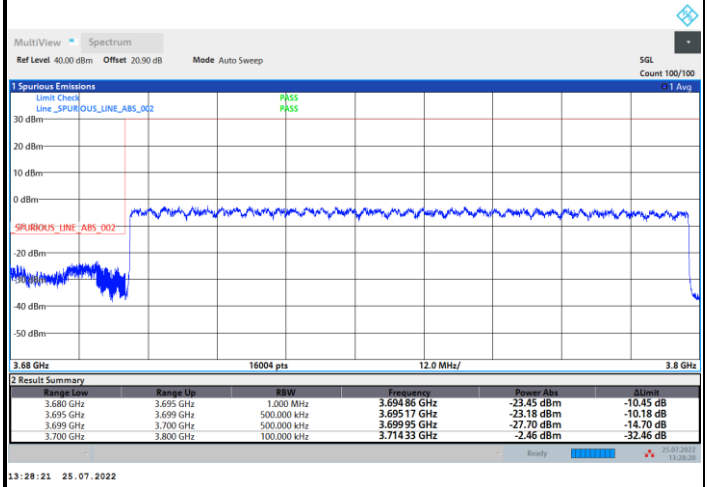
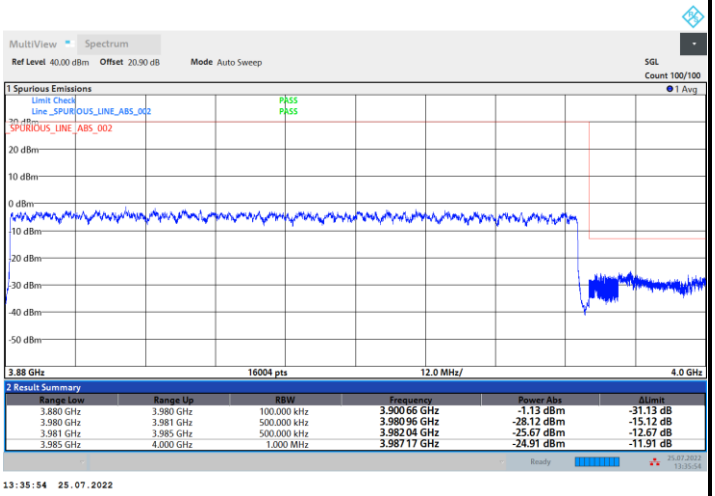
FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

