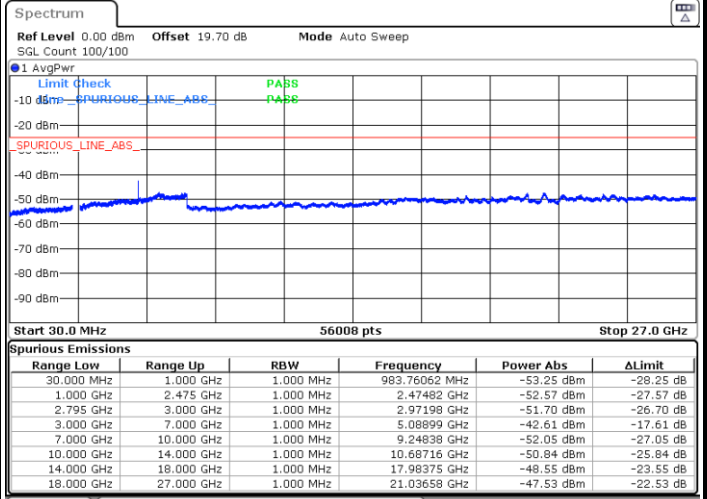
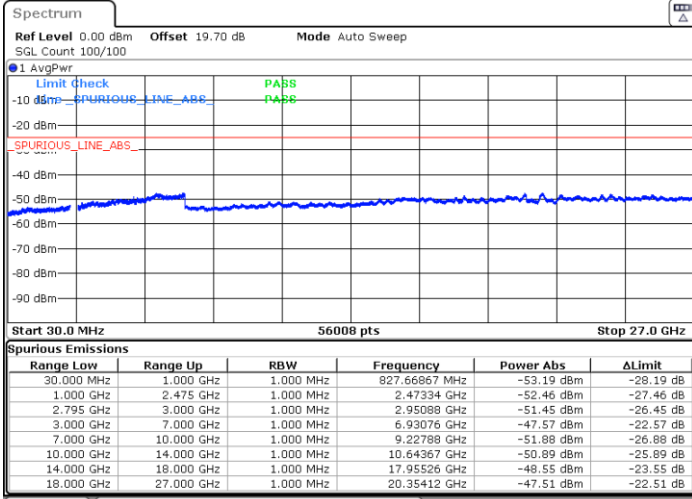




FR1 n41 /100MHz / CP OFDM /16QAM

Lowest Channel / 1RB1

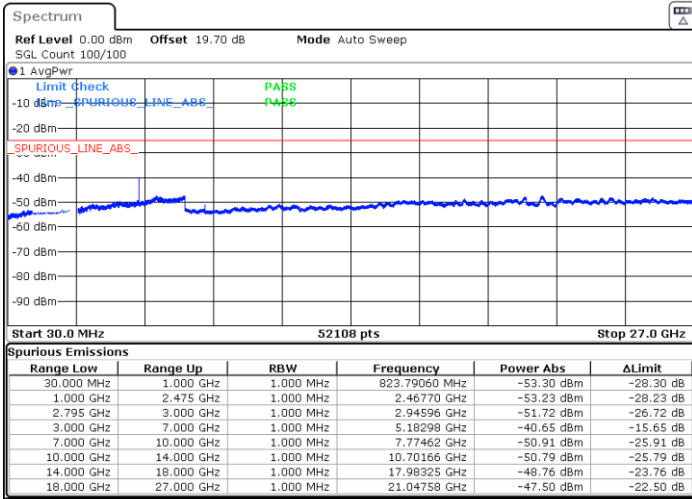
Middle Channel / 1RB1



Date: 7.SEP.2022 18:28:12

Date: 7.SEP.2022 17:40:50

Highest Channel / 1RB1



Date: 7.SEP.2022 18:37:10



Frequency Stability

Test Conditions		FR1 n41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0033	
20	Normal Voltage	0.0026	
20	Battery End Point	0.0031	

Note:

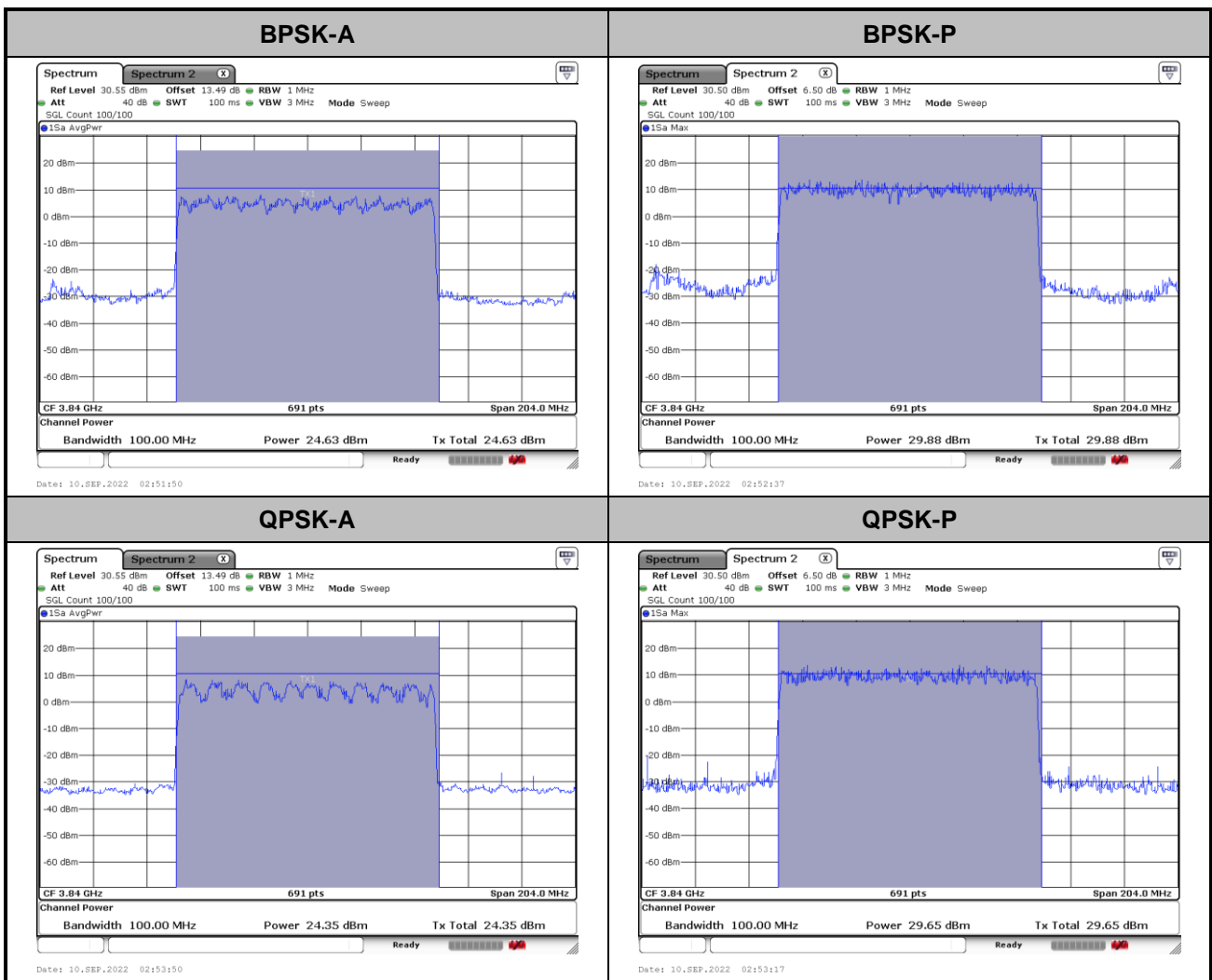
1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# FR1 n77

## Peak-to-Average Ratio

Mode	FR1 n77 / 100MHz / DFT-S OFDM		
Mod.	100M		Limit: 13dB
RB Size	BPSK	QPSK	Result
Middle CH	5.25	5.3	PASS





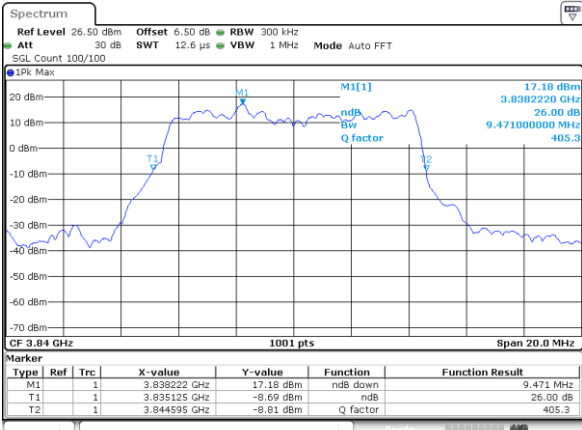
**26dB Bandwidth**

Mode	FR1 n77 : 26dB BW(10 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	9.47	9.95	9.49	9.67
Mode	FR1 n77 : 26dB BW(15 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	15.08	14.99	14.69	15.29
Mode	FR1 n77 : 26dB BW(20 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	19.38	19.30	19.30	19.18
Mode	FR1 n77 : 26dB BW(25 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	24.14	24.46	24.46	24.62
Mode	FR1 n77 : 26dB BW(30 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	29.17	29.01	28.85	28.77
Mode	FR1 n77 : 26dB BW(40 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	40.28	40.76	40.28	40.36
Mode	FR1 n77 : 26dB BW(50 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	49.75	49.75	49.75	49.75
Mode	FR1 n77 : 26dB BW(60 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	60.66	60.42	60.42	60.42
Mode	FR1 n77 : 26dB BW(70 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	70.33	70.33	70.01	70.33
Mode	FR1 n77 : 26dB BW(80 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	79.92	79.92	79.92	79.92
Mode	FR1 n77 : 26dB BW(90 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	92.07	92.25	92.07	92.07
Mode	FR1 n77 : 26dB BW(100 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	102.3	102.3	102.3	102.5



