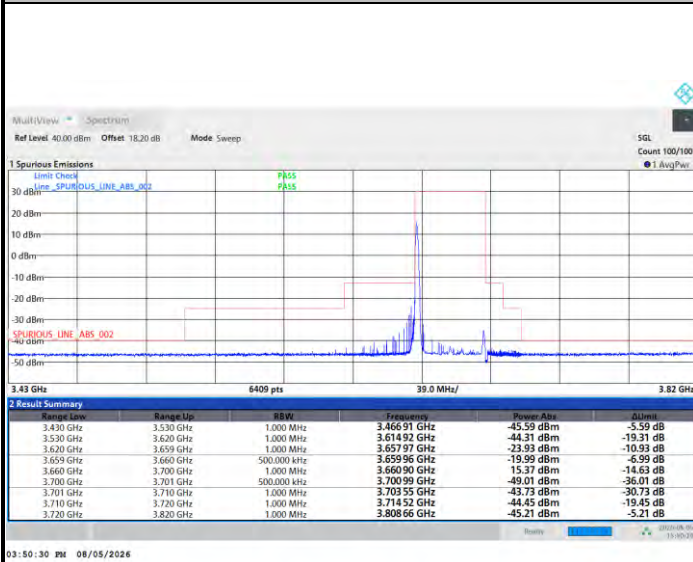




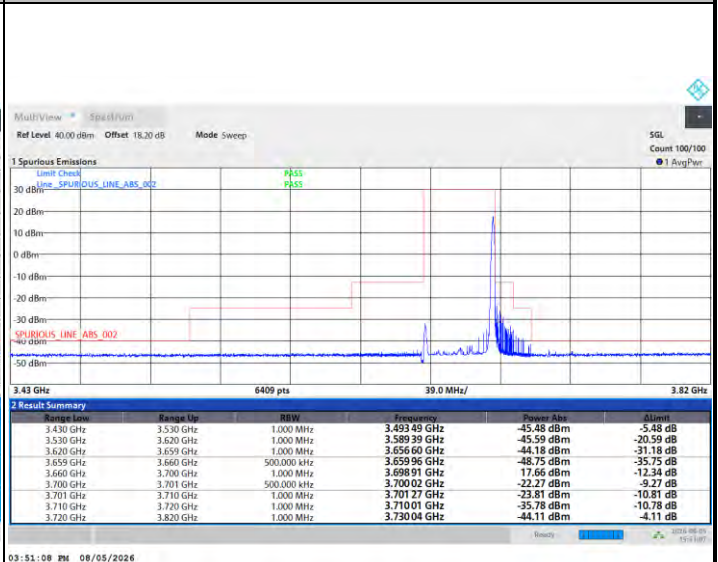
FR1 n48 / 40MHz / CP OFDM / 16QAM

Highest Channel

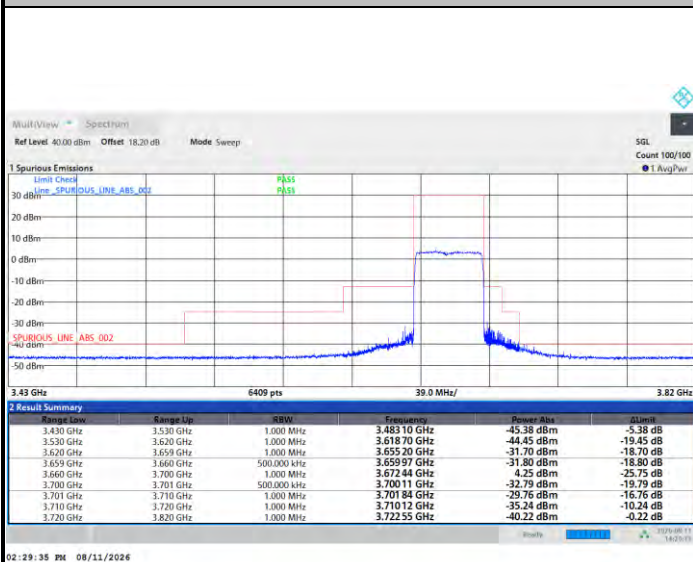
1RB0



1RBmax



Full RB



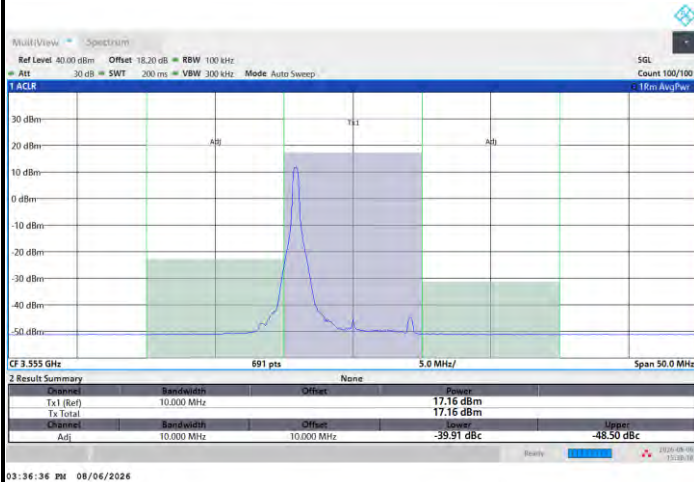


Adjacent Channel Leakage Ratio (ACLR)

