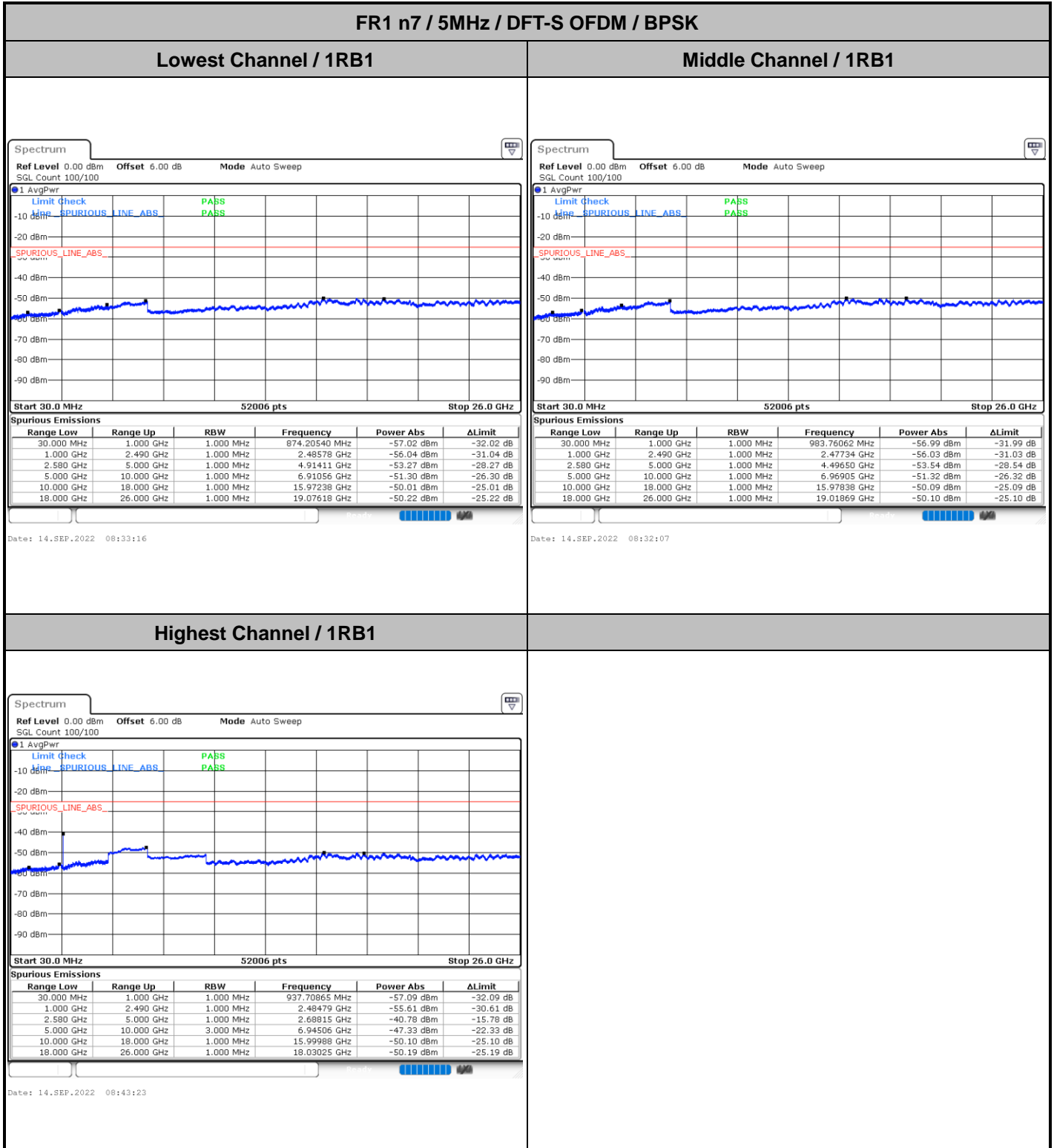




# Conducted Spurious Emission

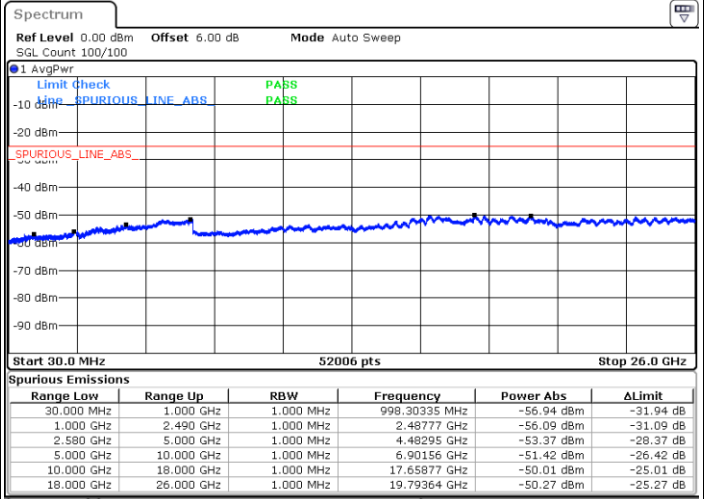
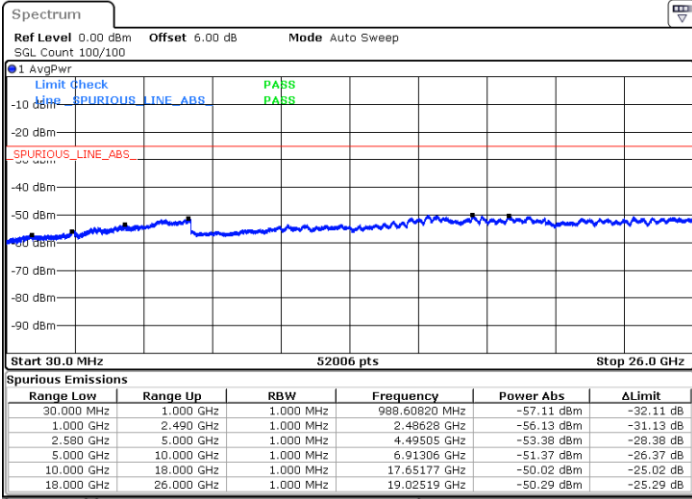




FR1 n7 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

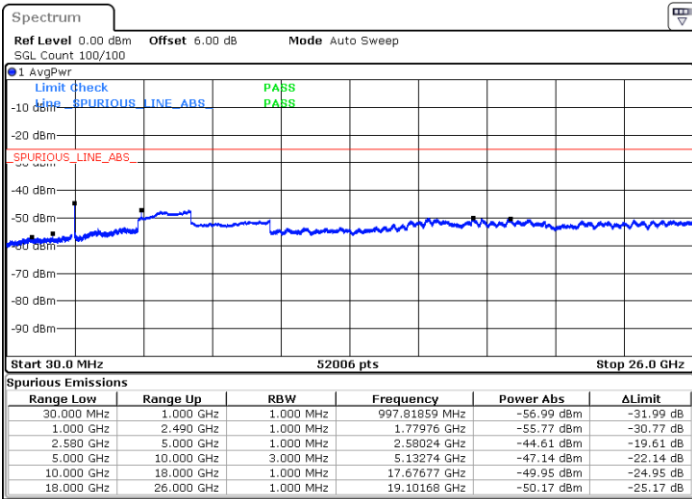
Middle Channel / 1RB1



Date: 14.SEP.2022 08:34:20

Date: 14.SEP.2022 08:30:32

Highest Channel / 1RB1



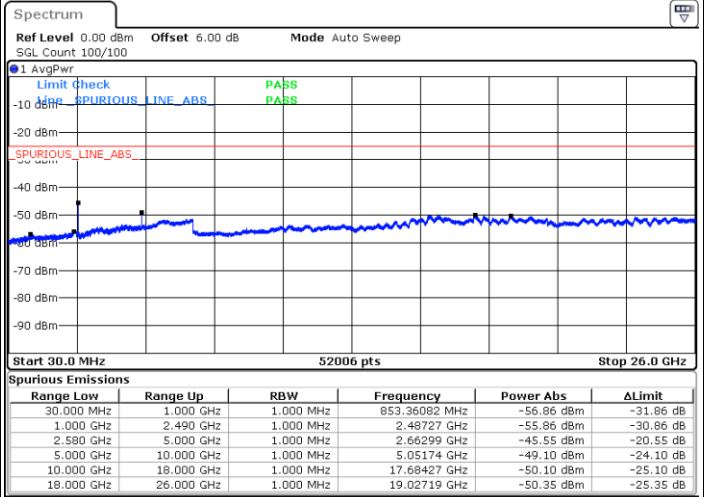
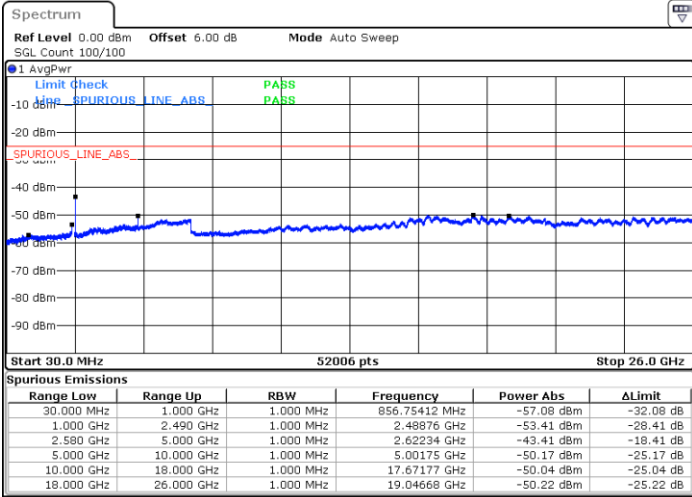
Date: 14.SEP.2022 08:44:15



FR1 n7 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

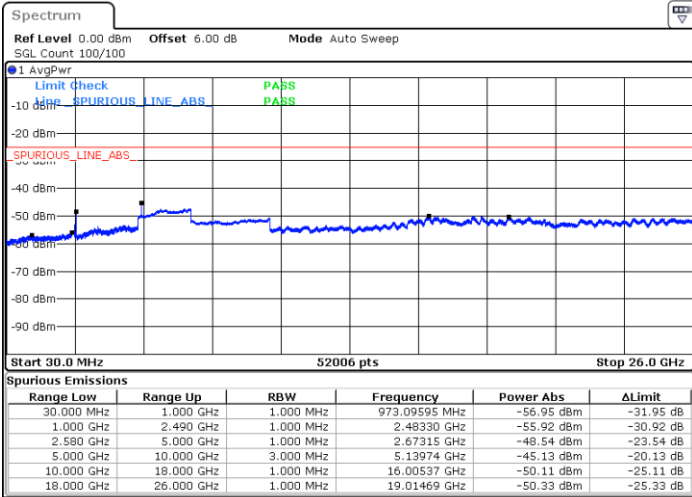
Middle Channel / 1RB1



Date: 14.SEP.2022 07:47:21

Date: 14.SEP.2022 07:43:41

Highest Channel / 1RB1



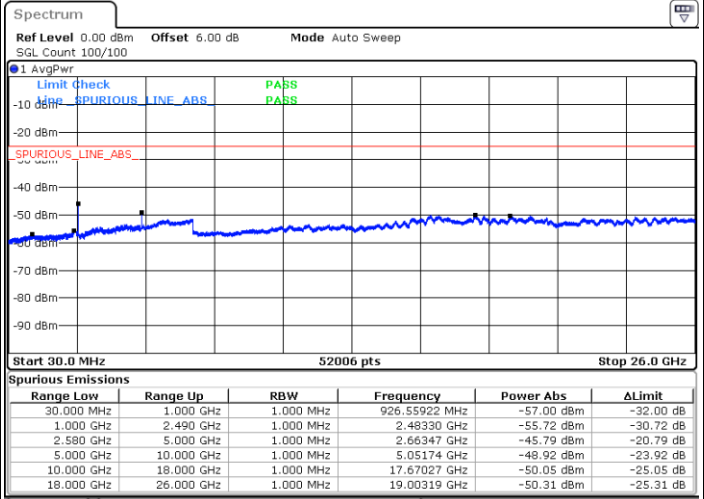
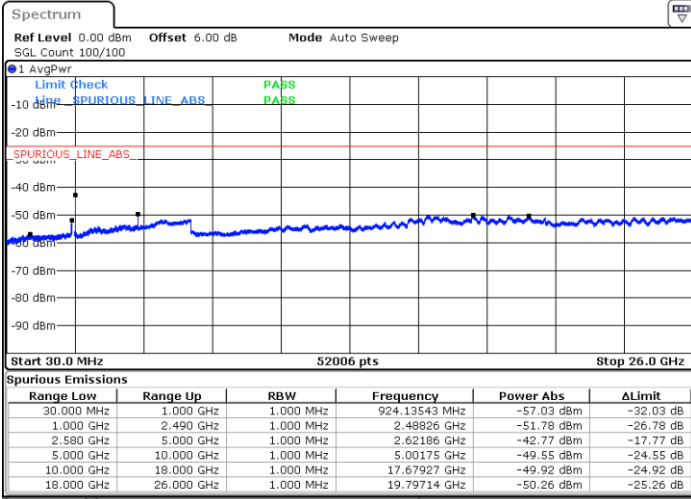
Date: 14.SEP.2022 07:57:37



