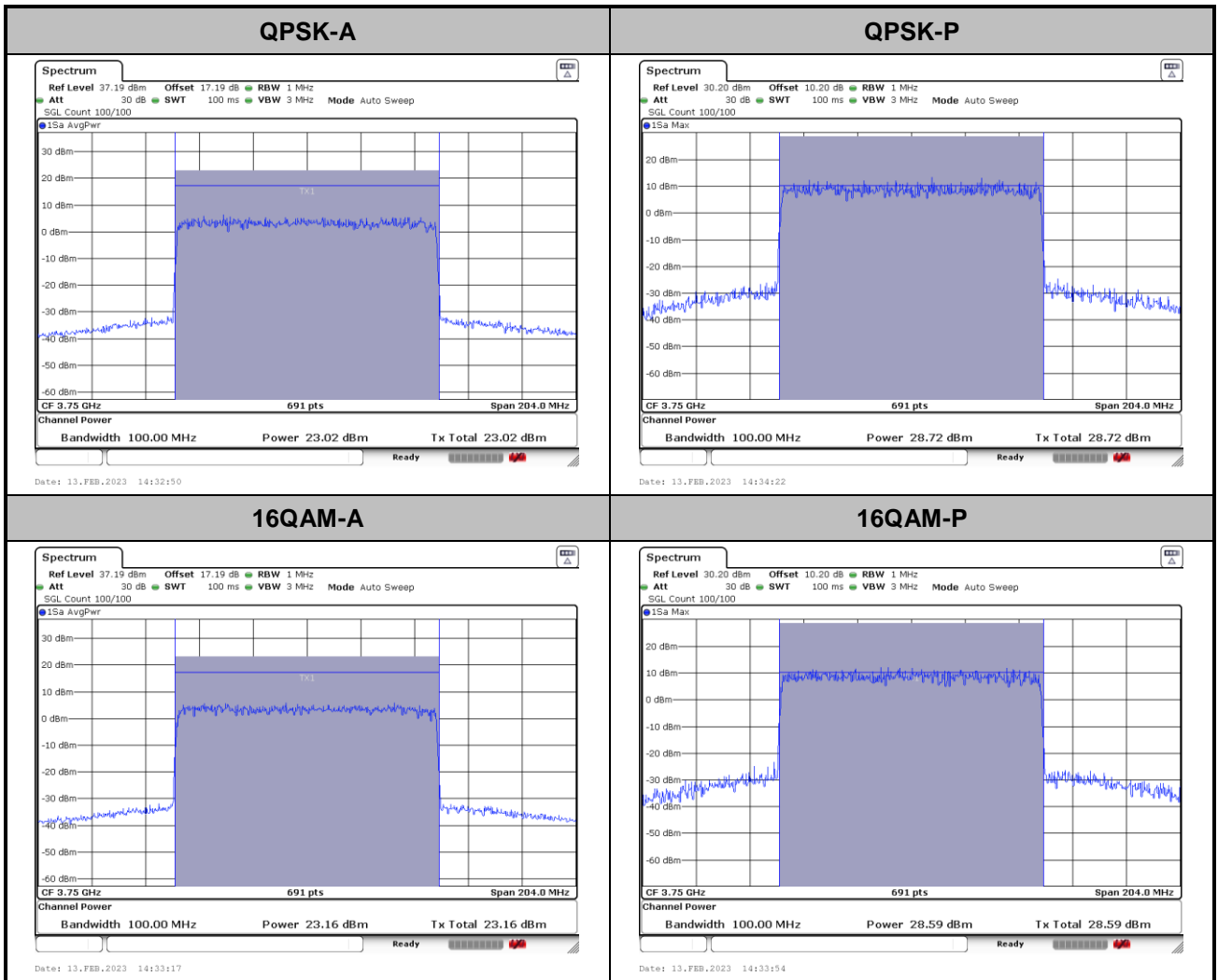




FR1 n78 UL MIMO

Peak-to-Average Ratio

Mode	FR1 n78 / 20MHz / CP OFDM			
Mod.	20M			Limit: 13dB
RB Size	BPSK	QPSK		Result
Middle CH	5.7	5.43		PASS



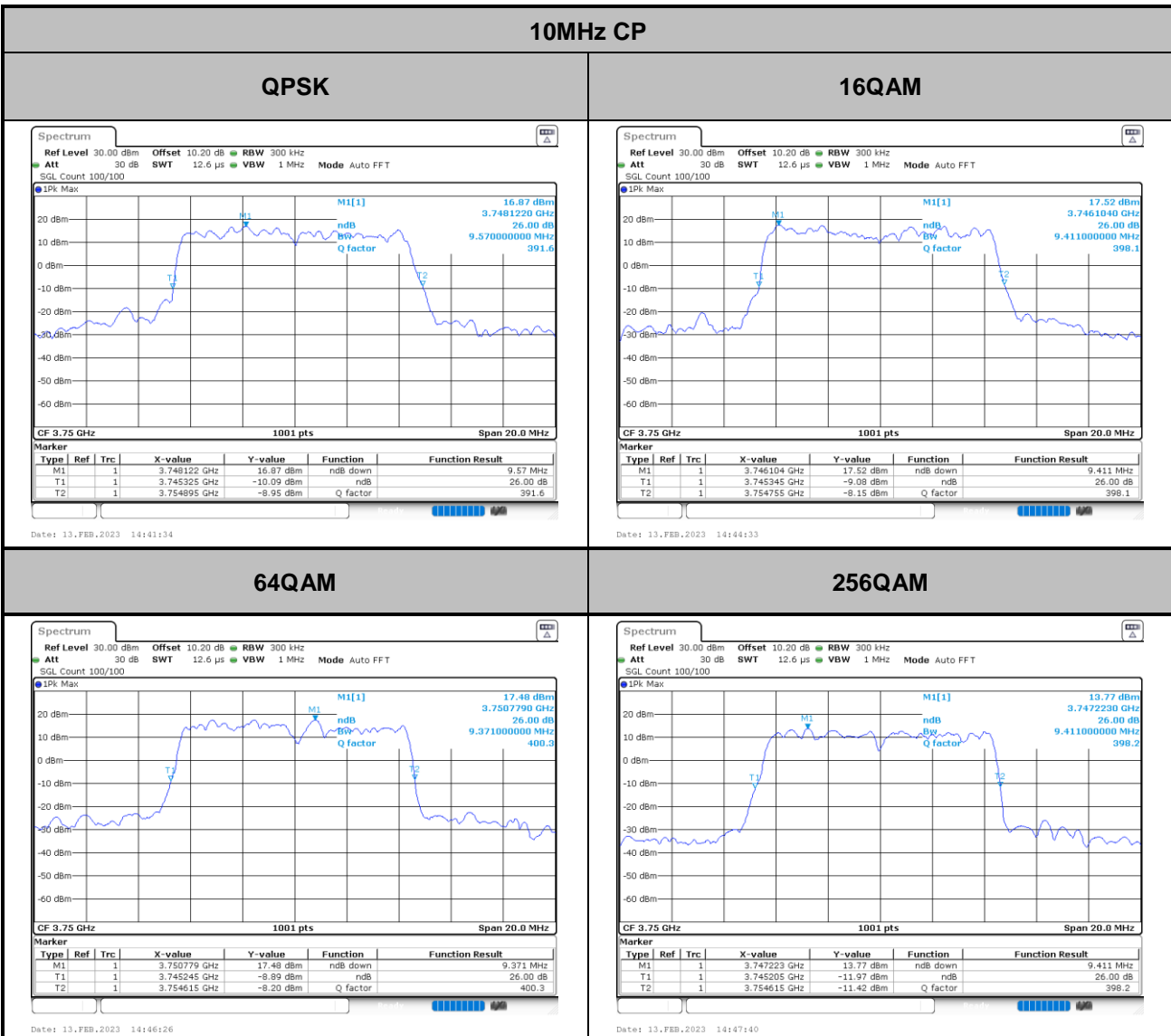


26dB Bandwidth

Mode	FR1 n78 : 26dB BW(10 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	9.57	9.41	9.37	9.41
Mode	FR1 n78 : 26dB BW(15 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	14.63	14.33	14.51	14.57
Mode	FR1 n78 : 26dB BW(20 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	19.30	19.02	19.18	19.42
Mode	FR1 n78 : 26dB BW(25 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	24.14	24.10	24.46	24.18
Mode	FR1 n78 : 26dB BW(30 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	28.85	28.77	29.05	29.05
Mode	FR1 n78 : 26dB BW(40 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	40.28	40.44	40.2	40.12
Mode	FR1 n78 : 26dB BW(50 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	49.75	49.85	49.75	49.85
Mode	FR1 n78 : 26dB BW(60 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	60.3	60.42	60.18	60.42
Mode	FR1 n78 : 26dB BW(80 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	81.84	82.48	82.32	82.32



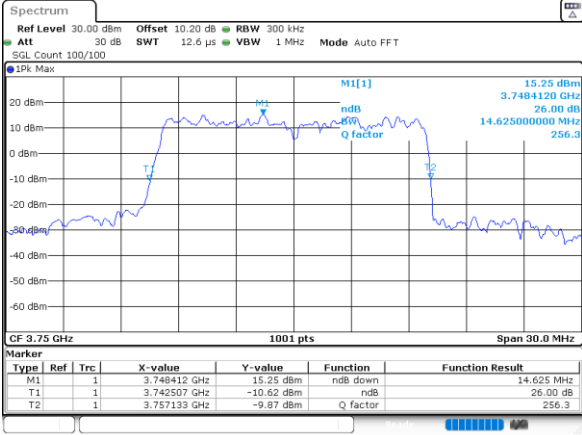
Mode	FR1 n78 : 26dB BW(90 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	92.25	92.61	92.25	91.71
Mode	FR1 n78 : 26dB BW(100 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	102.7	102.5	102.3	102.5





