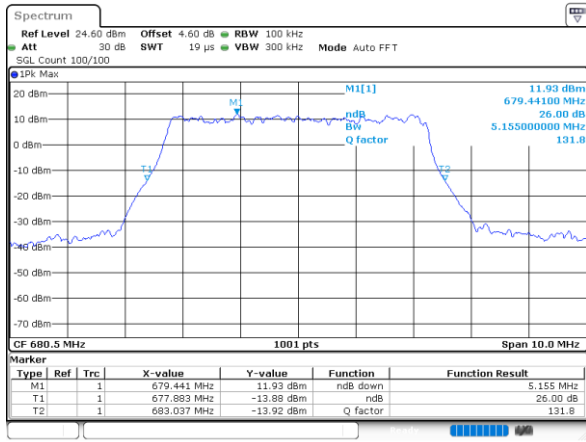




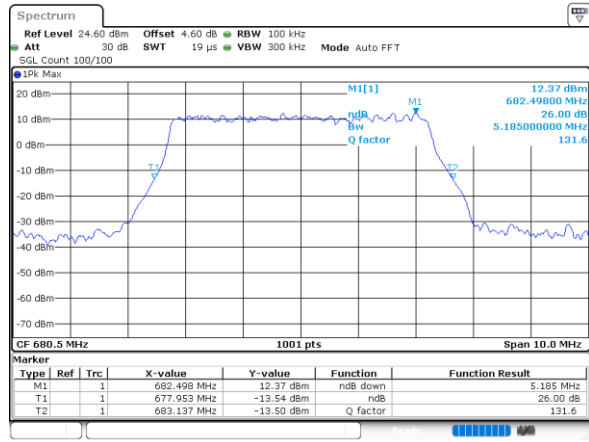
5M

QPSK



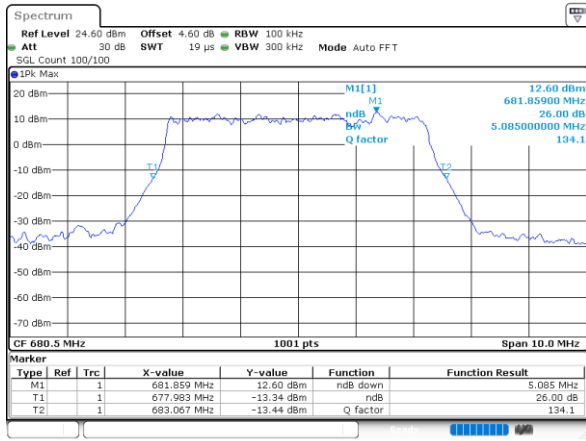
Date: 9,DEC,2022 08:14:54

16QAM



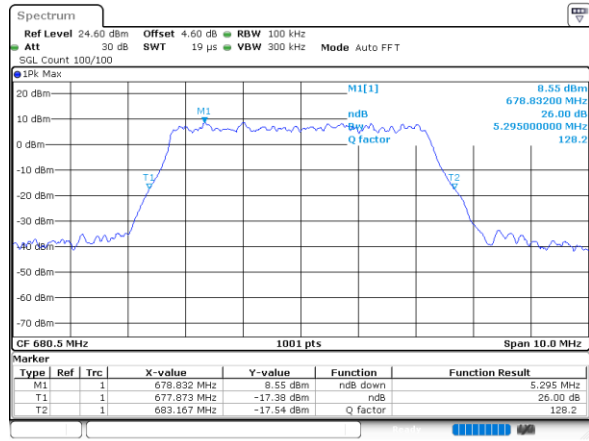
Date: 9,DEC,2022 08:15:08

64QAM



Date: 9,DEC,2022 08:15:33

256QAM

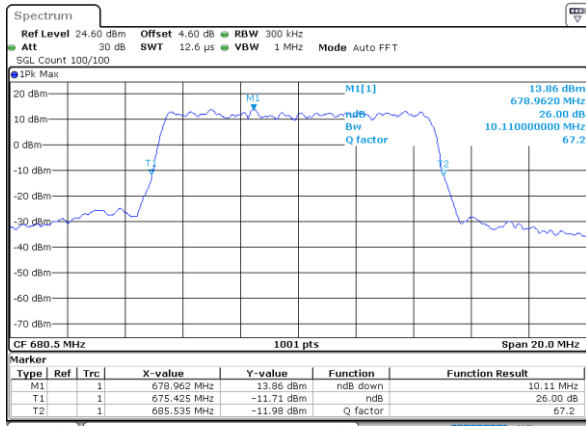


Date: 9,DEC,2022 08:20:55



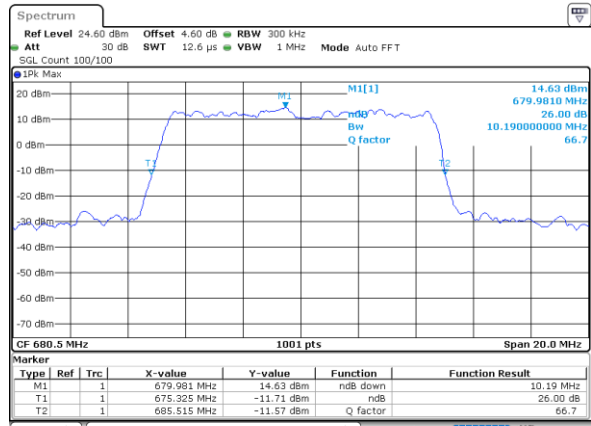
10M

QPSK



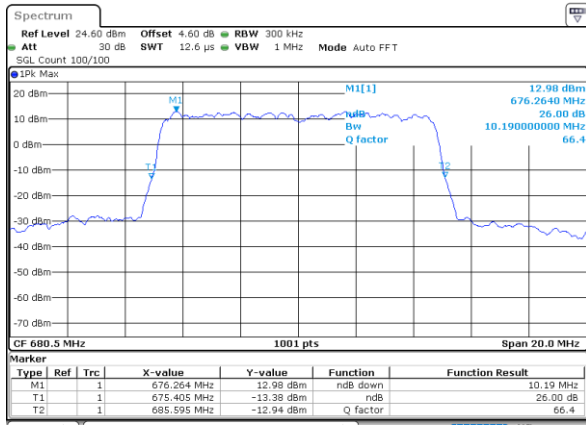
Date: 9,DEC,2022 08:56:27

16QAM



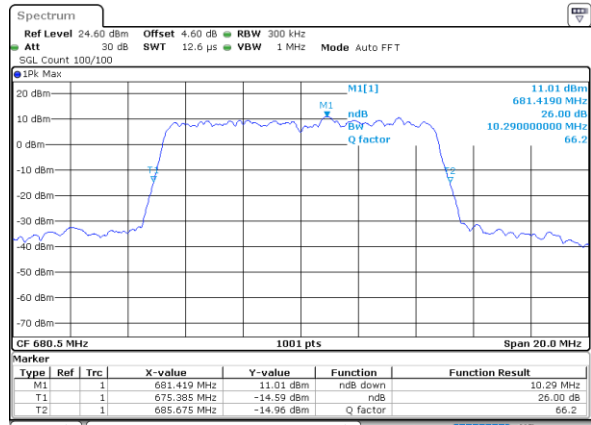
Date: 9,DEC,2022 08:58:11

64QAM



Date: 9,DEC,2022 08:59:16

256QAM

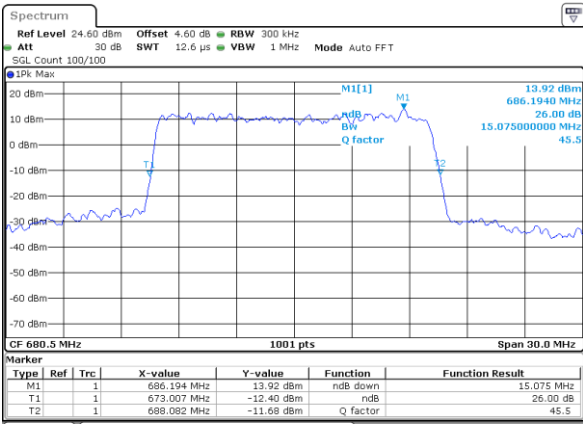


Date: 9,DEC,2022 09:00:03



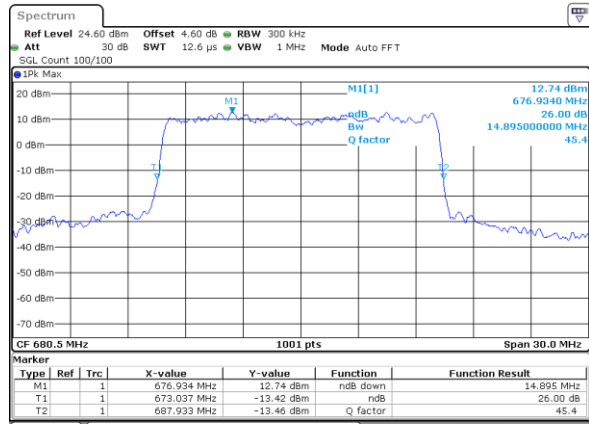
15M

QPSK



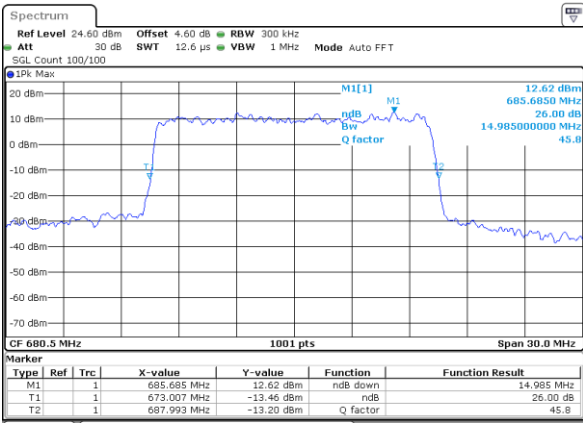
Date: 9,DEC,2022 09:18:58

16QAM



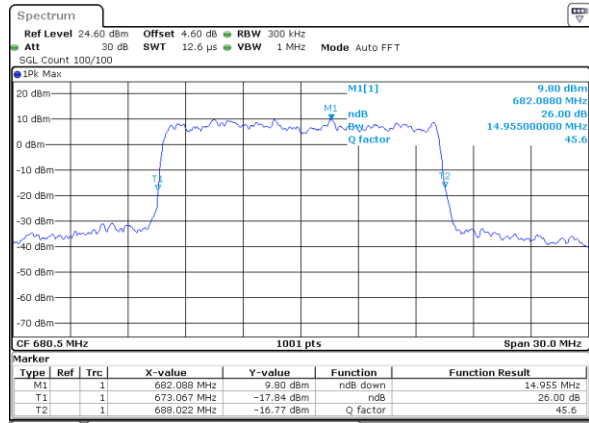
Date: 9,DEC,2022 09:20:13

64QAM



Date: 9,DEC,2022 09:21:18

256QAM

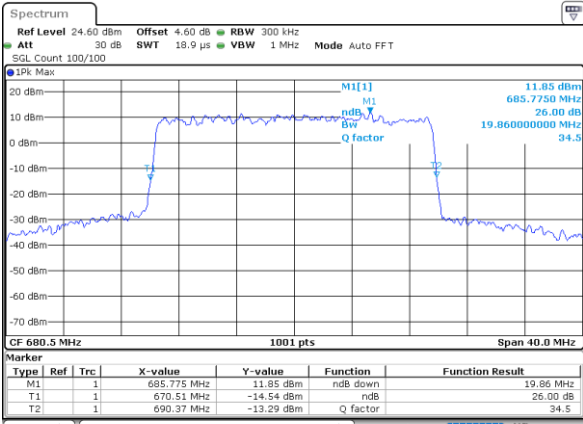


Date: 9,DEC,2022 09:22:48



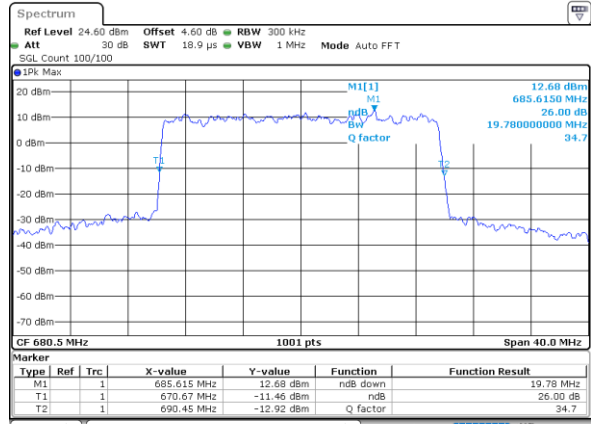
20M

QPSK



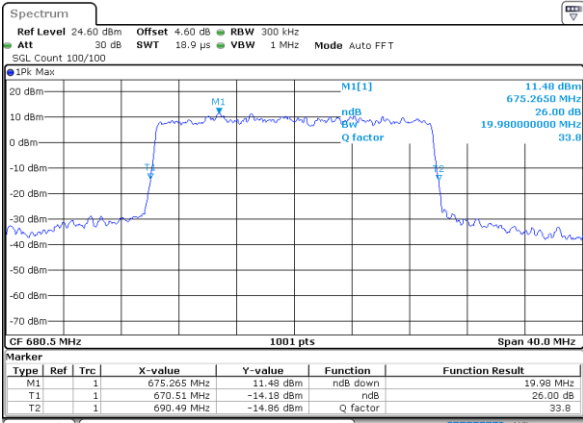
Date: 9,DEC,2022 10:13:44

16QAM



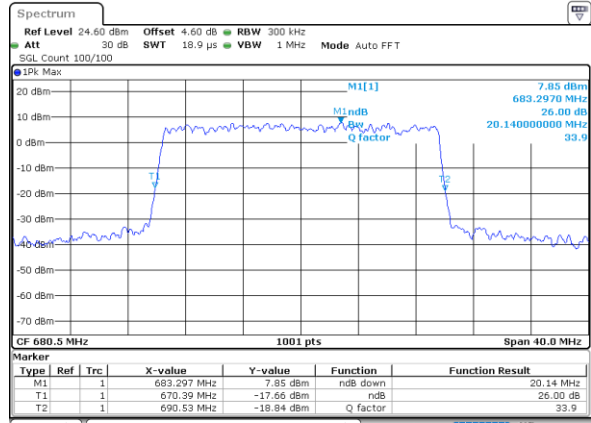
Date: 9,DEC,2022 10:15:19

64QAM



Date: 9,DEC,2022 10:16:12

256QAM



Date: 9,DEC,2022 10:17:05



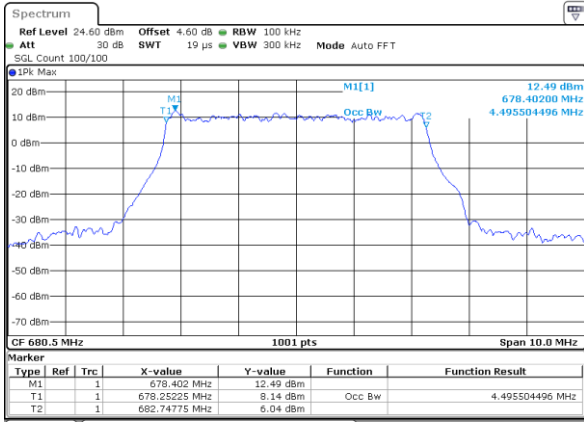
### Occupied Bandwidth

Mode	FR1 n71: OB / DFT-S OFDM			
BW	5MHz			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	4.50	4.48	4.49	4.53
BW	10MHz			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	9.35	9.37	9.35	9.35
BW	15MHz			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	14.18	14.18	14.18	14.15
BW	20MHz			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	18.98	18.94	18.90	18.94