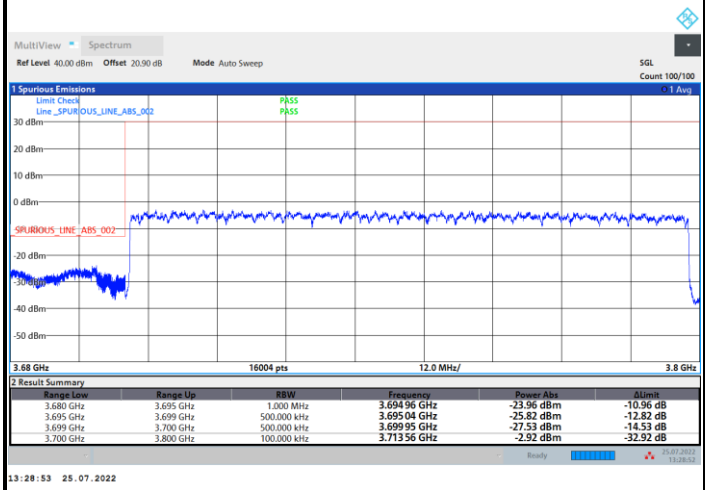


Highest Band Edge / Full RB

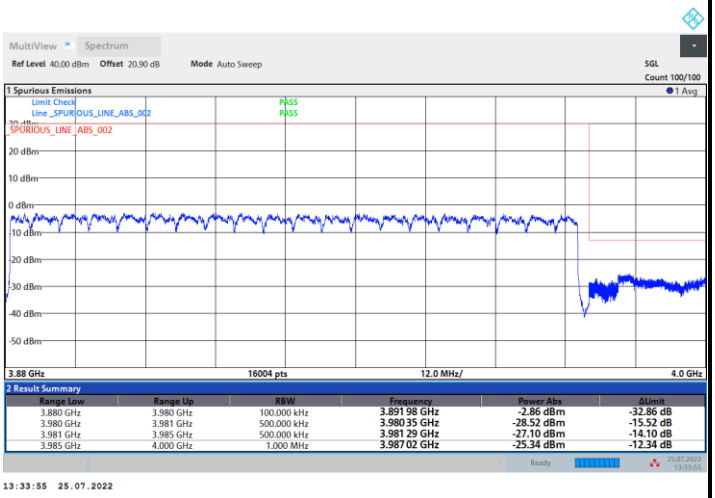


FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB

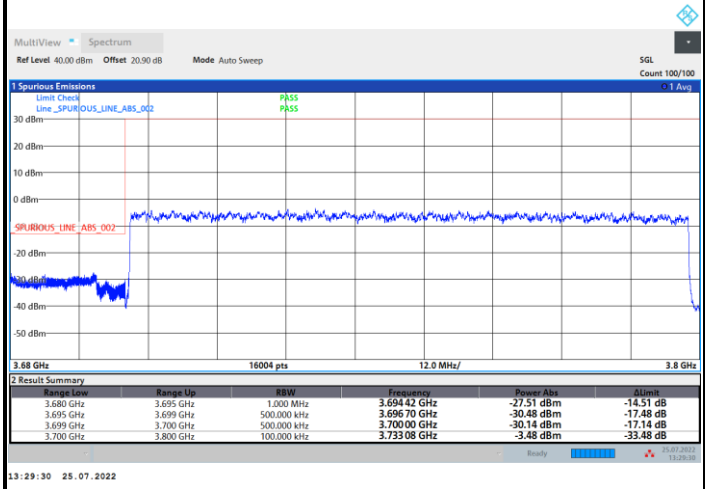


Highest Band Edge / Full RB

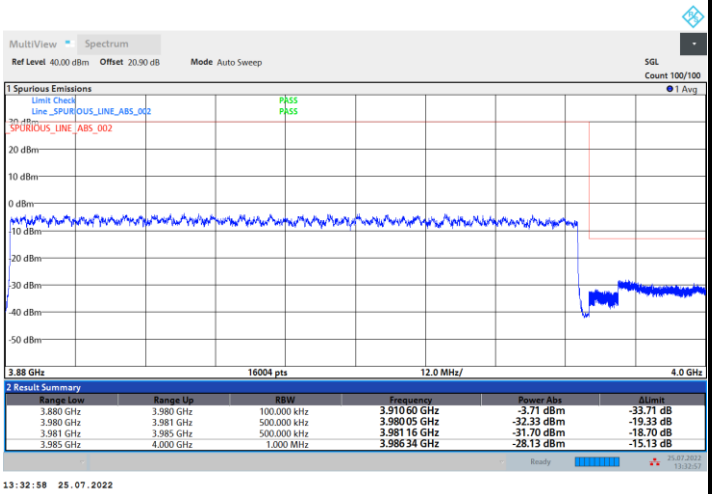


FR1 n77 / 100MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