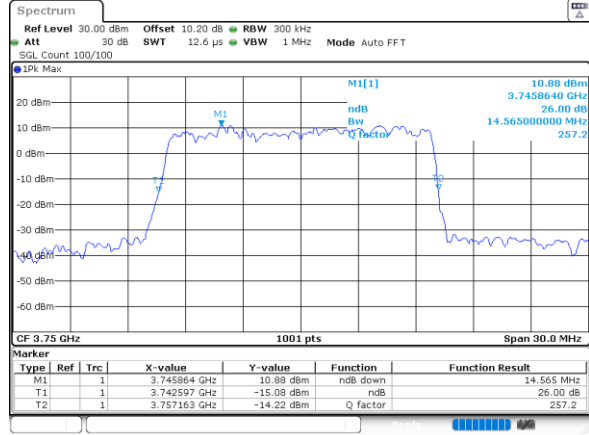
15MHz CP

QPSK



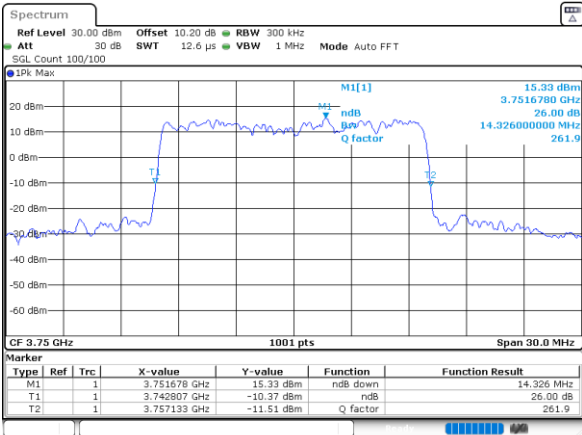
Date: 13.FEB.2023 14:59:21

16QAM



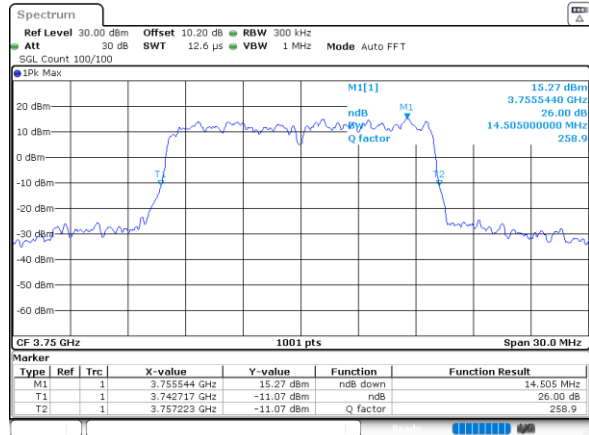
Date: 13.FEB.2023 14:56:138

64QAM



Date: 13.FEB.2023 14:58:55

256QAM

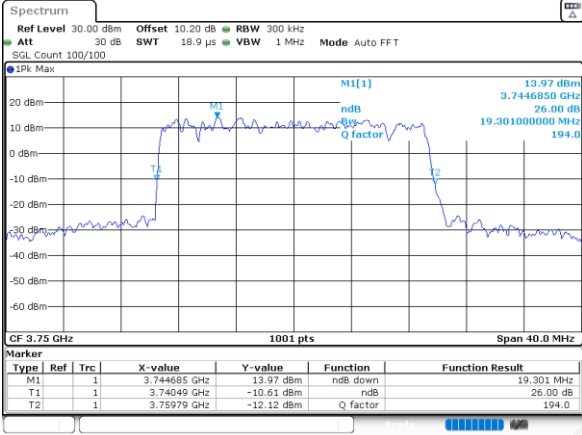


Date: 13.FEB.2023 14:57:100



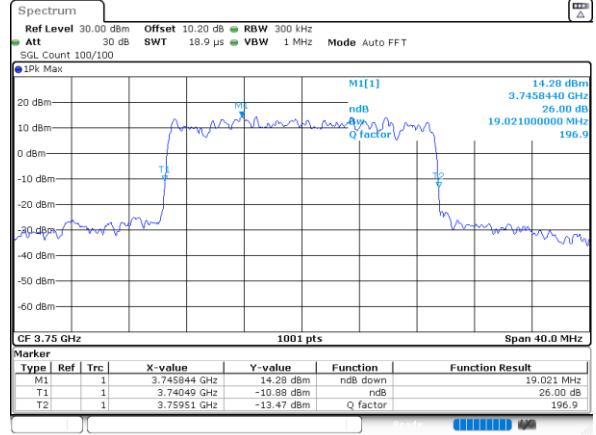
20MHz CP

QPSK



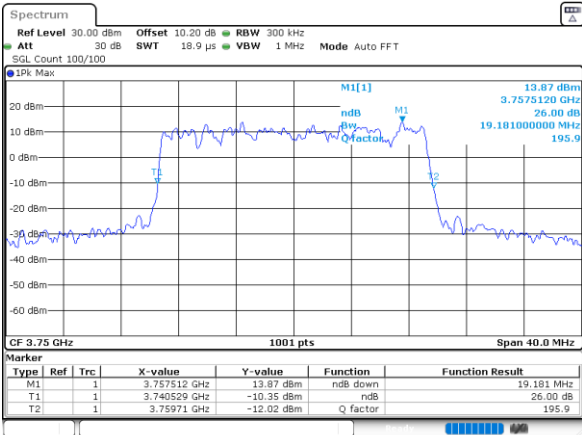
Date: 13.FEB.2023 14:59:39

16QAM



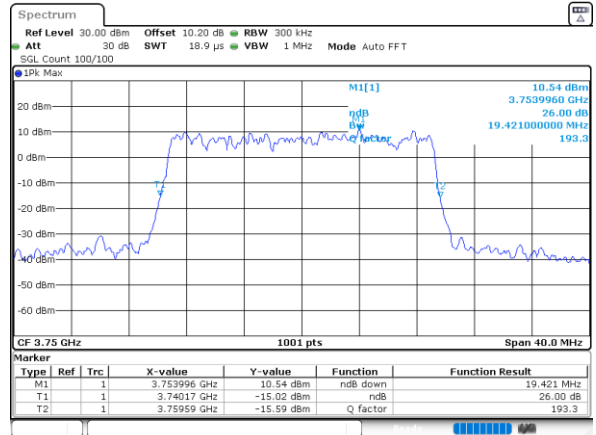
Date: 13.FEB.2023 15:00:33

64QAM



Date: 13.FEB.2023 15:00:46

256QAM

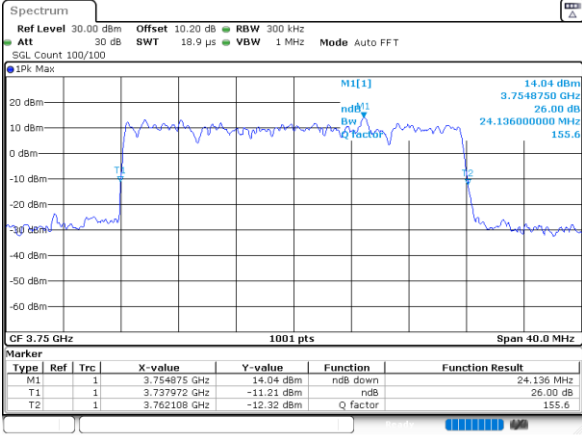


Date: 13.FEB.2023 15:01:00



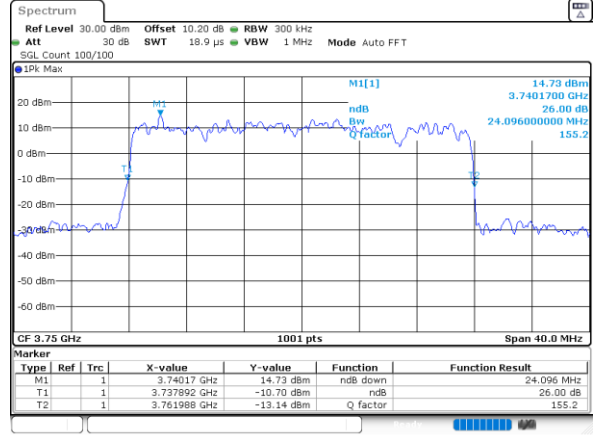
25MHz CP

QPSK



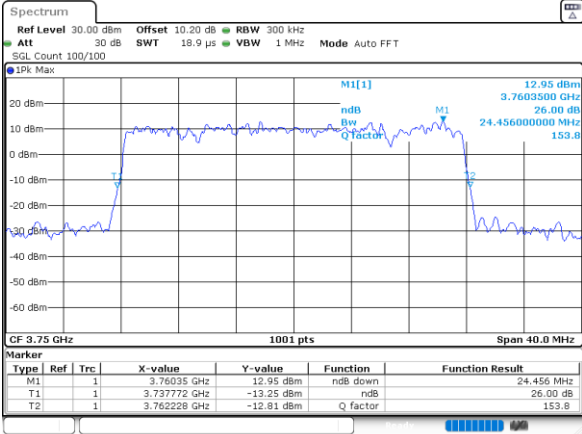
Date: 13.FEB.2023 15:02:00

16QAM



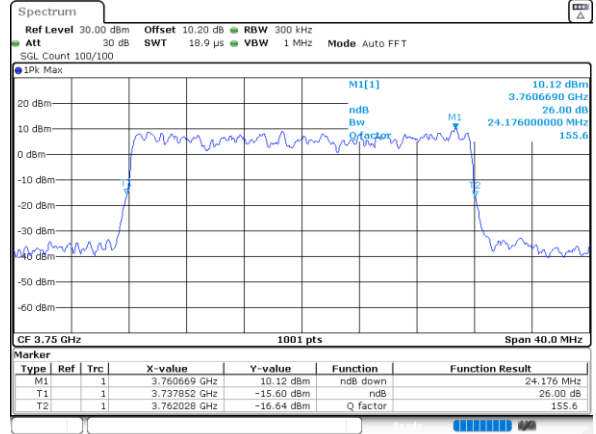
Date: 13.FEB.2023 15:01:46

64QAM



Date: 13.FEB.2023 15:01:33

256QAM



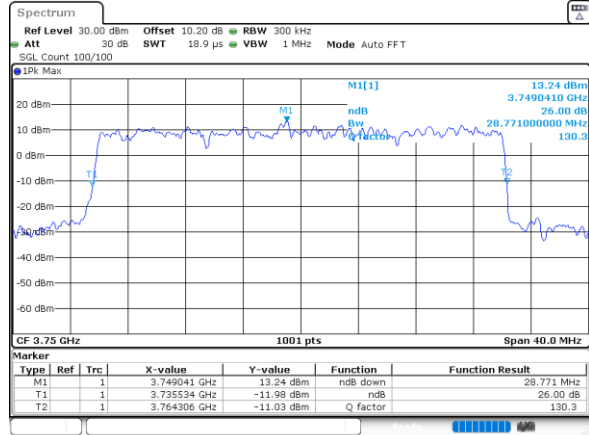
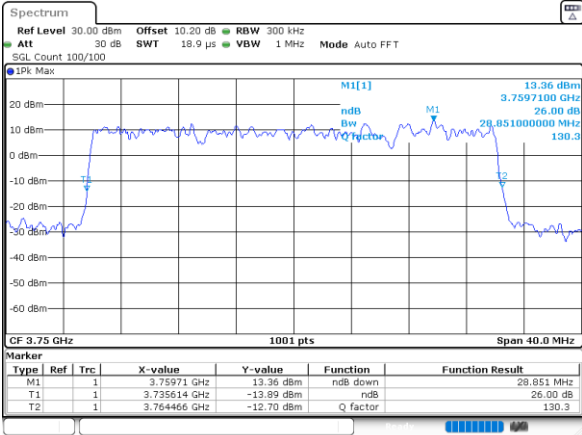
Date: 13.FEB.2023 15:01:20



30MHz CP

QPSK

16QAM

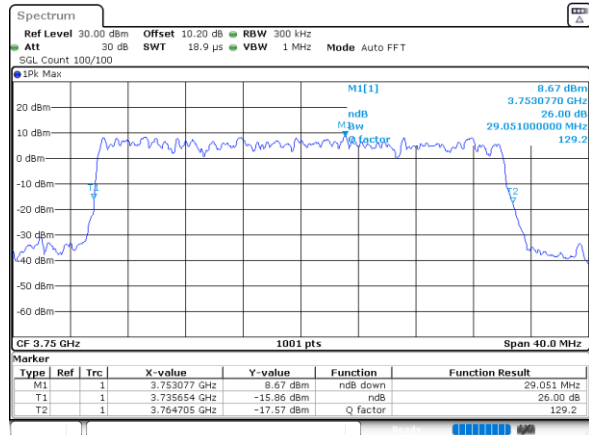
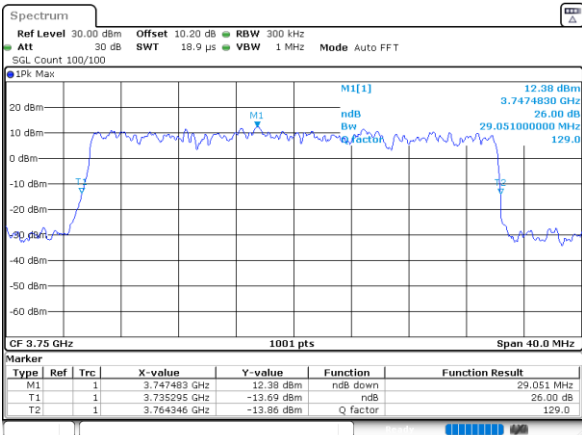


Date: 13.FEB.2023 15:02:43

Date: 13.FEB.2023 15:02:55

64QAM

256QAM



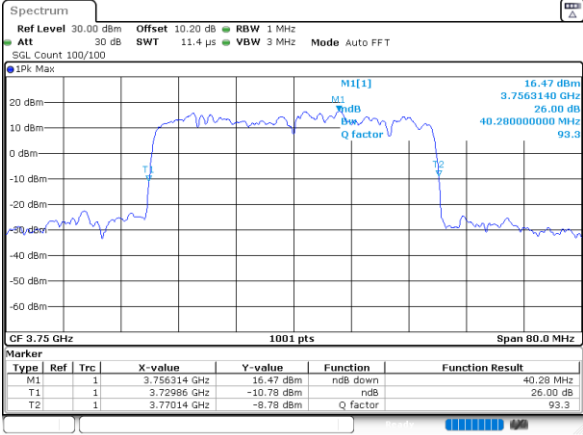
Date: 13.FEB.2023 15:03:18

Date: 13.FEB.2023 15:03:30



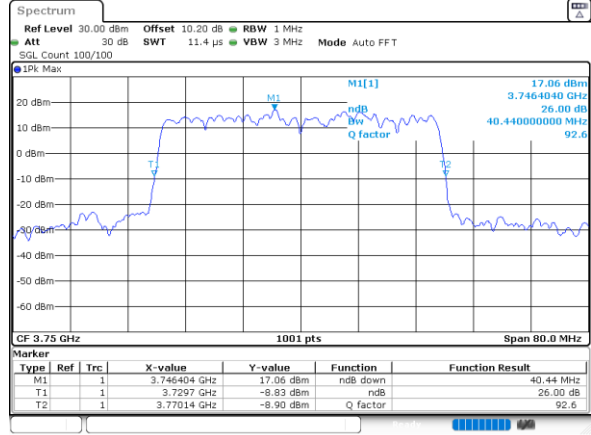
40MHz CP

QPSK



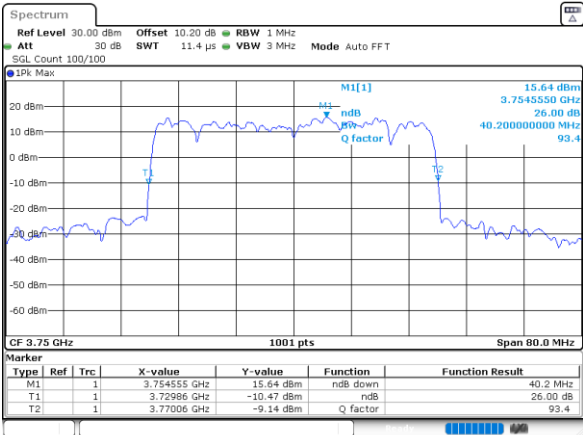
Date: 13.FEB.2023 15:04:48

16QAM



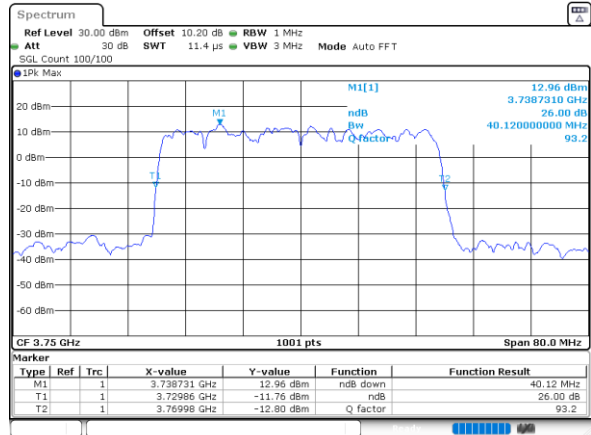
Date: 13.FEB.2023 15:04:33

64QAM



Date: 13.FEB.2023 15:04:16

256QAM

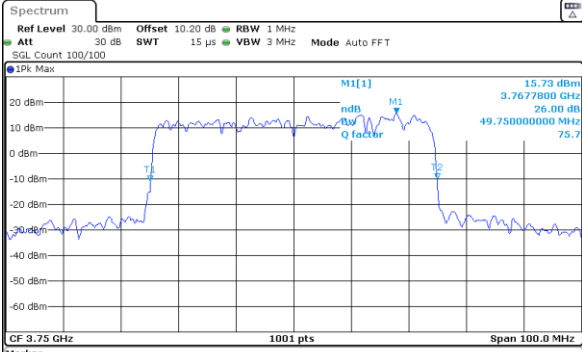


Date: 13.FEB.2023 15:04:02



50MHz CP

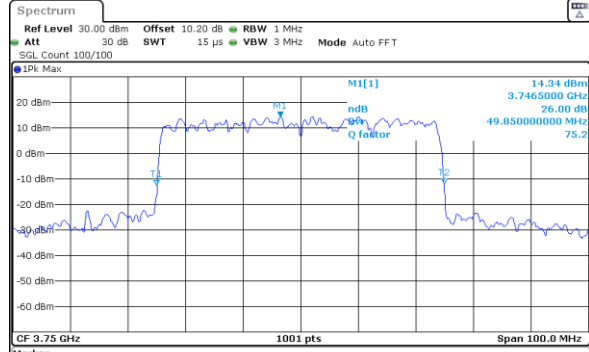
QPSK



Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1			3.76778 GHz	15.73 dBm	ndB down	49.75 MHz
T1	1			3.72512 GHz	-10.88 dBm	ndB	26.00 dB
T2	1			3.77488 GHz	-10.11 dBm	Q factor	75.7

Date: 13.FEB.2023 15:05:14

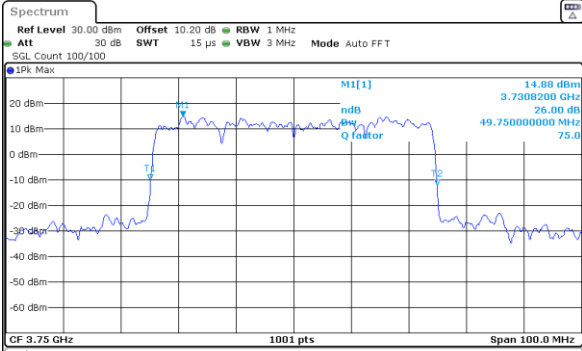
16QAM



Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1			3.7465 GHz	14.34 dBm	ndB down	49.85 MHz
T1	1			3.72502 GHz	-12.55 dBm	ndB	26.00 dB
T2	1			3.77488 GHz	-11.88 dBm	Q factor	75.2

Date: 13.FEB.2023 15:05:29

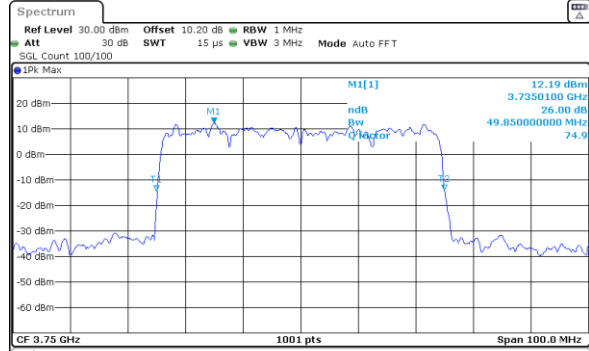
64QAM



Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1			3.75082 GHz	14.88 dBm	ndB down	49.75 MHz
T1	1			3.72512 GHz	-9.89 dBm	ndB	26.00 dB
T2	1			3.77488 GHz	-12.08 dBm	Q factor	75.0

