



Appendix B

NR band N38



CONTENT

Page

1	EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA(ANT1)	4
2	PEAK-TO-AVERAGE RATIO	11
2.1	TEST RESULTS	11
2.2	TEST PLOTS	11
3	MODULATION CHARACTERISTICS	13
3.1	TEST PLOTS	13
3.1.1	Test Band = N38	13
4	OCCUPIED BANDWIDTH & 26DB EMISSION BANDWIDTH	16
4.1	TEST RESULTS	16
4.2	TEST PLOTS	17
5	BAND EDGES COMPLIANCE	27
5.1	TEST PLOTS	27
6	SPURIOUS EMISSION AT ANTENNA TERMINAL	53
6.1	TEST PLOTS	53
7	FIELD STRENGTH OF SPURIOUS RADIATION	61
7.1	TEST BAND = SA_BAND=38_TM1	61
7.1.1	Test Channel = Low Channel TRAFFIC	61
7.2	TEST BAND = SA_BAND=38_TM1	62
7.2.1	Test Channel = Low Channel TRAFFIC	62
7.3	TEST BAND = SA_BAND=38_TM1	63
7.3.1	Test Channel = Mid Channel TRAFFIC	63
7.4	TEST BAND = SA_BAND=38_TM1	64
7.4.1	Test Channel = Mid Channel TRAFFIC	64
7.5	TEST BAND = SA_BAND=38_TM1	65
7.5.1	Test Channel = High Channel TRAFFIC	65
7.6	TEST BAND = SA_BAND=38_TM1	66
7.6.1	Test Channel = High Channel TRAFFIC	66
8	FREQUENCY STABILITY	67
8.1	FREQUENCY ERROR VS. VOLTAGE	67





8.2	FREQUENCY ERROR VS. TEMPERATURE	67
-----	---------------------------------------	----





1 Effective (Isotropic) Radiated Power Output Data(ANT1)

NR Band	SCS	Bandwidth	Modulation	Channel	RBConfig	Result	EIRP	Limit	Verdict
N38	30kHz	10MHz	DFT-PI2BPSK	Low	Inner_1RB_Left	22.93	25.98	33	PASS
N38	30kHz	10MHz	DFT-PI2BPSK	Low	Inner_1RB_Right	22.96	26.01	33	PASS
N38	30kHz	10MHz	DFT-PI2BPSK	Low	Inner_Full	23	26.05	33	PASS
N38	30kHz	10MHz	DFT-PI2BPSK	Mid	Inner_1RB_Left	22.63	25.68	33	PASS
N38	30kHz	10MHz	DFT-PI2BPSK	Mid	Inner_1RB_Right	22.55	25.6	33	PASS
N38	30kHz	10MHz	DFT-PI2BPSK	Mid	Inner_Full	22.57	25.62	33	PASS
N38	30kHz	10MHz	DFT-PI2BPSK	High	Inner_1RB_Left	22.59	25.64	33	PASS
N38	30kHz	10MHz	DFT-PI2BPSK	High	Inner_1RB_Right	22.79	25.84	33	PASS
N38	30kHz	10MHz	DFT-PI2BPSK	High	Inner_Full	22.66	25.71	33	PASS
N38	30kHz	10MHz	DFT-QPSK	Low	Inner_1RB_Left	22.94	25.99	33	PASS
N38	30kHz	10MHz	DFT-QPSK	Low	Inner_1RB_Right	22.9	25.95	33	PASS
N38	30kHz	10MHz	DFT-QPSK	Low	Inner_Full	23.1	26.15	33	PASS
N38	30kHz	10MHz	DFT-QPSK	Mid	Inner_1RB_Left	22.59	25.64	33	PASS
N38	30kHz	10MHz	DFT-QPSK	Mid	Inner_1RB_Right	22.63	25.68	33	PASS
N38	30kHz	10MHz	DFT-QPSK	Mid	Inner_Full	22.57	25.62	33	PASS
N38	30kHz	10MHz	DFT-QPSK	High	Inner_1RB_Left	22.57	25.62	33	PASS
N38	30kHz	10MHz	DFT-QPSK	High	Inner_1RB_Right	22.87	25.92	33	PASS
N38	30kHz	10MHz	DFT-QPSK	High	Inner_Full	22.72	25.77	33	PASS
N38	30kHz	10MHz	DFT-16QAM	Low	Inner_1RB_Left	21.37	24.42	33	PASS
N38	30kHz	10MHz	DFT-16QAM	Low	Inner_1RB_Right	21.48	24.53	33	PASS
N38	30kHz	10MHz	DFT-16QAM	Low	Inner_Full	21.52	24.57	33	PASS
N38	30kHz	10MHz	DFT-16QAM	Mid	Inner_1RB_Left	22.03	25.08	33	PASS
N38	30kHz	10MHz	DFT-16QAM	Mid	Inner_1RB_Right	21.89	24.94	33	PASS
N38	30kHz	10MHz	DFT-16QAM	Mid	Inner_Full	22.17	25.22	33	PASS
N38	30kHz	10MHz	DFT-16QAM	High	Inner_1RB_Left	22.17	25.22	33	PASS
N38	30kHz	10MHz	DFT-16QAM	High	Inner_1RB_Right	22.33	25.38	33	PASS
N38	30kHz	10MHz	DFT-16QAM	High	Inner_Full	22.25	25.3	33	PASS
N38	30kHz	10MHz	DFT-64QAM	Low	Inner_1RB_Left	19.38	22.43	33	PASS
N38	30kHz	10MHz	DFT-64QAM	Low	Inner_1RB_Right	19.46	22.51	33	PASS
N38	30kHz	10MHz	DFT-64QAM	Low	Inner_Full	19.3	22.35	33	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Inspection & Testing Services Laboratory)

