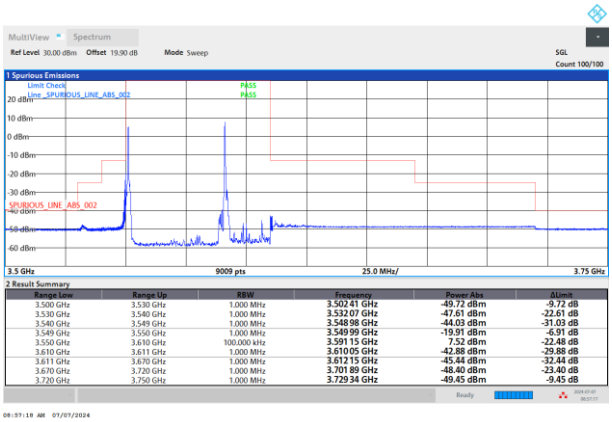
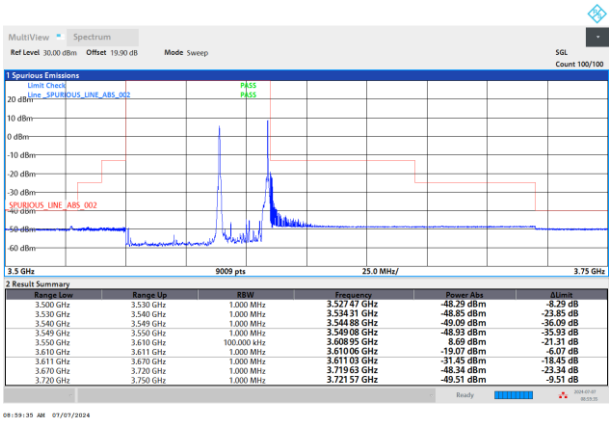
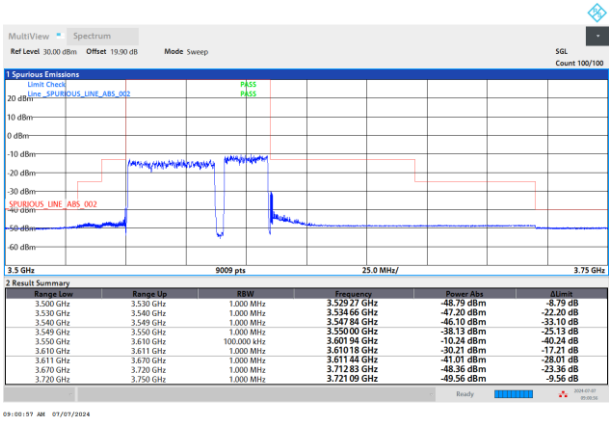
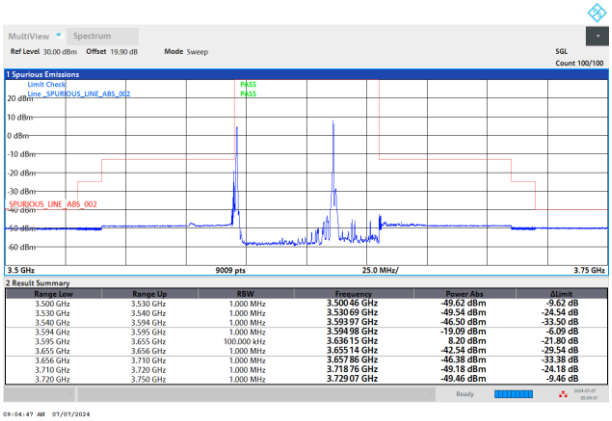
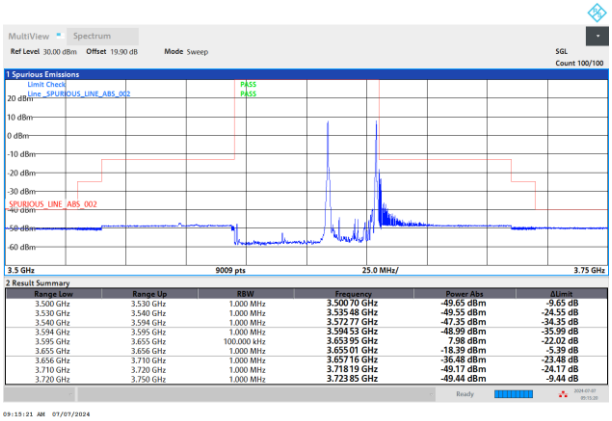
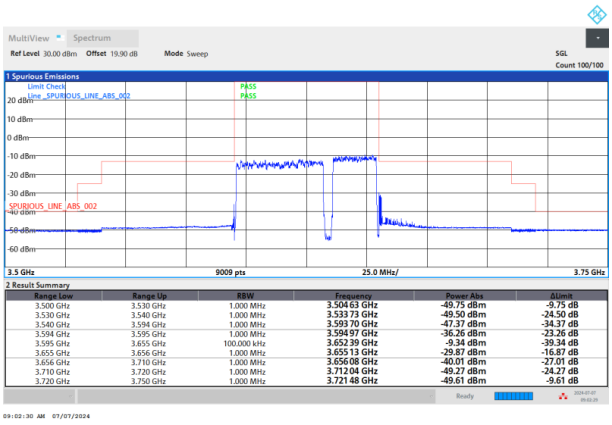
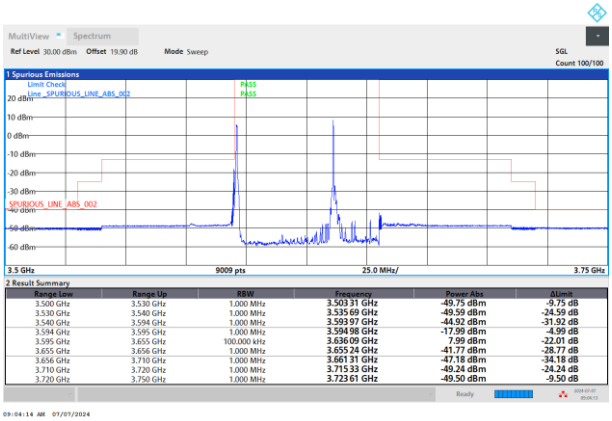
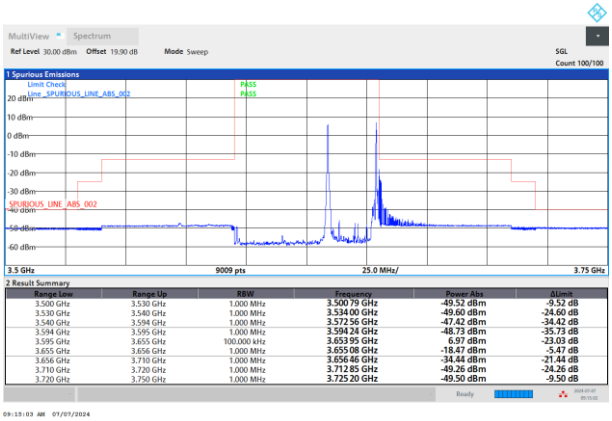
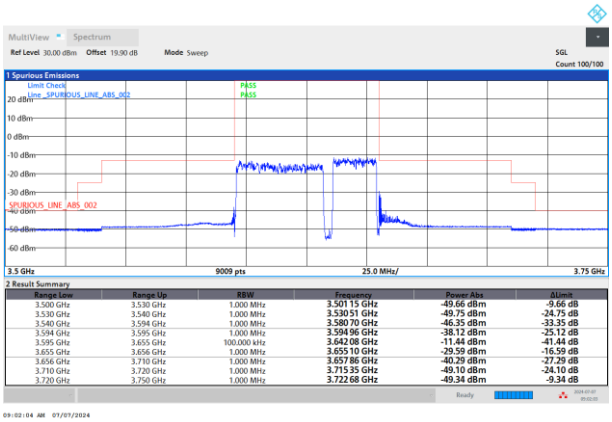
