	9.07				
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09		2.71		4.50		9.01					
Middle CH	1.09		2.71		4.50		9.03					
Highest CH	1.09		2.72		4.49		8.99					



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	-	-	-	-	4.49	4.47	9.01	9.07	13.46	13.46	18.30	18.34
Middle CH	-	-	-	-	4.47	4.49	9.01	9.03	13.43	13.37	18.38	18.38
Highest CH	-	-	-	-	4.48	4.50	9.03	8.97	13.43	13.40	18.38	18.38
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	4.50	9.03	9.03	13.43	13.43	18.38	18.38
Middle CH	-	-	-	-	4.50	4.50	9.01	9.01	13.46	13.46	18.42	18.42
Highest CH	-	-	-	-	4.51	4.51	9.05	9.05	13.49	13.49	18.46	18.46

Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.72	2.70	4.50	4.48	9.01	8.95	-	-	-	-
Middle CH	1.09	1.09	2.72	2.73	4.50	4.50	9.01	9.05	-	-	-	-
Highest CH	1.10	1.09	2.74	2.72	4.49	4.49	8.97	8.97	-	-	-	-
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09	1.09	2.72	2.72	4.51	4.51	9.01	9.01	-	-	-	-
Middle CH	1.09	1.09	2.72	2.72	4.51	4.51	9.05	9.05	-	-	-	-
Highest CH	1.09	1.09	2.72	2.72	4.50	4.50	9.01	9.01	-	-	-	-

Mode	LTE Band 38 : 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	-	-	-	-	4.47	4.46	9.01	8.99	13.40	13.37	18.46	18.42
Middle CH	-	-	-	-	4.47	4.50	8.95	9.05	13.46	13.40	18.26	18.38
Highest CH	-	-	-	-	4.49	4.50	8.99	9.07	13.55	13.43	18.46	18.46
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.48	4.48	9.05	9.05	13.46	13.46	18.38	18.38
Middle CH	-	-	-	-	4.49	4.49	9.05	9.05	13.40	13.40	18.34	18.34
Highest CH	-	-	-	-	4.50	4.50	9.01	9.01	13.40	13.40	18.26	18.26



For CA

Mode	LTE Band 7 : 99%OBW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	27.99	-	23.38	28.59
Middle CH	27.87	-	23.38	28.53
Highest CH	27.93	-	23.43	28.65
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.87	28.05	32.87	37.64
Middle CH	32.73	27.99	32.87	37.72
Highest CH	32.73	27.99	32.94	37.64

Mode	LTE Band 7 : 99%OBW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	27.93	-	23.53	28.59
Middle CH	27.93	-	23.43	28.47
Highest CH	27.93	-	23.43	28.65
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.73	27.93	32.87	37.48
Middle CH	32.94	27.93	32.87	37.64
Highest CH	32.73	27.87	32.80	37.72

Mode	LTE Band 7 : 99%OBW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	28.05	-	23.43	28.59
Middle CH	27.99	-	23.43	28.53
Highest CH	27.93	-	23.43	28.59
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.73	27.99	32.73	37.64
Middle CH	32.73	27.93	32.80	37.56
Highest CH	32.73	27.93	32.80	37.56



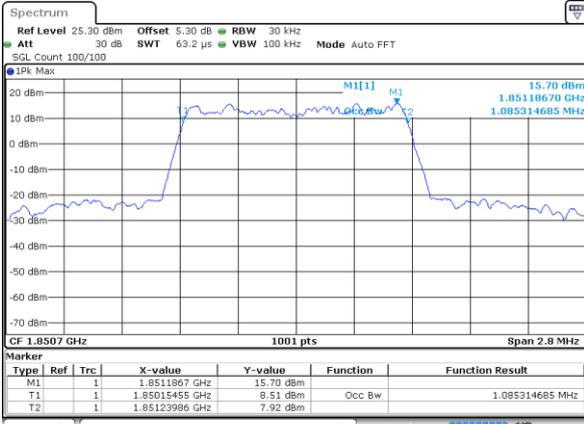
Mode	LTE Band 38 : 99%OBW(MHz)			
Mod.	QPSK		16QAM	
BW	15MHz+15MHz	20MHz+20MHz	15MHz+15MHz	20MHz+20MHz
Lowest CH	28.71	37.56	28.59	37.72
Middle CH	28.65	37.64	28.65	37.72
Highest CH	28.59	37.72	28.59	37.72