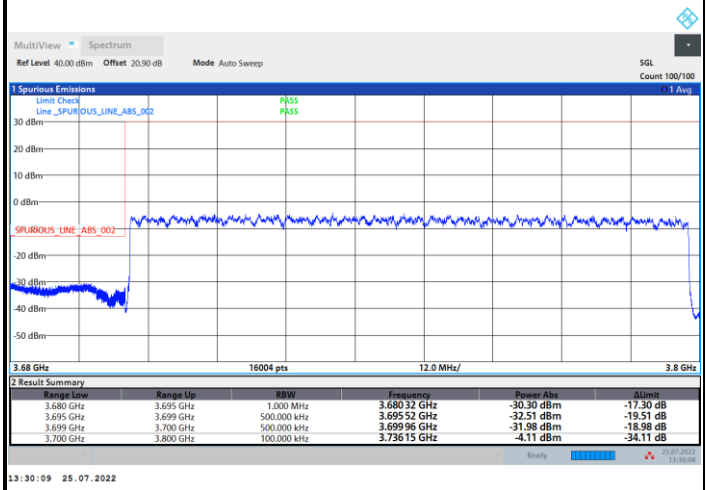


Highest Band Edge / Full RB

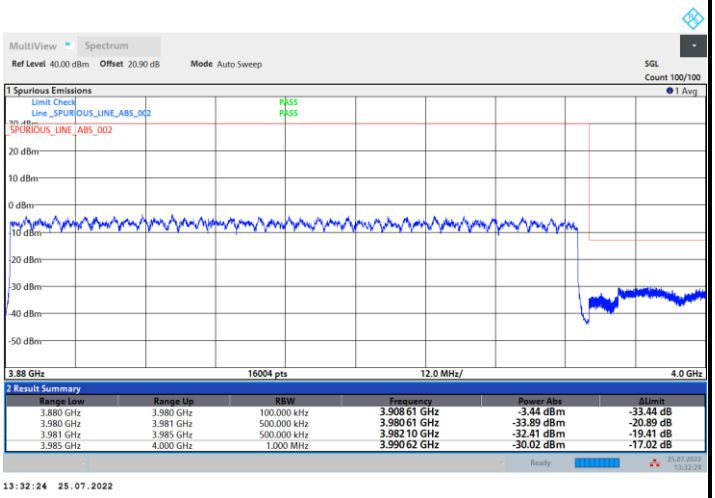


FR1 n77 / 100MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB

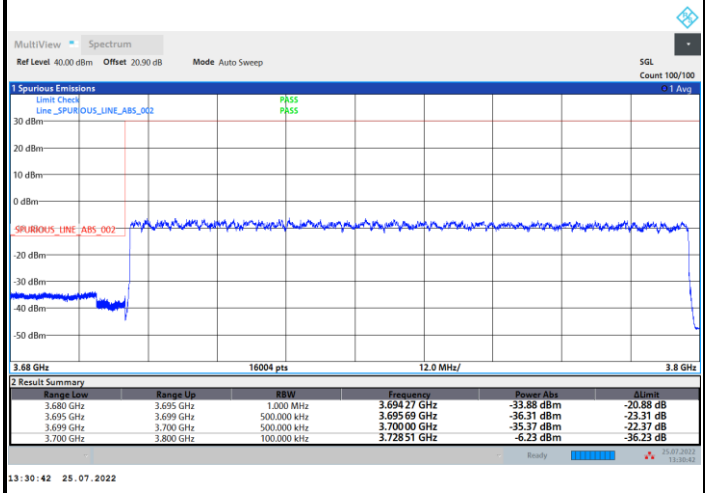


Highest Band Edge / Full RB



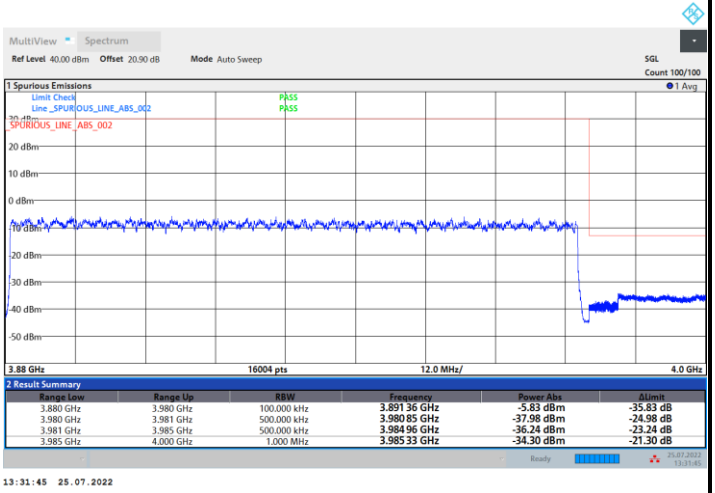
FR1 n77 / 100MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB



13:30:42 25.07.2022

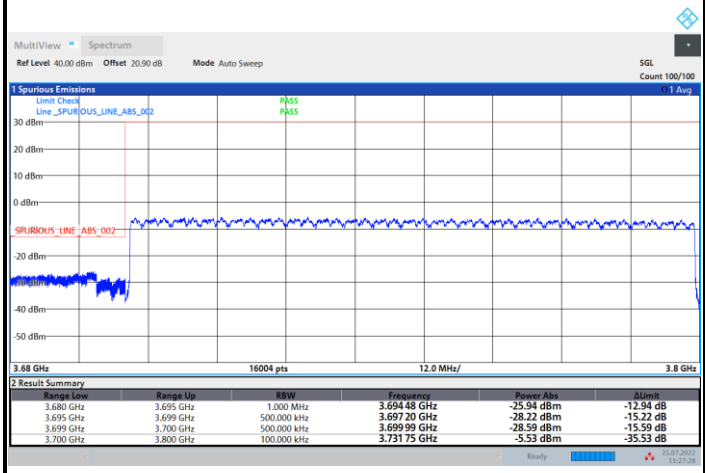
Highest Band Edge / Full RB



13:31:45 25.07.2022

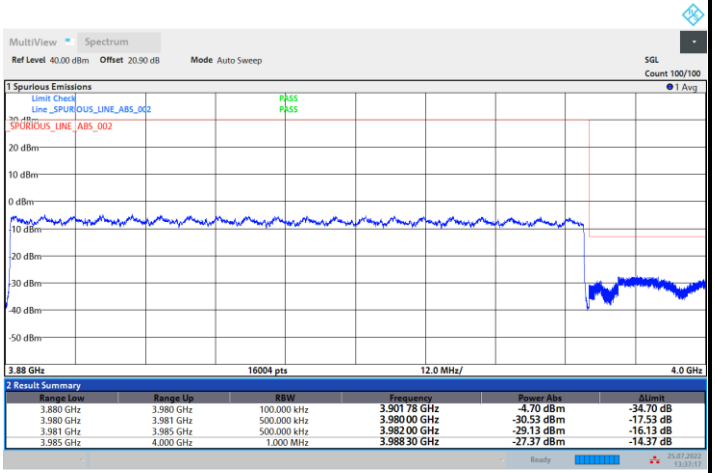
FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