Date: 13.FEB.2023 15:05:43

256QAM



Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1			3.73501 GHz	12.19 dBm	ndB down	49.85 MHz
T1	1			3.72502 GHz	-14.29 dBm	ndB	26.00 dB
T2	1			3.77488 GHz	-13.94 dBm	Q factor	74.9

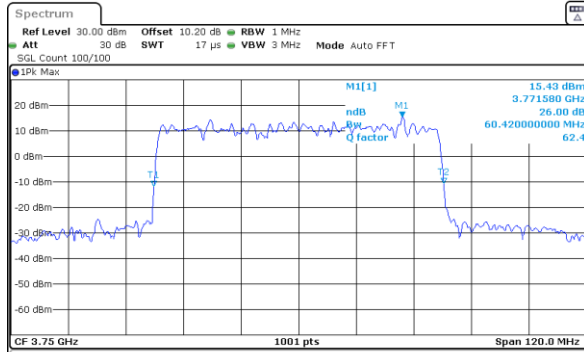
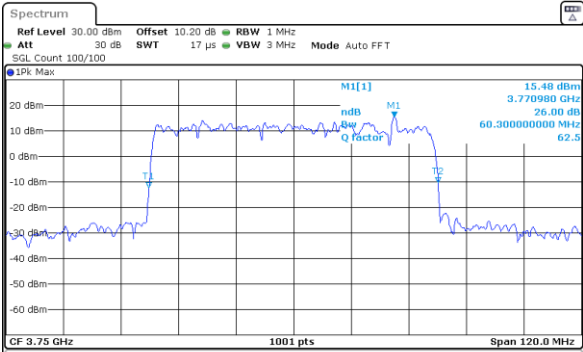
Date: 13.FEB.2023 15:06:01



60MHz CP

QPSK

16QAM

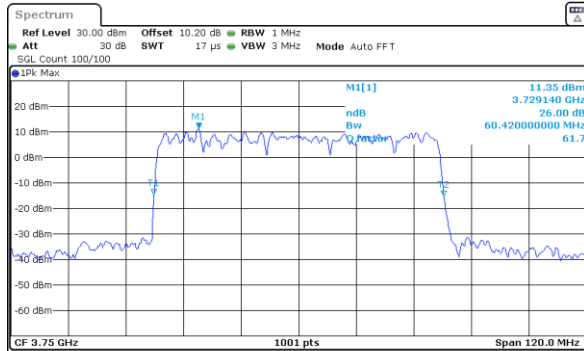
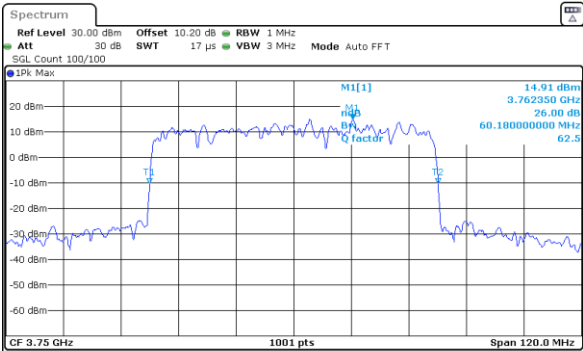


Date: 13.FEB.2023 15:07:24

Date: 13.FEB.2023 15:07:09

64QAM

256QAM



Date: 13.FEB.2023 15:06:54

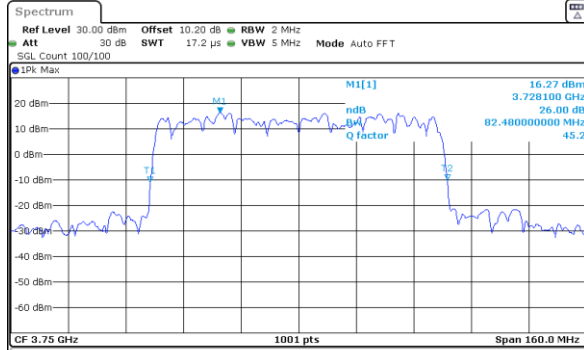
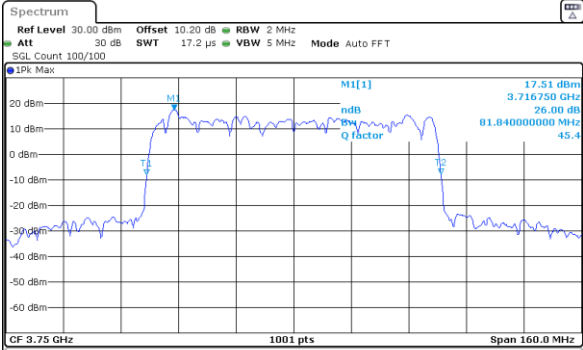
Date: 13.FEB.2023 15:06:38



80MHz CP

QPSK

16QAM

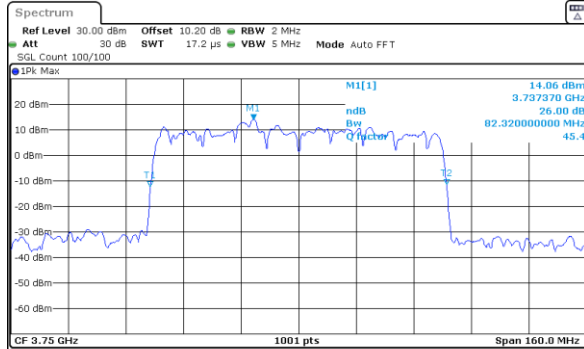
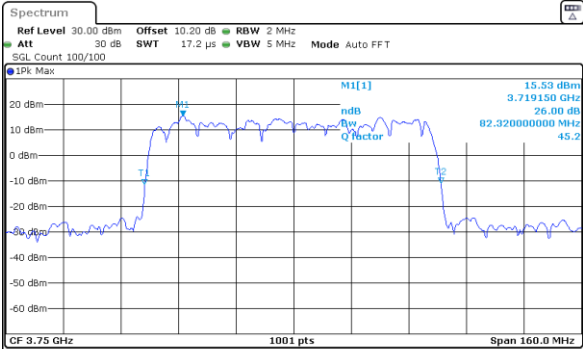


Date: 13.FEB.2023 15:07:49

Date: 13.FEB.2023 15:08:06

64QAM

256QAM



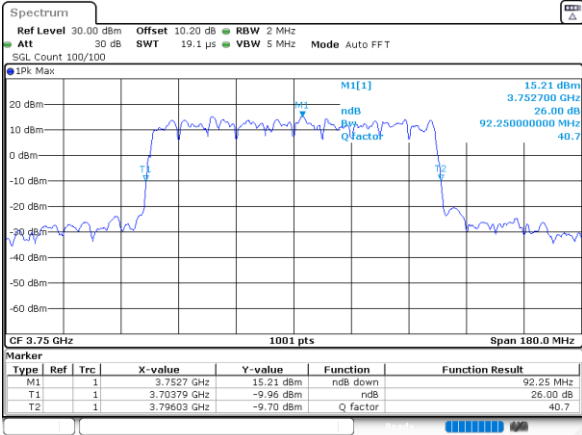
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Date: 13.FEB.2023 15:08:41



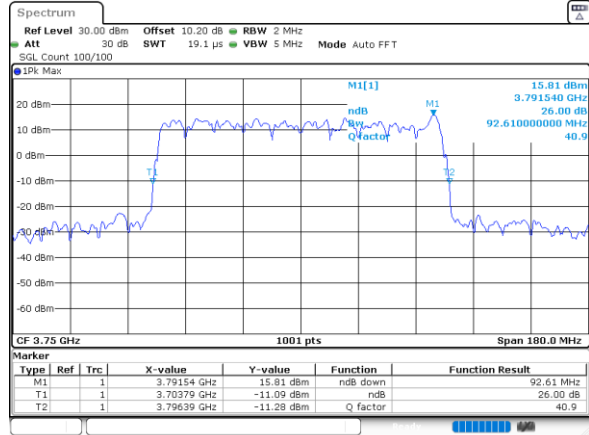
90MHz CP

QPSK



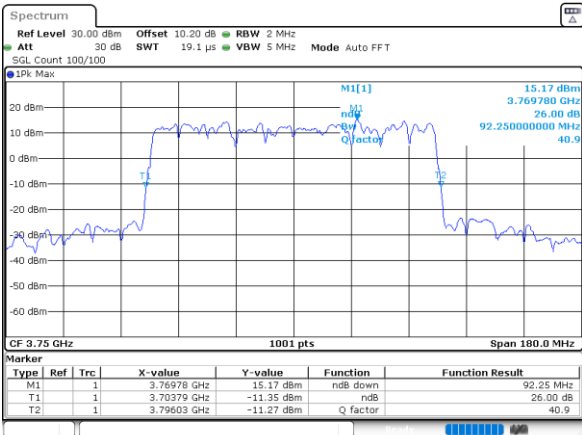
Date: 13.FEB.2023 15:10:00

16QAM



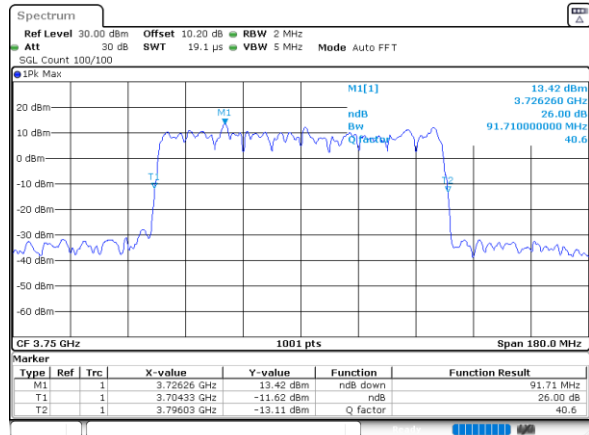
Date: 13.FEB.2023 15:09:37

64QAM



Date: 13.FEB.2023 15:09:21

256QAM

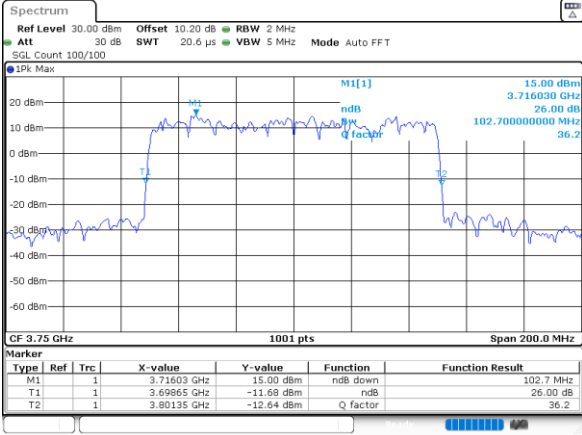


Date: 13.FEB.2023 15:09:05



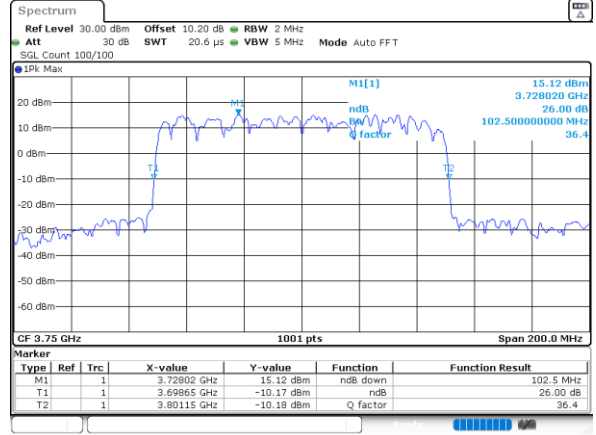
100MHz CP

QPSK



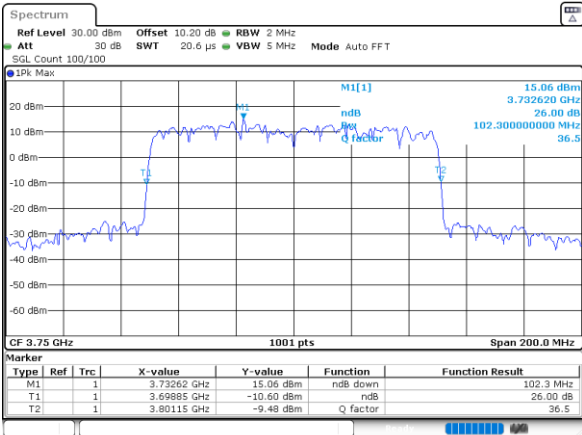
Date: 13.FEB.2023 15:11:13

16QAM



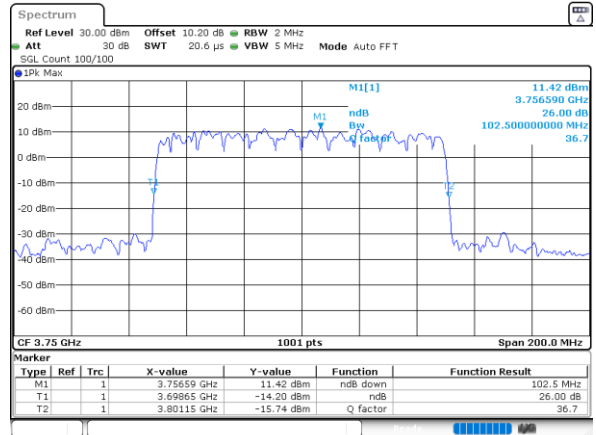
Date: 13.FEB.2023 15:11:29

64QAM



Date: 13.FEB.2023 15:11:44

256QAM



Date: 13.FEB.2023 15:12:01



Occupied Bandwidth

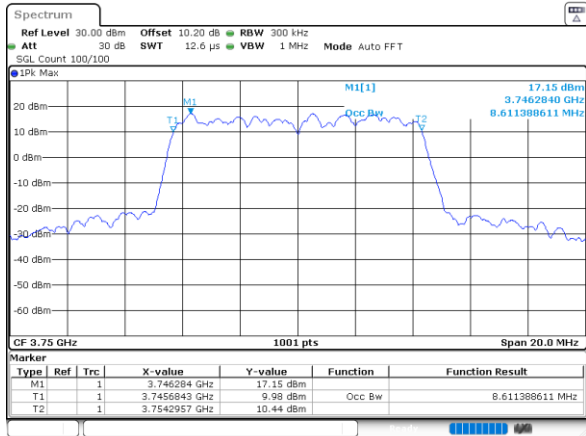
Mode	FR1 n78 : OB BW(10 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	8.61	8.61	8.73	8.65
Mode	FR1 n78 : OB BW(15 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	13.67	13.55	13.73	13.67
Mode	FR1 n78 : OB BW(20 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	18.18	18.06	18.22	18.22
Mode	FR1 n78 : OB BW(25 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	23.14	23.18	23.18	23.22
Mode	FR1 n78 : OB BW(30 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	27.81	27.77	27.81	27.73
Mode	FR1 n78 : OB BW(40 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	38.04	38.04	37.64	37.96
Mode	FR1 n78 : OB BW(50 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	47.45	47.05	47.85	47.65
Mode	FR1 n78 : OB BW(60 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	57.90	57.30	57.54	58.02
Mode	FR1 n78 : OB BW(80 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	76.88	78.16	77.84	77.68
Mode	FR1 n78 : OB BW(90 MHz) / CP OFDM				
BW	CP				



Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	87.39	87.21	87.03	86.49
Mode	FR1 n78 : OB BW(100 MHz) / CP OFDM				
BW	CP				
Mod.	-	QPSK	16QAM	64QAM	256QAM
Middle CH	-	97.70	97.30	97.70	97.70