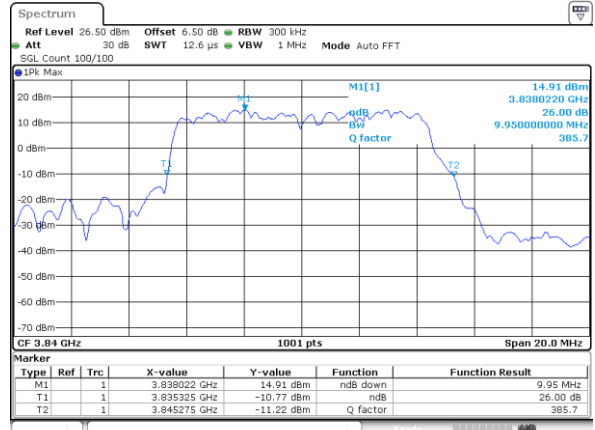
10MHz CP

QPSK



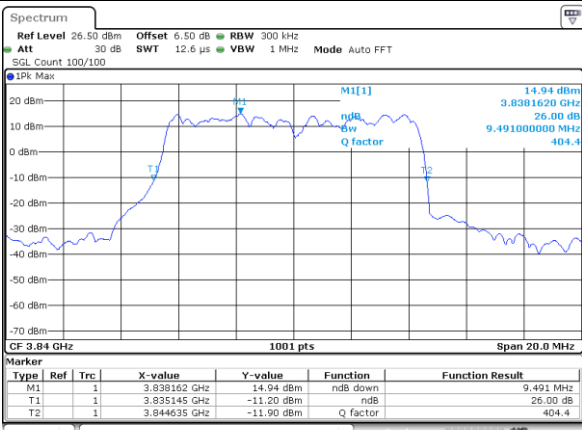
Date: 9\_SEP.2022 02:16:51

16QAM



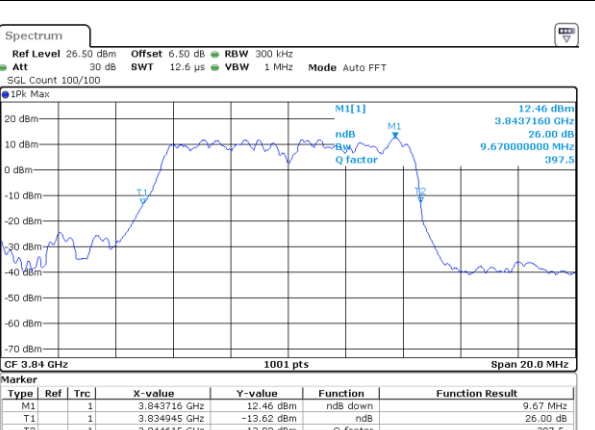
Date: 9\_SEP.2022 02:16:30

64QAM



Date: 9\_SEP.2022 02:16:01

256QAM

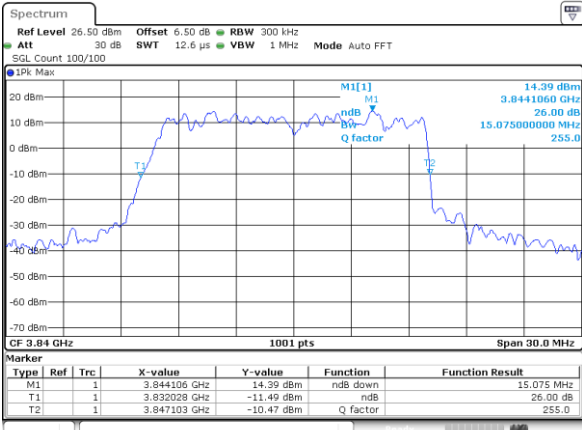


Date: 9\_SEP.2022 02:16:01



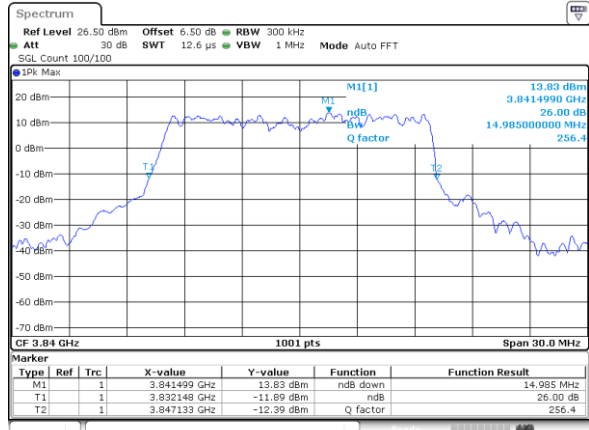
15MHz CP

QPSK



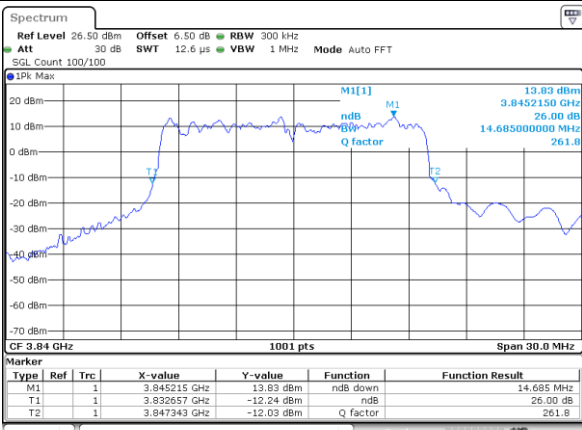
Date: 9\_SEP.2022 02:10:45

16QAM



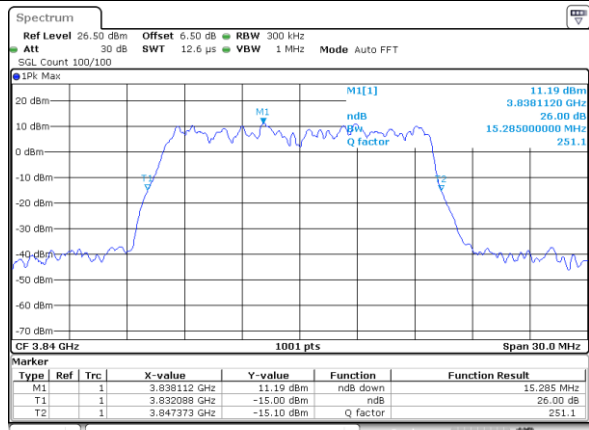
Date: 9\_SEP.2022 02:11:47

64QAM



Date: 9\_SEP.2022 02:12:08

256QAM

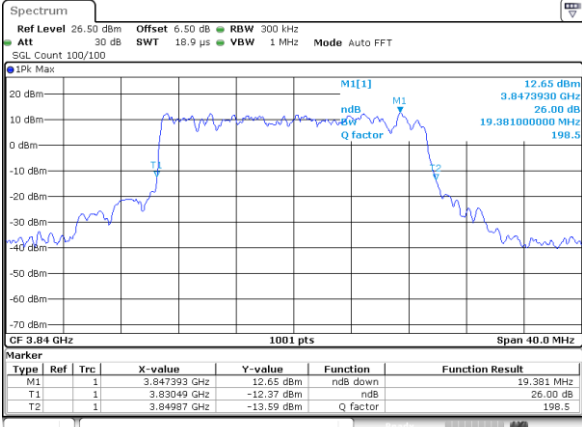


Date: 9\_SEP.2022 02:12:29



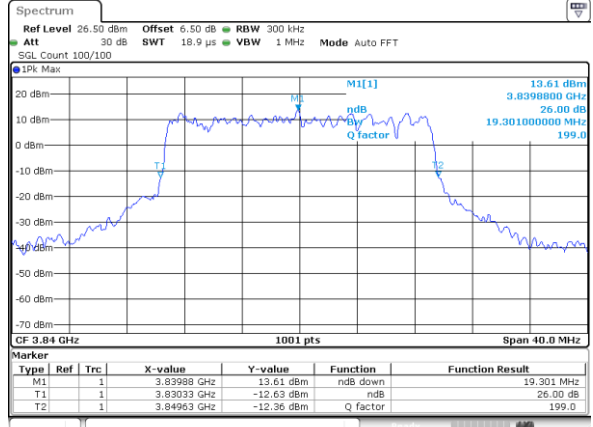
20MHz CP

QPSK



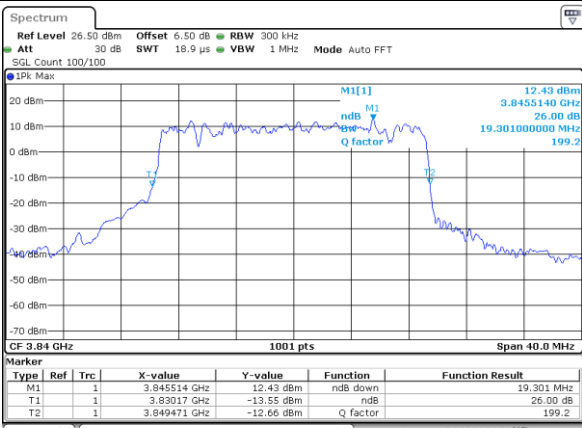
Date: 9\_SEP.2022 02:11:05

16QAM



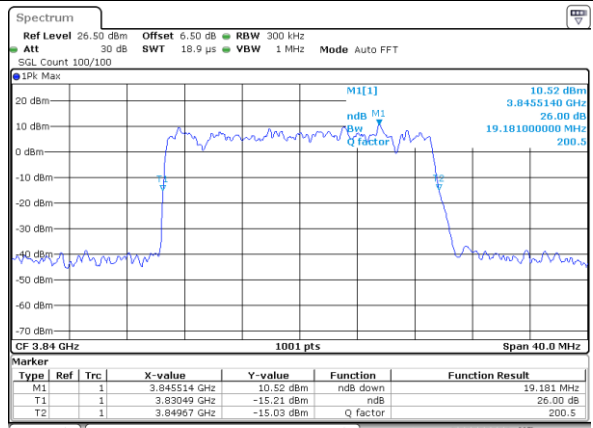
Date: 9\_SEP.2022 02:09:28

64QAM



Date: 9\_SEP.2022 02:09:04

256QAM

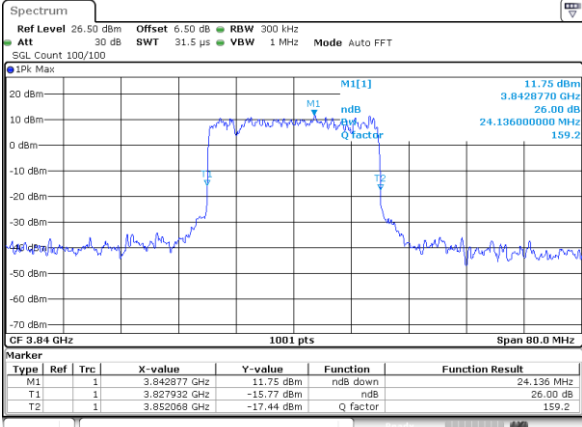


Date: 9\_SEP.2022 02:08:40



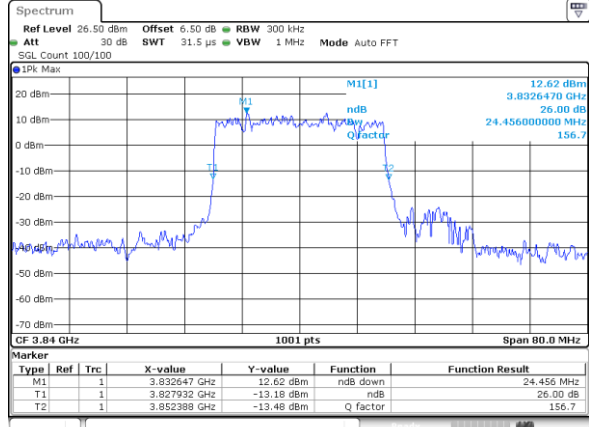
25MHz CP

QPSK



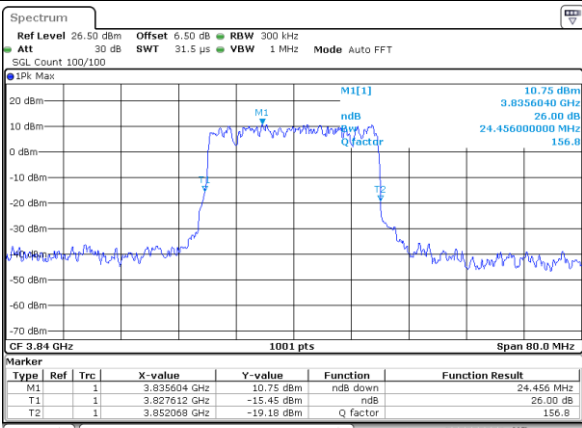
Date: 9\_SEP.2022 02:06:54

16QAM



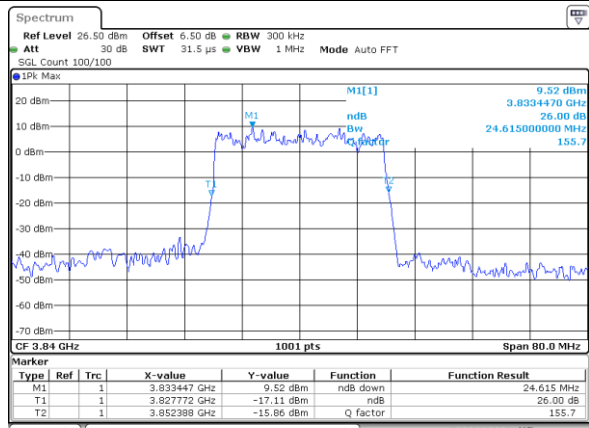
Date: 9\_SEP.2022 02:07:18

64QAM



Date: 9\_SEP.2022 02:07:43

256QAM

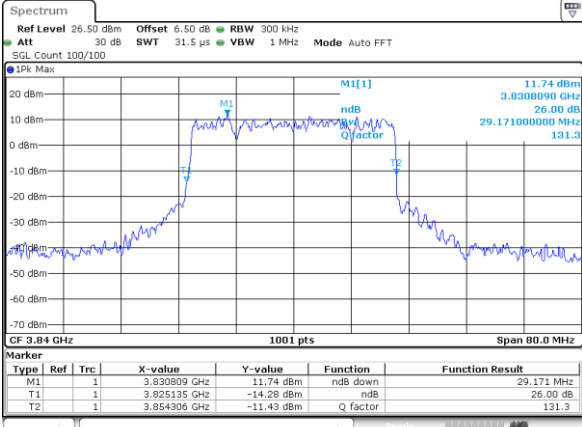


Date: 9\_SEP.2022 02:08:04



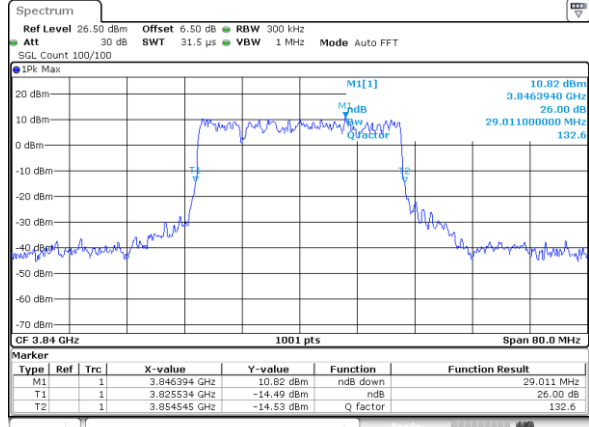
30MHz CP

QPSK



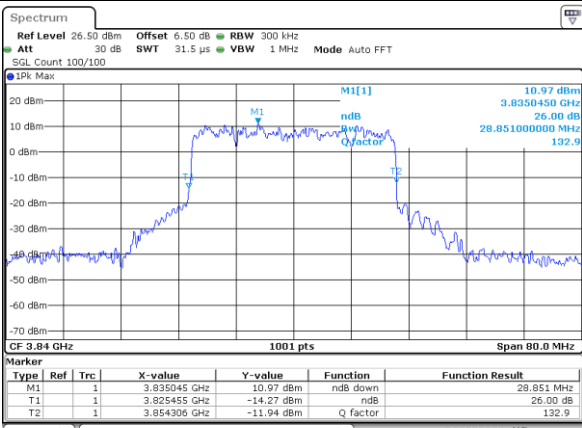
Date: 9\_SEP.2022 01:59:07

16QAM



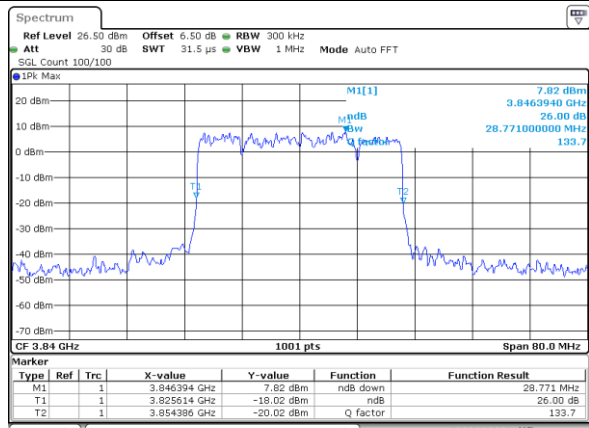
Date: 9\_SEP.2022 01:56:43

64QAM



Date: 9\_SEP.2022 01:50:30

256QAM

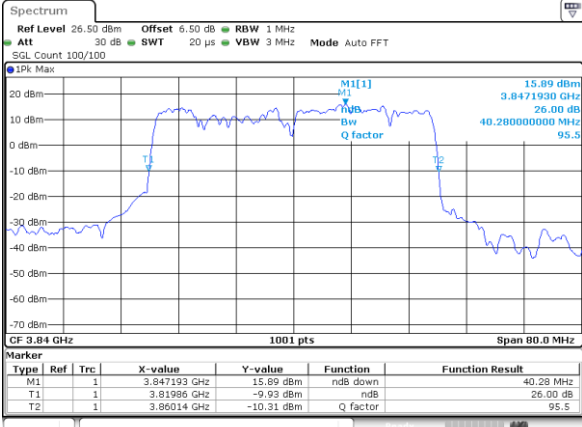


Date: 9\_SEP.2022 01:50:08



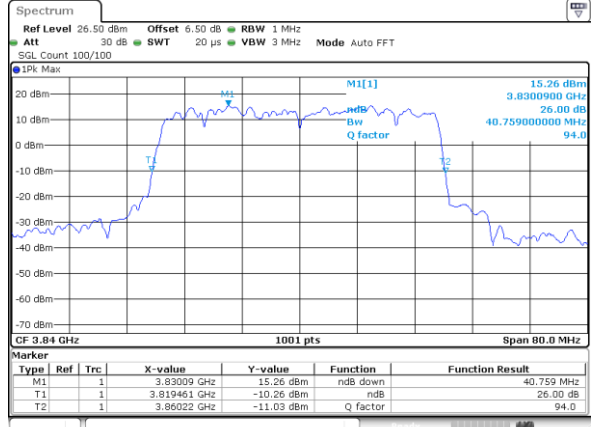
40MHz CP

QPSK



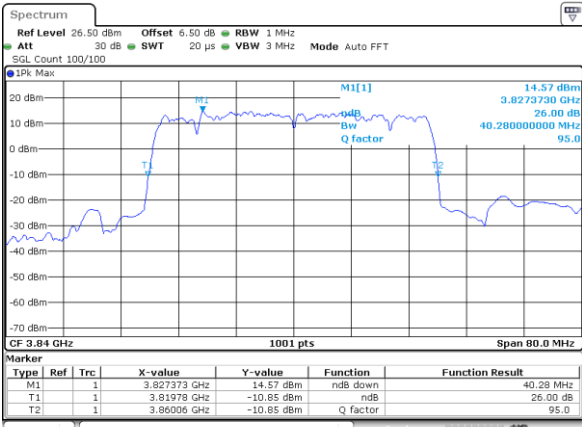