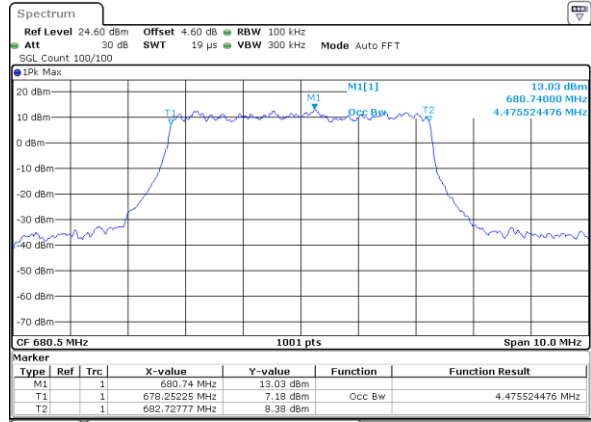
5M

QPSK



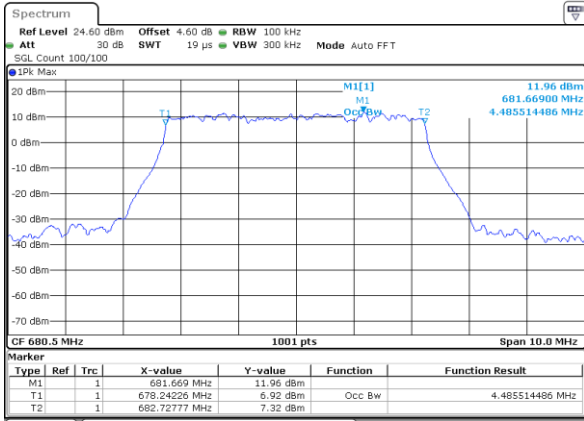
Date: 9,DEC,2022 08:14:49

16QAM



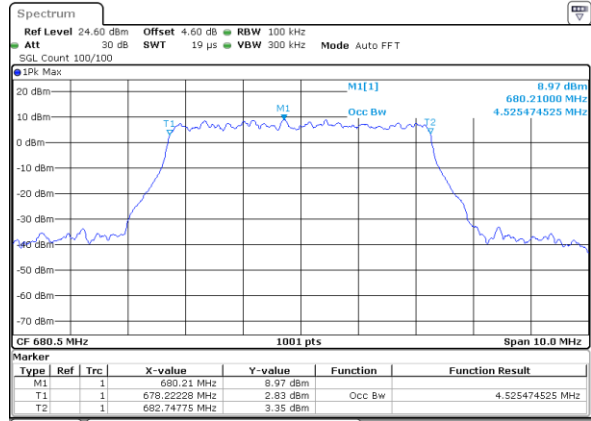
Date: 9,DEC,2022 08:15:02

64QAM



Date: 9,DEC,2022 08:15:21

256QAM

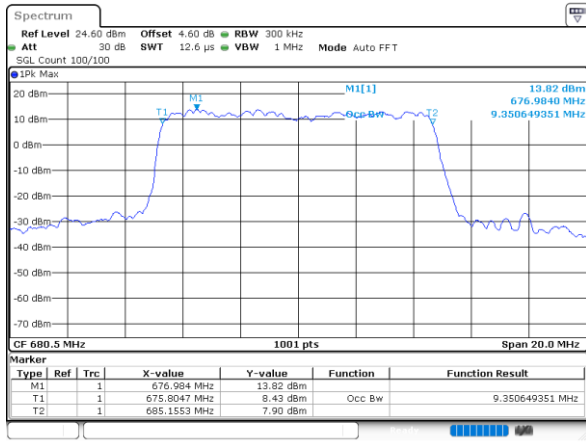


Date: 9,DEC,2022 08:15:55



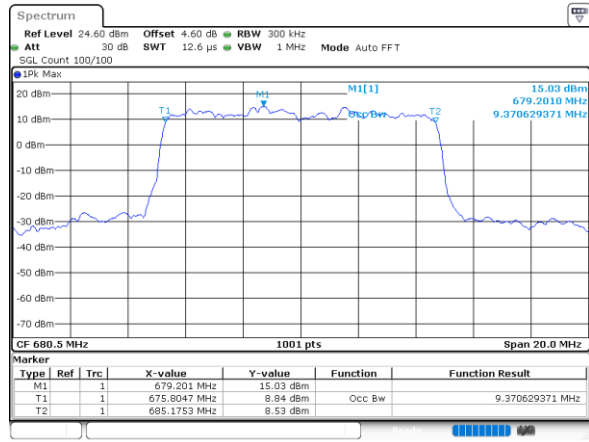
10M

QPSK



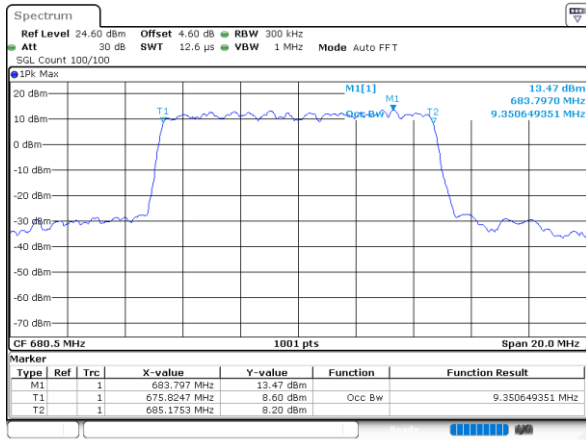
Date: 9,DEC,2022 08:56:34

16QAM



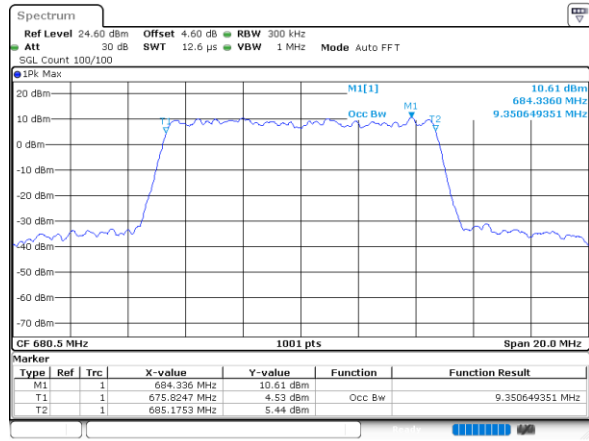
Date: 9,DEC,2022 08:57:47

64QAM



Date: 9,DEC,2022 08:58:49

256QAM

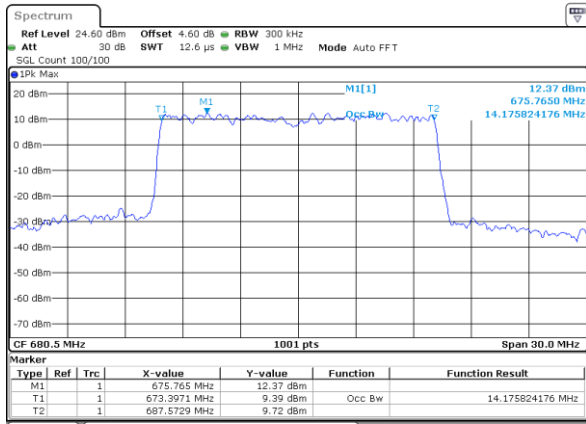


Date: 9,DEC,2022 08:59:48



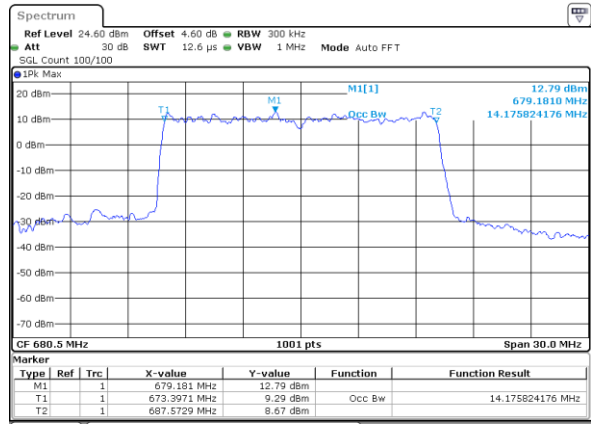