FR1 n7 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

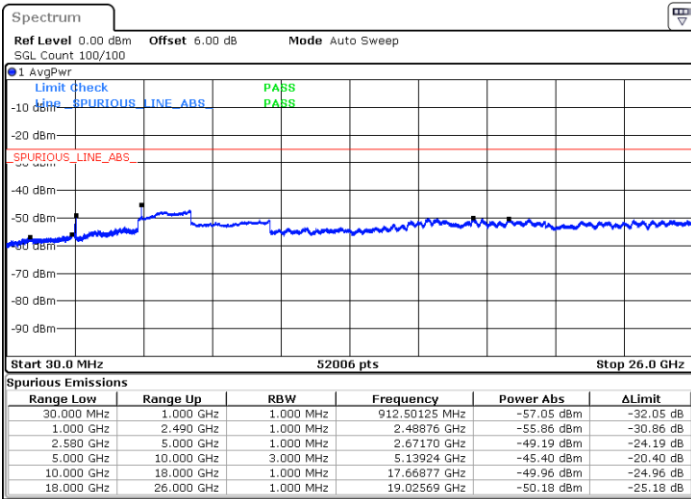
Middle Channel / 1RB1



Date: 14.SEP.2022 07:46:27

Date: 14.SEP.2022 07:45:11

Highest Channel / 1RB1



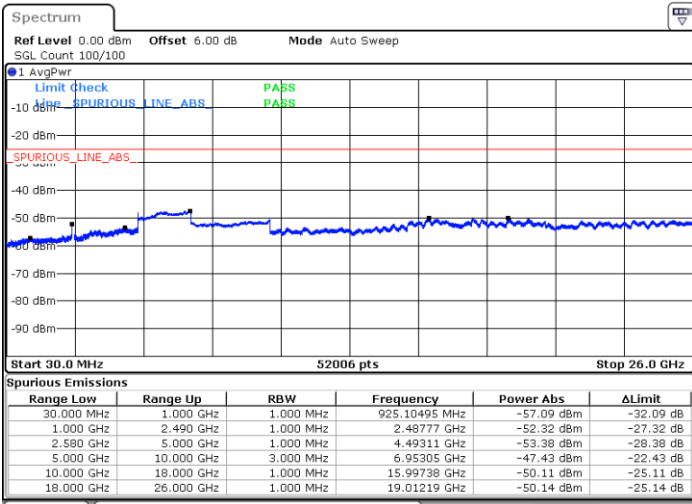
Date: 14.SEP.2022 07:58:57



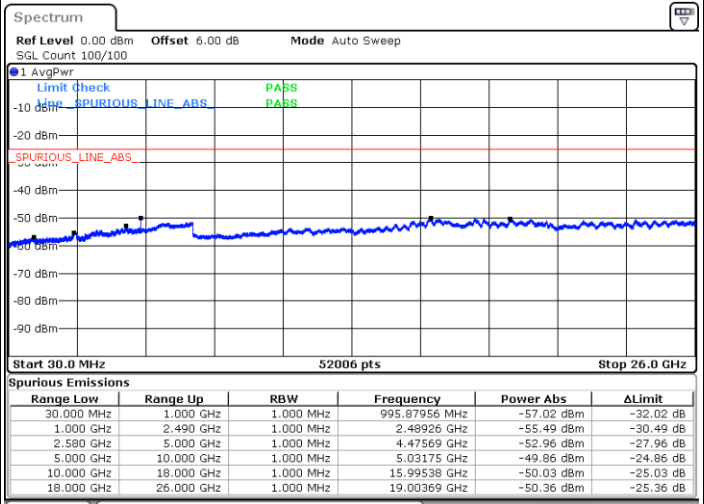
FR1 n7 / 40MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

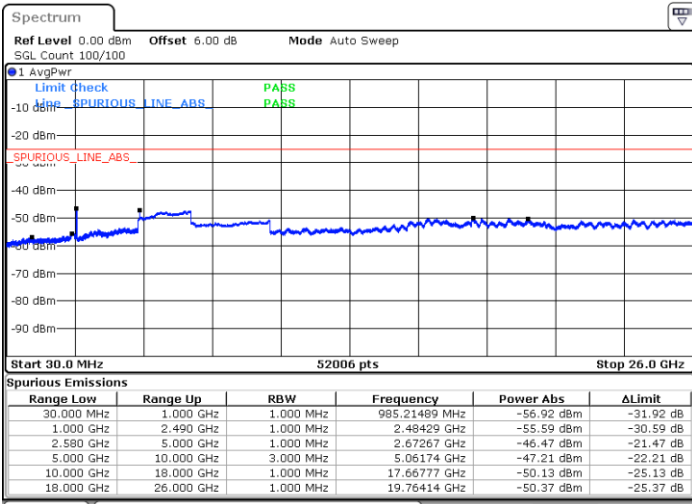


Date: 14.SEP.2022 07:21:19



Date: 14.SEP.2022 06:48:30

Highest Channel / 1RB1



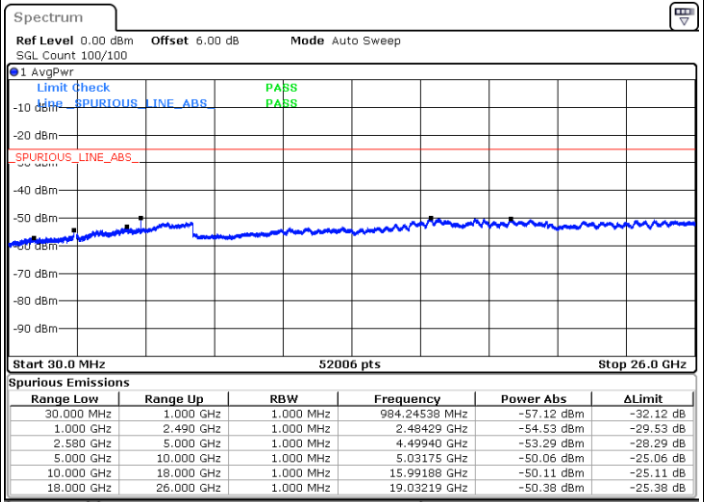
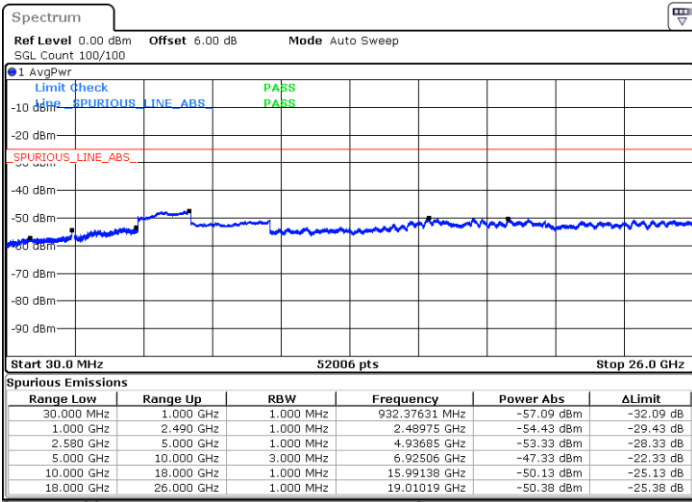
Date: 14.SEP.2022 07:31:35



FR1 n7 / 40MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

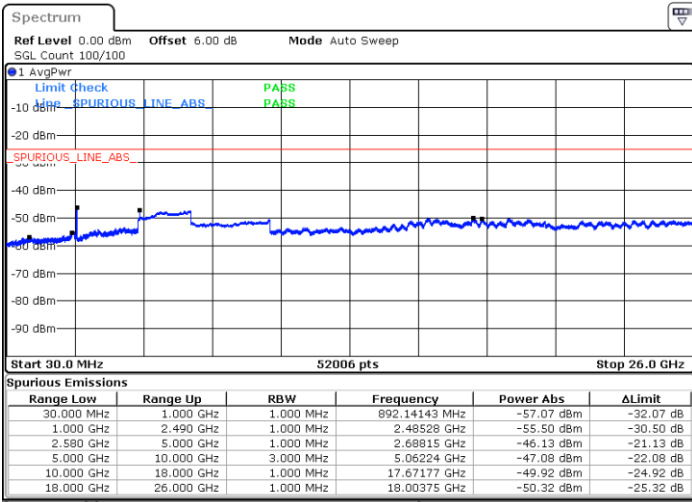
Middle Channel / 1RB1



Date: 14.SEP.2022 07:20:27

Date: 14.SEP.2022 06:50:12

Highest Channel / 1RB1



Date: 14.SEP.2022 07:32:38



Frequency Stability

Test Conditions		FR1 n7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0102	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0035	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0011	

Note:

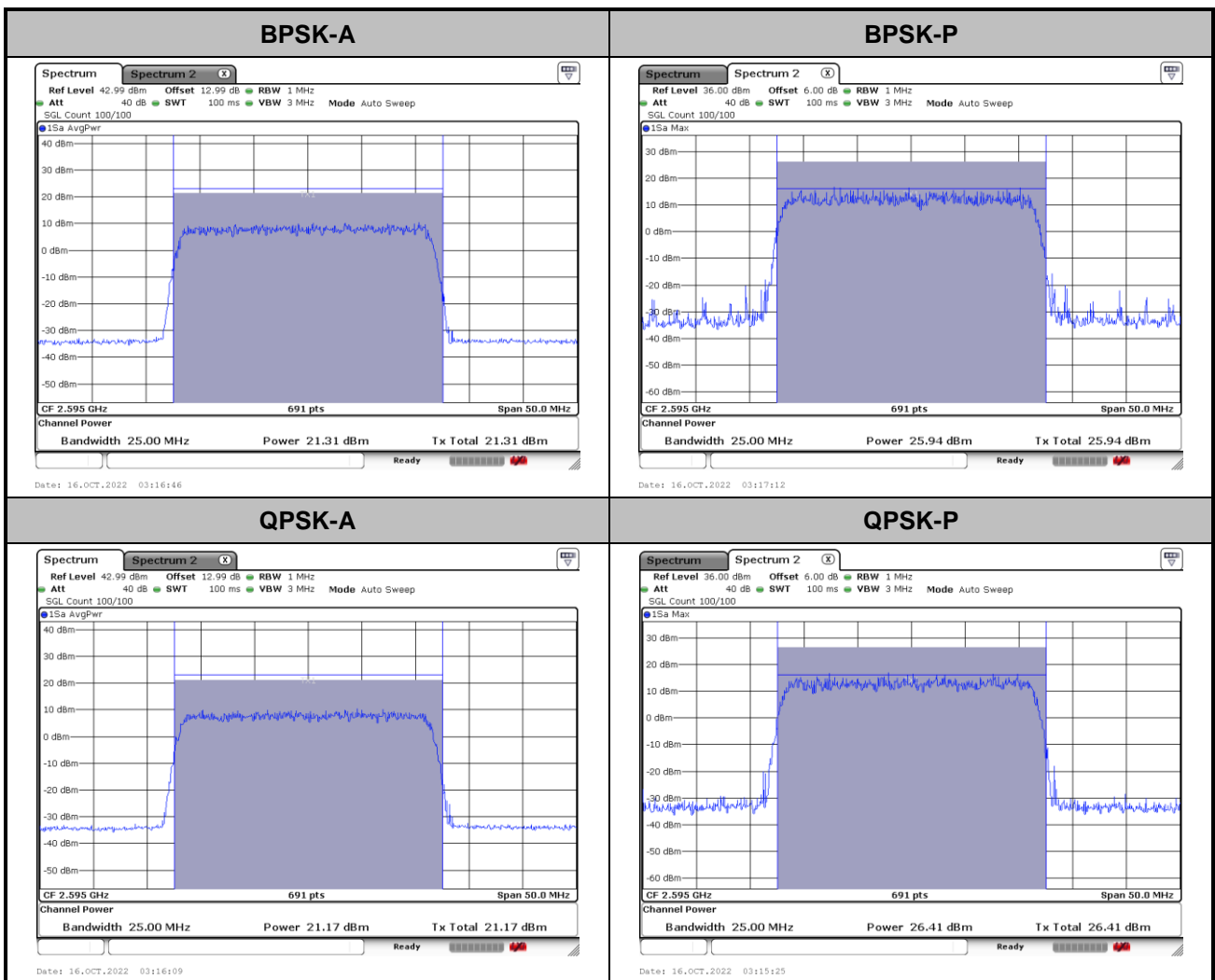
1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# FR1 n38

