Appendix B.21

NR Band n12

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 t (86-512) 62992980 www.sgsgroup.com.cn
中国·苏州·中国（江苏）自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编：215000 t (86-512) 62992980 sgs.china@sgs.com

Effective (Isotropic) Radiated Power Output Data for SA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Power（dBm）	ERP（dBm）	LIMIT	Verdict
N12	15	5	DFT-PI2BPSK	L	Inner_1RB_Left	22.46	21.89	34.77	PASS
N12	15	5	DFT-PI2BPSK	L	Inner_1RB_Right	22.6	22.03	34.77	PASS
N12	15	5	DFT-PI2BPSK	L	Outer_Full	22.02	21.45	34.77	PASS
N12	15	5	DFT-QPSK	L	Inner_1RB_Left	22.65	22.08	34.77	PASS
N12	15	5	DFT-QPSK	L	Inner_1RB_Right	22.63	22.06	34.77	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	21.51	20.94	34.77	PASS
N12	15	5	DFT-16QAM	L	Inner_1RB_Left	21.58	21.01	34.77	PASS
N12	15	5	DFT-16QAM	L	Inner_1RB_Right	21.64	21.07	34.77	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	20.57	20	34.77	PASS
N12	15	5	DFT-64QAM	L	Inner_1RB_Left	19.98	19.41	34.77	PASS
N12	15	5	DFT-64QAM	L	Inner_1RB_Right	20.08	19.51	34.77	PASS
N12	15	5	DFT-64QAM	L	Outer_Full	20	19.43	34.77	PASS
N12	15	5	DFT-256QAM	L	Inner_1RB_Left	18.2	17.63	34.77	PASS
N12	15	5	DFT-256QAM	L	Inner_1RB_Right	18.28	17.71	34.77	PASS
N12	15	5	DFT-256QAM	L	Outer_Full	18.1	17.53	34.77	PASS
N12	15	5	DFT-PI2BPSK	M	Inner_1RB_Left	22.56	21.99	34.77	PASS
N12	15	5	DFT-PI2BPSK	M	Inner_1RB_Right	22.73	22.16	34.77	PASS
N12	15	5	DFT-PI2BPSK	M	Outer_Full	22.08	21.51	34.77	PASS
N12	15	5	DFT-QPSK	M	Inner_1RB_Left	22.53	21.96	34.77	PASS
N12	15	5	DFT-QPSK	M	Inner_1RB_Right	22.8	22.23	34.77	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	21.63	21.06	34.77	PASS
N12	15	5	DFT-16QAM	M	Inner_1RB_Left	21.57	21	34.77	PASS
N12	15	5	DFT-16QAM	M	Inner_1RB_Right	21.77	21.2	34.77	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	20.62	20.05	34.77	PASS
N12	15	5	DFT-64QAM	M	Inner_1RB_Left	20.01	19.44	34.77	PASS
N12	15	5	DFT-64QAM	M	Inner_1RB_Right	20.36	19.79	34.77	PASS
N12	15	5	DFT-64QAM	M	Outer_Full	20.52	19.95	34.77	PASS
N12	15	5	DFT-256QAM	M	Inner_1RB_Left	18.33	17.76	34.77	PASS
N12	15	5	DFT-256QAM	M	Inner_1RB_Right	18.55	17.98	34.77	PASS
N12	15	5	DFT-256QAM	M	Outer_Full	18.22	17.65	34.77	PASS
N12	15	5	DFT-PI2BPSK	H	Inner_1RB_Left	22.84	22.27	34.77	PASS

