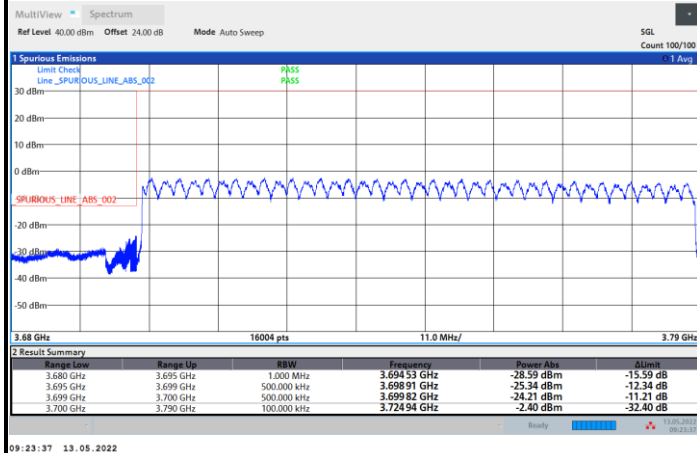


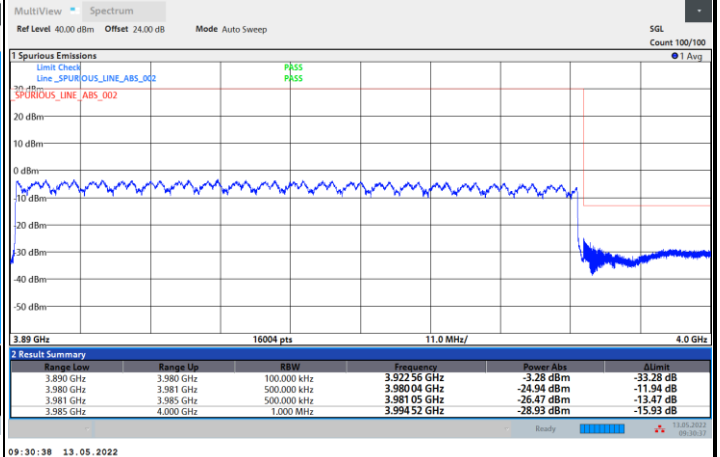


FR1 n77 / 90MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

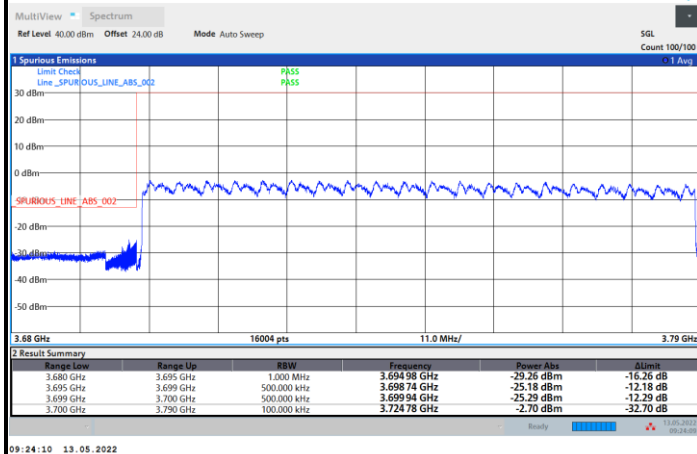


Highest Band Edge / Full RB

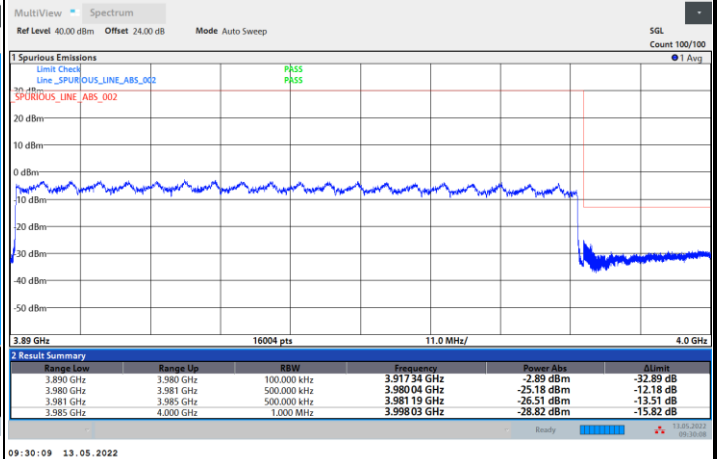


FR1 n77 / 90MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



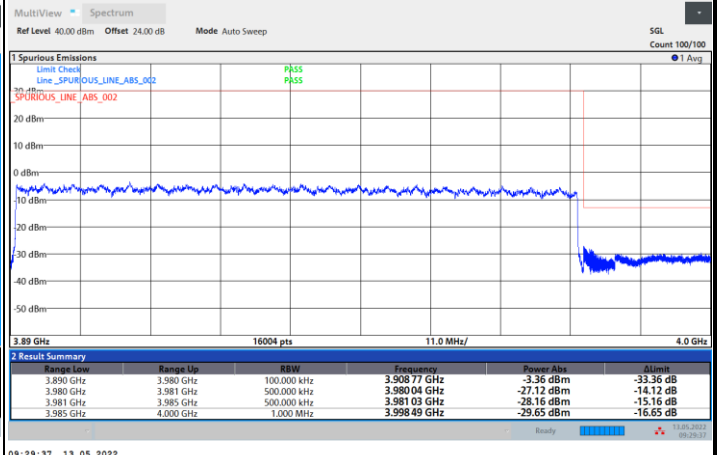


FR1 n77 / 90MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

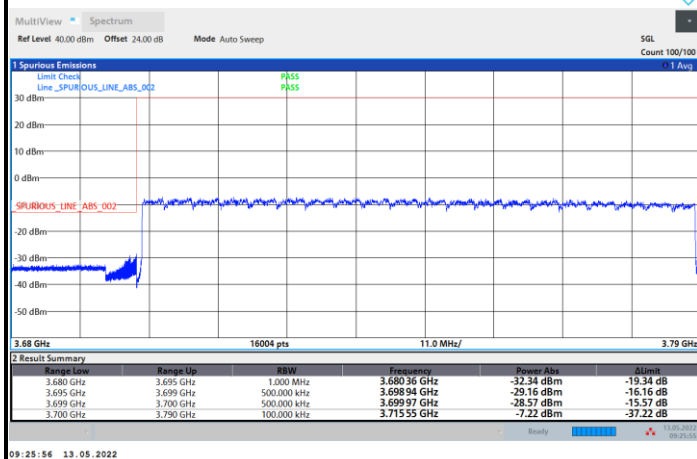


Highest Band Edge / Full RB

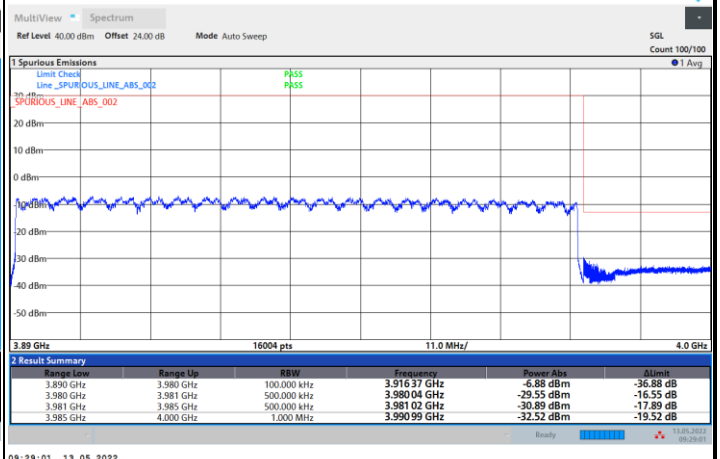


FR1 n77 / 90MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB



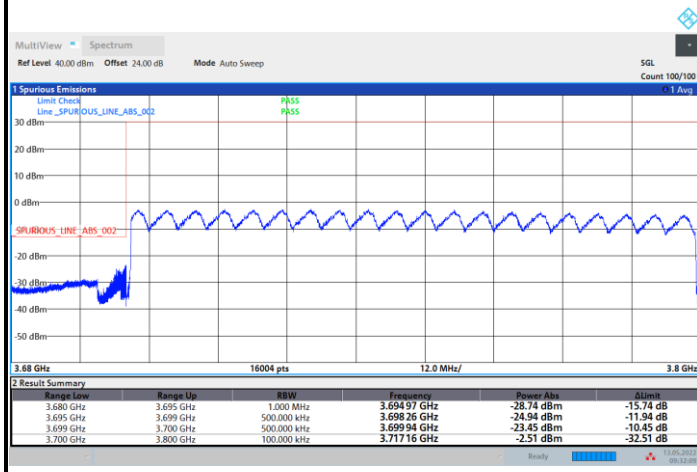
