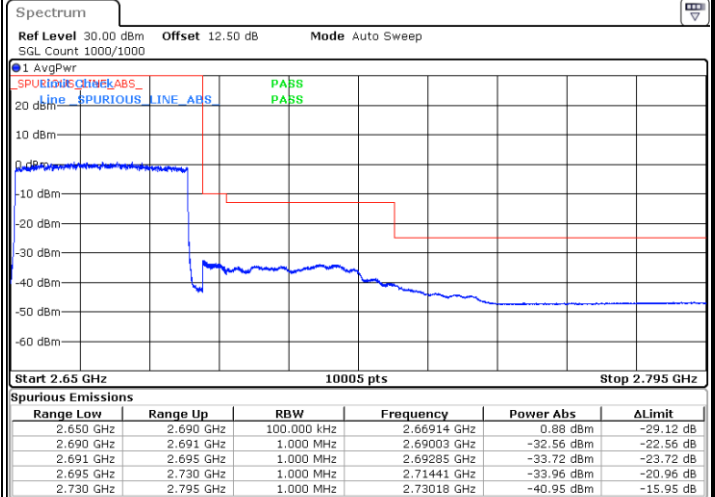
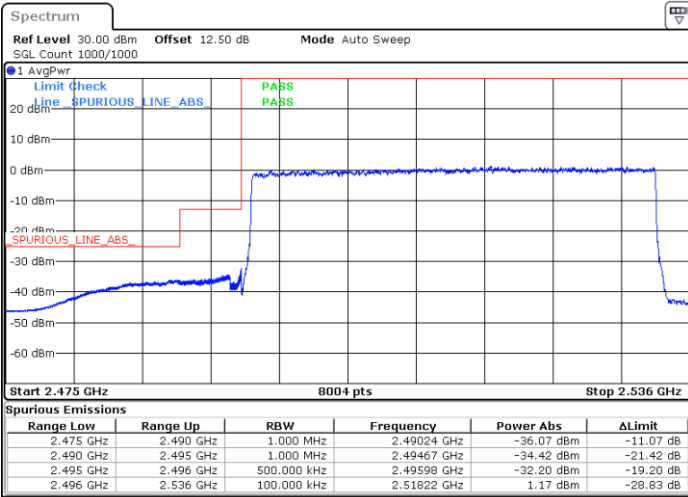




FR1 n41 / 40MHz / DFT-S OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19.DEC.2020 17:17:31

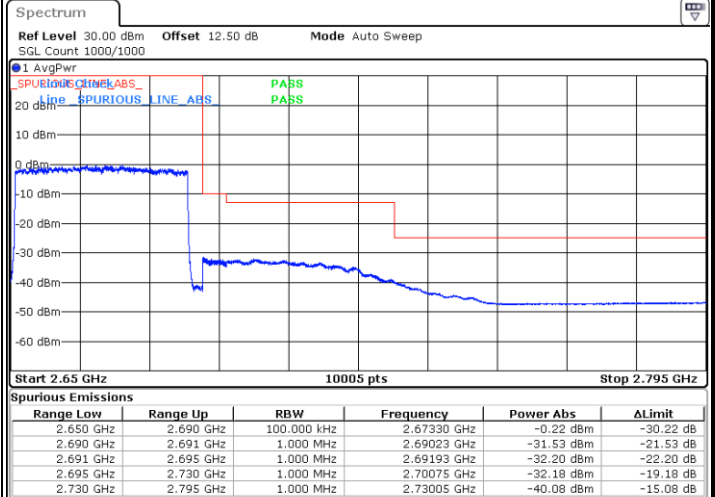
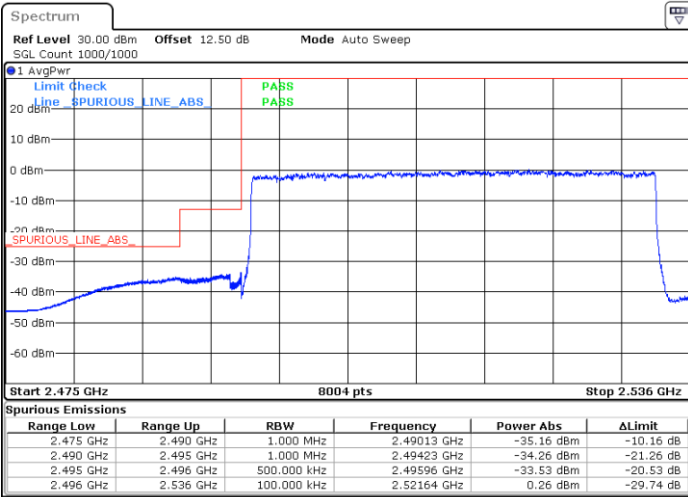
Date: 19.DEC.2020 17:24:37



FR1 n41 / 40MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 17:15:47

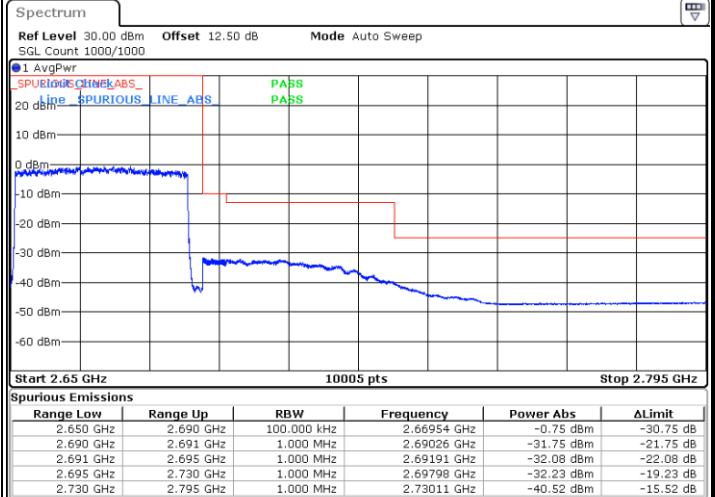
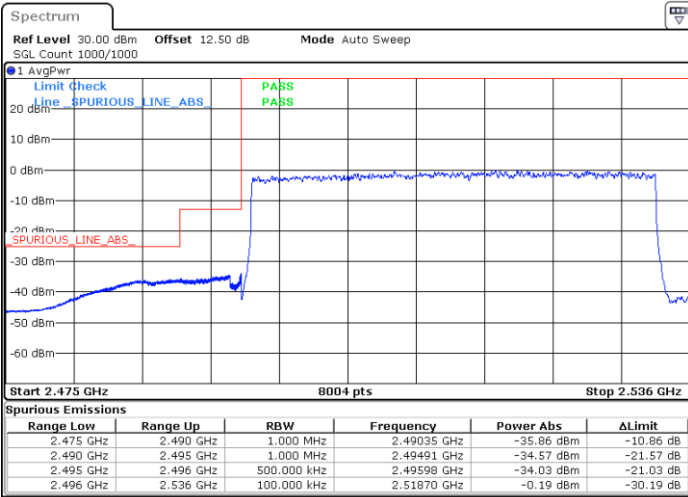
Date: 19,DEC.2020 17:25:47



FR1 n41 / 40MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 17:14:44

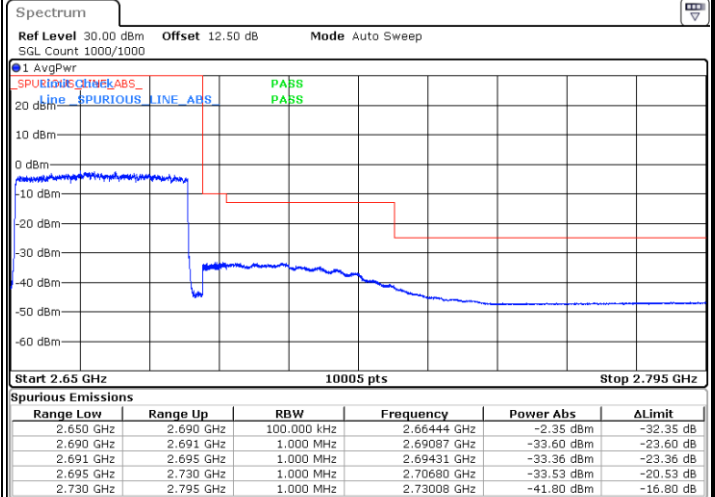
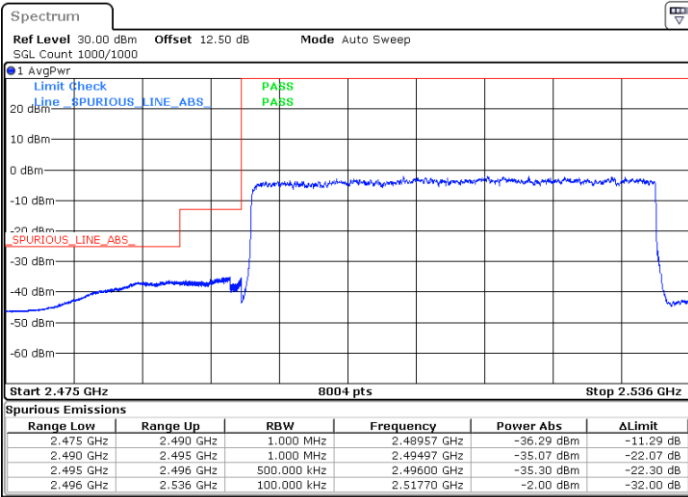
Date: 19,DEC.2020 17:26:53



FR1 n41 / 40MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19.DEC.2020 17:12:29

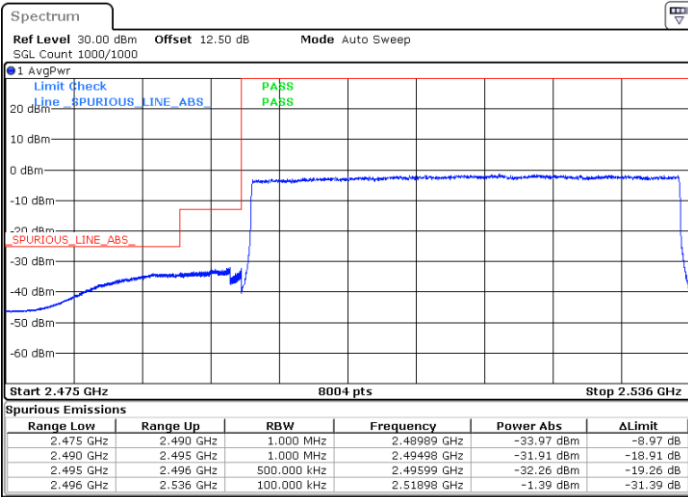
Date: 19.DEC.2020 17:28:06



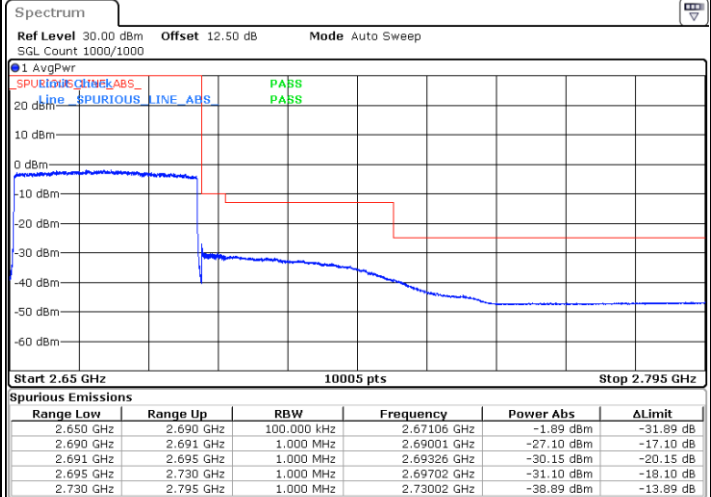
FR1 n41 / 40MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19.DEC.2020 17:20:16



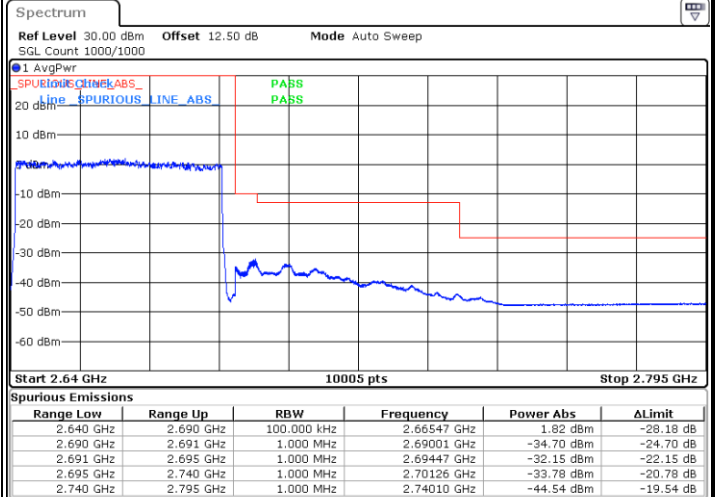
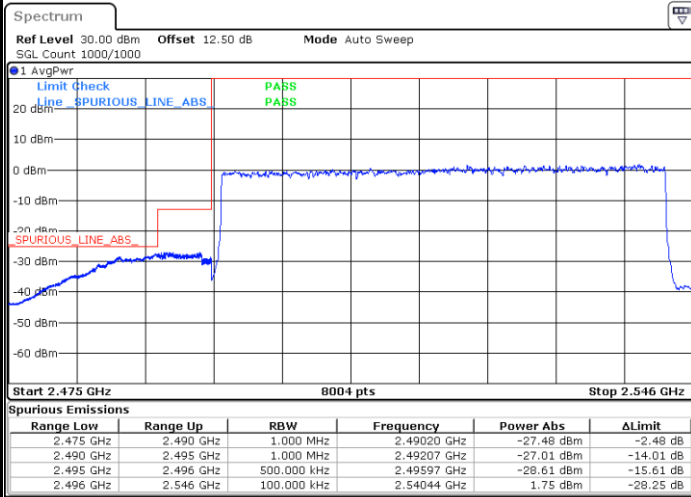
Date: 19.DEC.2020 17:22:08



FR1 n41 / 50MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 21, JAN. 2021 22:46:04