N12	15	5	DFT-PI2BPSK	H	Inner_1RB_Right	23.05	22.48	34.77	PASS
N12	15	5	DFT-PI2BPSK	H	Outer_Full	22.57	22	34.77	PASS
N12	15	5	DFT-QPSK	H	Inner_1RB_Left	22.83	22.26	34.77	PASS
N12	15	5	DFT-QPSK	H	Inner_1RB_Right	23.07	22.5	34.77	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	22.11	21.54	34.77	PASS
N12	15	5	DFT-16QAM	H	Inner_1RB_Left	21.83	21.26	34.77	PASS
N12	15	5	DFT-16QAM	H	Inner_1RB_Right	22.18	21.61	34.77	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	21.17	20.6	34.77	PASS
N12	15	5	DFT-64QAM	H	Inner_1RB_Left	20.36	19.79	34.77	PASS
N12	15	5	DFT-64QAM	H	Inner_1RB_Right	20.64	20.07	34.77	PASS
N12	15	5	DFT-64QAM	H	Outer_Full	20.59	20.02	34.77	PASS
N12	15	5	DFT-256QAM	H	Inner_1RB_Left	18.68	18.11	34.77	PASS
N12	15	5	DFT-256QAM	H	Inner_1RB_Right	18.85	18.28	34.77	PASS
N12	15	5	DFT-256QAM	H	Outer_Full	18.72	18.15	34.77	PASS
N12	15	10	DFT-PI2BPSK	L	Inner_1RB_Left	22.31	21.74	34.77	PASS
N12	15	10	DFT-PI2BPSK	L	Inner_1RB_Right	22.64	22.07	34.77	PASS
N12	15	10	DFT-PI2BPSK	L	Outer_Full	21.84	21.27	34.77	PASS
N12	15	10	DFT-QPSK	L	Inner_1RB_Left	22.32	21.75	34.77	PASS
N12	15	10	DFT-QPSK	L	Inner_1RB_Right	22.65	22.08	34.77	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	21.4	20.83	34.77	PASS
N12	15	10	DFT-16QAM	L	Inner_1RB_Left	21.33	20.76	34.77	PASS
N12	15	10	DFT-16QAM	L	Inner_1RB_Right	21.78	21.21	34.77	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	20.4	19.83	34.77	PASS
N12	15	10	DFT-64QAM	L	Inner_1RB_Left	19.88	19.31	34.77	PASS
N12	15	10	DFT-64QAM	L	Inner_1RB_Right	20.2	19.63	34.77	PASS
N12	15	10	DFT-64QAM	L	Outer_Full	19.89	19.32	34.77	PASS
N12	15	10	DFT-256QAM	L	Inner_1RB_Left	18.11	17.54	34.77	PASS
N12	15	10	DFT-256QAM	L	Inner_1RB_Right	18.42	17.85	34.77	PASS
N12	15	10	DFT-256QAM	L	Outer_Full	18	17.43	34.77	PASS
N12	15	10	DFT-PI2BPSK	M	Inner_1RB_Left	22.32	21.75	34.77	PASS
N12	15	10	DFT-PI2BPSK	M	Inner_1RB_Right	22.85	22.28	34.77	PASS
N12	15	10	DFT-PI2BPSK	M	Outer_Full	21.88	21.31	34.77	PASS
N12	15	10	DFT-QPSK	M	Inner_1RB_Left	22.43	21.86	34.77	PASS
N12	15	10	DFT-QPSK	M	Inner_1RB_Right	23.06	22.49	34.77	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	21.37	20.8	34.77	PASS
N12	15	10	DFT-16QAM	M	Inner_1RB_Left	21.43	20.86	34.77	PASS
N12	15	10	DFT-16QAM	M	Inner_1RB_Right	21.97	21.4	34.77	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	20.37	19.8	34.77	PASS

N12	15	10	DFT-64QAM	M	Inner_1RB_Left	19.88	19.31	34.77	PASS
N12	15	10	DFT-64QAM	M	Inner_1RB_Right	20.43	19.86	34.77	PASS
N12	15	10	DFT-64QAM	M	Outer_Full	19.81	19.24	34.77	PASS
N12	15	10	DFT-256QAM	M	Inner_1RB_Left	18.07	17.5	34.77	PASS
N12	15	10	DFT-256QAM	M	Inner_1RB_Right	18.61	18.04	34.77	PASS
N12	15	10	DFT-256QAM	M	Outer_Full	17.95	17.38	34.77	PASS
N12	15	10	DFT-PI2BPSK	H	Inner_1RB_Left	22.52	21.95	34.77	PASS
N12	15	10	DFT-PI2BPSK	H	Inner_1RB_Right	23.02	22.45	34.77	PASS
N12	15	10	DFT-PI2BPSK	H	Outer_Full	22.29	21.72	34.77	PASS
N12	15	10	DFT-QPSK	H	Inner_1RB_Left	22.45	21.88	34.77	PASS
N12	15	10	DFT-QPSK	H	Inner_1RB_Right	22.99	22.42	34.77	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	21.75	21.18	34.77	PASS
N12	15	10	DFT-16QAM	H	Inner_1RB_Left	21.53	20.96	34.77	PASS
N12	15	10	DFT-16QAM	H	Inner_1RB_Right	21.99	21.42	34.77	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	20.76	20.19	34.77	PASS
N12	15	10	DFT-64QAM	H	Inner_1RB_Left	19.94	19.37	34.77	PASS
N12	15	10	DFT-64QAM	H	Inner_1RB_Right	20.49	19.92	34.77	PASS
N12	15	10	DFT-64QAM	H	Outer_Full	20.45	19.88	34.77	PASS
N12	15	10	DFT-256QAM	H	Inner_1RB_Left	18.45	17.88	34.77	PASS
N12	15	10	DFT-256QAM	H	Inner_1RB_Right	18.69	18.12	34.77	PASS
N12	15	10	DFT-256QAM	H	Outer_Full	18.56	17.99	34.77	PASS
N12	15	15	DFT-PI2BPSK	L	Inner_1RB_Left	23.32	22.75	34.77	PASS
N12	15	15	DFT-PI2BPSK	L	Inner_1RB_Right	23.11	22.54	34.77	PASS
N12	15	15	DFT-PI2BPSK	L	Outer_Full	22.07	21.5	34.77	PASS
N12	15	15	DFT-QPSK	L	Inner_1RB_Left	22.35	21.78	34.77	PASS
N12	15	15	DFT-QPSK	L	Inner_1RB_Right	23.03	22.46	34.77	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	21.56	20.99	34.77	PASS
N12	15	15	DFT-16QAM	L	Inner_1RB_Left	21.41	20.84	34.77	PASS
N12	15	15	DFT-16QAM	L	Inner_1RB_Right	22.09	21.52	34.77	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	20.59	20.02	34.77	PASS
N12	15	15	DFT-64QAM	L	Inner_1RB_Left	19.85	19.28	34.77	PASS
N12	15	15	DFT-64QAM	L	Inner_1RB_Right	20.5	19.93	34.77	PASS
N12	15	15	DFT-64QAM	L	Outer_Full	20.66	20.09	34.77	PASS
N12	15	15	DFT-256QAM	L	Inner_1RB_Left	18.77	18.2	34.77	PASS
N12	15	15	DFT-256QAM	L	Inner_1RB_Right	18.76	18.19	34.77	PASS
N12	15	15	DFT-256QAM	L	Outer_Full	18.63	18.06	34.77	PASS
N12	15	15	DFT-PI2BPSK	M	Inner_1RB_Left	22.42	21.85	34.77	PASS
N12	15	15	DFT-PI2BPSK	M	Inner_1RB_Right	23.18	22.61	34.77	PASS

