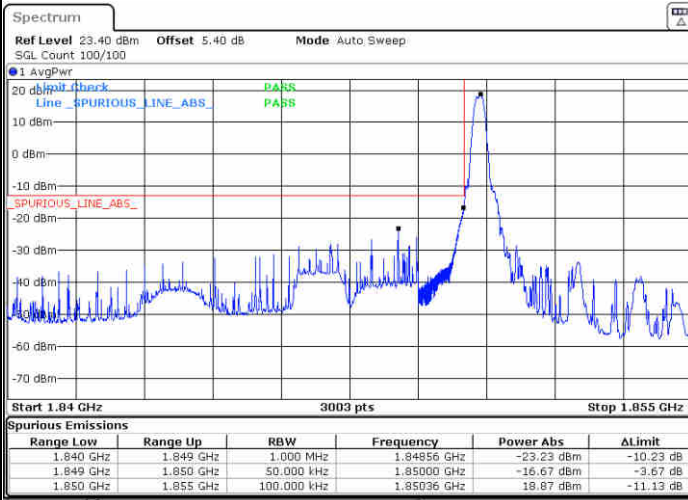




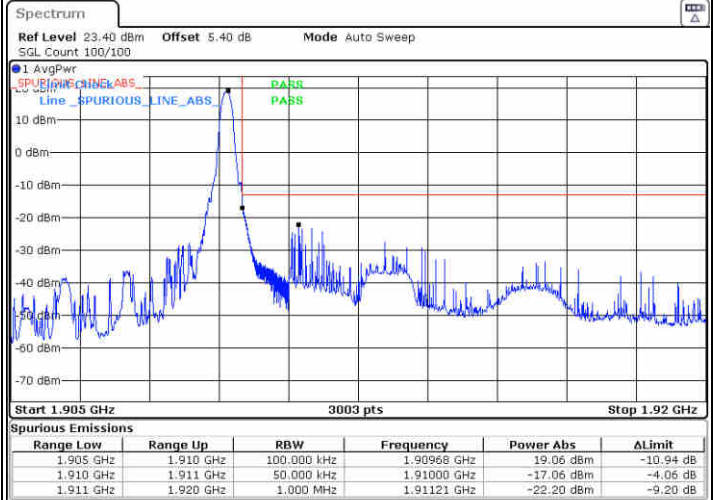
FR1 n2 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



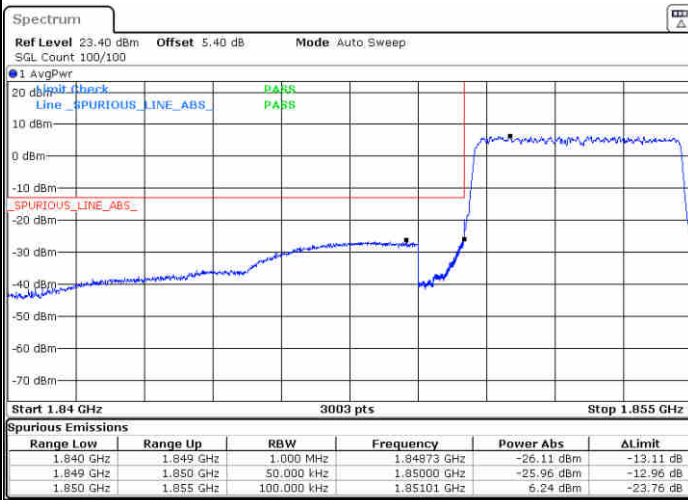
Date: 29 JUN 2020 02:40:43



Date: 29 JUN 2020 03:00:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 02:41:02



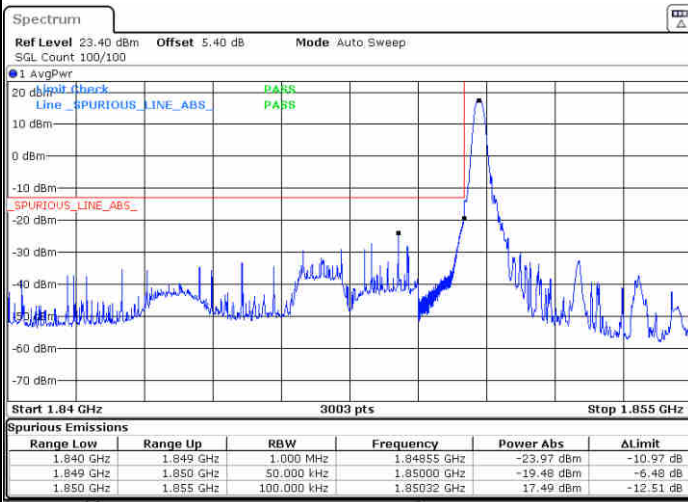
Date: 29 JUN 2020 03:00:35



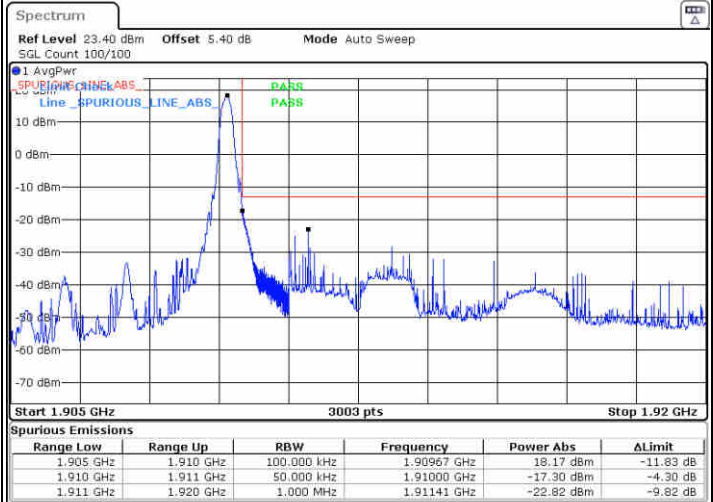
FR1 n2 / 5MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



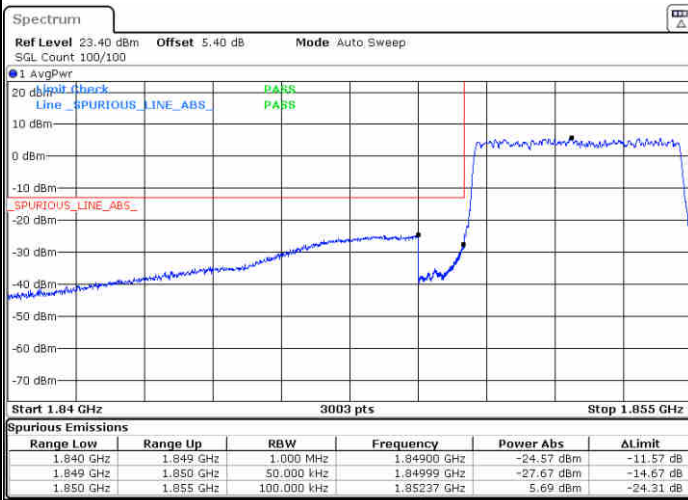
Date: 29 JUN 2020 02:42:18



Date: 29 JUN 2020 03:01:48

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 02:41:58



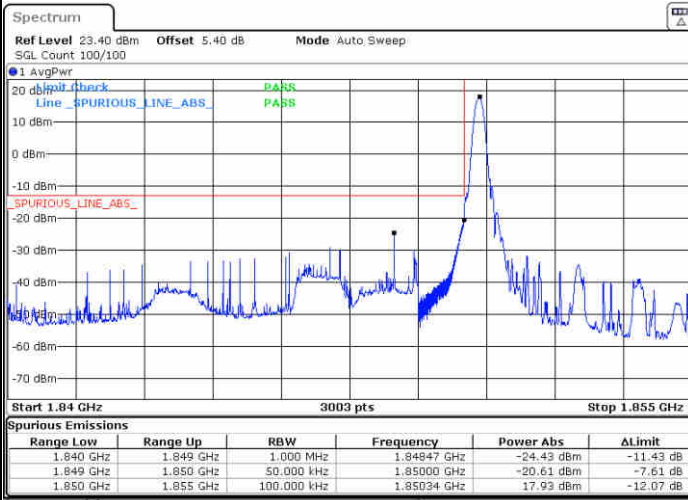
Date: 29 JUN 2020 03:01:24



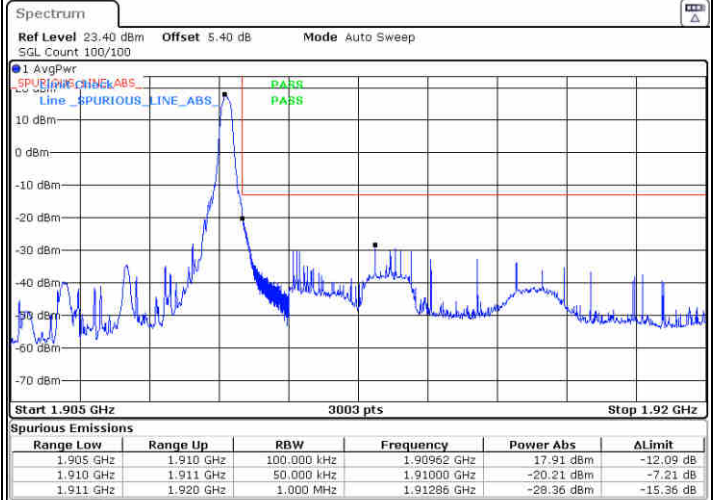
FR1 n2 / 5MHz / DFT-S OFDM / 64Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



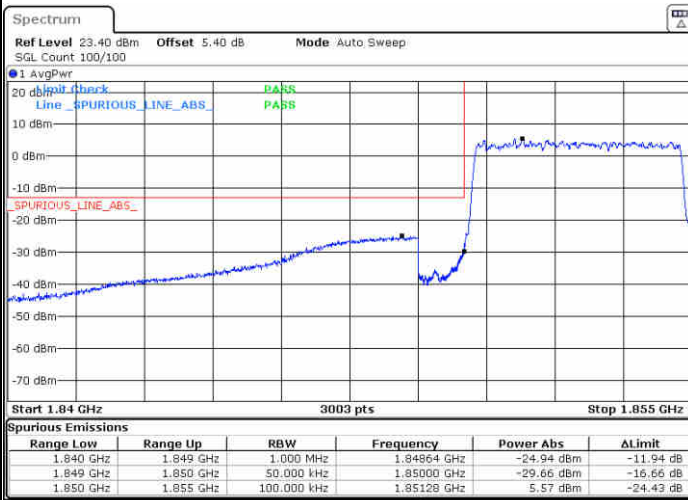
Date: 29 JUN 2020 02:42:43



Date: 29 JUN 2020 03:02:08

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 02:43:02



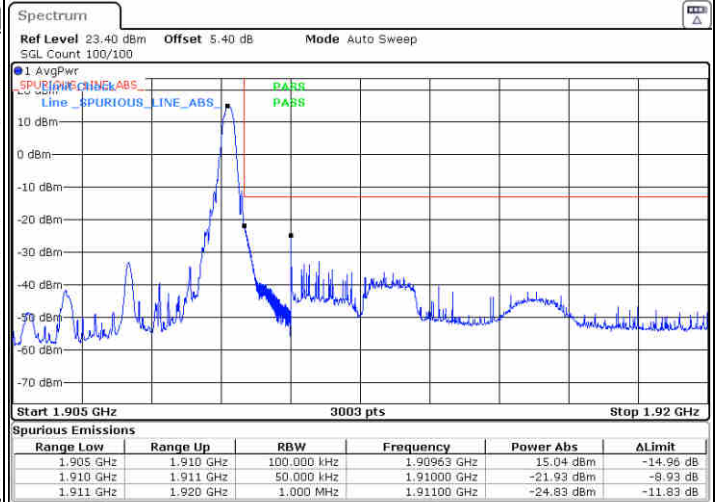
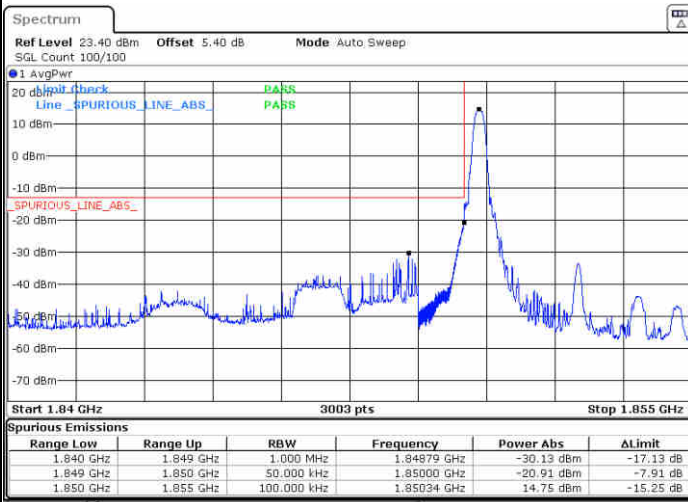
Date: 29 JUN 2020 03:02:30



FR1 n2 / 5MHz / DFT-S OFDM / 256Q

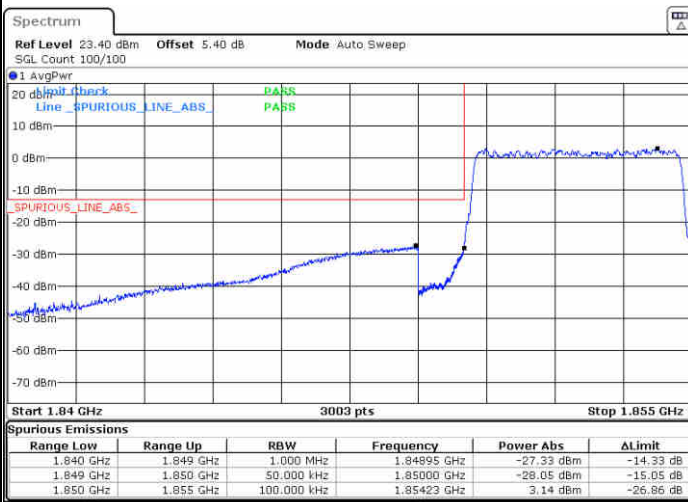
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