15M

QPSK



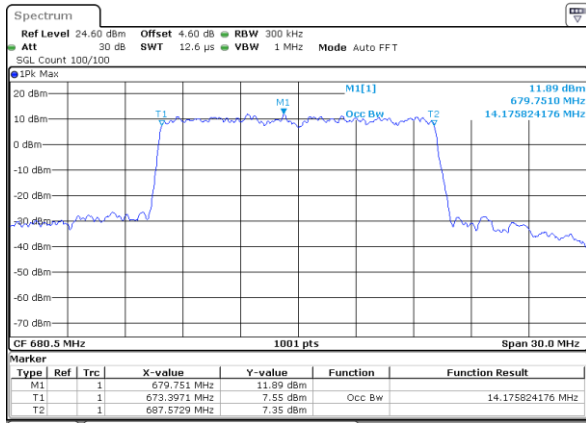
Date: 9,DEC,2022 09:18:40

16QAM



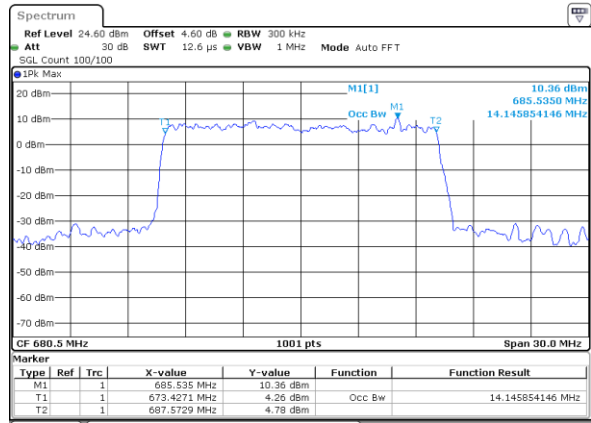
Date: 9,DEC,2022 09:19:35

64QAM



Date: 9,DEC,2022 09:20:54

256QAM



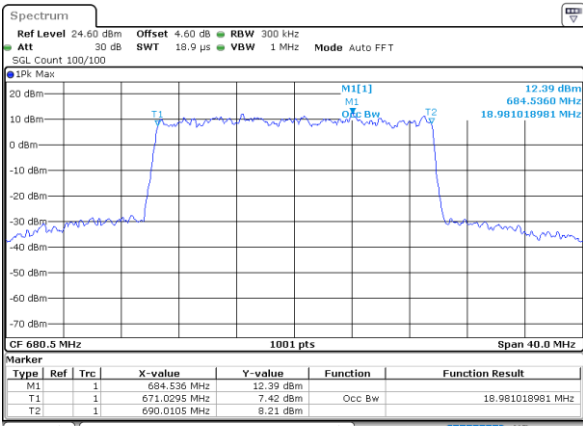
Date: 9,DEC,2022 09:22:14





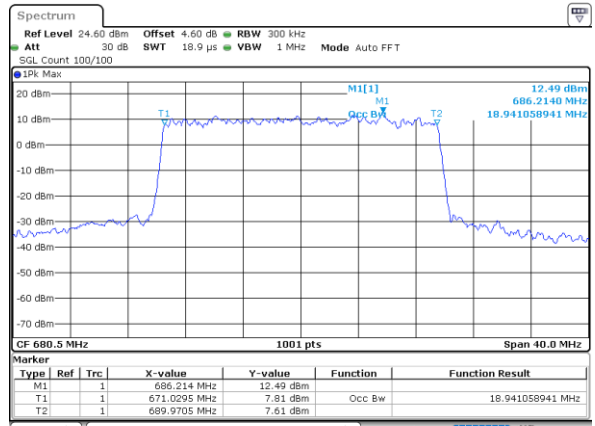
20M

QPSK



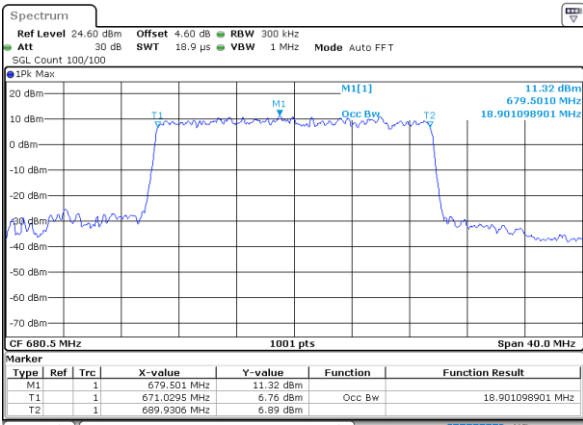
Date: 9,DEC,2022 10:13:26

16QAM



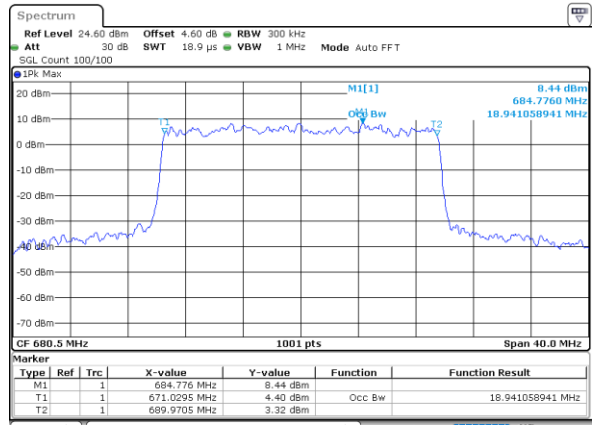
Date: 9,DEC,2022 10:15:10

64QAM



Date: 9,DEC,2022 10:15:50

256QAM



Date: 9,DEC,2022 10:16:43

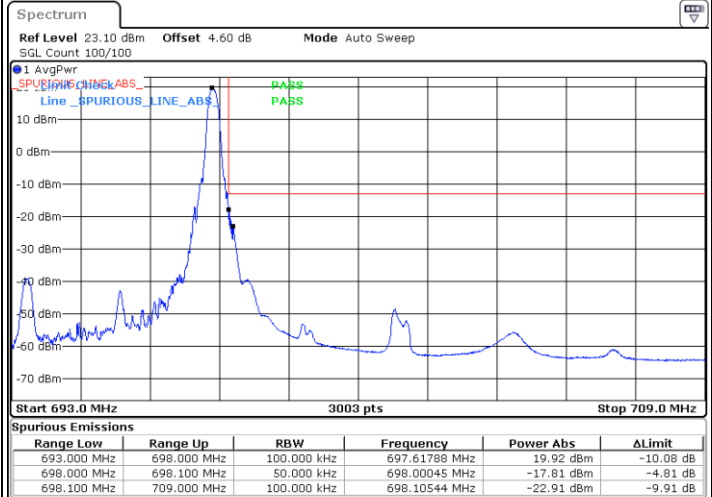
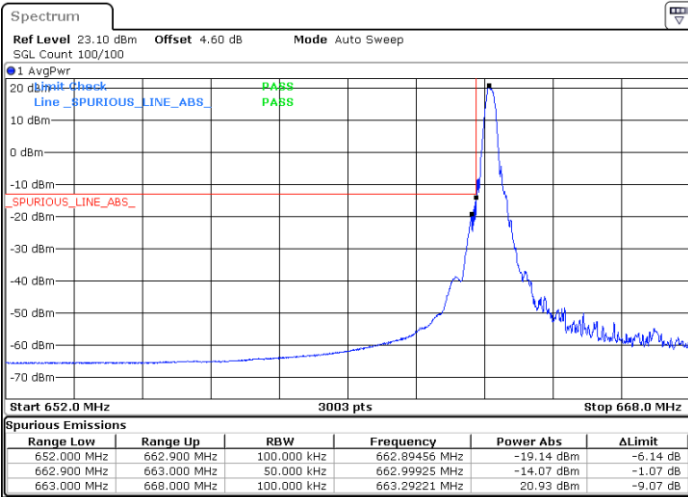