## Peak-to-Average Ratio

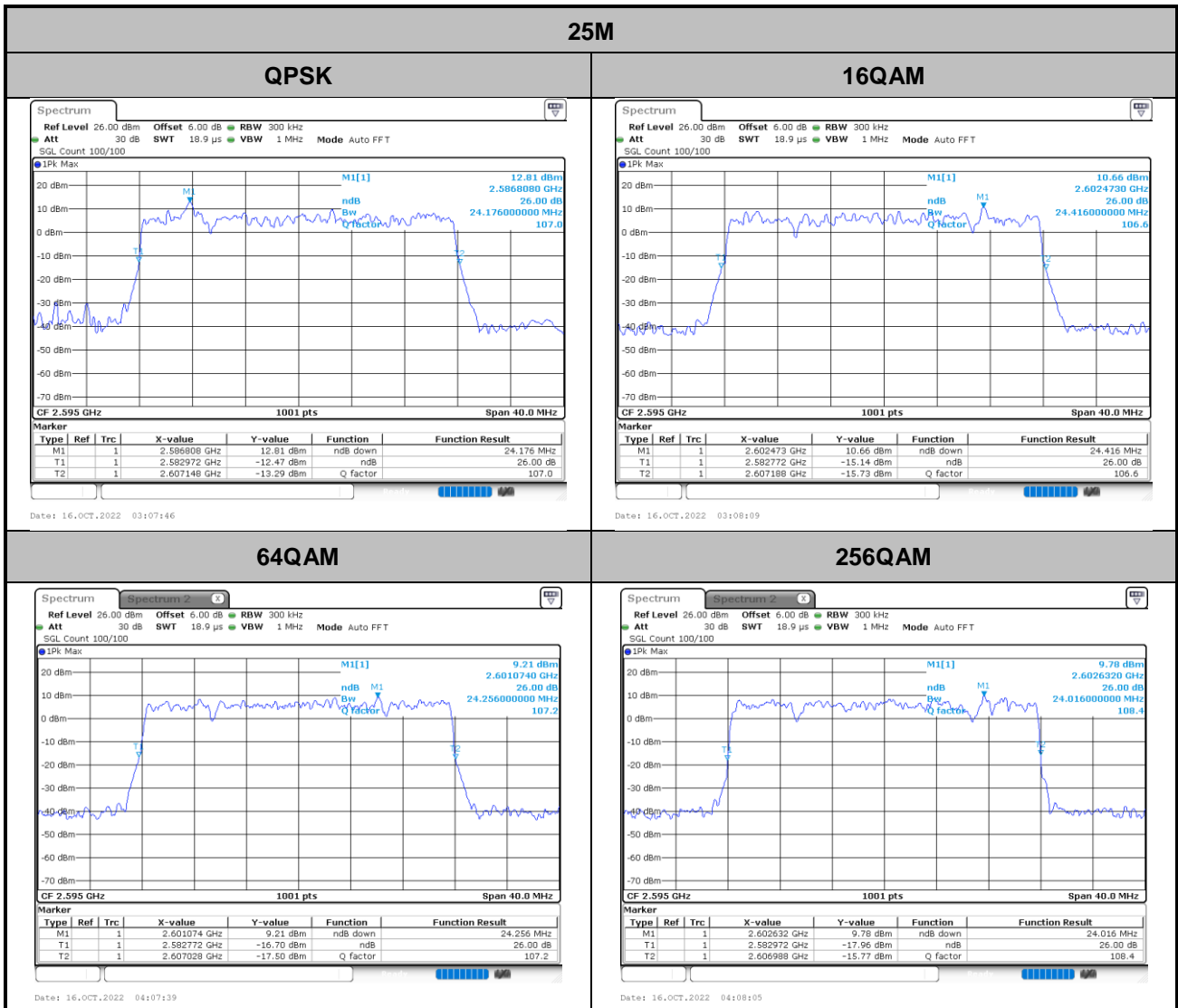
Mode	FR1 n38 /25MHz / DFT-S OFDM		
Mod.	25M		Limit: 13dB
RB Size	BPSK	QPSK	Result
Middle CH	4.63	5.27	PASS





## 26dB Bandwidth

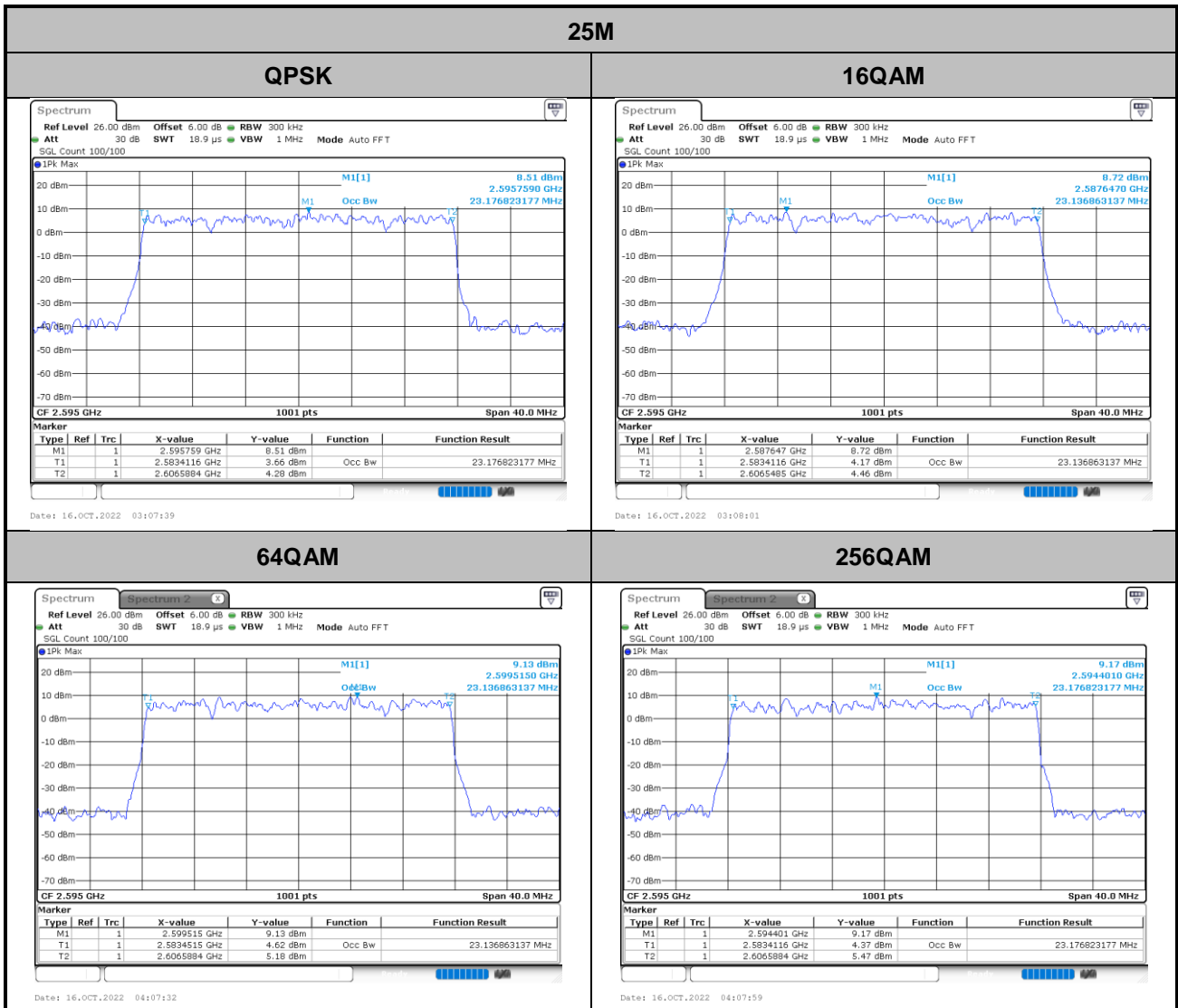
<b>Mode</b>	<b>FR1 n38 : 26dB BW(MHz) / DFT-S OFDM</b>			
<b>BW</b>	<b>25M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	24.18	24.42	24.26	24.02





# Occupied Bandwidth

<b>Mode</b>	<b>FR1 n38: OB BW(MHz) / DFT-S OFDM</b>			
<b>BW</b>	<b>25M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	23.18	23.14	23.14	23.17



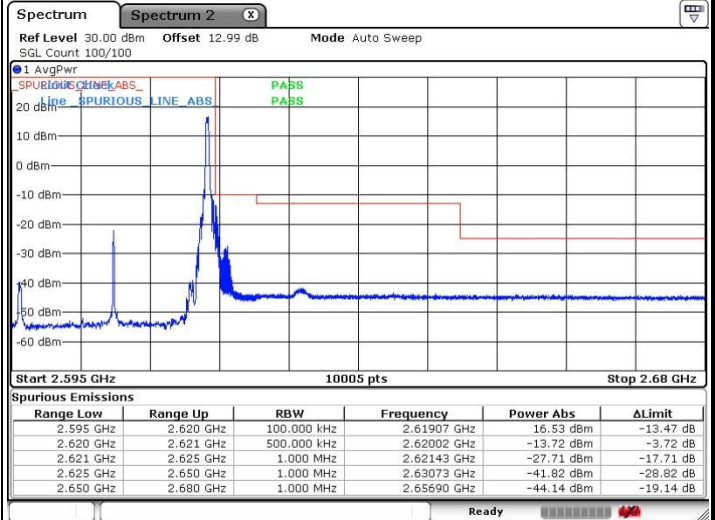
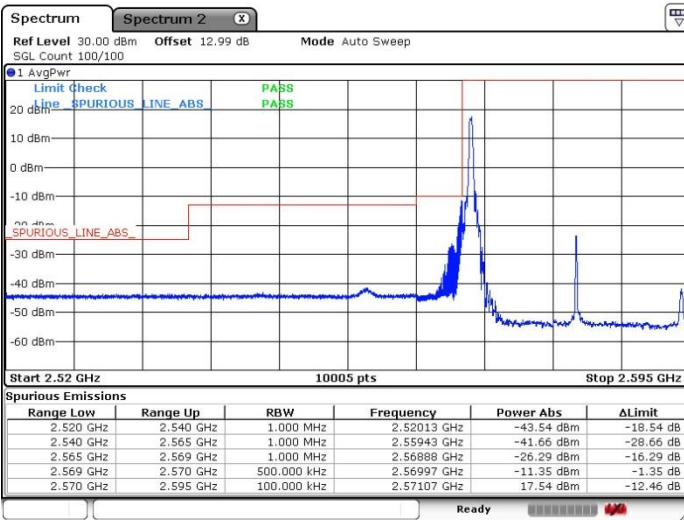


# Conducted Band Edge

FR1 n38/ 25MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

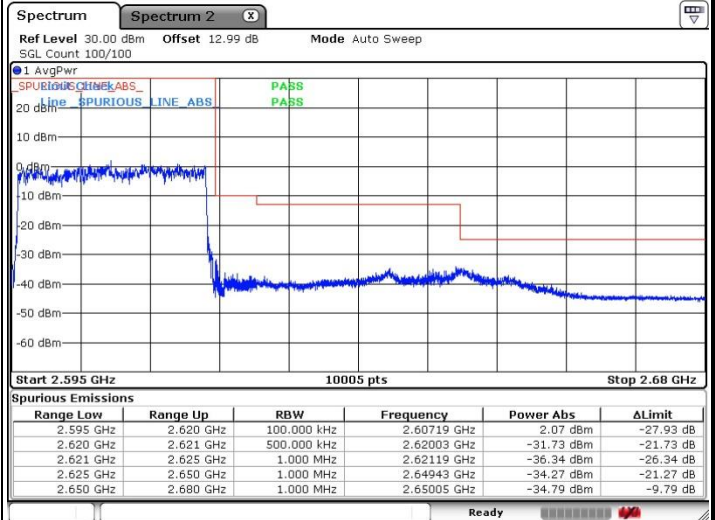
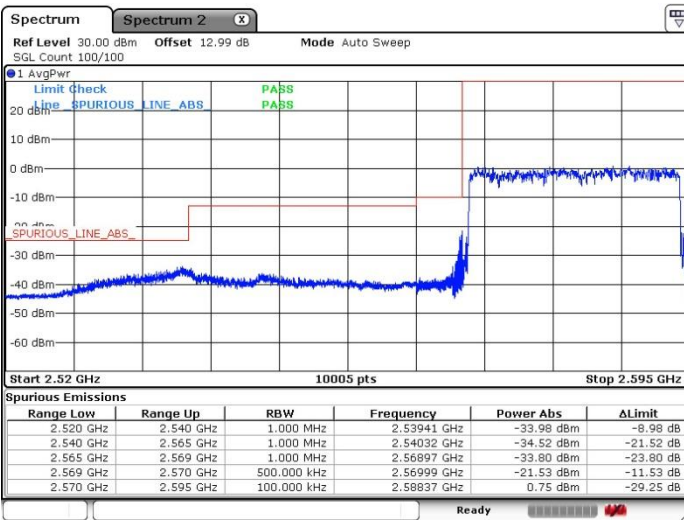