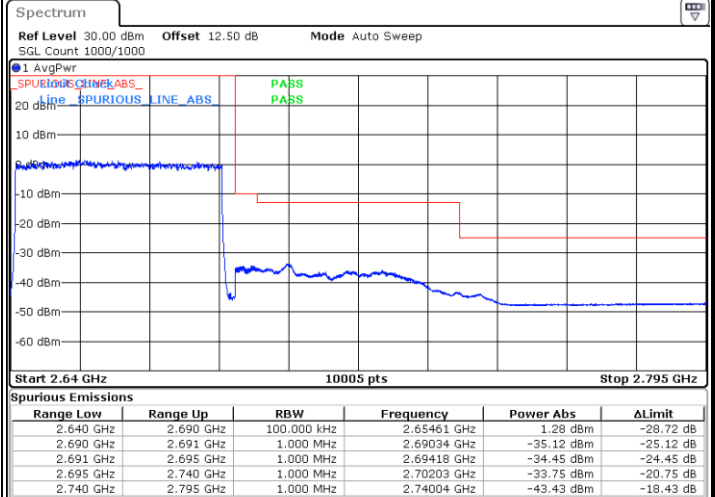
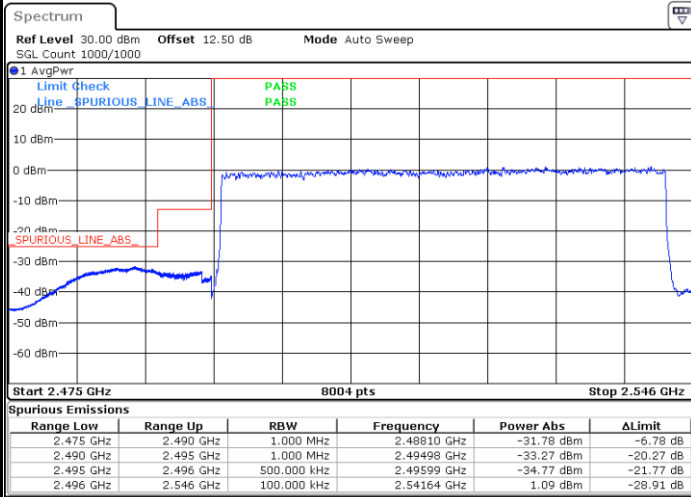
Date: 21, JAN. 2021 23:32:11



FR1 n41 / 50MHz / DFT-S OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 21, JAN. 2021 22:48:25

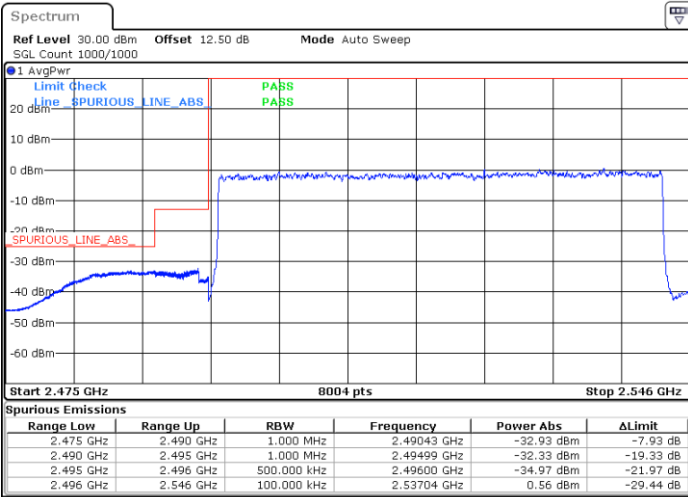
Date: 21, JAN. 2021 23:34:11



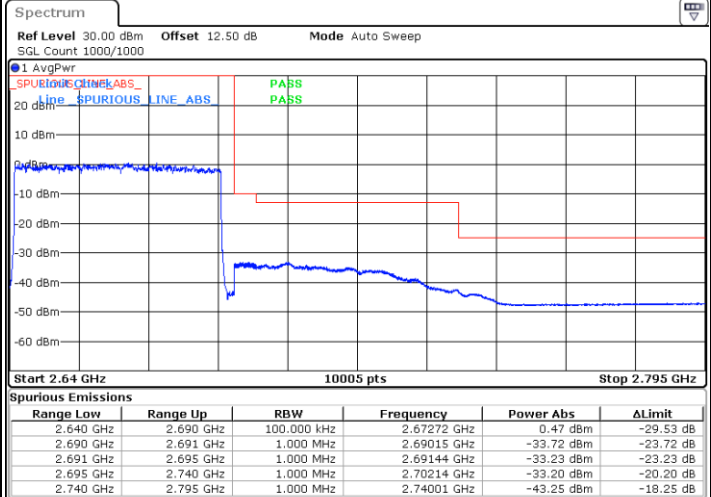
FR1 n41 / 50MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 21, JAN. 2021 22:50:43



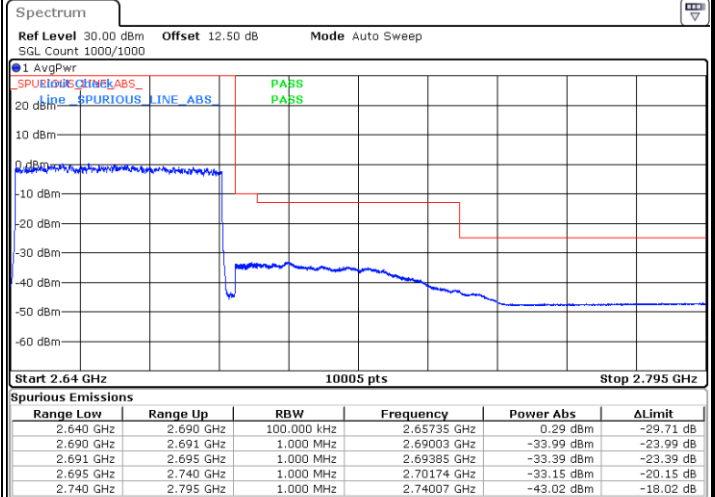
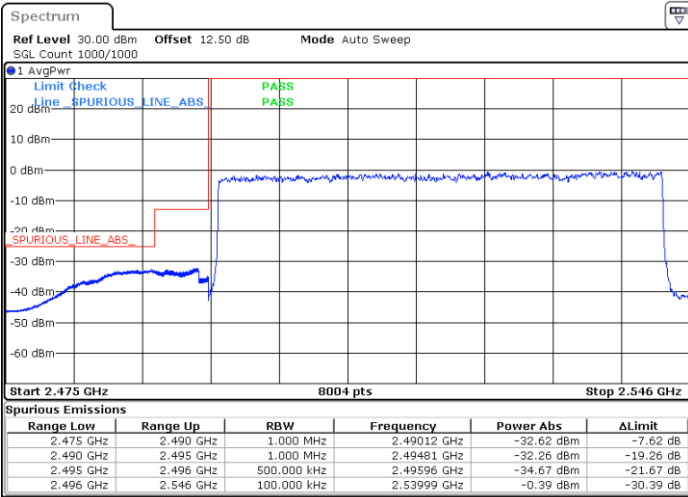
Date: 21, JAN. 2021 23:36:12



FR1 n41 / 50MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 21, JAN. 2021 22:53:50

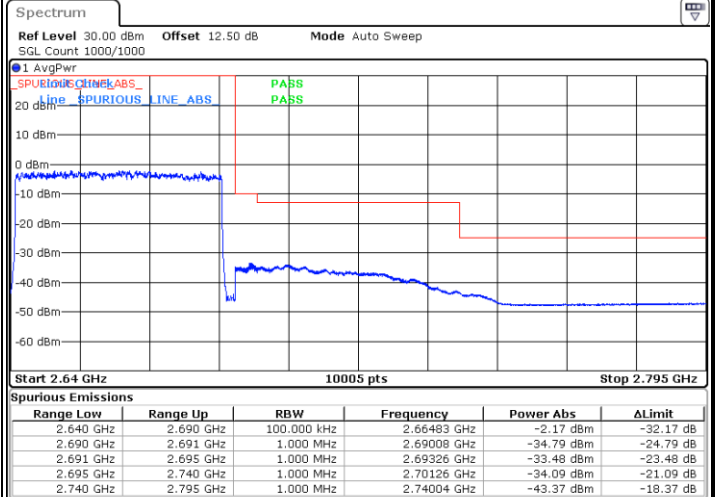
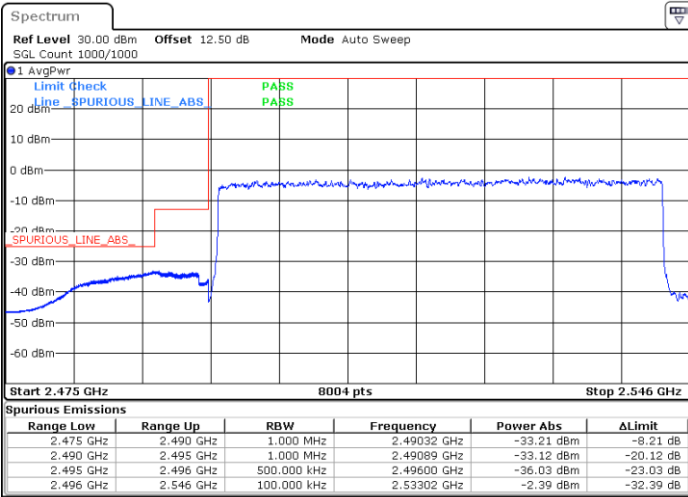
Date: 21, JAN. 2021 23:39:27



FR1 n41 / 50MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 21, JAN. 2021 22:56:51

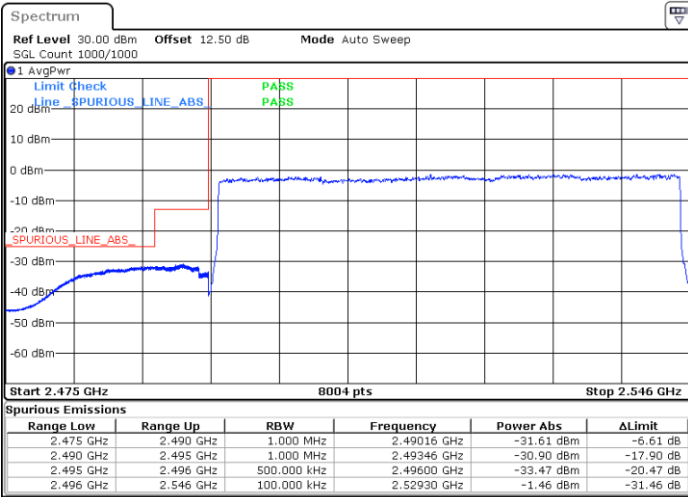
Date: 21, JAN. 2021 23:42:02



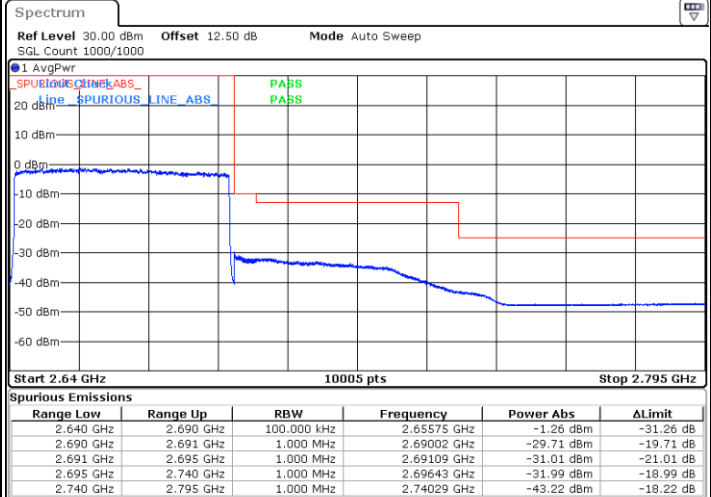
FR1 n41 / 50MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 21, JAN. 2021 22:43:12



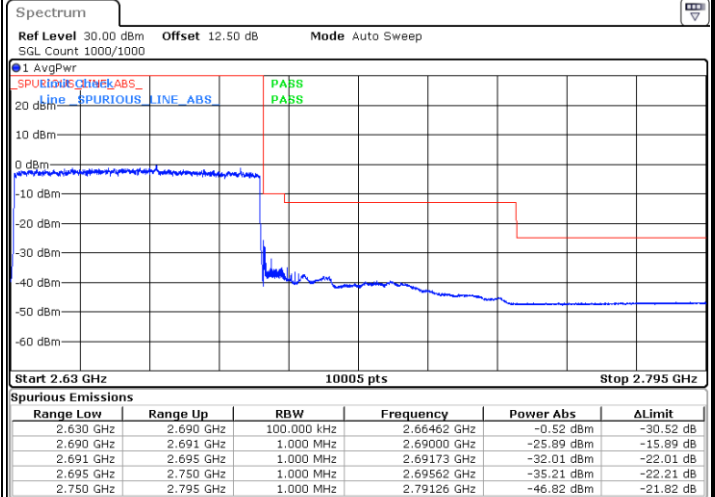
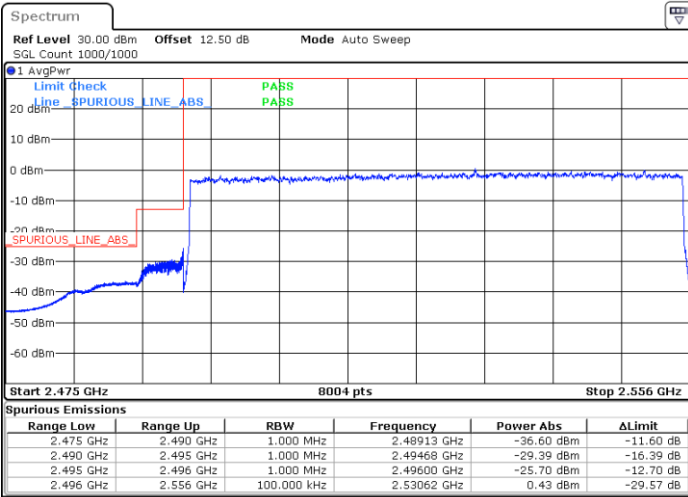
Date: 21, JAN. 2021 23:23:43



FR1 n41 / 60MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19, DEC. 2020 16:40:36

