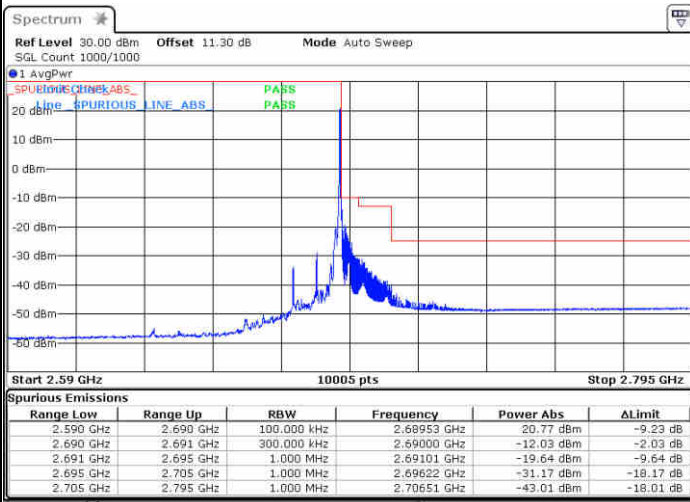




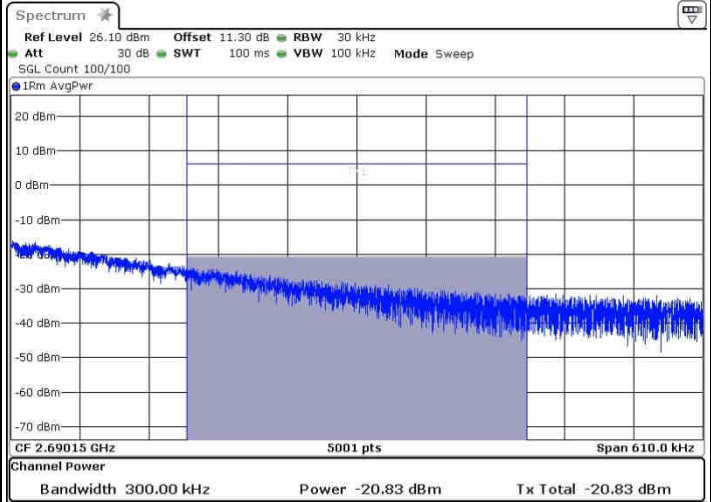
FR1 n41 / 15MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

Channel Power < -10dBm Pass



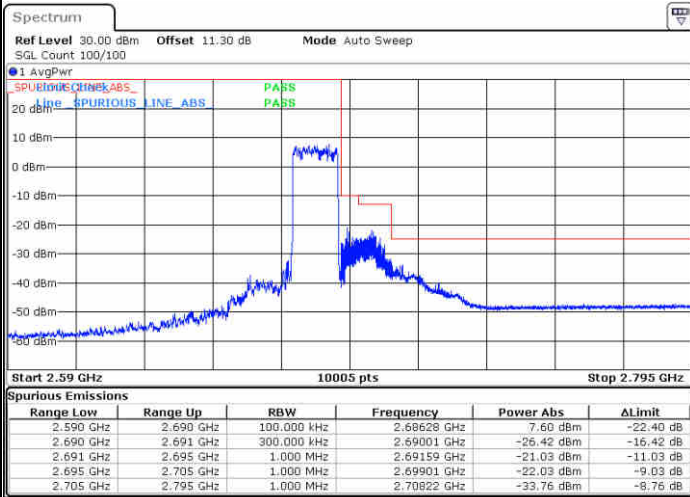
Date: 20.JAN.2021 04:25:15



Date: 20.JAN.2021 04:27:30

Highest Band Edge / Full RB

Channel Power < -10dBm Pass



Date: 20.JAN.2021 04:25:45

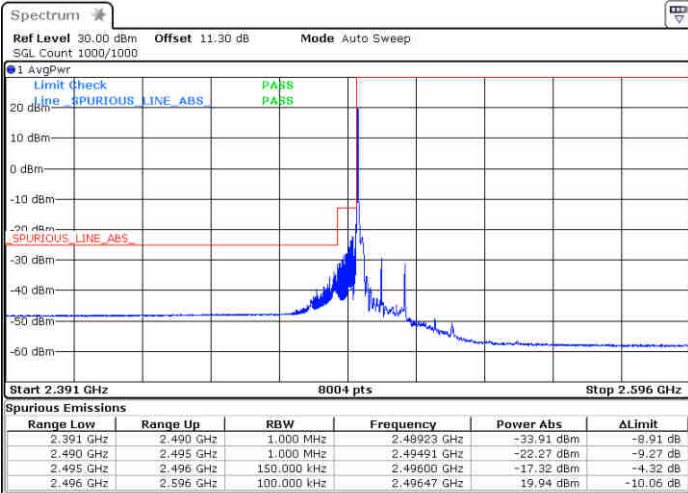
/



FR1 n41 / 15MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

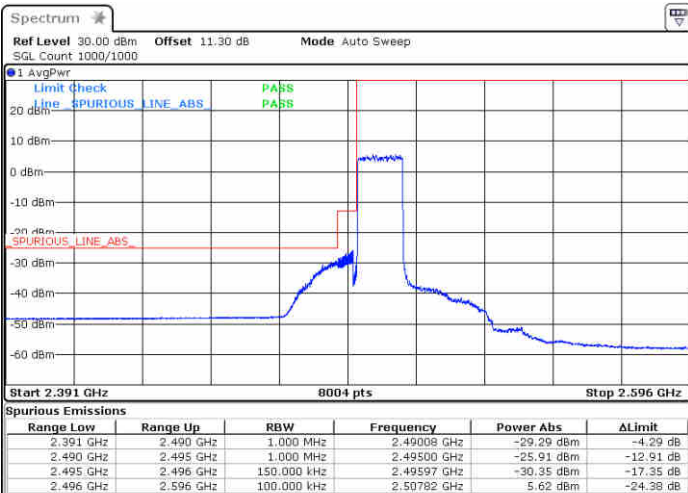
Channel Power < -13dBm Pass



Date: 20.JAN.2021 04:35:32

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



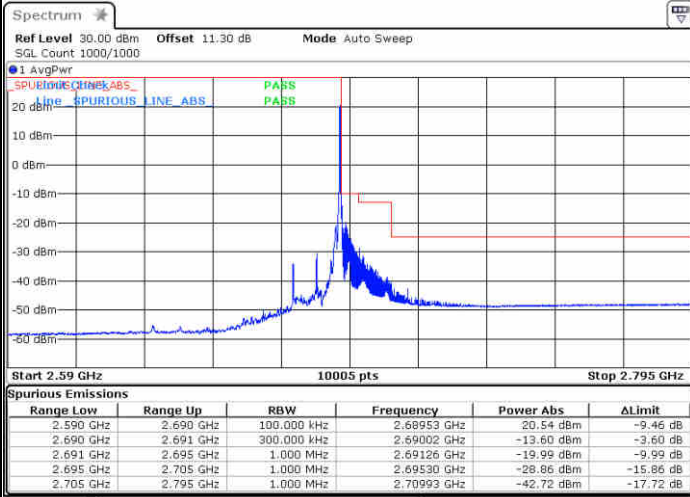
Date: 20.JAN.2021 04:38:13



FR1 n41 / 15MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

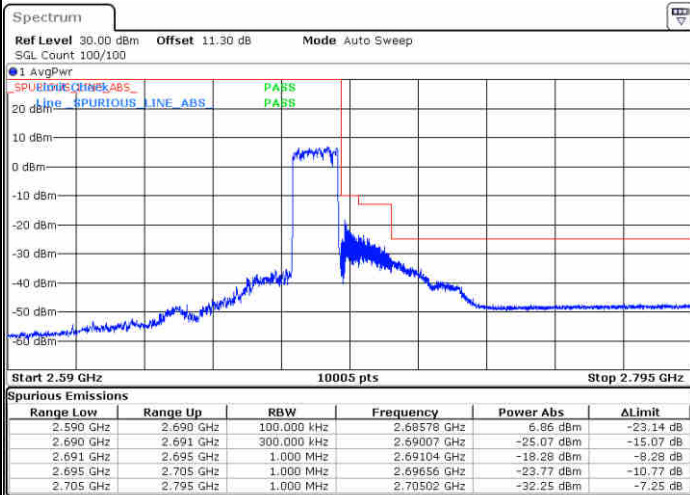
Channel Power < -13dBm Pass



Date: 20.JAN.2021 04:17:04

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



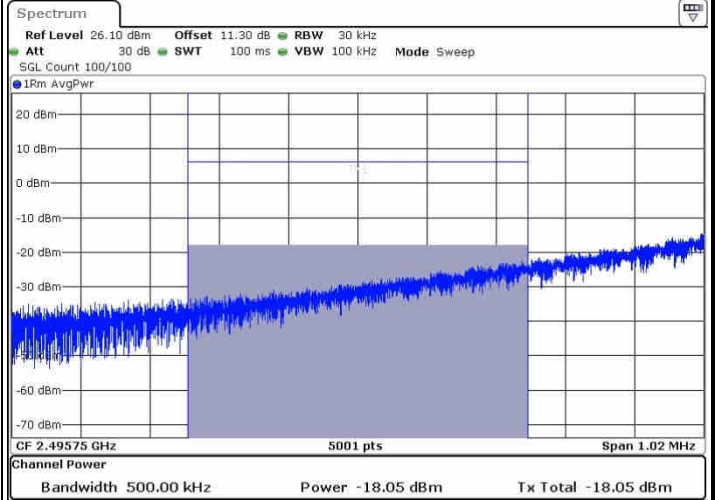
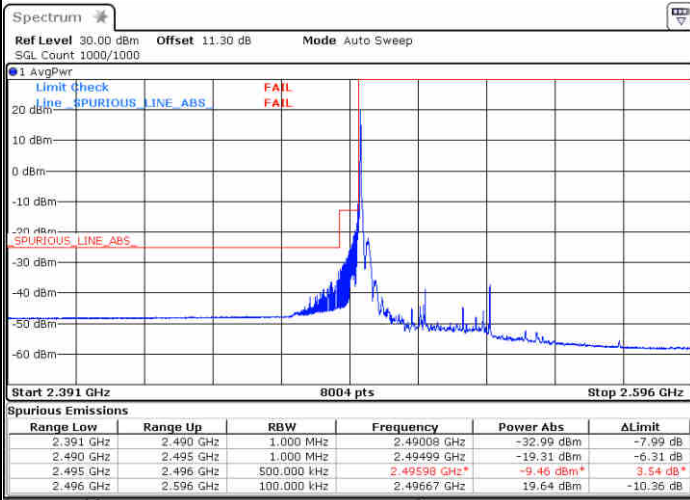
Date: 20.JAN.2021 04:26:06



FR1 n41 / 40MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass

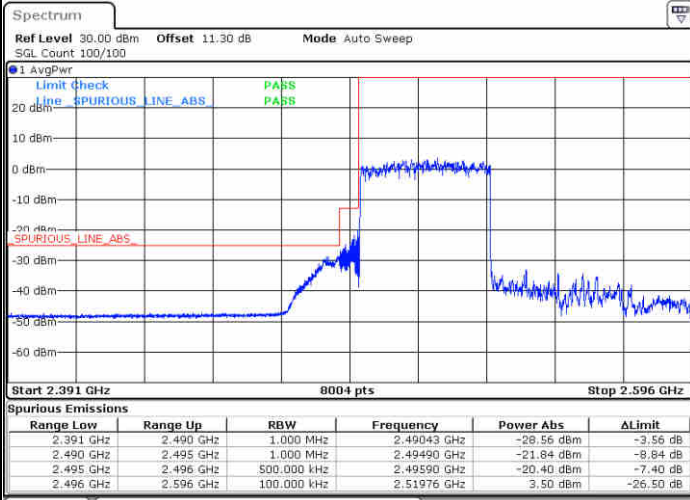


Date: 20.JAN.2021 03:20:07

Date: 20.JAN.2021 03:23:47

Lowest Band Edge / Full RB

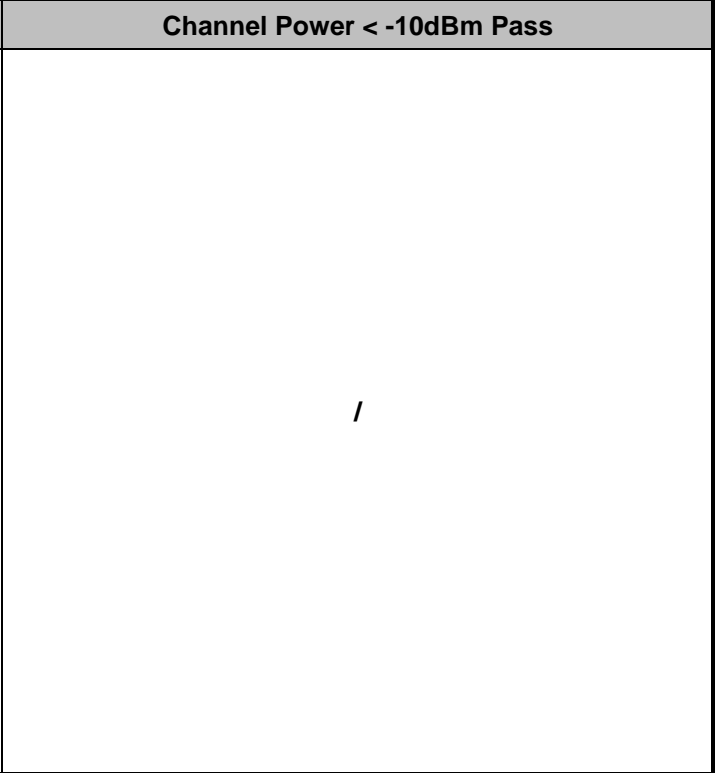
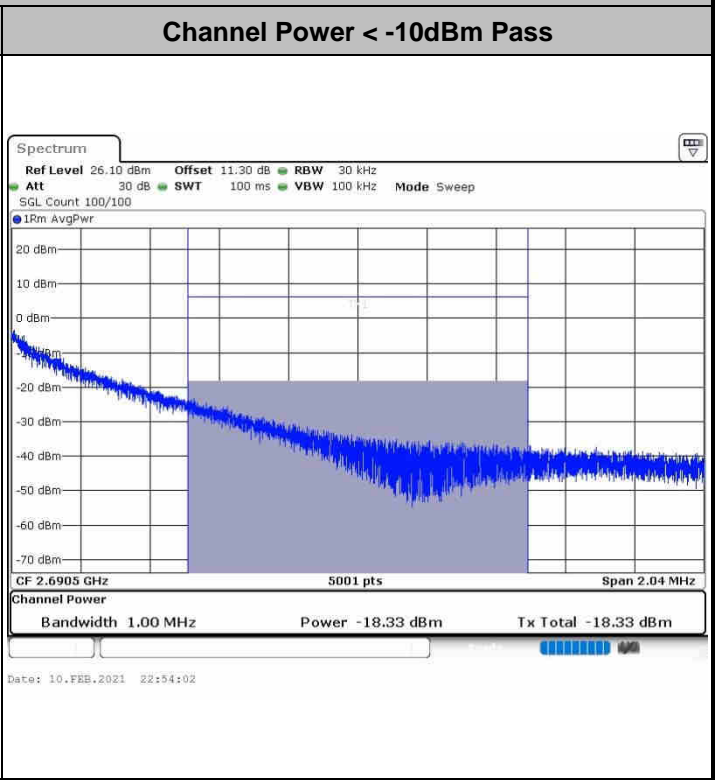
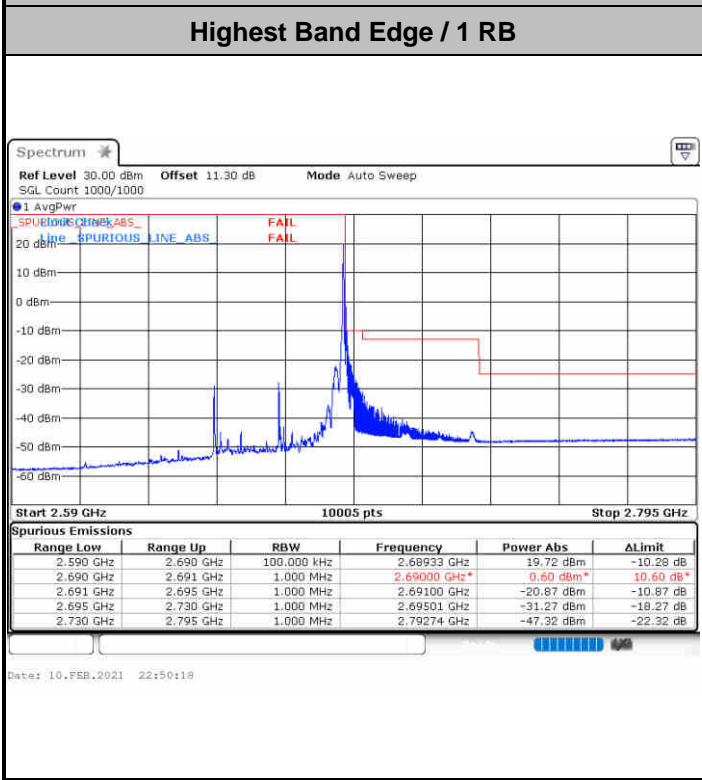
Channel Power < -13dBm Pass



Date: 20.JAN.2021 03:25:59



FR1 n41 / 40MHz / DFT-S OFDM BPSK

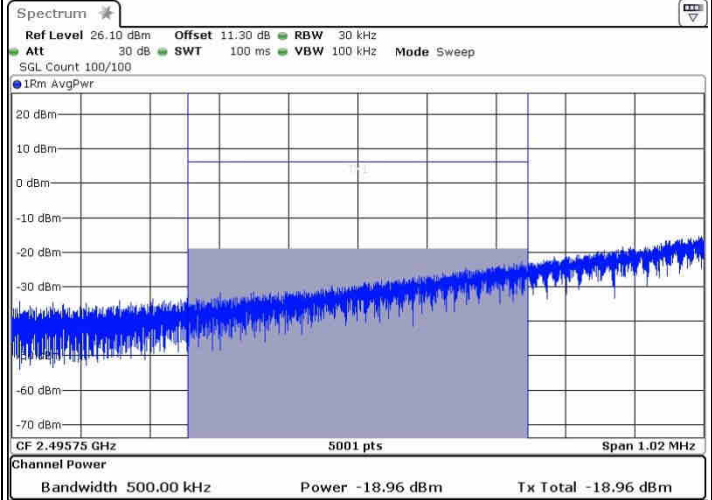
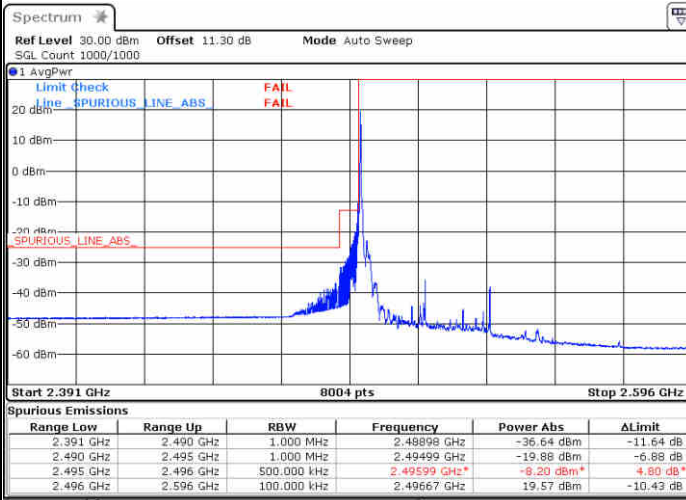