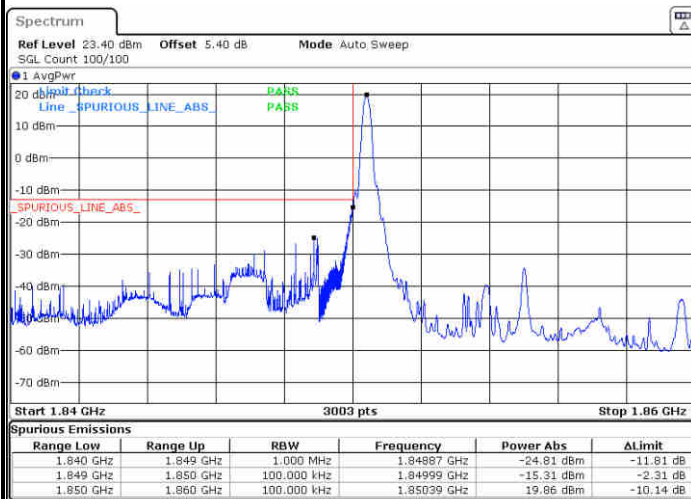
Highest Band Edge / Full RB



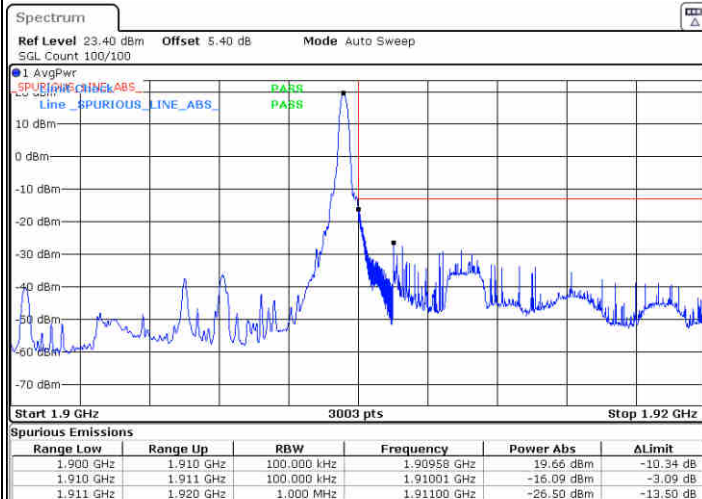


FR1 n2 / 10MHz / DFT-s-OFDM / PI/2 BPSK

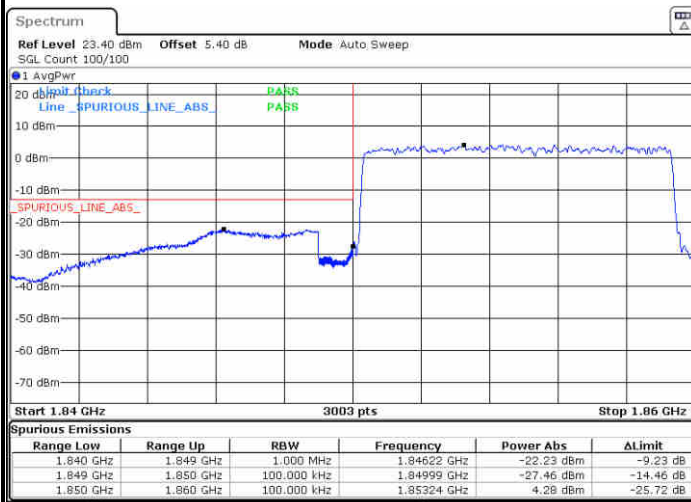
Lowest Band Edge / 1RB0



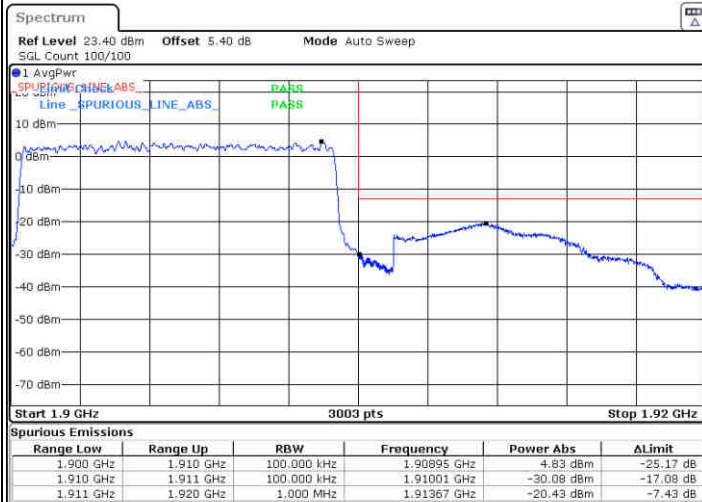
Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

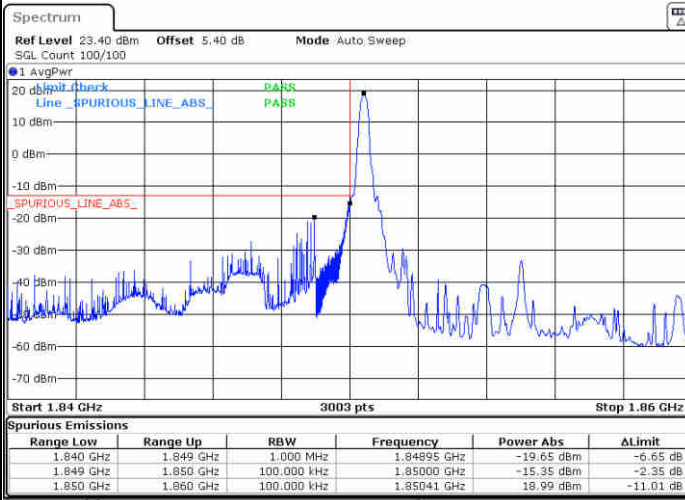




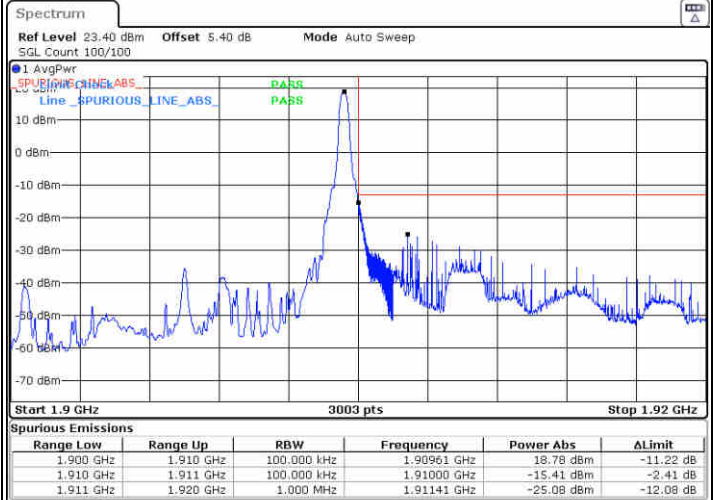
FR1 n2 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



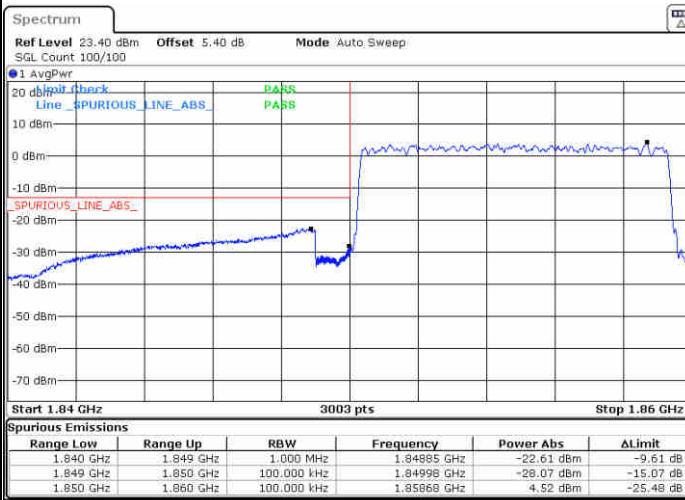
Date: 29 JUN 2020 03:06:19



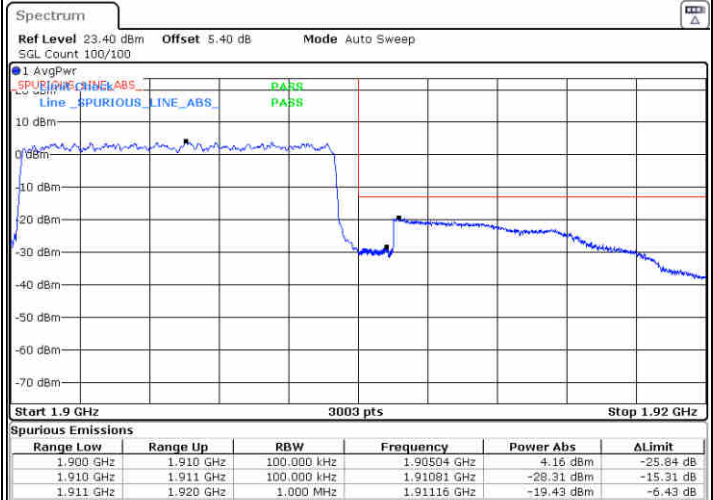
Date: 29 JUN 2020 03:13:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:06:32



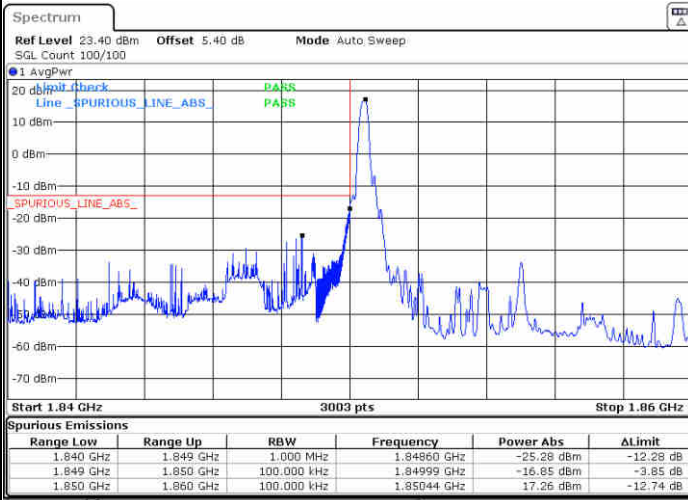
Date: 29 JUN 2020 03:13:38



FR1 n2 / 10MHz / DFT-s-OFDM / 16QAM

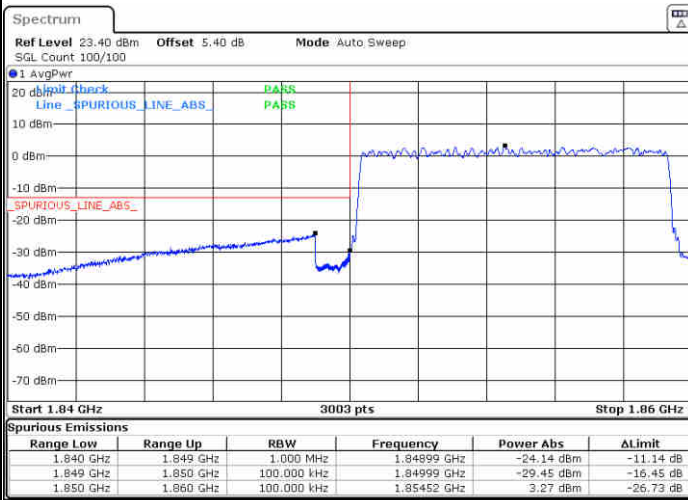
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

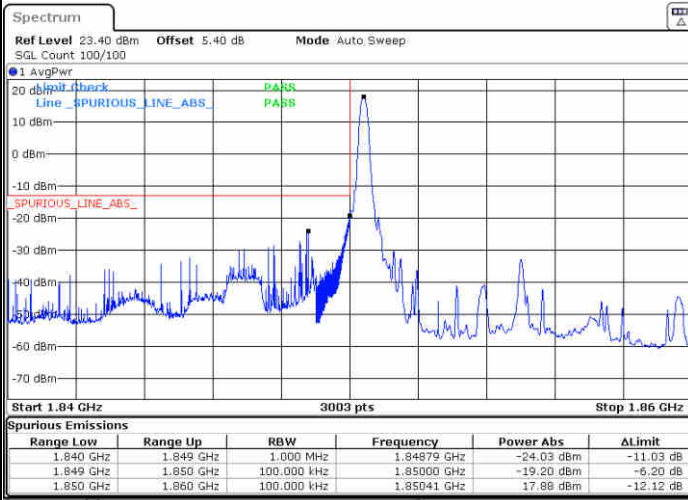




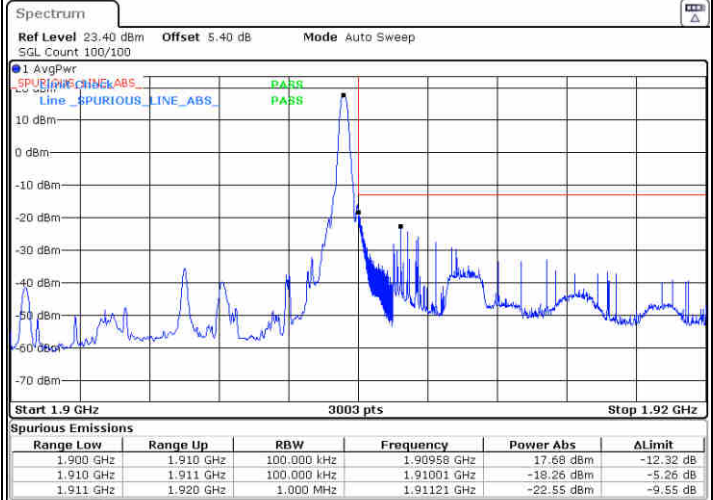
FR1 n2 / 10MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



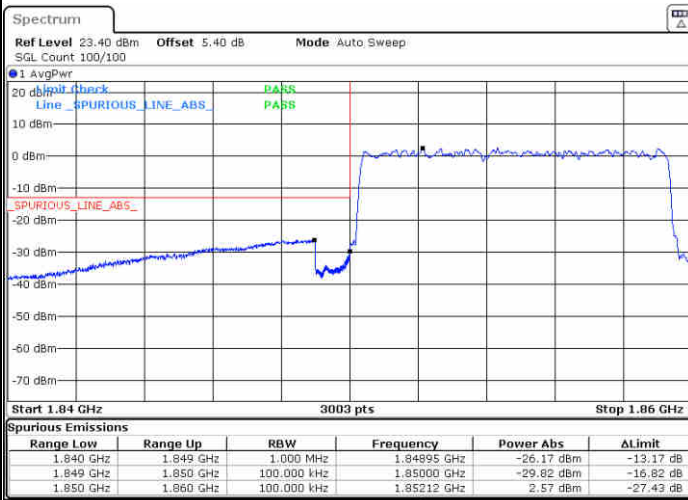
Date: 29 JUN 2020 03:07:36



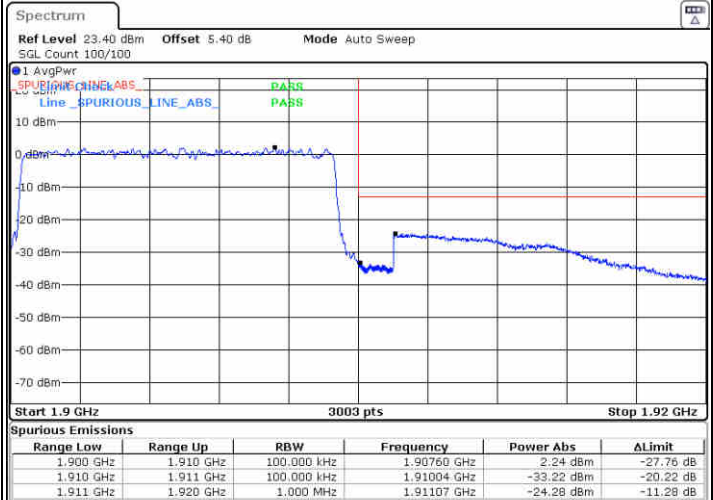
Date: 29 JUN 2020 03:14:48

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:07:49



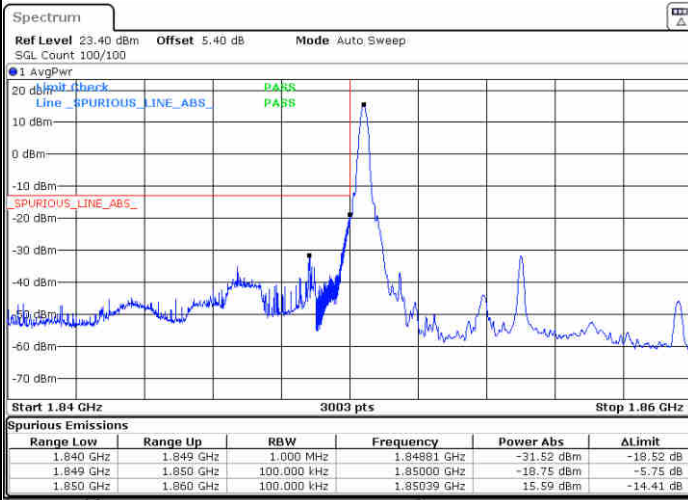
Date: 29 JUN 2020 03:15:04



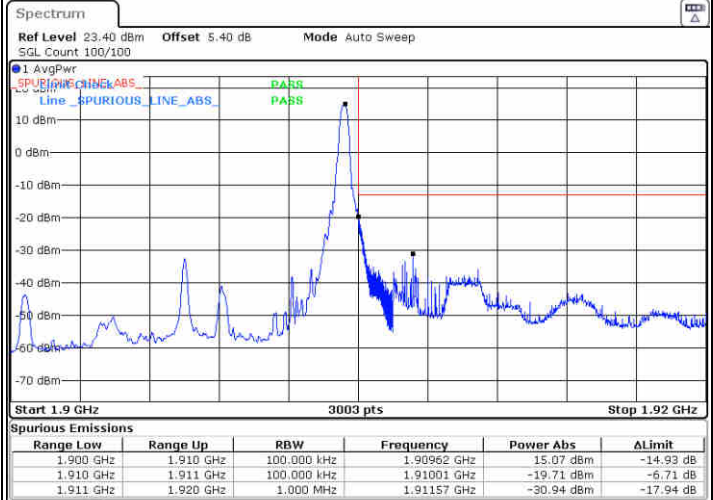
FR1 n2 / 10MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