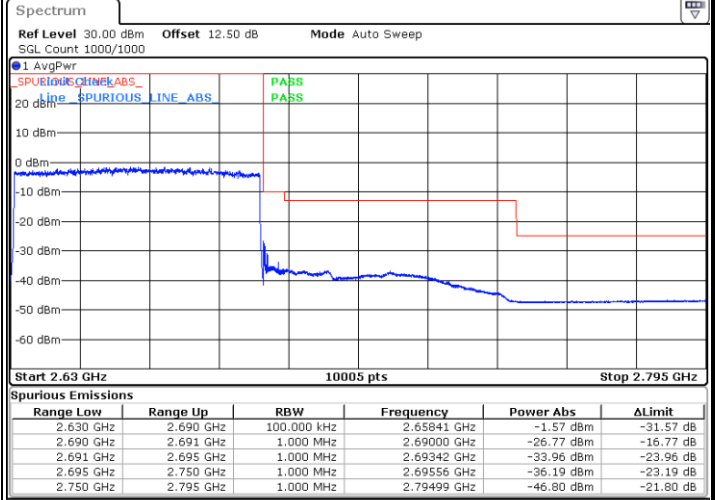
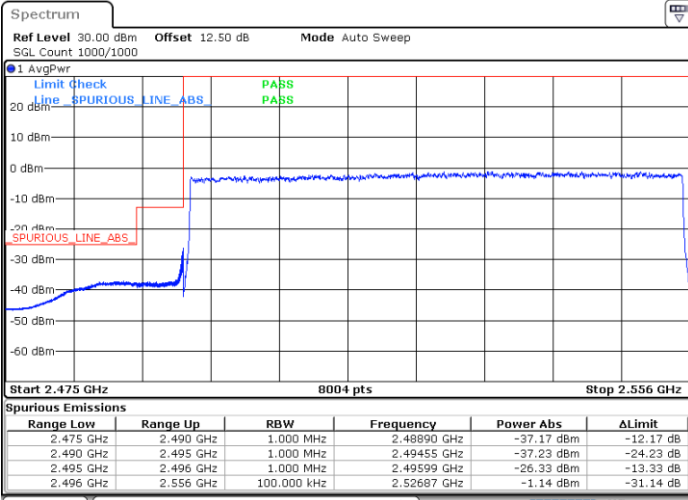
Date: 19, DEC. 2020 16:45:40



FR1 n41 / 60MHz / DFT-S OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19, DEC. 2020 16:39:28

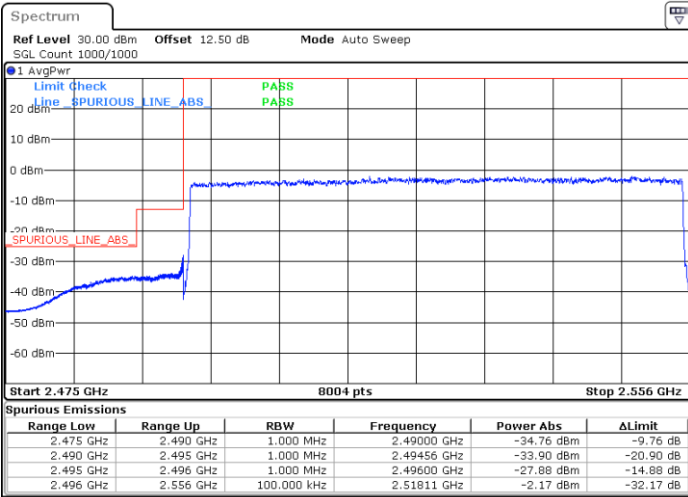
Date: 19, DEC. 2020 16:47:12



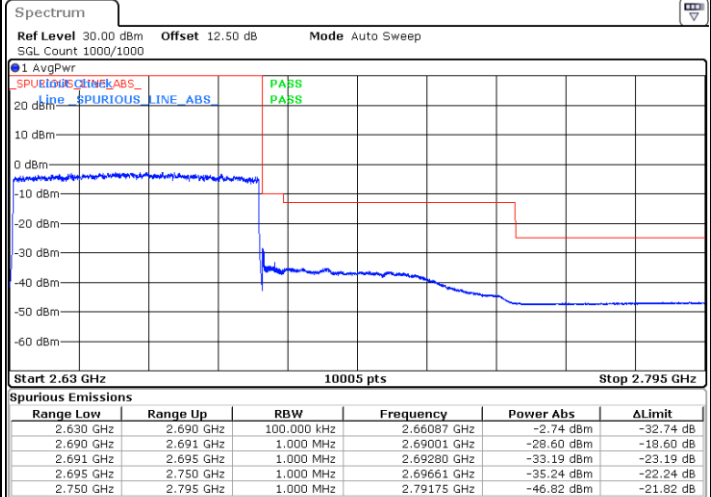
FR1 n41 / 60MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 16:38:24



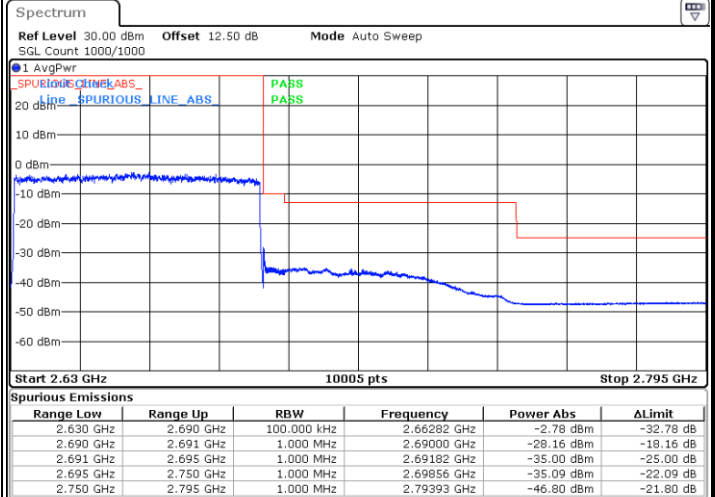
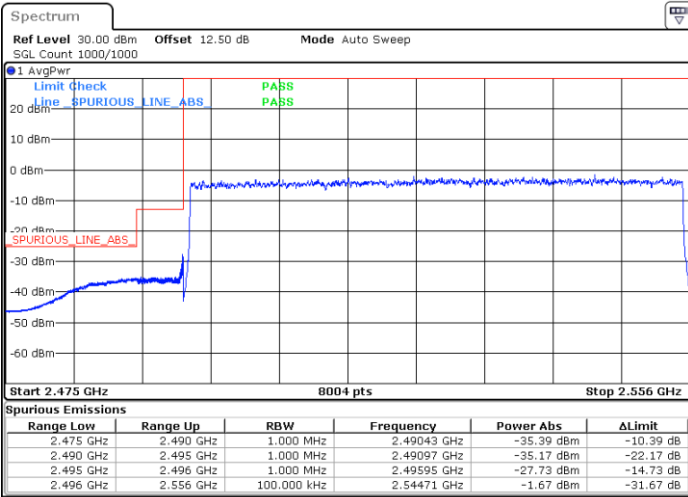
Date: 19,DEC.2020 16:48:18



FR1 n41 / 60MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 16:37:06

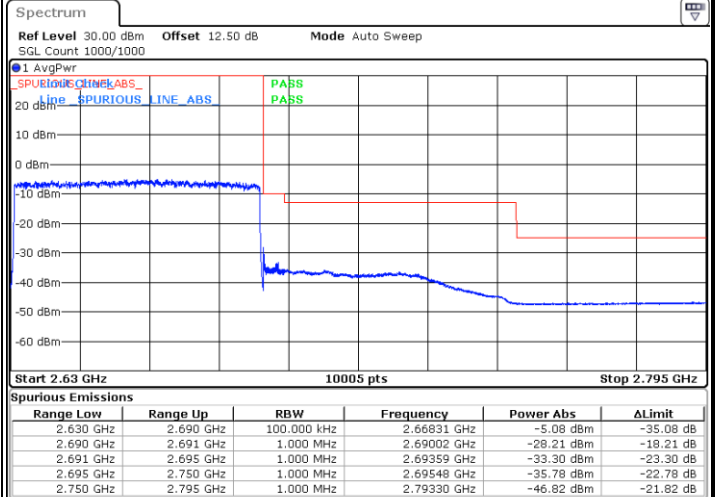
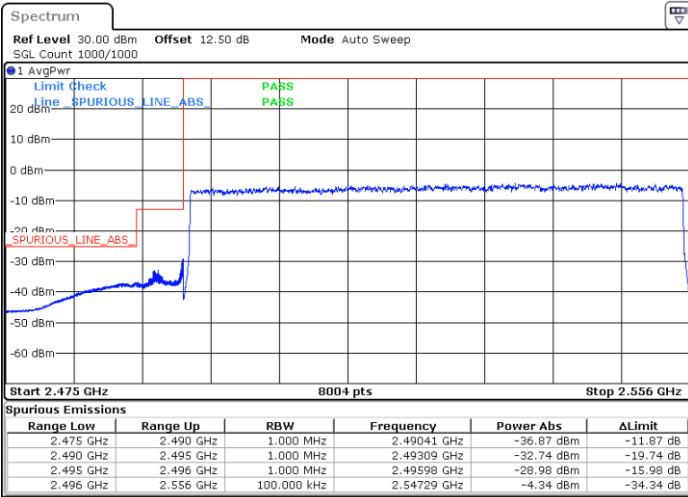
Date: 19,DEC.2020 16:50:08



FR1 n41 / 60MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 16:36:07

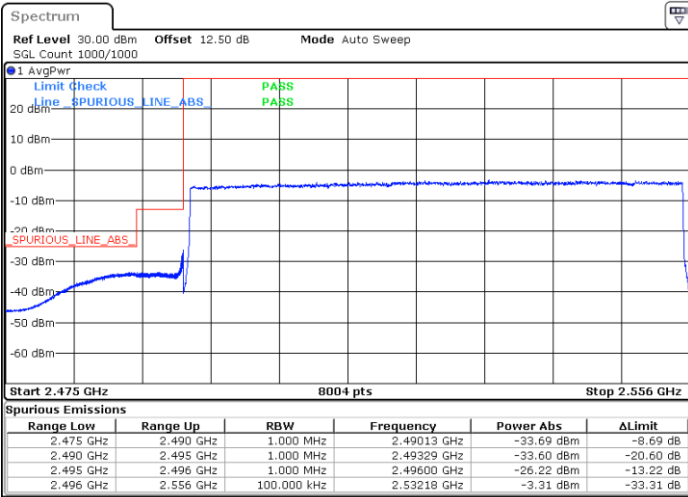
Date: 19,DEC.2020 16:51:39



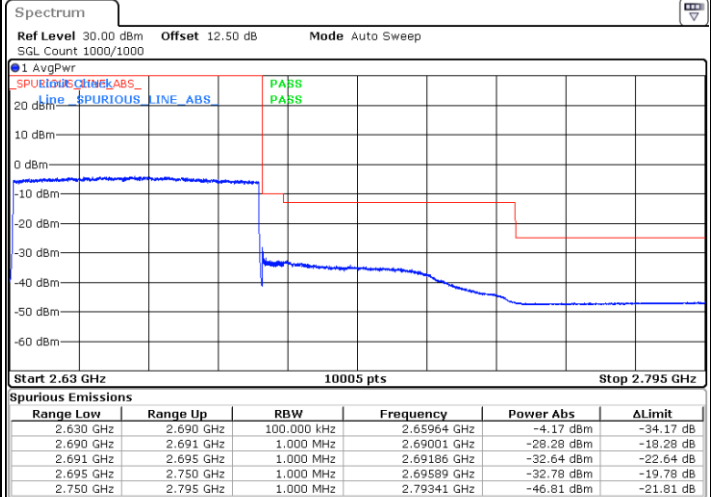
FR1 n41 / 60MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19, DEC. 2020 16:42:04



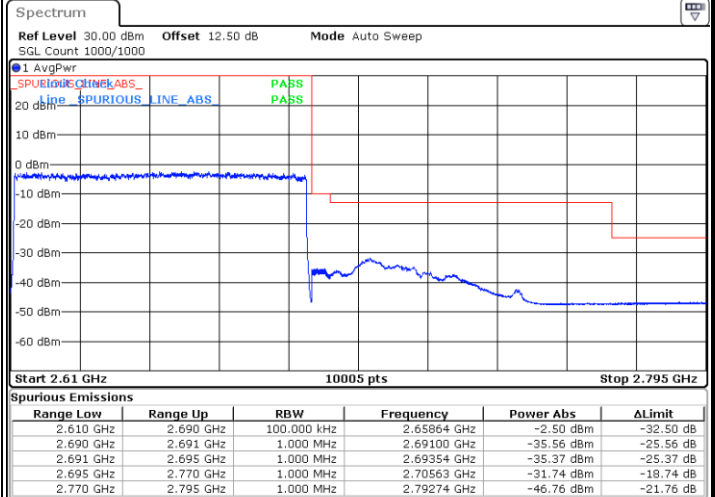
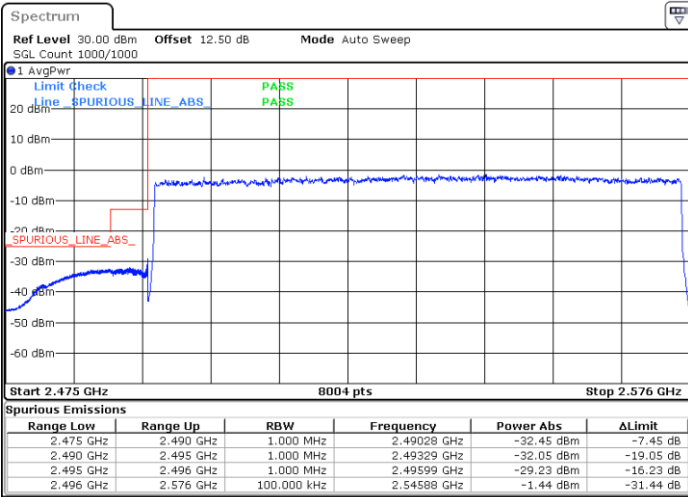
Date: 19, DEC. 2020 16:44:26