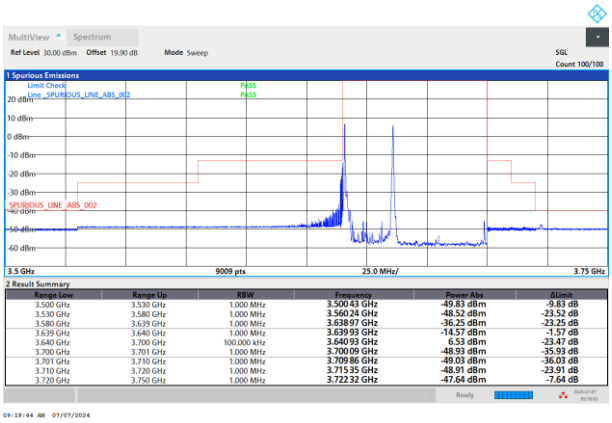
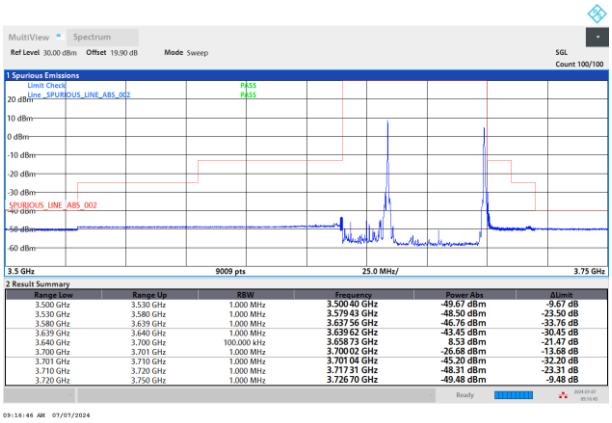
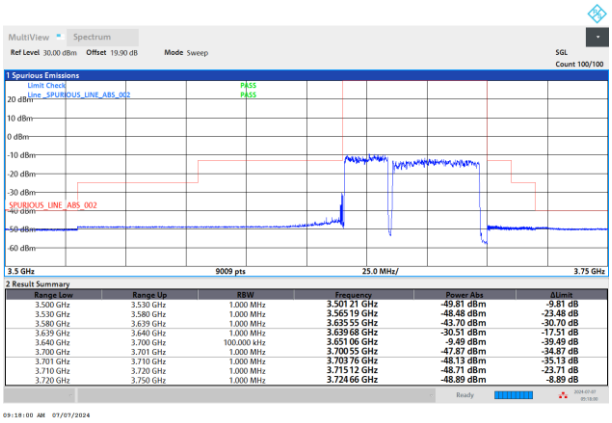
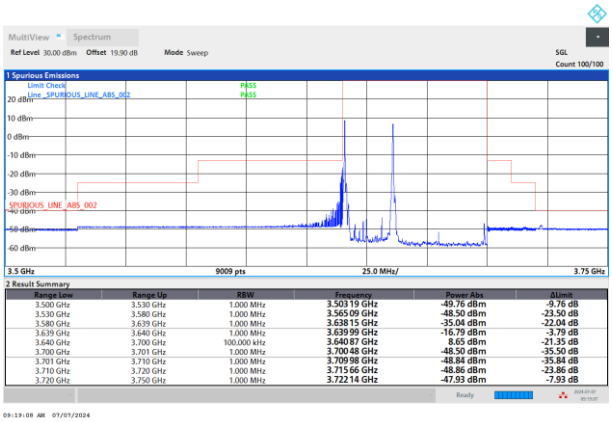
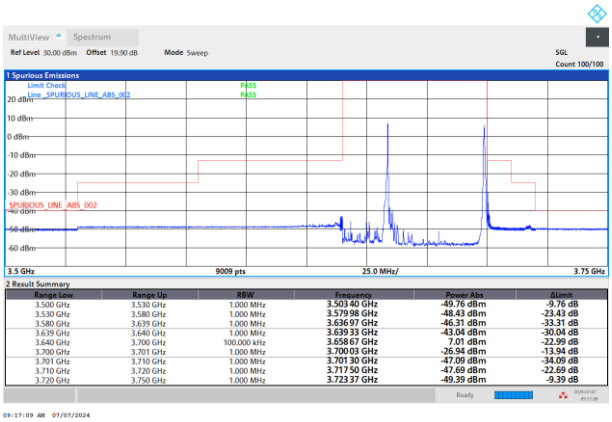
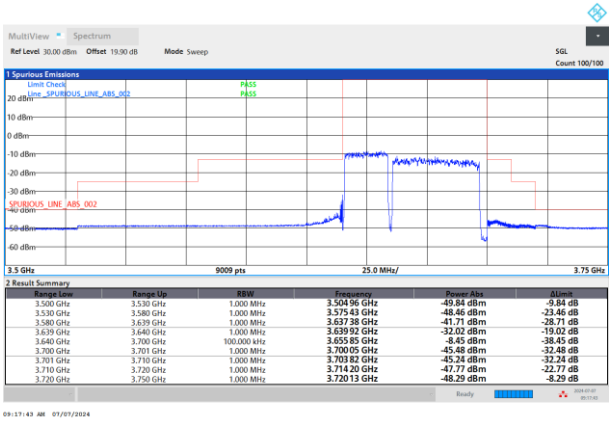
FR1 n48AA / 40MHz(NR)+20MHz(LTE) / DFT-S OFDM / QPSK	
Lowest Channel / 1RB0+1RB0	**Lowest Channel / 1RBmax+1RBmax**
	