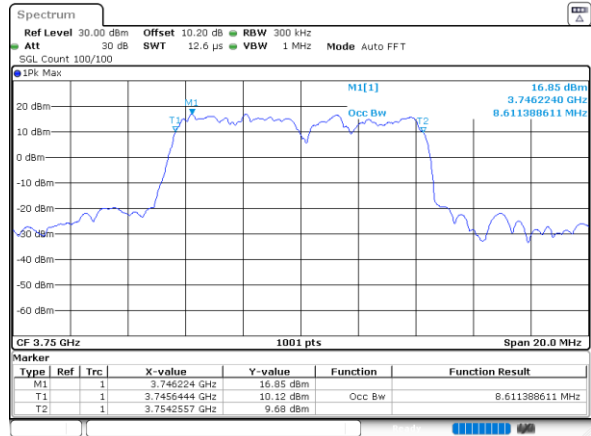
10MHz CP

QPSK



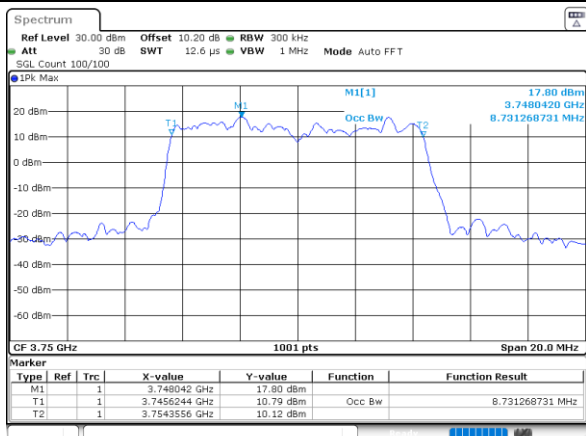
Date: 13.FEB.2023 14:41:00

16QAM



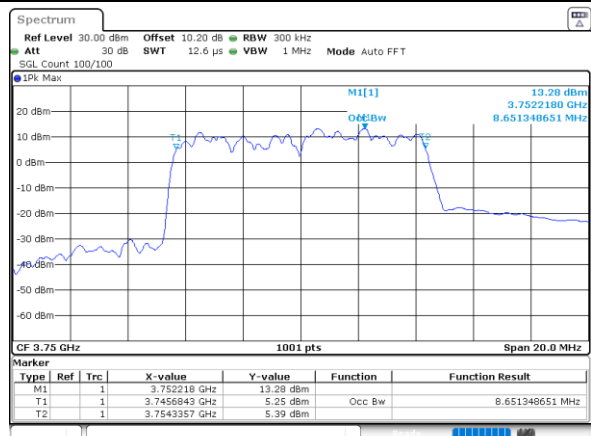
Date: 13.FEB.2023 14:44:20

64QAM



Date: 13.FEB.2023 14:46:54

256QAM

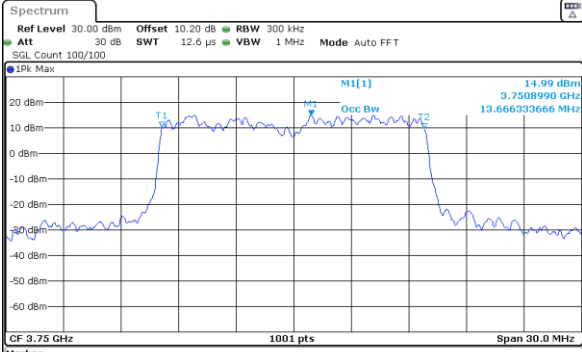


Date: 13.FEB.2023 14:47:33



15MHz CP

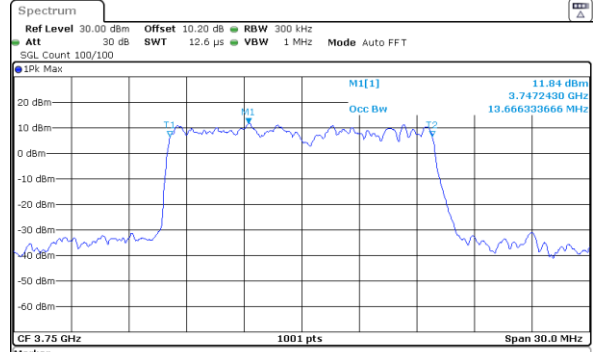
QPSK



Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1			3.750899 GHz	14.99 dBm		
T1	1			3.7431369 GHz	10.27 dBm	Occ Bw	13.666333666 MHz
T2	1			3.7568032 GHz	9.67 dBm		

Date: 13.FEB.2023 14:59:17

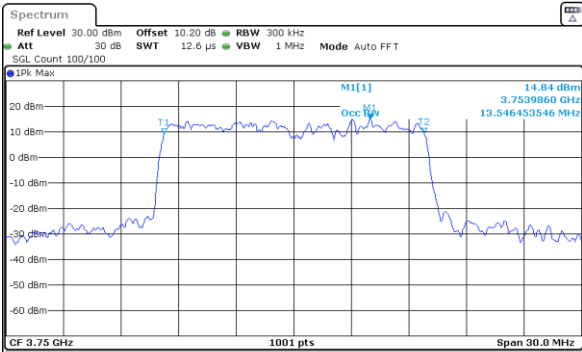
16QAM



Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1			3.747243 GHz	11.84 dBm		
T1	1			3.7431369 GHz	6.55 dBm	Occ Bw	13.666333666 MHz
T2	1			3.7568032 GHz	6.64 dBm		

Date: 13.FEB.2023 14:56:13

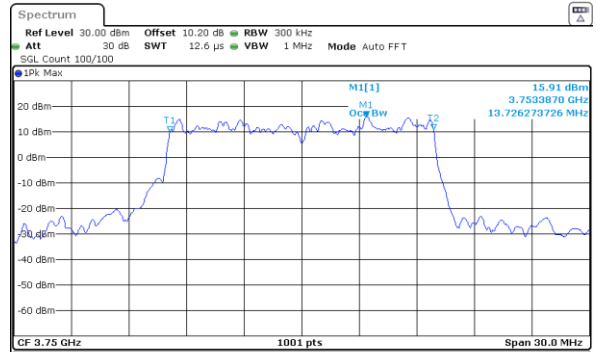
64QAM



Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1			3.753986 GHz	14.84 dBm		
T1	1			3.7432567 GHz	9.22 dBm	Occ Bw	13.546453546 MHz
T2	1			3.7568032 GHz	9.35 dBm		

Date: 13.FEB.2023 14:59:09

256QAM



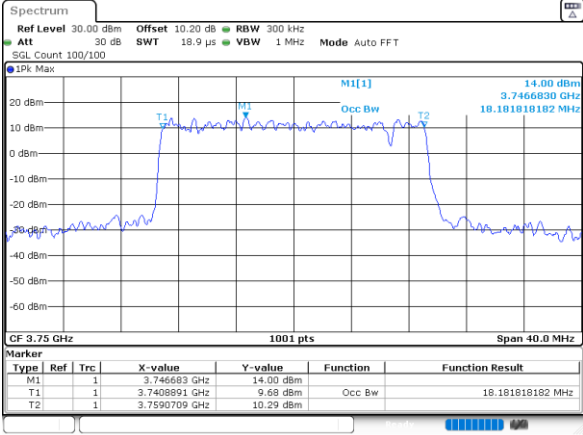
Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1			3.753987 GHz	15.91 dBm		
T1	1			3.7431369 GHz	10.11 dBm	Occ Bw	13.726273726 MHz
T2	1			3.7568631 GHz	10.73 dBm		

Date: 13.FEB.2023 14:56:14



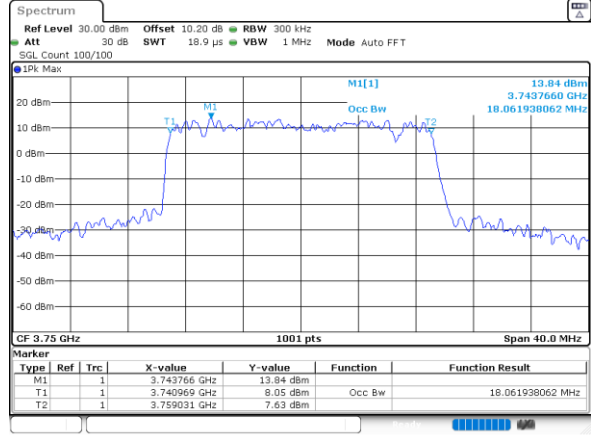
20MHz CP

QPSK



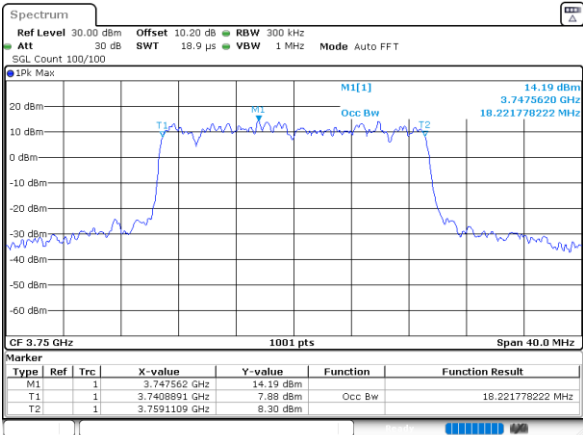
Date: 13.FEB.2023 14:59:34

16QAM



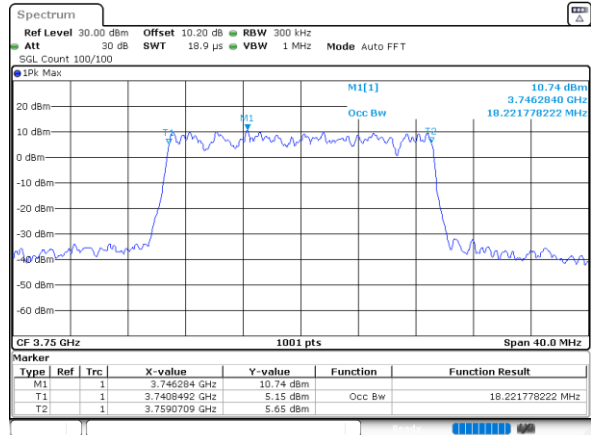
Date: 13.FEB.2023 15:00:29

64QAM



Date: 13.FEB.2023 15:00:42

256QAM



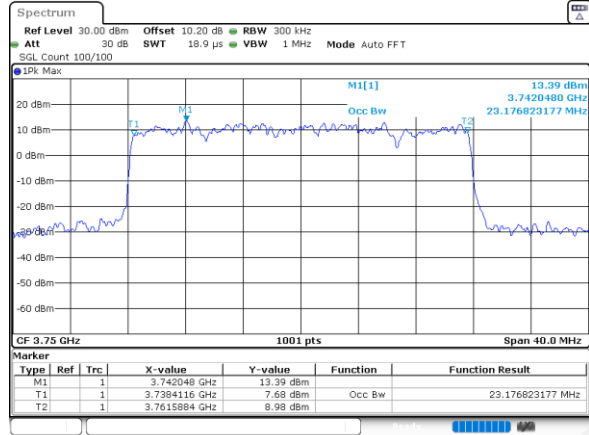
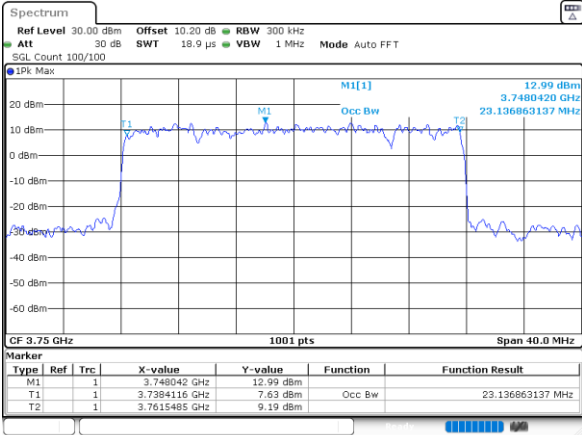
Date: 13.FEB.2023 15:00:55



25MHz CP

QPSK

16QAM

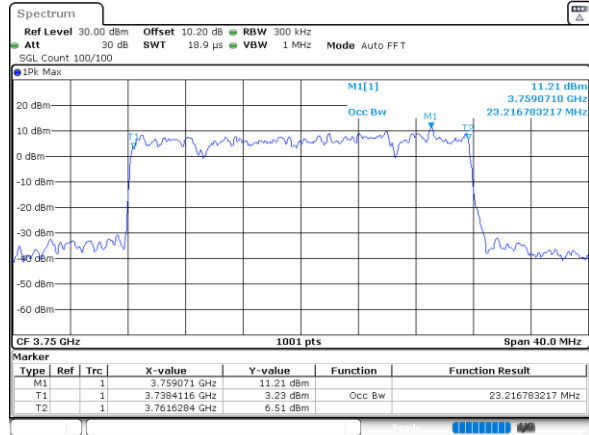
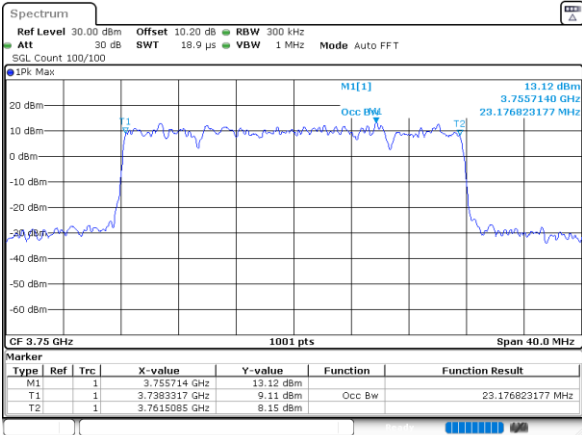


