



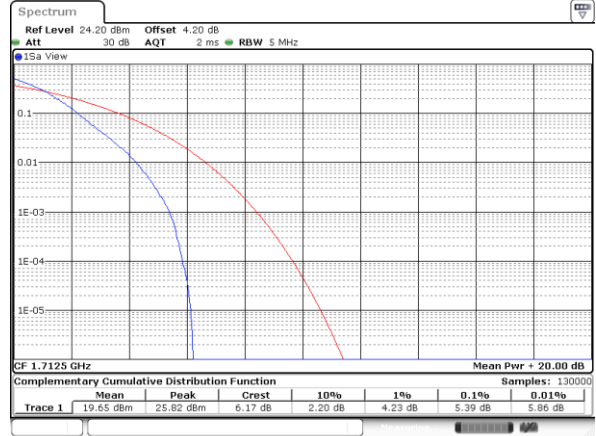
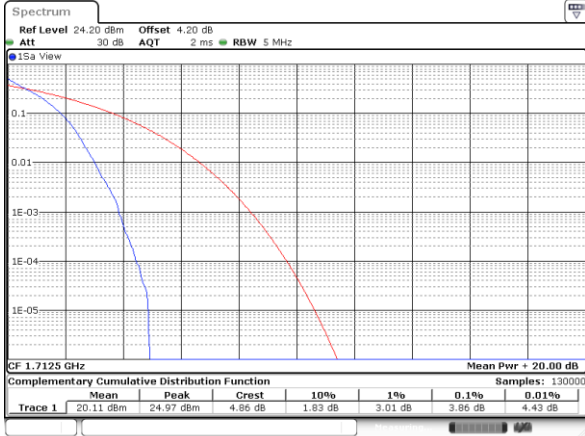
FR1 n66 / 5MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

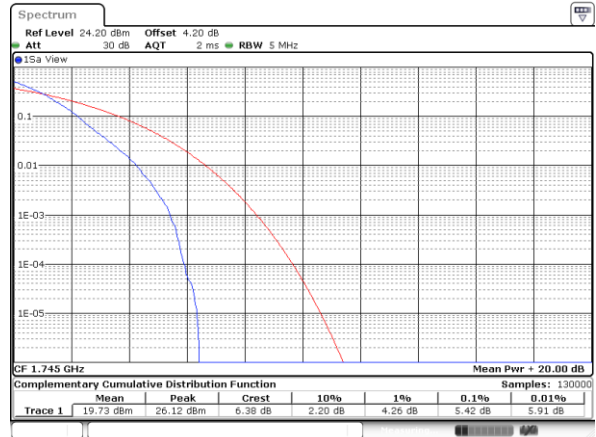
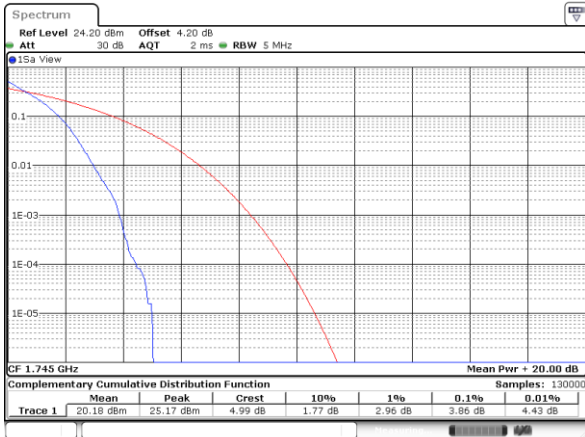


Date: 16\_JAN.2021 03:52:33

Date: 16\_JAN.2021 03:54:35

Middle Channel / Full RB

Middle Channel / Full RB

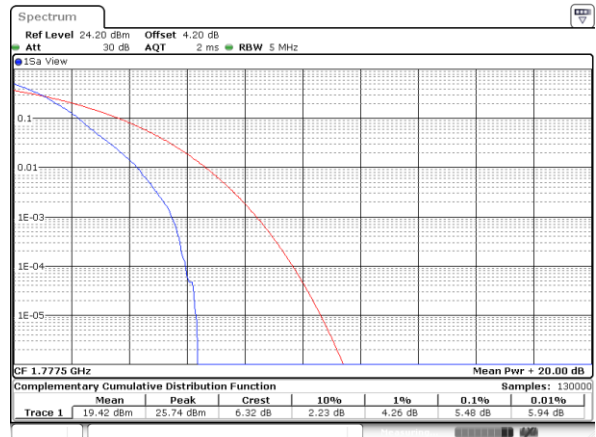
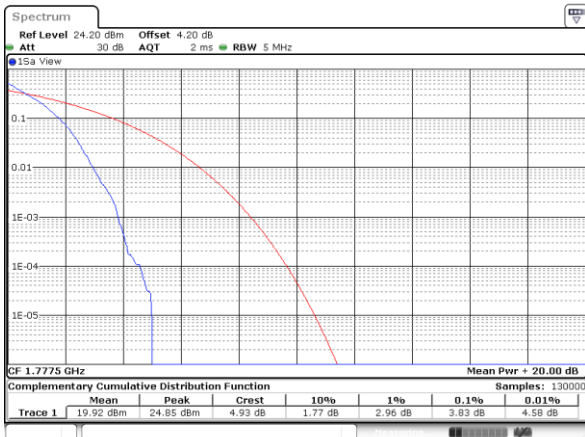


Date: 16\_JAN.2021 03:58:29

Date: 16\_JAN.2021 03:59:24

Highest Channel / Full RB

Highest Channel / Full RB



Date: 16\_JAN.2021 04:05:55

Date: 16\_JAN.2021 04:06:00



**26dB Bandwidth**

Mode	FR1 n66 : 26dB BW(MHz) / CP-OFDM							
BW	5MHz	5MHz	5MHz	5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	4.83	4.92	4.96	4.89				

Mode	FR1 n66 : 26dB BW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.81	9.83	9.83	9.89				

Mode	FR1 n66 : 26dB BW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.89	14.98	14.93	15.04				

Mode	FR1 n66 : 26dB BW(MHz) / CP-OFDM							
BW	20MHz	20MHz	20MHz	20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	20.06	20.22	20.10	19.94				

Mode	FR1 n66 : 26dB BW(MHz) / CP-OFDM							
BW	40MHz	40MHz	40MHz	40MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	40.99	40.99	40.91	40.99				



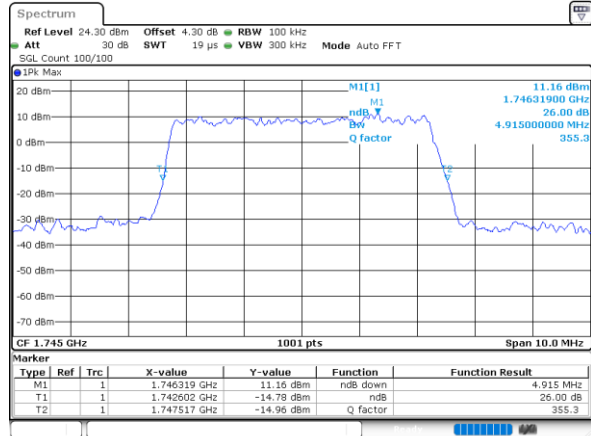
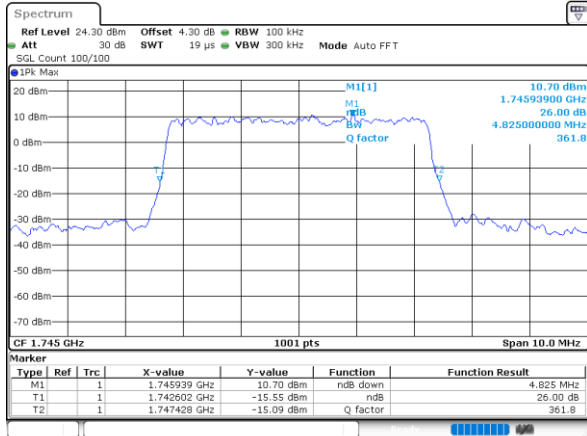
FR1 n66 / 5MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 13.JAN.2021 21:05:52

