



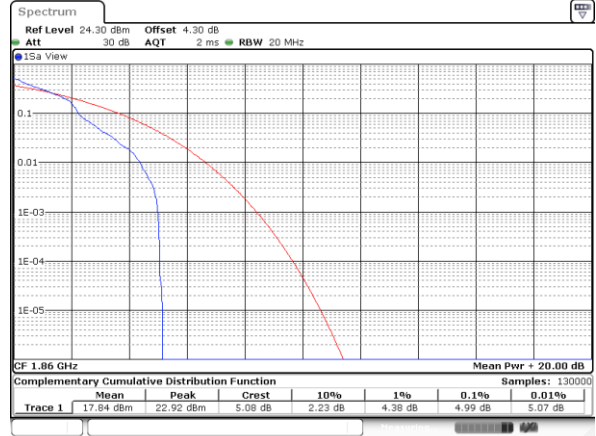
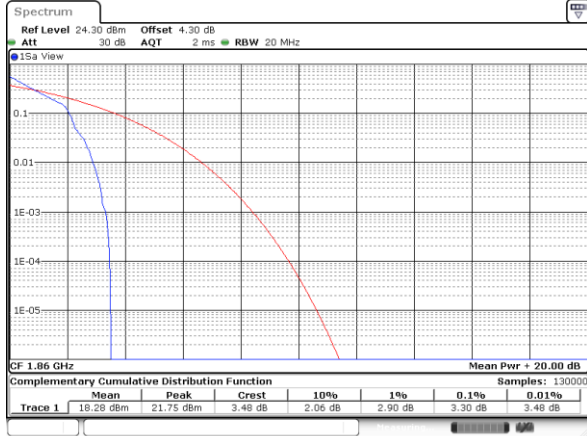
FR1 n2+5A / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / 1RB

Lowest Channel / 1RB

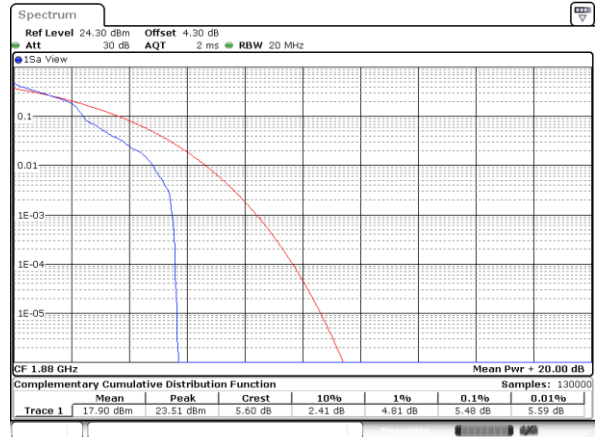


Date: 14_JAN.2021 00:08:05

Date: 14_JAN.2021 00:08:20

Middle Channel / 1 RB

Middle Channel / 1 RB

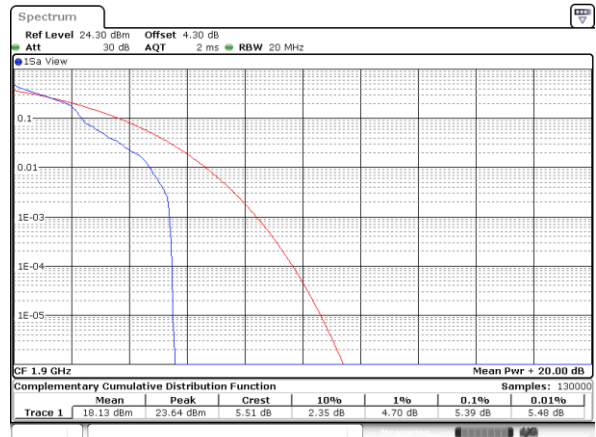
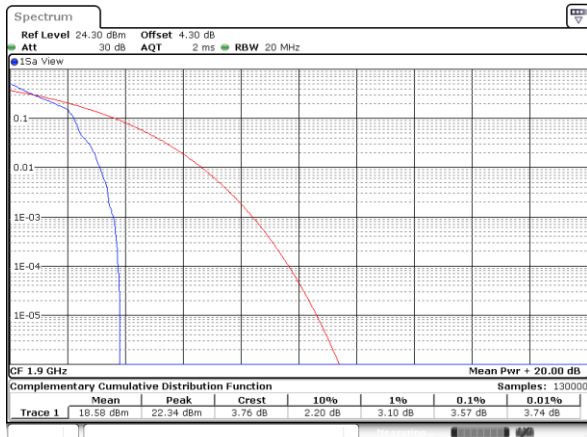


Date: 14_JAN.2021 00:09:42

Date: 14_JAN.2021 00:09:30

Highest Channel / 1 RB

Highest Channel / 1 RB



Date: 14_JAN.2021 00:11:56

Date: 14_JAN.2021 00:12:08



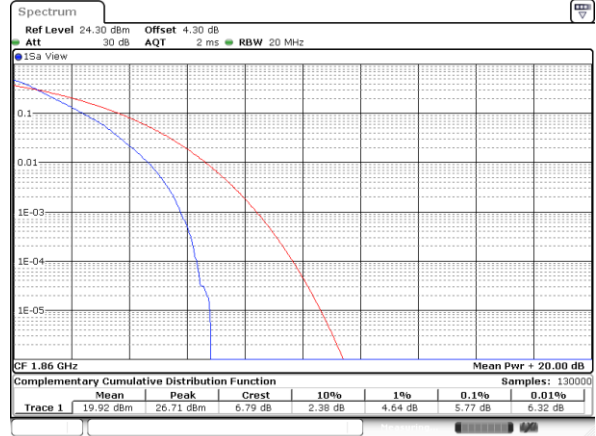
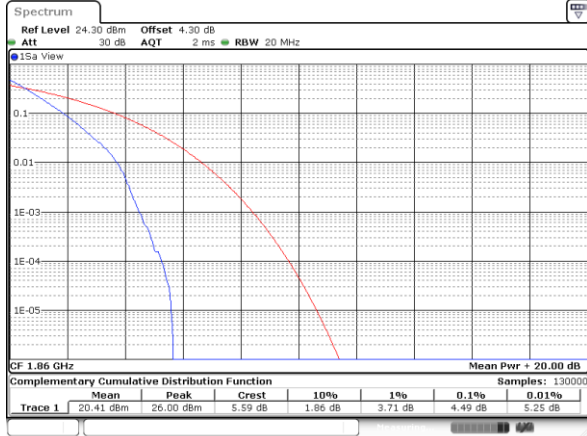
FR1 n2+5A / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

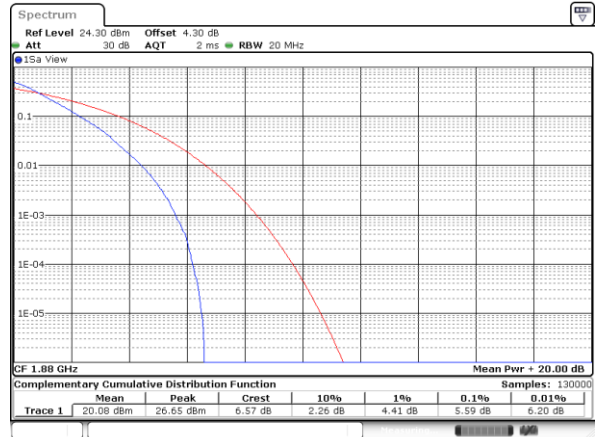
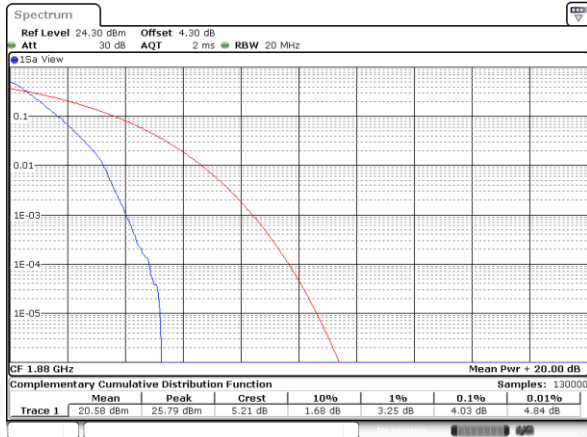


Date: 14_JAN.2021 00:07:32

Date: 14_JAN.2021 00:07:18

Middle Channel / Full RB

Middle Channel / Full RB

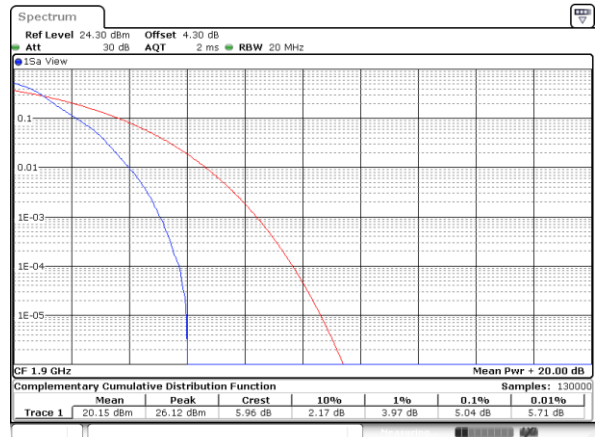
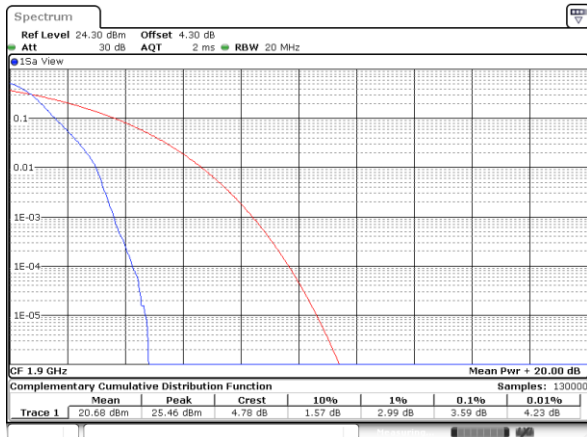


Date: 14_JAN.2021 00:10:02

Date: 14_JAN.2021 00:10:22

Highest Channel / Full RB

Highest Channel / Full RB



Date: 14_JAN.2021 00:11:42

Date: 14_JAN.2021 00:11:29



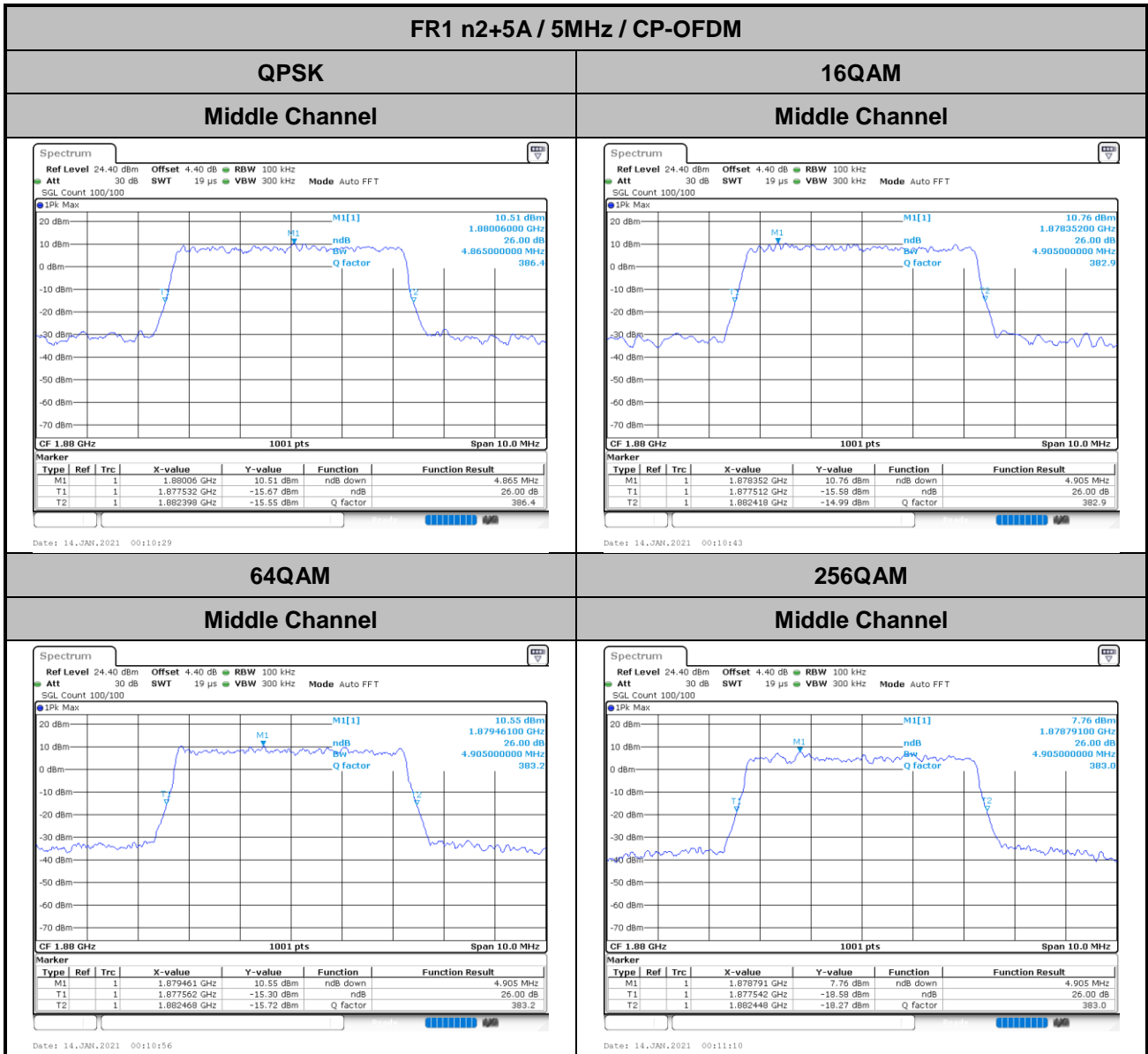
26dB Bandwidth

Mode	FR1 n2+5A : 26dB BW(MHz) / CP-OFDM							
BW	5MHz	5MHz	5MHz	5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	4.87	4.91	4.91	4.91				

Mode	FR1 n2+5A : 26dB BW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.77	9.95	9.87	9.79				

Mode	FR1 n2+5A : 26dB BW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.96	14.96	14.87	14.84				

Mode	FR1 n2+5A : 26dB BW(MHz) / CP-OFDM							
BW	20MHz	20MHz	20MHz	20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	19.98	19.78	20.06	20.02				





