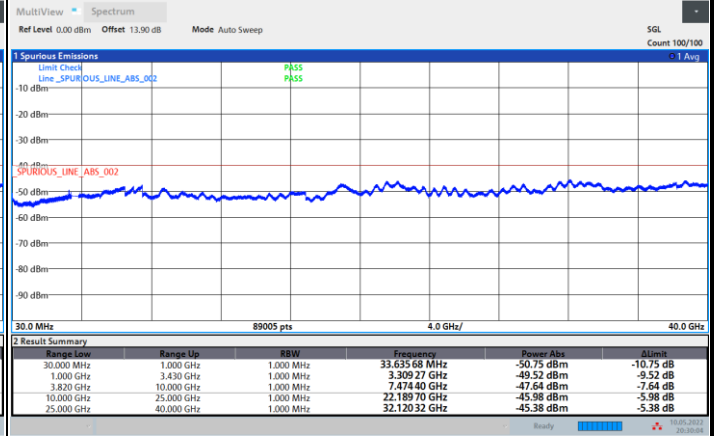
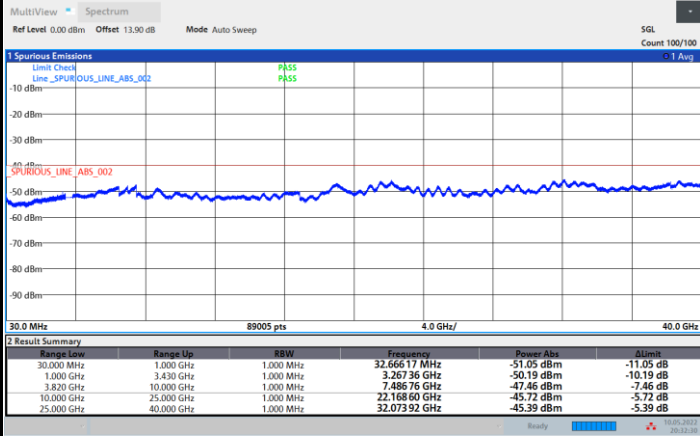




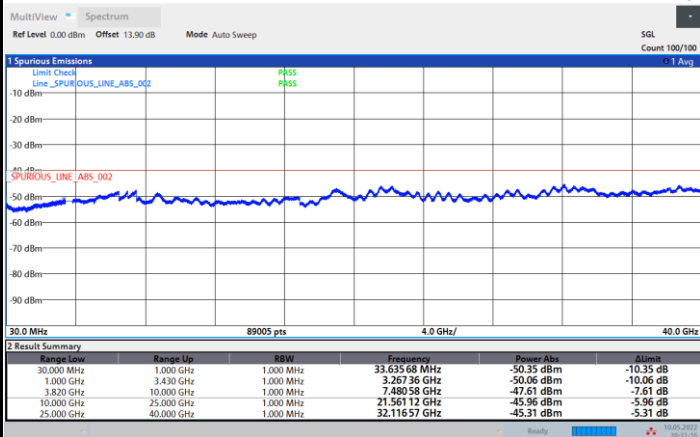
FR1 n48 / 20MHz / CP OFDM / QPSK / 1RB1

Lowest Channel

Middle Channel



Highest Channel





### Frequency Stability

Test Conditions		FR1 n48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0005	
20	Battery End Point	0.0027	