FR1 n41 / 80MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 16:26:10

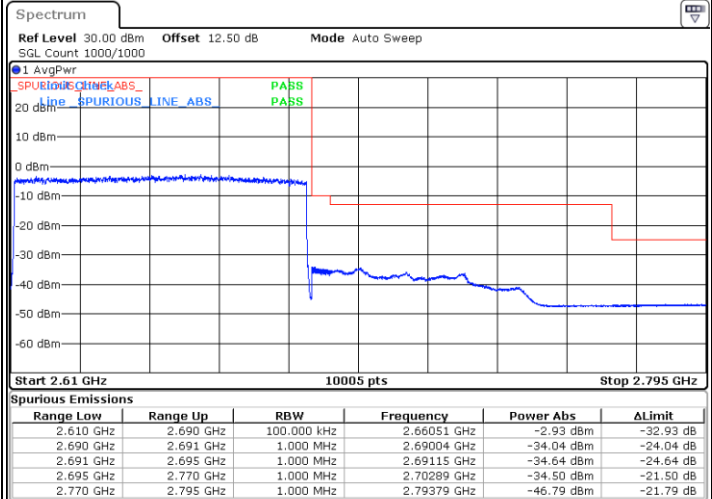
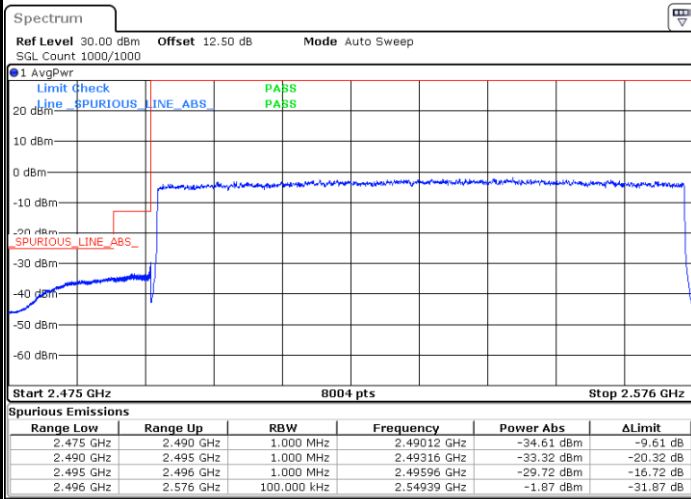
Date: 19,DEC.2020 16:30:28



FR1 n41 / 80MHz / DFT-S OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19, DEC. 2020 16:25:23

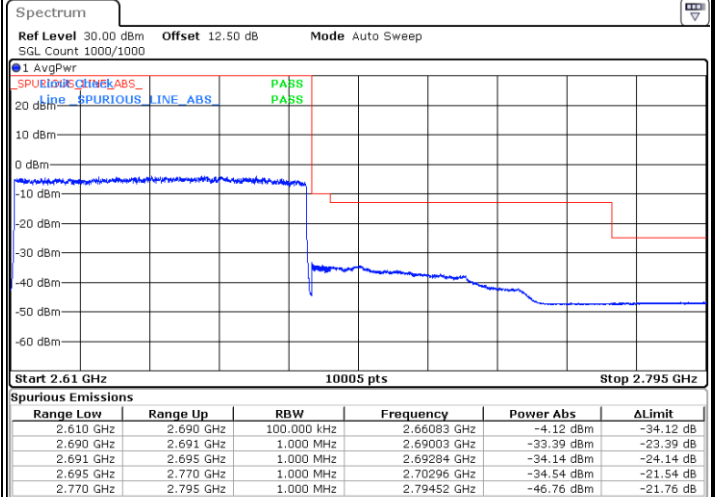
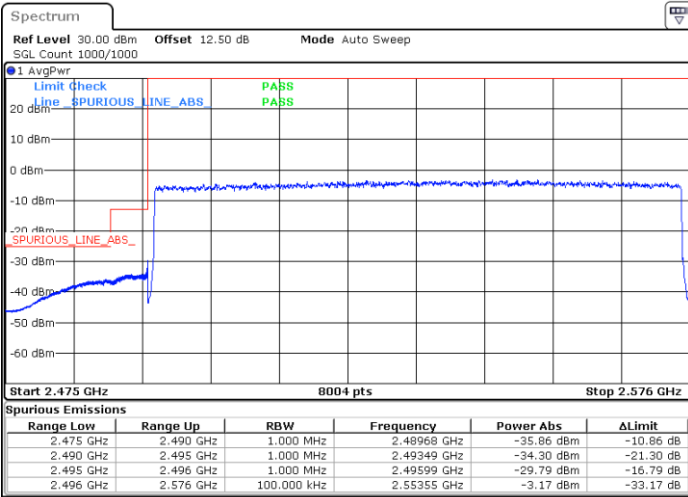
Date: 19, DEC. 2020 16:31:32



FR1 n41 / 80MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 16:24:13

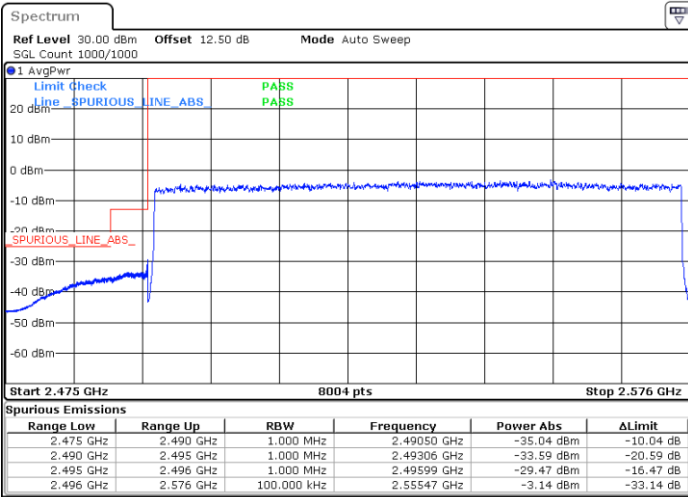
Date: 19,DEC.2020 16:32:39



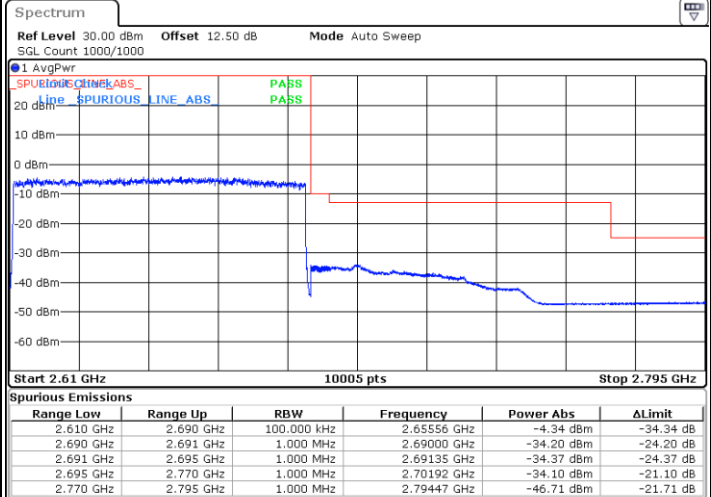
FR1 n41 / 80MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19, DEC. 2020 16:23:23



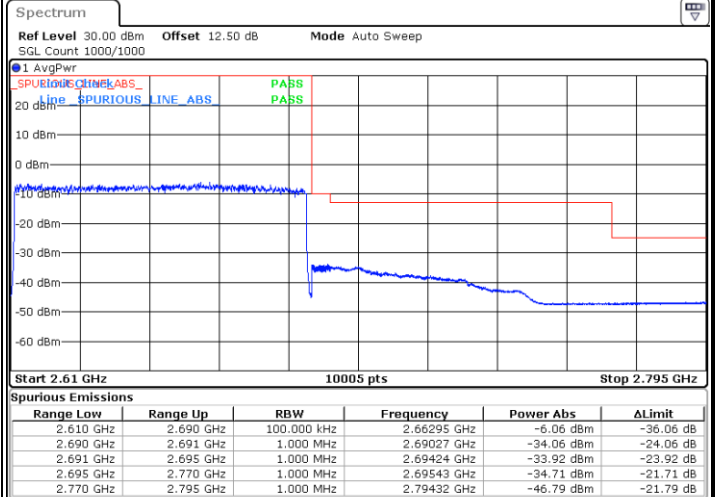
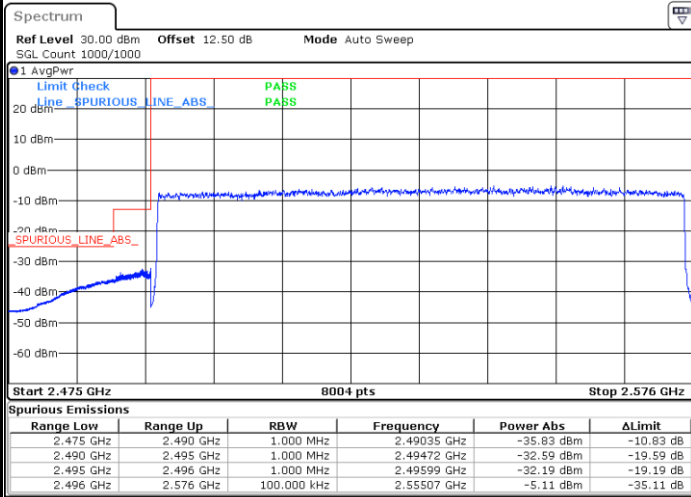
Date: 19, DEC. 2020 16:33:40



FR1 n41 / 80MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19, DEC. 2020 16:22:30

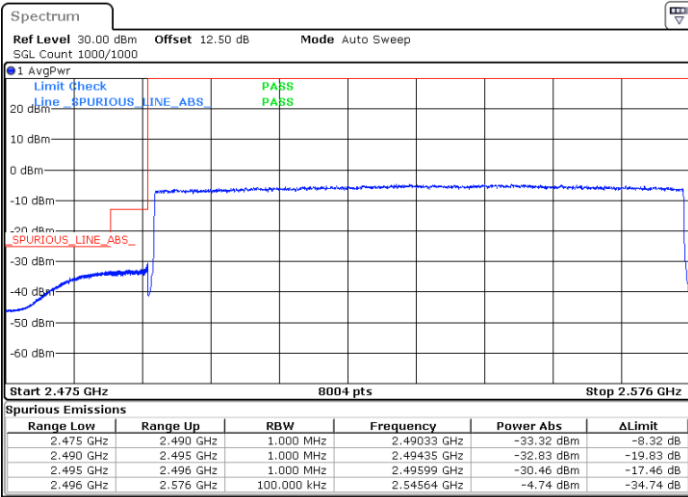
Date: 19, DEC. 2020 16:34:38



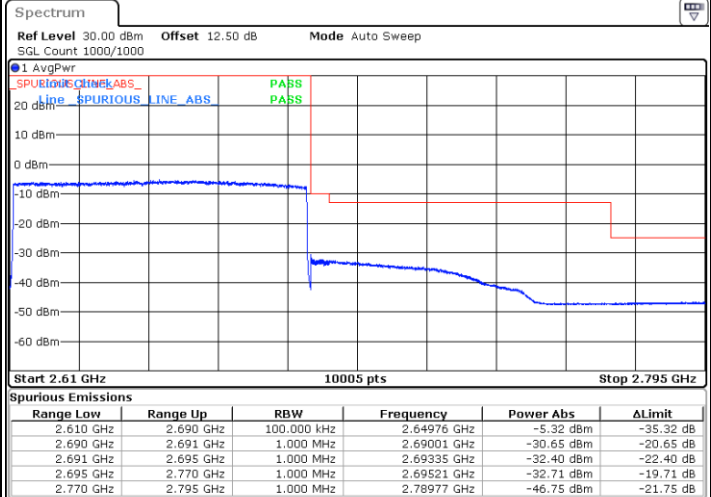
FR1 n41 / 80MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19.DEC.2020 16:27:35



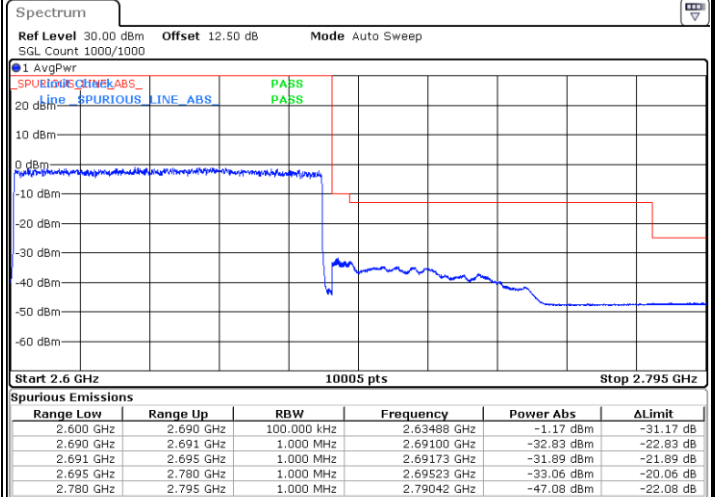
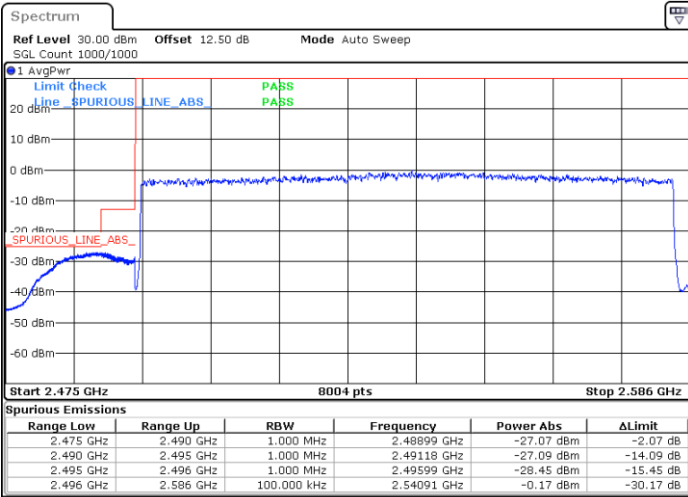
Date: 19.DEC.2020 16:29:23



FR1 n41 / 90MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 22.JAN.2021 02:44:16

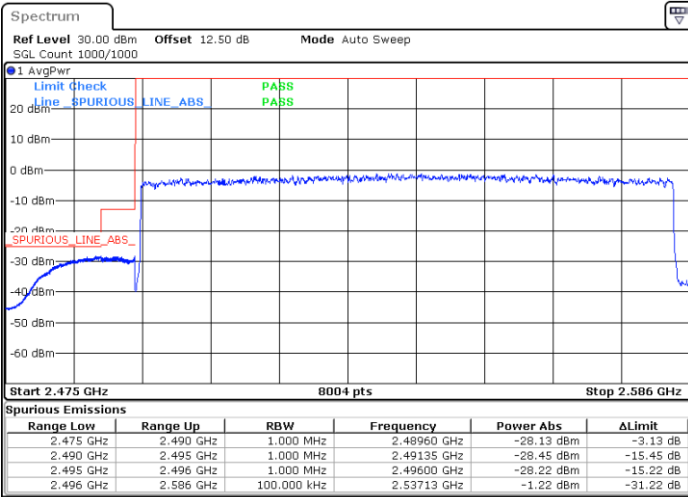
Date: 22.JAN.2021 03:44:59



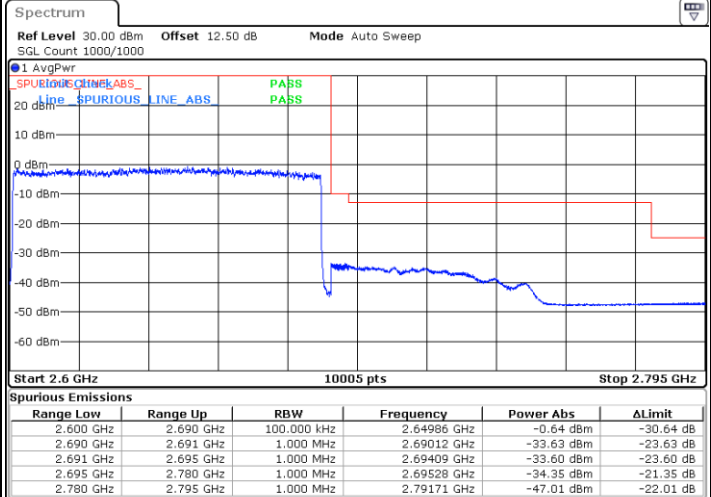
FR1 n41 / 90MHz / DFT-S OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 22.JAN.2021 02:51:01