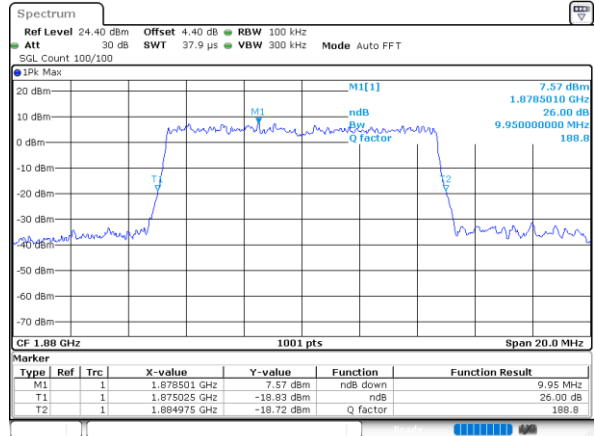
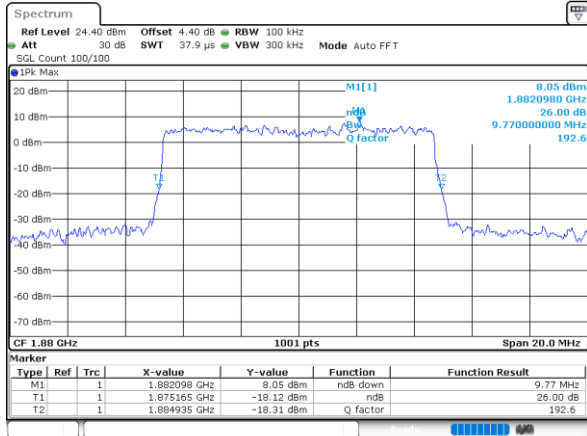
FR1 n2+5A / 10MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:09:30

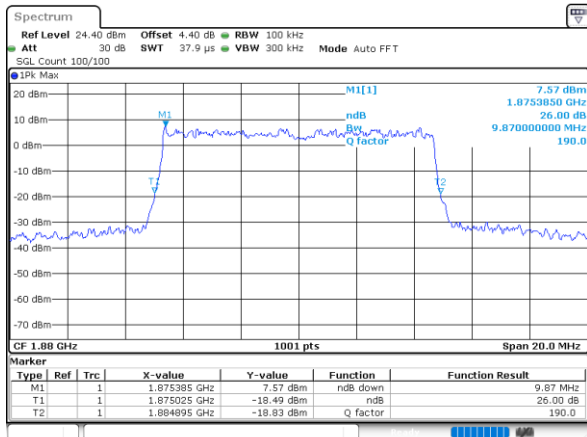
Date: 14.JAN.2021 00:09:17

64QAM

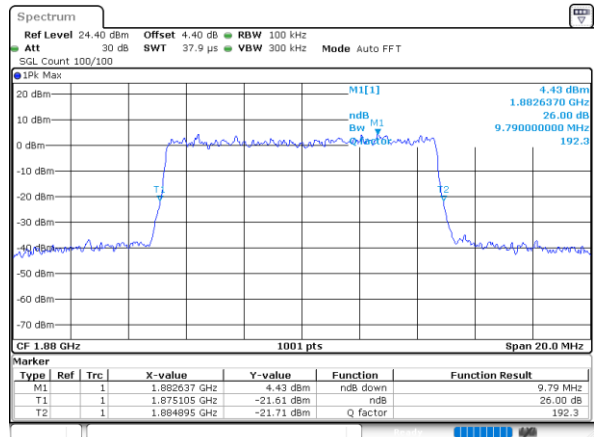
256QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:08:58



Date: 14.JAN.2021 00:08:36



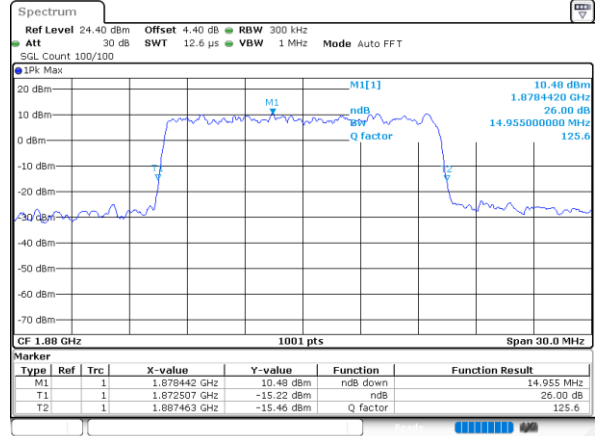
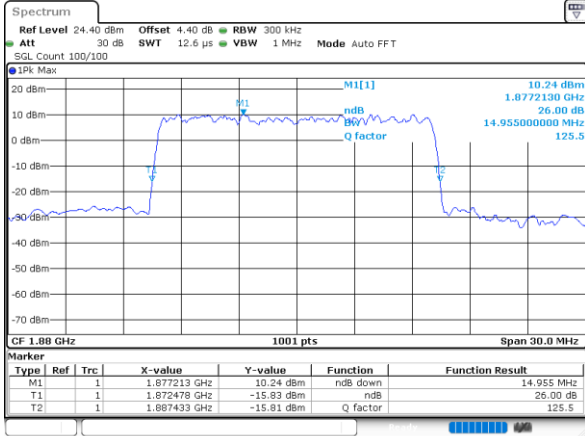
FR1 n2+5A / 15MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:07:10

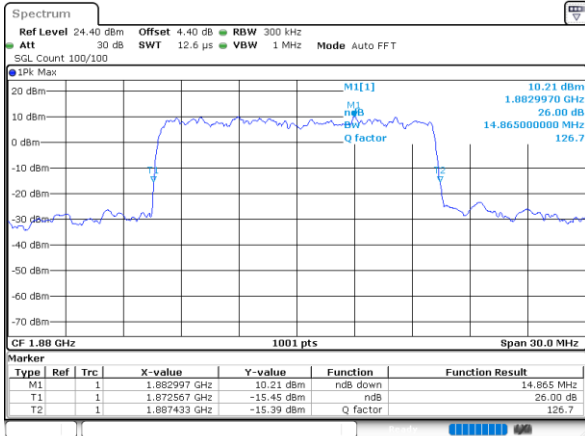
Date: 14.JAN.2021 00:07:26

64QAM

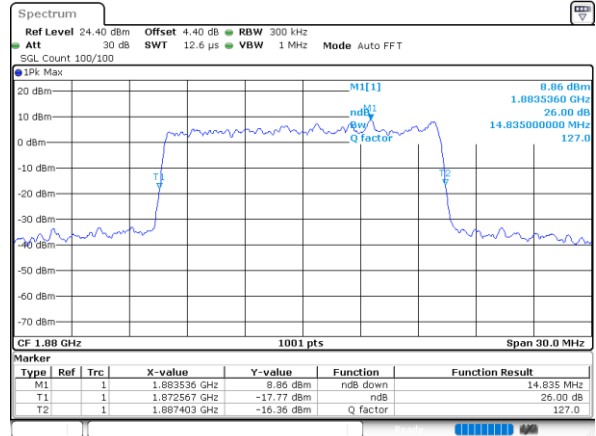
256QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:07:40



Date: 14.JAN.2021 00:07:55



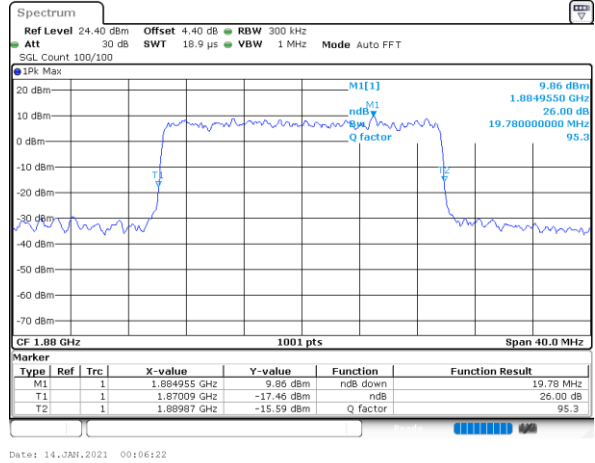
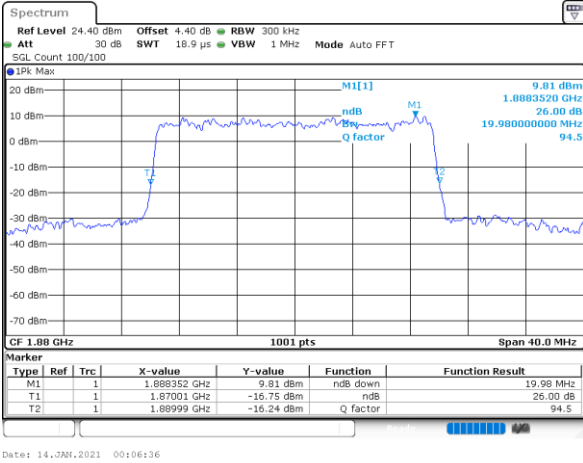
FR1 n2+5A / 20MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel

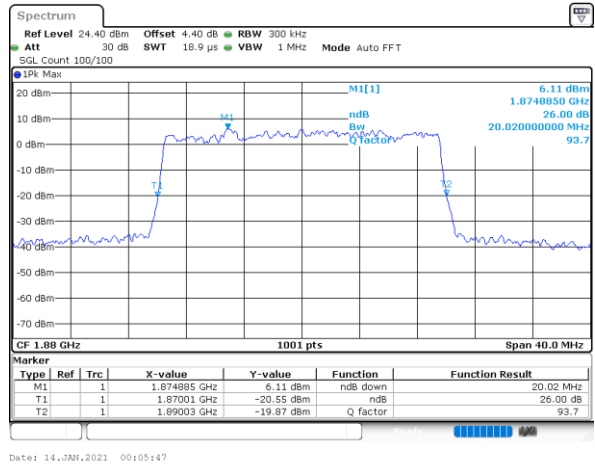
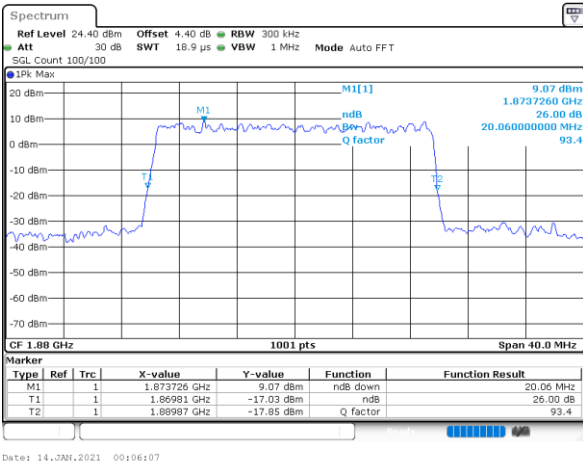


64QAM

256QAM

Middle Channel

Middle Channel





Occupied Bandwidth

Mode	FR1 n2+5A : OBW(MHz) / CP-OFDM							
BW	5MHz	5MHz	5MHz	5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	4.48	4.48	4.49	4.50				

Mode	FR1 n2+5A : OBW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.27	9.29	9.29	9.27				

Mode	FR1 n2+5A : OBW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.18	14.09	14.15	14.15				

Mode	FR1 n2+5A : OBW(MHz) / CP-OFDM							
BW	20MHz	20MHz	20MHz	20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	18.98	18.98	18.98	18.94				



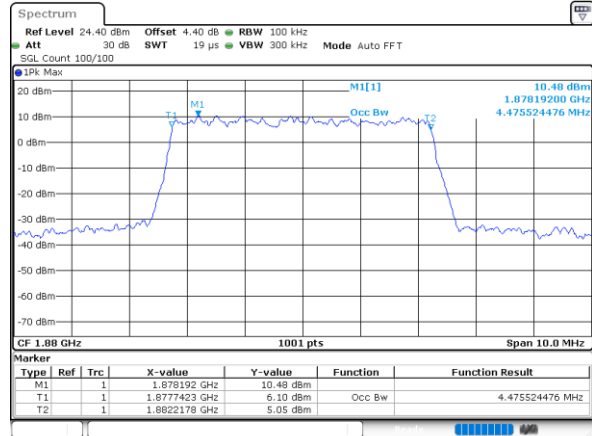
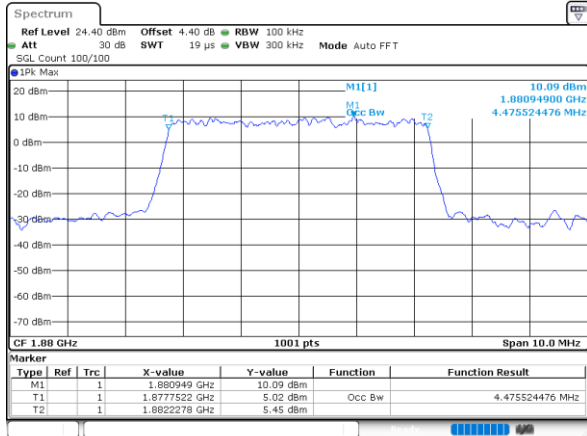
FR1 n2+5A / 5MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:10:24

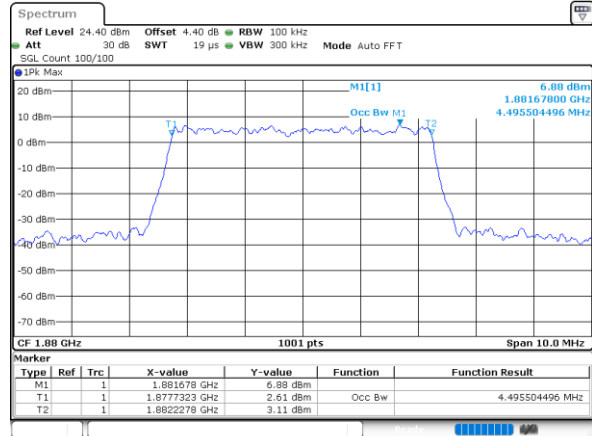
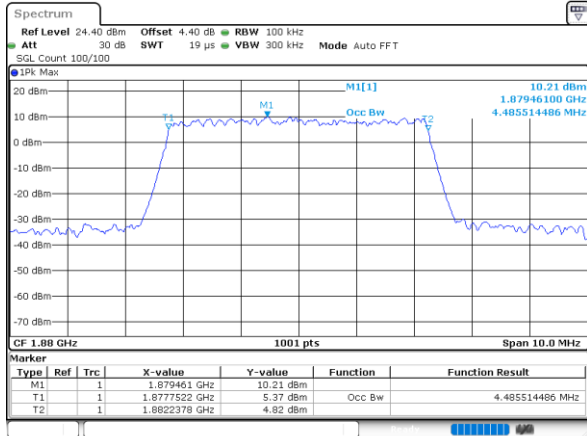
Date: 14.JAN.2021 00:10:38