Date: 16.OCT.2022 03:34:37

Date: 16.OCT.2022 03:41:53

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.OCT.2022 03:35:05

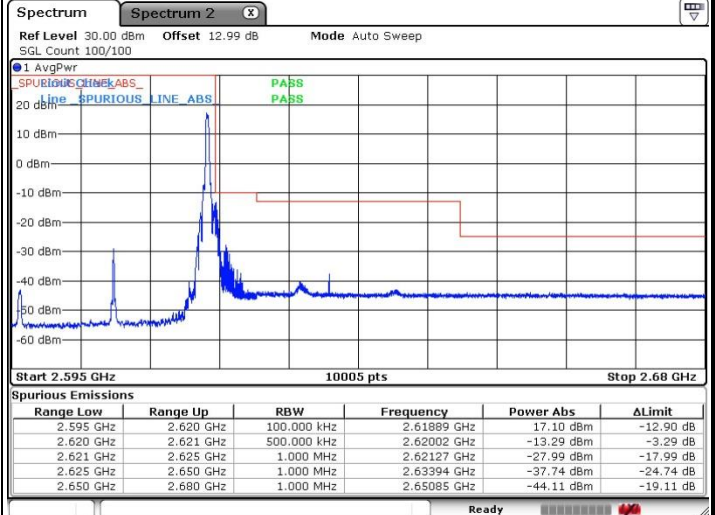
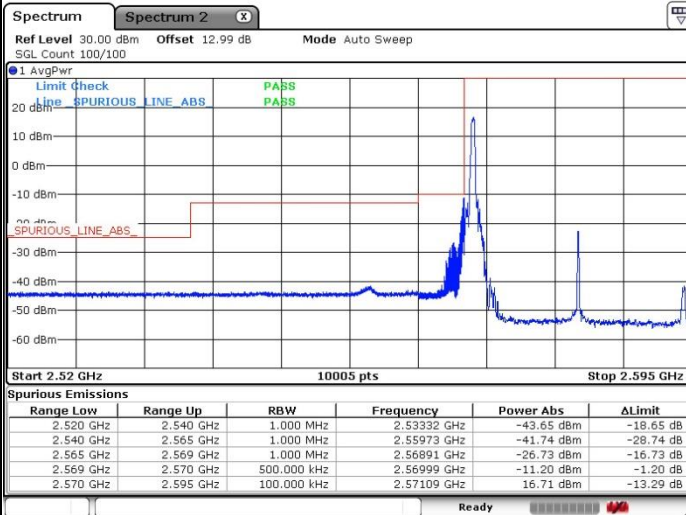
Date: 16.OCT.2022 03:41:19



FR1 n38 / 25MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

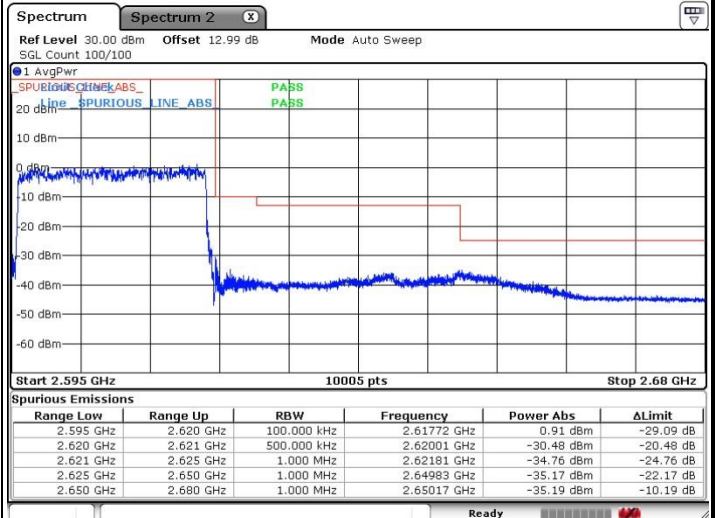
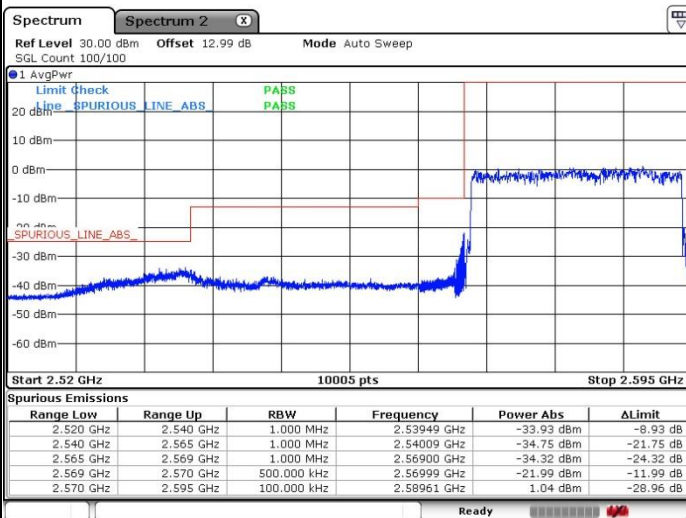


Date: 16.OCT.2022 03:34:10

Date: 16.OCT.2022 03:42:32

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.OCT.2022 03:35:20

Date: 16.OCT.2022 03:40:29

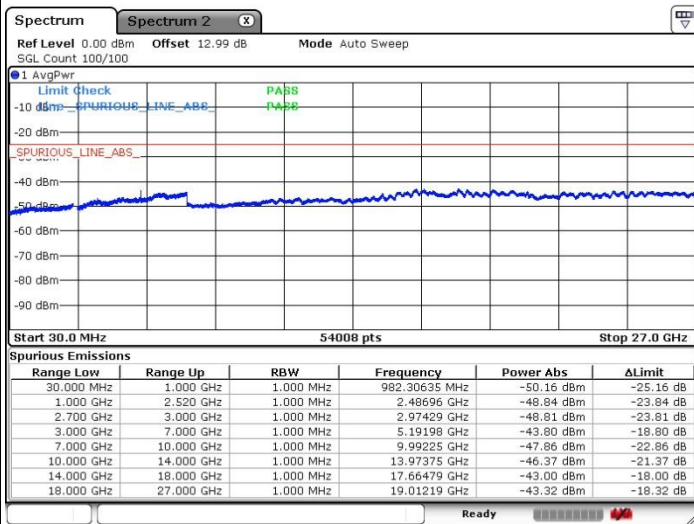
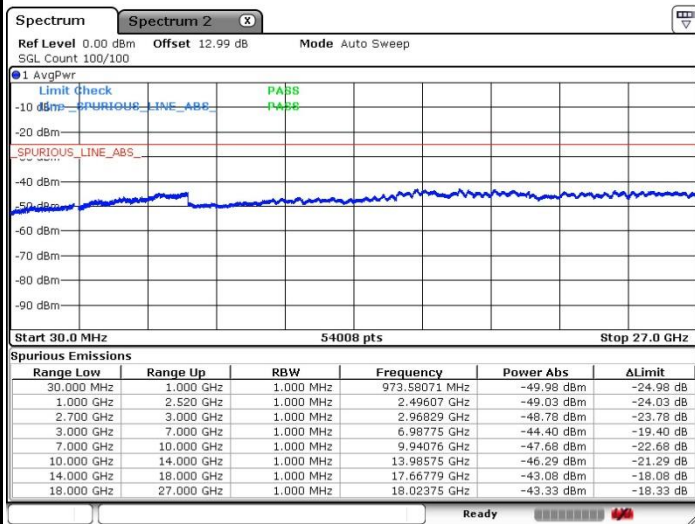


# Conducted Spurious Emission

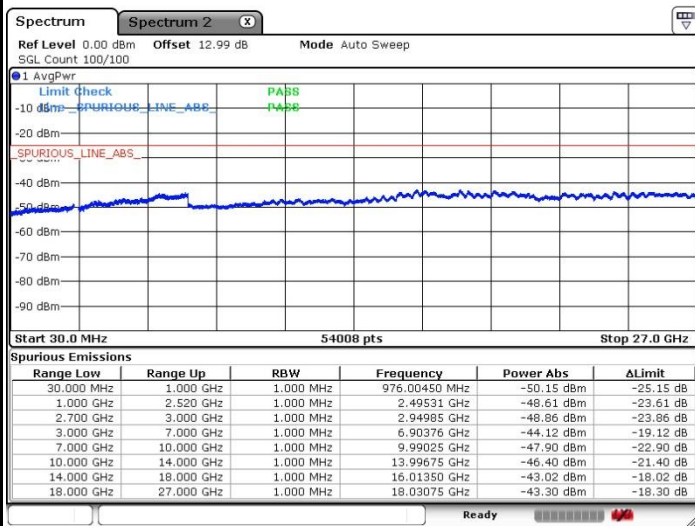
FR1 n38 / 25MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1



Highest Channel / 1RB1

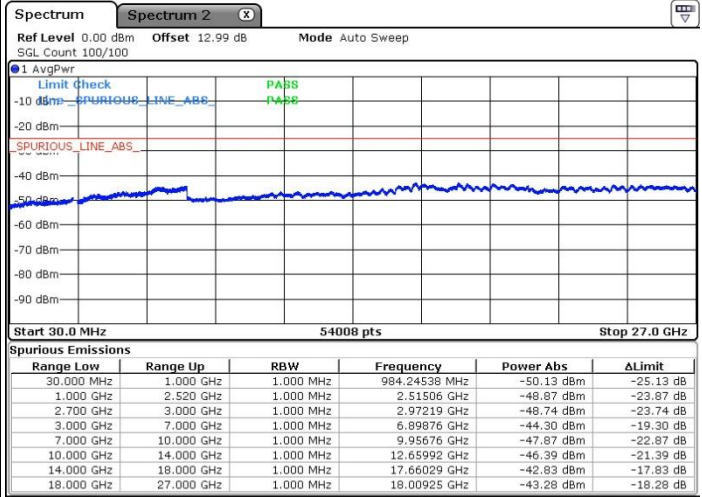
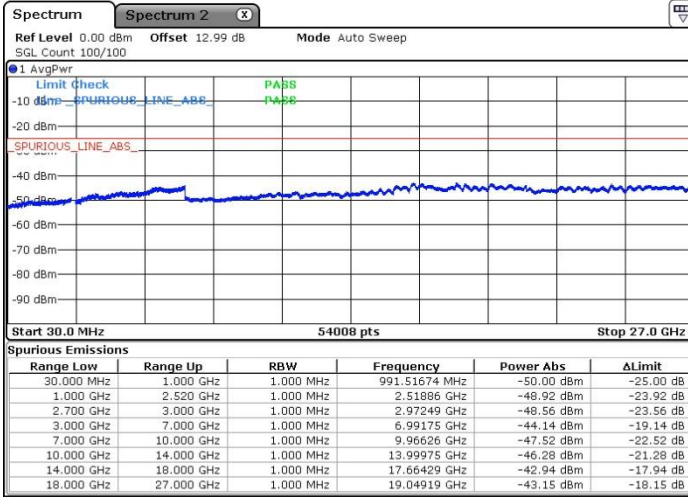




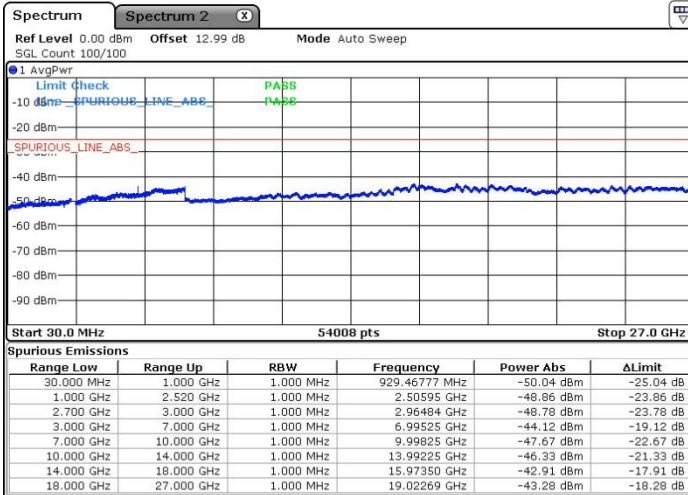
FR1 n38 / 25MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1



Highest Channel / 1RB1





Frequency Stability

Test Conditions		FR1 n38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 25MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0023	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0031	
20	Battery End Point	0.0002	

Note:

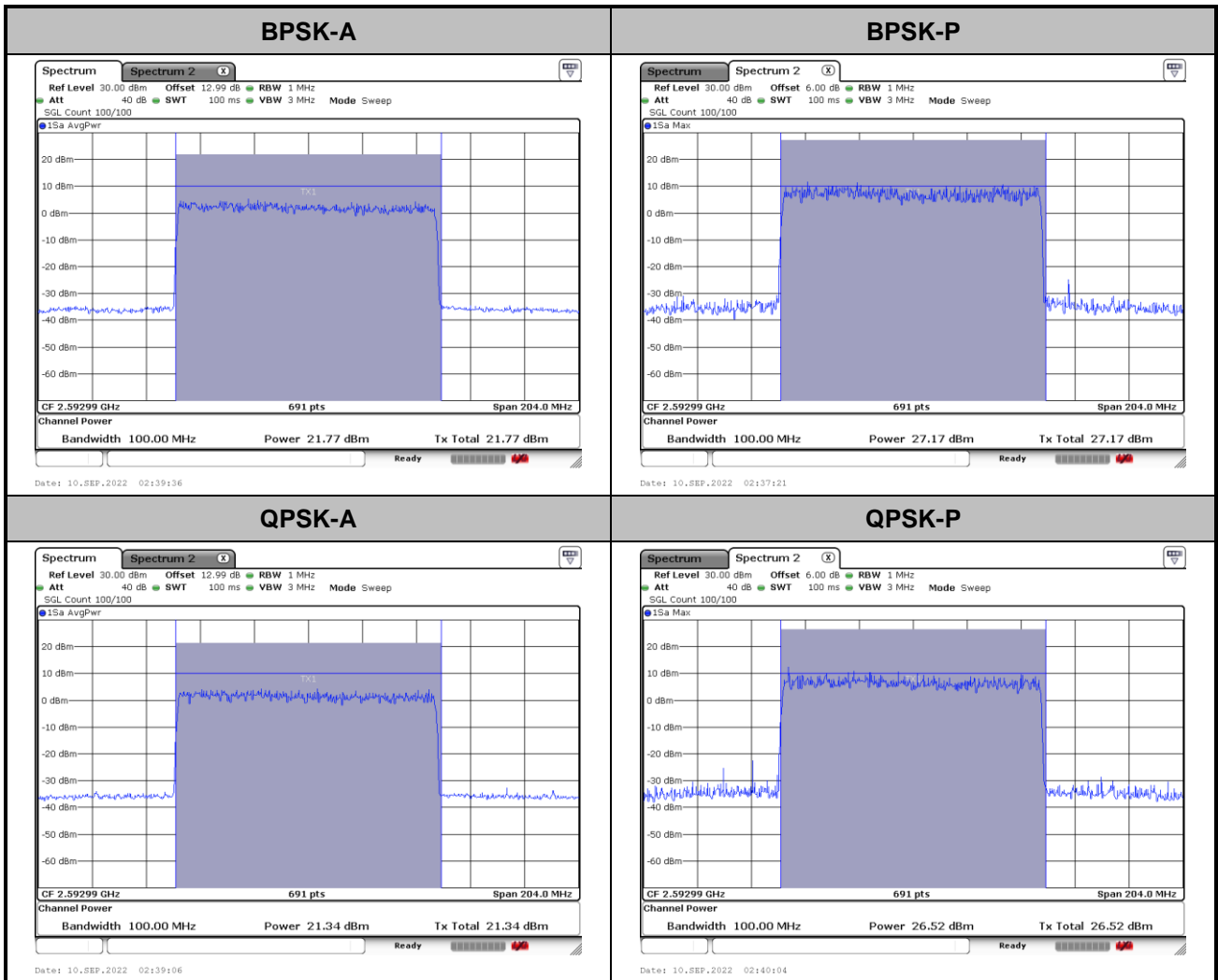
1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.48V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# FR1 n41

## Peak-to-Average Ratio

Mode	FR1 n41 / 100MHz / DFT-S OFDM				
Mod.	100M				Limit: 13dB
RB Size	BPSK	QPSK			Result
Middle CH	5.4	5.18			PASS





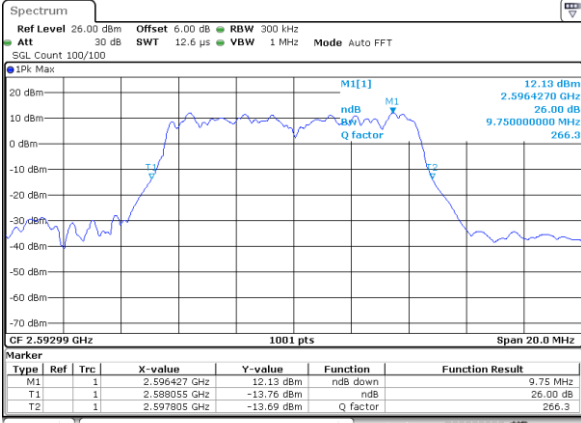
**26dB Bandwidth**

Mode	FR1 n41 : 26dB BW(10 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	9.75	9.41	9.57	9.53
Mode	FR1 n41 : 26dB BW(15 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	14.51	14.27	14.66	14.30
Mode	FR1 n41 : 26dB BW(20 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	19.30	19.22	19.38	19.18
Mode	FR1 n41 : 26dB BW(30 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	28.89	28.89	28.89	28.71
Mode	FR1 n41 : 26dB BW(40 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	40.28	40.20	39.88	40.28
Mode	FR1 n41 : 26dB BW(50 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	49.75	49.75	49.75	49.75
Mode	FR1 n41 : 26dB BW(60 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	60.18	60.54	60.30	60.66
Mode	FR1 n41 : 26dB BW(70 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	70.37	70.13	70.13	70.01
Mode	FR1 n41 : 26dB BW(80 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	82.32	82.16	82.16	82.32
Mode	FR1 n41 : 26dB BW(90 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	91.89	92.43	92.07	92.25
Mode	FR1 n41 : 26dB BW(100 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	102.3	102.5	102.5	102.5



