



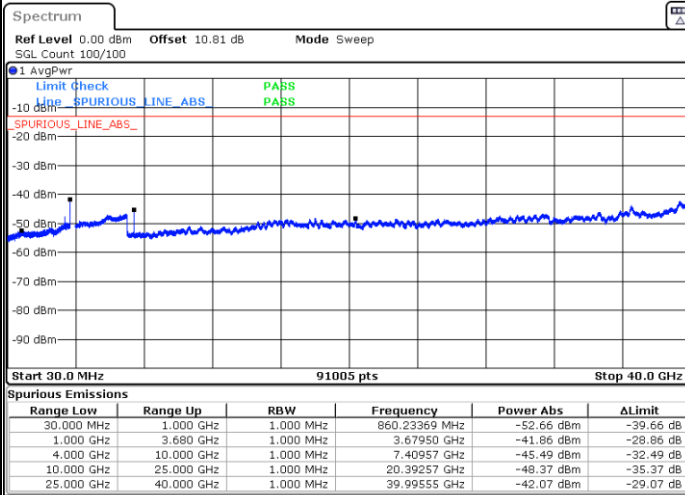
Conducted Spurious Emission

10M-ANT2

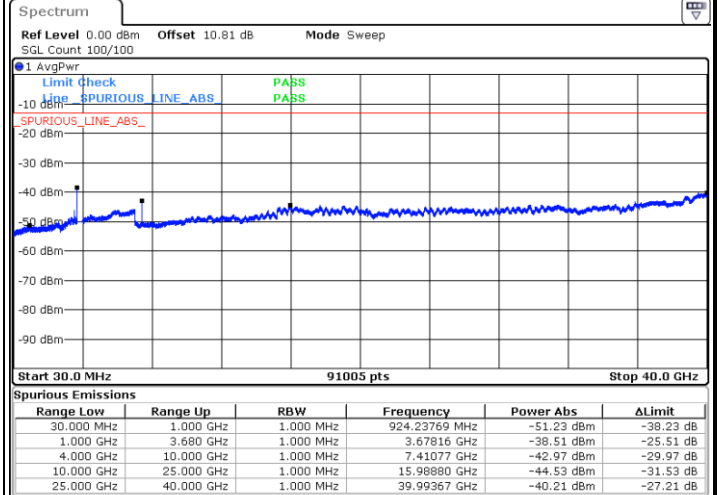
FR1 n77 / 10MHz / CP

Lowest Band Edge / FULLRB/QPSK

Lowest Band Edge / FULLRB/16QAM



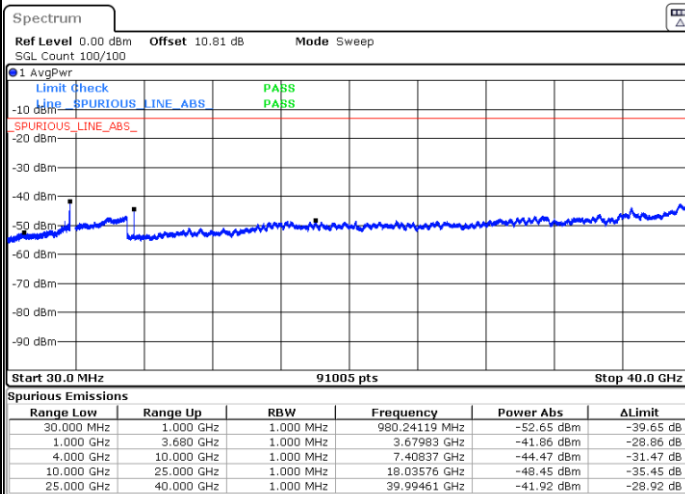
Date: 27.AUG.2024 16:48:00



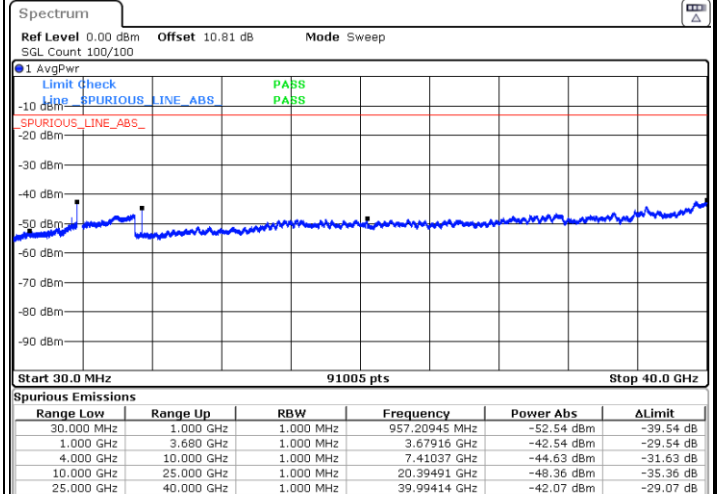
Date: 27.SEP.2024 02:16:39

Lowest Band Edge / FULLRB/64QAM

Lowest Band Edge / FULLRB/256QAM



Date: 27.AUG.2024 16:55:24



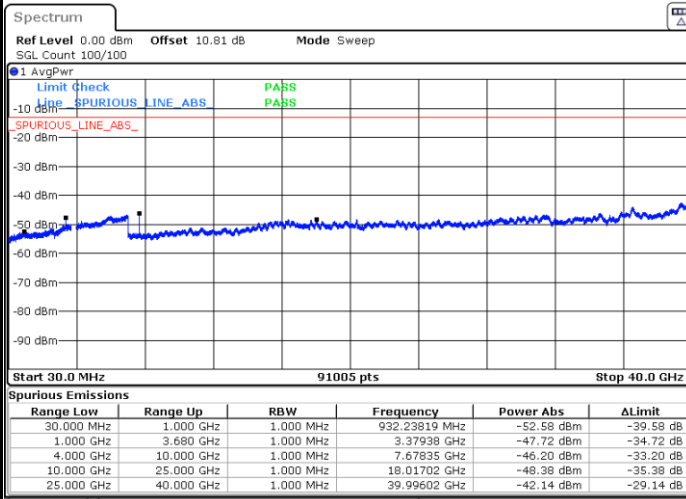
Date: 27.AUG.2024 16:59:30



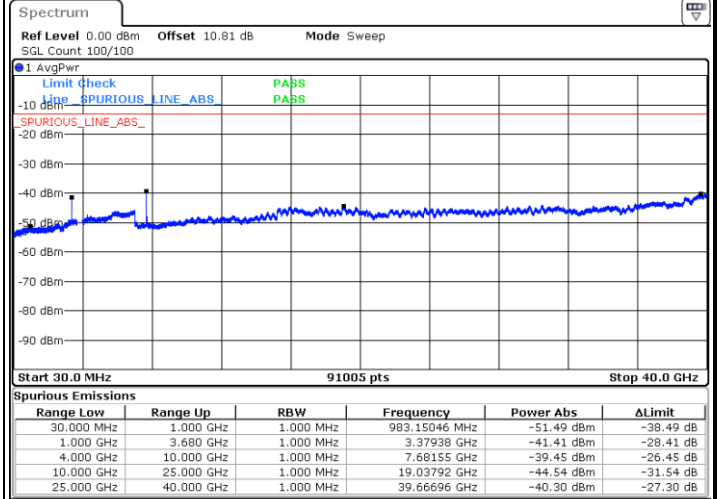
FR1 n77 / 10MHz / CP

Middle Band Edge / FULLRB/QPSK

Middle Band Edge / FULLRB/16QAM



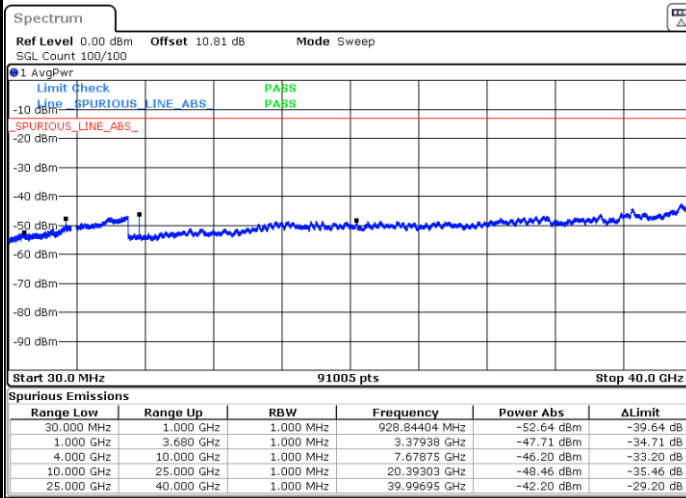
Date: 27.AUG.2024 17:01:49



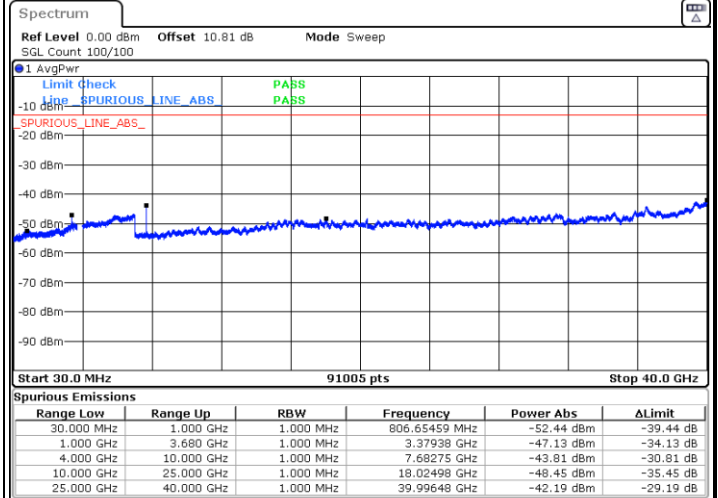
Date: 27.SEP.2024 02:28:33