64QAM

256QAM

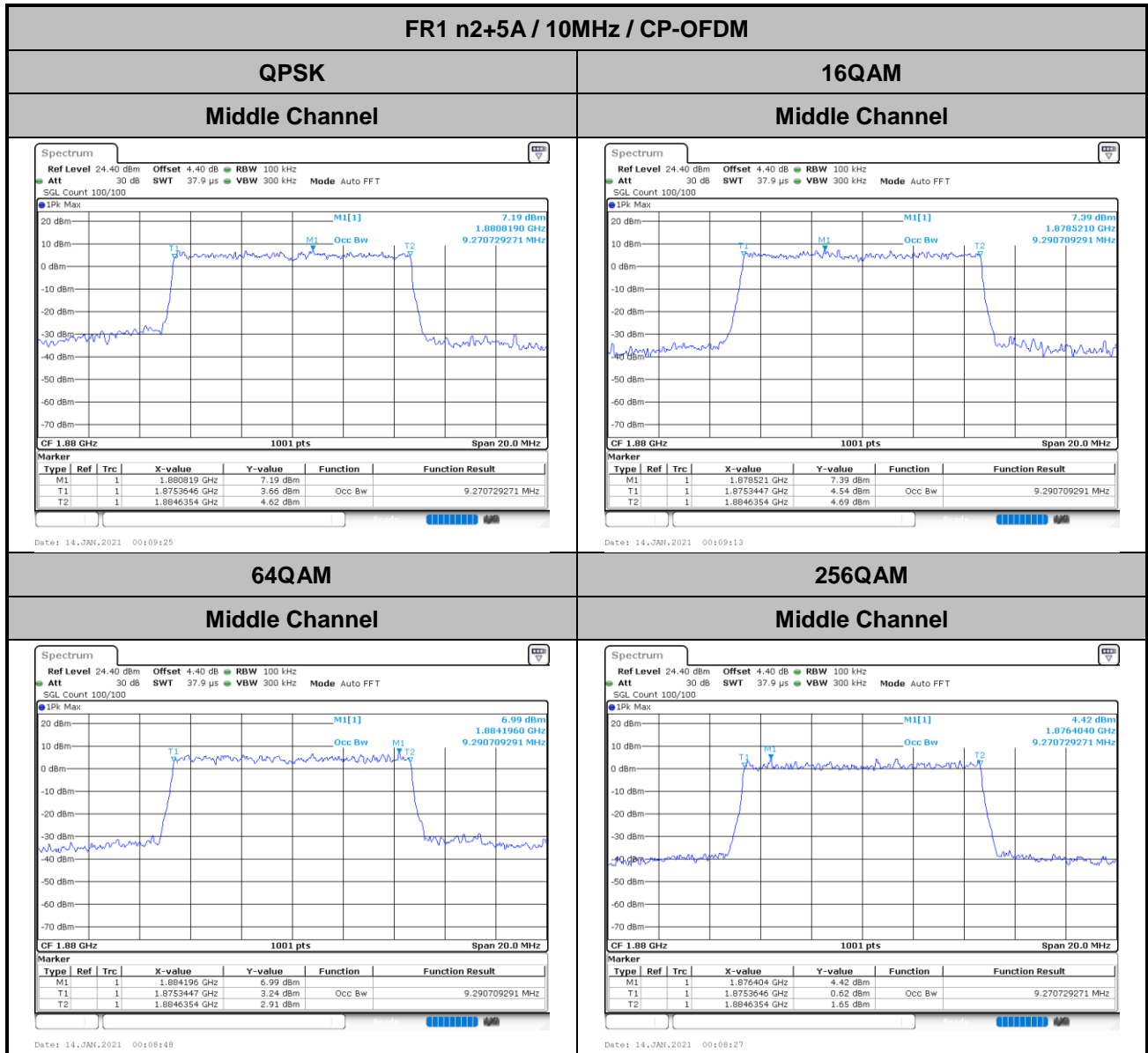
Middle Channel

Middle Channel



Date: 14.JAN.2021 00:10:52

Date: 14.JAN.2021 00:11:06





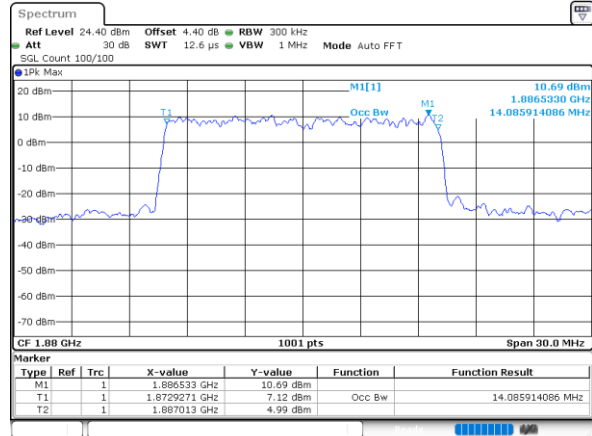
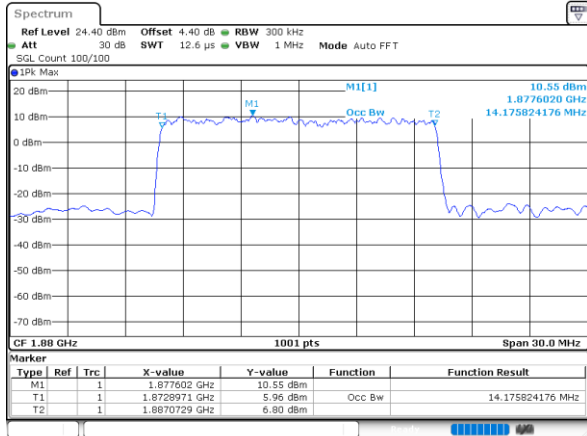
FR1 n2+5A / 15MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:07:06

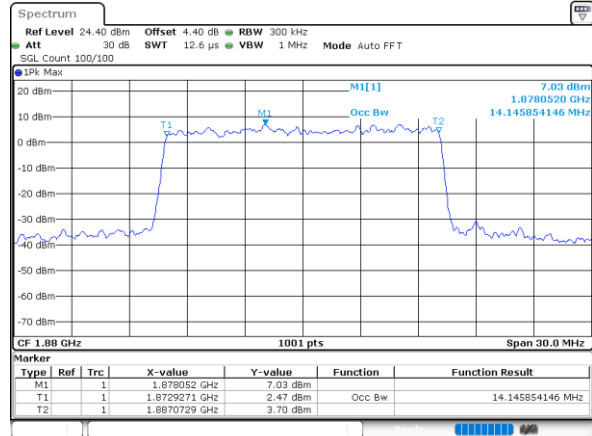
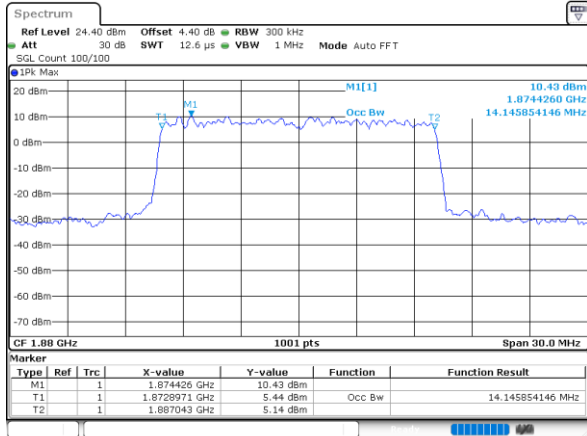
Date: 14.JAN.2021 00:07:22

64QAM

256QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:07:36

Date: 14.JAN.2021 00:07:50



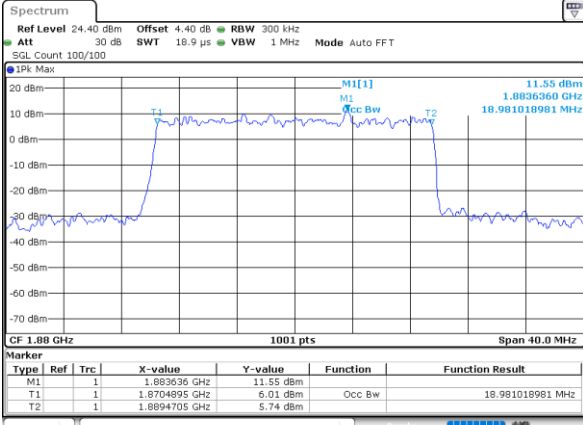
FR1 n2+5A / 20MHz / CP-OFDM

QPSK

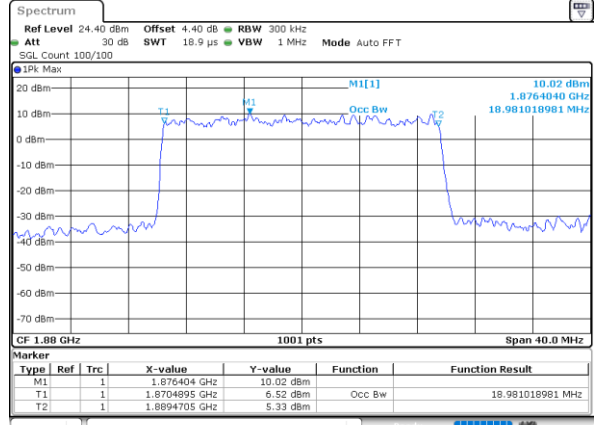
16QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:06:32



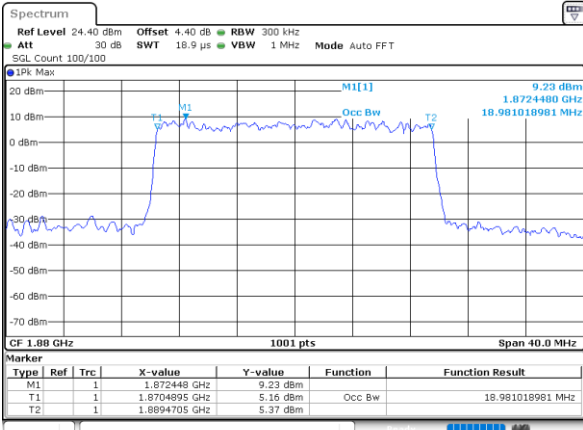
Date: 14.JAN.2021 00:06:18

64QAM

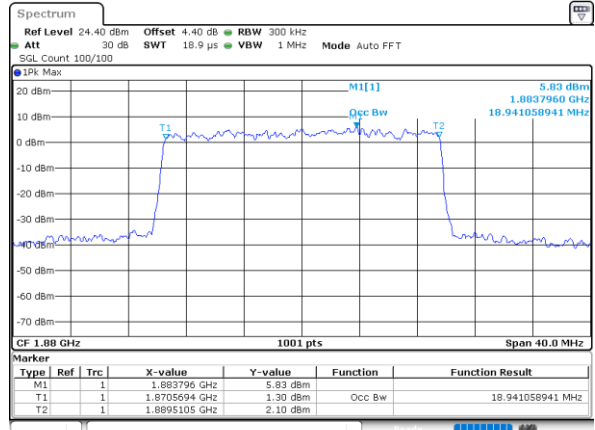
256QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:06:03