Date: 9\_SEP.2022 02:06:09

16QAM



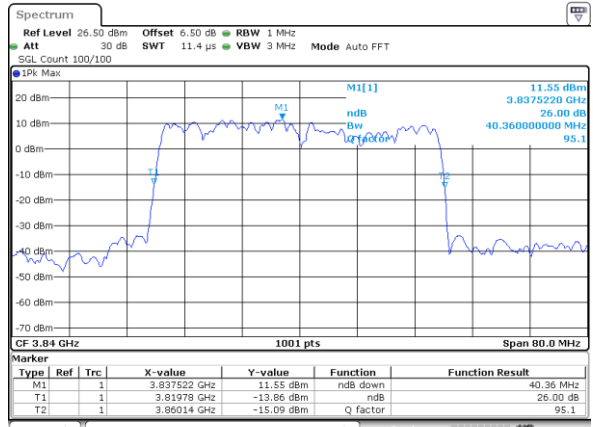
Date: 9\_SEP.2022 01:48:23

64QAM



Date: 9\_SEP.2022 01:48:58

256QAM

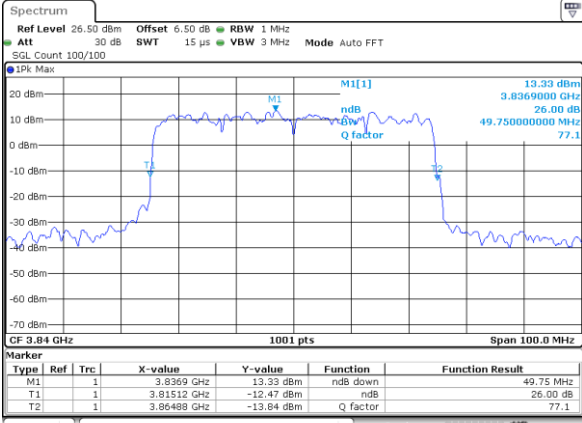


Date: 9\_SEP.2022 01:49:30



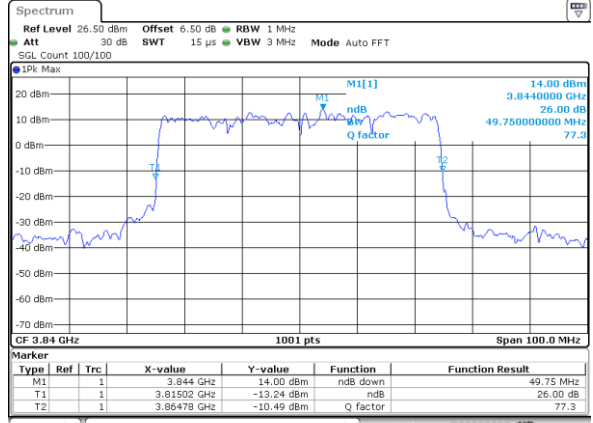
50MHz CP

QPSK



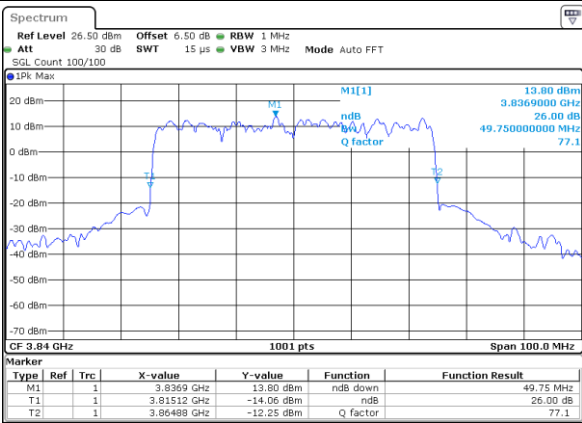
Date: 9\_SEP.2022 01:31:14

16QAM



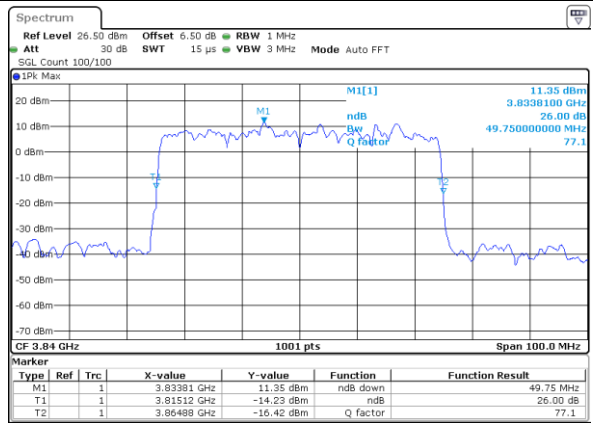
Date: 9\_SEP.2022 01:31:49

64QAM



Date: 9\_SEP.2022 01:32:19

256QAM

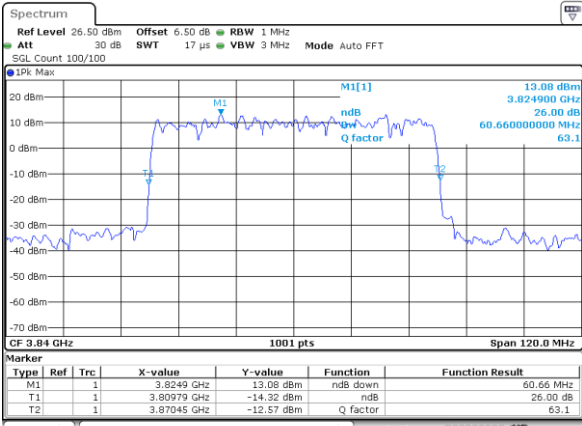


Date: 9\_SEP.2022 01:33:41



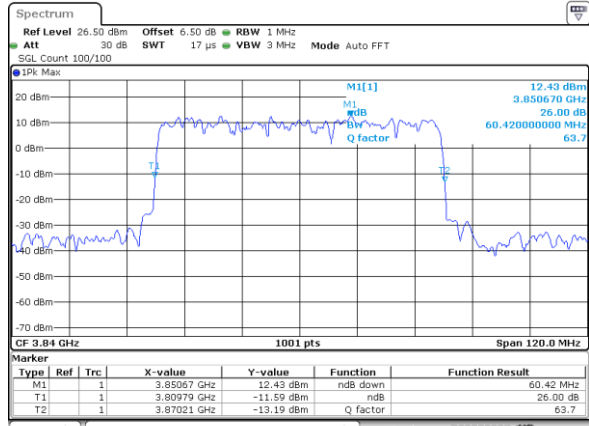
60MHz CP

QPSK



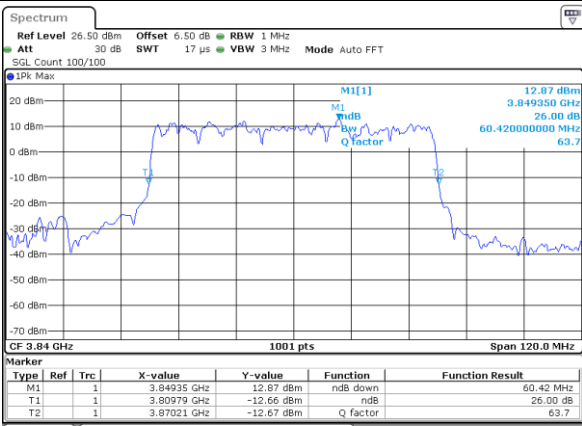
Date: 9\_SEP.2022 01:29:36

16QAM



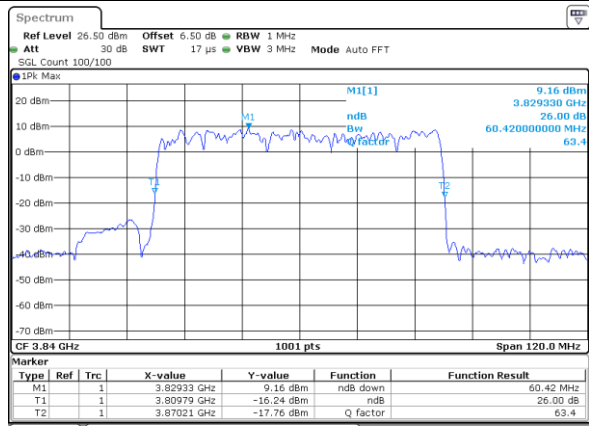
Date: 9\_SEP.2022 01:28:47

64QAM



Date: 9\_SEP.2022 01:28:02

256QAM

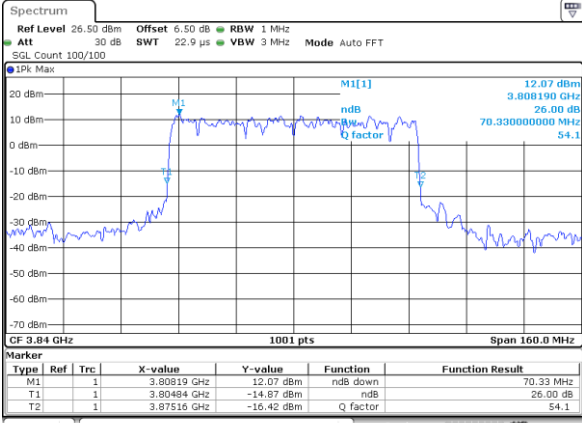


Date: 9\_SEP.2022 01:27:29



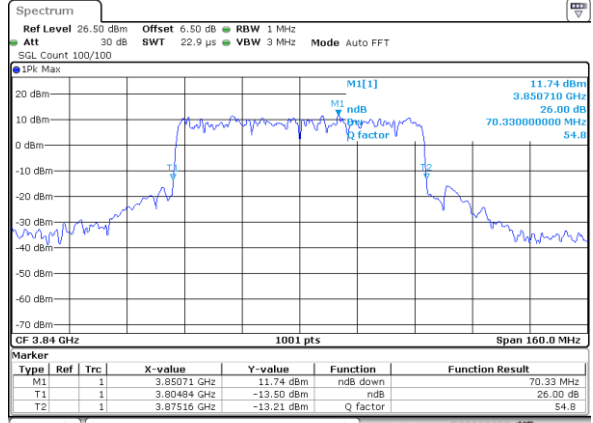
70MHz CP

QPSK



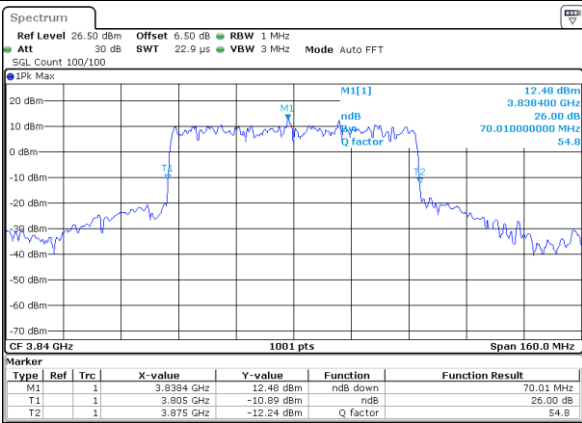
Date: 9\_SEP.2022 01:24:25

16QAM



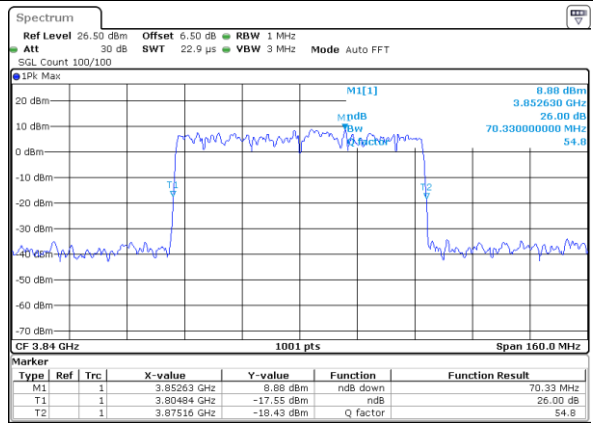
Date: 9\_SEP.2022 01:25:10

64QAM



Date: 9\_SEP.2022 01:25:36

256QAM

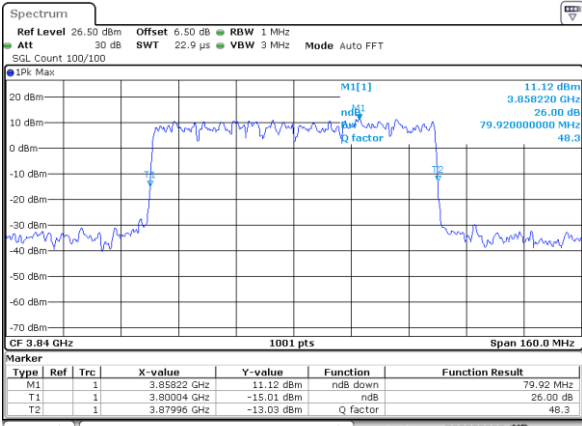


Date: 9\_SEP.2022 01:26:13



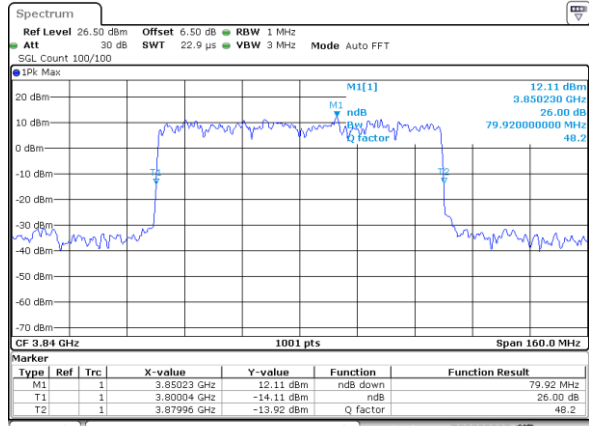
80MHz CP

QPSK



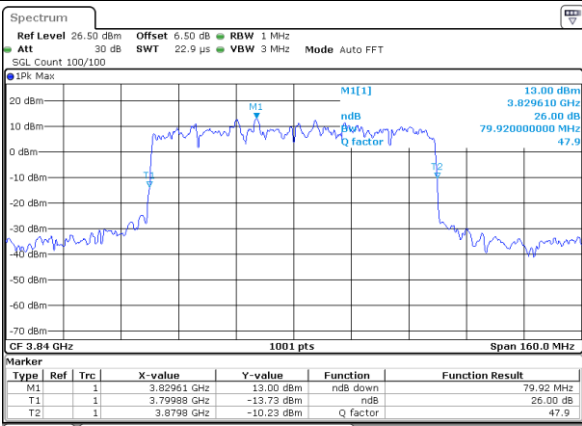
Date: 9\_SEP.2022 01:22:59

16QAM



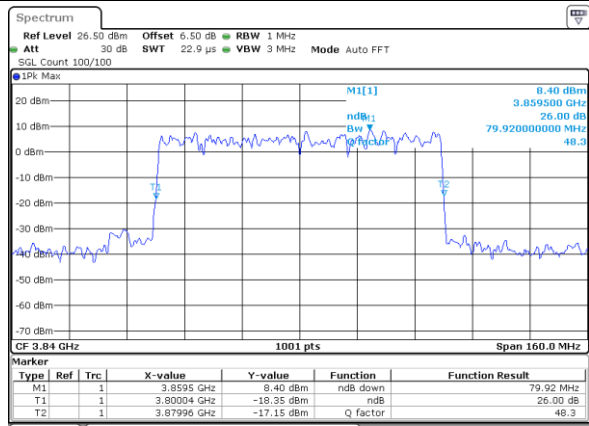
Date: 9\_SEP.2022 01:21:57

64QAM



Date: 9\_SEP.2022 01:21:18

256QAM

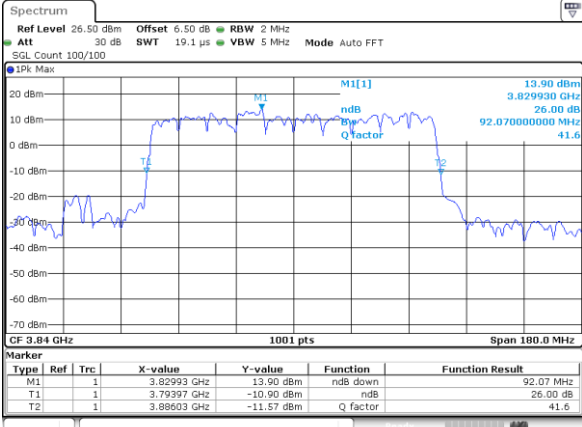


Date: 9\_SEP.2022 01:20:33



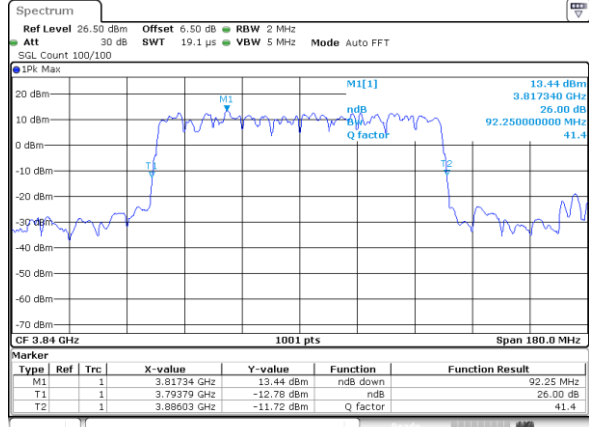
90MHz CP

QPSK



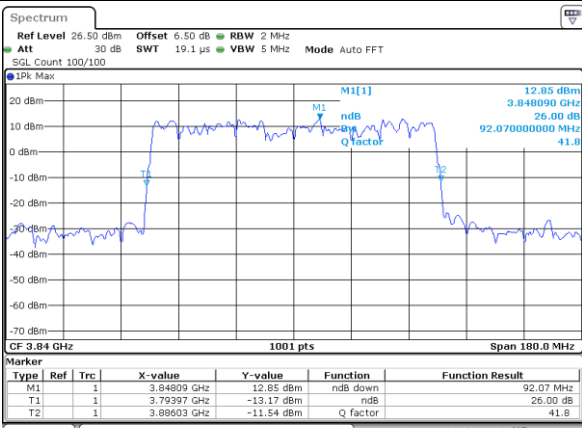
Date: 9\_SEP.2022 01:16:44

16QAM



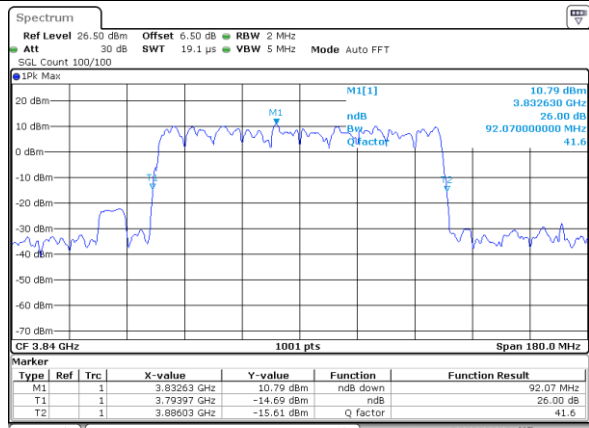
Date: 9\_SEP.2022 01:17:32