Highest Band Edge / Full RB



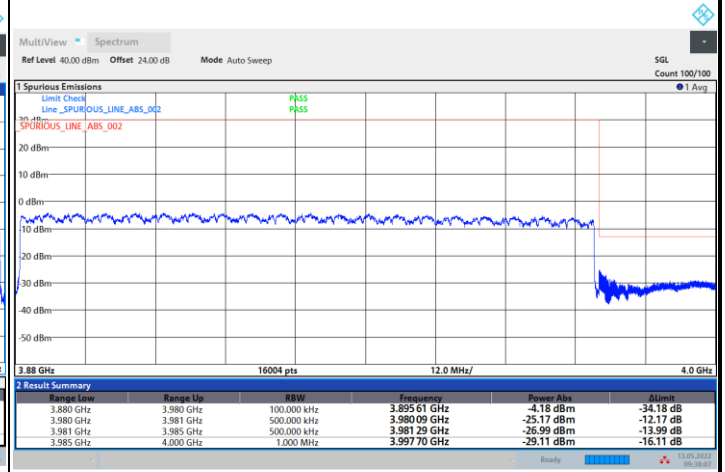


FR1 n77 / 100MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

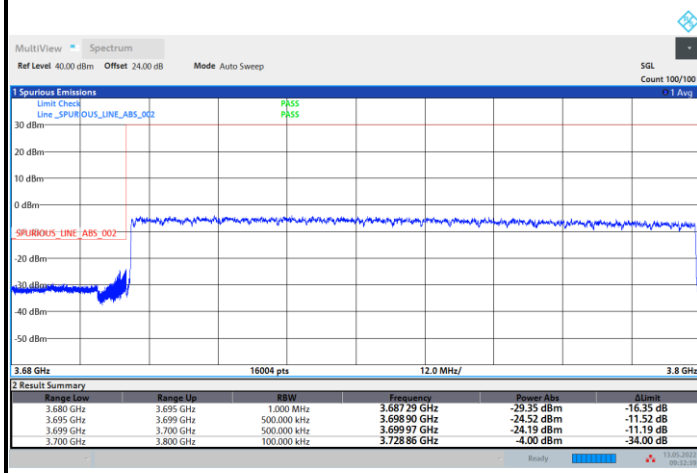


Highest Band Edge / Full RB

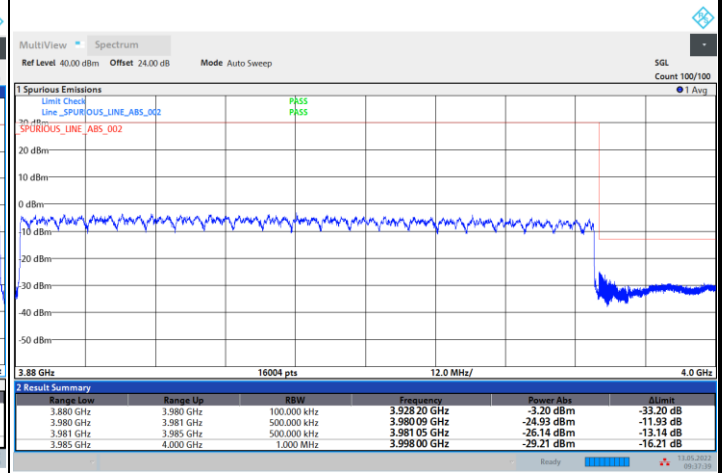


FR1 n77 / 100MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB



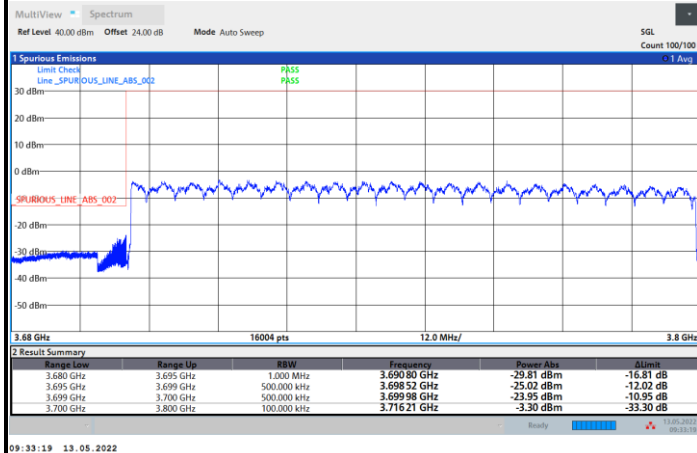
Highest Band Edge / Full RB



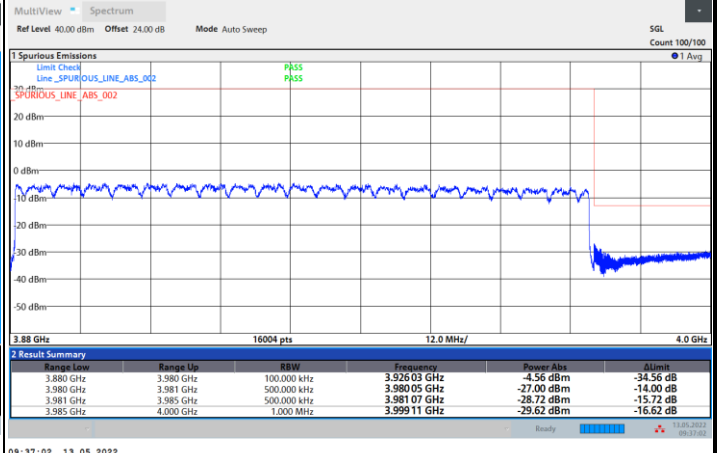


FR1 n77 / 100MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

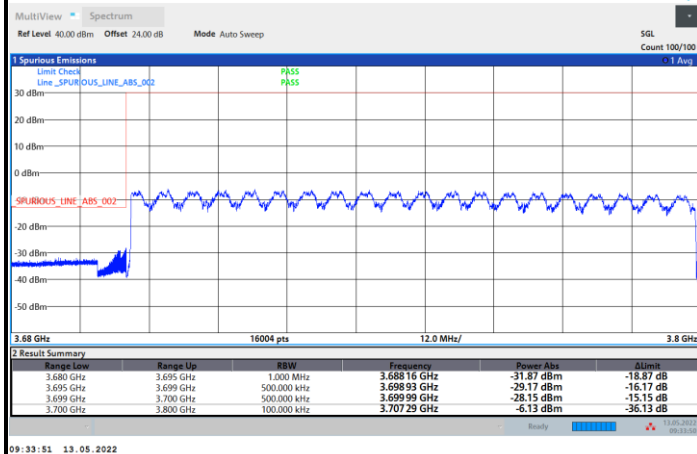


Highest Band Edge / Full RB

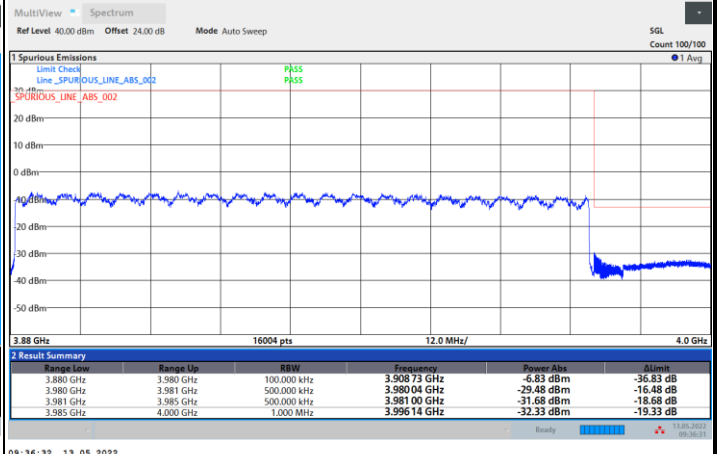


FR1 n77 / 100MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