FR1 n41 / 40MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass

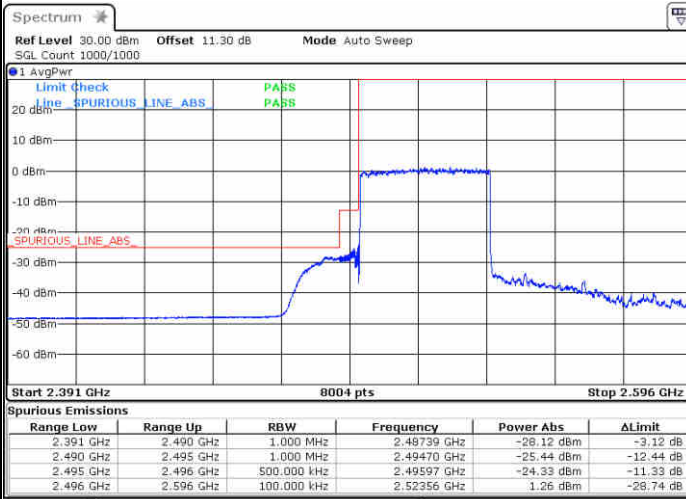


Date: 20.JAN.2021 03:22:29

Date: 20.JAN.2021 03:23:26

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



Date: 20.JAN.2021 03:28:49

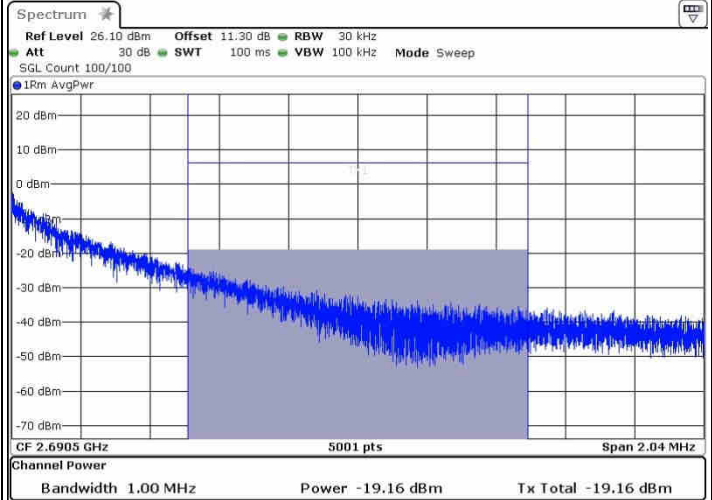
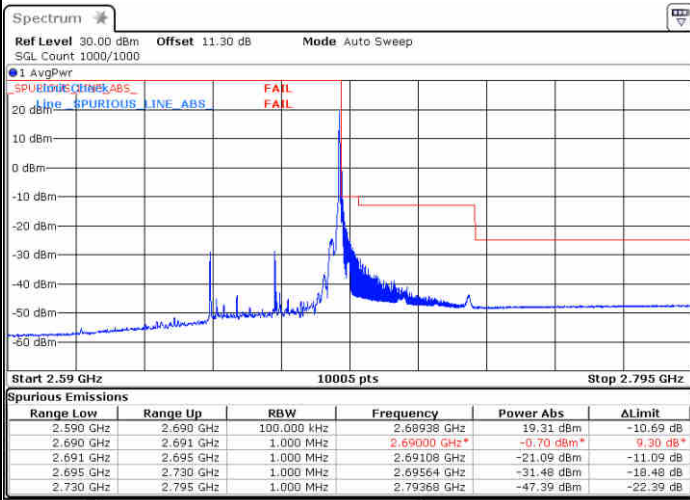
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FR1 n41 / 40MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

Channel Power < -10dBm Pass

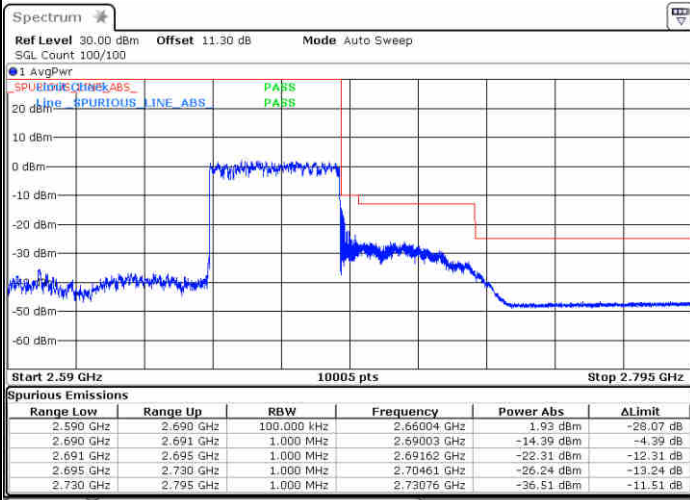


Date: 10.FEB.2021 22:53:05

Date: 10.FEB.2021 22:53:38

Highest Band Edge / Full RB

Channel Power < -10dBm Pass



Date: 10.FEB.2021 22:42:13

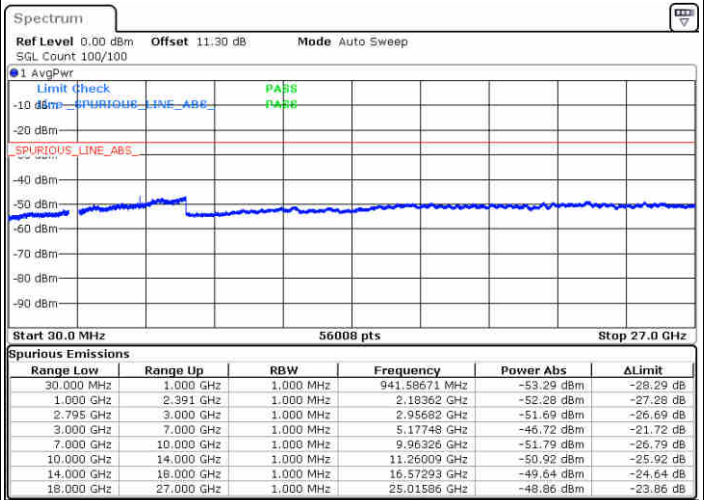
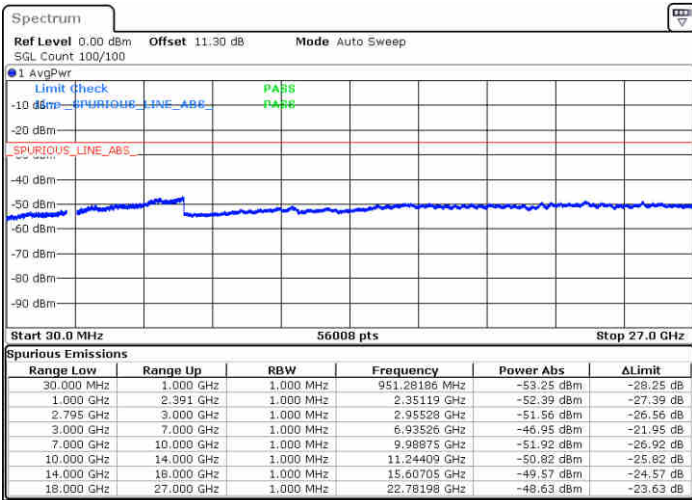


Conducted Spurious Emission

FR1 n41 / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

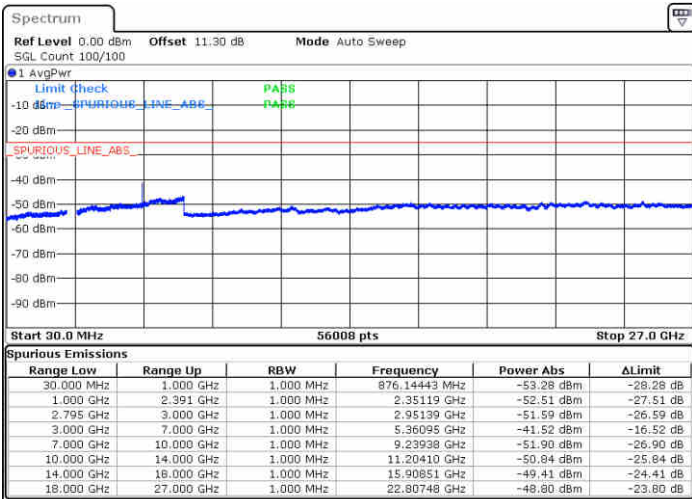
Middle Channel / 1RB



Date: 20.JAN.2021 05:03:29

Date: 20.JAN.2021 05:08:17

Highest Channel / 1RB



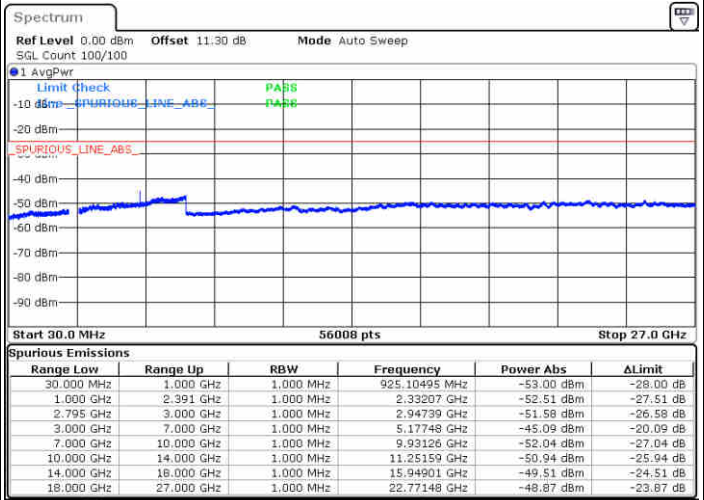
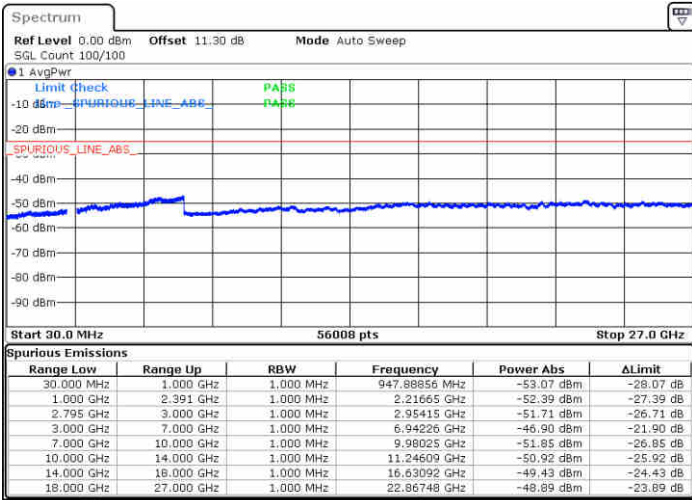
Date: 20.JAN.2021 05:15:29



FR1 n41 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

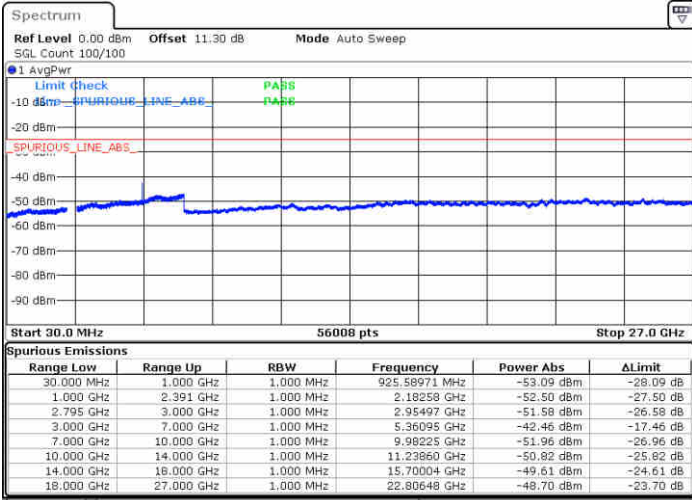
Middle Channel / 1RB



Date: 20.JAN.2021 05:01:32

Date: 20.JAN.2021 05:09:56

Highest Channel / 1RB



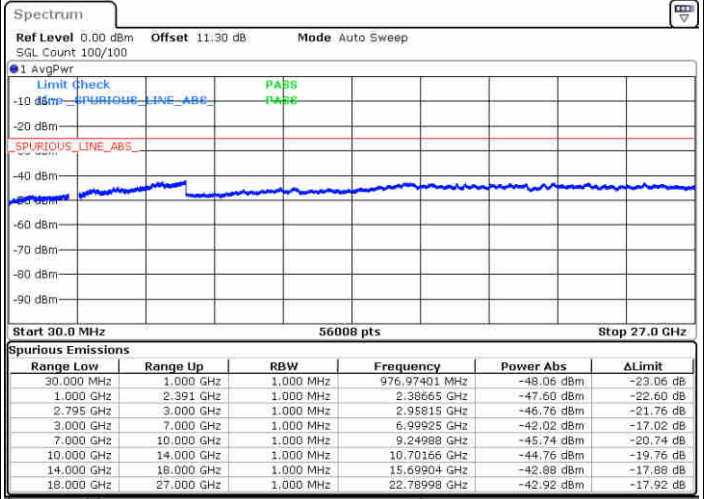
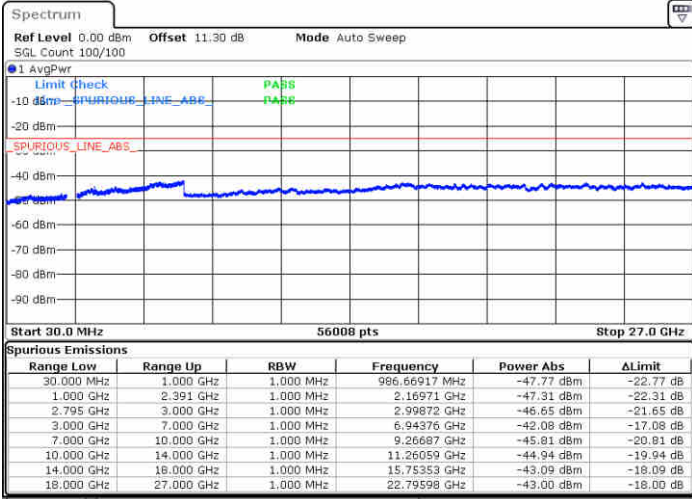
Date: 20.JAN.2021 05:13:20



FR1 n41 / 15MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

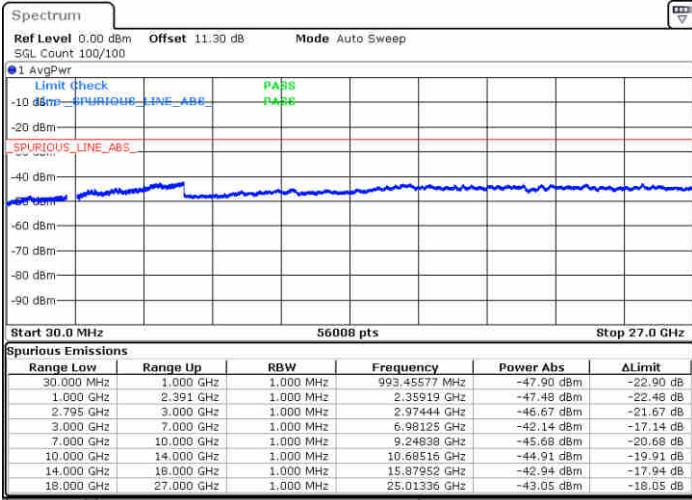
Middle Channel / 1RB



Date: 20.JAN.2021 03:40:05

Date: 20.JAN.2021 03:52:51

Highest Channel / 1RB



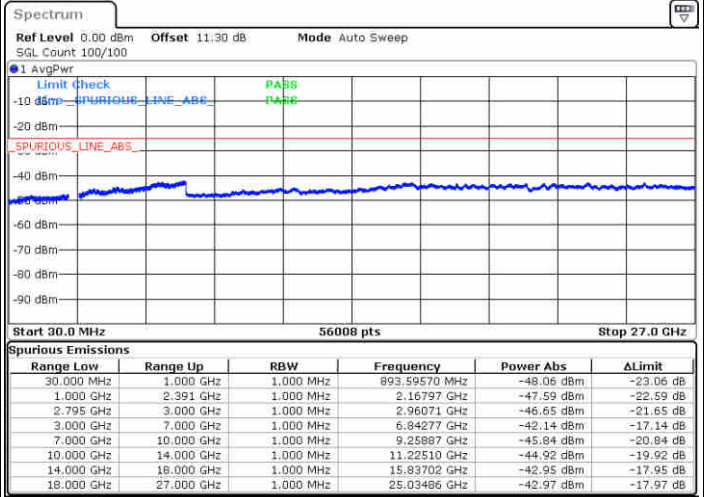
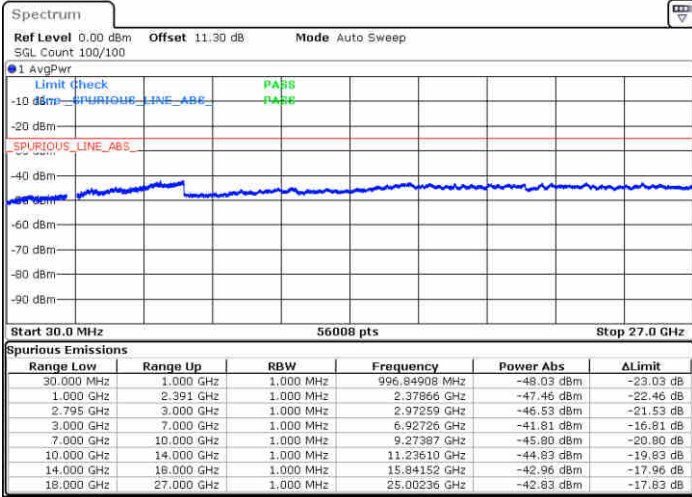
Date: 20.JAN.2021 03:58:36