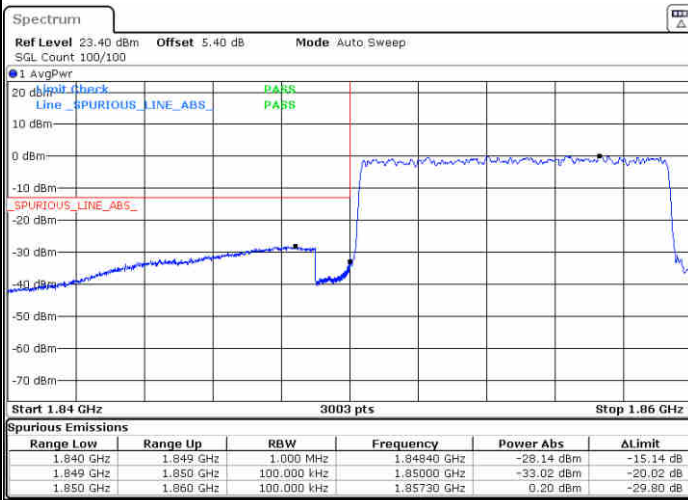
Date: 29 JUN 2020 03:08:55



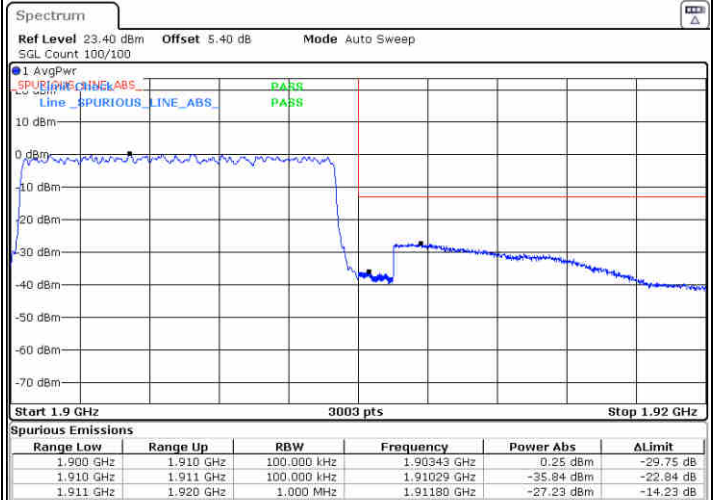
Date: 29 JUN 2020 03:16:13

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:08:41



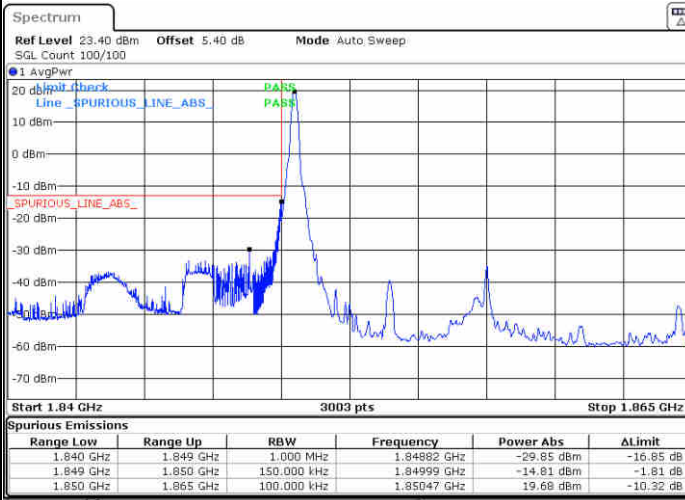
Date: 29 JUN 2020 03:15:59



FR1 n2 / 15MHz / DFT-s-OFDM / PI/2 BPSK

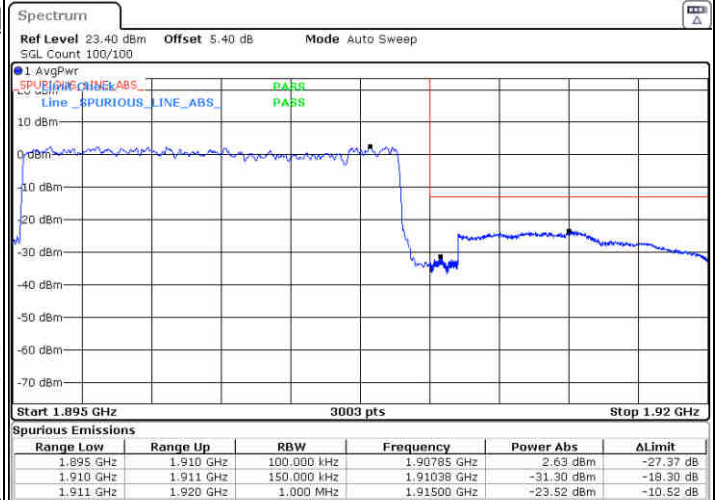
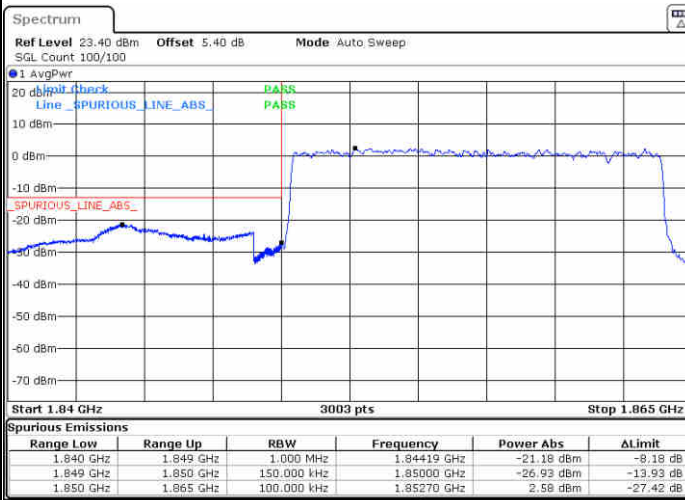
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

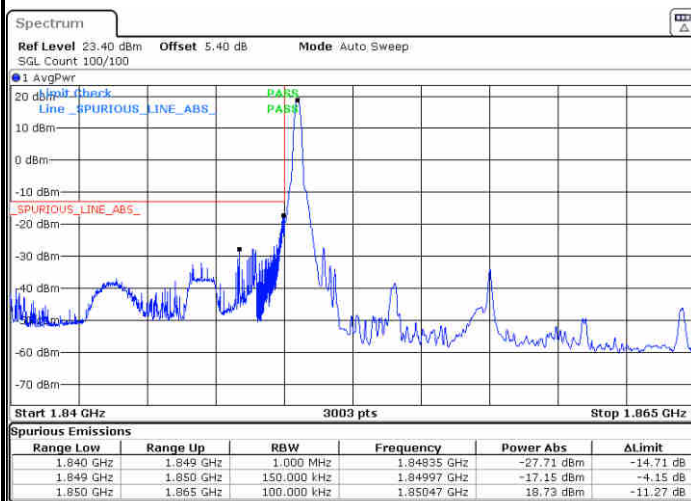
Highest Band Edge / Full RB



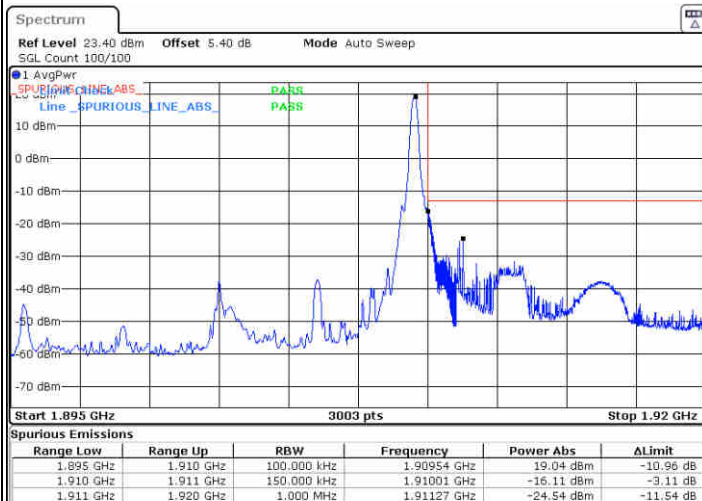


FR1 n2 / 15MHz / DFT-s-OFDM / QPSK

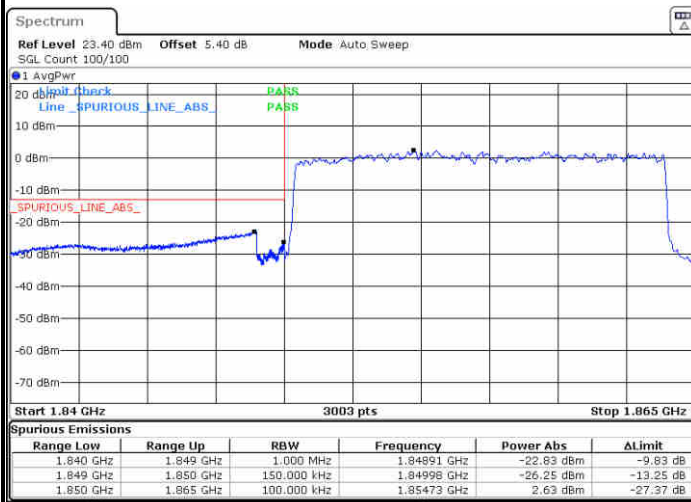
Lowest Band Edge / 1RB0



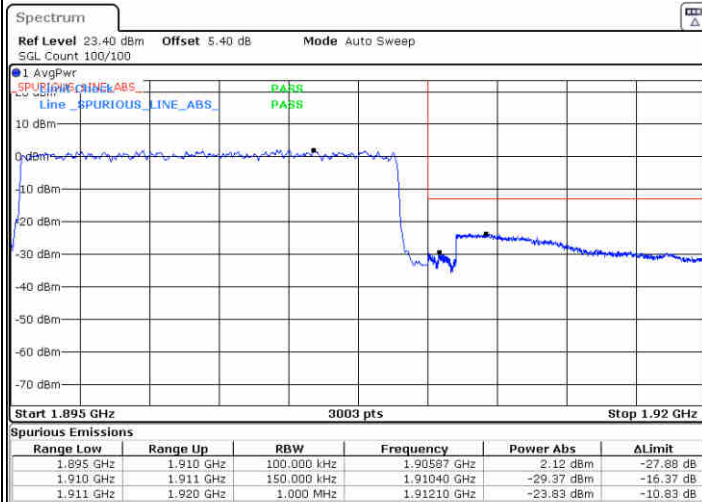
Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

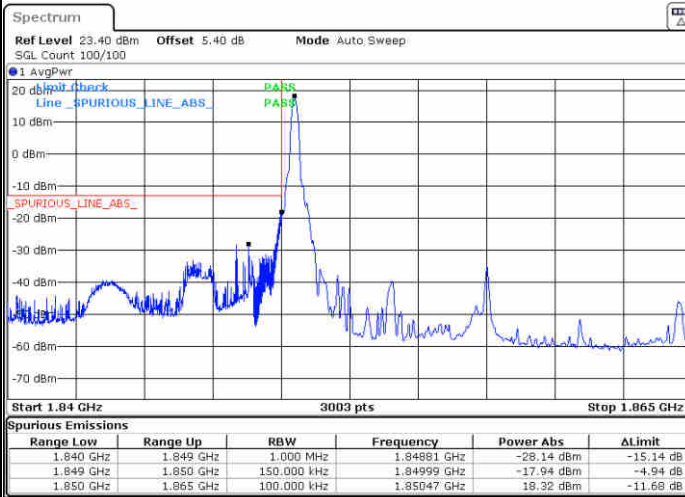




FR1 n2 / 15MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



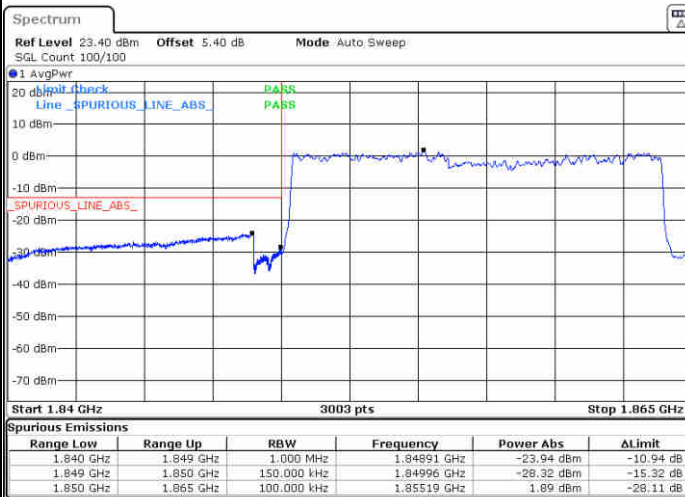
Date: 29 JUN 2020 03:19:31



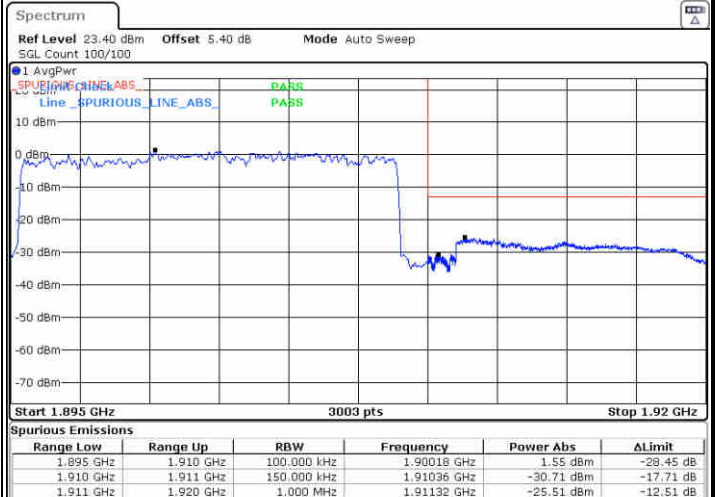
Date: 29 JUN 2020 03:26:57

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:19:19



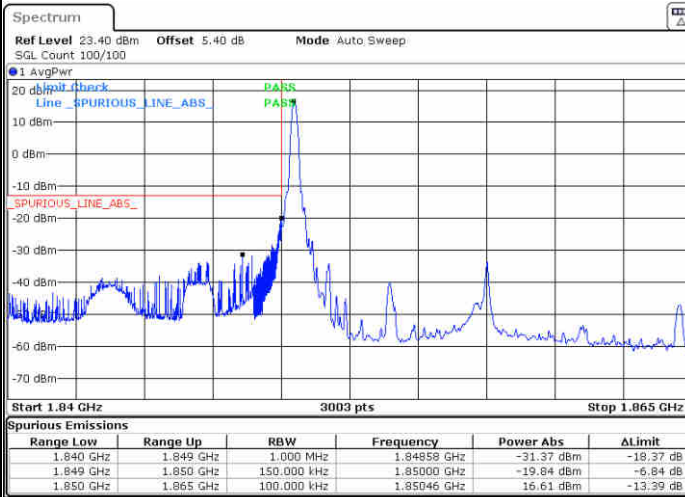
Date: 29 JUN 2020 03:26:34



FR1 n2 / 15MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



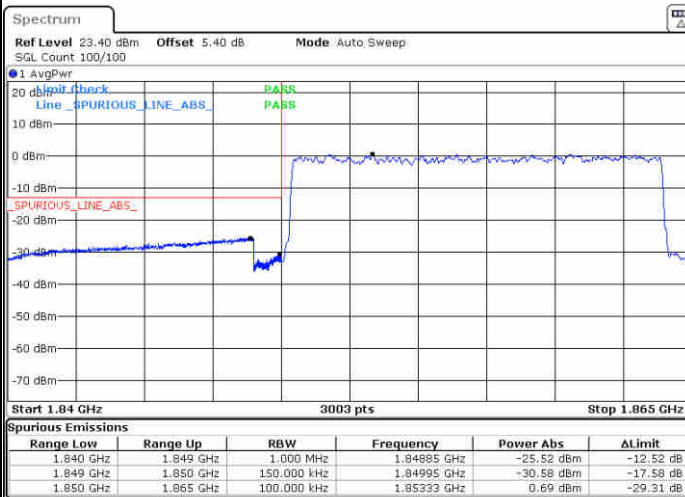
Date: 29 JUN 2020 03:19:43



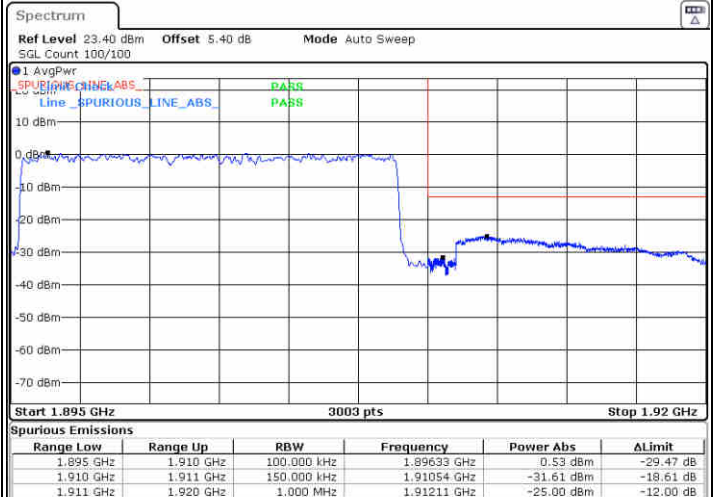
Date: 29 JUN 2020 03:27:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:19:57