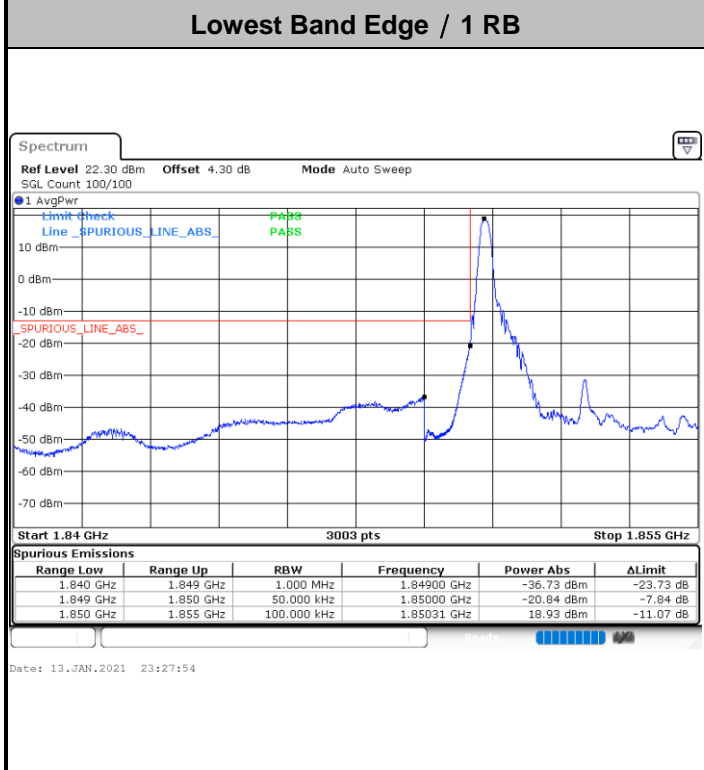


Date: 14.JAN.2021 00:05:42

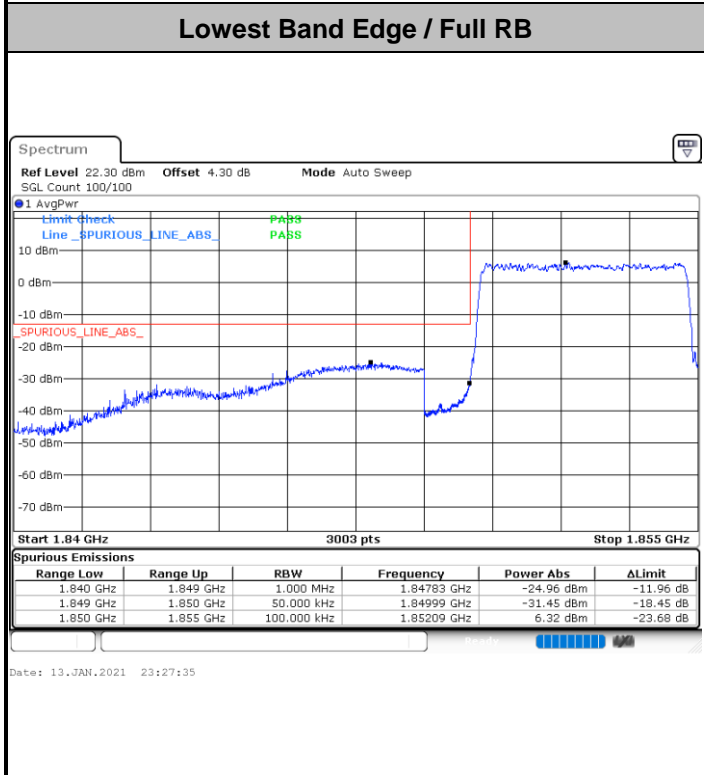


Conducted Band Edge

FR1 n2+5A / 5MHz / DFT-S OFDM BPSK



Channel Power < -13dBm Pass



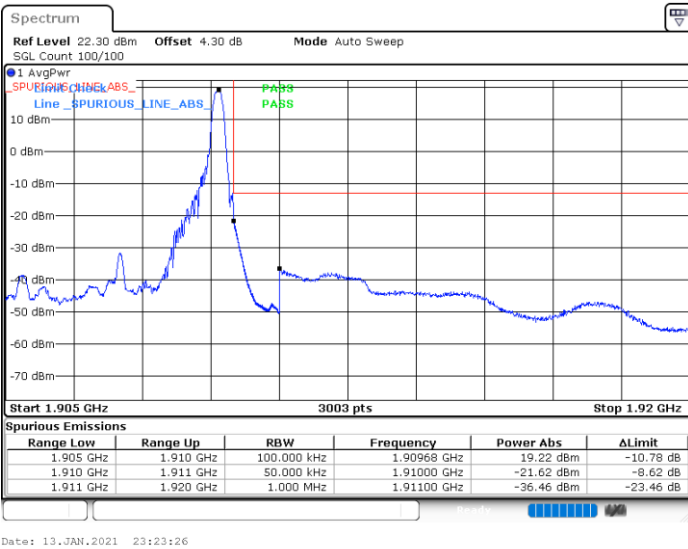
Channel Power < -13dBm Pass



FR1 n2+5A / 5MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

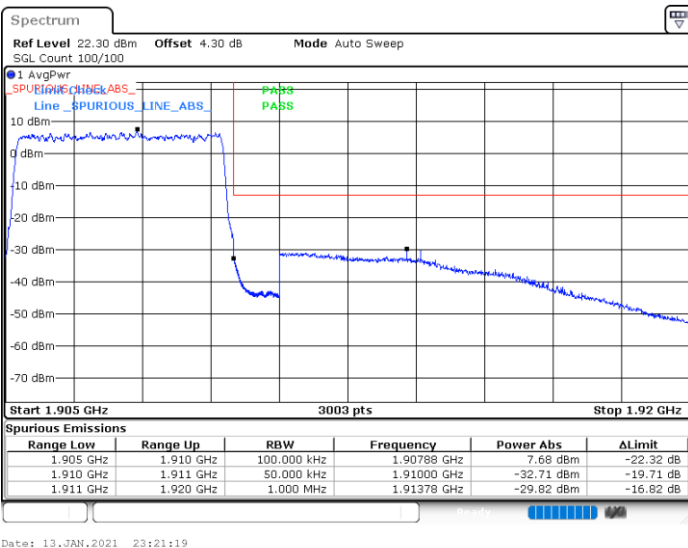
Channel Power < -13dBm Pass



Date: 13.JAN.2021 23:23:26

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



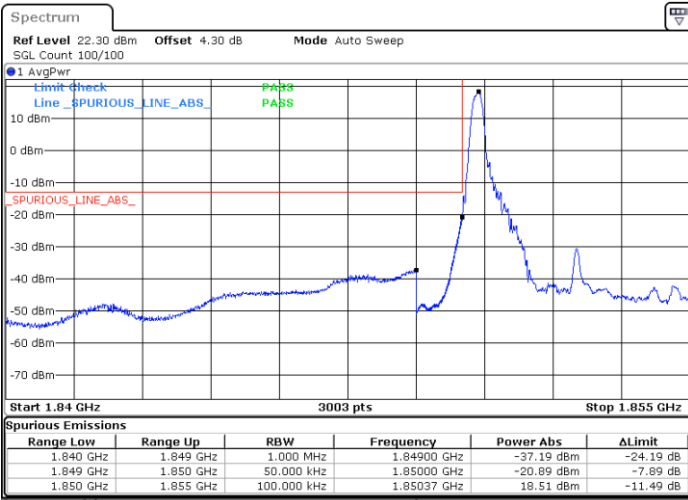
Date: 13.JAN.2021 23:21:19



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

Lowest Band Edge / 1 RB

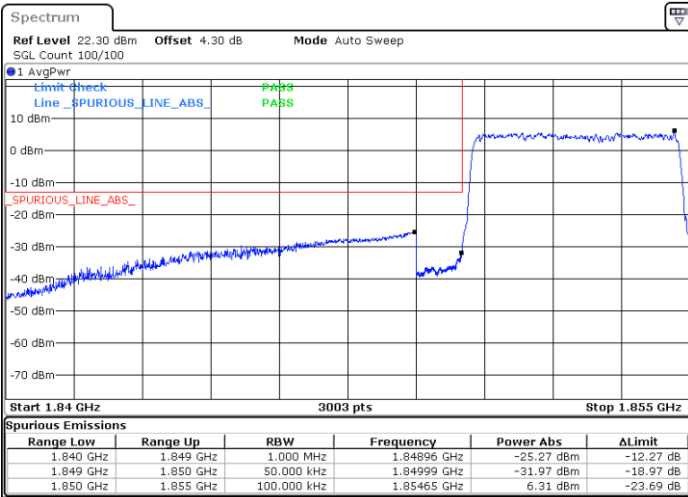
Channel Power < -13dBm Pass



Date: 13.JAN.2021 23:28:15

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



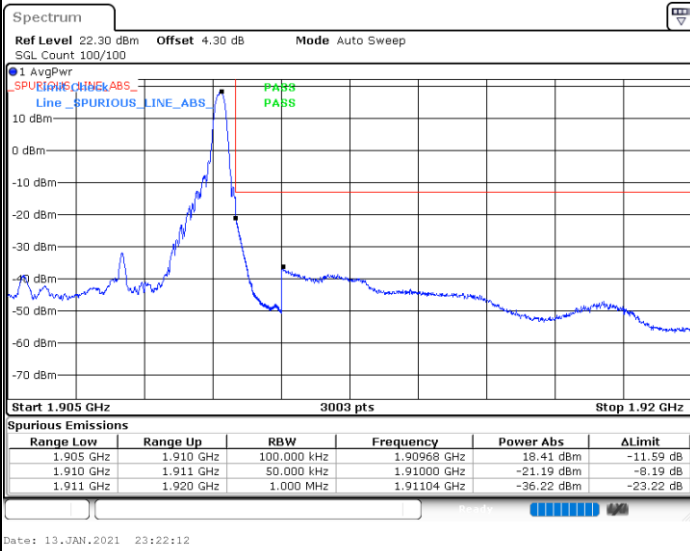
Date: 13.JAN.2021 23:27:01



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

Highest Band Edge / 1 RB

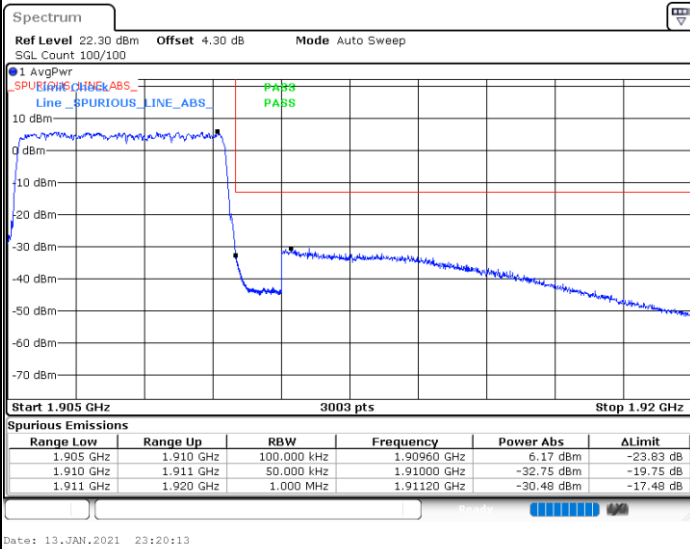
Channel Power < -13dBm Pass



/

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



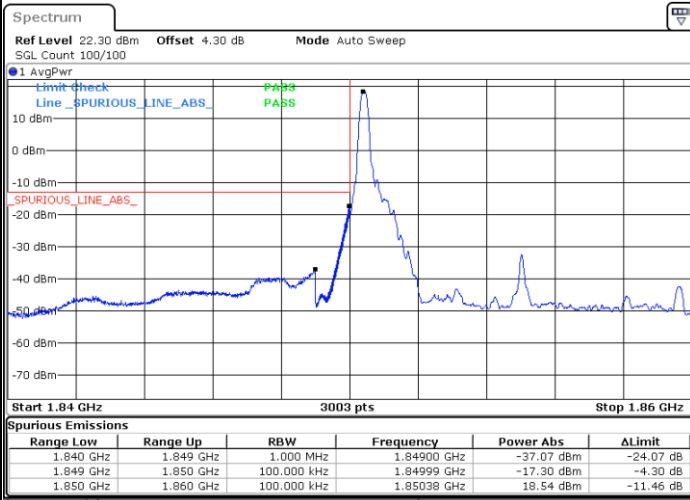
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FR1 n2+5A / 10MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

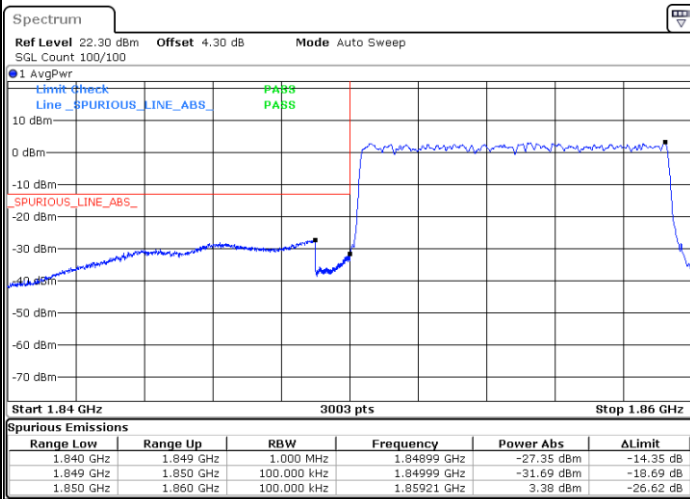
Channel Power < -13dBm Pass



Date: 13.JAN.2021 22:19:46

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



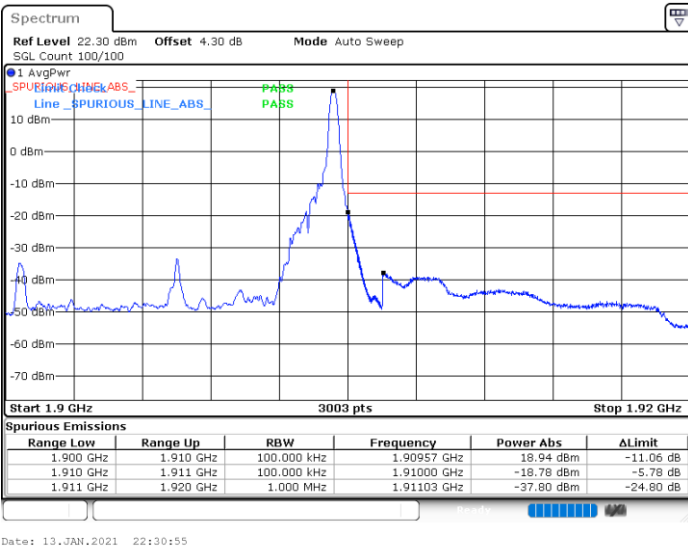
Date: 13.JAN.2021 22:13:02



FR1 n2+5A / 10MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

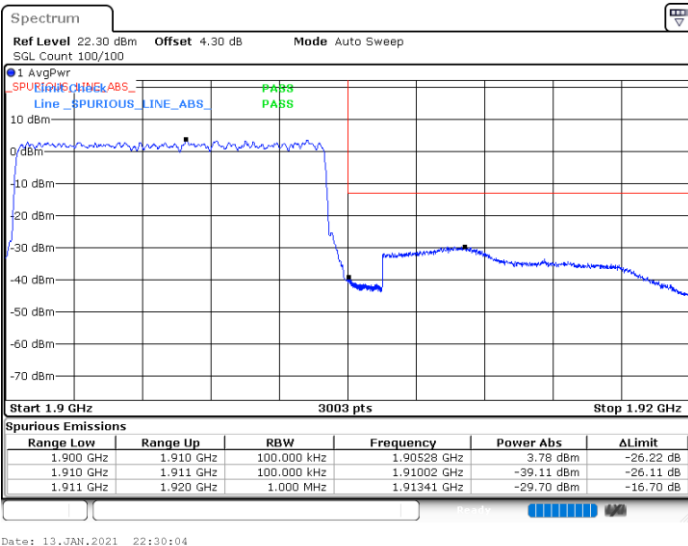
Channel Power < -13dBm Pass



/

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



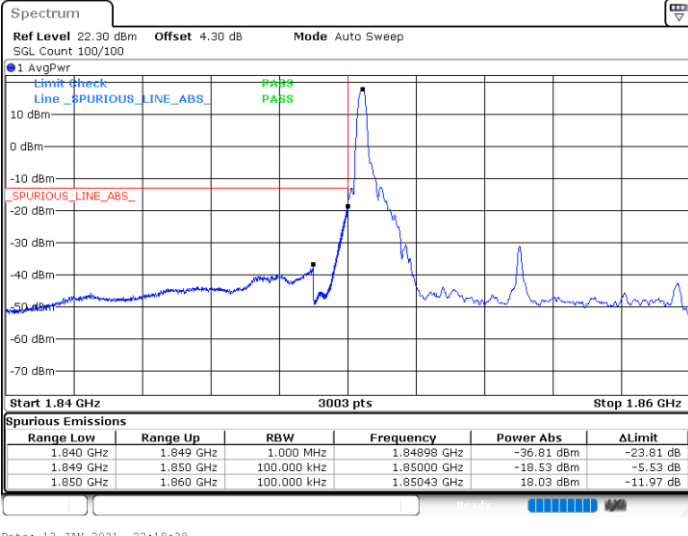
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FR1 n2+5A / 10MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

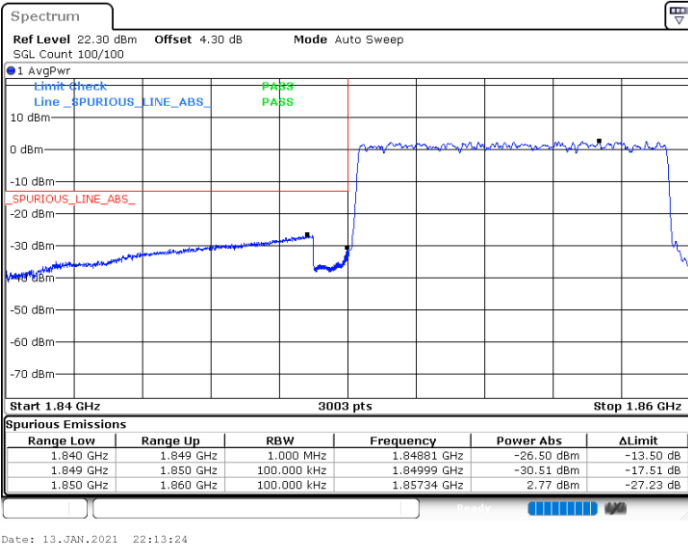
Channel Power < -13dBm Pass



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Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