FR1 n41 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

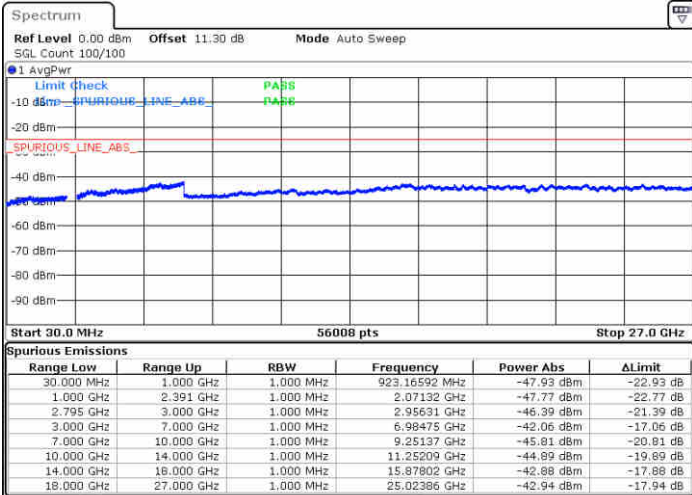
Middle Channel / 1RB



Date: 20.JAN.2021 03:41:50

Date: 20.JAN.2021 03:44:48

Highest Channel / 1RB



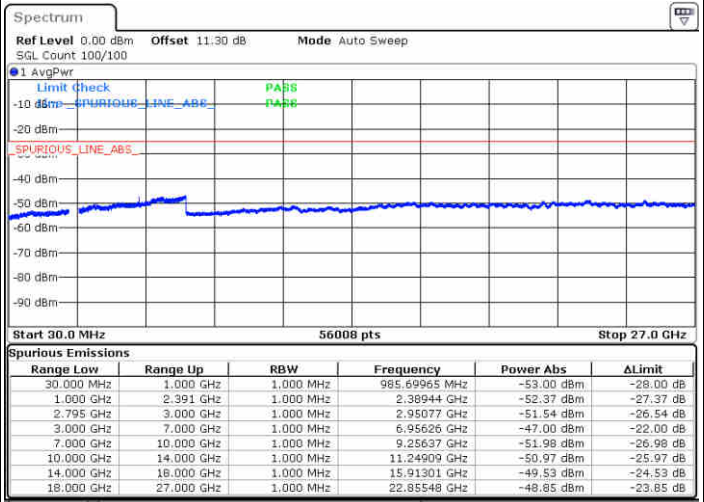
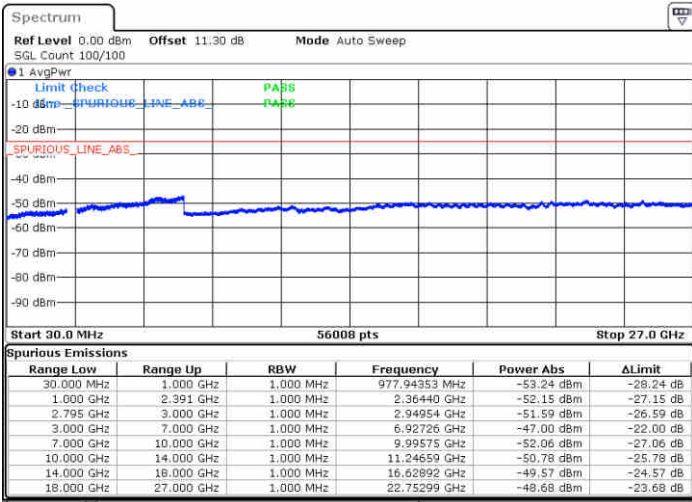
Date: 20.JAN.2021 04:09:30



FR1 n41 / 40MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

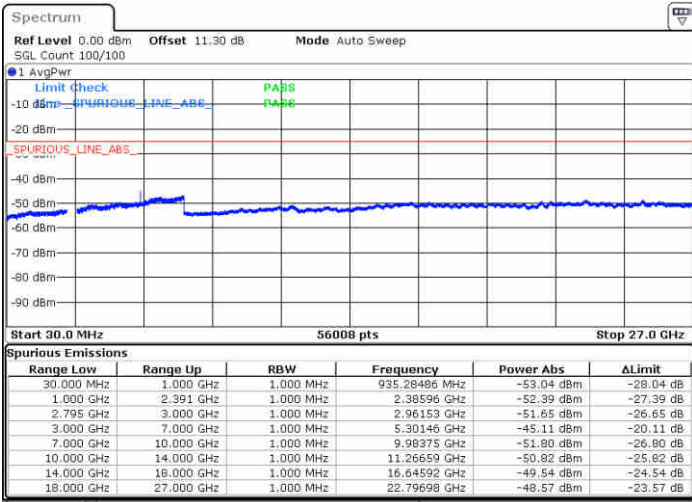
Middle Channel / 1RB



Date: 20.JAN.2021 02:25:34

Date: 20.JAN.2021 02:27:51

Highest Channel / 1RB



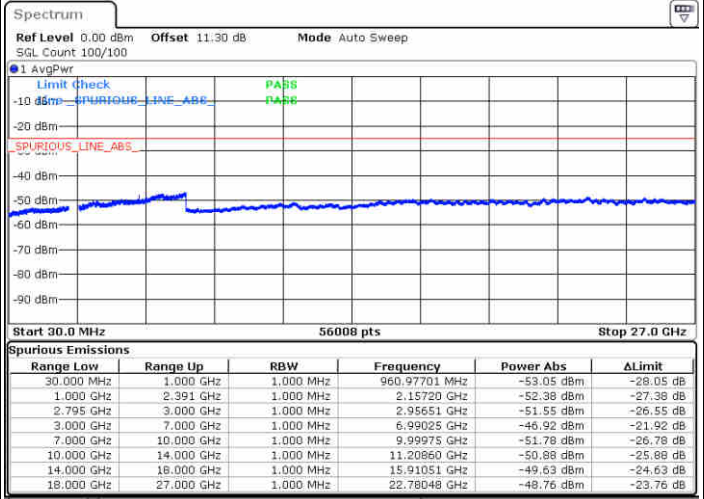
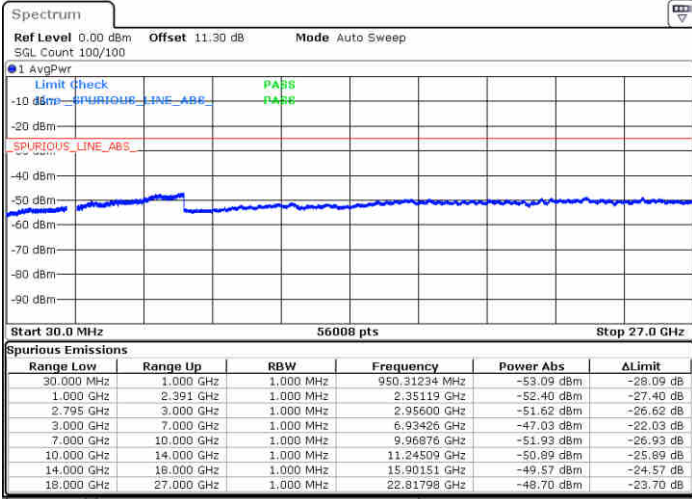
Date: 20.JAN.2021 02:36:52



FR1 n41 / 40MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

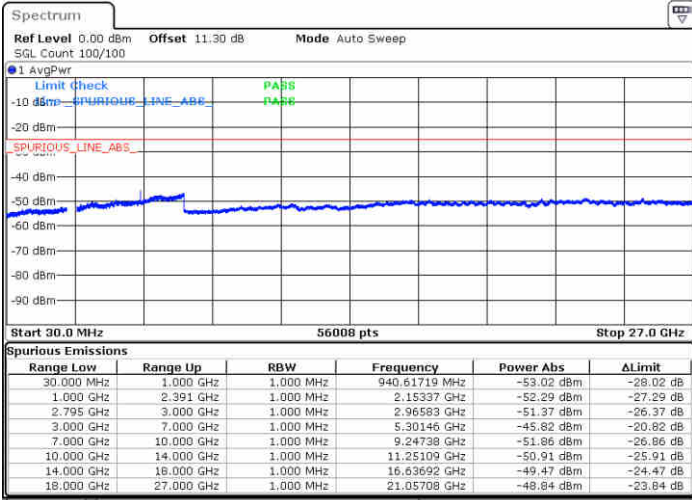
Middle Channel / 1RB



Date: 20.JAN.2021 02:22:39

Date: 20.JAN.2021 02:30:27

Highest Channel / 1RB



Date: 20.JAN.2021 02:35:15



Frequency Stability

Test Conditions		NR n41 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0025	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0031	

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.



5G NR n41 SA-SCS 30K

Peak-to-Average Ratio

Mode	FR1 n41 / 10MHz / 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	3.62	6.12	6.38	5.33	PASS
Middle CH	6.78	6.09	5.83	5.16	
Highest CH	3.57	3.77	6.26	5.45	



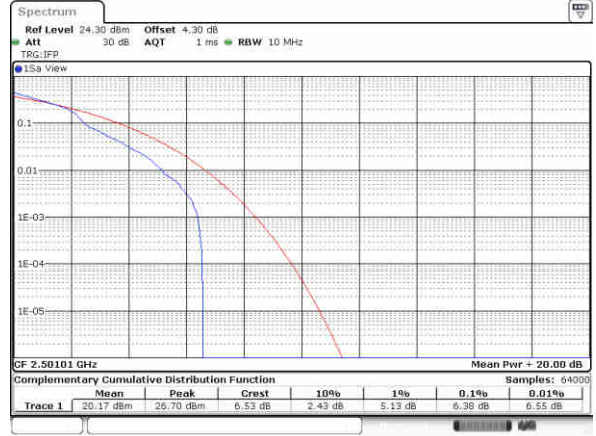
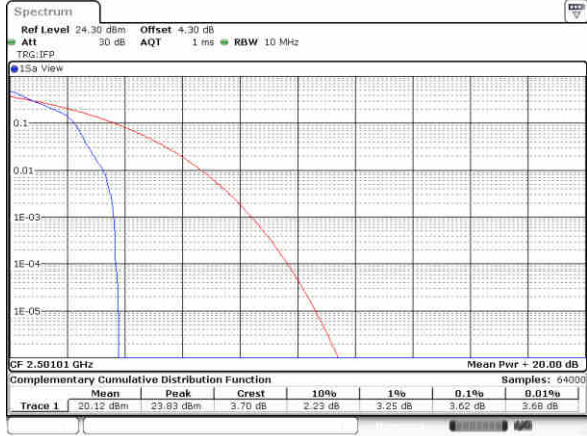
FR1 n41 / 10MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / 1RB

Lowest Channel / 1RB

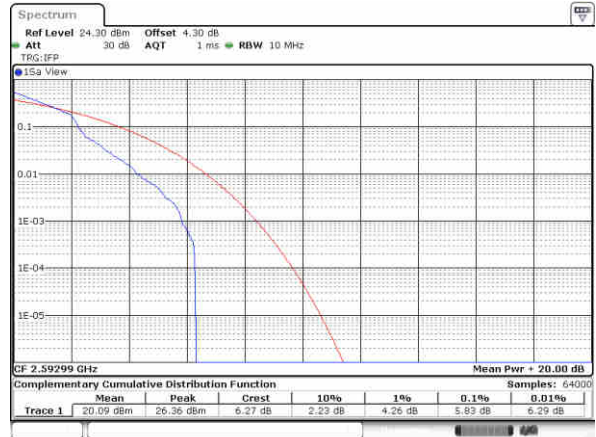
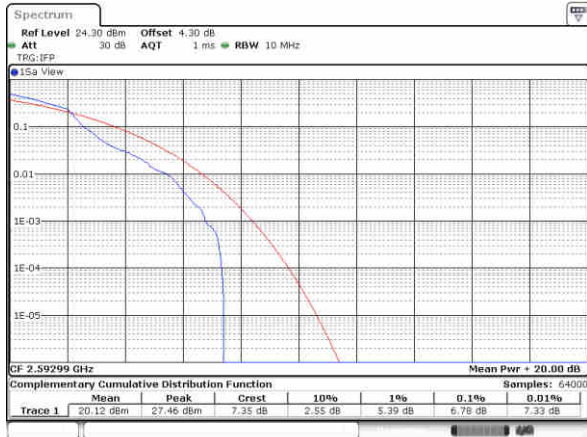


Date: 10_FEB,2021 21:53:41

Date: 10_FEB,2021 21:54:30

Middle Channel / 1 RB

Middle Channel / 1 RB

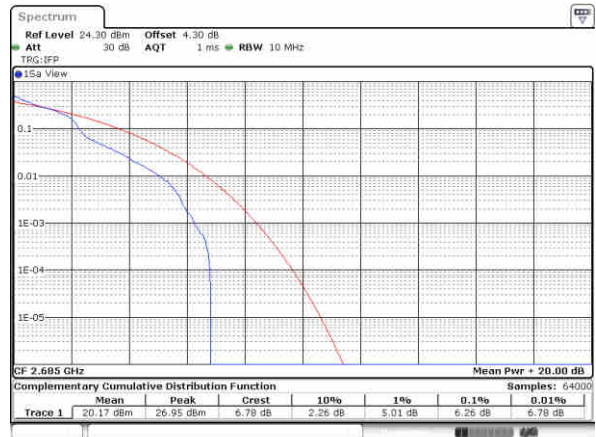
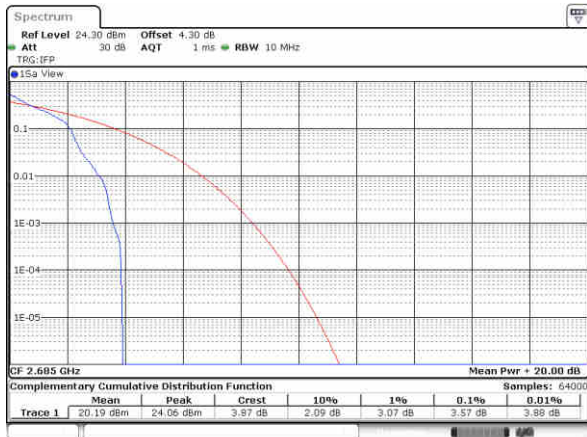


Date: 22_JAN,2021 00:46:09

Date: 22_JAN,2021 00:46:29

Highest Channel / 1 RB

Highest Channel / 1 RB



Date: 22_JAN,2021 01:05:38

Date: 22_JAN,2021 01:06:03



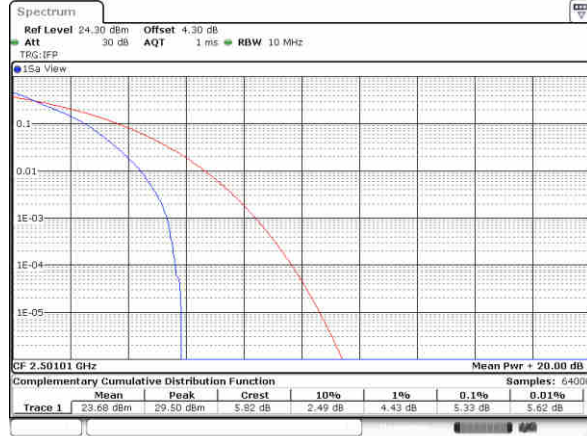
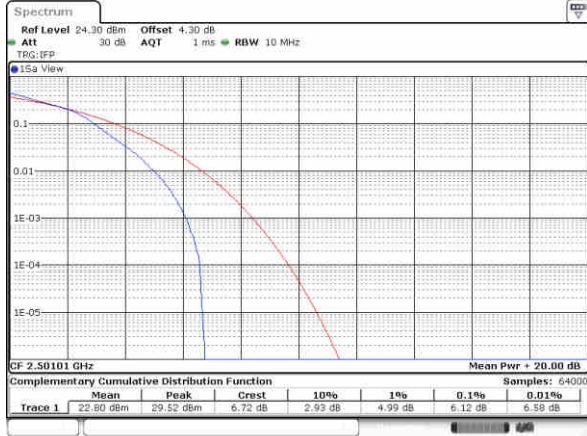
FR1 n41 / 10MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

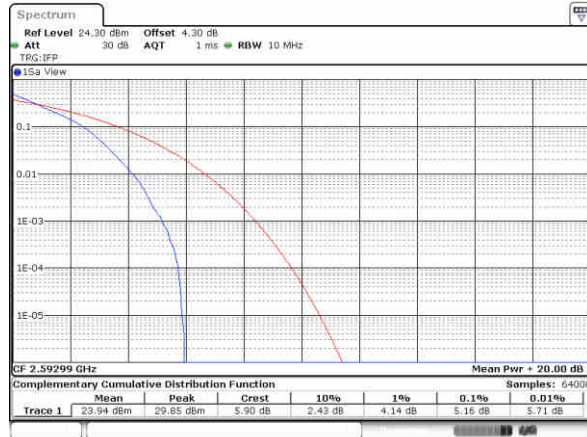
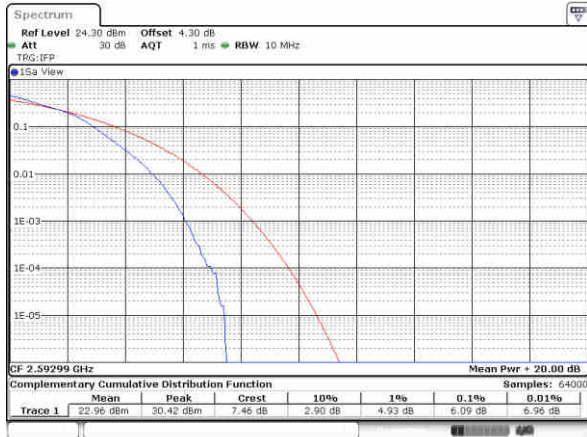


