Appendix B

NR band N38

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

CONTENT

Page

1 Effective (Isotropic) Radiated Power Output Data

Ant5:

NR Band	Bandwidth	SCS	Modulation	Channel	RB Config	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
N38	20MHz	30KHz	TM1	516000	Inner Full	24.35	23.15	33	PASS
N38	20MHz	30KHz	TM1	516000	Inner 1RB Left	24.47	23.27	33	PASS
N38	20MHz	30KHz	TM1	516000	Inner 1RB Right	24.28	23.08	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner Full	22.89	21.69	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner 1RB Left	22.65	21.45	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner 1RB Right	22.56	21.36	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner Full	24.04	22.84	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner 1RB Left	24.29	23.09	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner 1RB Right	24.09	22.89	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner Full	24.27	23.07	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner 1RB Left	24.47	23.27	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner 1RB Right	24.24	23.04	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner Full	22.85	21.65	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner 1RB Left	22.86	21.66	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner 1RB Right	22.52	21.32	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner Full	23.96	22.76	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner 1RB Left	24.17	22.97	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner 1RB Right	24.02	22.82	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner Full	23.37	22.17	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner 1RB Left	23.57	22.37	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner 1RB Right	23.38	22.18	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner Full	22.34	21.14	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner 1RB Left	22.62	21.42	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner 1RB Right	22.41	21.21	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner Full	22.62	21.42	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner 1RB Left	23.32	22.12	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner 1RB Right	23.03	21.83	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner Full	21.78	20.58	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner 1RB Left	21.91	20.71	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner 1RB Right	21.51	20.31	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner Full	20.90	19.70	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner 1RB Left	20.86	19.66	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner 1RB Right	20.73	19.53	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner Full	21.11	19.91	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner 1RB Left	21.89	20.69	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner 1RB Right	21.59	20.39	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner Full	21.83	20.63	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner 1RB Left	22.17	20.97	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner 1RB Right	21.60	20.40	33	PASS
N38	20MHz	30KHz	TM5	519000	Inner Full	20.86	19.66	33	PASS

N38	20MHz	30KHz	TM5	519000	Inner 1RB Left	21.21	20.01	33	PASS
N38	20MHz	30KHz	TM5	519000	Inner 1RB Right	20.76	19.56	33	PASS
N38	20MHz	30KHz	TM5	522000	Inner Full	21.34	20.14	33	PASS
N38	20MHz	30KHz	TM5	522000	Inner 1RB Left	21.51	20.31	33	PASS
N38	20MHz	30KHz	TM5	522000	Inner 1RB Right	21.45	20.25	33	PASS
N38	20MHz	30KHz	TM6	516000	Inner Full	24.34	23.14	33	PASS
N38	20MHz	30KHz	TM6	516000	Inner 1RB Left	24.54	23.34	33	PASS
N38	20MHz	30KHz	TM6	516000	Inner 1RB Right	24.31	23.11	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner Full	22.81	21.61	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner 1RB Left	22.89	21.69	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner 1RB Right	23.10	21.90	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner Full	23.99	22.79	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner 1RB Left	24.32	23.12	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner 1RB Right	24.00	22.80	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner Full	23.32	22.12	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner 1RB Left	23.19	21.99	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner 1RB Right	23.19	21.99	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner Full	22.34	21.14	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner 1RB Left	22.24	21.04	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner 1RB Right	22.32	21.12	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner Full	22.81	21.61	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner 1RB Left	23.27	22.07	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner 1RB Right	23.09	21.89	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner Full	21.84	20.64	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner 1RB Left	22.01	20.81	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner 1RB Right	21.63	20.43	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner Full	20.81	19.61	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner 1RB Left	21.06	19.86	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner 1RB Right	20.85	19.65	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner Full	20.94	19.74	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner 1RB Left	21.72	20.52	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner 1RB Right	21.61	20.41	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner Full	21.85	20.65	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner 1RB Left	22.15	20.95	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner 1RB Right	21.72	20.52	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner Full	20.93	19.73	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner 1RB Left	20.80	19.60	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner 1RB Right	20.67	19.47	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner Full	21.72	20.52	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner 1RB Left	21.52	20.32	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner 1RB Right	21.49	20.29	33	PASS

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Ant1:

NR Band	Bandwidth	SCS	Modulation	Channel	RB Config	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
N38	20MHz	30KHz	TM1	516000	Inner Full	22.83	20.83	33	PASS
N38	20MHz	30KHz	TM1	516000	Inner 1RB Left	22.78	20.78	33	PASS
N38	20MHz	30KHz	TM1	516000	Inner 1RB Right	22.75	20.75	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner Full	22.62	20.62	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner 1RB Left	22.76	20.76	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner 1RB Right	22.48	20.48	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner Full	23.90	21.90	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner 1RB Left	24.12	22.12	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner 1RB Right	23.95	21.95	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner Full	22.87	20.87	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner 1RB Left	22.72	20.72	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner 1RB Right	22.98	20.98	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner Full	22.54	20.54	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner 1RB Left	22.69	20.69	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner 1RB Right	22.38	20.38	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner Full	23.94	21.94	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner 1RB Left	24.03	22.03	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner 1RB Right	24.01	22.01	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner Full	22.26	20.26	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner 1RB Left	22.31	20.31	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner 1RB Right	22.29	20.29	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner Full	22.17	20.17	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner 1RB Left	22.17	20.17	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner 1RB Right	22.08	20.08	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner Full	22.87	20.87	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner 1RB Left	23.12	21.12	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner 1RB Right	22.93	20.93	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner Full	20.79	18.79	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner 1RB Left	20.82	18.82	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner 1RB Right	21.17	19.17	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner Full	20.78	18.78	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner 1RB Left	21.12	19.12	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner 1RB Right	20.46	18.46	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner Full	21.33	19.33	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner 1RB Left	22.01	20.01	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner 1RB Right	21.46	19.46	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner Full	20.80	18.80	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner 1RB Left	20.92	18.92	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner 1RB Right	20.31	18.31	33	PASS
N38	20MHz	30KHz	TM5	519000	Inner Full	20.84	18.84	33	PASS
N38	20MHz	30KHz	TM5	519000	Inner 1RB Left	20.96	18.96	33	PASS
N38	20MHz	30KHz	TM5	519000	Inner 1RB Right	20.52	18.52	33	PASS
N38	20MHz	30KHz	TM5	522000	Inner Full	21.80	19.80	33	PASS
N38	20MHz	30KHz	TM5	522000	Inner 1RB Left	21.48	19.48	33	PASS

N38	20MHz	30KHz	TM5	522000	Inner 1RB Right	21.51	19.51	33	PASS
N38	20MHz	30KHz	TM6	516000	Inner Full	22.88	20.88	33	PASS
N38	20MHz	30KHz	TM6	516000	Inner 1RB Left	23.02	21.02	33	PASS
N38	20MHz	30KHz	TM6	516000	Inner 1RB Right	23.14	21.14	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner Full	22.57	20.57	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner 1RB Left	22.91	20.91	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner 1RB Right	22.59	20.59	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner Full	23.99	21.99	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner 1RB Left	24.11	22.11	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner 1RB Right	23.99	21.99	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner Full	22.40	20.40	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner 1RB Left	22.22	20.22	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner 1RB Right	22.50	20.50	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner Full	22.19	20.19	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner 1RB Left	22.20	20.20	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner 1RB Right	22.17	20.17	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner Full	23.01	21.01	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner 1RB Left	23.14	21.14	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner 1RB Right	23.05	21.05	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner Full	20.92	18.92	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner 1RB Left	21.08	19.08	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner 1RB Right	21.20	19.20	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner Full	20.77	18.77	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner 1RB Left	21.03	19.03	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner 1RB Right	20.85	18.85	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner Full	21.49	19.49	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner 1RB Left	21.64	19.64	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner 1RB Right	21.41	19.41	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner Full	20.90	18.90	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner 1RB Left	20.54	18.54	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner 1RB Right	20.75	18.75	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner Full	20.83	18.83	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner 1RB Left	20.13	18.13	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner 1RB Right	20.75	18.75	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner Full	21.55	19.55	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner 1RB Left	21.23	19.23	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner 1RB Right	21.44	19.44	33	PASS

Note:

a: For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

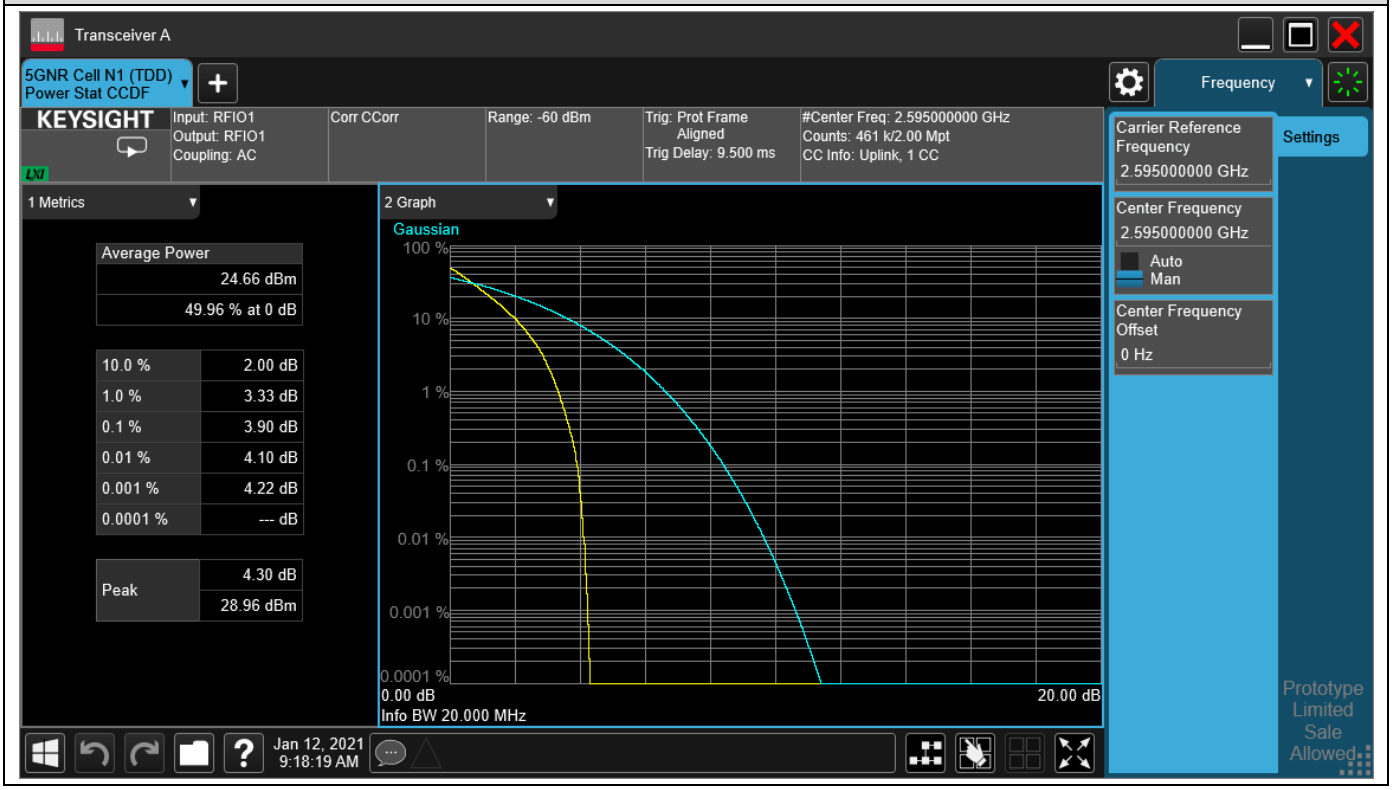
2 Peak-to-Average Ratio

2.1 Test Results

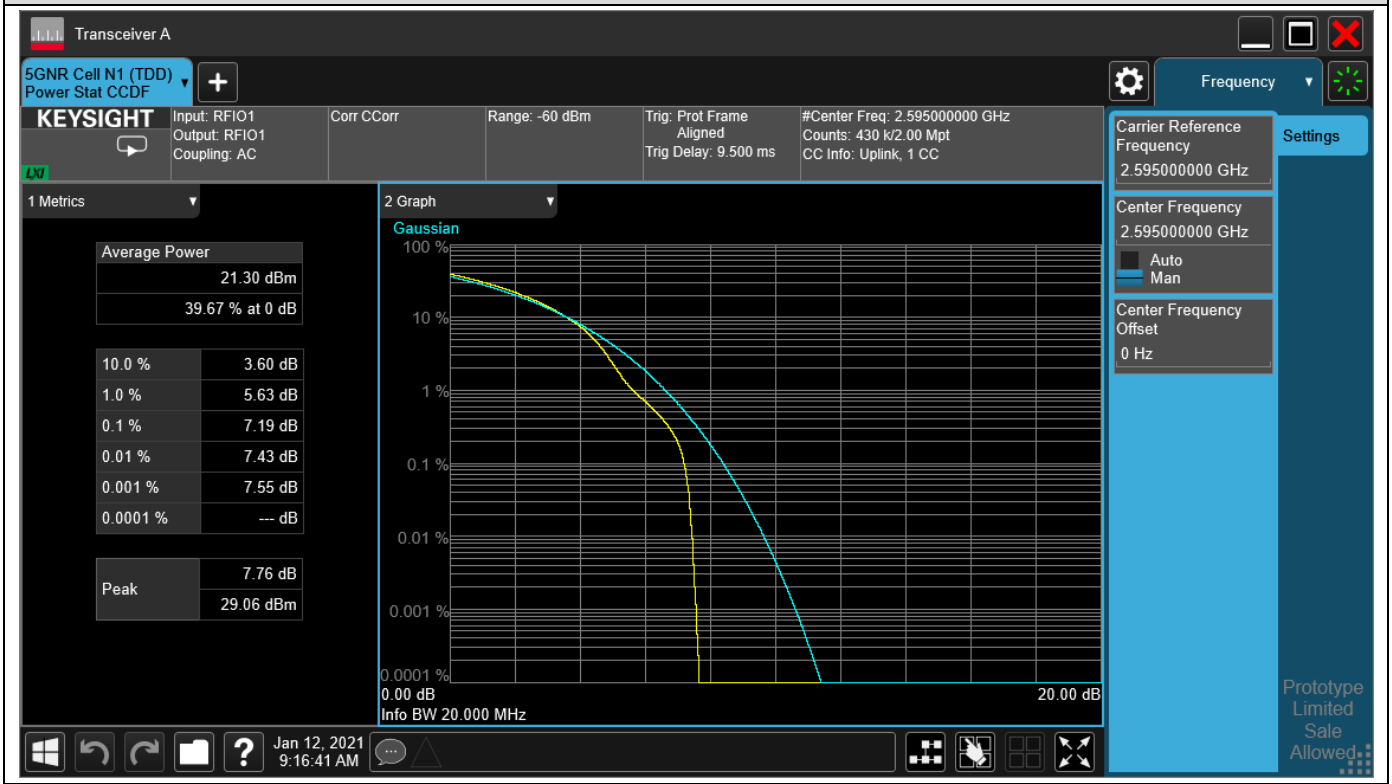
NR Band	Bandwidth	SCS	Modulation	Channel	RB Config	Result (dB)	Limit (dBm)	Verdict
N38	20MHz	30KHz	TM1	519000	Outer Full	3.90	13	PASS
N38	20MHz	30KHz	TM6	519000	Outer Full	7.19	13	PASS

2.2 Test Plots

N38-20MHz-15KHz-TM1-519000-Outer Full



N38-20MHz-15KHz-TM6-519000-Outer Full



REMARK:
All antenna and all modulation had been tested, but only the worst case data displayed in this report