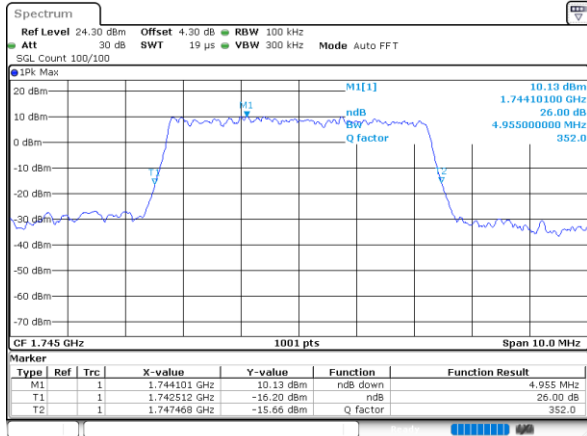
Date: 13.JAN.2021 21:05:26

64QAM

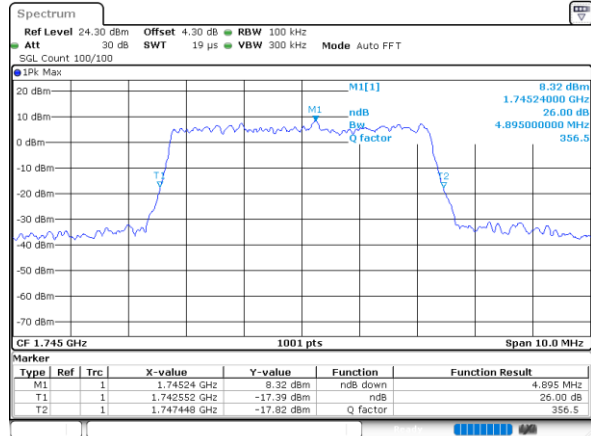
256QAM

Middle Channel

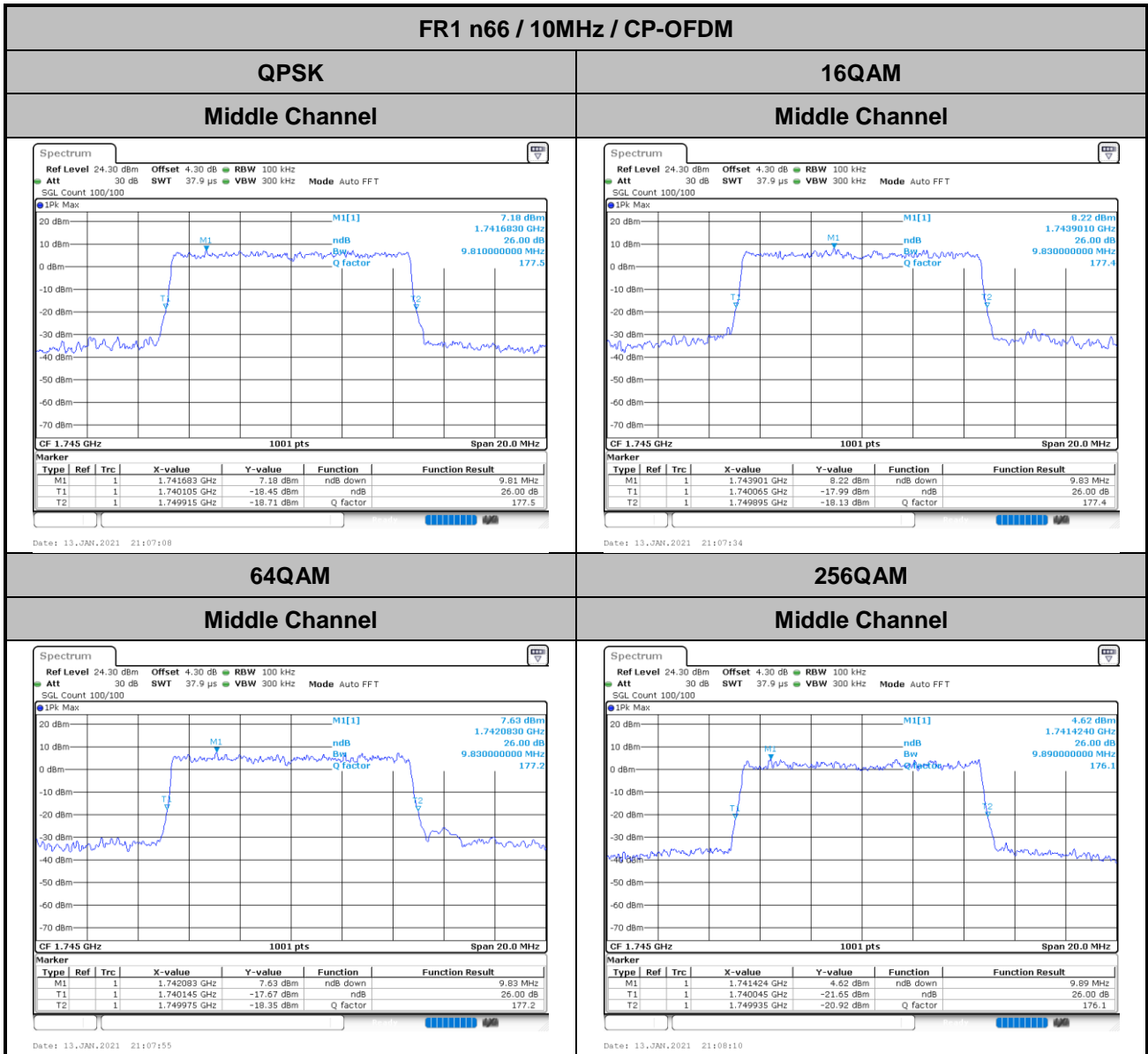
Middle Channel

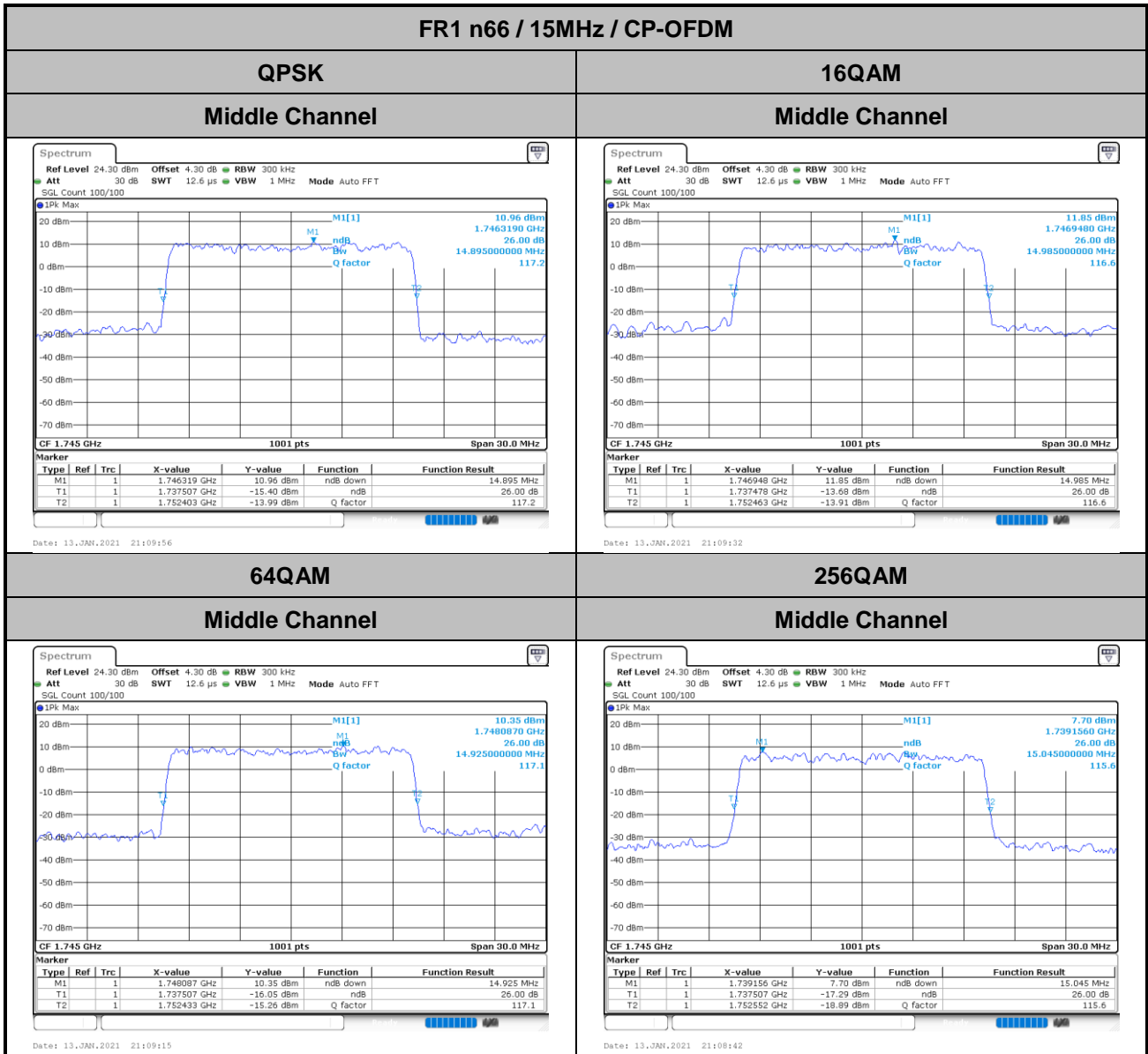


Date: 13.JAN.2021 21:05:09



Date: 13.JAN.2021 21:04:52







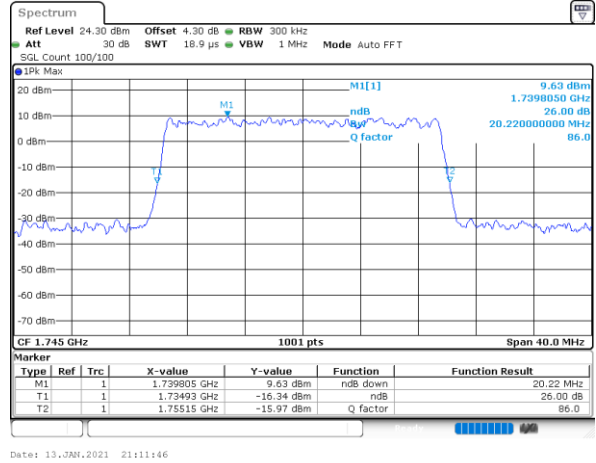
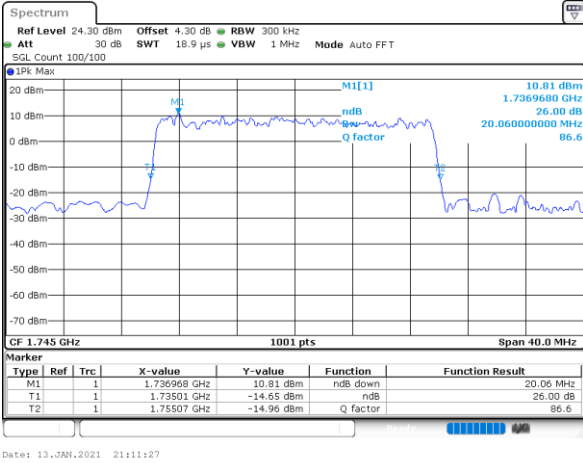
FR1 n66 / 20MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 13\_JAN\_2021 21:11:27

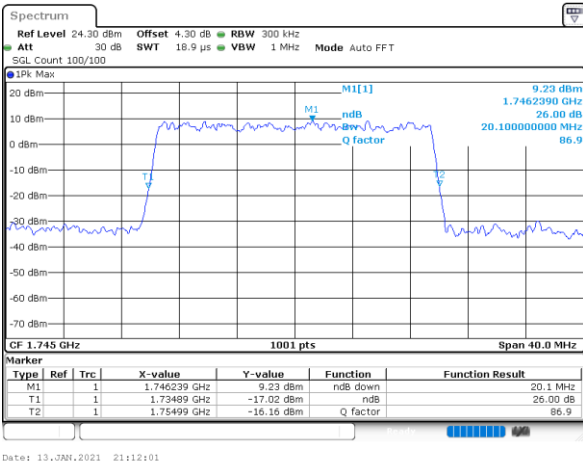
Date: 13\_JAN\_2021 21:11:46

64QAM

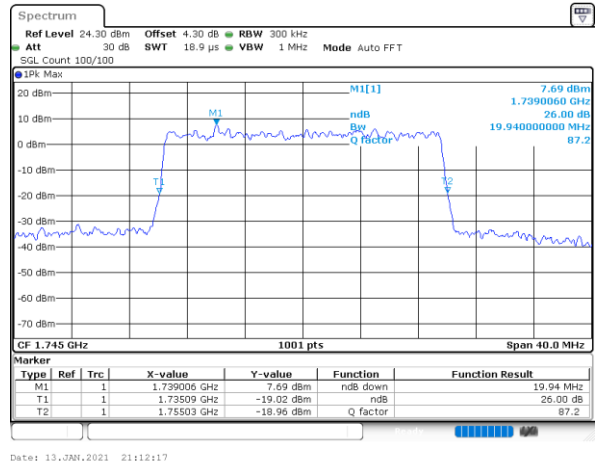
256QAM

Middle Channel

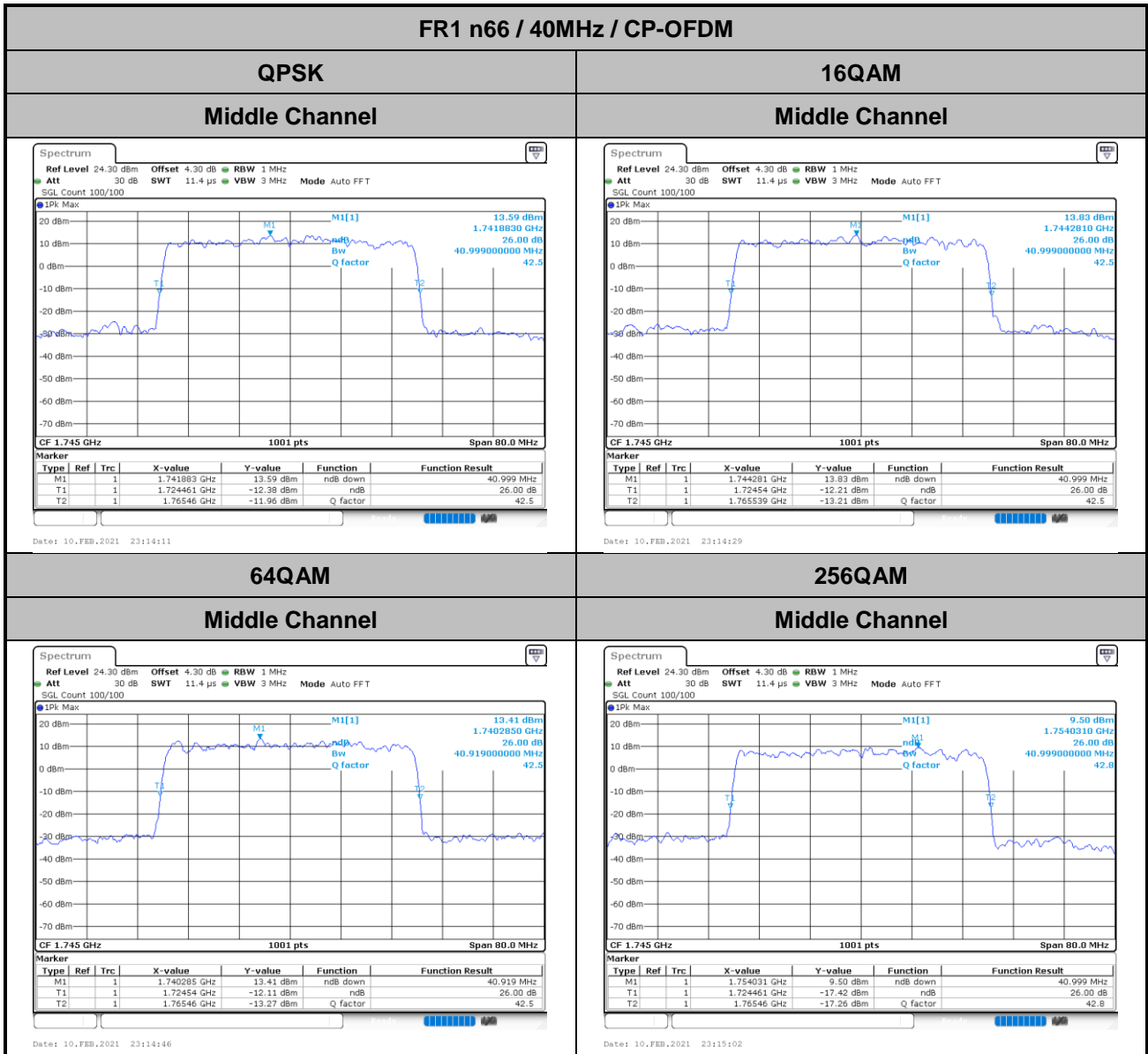
Middle Channel



Date: 13\_JAN\_2021 21:12:01



Date: 13\_JAN\_2021 21:12:17





### Occupied Bandwidth

Mode	FR1 n66 : OBW(MHz) / CP-OFDM							
BW	5MHz	5MHz	5MHz	5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	4.48	4.49	4.49	4.50				

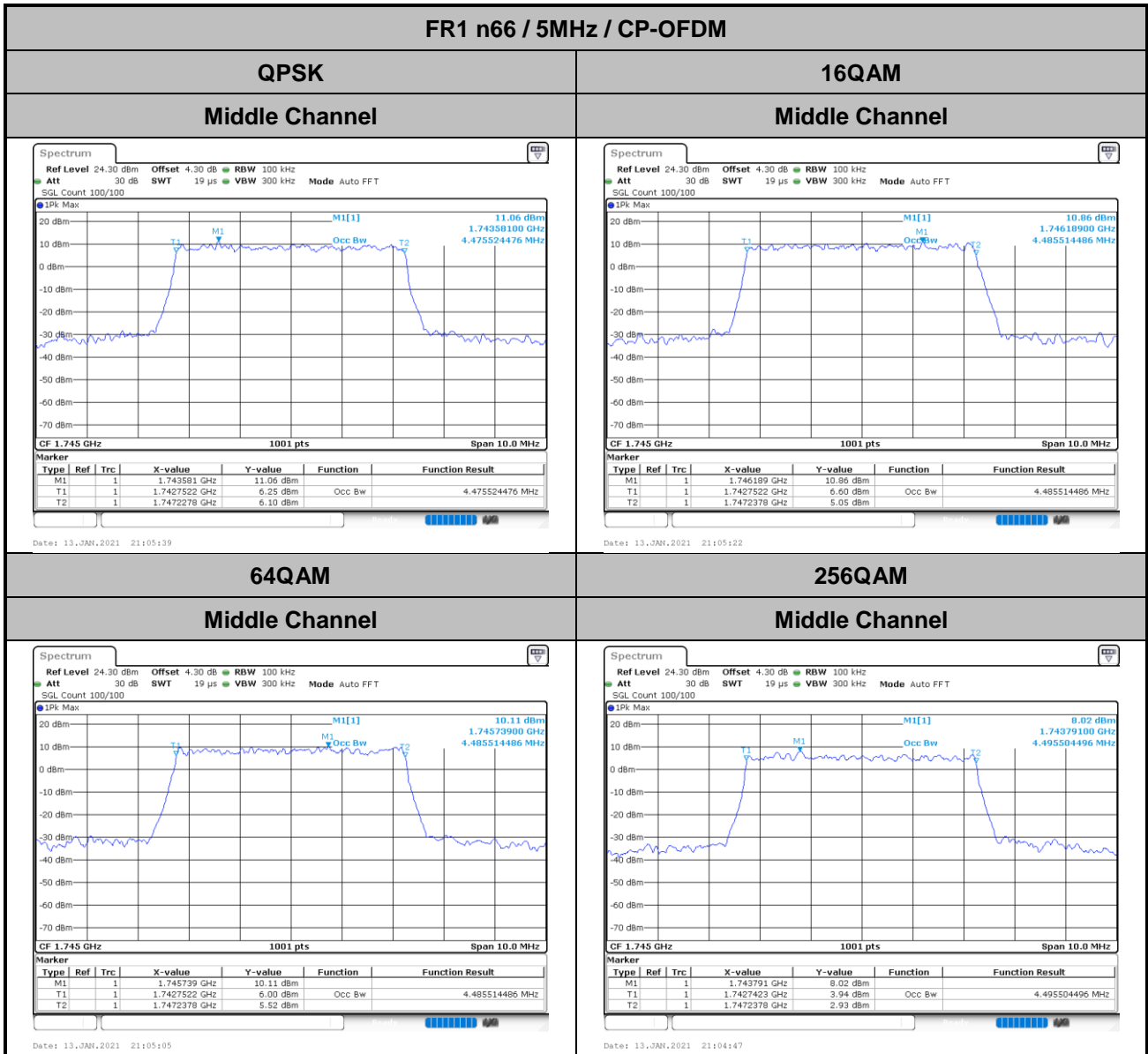
Mode	FR1 n66 : OBW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.27	9.29	9.27	9.27				

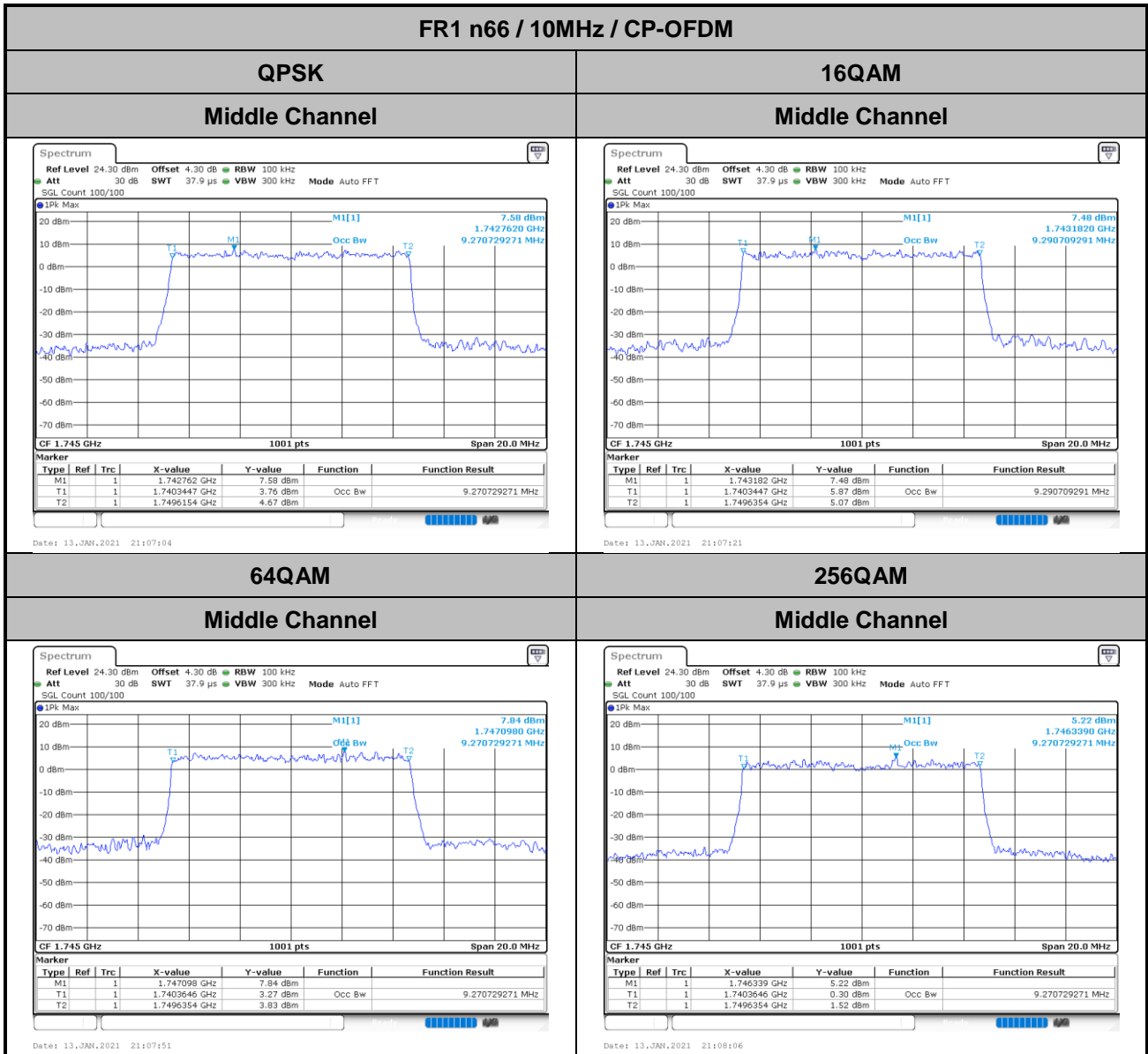
Mode	FR1 n66 : OBW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.12	14.09	14.15	14.15				