Date: 13.FEB.2023 15:01:56

Date: 13.FEB.2023 15:01:41

64QAM

256QAM



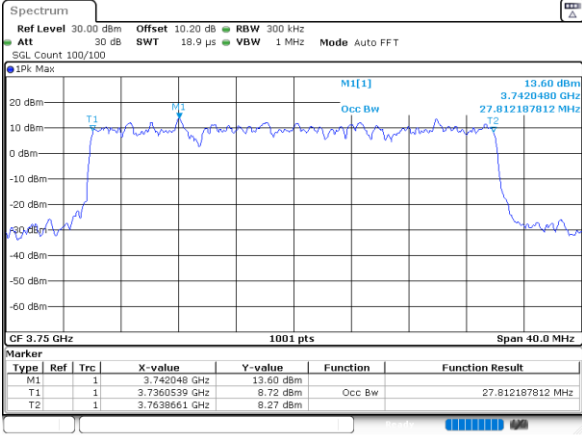
Date: 13.FEB.2023 15:01:29

Date: 13.FEB.2023 15:01:16



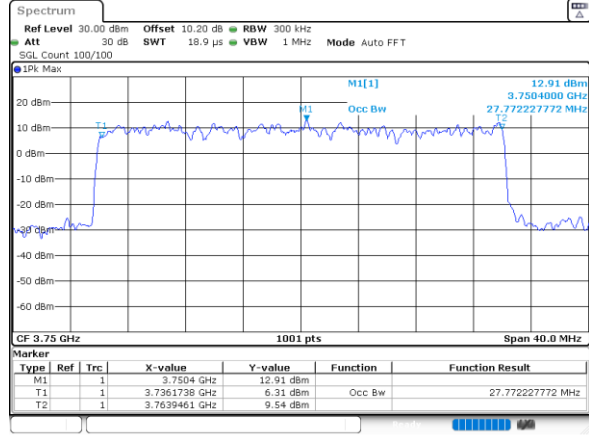
30MHz CP

QPSK



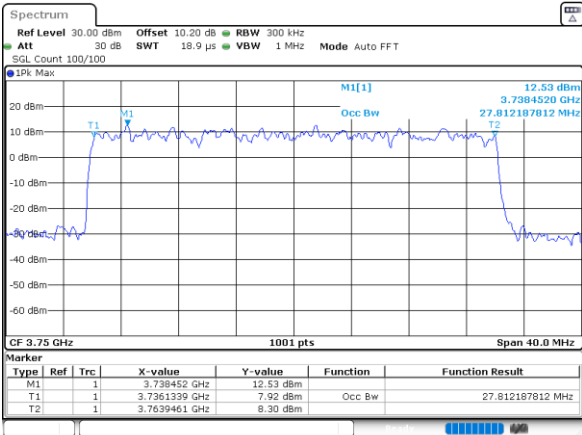
Date: 13.FEB.2023 15:02:38

16QAM



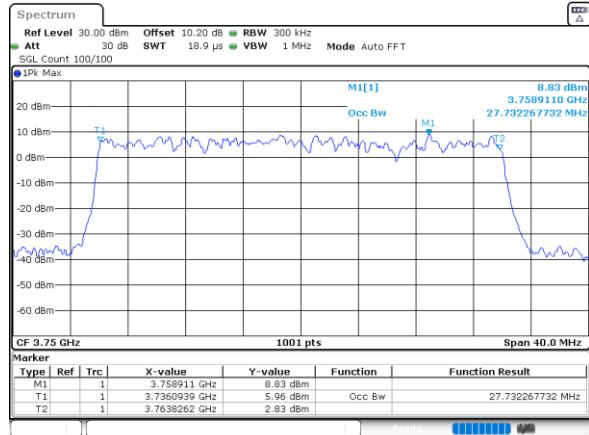
Date: 13.FEB.2023 15:02:51

64QAM



Date: 13.FEB.2023 15:03:11

256QAM



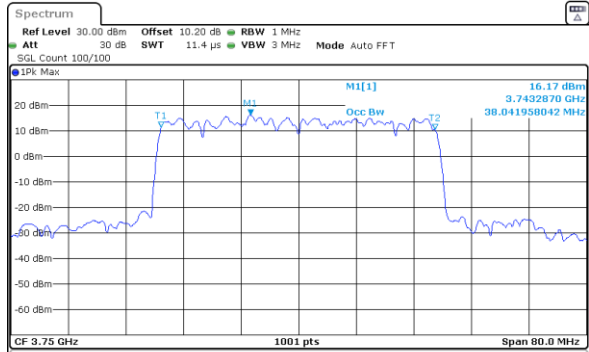
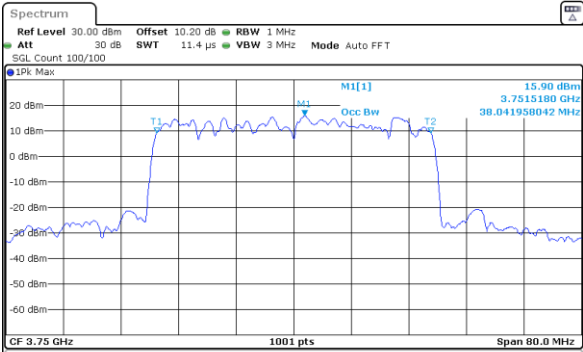
Date: 13.FEB.2023 15:03:39



40MHz CP

QPSK

16QAM

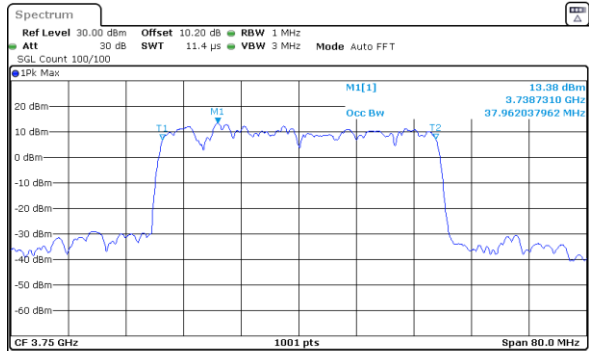
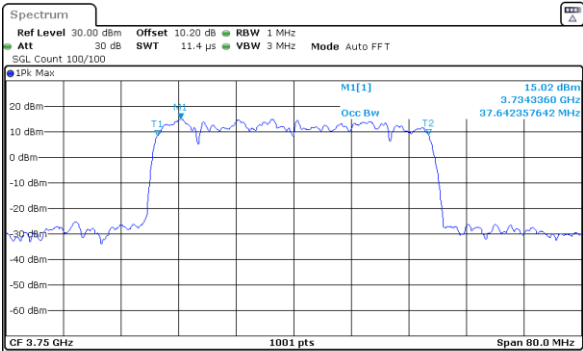


Date: 13.FEB.2023 15:04:43

Date: 13.FEB.2023 15:04:25

64QAM

256QAM



Date: 13.FEB.2023 15:04:11

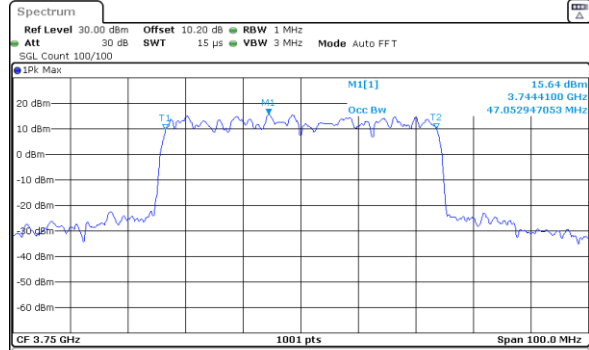
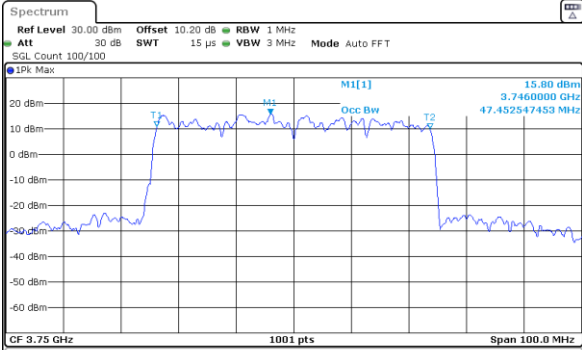
Date: 13.FEB.2023 15:03:58



50MHz CP

QPSK

16QAM

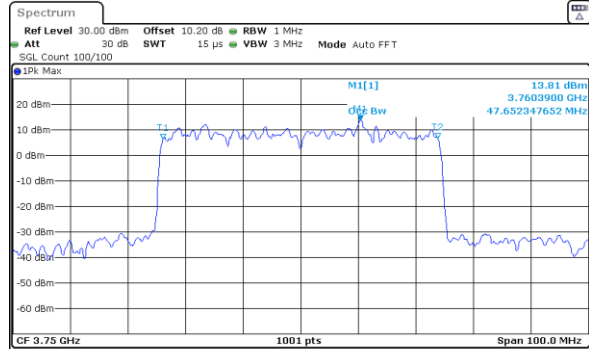
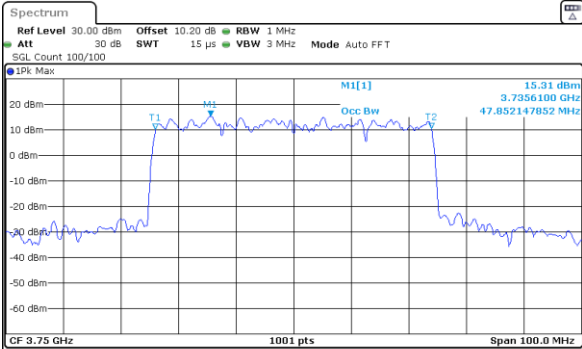


Date: 13.FEB.2023 15:05:09

Date: 13.FEB.2023 15:05:23

64QAM

256QAM



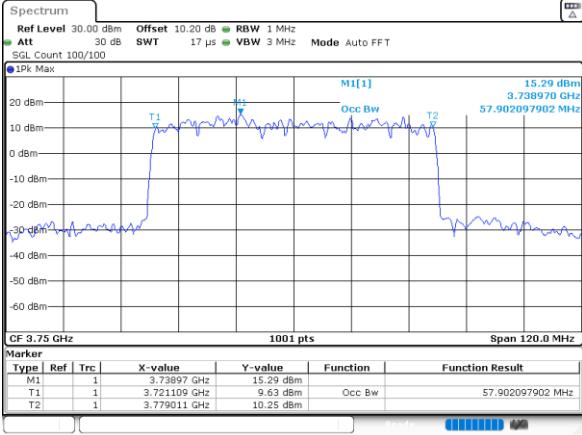
Date: 13.FEB.2023 15:05:38

Date: 13.FEB.2023 15:05:52



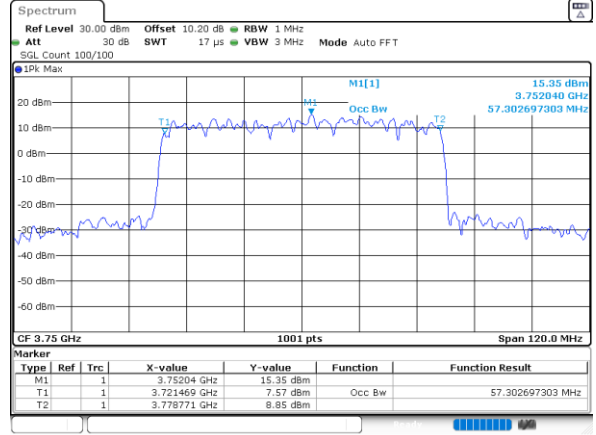
60MHz CP

QPSK



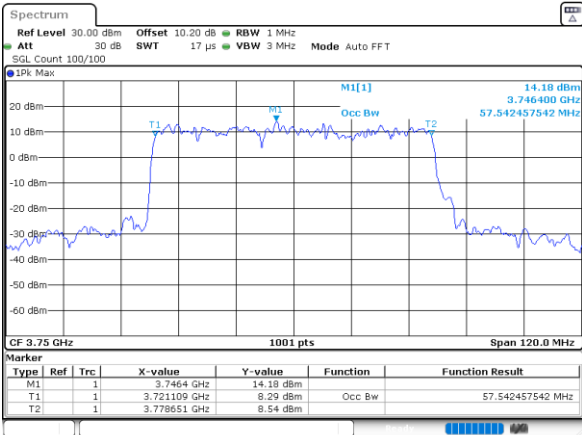
Date: 13.FEB.2023 15:07:17

16QAM



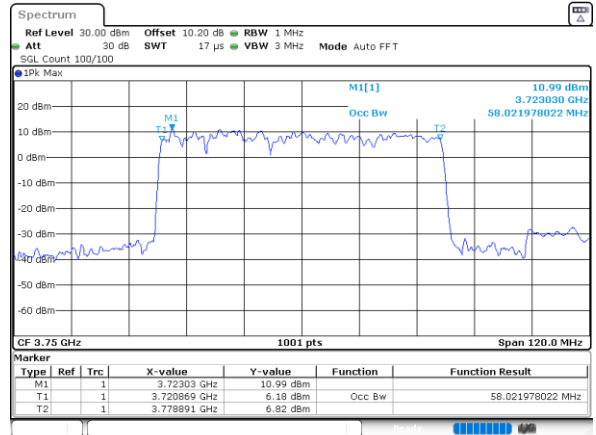
Date: 13.FEB.2023 15:07:04

64QAM



Date: 13.FEB.2023 15:06:48

256QAM



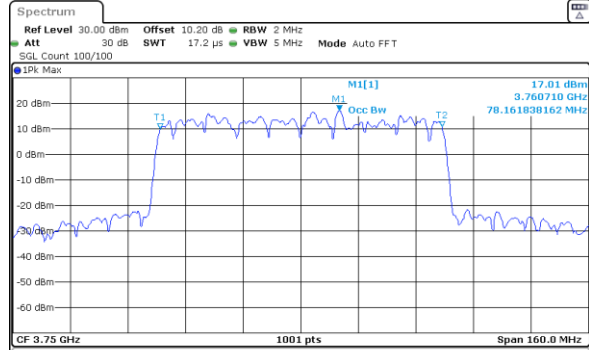
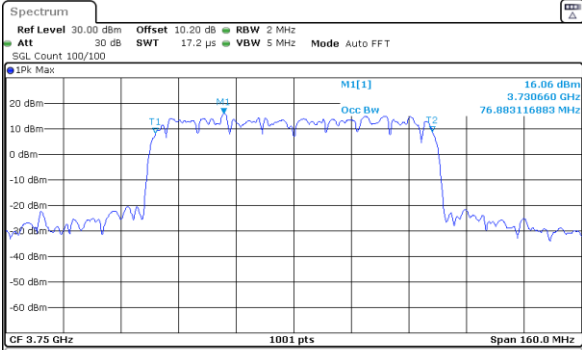
Date: 13.FEB.2023 15:06:32



80MHz CP

QPSK

16QAM

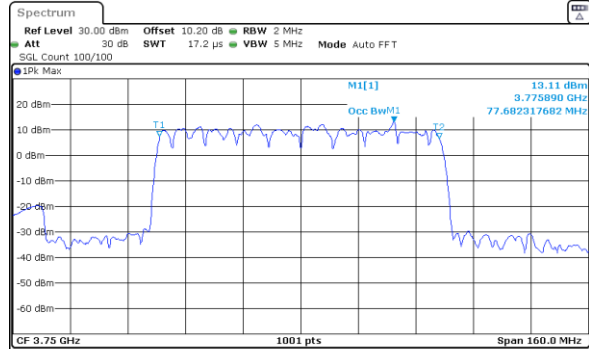
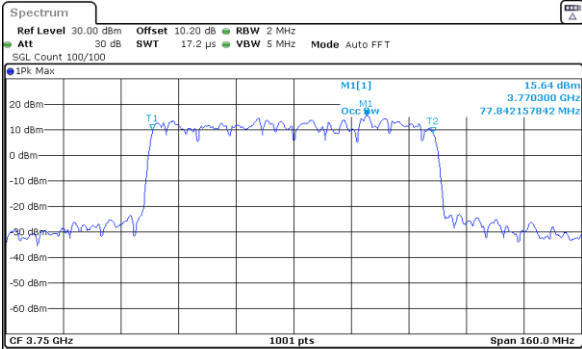