Lowest Channel / Full+Full	**NA**
	/

FR1 n48AA / 40MHz(NR)+20MHz(LTE) / DFT-S OFDM / BPSK	
Middle Channel / 1RB0+1RB0	**Middle Channel / 1RBmax+1RBmax**
	
Middle Channel / Full+Full	**NA**
	/

FR1 n48AA / 40MHz(NR)+20MHz(LTE) / DFT-S OFDM / QPSK	
Middle Channel / 1RB0+1RB0	**Middle Channel / 1RBmax+1RBmax**
	
Middle Channel / Full+Full	**NA**
	/

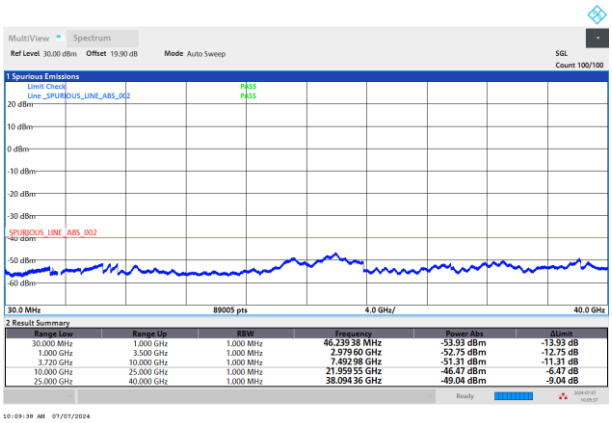
FR1 n48AA / 40MHz(NR)+20MHz(LTE) / DFT-S OFDM / BPSK	
Highest Channel / 1RB0+1RB0	**Highest Channel / 1RBmax+1RBmax**
	