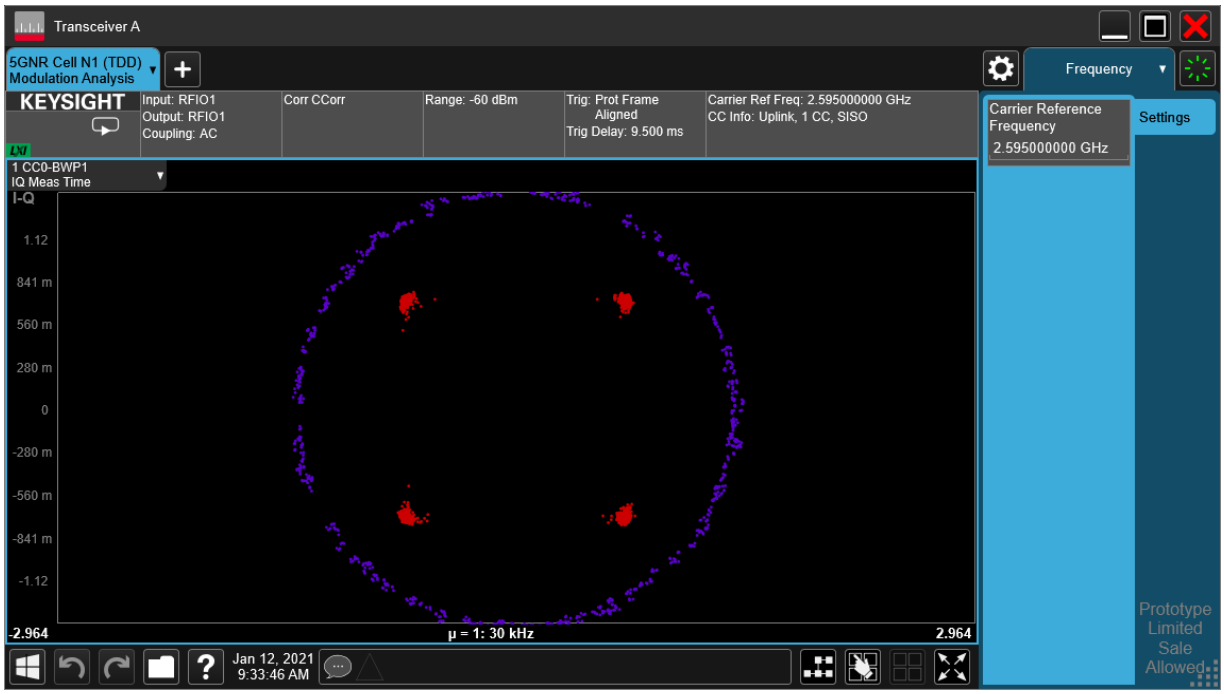
3 Modulation Characteristics

3.1 Test Plots

3.1.1 Test Band = N38

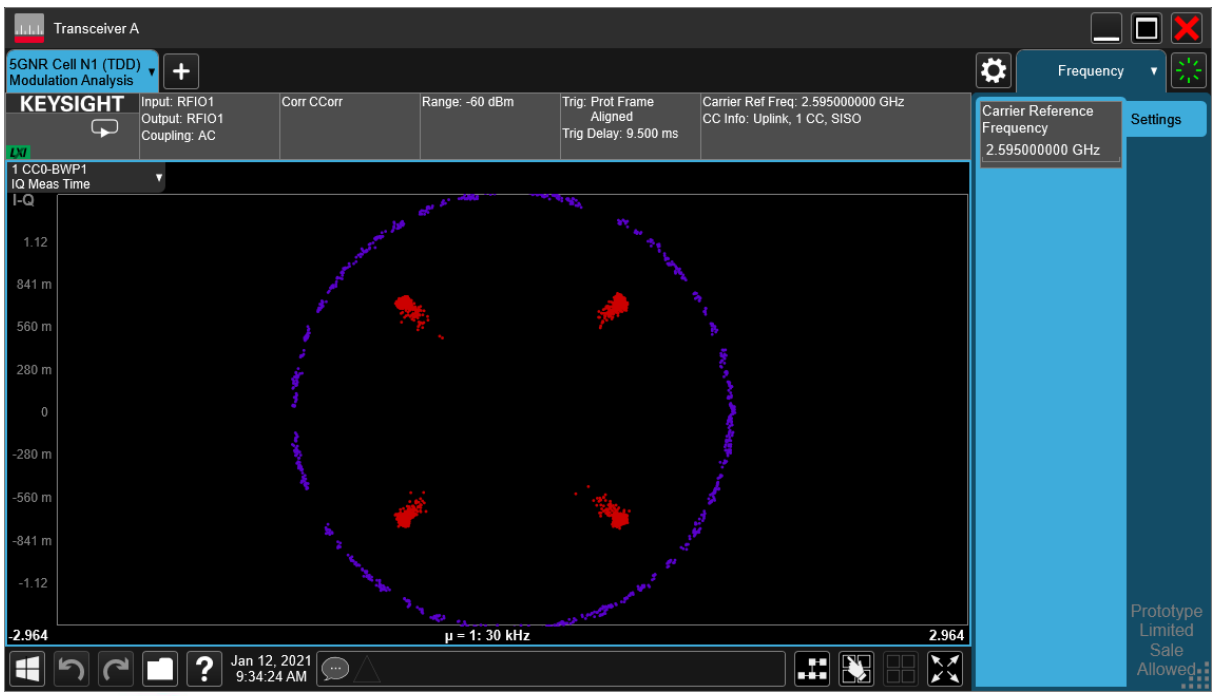
3.1.1.1 Test Mode = TM1 20MHz

3.1.1.1.1 Test Channel = MCH



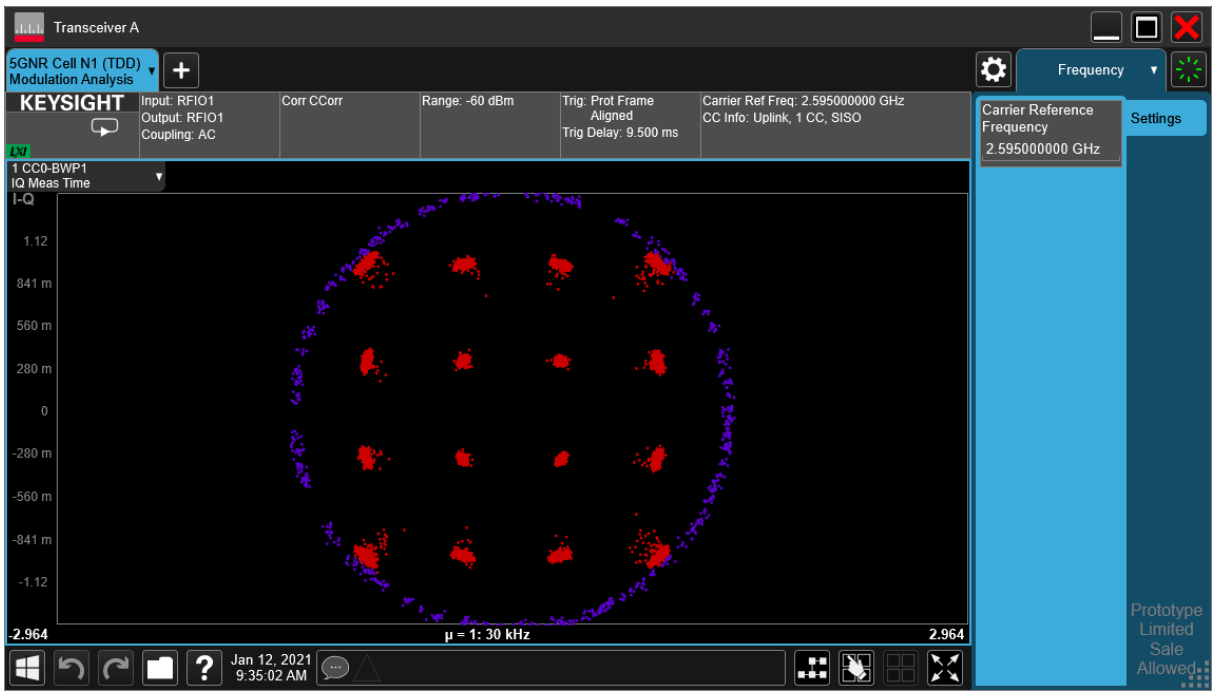
3.1.1.2 Test Mode = TM2 20MHz

3.1.1.2.1 Test Channel = MCH



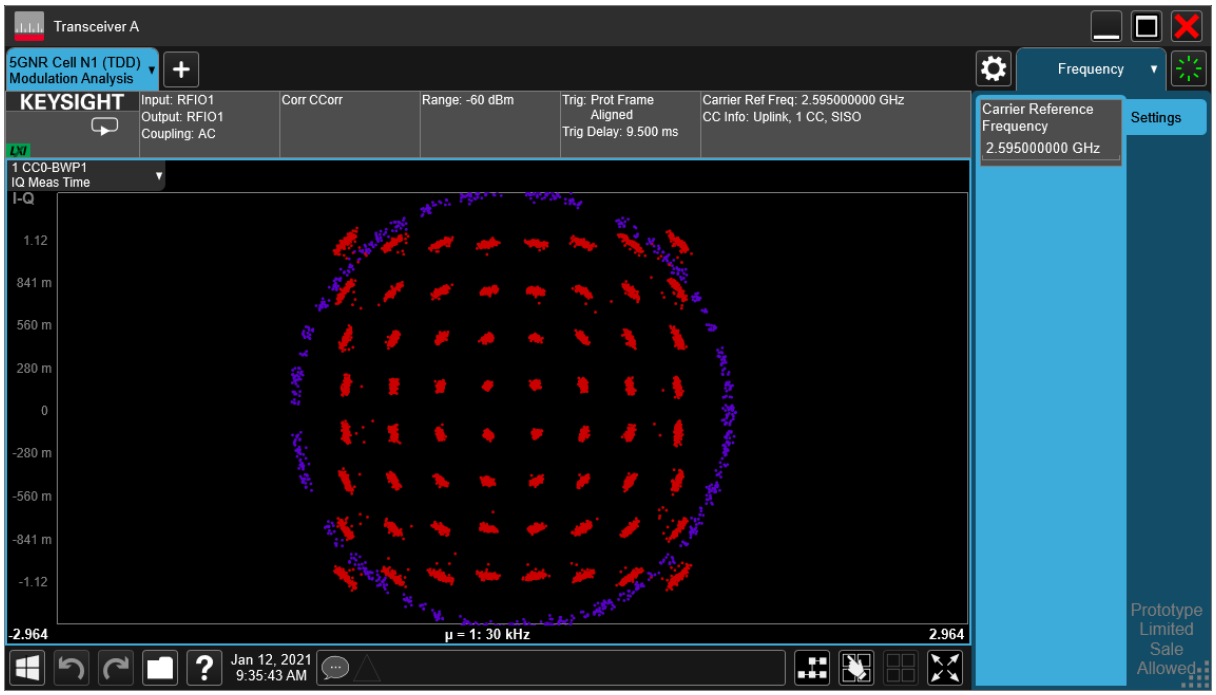
3.1.1.3 Test Mode = TM3 20MHz

3.1.1.3.1 Test Channel = MCH



3.1.1.4 Test Mode = TM4 20MHz

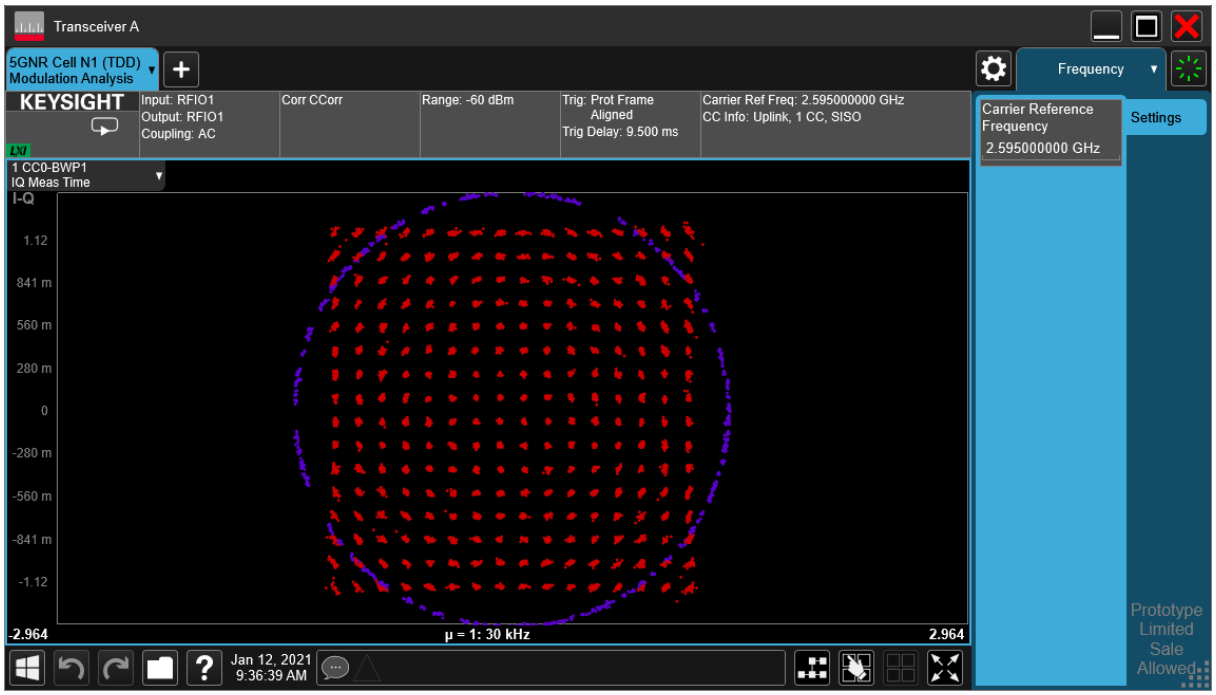
3.1.1.4.1 Test Channel = MCH



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

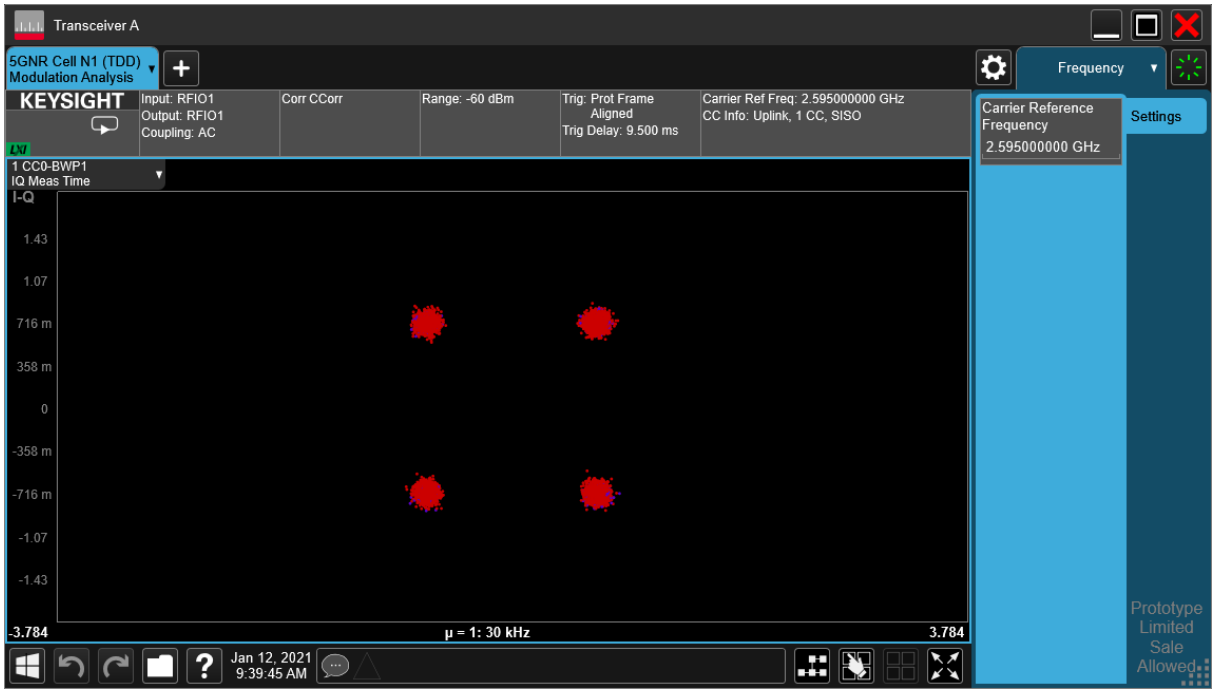
3.1.1.5 Test Mode = TM5 20MHz

3.1.1.5.1 Test Channel = MCH



3.1.1.6 Test Mode = TM6 20MHz

3.1.1.6.1 Test Channel = MCH



REMARK:
All antenna and all modulation had been tested, but only the worst case data displayed in this report

4 Occupied Bandwidth & 26dB Emission Bandwidth

4.1 Test Results

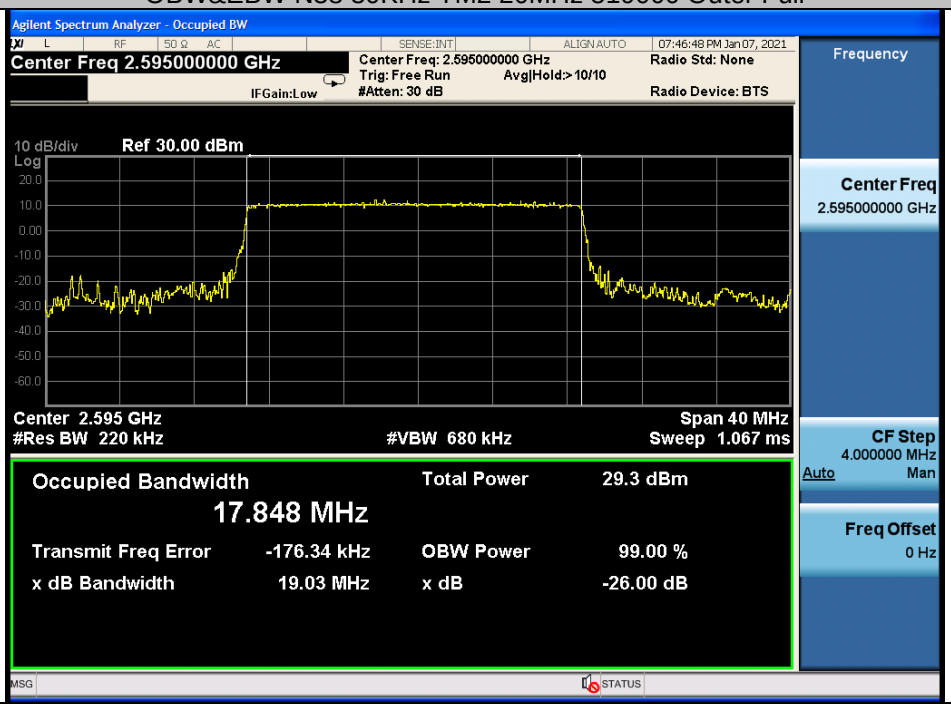
NR Band	Bandwidth	SCS	Modulation	Channel	RB Config	OBW (MHz)	EBW (MHz)	Verdict
N38	20MHz	30KHz	TM1	519000	Outer Full	17.81	27.69	PASS
N38	20MHz	30KHz	TM2	519000	Outer Full	17.85	19.03	PASS
N38	20MHz	30KHz	TM3	519000	Outer Full	17.79	18.90	PASS
N38	20MHz	30KHz	TM4	519000	Outer Full	17.83	19.04	PASS
N38	20MHz	30KHz	TM5	519000	Outer Full	17.79	19.72	PASS
N38	20MHz	30KHz	TM6	519000	Outer Full	18.21	19.60	PASS
N38	20MHz	30KHz	TM7	519000	Outer Full	18.23	19.33	PASS
N38	20MHz	30KHz	TM8	519000	Outer Full	18.20	19.36	PASS
N38	20MHz	30KHz	TM9	519000	Outer Full	18.24	19.54	PASS