Date: 13.FEB.2023 15:07:43

Date: 13.FEB.2023 15:07:59

64QAM

256QAM



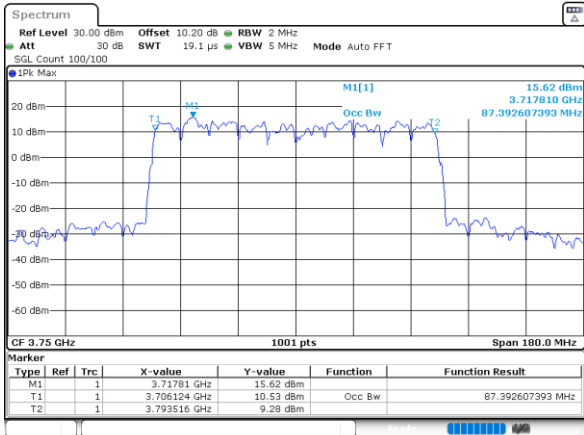
Date: 13.FEB.2023 15:08:18

Date: 13.FEB.2023 15:08:34



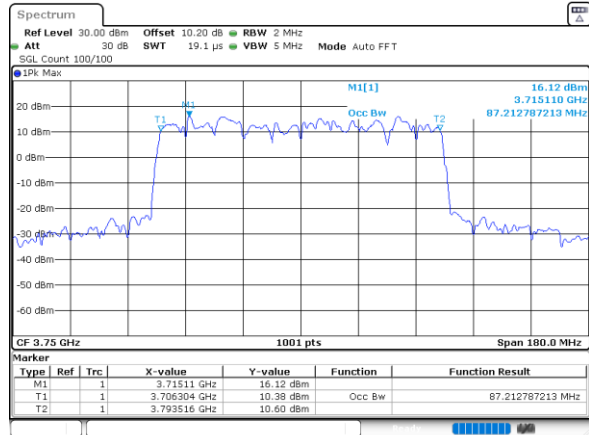
90MHz CP

QPSK



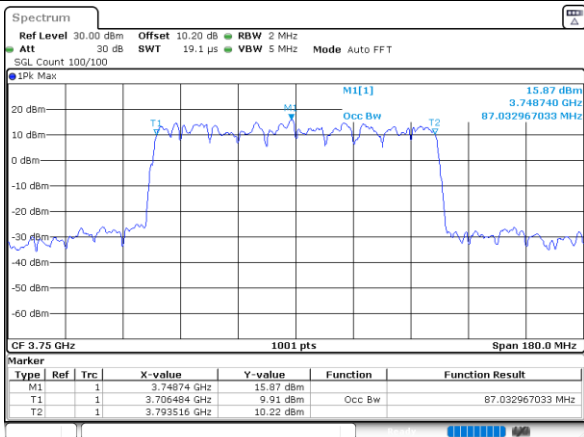
Date: 13.FEB.2023 15:09:53

16QAM



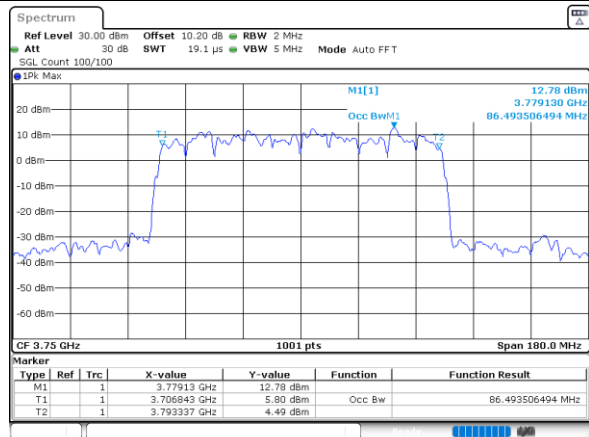
Date: 13.FEB.2023 15:09:31

64QAM



Date: 13.FEB.2023 15:09:15

256QAM

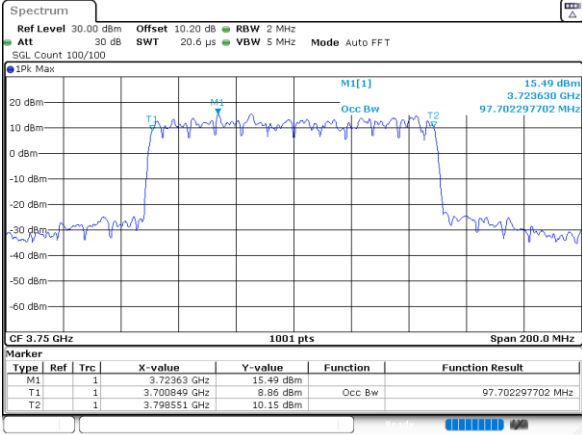


Date: 13.FEB.2023 15:08:58



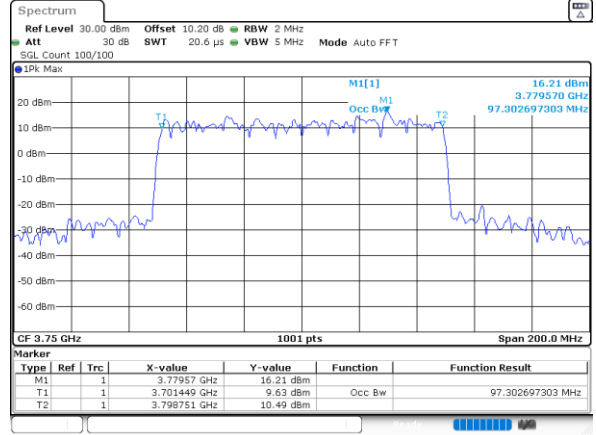
100MHz CP

QPSK



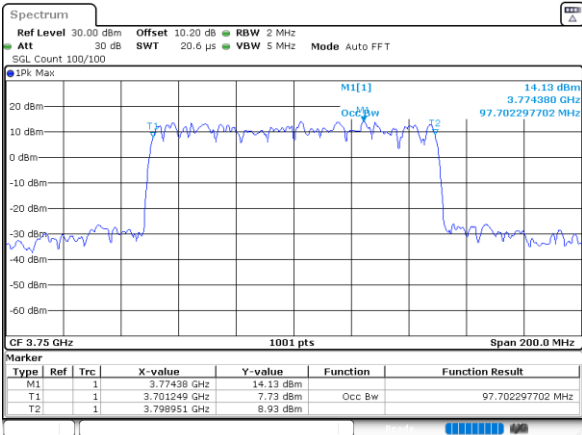
Date: 13.FEB.2023 15:11:06

16QAM



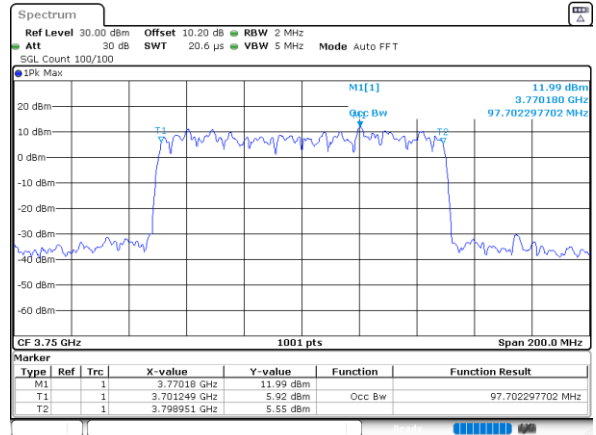
Date: 13.FEB.2023 15:11:22

64QAM



Date: 13.FEB.2023 15:11:38

256QAM



Date: 13.FEB.2023 15:11:54

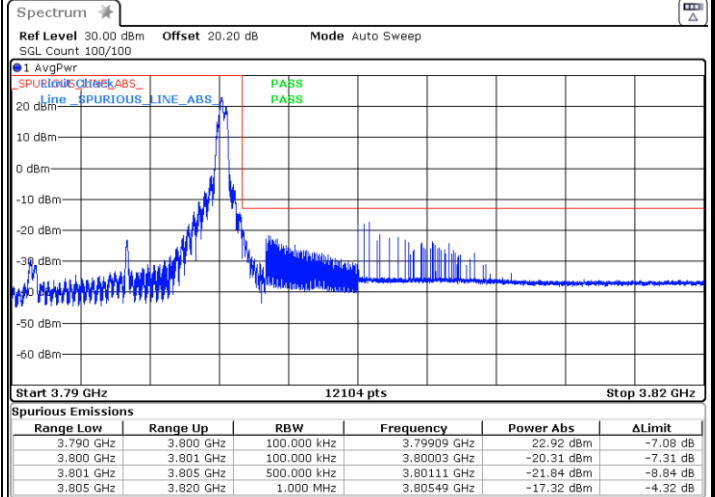
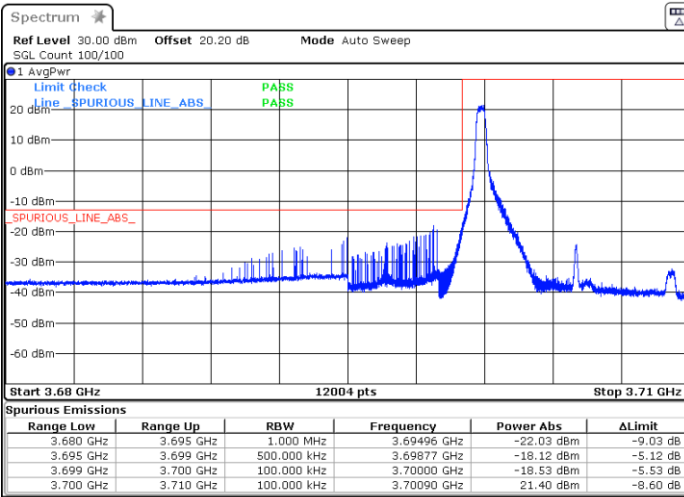


Conducted Band Edge

FR1 n78 / 10MHz / CP OFDM / PI/2 QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

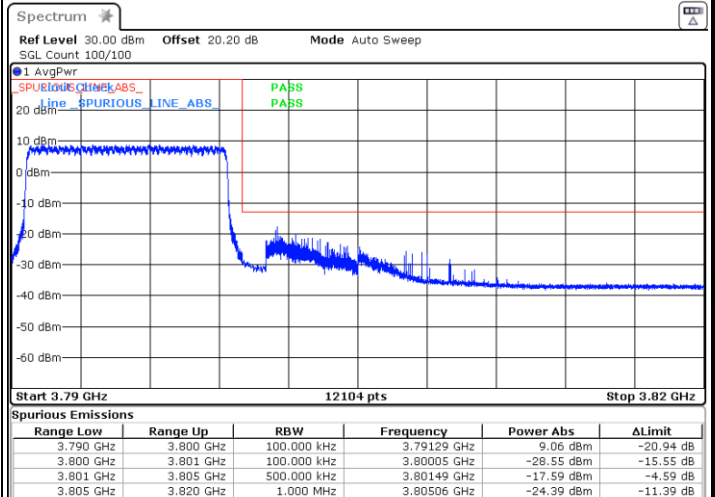
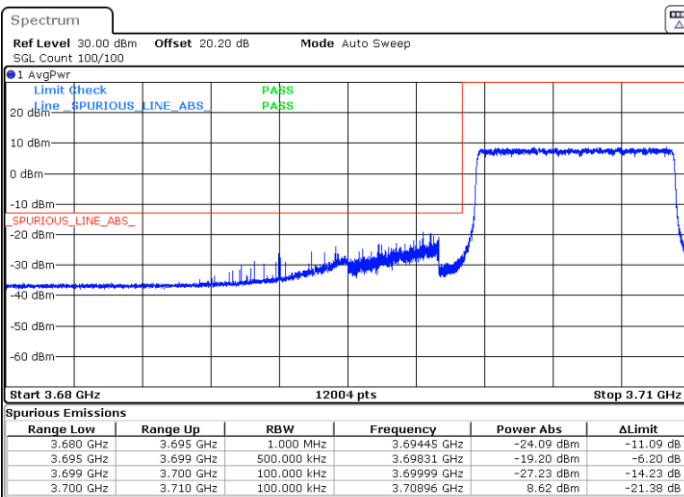


Date: 13.FEB.2023 12:37:18

Date: 13.FEB.2023 12:57:50

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 13.FEB.2023 12:40:28

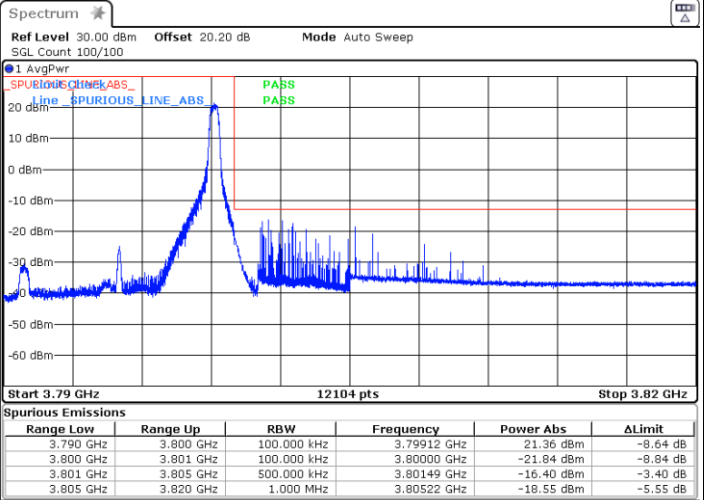
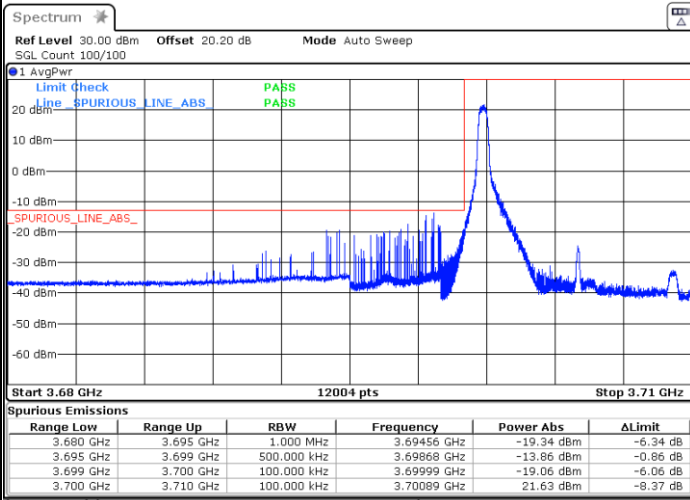
Date: 13.FEB.2023 12:54:57



FR1 n78 / 10MHz / CP OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

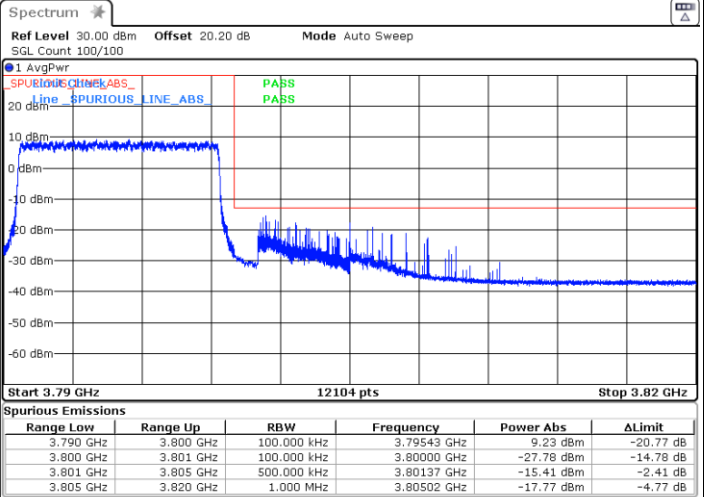
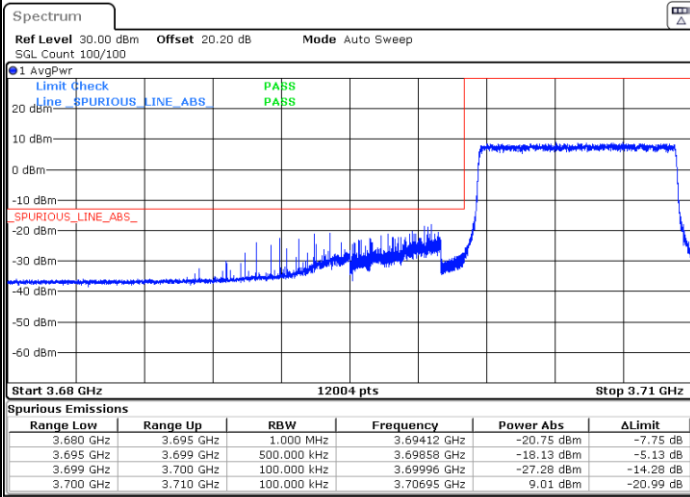