Middle Band Edge / FULLRB/64QAM

Middle Band Edge / FULLRB/256QAM



Date: 27.AUG.2024 17:07:27



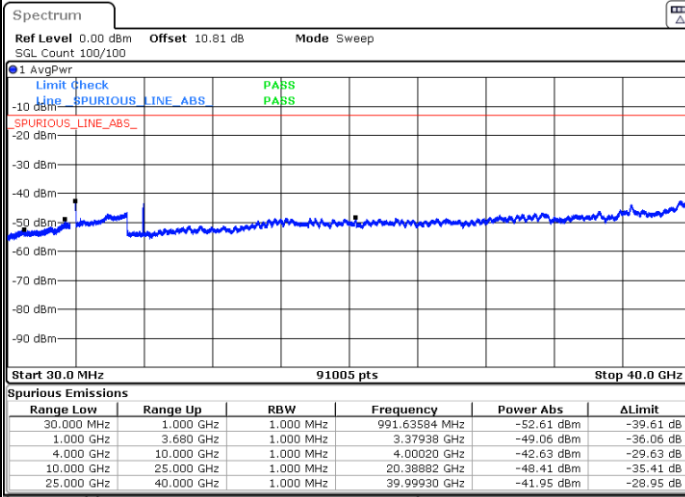
Date: 27.AUG.2024 17:47:39



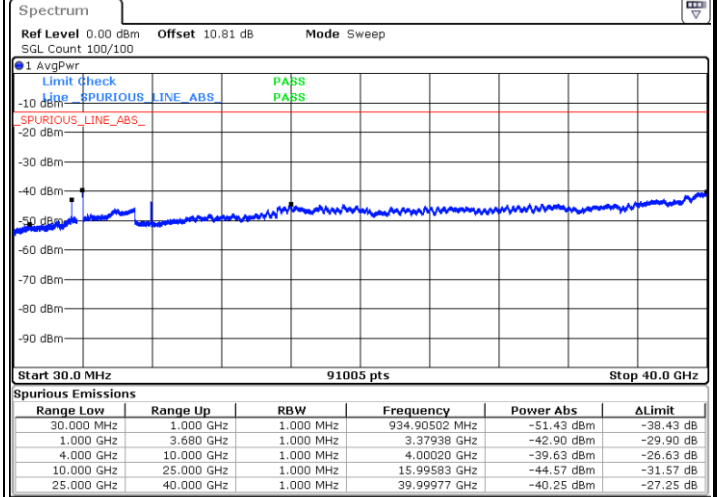
FR1 n77 / 10MHz / CP

Highest Band Edge / FULLRB/QPSK

Highest Band Edge / FULLRB/16QAM



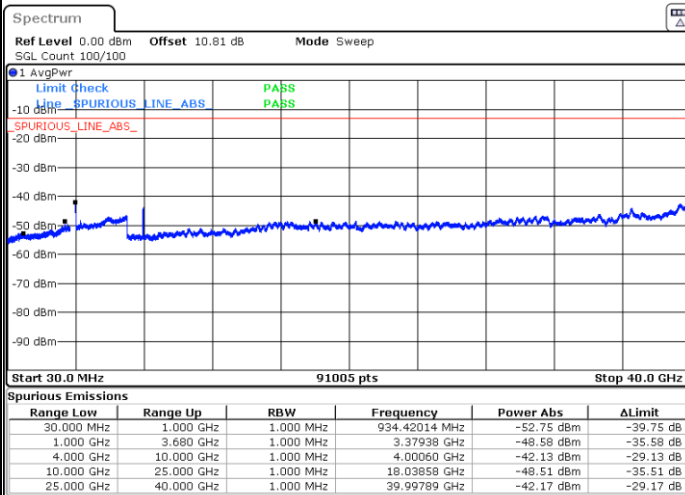
Date: 27.AUG.2024 17:53:54



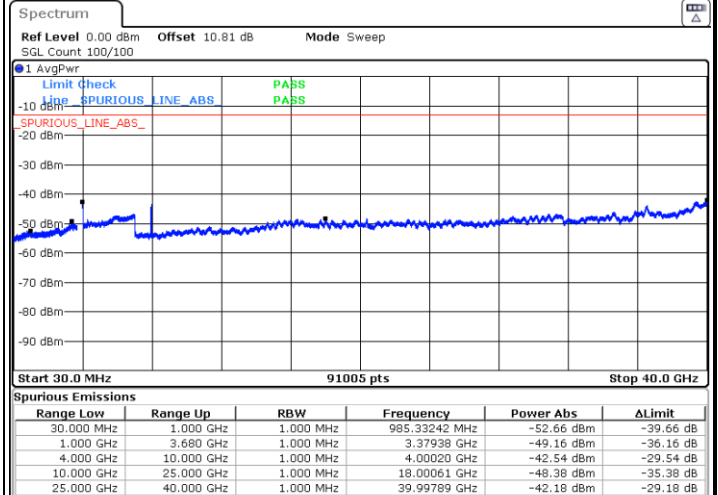
Date: 27.SEP.2024 03:42:32

Highest Band Edge / FULLRB/64QAM

Highest Band Edge / FULLRB/256QAM



Date: 27.AUG.2024 17:55:13



Date: 27.AUG.2024 17:55:29

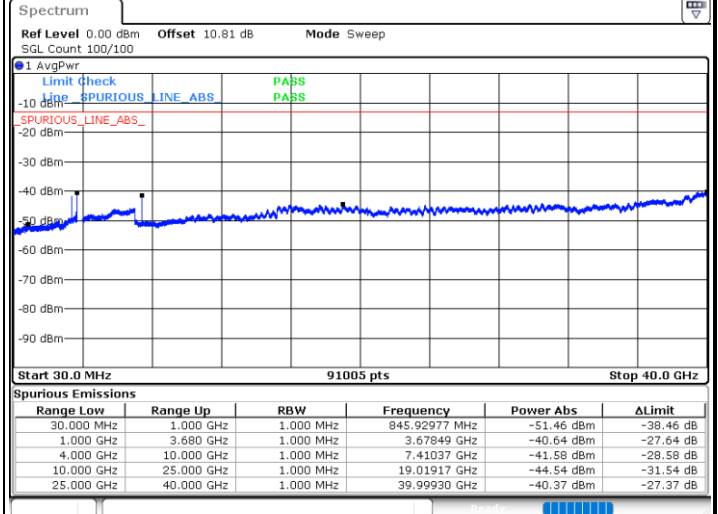
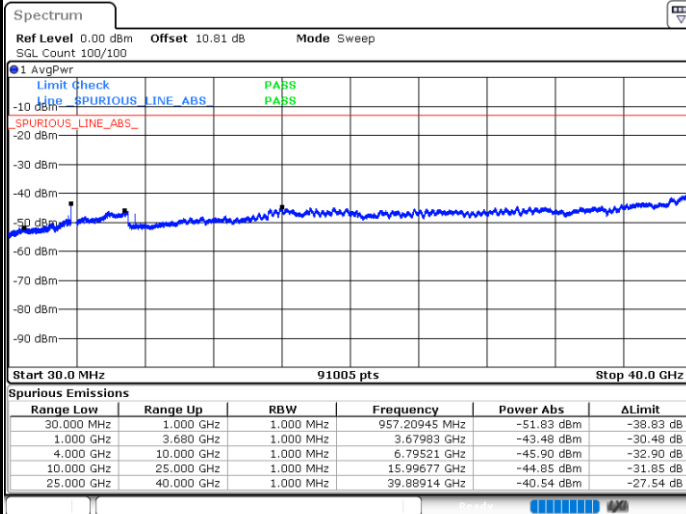


10M-ANT1

FR1 n77 / 10MHz / CP

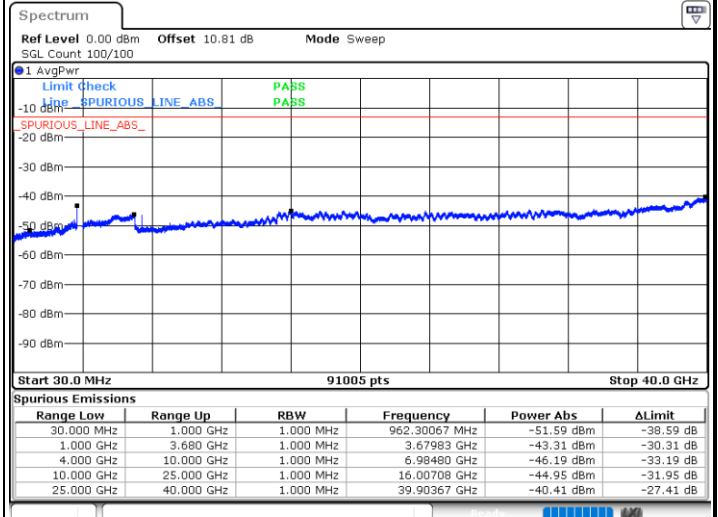
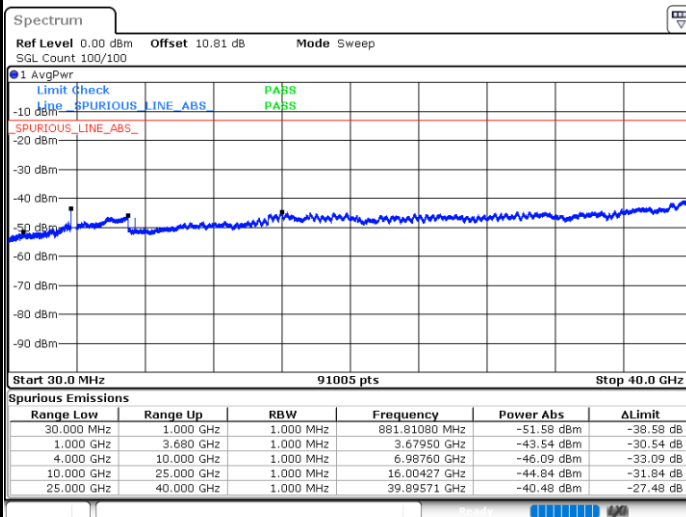
Lowest Band Edge / FULLRB/QPSK