Date: 22_JAN_2021 00:48:57

Date: 22_JAN_2021 00:49:39

Middle Channel / Full RB

Middle Channel / Full RB

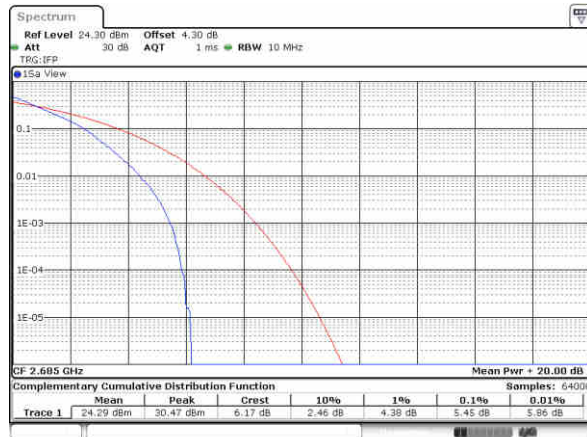
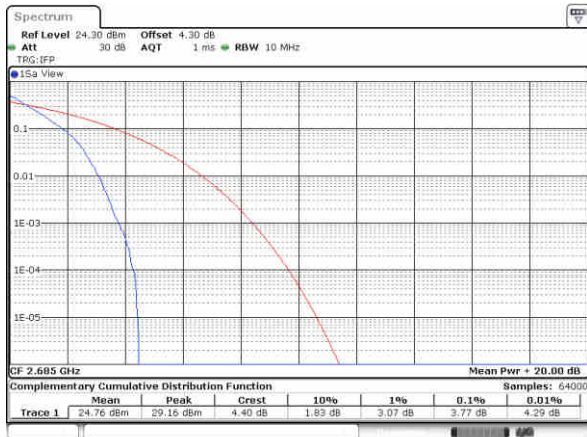


Date: 22_JAN_2021 00:45:34

Date: 22_JAN_2021 00:42:51

Highest Channel / Full RB

Highest Channel / Full RB



Date: 22_JAN_2021 01:07:00

Date: 22_JAN_2021 01:06:36



26dB Bandwidth

Mode	FR1 n41 : 26dB BW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.05	9.25	9.13	9.19				

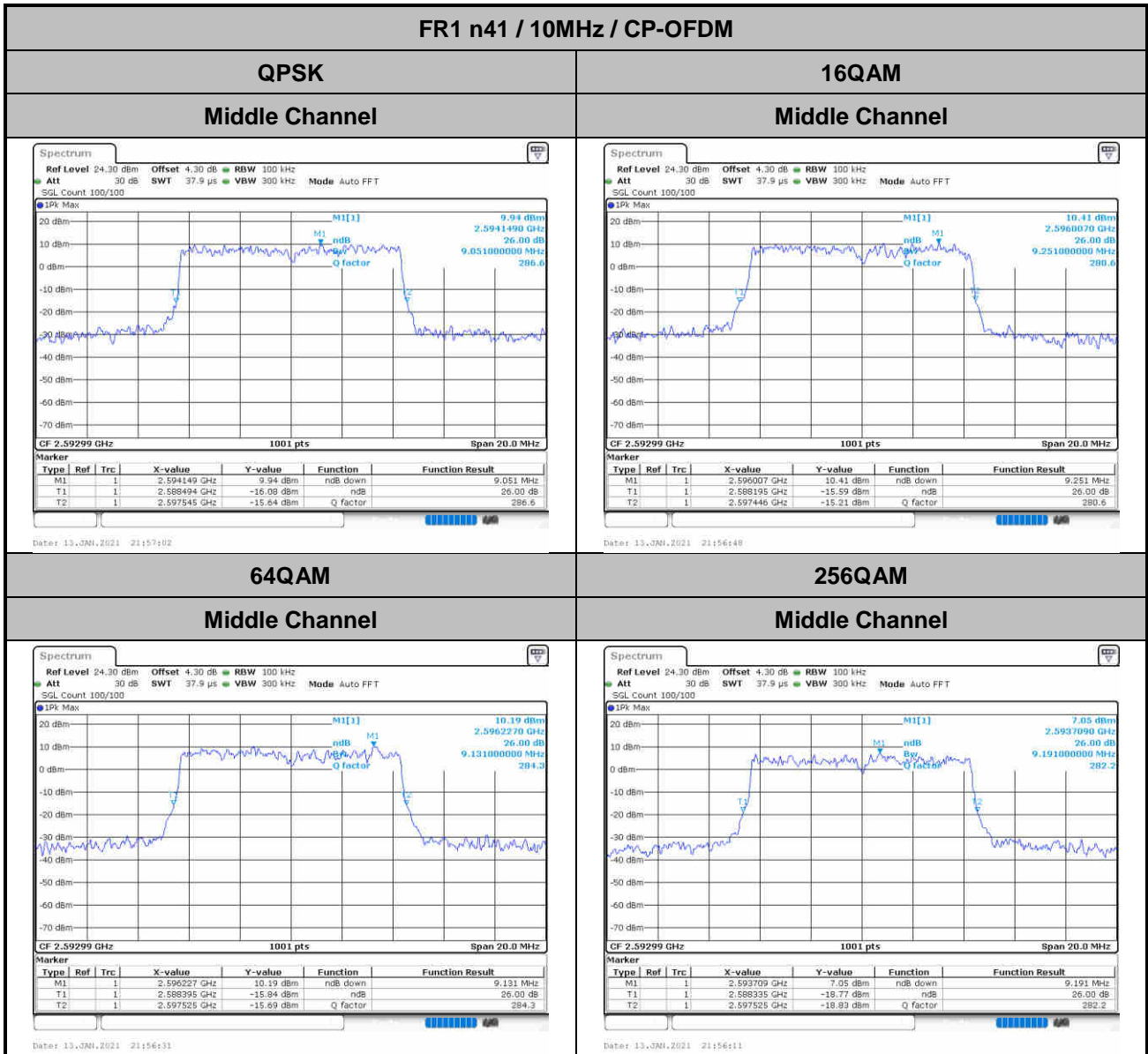
Mode	FR1 n41 : 26dB BW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.42	14.36	14.42	14.54				

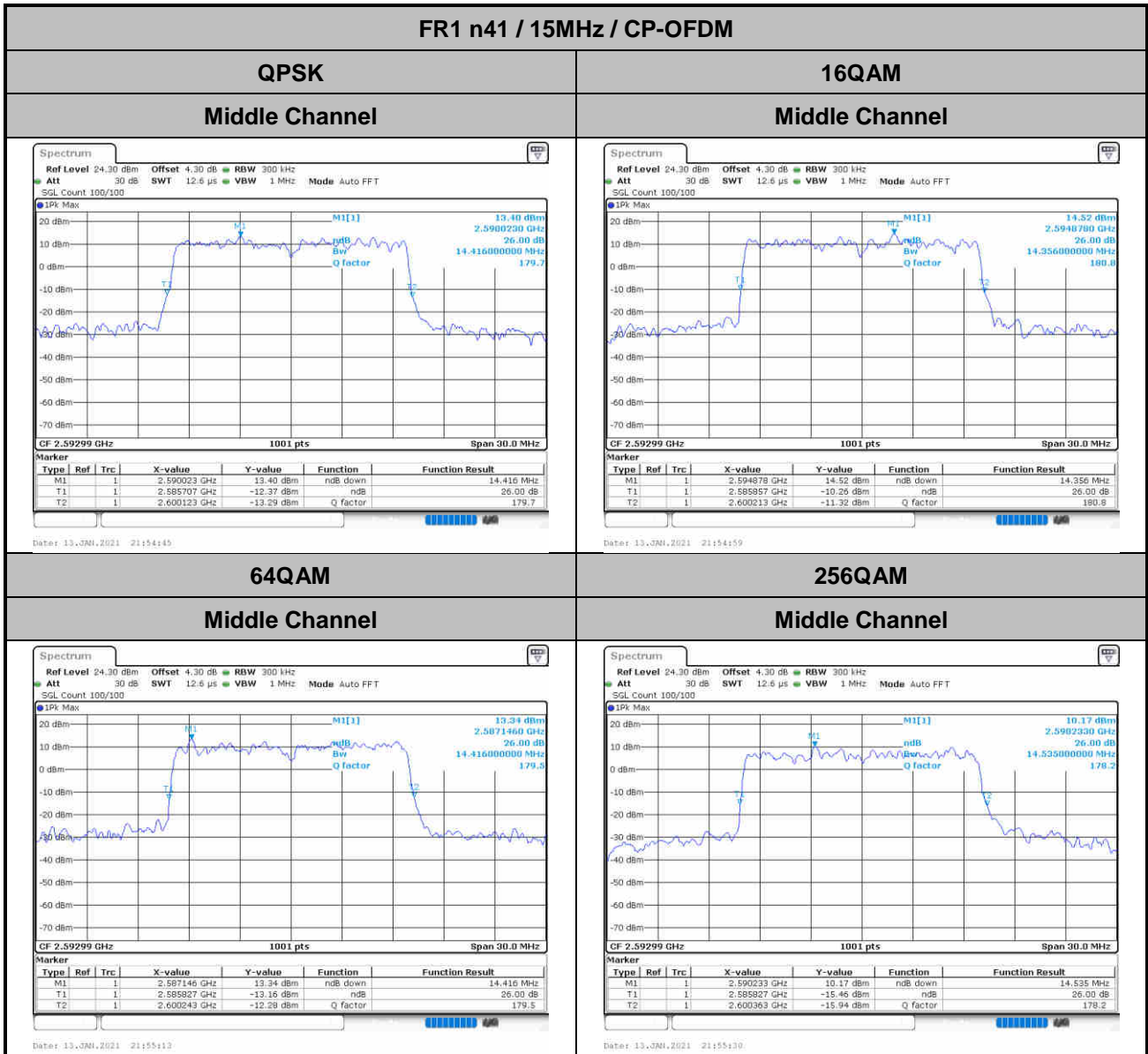
Mode	FR1 n41 : 26dB BW(MHz) / CP-OFDM							
BW	30MHz	30MHz	30MHz	30MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	28.89	28.83	28.77	28.77				

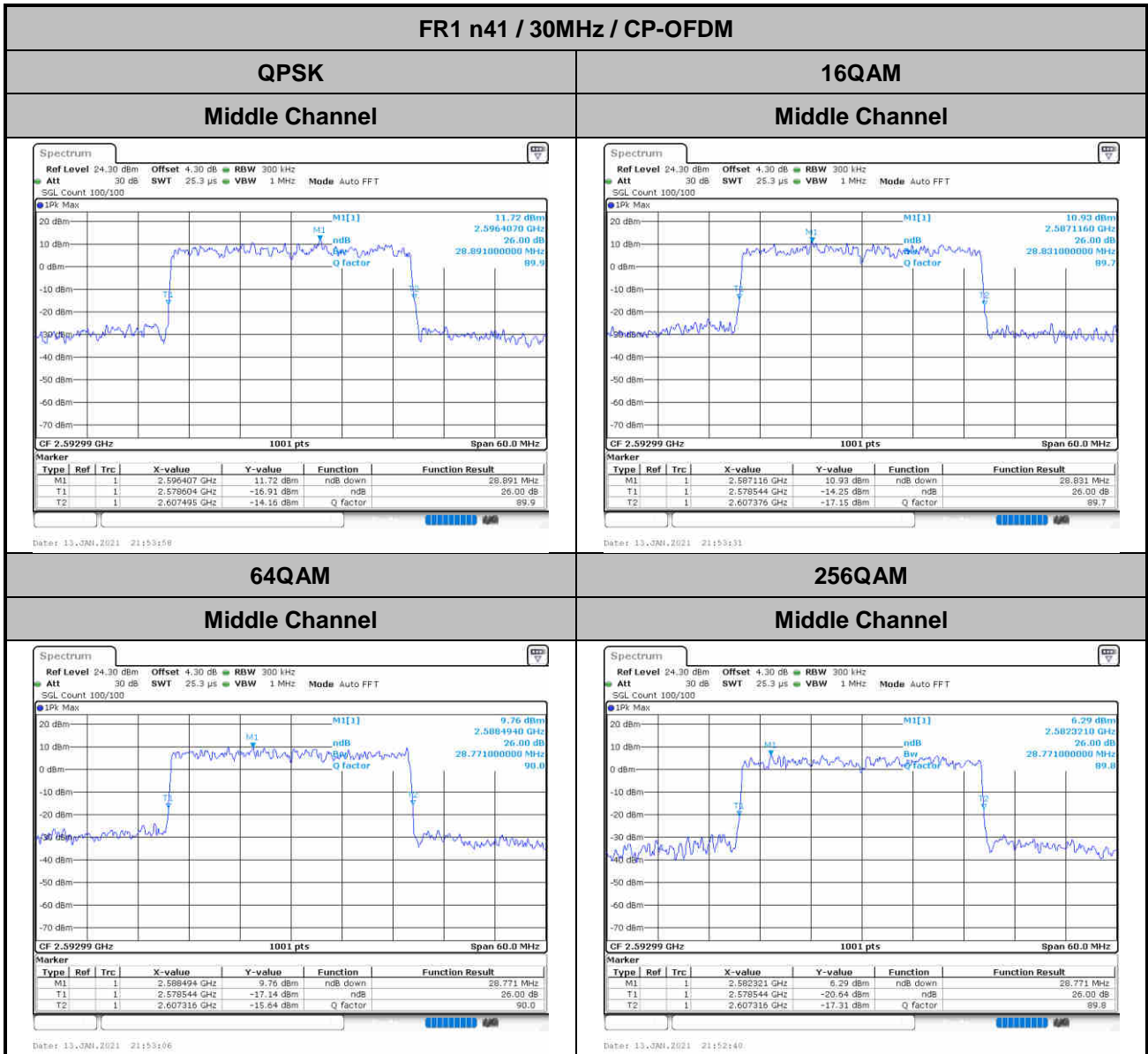
Mode	FR1 n41 : 26dB BW(MHz) / CP-OFDM							
BW	40MHz	40MHz	40MHz	40MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	40.28	40.36	40.28	40.51				

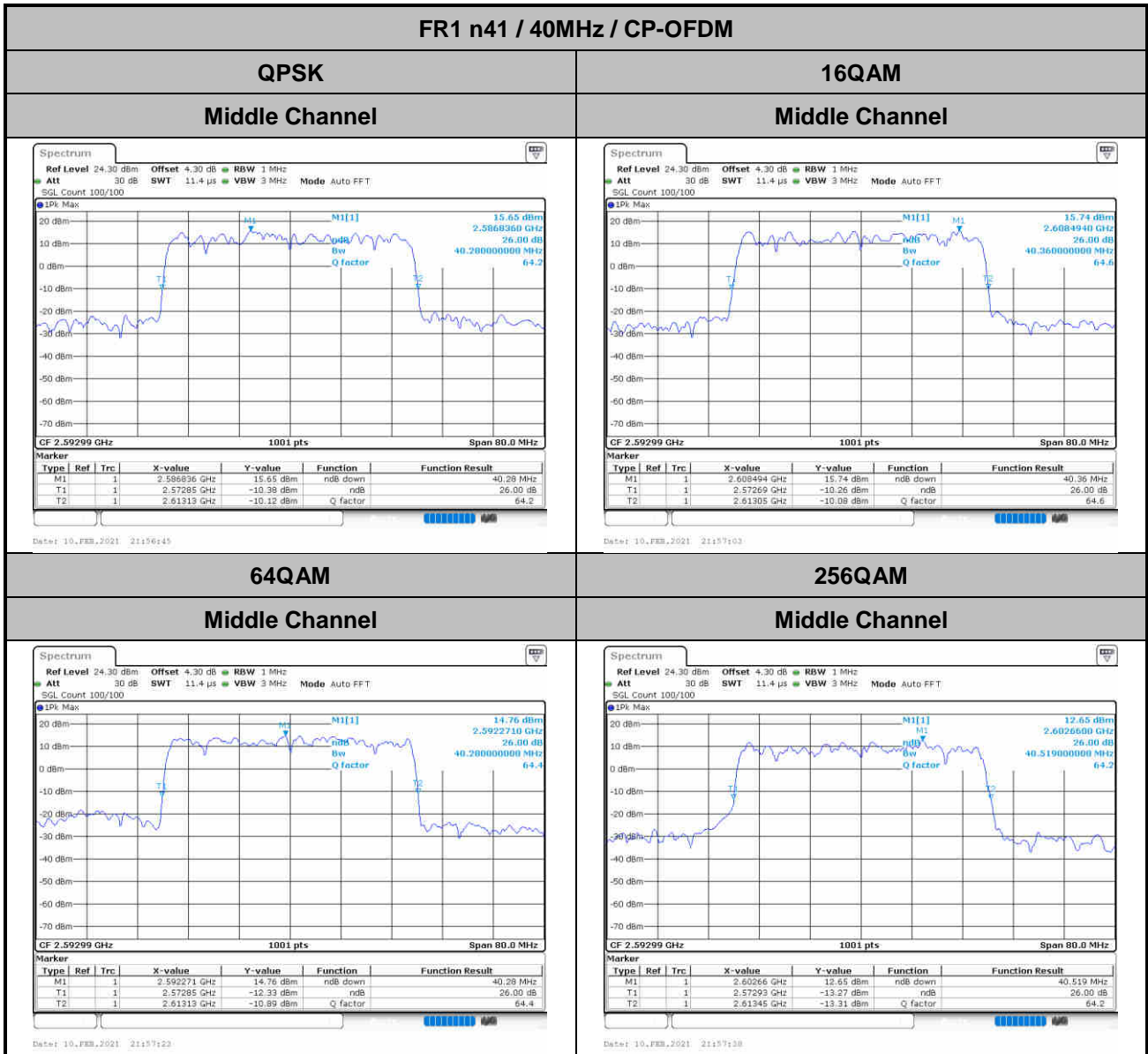
Mode	FR1 n41 : 26dB BW(MHz) / CP-OFDM							
BW	50MHz	50MHz	50MHz	50MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	49.65	49.75	49.65	49.65				