Mode	FR1 n66 : OBW(MHz) / CP-OFDM							
BW	20MHz	20MHz	20MHz	20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	18.98	19.02	18.86	18.98				

Mode	FR1 n66 : OBW(MHz) / CP-OFDM							
BW	40MHz	40MHz	40MHz	40MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	38.68	38.6	38.76	38.68				









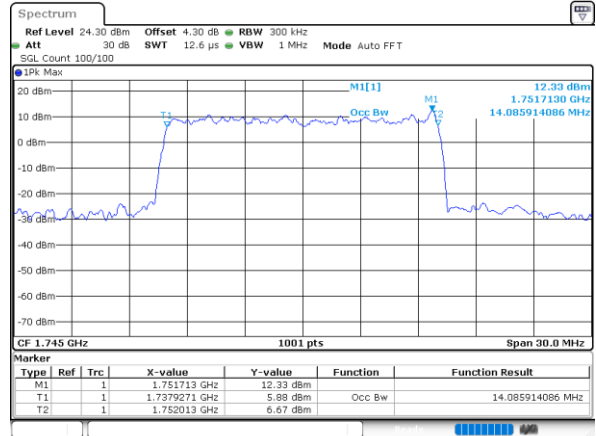
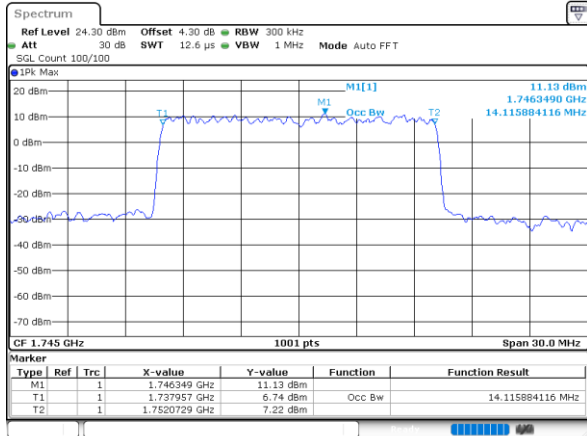
FR1 n66 / 15MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 13.JAN.2021 21:09:52

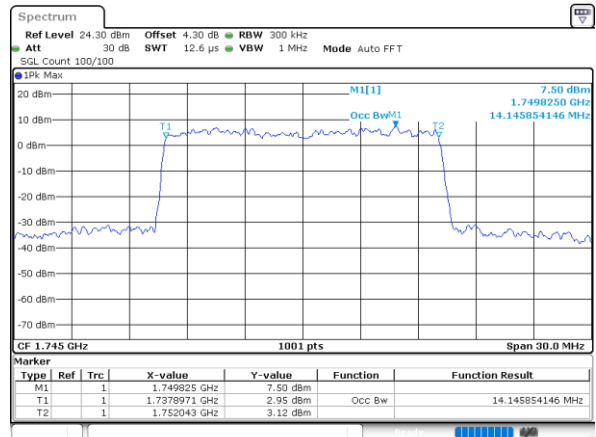
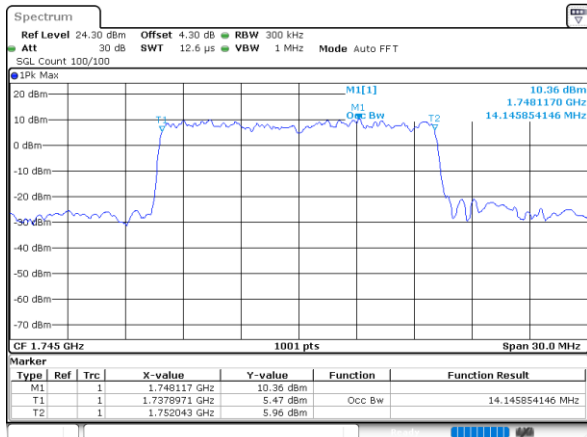
Date: 13.JAN.2021 21:09:28

64QAM

256QAM

Middle Channel

Middle Channel



Date: 13.JAN.2021 21:09:06

Date: 13.JAN.2021 21:08:38



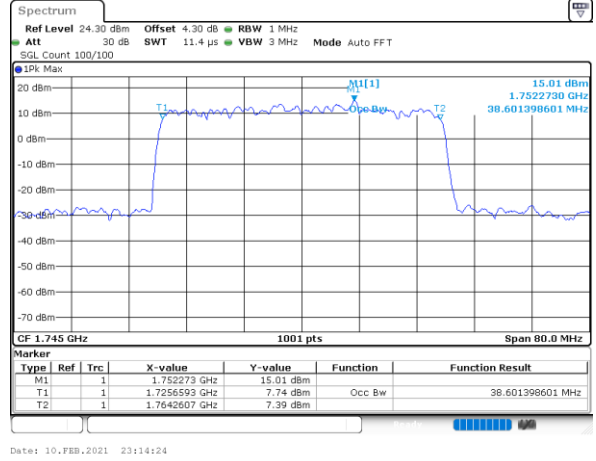
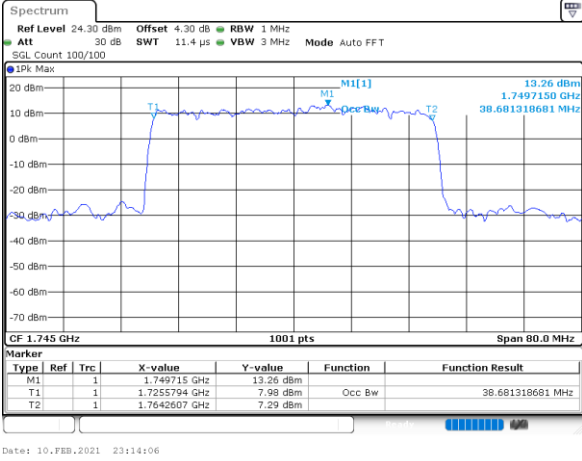
FR1 n66 / 20MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel

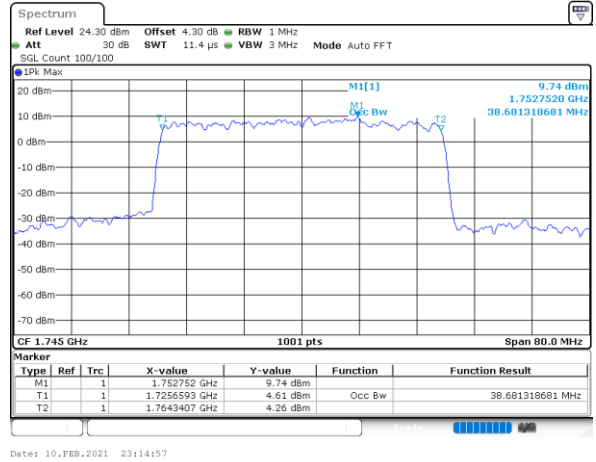
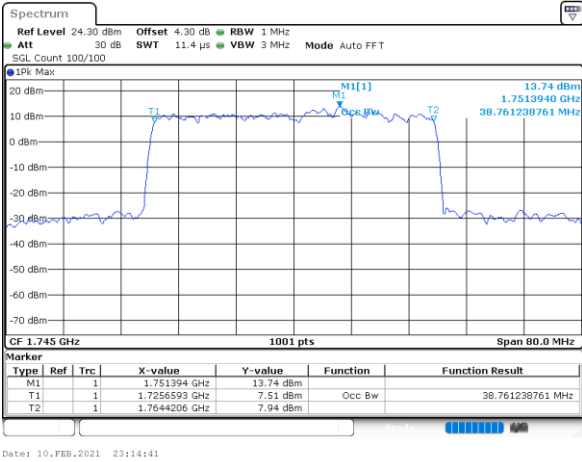