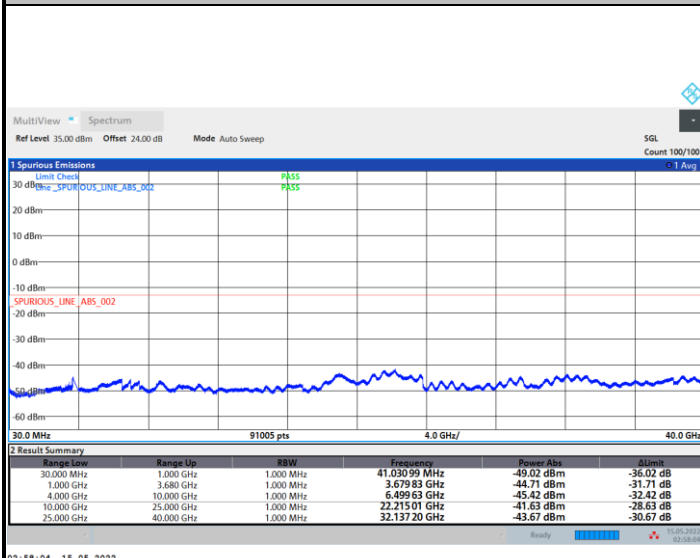




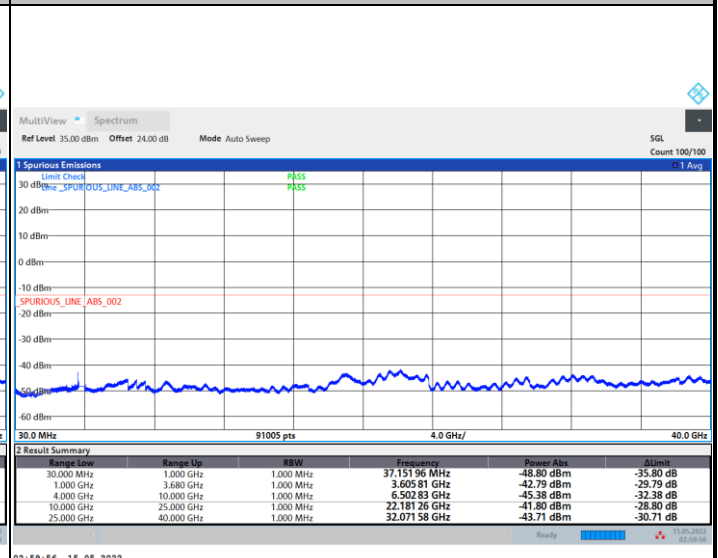
Conducted Spurious Emission

FR1 n77 / 10MHz / CP OFDM / QPSK / 1RB1

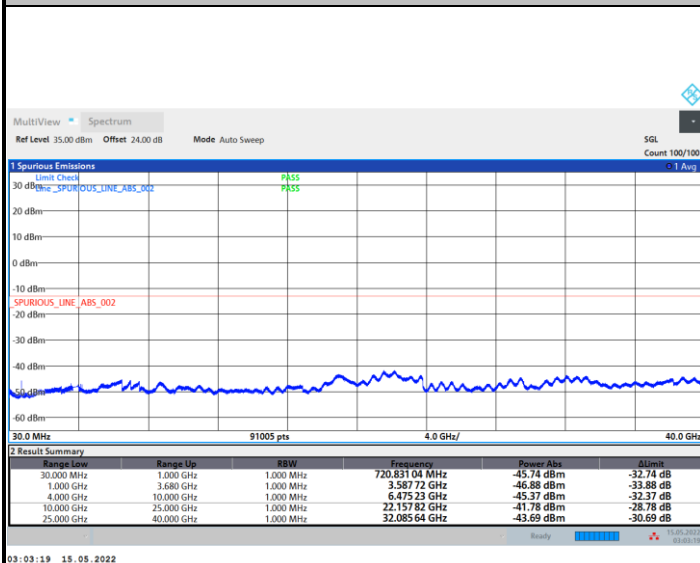
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n77 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0016	PASS
40	Normal Voltage	0.0038	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0037	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0038	

Note:

1. Normal Voltage = 3.86 V. ; Battery End Point (BEP) = 3.30 V. ; Maximum Voltage = 4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

<Primary Antenna>

5G NR n77(HPUE)