Lowest Band Edge / FULLRB/16QAM



Lowest Band Edge / FULLRB/64QAM

Lowest Band Edge / FULLRB/256QAM

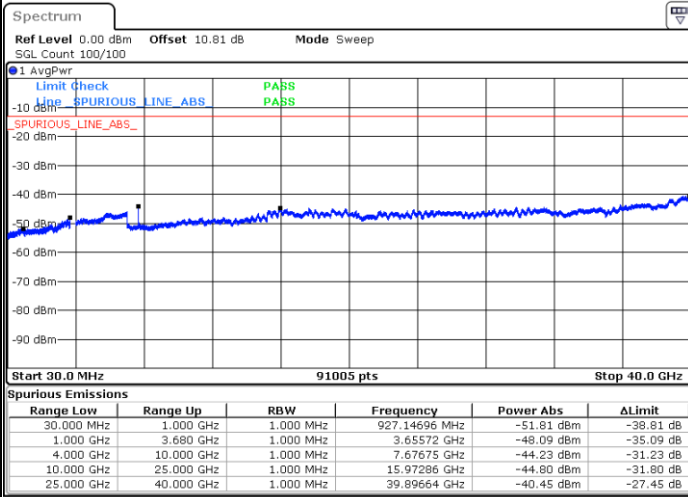




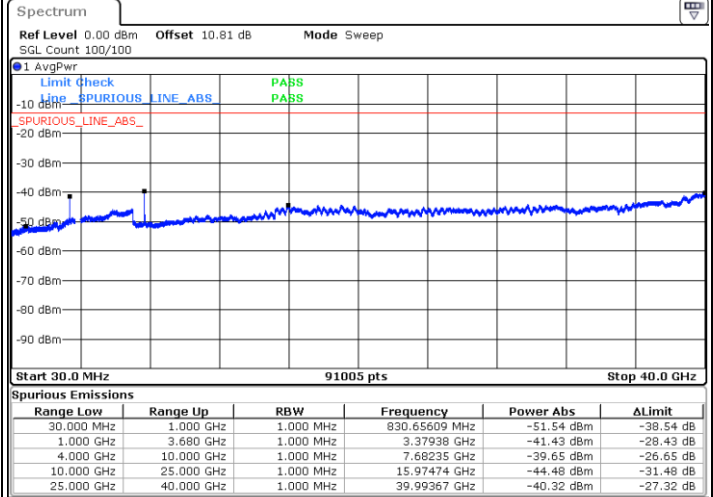
FR1 n77 / 10MHz / CP

Middle Band Edge / FULLRB/QPSK

Middle Band Edge / FULLRB/16QAM



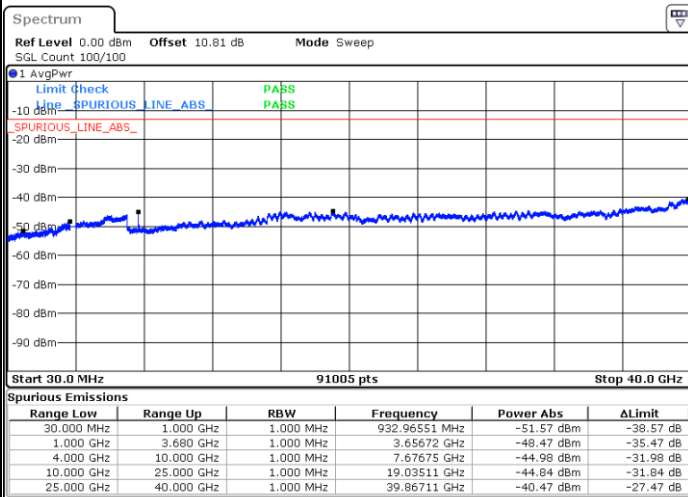
Date: 28.AUG.2024 13:36:13



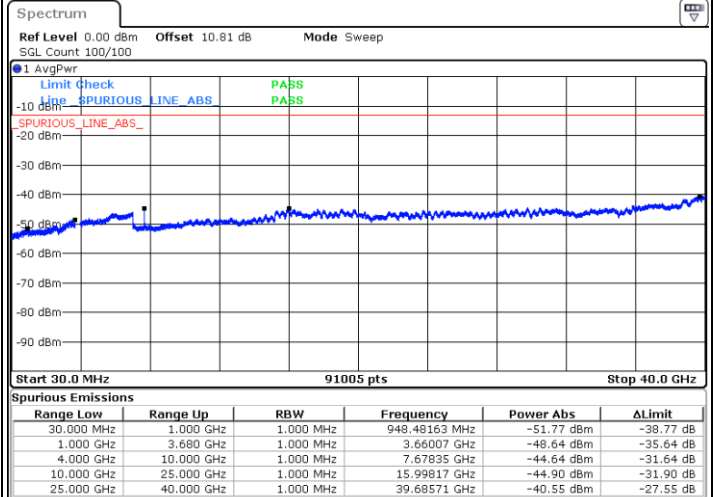
Date: 27.SEP.2024 02:27:24

Middle Band Edge / FULLRB/64QAM

Middle Band Edge / FULLRB/256QAM



Date: 28.AUG.2024 13:37:46



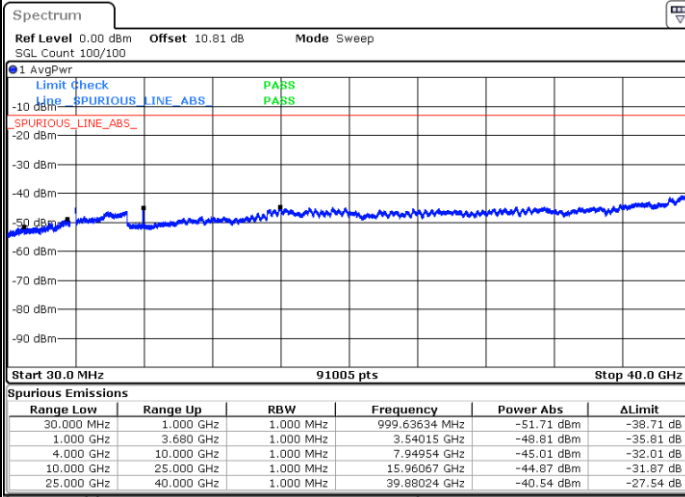
Date: 28.AUG.2024 13:39:14



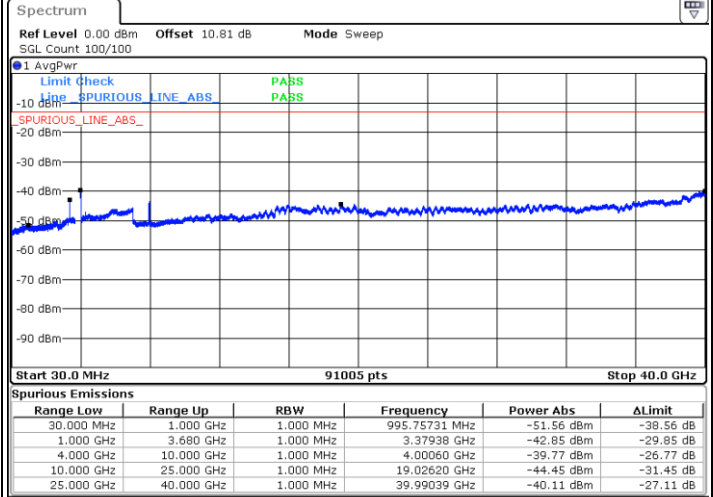
FR1 n77 / 10MHz / CP

Highest Band Edge / FULLRB/QPSK

Highest Band Edge / FULLRB/16QAM



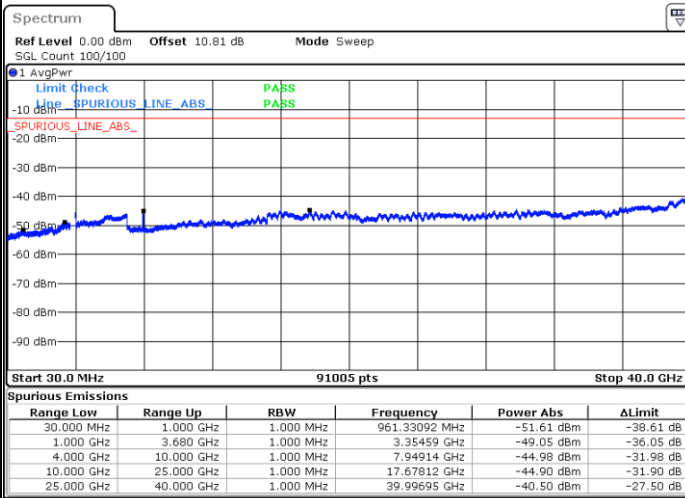
Date: 28.AUG.2024 13:52:41



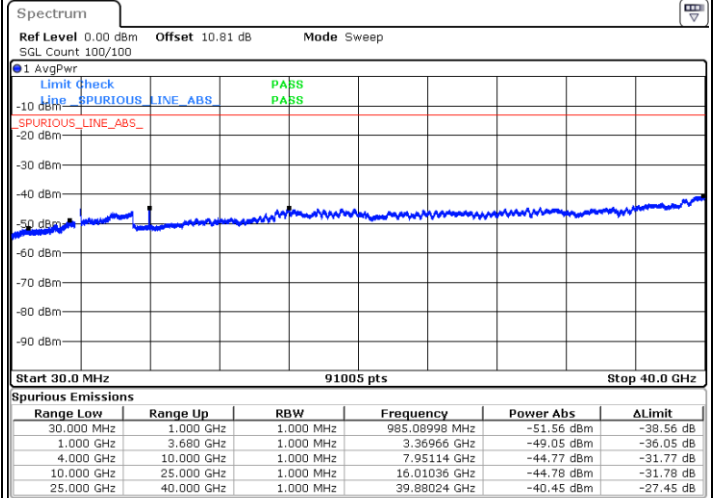
Date: 27.SEP.2024 03:40:52

Highest Band Edge / FULLRB/64QAM

Highest Band Edge / FULLRB/256QAM



Date: 28.AUG.2024 13:50:16



Date: 28.AUG.2024 13:49:02

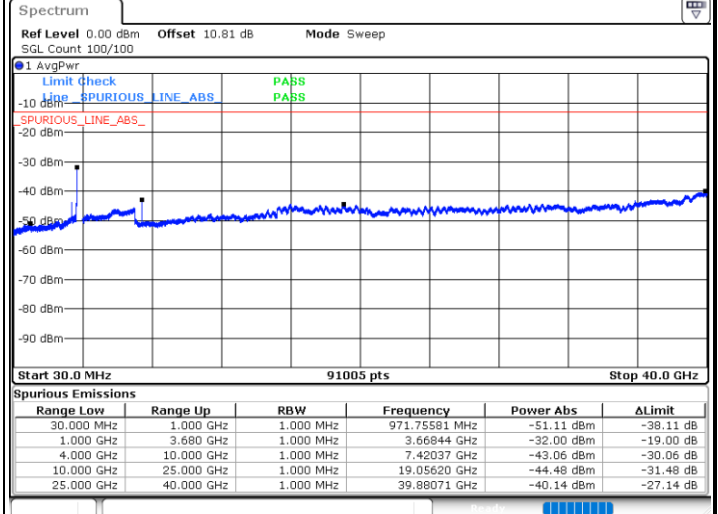
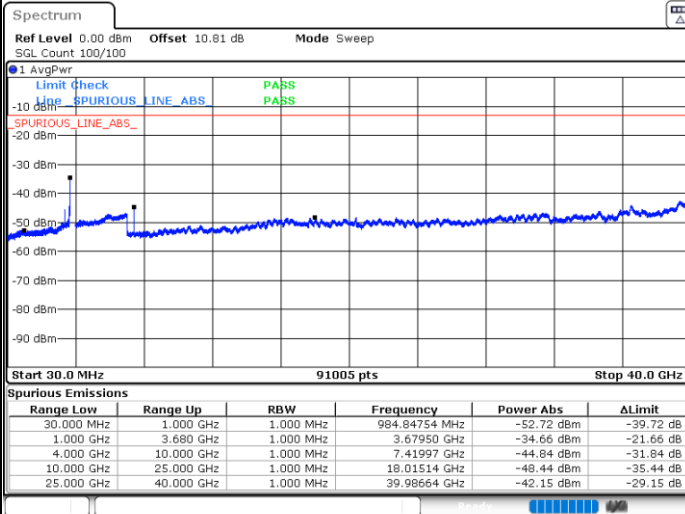


20M-ANT2

FR1 n77 / 20MHz / CP

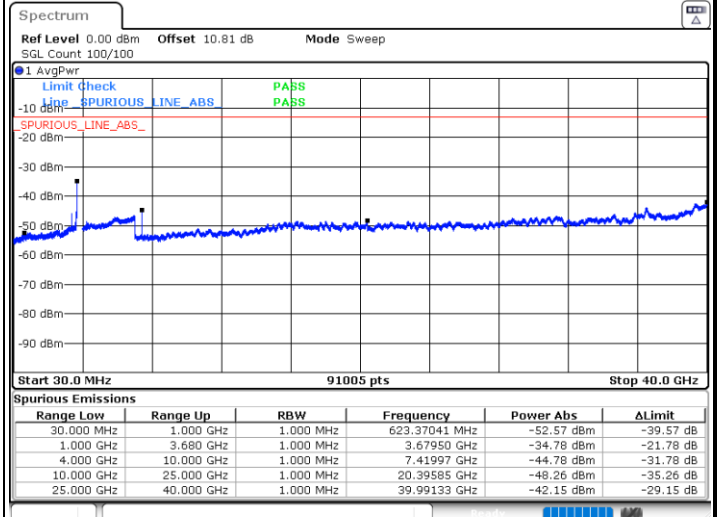
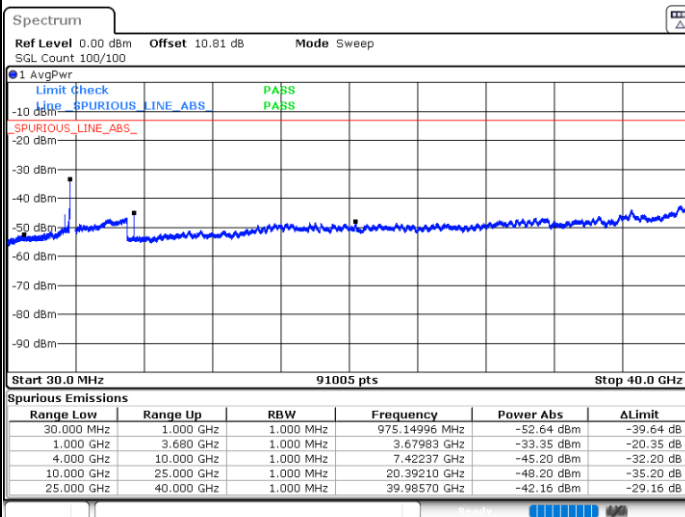
Lowest Band Edge / FULLRB/QPSK