64QAM



Date: 9\_SEP.2022 01:18:03

256QAM

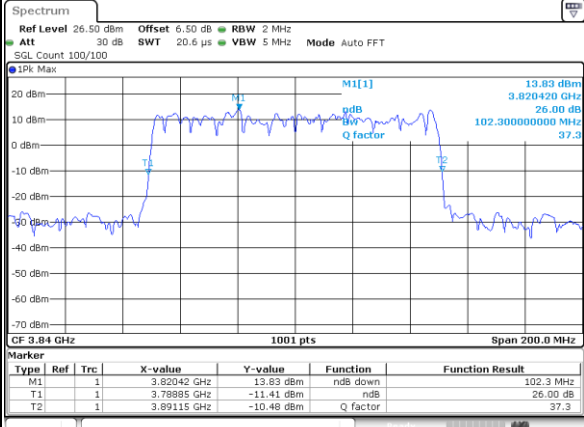


Date: 9\_SEP.2022 01:19:03



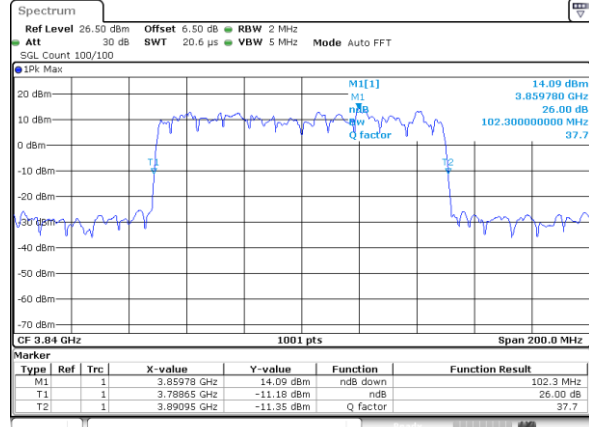
100MHz CP

QPSK



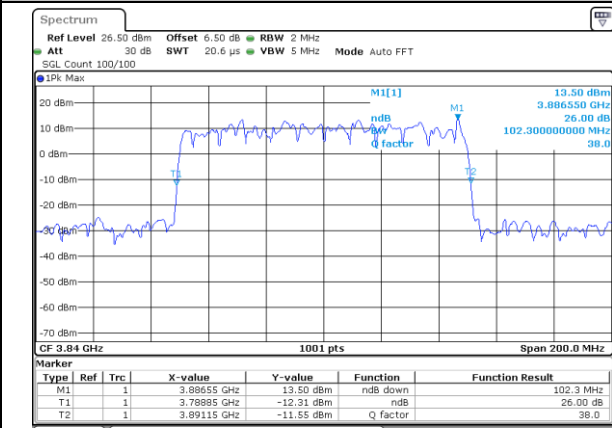
Date: 9\_SEP.2022 01:01:02

16QAM



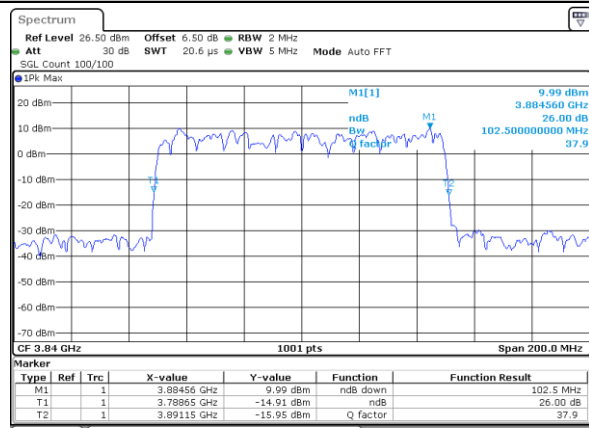
Date: 9\_SEP.2022 01:01:28

64QAM



Date: 9\_SEP.2022 01:02:03

256QAM



Date: 9\_SEP.2022 01:02:32



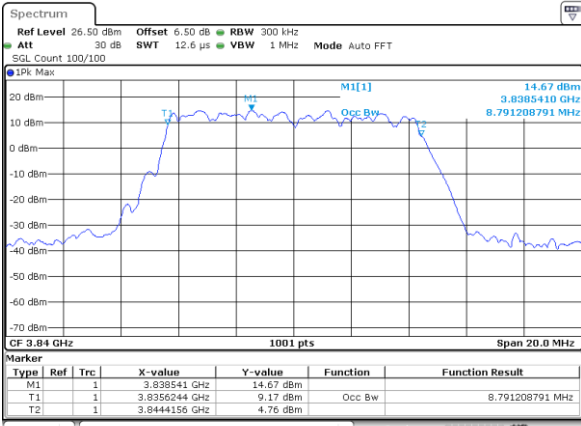
**Occupied Bandwidth**

Mode	FR1 n77 : OB BW(10 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	8.79	8.75	8.71	8.65
Mode	FR1 n77 : OB BW(15 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	13.76	13.64	13.64	13.58
Mode	FR1 n77 : OB BW(20 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	18.30	18.26	18.22	18.26
Mode	FR1 n77 : OB BW(25 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	23.26	23.34	23.26	23.18
Mode	FR1 n77 : OB BW(30 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	27.73	27.73	27.73	27.73
Mode	FR1 n77 : OB BW(40 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	38.20	37.64	37.80	37.96
Mode	FR1 n77 : OB BW(50 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	47.45	47.55	47.65	47.65
Mode	FR1 n77 : OB BW(60 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	58.02	57.66	57.78	57.90
Mode	FR1 n77 : OB BW(70 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	67.93	67.45	67.45	67.29
Mode	FR1 n77 : OB BW(80 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	77.68	77.20	77.36	77.52
Mode	FR1 n77 : OB BW(90 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	87.57	87.21	87.03	86.85
Mode	FR1 n77 : OB BW(100 MHz) / CP OFDM			
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	97.70	97.70	97.10	97.90