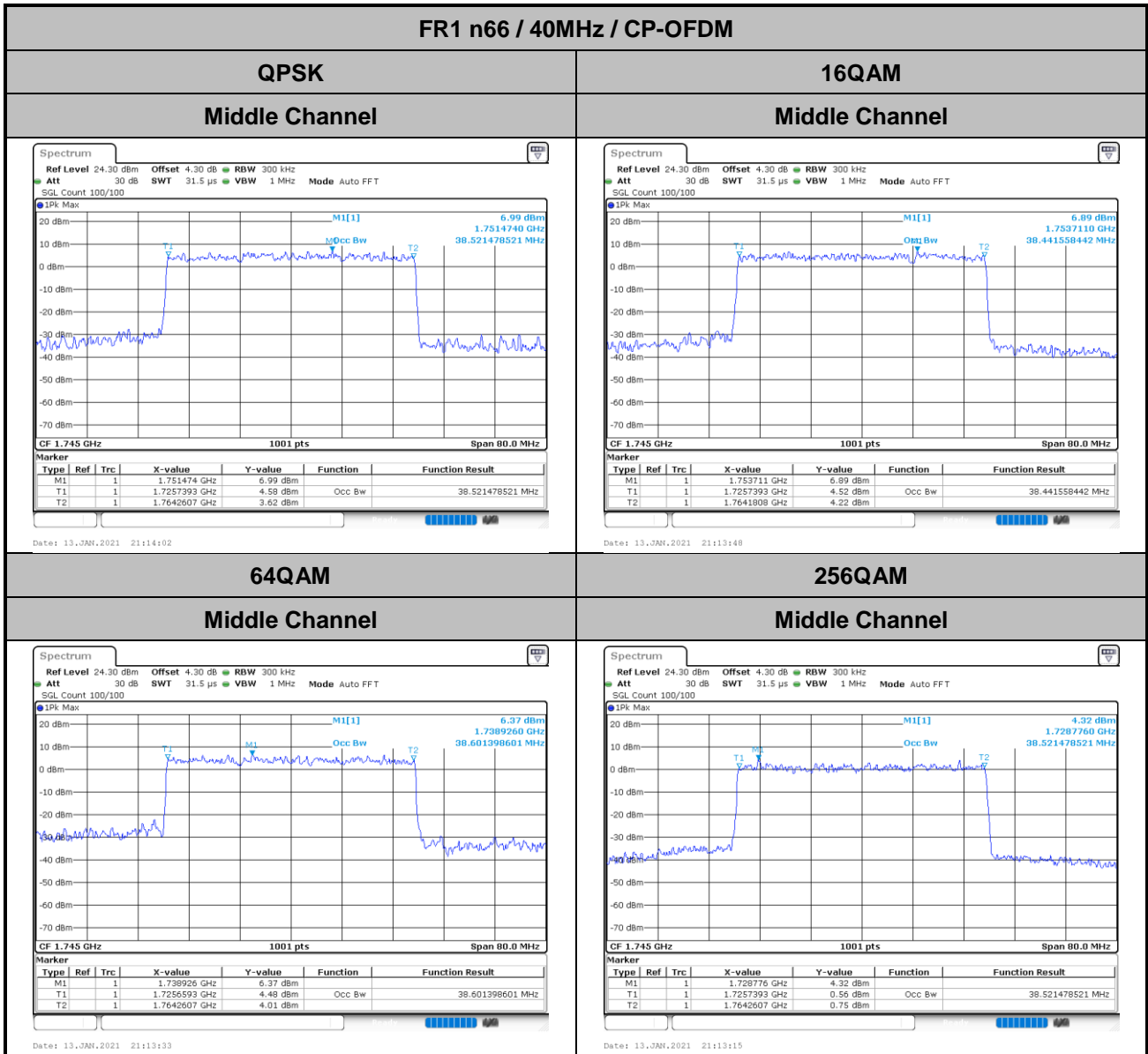
64QAM

256QAM

Middle Channel

Middle Channel

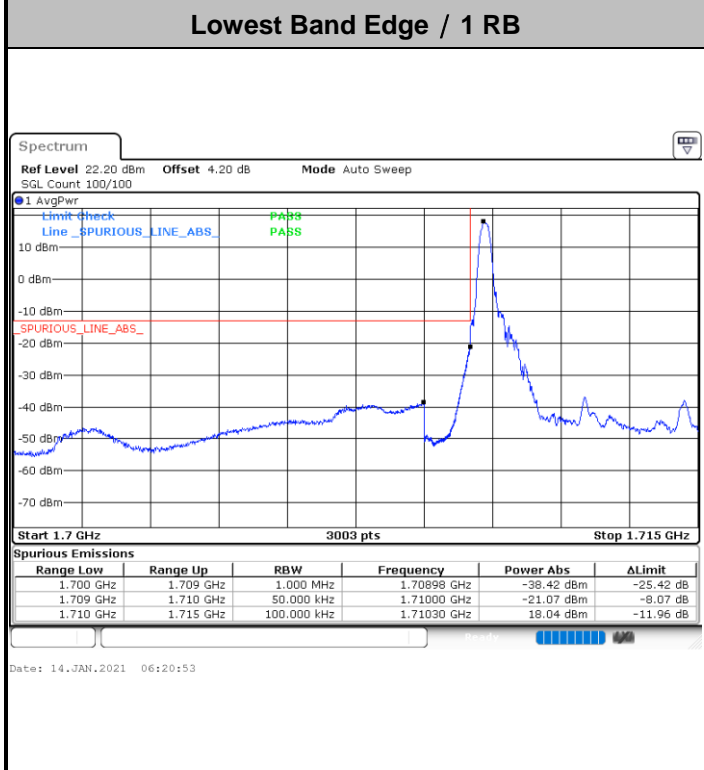




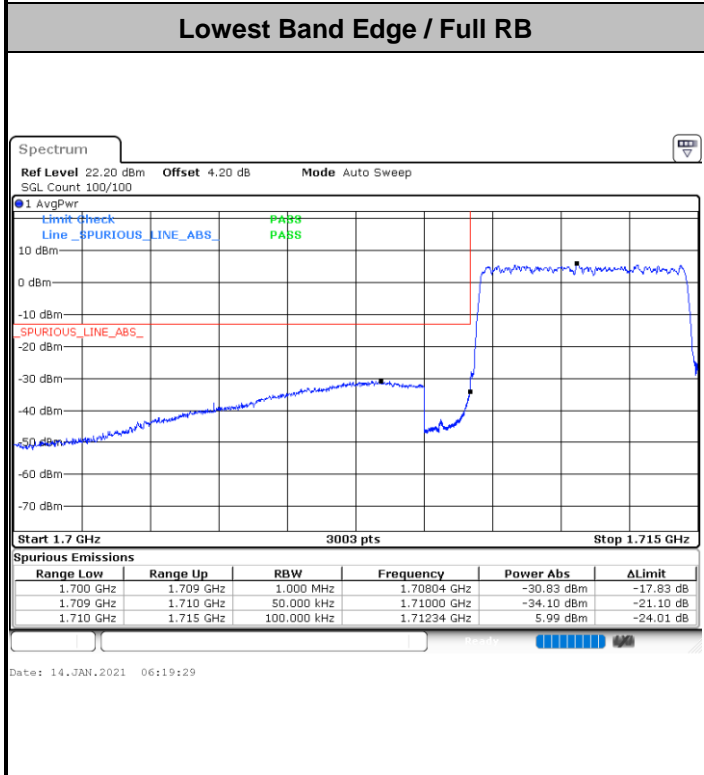


# Conducted Band Edge

## FR1 n66 / 5MHz / DFT-S OFDM BPSK



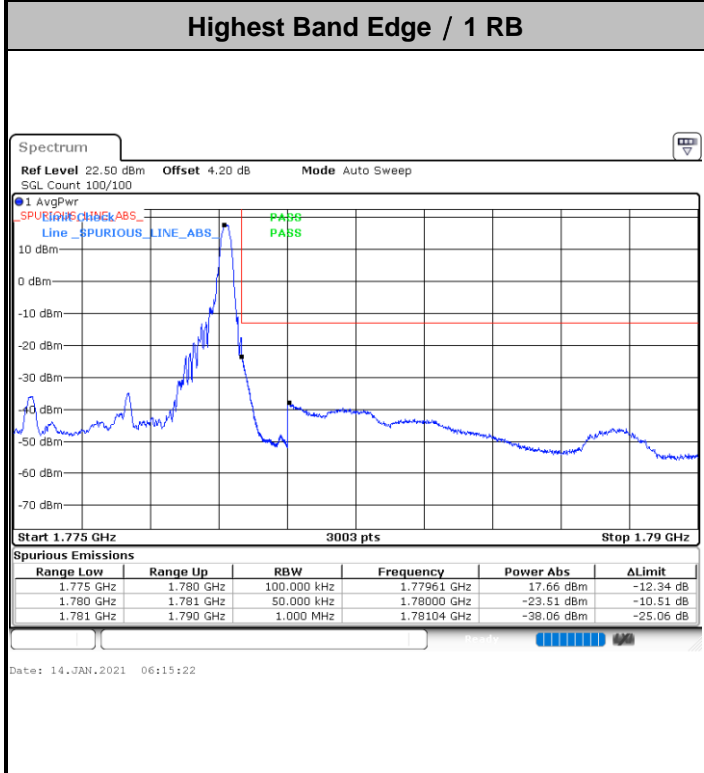
Channel Power < -13dBm Pass



Channel Power < -13dBm Pass

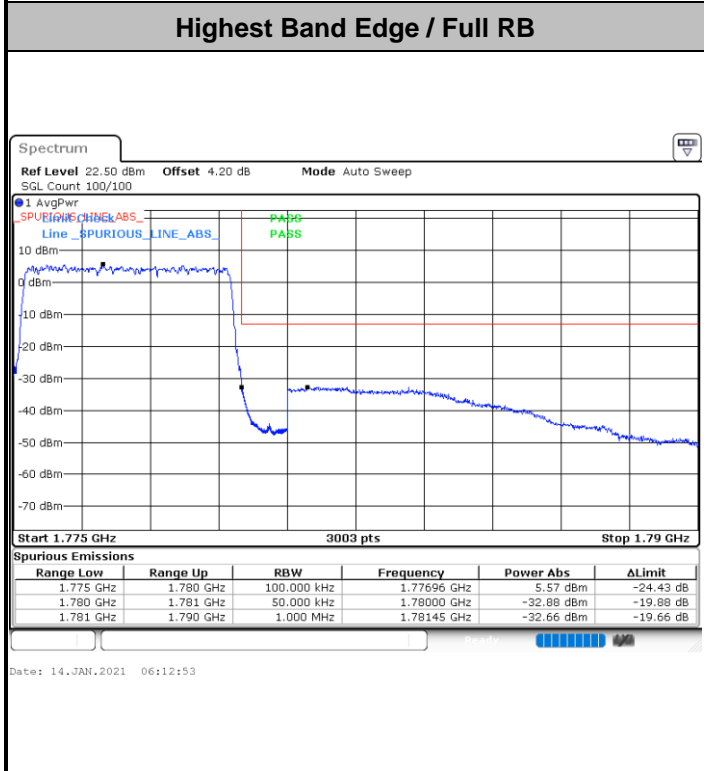


**FR1 n66 / 5MHz / DFT-S OFDM BPSK**



**Channel Power < -13dBm Pass**

/



**Channel Power < -13dBm Pass**

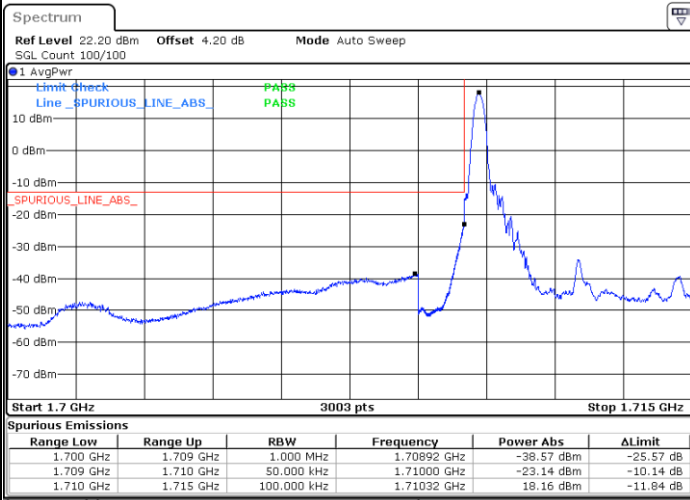
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FR1 n66 / 5MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

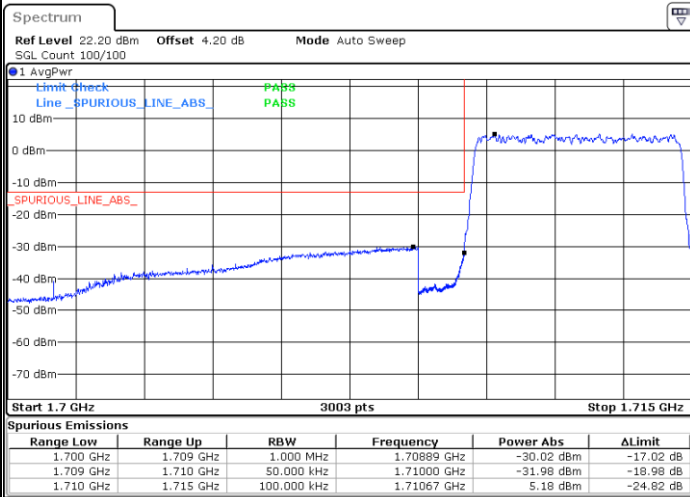
Channel Power < -13dBm Pass



Date: 14. JAN. 2021 06:21:29

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



Date: 14. JAN. 2021 06:18:02

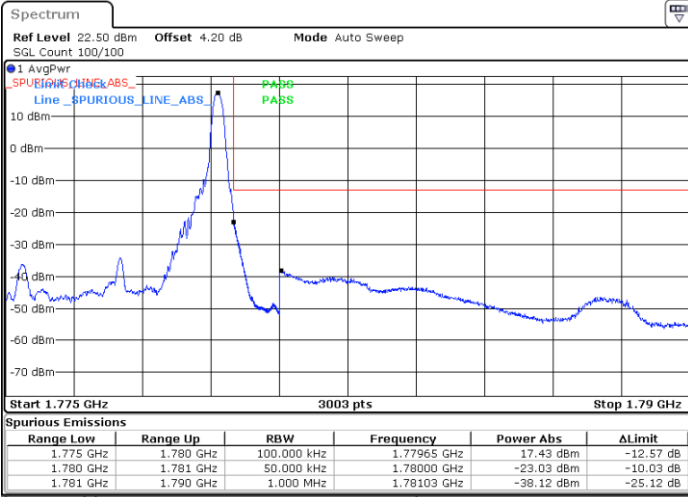




FR1 n66 / 5MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

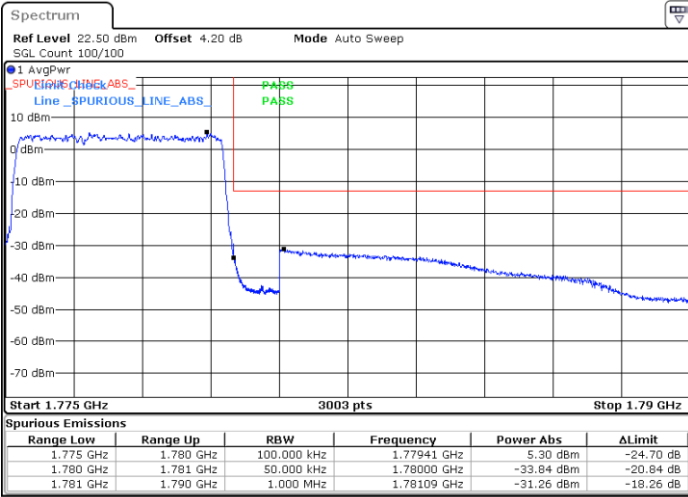
Channel Power < -13dBm Pass



Date: 14.JAN.2021 06:14:43

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



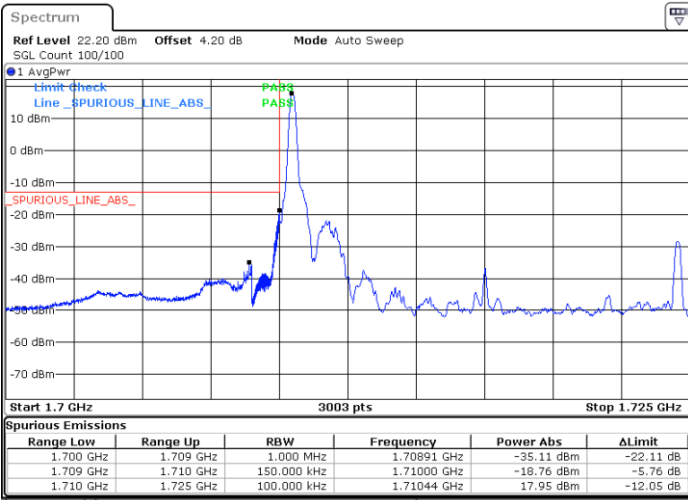
Date: 14.JAN.2021 06:14:07



FR1 n66 / 15MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

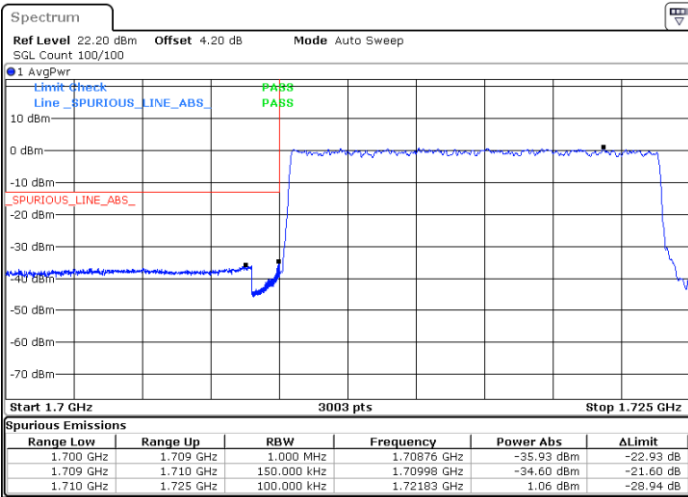
Channel Power < -13dBm Pass



Date: 14.JAN.2021 05:11:14

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



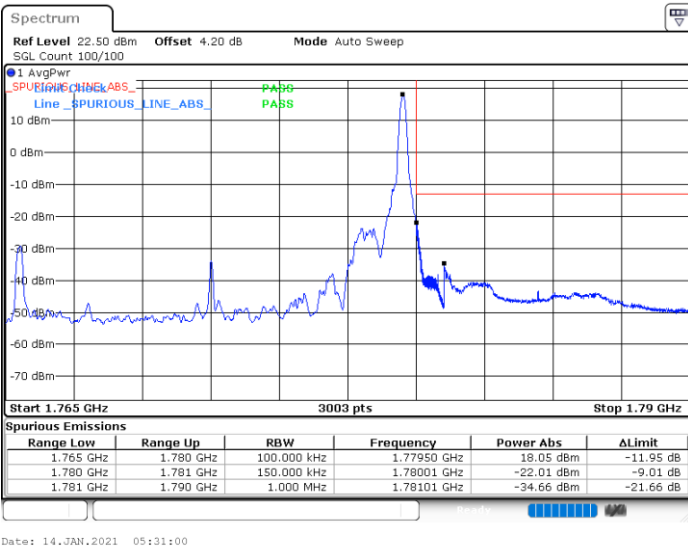
Date: 14.JAN.2021 05:03:05



FR1 n66 / 15MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

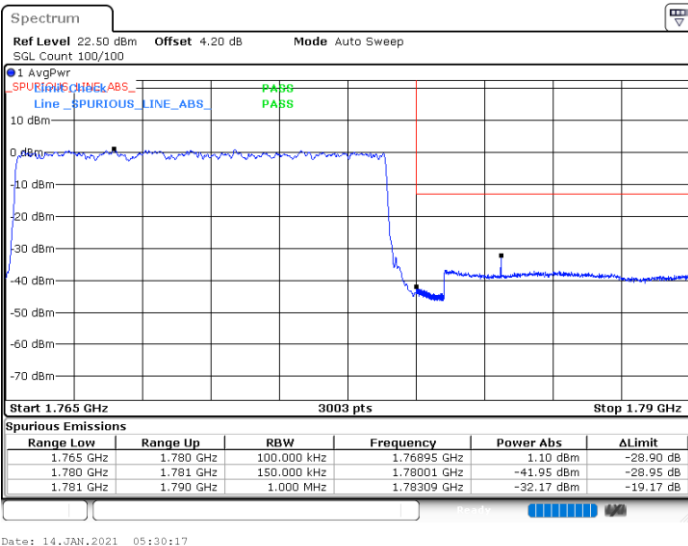
Channel Power < -13dBm Pass



/

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



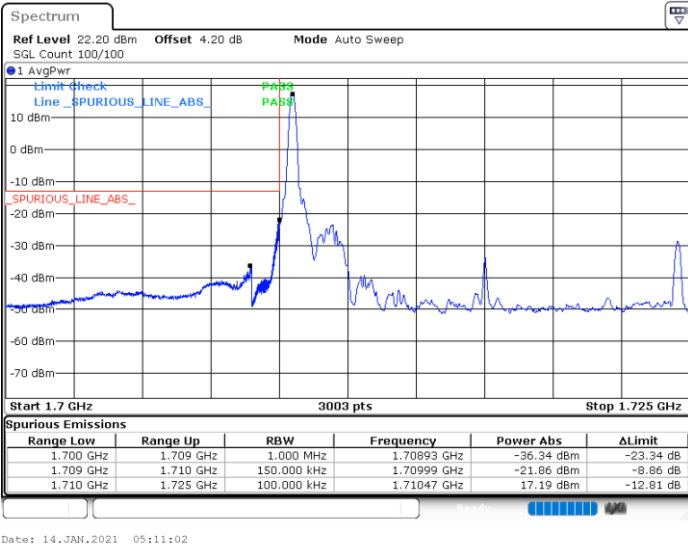
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FR1 n66 / 15MHz / DFT-S OFDM QPSK

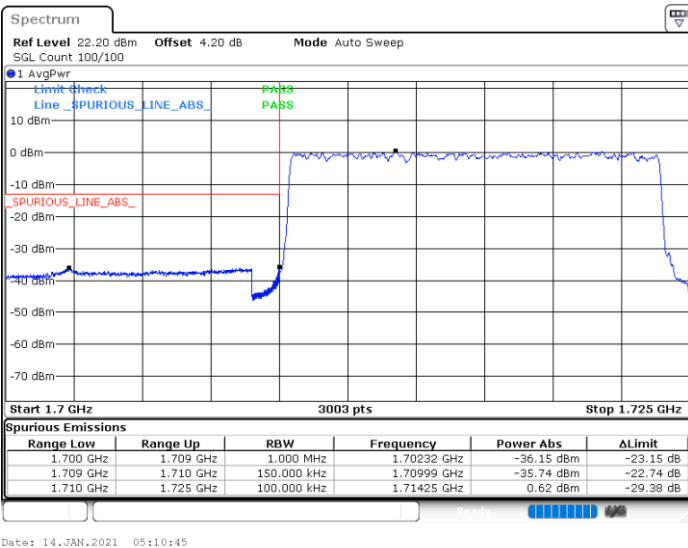
Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