Lowest Band Edge / FULLRB/16QAM



Lowest Band Edge / FULLRB/64QAM

Lowest Band Edge / FULLRB/256QAM

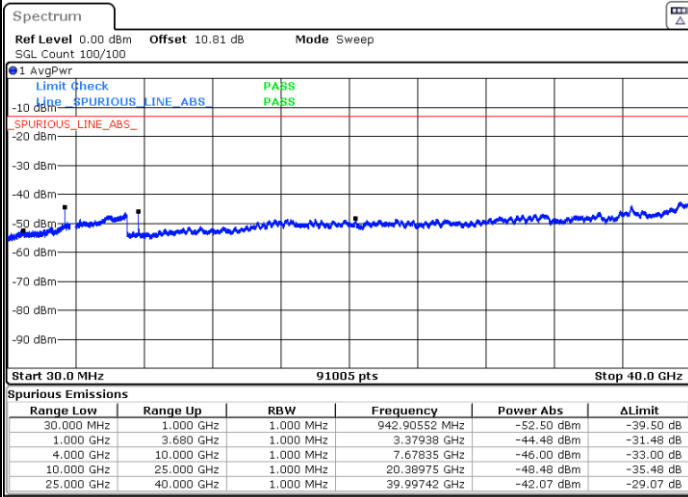




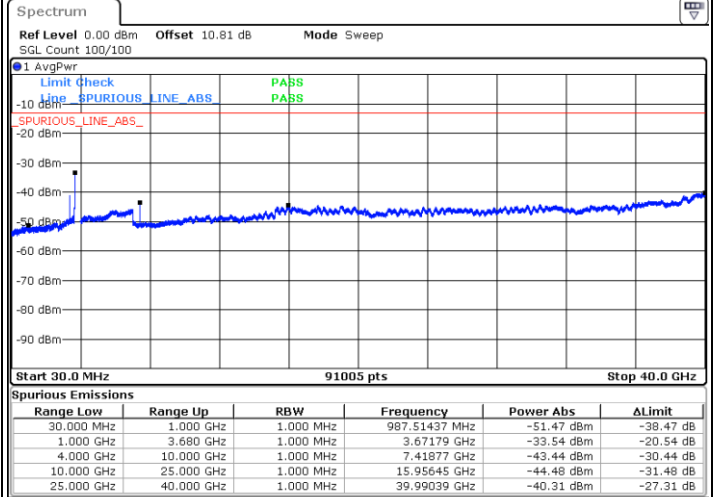
FR1 n77 / 20MHz / CP

Middle Band Edge / FULLRB/QPSK

Middle Band Edge / FULLRB/16QAM



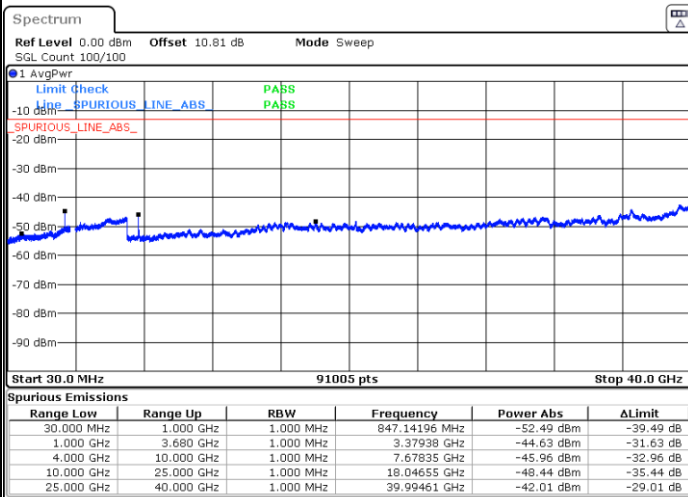
Date: 27.AUG.2024 18:13:44



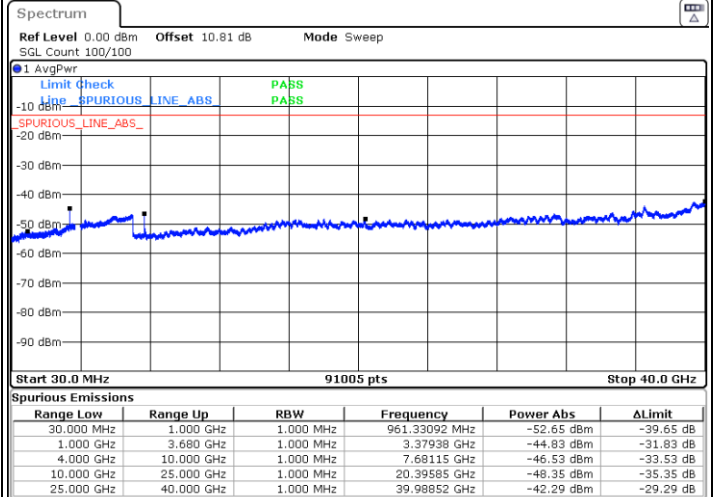
Date: 27.SEP.2024 04:36:30

Middle Band Edge / FULLRB/64QAM

Middle Band Edge / FULLRB/256QAM



Date: 27.AUG.2024 18:15:10



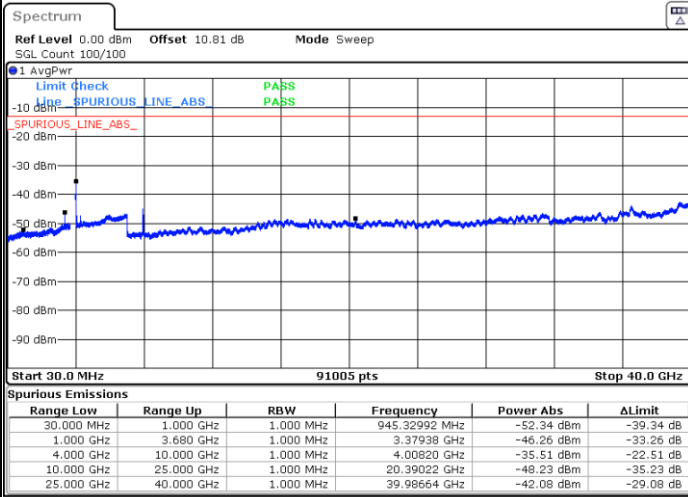
Date: 27.AUG.2024 18:16:31



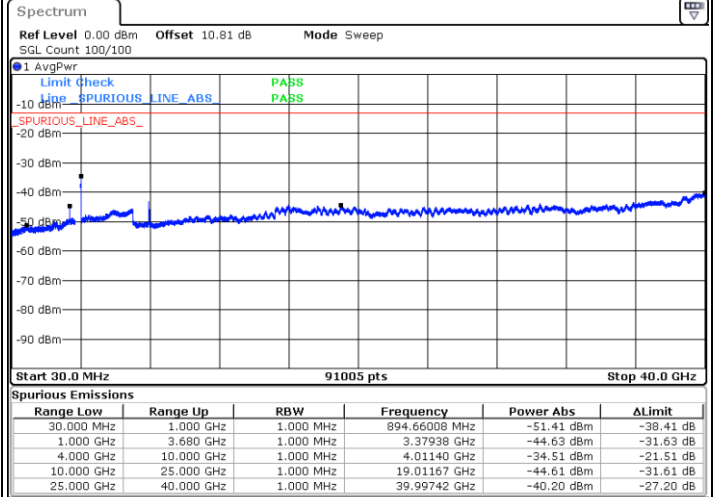
FR1 n77 / 20MHz / CP

Highest Band Edge / FULLRB/QPSK

Highest Band Edge / FULLRB/16QAM



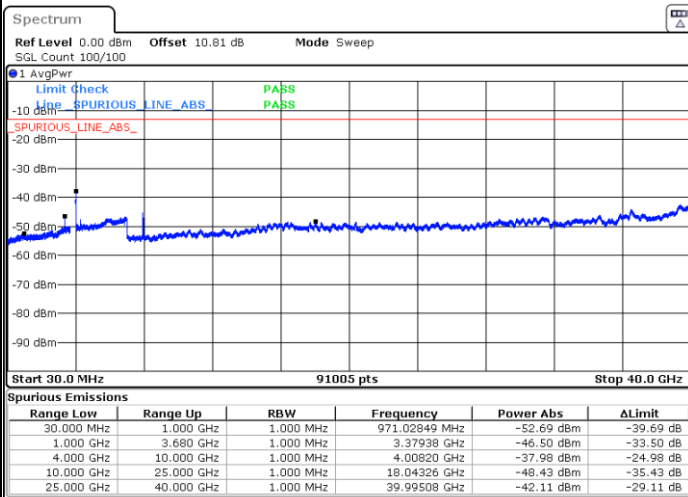
Date: 27.AUG.2024 18:53:44



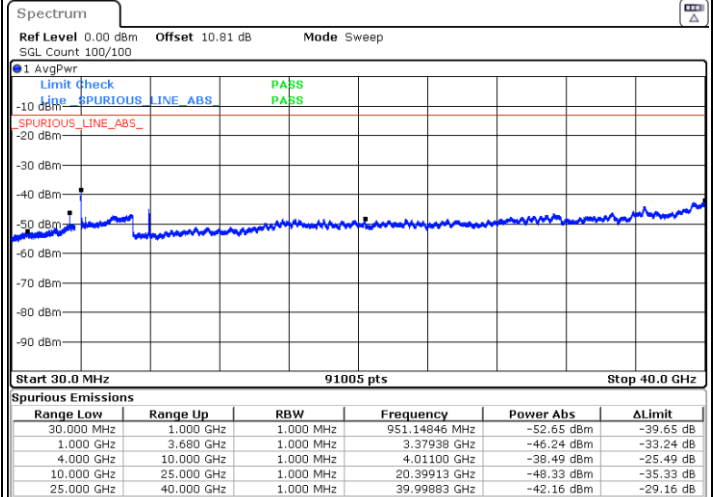
Date: 27.SEP.2024 04:46:31

Highest Band Edge / FULLRB/64QAM

Highest Band Edge / FULLRB/256QAM



Date: 27.AUG.2024 18:52:02



Date: 27.AUG.2024 18:50:42

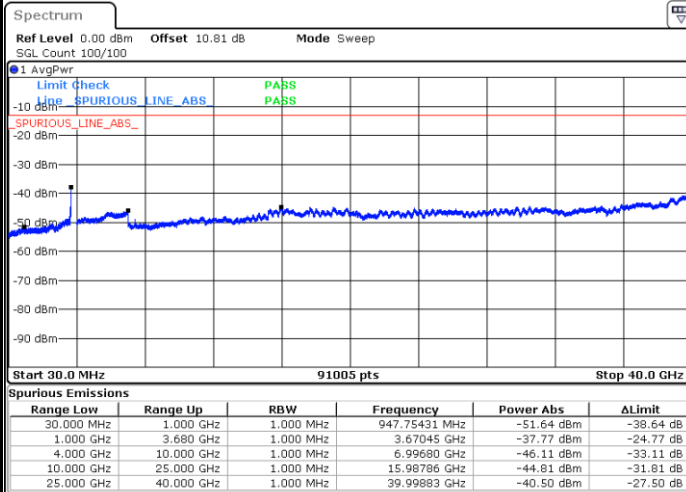


20M-ANT1

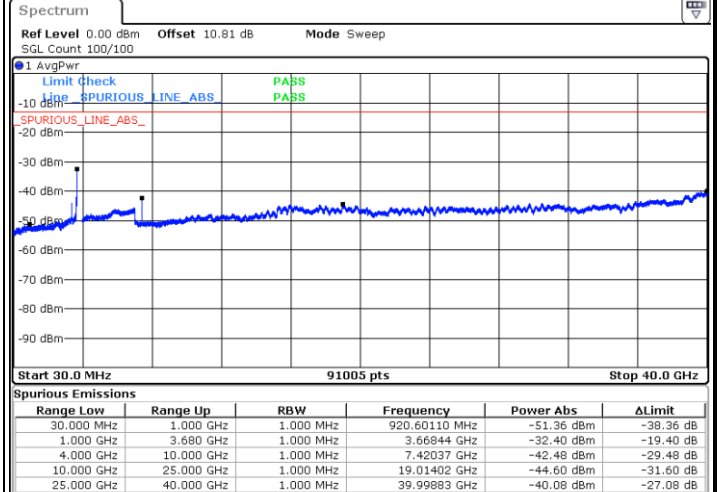
FR1 n77 / 20MHz / CP