N12	15	15	DFT-PI2BPSK	M	Outer_Full	22.08	21.51	34.77	PASS
N12	15	15	DFT-QPSK	M	Inner_1RB_Left	22.34	21.77	34.77	PASS
N12	15	15	DFT-QPSK	M	Inner_1RB_Right	23.07	22.5	34.77	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	21.55	20.98	34.77	PASS
N12	15	15	DFT-16QAM	M	Inner_1RB_Left	21.35	20.78	34.77	PASS
N12	15	15	DFT-16QAM	M	Inner_1RB_Right	22.1	21.53	34.77	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	20.59	20.02	34.77	PASS
N12	15	15	DFT-64QAM	M	Inner_1RB_Left	19.81	19.24	34.77	PASS
N12	15	15	DFT-64QAM	M	Inner_1RB_Right	20.57	20	34.77	PASS
N12	15	15	DFT-64QAM	M	Outer_Full	20.07	19.5	34.77	PASS
N12	15	15	DFT-256QAM	M	Inner_1RB_Left	18.11	17.54	34.77	PASS
N12	15	15	DFT-256QAM	M	Inner_1RB_Right	18.78	18.21	34.77	PASS
N12	15	15	DFT-256QAM	M	Outer_Full	18.18	17.61	34.77	PASS
N12	15	15	DFT-PI2BPSK	H	Inner_1RB_Left	22.43	21.86	34.77	PASS
N12	15	15	DFT-PI2BPSK	H	Inner_1RB_Right	23.2	22.63	34.77	PASS
N12	15	15	DFT-PI2BPSK	H	Outer_Full	22.13	21.56	34.77	PASS
N12	15	15	DFT-QPSK	H	Inner_1RB_Left	22.37	21.8	34.77	PASS
N12	15	15	DFT-QPSK	H	Inner_1RB_Right	23.1	22.53	34.77	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	21.6	21.03	34.77	PASS
N12	15	15	DFT-16QAM	H	Inner_1RB_Left	21.38	20.81	34.77	PASS
N12	15	15	DFT-16QAM	H	Inner_1RB_Right	22.12	21.55	34.77	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	20.66	20.09	34.77	PASS
N12	15	15	DFT-64QAM	H	Inner_1RB_Left	19.81	19.24	34.77	PASS
N12	15	15	DFT-64QAM	H	Inner_1RB_Right	20.61	20.04	34.77	PASS
N12	15	15	DFT-64QAM	H	Outer_Full	20.11	19.54	34.77	PASS
N12	15	15	DFT-256QAM	H	Inner_1RB_Left	18	17.43	34.77	PASS
N12	15	15	DFT-256QAM	H	Inner_1RB_Right	18.81	18.24	34.77	PASS
N12	15	15	DFT-256QAM	H	Outer_Full	18.55	17.98	34.77	PASS