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	10MHz	DFT-64QAM	Mid	Inner_1RB_Left	20.76	23.81	33	PASS
N38	30kHz	10MHz	DFT-64QAM	Mid	Inner_1RB_Right	20.87	23.92	33	PASS
N38	30kHz	10MHz	DFT-64QAM	Mid	Inner_Full	20.62	23.67	33	PASS
N38	30kHz	10MHz	DFT-64QAM	High	Inner_1RB_Left	20.87	23.92	33	PASS
N38	30kHz	10MHz	DFT-64QAM	High	Inner_1RB_Right	20.99	24.04	33	PASS
N38	30kHz	10MHz	DFT-64QAM	High	Inner_Full	20.78	23.83	33	PASS
N38	30kHz	10MHz	DFT-256QAM	Low	Inner_1RB_Left	19.44	22.49	33	PASS
N38	30kHz	10MHz	DFT-256QAM	Low	Inner_1RB_Right	19.49	22.54	33	PASS
N38	30kHz	10MHz	DFT-256QAM	Low	Inner_Full	19.29	22.34	33	PASS
N38	30kHz	10MHz	DFT-256QAM	Mid	Inner_1RB_Left	20.77	23.82	33	PASS
N38	30kHz	10MHz	DFT-256QAM	Mid	Inner_1RB_Right	20.9	23.95	33	PASS
N38	30kHz	10MHz	DFT-256QAM	Mid	Inner_Full	20.58	23.63	33	PASS
N38	30kHz	10MHz	DFT-256QAM	High	Inner_1RB_Left	20.86	23.91	33	PASS
N38	30kHz	10MHz	DFT-256QAM	High	Inner_1RB_Right	20.65	23.7	33	PASS
N38	30kHz	10MHz	DFT-256QAM	High	Inner_Full	20.8	23.85	33	PASS
N38	30kHz	10MHz	CP-QPSK	Low	Inner_1RB_Left	22.6	25.65	33	PASS
N38	30kHz	10MHz	CP-QPSK	Low	Inner_1RB_Right	23.04	26.09	33	PASS
N38	30kHz	10MHz	CP-QPSK	Low	Inner_Full	23.11	26.16	33	PASS
N38	30kHz	10MHz	CP-QPSK	Mid	Inner_1RB_Left	22.58	25.63	33	PASS
N38	30kHz	10MHz	CP-QPSK	Mid	Inner_1RB_Right	22.77	25.82	33	PASS
N38	30kHz	10MHz	CP-QPSK	Mid	Inner_Full	22.57	25.62	33	PASS
N38	30kHz	10MHz	CP-QPSK	High	Inner_1RB_Left	22.54	25.59	33	PASS
N38	30kHz	10MHz	CP-QPSK	High	Inner_1RB_Right	22.87	25.92	33	PASS
N38	30kHz	10MHz	CP-QPSK	High	Inner_Full	22.72	25.77	33	PASS
N38	30kHz	10MHz	CP-16QAM	Low	Inner_1RB_Left	21.4	24.45	33	PASS
N38	30kHz	10MHz	CP-16QAM	Low	Inner_1RB_Right	21.58	24.63	33	PASS
N38	30kHz	10MHz	CP-16QAM	Low	Inner_Full	21.6	24.65	33	PASS
N38	30kHz	10MHz	CP-16QAM	Mid	Inner_1RB_Left	22.1	25.15	33	PASS
N38	30kHz	10MHz	CP-16QAM	Mid	Inner_1RB_Right	22.18	25.23	33	PASS
N38	30kHz	10MHz	CP-16QAM	Mid	Inner_Full	22.11	25.16	33	PASS
N38	30kHz	10MHz	CP-16QAM	High	Inner_1RB_Left	22.12	25.17	33	PASS
N38	30kHz	10MHz	CP-16QAM	High	Inner_1RB_Right	22.04	25.09	33	PASS
N38	30kHz	10MHz	CP-16QAM	High	Inner_Full	22.2	25.25	33	PASS
N38	30kHz	10MHz	CP-64QAM	Low	Inner_1RB_Left	19.46	22.51	33	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Inspection & Testing Services Laboratory)