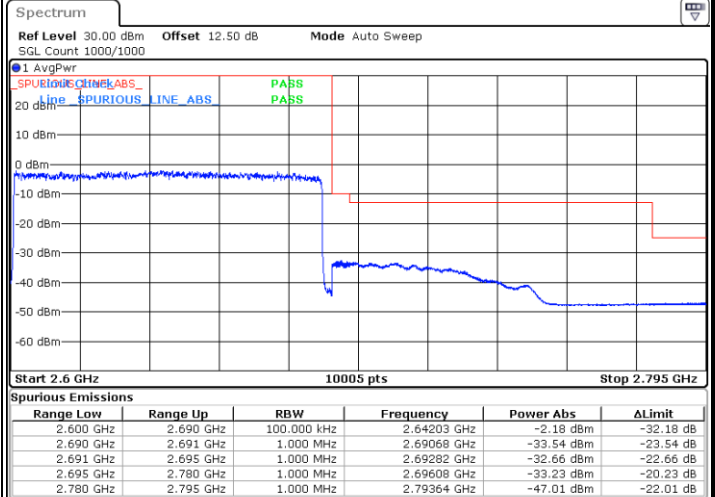
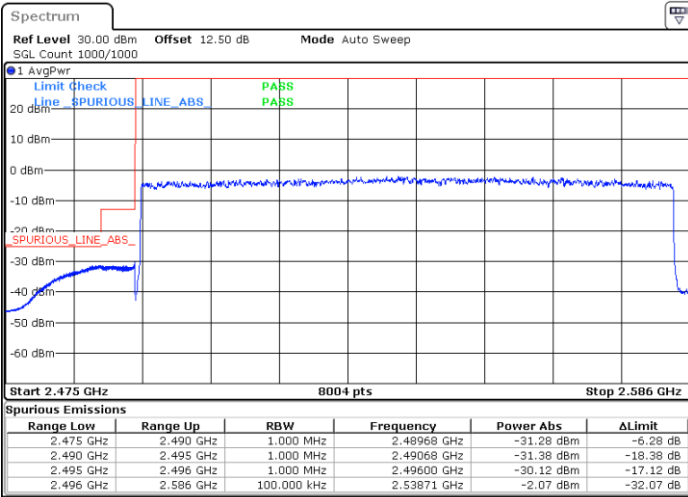
Date: 22.JAN.2021 03:47:23



FR1 n41 / 90MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 22, JAN. 2021 02:53:46

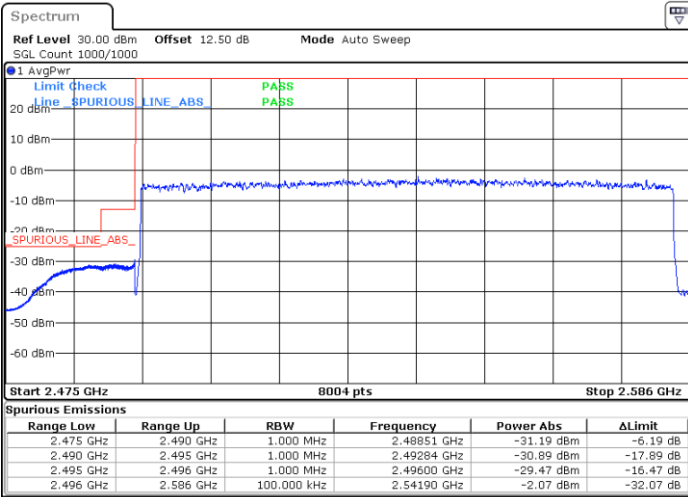
Date: 22, JAN. 2021 03:49:31



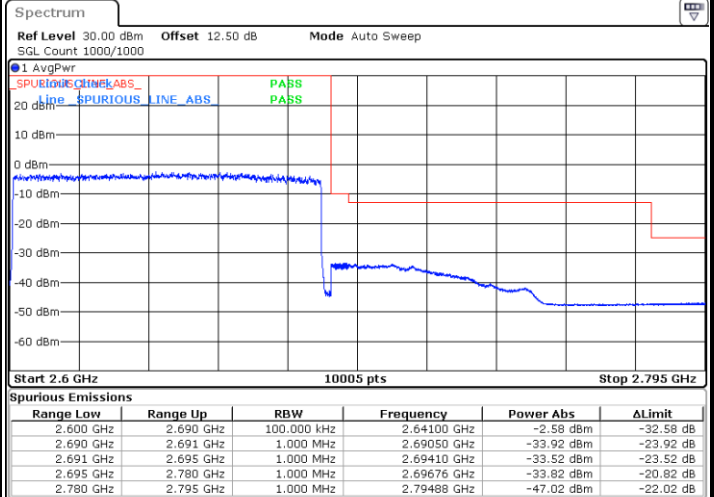
FR1 n41 / 90MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 22.JAN.2021 02:56:31



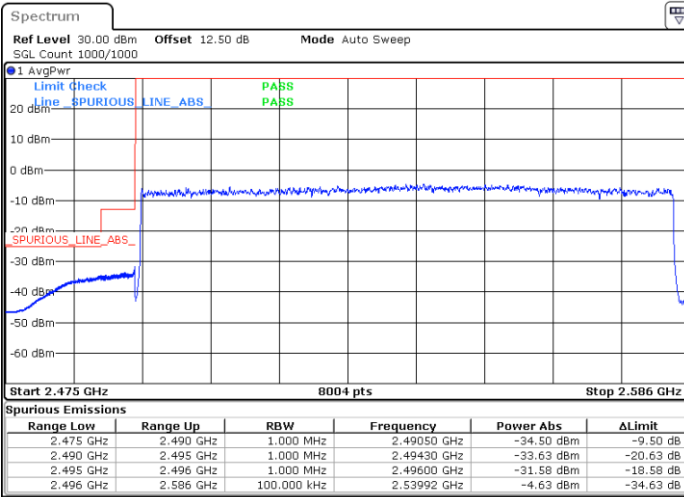
Date: 22.JAN.2021 03:53:07



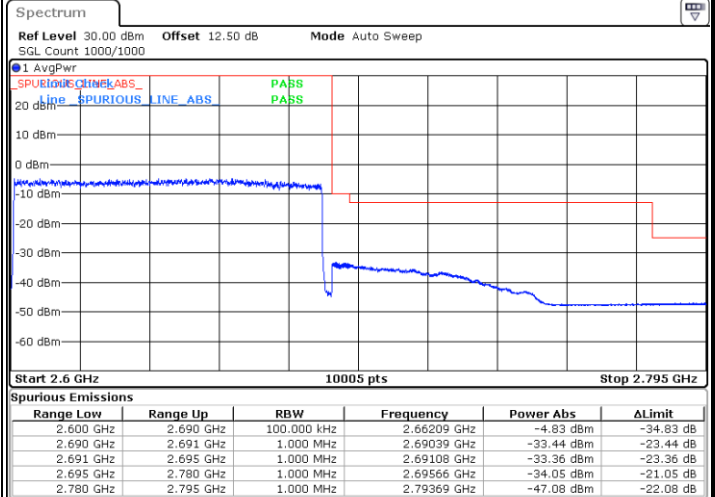
FR1 n41 / 90MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 22.JAN.2021 02:59:19



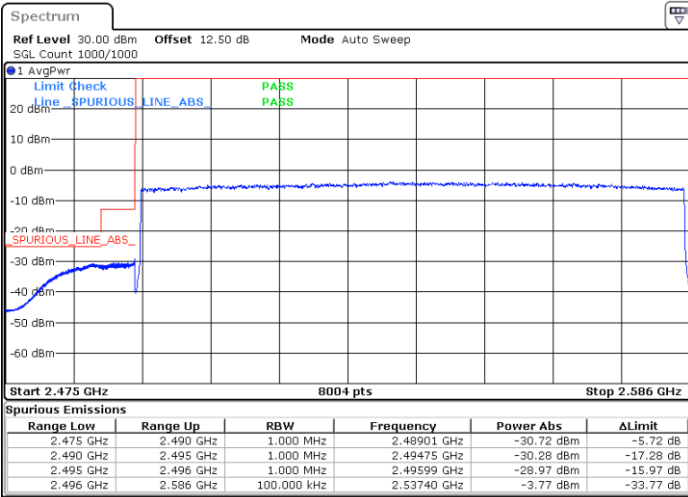
Date: 22.JAN.2021 03:55:31



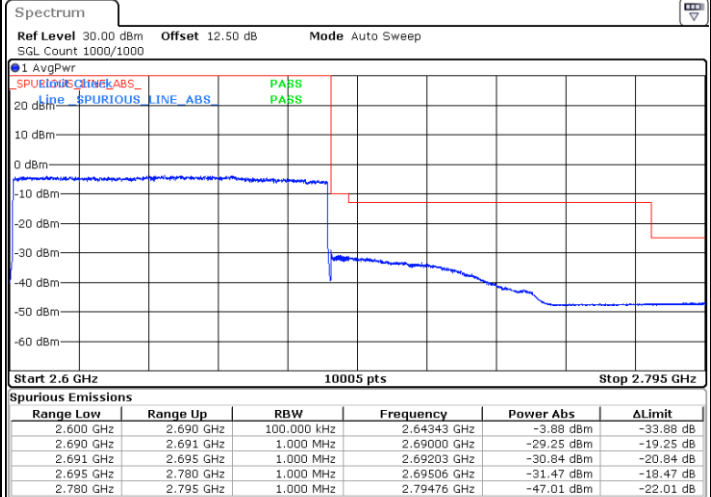
FR1 n41 / 90MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 22.JAN.2021 04:02:41



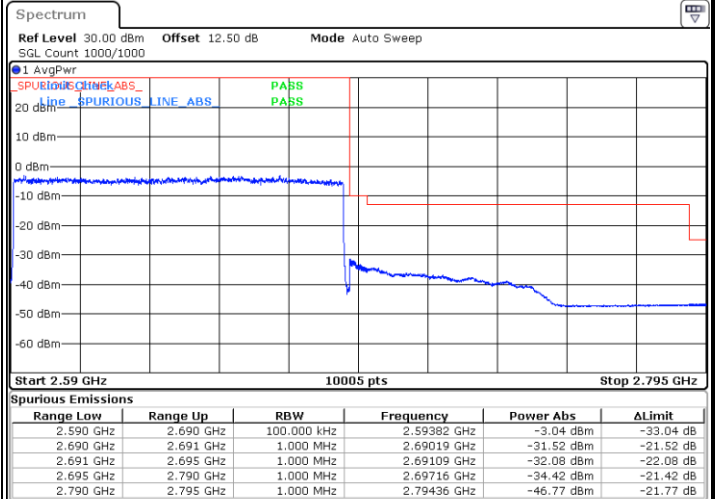
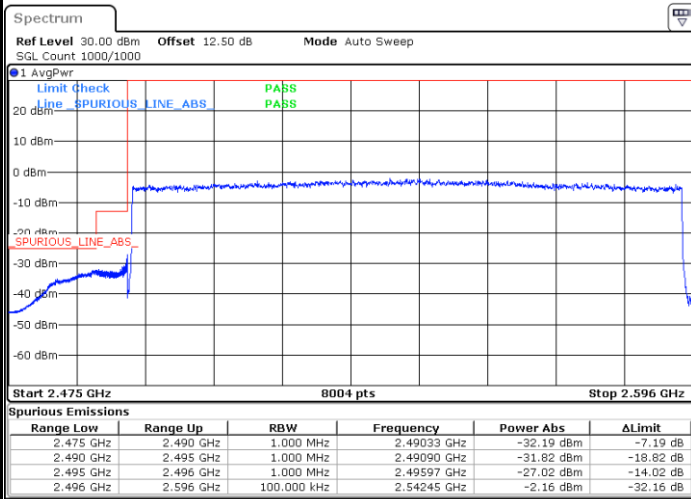
Date: 22.JAN.2021 03:39:35