Lowest Band Edge / FULLRB/QPSK

Lowest Band Edge / FULLRB/16QAM



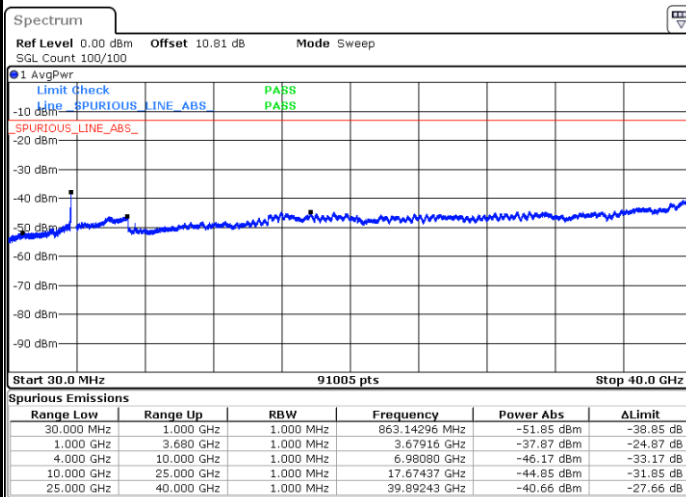
Date: 28.AUG.2024 14:04:52



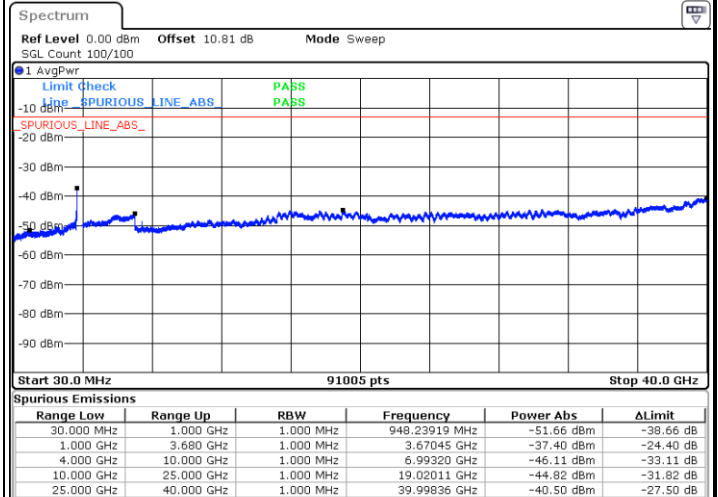
Date: 27.SEP.2024 04:31:18

Lowest Band Edge / FULLRB/64QAM

Lowest Band Edge / FULLRB/256QAM



Date: 28.AUG.2024 14:03:37



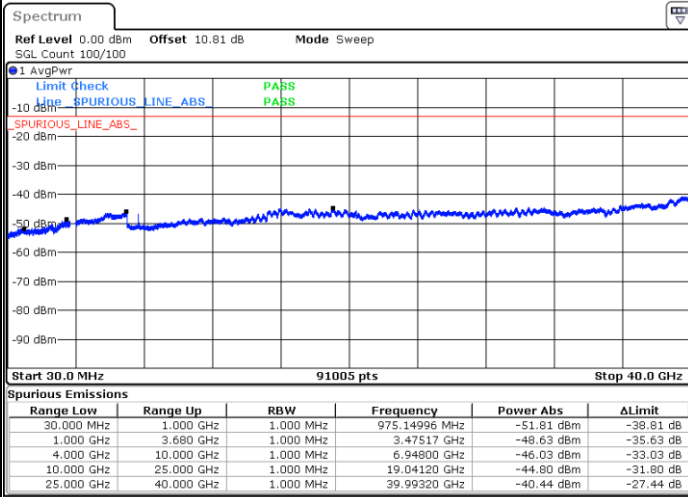
Date: 28.AUG.2024 14:02:22



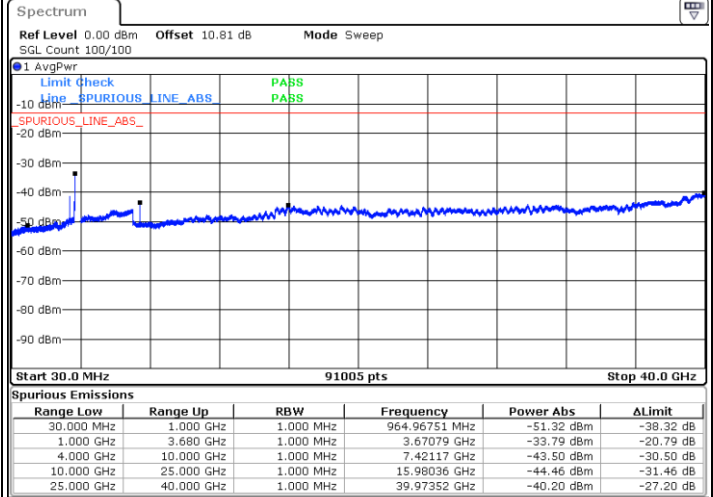
FR1 n77 / 20MHz / CP

Middle Band Edge / FULLRB/QPSK

Middle Band Edge / FULLRB/16QAM



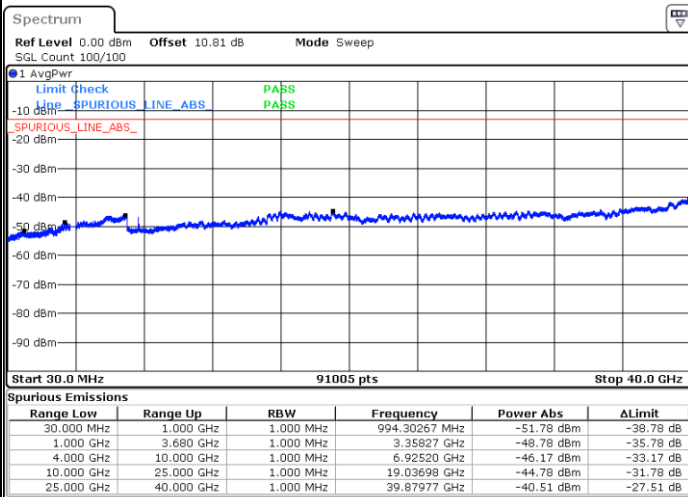
Date: 28.AUG.2024 14:06:51



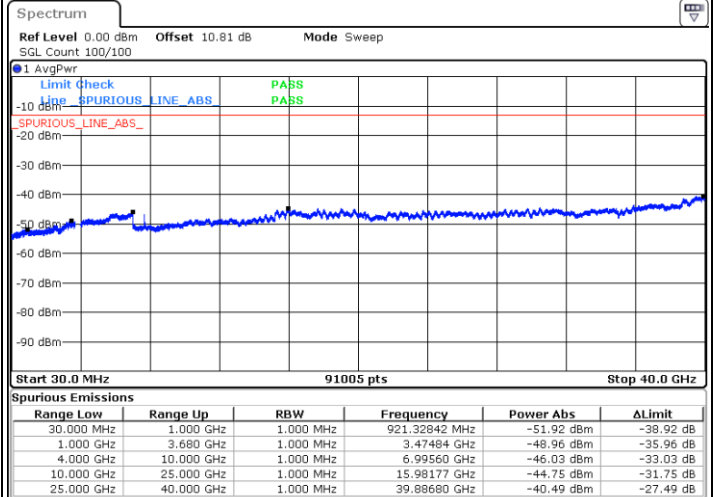
Date: 27.SEP.2024 04:34:54

Middle Band Edge / FULLRB/64QAM

Middle Band Edge / FULLRB/256QAM



Date: 28.AUG.2024 14:08:16



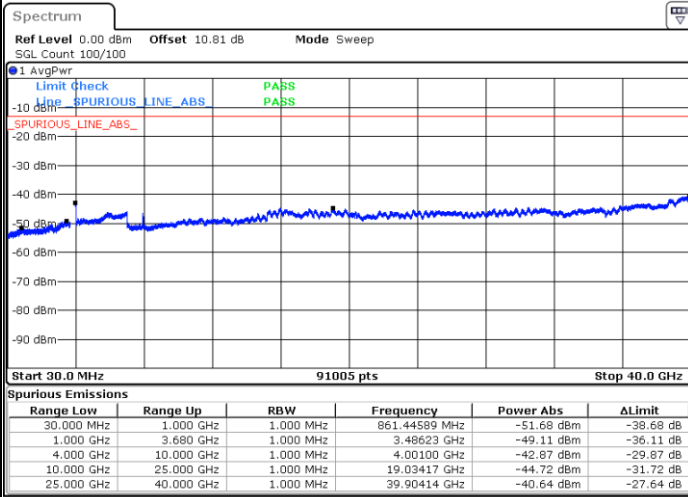
Date: 28.AUG.2024 14:09:24



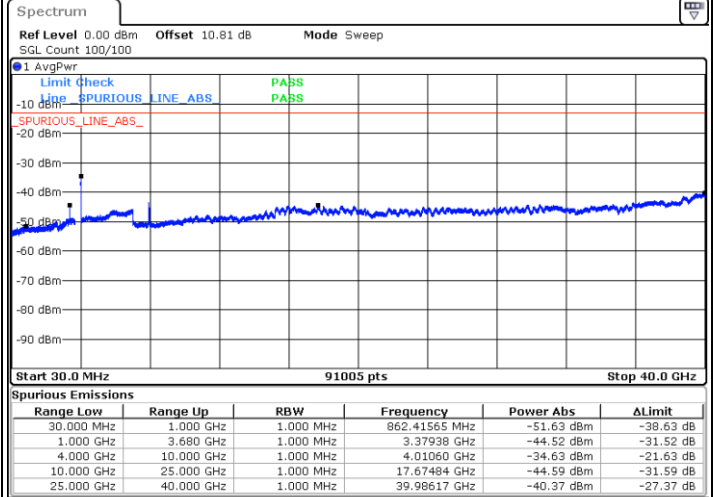
FR1 n77 / 20MHz / CP

Highest Band Edge / FULLRB/QPSK

Highest Band Edge / FULLRB/16QAM



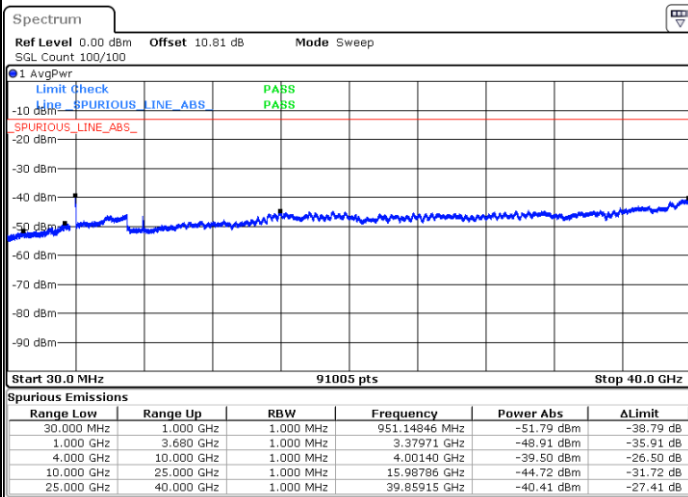
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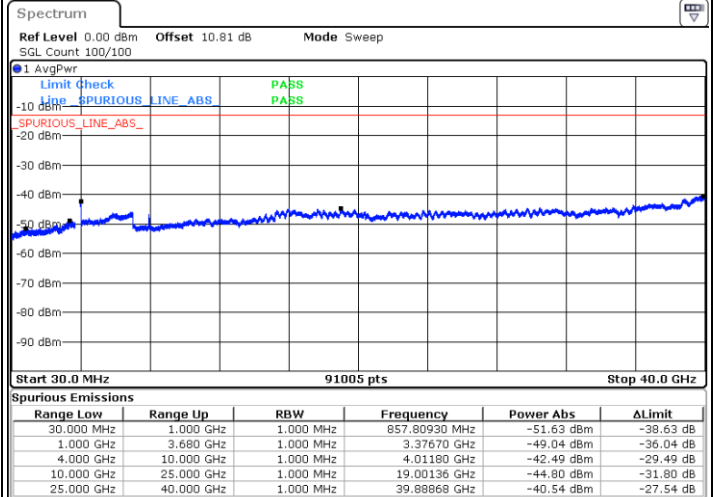
Date: 27.SEP.2024 04:44:22