Highest Channel / Full+Full	**NA**
	/

FR1 n48AA / 40MHz(NR)+20MHz(LTE) / DFT-S OFDM / QPSK	
Highest Channel / 1RB0+1RB0	**Highest Channel / 1RBmax+1RBmax**
	
Highest Channel / Full+Full	**NA**
	/

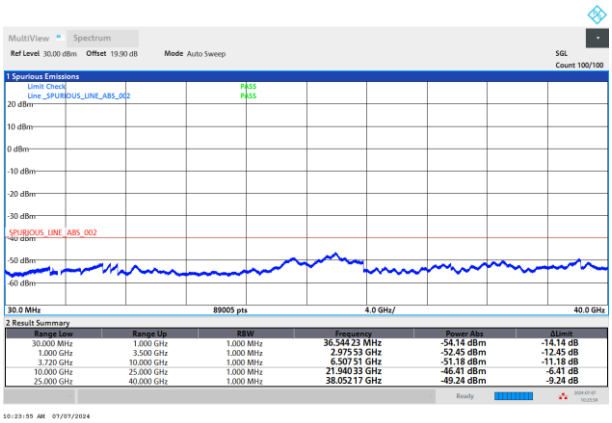
Conducted Spurious Emission

FR1 n48AA / 10MHz+20MHz / DFT-S OFDM / BPSK

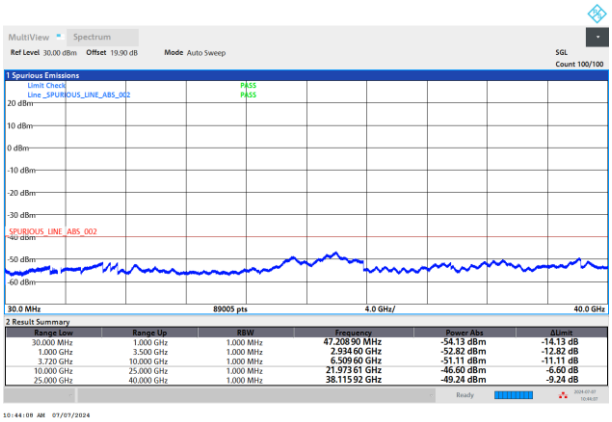
Lowest Channel / 1RB0



Middle Channel / 1RB0

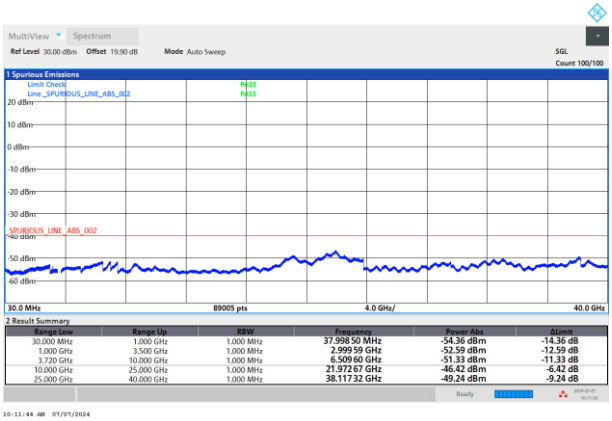
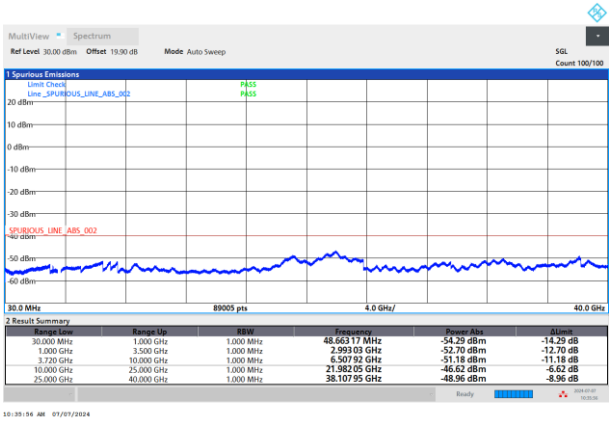
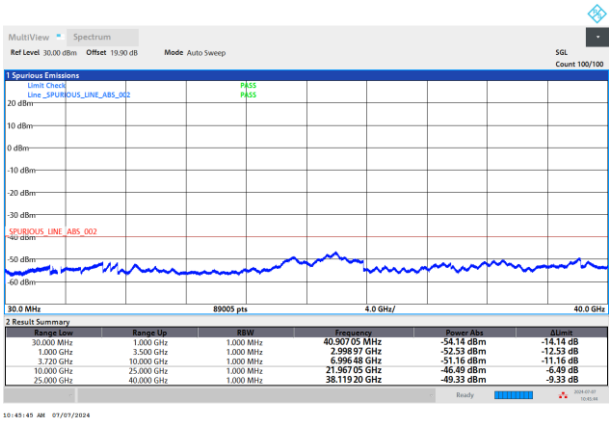