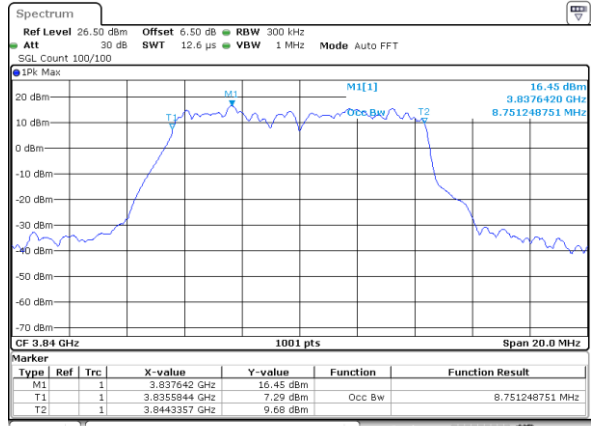
10MHz CP

QPSK



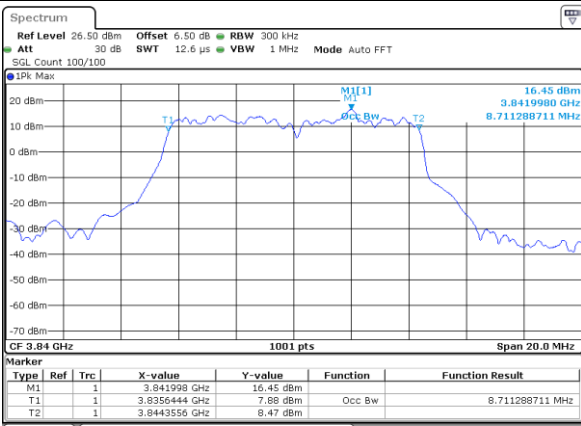
Date: 9\_SEP.2022 02:16:42

16QAM



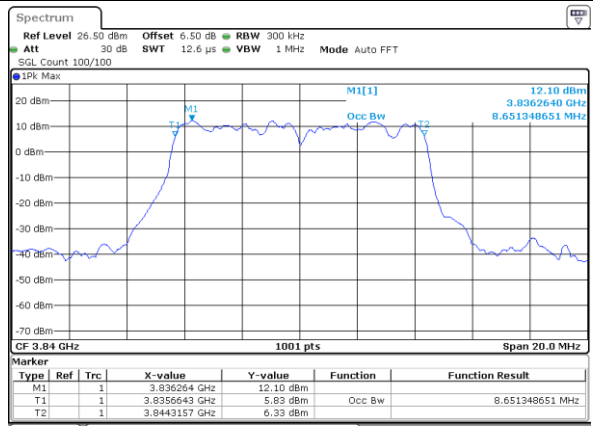
Date: 9\_SEP.2022 02:16:22

64QAM



Date: 9\_SEP.2022 02:14:05

256QAM

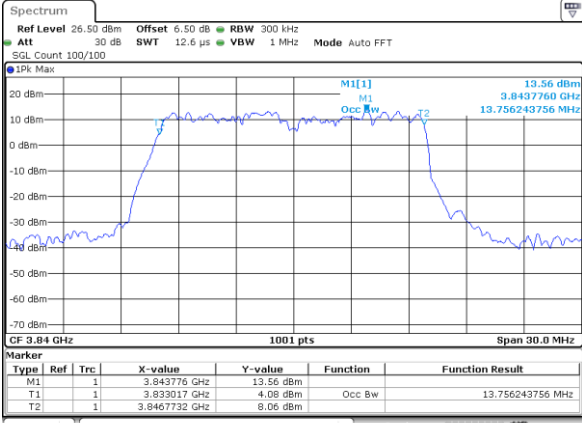


Date: 9\_SEP.2022 02:13:33



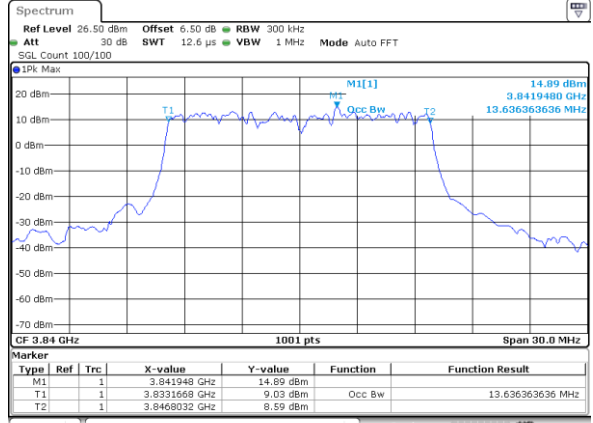
15MHz CP

QPSK



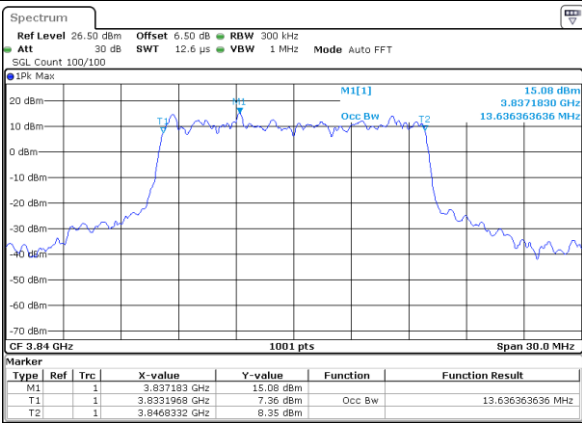
Date: 9\_SEP.2022 02:10:36

16QAM



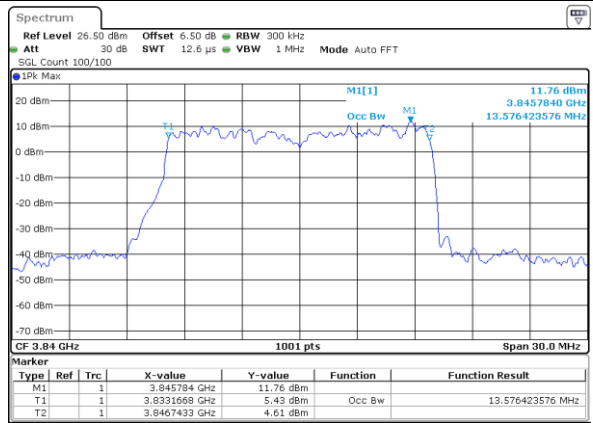
Date: 9\_SEP.2022 02:11:39

64QAM



Date: 9\_SEP.2022 02:12:00

256QAM

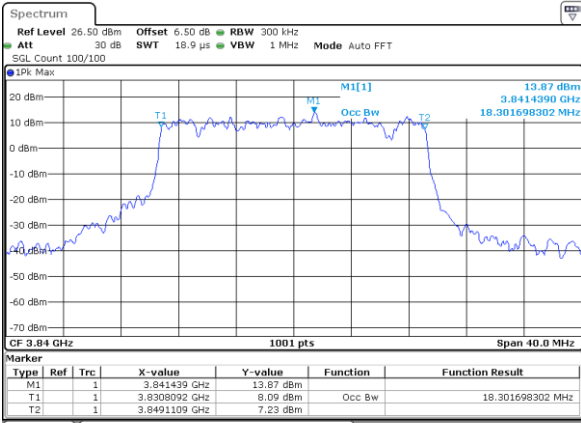


Date: 9\_SEP.2022 02:12:22



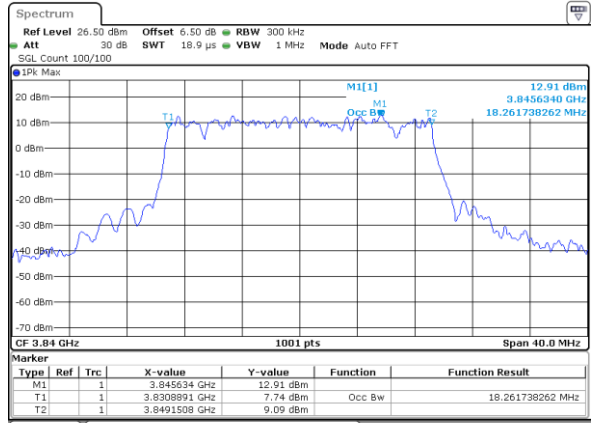
20MHz CP

QPSK



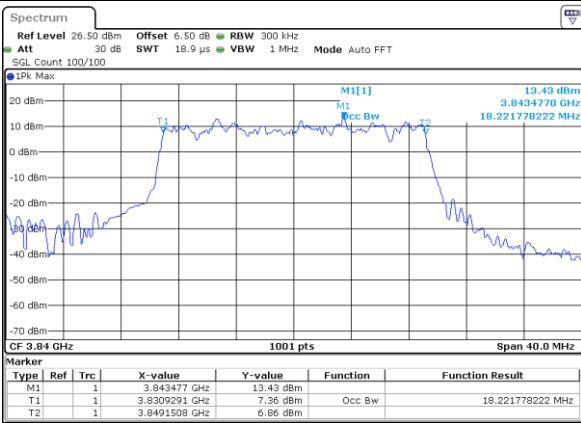
Date: 9\_SEP.2022 02:09:158

16QAM



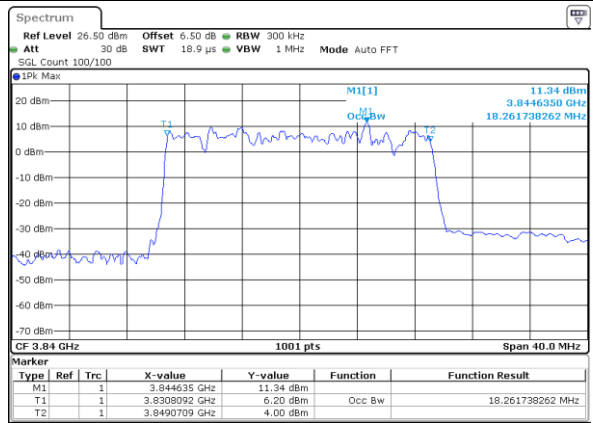
Date: 9\_SEP.2022 02:09:118

64QAM



Date: 9\_SEP.2022 02:08:153

256QAM

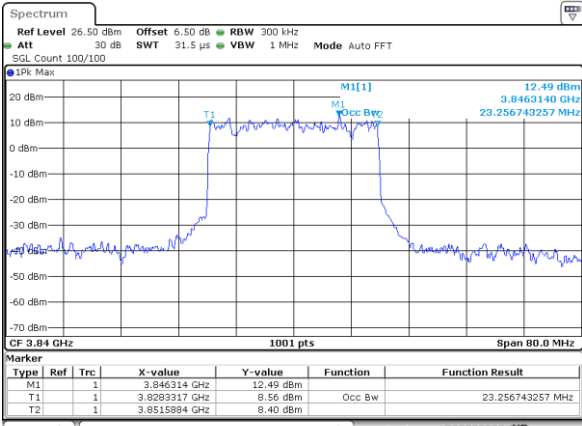


Date: 9\_SEP.2022 02:08:133

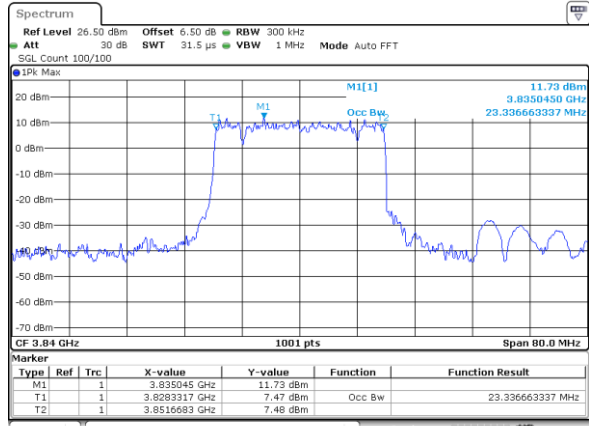


25MHz CP

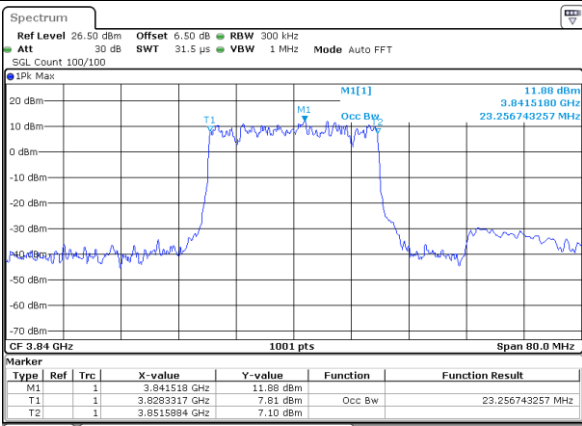
QPSK



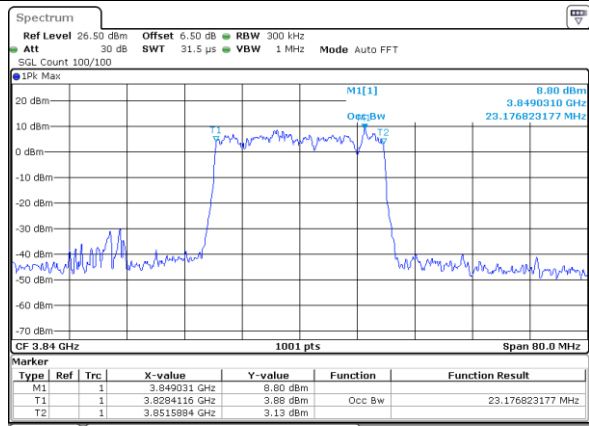
16QAM



64QAM