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	10MHz	CP-64QAM	Low	Inner_1RB_Right	19.35	22.4	33	PASS
N38	30kHz	10MHz	CP-64QAM	Low	Inner_Full	19.54	22.59	33	PASS
N38	30kHz	10MHz	CP-64QAM	Mid	Inner_1RB_Left	20.78	23.83	33	PASS
N38	30kHz	10MHz	CP-64QAM	Mid	Inner_1RB_Right	20.51	23.56	33	PASS
N38	30kHz	10MHz	CP-64QAM	Mid	Inner_Full	20.58	23.63	33	PASS
N38	30kHz	10MHz	CP-64QAM	High	Inner_1RB_Left	20.65	23.7	33	PASS
N38	30kHz	10MHz	CP-64QAM	High	Inner_1RB_Right	20.63	23.68	33	PASS
N38	30kHz	10MHz	CP-64QAM	High	Inner_Full	20.83	23.88	33	PASS
N38	30kHz	10MHz	CP-256QAM	Low	Inner_1RB_Left	19.33	22.38	33	PASS
N38	30kHz	10MHz	CP-256QAM	Low	Inner_1RB_Right	19.34	22.39	33	PASS
N38	30kHz	10MHz	CP-256QAM	Low	Inner_Full	19.45	22.5	33	PASS
N38	30kHz	10MHz	CP-256QAM	Mid	Inner_1RB_Left	20.5	23.55	33	PASS
N38	30kHz	10MHz	CP-256QAM	Mid	Inner_1RB_Right	20.52	23.57	33	PASS
N38	30kHz	10MHz	CP-256QAM	Mid	Inner_Full	20.71	23.76	33	PASS
N38	30kHz	10MHz	CP-256QAM	High	Inner_1RB_Left	20.65	23.7	33	PASS
N38	30kHz	10MHz	CP-256QAM	High	Inner_1RB_Right	20.87	23.92	33	PASS
N38	30kHz	10MHz	CP-256QAM	High	Inner_Full	20.82	23.87	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	Low	Inner_1RB_Left	22.53	25.58	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	Low	Inner_1RB_Right	22.64	25.69	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	Low	Inner_Full	22.72	25.77	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	Mid	Inner_1RB_Left	22.54	25.59	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	Mid	Inner_1RB_Right	22.54	25.59	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	Mid	Inner_Full	22.6	25.65	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	High	Inner_1RB_Left	22.54	25.59	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	High	Inner_1RB_Right	22.71	25.76	33	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	High	Inner_Full	22.79	25.84	33	PASS
N38	30kHz	15MHz	DFT-QPSK	Low	Inner_1RB_Left	22.48	25.53	33	PASS
N38	30kHz	15MHz	DFT-QPSK	Low	Inner_1RB_Right	22.7	25.75	33	PASS
N38	30kHz	15MHz	DFT-QPSK	Low	Inner_Full	22.69	25.74	33	PASS
N38	30kHz	15MHz	DFT-QPSK	Mid	Inner_1RB_Left	22.42	25.47	33	PASS
N38	30kHz	15MHz	DFT-QPSK	Mid	Inner_1RB_Right	22.71	25.76	33	PASS
N38	30kHz	15MHz	DFT-QPSK	Mid	Inner_Full	22.58	25.63	33	PASS
N38	30kHz	15MHz	DFT-QPSK	High	Inner_1RB_Left	22.55	25.6	33	PASS
N38	30kHz	15MHz	DFT-QPSK	High	Inner_1RB_Right	22.77	25.82	33	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Inspection & Testing Services Laboratory)