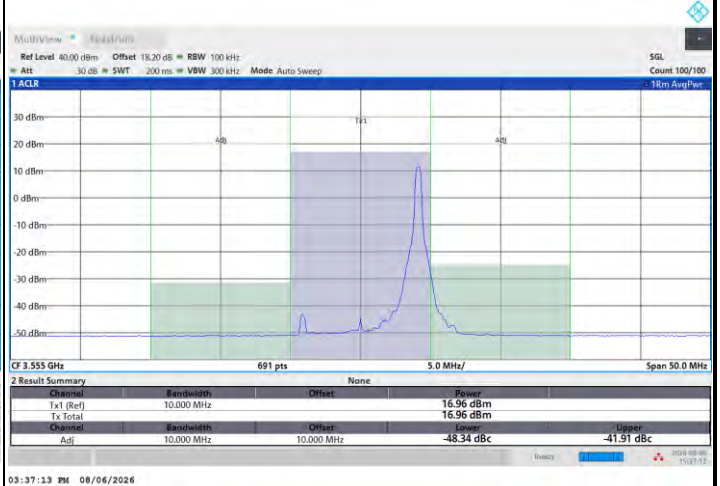
FR1 n48 / 10MHz / CP OFDM / QPSK

Lowest Channel

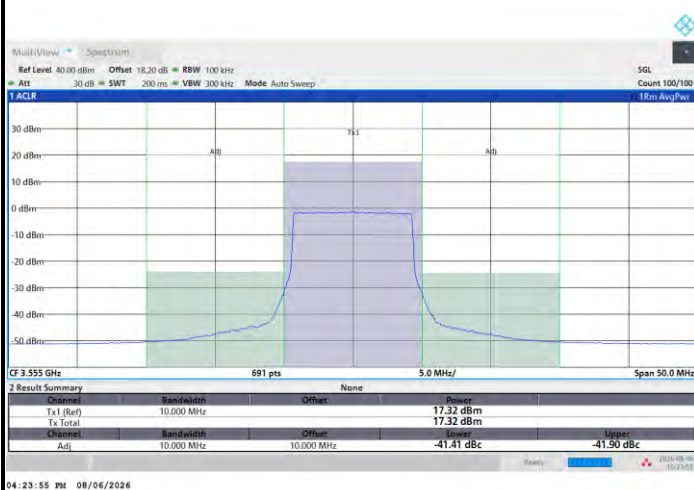
1RB0



1RBmax



Full RB

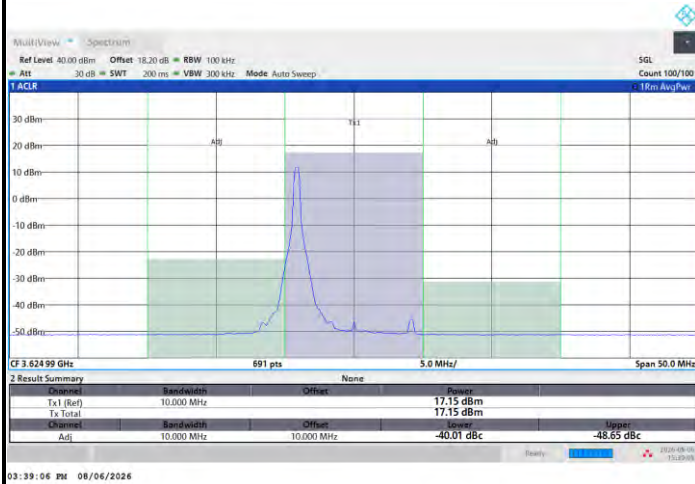




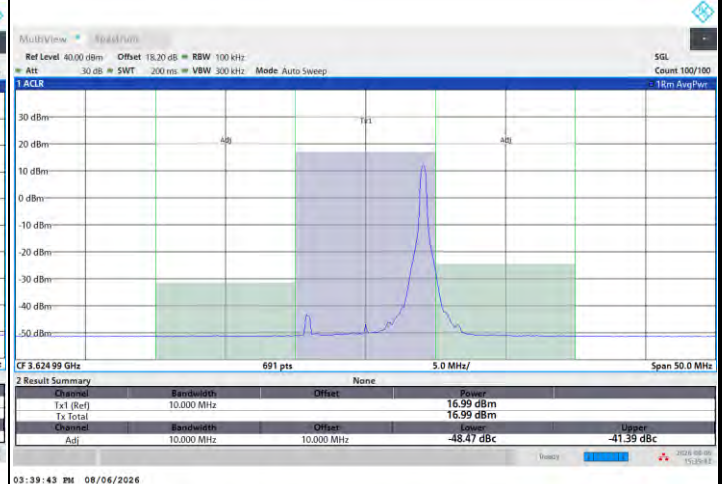
FR1 n48 / 10MHz / CP OFDM / QPSK

Middle Channel

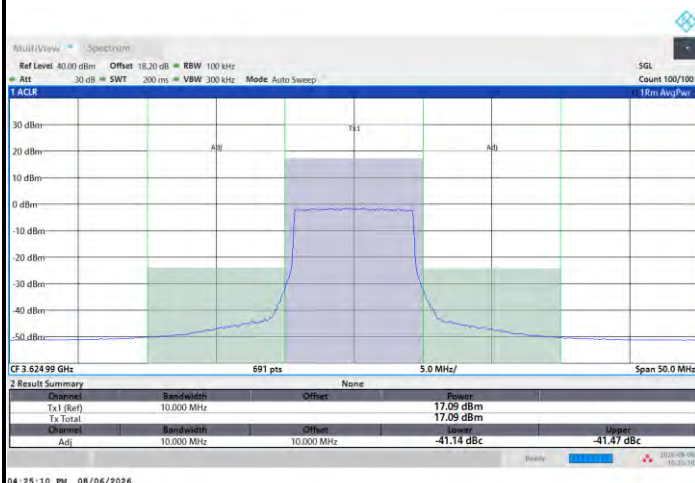
1RB0



1RBmax



Full RB

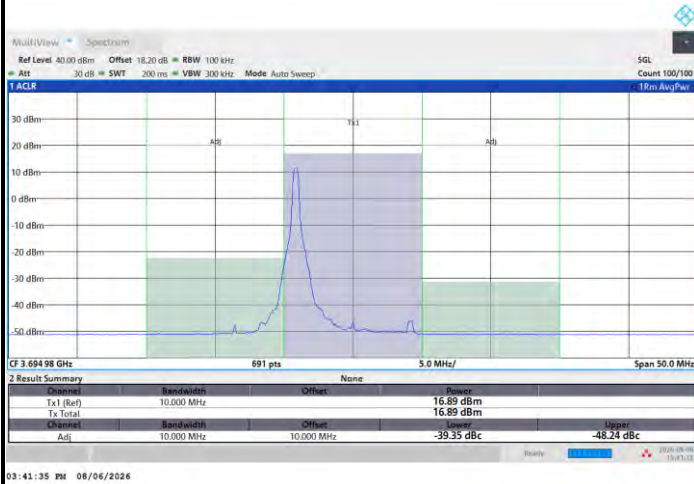




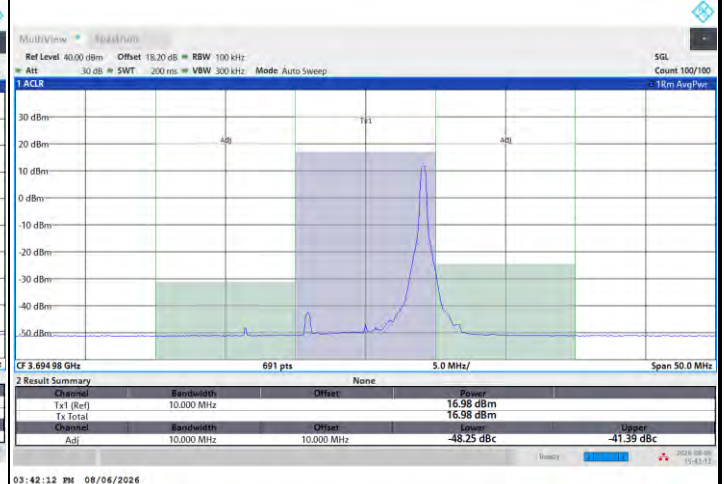
FR1 n48 / 10MHz / CP OFDM / QPSK

Highest Channel

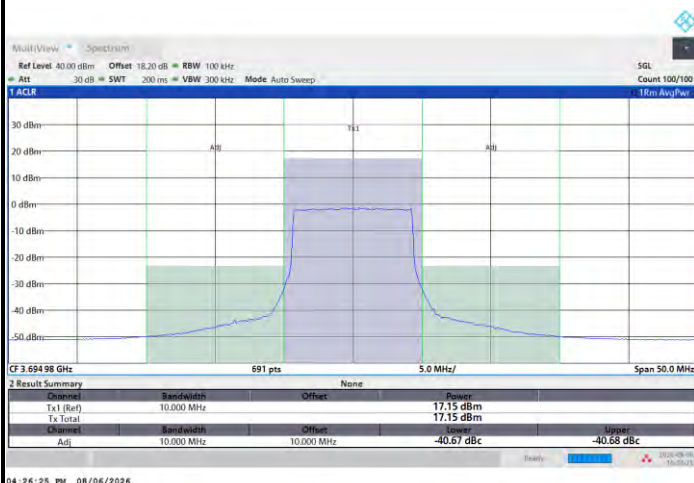
1RB0



1RBmax



Full RB

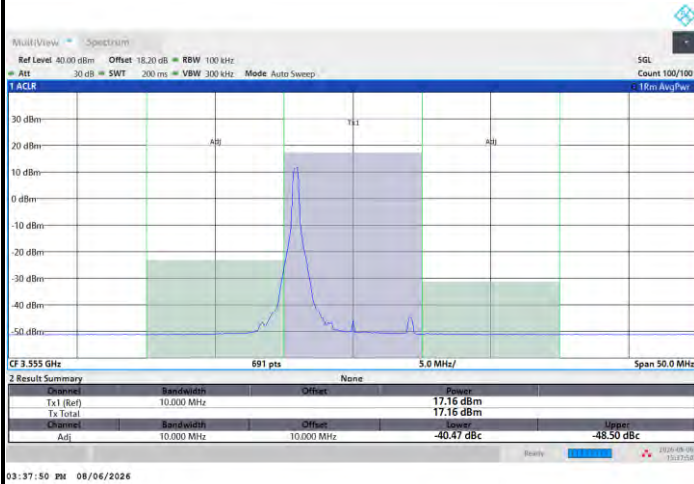




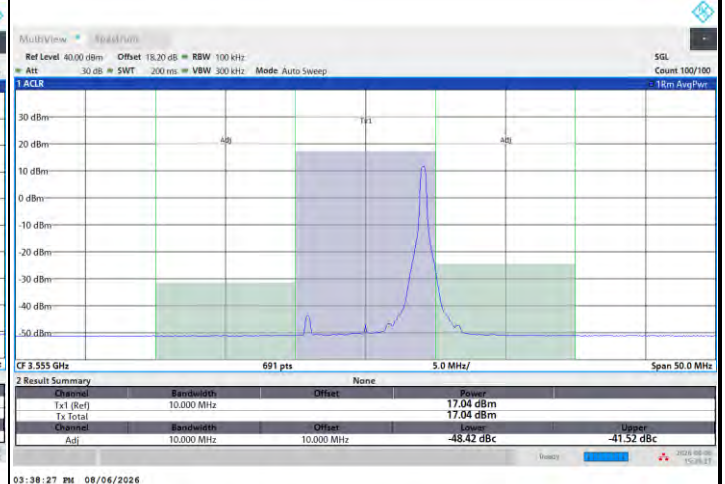
FR1 n48 / 10MHz / CP OFDM / 16QAM

Lowest Channel

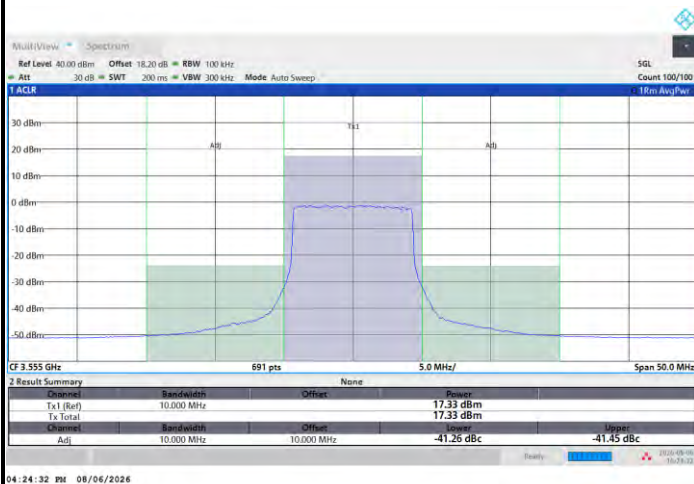
1RB0



1RBmax



Full RB

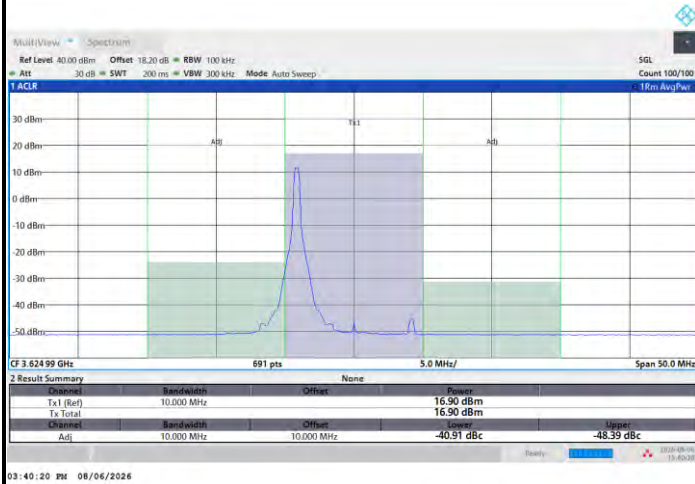




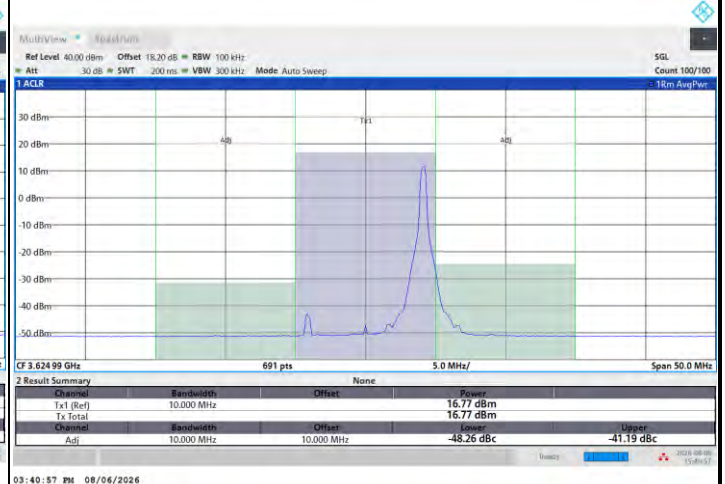
FR1 n48 / 10MHz / CP OFDM / 16QAM

Middle Channel

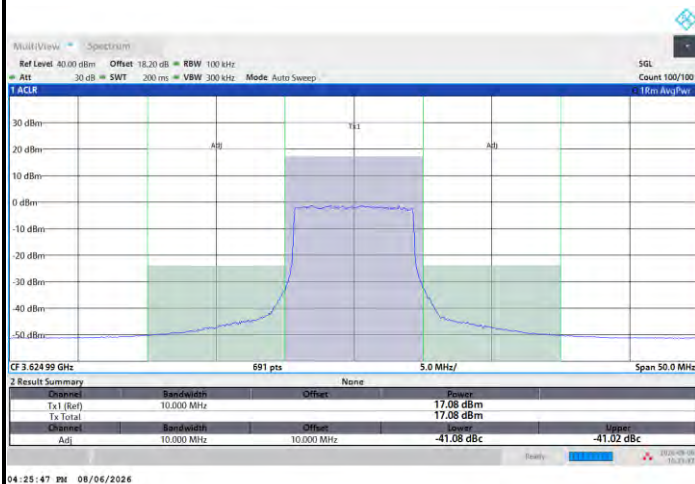
1RB0



1RBmax



Full RB

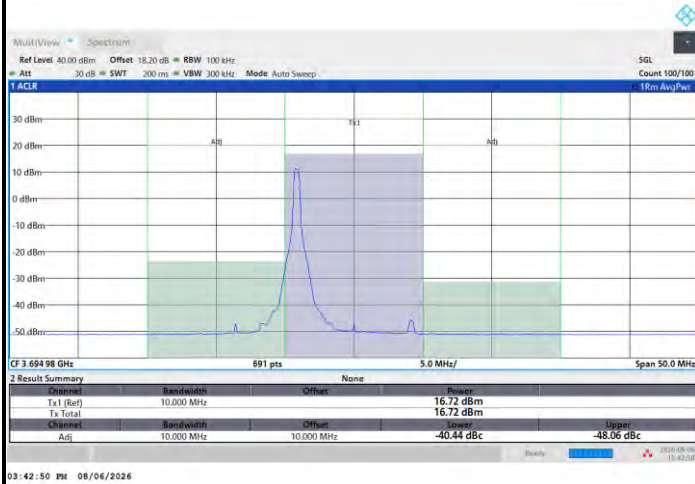




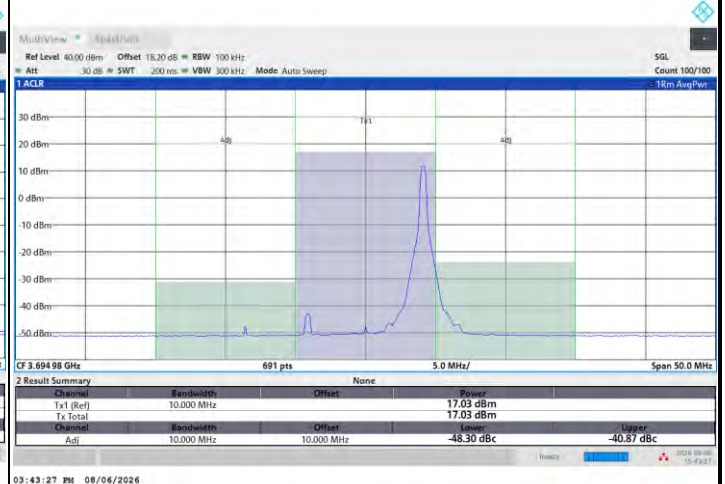
FR1 n48 / 10MHz / CP OFDM / 16QAM

Highest Channel

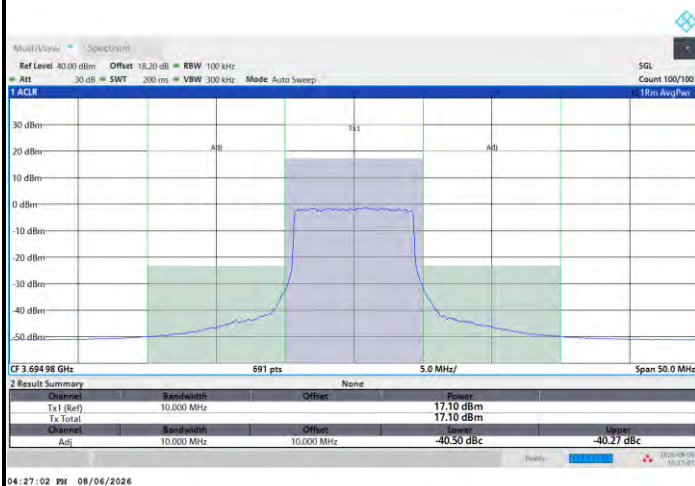
1RB0



1RBmax



Full RB





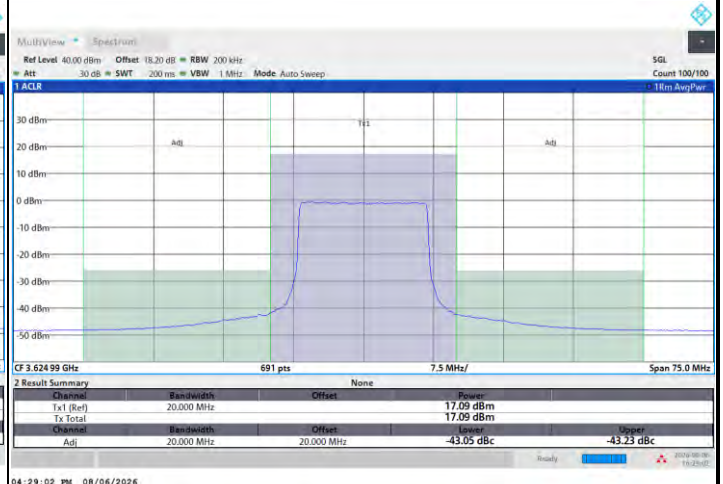
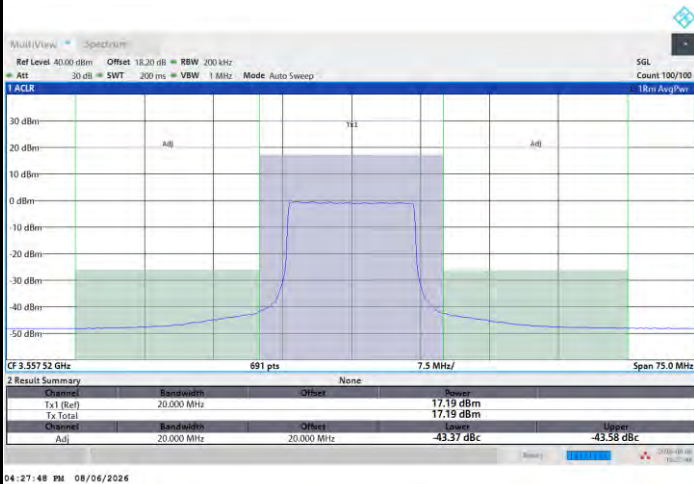
FR1 n48 / 15MHz / CP OFDM / QPSK

Lowest Channel

Middle Channel

Full RB

Full RB

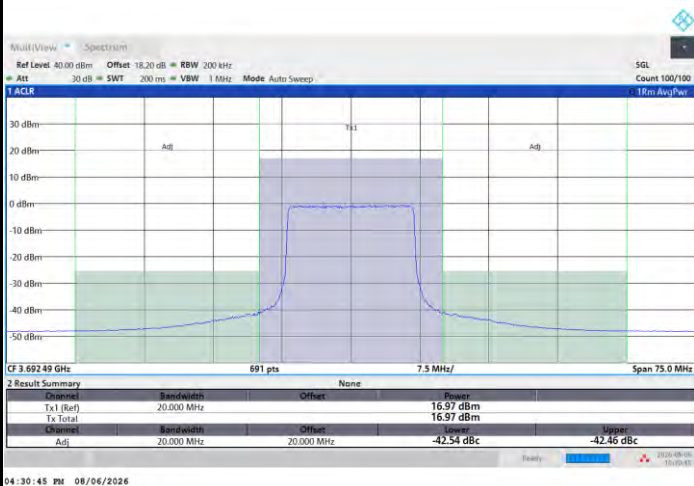


FR1 n48 / 15MHz / CP OFDM / QPSK

Highest Channel

Full RB

NA



NA



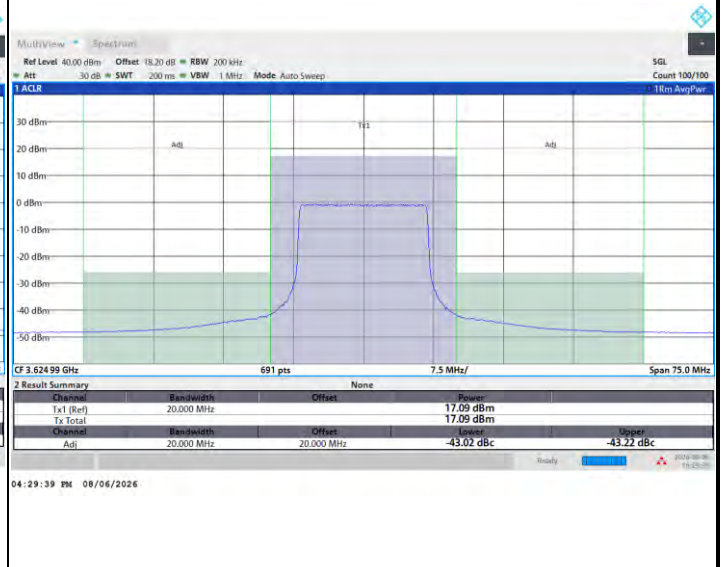
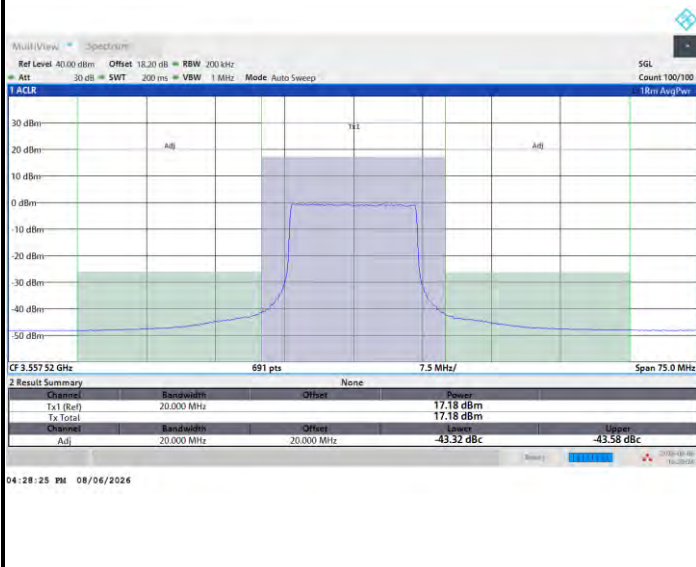
FR1 n48 / 15MHz / CP OFDM / 16QAM