4.2 Test Plots

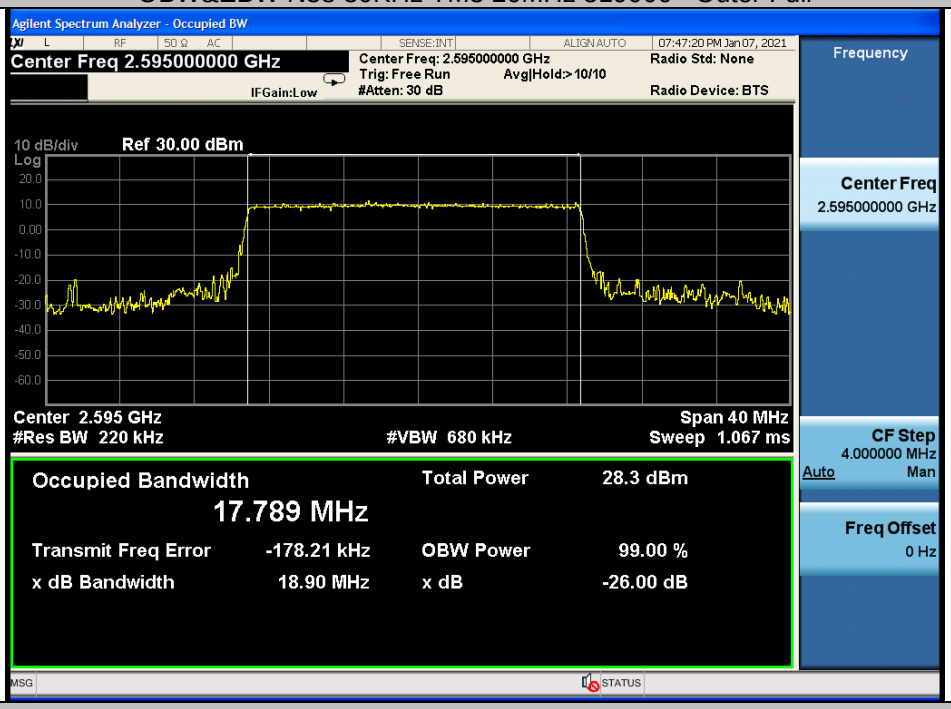
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

OBW&EBW N38 30KHz TM1 20MHz 519000 Outer Full

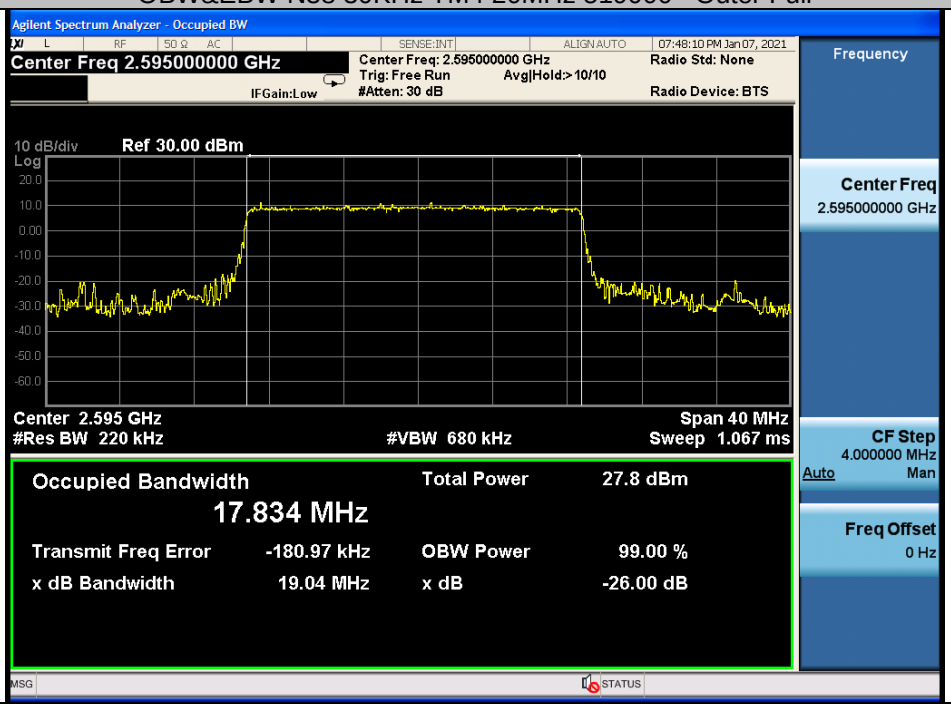
OBW&EBW N38 30KHz TM2 20MHz 519000 Outer Full



OBW&EBW N38 30KHz TM3 20MHz 519000 Outer Full

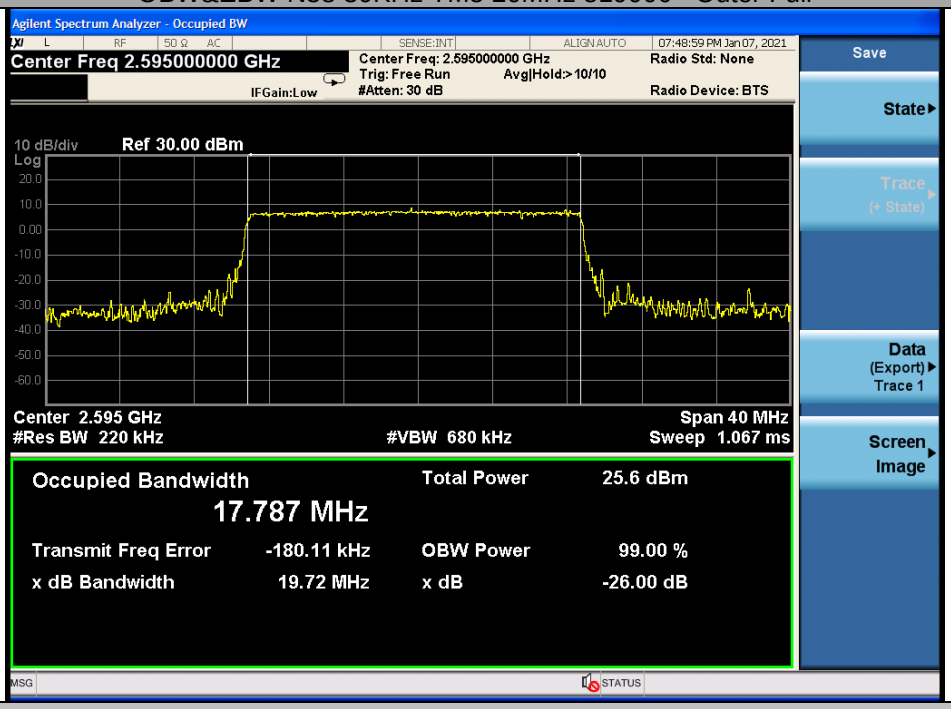


OBW&EBW N38 30KHz TM4 20MHz 519000 Outer Full

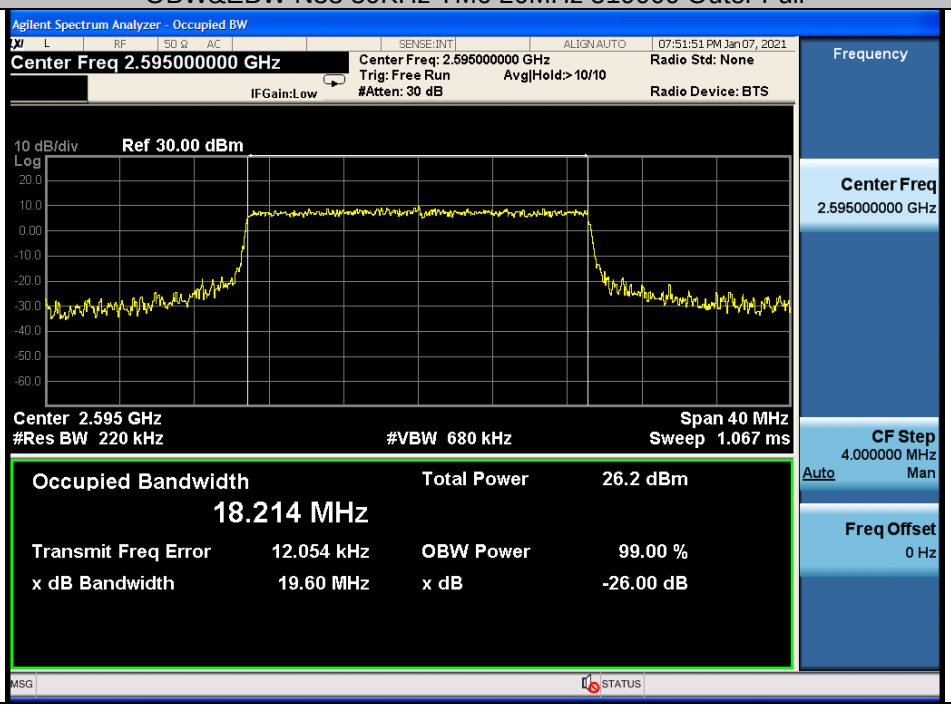


No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

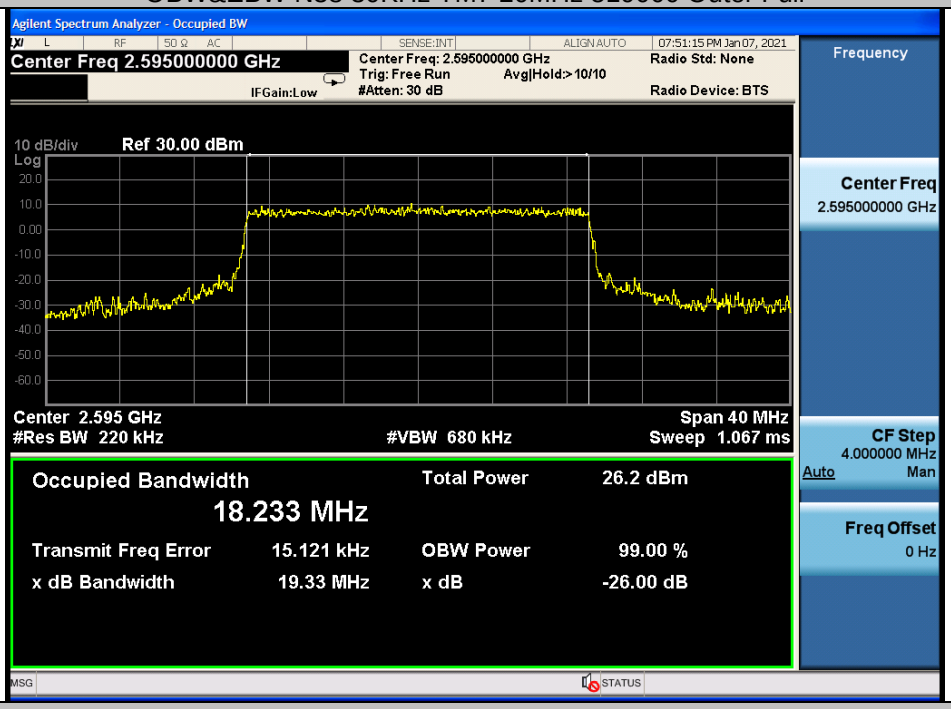
OBW&EBW N38 30KHz TM5 20MHz 519000 Outer Full