**Note:**

- 1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

<Internal Antenna>

<Ant. 1>

### 5G NR n48A

5G NR n48A / 20MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Margin ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7103	-51.31	-40	-11.31	-49.43	-61.01	1.84	11.54	H
	10654	-49.74	-40	-9.74	-52.34	-58.21	2.23	10.71	H
	14205	-49.26	-40	-9.26	-57.99	-58.89	2.65	12.28	H
	21307	-62.39	-40	-22.39	-76.76	-77.24	3.32	18.17	H
	24859	-47.75	-40	-7.75	-66.03	-62.52	3.71	18.48	H
	31959	-50.01	-40	-10.01	-72.44	-65.24	4.29	19.52	H
	7103	-52.34	-40	-12.34	-50.71	-62.04	1.84	11.54	V
	10654	-49.00	-40	-9.00	-51.19	-57.47	2.23	10.71	V
	14205	-49.01	-40	-9.01	-57.61	-58.64	2.65	12.28	V
	21307	-62.14	-40	-22.14	-76.2	-76.99	3.32	18.17	V
	24859	-54.66	-40	-14.66	-72.62	-69.43	3.71	18.48	V
	31959	-52.21	-40	-12.21	-74.08	-67.44	4.29	19.52	V
Middle	7233	-53.92	-40	-13.92	-52.4	-63.38	1.86	11.32	H
	10849	-50.49	-40	-10.49	-53.48	-58.87	2.22	10.59	H
	14465	-48.93	-40	-8.93	-57.9	-58.43	2.62	12.12	H
	18077	-59.81	-40	-19.81	-71.28	-74.18	3.23	17.60	H
	21696	-61.11	-40	-21.11	-76.27	-76.28	3.42	18.60	H
	25314	-58.22	-40	-18.22	-76.54	-73.22	3.78	18.78	H
	7233	-54.28	-40	-14.28	-53.1	-63.74	1.86	11.32	V
	10849	-48.24	-40	-8.24	-51	-56.62	2.22	10.59	V
	14465	-48.53	-40	-8.53	-57.94	-58.03	2.62	12.12	V
	18077	-59.01	-40	-19.01	-70.19	-73.38	3.23	17.60	V
	21696	-60.77	-40	-20.77	-75.59	-75.94	3.42	18.60	V
	25314	-59.18	-40	-19.18	-77.22	-74.18	3.78	18.78	V



Highest	7363	-49.81	-40	-9.81	-48.6	-59.27	1.92	11.38	H
	11044	-49.91	-40	-9.91	-53.33	-58.25	2.22	10.55	H
	14725	-48.50	-40	-8.50	-57.59	-58.50	2.59	12.60	H
	18410	-59.22	-40	-19.22	-71.01	-73.58	3.24	17.60	H
	22084	-57.60	-40	-17.60	-73.17	-72.97	3.52	18.88	H
	25770	-57.52	-40	-17.52	-76.18	-72.69	3.88	19.05	H
	7363	-50.13	-40	-10.13	-49.07	-59.59	1.92	11.38	V
	11044	-49.21	-40	-9.21	-52.56	-57.55	2.22	10.55	V
	14725	-46.84	-40	-6.84	-56.88	-56.84	2.59	12.60	V
	18410	-56.24	-40	-16.24	-67.8	-70.60	3.24	17.60	V
	22084	-58.11	-40	-18.11	-73.29	-73.48	3.52	18.88	V
	25770	-58.40	-40	-18.40	-76.77	-73.57	3.88	19.05	V

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



<Ant. 2 + Ant. 1>

**EN-DC 2A-n48A**

EN-DC 2A-n48A / 20MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Margin ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7233	-57.28	-40	-17.28	-55.76	-66.74	1.86	11.32	H
	10849	-52.76	-40	-12.76	-55.75	-61.14	2.22	10.59	H
	14465	-49.29	-40	-9.29	-58.26	-58.79	2.62	12.12	H
	10877	-59.89	-40	-19.89	-71.36	-68.25	2.21	10.57	H
	21696	-60.29	-40	-20.29	-75.45	-75.46	3.42	18.60	H
	25314	-55.13	-40	-15.13	-73.45	-70.13	3.78	18.78	H
									H
	7233	-57.13	-40	-17.13	-55.95	-66.59	1.86	11.32	V
	10849	-53.06	-40	-13.06	-55.82	-61.44	2.22	10.59	V
	14465	-49.04	-40	-9.04	-58.45	-58.54	2.62	12.12	V
	10877	-58.79	-40	-18.79	-69.97	-67.15	2.21	10.57	V
	21696	-60.56	-40	-20.56	-75.38	-75.73	3.42	18.60	V
	25314	-58.58	-40	-18.58	-76.62	-73.58	3.78	18.78	V
									V