Lowest Channel

Middle Channel

Full RB

Full RB

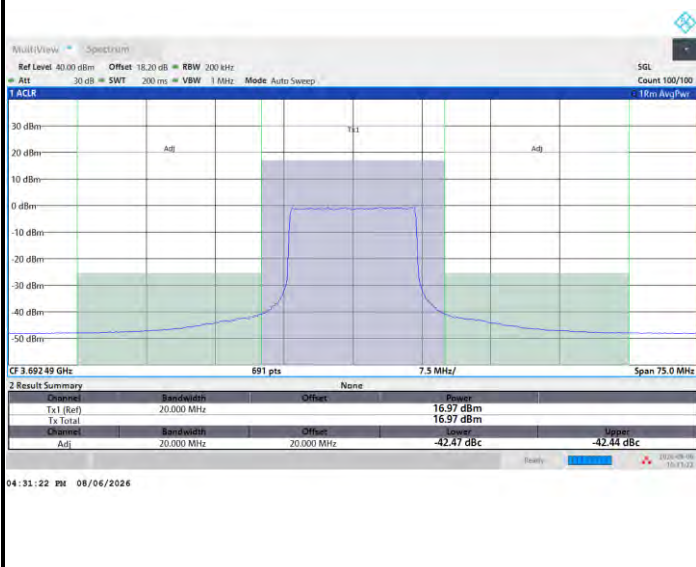


FR1 n48 / 15MHz / CP OFDM / 16QAM

Highest Channel

Full RB

NA



NA



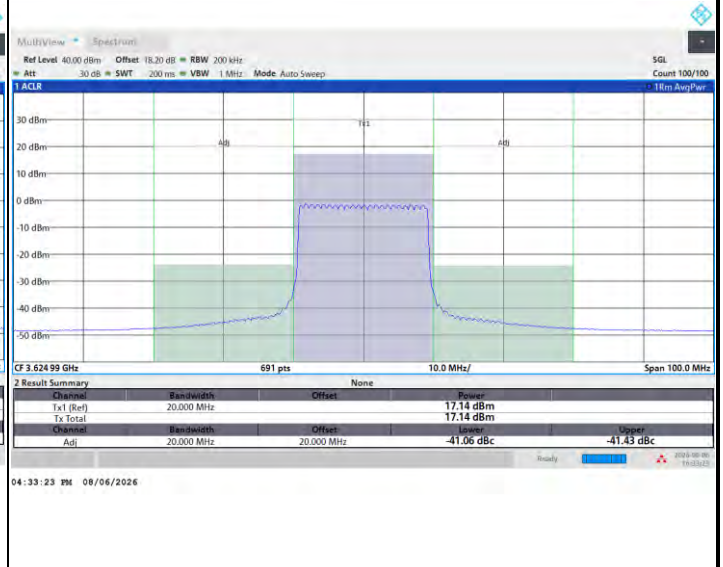
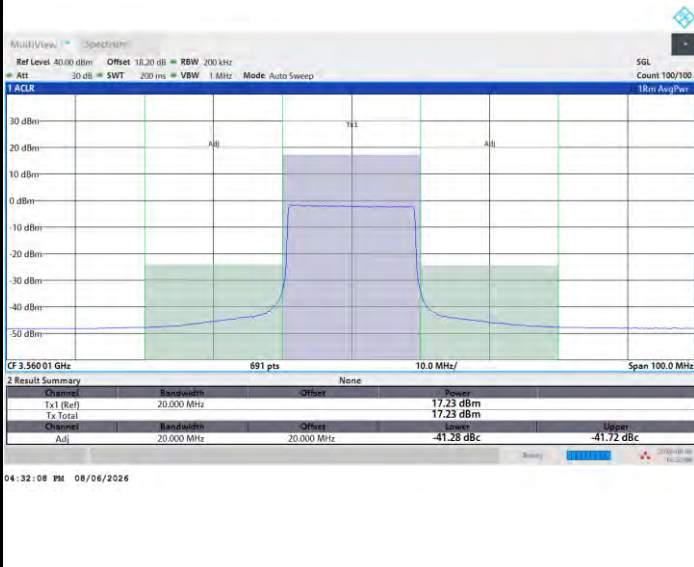
FR1 n48 / 20MHz / CP OFDM / QPSK

Lowest Channel

Middle Channel

Full RB

Full RB

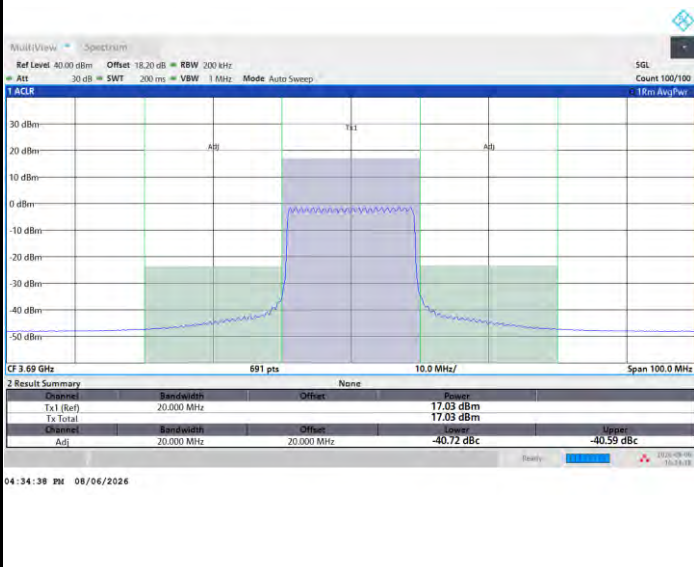


FR1 n48 / 20MHz / CP OFDM / QPSK

Highest Channel

Full RB

NA



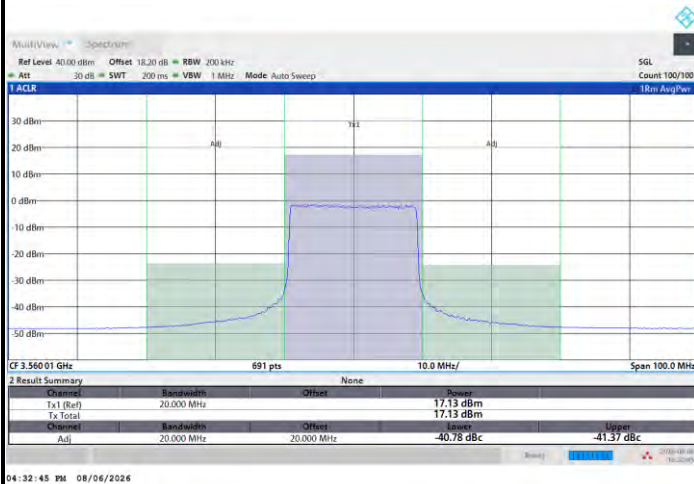
NA



FR1 n48 / 20MHz / CP OFDM / 16QAM

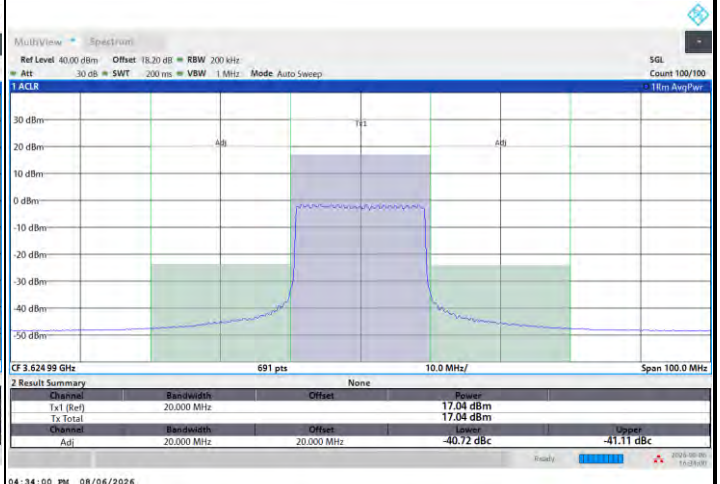
Lowest Channel

Full RB



Middle Channel

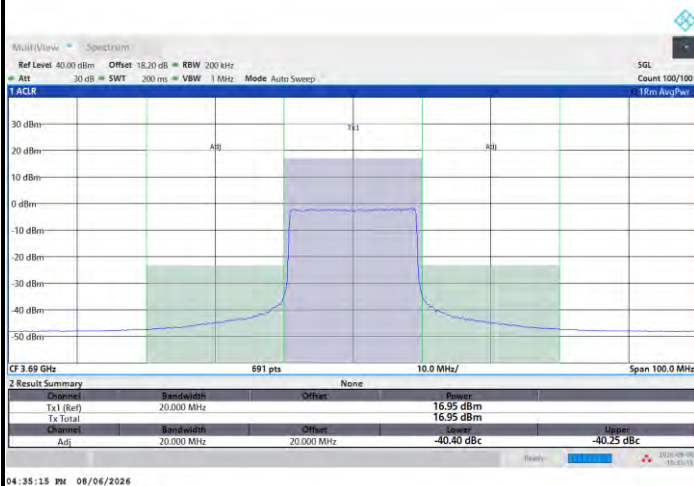
Full RB



FR1 n48 / 20MHz / CP OFDM / 16QAM

Highest Channel

Full RB



NA

NA



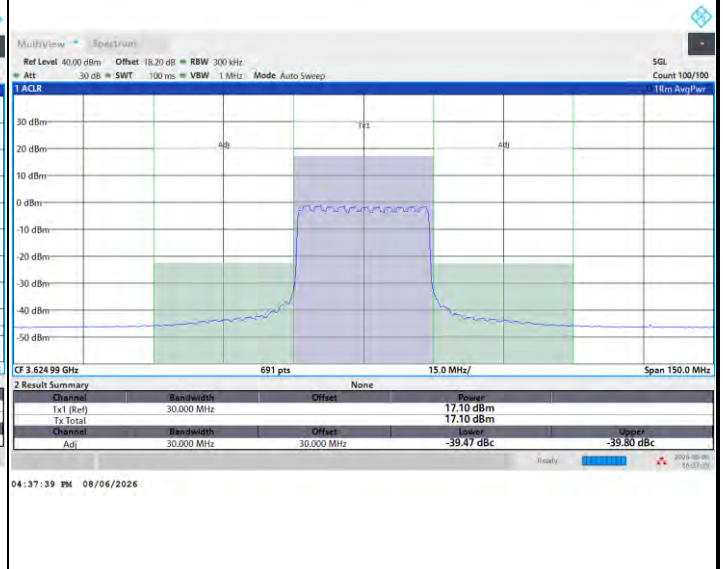
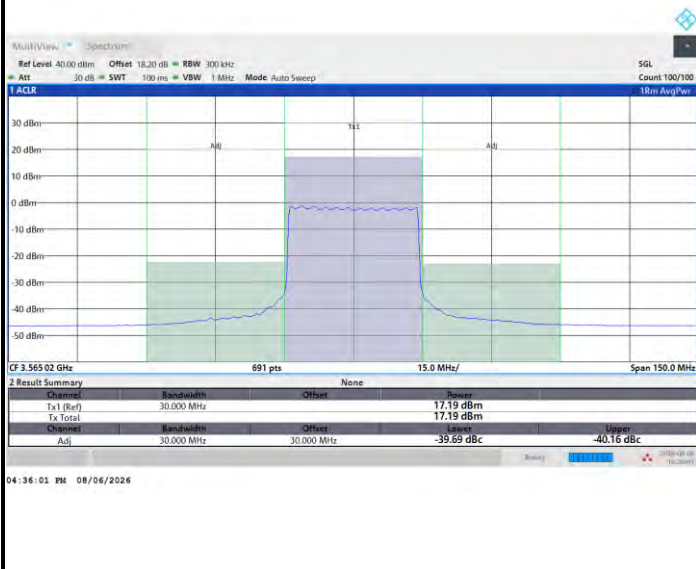
FR1 n48 / 30MHz / CP OFDM / QPSK

Lowest Channel

Middle Channel

Full RB

Full RB

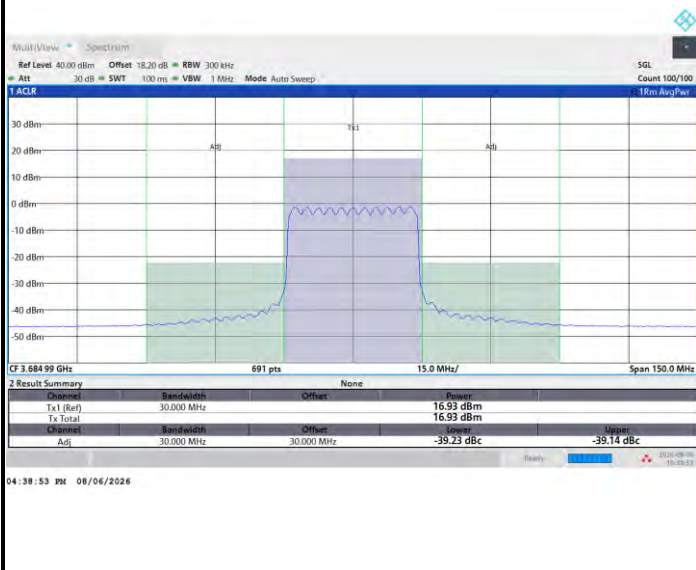


FR1 n48 / 30MHz / CP OFDM / QPSK

Highest Channel

Full RB

NA



NA



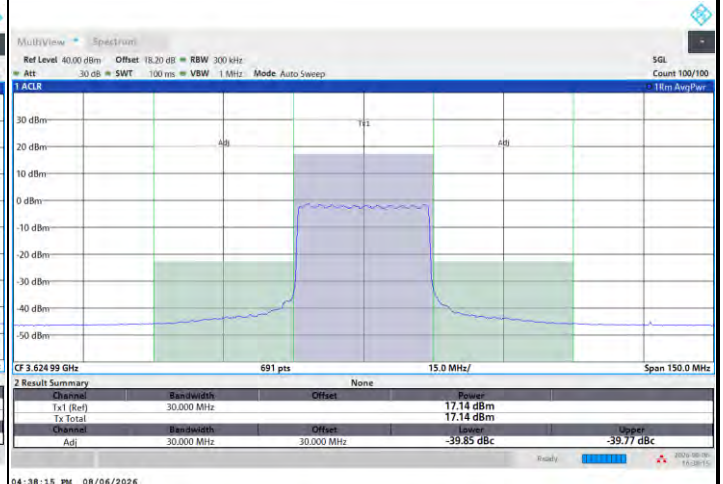
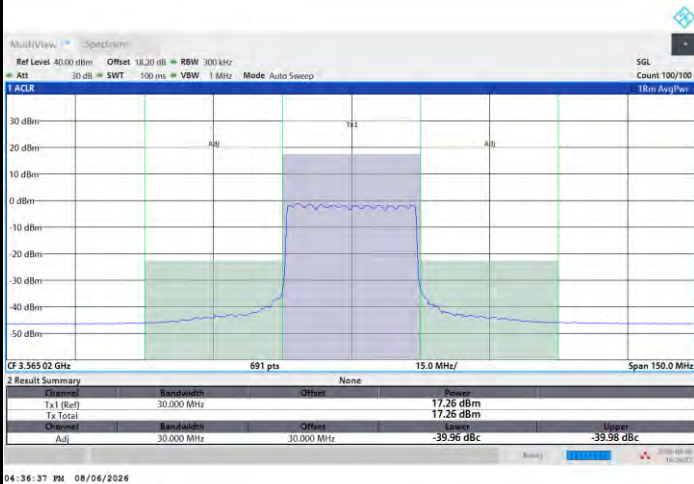
FR1 n48 / 30MHz / CP OFDM / 16QAM