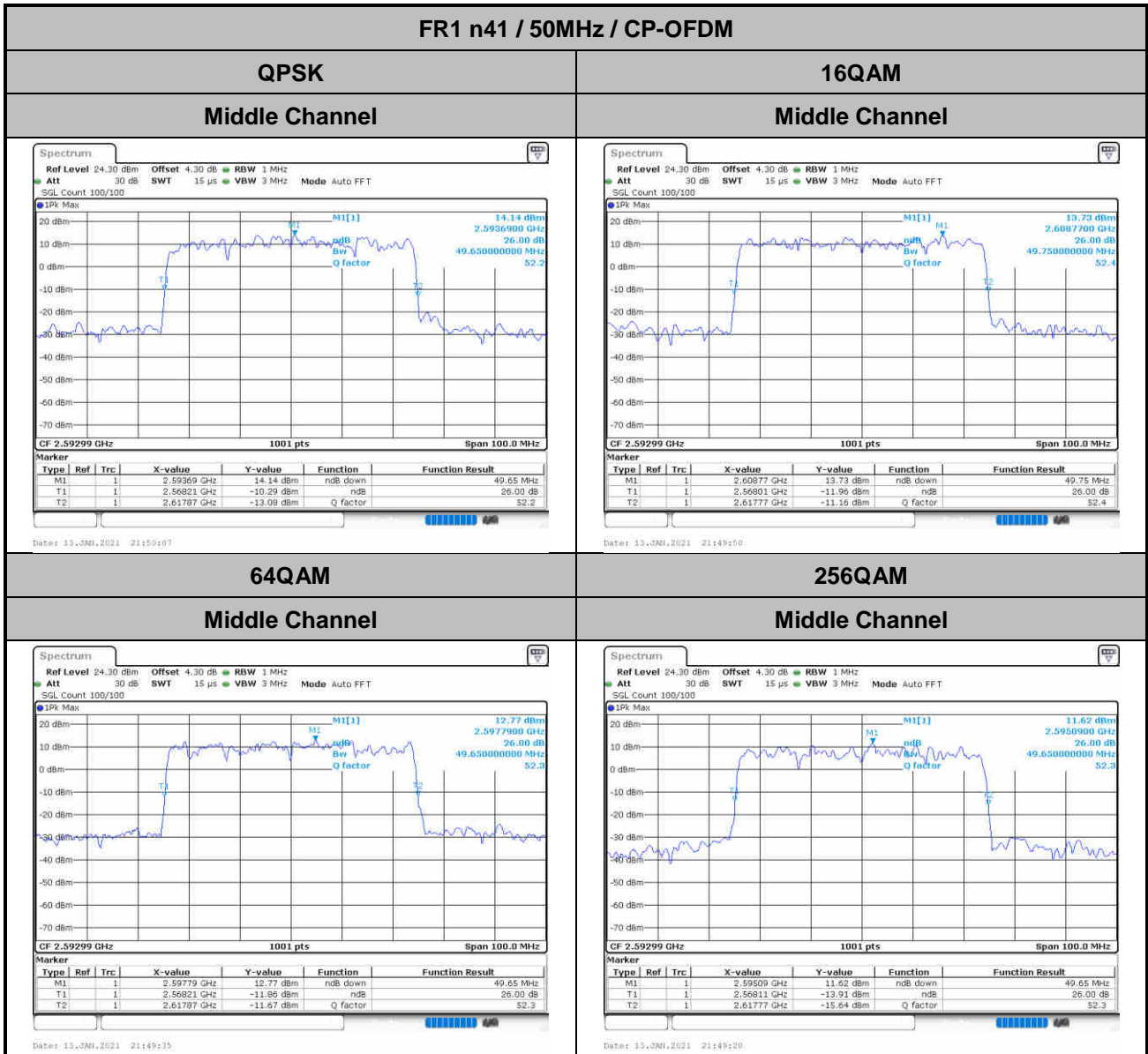
Mode	FR1 n41 : 26dB BW(MHz) / CP-OFDM							
BW	80MHz	80MHz	80MHz	80MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	79.92	79.92	79.92	79.92				

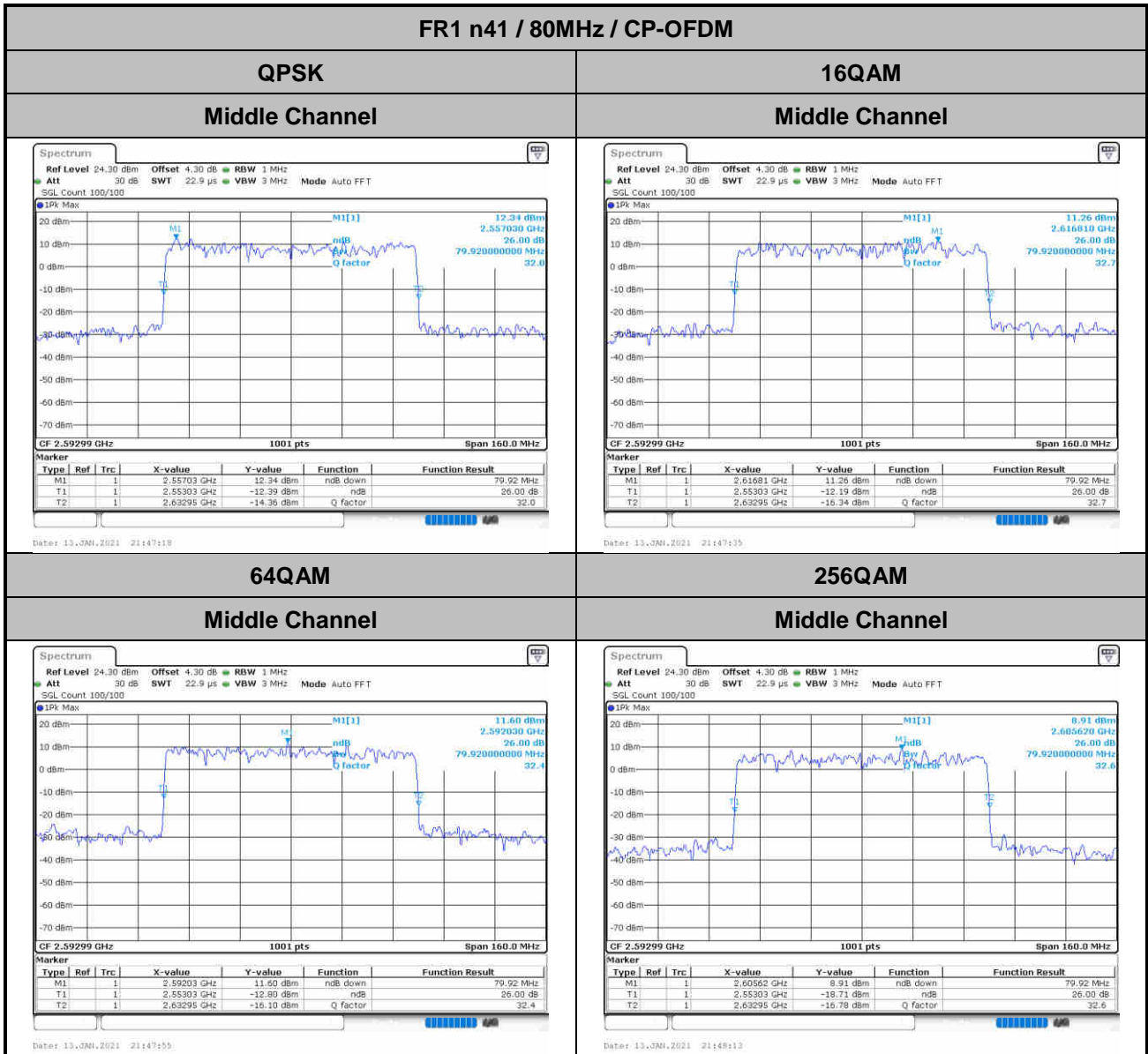














Occupied Bandwidth

Mode	FR1 n41 : OBW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	8.57	8.55	8.59	8.55				

Mode	FR1 n41 : OBW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	13.64	13.61	13.61	13.55				

Mode	FR1 n41 : OBW(MHz) / CP-OFDM							
BW	30MHz	30MHz	30MHz	30MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	27.51	27.87	27.63	27.93				

Mode	FR1 n41 : OBW(MHz) / CP-OFDM							
BW	40MHz	40MHz	40MHz	40MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	38.12	37.8	37.88	38.04				

Mode	FR1 n41 : OBW(MHz) / CP-OFDM							
BW	50MHz	50MHz	50MHz	50MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	47.25	47.55	47.35	47.85				

Mode	FR1 n41 : OBW(MHz) / CP-OFDM							
BW	80MHz	80MHz	80MHz	80MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	77.52	77.84	77.84	77.84				



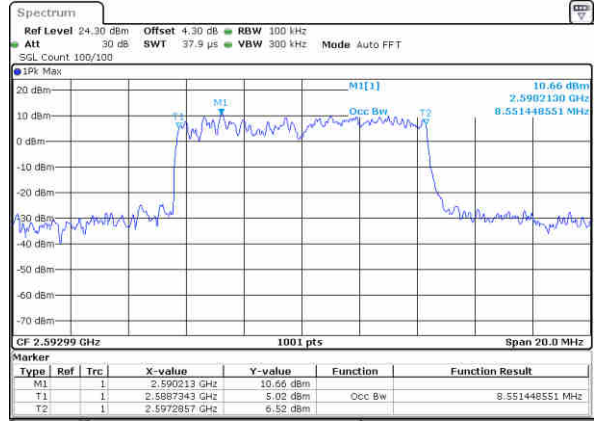
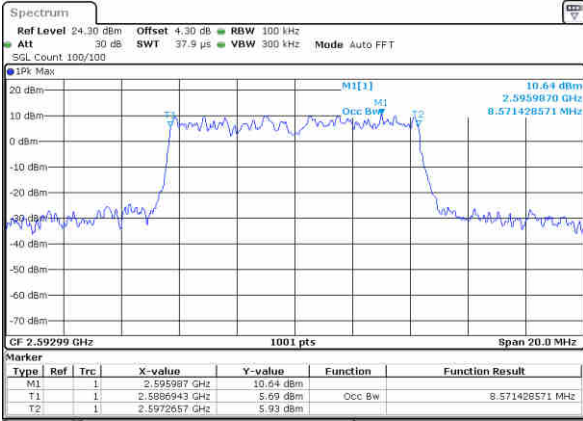
FR1 n41 / 10MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 13_JAN_2021 21:56:57

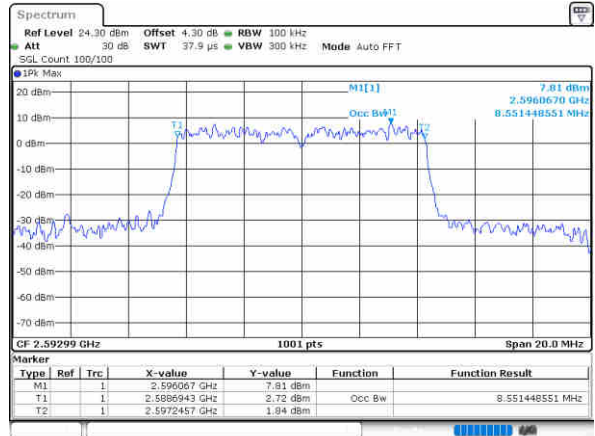
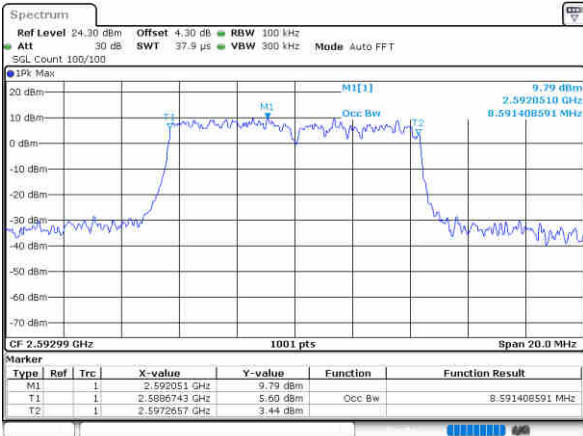
Date: 13_JAN_2021 21:56:43