FR1 n41 / 100MHz / DFT-S OFDM / PI/2 BPSK / Full RB

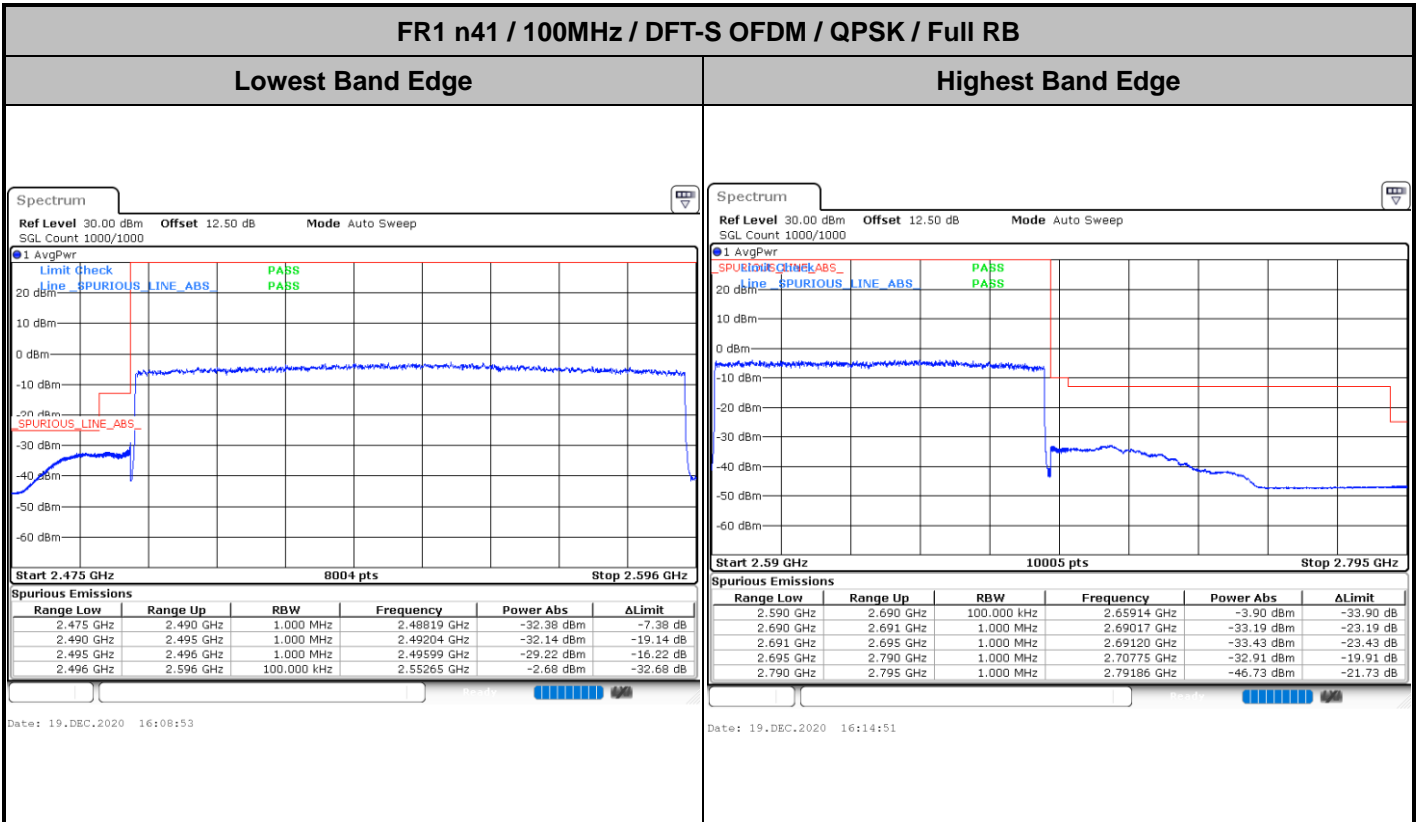
Lowest Band Edge

Highest Band Edge



Date: 19, DEC. 2020 16:09:43

Date: 19, DEC. 2020 16:13:44

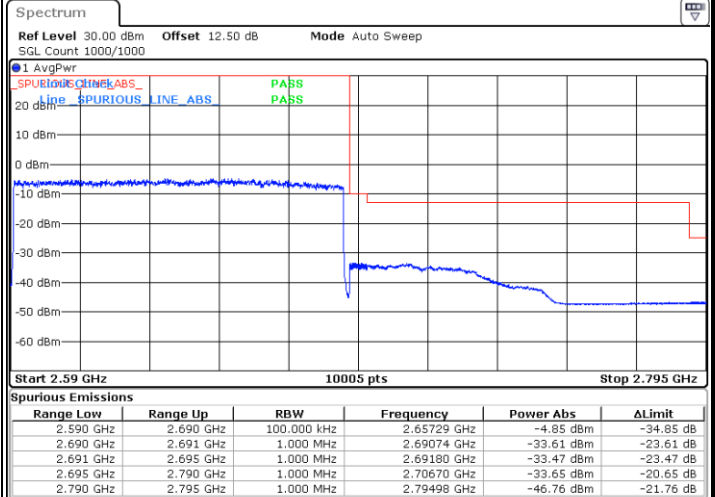
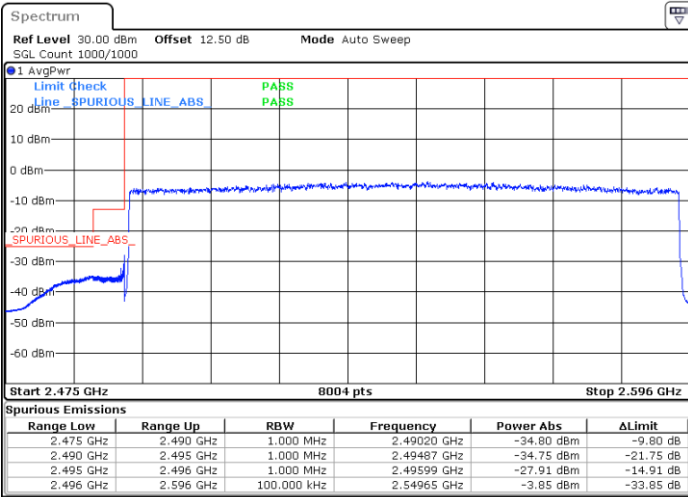




FR1 n41 / 100MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 16:07:56

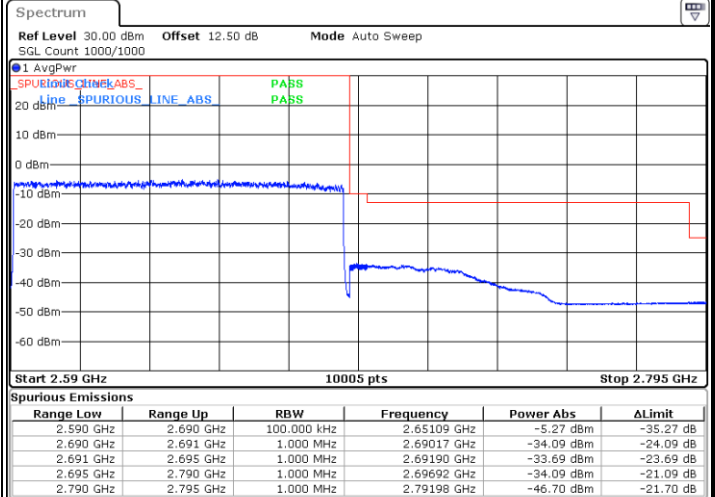
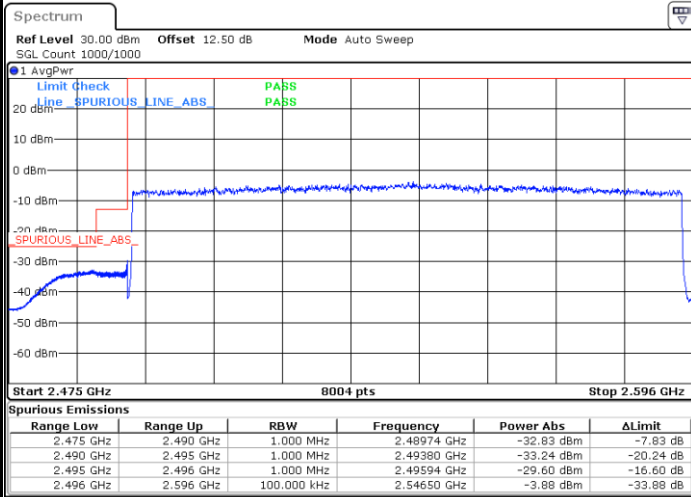
Date: 19,DEC.2020 16:15:56



FR1 n41 / 100MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19.DEC.2020 16:07:10

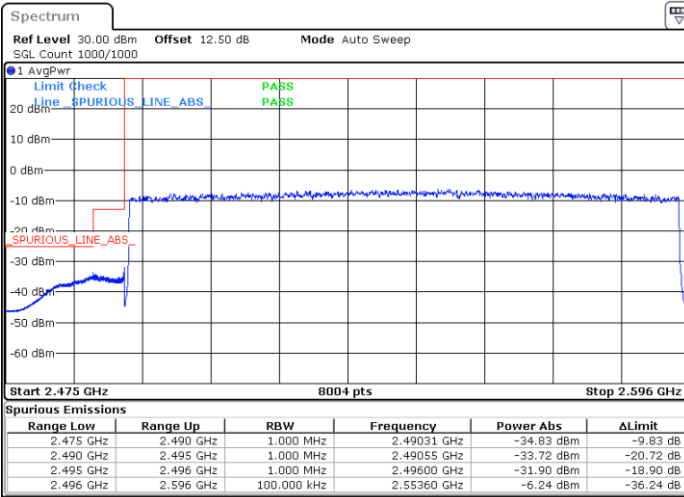
Date: 19.DEC.2020 16:17:29



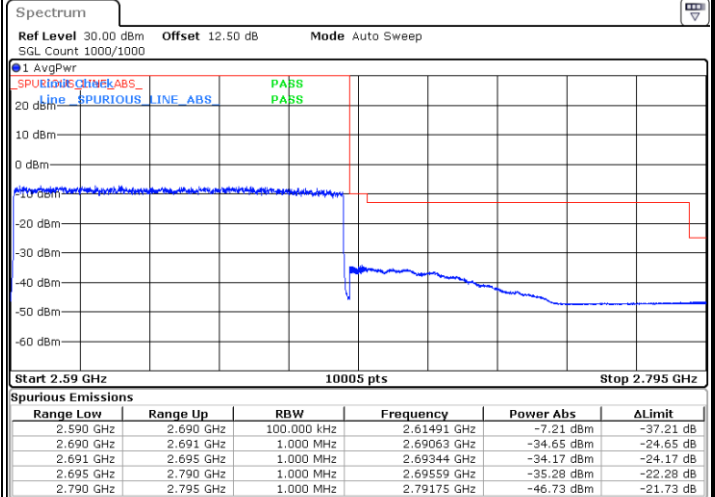
FR1 n41 / 100MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19,DEC.2020 16:06:19



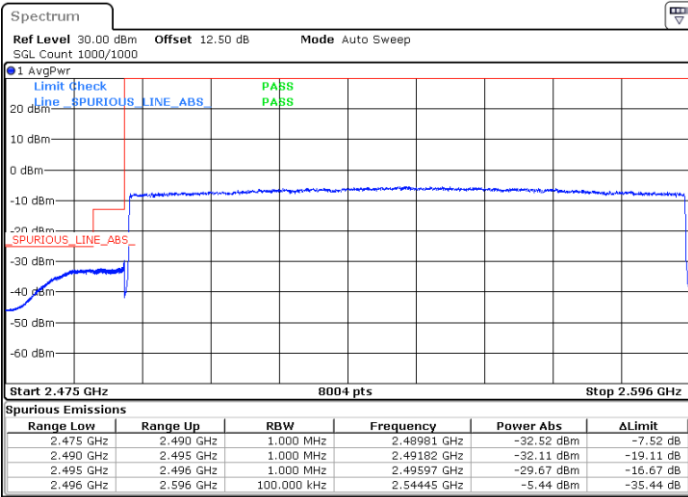
Date: 19,DEC.2020 16:20:09



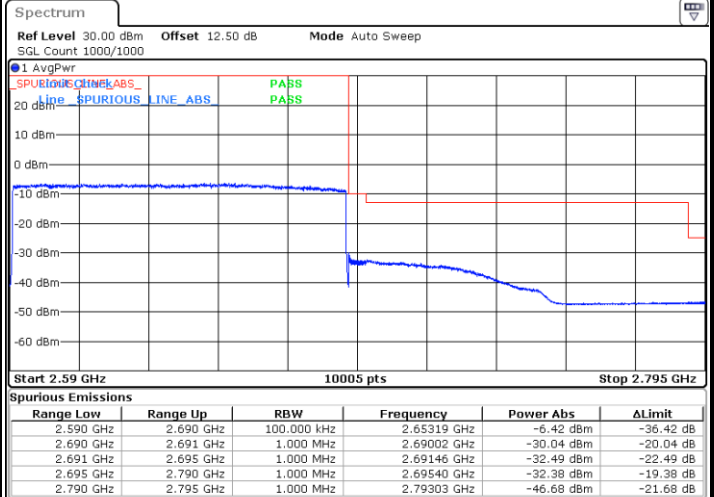
FR1 n41 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 19.DEC.2020 16:10:47



Date: 19.DEC.2020 16:12:25

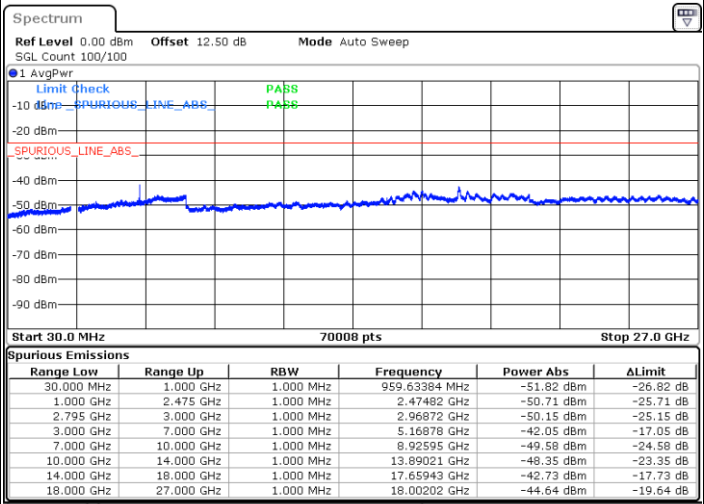
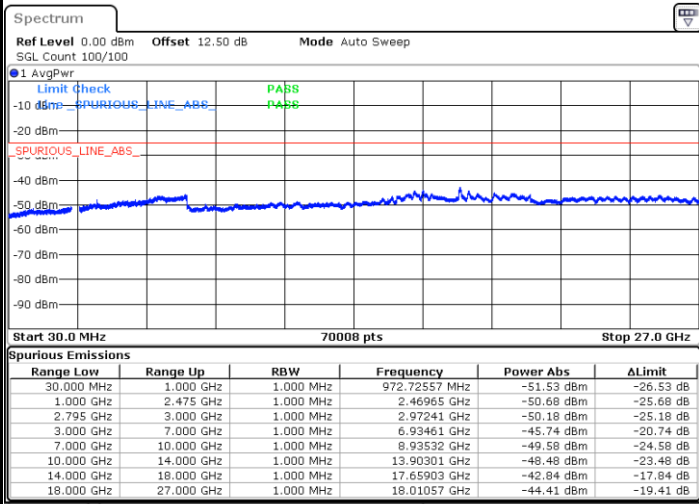