Lowest Channel

Middle Channel

Full RB

Full RB

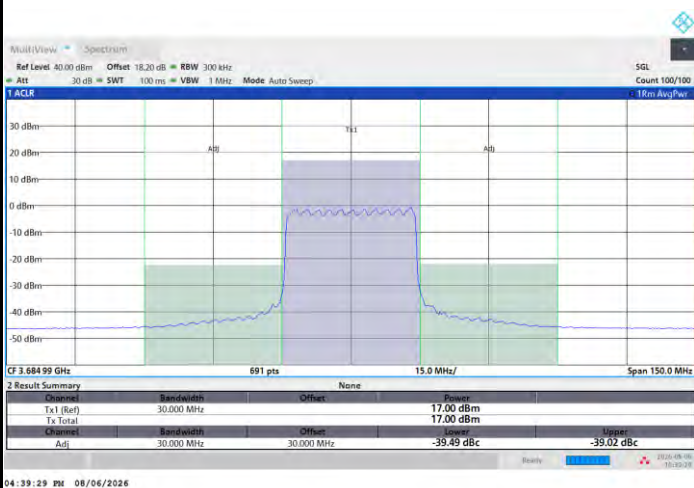


FR1 n48 / 30MHz / CP OFDM / 16QAM

Highest Channel

Full RB

NA



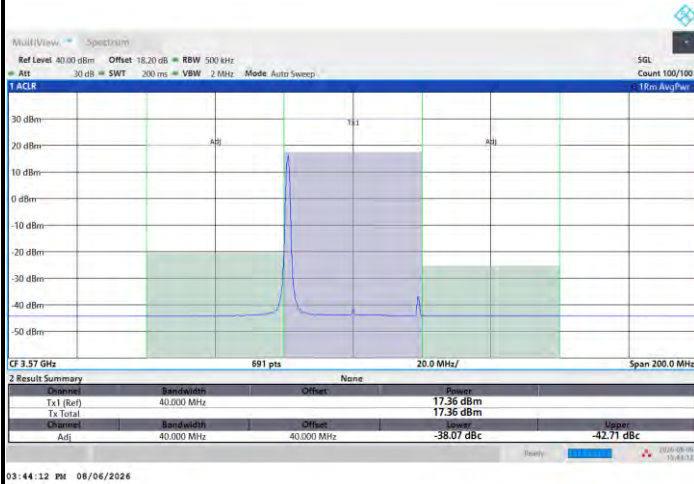
NA



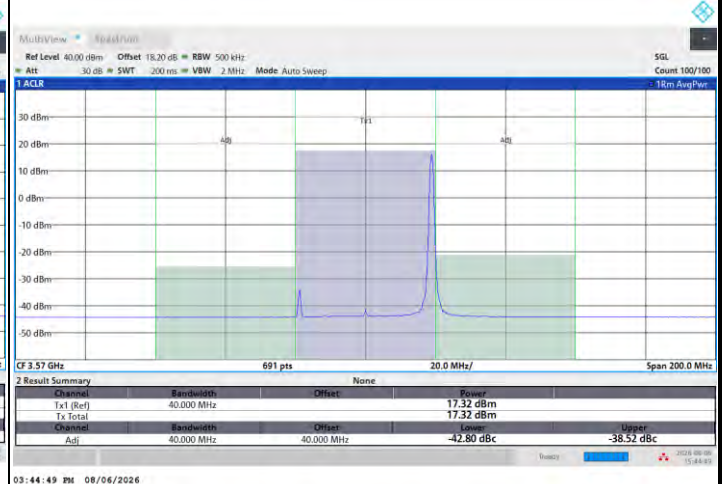
FR1 n48 / 40MHz / CP OFDM / QPSK

Lowest Channel

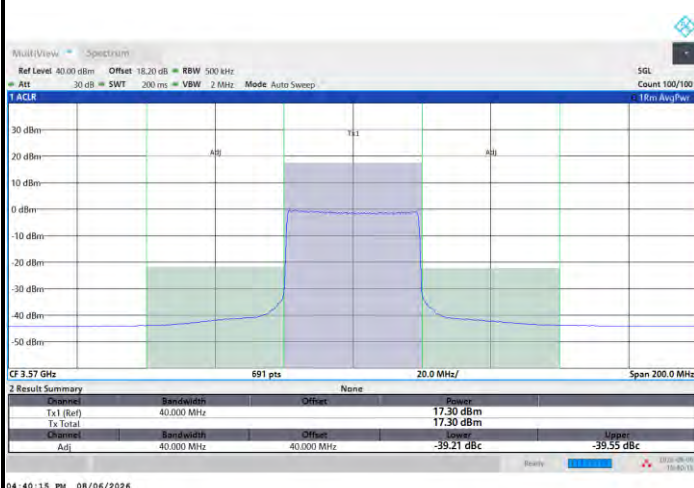
1RB0



1RBmax



Full RB

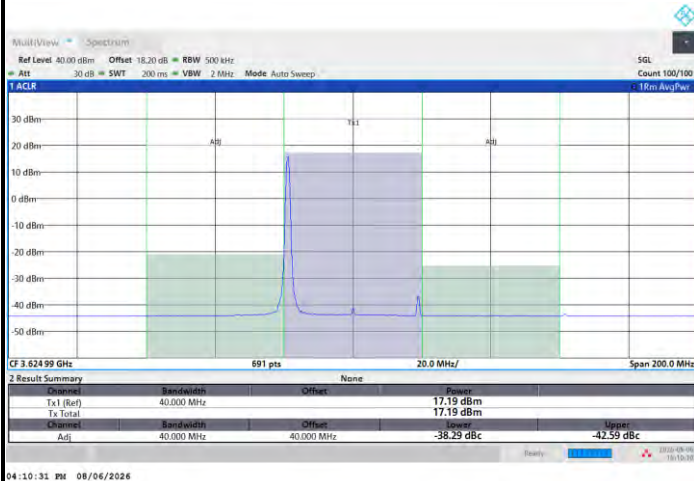




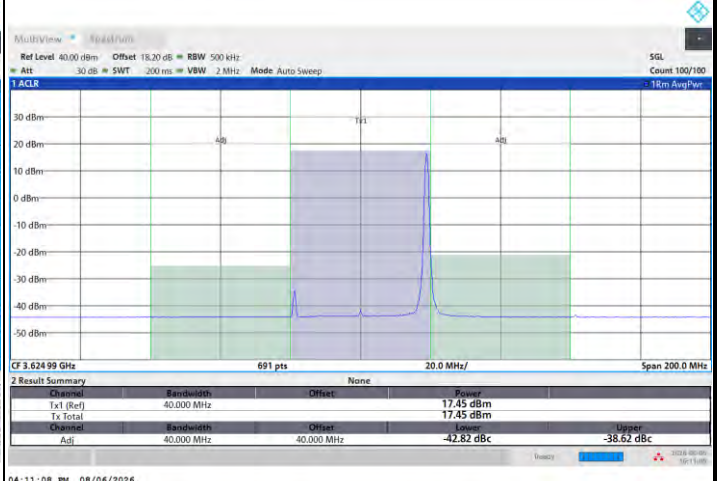
FR1 n48 / 40MHz / CP OFDM / QPSK

Middle Channel

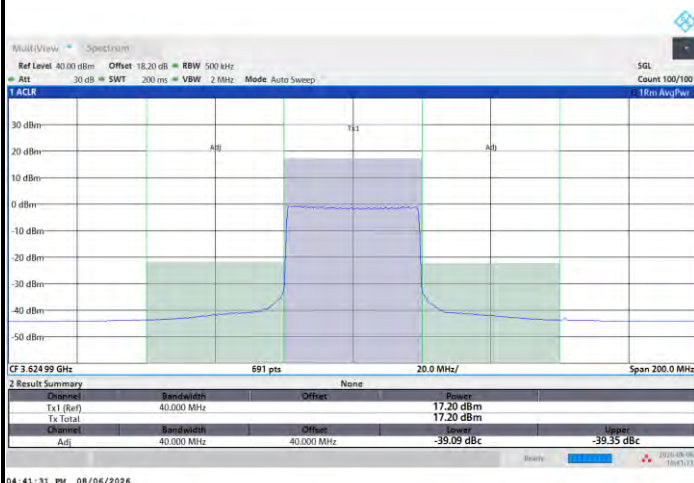
1RB0



1RBmax



Full RB

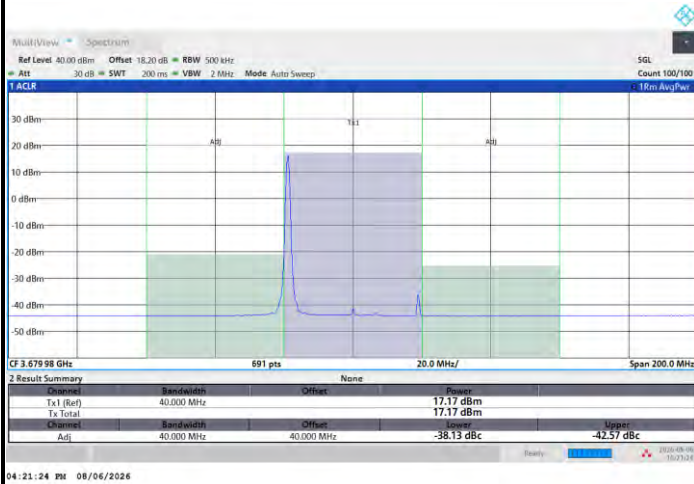




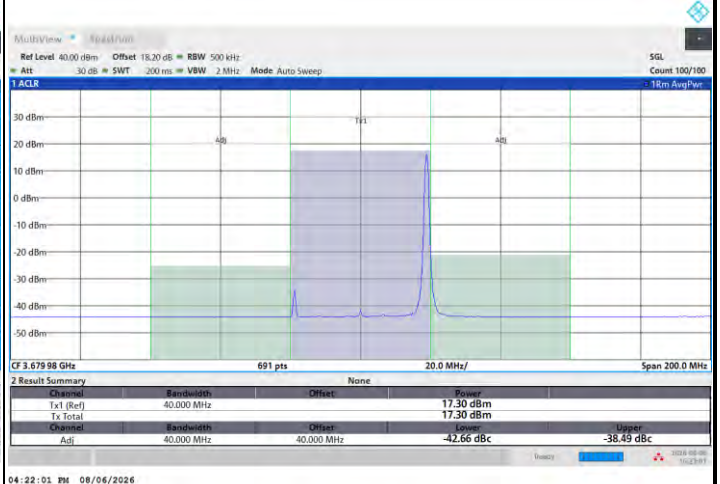
FR1 n48 / 40MHz / CP OFDM / QPSK

Highest Channel

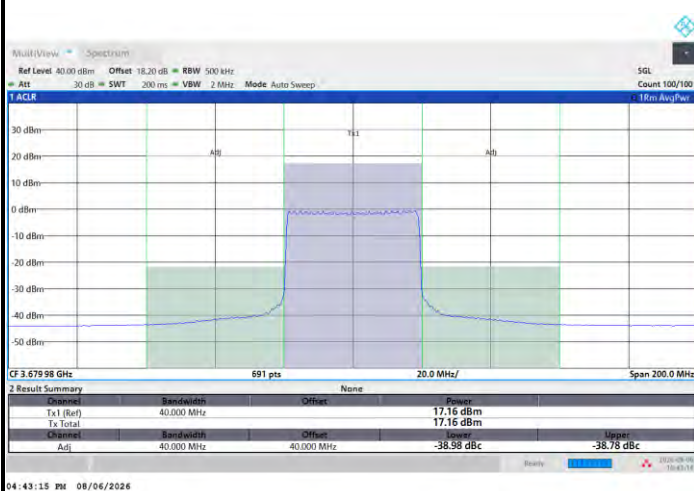
1RB0



1RBmax



Full RB

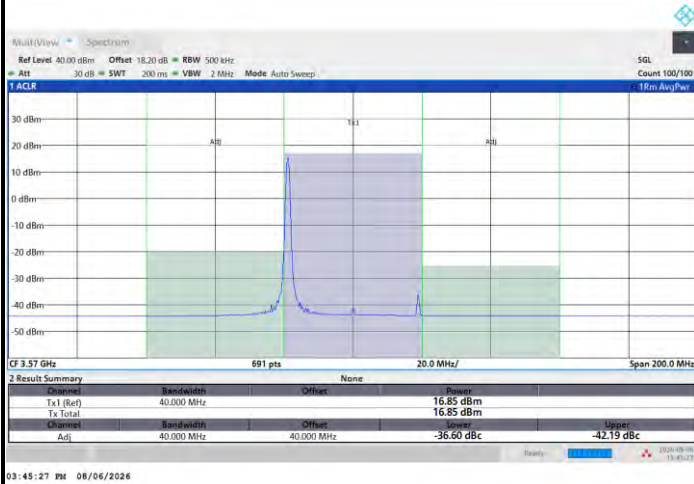




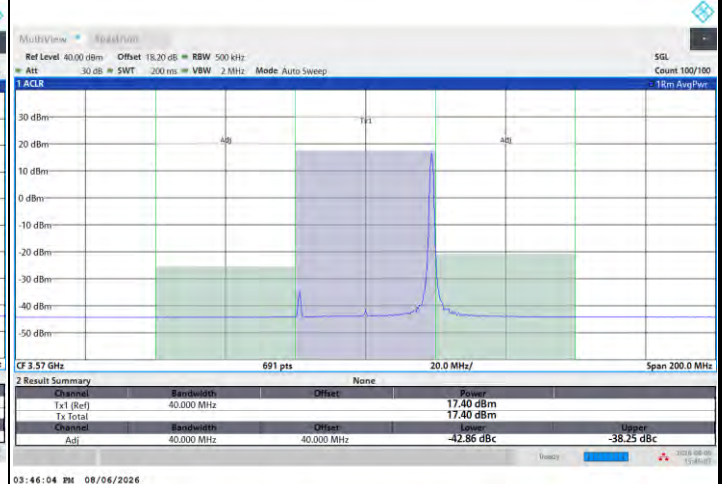
FR1 n48 / 40MHz / CP OFDM / 16QAM

Lowest Channel

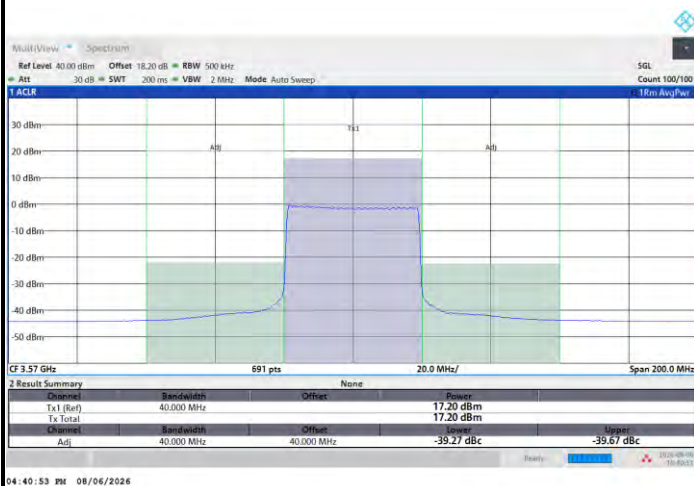
1RB0



1RBmax



Full RB

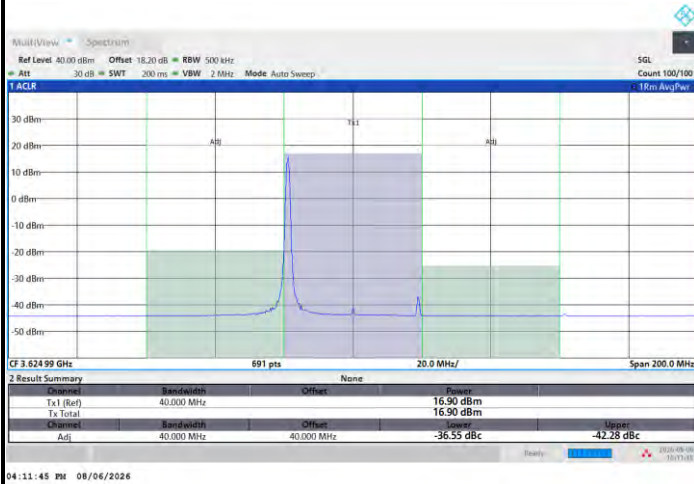




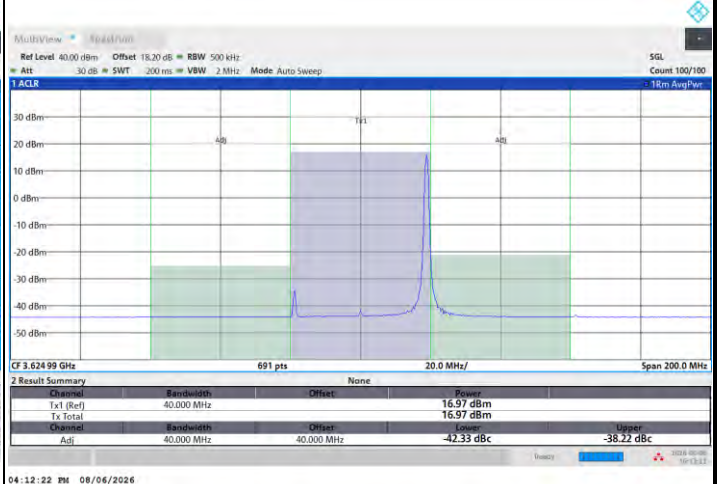
FR1 n48 / 40MHz / CP OFDM / 16QAM

Middle Channel

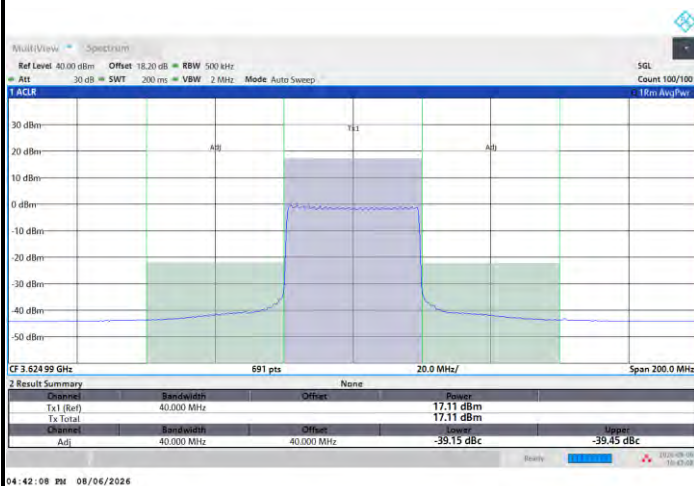
1RB0



1RBmax



Full RB

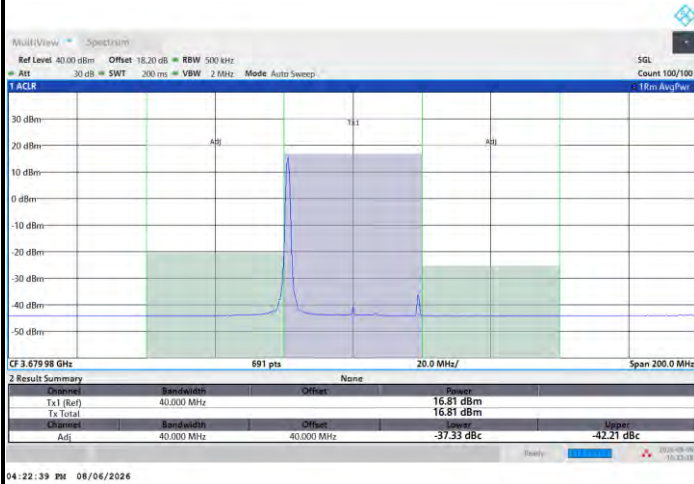




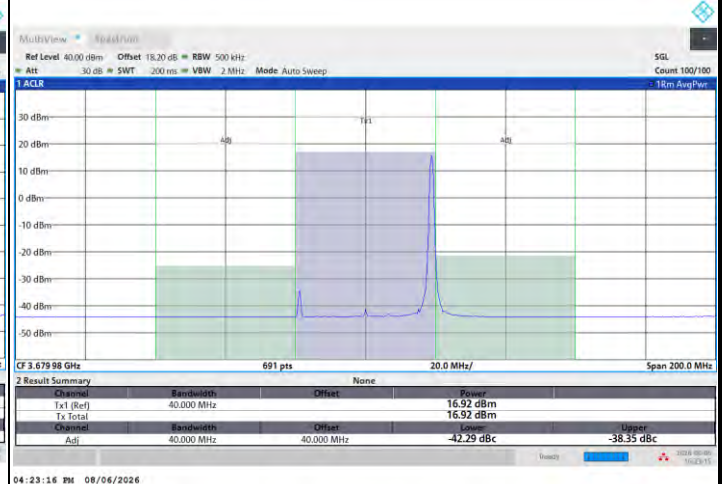
FR1 n48 / 40MHz / CP OFDM / 16QAM

Highest Channel

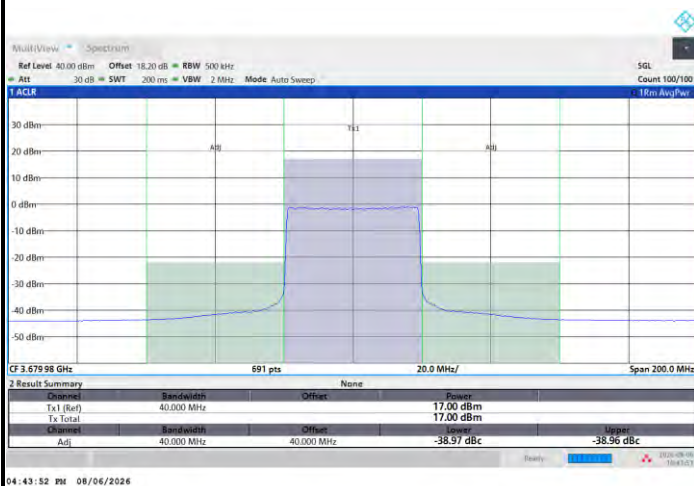
1RB0



1RBmax



Full RB

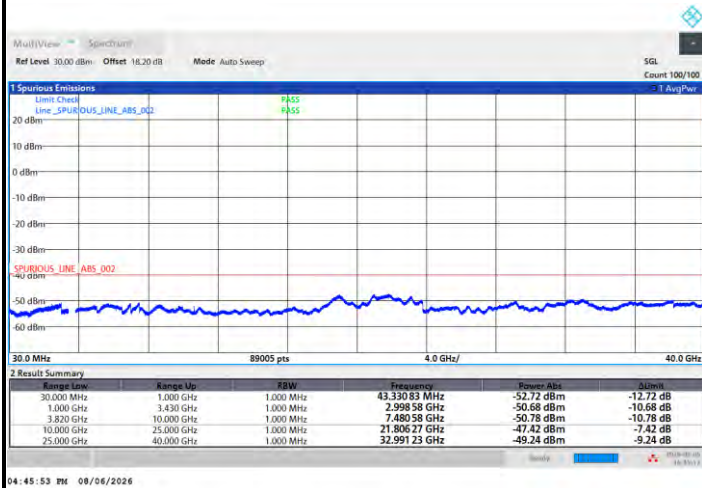