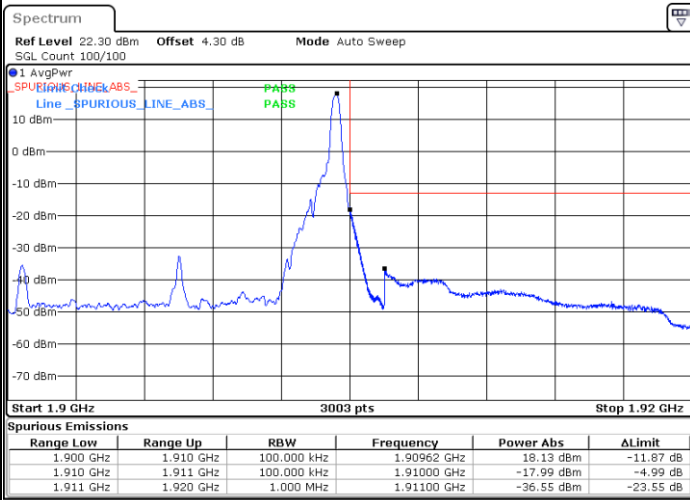
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FR1 n2+5A / 10MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

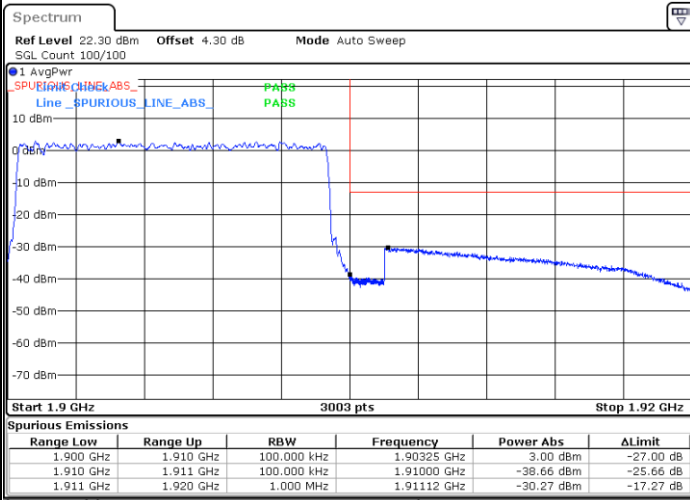
Channel Power < -13dBm Pass



Date: 13.JAN.2021 22:31:13

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



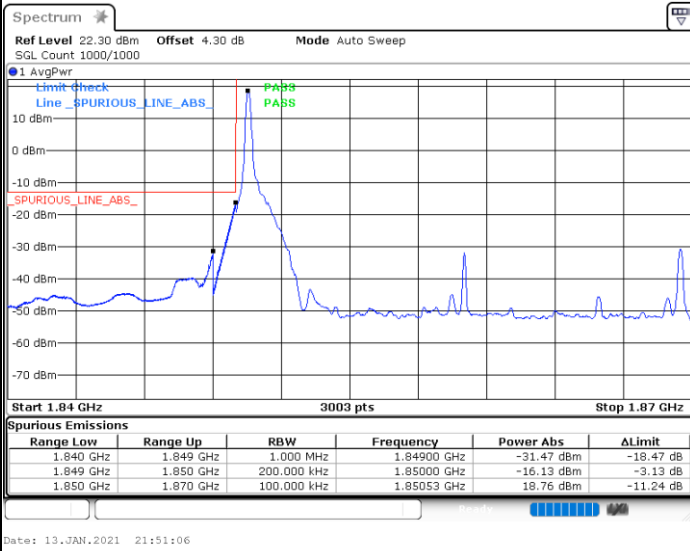
Date: 13.JAN.2021 22:28:45



FR1 n2+5A / 20MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

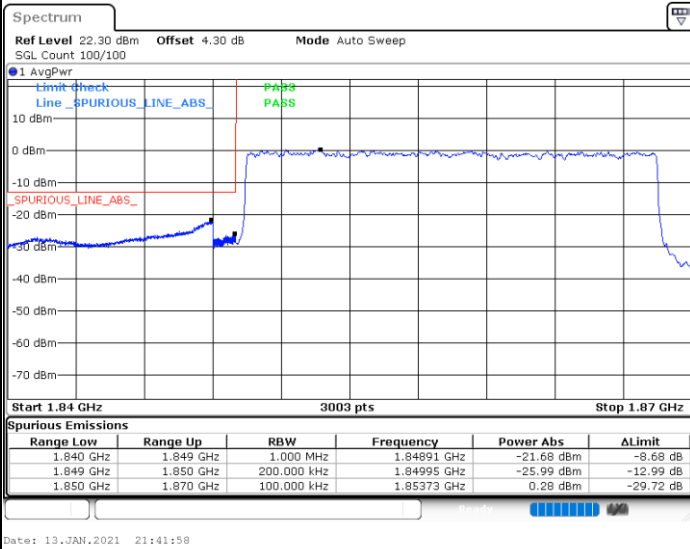
Channel Power < -13dBm Pass



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Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



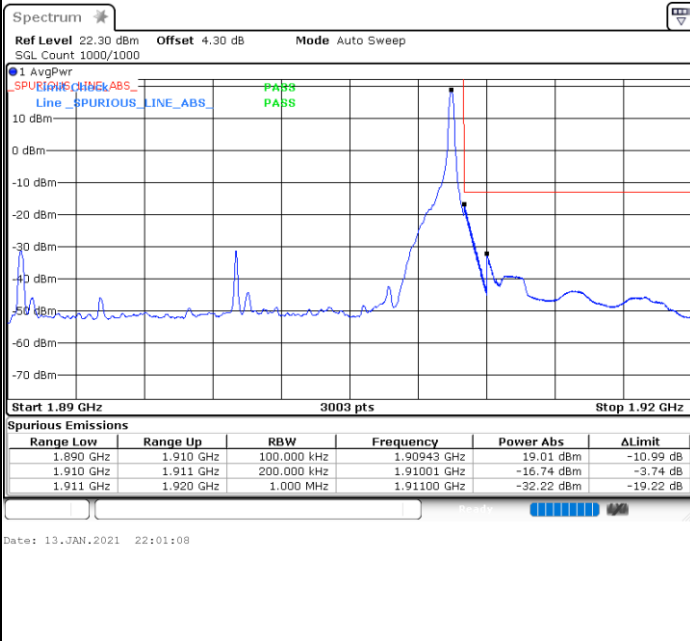
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FR1 n2+5A / 20MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

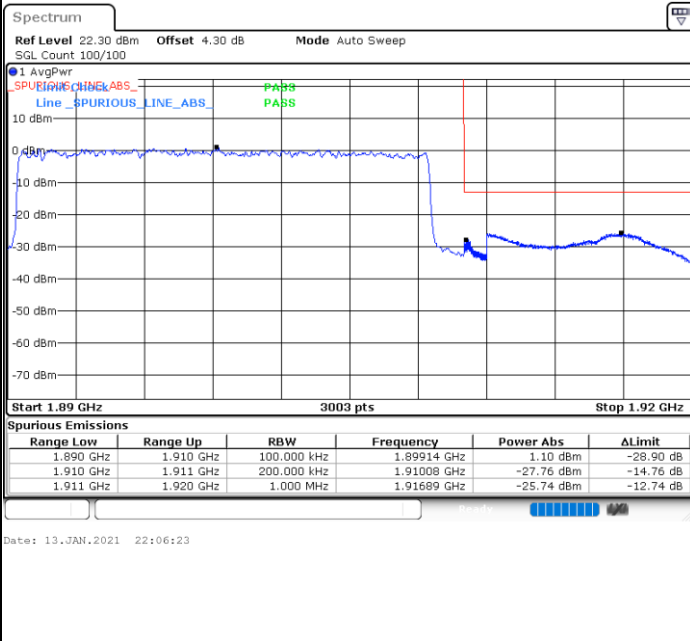
Channel Power < -13dBm Pass



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Highest Band Edge / Full RB

Channel Power < -13dBm Pass



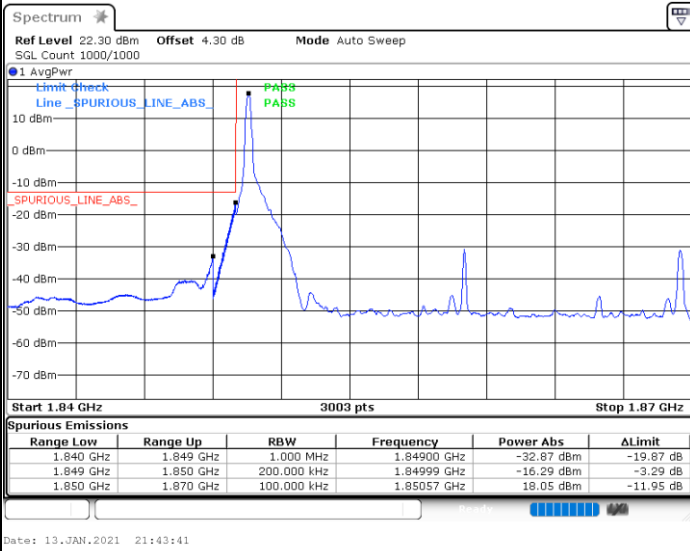
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FR1 n2+5A / 20MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

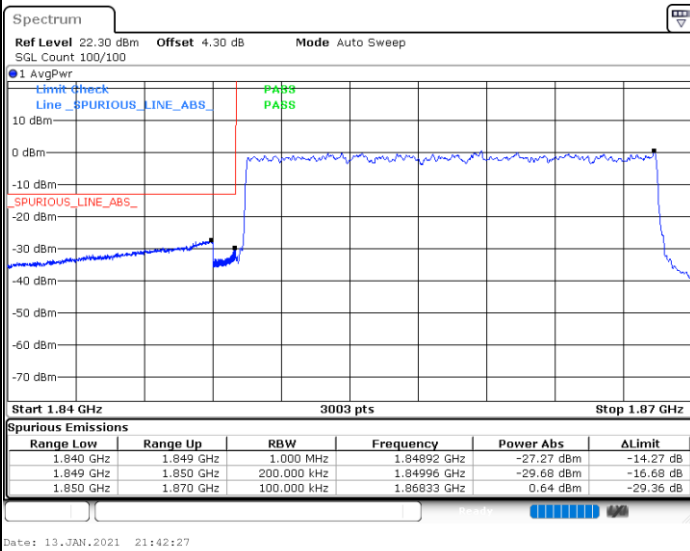
Channel Power < -13dBm Pass



/

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



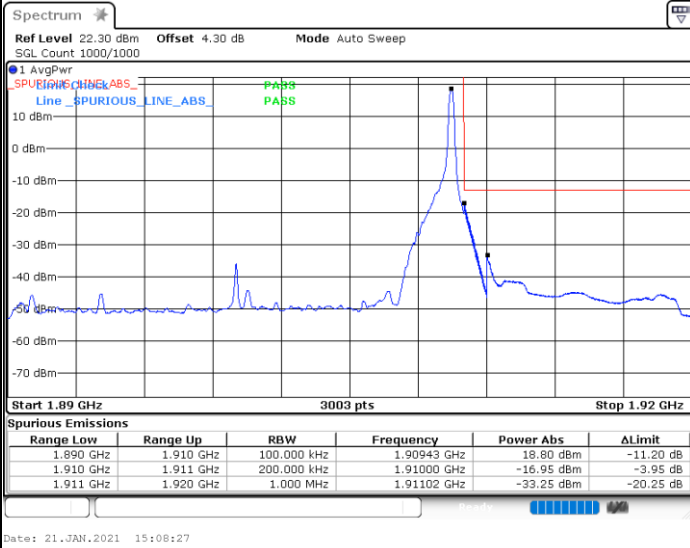
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FR1 n2+5A / 20MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

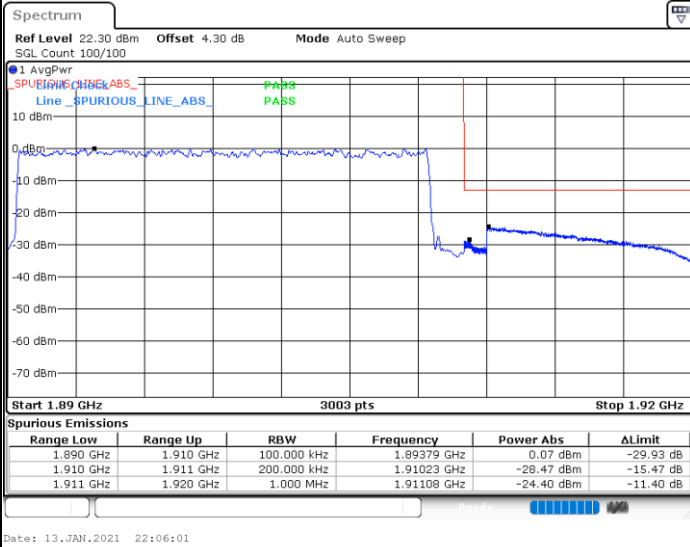
Channel Power < -13dBm Pass



/

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



/

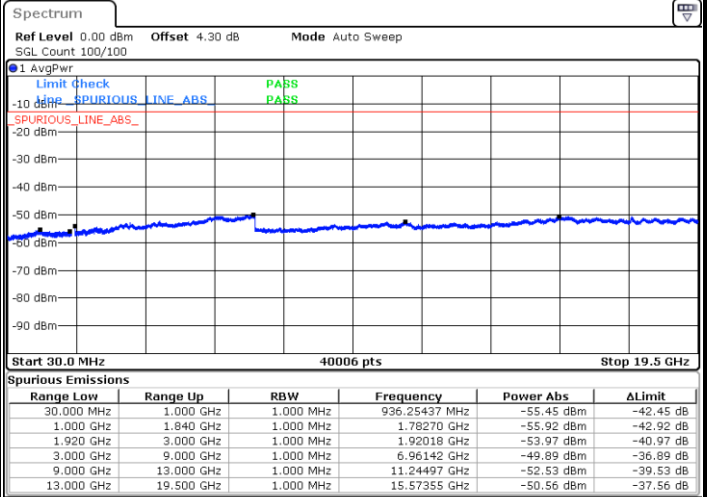
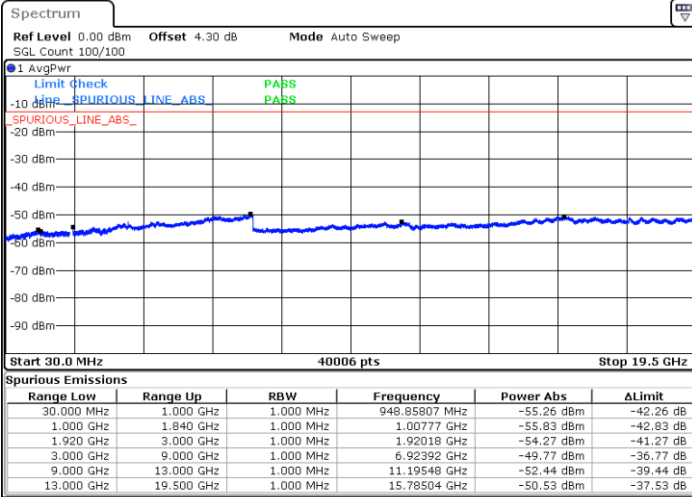