Lowest Band Edge / Full RB

Channel Power < -13dBm Pass

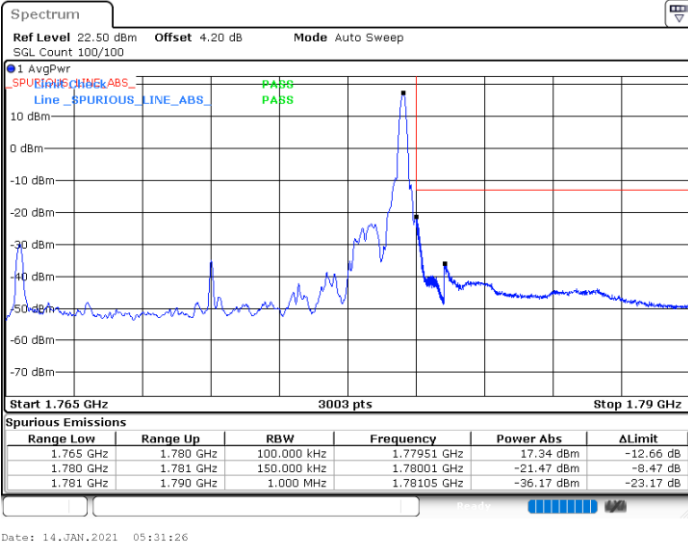




FR1 n66 / 15MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

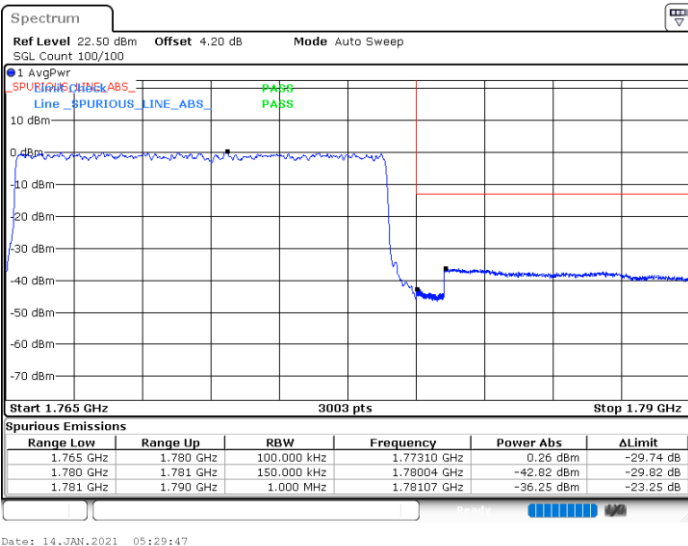
Channel Power < -13dBm Pass



/

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



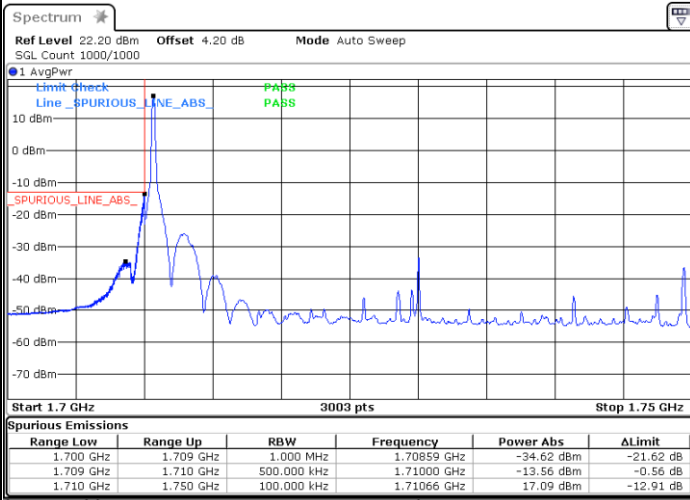
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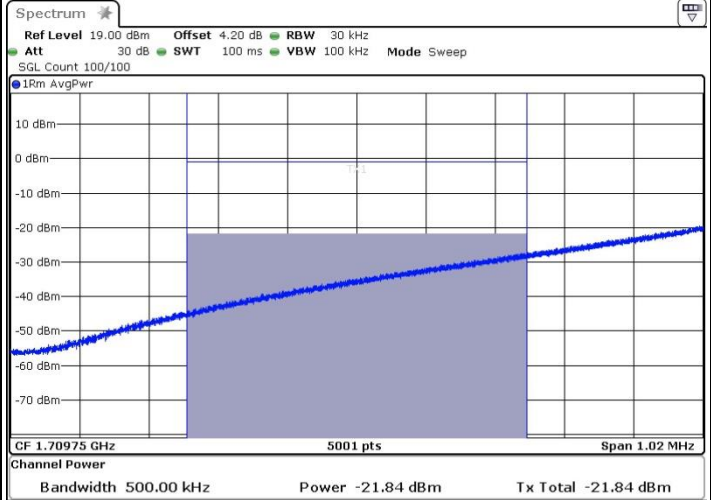
FR1 n66 / 40MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



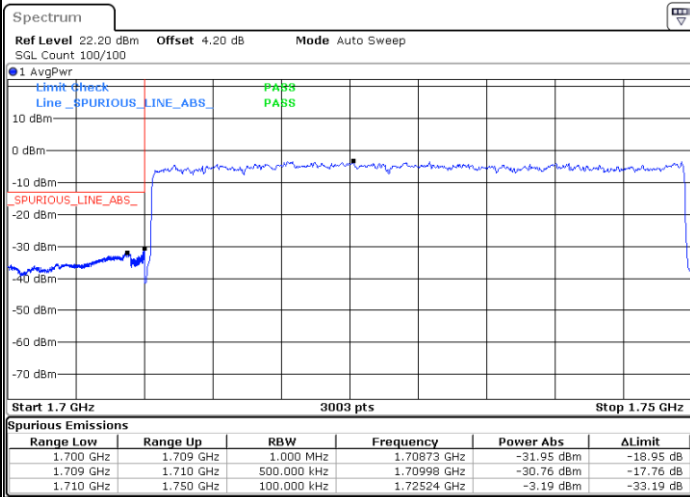
Date: 14.JAN.2021 04:17:54



Date: 14.JAN.2021 04:20:56

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



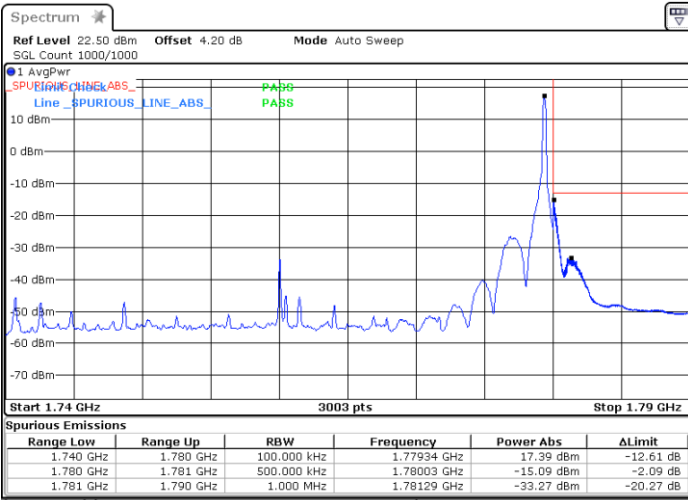
Date: 14.JAN.2021 04:21:23

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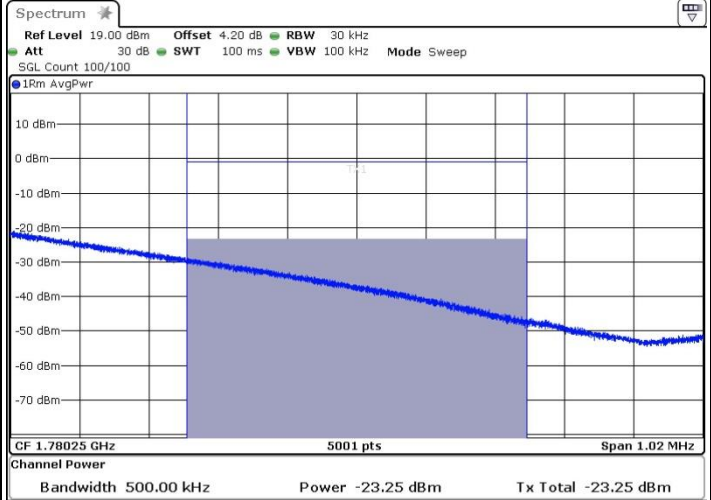
FR1 n66 / 40MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB



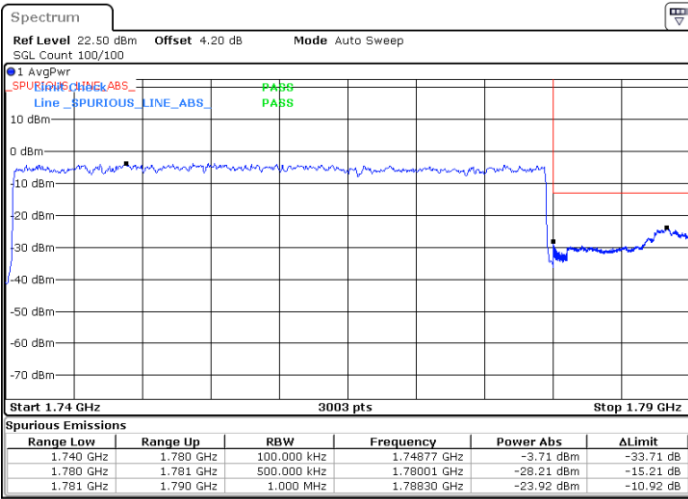
Date: 14.JAN.2021 04:03:56

Channel Power < -13dBm Pass



Date: 14.JAN.2021 04:09:01

Highest Band Edge / Full RB



Date: 14.JAN.2021 04:02:05

Channel Power < -13dBm Pass

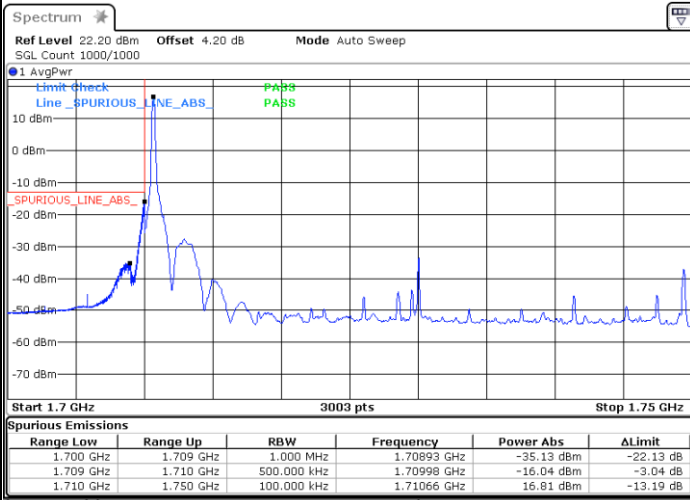
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FR1 n66 / 40MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

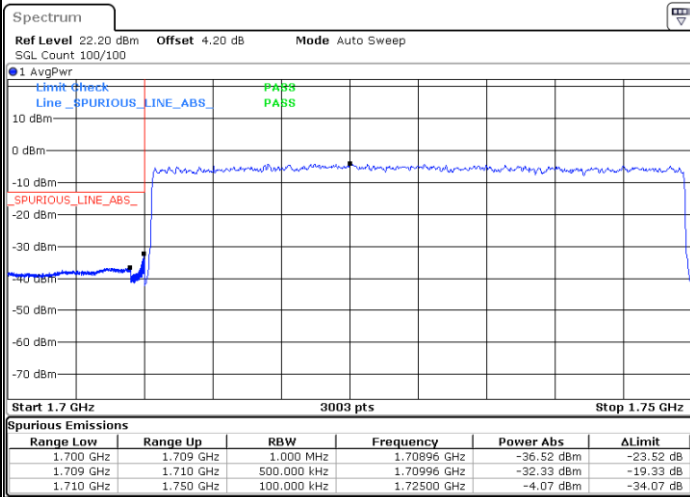
Channel Power < -13dBm Pass



Date: 14.JAN.2021 04:15:09

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



Date: 14.JAN.2021 04:21:35

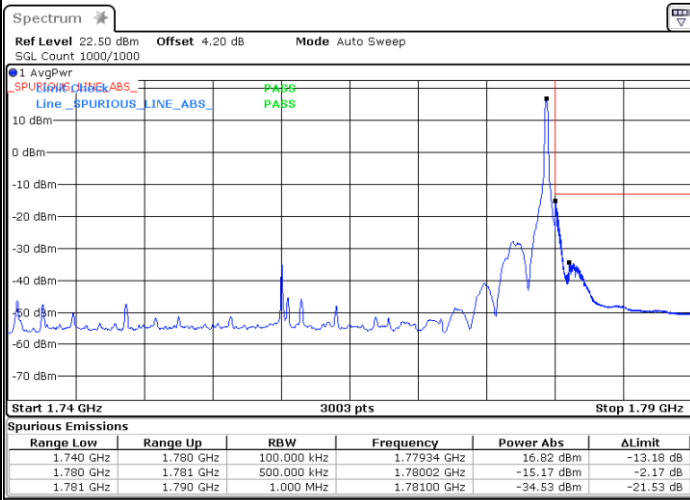




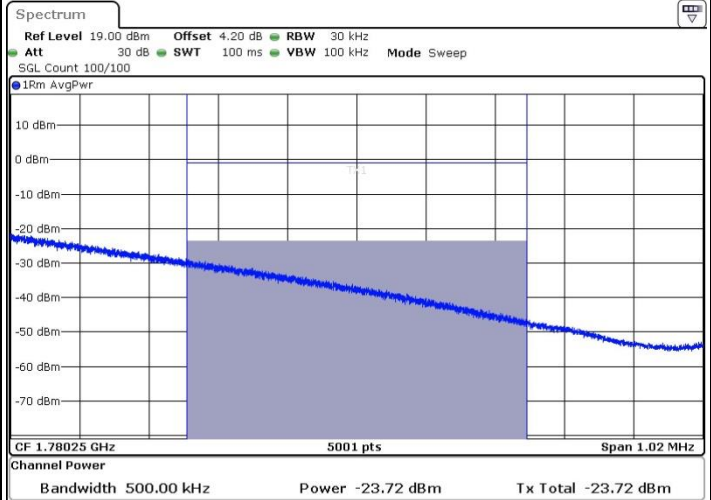
FR1 n66 / 40MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