# Conducted Band Edge

## FR1 n71 / 5MHz / DFT-S OFDM / PI/2 BPSK

### Lowest Band Edge / 1RB0

### Highest Band Edge / 1RBMAX

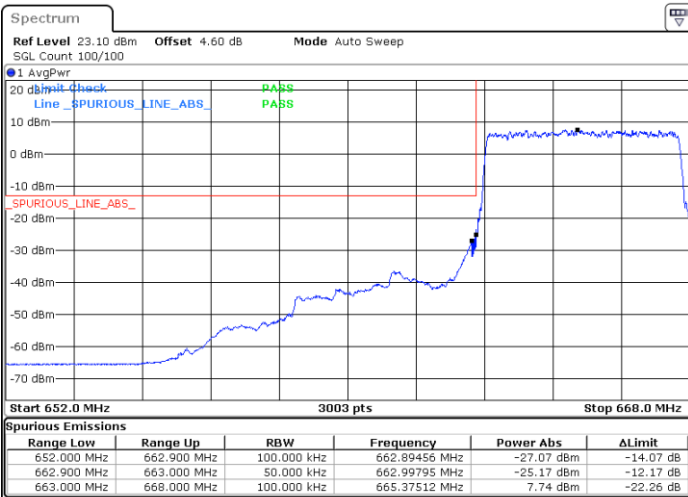


Date: 9.DEC.2022 08:02:21

Date: 9.DEC.2022 08:27:04

### Lowest Band Edge / Full RB

### Highest Band Edge / Full RB



Date: 9.DEC.2022 08:07:24

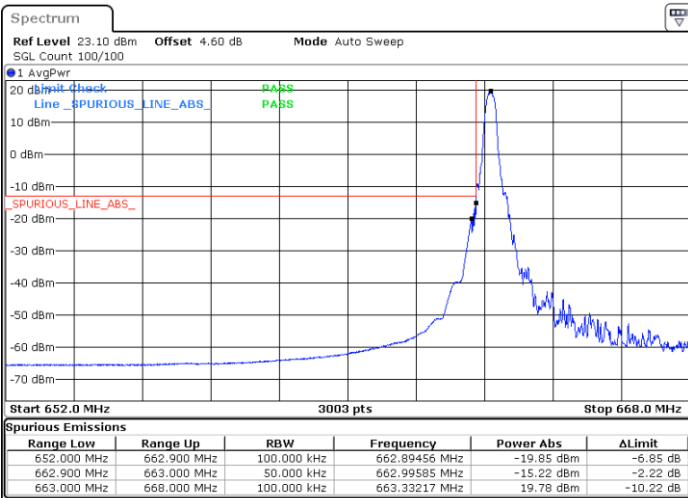
Date: 9.DEC.2022 08:22:34



FR1 n71 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

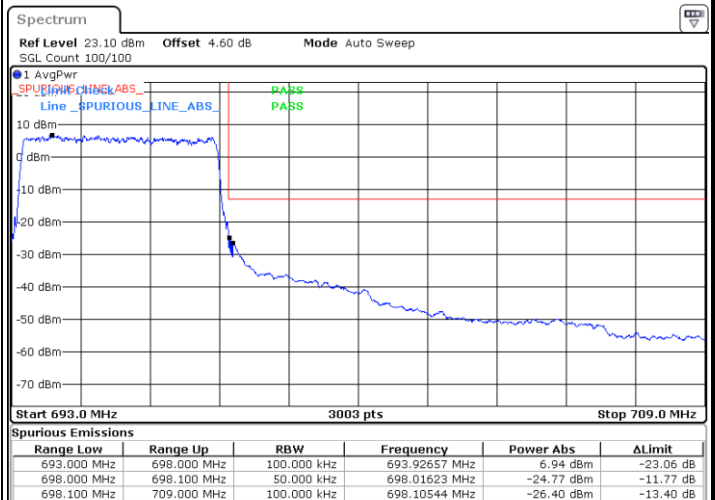
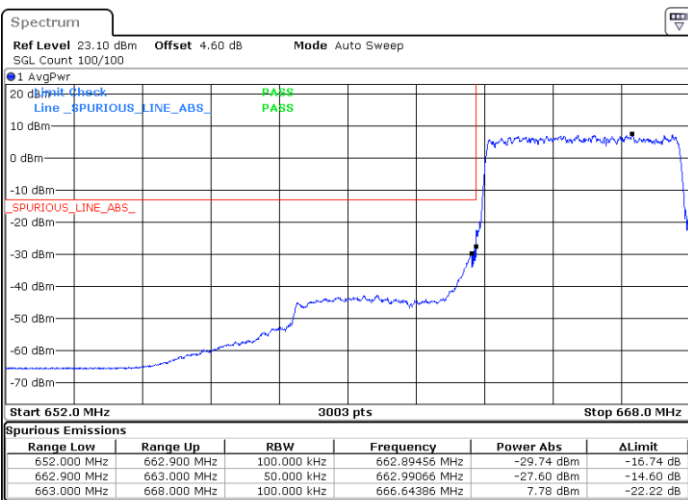


Date: 9.DEC.2022 08:03:59

Date: 9.DEC.2022 08:25:49

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9.DEC.2022 08:05:16

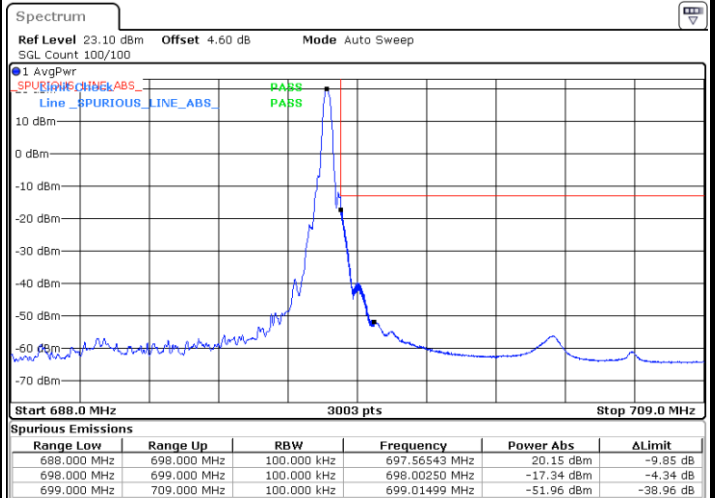
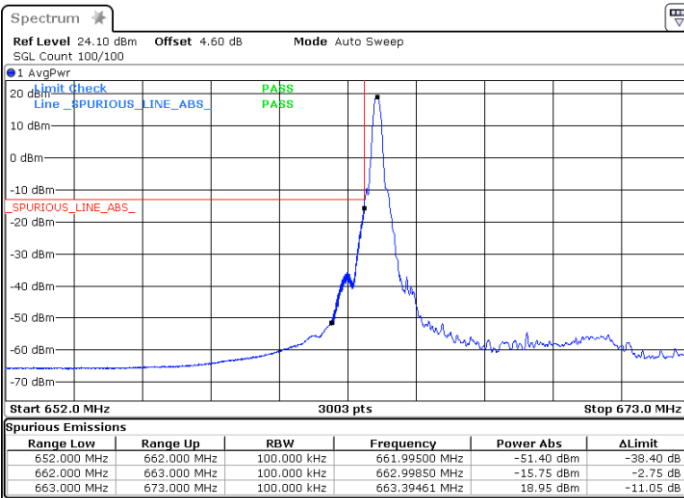
Date: 9.DEC.2022 08:24:48



FR1 n71 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

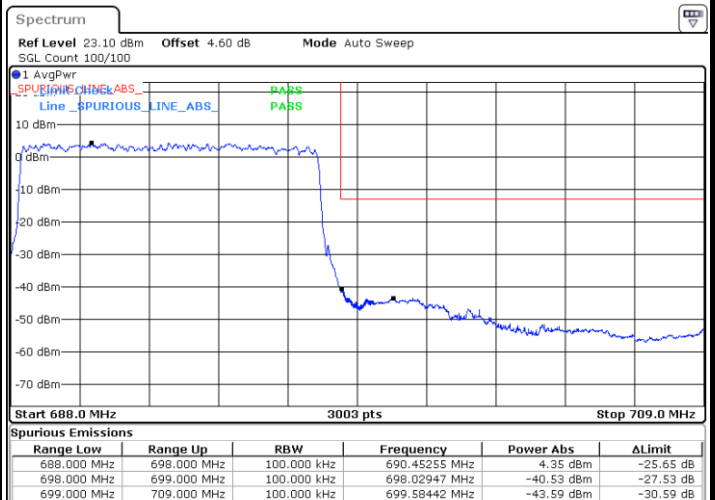
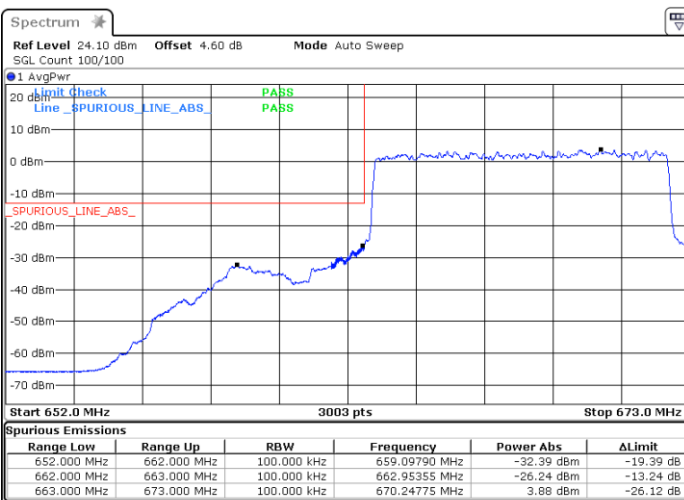