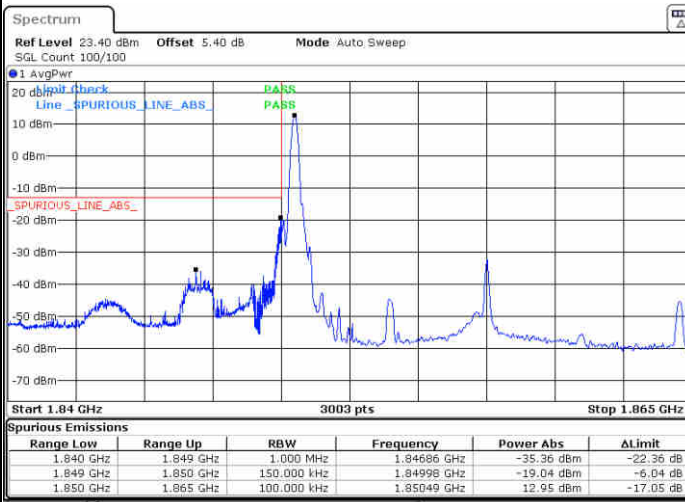
Date: 29 JUN 2020 03:27:25



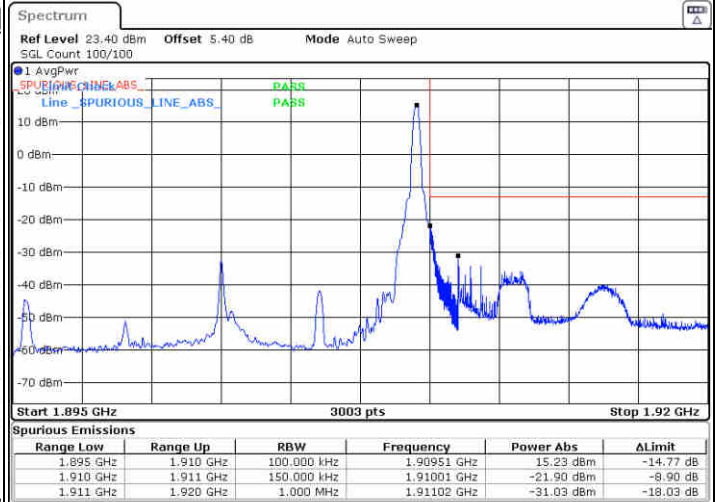
FR1 n2 / 15MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



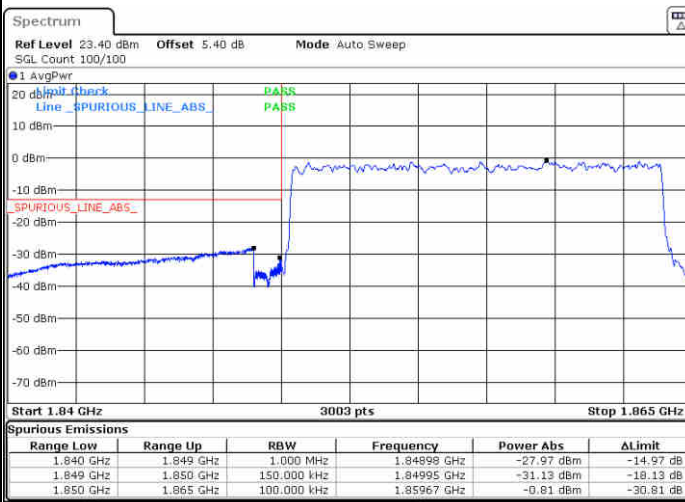
Date: 29 JUN 2020 03:21:01



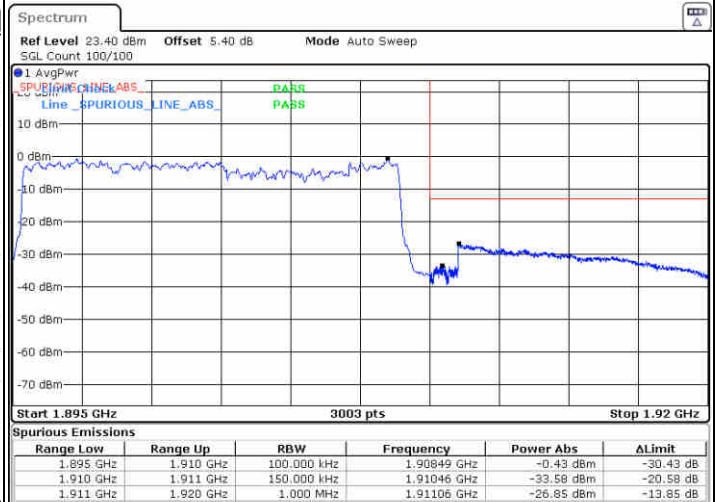
Date: 29 JUN 2020 03:28:25

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:20:49

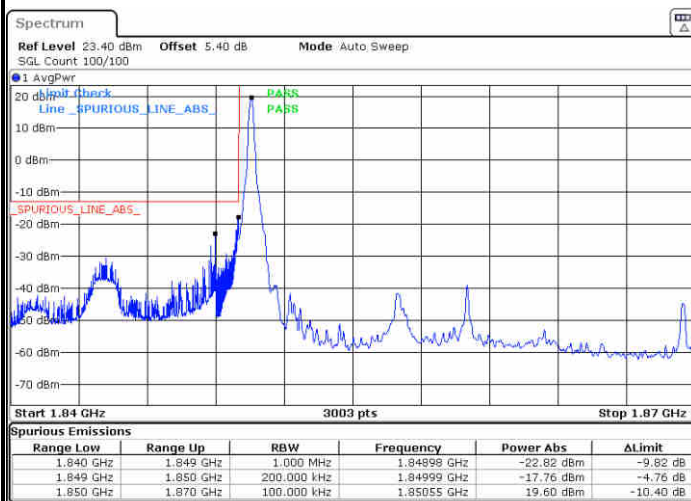


Date: 29 JUN 2020 03:28:09

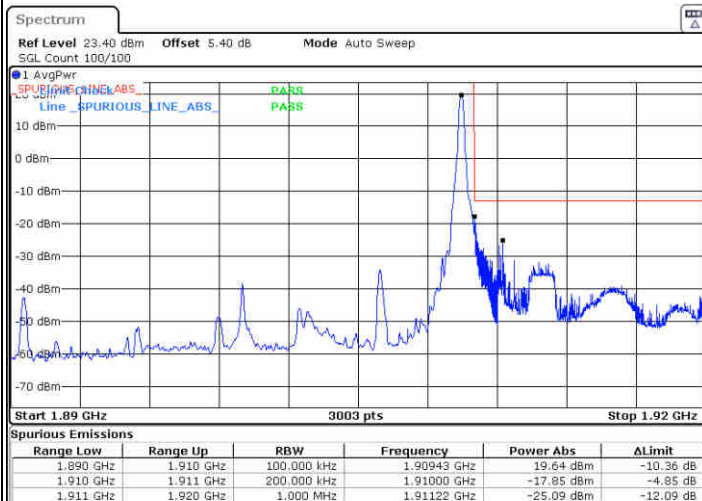


FR1 n2 / 20MHz / DFT-s-OFDM / PI/2 BPSK

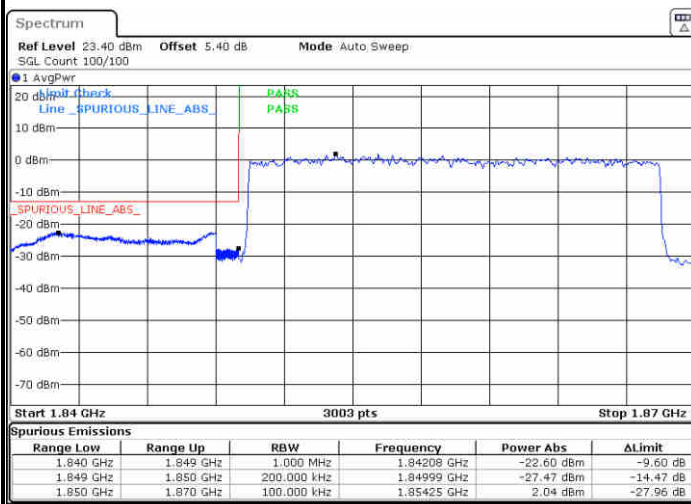
Lowest Band Edge / 1RB0



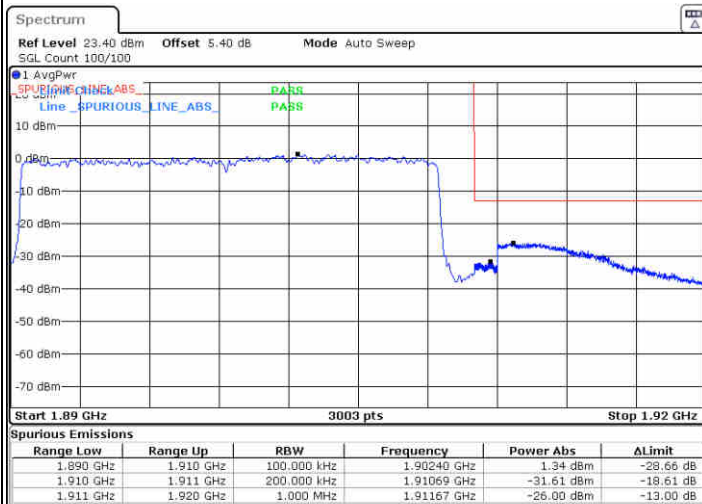
Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

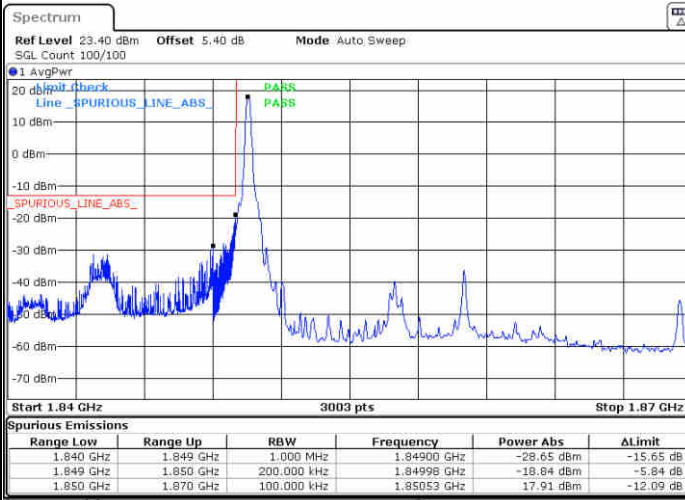




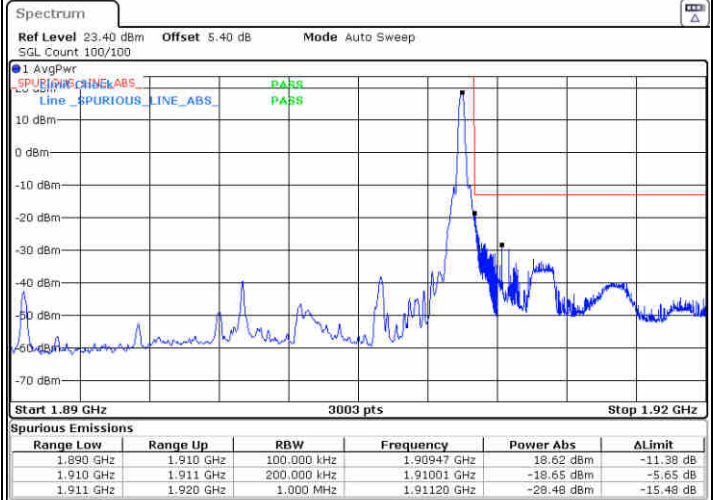
FR1 n2 / 20MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



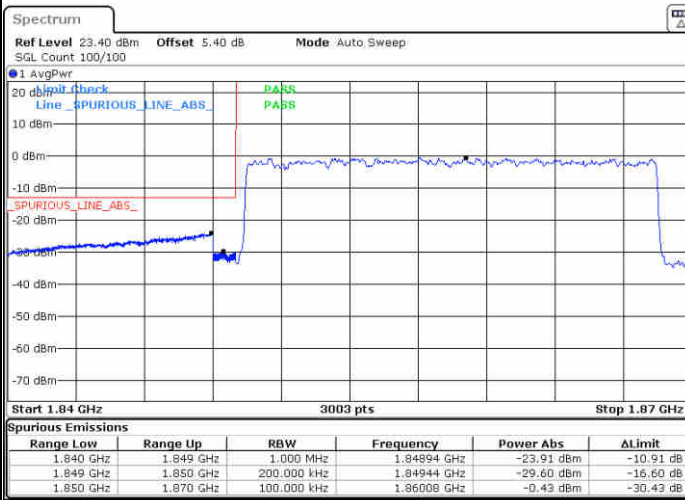
Date: 29 JUN 2020 03:32:08



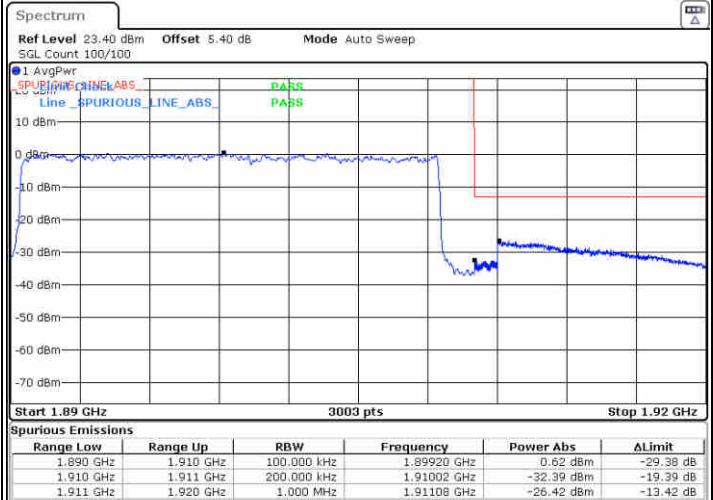
Date: 29 JUN 2020 03:42:39

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:32:22



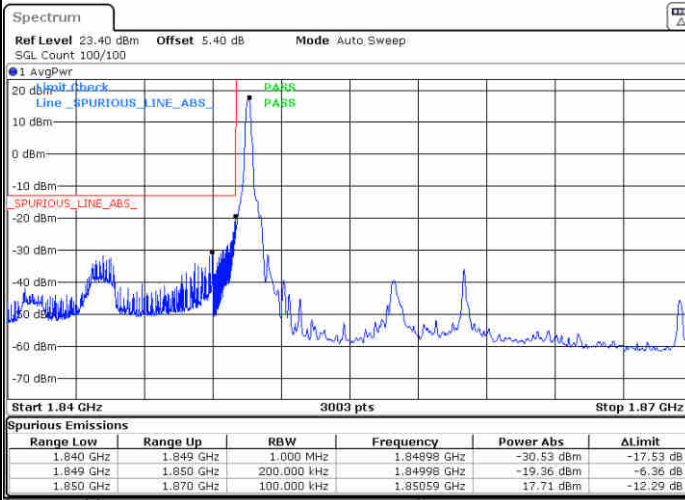
Date: 29 JUN 2020 03:44:40



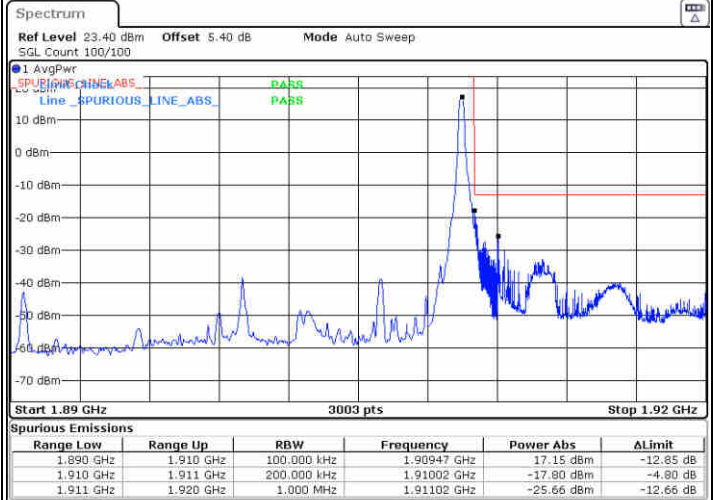
FR1 n2 / 20MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