Conducted Spurious Emission

FR1 n41 / 20MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel

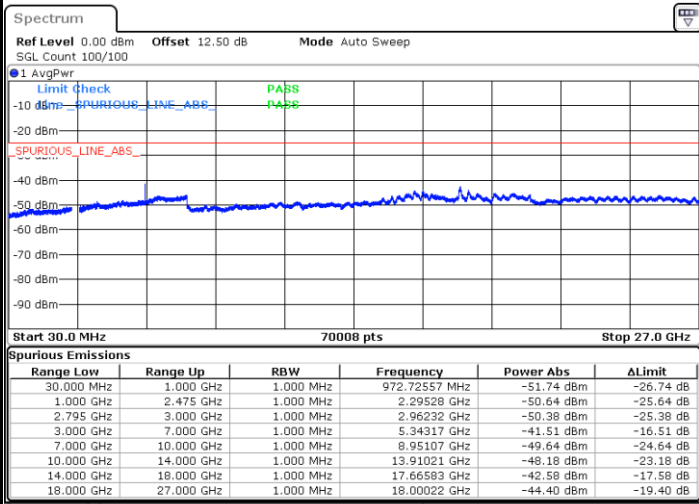
Middle Channel



Date: 19.DEC.2020 17:30:33

Date: 19.DEC.2020 17:32:20

Highest Channel



Date: 19.DEC.2020 17:33:55



Frequency Stability

Test Conditions		FR1 n41 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0201	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0208	
-30	Normal Voltage	0.0231	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.60 V. ; Maximum Voltage =4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n78_HPUE

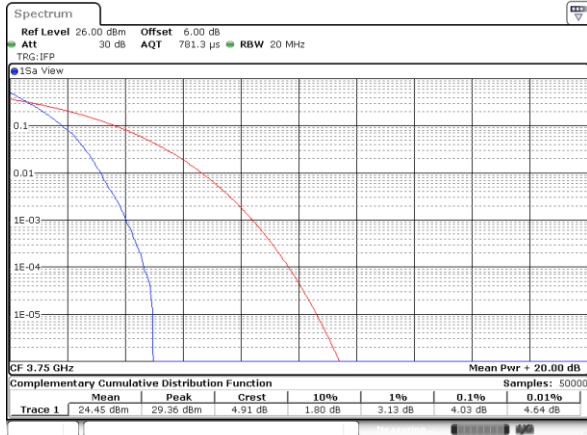
Peak-to-Average Ratio

Mode	FR1 n78 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.03	5.42	6.32	6.43	PASS
Mode	FR1 n78 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.49				PASS



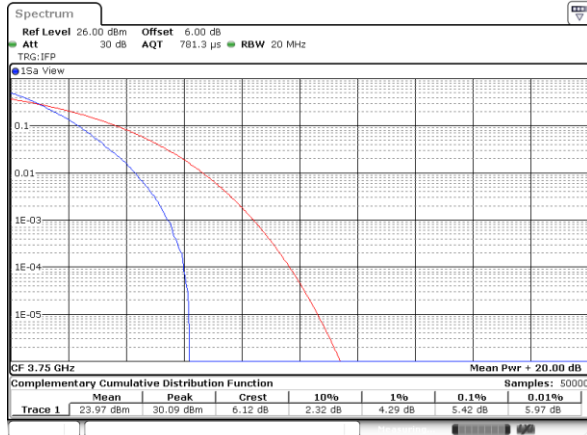
FR1 n78 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



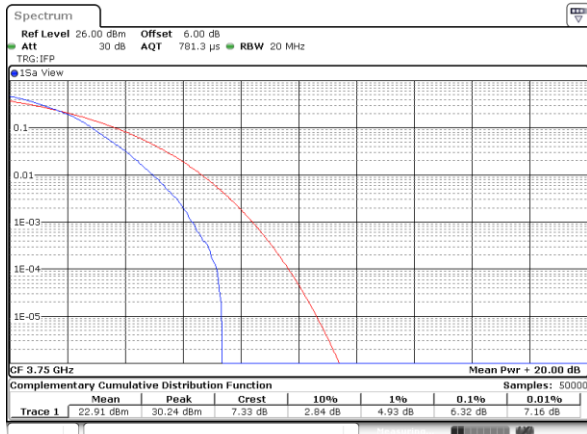
Date: 29. DEC. 2020 09:26:38

QPSK



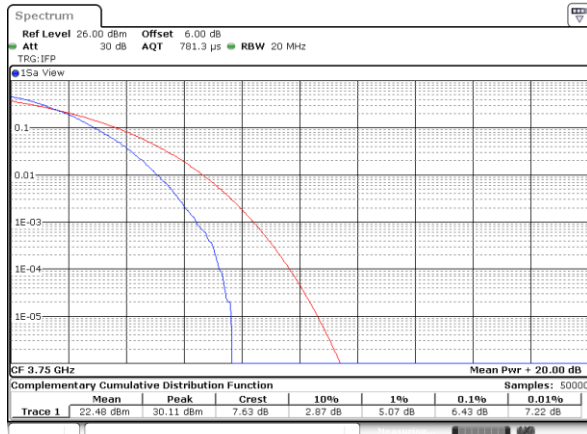
Date: 29. DEC. 2020 09:28:14

16QAM



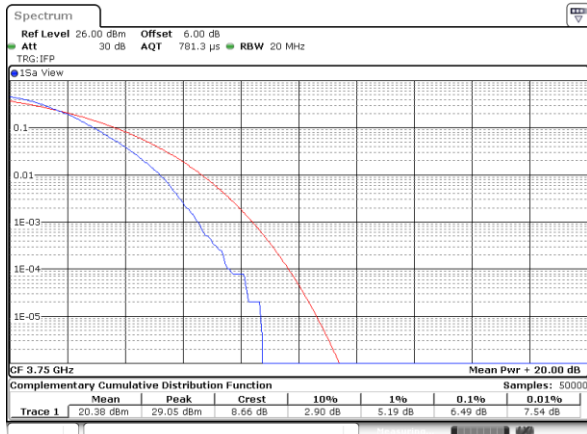
Date: 29. DEC. 2020 09:32:08

64QAM



Date: 29. DEC. 2020 09:32:35

256QAM



Date: 29. DEC. 2020 09:34:07



26dB Bandwidth

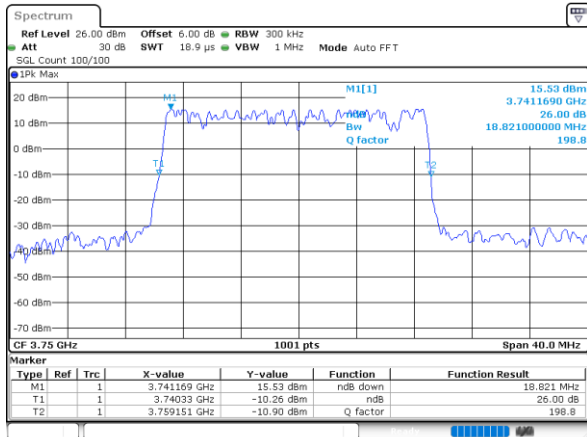
Mode	FR1 n78 : 26dB BW(MHz) / DFT-S OFDM							
BW	20MHz	30MHz	40MHz	50MHz	60MHz	70MHz	80MHz	90MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	18.82	-	38.20	48.15	60.54	-	79.76	88.47
BW	100MHz							
Mod.	PI/2 BPSK							
Middle CH	99.50							

Mode	FR1 n78 : 26dB BW(MHz) / CP OFDM							
BW	20MHz		30MHz		40MHz		50MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	19.42	19.38	-	-	40.36	40.44	49.75	49.75
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	18.98	19.22	-	-	40.28	40.28	49.75	49.75
BW	60MHz		70MHz		80MHz		90MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	60.30	60.30	-	-	79.92	79.92	90.45	90.45
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	60.18	60.42	-	-	79.92	79.92	90.27	90.45
BW	100MHz							
Mod.	QPSK	16QAM						
Middle CH	100.50	100.50						
Mod.	64QAM	256QAM						
Middle CH	100.50	100.50						



FR1 n78 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

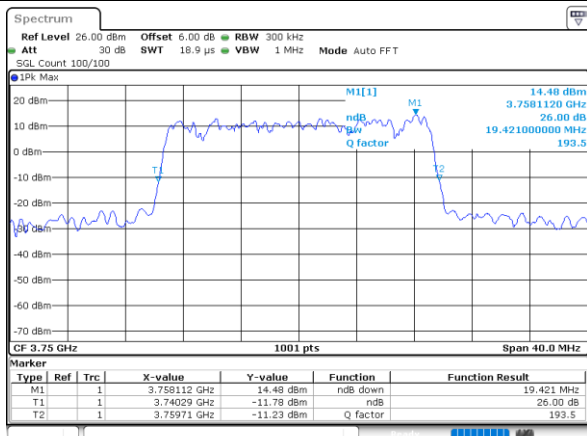
PI/2 BPSK



Date: 29. DEC. 2020 09:26:13

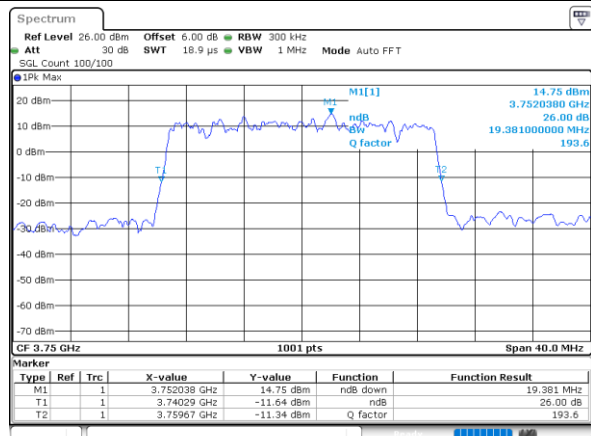
FR1 n78 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



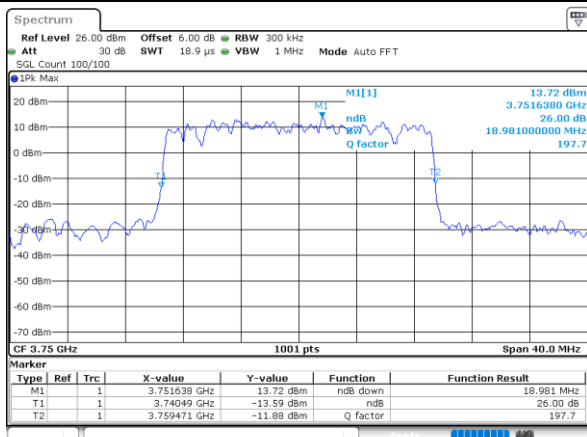
Date: 29. DEC. 2020 09:36:33

16QAM



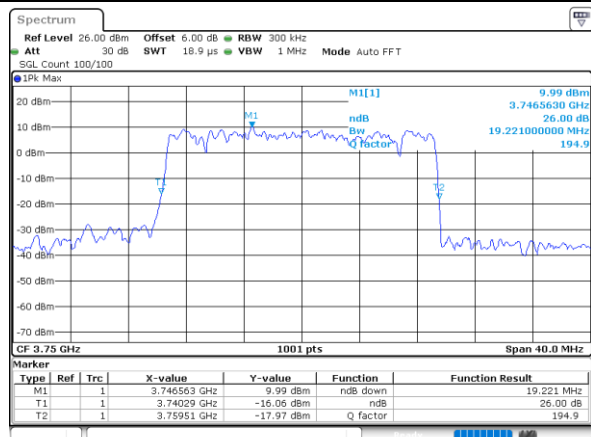
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64QAM



Date: 29. DEC. 2020 09:35:25

256QAM

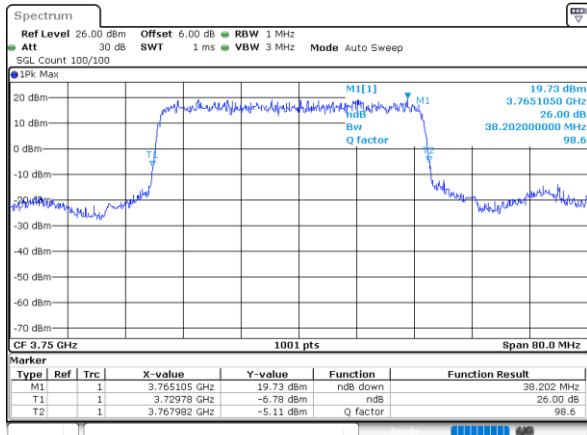


Date: 29. DEC. 2020 09:35:04



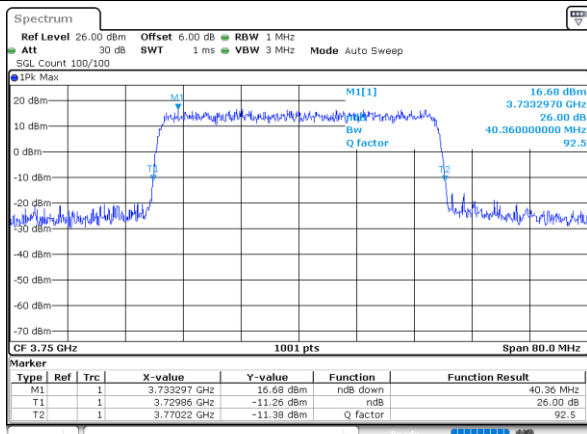
FR1 n78 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