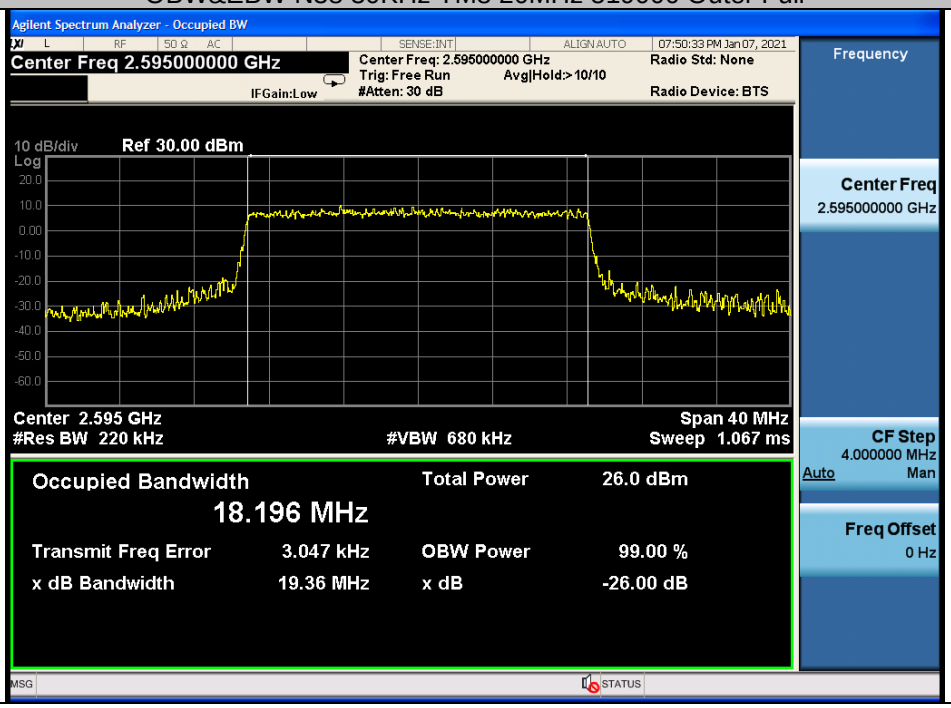
OBW&EBW N38 30KHz TM6 20MHz 519000 Outer Full



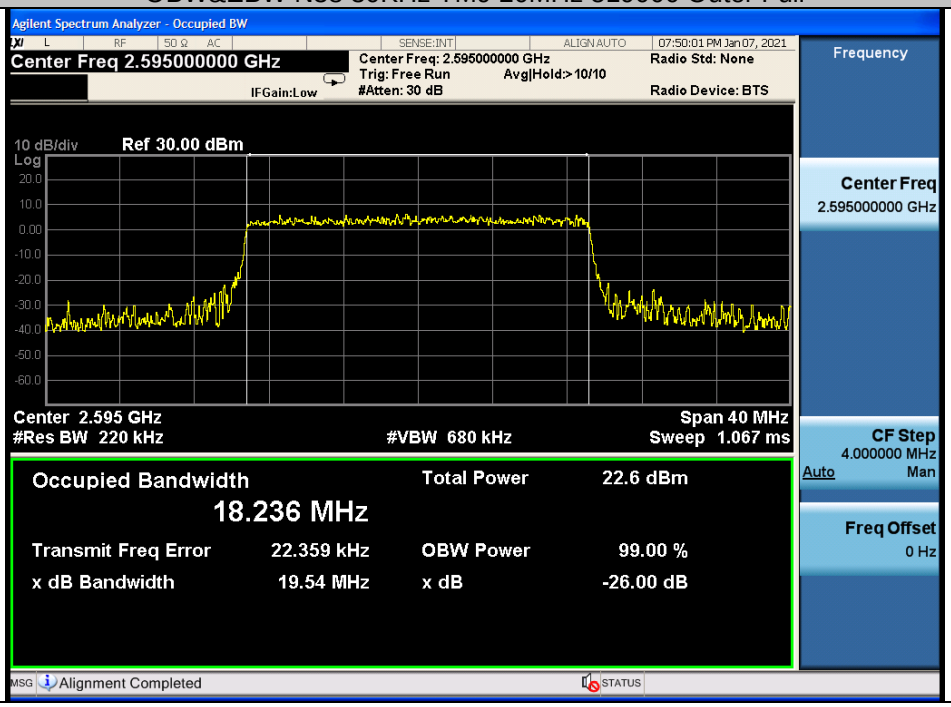
OBW&EBW N38 30KHz TM7 20MHz 519000 Outer Full



OBW&EBW N38 30KHz TM8 20MHz 519000 Outer Full



OBW&EBW N38 30KHz TM9 20MHz 519000 Outer Full

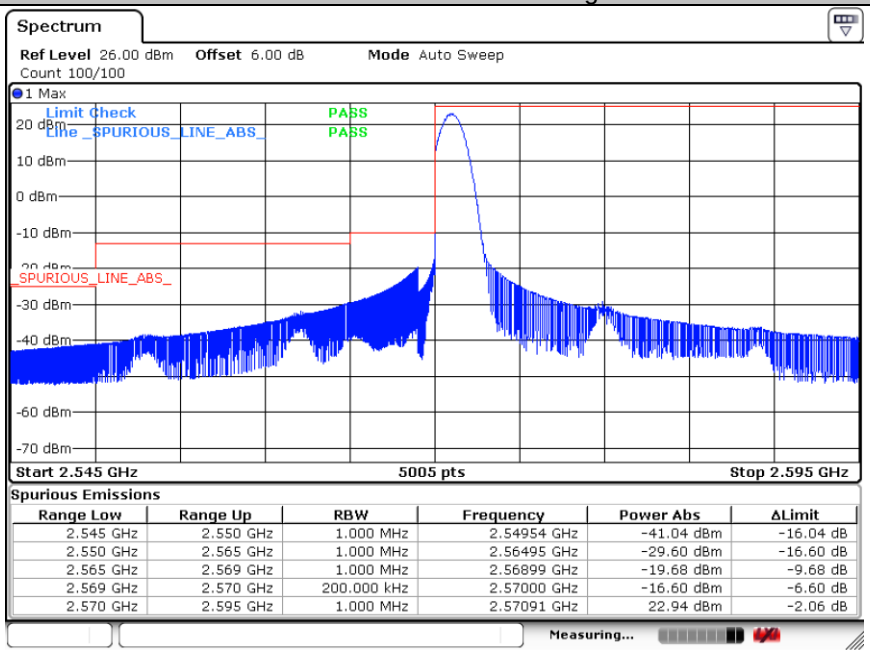


REMARK:
All antenna and all modulation had been tested, but only the worst case data displayed in this report

5 Band Edges Compliance

5.1 Test Plots

N38 30KHz TM1 20MHz 516000 Edge 1RB Left

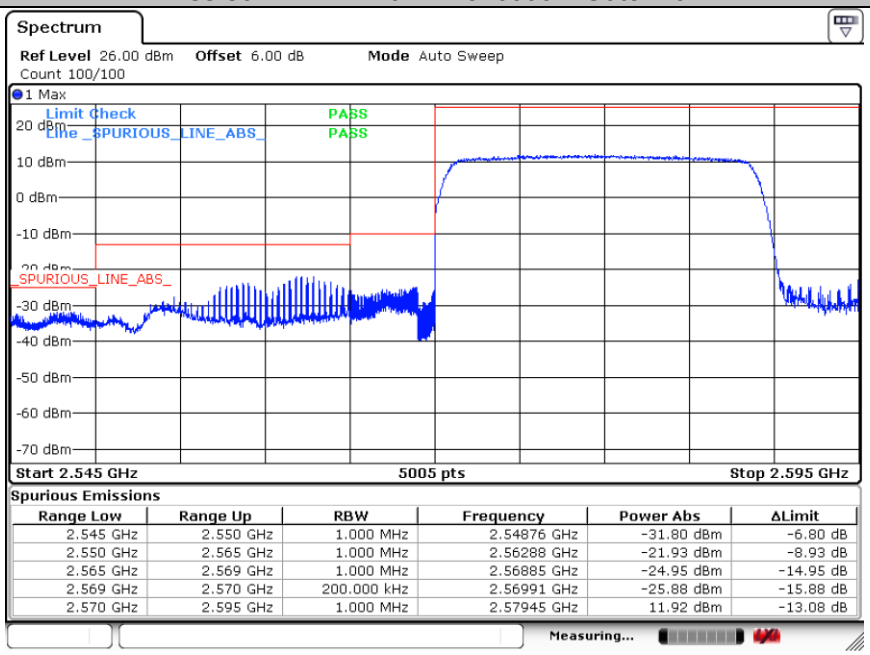


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.545 GHz	2.550 GHz	1.000 MHz	2.54954 GHz	-41.04 dBm	-16.04 dB
2.550 GHz	2.565 GHz	1.000 MHz	2.56495 GHz	-29.60 dBm	-16.60 dB
2.565 GHz	2.569 GHz	1.000 MHz	2.56899 GHz	-19.68 dBm	-9.68 dB
2.569 GHz	2.570 GHz	200.000 kHz	2.57000 GHz	-16.60 dBm	-6.60 dB
2.570 GHz	2.595 GHz	1.000 MHz	2.57091 GHz	22.94 dBm	-2.06 dB