Highest Band Edge / FULLRB/64QAM

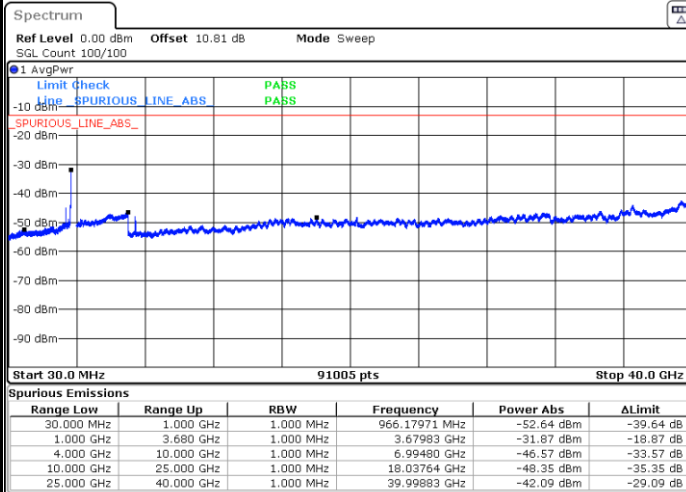
Highest Band Edge / FULLRB/256QAM



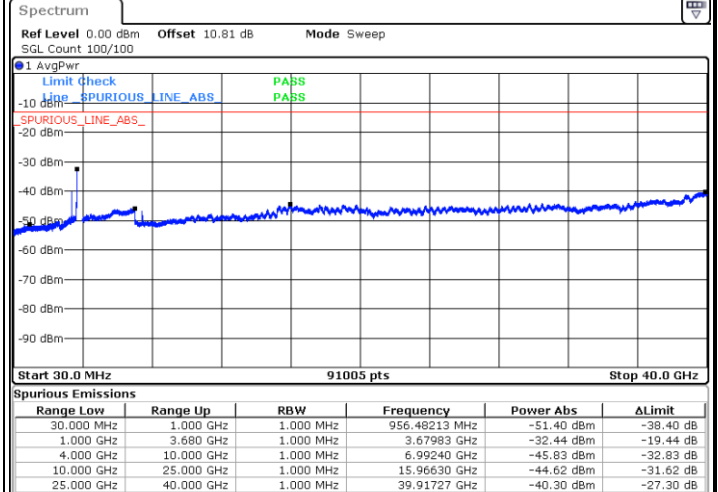
Date: 28.AUG.2024 14:22:08



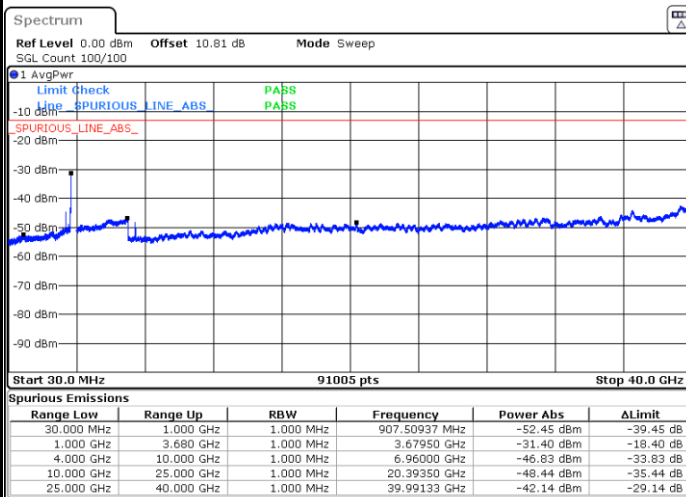
Date: 28.AUG.2024 14:20:41

**30M-ANT2****FR1 n77 / 30MHz / CP****Lowest Band Edge / FULLRB/QPSK****Lowest Band Edge / FULLRB/16QAM**

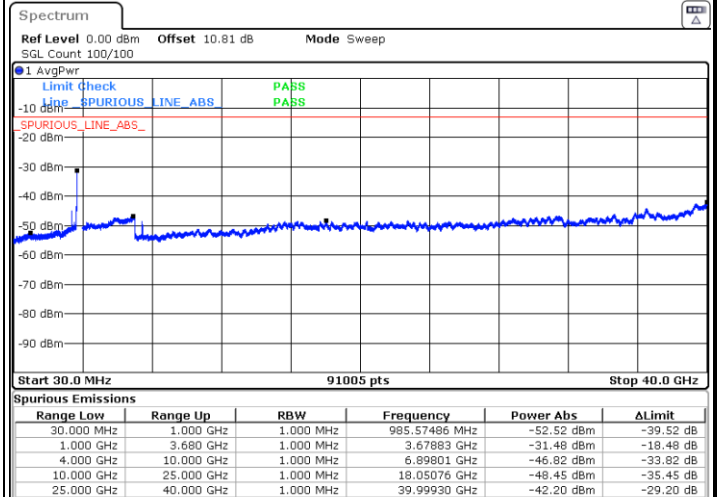
Date: 27.AUG.2024 19:03:56



Date: 27.SEP.2024 05:39:03

Lowest Band Edge / FULLRB/64QAM**Lowest Band Edge / FULLRB/256QAM**

Date: 27.AUG.2024 19:06:04



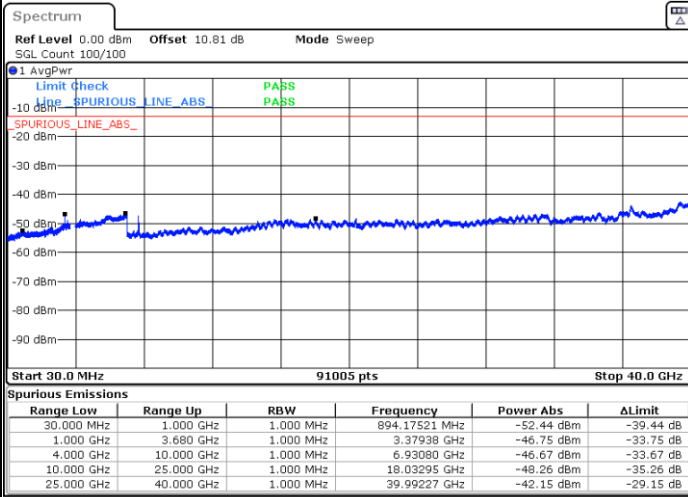
Date: 27.AUG.2024 19:07:14



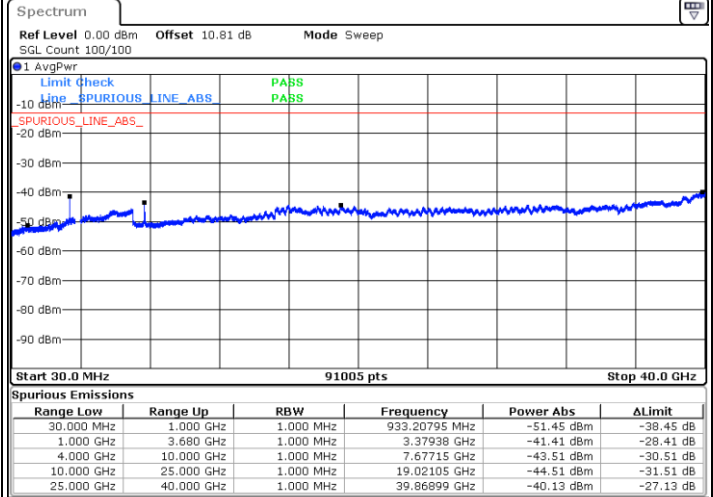
FR1 n77 / 30MHz / CP

Middle Band Edge / FULLRB/QPSK

Middle Band Edge / FULLRB/16QAM



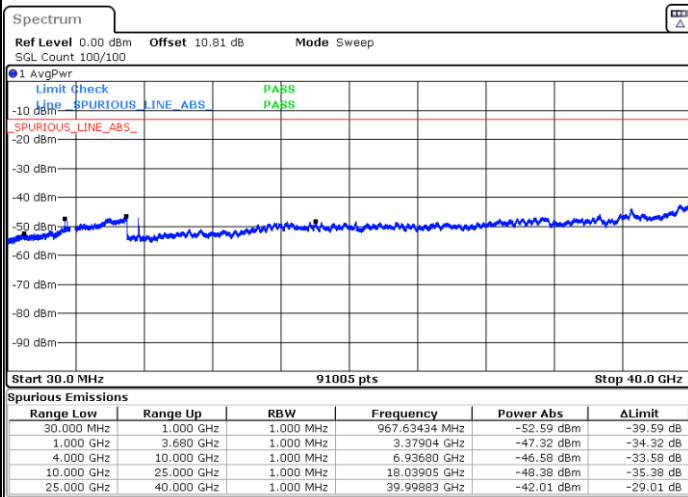
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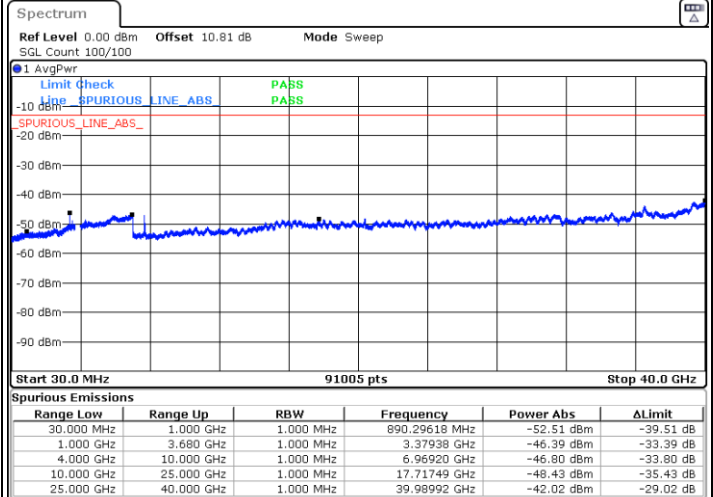
Date: 27.SEP.2024 05:43:14