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中国·苏州·中国（江苏）自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编：215000 t (86-512) 62992980 sgs.china@sgs.com

Field Strength of Spurious Radiation

Test Band = 5G NR N12_ TM1
Test Channel = Low

Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1399.6800	44.41	-48.00	25.62	-73.23	-13.00	60.23	247	251	Horizontal
2	2099.5200	43.53	-47.71	26.99	-72.45	-13.00	59.45	154	356	Horizontal
3	2799.3600	43.78	-46.92	28.48	-69.92	-13.00	56.92	185	238	Horizontal
4	3499.2000	43.30	-46.54	29.52	-68.98	-13.00	55.98	196	320	Horizontal
5	4199.0400	40.95	-45.96	31.10	-69.17	-13.00	56.17	126	266	Horizontal
6	4898.8800	41.87	-45.58	32.60	-66.37	-13.00	53.37	255	197	Horizontal

Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1399.6800	43.87	-48.00	25.62	-73.77	-13.00	60.77	211	67	Vertical
2	2099.5200	43.39	-47.71	26.99	-72.59	-13.00	59.59	154	360	Vertical
3	2799.3600	42.65	-46.92	28.48	-71.05	-13.00	58.05	174	311	Vertical
4	3499.2000	42.47	-46.54	29.52	-69.81	-13.00	56.81	185	270	Vertical
5	4199.0400	41.13	-45.96	31.10	-68.99	-13.00	55.99	169	354	Vertical
6	4898.8800	42.02	-45.58	32.60	-66.22	-13.00	53.22	192	243	Vertical

Test Band = 5G NR N12_ TM1
Test Channel = Mid

Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1401.6800	44.09	-48.01	25.62	-73.56	-13.00	60.56	211	77	Horizontal
2	2102.5200	44.01	-47.71	27.00	-71.96	-13.00	58.96	152	62	Horizontal
3	2803.3600	43.13	-46.91	28.49	-70.54	-13.00	57.54	136	36	Horizontal
4	3504.2000	43.01	-46.53	29.52	-69.26	-13.00	56.26	256	158	Horizontal
5	4205.0400	41.39	-45.95	31.11	-68.71	-13.00	55.71	291	132	Horizontal
6	4905.8800	41.91	-45.59	32.62	-66.33	-13.00	53.33	147	306	Horizontal

Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1401.6800	44.69	-48.01	25.62	-72.96	-13.00	59.96	144	211	Vertical
2	2102.5200	43.02	-47.71	27.00	-72.95	-13.00	59.95	129	354	Vertical
3	2803.3600	43.53	-46.91	28.49	-70.14	-13.00	57.14	146	108	Vertical
4	3504.2000	42.75	-46.53	29.52	-69.52	-13.00	56.52	175	126	Vertical
5	4205.0400	41.75	-45.95	31.11	-68.35	-13.00	55.35	153	243	Vertical
6	4905.8800	41.47	-45.59	32.62	-66.77	-13.00	53.77	261	13	Vertical

Test Band = 5G NR N12_ TM1
Test Channel = High

Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1403.6800	44.56	-48.01	25.61	-73.10	-13.00	60.10	215	1	Horizontal
2	2105.5200	42.50	-47.71	27.01	-73.46	-13.00	60.46	142	62	Horizontal
3	2807.3600	42.75	-46.89	28.51	-70.89	-13.00	57.89	163	347	Horizontal
4	3509.2000	42.71	-46.52	29.53	-69.54	-13.00	56.54	250	103	Horizontal
5	4211.0400	41.45	-45.94	31.12	-68.63	-13.00	55.63	190	347	Horizontal
6	4912.8800	42.01	-45.61	32.64	-66.22	-13.00	53.22	148	171	Horizontal

Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1403.6800	44.57	-48.01	25.61	-73.09	-13.00	60.09	274	4	Vertical
2	2105.5200	42.81	-47.71	27.01	-73.15	-13.00	60.15	136	269	Vertical
3	2807.3600	42.38	-46.89	28.51	-71.26	-13.00	58.26	259	68	Vertical
4	3509.2000	42.48	-46.52	29.53	-69.77	-13.00	56.77	165	354	Vertical
5	4211.0400	42.23	-45.94	31.12	-67.85	-13.00	54.85	147	269	Vertical
6	4912.8800	41.91	-45.61	32.64	-66.32	-13.00	53.32	158	150	Vertical

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & AMP. The basic equation with a sample calculation is as follows:

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Level = Reading Level + AF + Factor -95.26

Margin = Limit – Level

---End of Attachment---