64QAM

256QAM

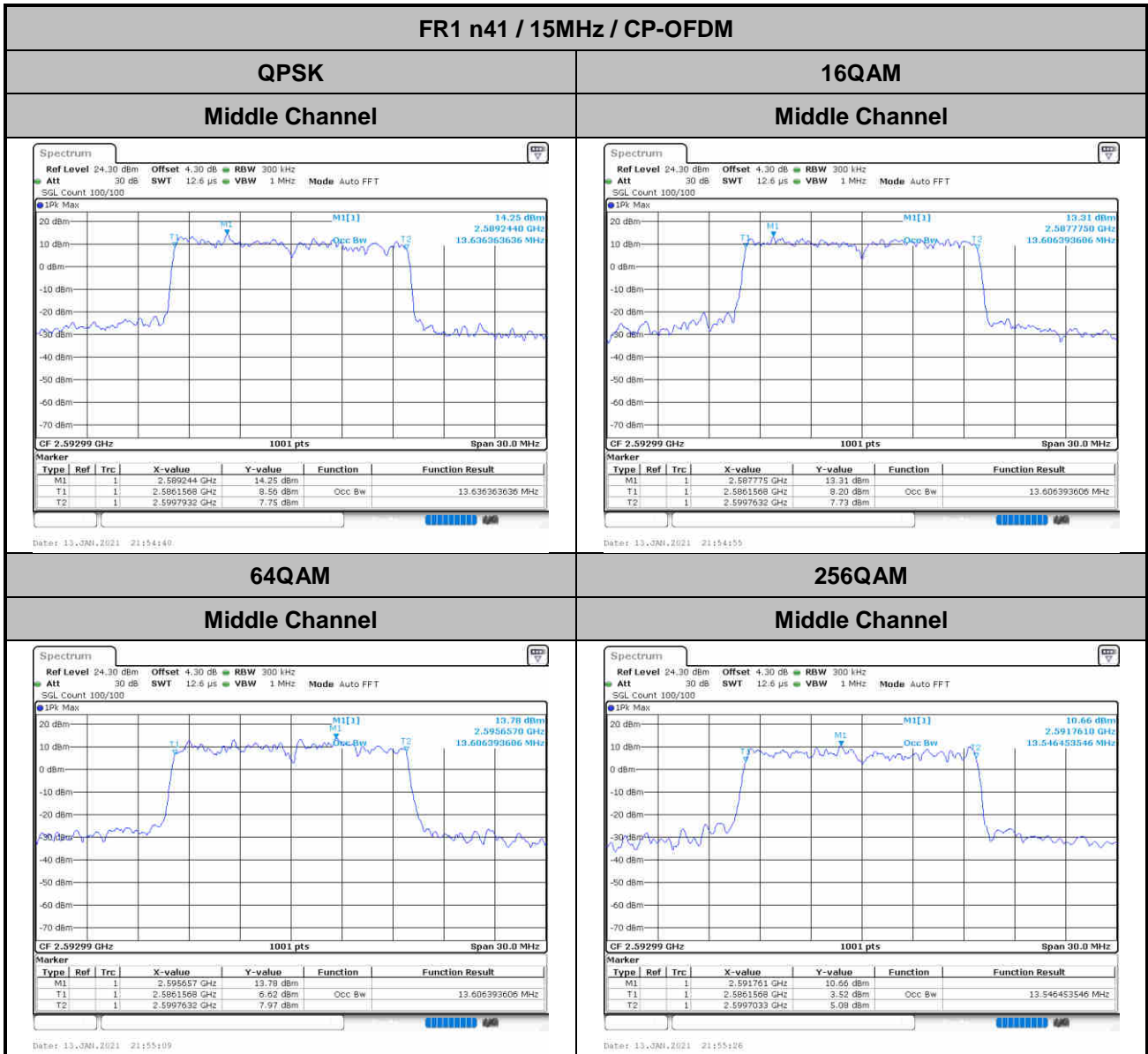
Middle Channel

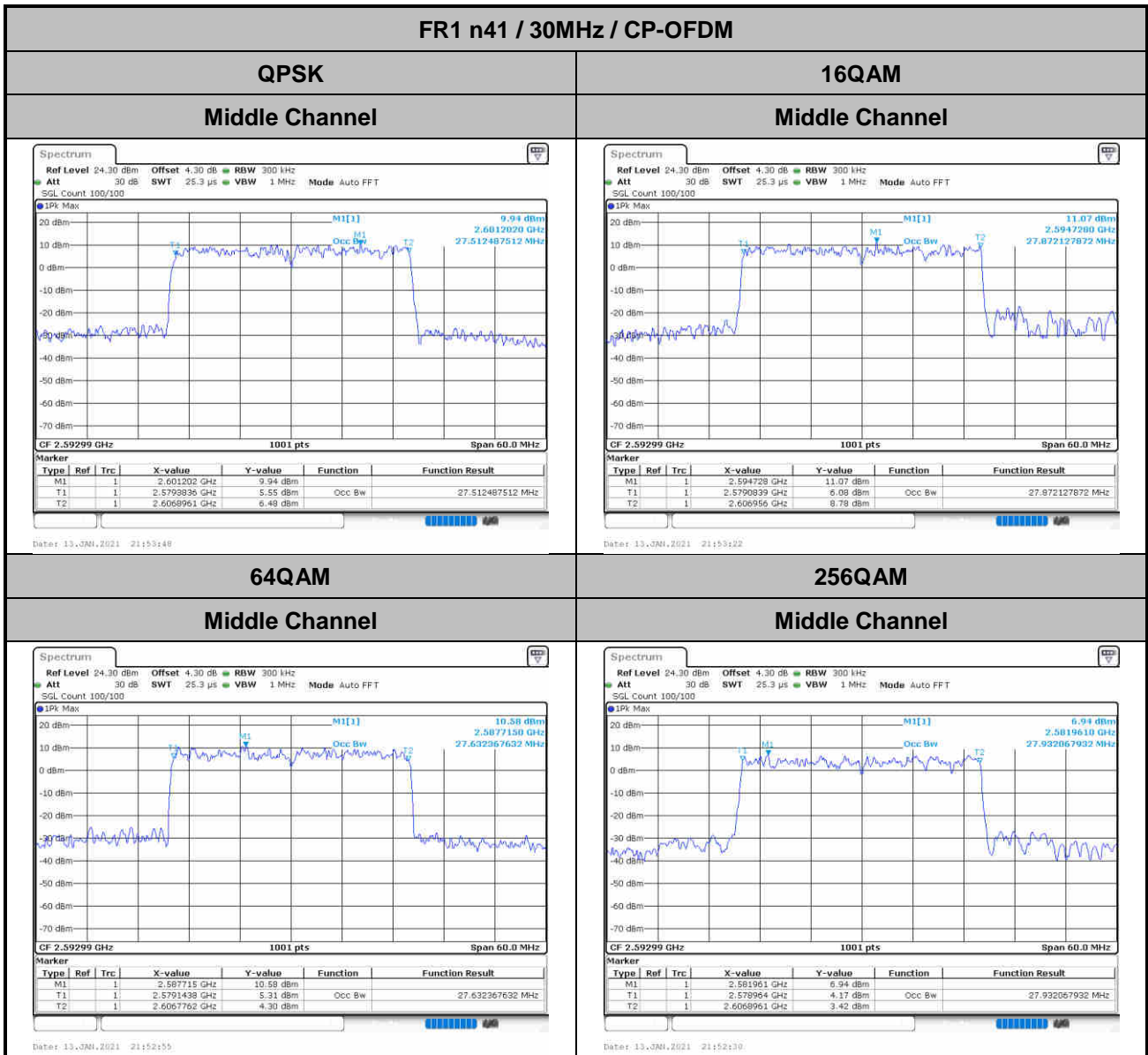
Middle Channel

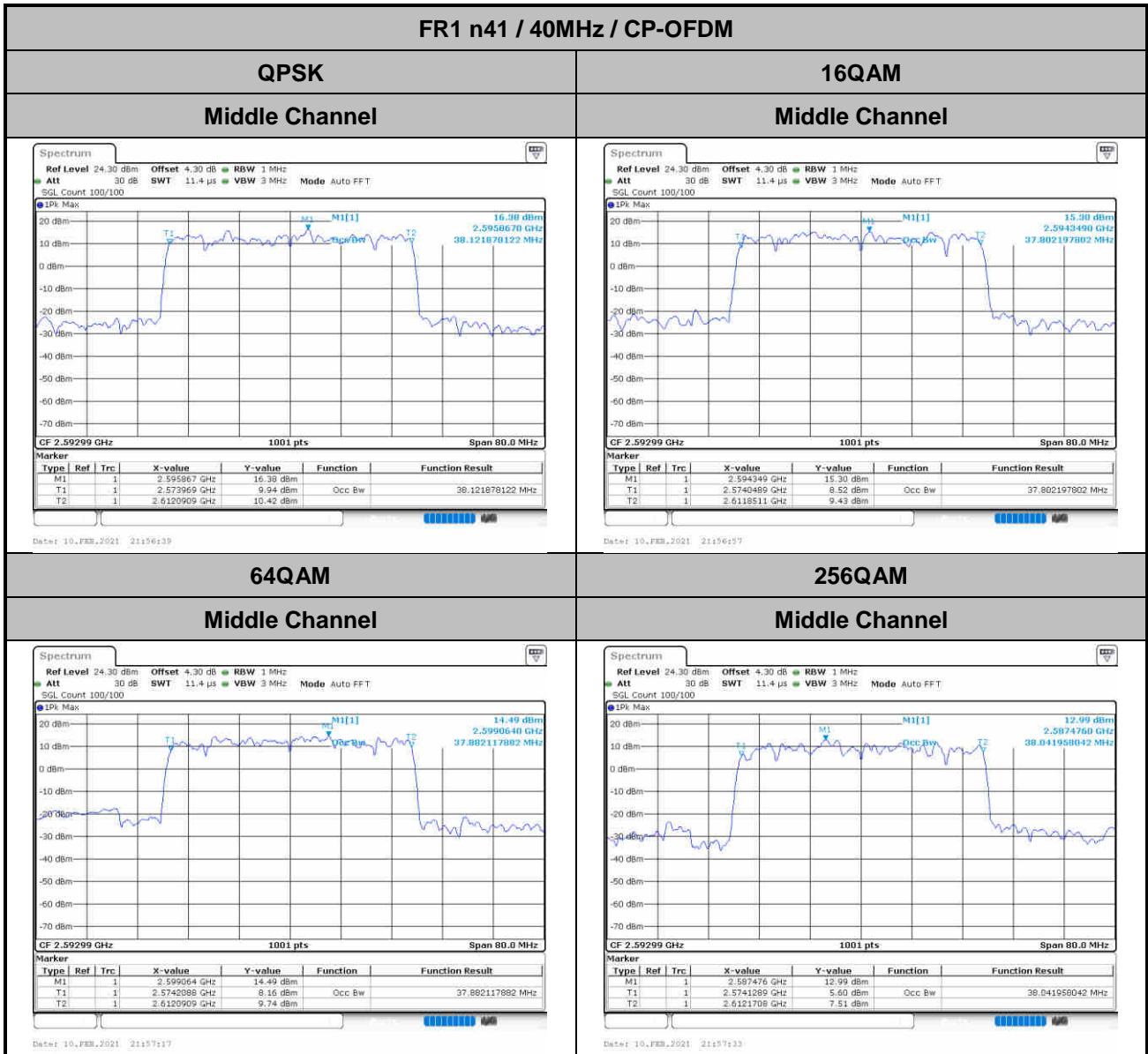


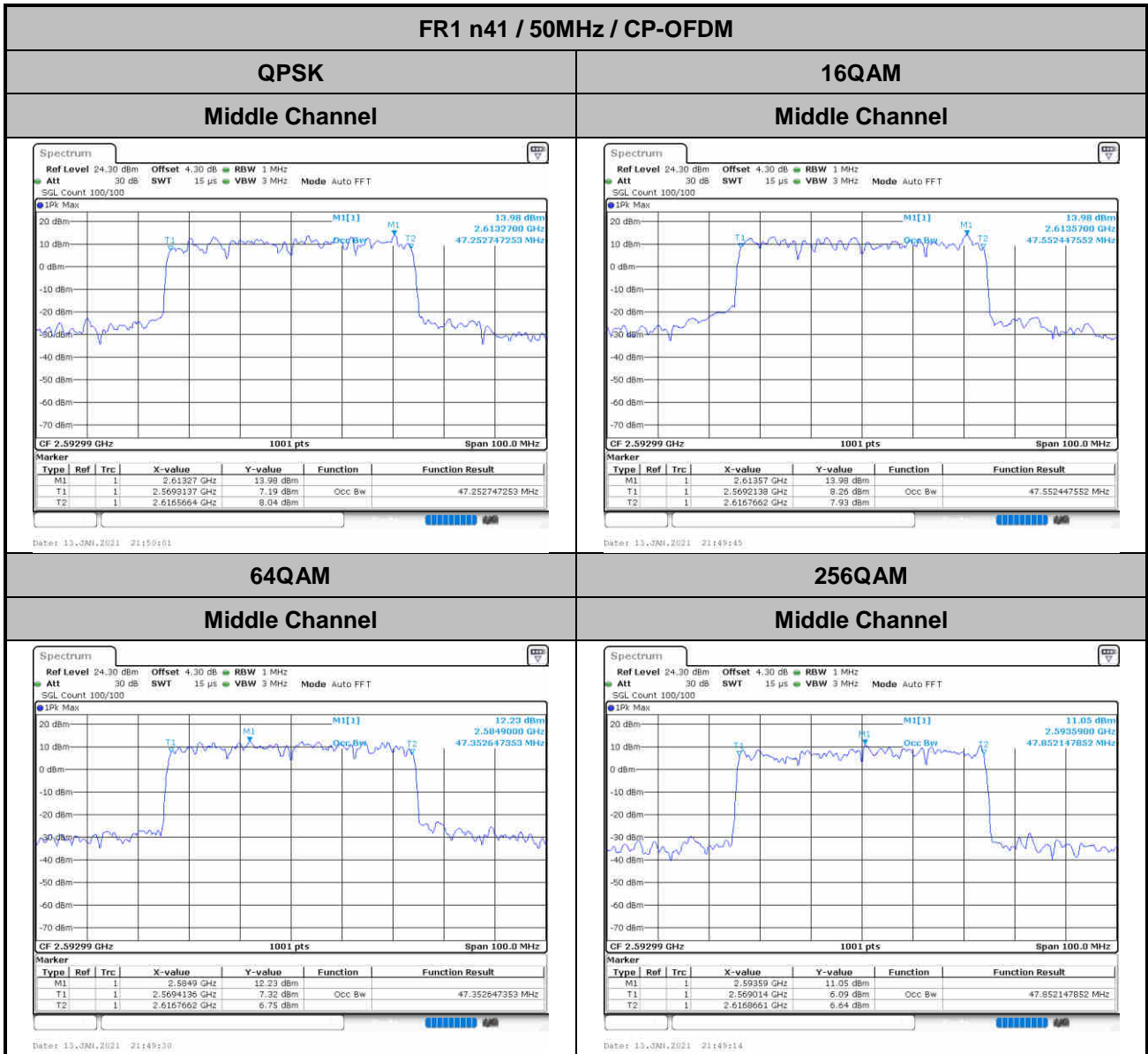
Date: 13_JAN_2021 21:56:26

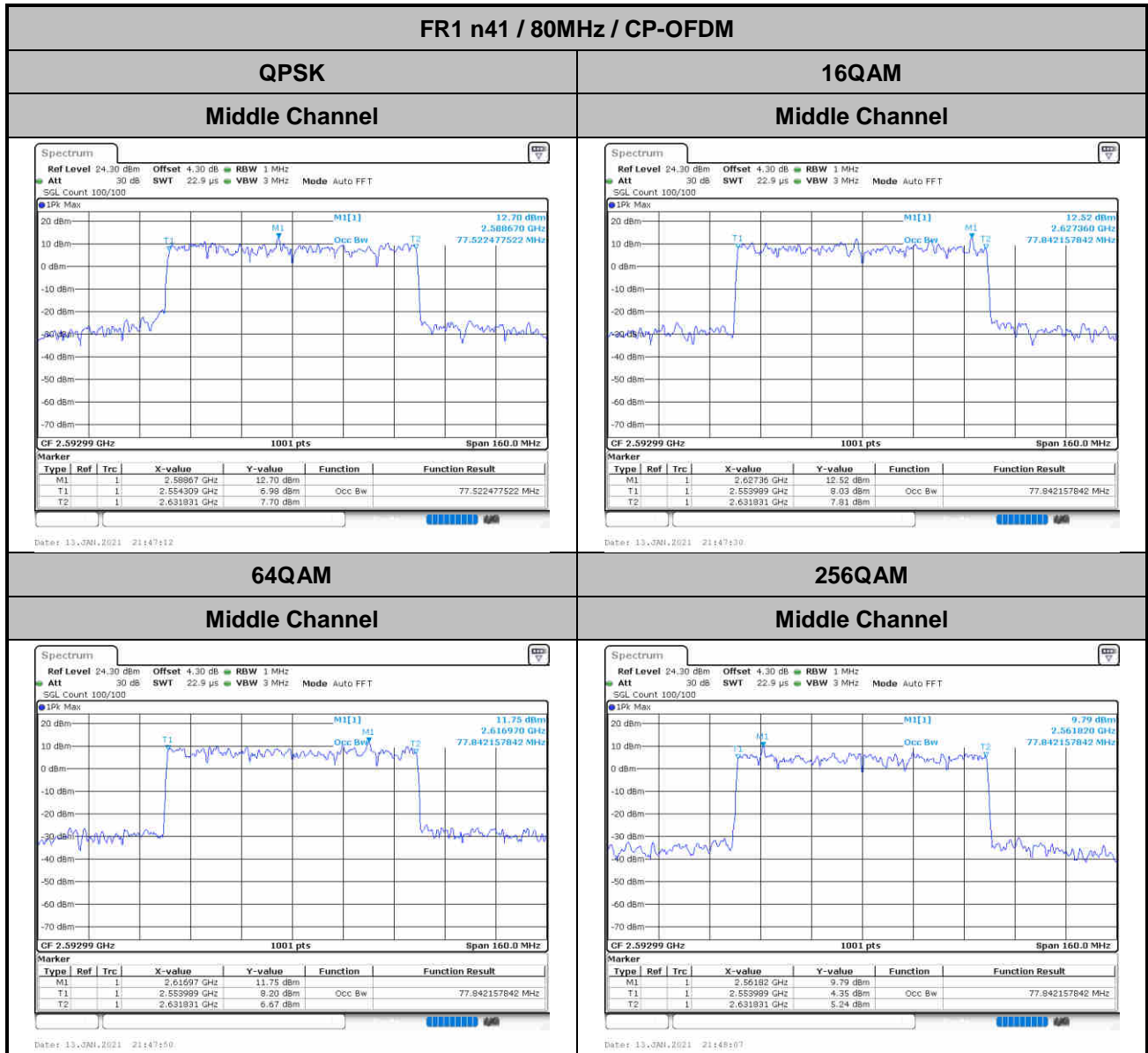
Date: 13_JAN_2021 21:56:07





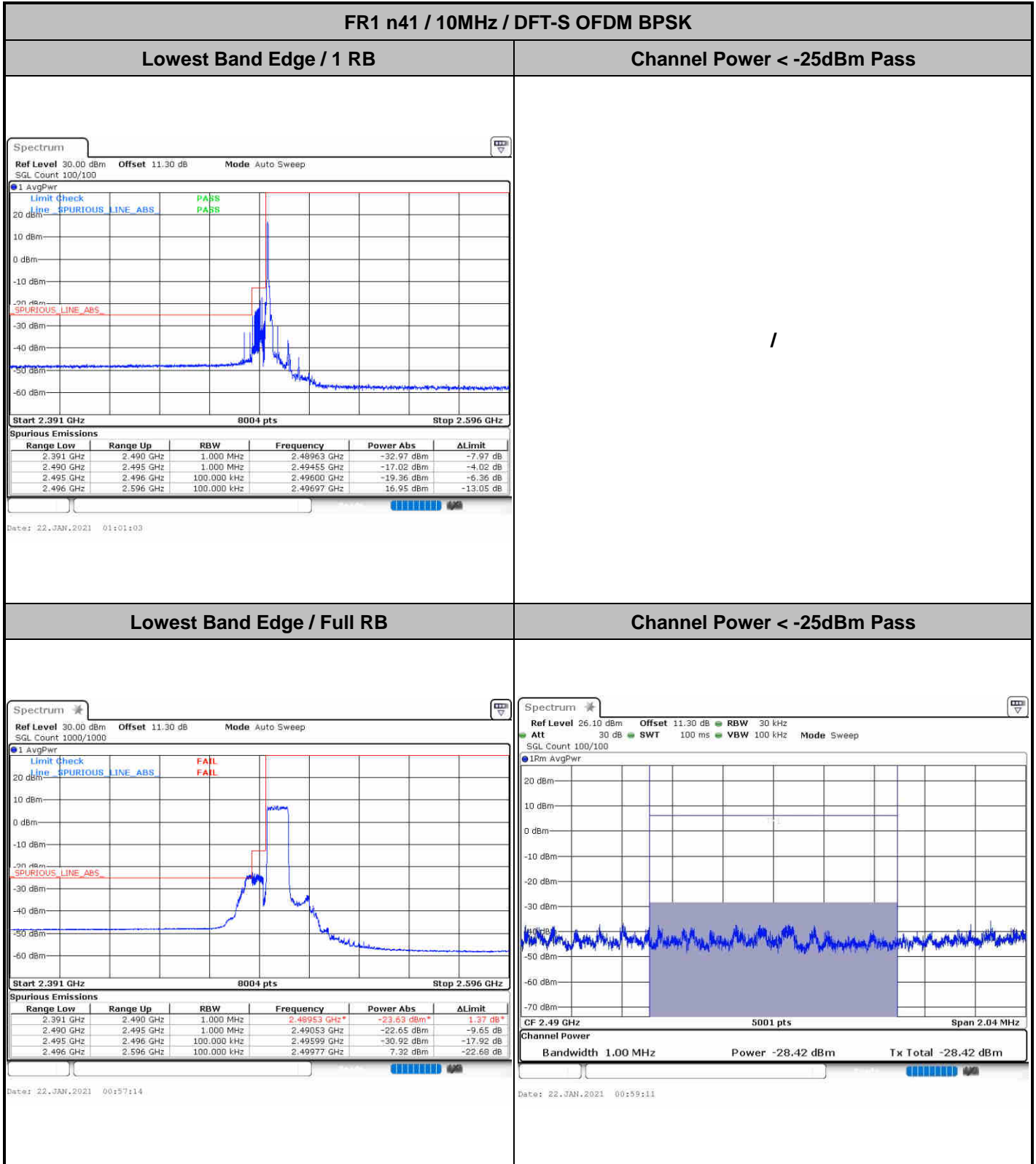








Conducted Band Edge

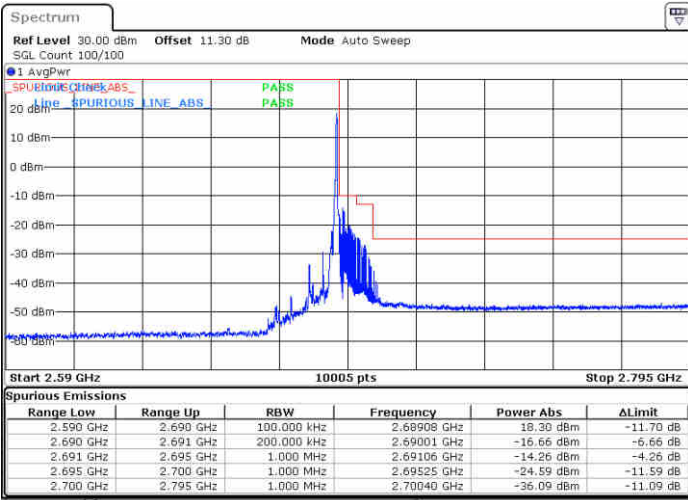




FR1 n41 / 10MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Date: 22.JAN.2021 01:04:51