Date: 13.FEB.2023 12:38:19

Date: 13.FEB.2023 12:56:17

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 13.FEB.2023 12:39:49

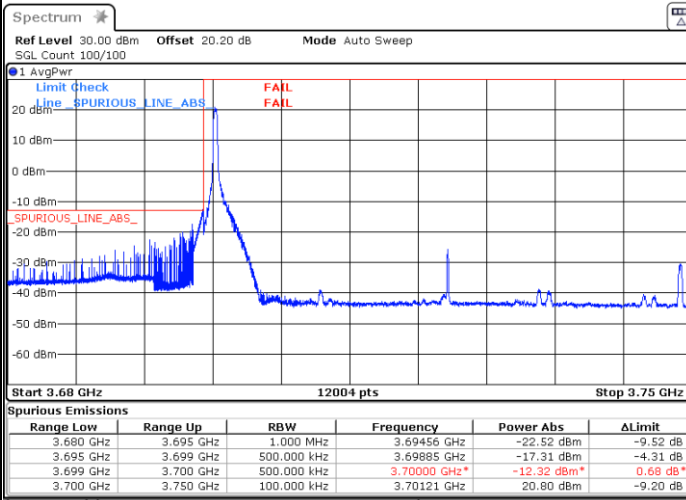
Date: 13.FEB.2023 12:55:34



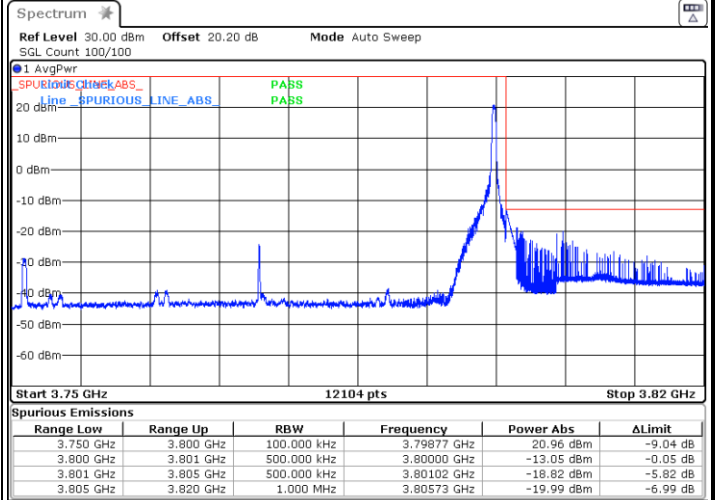
FR1 n78 / 50MHz / CP OFDM / PI/2 QPSK

Lowest Band Edge / 1RB0

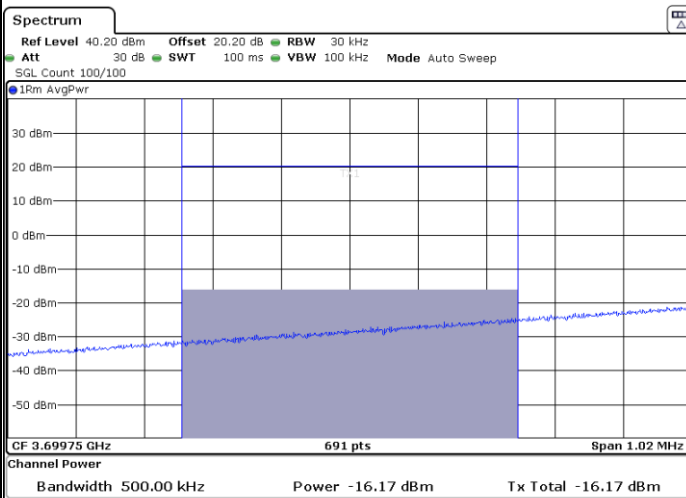
Highest Band Edge / 1RBmax



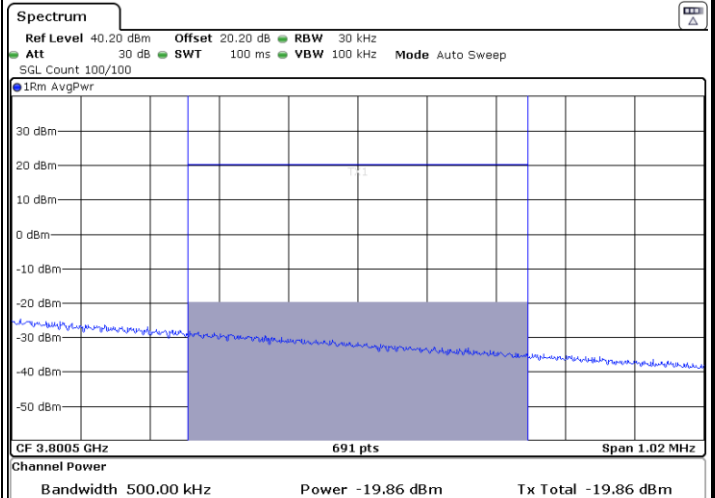
Date: 13.FEB.2023 13:03:46



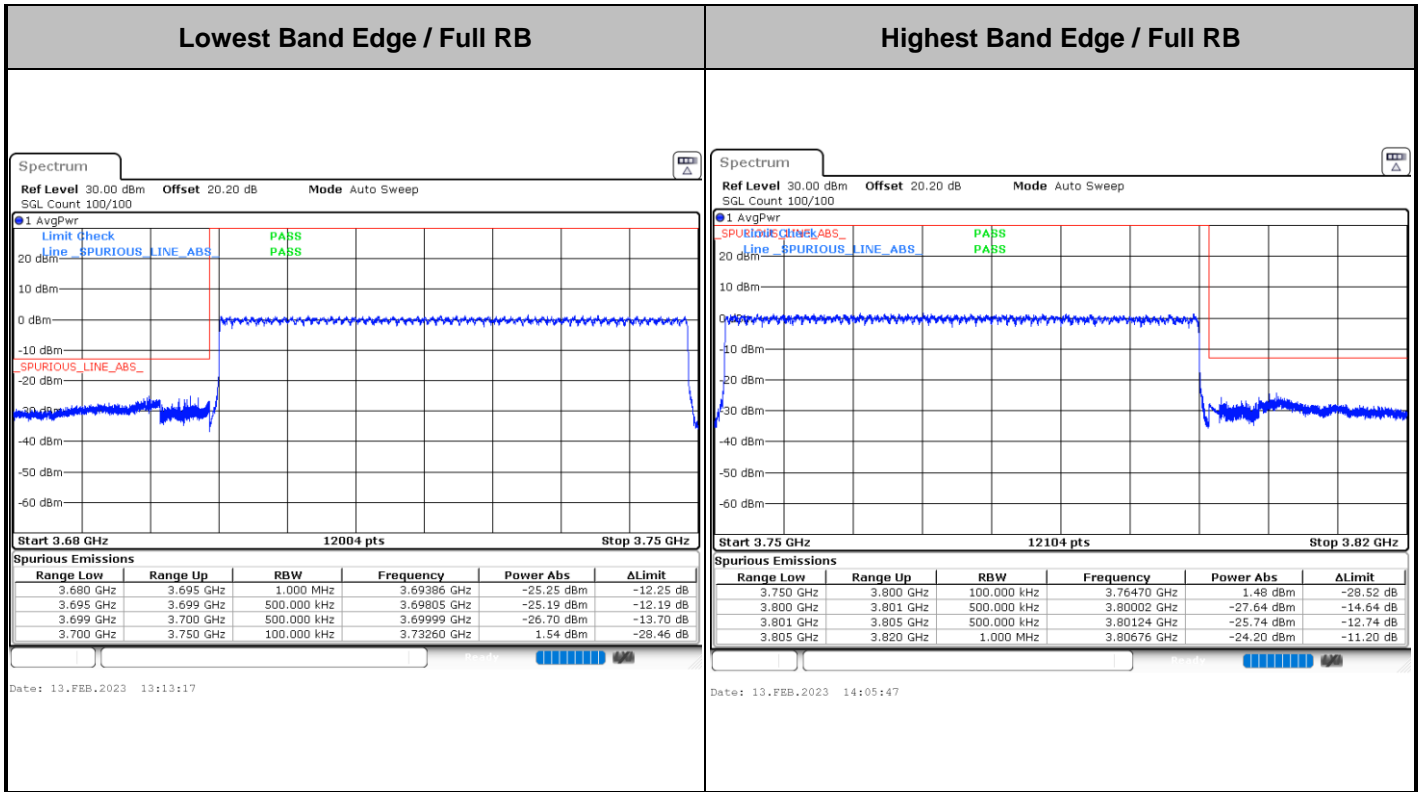
Date: 13.FEB.2023 14:08:08



Date: 13.FEB.2023 13:11:30



Date: 13.FEB.2023 14:14:32

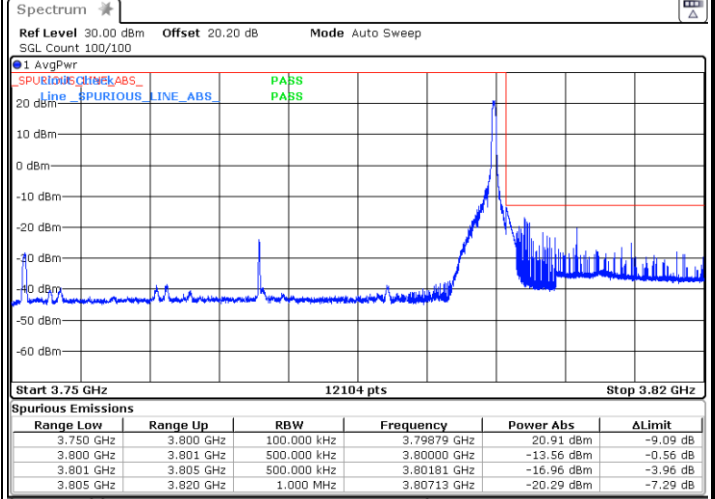
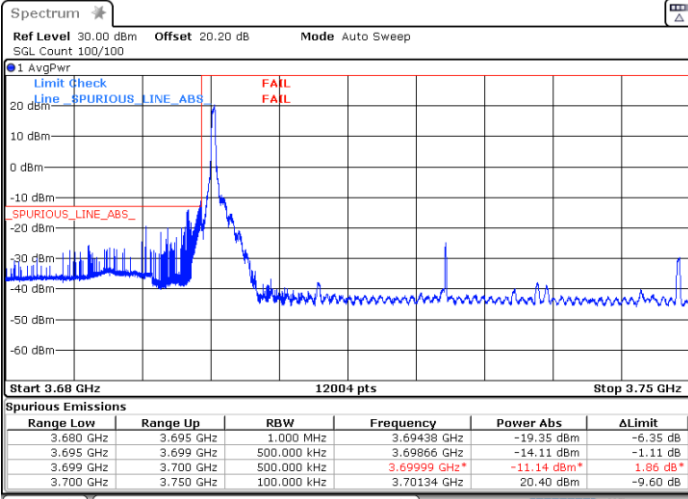




FR1 n78 / 50MHz / CP OFDM / 16QAAM

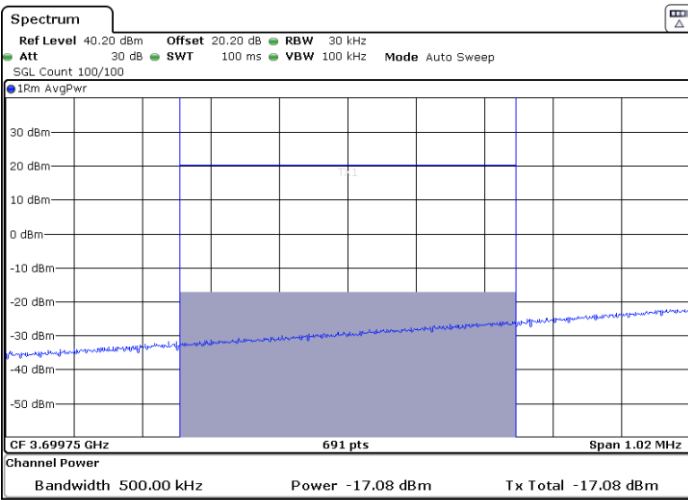
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