Mode	LTE Band 38 : 99%OBW(MHz)			
Mod.	64QAM		-	
BW	15MHz+15MHz	20MHz+20MHz	-	-
Lowest CH	28.53	37.80	-	-
Middle CH	28.59	37.72	-	-
Highest CH	28.53	37.72	-	--

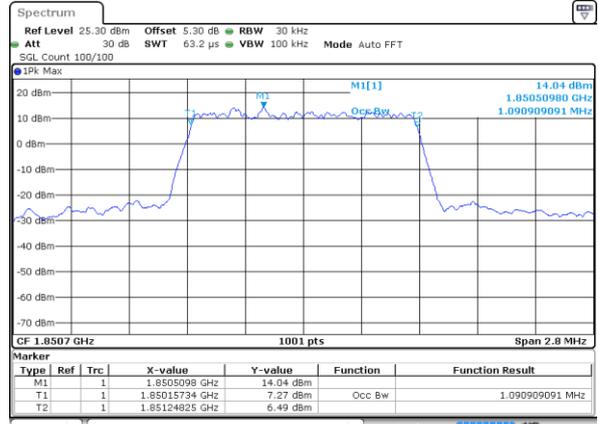


LTE Band 2

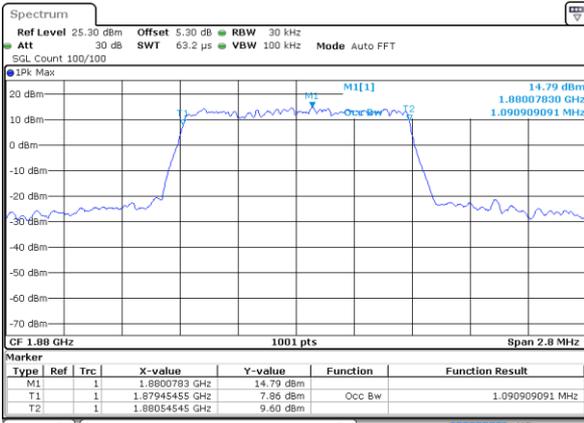
Lowest Channel / 1.4MHz / QPSK



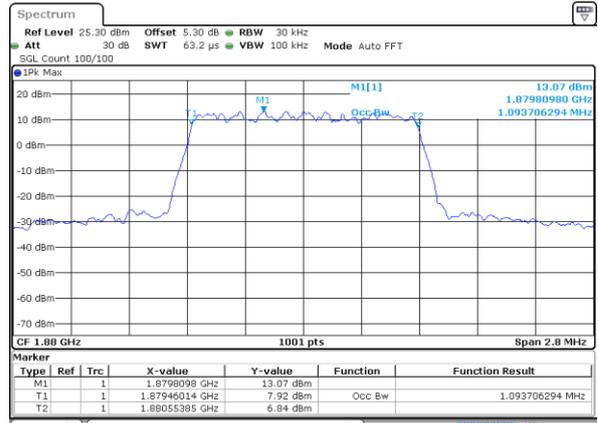
Lowest Channel / 1.4MHz / 16QAM



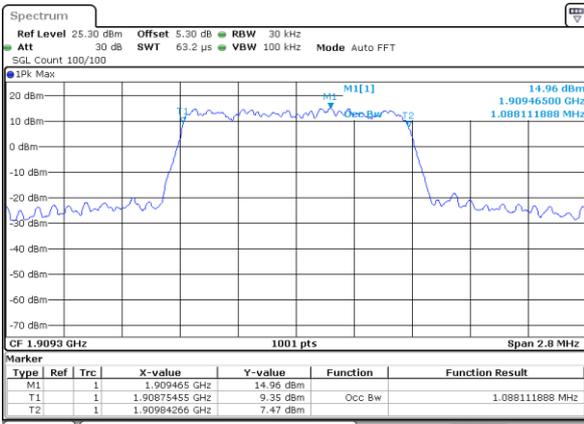
Middle Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



Highest Channel / 1.4MHz / 16QAM