13:27:28 25.07.2022

Highest Band Edge

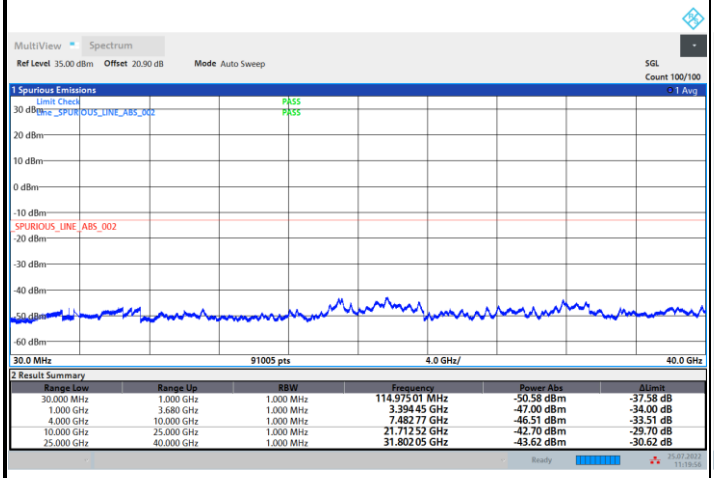


13:37:18 25.07.2022

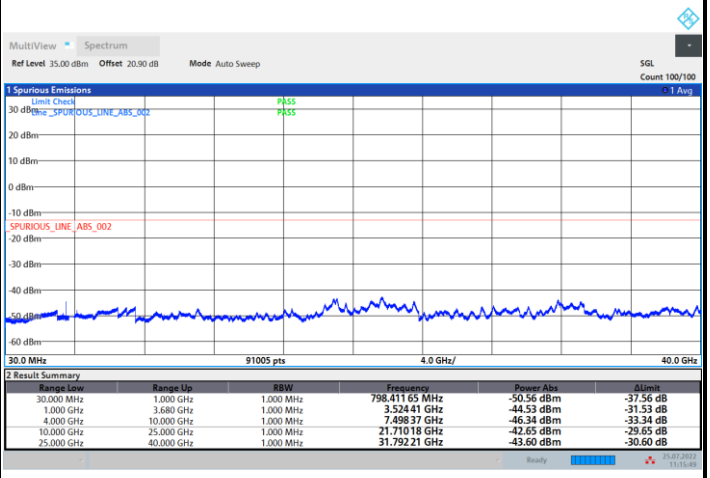
Conducted Spurious Emission

FR1 n77 / 20MHz / DFT-S OFDM / QPSK / 1RB1

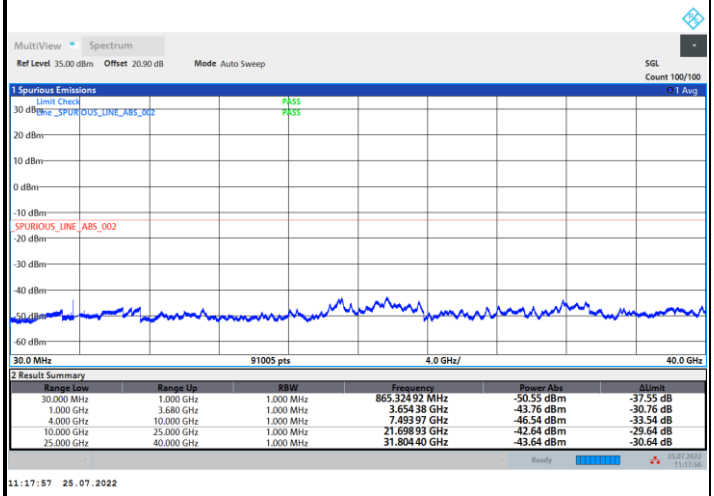
Lowest Channel



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	0.0001	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0040	

Note:

1. Normal Voltage = 4.05 V.；Battery End Point (BEP) = 3.85 V.；Maximum Voltage = 4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

<Ant. 11>

5G NR n77

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	7402	-40.84	-13	-27.84	-71.75	-48.15	1.94	11.40	H
	11103	-35.91	-13	-22.91	-73.04	-42.14	2.24	10.62	H
	14808	-29.01	-13	-16.01	-71.92	-37.05	2.58	12.78	H
	18506	-62.25	-13	-49.25	-72.83	-74.45	3.24	17.59	H
	22208	-60.14	-13	-47.14	-74.61	-73.33	3.52	18.86	H
	25909	-57.87	-13	-44.87	-76.73	-70.88	3.92	19.08	H
	7402	-41.32	-13	-28.32	-72.32	-48.63	1.94	11.40	V
	11103	-36.15	-13	-23.15	-73.23	-42.38	2.24	10.62	V
	14808	-28.09	-13	-15.09	-72.12	-36.13	2.58	12.78	V
	18506	-62.04	-13	-49.04	-72.4	-74.24	3.24	17.59	V
	22208	-60.36	-13	-47.36	-74.43	-73.55	3.52	18.86	V
	25909	-57.99	-13	-44.99	-76.54	-71.00	3.92	19.08	V
Middle	7582	-41.93	-13	-28.93	-72.45	-49.41	1.90	11.53	H
	11373	-35.44	-13	-22.44	-72.86	-41.89	2.35	10.95	H
	15168	-29.25	-13	-16.25	-71.49	-38.44	2.60	13.94	H
	18956	-62.32	-13	-49.32	-72.95	-74.06	3.26	17.14	H
	22748	-59.65	-13	-46.65	-75.13	-72.65	3.55	18.70	H
	26539	-57.35	-13	-44.35	-76.62	-69.93	3.93	18.65	H
	7582	-41.84	-13	-28.84	-72.53	-49.32	1.90	11.53	V
	11373	-35.30	-13	-22.30	-72.79	-41.75	2.35	10.95	V
	15168	-28.59	-13	-15.59	-71.91	-37.78	2.60	13.94	V
	18956	-62.57	-13	-49.57	-72.97	-74.31	3.26	17.14	V
	22748	-59.50	-13	-46.50	-74.6	-72.50	3.55	18.70	V
	26539	-57.40	-13	-44.40	-76.29	-69.98	3.93	18.65	V