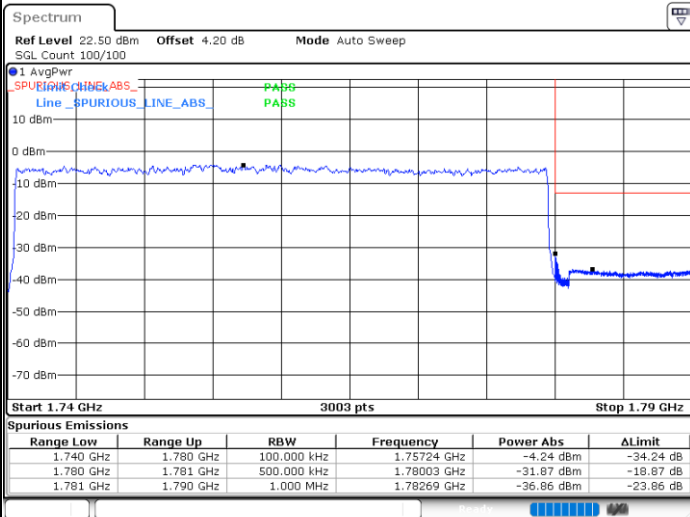
Date: 14.JAN.2021 04:11:45



Date: 14.JAN.2021 04:09:35

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



Date: 14.JAN.2021 04:01:51

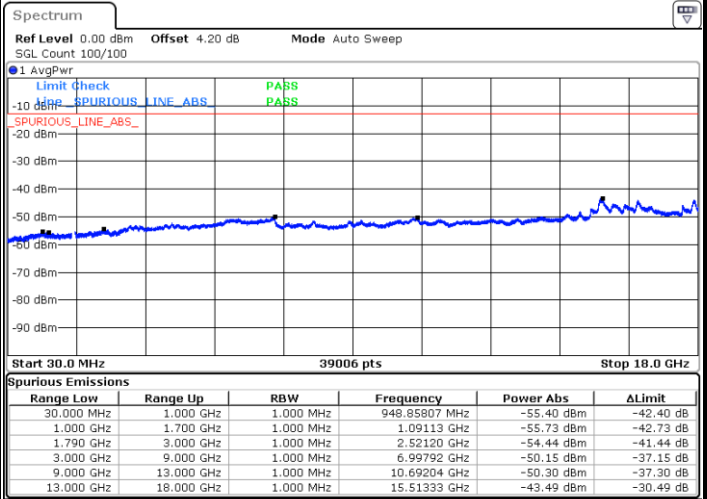
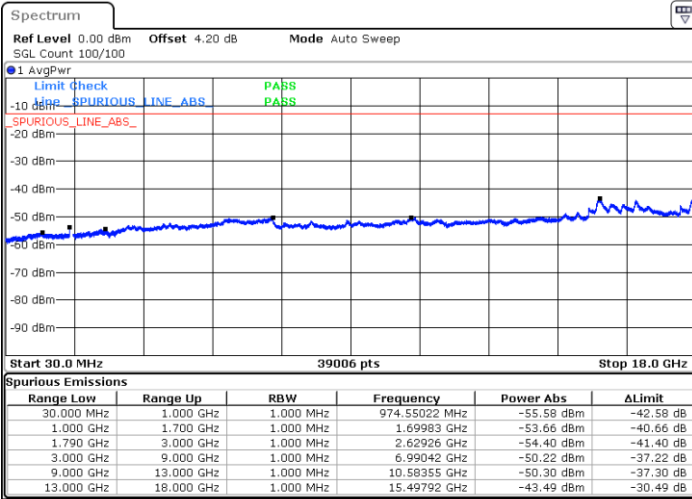


# Conducted Spurious Emission

FR1 n66 / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

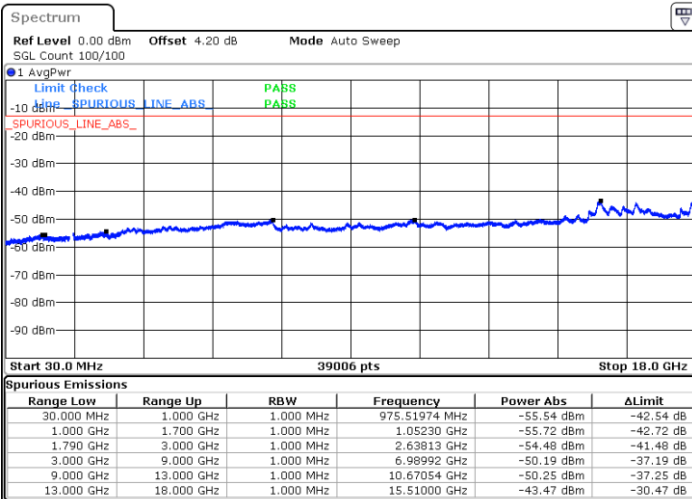
Middle Channel / 1RB



Date: 14.JAN.2021 06:03:16

Date: 14.JAN.2021 06:04:59

Highest Channel / 1RB



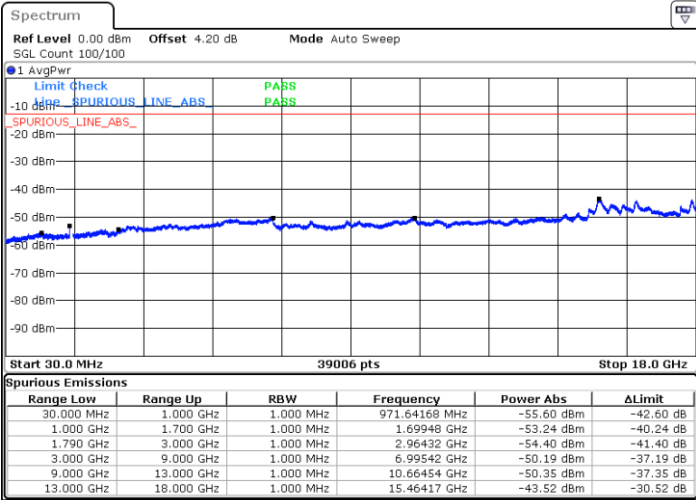
Date: 14.JAN.2021 06:11:27



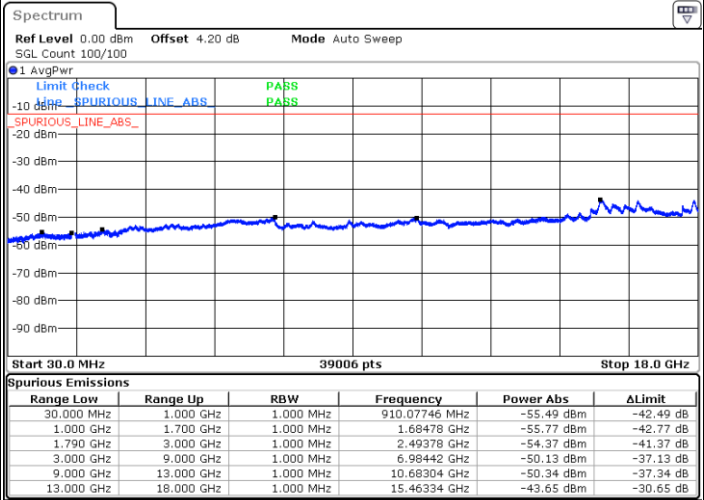
FR1 n66 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

Middle Channel / 1RB

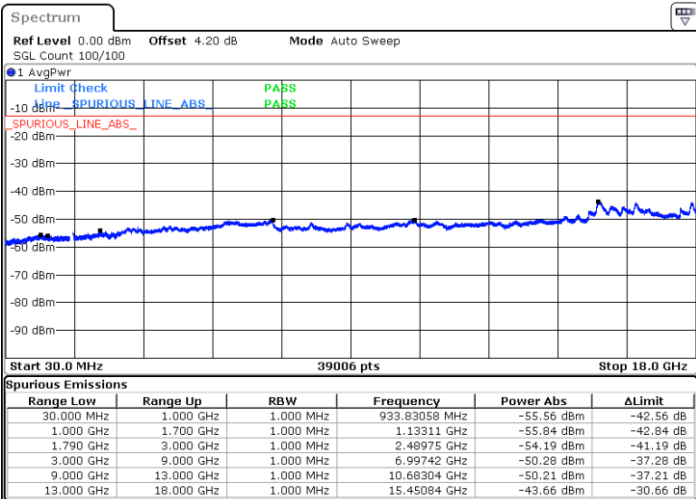


Date: 14.JAN.2021 06:01:52



Date: 14.JAN.2021 06:07:34

Highest Channel / 1RB



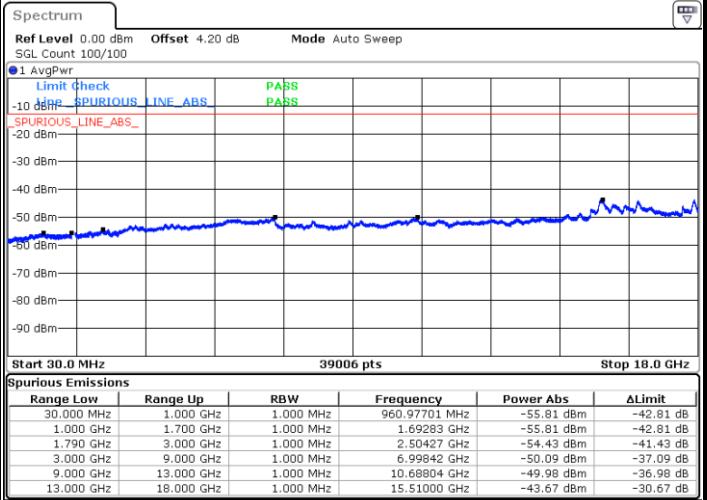
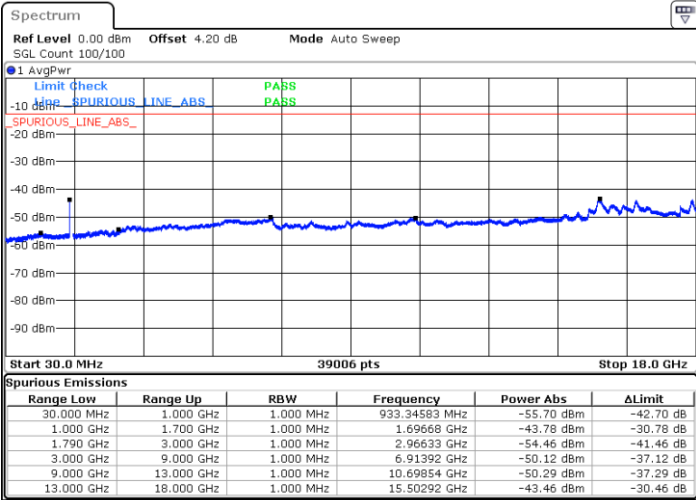
Date: 14.JAN.2021 06:09:56



FR1 n66 / 15MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

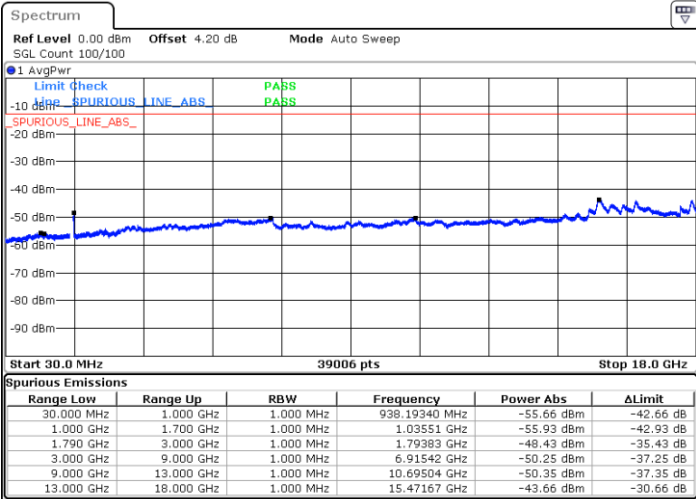
Middle Channel / 1RB



Date: 14.JAN.2021 05:14:02

Date: 14.JAN.2021 05:25:09

Highest Channel / 1RB



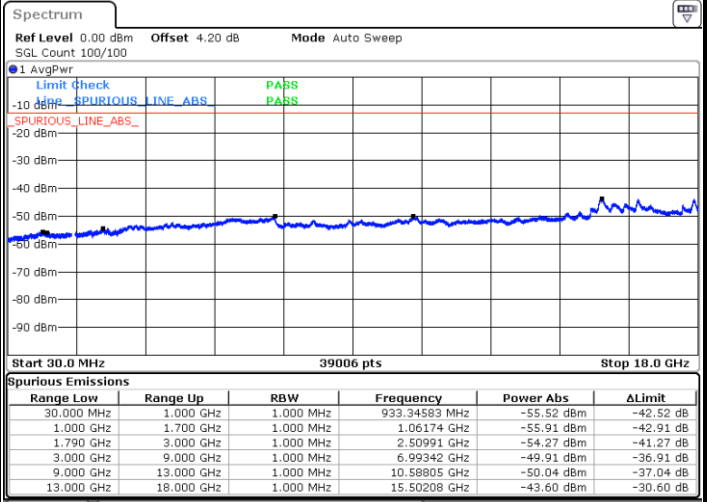
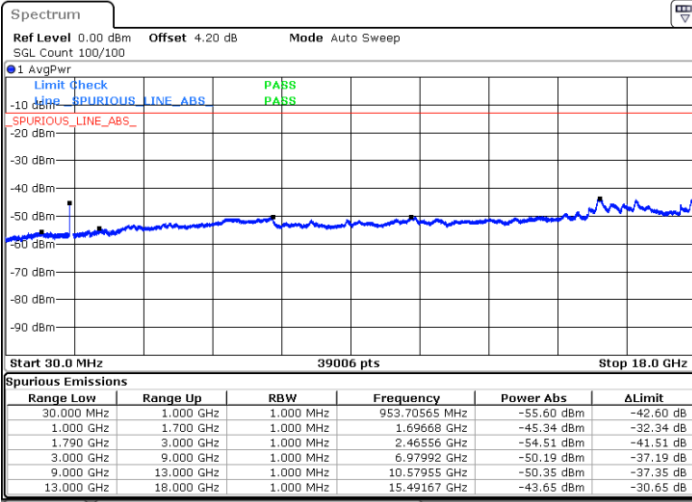
Date: 14.JAN.2021 05:34:12



FR1 n66 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

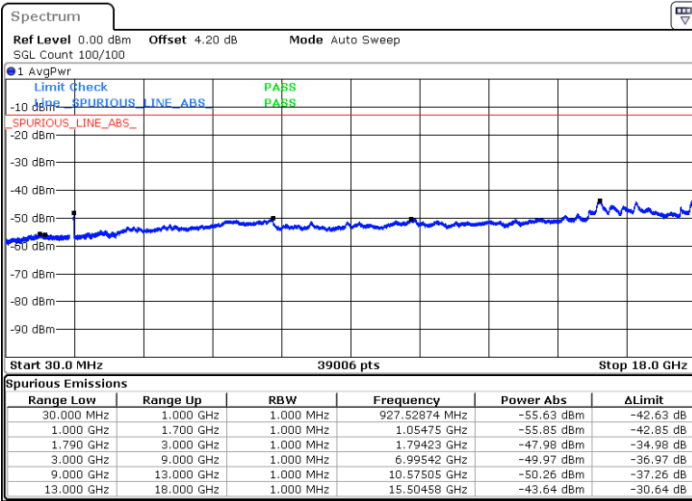
Middle Channel / 1RB



Date: 14. JAN. 2021 05:21:40

Date: 14. JAN. 2021 05:26:50

Highest Channel / 1RB



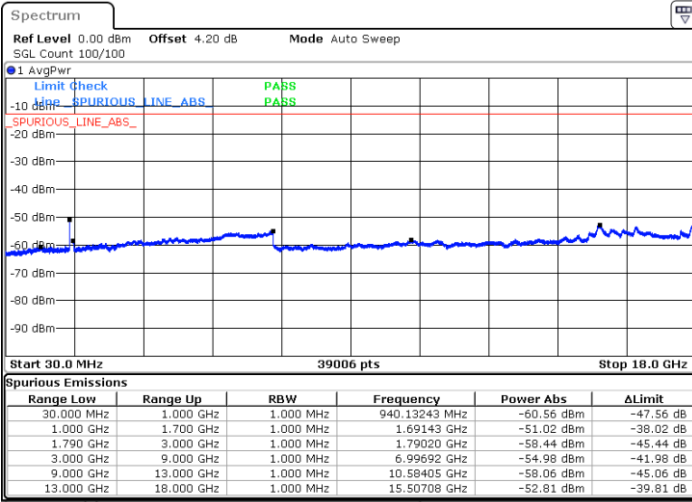
Date: 14. JAN. 2021 05:32:46



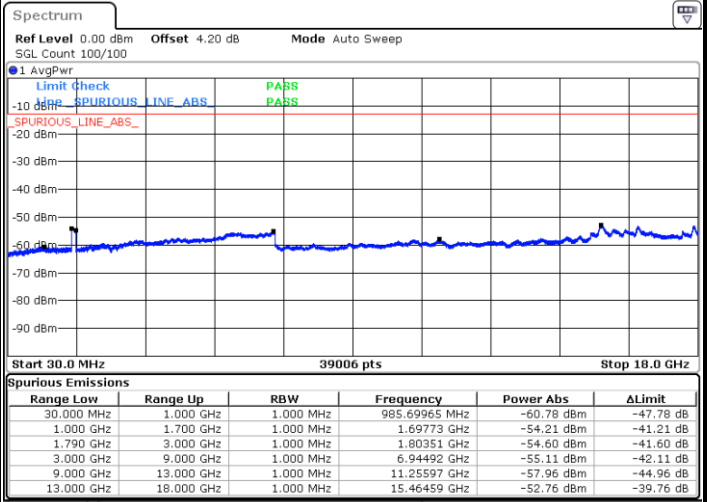
FR1 n66 / 40MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