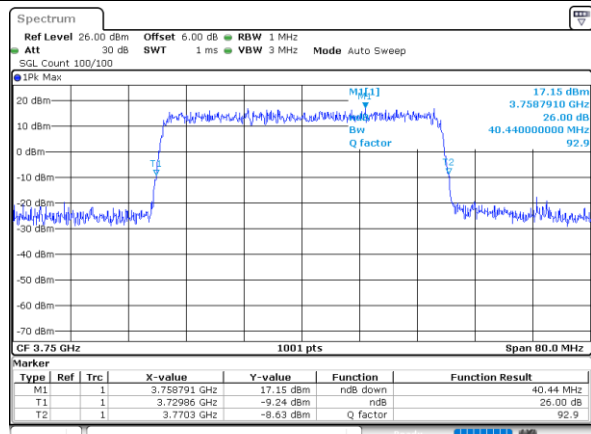


FR1 n78 / 40MHz / CP OFDM / Middle Channel / Full RB

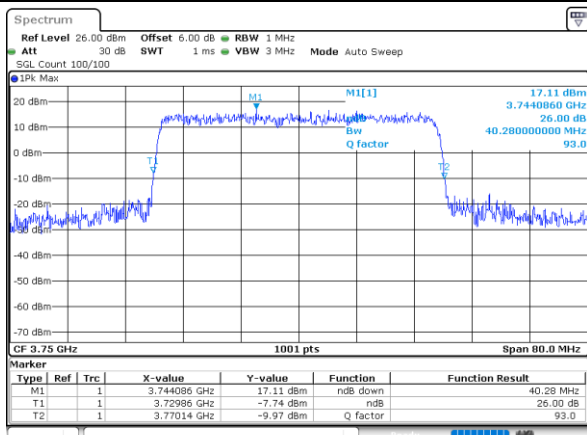
QPSK



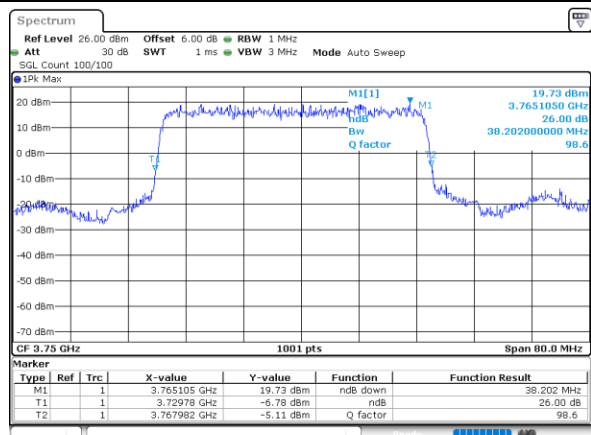
16QAM



64QAM



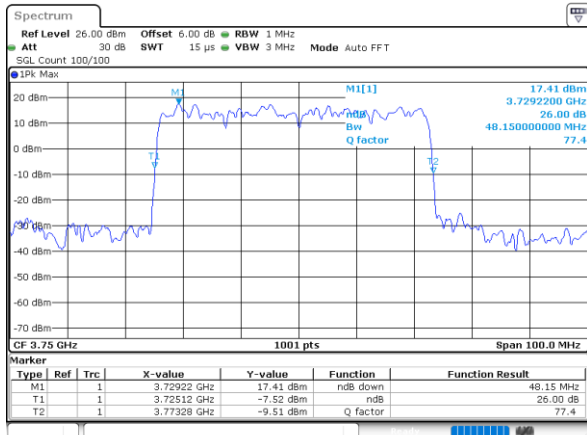
256QAM





FR1 n78 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

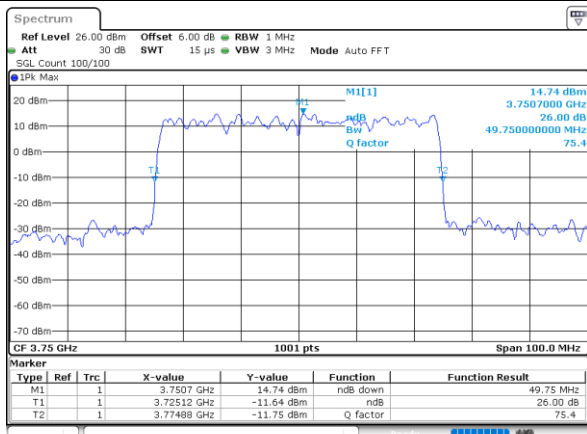
PI/2 BPSK



Date: 29.Dec.2020 12:42:31

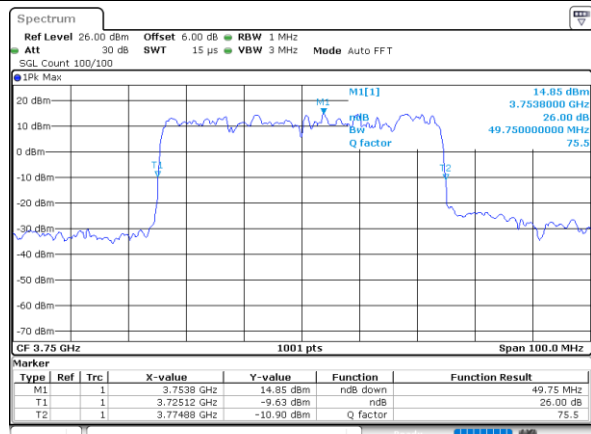
FR1 n78 / 50MHz / CP OFDM / Middle Channel / Full RB

QPSK



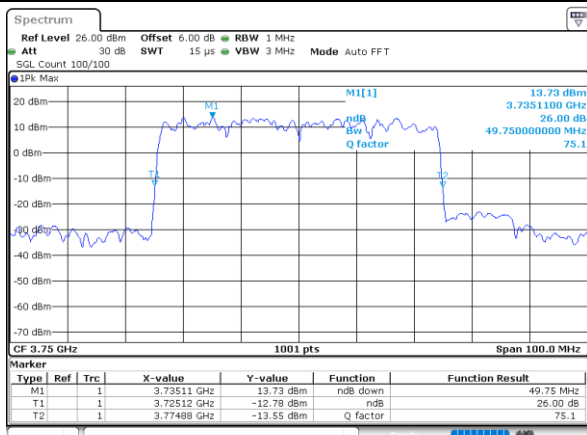
Date: 29.Dec.2020 12:40:36

16QAM



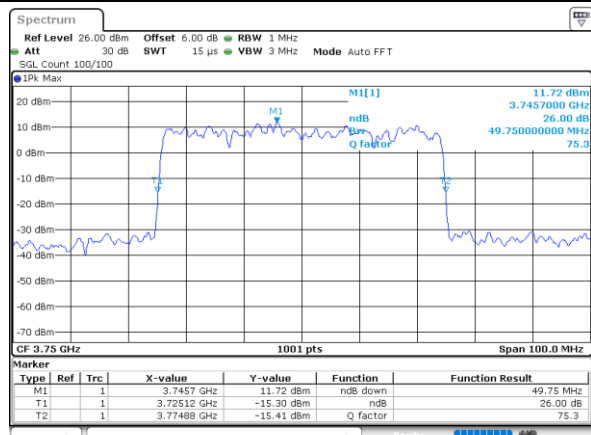
Date: 29.Dec.2020 12:41:01

64QAM



Date: 29.Dec.2020 12:41:31

256QAM

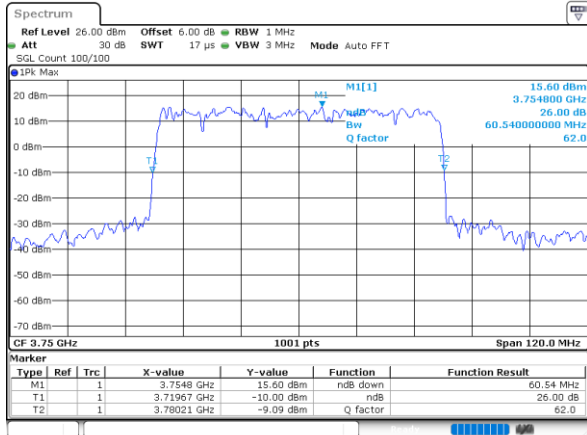


Date: 29.Dec.2020 12:42:01



FR1 n78 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

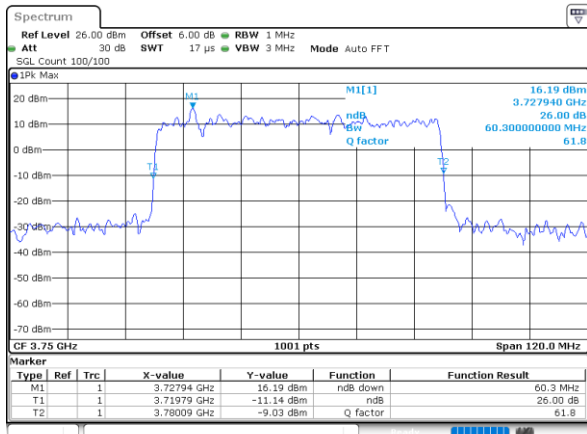
PI/2 BPSK



Date: 29.Dec.2020 13:19:51

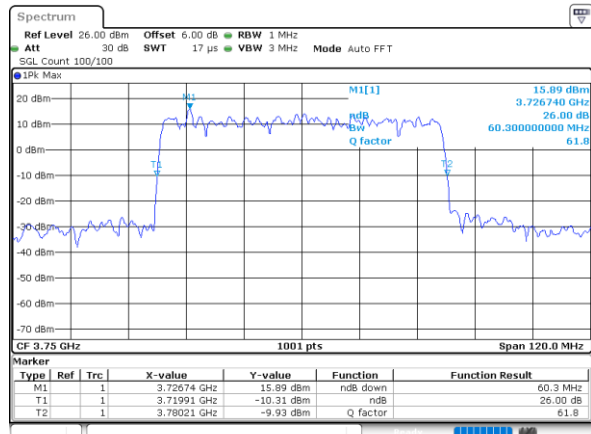
FR1 n78 / 60MHz / CP OFDM / Middle Channel / Full RB

QPSK



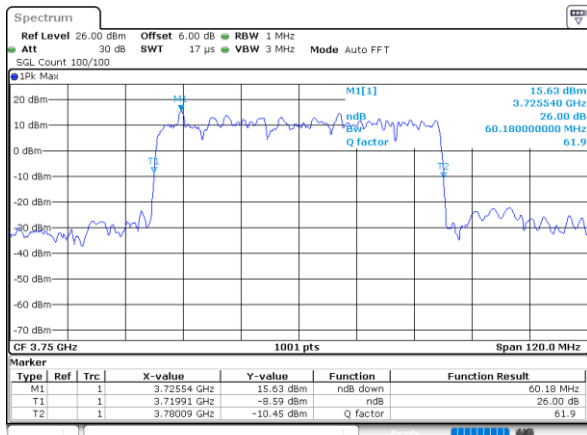
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16QAM



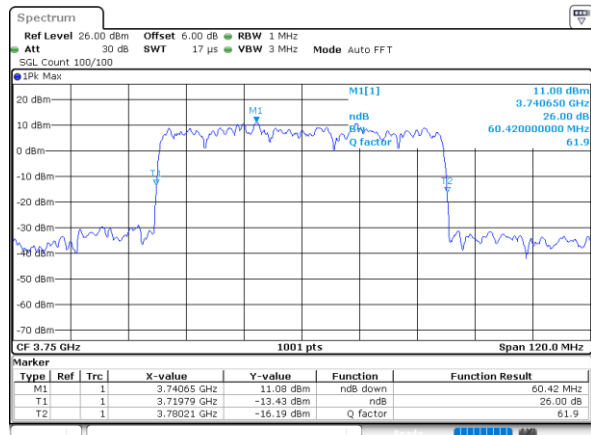
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64QAM



Date: 29.Dec.2020 13:16:31

256QAM

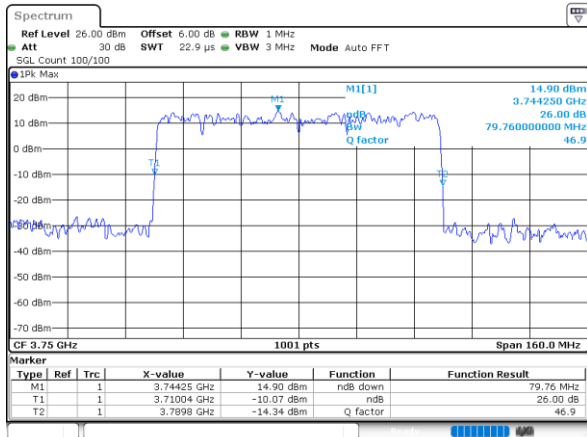


Date: 29.Dec.2020 13:15:16



FR1 n78 / 80MHz / DFT-S OFDM / Middle Channel / Full RB

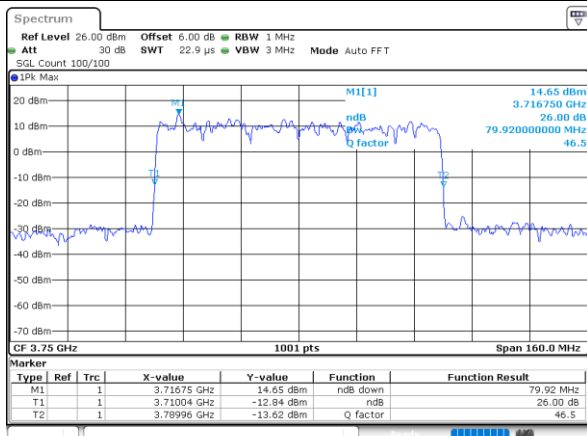
PI/2 BPSK



Date: 29.Dec.2020 13:56:37

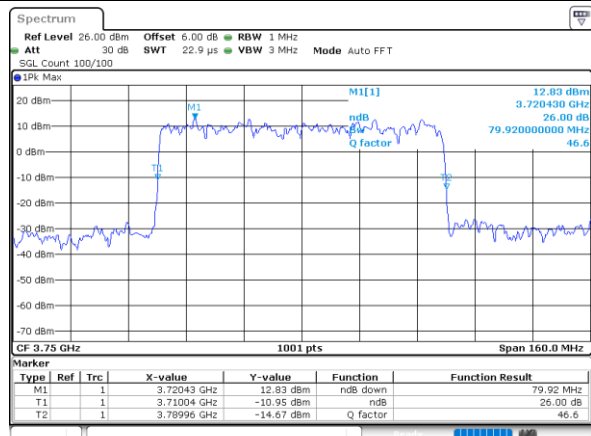
FR1 n78 / 80MHz / CP OFDM / Middle Channel / Full RB

QPSK



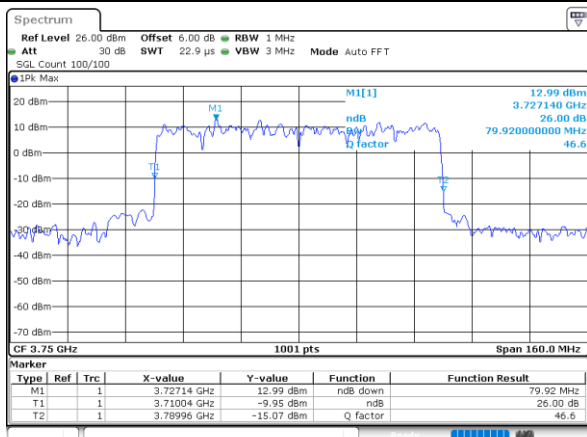
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16QAM



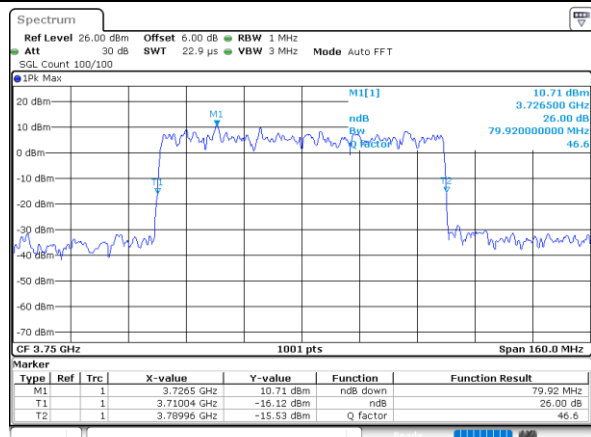
Date: 29.Dec.2020 13:55:24

64QAM



Date: 29.Dec.2020 13:54:57

256QAM



Date: 29.Dec.2020 13:54:33