5G NR n77 / 100MHz / 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	7401	-40.89	-13	-27.89	-71.81	-48.20	1.94	11.40	H
	11102	-35.54	-13	-22.54	-72.39	-41.77	2.24	10.62	H
	14808	-28.36	-13	-15.36	-71.4	-36.40	2.58	12.78	H
	28510	-62.61	-13	-49.61	-74.49	-75.87	3.99	19.40	H
	22208	-60.73	-13	-47.73	-76.46	-73.92	3.52	18.86	H
	25909	-58.97	-13	-45.97	-77.79	-71.98	3.92	19.08	H
									H
	7401	-40.86	-13	-27.86	-71.87	-48.17	1.94	11.40	V
	11102	-35.71	-13	-22.71	-72.52	-41.94	2.24	10.62	V
	14808	-27.06	-13	-14.06	-71.22	-35.10	2.58	12.78	V
	28510	-63.07	-13	-50.07	-74.72	-76.33	3.99	19.40	V
	22208	-61.17	-13	-48.17	-76.5	-74.36	3.52	18.86	V
	25909	-58.51	-13	-45.51	-77.04	-71.52	3.92	19.08	V
									V



Middle	7584	-41.51	-13	-28.51	-72.03	-49.00	1.89	11.54	H
	11375	-34.75	-13	-21.75	-71.9	-41.20	2.35	10.95	H
	15168	-28.78	-13	-15.78	-71.11	-37.97	2.60	13.94	H
	18954	-64.02	-13	-51.02	-75.59	-75.76	3.26	17.15	H
	22750	-60.14	-13	-47.14	-76.68	-73.14	3.56	18.70	H
	26539	-56.92	-13	-43.92	-76.61	-69.50	3.93	18.65	H
									H
	7584	-70.88	-13	-57.88	-71.88	-78.37	1.89	11.54	V
	11375	-71.15	-13	-58.15	-72.15	-77.60	2.35	10.95	V
	15168	-27.81	-13	-14.81	-71.22	-37.00	2.60	13.94	V
	18954	-63.96	-13	-50.96	-75.3	-75.70	3.26	17.15	V
	22750	-60.66	-13	-47.66	-76.81	-73.66	3.56	18.70	V
	26539	-57.70	-13	-44.70	-77.01	-70.28	3.93	18.65	V
									V
Highest	7763	-40.56	-13	-27.56	-71.31	-48.21	1.88	11.68	H
	11643	-33.72	-13	-20.72	-71.68	-40.72	2.46	11.61	H
	15522	-29.73	-13	-16.73	-70.63	-40.35	2.70	15.46	H
	19409	-63.03	-13	-50.03	-75.35	-75.08	3.23	17.43	H
	23283	-59.15	-13	-46.15	-76.26	-72.02	3.63	18.66	H
	27169	-57.14	-13	-44.14	-77.71	-70.43	3.93	19.37	H
									H
	7763	-40.69	-13	-27.69	-71.71	-48.34	1.88	11.68	V
	11643	-34.00	-13	-21.00	-71.88	-41.00	2.46	11.61	V
	15522	-29.59	-13	-16.59	-70.77	-40.21	2.70	15.46	V
	19406	-63.59	-13	-50.59	-75.65	-75.64	3.23	17.42	V
	23288	-59.59	-13	-46.59	-76.37	-72.46	3.63	18.66	V
	27169	-57.51	-13	-44.51	-77.72	-70.80	3.93	19.37	V
									V