Middle Channel / 1RB

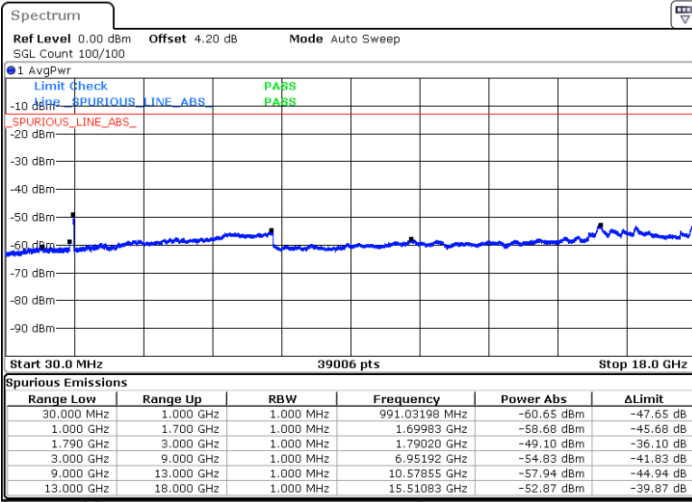


Date: 14.JAN.2021 03:47:11



Date: 14.JAN.2021 03:43:38

Highest Channel / 1RB



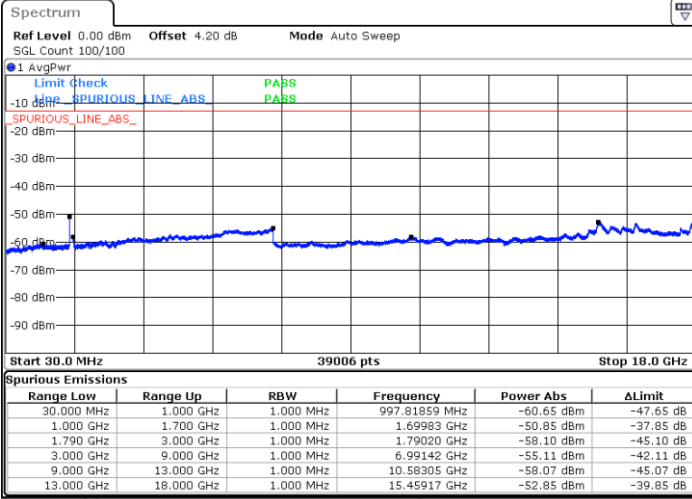
Date: 14.JAN.2021 04:00:16



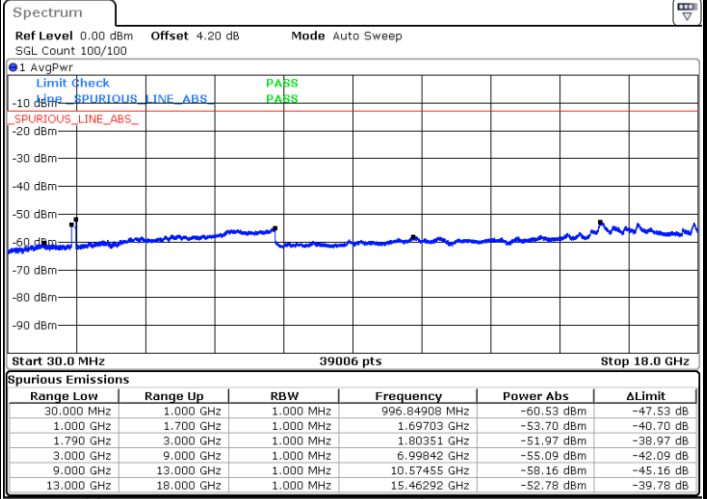
FR1 n66 / 40MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

Middle Channel / 1RB

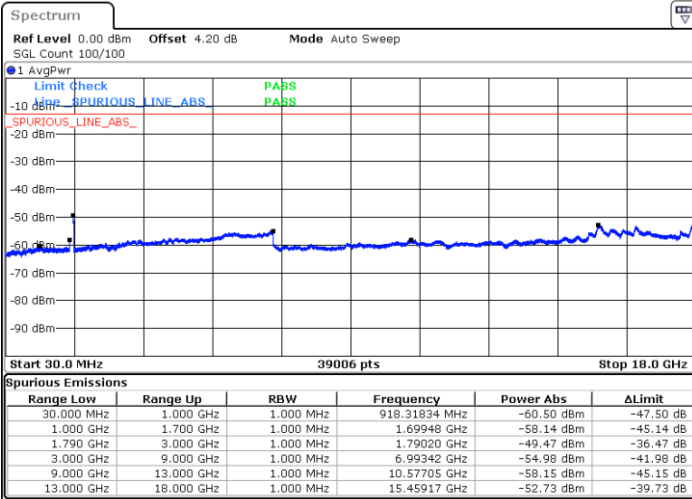


Date: 14.JAN.2021 03:51:32



Date: 14.JAN.2021 03:40:45

Highest Channel / 1RB



Date: 14.JAN.2021 03:58:44



### Frequency Stability

Test Conditions		NR n66 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0013	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0015	

**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 n66 NSA

## Peak-to-Average Ratio

Mode	FR1 n66+48A / 5MHz / 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	3.51	4.06	4.99	5.30	<b>PASS</b>
Middle CH	3.54	4.06	5.13	5.30	
Highest CH	3.54	4.00	5.07	5.30	



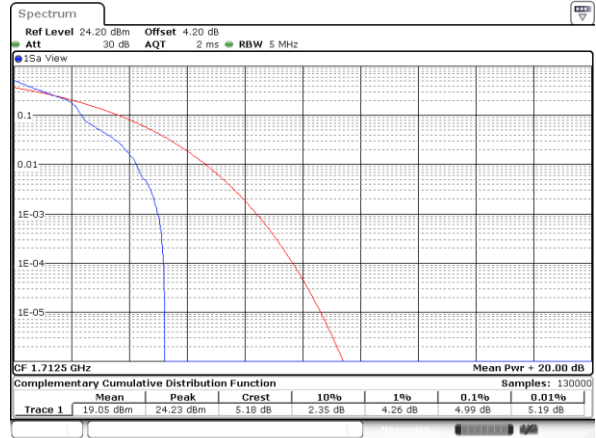
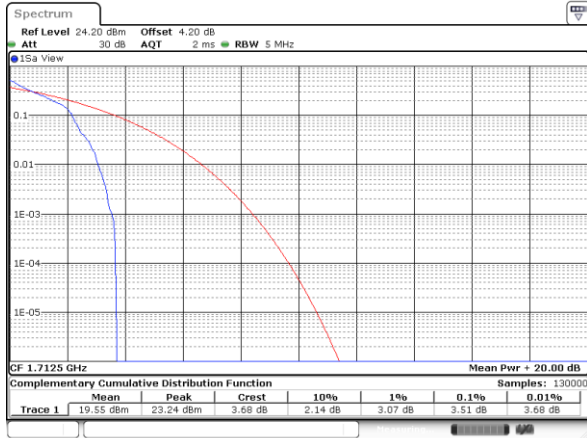
FR1 n66+48A / 5MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / 1RB

Lowest Channel / 1RB

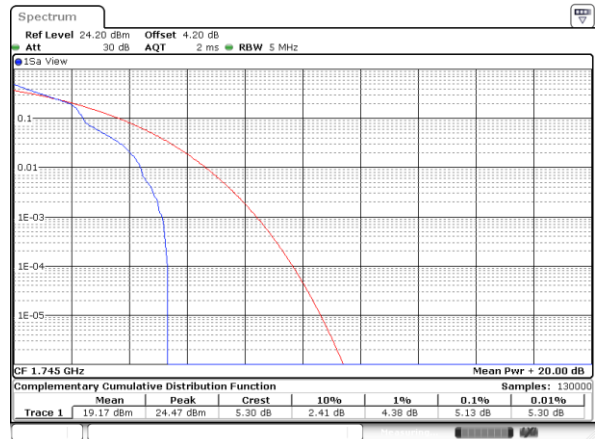
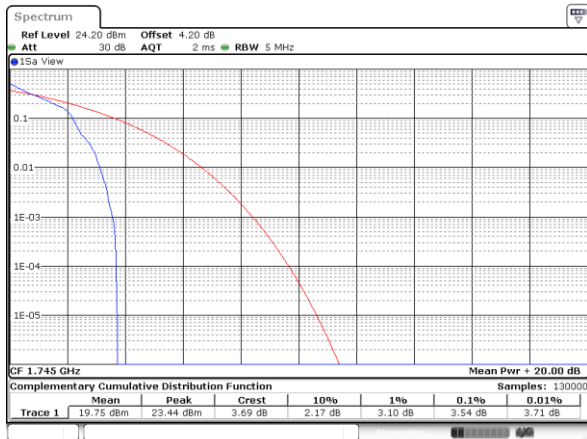


Date: 21\_JAN\_2021 15:57:51

Date: 21\_JAN\_2021 15:58:36

Middle Channel / 1 RB

Middle Channel / 1 RB

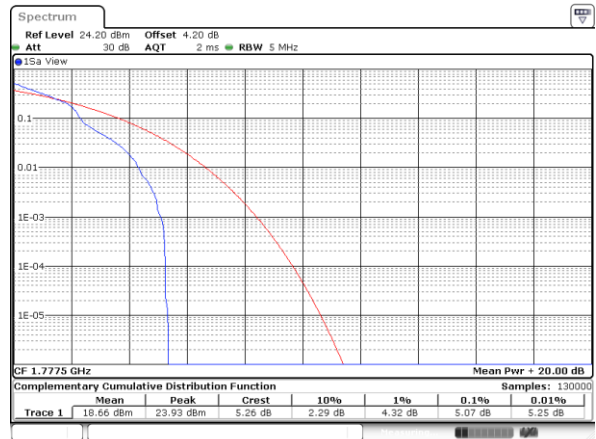
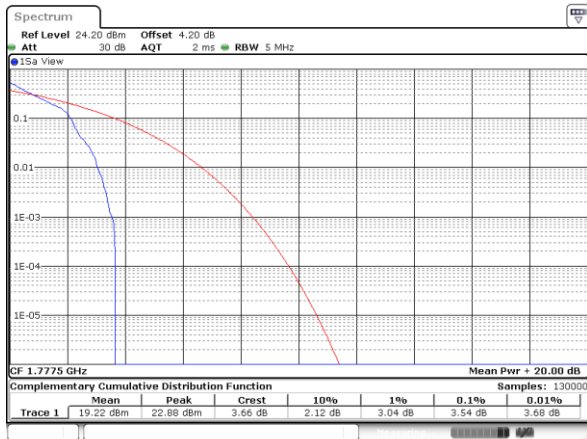


Date: 21\_JAN\_2021 16:00:07

Date: 21\_JAN\_2021 15:59:55

Highest Channel / 1 RB

Highest Channel / 1 RB



Date: 21\_JAN\_2021 16:00:32

Date: 21\_JAN\_2021 16:00:44



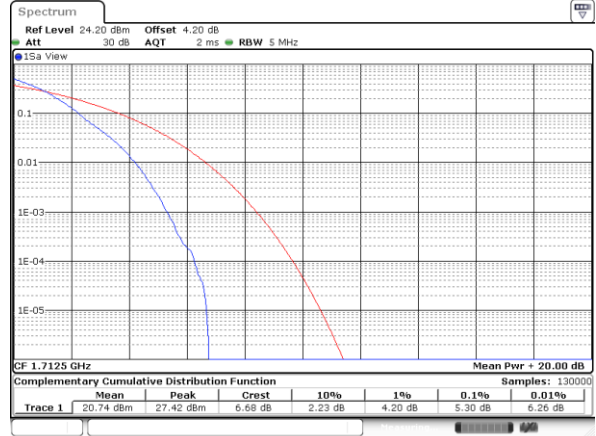
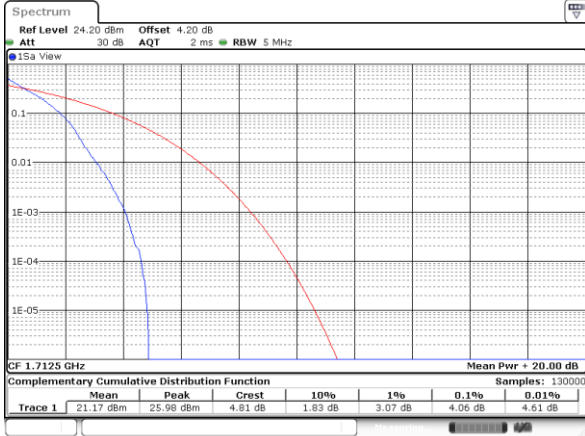
FR1 n66+48A / 5MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

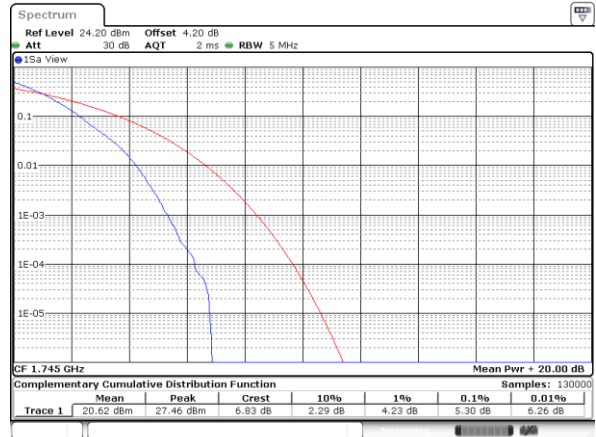
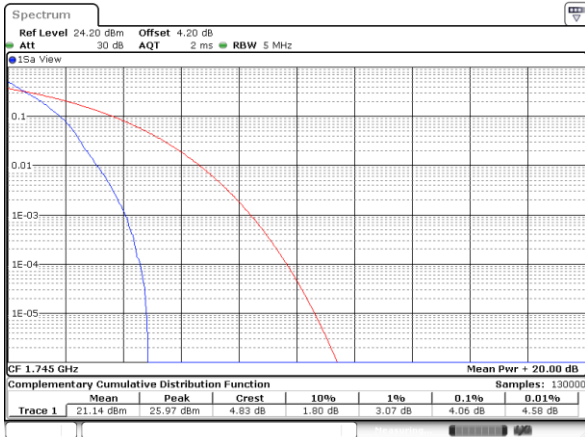


Date: 21\_JAN\_2021 15:59:03

Date: 21\_JAN\_2021 15:59:49

Middle Channel / Full RB

Middle Channel / Full RB

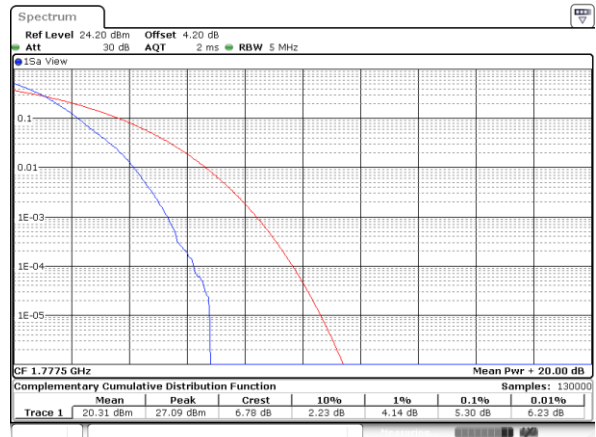
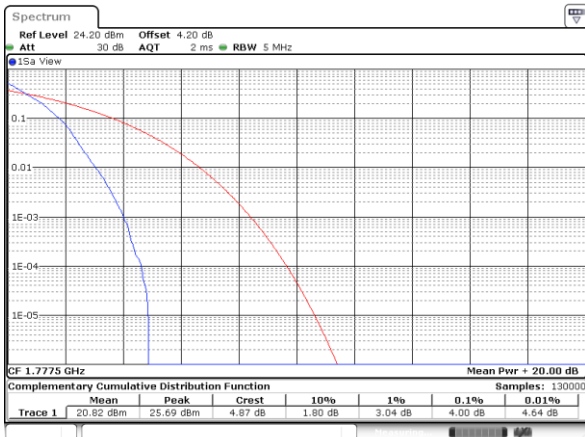