Conducted Spurious Emission

FR1 n2+5A / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

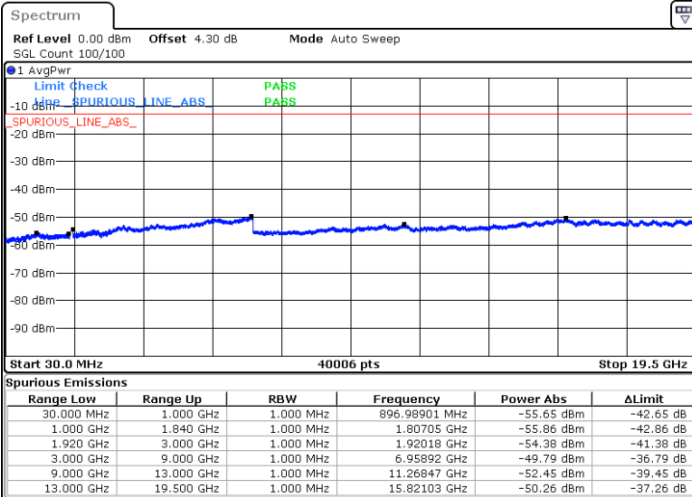
Middle Channel / 1RB



Date: 13.JAN.2021 23:08:01

Date: 13.JAN.2021 23:12:47

Highest Channel / 1RB



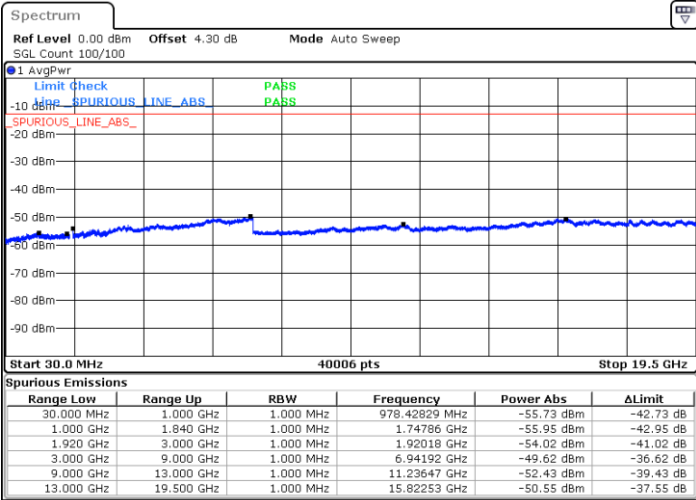
Date: 13.JAN.2021 23:14:05



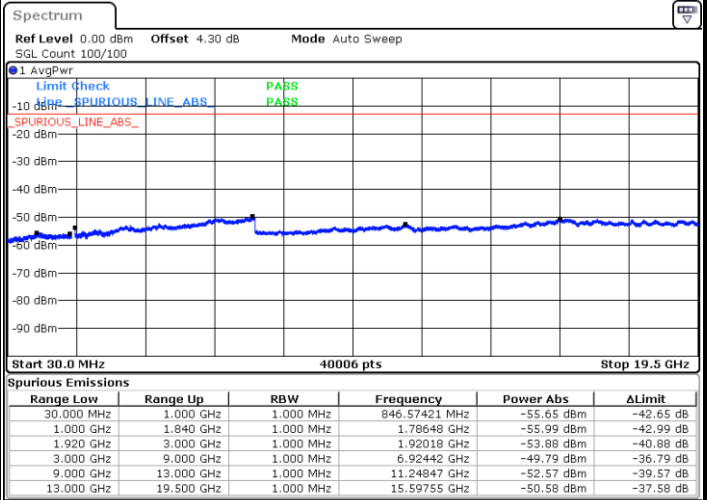
FR1 n2+5A / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

Middle Channel / 1RB

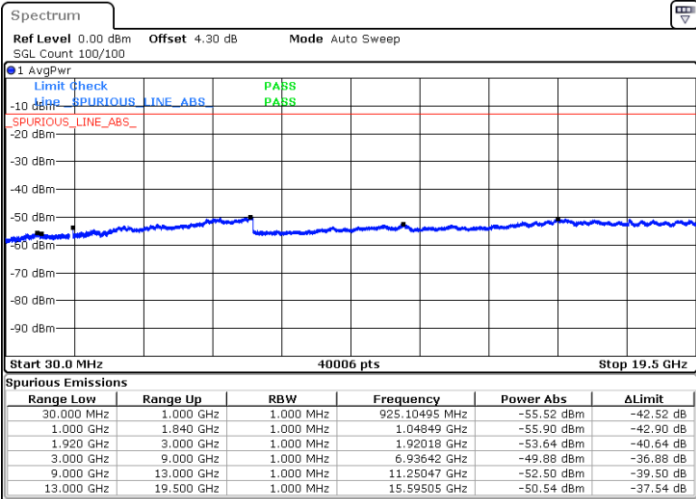


Date: 13.JAN.2021 23:09:51



Date: 13.JAN.2021 23:11:13

Highest Channel / 1RB



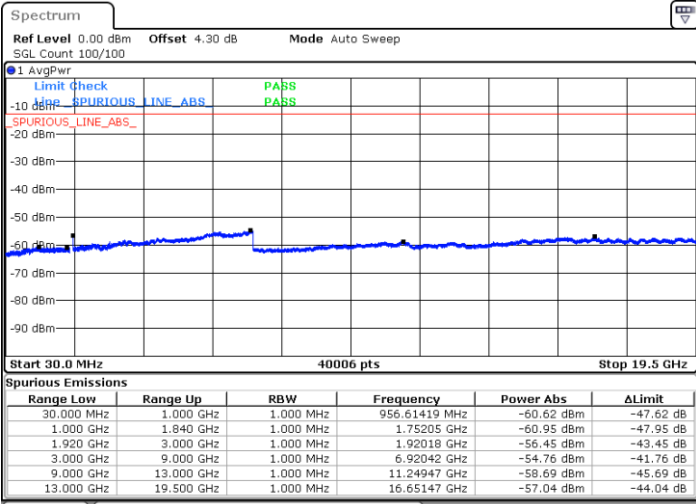
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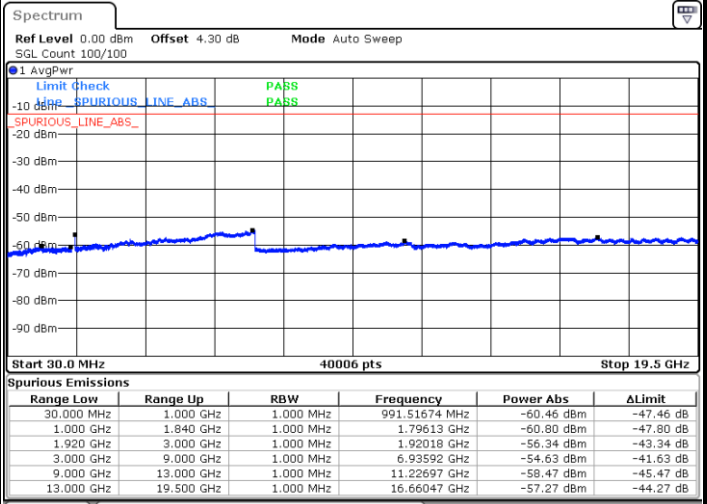
FR1 n2+5A / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

Middle Channel / 1RB

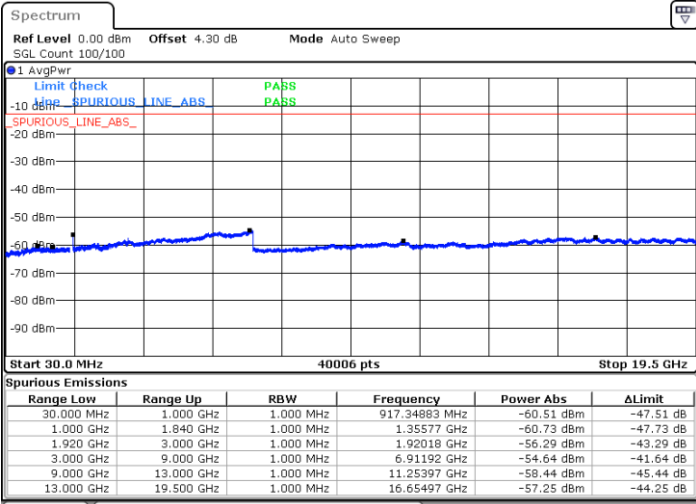


Date: 13.JAN.2021 23:01:12



Date: 13.JAN.2021 22:44:49

Highest Channel / 1RB



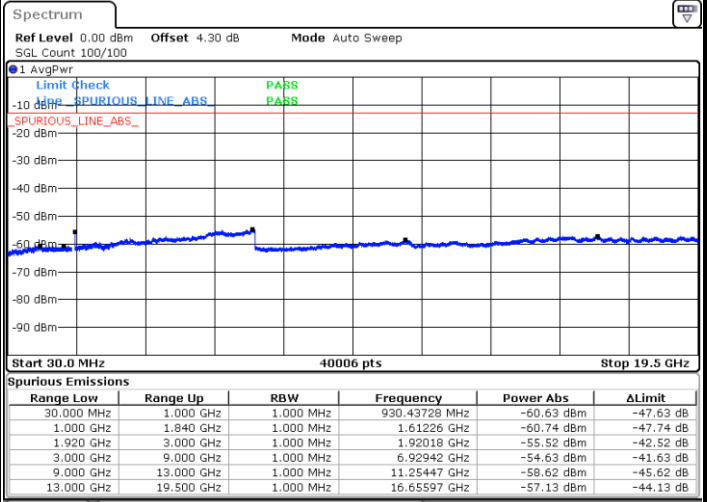
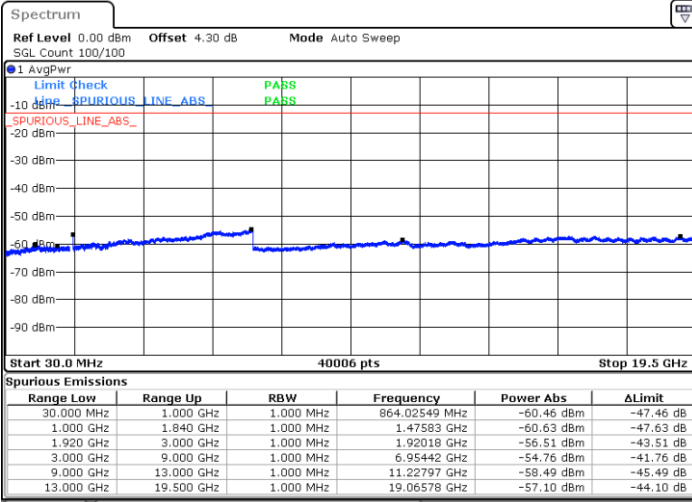
Date: 13.JAN.2021 22:41:51