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



<ASDIV Antenna>

5G NR n77(HPUE)

5G NR n77 / 100MHz / 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	7401	-41.92	-13	-28.92	-72.84	-49.23	1.94	11.40	H
	11102	-36.64	-13	-23.64	-73.5	-42.87	2.24	10.62	H
	14808	-28.72	-13	-15.72	-71.76	-36.76	2.58	12.78	H
	18510	-62.68	-13	-49.68	-74.56	-74.88	3.24	17.59	H
	22206	-60.77	-13	-47.77	-76.5	-73.96	3.52	18.86	H
	25909	-58.83	-13	-45.83	-77.65	-71.84	3.92	19.08	H
									H
	7401	-41.57	-13	-28.57	-72.58	-48.88	1.94	11.40	V
	11102	-36.72	-13	-23.72	-73.53	-42.95	2.24	10.62	V
	14808	-27.84	-13	-14.84	-72	-35.88	2.58	12.78	V
	18510	-62.71	-13	-49.71	-74.36	-74.91	3.24	17.59	V
	22206	-61.06	-13	-48.06	-76.39	-74.25	3.52	18.86	V
	25909	-59.24	-13	-46.24	-77.75	-72.25	3.92	19.08	V
									V



Middle	7584	-41.96	-13	-28.96	-72.49	-49.45	1.89	11.54	H
	11375	-35.62	-13	-22.62	-72.77	-42.07	2.35	10.95	H
	15168	-29.09	-13	-16.09	-71.44	-38.28	2.60	13.94	H
	18954	-63.89	-13	-50.89	-75.46	-75.63	3.26	17.15	H
	22750	-59.66	-13	-46.66	-76.2	-72.66	3.56	18.70	H
	26539	-57.31	-13	-44.31	-77	-69.89	3.93	18.65	H
									H
	7584	-41.65	-13	-28.65	-72.35	-49.14	1.89	11.54	V
	11375	-35.29	-13	-22.29	-72.51	-41.74	2.35	10.95	V
	15168	-28.08	-13	-15.08	-71.51	-37.27	2.60	13.94	V
	18954	-63.52	-13	-50.52	-74.86	-75.26	3.26	17.15	V
	22750	-60.46	-13	-47.46	-76.61	-73.46	3.56	18.70	V
	26539	-58.14	-13	-45.14	-77.45	-70.72	3.93	18.65	V
									V
Highest	7763	-41.33	-13	-28.33	-72.08	-48.98	1.88	11.68	H
	11643	-34.69	-13	-21.69	-72.66	-41.69	2.46	11.61	H
	15522	-30.54	-13	-17.54	-71.43	-41.16	2.70	15.46	H
	19409	-63.20	-13	-50.20	-75.52	-75.25	3.23	17.43	H
	23283	-59.49	-13	-46.49	-76.6	-72.36	3.63	18.66	H
	27169	-57.14	-13	-44.14	-77.71	-70.43	3.93	19.37	H
									H
	7763	-41.52	-13	-28.52	-72.54	-49.17	1.88	11.68	V
	11643	-34.82	-13	-21.82	-72.7	-41.82	2.46	11.61	V
	15522	-30.42	-13	-17.42	-71.58	-41.04	2.70	15.46	V
	19409	-63.14	-13	-50.14	-75.2	-75.19	3.23	17.43	V
	23283	-59.42	-13	-46.42	-76.2	-72.29	3.63	18.66	V
	27169	-57.35	-13	-44.35	-77.56	-70.64	3.93	19.37	V
									V