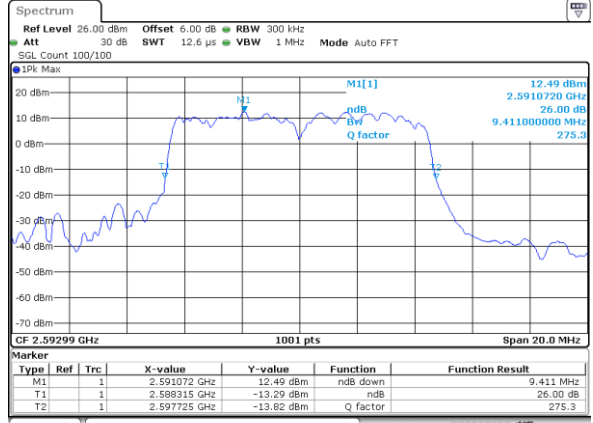
10MHz CP

QPSK



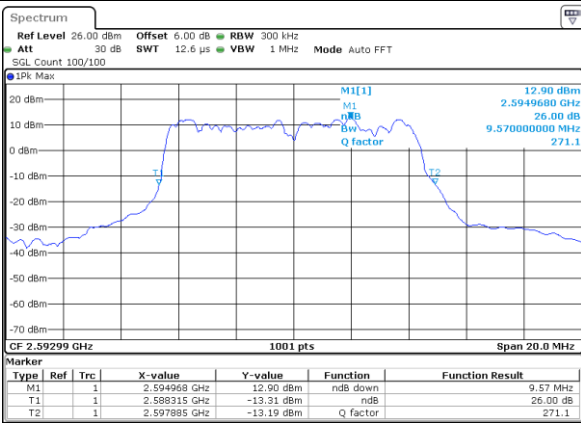
Date: 9\_SEP.2022 23:54:139

16QAM



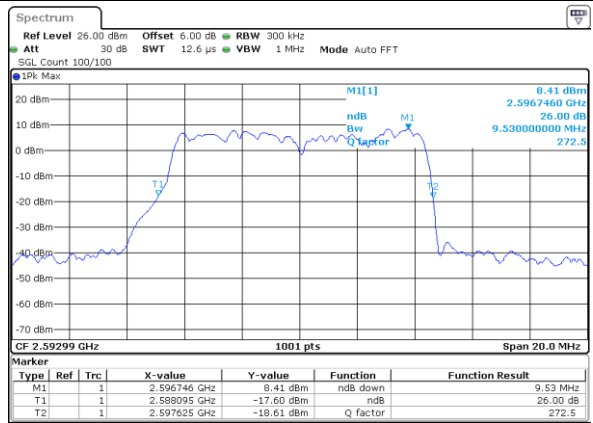
Date: 9\_SEP.2022 23:54:117

64QAM



Date: 9\_SEP.2022 23:53:156

256QAM

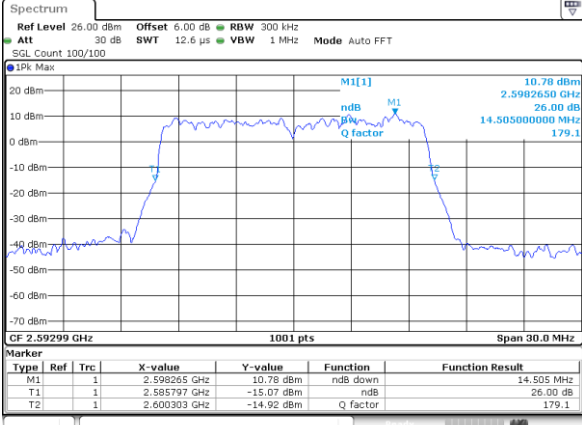


Date: 9\_SEP.2022 23:53:120



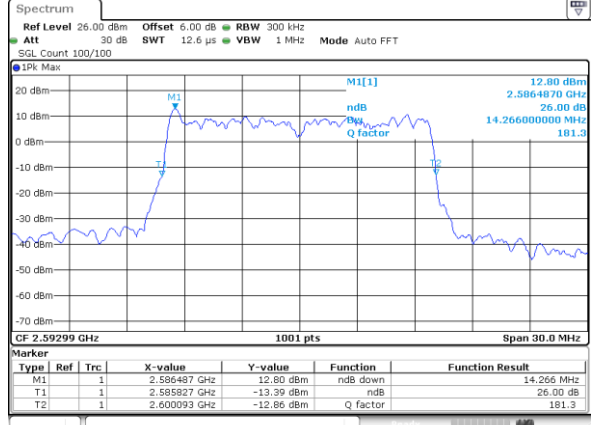
15MHz CP

QPSK



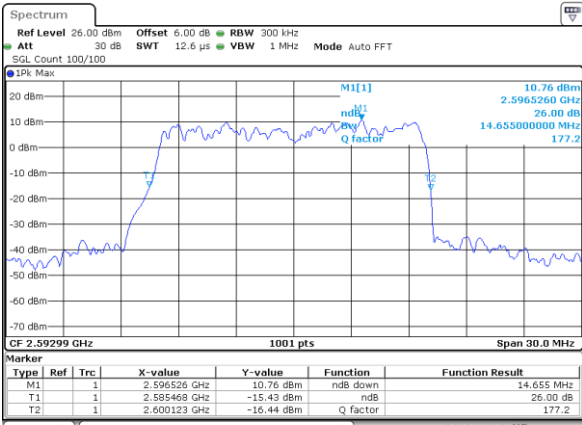
Date: 9\_SEP.2022 23:50:136

16QAM



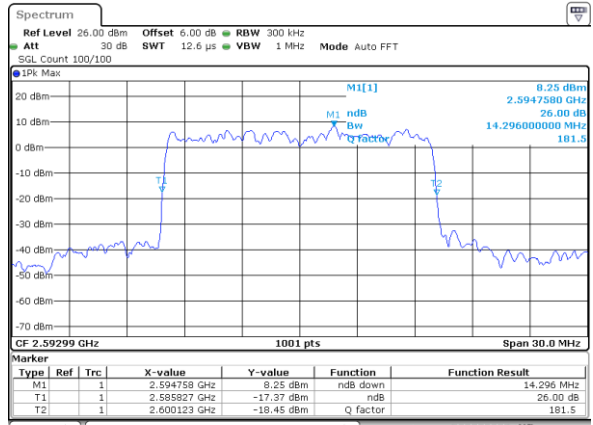
Date: 9\_SEP.2022 23:51:25

64QAM



Date: 9\_SEP.2022 23:51:158

256QAM

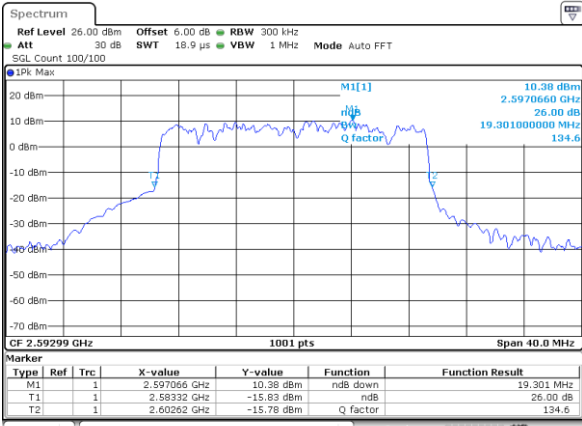


Date: 9\_SEP.2022 23:52:136



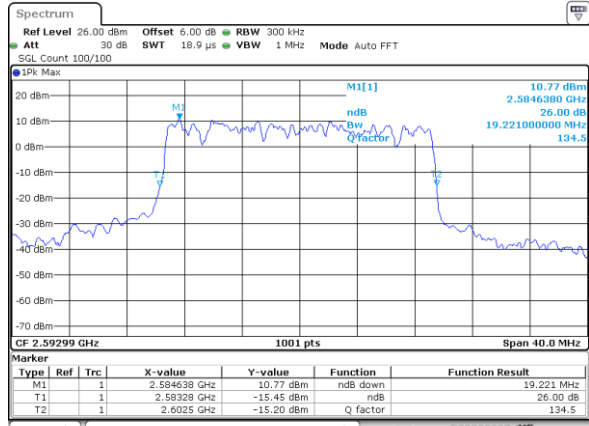
20MHz CP

QPSK



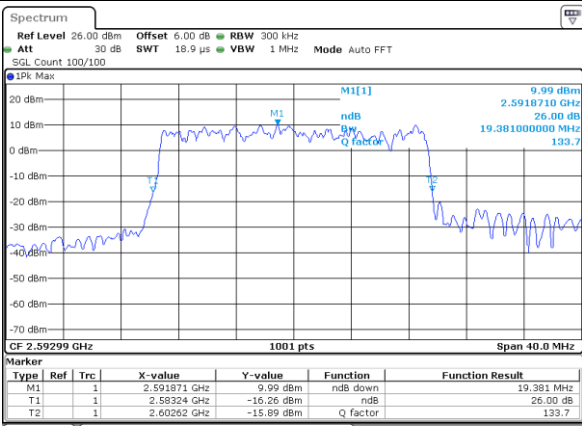
Date: 10\_SEP.2022 02:06:57

16QAM



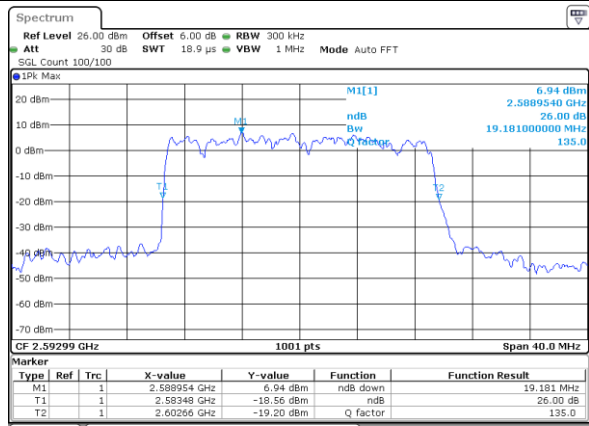
Date: 10\_SEP.2022 02:07:19

64QAM



Date: 10\_SEP.2022 02:07:50

256QAM

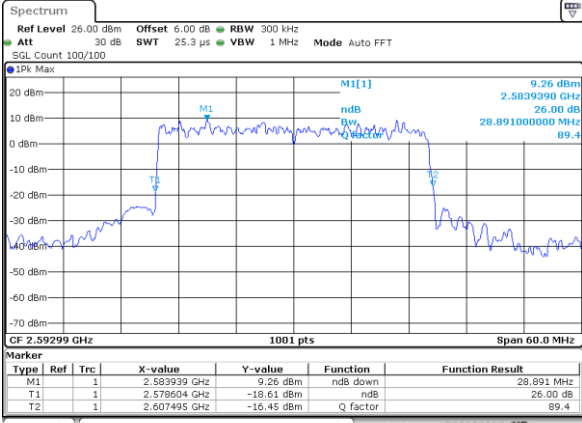


Date: 10\_SEP.2022 02:08:26



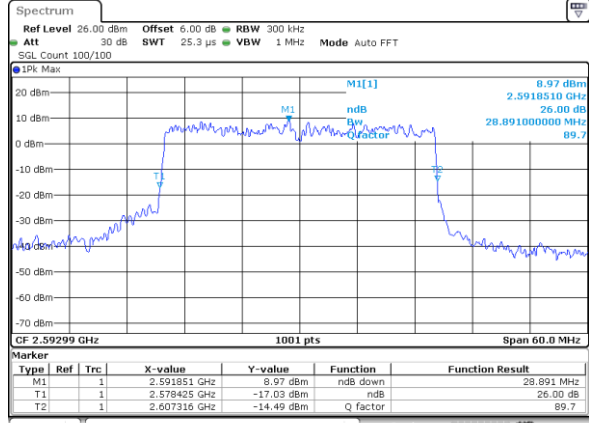
30MHz CP

QPSK



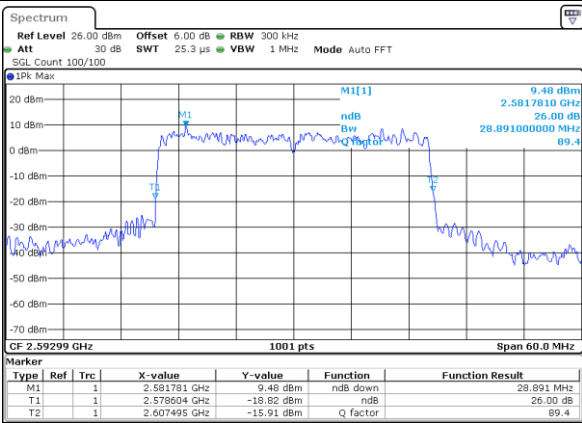
Date: 10\_SEP.2022 02:15:27

16QAM



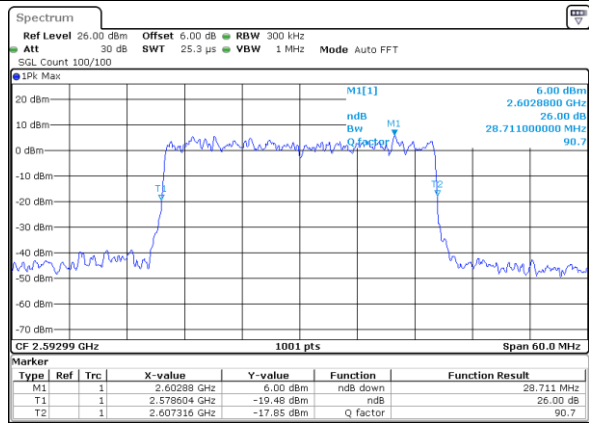
Date: 10\_SEP.2022 02:16:28

64QAM



Date: 10\_SEP.2022 02:16:59

256QAM

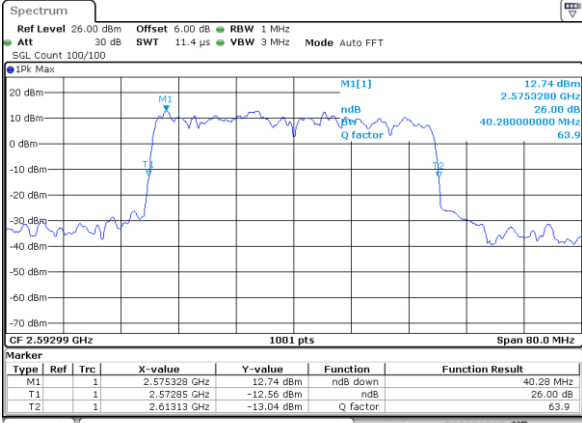


Date: 10\_SEP.2022 02:18:08



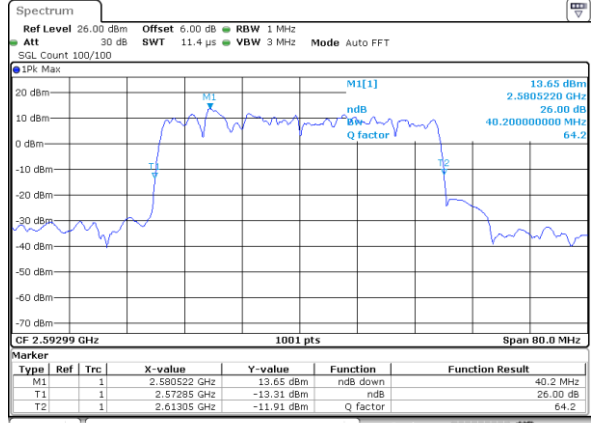
40MHz CP

QPSK



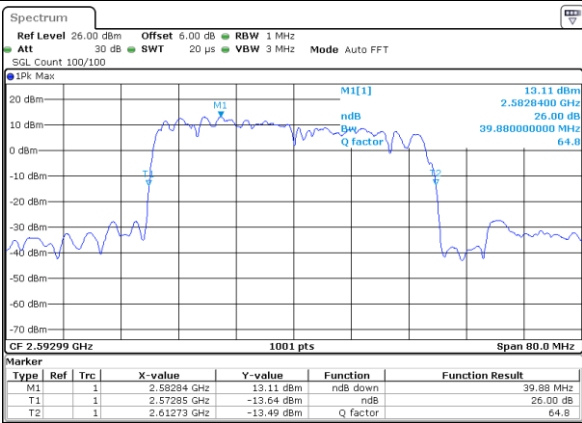
Date: 10\_SEP.2022 02:20:58

16QAM



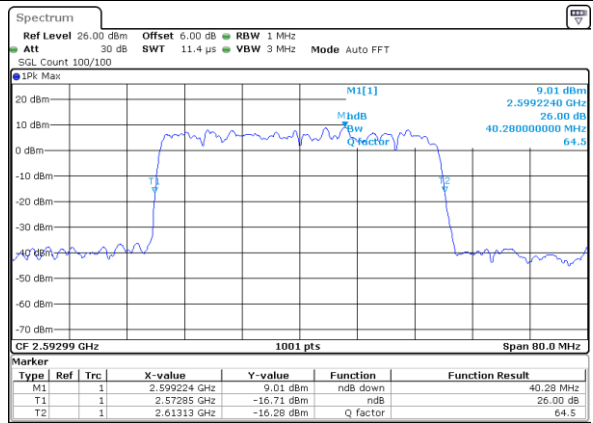
Date: 10\_SEP.2022 02:20:33

64QAM



Date: 10\_SEP.2022 02:20:05

256QAM

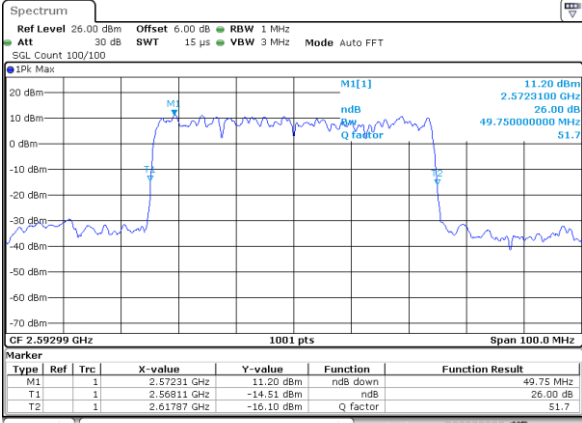


Date: 10\_SEP.2022 02:19:25



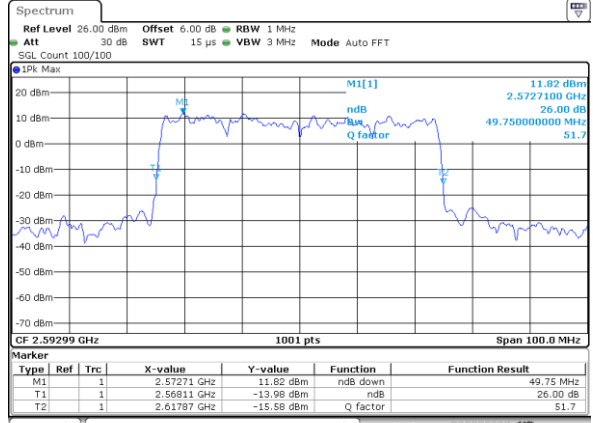
50MHz CP

QPSK



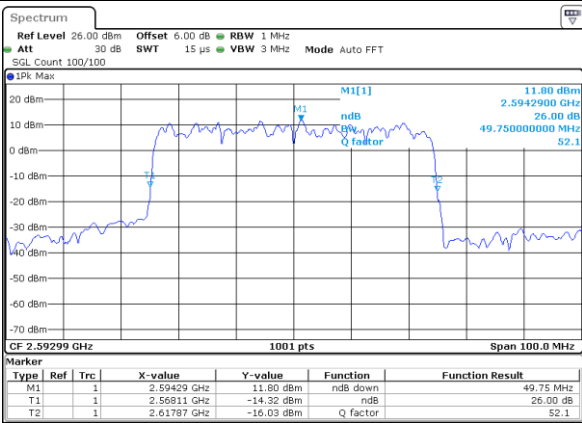
Date: 10\_SEP.2022 02:21:38

16QAM



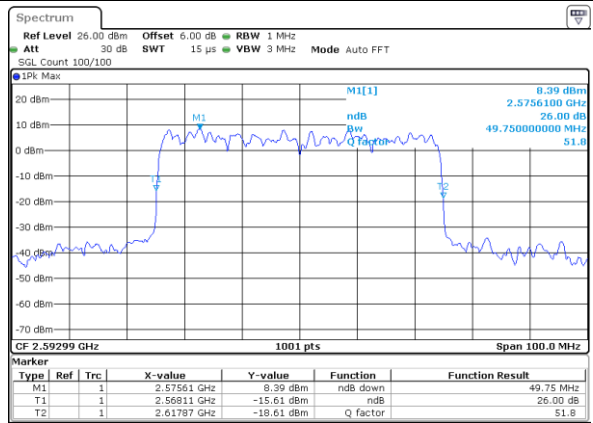