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



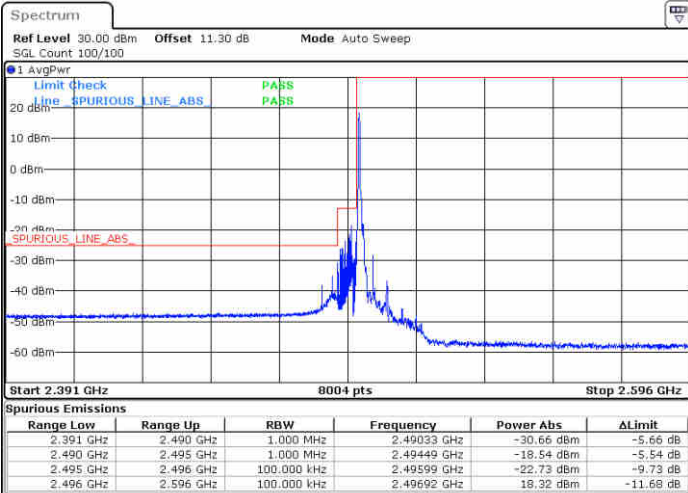
Date: 22.JAN.2021 01:03:59



FR1 n41 / 10MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

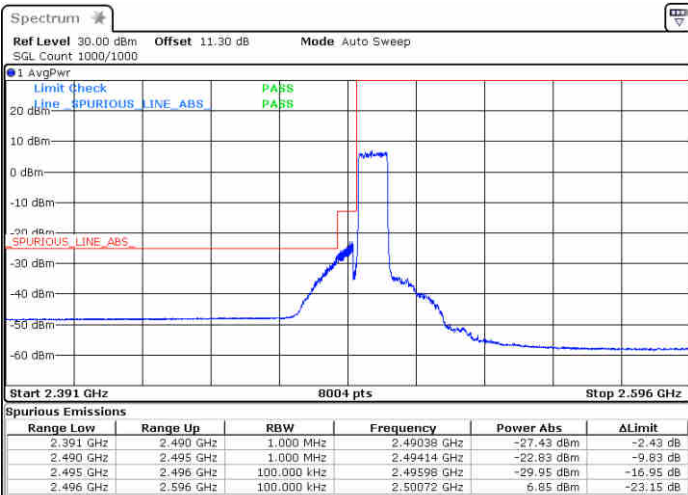
Channel Power < -25dBm Pass



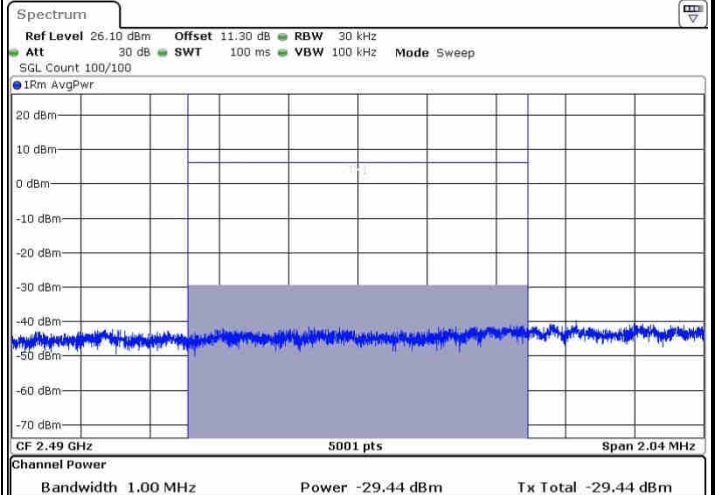
Date: 22.JAN.2021 01:00:49

Lowest Band Edge / Full RB

Channel Power < -25dBm Pass



Date: 22.JAN.2021 00:51:46



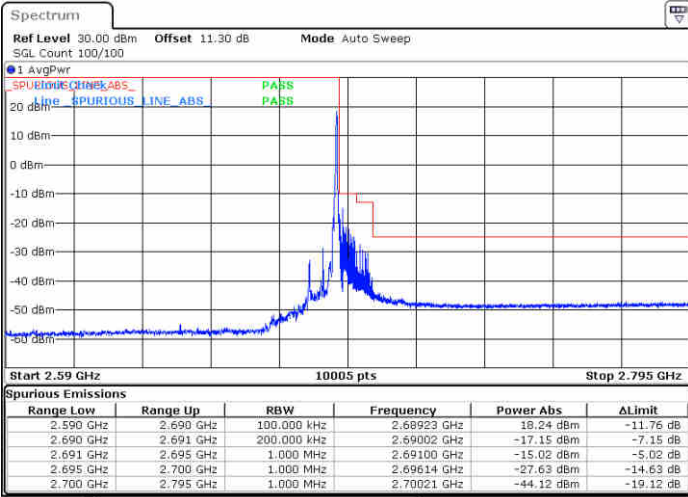
Date: 22.JAN.2021 00:59:30



FR1 n41 / 10MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

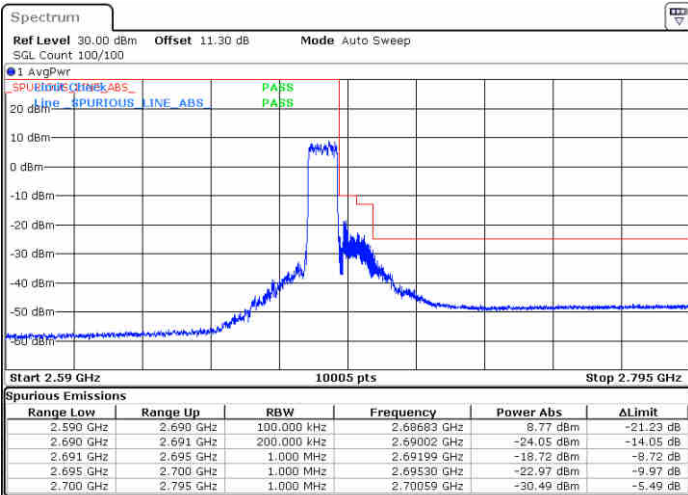
Channel Power < -13dBm Pass



Date: 22.JAN.2021 01:04:37

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



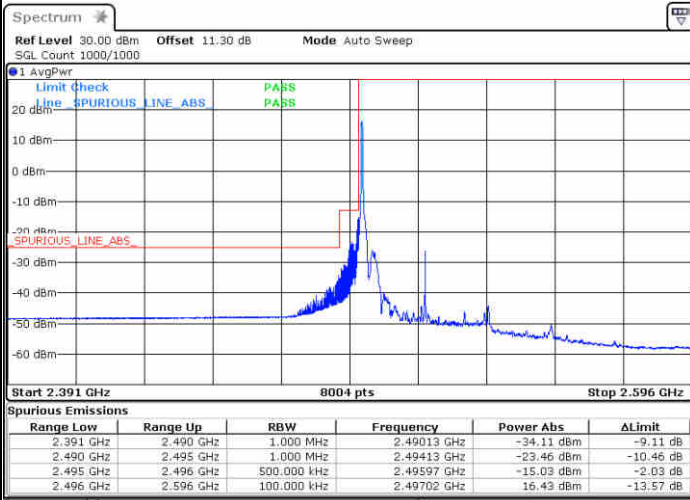
Date: 22.JAN.2021 01:04:19



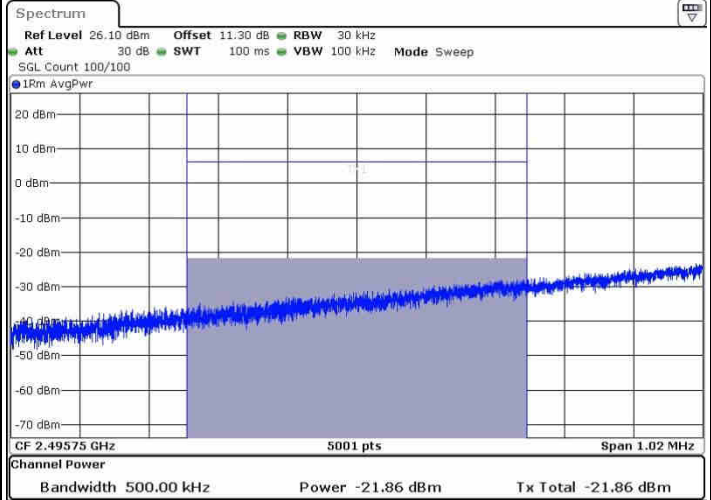
FR1 n41 / 40MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



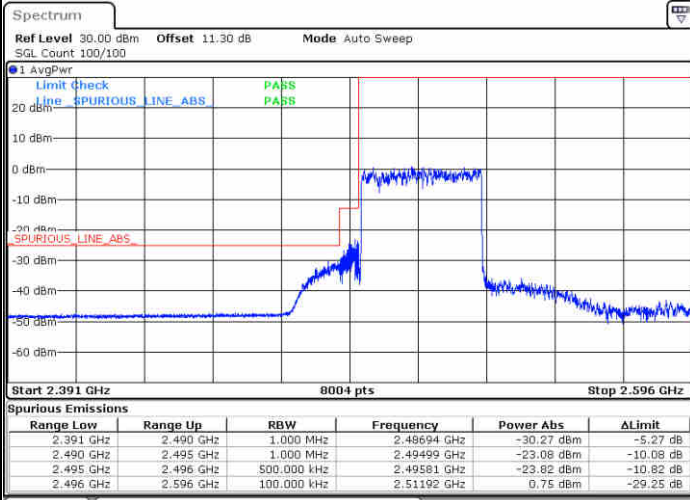
Date: 22.JAN.2021 00:30:00



Date: 22.JAN.2021 00:35:18

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



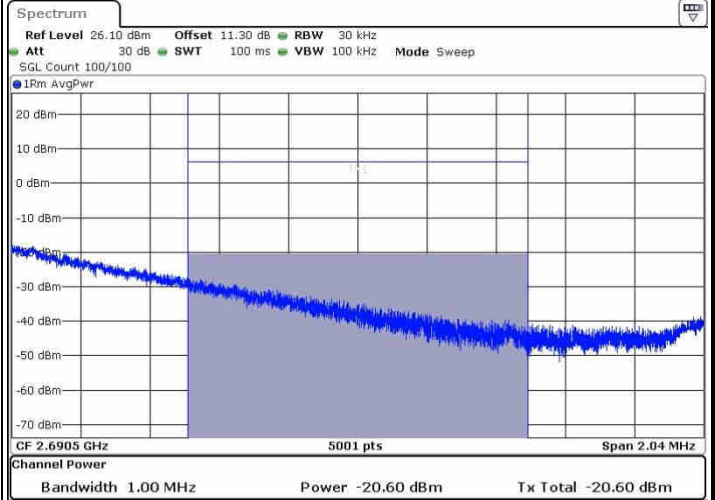
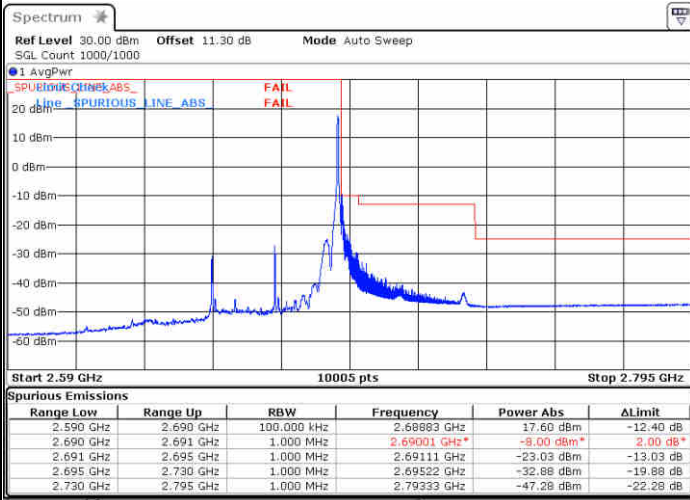
Date: 22.JAN.2021 00:28:41



FR1 n41 / 40MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

Channel Power < -10dBm Pass

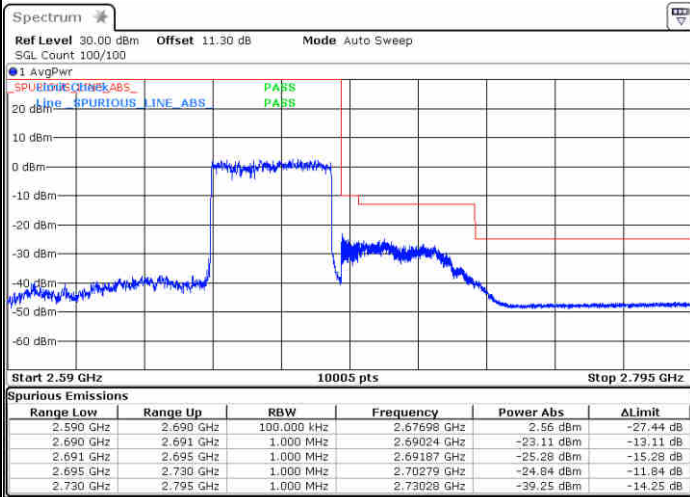


Date: 10.FEB.2021 22:07:47

Date: 10.FEB.2021 22:12:33

Highest Band Edge / Full RB

Channel Power < -10dBm Pass



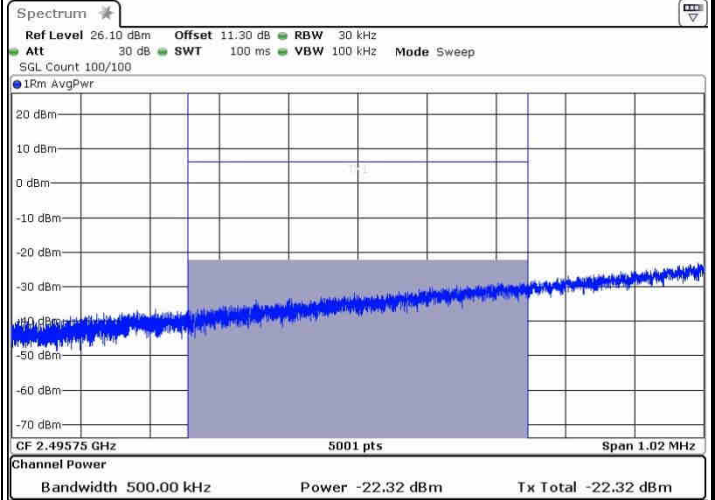
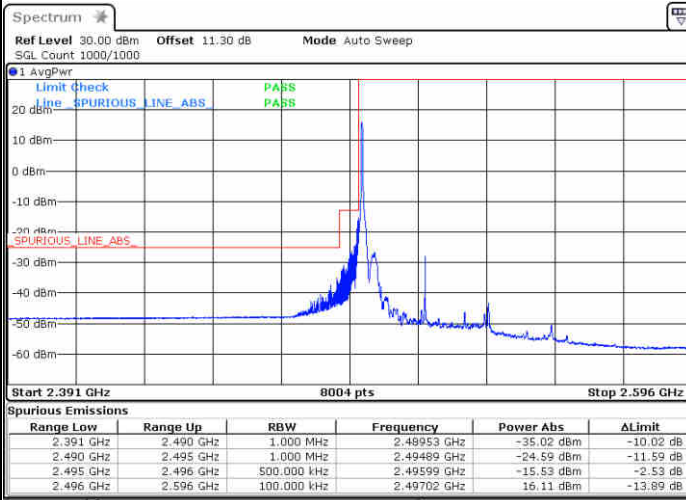
Date: 10.FEB.2021 22:06:12



FR1 n41 / 40MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass

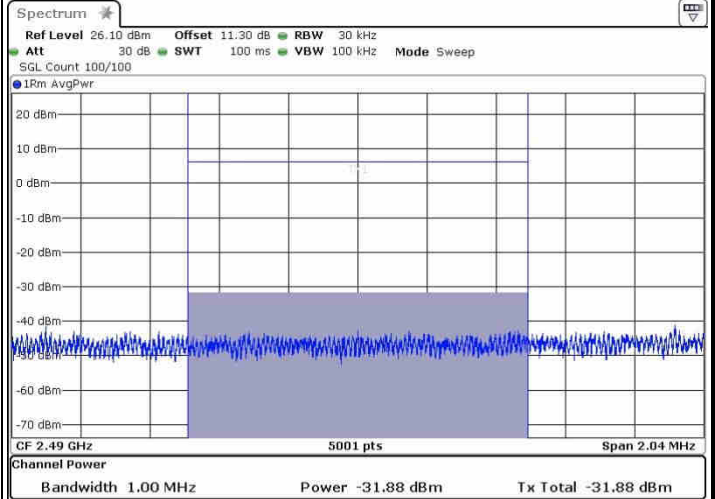
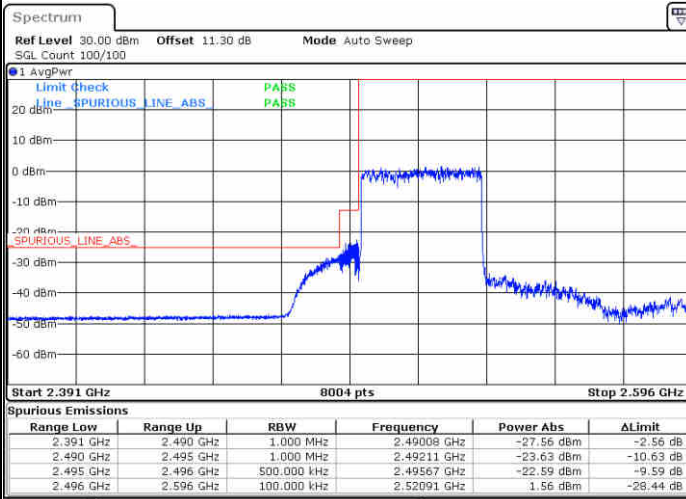


Date: 22.JAN.2021 00:30:42

Date: 22.JAN.2021 00:34:50

Lowest Band Edge / Full RB

Channel Power < -25dBm Pass



Date: 22.JAN.2021 00:28:26

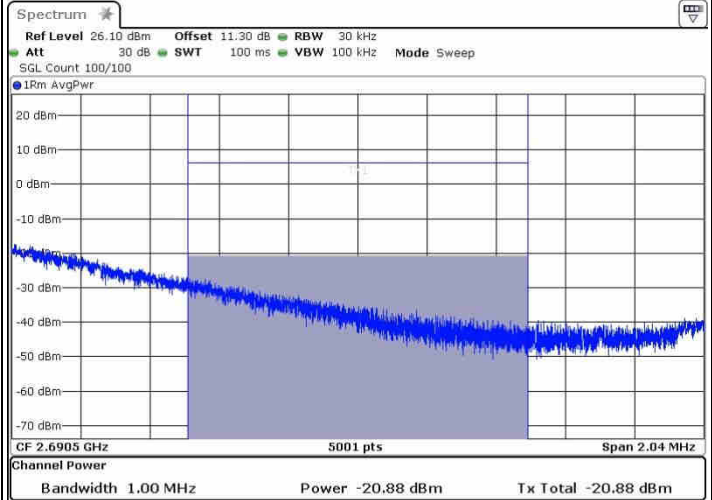
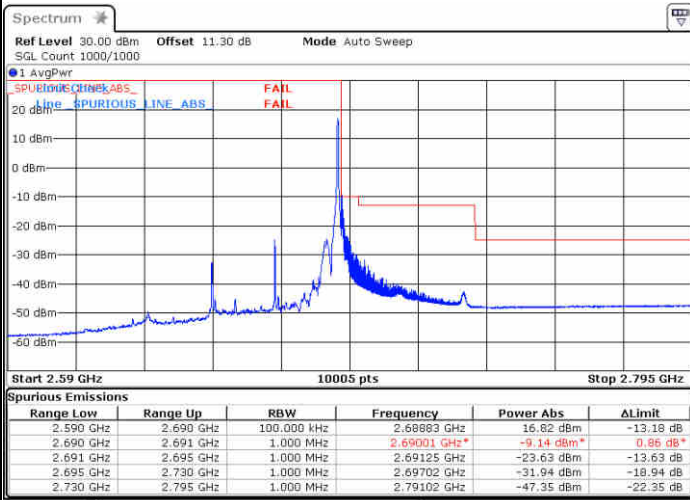
Date: 10.FEB.2021 22:01:03