Date: 9.DEC.2022 08:41:47

Date: 9.DEC.2022 09:03:17

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9.DEC.2022 08:48:01

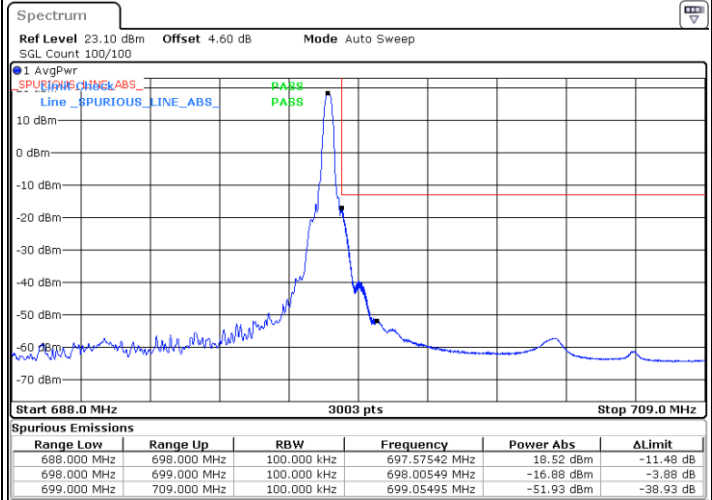
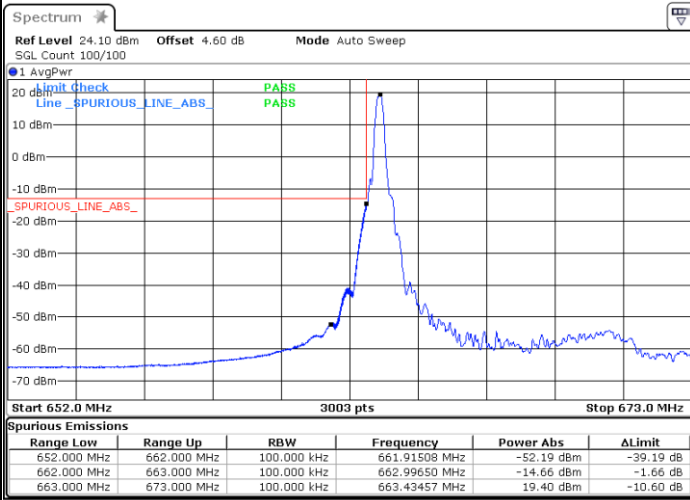
Date: 9.DEC.2022 09:06:10



FR1 n71 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

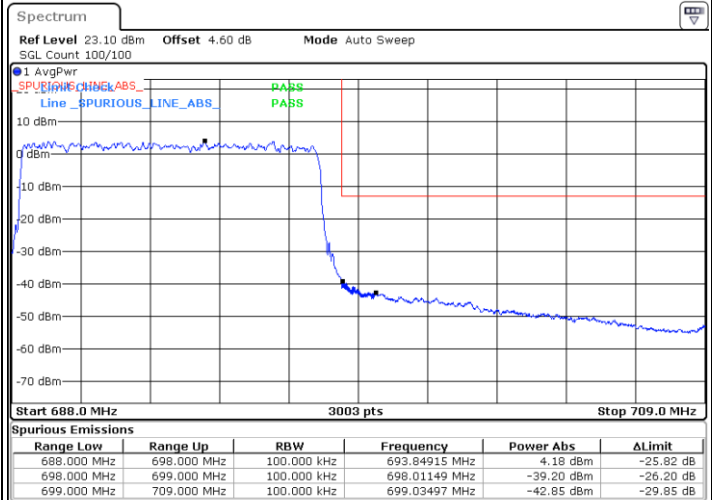
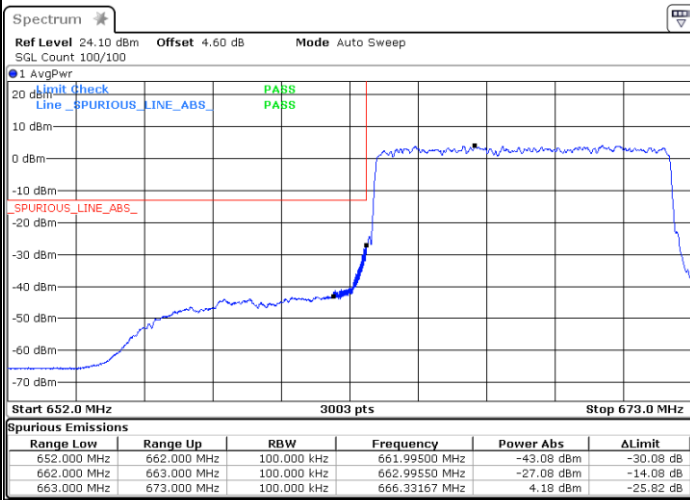


Date: 9.DEC.2022 08:45:15

Date: 9.DEC.2022 09:04:22

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9.DEC.2022 08:46:25

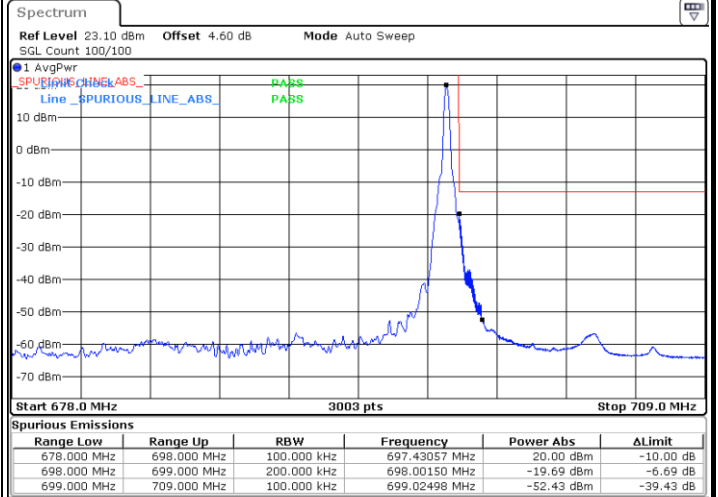
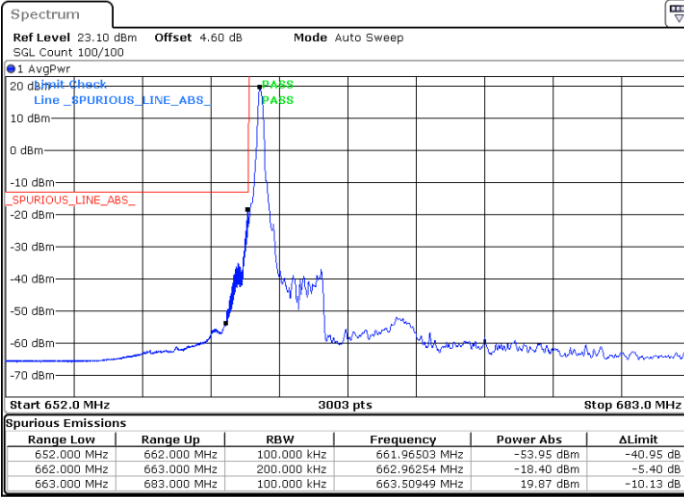
Date: 9.DEC.2022 09:05:24



FR1 n71 / 20MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

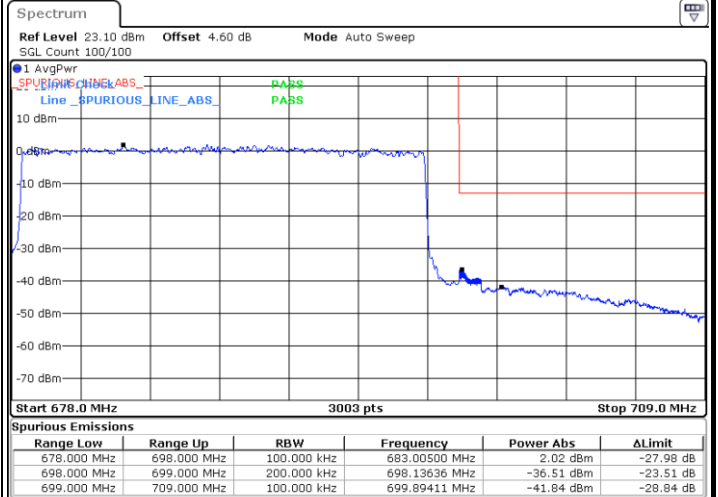
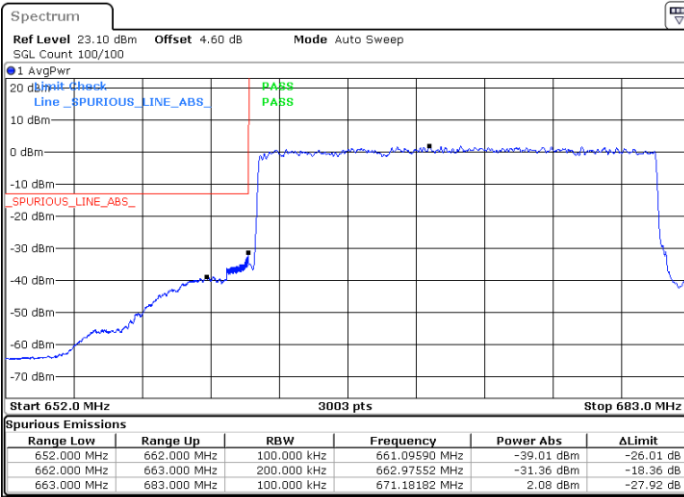


Date: 9.DEC.2022 09:29:06

Date: 9.DEC.2022 10:06:18

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9.DEC.2022 09:32:31

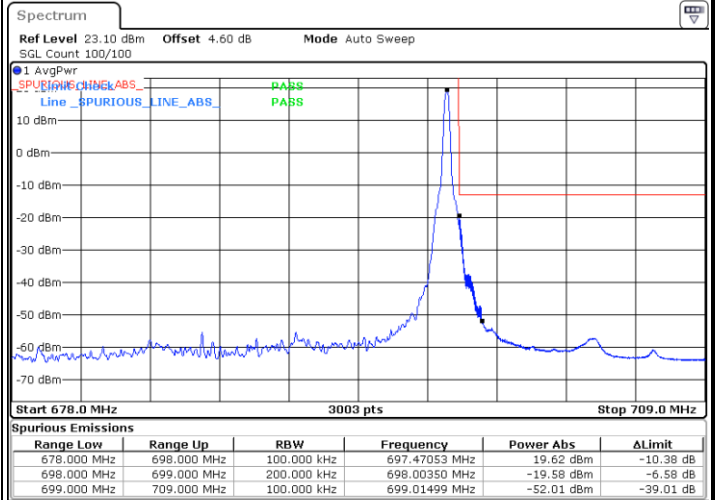
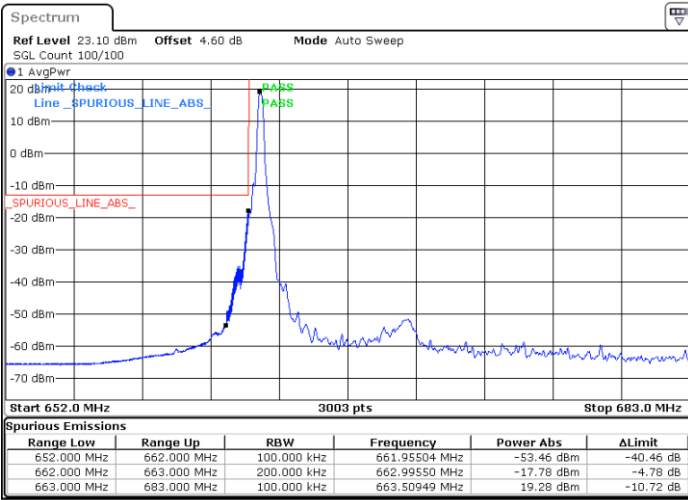
Date: 9.DEC.2022 10:02:13