Date: 10\_SEP.2022 02:22:01

64QAM



Date: 10\_SEP.2022 02:22:20

256QAM

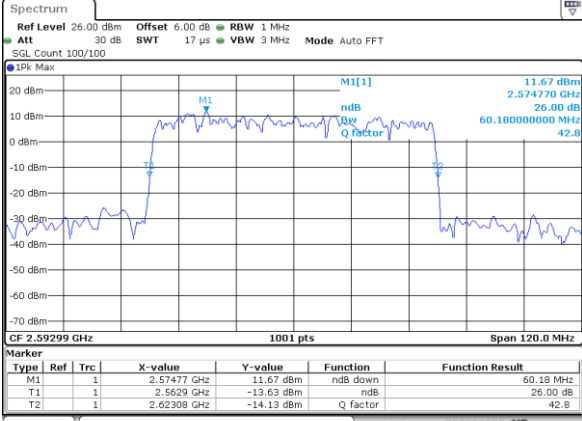


Date: 10\_SEP.2022 02:22:47



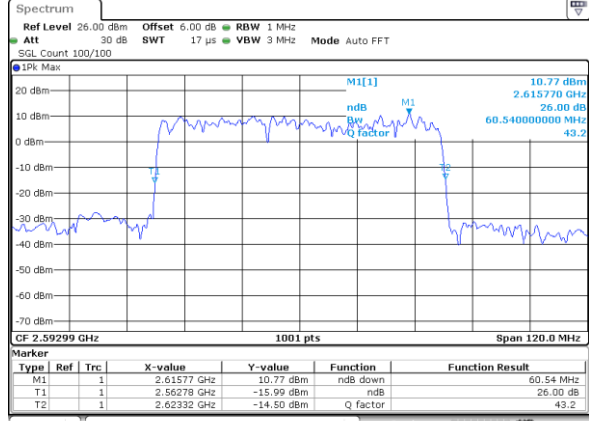
60MHz CP

QPSK



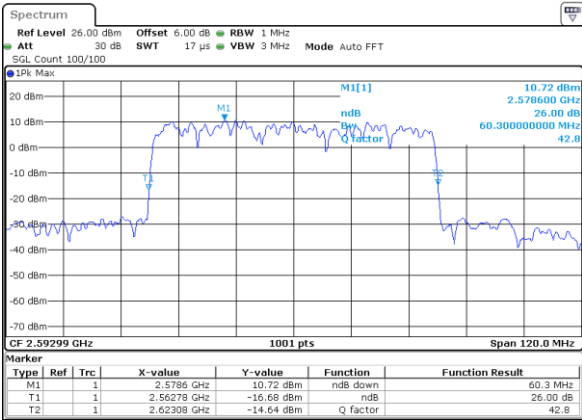
Date: 10\_SEP.2022 02:24:50

16QAM



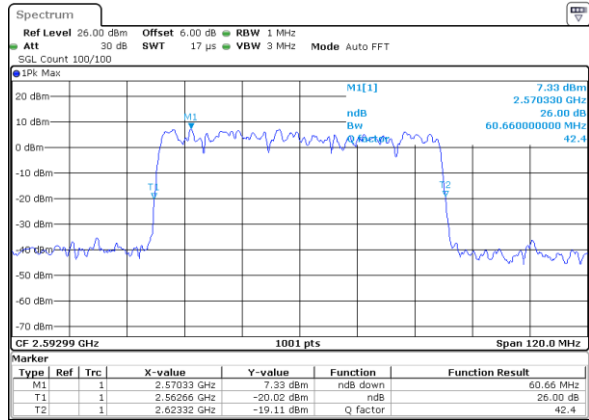
Date: 10\_SEP.2022 02:24:16

64QAM



Date: 10\_SEP.2022 02:23:52

256QAM

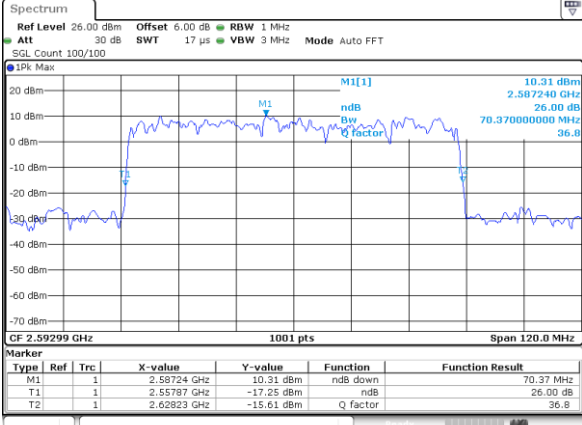


Date: 10\_SEP.2022 02:23:27



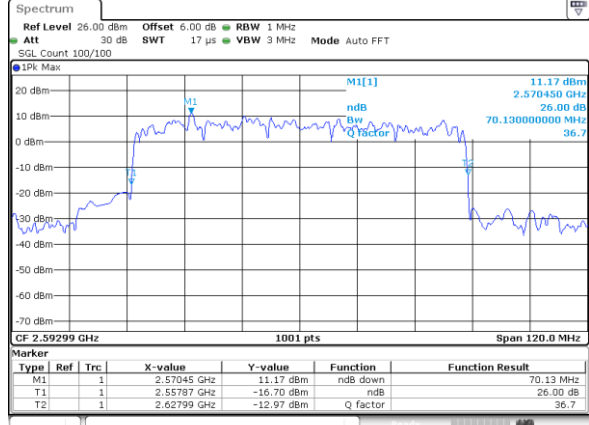
70MHz CP

QPSK



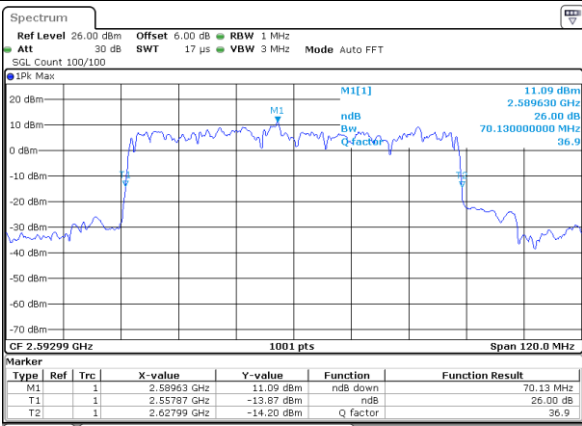
Date: 10\_SEP.2022 02:25:27

16QAM



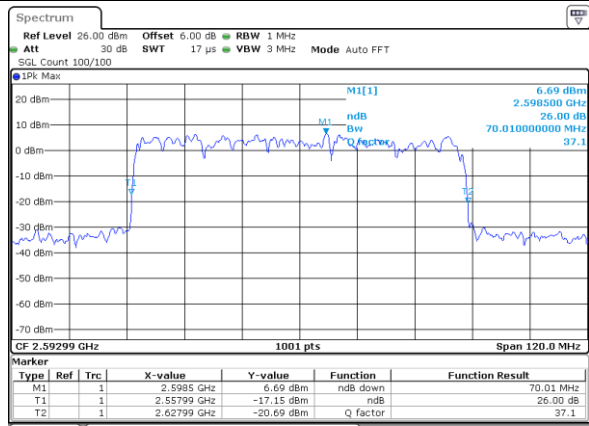
Date: 10\_SEP.2022 02:25:58

64QAM



Date: 10\_SEP.2022 02:26:22

256QAM

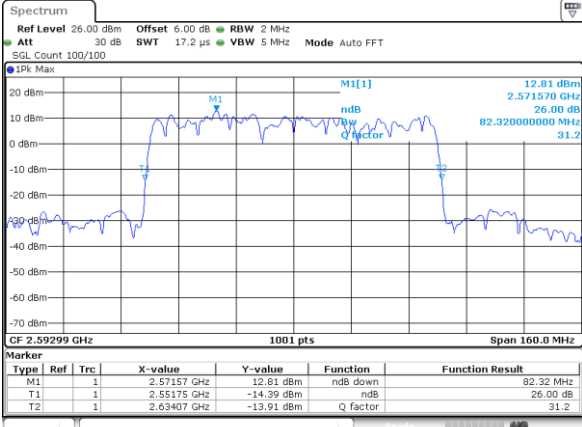


Date: 10\_SEP.2022 02:26:46



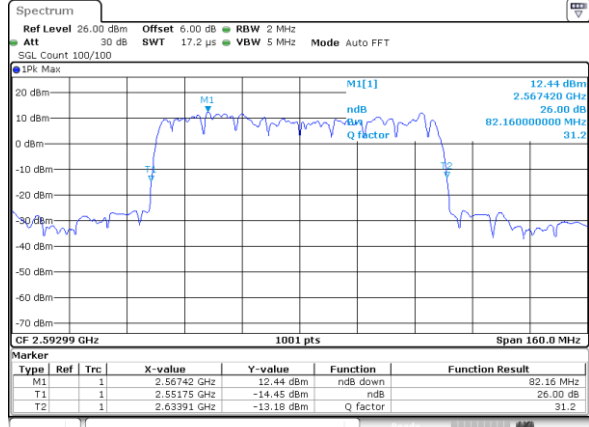
80MHz CP

QPSK



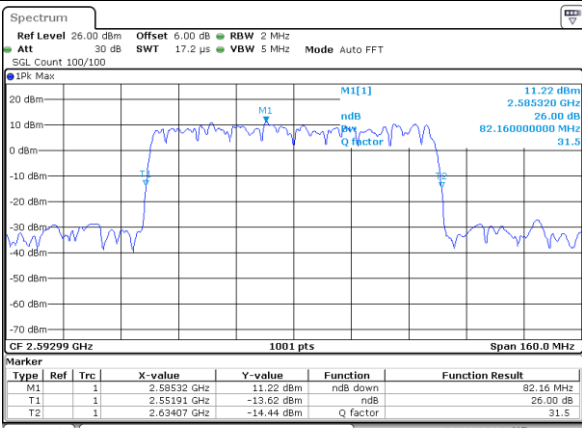
Date: 10\_SEP.2022 02:28:45

16QAM



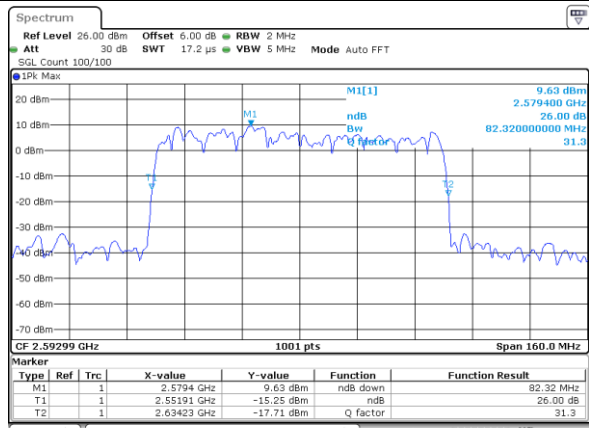
Date: 10\_SEP.2022 02:28:21

64QAM



Date: 10\_SEP.2022 02:27:57

256QAM

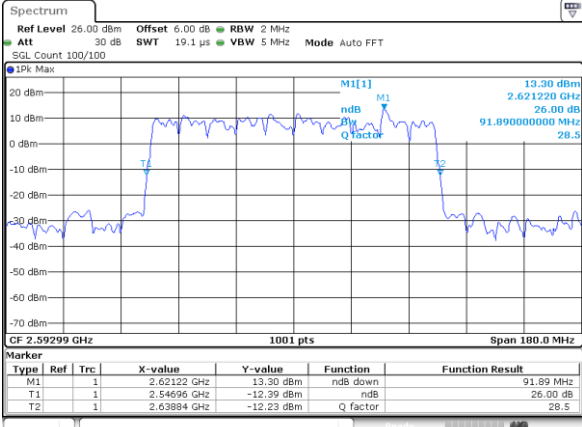


Date: 10\_SEP.2022 02:27:31



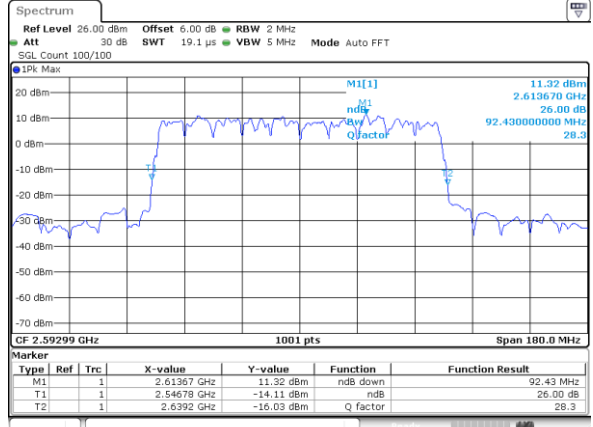
90MHz CP

QPSK



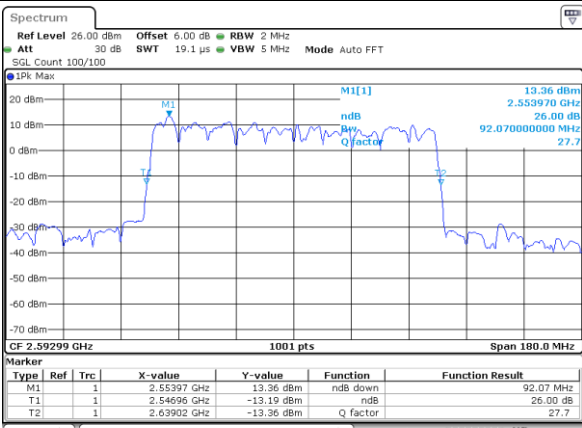
Date: 10\_SEP.2022 02:29:44

16QAM



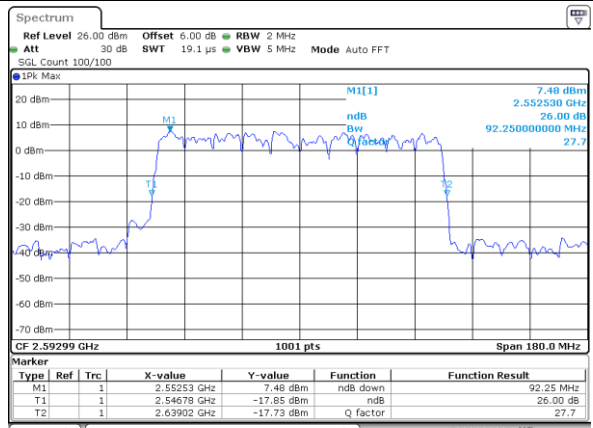
Date: 10\_SEP.2022 02:13:17

64QAM



Date: 10\_SEP.2022 02:13:52

256QAM

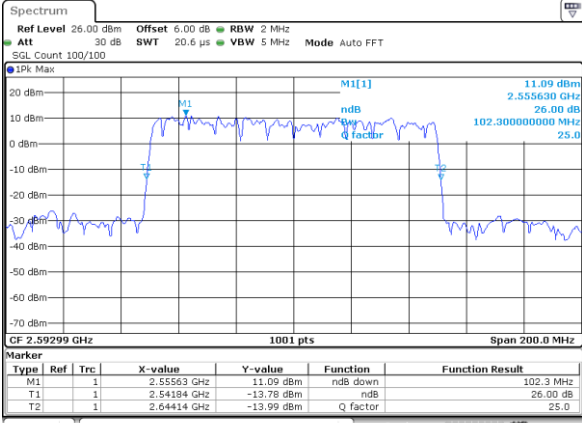


Date: 10\_SEP.2022 02:13:16



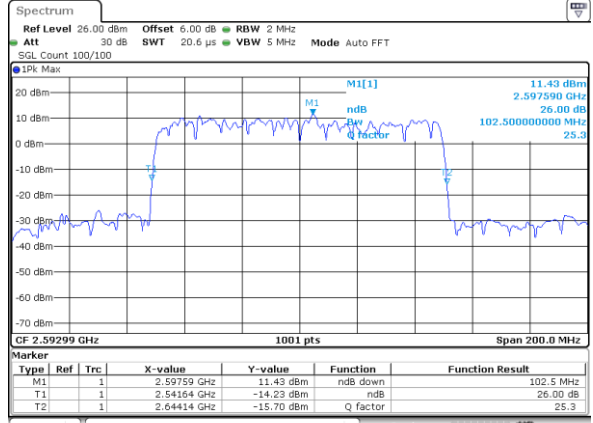
100MHz CP

QPSK



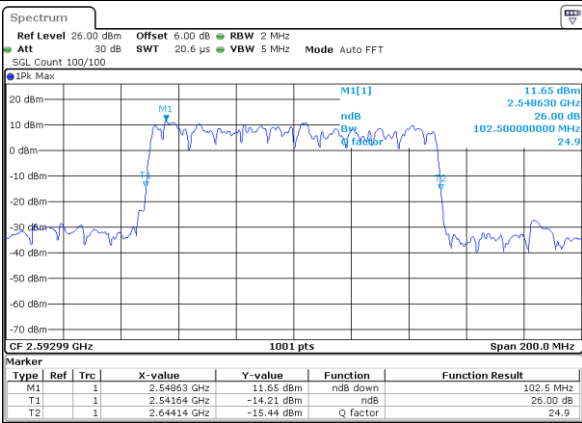
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16QAM



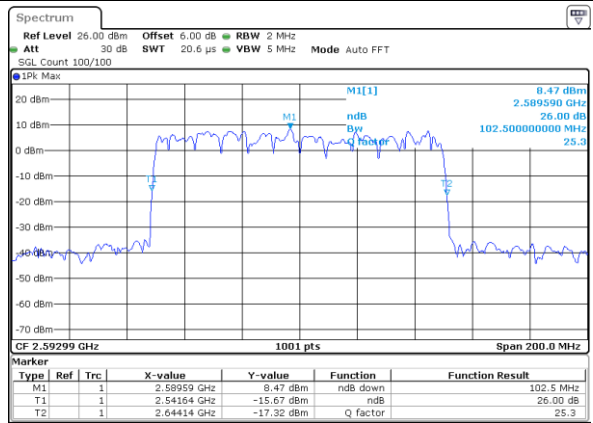
Date: 10\_SEP.2022 02:13:01

64QAM



Date: 10\_SEP.2022 02:13:23

256QAM



Date: 10\_SEP.2022 02:13:05