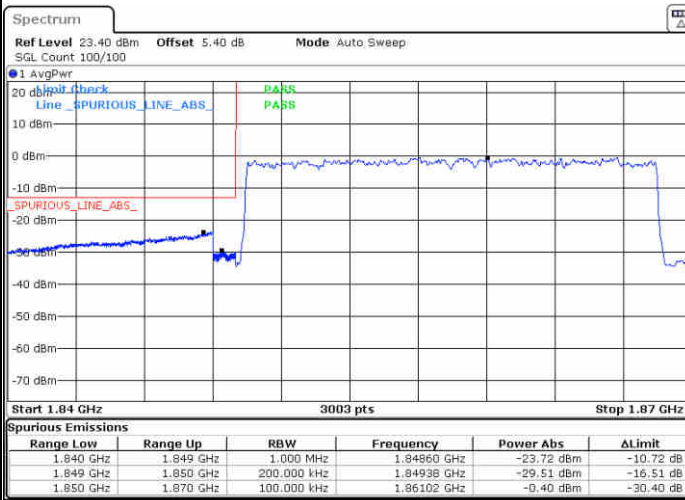
Date: 29 JUN 2020 03:33:16



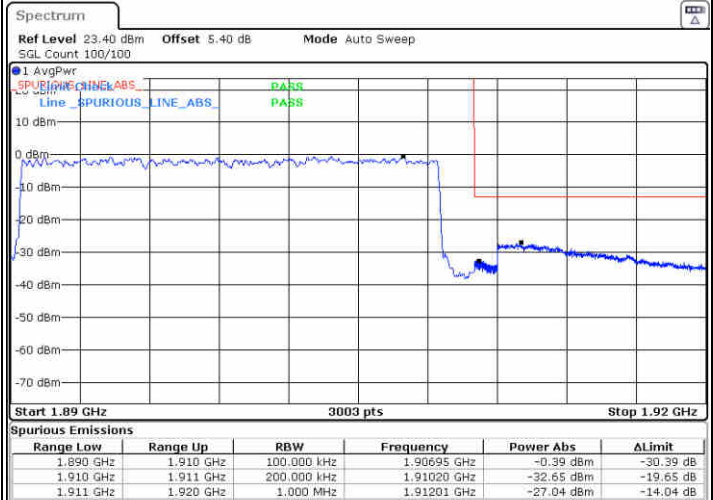
Date: 29 JUN 2020 03:46:09

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:33:04



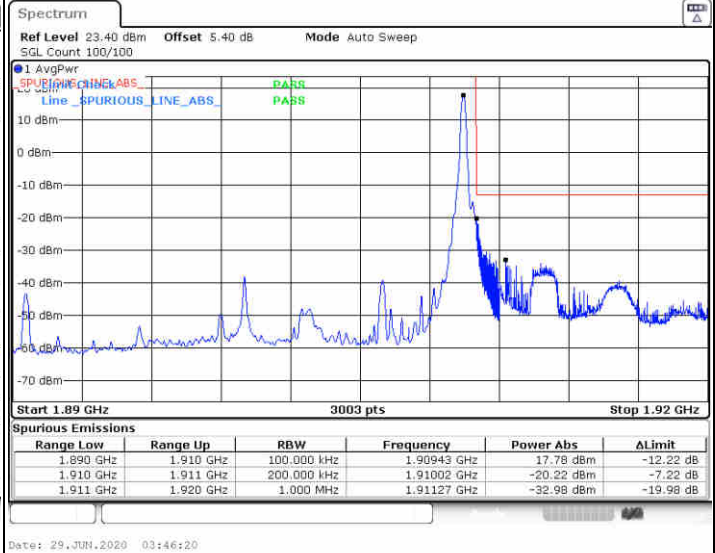
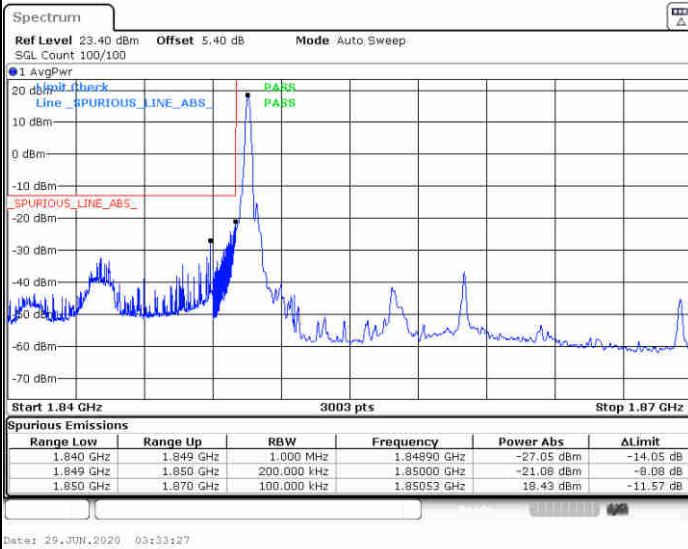
Date: 29 JUN 2020 03:45:22



FR1 n2 / 20MHz / DFT-s-OFDM / 64QAM

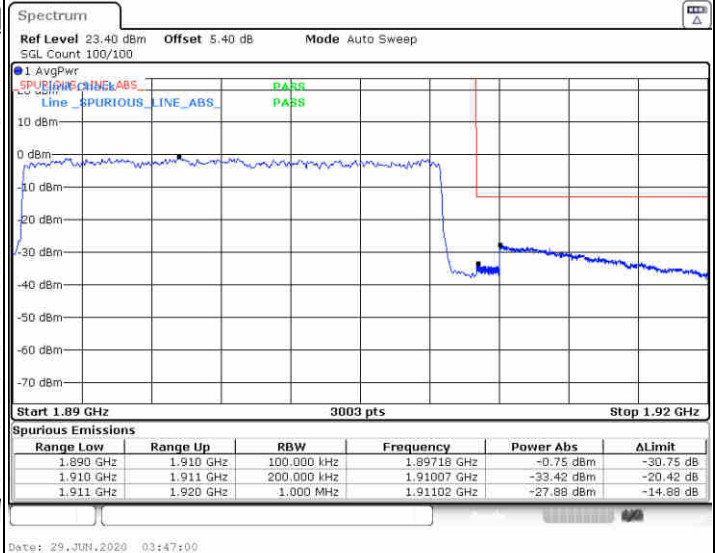
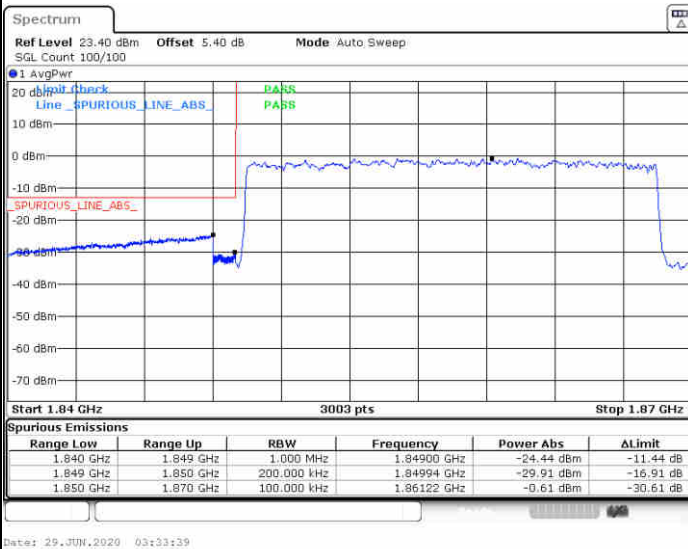
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

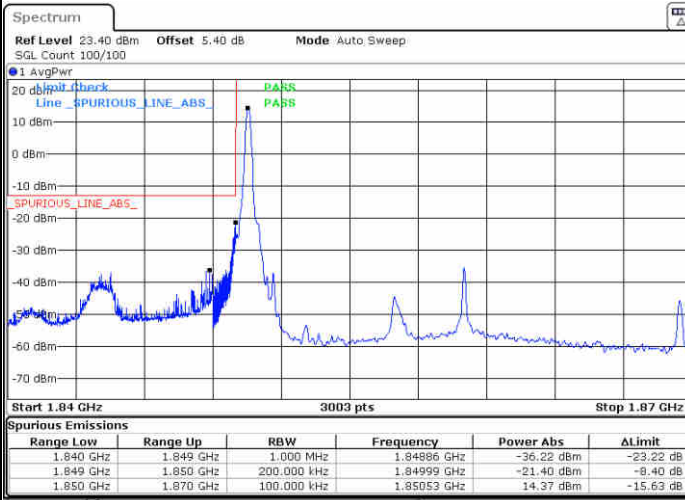




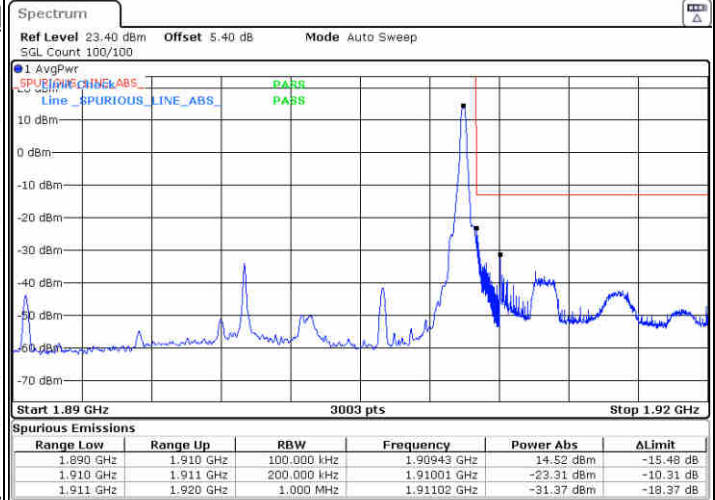
FR1 n2 / 20MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



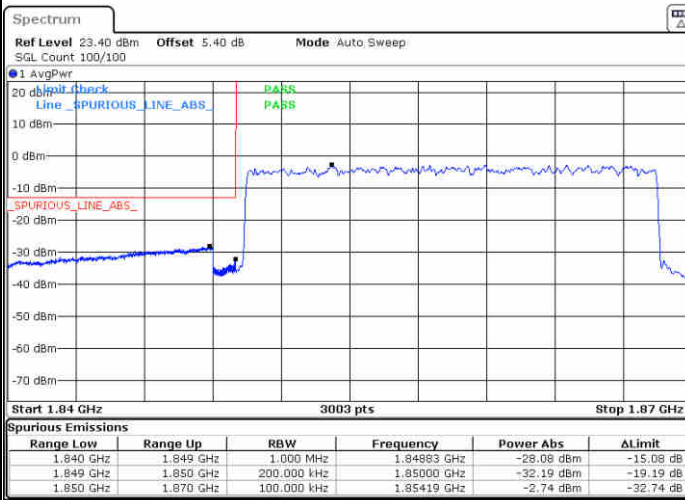
Date: 29 JUN 2020 03:34:42



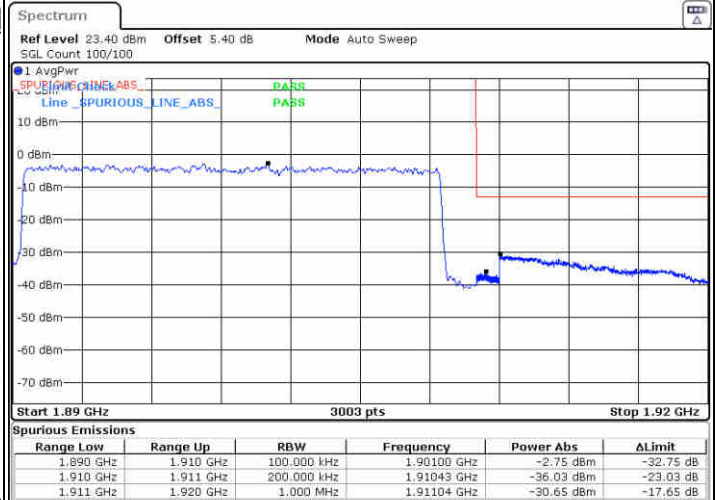
Date: 29 JUN 2020 03:48:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 03:34:24



Date: 29 JUN 2020 03:47:49

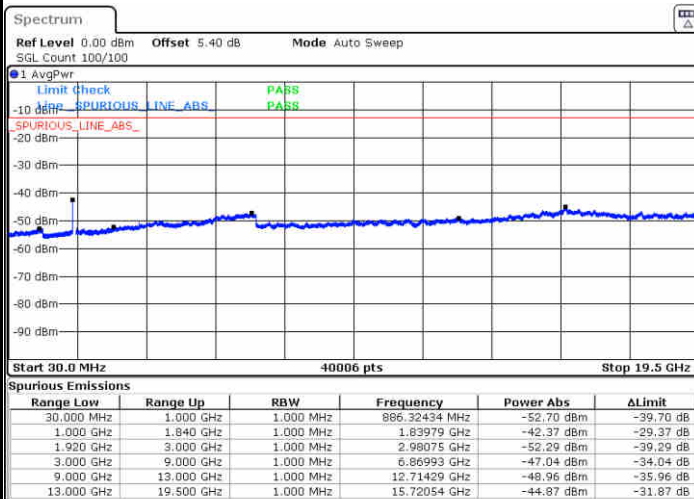


Conducted Spurious Emission

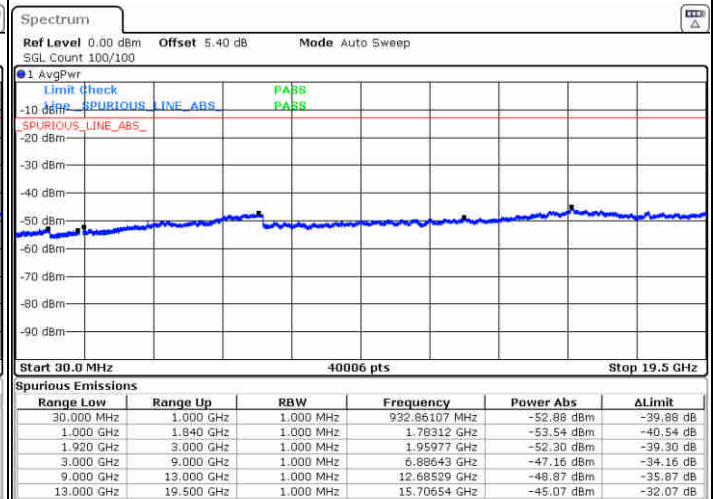
FR1 n2 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