Highest	7762	-41.72	-13	-28.72	-72.51	-49.37	1.88	11.68	H
	11643	-34.40	-13	-21.40	-72.54	-41.40	2.46	11.61	H
	15528	-30.26	-13	-17.26	-71.33	-40.89	2.70	15.48	H
	19406	-61.91	-13	-48.91	-73.16	-73.96	3.23	17.42	H
	23288	-58.81	-13	-45.81	-75.13	-71.68	3.63	18.66	H
	27169	-56.06	-13	-43.06	-76.1	-69.35	3.93	19.37	H
	7762	-41.18	-13	-28.18	-72.24	-48.83	1.88	11.68	V
	11643	-34.44	-13	-21.44	-72.5	-41.44	2.46	11.61	V
	15528	-30.07	-13	-17.07	-71.41	-40.70	2.70	15.48	V
	19406	-62.45	-13	-49.45	-73.44	-74.50	3.23	17.42	V
	23288	-59.52	-13	-46.52	-75.52	-72.39	3.63	18.66	V
	27169	-57.09	-13	-44.09	-76.77	-70.38	3.93	19.37	V

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

5G NR n78

5G NR n78 / 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)
Middle	7402	-41.63	-13	-28.63	-72.54	-48.94	1.94	11.40	H
	11103	-36.23	-13	-23.23	-73.36	-42.46	2.24	10.62	H
	14808	-28.89	-13	-15.89	-71.8	-36.93	2.58	12.78	H
	18506	-62.00	-13	-49.00	-72.58	-74.20	3.24	17.59	H
	22208	-60.19	-13	-47.19	-74.66	-73.38	3.52	18.86	H
	25909	-57.87	-13	-44.87	-76.73	-70.88	3.92	19.08	H
	7402	-41.33	-13	-28.33	-72.33	-48.64	1.94	11.40	V
	11103	-36.26	-13	-23.26	-73.34	-42.49	2.24	10.62	V
	14808	-28.21	-13	-15.21	-72.24	-36.25	2.58	12.78	V
	18506	-62.00	-13	-49.00	-72.36	-74.20	3.24	17.59	V
	22208	-60.65	-13	-47.65	-74.72	-73.84	3.52	18.86	V
	25909	-58.43	-13	-45.43	-76.98	-71.44	3.92	19.08	V