FR1 n71/ 20MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

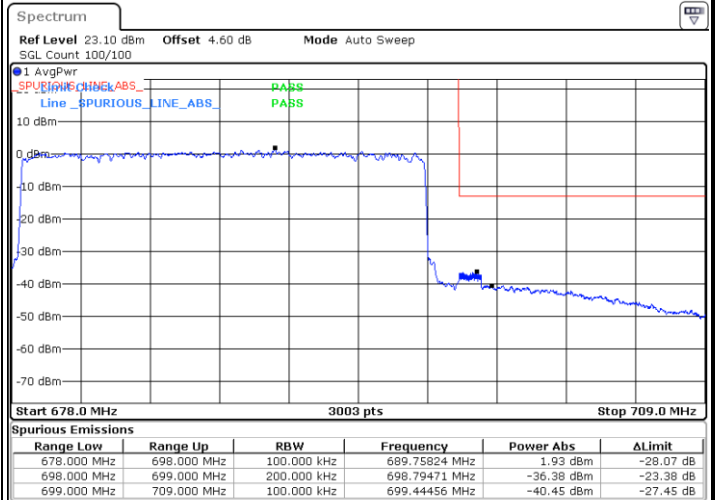
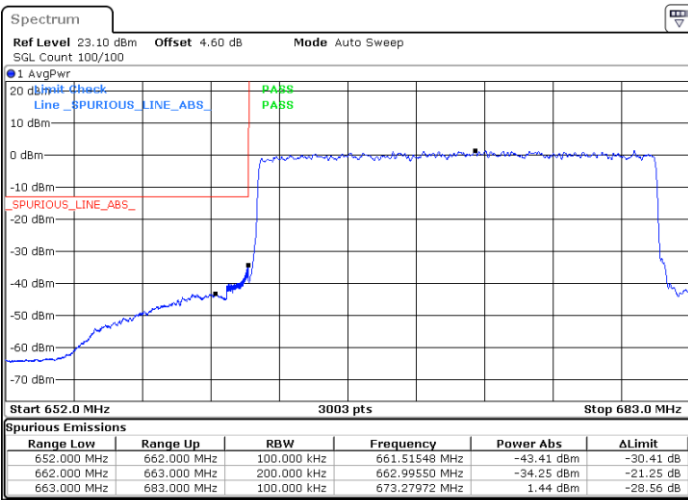


Date: 9.DEC.2022 09:30:31

Date: 9.DEC.2022 10:05:01

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9.DEC.2022 09:31:28

Date: 9.DEC.2022 10:03:09

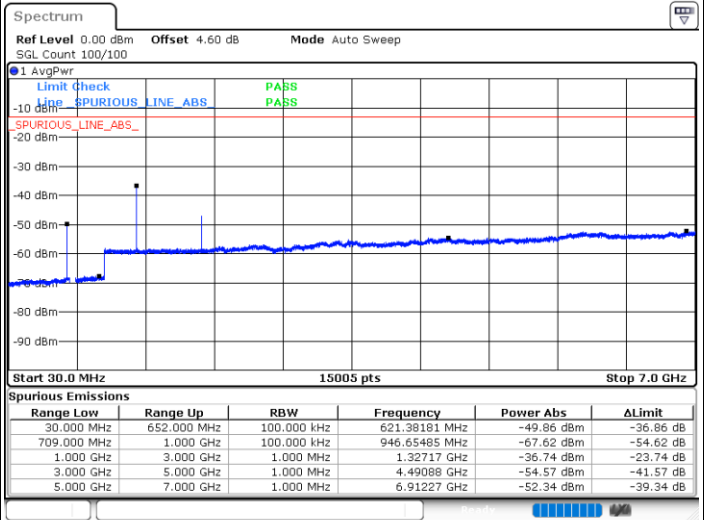
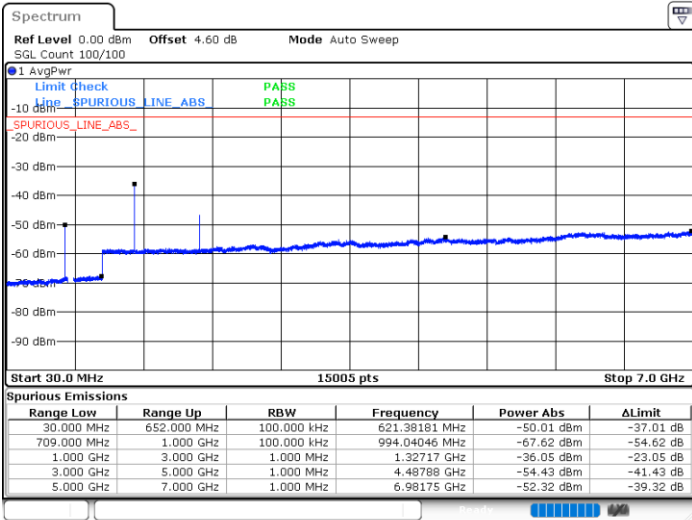


# Conducted Spurious Emission

FR1 n71 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

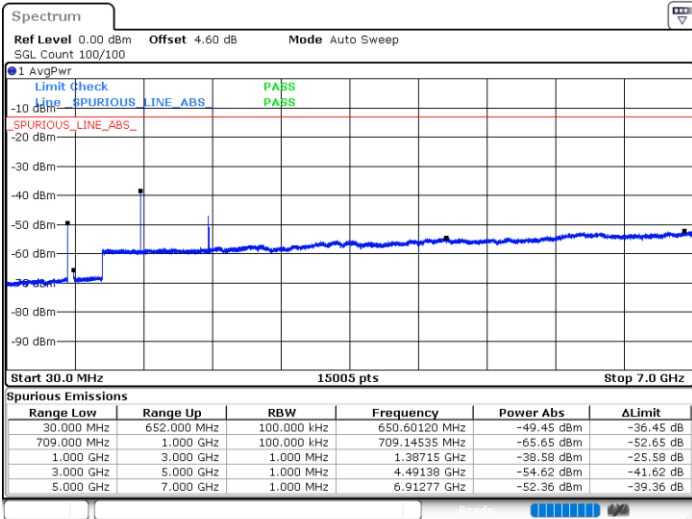
Middle Channel / 1RB1



Date: 9.DEC.2022 08:11:49

Date: 9.DEC.2022 08:14:00

Highest Channel / 1RB1



Date: 9.DEC.2022 08:28:33

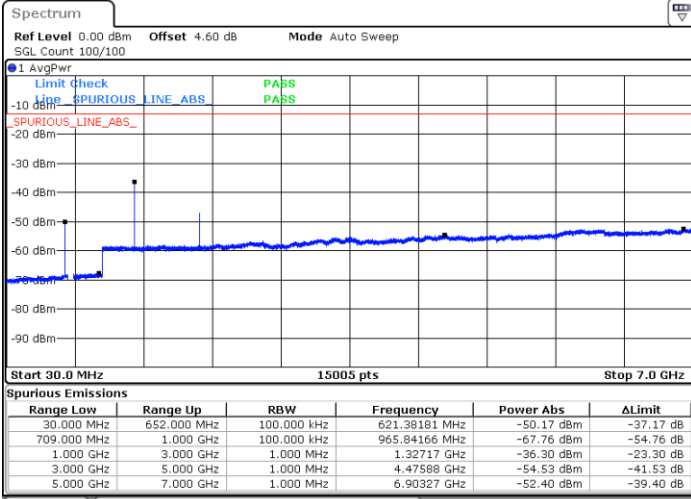




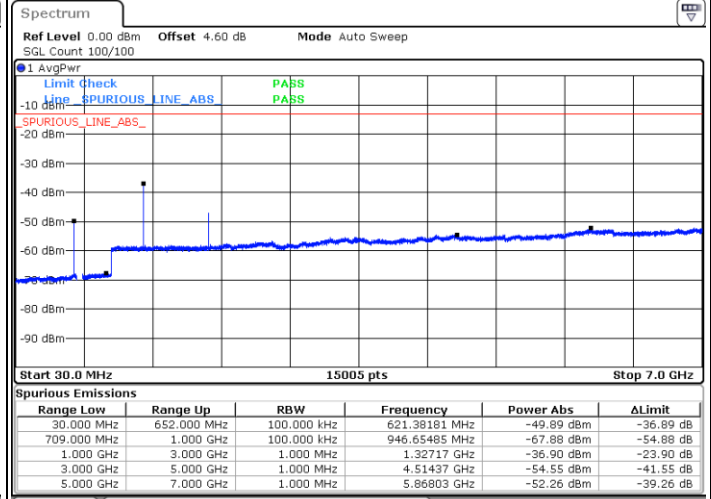
FR1 n71 / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