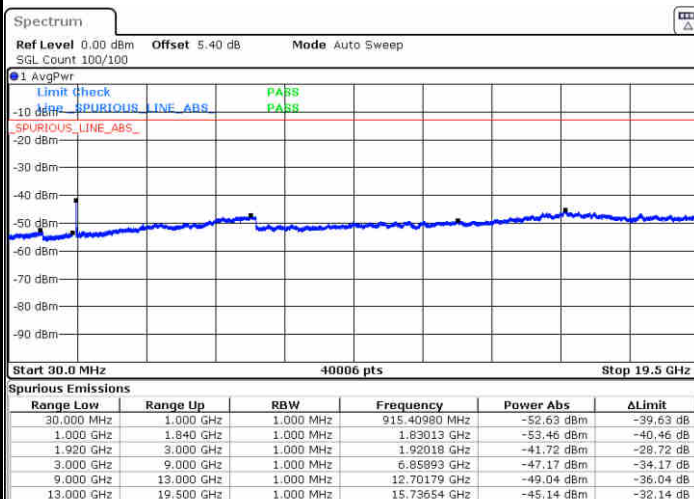


Date: 29.JUN.2020 03:58:47



Date: 29.JUN.2020 04:20:58

Highest Channel / 1RB1

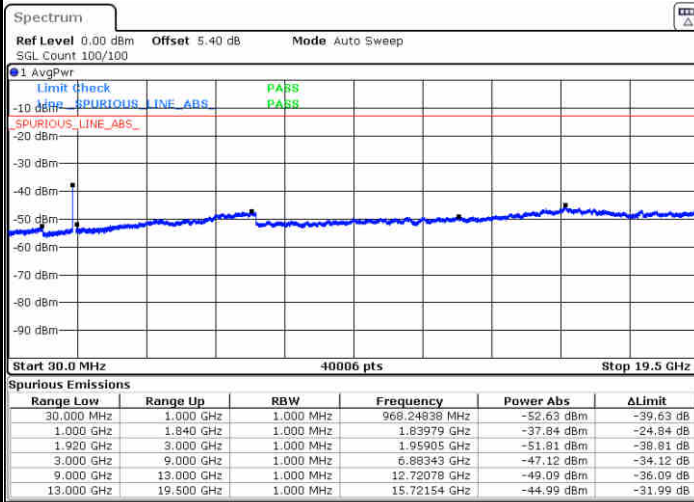


Date: 29.JUN.2020 04:25:15



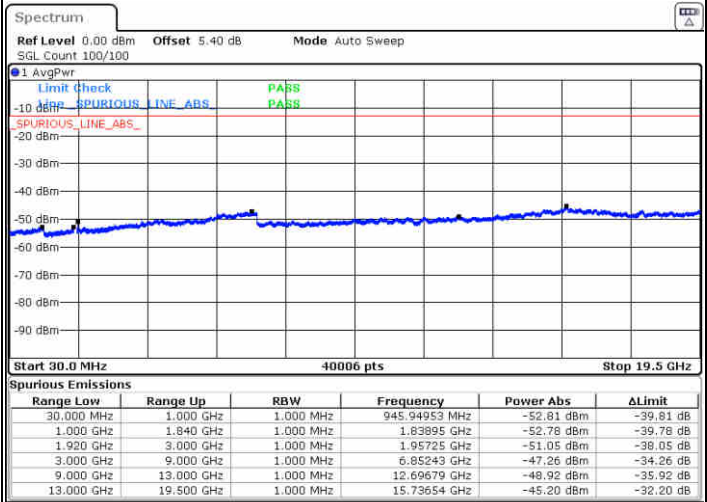
FR1 n2 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



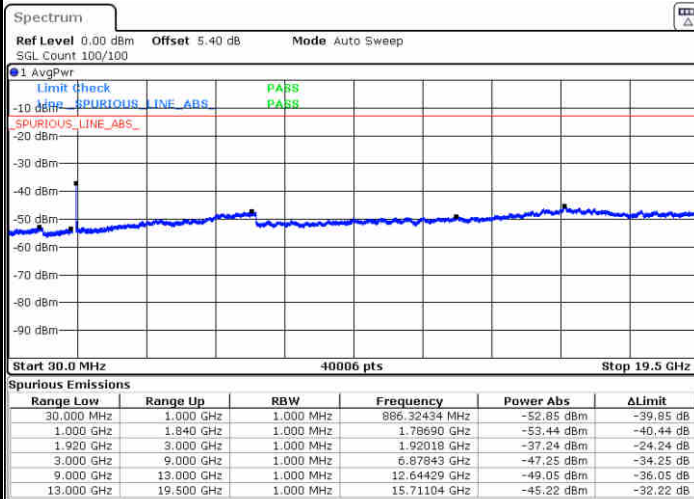
Date: 29.JUN.2020 04:29:45

Middle Channel / 1RB1



Date: 29.JUN.2020 04:34:07

Highest Channel / 1RB1

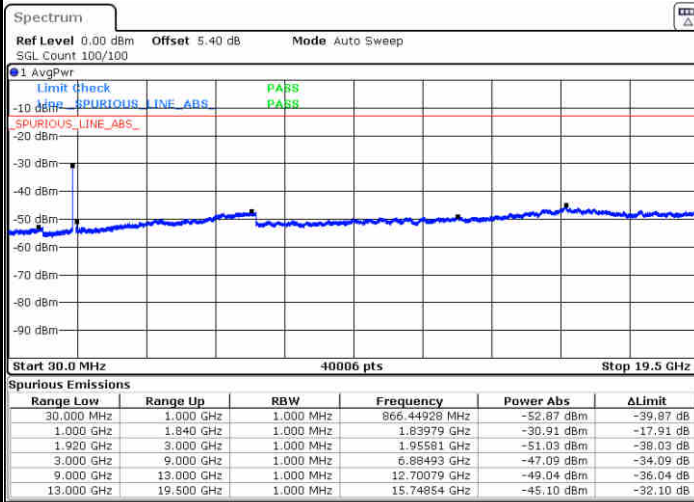


Date: 29.JUN.2020 04:38:16



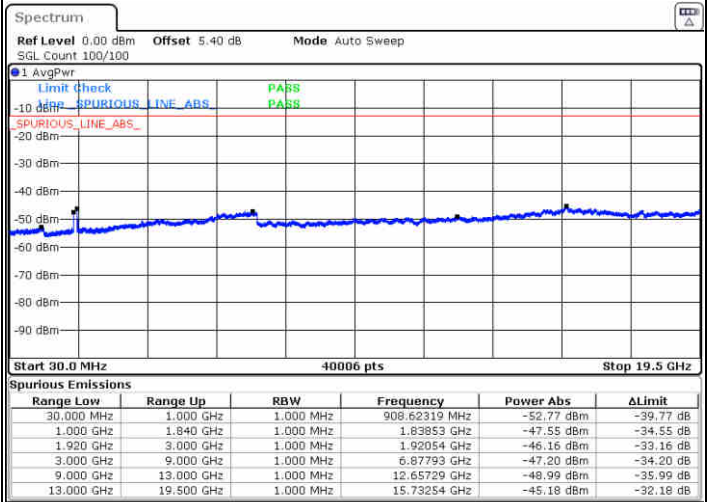
FR1 n2 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



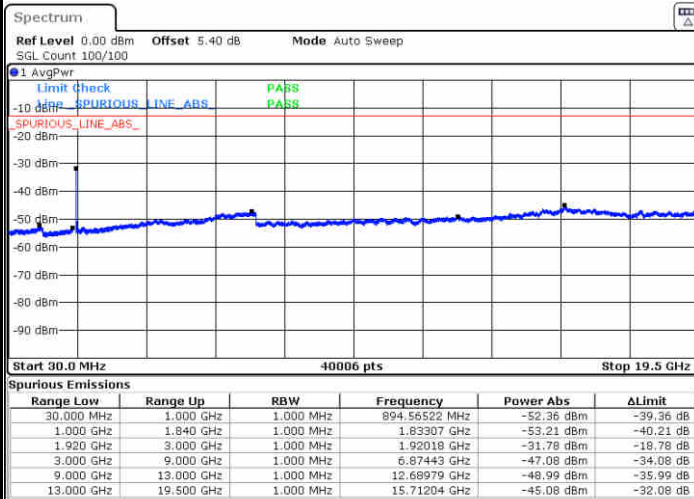
Date: 29.JUN.2020 05:02:01

Middle Channel / 1RB1



Date: 29.JUN.2020 05:06:24

Highest Channel / 1RB1

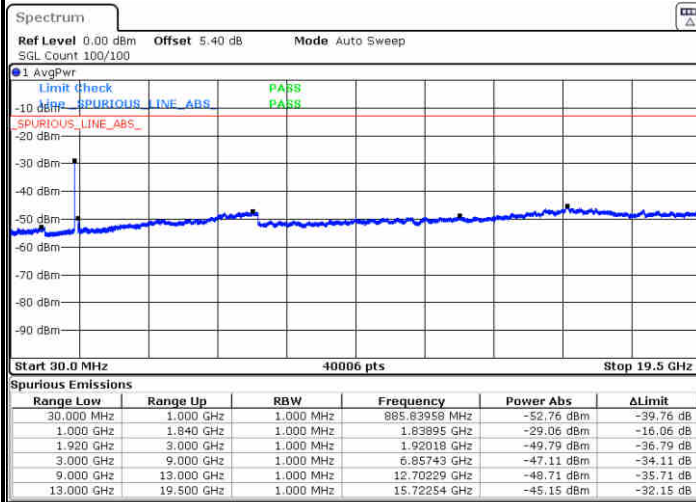


Date: 29.JUN.2020 05:10:50



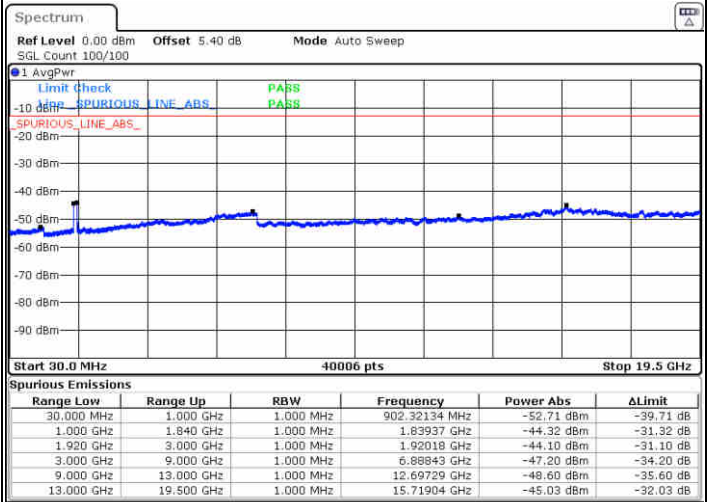
FR1 n2 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



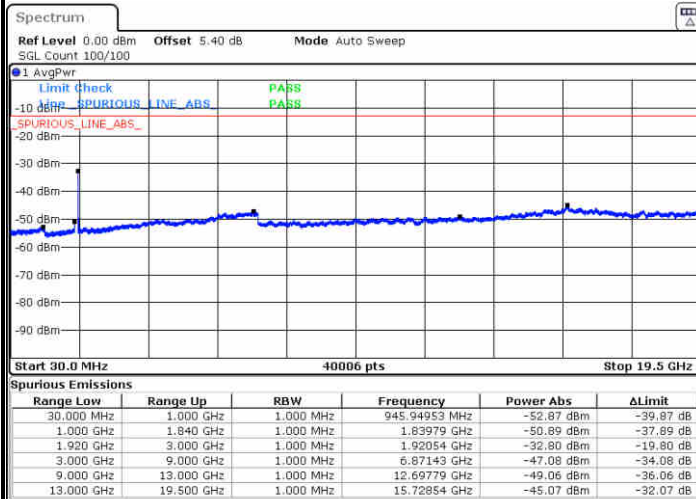
Date: 29.JUN.2020 05:15:15

Middle Channel / 1RB1



Date: 29.JUN.2020 05:19:38

Highest Channel / 1RB1



Date: 29.JUN.2020 05:24:16

Frequency Stability

Test Conditions		FR1 n2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



5G NR n5

Peak-to-Average Ratio

Mode	FR1 n5 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Lowest CH	5.86	5.91	6.72	7.04	PASS
Middle CH	4.55	5.80	6.75	7.07	
Highest CH	4.55	5.94	6.72	7.19	
Mode	FR1 n5 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Lowest CH	7.28				PASS
Middle CH	7.28				
Highest CH	7.33				
Mode	FR1 n5 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	1 RB0	1 RB0	1 RB0	1 RB0	Result
Lowest CH	5.01	6.52	7.04	7.39	PASS
Middle CH	4.96	6.20	7.10	7.10	
Highest CH	4.96	5.65	7.04	7.59	
Mode	FR1 n5 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	1 RB0				Result
Lowest CH	7.42				PASS
Middle CH	7.42				
Highest CH	7.42				



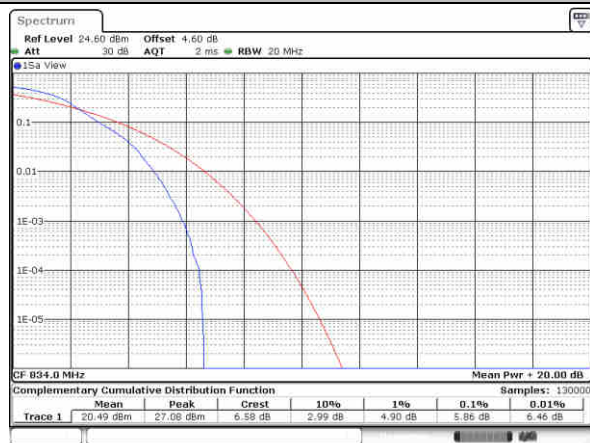
FR1 n5 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

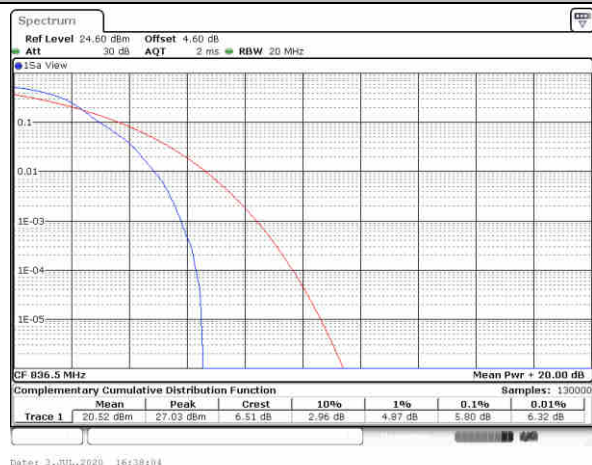
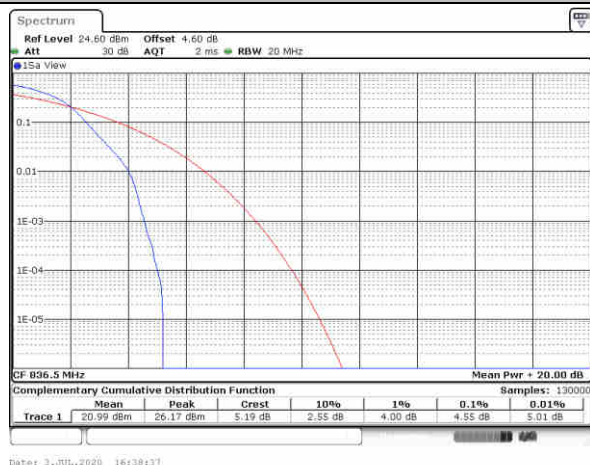
Lowest Channel / Full RB