FR1 n2+5A / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

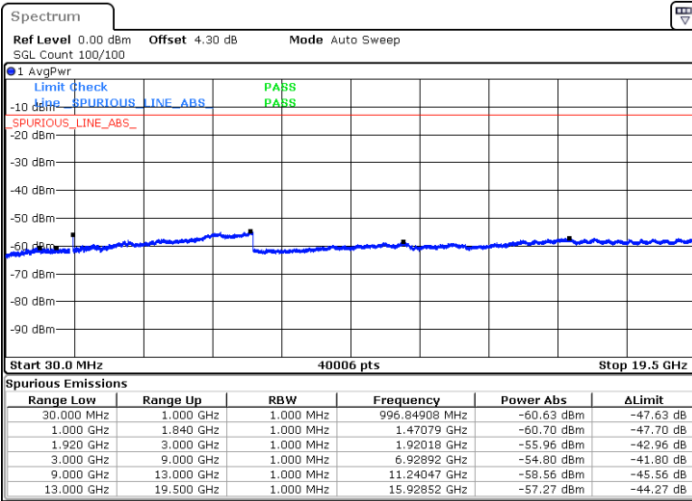
Middle Channel / 1RB



Date: 13. JAN. 2021 22:59:21

Date: 13. JAN. 2021 22:49:13

Highest Channel / 1RB

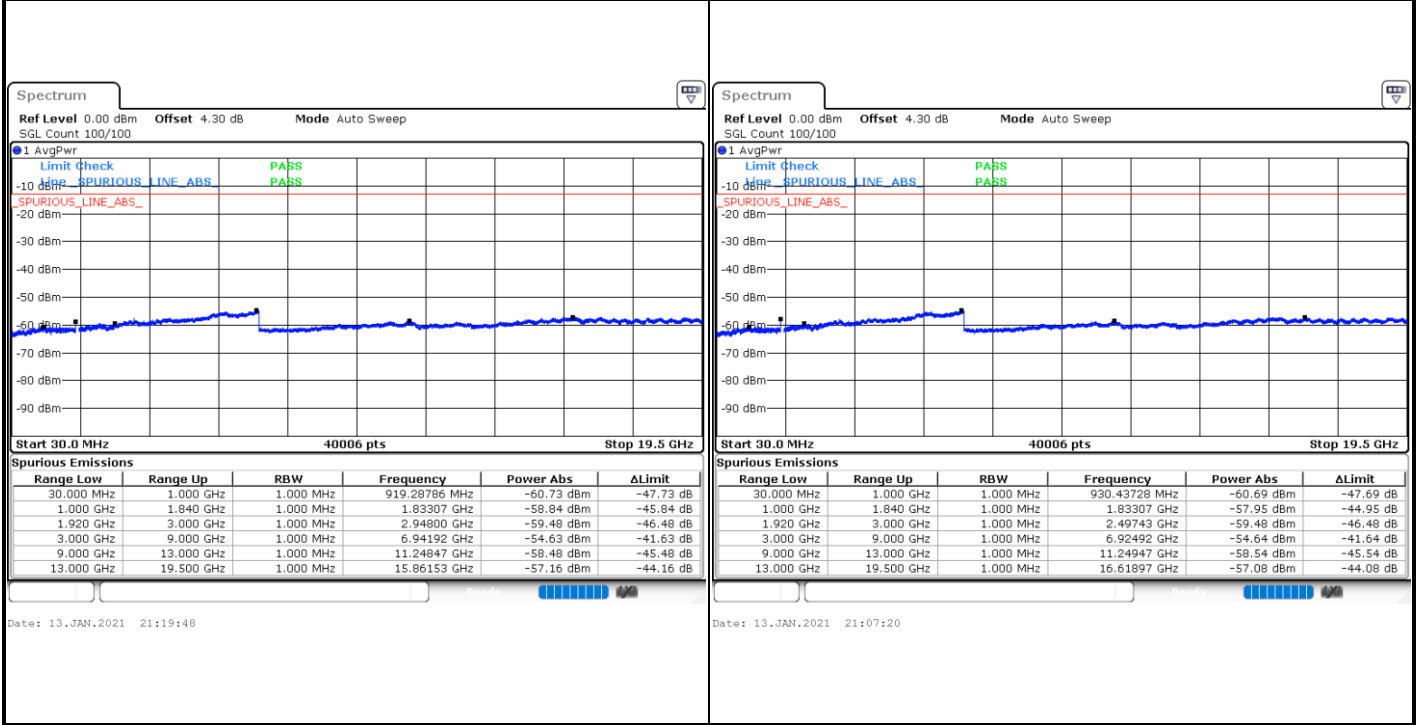


Date: 13. JAN. 2021 22:37:46

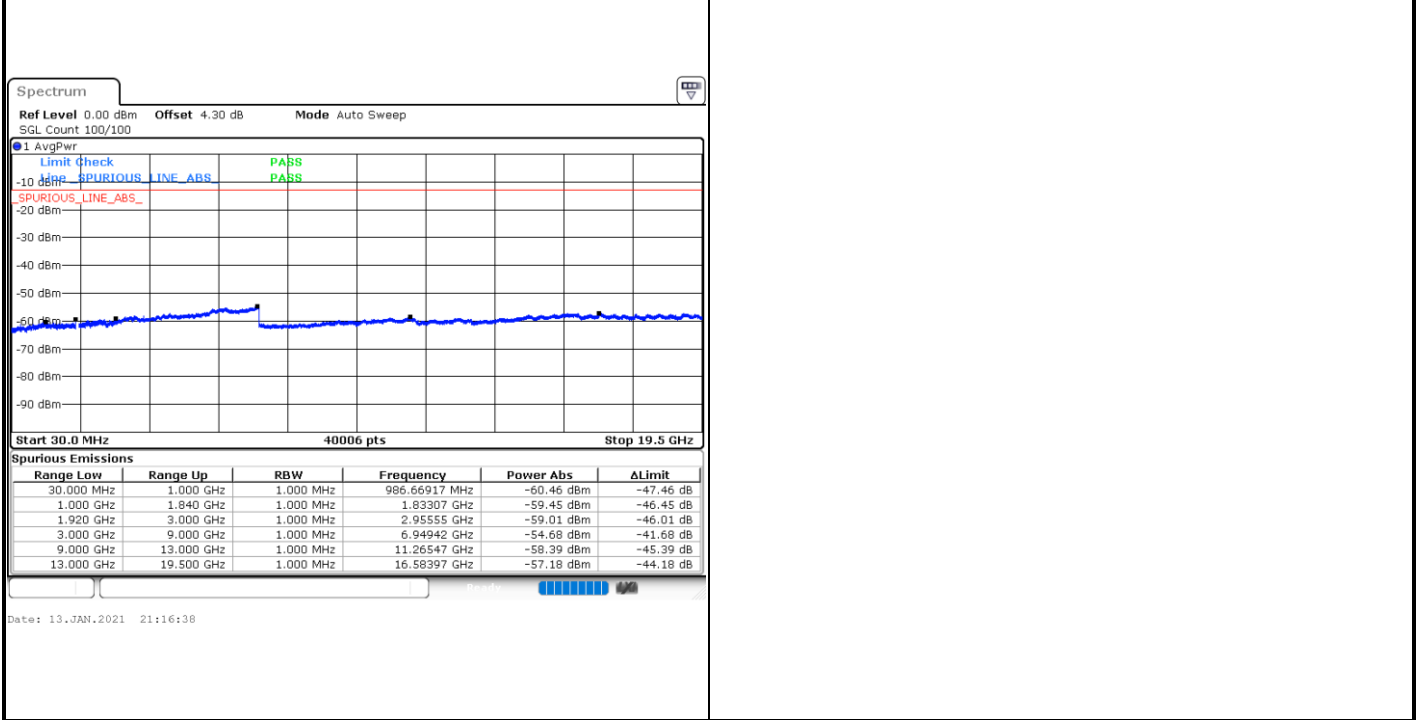


FR1 n2+5A / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB	Middle Channel / 1RB
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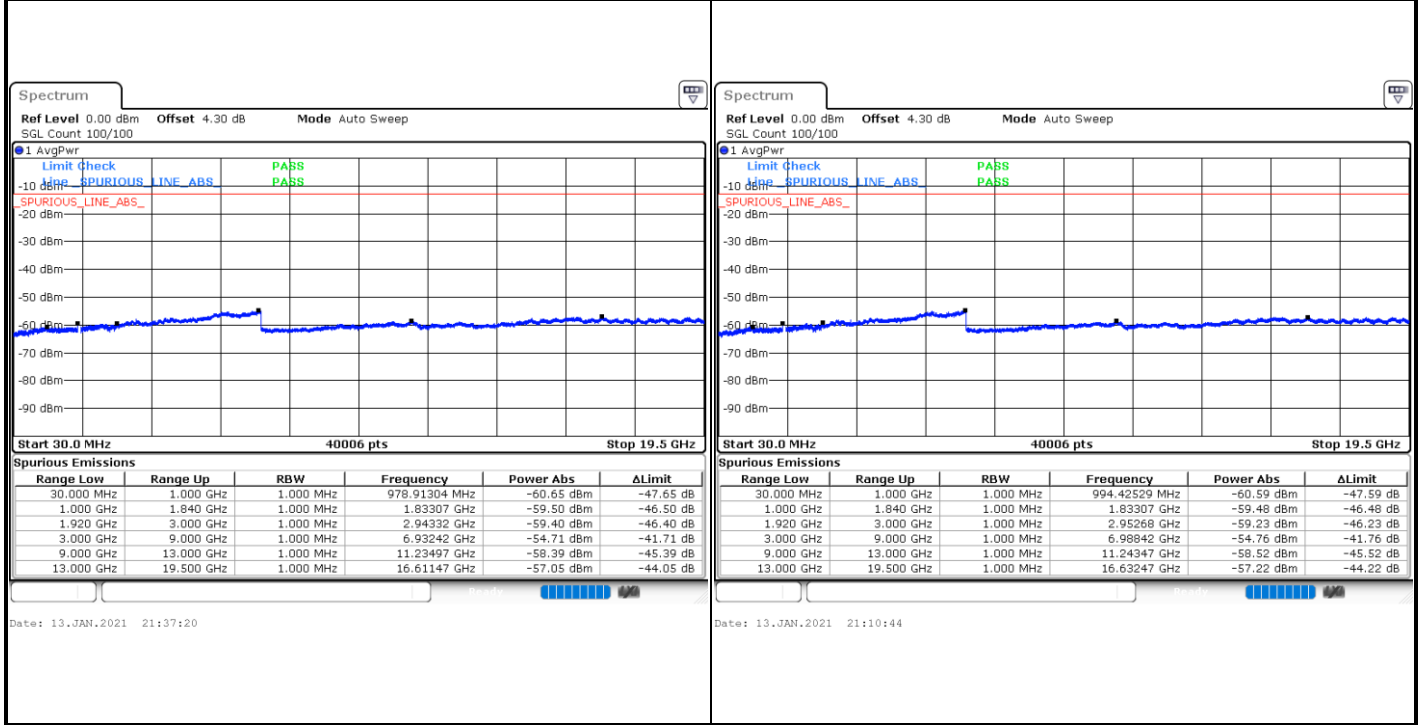
Highest Channel / 1RB



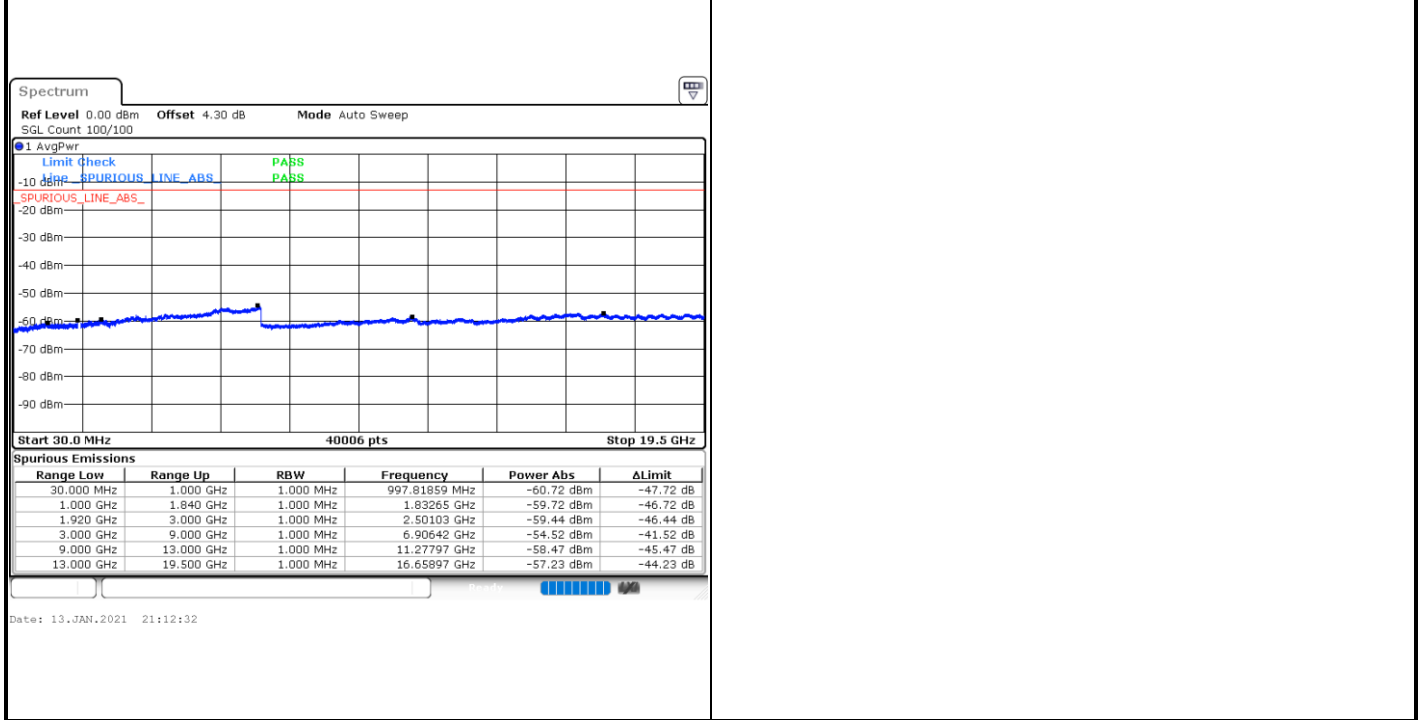


FR1 n2+5A / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB	Middle Channel / 1RB
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Highest Channel / 1RB





Frequency Stability

Test Conditions		NR n2+5A (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0018	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0013	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0026	
20	Normal Voltage	0.0031	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.14 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



FR1 n5 SA

Peak-to-Average Ratio

Mode	FR1 n5 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	PI/2 BPSK	QPSK	QPSK	Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.71	3.86	5.04	5.04	PASS
Middle CH	3.83	3.94	5.13	5.07	
Highest CH	3.59	3.80	5.10	4.99	



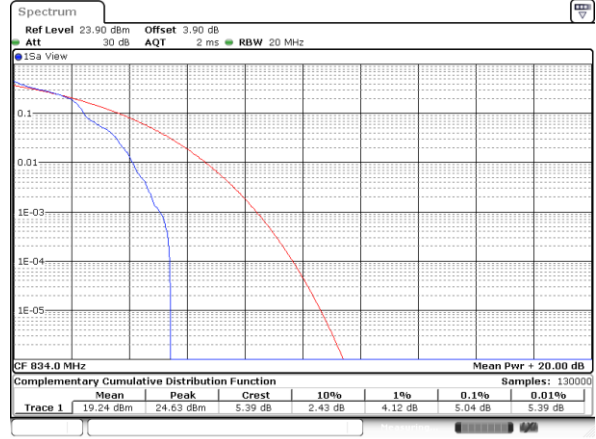
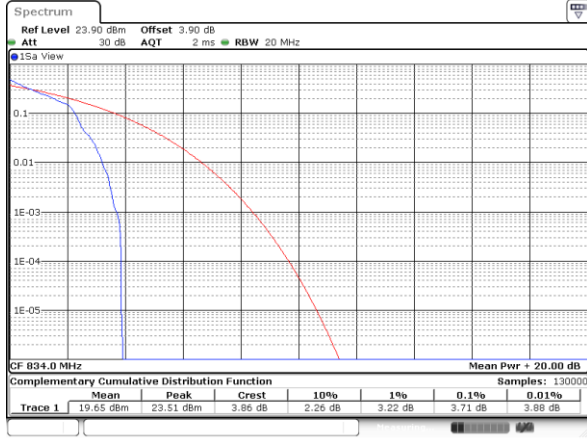
FR1 n5 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / 1RB

Lowest Channel / 1RB

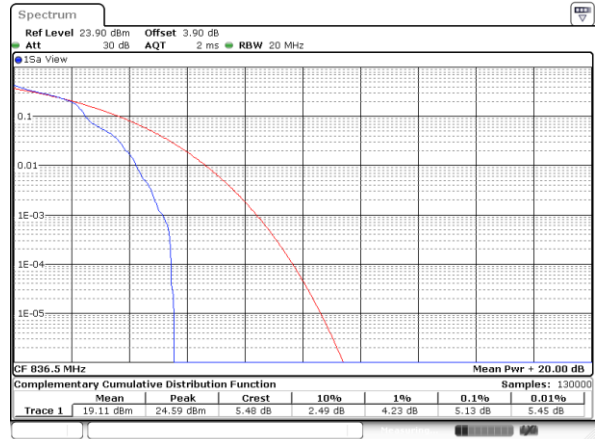
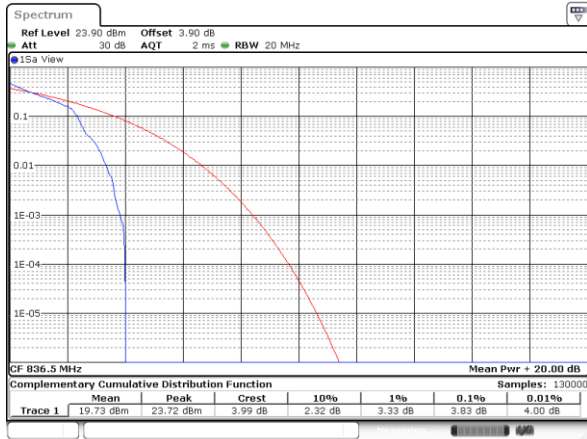