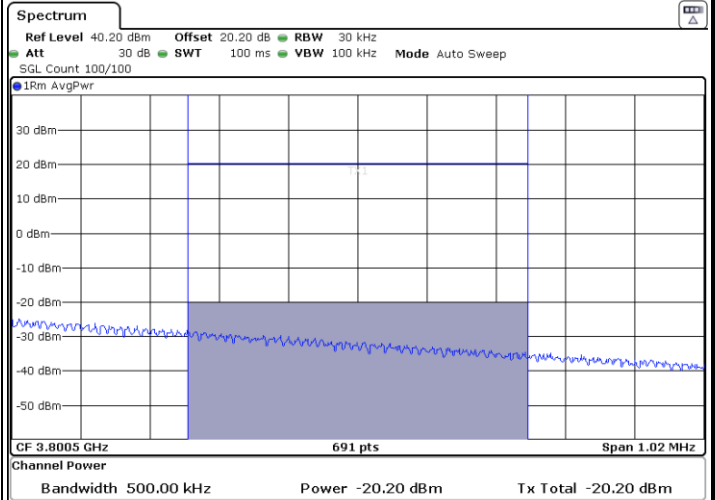


Date: 13.FEB.2023 13:06:40

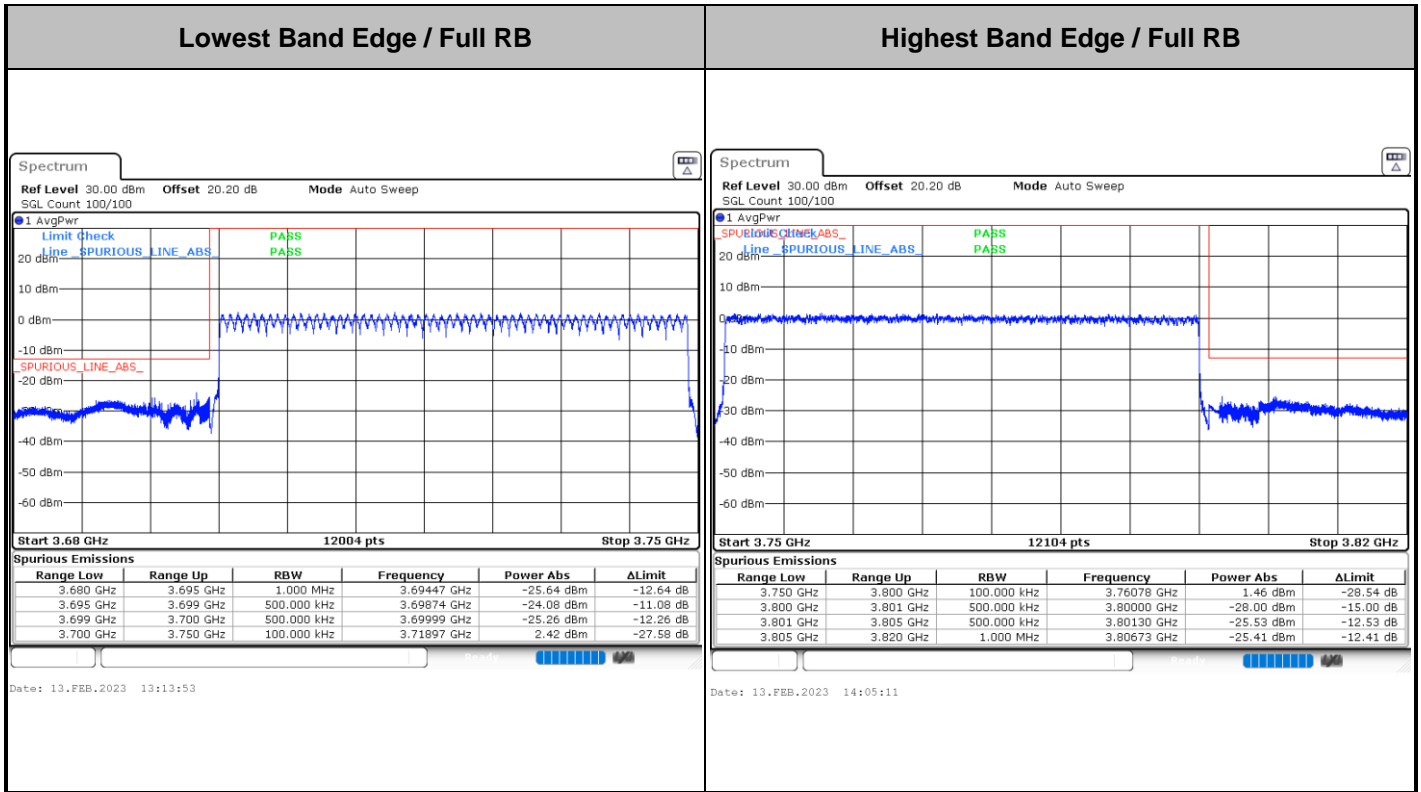
Date: 13.FEB.2023 14:10:30



Date: 13.FEB.2023 13:11:01



Date: 13.FEB.2023 14:13:59

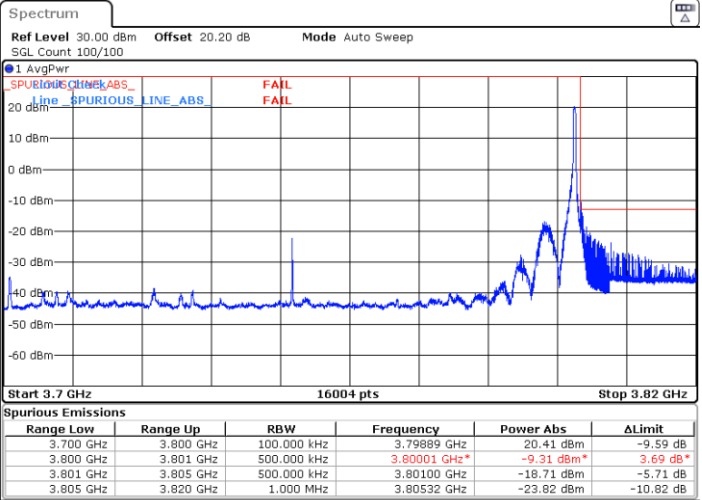
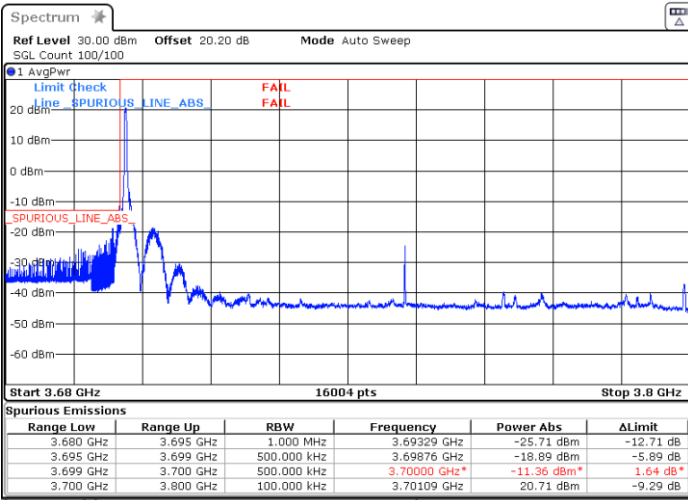




FR1 n78 / 100MHz / CP OFDM / PI/2 QPSK

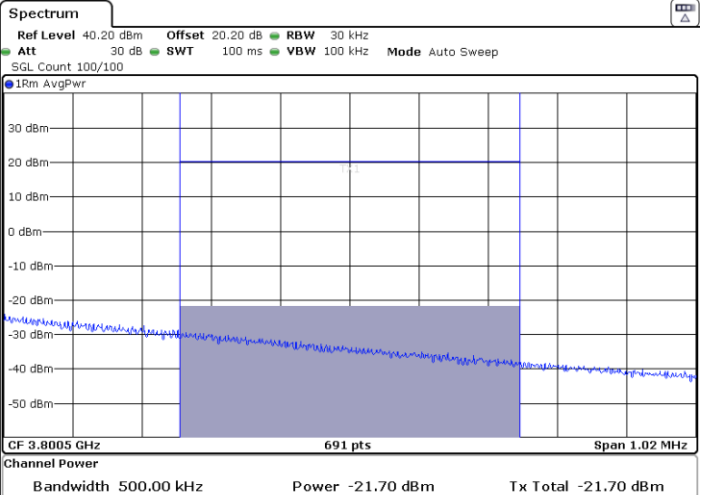
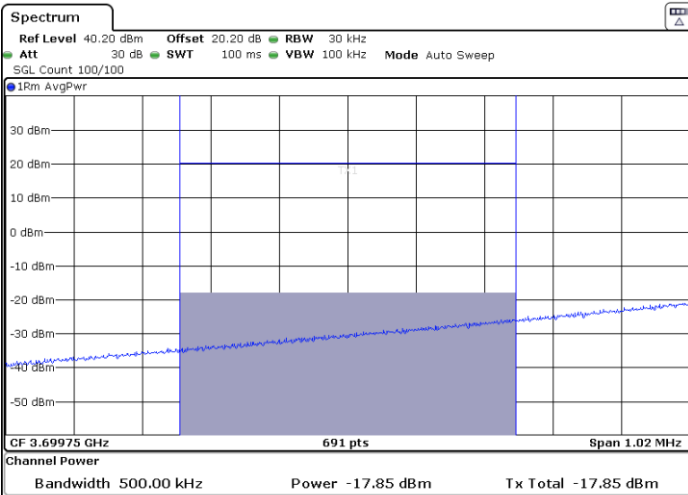
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



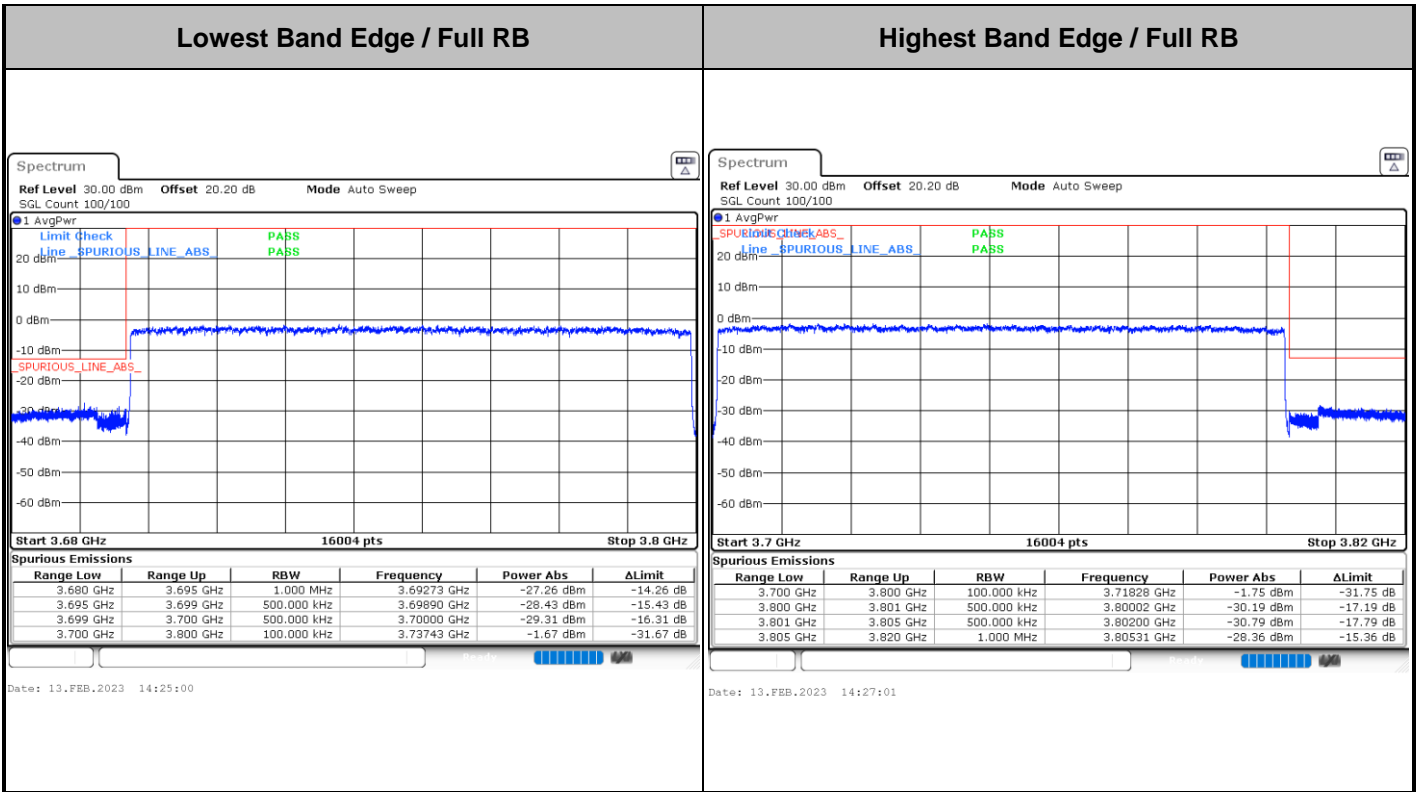
Date: 13.FEB.2023 14:19:52

Date: 13.FEB.2023 14:28:13



Date: 13.FEB.2023 14:24:09

Date: 13.FEB.2023 14:30:53

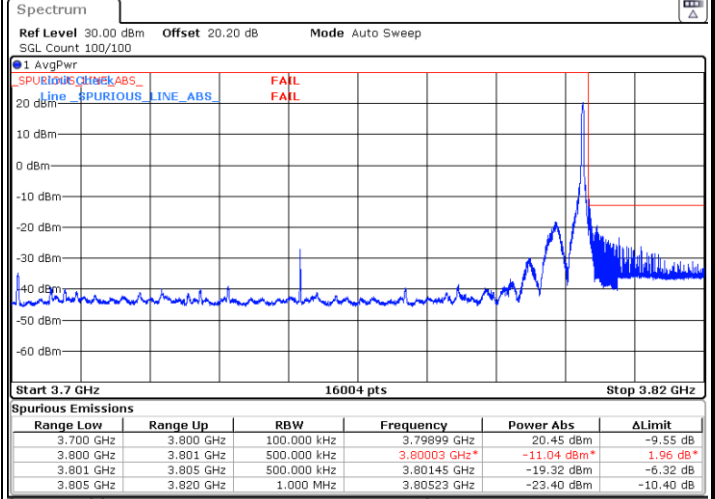
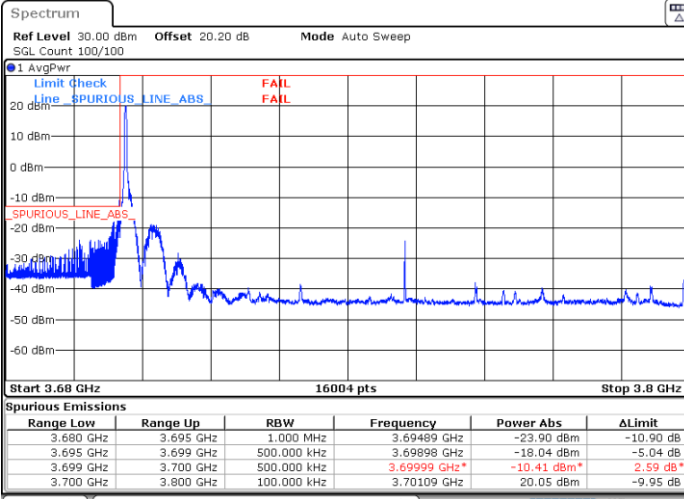




FR1 n78 / 100MHz / CP OFDM / 16QAM

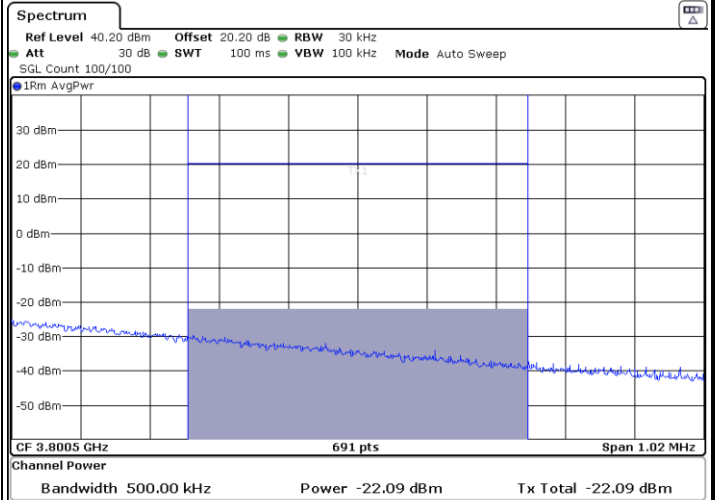
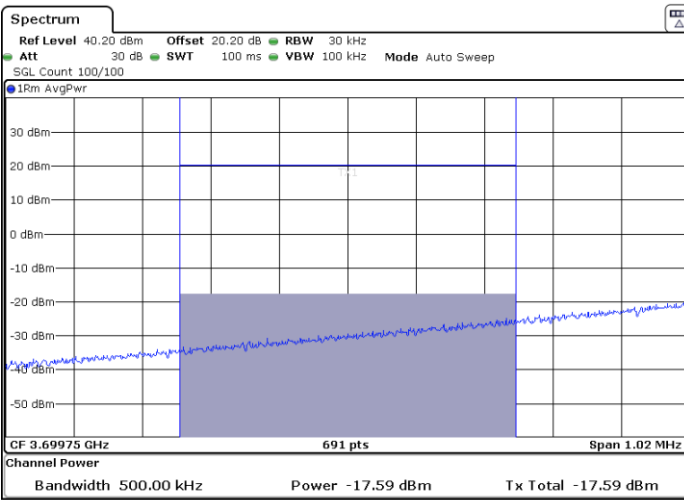
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Date: 13.FEB.2023 14:21:28

Date: 13.FEB.2023 14:28:47



Date: 13.FEB.2023 14:23:38

Date: 13.FEB.2023 14:30:25