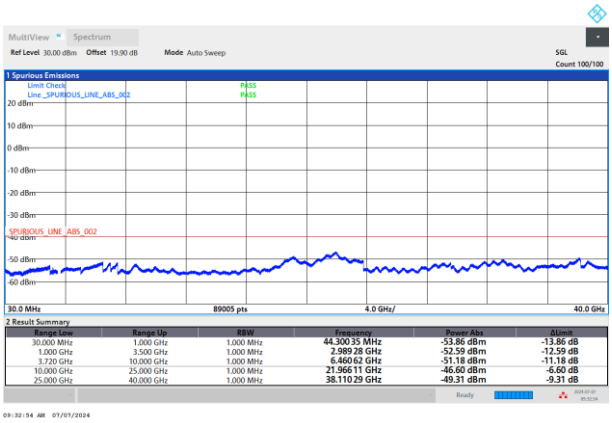
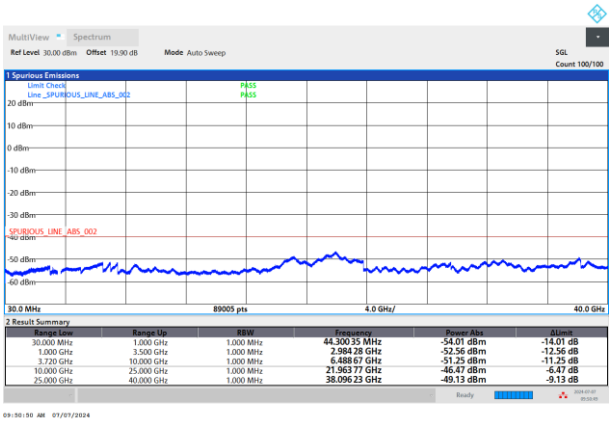
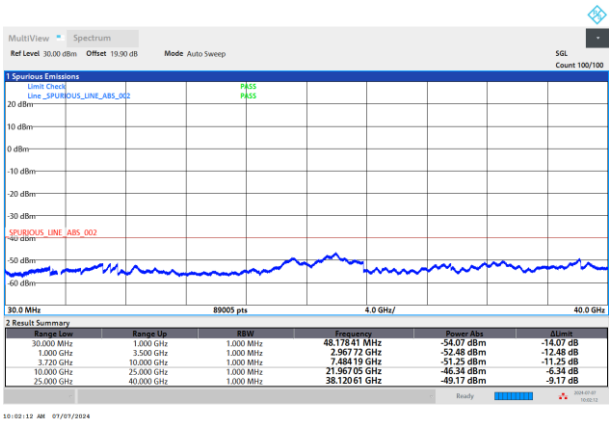
Hightest Channel / 1RB0

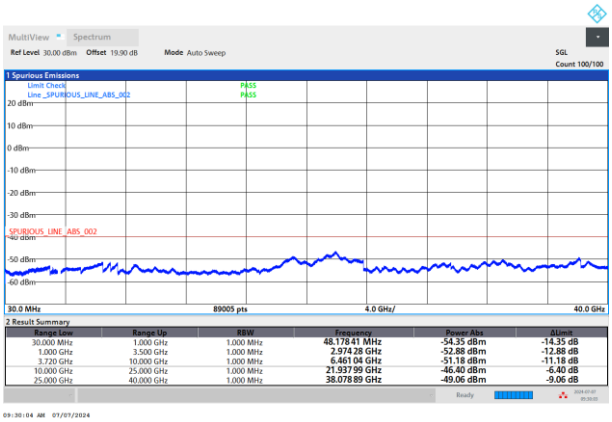
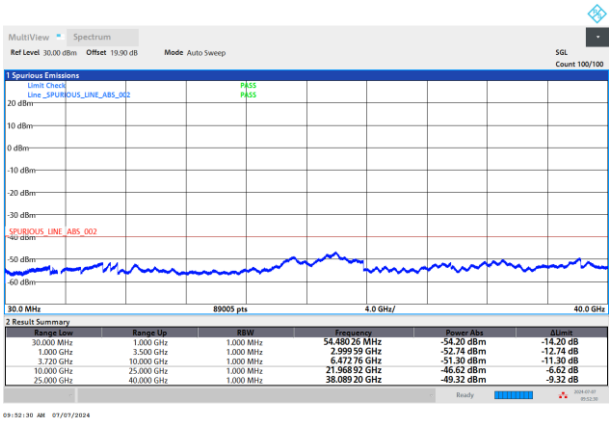
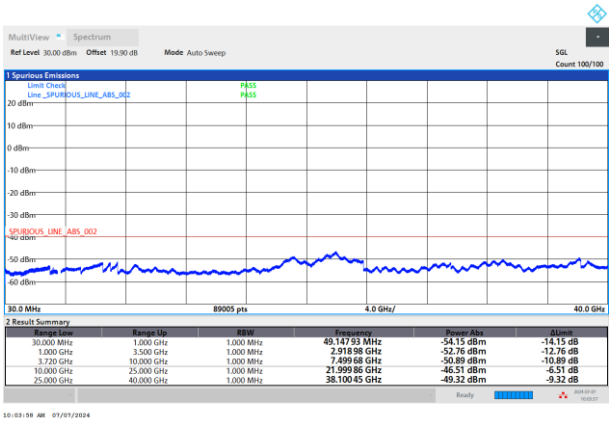