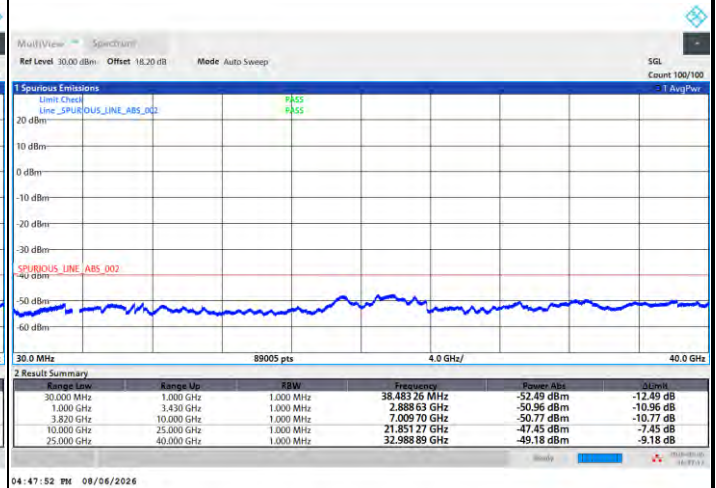
Conducted Spurious Emission

FR1 n48 / 10MHz / CP OFDM / QPSK / 1RB1

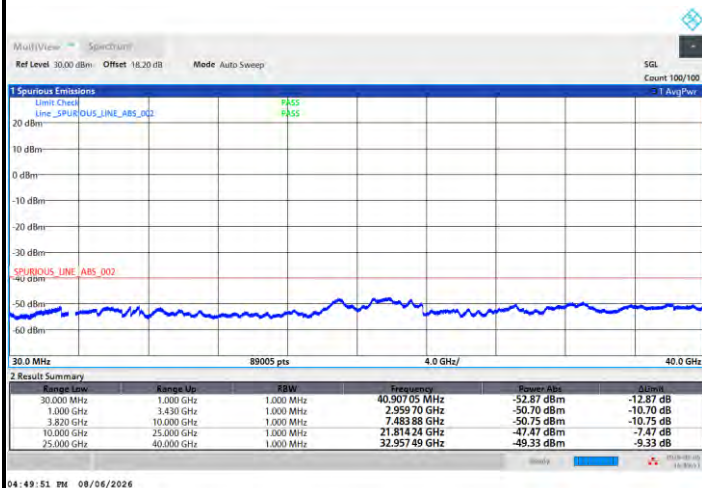
Lowest Channel



Middle Channel



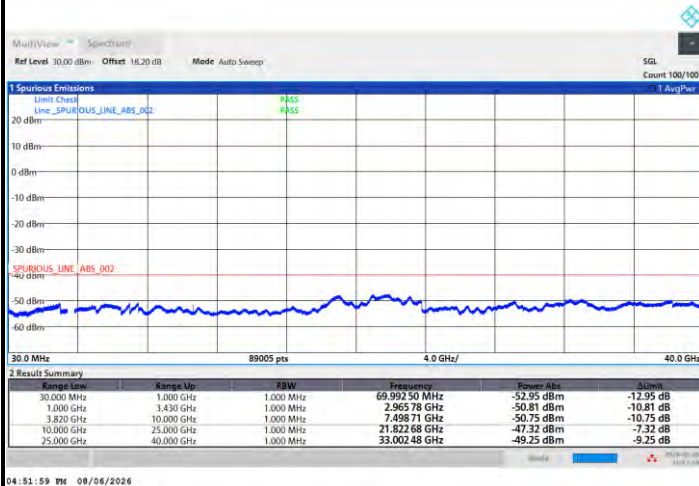
Highest Channel



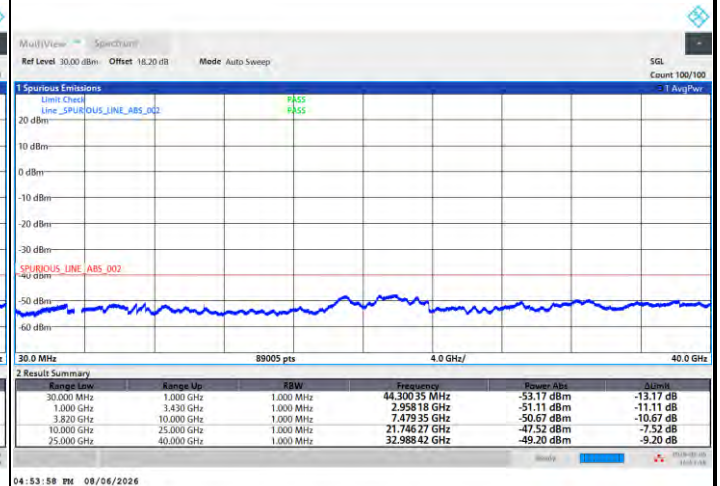


FR1 n48 / 15MHz / CP OFDM / QPSK / 1RB1

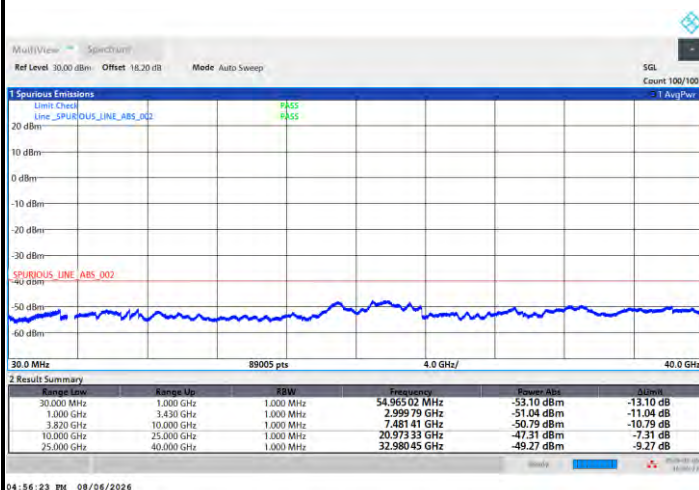
Lowest Channel



Middle Channel



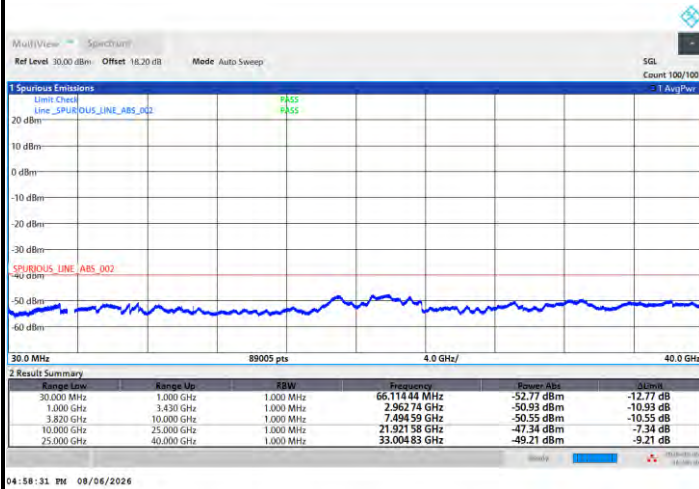
Highest Channel



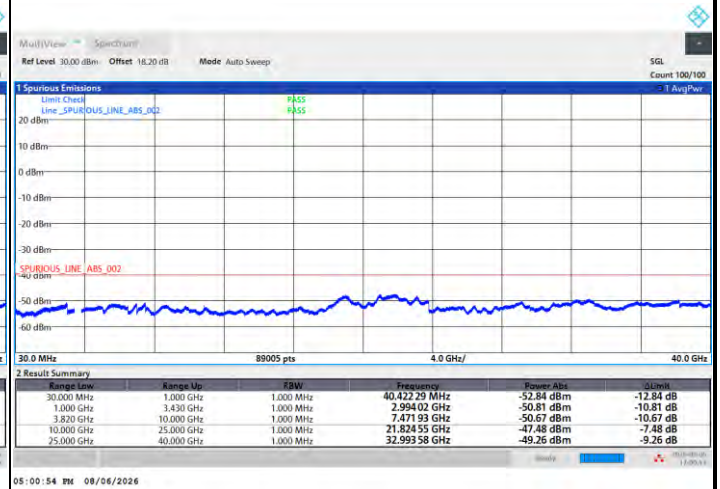


FR1 n48 / 20MHz / CP OFDM / QPSK / 1RB1

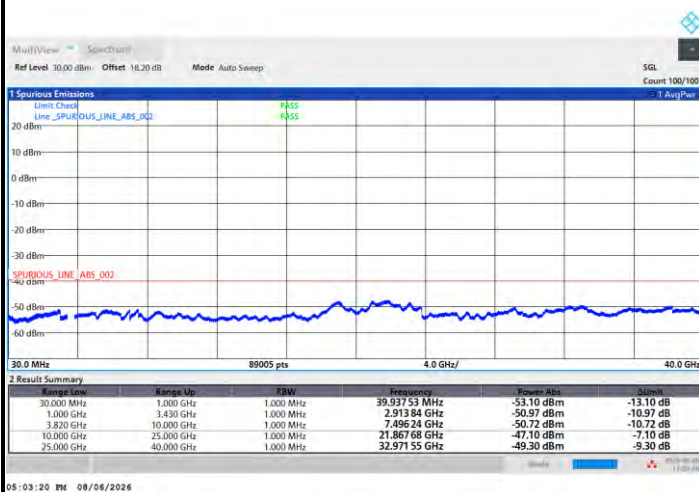
Lowest Channel



Middle Channel



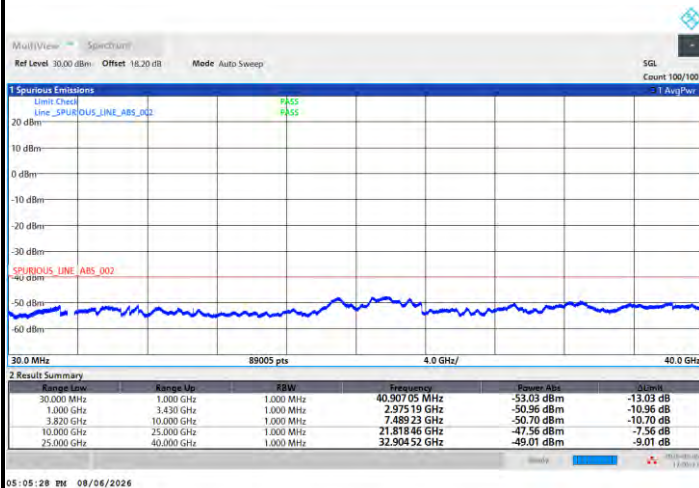
Highest Channel



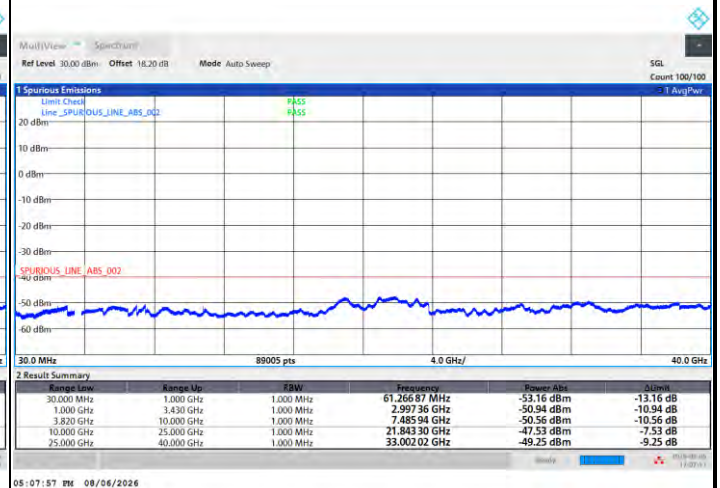


FR1 n48 / 30MHz / CP OFDM / QPSK / 1RB1

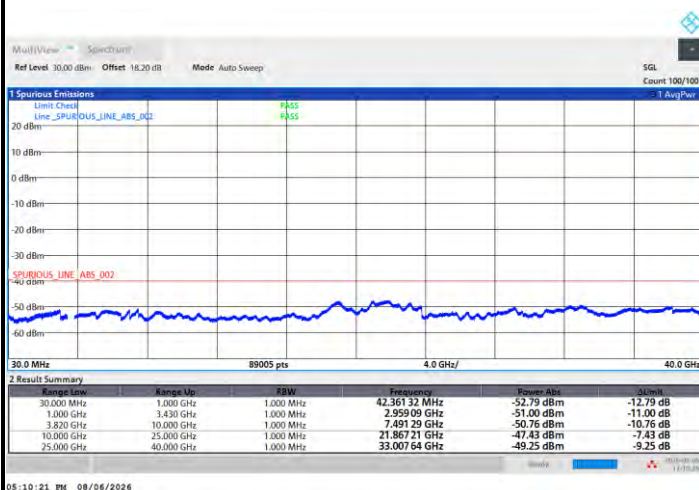
Lowest Channel



Middle Channel



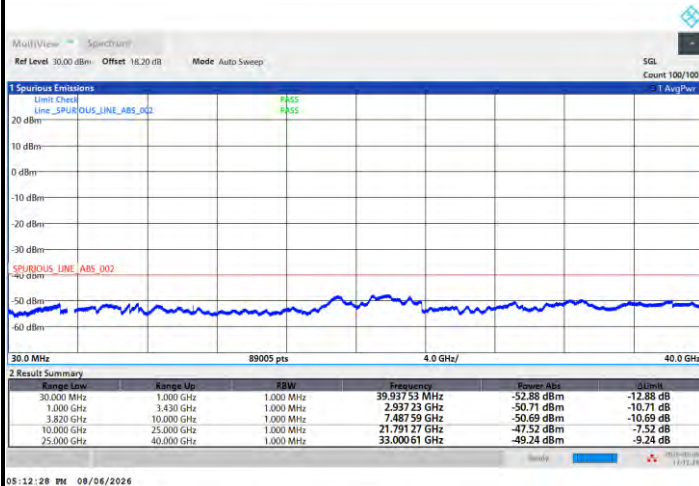
Highest Channel



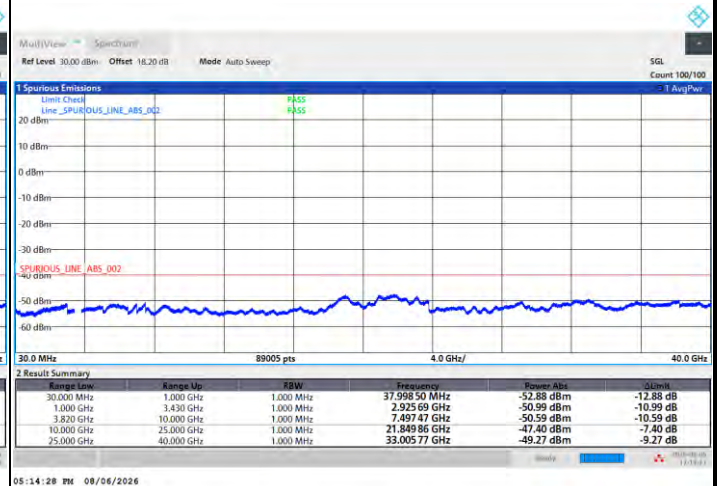


FR1 n48 / 40MHz / CP OFDM / QPSK / 1RB1

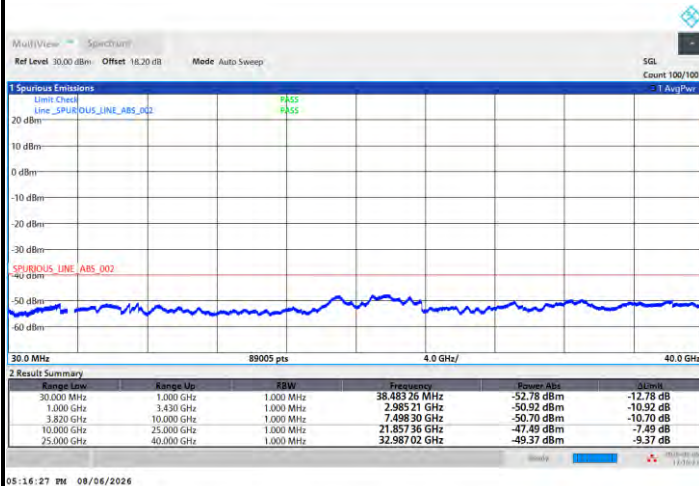
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n48 (QPSK) / Middle Channel 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0018	6.7	Yes	PASS
40	Normal Voltage	0.0014	-5.2	Yes	
30	Normal Voltage	0.0019	6.8	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0014	-5.2	Yes	
0	Normal Voltage	0.0021	7.7	Yes	
-10	Normal Voltage	0.0008	2.8	Yes	
-20	Normal Voltage	0.0007	2.5	Yes	
-30	Normal Voltage	0.0012	-4.5	Yes	