FR1 n41 / 40MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

Channel Power < -10dBm Pass

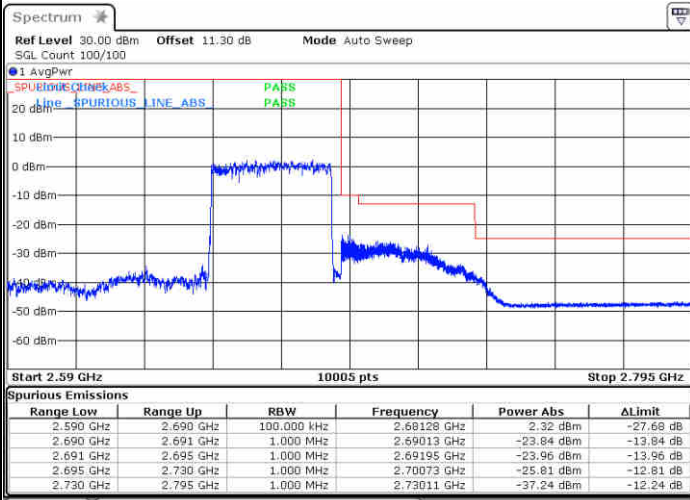


Date: 10.FEB.2021 22:11:23

Date: 10.FEB.2021 22:12:09

Highest Band Edge / Full RB

Channel Power < -10dBm Pass



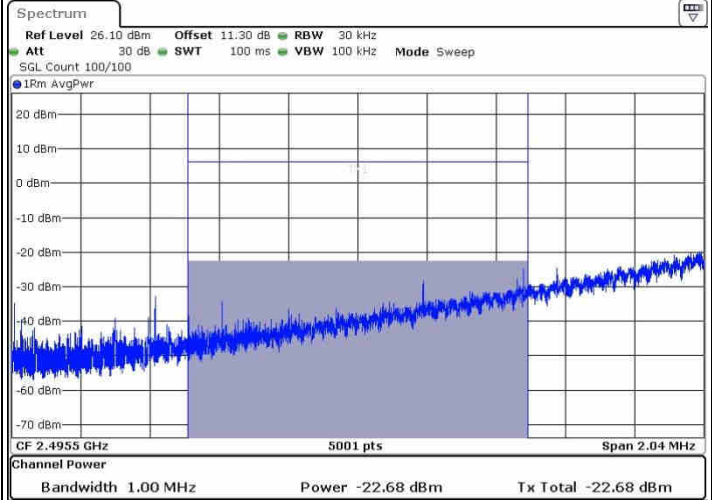
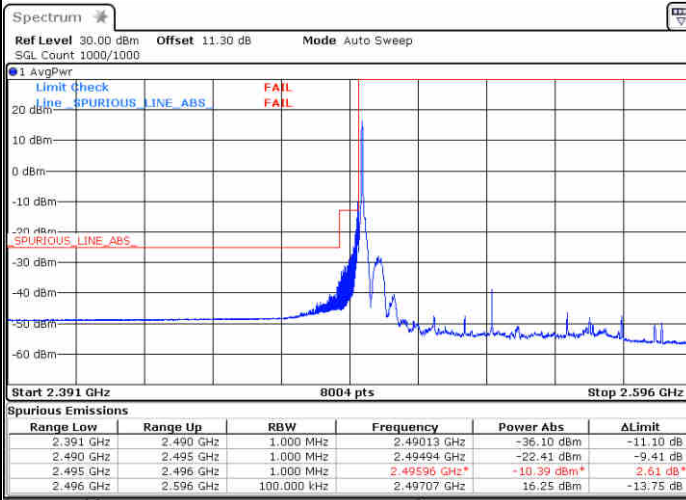
Date: 10.FEB.2021 22:04:49



FR1 n41 / 80MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass

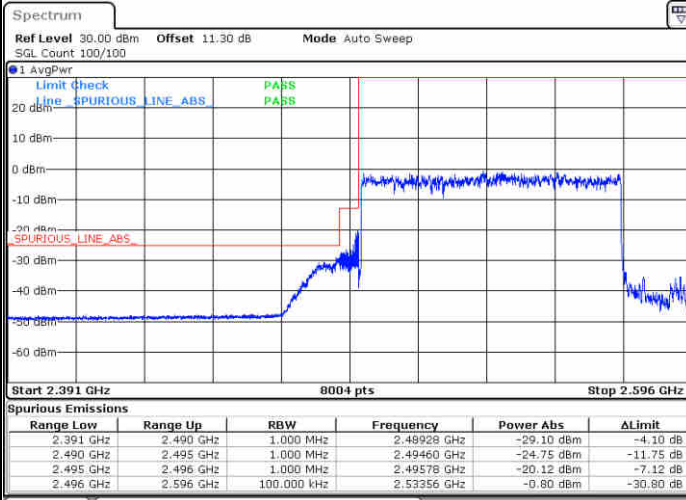


Date: 16.JAN.2021 03:04:18

Date: 16.JAN.2021 03:36:41

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



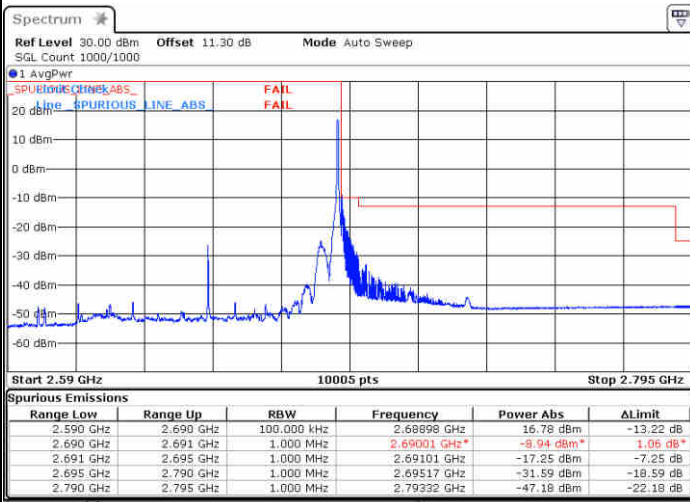
Date: 16.JAN.2021 03:18:51



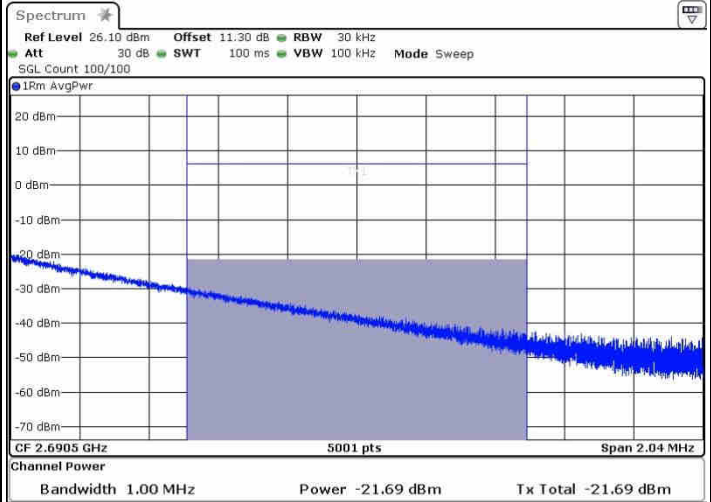
FR1 n41 / 80MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

Channel Power < -10dBm Pass



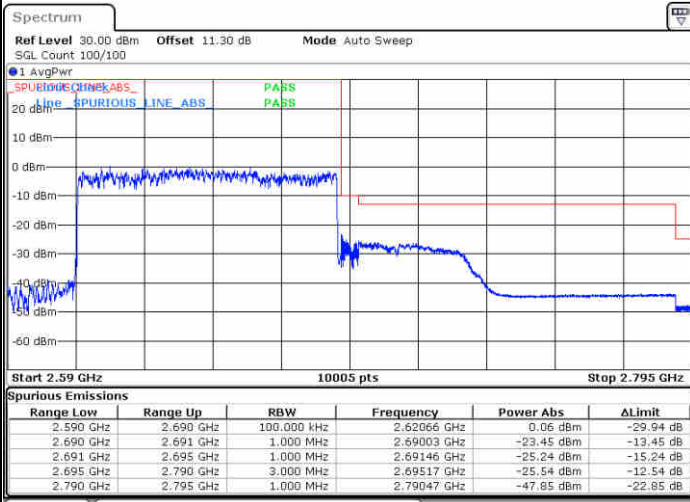
Date: 10.FEB.2021 22:35:09



Date: 16.JAN.2021 03:27:10

Highest Band Edge / Full RB

Channel Power < -10dBm Pass



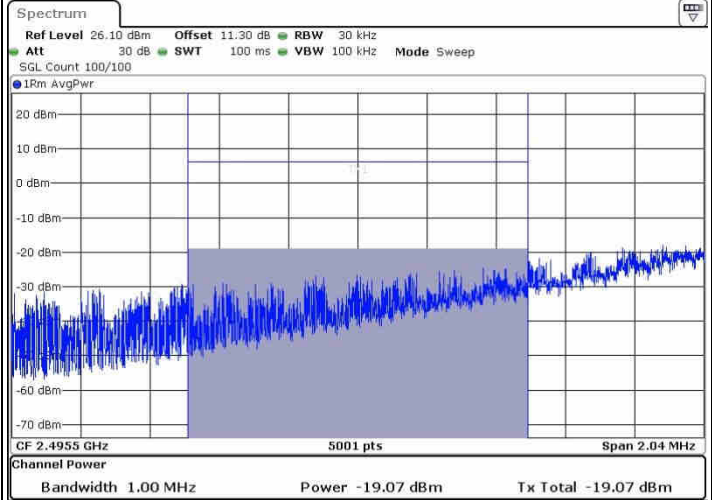
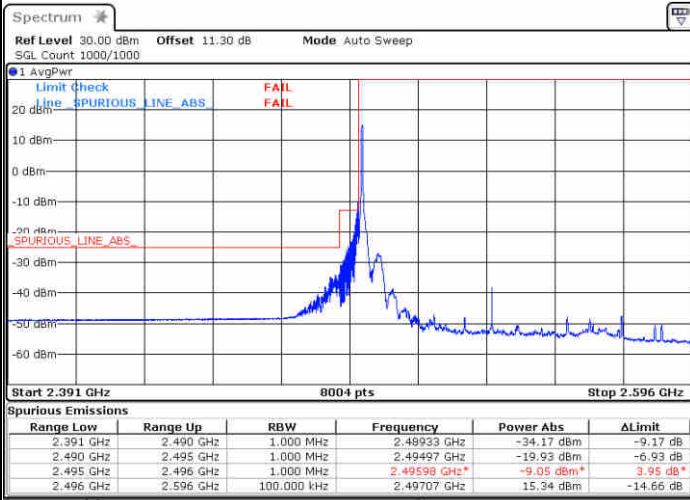
Date: 16.JAN.2021 03:19:58



FR1 n41 / 80MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass

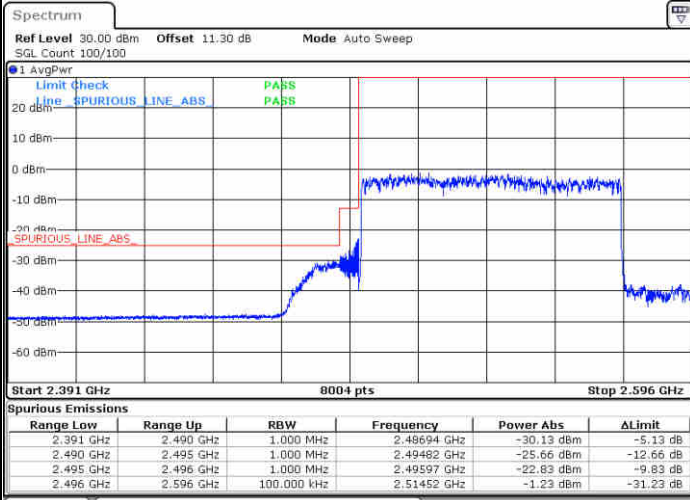


Date: 16.JAN.2021 03:07:33

Date: 16.JAN.2021 03:32:53

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



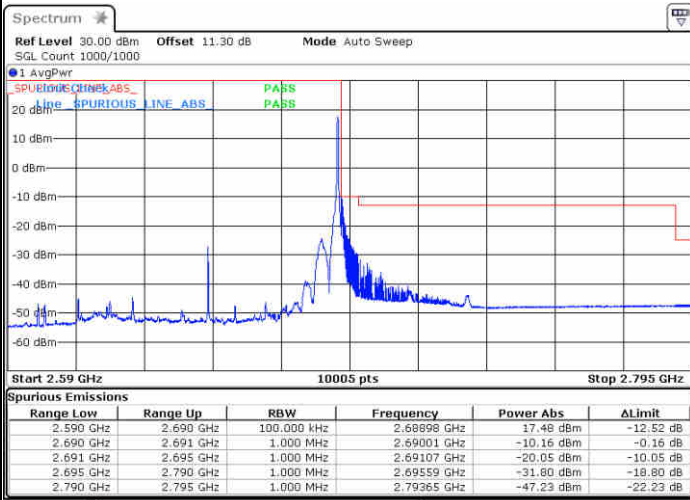
Date: 16.JAN.2021 03:15:11



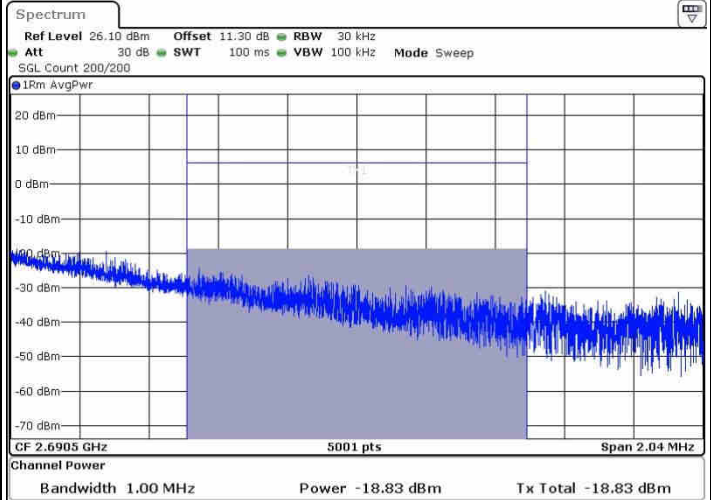
FR1 n41 / 80MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

Channel Power < -10dBm Pass



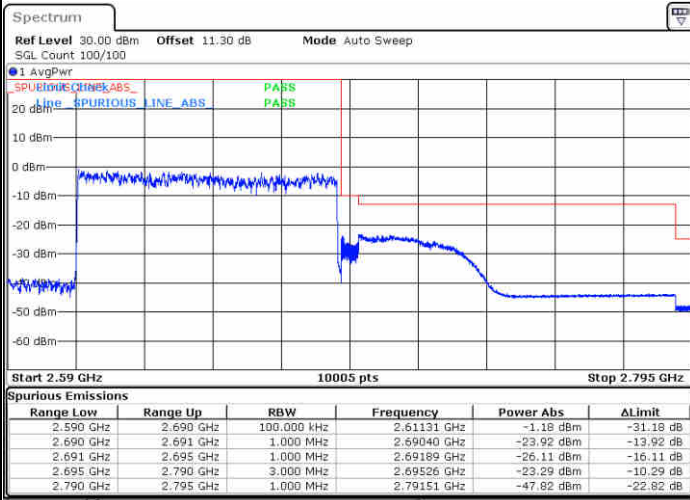
Date: 10.FEB.2021 22:33:25



Date: 16.JAN.2021 03:30:00

Highest Band Edge / Full RB

Channel Power < -10dBm Pass



Date: 16.JAN.2021 03:20:16

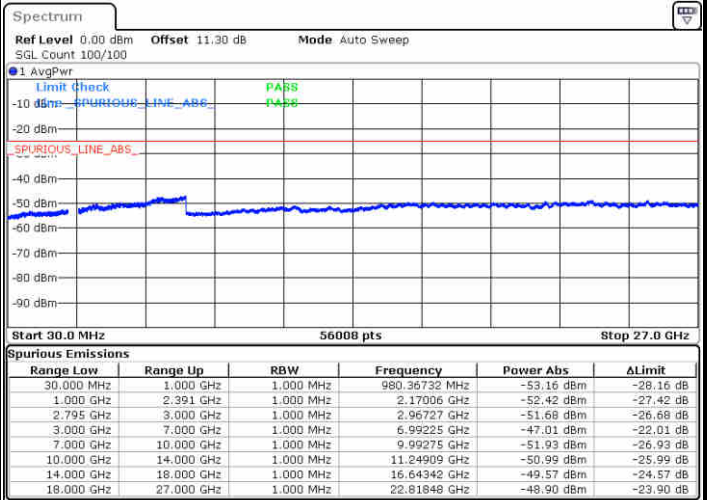
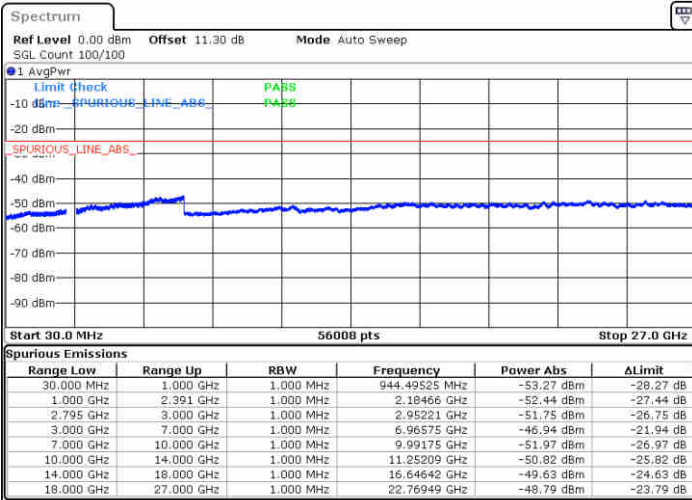


Conducted Spurious Emission

FR1 n41 / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

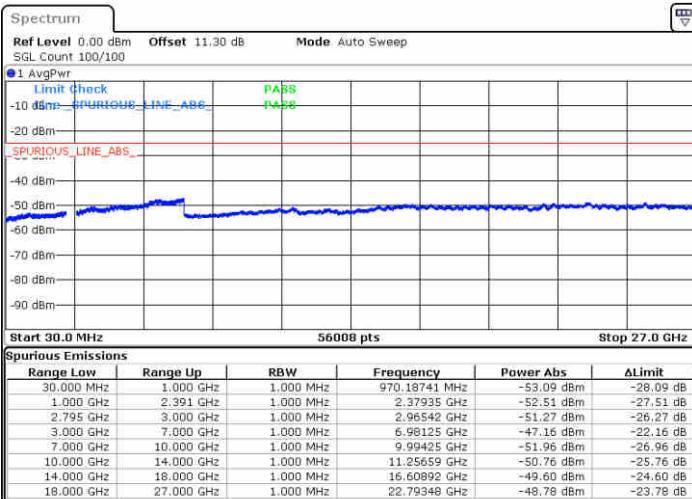
Middle Channel / 1RB



Date: 22.JAN.2021 00:16:11

Date: 22.JAN.2021 00:19:39

Highest Channel / 1RB



Date: 22.JAN.2021 00:22:00