Lowest Channel / Full RB



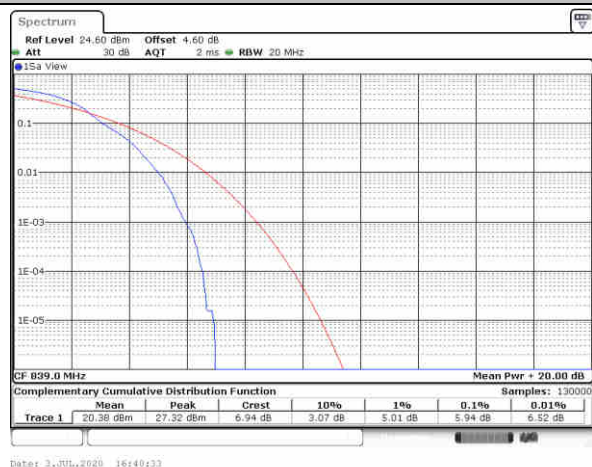
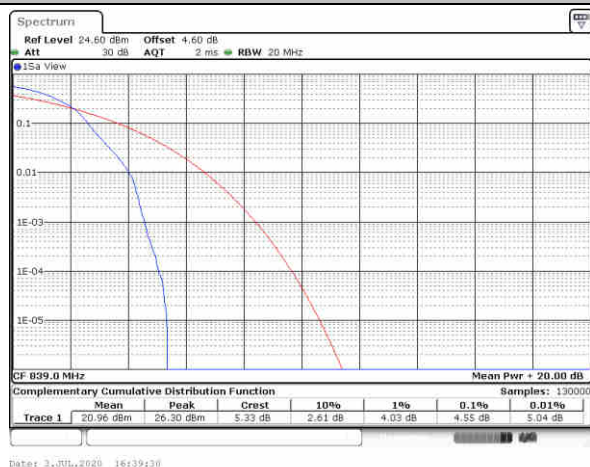
Middle Channel / Full RB

Middle Channel / Full RB



Highest Channel / Full RB

Highest Channel / Full RB





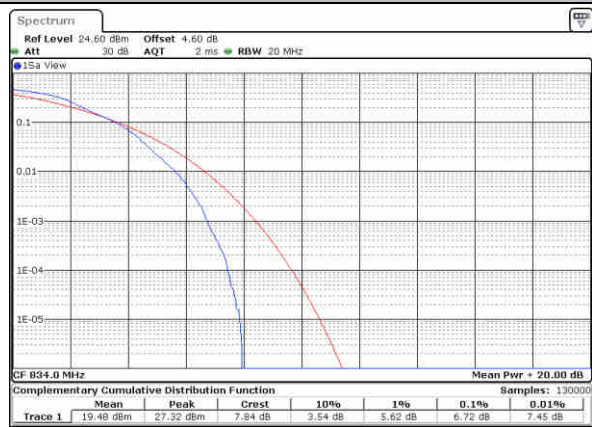
FR1 n5 / 20MHz / DFT-S OFDM

16QAM

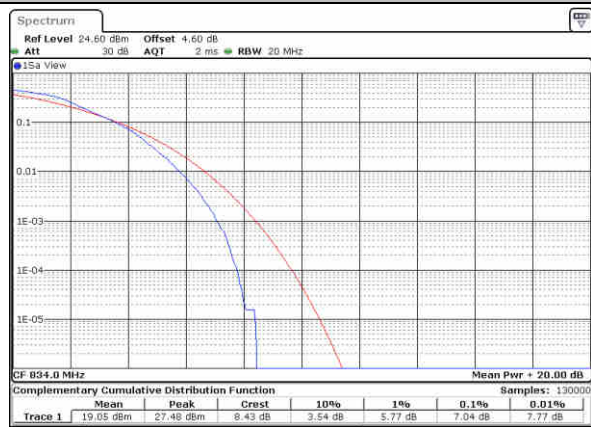
64QAM

Lowest Channel / Full RB

Lowest Channel / Full RB



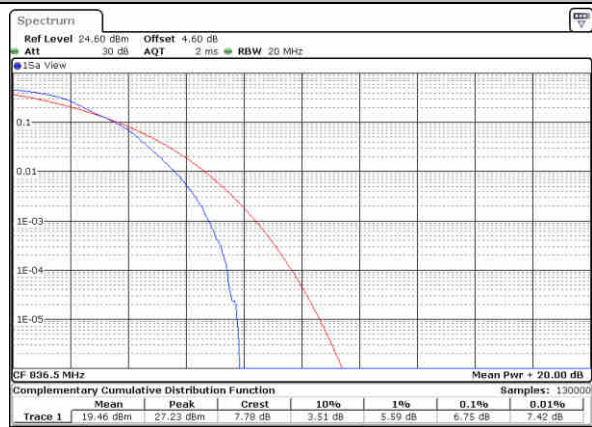
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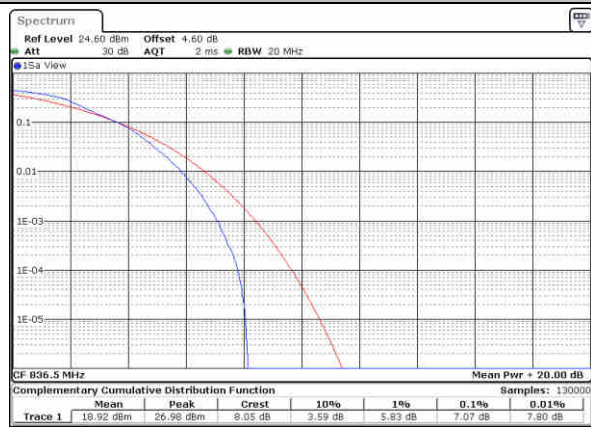
Date: 3_JUL_2020 16:00:18

Middle Channel / Full RB

Middle Channel / Full RB



Date: 3_JUL_2020 16:17:13



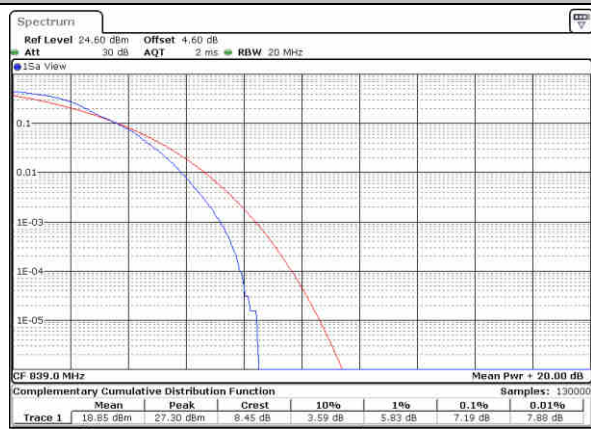
Date: 3_JUL_2020 16:17:14

Highest Channel / Full RB

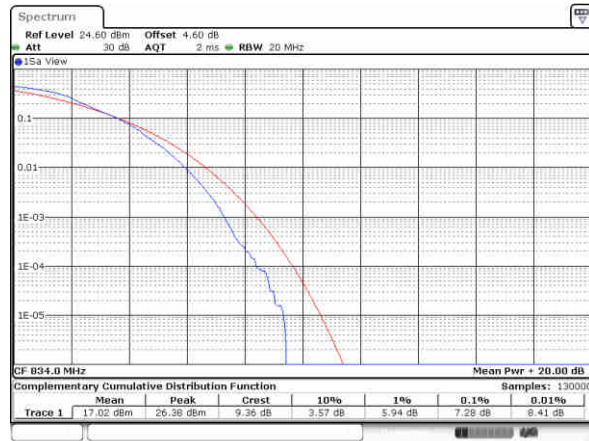
Highest Channel / Full RB

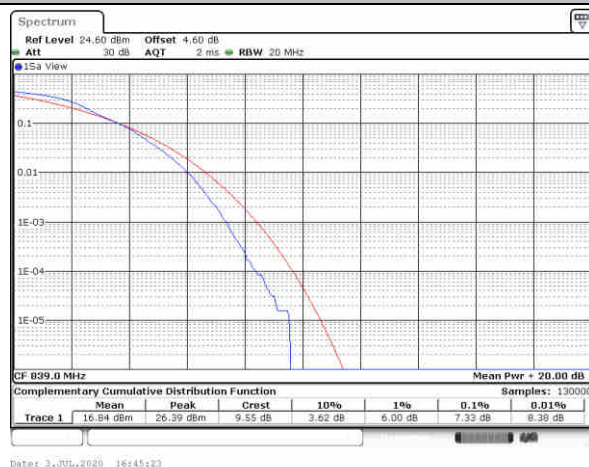


Date: 3_JUL_2020 16:43:05



Date: 3_JUL_2020 16:44:12

FR1 n5 / 20MHz / DFT-S OFDM
256QAM
Lowest Channel / Full RB

Middle Channel / Full RB

Highest Channel / Full RB




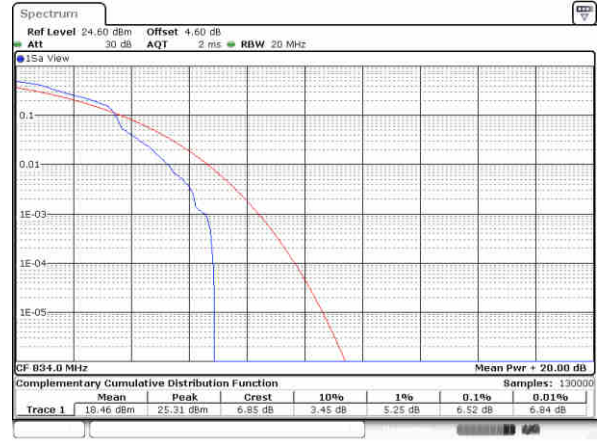
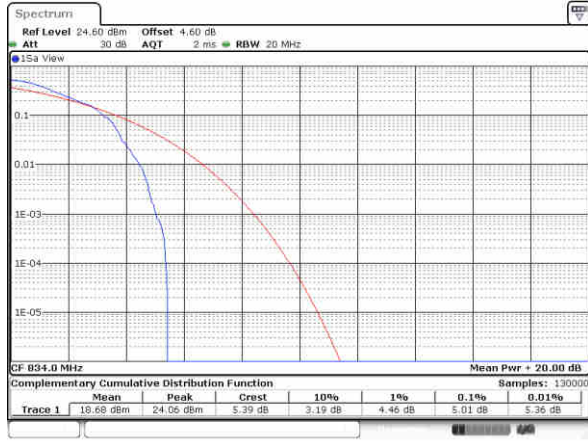
FR1 n5 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

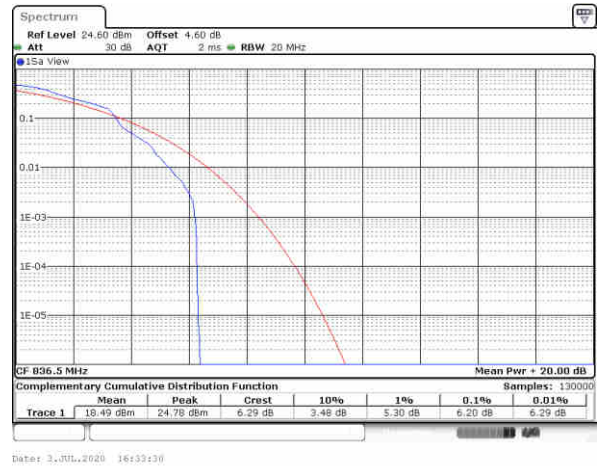
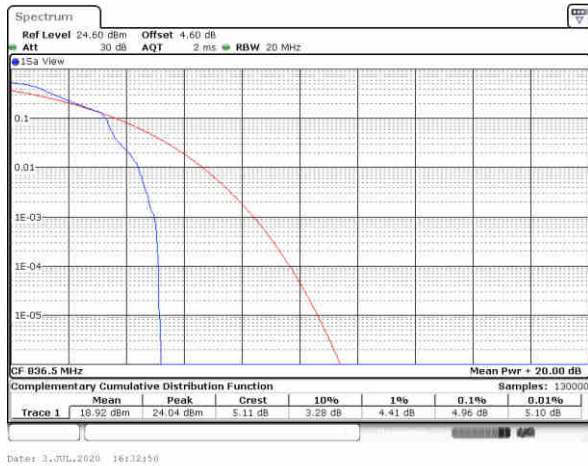
Lowest Channel / 1RB0

Lowest Channel / 1RB0



Middle Channel / 1RB0

Middle Channel / 1RB0



Highest Channel / 1RB0

Highest Channel / 1RB0





FR1 n5 / 20MHz / DFT-S OFDM

16QAM

64QAM

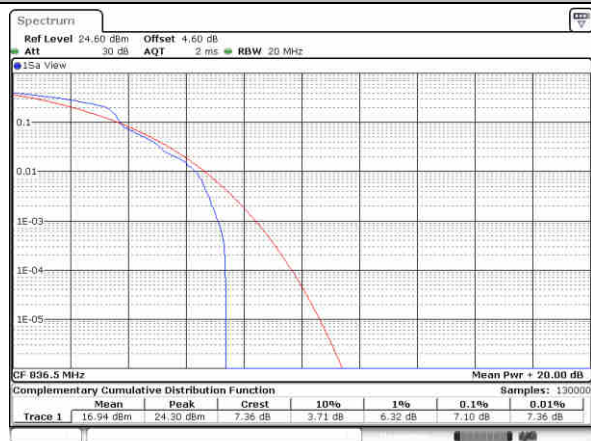
Lowest Channel / 1RB0

Lowest Channel / 1RB0



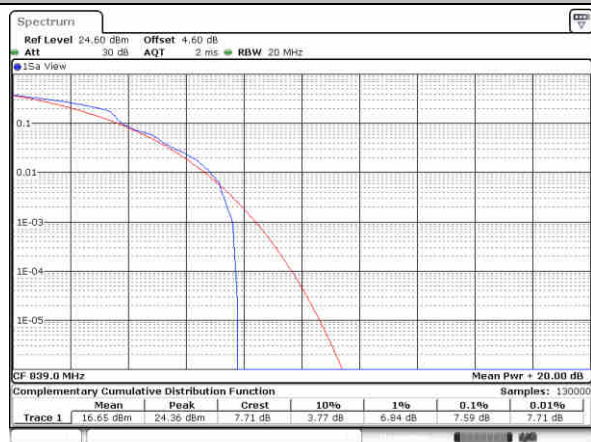
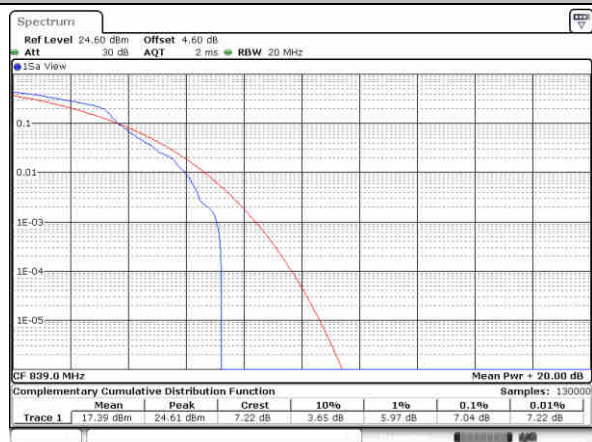
Middle Channel / 1RB0