20	Maximum Voltage	0.0022	8	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0006	-2	Yes	

Note:

1. Normal Voltage = 120 V. ; Minimum Voltage = 102 V. ; Maximum Voltage = 138 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. The frequency variation is sufficient to ensure that the occupied bandwidth of all operation channels stay within the operating frequency block or frequency block group.



Appendix B. Radiated Spurious Emission Test Data

Test Engineer :	Tim Lee, Wilson Wu, Gerry Wei	Relative Humidity(%):	50~60%
		Temperature(°C):	20~25°C

B1.Summary of each worse mode

Mode	Band	Part	Ch	Freq (MHz)	Level (dBm)	Det	Ant Factor (dB)	Amp/Cbl (dB)	Filter (dB)	EIRPCF (dB)	Reading (dBUV)	Limit (dBm)	Margin (dB)	Pol	Ant
1	NR SA n48	Part 96	L	10653	-40.73	RMS	38.91	-39.48	0.59	-95.23	54.48	-40.00	-0.73	V	1
2	NR SA n48 MIMO	Part 96	L	10653	-49.96	RMS	38.91	-40.96	0.59	-95.23	46.73	-40.00	-9.96	H	1+7

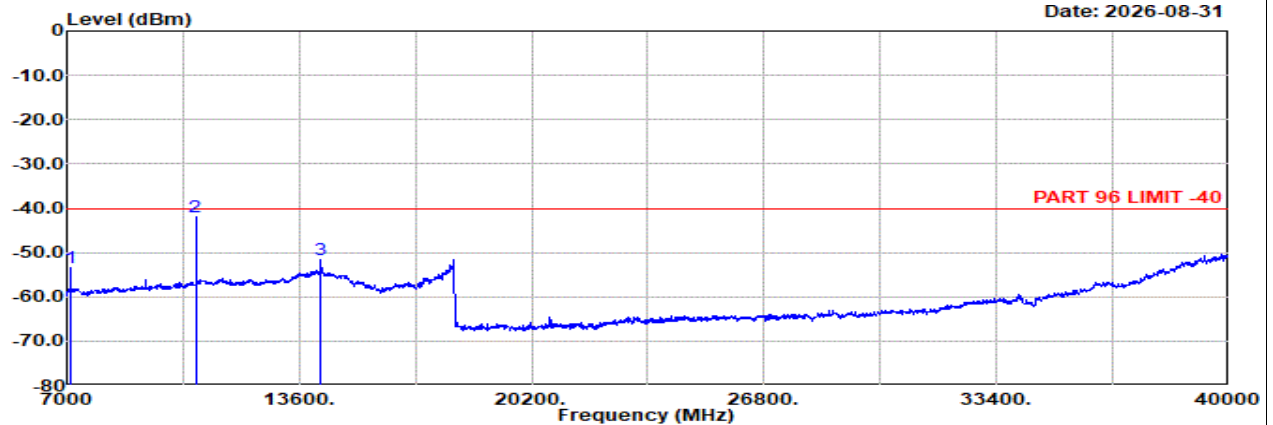


Ant. 1

Part 96 Mode 1

NR SA n48 20M Ch637334 1RB1 BPSK

L

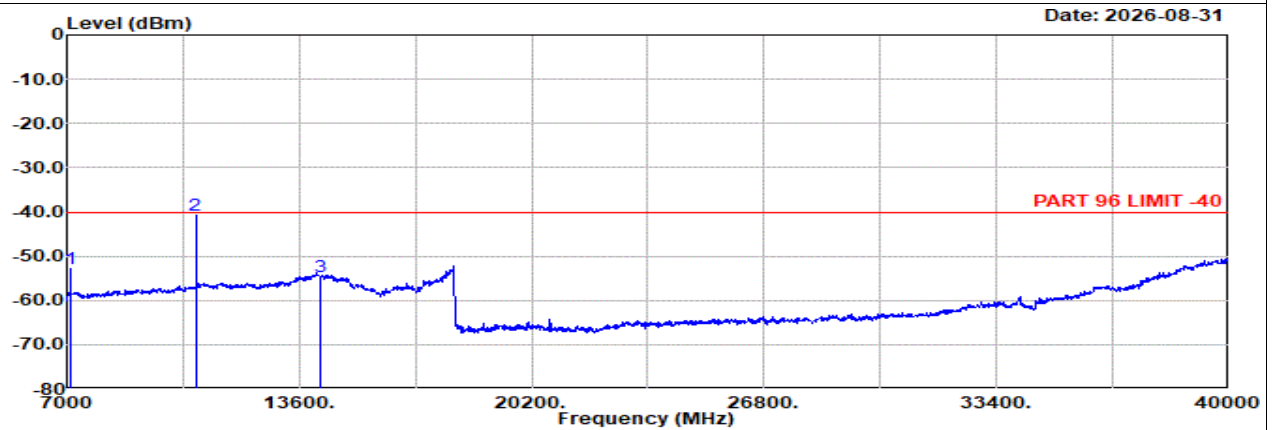


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Horizontal

: SA n48 20M Ch637334 1RB1 BPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7102.00	-53.58	RMS		36.41	-43.20	1.11	-95.23	47.33	-40.00	-13.58	Horizontal
2	10653.00	-42.01	RMS		38.91	-39.48	0.59	-95.23	53.20	-40.00	-2.01	Horizontal
3	14205.00	-51.67	RMS		40.79	-35.55	0.44	-95.23	37.88	-40.00	-11.67	Horizontal