Middle Band Edge / FULLRB/64QAM

Middle Band Edge / FULLRB/256QAM



Date: 27.AUG.2024 19:34:25



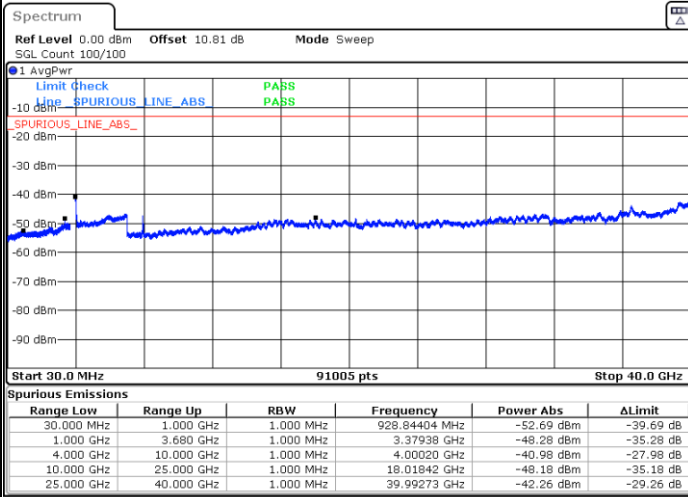
Date: 27.AUG.2024 19:35:59



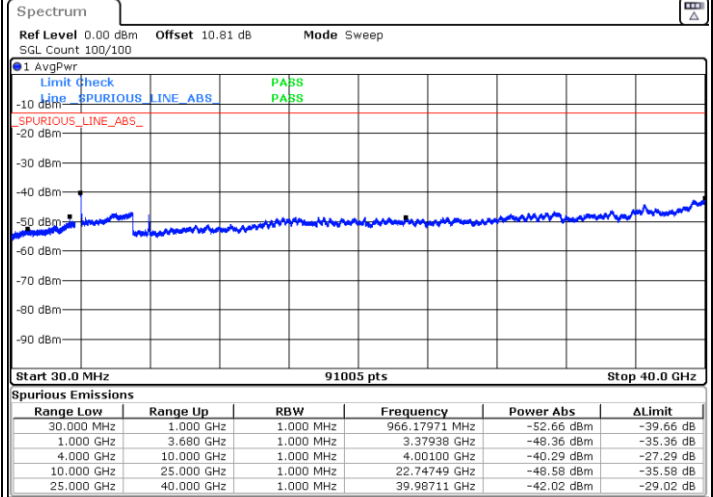
FR1 n77 / 30MHz / CP

Highest Band Edge / FULLRB/QPSK

Highest Band Edge / FULLRB/16QAM



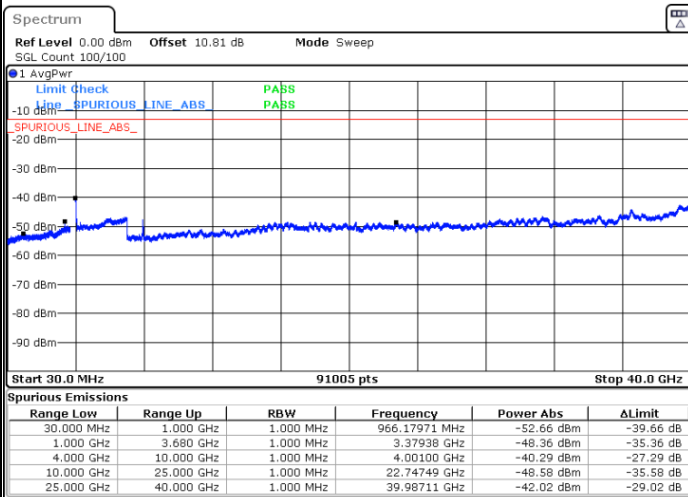
Date: 27.AUG.2024 20:07:36



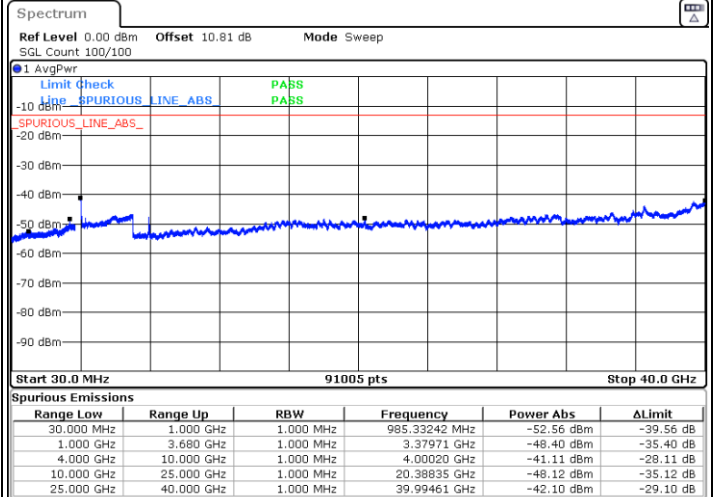
Date: 27.AUG.2024 19:59:38

Highest Band Edge / FULLRB/64QAM

Highest Band Edge / FULLRB/256QAM



Date: 27.AUG.2024 19:59:38



Date: 27.AUG.2024 19:57:20

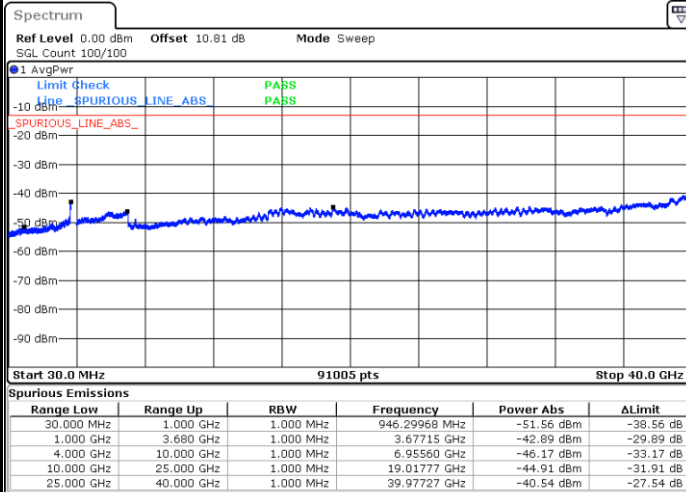


30M-ANT1

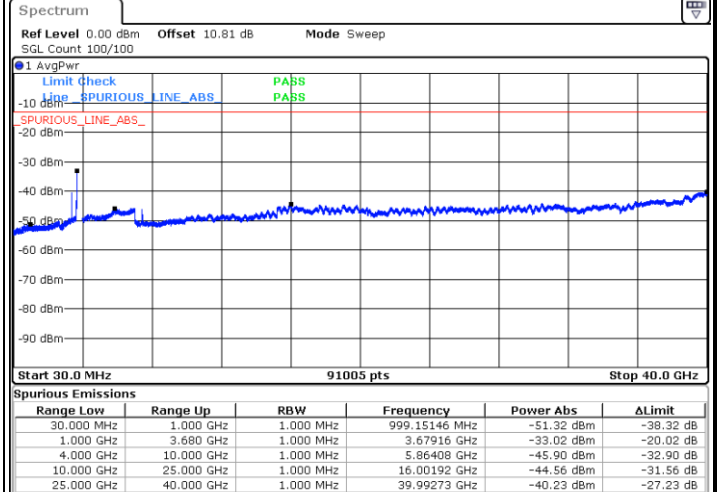
FR1 n77 / 30MHz / CP

Lowest Band Edge / FULLRB/QPSK

Lowest Band Edge / FULLRB/16QAM



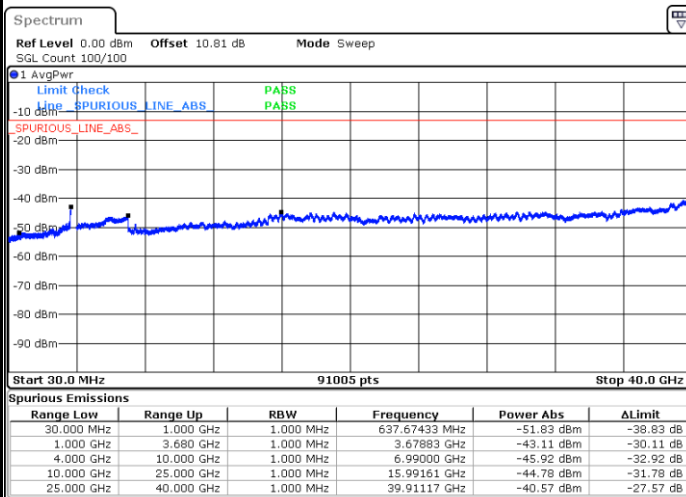
Date: 28.AUG.2024 14:39:26



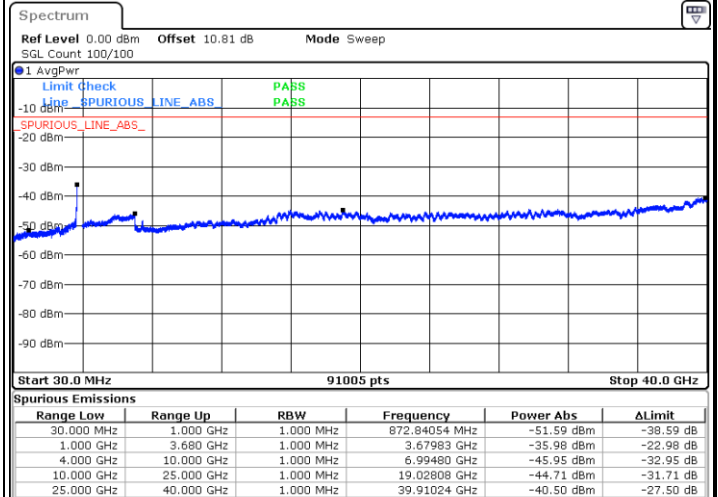
Date: 27.SEP.2024 05:37:35

Lowest Band Edge / FULLRB/64QAM

Lowest Band Edge / FULLRB/256QAM



Date: 28.AUG.2024 14:37:51



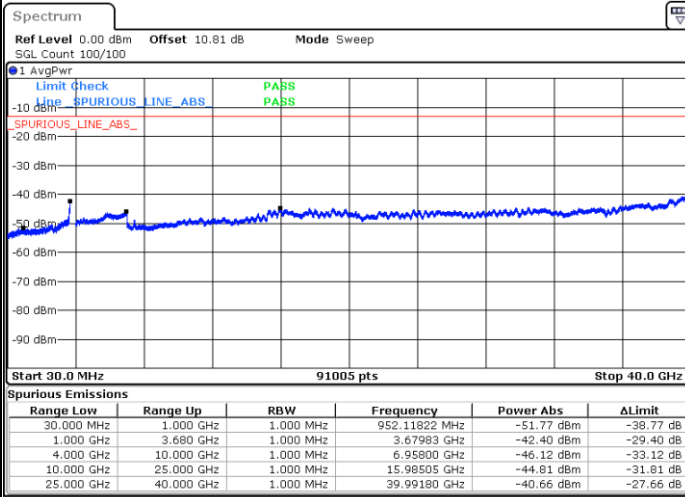
Date: 28.AUG.2024 14:35:32



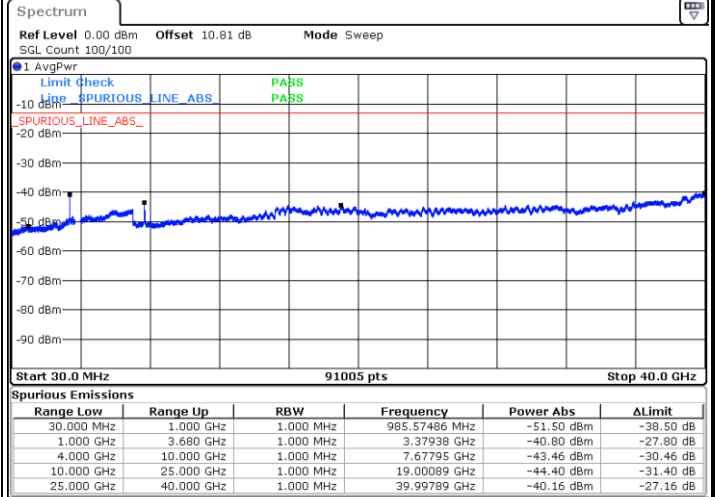
FR1 n77 / 30MHz / CP

Middle Band Edge / FULLRB/QPSK

Middle Band Edge / FULLRB/16QAM



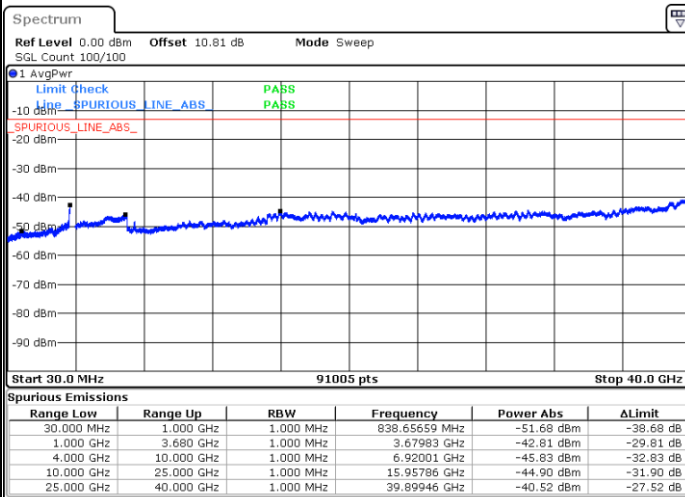
Date: 28.AUG.2024 14:44:48



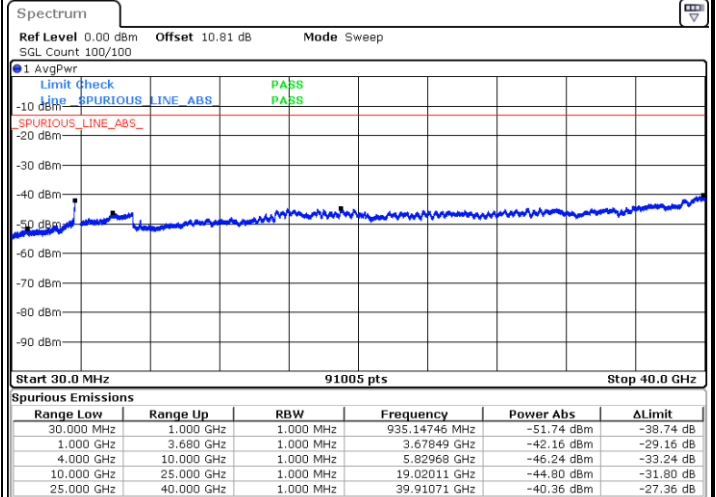
Date: 27.SEP.2024 05:44:38

Middle Band Edge / FULLRB/64QAM

Middle Band Edge / FULLRB/256QAM



Date: 28.AUG.2024 14:43:36



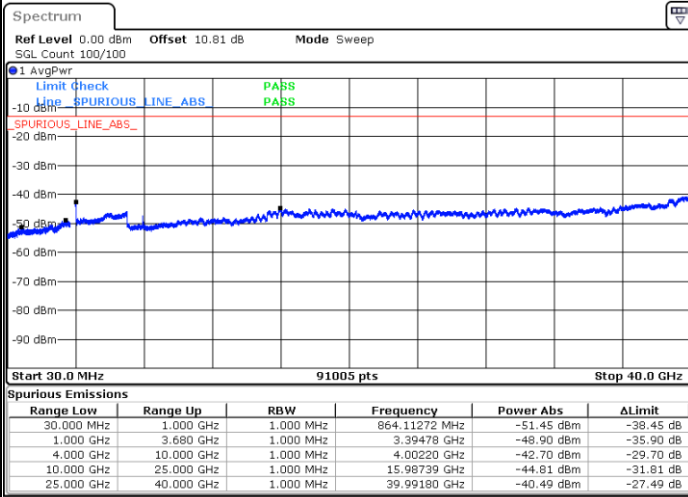
Date: 28.AUG.2024 14:46:14



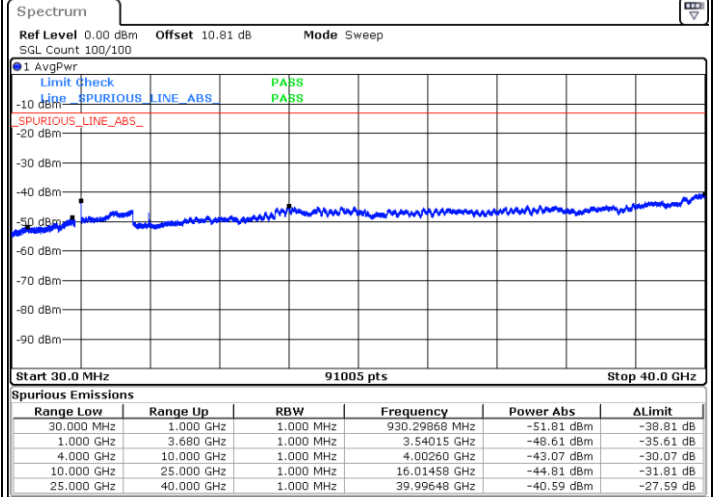
FR1 n77 / 30MHz / CP

Highest Band Edge / FULLRB/QPSK

Highest Band Edge / FULLRB/16QAM



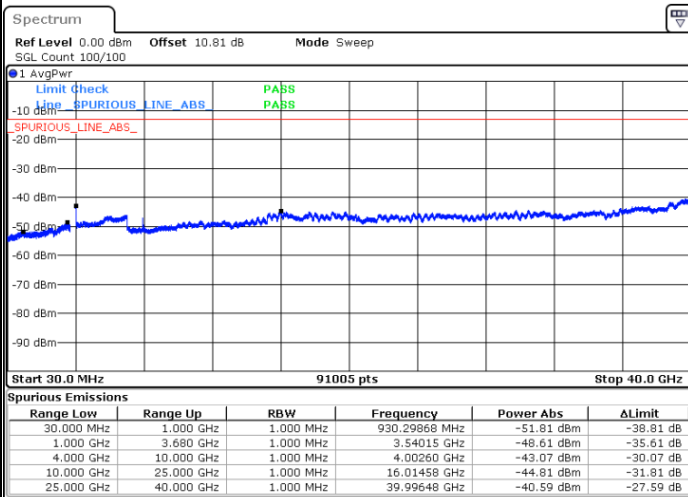
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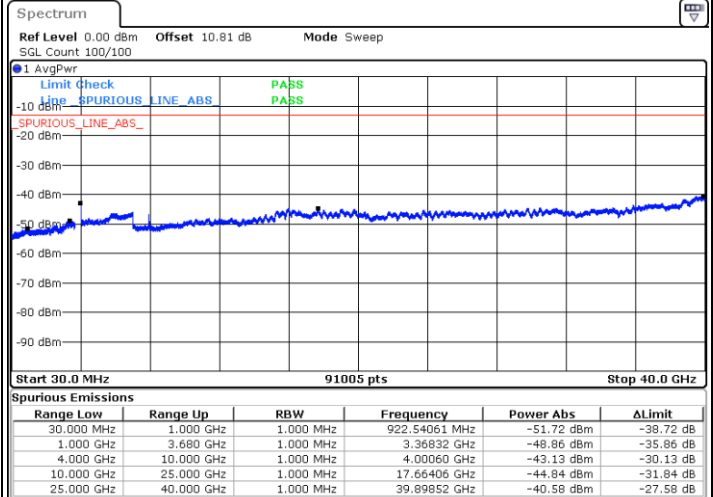
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Highest Band Edge / FULLRB/64QAM

Highest Band Edge / FULLRB/256QAM



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Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Bruce	Temperature :	24~25°C
		Relative Humidity :	41~42%

n77 UL MIMO / NR 100+100MHz / QPSK for Sample 1								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7682	-45.56	-13	-32.56	-55.77	3.03	13.24	H
	11521	-62.11	-13	-49.11	-71.56	3.56	13.01	H
	15360	-60.02	-13	-47.02	-69.54	3.92	13.44	H
	7682	-50.15	-13	-37.15	-60.36	3.03	13.24	V
	11521	-62.23	-13	-49.23	-71.68	3.56	13.01	V
	15360	-59.70	-13	-46.70	-69.22	3.92	13.44	V

Remark:

1. Spurious emissions within 30-1000MHz were found more than 20dB below limit line.
2. The TX Antenna is the measurement antenna in the laboratory measurement system.