Date: 11.JAN.2021 18:55:24

N38 30KHz TM1 20MHz 516000 Outer Full

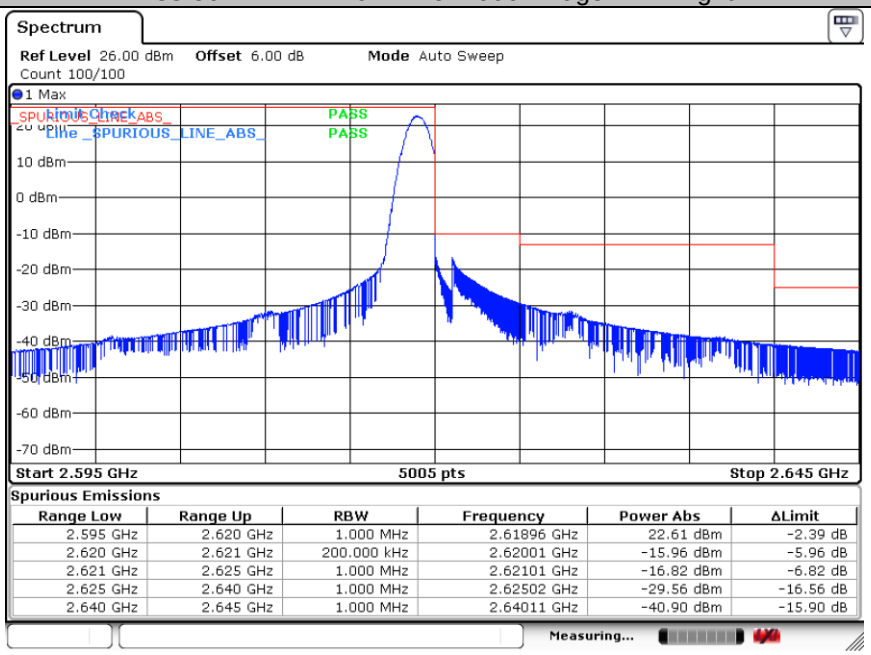


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.545 GHz	2.550 GHz	1.000 MHz	2.54876 GHz	-31.80 dBm	-6.80 dB
2.550 GHz	2.565 GHz	1.000 MHz	2.56288 GHz	-21.93 dBm	-8.93 dB
2.565 GHz	2.569 GHz	1.000 MHz	2.56885 GHz	-24.95 dBm	-14.95 dB
2.569 GHz	2.570 GHz	200.000 kHz	2.56991 GHz	-25.88 dBm	-15.88 dB
2.570 GHz	2.595 GHz	1.000 MHz	2.57945 GHz	11.92 dBm	-13.08 dB

Date: 11.JAN.2021 18:53:23

N38 30KHz TM1 20MHz 522000 Edge 1RB Right

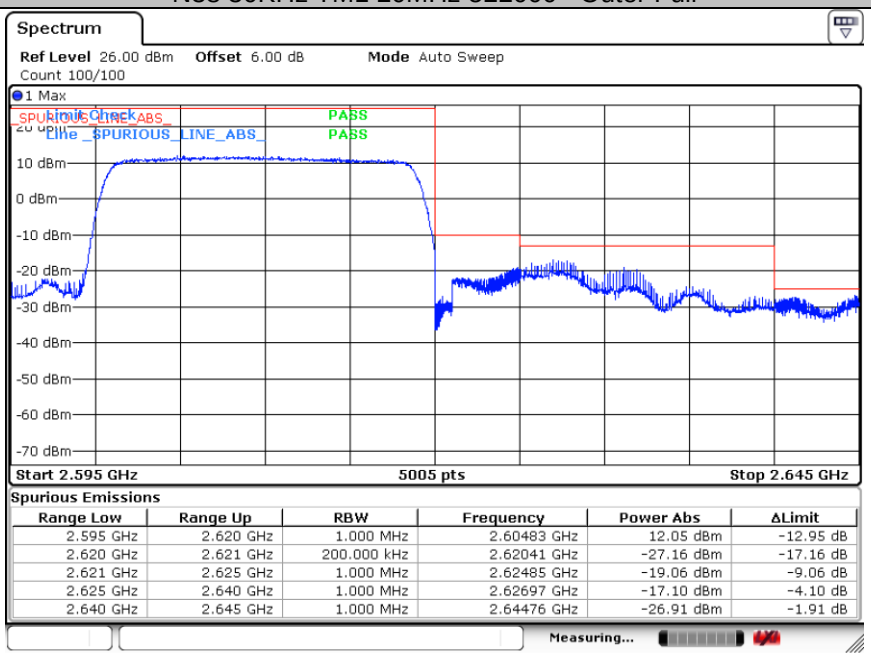


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.595 GHz	2.620 GHz	1.000 MHz	2.61896 GHz	22.61 dBm	-2.39 dB
2.620 GHz	2.621 GHz	200.000 kHz	2.62001 GHz	-15.96 dBm	-5.96 dB
2.621 GHz	2.625 GHz	1.000 MHz	2.62101 GHz	-16.82 dBm	-6.82 dB
2.625 GHz	2.640 GHz	1.000 MHz	2.62502 GHz	-29.56 dBm	-16.56 dB
2.640 GHz	2.645 GHz	1.000 MHz	2.64011 GHz	-40.90 dBm	-15.90 dB

Date: 11.JAN.2021 19:09:21

N38 30KHz TM1 20MHz 522000 Outer Full



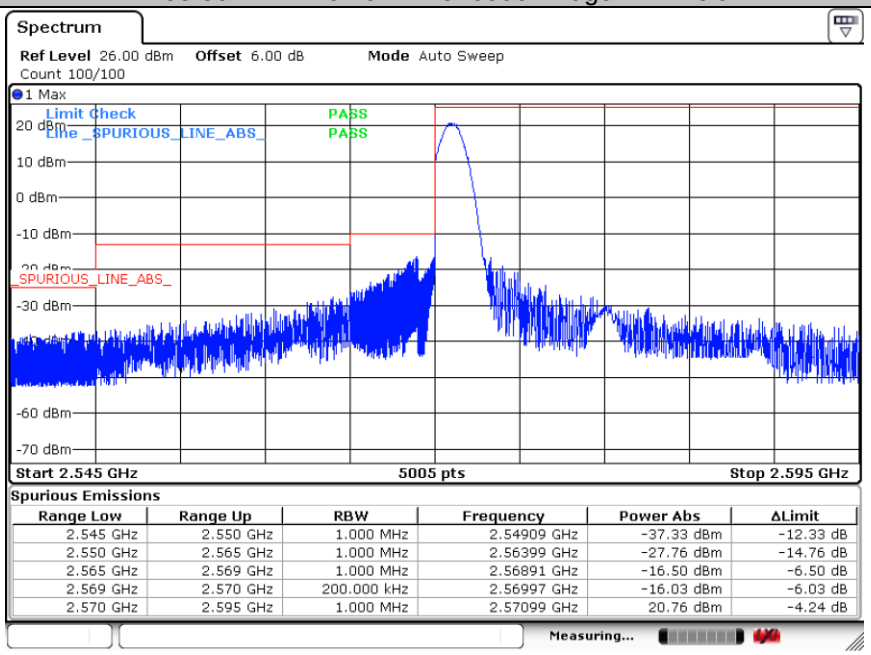
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.595 GHz	2.620 GHz	1.000 MHz	2.60483 GHz	12.05 dBm	-12.95 dB
2.620 GHz	2.621 GHz	200.000 kHz	2.62041 GHz	-27.16 dBm	-17.16 dB
2.621 GHz	2.625 GHz	1.000 MHz	2.62485 GHz	-19.06 dBm	-9.06 dB
2.625 GHz	2.640 GHz	1.000 MHz	2.62697 GHz	-17.10 dBm	-4.10 dB
2.640 GHz	2.645 GHz	1.000 MHz	2.64476 GHz	-26.91 dBm	-1.91 dB

Date: 11.JAN.2021 19:07:26

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

N38 30KHz TM6 20MHz 516000 Edge 1RB Left

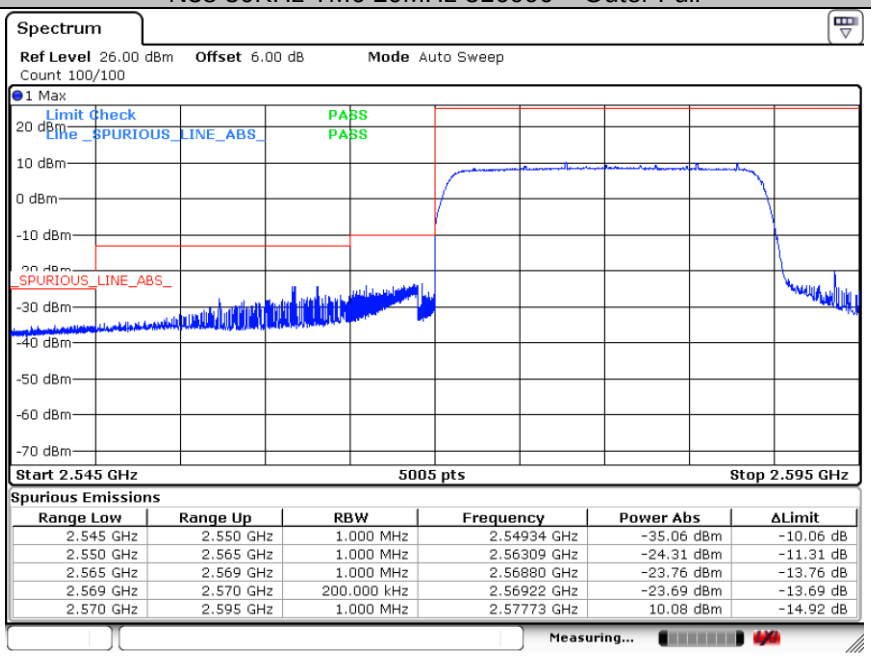


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.545 GHz	2.550 GHz	1.000 MHz	2.54909 GHz	-37.33 dBm	-12.33 dB
2.550 GHz	2.565 GHz	1.000 MHz	2.56399 GHz	-27.76 dBm	-14.76 dB
2.565 GHz	2.569 GHz	1.000 MHz	2.56891 GHz	-16.50 dBm	-6.50 dB
2.569 GHz	2.570 GHz	200.000 kHz	2.56997 GHz	-16.03 dBm	-6.03 dB
2.570 GHz	2.595 GHz	1.000 MHz	2.57099 GHz	20.76 dBm	-4.24 dB

Date: 11.JAN.2021 18:59:21

N38 30KHz TM6 20MHz 516000 Outer Full



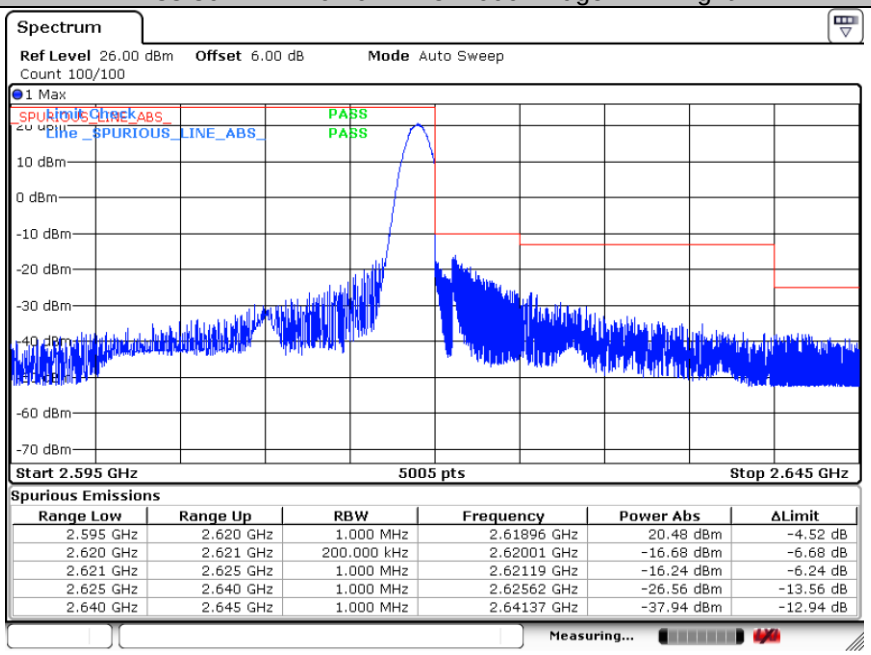
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.545 GHz	2.550 GHz	1.000 MHz	2.54934 GHz	-35.06 dBm	-10.06 dB
2.550 GHz	2.565 GHz	1.000 MHz	2.56309 GHz	-24.31 dBm	-11.31 dB
2.565 GHz	2.569 GHz	1.000 MHz	2.56880 GHz	-23.76 dBm	-13.76 dB
2.569 GHz	2.570 GHz	200.000 kHz	2.56922 GHz	-23.69 dBm	-13.69 dB
2.570 GHz	2.595 GHz	1.000 MHz	2.57773 GHz	10.08 dBm	-14.92 dB