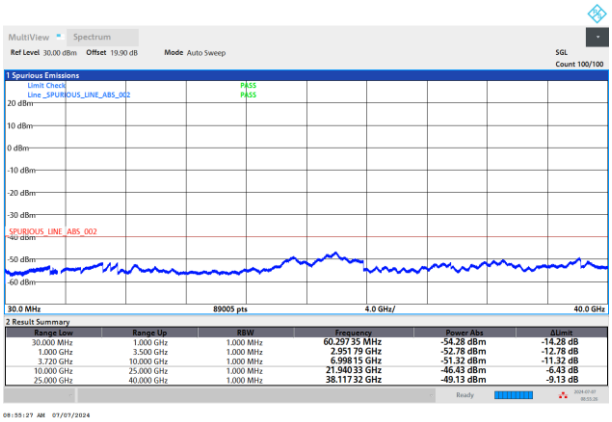
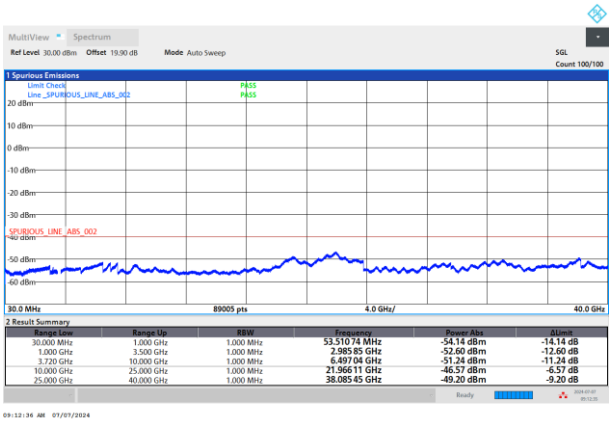
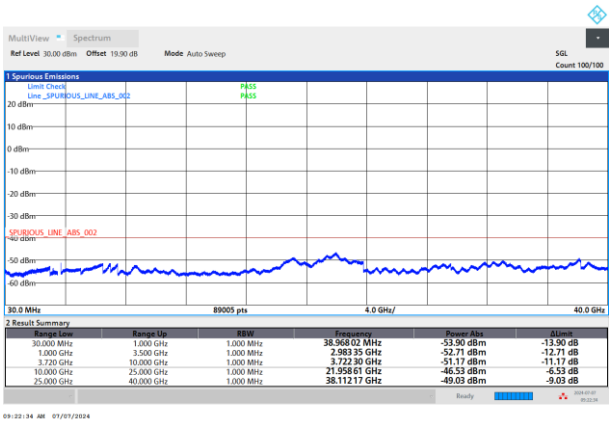
NA

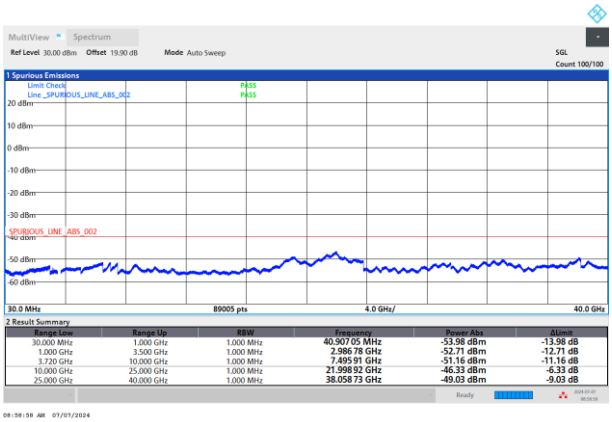
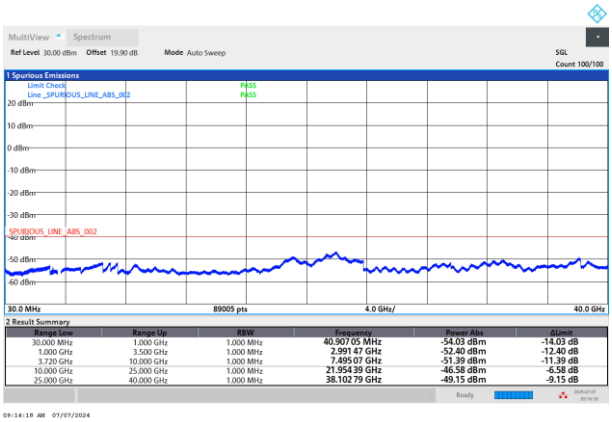
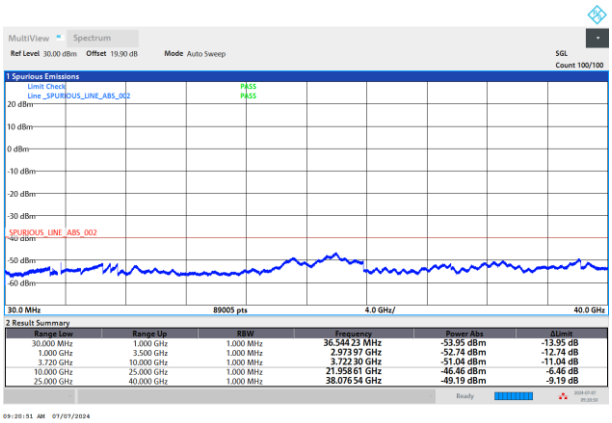
/