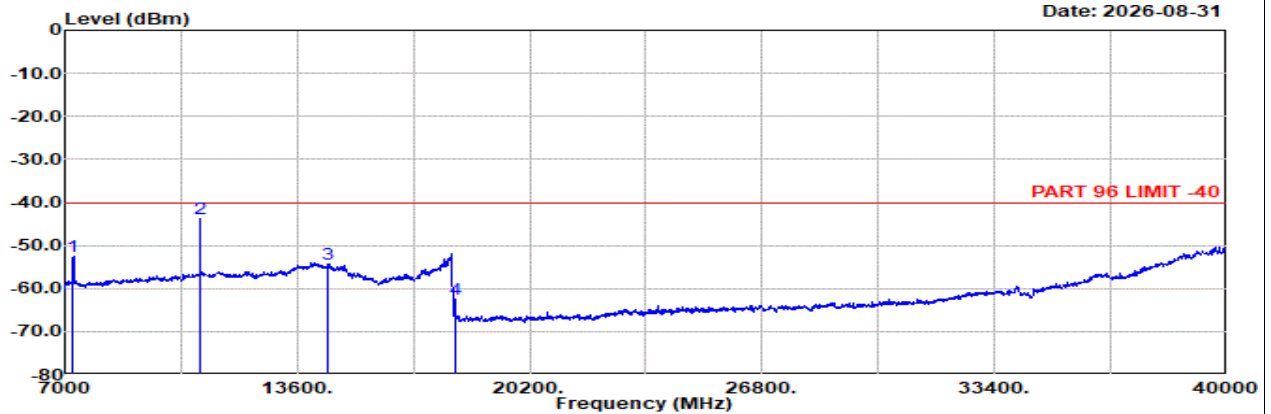


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Vertical

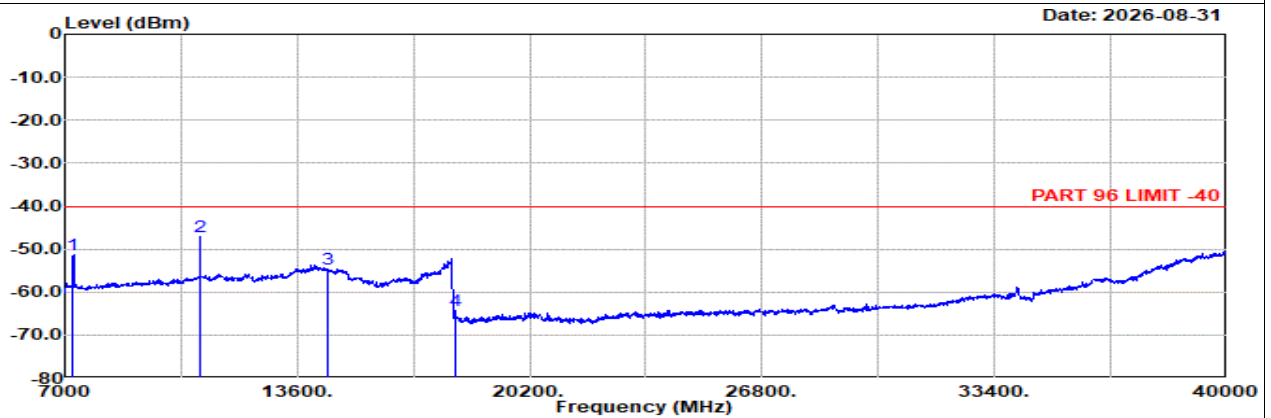
: SA n48 20M Ch637334 1RB1 BPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7102.00	-52.72	RMS		36.41	-43.20	1.11	-95.23	48.19	-40.00	-12.72	Vertical
2	10653.00	-40.73	RMS		38.91	-39.48	0.59	-95.23	54.48	-40.00	-0.73	Vertical
3	14205.00	-54.53	RMS		40.79	-35.55	0.44	-95.23	35.02	-40.00	-14.53	Vertical

**Ant. 1****Part 96 Mode 1****NR SA n48 20M Ch641666 1RB1 BPSK****M**

Site : 03CH12-HY
Condition: PART 96 LIMIT -40 3m 9120D-01212 Horizontal
: SA n48 20M Ch641666 1RB1 BPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb	Filter 1	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm			dB/m	dB	dB	dB	dBm	dB	
1	7232.00	-52.38	RMS	36.90	-43.12	0.96	-95.23	48.11	-40.00	-12.38	Horizontal
2	10848.00	-43.88	RMS	38.90	-39.02	0.59	-95.23	50.88	-40.00	-3.88	Horizontal
3	14464.00	-54.46	RMS	40.60	-35.59	0.42	-95.23	35.34	-40.00	-14.46	Horizontal
4	18088.00	-62.62	RMS	37.32	-34.12	-9.54	-95.23	38.95	-40.00	-22.62	Horizontal



Site : 03CH12-HY
Condition: PART 96 LIMIT -40 3m 9120D-01212 Vertical
: SA n48 20M Ch641666 1RB1 BPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb	Filter 1	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm			dB/m	dB	dB	dB	dBm	dB	
1	7232.00	-51.40	RMS	36.90	-43.12	0.96	-95.23	49.09	-40.00	-11.40	Vertical
2	10848.00	-47.12	RMS	38.90	-39.02	0.59	-95.23	47.64	-40.00	-7.12	Vertical
3	14464.00	-54.64	RMS	40.60	-35.59	0.42	-95.23	35.16	-40.00	-14.64	Vertical
4	18088.00	-64.32	RMS	37.32	-34.12	-9.54	-95.23	37.25	-40.00	-24.32	Vertical

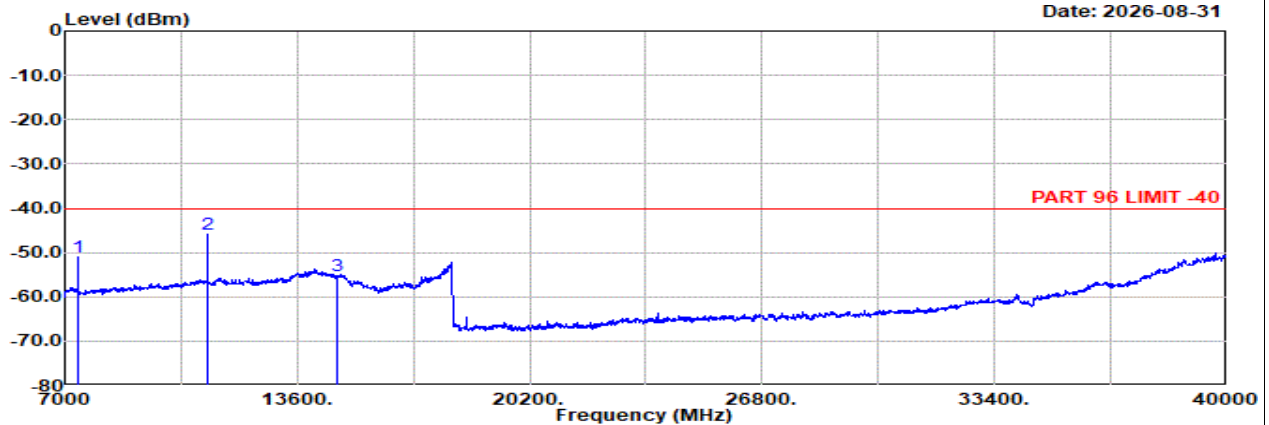


Ant. 1

Part 96 Mode 1

NR SA n48 20M Ch646000 1RB1 BPSK

H

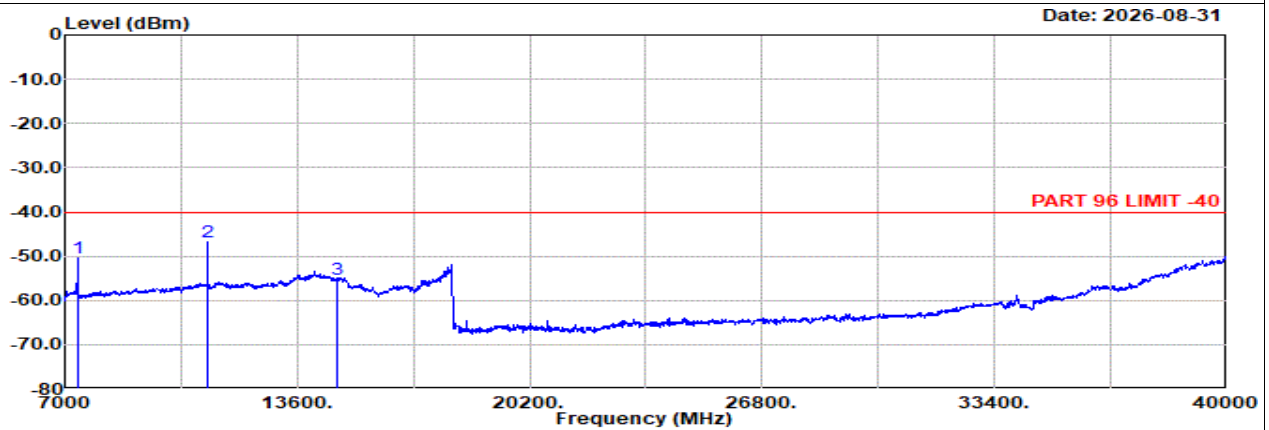


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Horizontal

: SA n48 20M Ch646000 1RB1 BPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB			dBuV	dBm	dB	
1	7362.00	-50.95	RMS		36.65	-43.02	0.90	-95.23	49.75	-40.00	-10.95	Horizontal
2	11043.00	-46.02	RMS		38.79	-38.60	0.60	-95.23	48.42	-40.00	-6.02	Horizontal
3	14724.00	-55.35	RMS		40.40	-35.50	0.40	-95.23	34.58	-40.00	-15.35	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Vertical

: SA n48 20M Ch646000 1RB1 BPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB			dBuV	dBm	dB	
1	7362.00	-50.36	RMS		36.65	-43.02	0.90	-95.23	50.34	-40.00	-10.36	Vertical
2	11043.00	-46.94	RMS		38.79	-38.60	0.60	-95.23	47.50	-40.00	-6.94	Vertical
3	14724.00	-55.28	RMS		40.40	-35.50	0.40	-95.23	34.65	-40.00	-15.28	Vertical

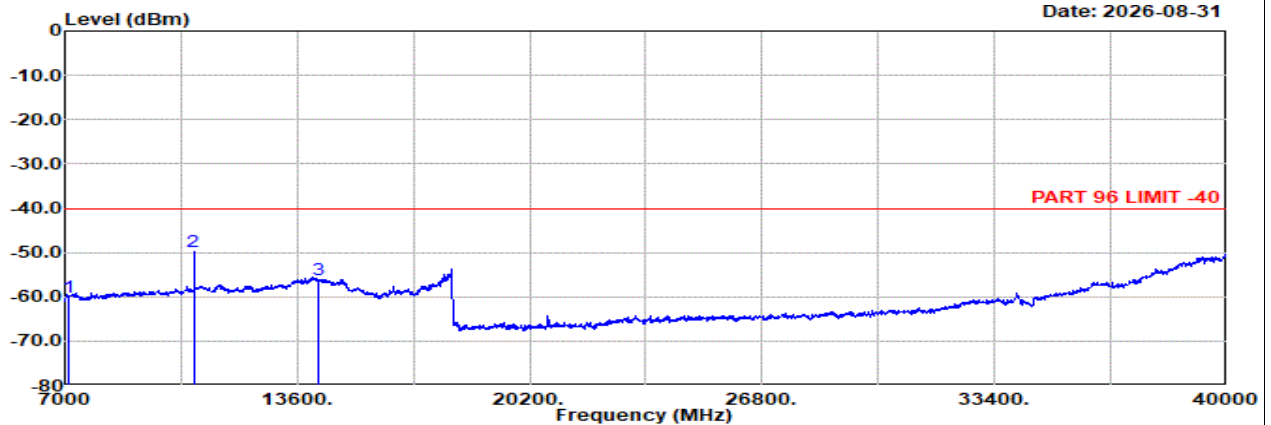


Ant. 1+7

Part 96 Mode 2

NR SA n48 MIMO 20M Ch637334 1RB1 QPSK

L

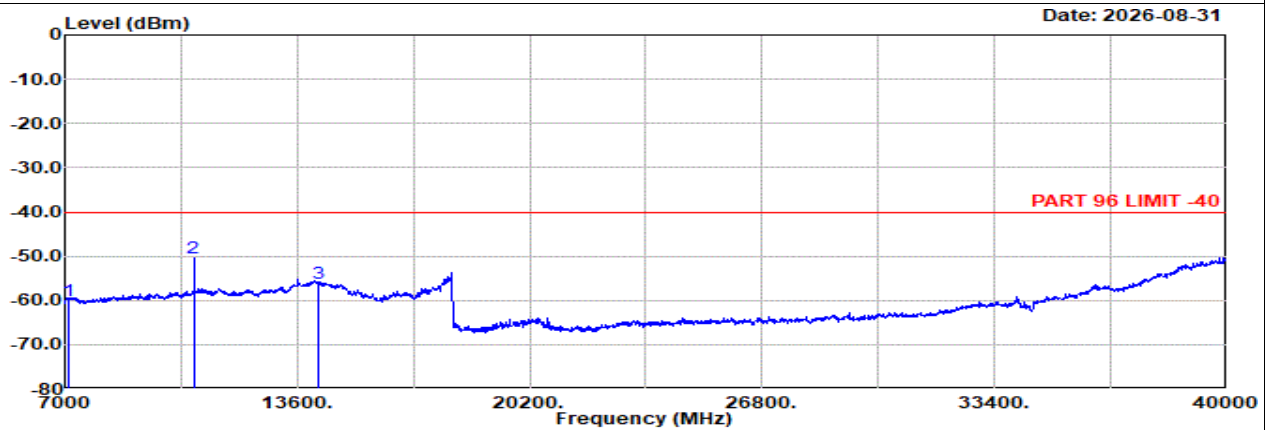


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Horizontal

: SA n48 20M MIMO Ch637334 1RB1 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB		dB	dBuV	dBm	dB	
1	7102.00	-59.92	RMS		36.41	-44.45	1.11	-95.23	42.24	-40.00	-19.92	Horizontal
2	10653.00	-49.96	RMS		38.91	-40.96	0.59	-95.23	46.73	-40.00	-9.96	Horizontal
3	14204.00	-56.04	RMS		40.79	-37.14	0.44	-95.23	35.10	-40.00	-16.04	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Vertical