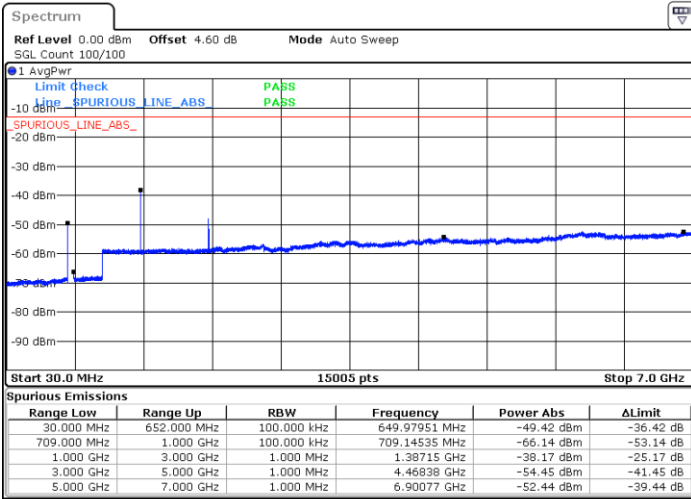


Date: 9.DEC.2022 08:12:58



Date: 9.DEC.2022 08:13:34

Highest Channel / 1RB1



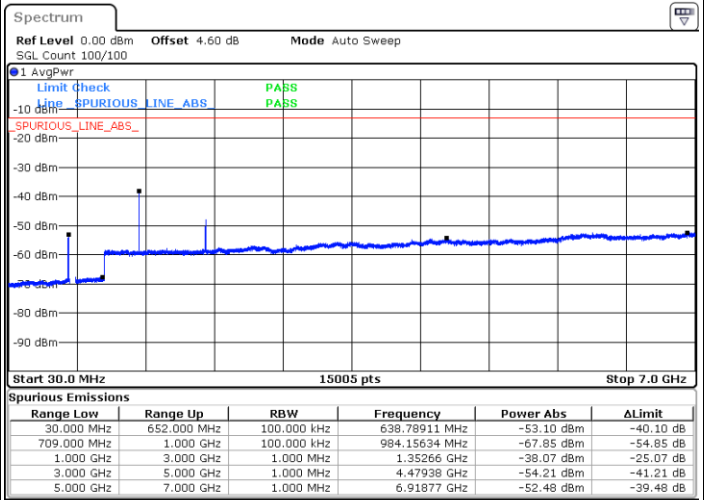
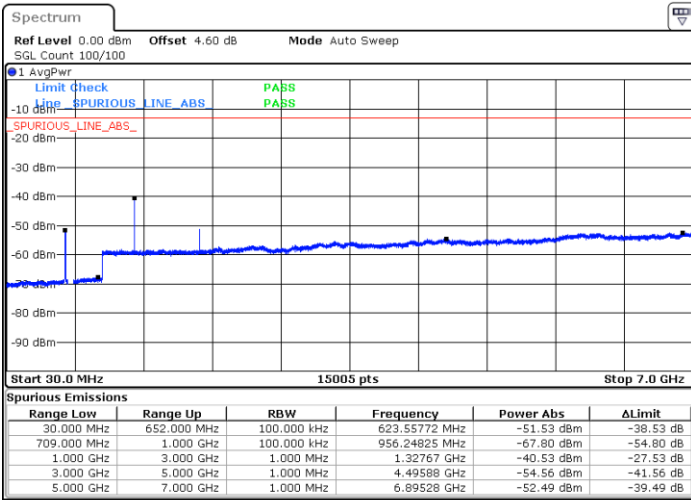
Date: 9.DEC.2022 08:30:21



FR1 n71/ 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

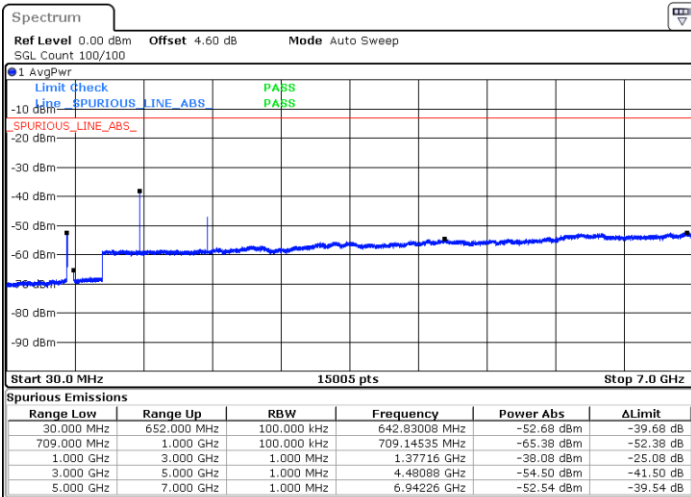
Middle Channel / 1RB1



Date: 9.DEC.2022 08:50:41

Date: 9.DEC.2022 08:54:27

Highest Channel / 1RB1



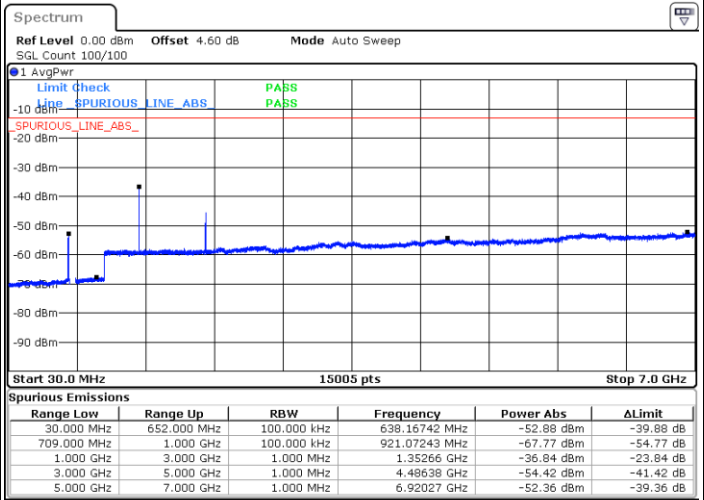
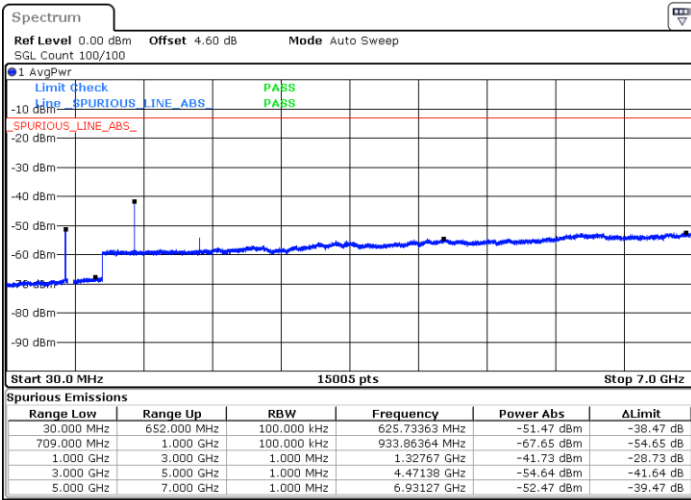
Date: 9.DEC.2022 09:08:43



FR1 n71/ 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

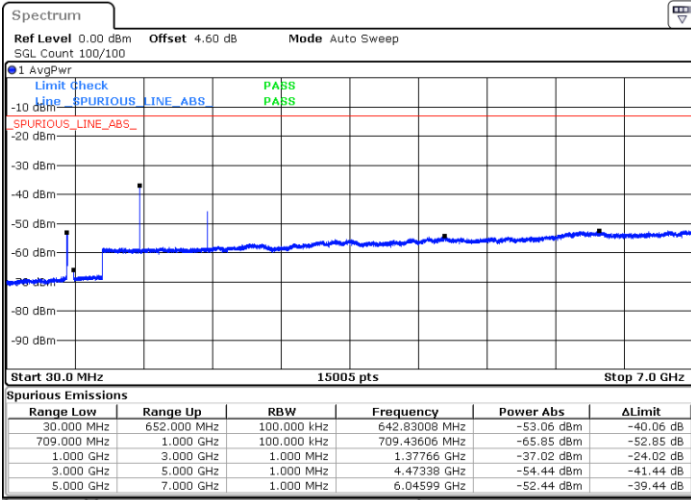
Middle Channel / 1RB1



Date: 9.DEC.2022 08:51:26

Date: 9.DEC.2022 08:53:12

Highest Channel / 1RB1



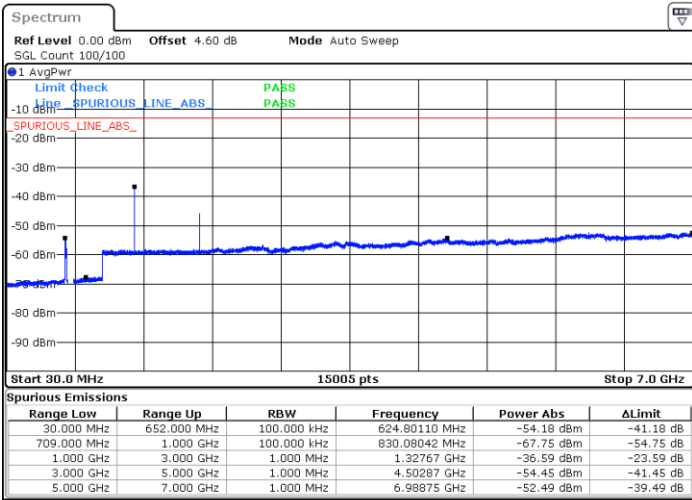
Date: 9.DEC.2022 09:12:00



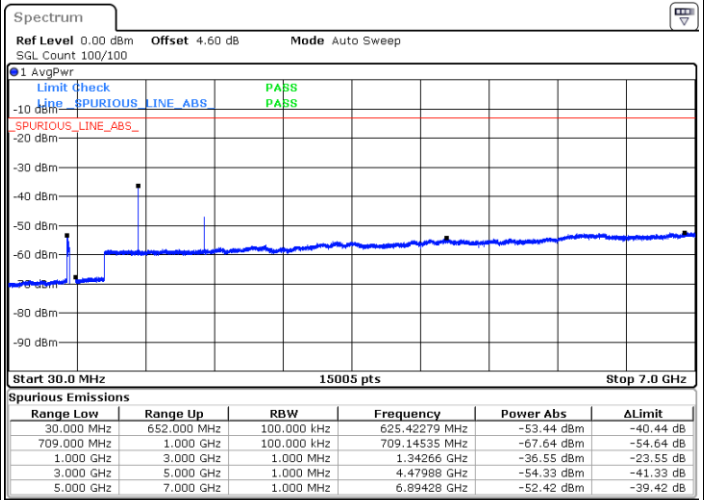
FR1 n71 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