Middle Channel / 1RB0



Highest Channel / 1RB0

Highest Channel / 1RB0

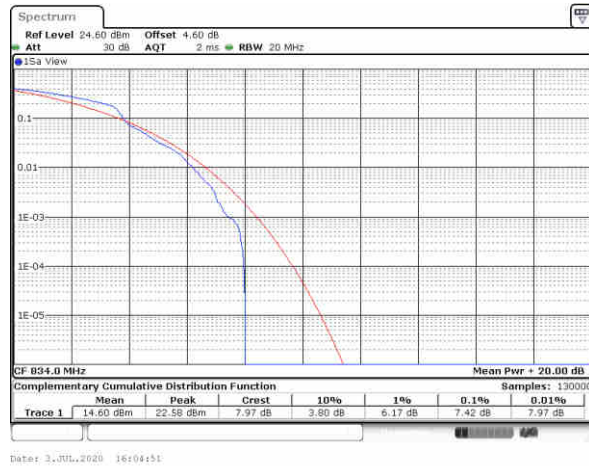




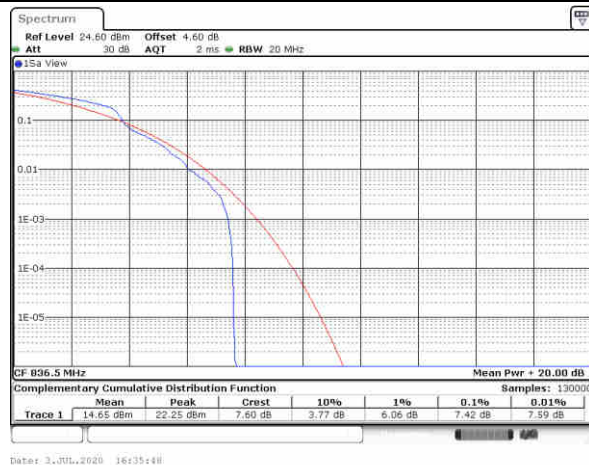
FR1 n5 / 20MHz / DFT-S OFDM

256QAM

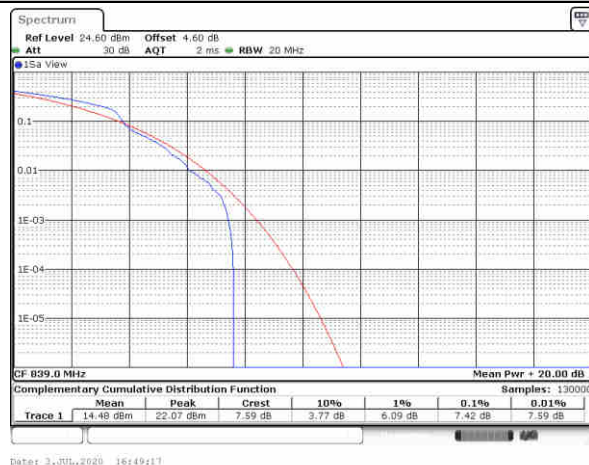
Lowest Channel / 1RB0



Middle Channel / 1RB0



Highest Channel / 1RB0



**26dB Bandwidth**

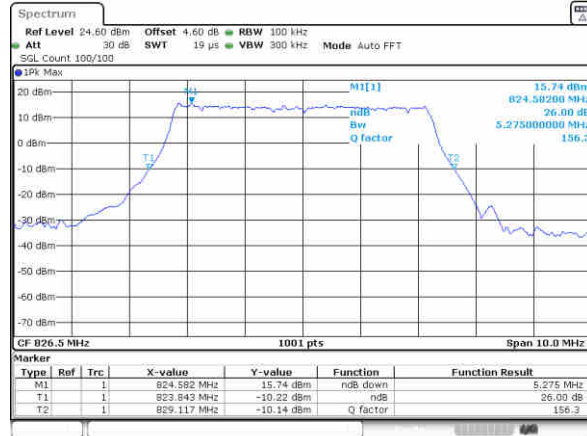
Mode	FR1 n5 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Lowest CH	5.28		10.07		14.27		20.10	
Middle CH	5.12		9.99		14.51		20.02	
Highest CH	5.22		9.87		14.21		20.14	
Mode	FR1 n5 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	5.04	5.12	9.85	9.73	14.24	14.45	20.18	20.14
Middle CH	5.18	4.97	9.97	9.65	14.33	14.30	20.14	20.14
Highest CH	5.05	5.03	9.79	9.81	14.36	14.33	20.06	20.18
Mode	FR1 n5 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	5.00	5.03	9.89	9.83	14.18	14.54	20.02	20.06
Middle CH	5.12	5.25	9.91	9.71	14.60	14.51	20.10	20.10
Highest CH	5.14	5.04	9.75	9.81	14.56	14.56	20.02	20.06



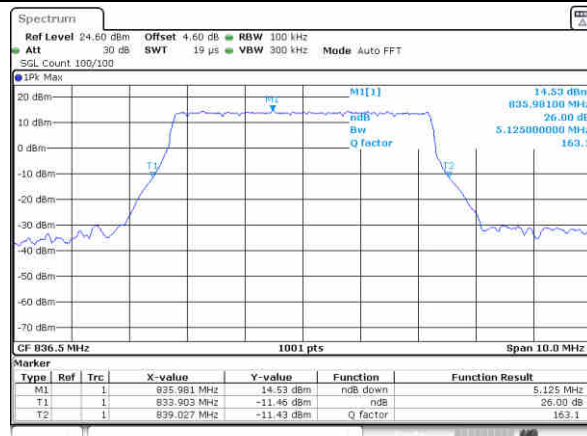
FR1 n5 / 5MHz / DFT-S OFDM

PI/2 BPSK

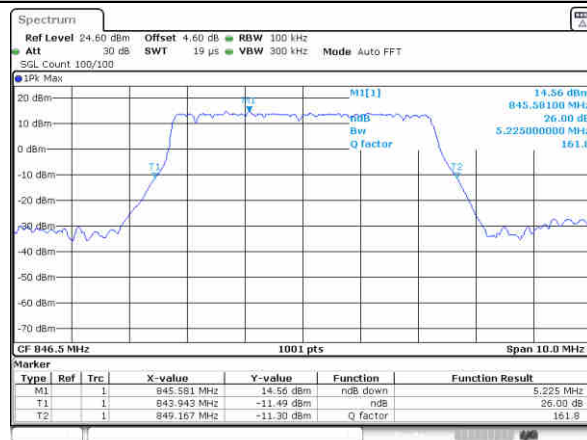
Lowest Channel



Middle Channel



Highest Channel

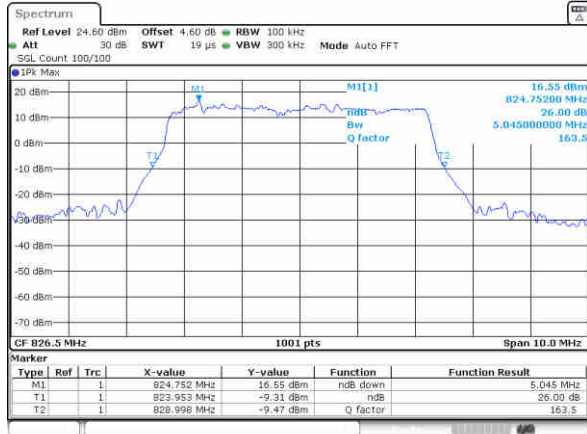




FR1 n5 / 5MHz / DFT-S OFDM

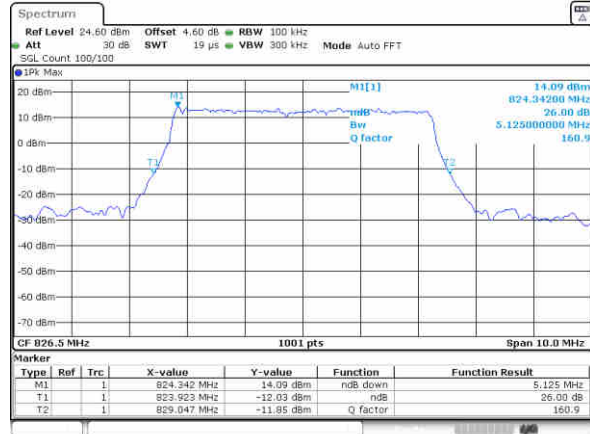
QPSK

Lowest Channel

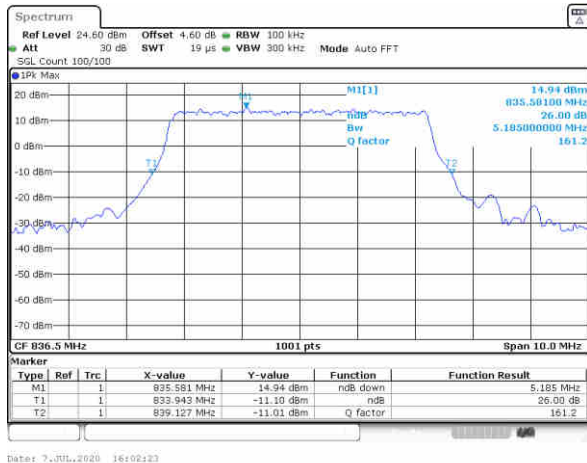


16QAM

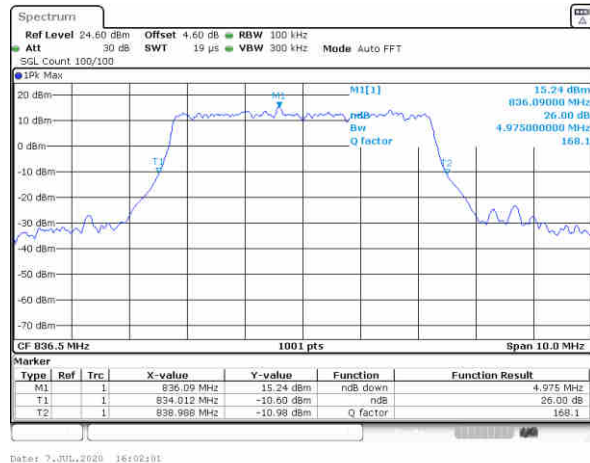
Lowest Channel



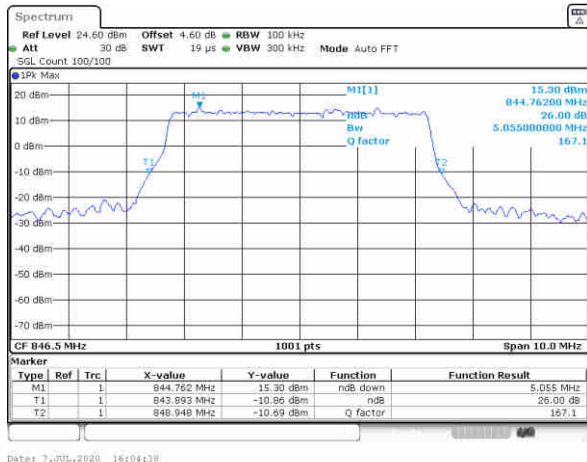
Middle Channel



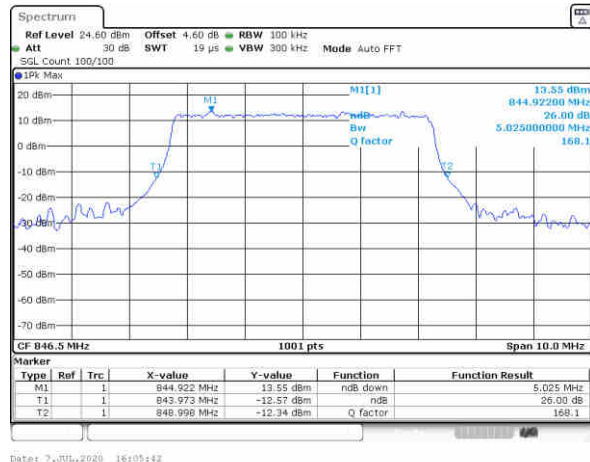
Middle Channel



Highest Channel



Highest Channel

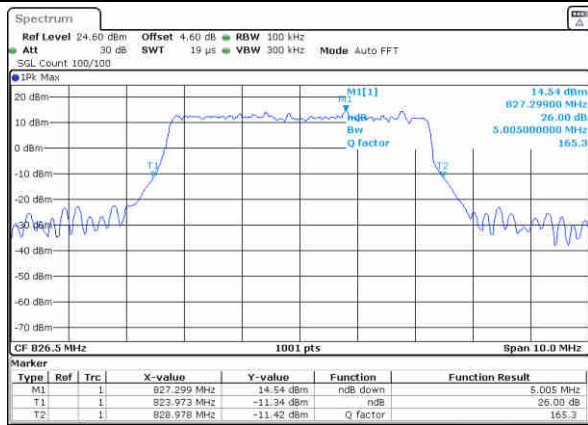




FR1 n5 / 5MHz / DFT-S OFDM

64QAM

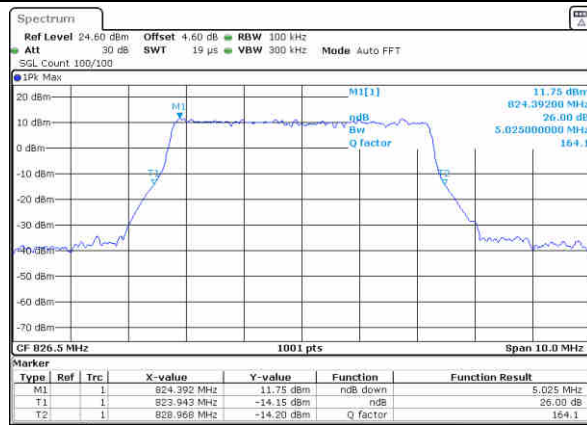
Lowest Channel



Date: 7 JUL 2020 15:47:43

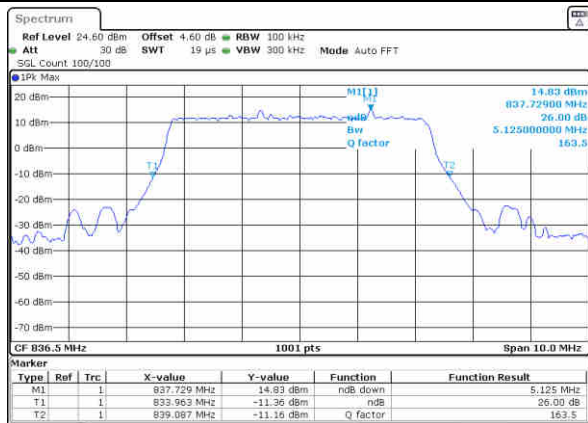
256QAM

Lowest Channel



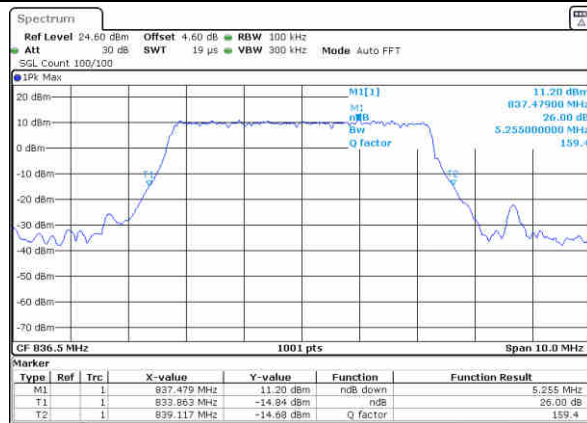
Date: 7 JUL 2020 15:48:47

Middle Channel



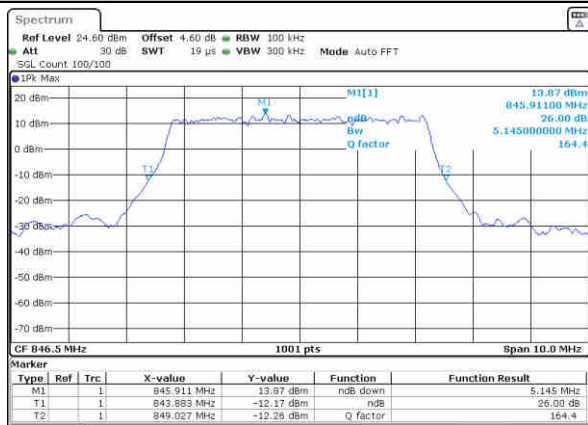
Date: 7 JUL 2020 16:01:39

Middle Channel



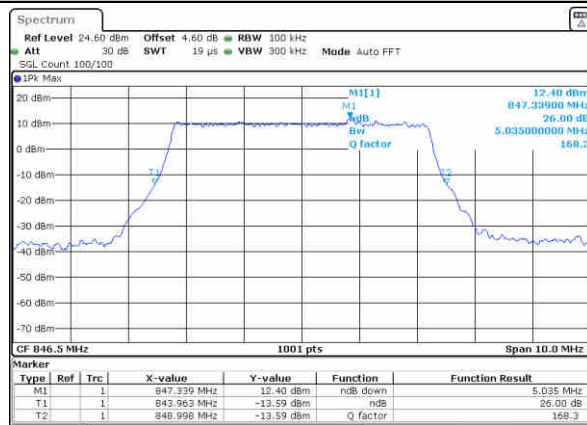
Date: 7 JUL 2020 16:01:59

Highest Channel



Date: 7 JUL 2020 16:02:48

Highest Channel



Date: 7 JUL 2020 16:03:54