Date: 11.JAN.2021 18:57:58

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

N38 30KHz TM6 20MHz 522000 Edge 1RB Right

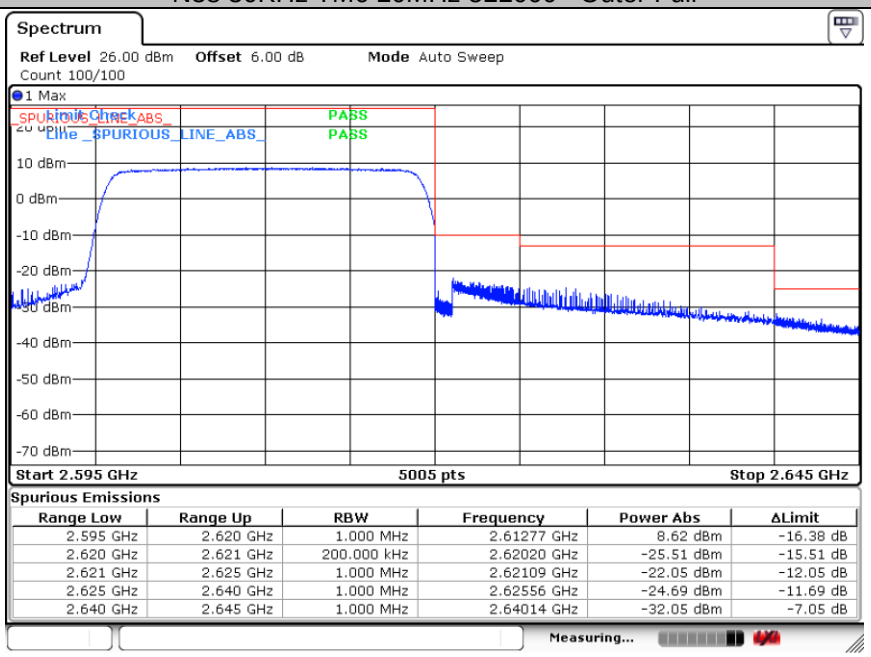


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.595 GHz	2.620 GHz	1.000 MHz	2.61896 GHz	20.48 dBm	-4.52 dB
2.620 GHz	2.621 GHz	200.000 kHz	2.62001 GHz	-16.68 dBm	-6.68 dB
2.621 GHz	2.625 GHz	1.000 MHz	2.62119 GHz	-16.24 dBm	-6.24 dB
2.625 GHz	2.640 GHz	1.000 MHz	2.62562 GHz	-26.56 dBm	-13.56 dB
2.640 GHz	2.645 GHz	1.000 MHz	2.64137 GHz	-37.94 dBm	-12.94 dB

Date: 11.JAN.2021 19:05:45

N38 30KHz TM6 20MHz 522000 Outer Full



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.595 GHz	2.620 GHz	1.000 MHz	2.61277 GHz	8.62 dBm	-16.38 dB
2.620 GHz	2.621 GHz	200.000 kHz	2.62020 GHz	-25.51 dBm	-15.51 dB
2.621 GHz	2.625 GHz	1.000 MHz	2.62109 GHz	-22.05 dBm	-12.05 dB
2.625 GHz	2.640 GHz	1.000 MHz	2.62556 GHz	-24.69 dBm	-11.69 dB
2.640 GHz	2.645 GHz	1.000 MHz	2.64014 GHz	-32.05 dBm	-7.05 dB

Date: 11.JAN.2021 19:04:24

REMARK:
All antenna and all modulation had been tested, but only the worst case data displayed in this report

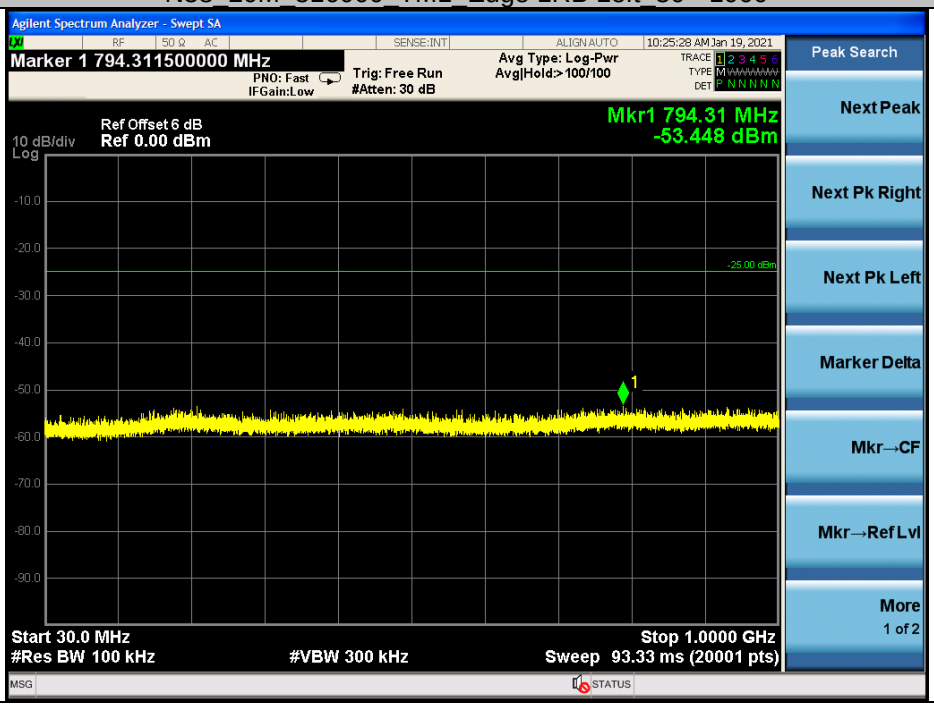
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

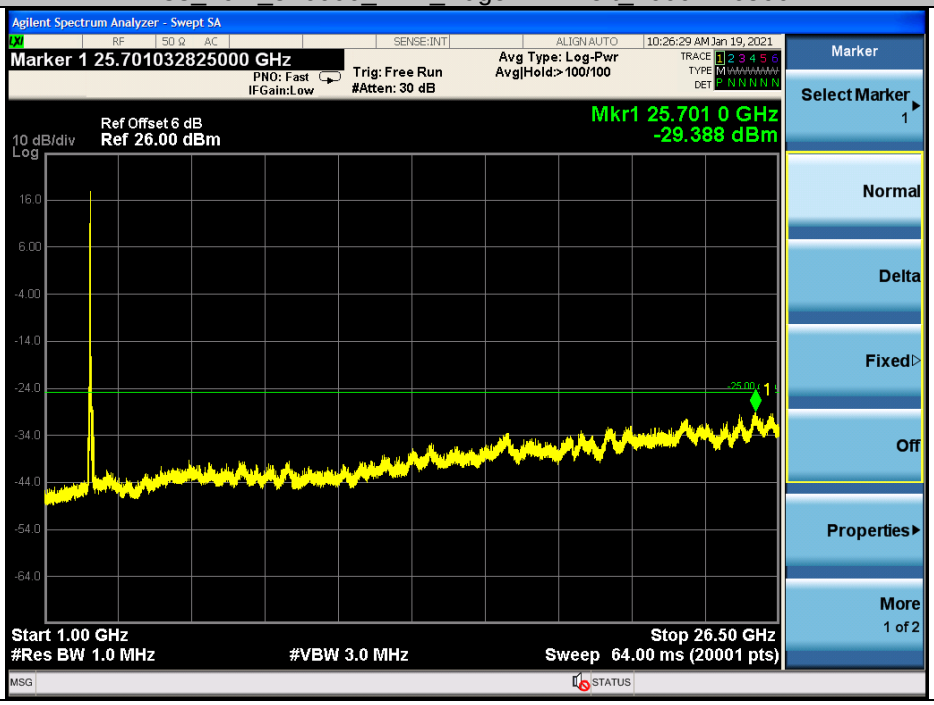
6 Spurious Emission at Antenna Terminal

REMARK: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrow Band signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k * (Span / RBW)" with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