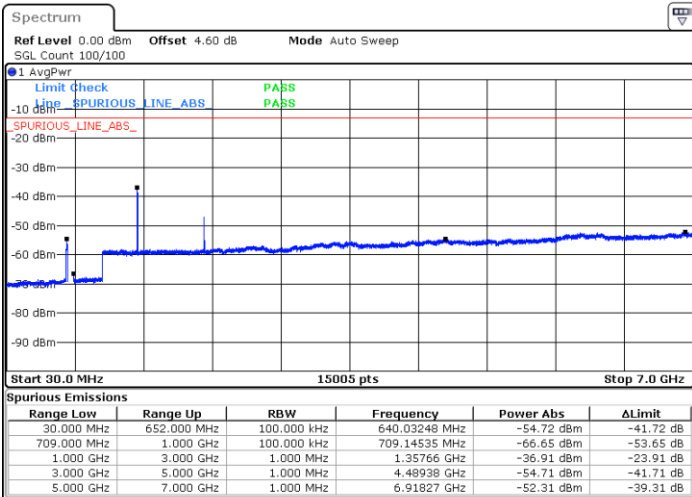


Date: 9.DEC.2022 09:36:22



Date: 9.DEC.2022 09:45:47

Highest Channel / 1RB1



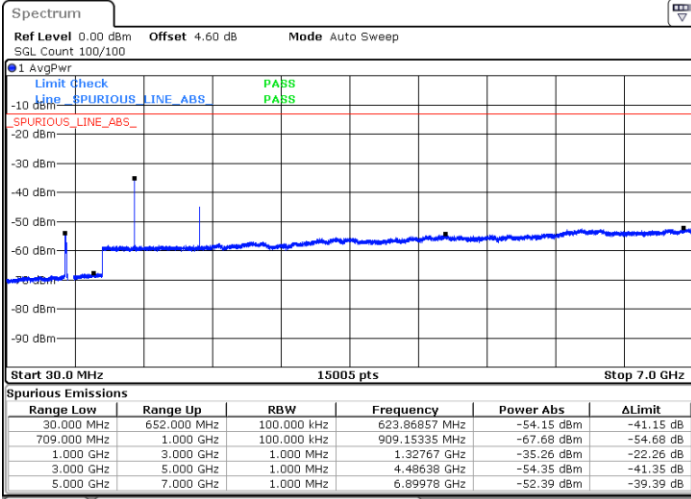
Date: 9.DEC.2022 10:07:29



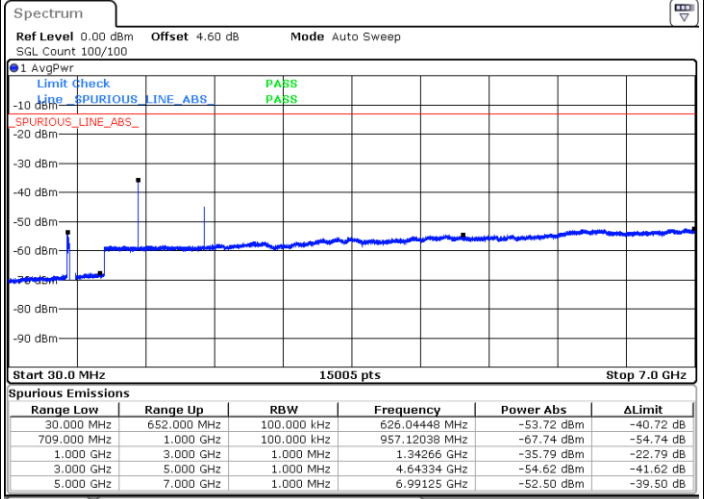
FR1 n71 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

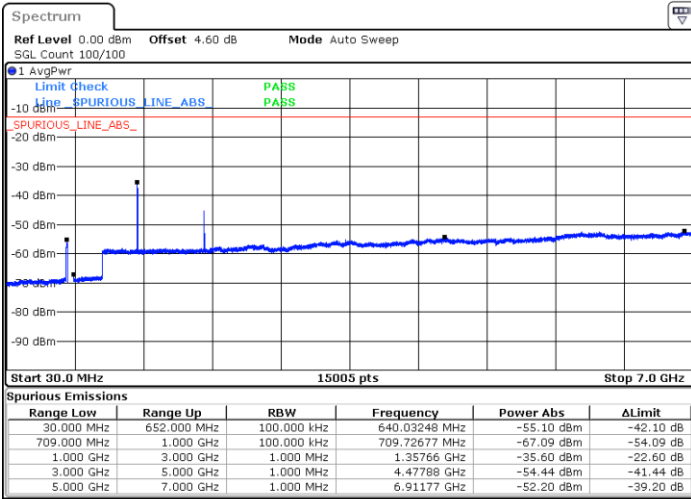


Date: 9.DEC.2022 09:40:29



Date: 9.DEC.2022 09:43:55

Highest Channel / 1RB1



Date: 9.DEC.2022 10:09:42



Frequency Stability

Test Conditions		FR1 n71 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0052	
-30	Normal Voltage	0.0035	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0027	
20	Battery End Point	0.0034	

Note:

1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.48 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

Note: Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

SA n2 / NR 20MHz / QPSK / ANTO								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3741	-58.53	-13	-45.53	-70.79	2.64	14.90	H
	5613	-56.42	-13	-43.42	-68.28	2.94	14.80	H
	7488	-53.95	-13	-40.95	-63.72	3.39	13.16	H
	3741	-58.22	-13	-45.22	-70.48	2.64	14.90	V
	5613	-57.06	-13	-44.06	-68.92	2.94	14.80	V
	7488	-53.83	-13	-40.83	-63.60	3.39	13.16	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_13A_n2A / LTE 10MHz + NR 20MHz / QPSK / ANTO(LTE) & ANTO(NR)								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
NR n2 LTE Band13 Middle	3741	-58.78	-13	-45.78	-71.04	2.64	14.90	H
	5613	-50.11	-13	-37.11	-61.97	2.94	14.80	H
	7488	-53.70	-13	-40.70	-63.47	3.39	13.16	H
	3741	-58.27	-13	-45.27	-70.53	2.64	14.90	V
	5613	-57.36	-13	-44.36	-69.22	2.94	14.80	V
	7488	-53.65	-13	-40.65	-63.42	3.39	13.16	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

SA n5 / NR 20MHz / QPSK / ANTO								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-66.25	-13	-53.25	-73.22	1.58	10.70	H
	2480	-57.64	-13	-44.64	-65.89	2.102	12.50	H
	3312	-61.91	-13	-48.91	-70.80	2.856	13.90	H
	1656	-64.73	-13	-51.73	-71.70	1.58	10.70	V
	2480	-55.17	-13	-42.17	-63.42	2.10	12.50	V
	3312	-61.56	-13	-48.56	-70.45	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



EN-DC_66A_n5A / LTE 20MHz + NR 20MHz / QPSK / ANT0(LTE) & ANT0(NR)								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
NR n5 LTE Band66 Middle	1656	-65.90	-13	-52.90	-72.87	1.58	10.70	H
	2482	-57.39	-13	-44.39	-65.64	2.102	12.50	H
	3312	-61.87	-13	-48.87	-70.76	2.856	13.90	H
	1656	-65.02	-13	-52.02	-71.99	1.58	10.70	V
	2482	-50.95	-13	-37.95	-59.20	2.10	12.50	V
	3312	-61.91	-13	-48.91	-70.80	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_48A_n5A / LTE 20MHz + NR 20MHz / QPSK / ANT2(LTE) & ANT0(NR)								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
NR n5 LTE Band48 Middle	1656	-65.82	-13	-52.82	-72.79	1.58	10.70	H
	2480	-59.01	-13	-46.01	-67.26	2.102	12.50	H
	3312	-58.57	-13	-45.57	-67.46	2.856	13.90	H
	1656	-65.09	-13	-52.09	-72.06	1.58	10.70	V
	2480	-56.00	-13	-43.00	-64.25	2.10	12.50	V
	3312	-57.62	-13	-44.62	-66.51	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

SA n41 / NR 100MHz / QPSK / ANT2								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5088	-62.23	-25	-37.23	-72.44	3.03	13.24	H
	7632	-55.92	-25	-30.92	-65.37	3.56	13.01	H
	10190	-61.99	-25	-36.99	-71.51	3.92	13.44	H
	5088	-62.34	-25	-37.34	-72.55	3.03	13.24	V
	7632	-54.47	-25	-29.47	-63.92	3.56	13.01	V
	10190	-62.14	-25	-37.14	-71.66	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_2A_n41A / LTE 20MHz + NR 100MHz / QPSK / ANT0(LTE) & ANT1(NR)								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
NR n41 LTE Band2 Middle	5088	-60.25	-25	-35.25	-70.46	3.03	13.24	H
	7632	-50.98	-25	-25.98	-60.43	3.56	13.01	H
	10190	-60.68	-25	-35.68	-70.20	3.92	13.44	H
	5088	-61.23	-25	-36.23	-71.44	3.03	13.24	V
	7632	-49.92	-25	-24.92	-59.37	3.56	13.01	V





	10190	-61.12	-25	-36.12	-70.64	3.92	13.44	V
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Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_48A_n66A / LTE 20MHz + NR 40MHz / QPSK / ANT2(LTE) & ANT0(NR)								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
NR n66 LTE Band48 Middle	3453	-59.13	-13	-46.13	-69.87	2.604	13.34	H
	5181	-56.71	-13	-43.71	-67.22	3.011	13.52	H
	6912	-55.75	-13	-42.75	-65.95	3.271	13.47	H
	3453	-59.37	-13	-46.37	-70.11	2.604	13.34	V
	5181	-57.17	-13	-44.17	-67.68	3.011	13.52	V
	6912	-55.96	-13	-42.96	-66.16	3.271	13.47	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

SA n71 / NR 20MHz(ANT0) / QPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1344	-68.59	-13	-55.59	-71.70	-71.84	4.00	9.40	H
	2016	-63.20	-13	-50.20	-73.73	-66.77	4.88	10.60	H
	2688	-61.28	-13	-48.28	-75.18	-66.21	5.52	12.60	H
	1344	-67.64	-13	-54.64	-71.59	-70.89	4.00	9.40	V
	2016	-62.33	-13	-49.33	-73.40	-65.90	4.88	10.60	V
	2688	-60.38	-13	-47.38	-75.07	-65.31	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_66A_n71A / LTE 20MHz + NR 20MHz / QPSK / ANT0(LTE) & ANT0(NR)									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
NR n71 LTE Band66 Middle	1344	-68.56	-13	-55.56	-71.70	-71.81	4.00	9.40	H
	2016	-63.34	-13	-50.34	-73.73	-66.91	4.88	10.60	H
	2688	-61.28	-13	-48.28	-75.18	-66.21	5.52	12.60	H
	1344	-67.73	-13	-54.73	-71.59	-70.98	4.00	9.40	V
	2104	-61.92	-13	-48.92	-73.40	-65.49	4.88	10.60	V
	2688	-45.86	-13	-32.86	-75.07	-50.79	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.