Date: 21\_JAN\_2021 15:59:27

Date: 21\_JAN\_2021 15:59:39

Highest Channel / Full RB

Highest Channel / Full RB



Date: 21\_JAN\_2021 16:01:21

Date: 21\_JAN\_2021 16:01:03



26dB Bandwidth

Mode	FR1 n66+48A : 26dB BW(MHz) / CP-OFDM							
BW	5MHz	5MHz	5MHz	5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	4.92	4.88	4.92	4.84				

Mode	FR1 n66+48A : 26dB BW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.95	9.81	9.79	9.83				

Mode	FR1 n66+48A : 26dB BW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.96	14.93	14.98	14.84				

Mode	FR1 n66+48A : 26dB BW(MHz) / CP-OFDM							
BW	20MHz	20MHz	20MHz	20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	19.90	19.90	19.90	19.98				

Mode	FR1 n66+48A : 26dB BW(MHz) / CP-OFDM							
BW	40MHz	40MHz	40MHz	40MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	41.00	40.84	40.92	41.08				



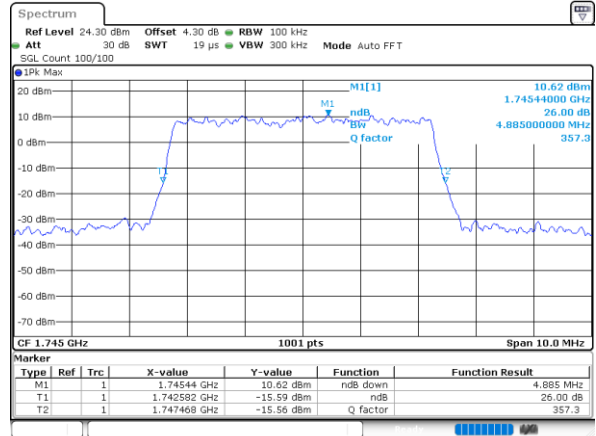
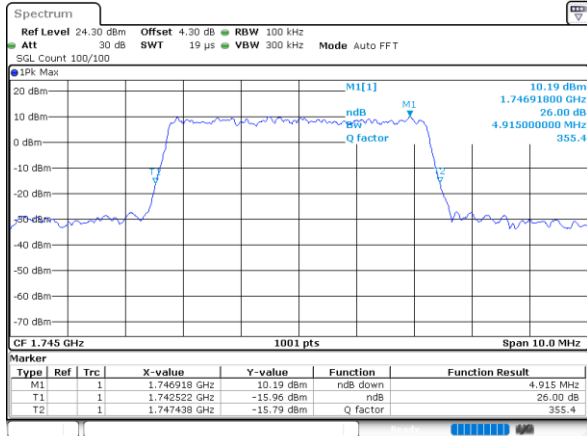
FR1 n66+48A / 5MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 13\_JAN\_2021 22:46:59

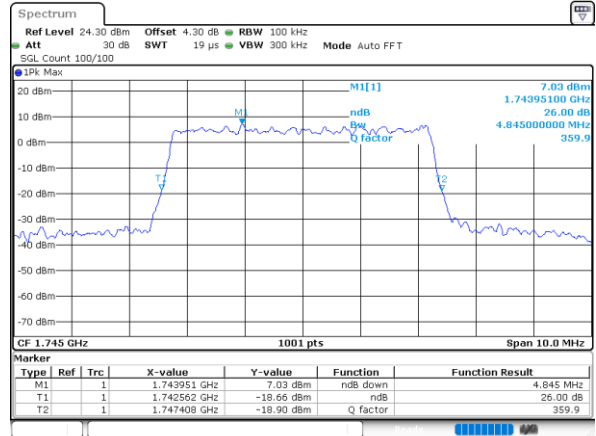
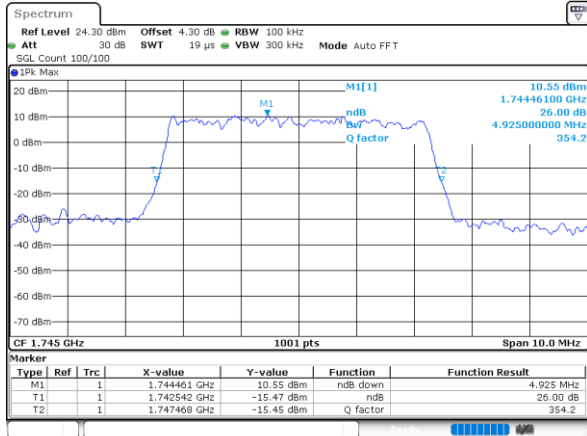
Date: 13\_JAN\_2021 22:47:24

64QAM

256QAM

Middle Channel

Middle Channel



Date: 13\_JAN\_2021 22:47:47

Date: 13\_JAN\_2021 22:48:03



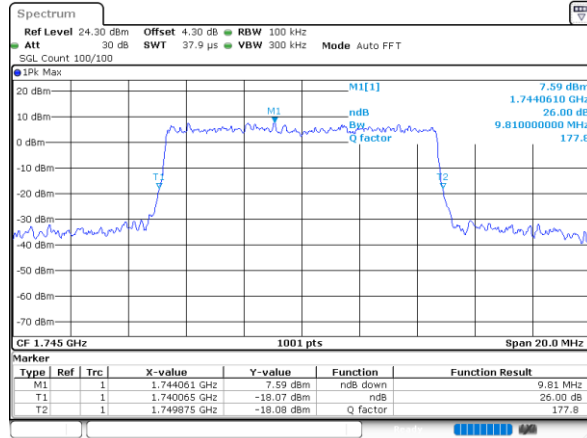
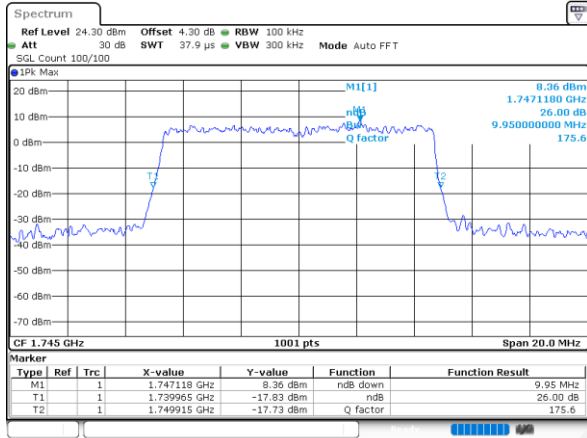
FR1 n66+48A / 10MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 13.JAN.2021 23:28:55

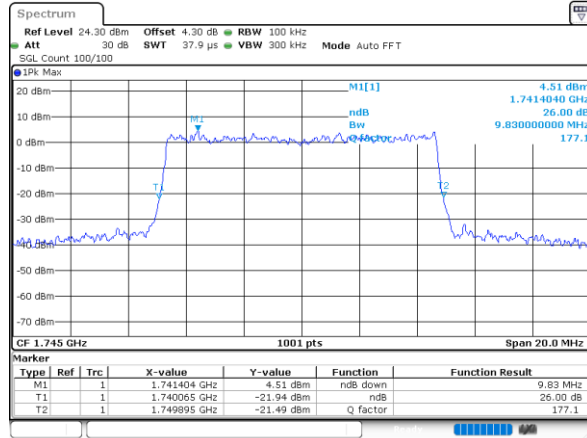
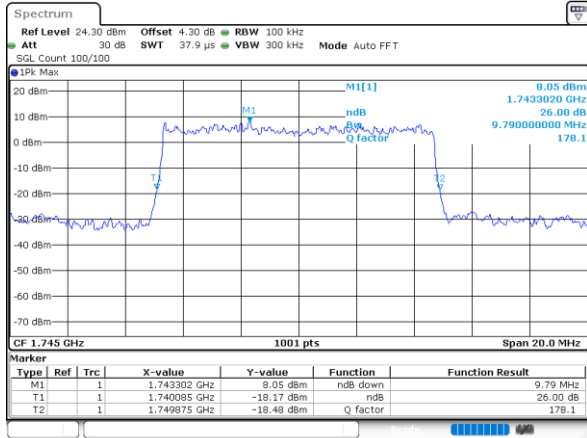
Date: 13.JAN.2021 23:27:23

64QAM

256QAM

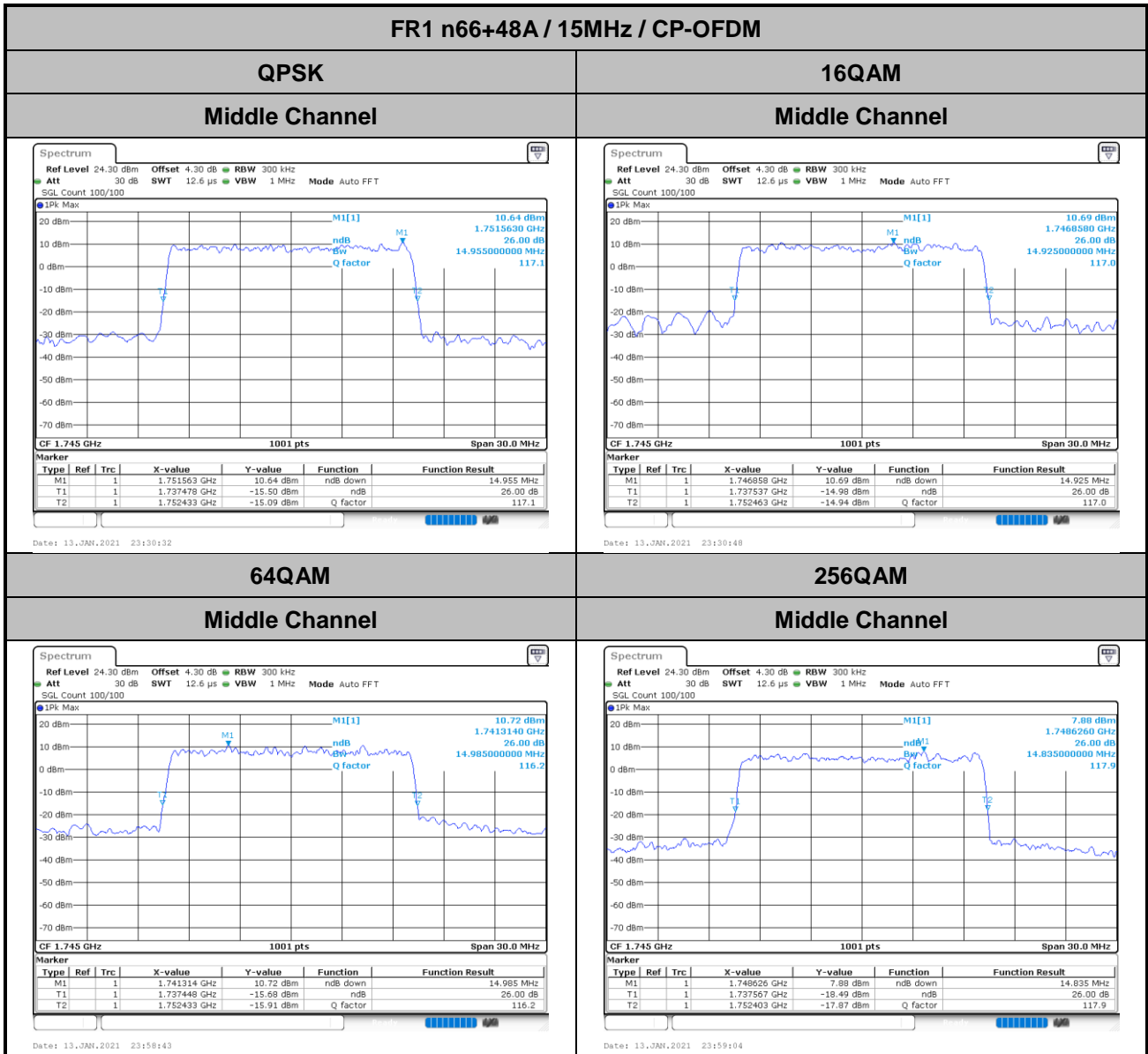
Middle Channel

Middle Channel



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

Date: 13.JAN.2021 23:26:45





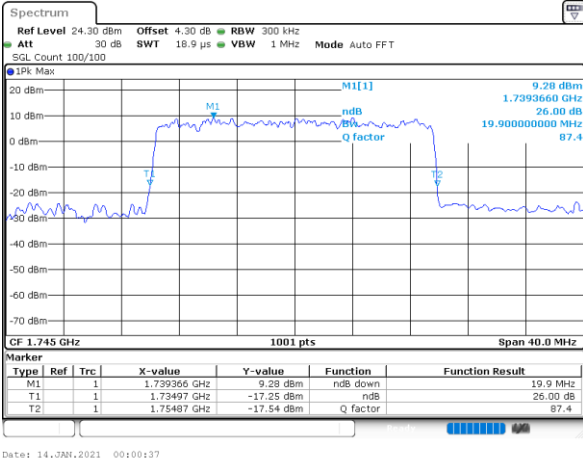
FR1 n66+48A / 20MHz / CP-OFDM

QPSK

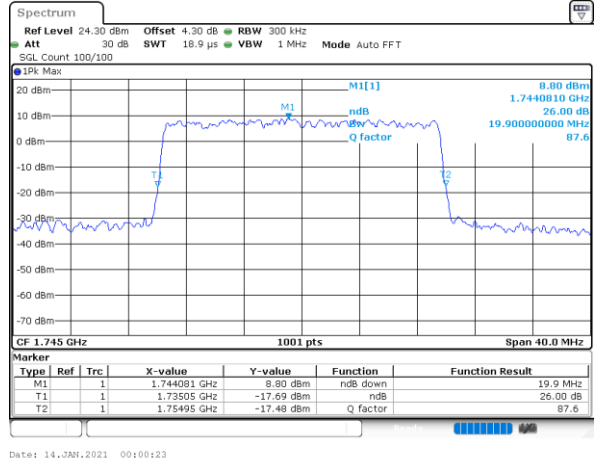
16QAM

Middle Channel

Middle Channel



Date: 14.JAN.2021 00:00:37



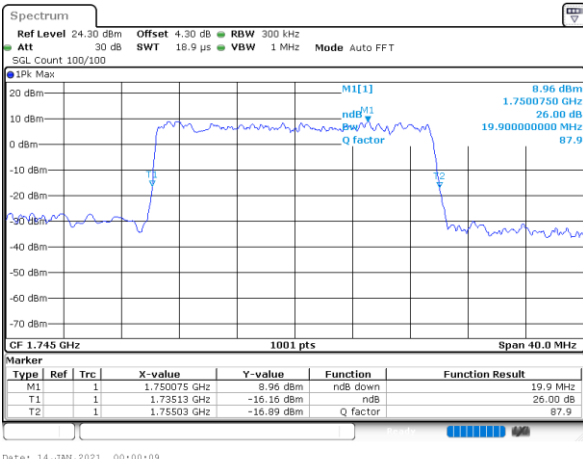
Date: 14.JAN.2021 00:00:23

64QAM

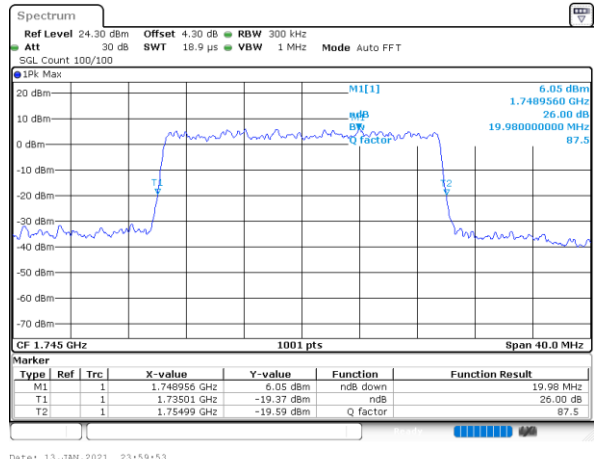
256QAM

Middle Channel

Middle Channel



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



Date: 13.JAN.2021 23:59:53