: SA n48 20M MIMO Ch637334 1RB1 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB		dB	dBuV	dBm	dB	
1	7102.00	-59.94	RMS		36.41	-44.45	1.11	-95.23	42.22	-40.00	-19.94	Vertical
2	10653.00	-50.37	RMS		38.91	-40.96	0.59	-95.23	46.32	-40.00	-10.37	Vertical
3	14204.00	-56.07	RMS		40.79	-37.14	0.44	-95.23	35.07	-40.00	-16.07	Vertical

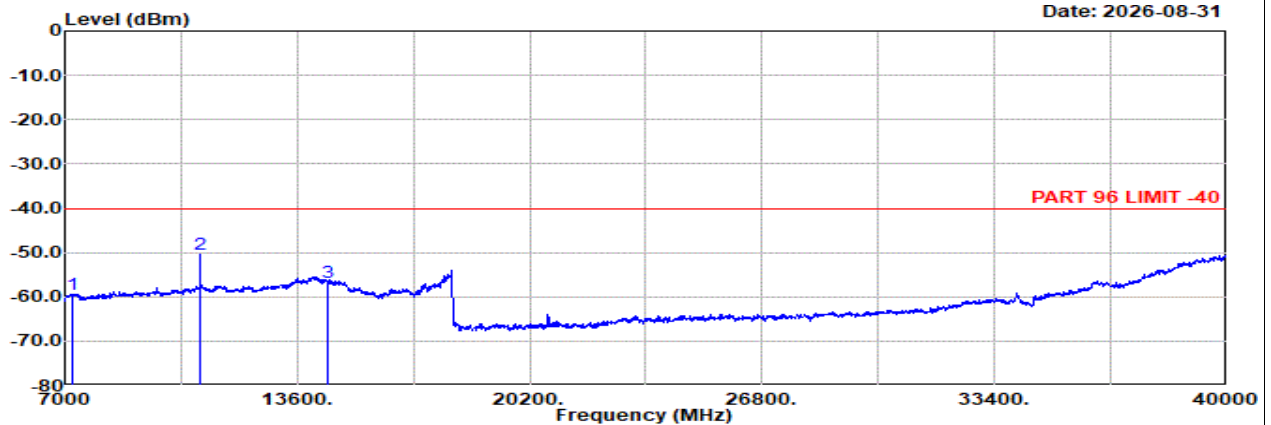


Ant. 1+7

Part 96 Mode 2

NR SA n48 MIMO 20M Ch641666 1RB1 QPSK

M

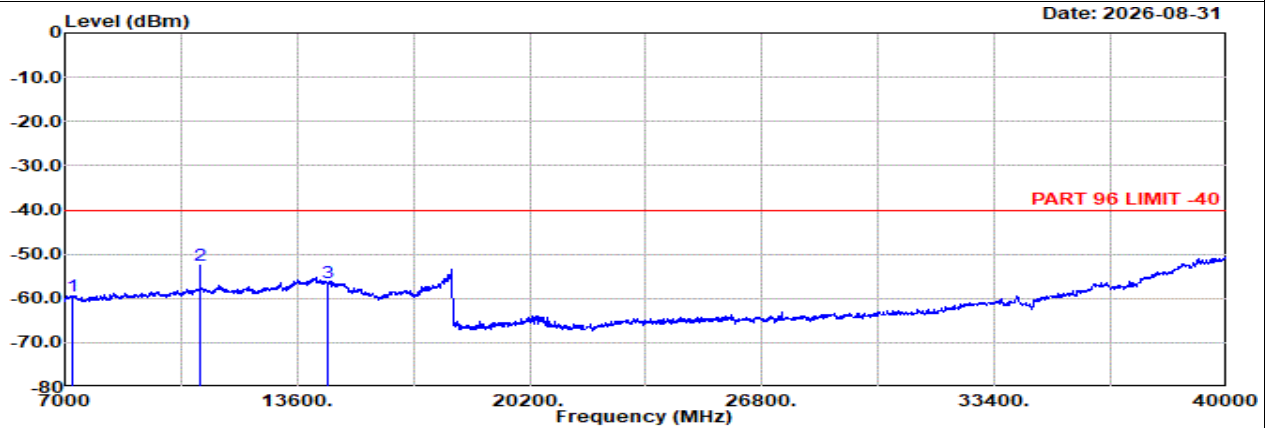


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Horizontal

: SA n48 20M MIMO Ch641666 1RB1 QPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin Pol	
				Factor	1					
	MHz	dBm								
1	7232.00	-59.53	RMS	36.90	-44.39	0.96	-95.23	42.23	-40.00	-19.53 Horizontal
2	10848.00	-50.42	RMS	38.90	-40.54	0.59	-95.23	45.86	-40.00	-10.42 Horizontal
3	14464.00	-56.81	RMS	40.60	-37.22	0.42	-95.23	34.62	-40.00	-16.81 Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Vertical

: SA n48 20M MIMO Ch641666 1RB1 QPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin Pol	
				Factor	1					
	MHz	dBm								
1	7232.00	-59.34	RMS	36.90	-44.39	0.96	-95.23	42.42	-40.00	-19.34 Vertical
2	10848.00	-52.40	RMS	38.90	-40.54	0.59	-95.23	43.88	-40.00	-12.40 Vertical
3	14464.00	-56.43	RMS	40.60	-37.22	0.42	-95.23	35.00	-40.00	-16.43 Vertical

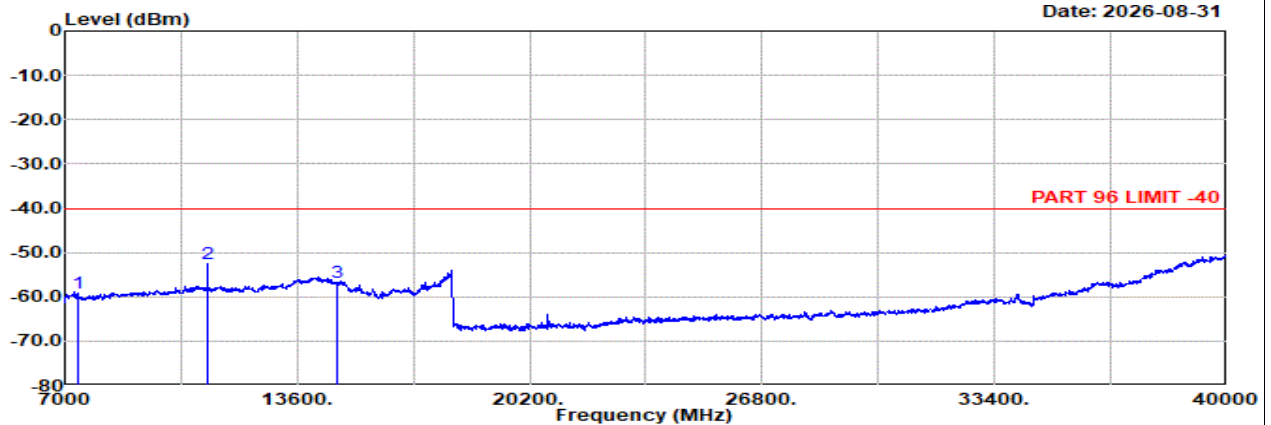


Ant. 1+7

Part 96 Mode 2

NR SA n48 MIMO 20M Ch646000 1RB1 QPSK

H

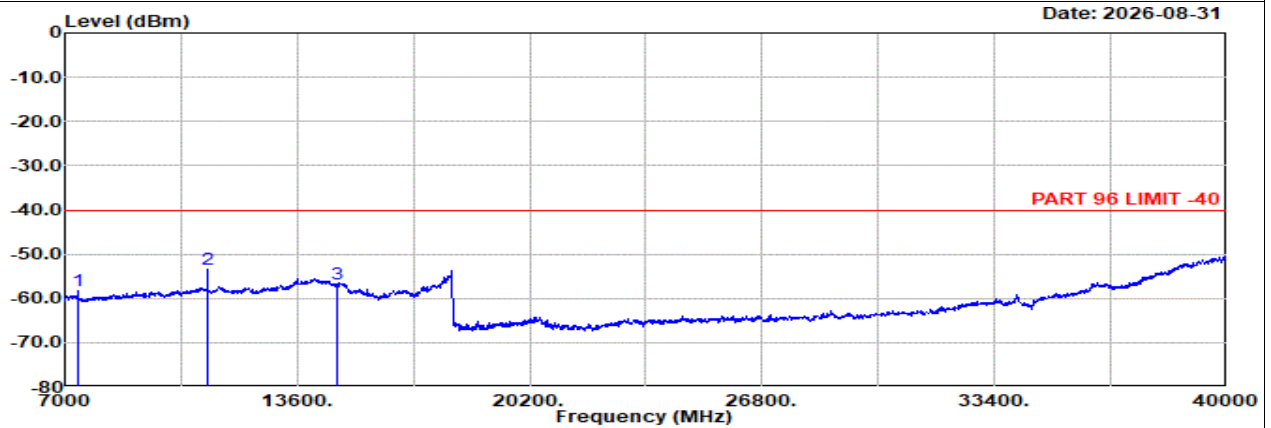


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Horizontal

: SA n48 20M MIMO Ch646000 1RB1 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB		dBuV	dBm	dB		
1	7362.00	-59.24	RMS		36.65	-44.29	0.90 -95.23	42.73	-40.00	-19.24	Horizontal	
2	11043.00	-52.60	RMS		38.79	-40.15	0.60 -95.23	43.39	-40.00	-12.60	Horizontal	
3	14724.00	-56.75	RMS		40.40	-37.17	0.40 -95.23	34.85	-40.00	-16.75	Horizontal	



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-01212 Vertical

: SA n48 20M MIMO Ch646000 1RB1 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB		dBuV	dBm	dB		
1	7362.00	-58.39	RMS		36.65	-44.29	0.90 -95.23	43.58	-40.00	-18.39	Vertical	
2	11043.00	-53.48	RMS		38.79	-40.15	0.60 -95.23	42.51	-40.00	-13.48	Vertical	
3	14724.00	-56.69	RMS		40.40	-37.17	0.40 -95.23	34.91	-40.00	-16.69	Vertical	

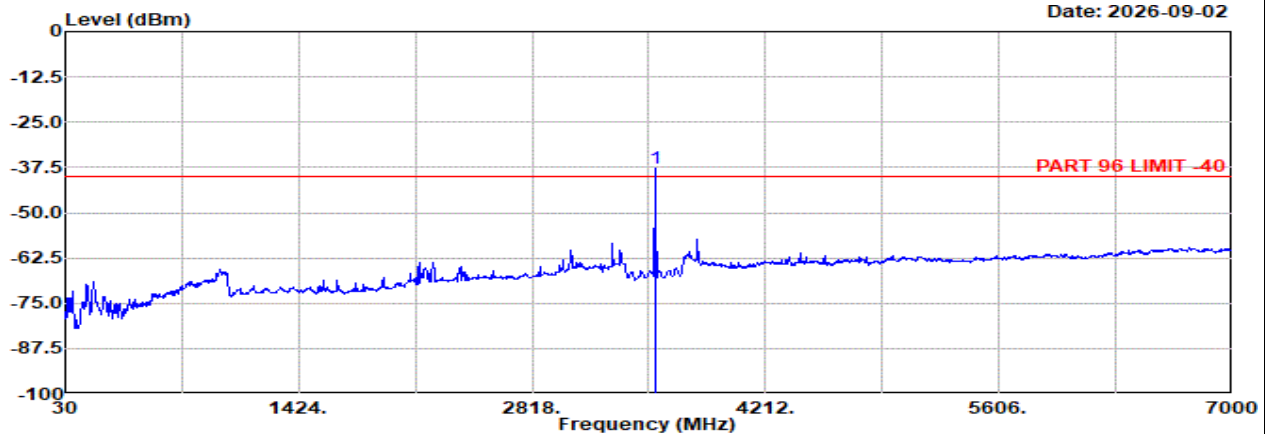


Ant. 1

Part 96 Mode 1

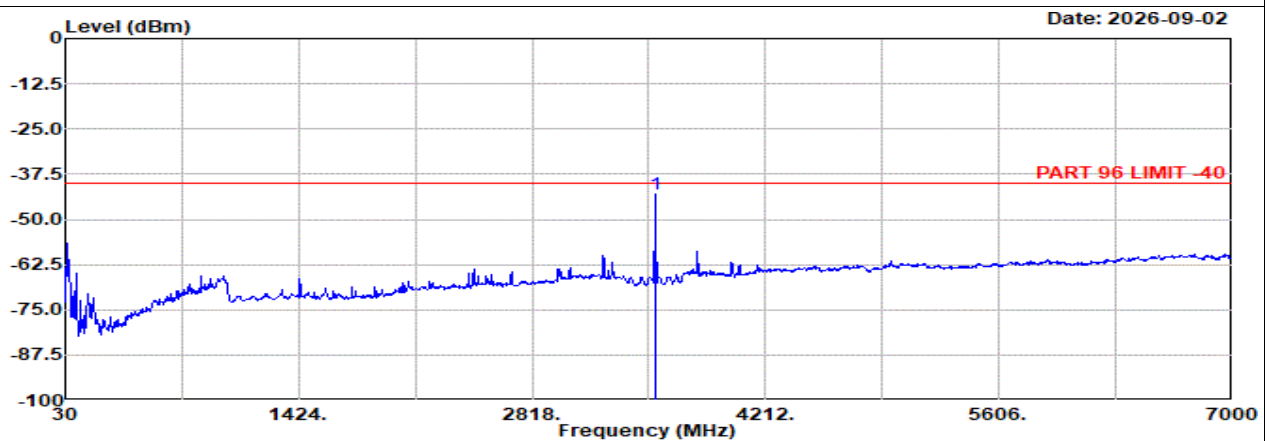
NR SA n48 20M Ch637334 1RB1 BPSK

L



Site : 03CH12-HY
Condition: PART 96 LIMIT -40 3m 9120D-01212 Horizontal
: SA n48 20M Ch637334 1RB1 BPSK
: #1 is fundamental signal which can be ignored.

	Freq	Level	Detector	Ant Factor	Amp\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
	MHz	dBm			1			g			
1	3551.00	-37.92	RMS	29.70	-46.55	0.54	-95.23	73.62	-40.00	2.08	Horizontal



Site : 03CH12-HY
Condition: PART 96 LIMIT -40 3m 9120D-01212 Vertical
: SA n48 20M Ch637334 1RB1 BPSK
: #1 is fundamental signal which can be ignored.

	Freq	Level	Detector	Ant Factor	Amp\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
	MHz	dBm			1			g			
1	3551.00	-43.16	RMS	29.70	-46.55	0.54	-95.23	68.38	-40.00	-3.16	Vertical