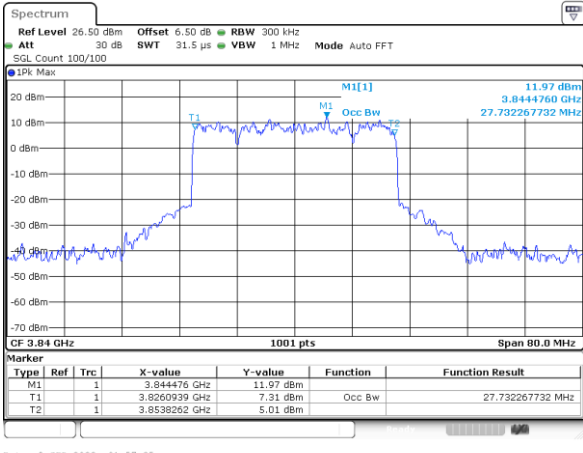
256QAM





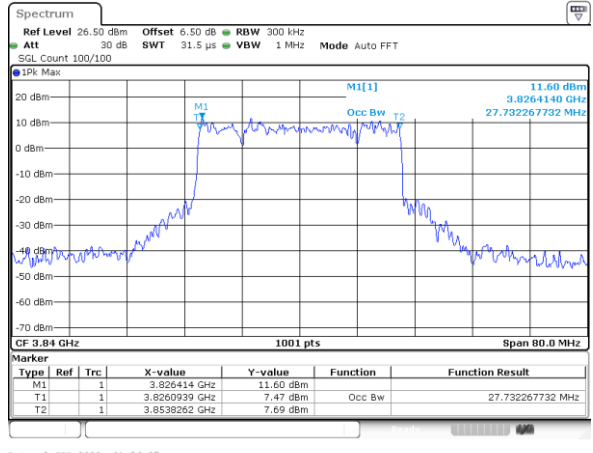
30MHz CP

QPSK



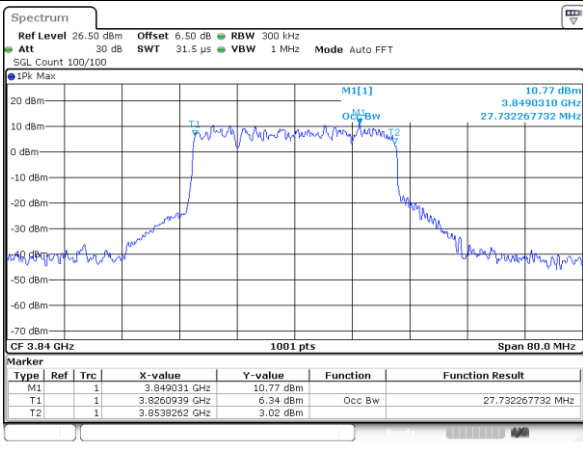
Date: 9\_SEP.2022 01:57:25

16QAM



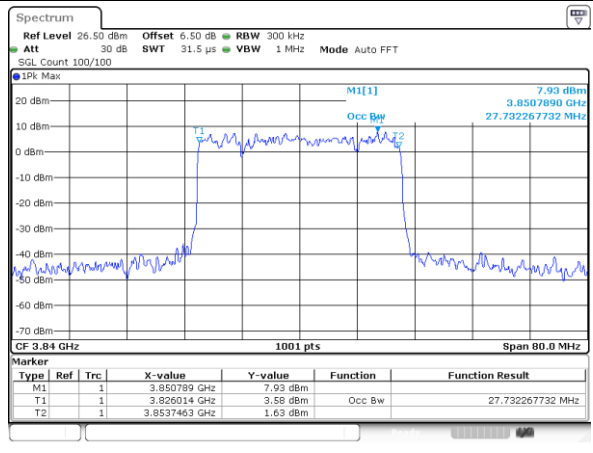
Date: 9\_SEP.2022 01:56:27

64QAM



Date: 9\_SEP.2022 01:50:21

256QAM

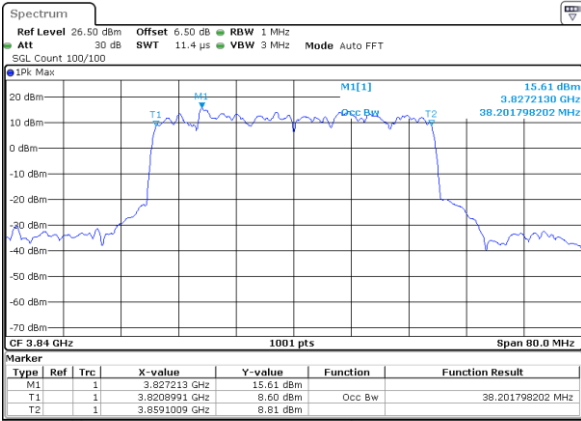


Date: 9\_SEP.2022 01:50:00



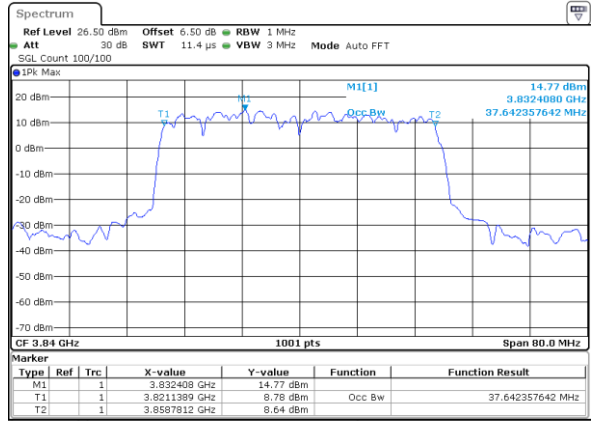
40MHz CP

QPSK



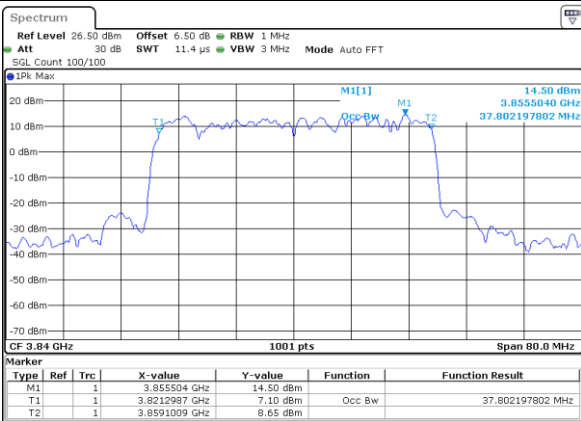
Date: 9\_SEP.2022 01:46:12

16QAM



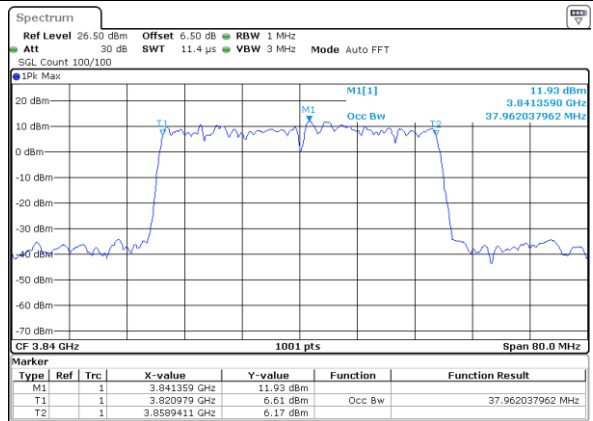
Date: 9\_SEP.2022 01:46:58

64QAM



Date: 9\_SEP.2022 01:48:45

256QAM

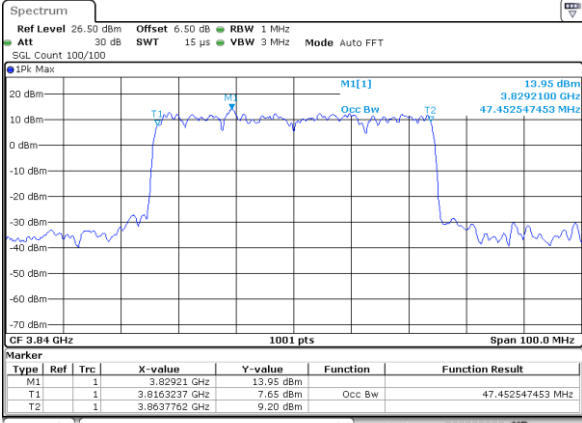


Date: 9\_SEP.2022 01:49:22



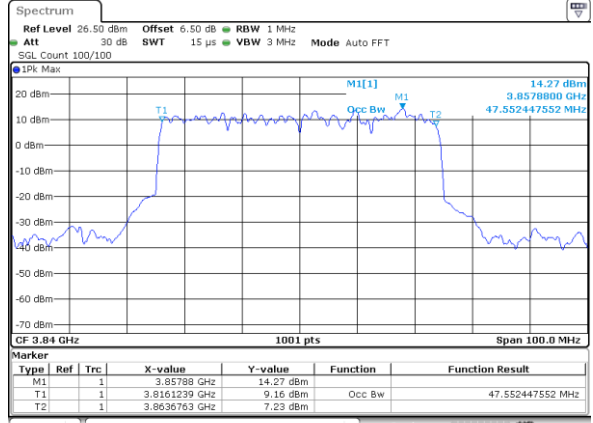
50MHz CP

QPSK



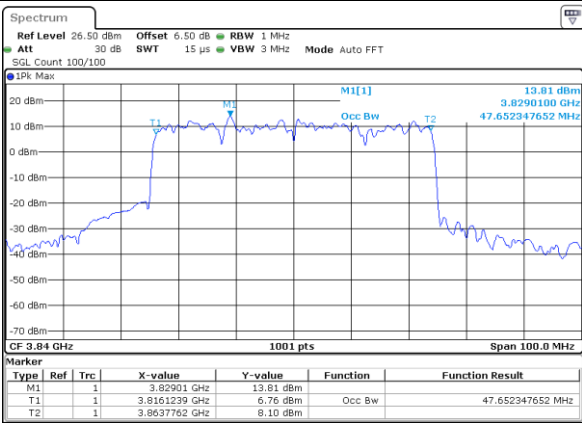
Date: 9\_SEP.2022 01:30:39

16QAM



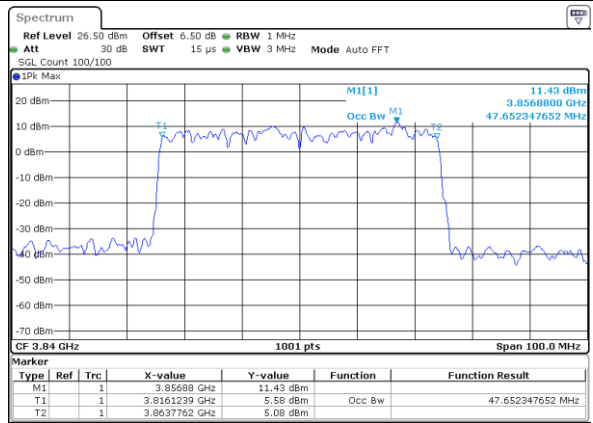
Date: 9\_SEP.2022 01:31:35

64QAM



Date: 9\_SEP.2022 01:32:27

256QAM

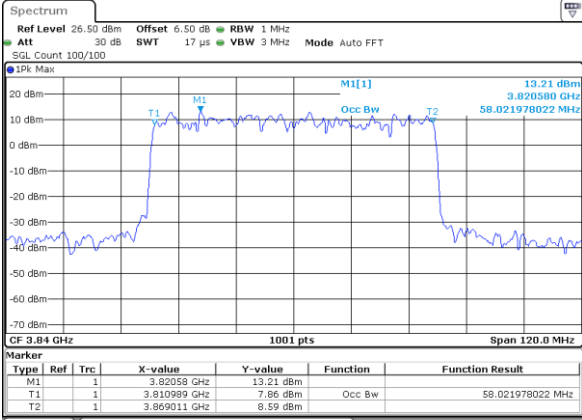


Date: 9\_SEP.2022 01:33:10



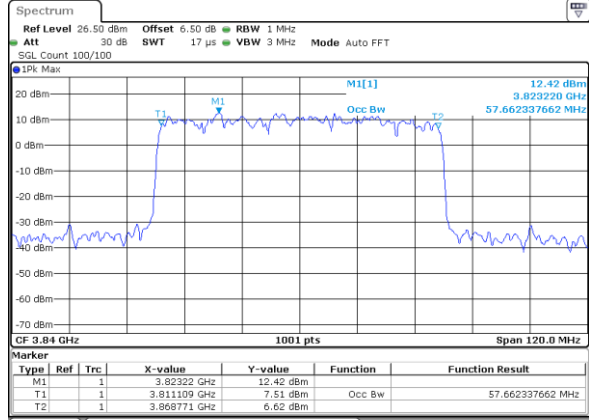
60MHz CP

QPSK



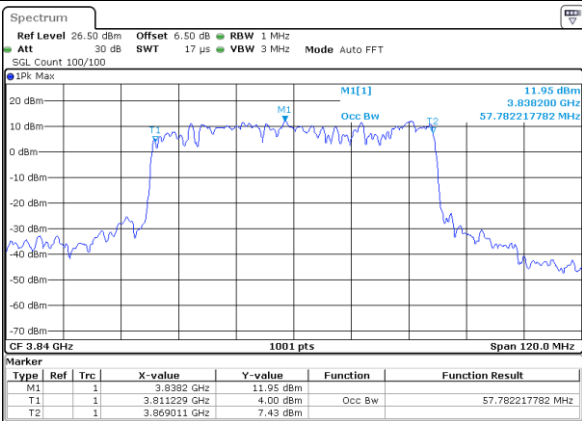
Date: 9\_SEP.2022 01:29:23

16QAM