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



<MIMO Antenna>

5G NR n77 (HPUE)

5G NR n77 (HPUE)/ 100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7402	-41.27	-13	-28.27	-72.19	-48.58	1.94	11.40	H
	11103	-36.68	-13	-23.68	-73.54	-42.91	2.24	10.62	H
	14808	-29.18	-13	-16.18	-72.22	-37.22	2.58	12.78	H
	18510	-62.89	-13	-49.89	-74.77	-75.09	3.24	17.59	H
	22207	-60.88	-13	-47.88	-76.61	-74.07	3.52	18.86	H
	25908	-58.61	-13	-45.61	-77.43	-71.62	3.92	19.08	H
									H
	7402	-41.35	-13	-28.35	-72.36	-48.66	1.94	11.40	V
	11103	-36.86	-13	-23.86	-73.67	-43.09	2.24	10.62	V
	14808	-27.58	-13	-14.58	-71.74	-35.62	2.58	12.78	V
	18510	-62.92	-13	-49.92	-74.57	-75.12	3.24	17.59	V
	22207	-61.12	-13	-48.12	-76.45	-74.31	3.52	18.86	V
	25908	-58.92	-13	-45.92	-77.43	-71.93	3.92	19.08	V
									V



Middle	7582	-41.84	-13	-28.84	-72.37	-49.32	1.90	11.53	H
	11373	-35.63	-13	-22.63	-72.78	-42.08	2.35	10.95	H
	15168	-29.13	-13	-16.13	-71.46	-38.32	2.60	13.94	H
	18954	-64.03	-13	-51.03	-75.6	-75.77	3.26	17.15	H
	22747	-60.31	-13	-47.31	-76.84	-73.31	3.55	18.70	H
	26538	-57.44	-13	-44.44	-77.13	-70.01	3.93	18.65	H
									H
	7582	-41.50	-13	-28.50	-72.2	-48.98	1.90	11.53	V
	11373	-35.40	-13	-22.40	-72.62	-41.85	2.35	10.95	V
	15168	-27.66	-13	-14.66	-71.07	-36.85	2.60	13.94	V
	18954	-64.54	-13	-51.54	-75.88	-76.28	3.26	17.15	V
	22747	-60.76	-13	-47.76	-76.91	-73.76	3.55	18.70	V
	26538	-57.88	-13	-44.88	-77.19	-70.45	3.93	18.65	V
									V
Highest	7762	-41.08	-13	-28.08	-71.83	-48.73	1.88	11.68	H
	11643	-34.45	-13	-21.45	-72.41	-41.45	2.46	11.61	H
	15528	-30.62	-13	-17.62	-71.51	-41.25	2.70	15.48	H
	19409	-62.79	-13	-49.79	-75.11	-74.84	3.23	17.43	H
	23287	-59.22	-13	-46.22	-76.33	-72.09	3.63	18.66	H
	27168	-57.21	-13	-44.21	-77.78	-70.50	3.93	19.37	H
									H
	7762	-41.08	-13	-28.08	-72.1	-48.73	1.88	11.68	V
	11643	-34.47	-13	-21.47	-72.35	-41.47	2.46	11.61	V
	15528	-30.26	-13	-17.26	-71.42	-40.89	2.70	15.48	V
	19409	-63.22	-13	-50.22	-75.28	-75.27	3.23	17.43	V
	23287	-59.62	-13	-46.62	-76.4	-72.49	3.63	18.66	V
	27168	-57.67	-13	-44.67	-77.88	-70.96	3.93	19.37	V
									V

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

—————THE END—————