NSA_B66_n77 / LTE (20+20MHz) + NR (100+100MHz) / QPSK for combination of 4G + 5G sample 1								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7682	-46.62	-13	-33.62	-56.83	3.03	13.24	H
	11521	-62.46	-13	-49.46	-71.91	3.56	13.01	H
	15360	-60.14	-13	-47.14	-69.66	3.92	13.44	H
	7682	-48.14	-13	-35.14	-58.35	3.03	13.24	V
	11521	-62.25	-13	-49.25	-71.70	3.56	13.01	V
	15360	-60.09	-13	-47.09	-69.61	3.92	13.44	V

Remark:

1. Spurious emissions within 30-1000MHz were found more than 20dB below limit line.
2. The TX Antenna is the measurement antenna in the laboratory measurement system.



n77 UL MIMO / NR 30+30MHz / QPSK for Sample 2								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7682	-44.57	-13	-31.57	-54.78	3.03	13.24	H
	11521	-62.11	-13	-49.11	-71.56	3.56	13.01	H
	15360	-60.36	-13	-47.36	-69.88	3.92	13.44	H
	7682	-46.39	-13	-33.39	-56.60	3.03	13.24	V
	11521	-61.93	-13	-48.93	-71.38	3.56	13.01	V
	15360	-59.74	-13	-46.74	-69.26	3.92	13.44	V

Remark:

1. Spurious emissions within 30-1000MHz were found more than 20dB below limit line.
2. The TX Antenna is the measurement antenna in the laboratory measurement system.

NSA_B66_n77 / LTE (20+20MHz) + NR (30+30MHz) / QPSK for combination of 4G + 5G sample 2								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7682	-45.07	-13	-32.07	-55.28	3.03	13.24	H
	11521	-62.01	-13	-49.01	-71.46	3.56	13.01	H
	15360	-60.12	-13	-47.12	-69.64	3.92	13.44	H
	7682	-47.53	-13	-34.53	-57.74	3.03	13.24	V
	11521	-62.04	-13	-49.04	-71.49	3.56	13.01	V
	15360	-60.26	-13	-47.26	-69.78	3.92	13.44	V

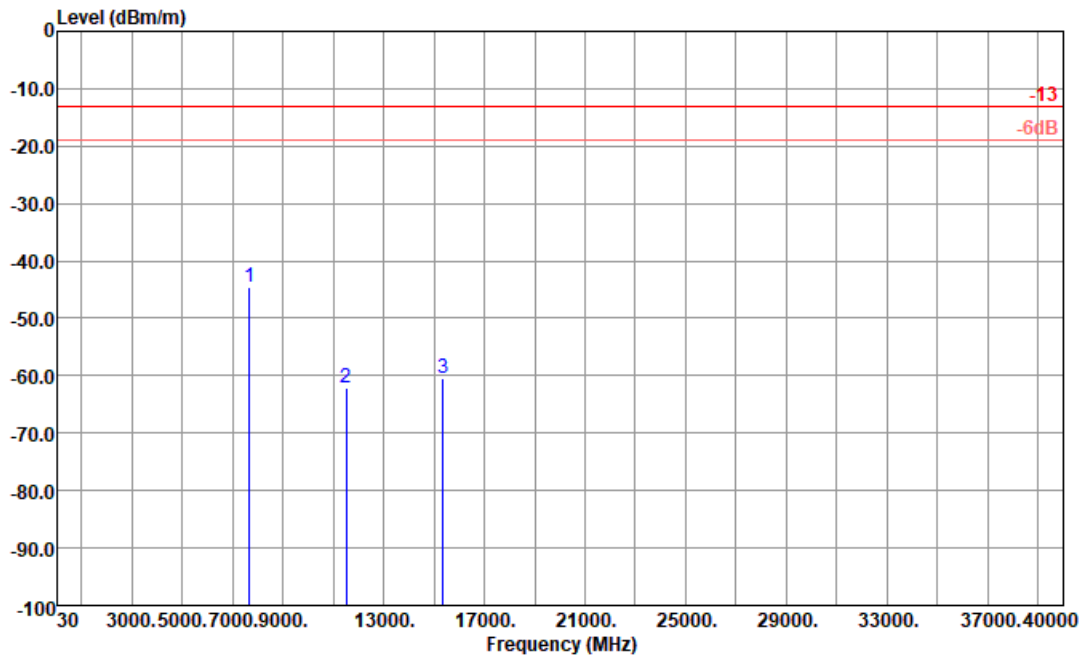
Remark:

1. Spurious emissions within 30-1000MHz were found more than 20dB below limit line.
2. The TX Antenna is the measurement antenna in the laboratory measurement system.



Worst test plots

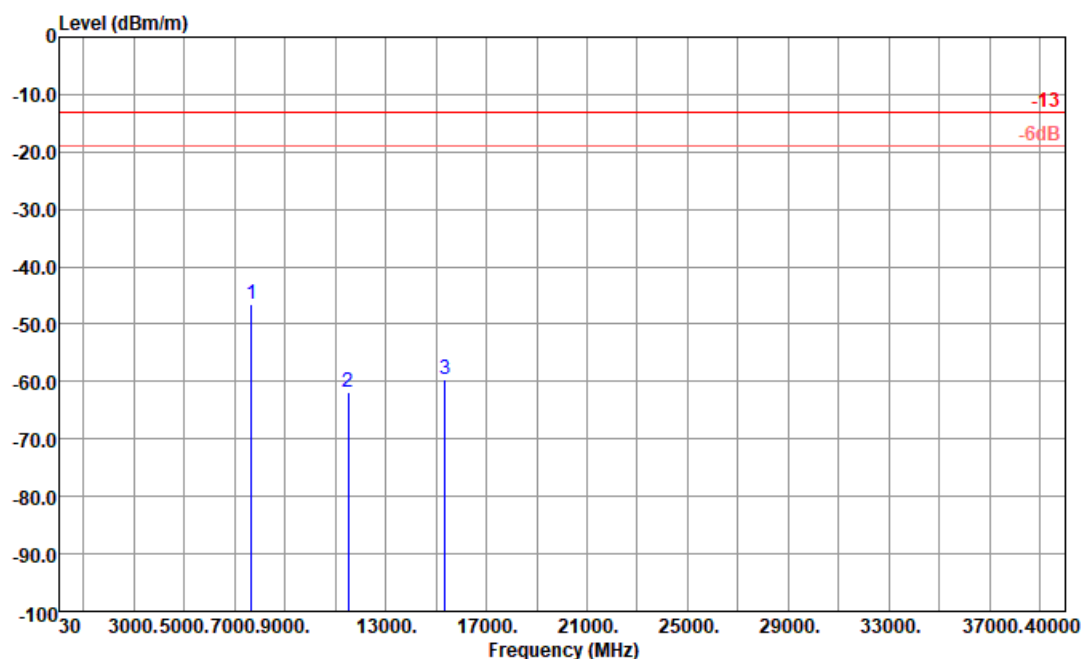
n77 UL MIMO / NR 30+30MHz / QPSK for Sample 2 middle channel



Site : 03CH04-KS
Condition : -13 3m HF PART 22/24/27 HORIZONTAL

ANT : UL MIMO
: Full-directivity
NR : CP-OFD BW=30M/QPSK/Full RB

	Freq	Level	Over	Limit	Read	
			Limit	Line		
	MHz	dBm/m	dB	dBm/m	dBm	Pol/Phase
1 p	7682.00	-44.57	-31.57	-13.00	-39.86	HORIZONTAL
2	11521.00	-62.11	-49.11	-13.00	-64.88	HORIZONTAL
3	15360.00	-60.36	-47.36	-13.00	-66.18	HORIZONTAL



Site : 03CH04-K5
Condition : -13.3m HF PART 22/24/27 VERTICAL

ANT : UL MIMO
: Full-directivity
NR : CP-OFD BW=30M/QPSK/Full RB

	Freq	Level	Over	Limit	Read	Pol/Phase
			Limit	Line	Level	
	MHz	dBm/m	dB	dBm/m	dBm	
1 p	7682.00	-46.39	-33.39	-13.00	-41.75	VERTICAL
2	11521.00	-61.93	-48.93	-13.00	-64.60	VERTICAL
3	15360.00	-59.74	-46.74	-13.00	-65.56	VERTICAL