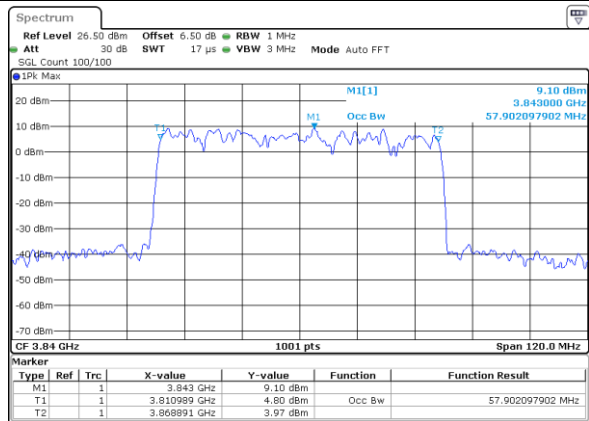
Date: 9\_SEP.2022 01:28:36

64QAM



Date: 9\_SEP.2022 01:27:50

256QAM

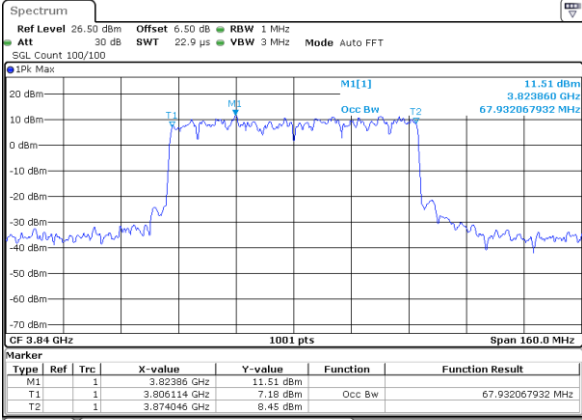


Date: 9\_SEP.2022 01:26:50



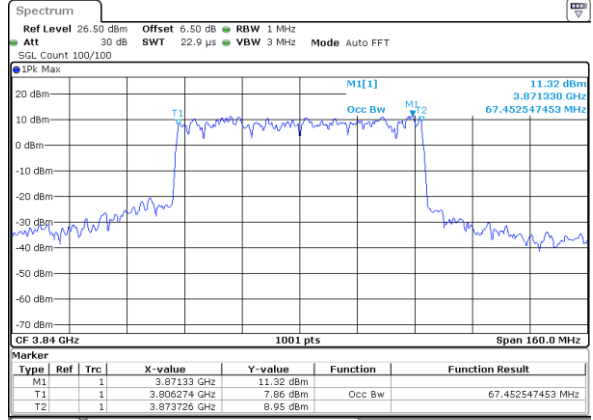
70MHz CP

QPSK



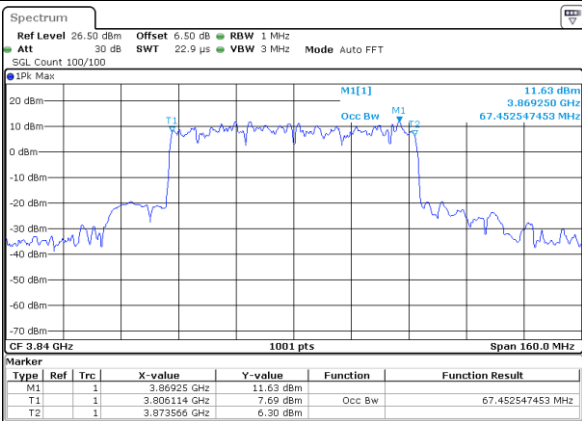
Date: 9\_SEP.2022 01:24:13

16QAM



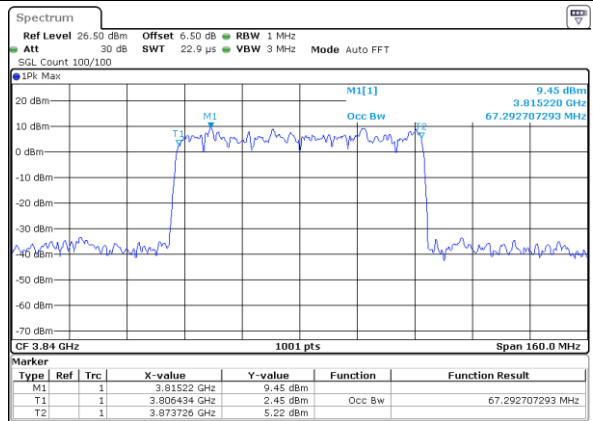
Date: 9\_SEP.2022 01:24:57

64QAM



Date: 9\_SEP.2022 01:25:27

256QAM

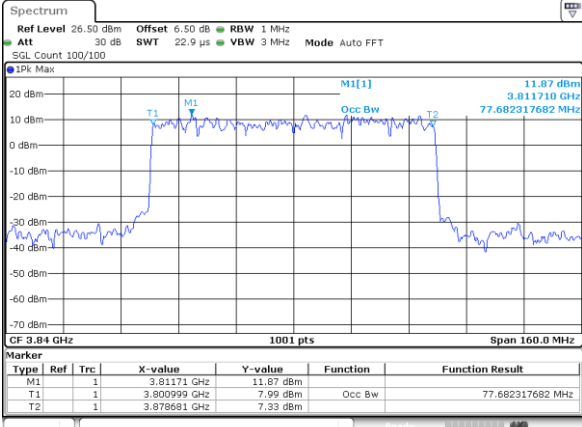


Date: 9\_SEP.2022 01:26:04



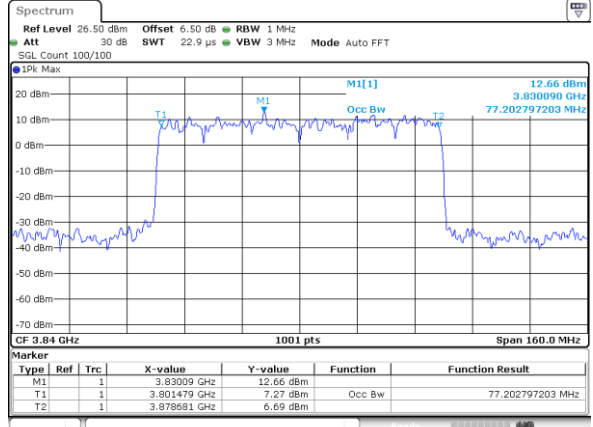
80MHz CP

QPSK



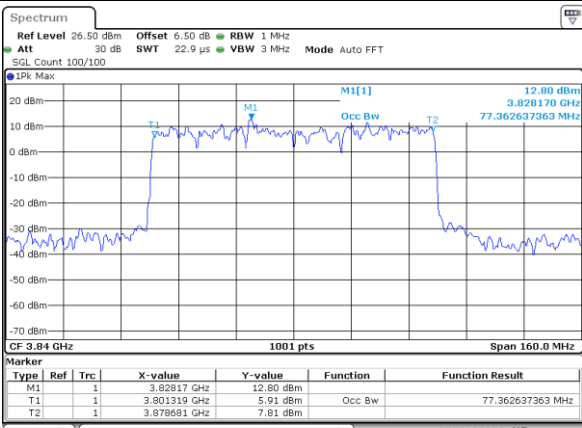
Date: 9\_SEP.2022 01:22:10

16QAM



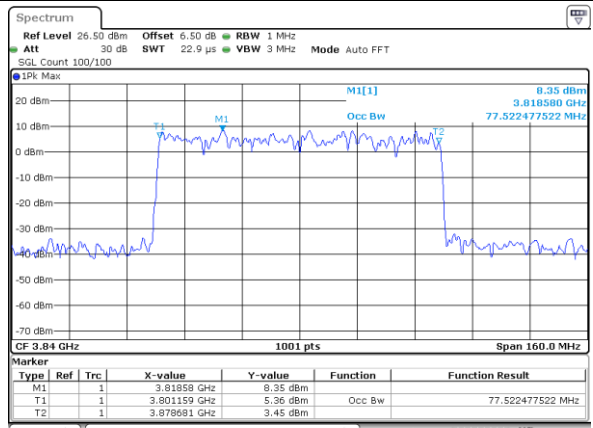
Date: 9\_SEP.2022 01:21:36

64QAM



Date: 9\_SEP.2022 01:20:49

256QAM

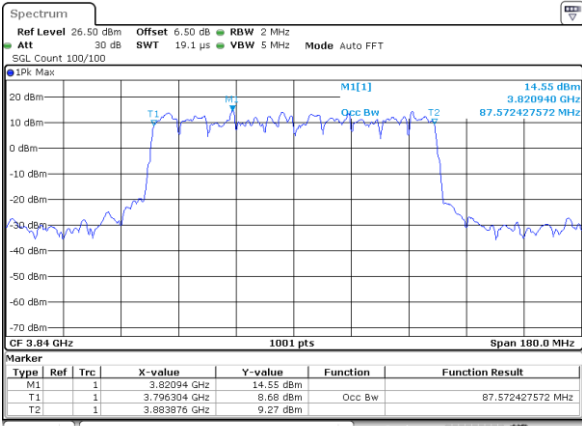


Date: 9\_SEP.2022 01:20:25



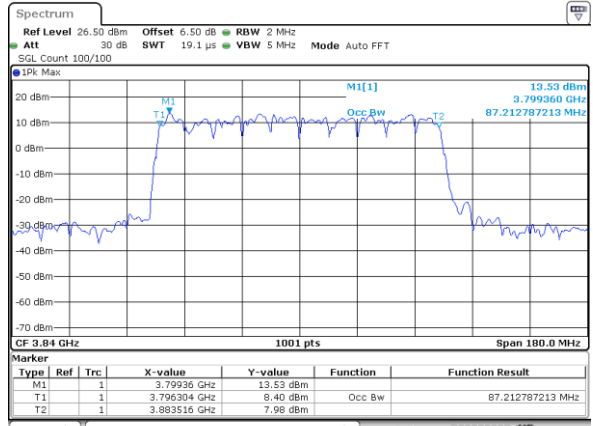
90MHz CP

QPSK



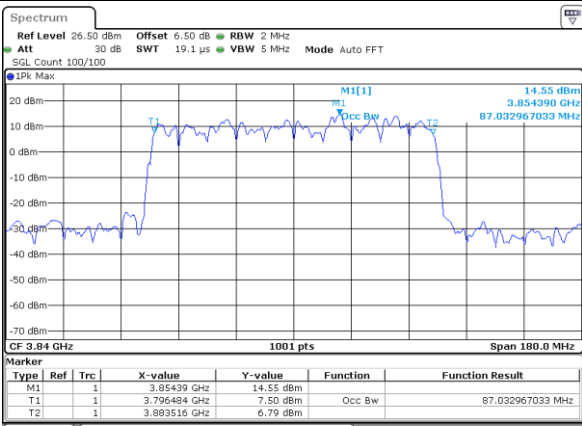
Date: 9\_SEP.2022 01:16:16

16QAM



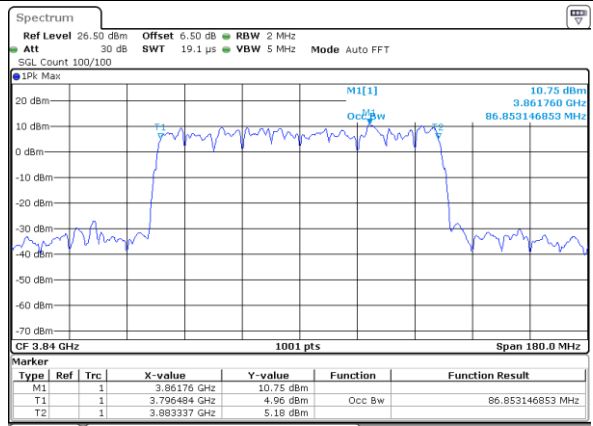
Date: 9\_SEP.2022 01:17:20

64QAM



Date: 9\_SEP.2022 01:17:47

256QAM

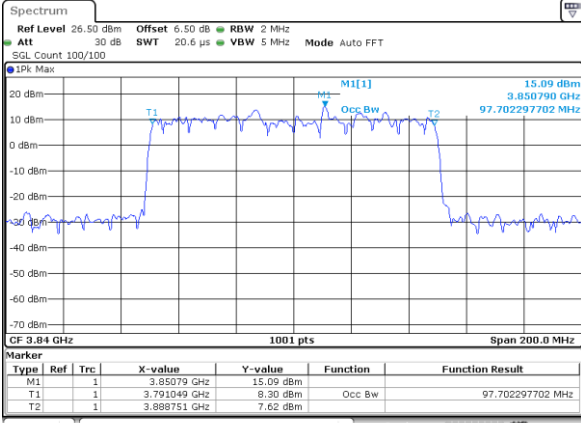


Date: 9\_SEP.2022 01:18:28