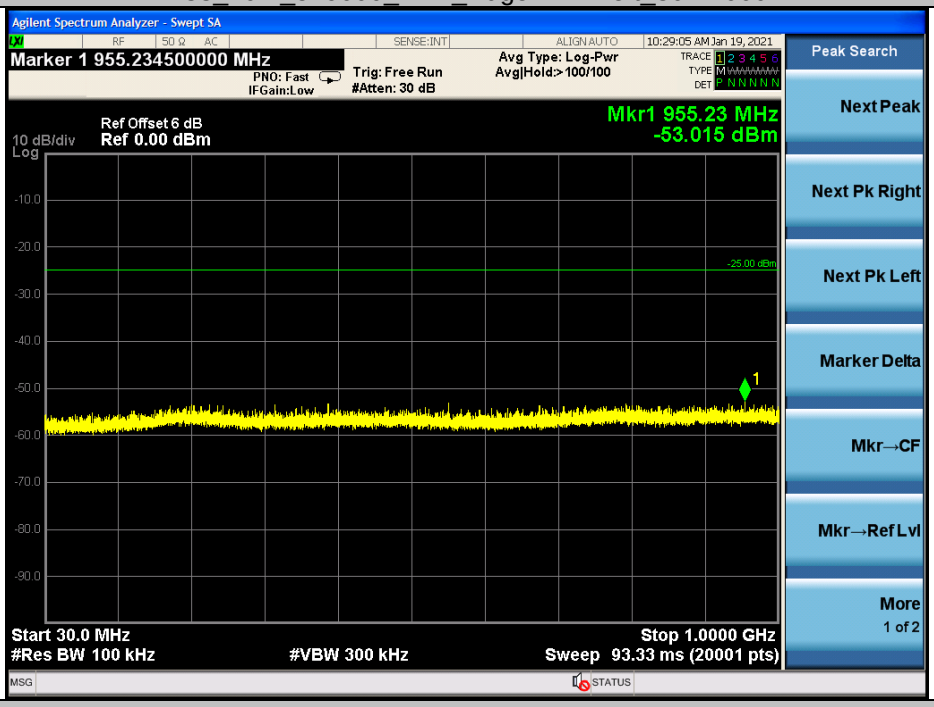
6.1 Test Plots

N38_20M_516000_TM1_Edge 1RB Left_30 - 1000

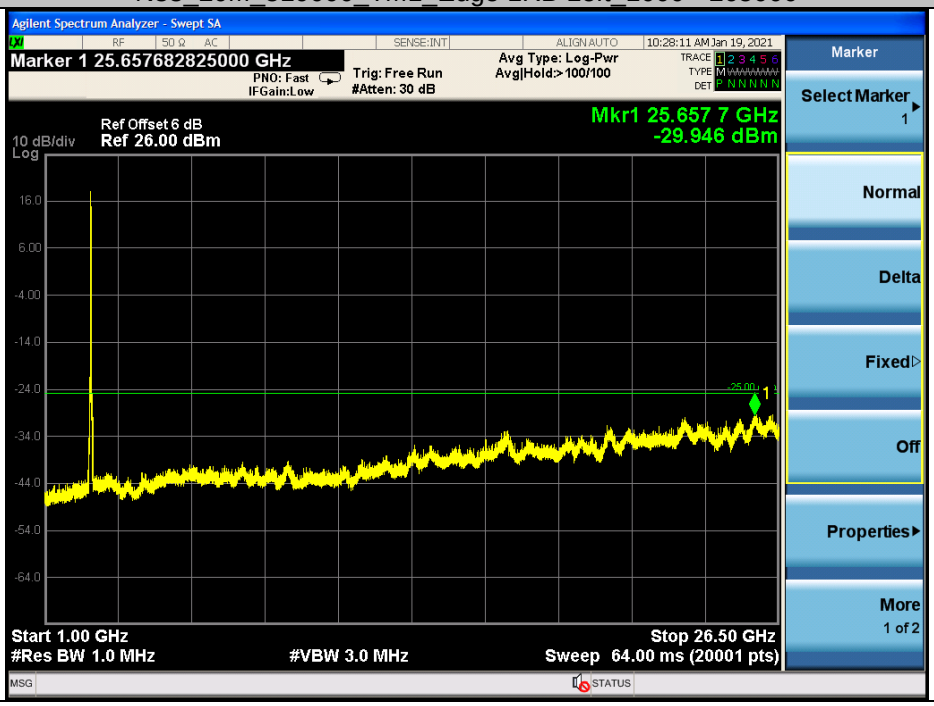


N38_20M_516000_TM1_Edge 1RB Left_1000 - 26500


N38_20M_519000_TM1_Edge 1RB Left_30 - 1000

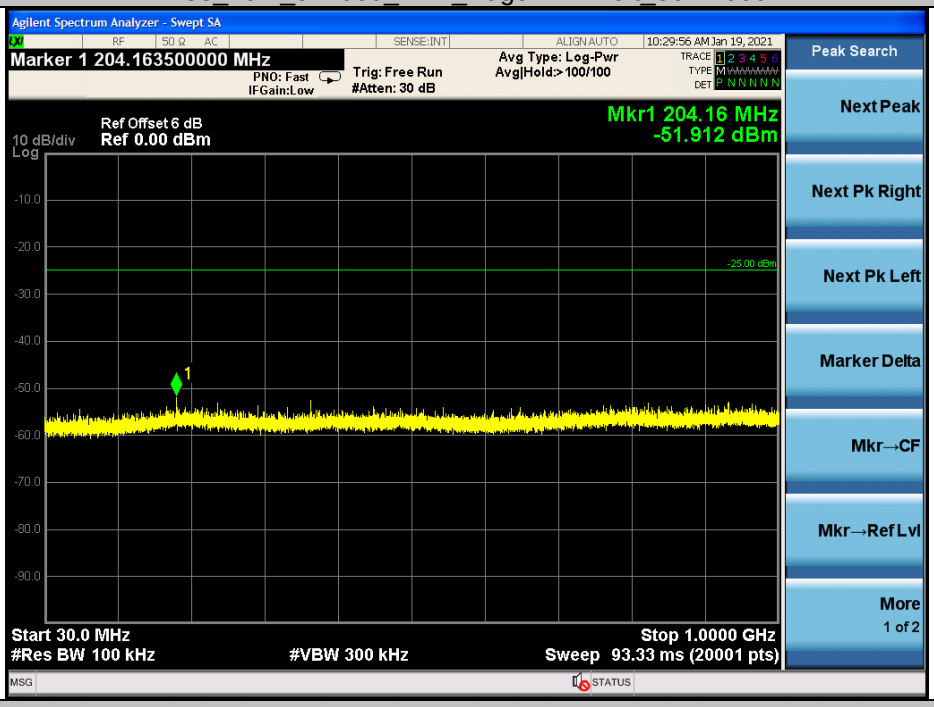


N38_20M_519000_TM1_Edge 1RB Left_1000 - 265000

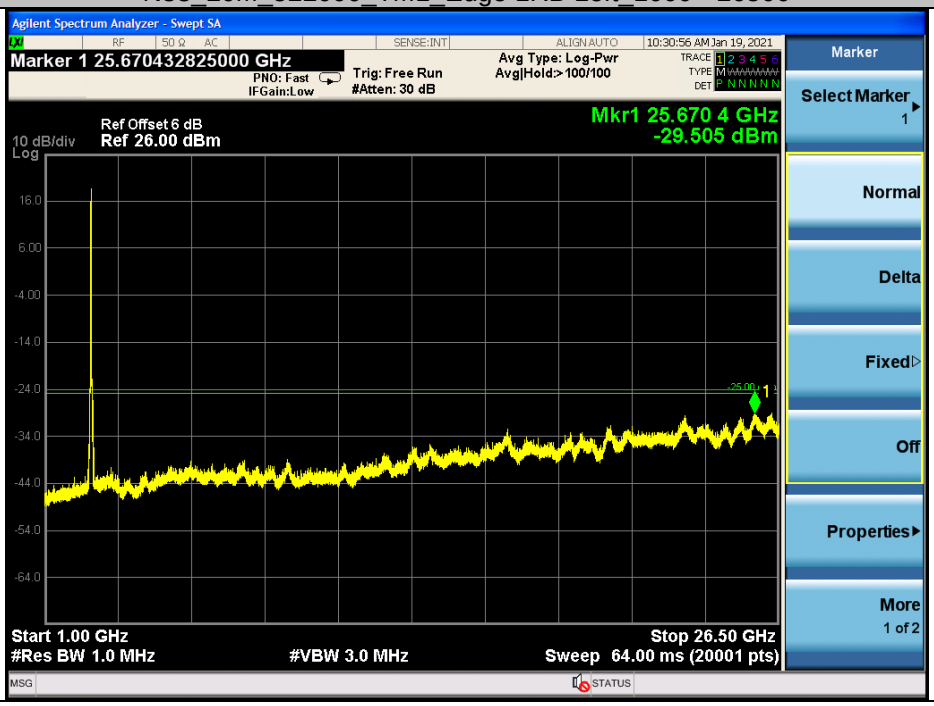


No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

N38_20M_522000_TM1_Edge 1RB Left_30 - 1000



N38_20M_522000_TM1_Edge 1RB Left_1000 - 26500



REMARK:
All antenna and all modulation had been tested, but only the worst case data displayed in this report

7 Field Strength of Spurious Radiation

7.1 Test Band = N38(ant5)

7.1.1 Test Mode = 20MHz _TM 1

7.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
40.6700	-72.89	-25.00	47.89	Vertical
87.2300	-68.31	-25.00	43.31	Vertical
574.4125	-80.86	-25.00	55.86	Vertical
1421.3211	-55.07	-25.00	30.07	Vertical
6770.4385	-52.64	-25.00	27.64	Vertical
17758.4879	-39.69	-25.00	14.69	Vertical
37.7600	-74.10	-25.00	49.10	Horizontal
204.6000	-75.75	-25.00	50.75	Horizontal
571.7450	-80.54	-25.00	55.54	Horizontal
1799.2400	-44.34	-25.00	19.34	Horizontal
5736.1368	-52.78	-25.00	27.78	Horizontal
17406.7203	-40.52	-25.00	15.52	Horizontal

7.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
39.9425	-72.14	-25.00	47.14	Vertical
85.5325	-68.48	-25.00	43.48	Vertical
484.2025	-81.81	-25.00	56.81	Vertical
1924.9462	-51.36	-25.00	26.36	Vertical
6765.9383	-52.46	-25.00	27.46	Vertical
17842.4921	-40.27	-25.00	15.27	Vertical
40.4275	-75.08	-25.00	50.08	Horizontal
204.8425	-75.37	-25.00	50.37	Horizontal
735.9175	-78.50	-25.00	53.50	Horizontal
1800.5400	-44.52	-25.00	19.52	Horizontal
5739.8870	-53.34	-25.00	28.34	Horizontal
17397.7199	-40.65	-25.00	15.65	Horizontal

7.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
37.7600	-73.79	-25.00	48.79	Vertical
84.3200	-69.40	-25.00	44.40	Vertical
499.4800	-81.12	-25.00	56.12	Vertical
1921.7461	-48.83	-25.00	23.83	Vertical
6843.9422	-52.43	-25.00	27.43	Vertical
17856.7428	-40.20	-25.00	15.20	Vertical
40.4275	-75.32	-25.00	50.32	Horizontal
204.8425	-75.40	-25.00	50.40	Horizontal
732.5225	-78.20	-25.00	53.20	Horizontal
1801.0401	-44.50	-25.00	19.50	Horizontal
5701.6351	-53.29	-25.00	28.29	Horizontal
17384.9692	-40.69	-25.00	15.69	Horizontal

Remark:

1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.
3 All modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.
4 The disturbance above26.5GHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

8 Frequency Stability

8.1 Frequency Error VS. Voltage

NR Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage [Vdc]	Temperature(℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
N38	30KHz	20MHz	TM1	516000	Outer Full	VL	NT	-12.56	-0.00487	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	NT	-10.23	-0.00397	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VH	NT	11.30	0.00438	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VL	NT	-17.54	-0.00676	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	NT	-9.65	-0.00372	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VH	NT	-11.56	-0.00445	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VL	NT	-13.10	-0.00502	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	NT	9.64	0.00369	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VH	NT	11.68	0.00448	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VL	NT	-8.55	-0.00331	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	NT	-15.56	-0.00603	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VH	NT	-11.84	-0.00459	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VL	NT	-10.68	-0.00412	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	NT	9.79	0.00377	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VH	NT	-17.42	-0.00671	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VL	NT	11.41	0.00437	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	NT	-10.66	-0.00408	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VH	NT	9.38	0.00359	±2.5	PASS

8.2 Frequency Error VS. Temperature

NR Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage [Vdc]	Temperature(℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	-30	-8.40	-0.00326	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	-20	15.64	0.00606	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	-10	20.53	0.00796	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	0	-11.66	-0.00452	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	10	12.83	0.00497	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	20	12.47	0.00483	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	30	6.45	0.00250	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	40	-14.08	-0.00546	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	50	11.76	0.00456	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	-30	-13.65	-0.00526	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	-20	-11.90	-0.00459	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	-10	-18.09	-0.00697	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	0	-12.67	-0.00488	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	10	-20.41	-0.00787	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	20	-12.94	-0.00499	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	30	-10.24	-0.00395	±2.5	PASS

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

N38	30KHz	20MHz	TM1	519000	Outer Full	VN	40	-13.33	-0.00514	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	50	15.46	0.00596	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	-30	13.63	0.00522	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	-20	-15.55	-0.00596	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	-10	-8.52	-0.00326	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	0	9.16	0.00351	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	10	-13.21	-0.00506	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	20	13.33	0.00511	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	30	-11.44	-0.00438	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	40	-17.17	-0.00658	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	50	12.08	0.00463	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	-30	-10.22	-0.00396	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	-20	-11.61	-0.00450	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	-10	13.65	0.00529	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	0	-9.61	-0.00372	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	10	-11.58	-0.00449	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	20	12.59	0.00488	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	30	-14.35	-0.00556	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	40	-12.11	-0.00469	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	50	-11.54	-0.00447	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	-30	-9.56	-0.00368	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	-20	-14.65	-0.00565	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	-10	-10.23	-0.00394	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	0	-14.68	-0.00566	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	10	10.28	0.00396	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	20	-11.55	-0.00445	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	30	-13.66	-0.00526	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	40	-18.20	-0.00701	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	50	-19.63	-0.00756	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	-30	13.86	0.00531	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	-20	17.44	0.00668	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	-10	18.46	0.00707	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	0	-13.09	-0.00502	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	10	18.23	0.00698	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	20	-19.54	-0.00749	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	30	12.17	0.00466	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	40	14.08	0.00539	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	50	-11.66	-0.00447	±2.5	PASS

REMARK:
All antenna and all modulation had been tested, but only the worst case data displayed in this report

The End

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com