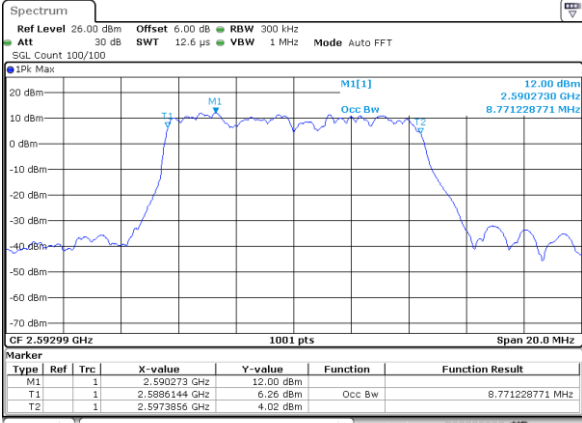
Occupied Bandwidth

Mode	FR1 n41 : OB BW(10 MHz) / DFT-S OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	8.77	8.73	8.85	8.59
Mode	FR1 n41 : OB BW(15 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	13.70	13.55	13.67	13.67
Mode	FR1 n41 : OB BW(20 MHz) / DFT-S OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	18.22	18.30	18.26	18.30
Mode	FR1 n41 : OB BW(30 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	27.81	27.93	27.81	27.87
Mode	FR1 n41 : OB BW(40 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	37.40	37.88	38.12	38.20
Mode	FR1 n41 : OB BW(50 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	47.45	47.55	47.85	47.35
Mode	FR1 n41 : OB BW(60 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	57.78	57.78	58.02	57.66
Mode	FR1 n41 : OB BW(70 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	67.37	67.61	67.61	66.89
Mode	FR1 n41 : OB BW(80 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	78.32	78.00	78.00	77.84
Mode	FR1 n41 : OB BW(90 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	87.21	87.57	87.57	87.21
Mode	FR1 n41 : OB BW(100 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	97.10	97.30	97.50	97.90



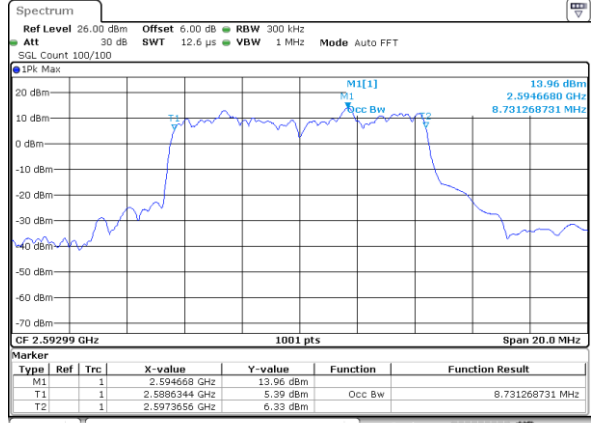
10MHz CP

QPSK



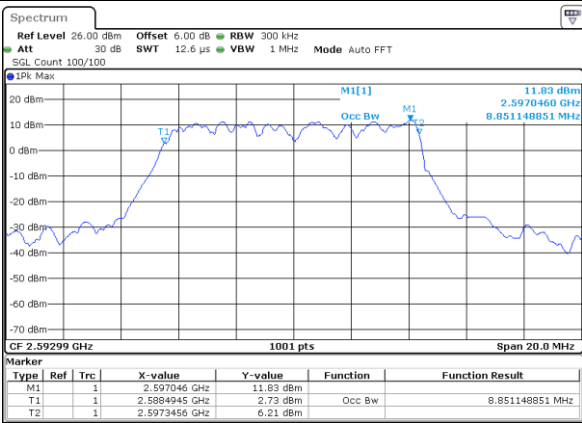
Date: 9\_SEP.2022 23:54:50

16QAM



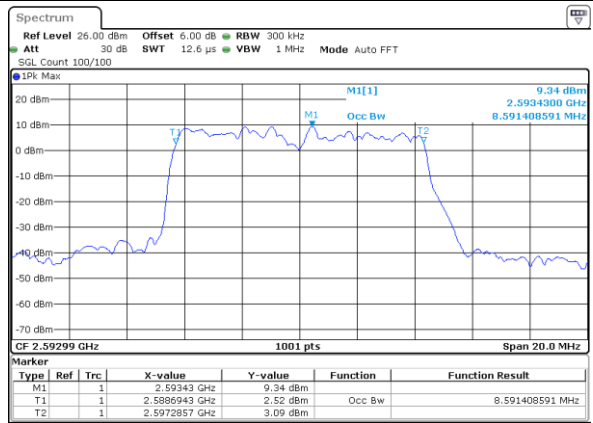
Date: 9\_SEP.2022 23:54:11

64QAM



Date: 9\_SEP.2022 23:53:48

256QAM

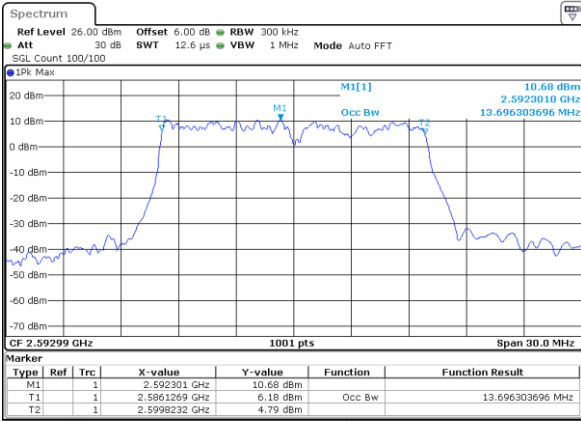


Date: 9\_SEP.2022 23:53:13



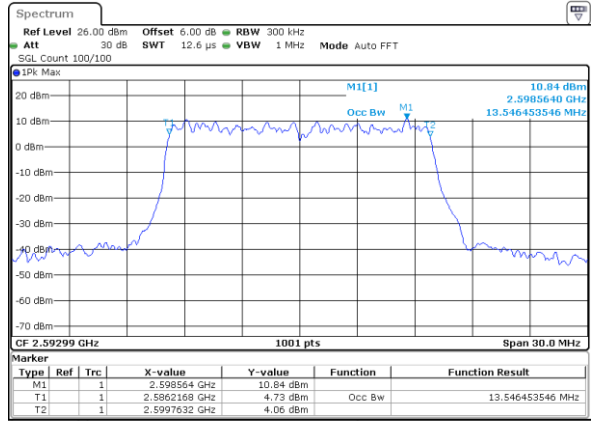
15MHz CP

QPSK



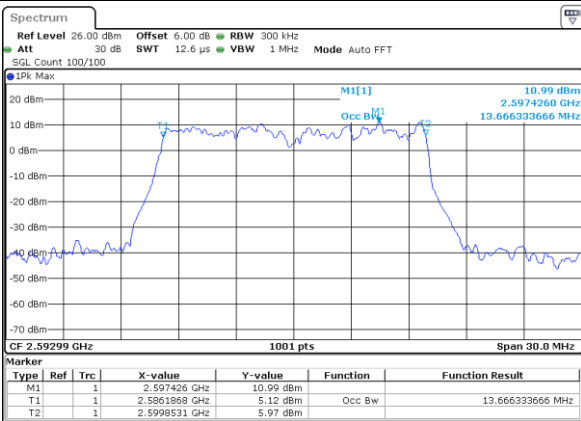
Date: 9\_SEP.2022 23:50:27

16QAM



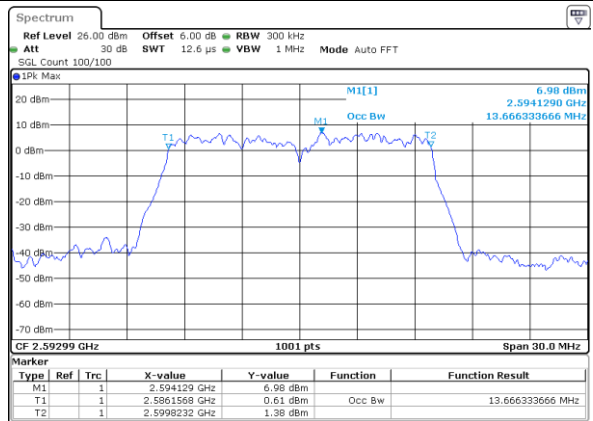
Date: 9\_SEP.2022 23:51:04

64QAM



Date: 9\_SEP.2022 23:51:45

256QAM



Date: 9\_SEP.2022 23:52:28