FR1 n48AA / 10MHz+20MHz / DFT-S OFDM / QPSK	
Lowest Channel / 1RB0	**Middle Channel / 1RB0**
 MultiView Spectrum Ref Level 30.00 dBm Offset 19.90 dB Mode Auto Sweep SGL Count 100/100 1 Spurious Emissions Limit Check PASS Line _SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002 30.0 MHz 89005 pts 4.0 GHz/ 40.0 GHz 2 Result Summary Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 30.000 MHz / 1.000 GHz / 1.000 MHz / 37.998 50 MHz / -54.36 dBm / -14.36 dB 1.000 GHz / 3.500 GHz / 1.000 MHz / 2.999 59 GHz / -52.59 dBm / -12.59 dB 3.720 GHz / 10.000 GHz / 1.000 MHz / 6.509 60 GHz / -51.33 dBm / -11.33 dB 10.000 GHz / 25.000 GHz / 1.000 MHz / 21.972 67 GHz / -46.42 dBm / -6.42 dB 25.000 GHz / 40.000 GHz / 1.000 MHz / 38.117 32 GHz / -49.24 dBm / -9.24 dB 10:11:44 AM 07/07/2024	 MultiView Spectrum Ref Level 30.00 dBm Offset 19.90 dB Mode Auto Sweep SGL Count 100/100 1 Spurious Emissions Limit Check PASS Line _SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002 30.0 MHz 89005 pts 4.0 GHz/ 40.0 GHz 2 Result Summary Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 30.000 MHz / 1.000 GHz / 1.000 MHz / 48.663 17 MHz / -54.29 dBm / -14.29 dB 1.000 GHz / 3.500 GHz / 1.000 MHz / 2.993 03 GHz / -52.70 dBm / -12.70 dB 3.720 GHz / 10.000 GHz / 1.000 MHz / 6.507 92 GHz / -51.18 dBm / -11.18 dB 10.000 GHz / 25.000 GHz / 1.000 MHz / 21.982 05 GHz / -46.62 dBm / -6.62 dB 25.000 GHz / 40.000 GHz / 1.000 MHz / 38.107 95 GHz / -48.96 dBm / -8.96 dB 10:35:56 AM 07/07/2024
Hightest Channel / 1RB0	**NA**
 MultiView Spectrum Ref Level 30.00 dBm Offset 19.90 dB Mode Auto Sweep SGL Count 100/100 1 Spurious Emissions Limit Check PASS Line _SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002 30.0 MHz 89005 pts 4.0 GHz/ 40.0 GHz 2 Result Summary Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 30.000 MHz / 1.000 GHz / 1.000 MHz / 40.907 05 MHz / -54.14 dBm / -14.14 dB 1.000 GHz / 3.500 GHz / 1.000 MHz / 2.998 97 GHz / -52.53 dBm / -12.53 dB 3.720 GHz / 10.000 GHz / 1.000 MHz / 6.996 48 GHz / -51.16 dBm / -11.16 dB 10.000 GHz / 25.000 GHz / 1.000 MHz / 21.967 05 GHz / -46.49 dBm / -6.49 dB 25.000 GHz / 40.000 GHz / 1.000 MHz / 38.119 20 GHz / -49.33 dBm / -9.33 dB 10:45:45 AM 07/07/2024	/

FR1 n48AA / 20MHz+20MHz / DFT-S OFDM / BPSK	
Lowest Channel / 1RB0	**Middle Channel / 1RB0**
	
Hightest Channel / 1RB0	**NA**
	/

FR1 n48AA / 20MHz+20MHz / DFT-S OFDM / QPSK	
Lowest Channel / 1RB0	**Middle Channel / 1RB0**
	
Hightest Channel / 1RB0	**NA**
	/

FR1 n48AA / 40MHz+20MHz / DFT-S OFDM / BPSK	
Lowest Channel / 1RB0	**Middle Channel / 1RB0**
	
Hightest Channel / 1RB0	**NA**
	/

FR1 n48AA / 40MHz+20MHz / DFT-S OFDM / QPSK	
Lowest Channel / 1RB0	**Middle Channel / 1RB0**
	
Hightest Channel / 1RB0	**NA**
	/

Frequency Stability

Test Conditions		NR n48AA (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz+20MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0019	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0018	

Note:

1. Normal Voltage =54V. ; Minimum Voltage =48V. ; Maximum Voltage =57V.

2. The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	LiangPing Zhou	Temperature :	22~25℃
		Relative Humidity :	48~52%