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

<Ant. 0 + Ant. 12>

EN-DC 13A-n77A

EN-DC 13A-n77A / 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	7402	-40.67	-13	-27.67	-71.57	-47.98	1.94	11.40	H
	11103	-35.95	-13	-22.95	-73.08	-42.18	2.24	10.62	H
	14805	-28.46	-13	-15.46	-71.38	-36.50	2.58	12.77	H
	18506	-62.14	-13	-49.14	-72.72	-74.34	3.24	17.59	H
	22208	-59.76	-13	-46.76	-74.23	-72.95	3.52	18.86	H
	25909	-57.82	-13	-44.82	-76.68	-70.83	3.92	19.08	H
	7402	-41.07	-13	-28.07	-72.07	-48.38	1.94	11.40	V
	11103	-35.95	-13	-22.95	-73.03	-42.18	2.24	10.62	V
	14805	-27.81	-13	-14.81	-71.84	-35.85	2.58	12.77	V
	18506	-62.65	-13	-49.65	-73.01	-74.85	3.24	17.59	V
	22208	-61.14	-13	-48.14	-75.21	-74.33	3.52	18.86	V
	25909	-58.56	-13	-45.56	-77.11	-71.57	3.92	19.08	V
Middle	7582	-41.19	-13	-28.19	-71.71	-48.67	1.90	11.53	H
	11373	-34.69	-13	-21.69	-72.11	-41.14	2.35	10.95	H
	15165	-29.08	-13	-16.08	-71.34	-38.25	2.60	13.93	H
	18956	-61.10	-13	-48.10	-71.73	-72.84	3.26	17.14	H
	22748	-59.47	-13	-46.47	-74.95	-72.47	3.55	18.70	H
	26539	-56.84	-13	-43.84	-76.11	-69.42	3.93	18.65	H
	7582	-41.06	-13	-28.06	-71.75	-48.54	1.90	11.53	V
	11373	-35.19	-13	-22.19	-72.68	-41.64	2.35	10.95	V
	15165	-28.03	-13	-15.03	-71.37	-37.20	2.60	13.93	V
	18956	-63.48	-13	-50.48	-73.88	-75.22	3.26	17.14	V
	22748	-60.27	-13	-47.27	-75.37	-73.27	3.55	18.70	V
	26539	-57.52	-13	-44.52	-76.41	-70.10	3.93	18.65	V

Highest	7763	-40.96	-13	-27.96	-71.75	-48.61	1.88	11.68	H
	11644	-34.21	-13	-21.21	-72.36	-41.22	2.46	11.62	H
	15525	-30.15	-13	-17.15	-71.23	-40.77	2.70	15.47	H
	19406	-62.35	-13	-49.35	-73.6	-74.40	3.23	17.42	H
	23288	-59.11	-13	-46.11	-75.43	-71.98	3.63	18.66	H
	27169	-56.46	-13	-43.46	-76.5	-69.75	3.93	19.37	H
	7763	-40.62	-13	-27.62	-71.68	-48.27	1.88	11.68	V
	11644	-33.96	-13	-20.96	-71.96	-40.97	2.46	11.62	V
	15525	-29.91	-13	-16.91	-71.26	-40.53	2.70	15.47	V
	19406	-63.31	-13	-50.31	-74.3	-75.36	3.23	17.42	V
	23288	-59.78	-13	-46.78	-75.78	-72.65	3.63	18.66	V
	27169	-57.22	-13	-44.22	-76.9	-70.51	3.93	19.37	V

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

<Ant. 4 + Ant. 12>

EN-DC 66A-n78A

EN-DC 66A-n78A / 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)
Middle	7402	-40.39	-13	-27.39	-71.29	-47.70	1.94	11.40	H
	11103	-32.55	-13	-19.55	-69.68	-38.78	2.24	10.62	H
	14805	-28.92	-13	-15.92	-71.84	-36.96	2.58	12.77	H
	18506	-62.00	-13	-49.00	-72.58	-74.20	3.24	17.59	H
	22208	-60.24	-13	-47.24	-74.71	-73.43	3.52	18.86	H
	25909	-57.87	-13	-44.87	-76.73	-70.88	3.92	19.08	H
	7402	-40.96	-13	-27.96	-71.96	-48.27	1.94	11.40	V
	11103	-33.48	-13	-20.48	-70.56	-39.71	2.24	10.62	V
	14805	-27.86	-13	-14.86	-71.89	-35.90	2.58	12.77	V
	18506	-62.26	-13	-49.26	-72.62	-74.46	3.24	17.59	V
	22208	-60.17	-13	-47.17	-74.24	-73.36	3.52	18.86	V
	25909	-57.67	-13	-44.67	-76.22	-70.68	3.92	19.08	V

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