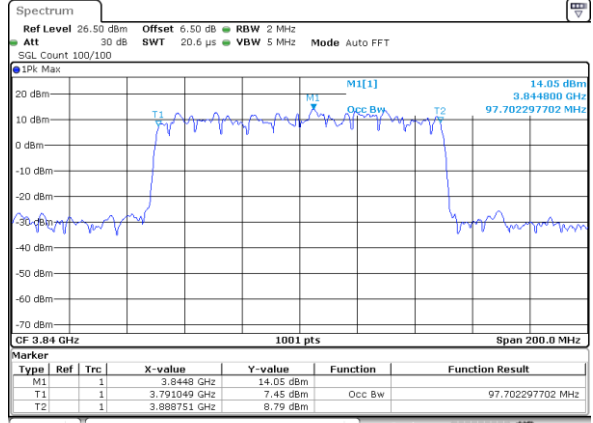
100MHz CP

QPSK



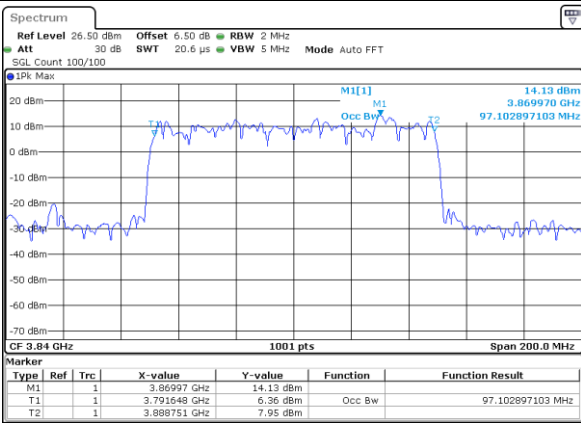
Date: 9\_SEP.2022 01:00:15

16QAM



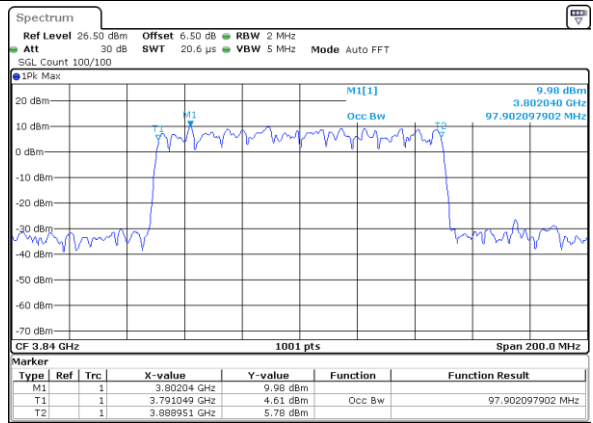
Date: 9\_SEP.2022 01:01:18

64QAM



Date: 9\_SEP.2022 01:01:47

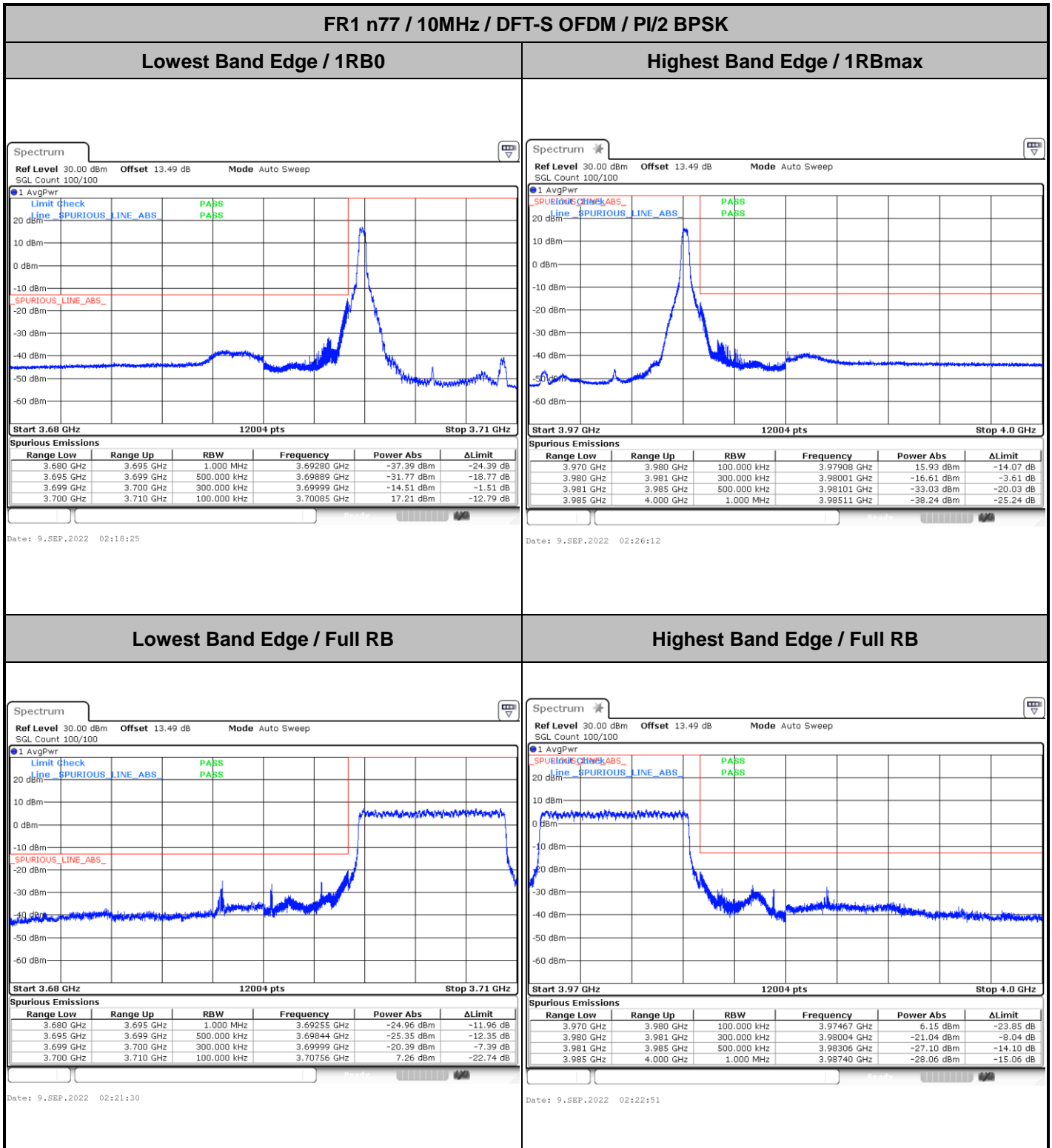
256QAM



Date: 9\_SEP.2022 01:02:22



# Conducted Band Edge

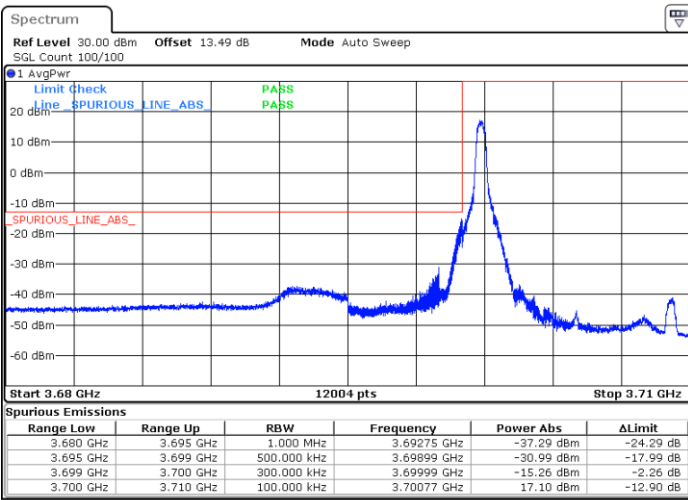




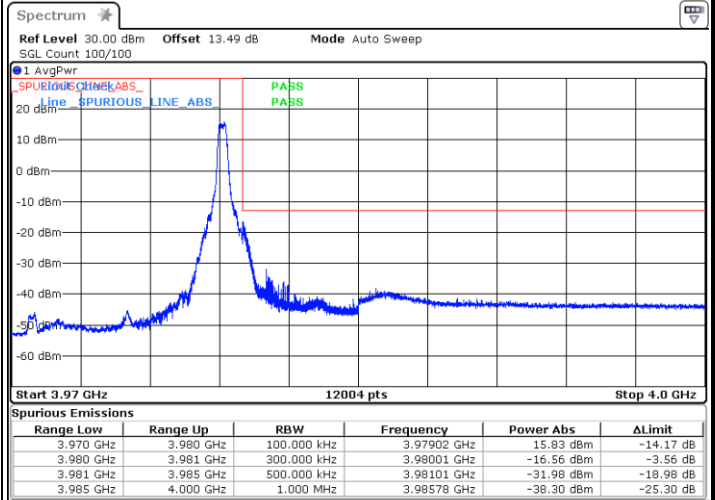
FR1 n77 / 10MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



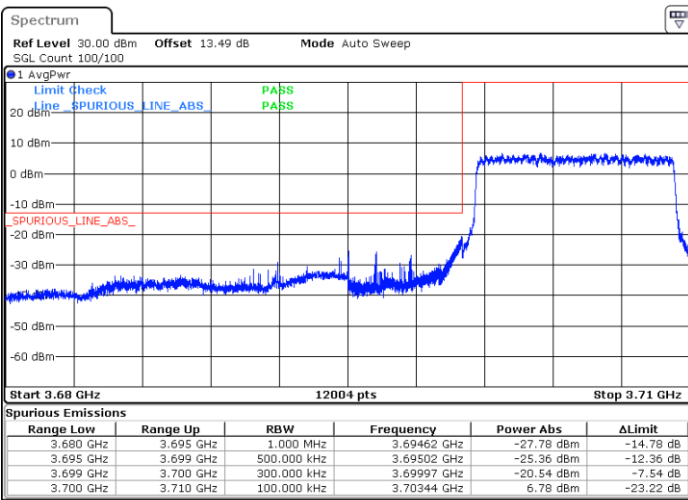
Date: 9.SEP.2022 02:19:56



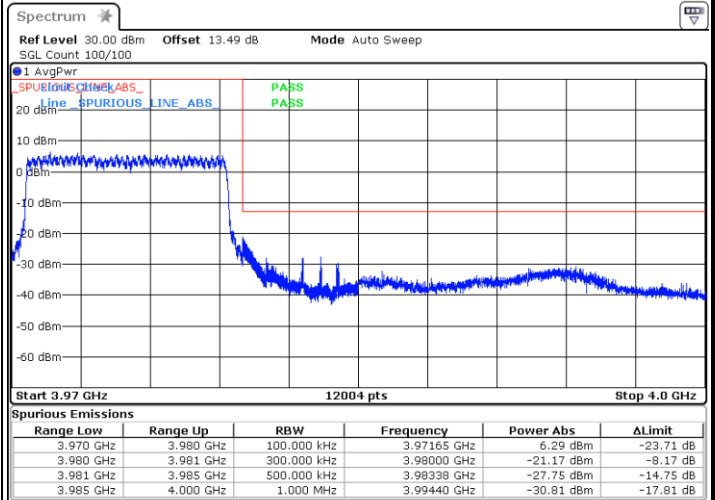
Date: 9.SEP.2022 02:25:02

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9.SEP.2022 02:20:40



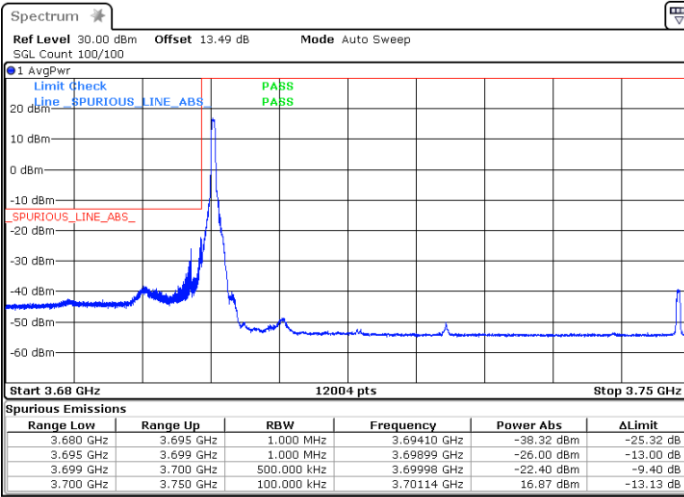
Date: 9.SEP.2022 02:23:41



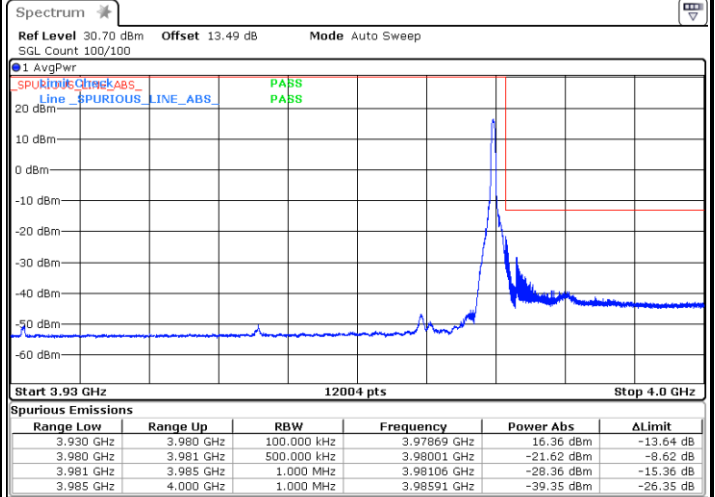
FR1 n77 / 50MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



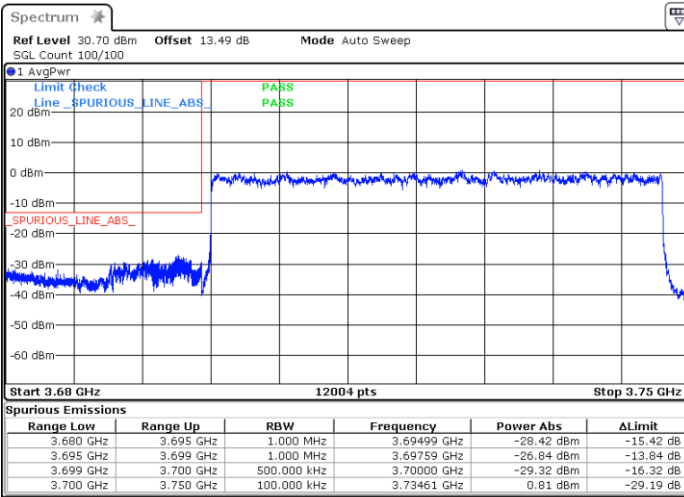
Date: 9.SEP.2022 01:35:48



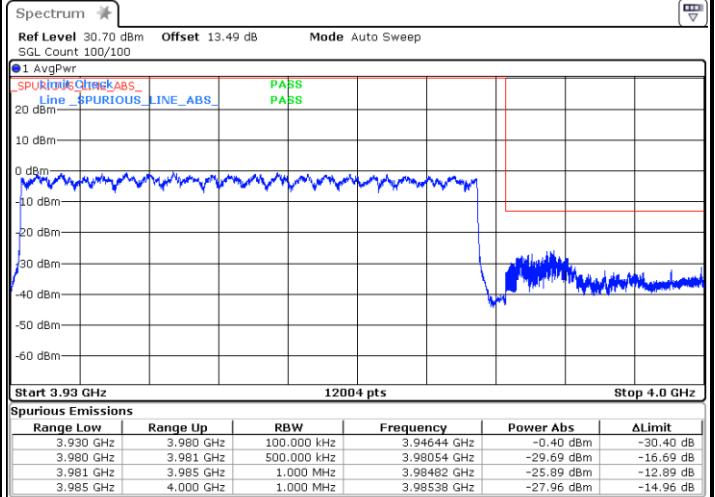
Date: 9.SEP.2022 01:45:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9.SEP.2022 01:40:15



Date: 9.SEP.2022 01:41:30