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



**EN-DC 66A-n48A**

EN-DC 66A-n48A / 20MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Margin ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7233	-57.30	-40	-17.30	-55.78	-66.76	1.86	11.32	H
	10849	-52.92	-40	-12.92	-55.91	-61.30	2.22	10.59	H
	14465	-49.29	-40	-9.29	-58.26	-58.79	2.62	12.12	H
	18077	-59.99	-40	-19.99	-71.46	-74.36	3.23	17.60	H
	21697	-60.32	-40	-20.32	-75.48	-75.49	3.43	18.60	H
	25314	-56.62	-40	-16.62	-74.94	-71.62	3.78	18.78	H
									H
	7233	-57.16	-40	-17.16	-55.98	-66.62	1.86	11.32	V
	10849	-52.96	-40	-12.96	-55.72	-61.34	2.22	10.59	V
	14465	-48.55	-40	-8.55	-57.96	-58.05	2.62	12.12	V
	18077	-60.69	-40	-20.69	-71.87	-75.06	3.23	17.60	V
	21697	-60.62	-40	-20.62	-75.45	-75.79	3.43	18.60	V
	25314	-57.99	-40	-17.99	-76.03	-72.99	3.78	18.78	V
									V

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



MIMO <Ant. 1+2>

5G NR n48A

5G NR n48A / 20MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Margin ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7103	-50.76	-40	-10.76	-48.88	-60.46	1.84	11.54	H
	10654	-51.98	-40	-11.98	-54.58	-60.45	2.23	10.71	H
	14205	-47.19	-40	-7.19	-55.92	-56.82	2.65	12.28	H
	21307	-60.57	-40	-20.57	-74.94	-75.42	3.32	18.17	H
	24859	-51.59	-40	-11.59	-69.87	-66.36	3.71	18.48	H
	31959	-55.35	-40	-15.35	-75.86	-70.58	4.29	19.52	H
	7103	-48.42	-40	-8.42	-46.79	-58.12	1.84	11.54	V
	10654	-51.43	-40	-11.43	-53.62	-59.90	2.23	10.71	V
	14205	-48.60	-40	-8.60	-57.2	-58.23	2.65	12.28	V
	21307	-62.63	-40	-22.63	-76.69	-77.48	3.32	18.17	V
	24859	-57.13	-40	-17.13	-75.09	-71.90	3.71	18.48	V
	31959	-56.02	-40	-16.02	-76.12	-71.25	4.29	19.52	V
Middle	7233	-52.44	-40	-12.44	-50.92	-61.90	1.86	11.32	H
	10849	-51.66	-40	-11.66	-54.65	-60.04	2.22	10.59	H
	14465	-48.61	-40	-8.61	-57.58	-58.11	2.62	12.12	H
	18077	-60.43	-40	-20.43	-71.91	-74.80	3.23	17.60	H
	21696	-61.23	-40	-21.23	-76.39	-76.40	3.42	18.60	H
	25314	-56.66	-40	-16.66	-74.98	-71.66	3.78	18.78	H
	7233	-49.97	-40	-9.97	-48.79	-59.43	1.86	11.32	V
	10849	-51.57	-40	-11.57	-54.33	-59.95	2.22	10.59	V
	14465	-48.59	-40	-8.59	-58	-58.09	2.62	12.12	V
	18077	-60.42	-40	-20.42	-71.6	-74.79	3.23	17.60	V
	21696	-60.88	-40	-20.88	-75.71	-76.05	3.42	18.60	V
	25314	-58.56	-40	-18.56	-76.6	-73.56	3.78	18.78	V



Highest	7363	-49.12	-40	-9.12	-47.91	-58.58	1.92	11.38	H
	11044	-51.25	-40	-11.25	-54.67	-59.59	2.22	10.55	H
	14725	-48.12	-40	-8.12	-57.21	-58.12	2.59	12.60	H
	18410	-60.64	-40	-20.64	-72.43	-75.00	3.24	17.60	H
	22084	-60.24	-40	-20.24	-75.81	-75.61	3.52	18.88	H
	25770	-58.56	-40	-18.56	-77.22	-73.73	3.88	19.05	H
	7363	-51.80	-40	-11.80	-50.74	-61.26	1.92	11.38	V
	11044	-52.90	-40	-12.90	-56.25	-61.24	2.22	10.55	V
	14725	-45.53	-40	-5.53	-55.57	-55.53	2.59	12.60	V
	18410	-60.95	-40	-20.95	-72.51	-75.31	3.24	17.60	V
	22084	-60.88	-40	-20.88	-76.07	-76.25	3.52	18.88	V
	25770	-58.15	-40	-18.15	-76.52	-73.32	3.88	19.05	V

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