Date: 11_JAN.2021 11:12:22

Date: 11_JAN.2021 11:06:48

Middle Channel / 1 RB

Middle Channel / 1 RB

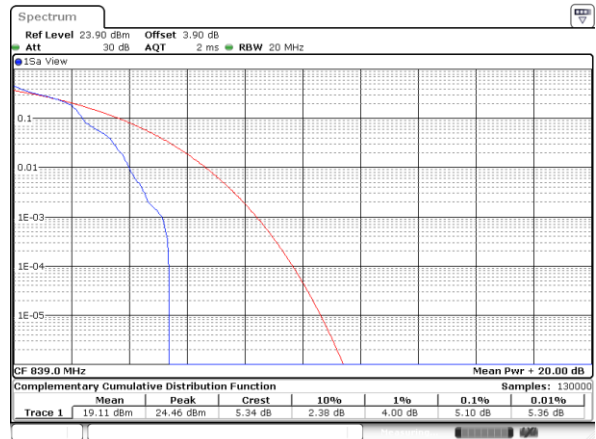
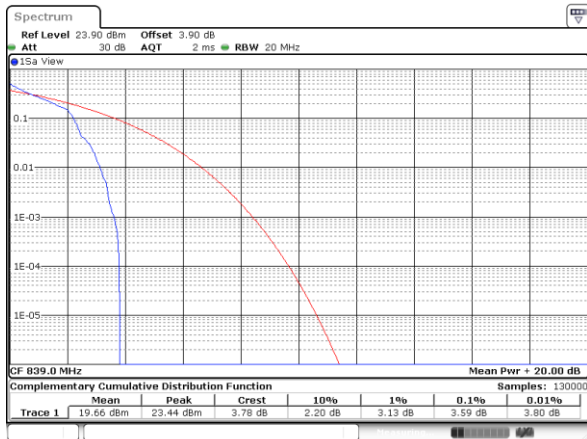


Date: 11_JAN.2021 11:28:08

Date: 11_JAN.2021 11:28:22

Highest Channel / 1 RB

Highest Channel / 1 RB



Date: 11_JAN.2021 11:26:41

Date: 11_JAN.2021 11:26:27



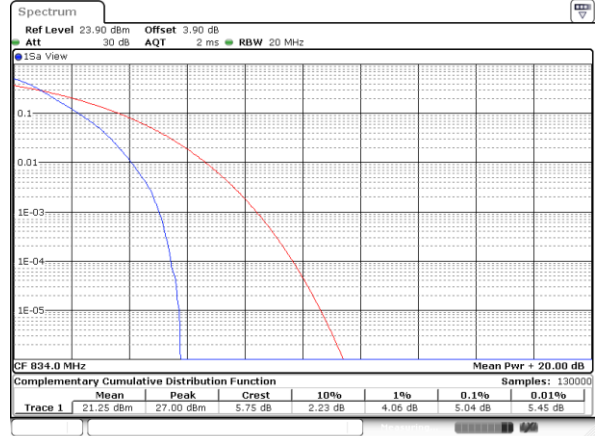
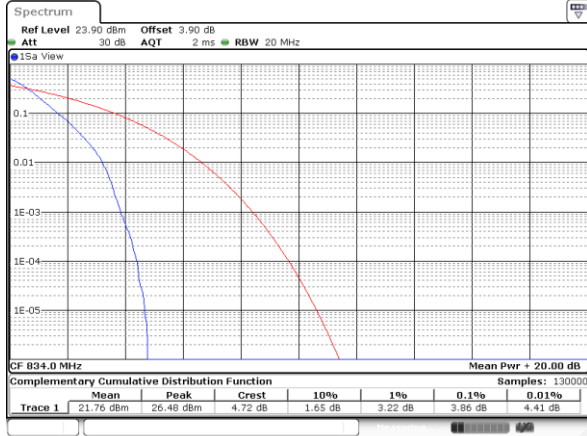
FR1 n5 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

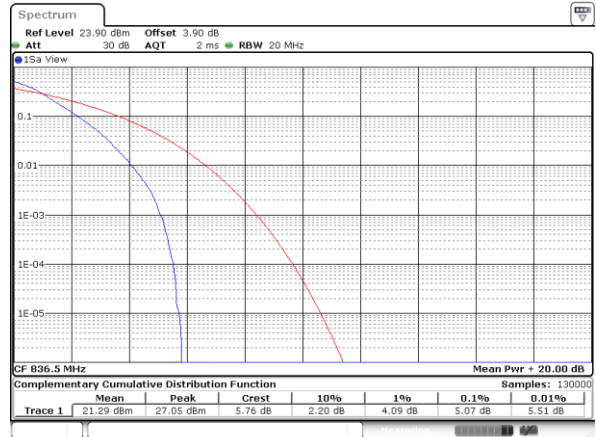
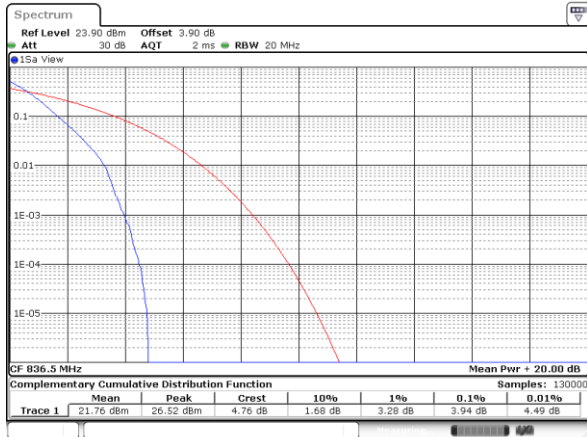


Date: 11_JAN_2021 11:19:40

Date: 11_JAN_2021 11:20:35

Middle Channel / Full RB

Middle Channel / Full RB

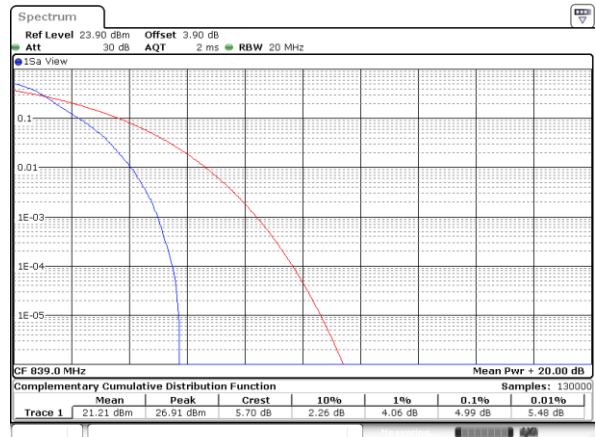
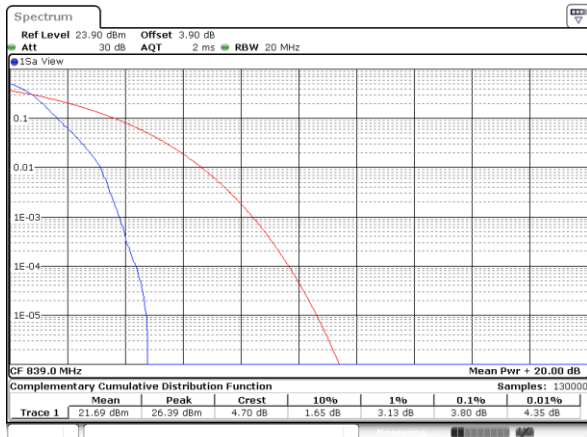


Date: 11_JAN_2021 11:22:39

Date: 11_JAN_2021 11:22:10

Highest Channel / Full RB

Highest Channel / Full RB



Date: 11_JAN_2021 11:24:20

Date: 11_JAN_2021 11:25:24



26dB Bandwidth

Mode	FR1 n5 : 26dB BW(MHz) / CP-OFDM							
BW	5MHz	5MHz	5MHz	5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	4.95	4.88	4.93	4.84				

Mode	FR1 n5 : 26dB BW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.87	9.77	9.83	9.71				

Mode	FR1 n5 : 26dB BW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.87	14.93	14.93	14.98				

Mode	FR1 n5 : 26dB BW(MHz) / CP-OFDM							
BW	20MHz	20MHz	20MHz	20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	20.06	20.02	19.94	20.14				



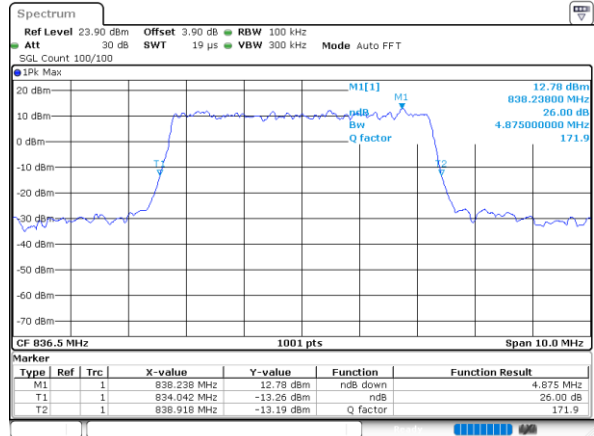
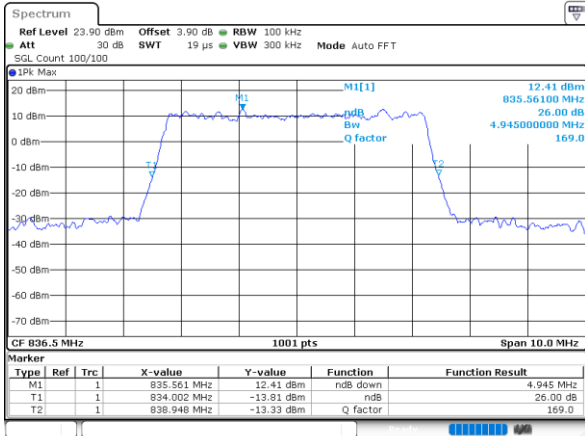
FR1 n5 / 5MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 13.JAN.2021 19:46:49

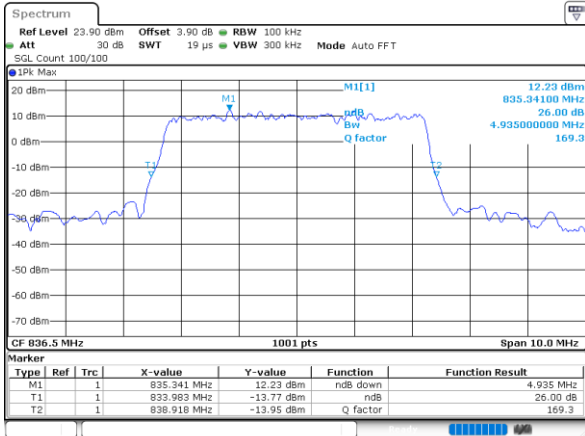
Date: 13.JAN.2021 19:46:36

64QAM

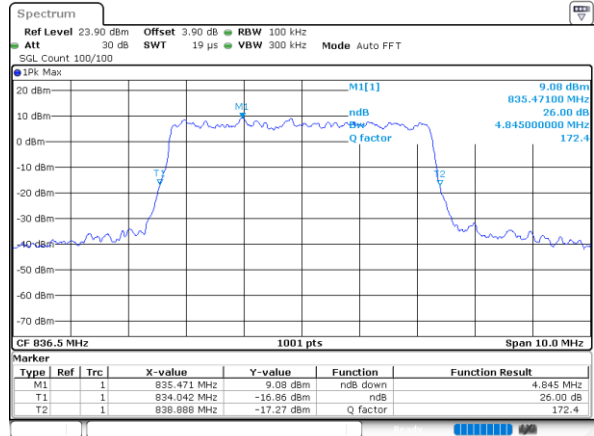
256QAM

Middle Channel

Middle Channel



Date: 13.JAN.2021 19:46:20



Date: 13.JAN.2021 19:46:04



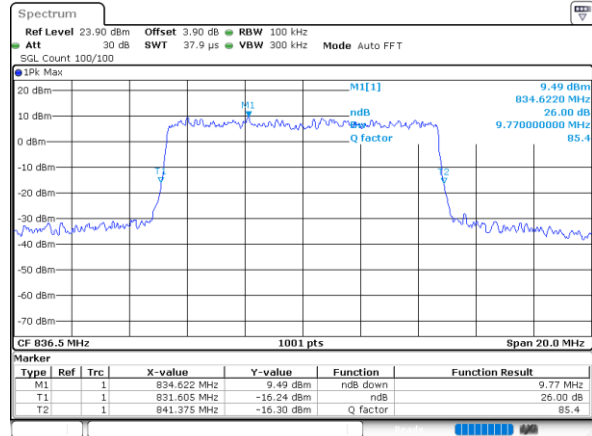
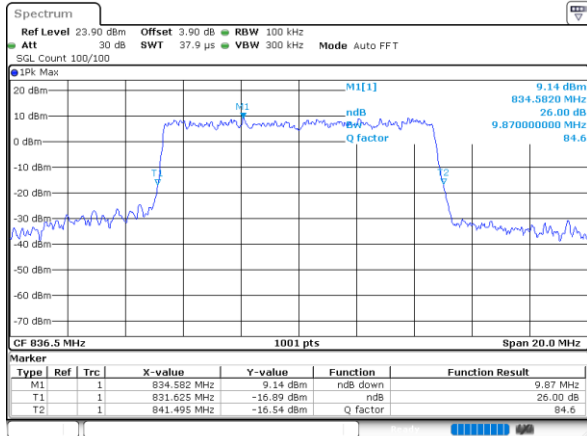
FR1 n5 / 10MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 13.JAN.2021 19:47:24

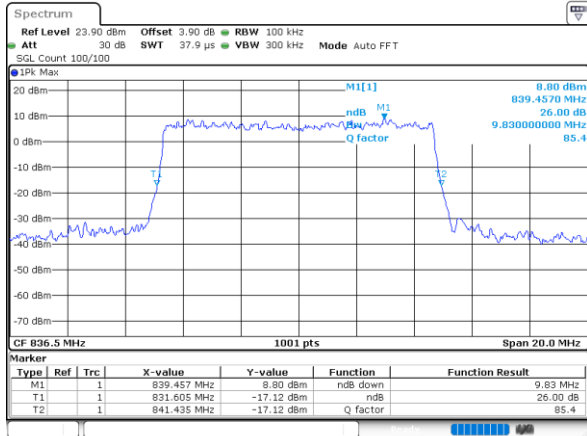
Date: 13.JAN.2021 19:47:40

64QAM

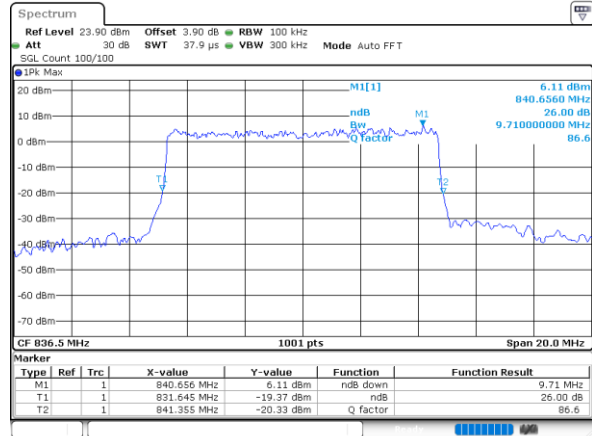
256QAM

Middle Channel

Middle Channel



Date: 13.JAN.2021 19:47:56



Date: 13.JAN.2021 19:48:14