Note: Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

SA n48 / 40MHz / QPSK / ANT5									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7212.46	-59.09	-40	-19.09	-64.96	-62.39	8.30	11.60	H
	10818.69	-55.65	-40	-15.65	-67.88	-57.17	10.48	12.00	H
	14424.92	-49.31	-40	-9.31	-66.83	-51.01	11.80	13.50	H
	7212.46	-58.43	-40	-18.43	-64.67	-61.73	8.30	11.60	V
	10818.69	-55.75	-40	-15.75	-67.6	-57.27	10.48	12.00	V
	14424.92	-50.01	-40	-10.01	-66.96	-51.71	11.80	13.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_48A_n48A / LTE 20MHz + NR 40MHz / QPSK / ANT4(LTE) & ANT5(NR)									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n48 Middle	7212.46	-59.27	-40	-19.27	-65.14	-62.57	8.30	11.60	H
	10818.69	-55.40	-40	-15.40	-67.63	-56.92	10.48	12.00	H
	14424.92	-50.03	-40	-10.03	-67.55	-51.73	11.80	13.50	H
	7212.46	-58.78	-40	-18.78	-65.02	-62.08	8.30	11.60	V
	10818.69	-55.79	-40	-15.79	-67.64	-57.31	10.48	12.00	V
	14424.92	-50.57	-40	-10.57	-67.52	-52.27	11.80	13.50	V
LTE Band48 Middle	7232.00	-59.50	-40	-19.50	-65.44	-62.80	8.30	11.60	H
	10848.00	-55.01	-40	-15.01	-67.29	-56.53	10.48	12.00	H
	14464.00	-50.03	-40	-10.03	-67.77	-51.73	11.80	13.50	H
	7232.00	-58.90	-40	-18.90	-65.15	-62.20	8.30	11.60	V
	10848.00	-55.35	-40	-15.35	-67.26	-56.87	10.48	12.00	V
	14464.00	-50.42	-40	-10.42	-67.58	-52.12	11.80	13.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_n48AA / LTE 20MHz + NR 40MHz / QPSK / ANT4(LTE) & ANT5(NR)									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n48 Middle	7187.59	-58.96	-40	-18.96	-64.77	-62.26	8.30	11.60	H
	10781.38	-55.70	-40	-15.70	-67.79	-57.22	10.48	12.00	H
	14375.18	-50.31	-40	-10.31	-67.48	-52.01	11.80	13.50	H
	7187.59	-59.07	-40	-19.07	-65.25	-62.37	8.30	11.60	V
	10781.38	-55.97	-40	-15.97	-67.66	-57.49	10.48	12.00	V
	14375.18	-50.71	-40	-10.71	-67.34	-52.41	11.80	13.50	V
LTE Band48 Middle	7272.00	-59.15	-40	-19.15	-65.18	-62.45	8.30	11.60	H
	10908.00	-54.29	-40	-14.29	-66.76	-55.81	10.48	12.00	H
	14544.00	-49.43	-40	-9.43	-67.37	-51.13	11.80	13.50	H
	7272.00	-59.01	-40	-19.01	-65.28	-62.31	8.30	11.60	V
	10908.00	-55.11	-40	-15.11	-67.24	-56.63	10.48	12.00	V
	14544.00	-50.21	-40	-10.21	-67.56	-51.91	11.80	13.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

SA n48 MIMO / 40MHz / QPSK / ANT(5+4)									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7212.46	-59.07	-40	-19.07	-64.94	-62.37	8.30	11.60	H
	10818.69	-55.51	-40	-15.51	-67.74	-57.03	10.48	12.00	H
	14424.92	-50.66	-40	-10.66	-68.18	-52.36	11.80	13.50	H
	7212.46	-58.48	-40	-18.48	-64.72	-61.78	8.30	11.60	V
	10818.69	-55.81	-40	-15.81	-67.66	-57.33	10.48	12.00	V
	14424.92	-51.29	-40	-11.29	-68.24	-52.99	11.80	13.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

CA_n48B / 40MHz+40MHz / QPSK / ANT5									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7249.92	-59.49	-40	-19.49	-65.48	-62.79	8.30	11.60	H
	10874.88	-55.46	-40	-15.46	-67.83	-56.98	10.48	12.00	H
	14499.84	-49.90	-40	-9.90	-67.87	-51.60	11.80	13.50	H
	7249.92	-59.39	-40	-19.39	-65.66	-62.69	8.30	11.60	V
	10874.88	-55.87	-40	-15.87	-67.89	-57.39	10.48	12.00	V
	14499.84	-50.38	-40	-10.38	-67.75	-52.08	11.80	13.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

SA n48 / 40MHz / QPSK / ANT5/ sample 2									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7212.46	-59.62	-40	-19.62	-65.49	-62.92	8.30	11.60	H
	10818.69	-55.86	-40	-15.86	-68.09	-57.38	10.48	12.00	H
	14424.92	-51.00	-40	-11.00	-68.52	-52.70	11.80	13.50	H
	7212.46	-59.39	-40	-19.39	-65.63	-62.69	8.30	11.60	V
	10818.69	-56.36	-40	-16.36	-68.21	-57.88	10.48	12.00	V
	14424.92	-51.66	-40	-11.66	-68.61	-53.36	11.80	13.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.