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	15MHz	DFT-QPSK	High	Inner_Full	22.77	25.82	33	PASS
N38	30kHz	15MHz	DFT-16QAM	Low	Inner_1RB_Left	22.08	25.13	33	PASS
N38	30kHz	15MHz	DFT-16QAM	Low	Inner_1RB_Right	21.91	24.96	33	PASS
N38	30kHz	15MHz	DFT-16QAM	Low	Inner_Full	22.17	25.22	33	PASS
N38	30kHz	15MHz	DFT-16QAM	Mid	Inner_1RB_Left	22.02	25.07	33	PASS
N38	30kHz	15MHz	DFT-16QAM	Mid	Inner_1RB_Right	21.86	24.91	33	PASS
N38	30kHz	15MHz	DFT-16QAM	Mid	Inner_Full	22.09	25.14	33	PASS
N38	30kHz	15MHz	DFT-16QAM	High	Inner_1RB_Left	22.03	25.08	33	PASS
N38	30kHz	15MHz	DFT-16QAM	High	Inner_1RB_Right	22.06	25.11	33	PASS
N38	30kHz	15MHz	DFT-16QAM	High	Inner_Full	22.19	25.24	33	PASS
N38	30kHz	15MHz	DFT-64QAM	Low	Inner_1RB_Left	20.75	23.8	33	PASS
N38	30kHz	15MHz	DFT-64QAM	Low	Inner_1RB_Right	20.87	23.92	33	PASS
N38	30kHz	15MHz	DFT-64QAM	Low	Inner_Full	20.76	23.81	33	PASS
N38	30kHz	15MHz	DFT-64QAM	Mid	Inner_1RB_Left	20.43	23.48	33	PASS
N38	30kHz	15MHz	DFT-64QAM	Mid	Inner_1RB_Right	20.81	23.86	33	PASS
N38	30kHz	15MHz	DFT-64QAM	Mid	Inner_Full	20.66	23.71	33	PASS
N38	30kHz	15MHz	DFT-64QAM	High	Inner_1RB_Left	20.58	23.63	33	PASS
N38	30kHz	15MHz	DFT-64QAM	High	Inner_1RB_Right	20.64	23.69	33	PASS
N38	30kHz	15MHz	DFT-64QAM	High	Inner_Full	20.87	23.92	33	PASS
N38	30kHz	15MHz	DFT-256QAM	Low	Inner_1RB_Left	20.52	23.57	33	PASS
N38	30kHz	15MHz	DFT-256QAM	Low	Inner_1RB_Right	20.84	23.89	33	PASS
N38	30kHz	15MHz	DFT-256QAM	Low	Inner_Full	20.79	23.84	33	PASS
N38	30kHz	15MHz	DFT-256QAM	Mid	Inner_1RB_Left	20.43	23.48	33	PASS
N38	30kHz	15MHz	DFT-256QAM	Mid	Inner_1RB_Right	20.48	23.53	33	PASS
N38	30kHz	15MHz	DFT-256QAM	Mid	Inner_Full	20.63	23.68	33	PASS
N38	30kHz	15MHz	DFT-256QAM	High	Inner_1RB_Left	20.86	23.91	33	PASS
N38	30kHz	15MHz	DFT-256QAM	High	Inner_1RB_Right	20.88	23.93	33	PASS
N38	30kHz	15MHz	DFT-256QAM	High	Inner_Full	20.9	23.95	33	PASS
N38	30kHz	15MHz	CP-QPSK	Low	Inner_1RB_Left	22.49	25.54	33	PASS
N38	30kHz	15MHz	CP-QPSK	Low	Inner_1RB_Right	22.69	25.74	33	PASS
N38	30kHz	15MHz	CP-QPSK	Low	Inner_Full	22.74	25.79	33	PASS
N38	30kHz	15MHz	CP-QPSK	Mid	Inner_1RB_Left	22.54	25.59	33	PASS
N38	30kHz	15MHz	CP-QPSK	Mid	Inner_1RB_Right	22.71	25.76	33	PASS
N38	30kHz	15MHz	CP-QPSK	Mid	Inner_Full	22.68	25.73	33	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Laboratory

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	15MHz	CP-QPSK	High	Inner_1RB_Left	22.61	25.66	33	PASS
N38	30kHz	15MHz	CP-QPSK	High	Inner_1RB_Right	22.82	25.87	33	PASS
N38	30kHz	15MHz	CP-QPSK	High	Inner_Full	22.86	25.91	33	PASS
N38	30kHz	15MHz	CP-16QAM	Low	Inner_1RB_Left	21.96	25.01	33	PASS
N38	30kHz	15MHz	CP-16QAM	Low	Inner_1RB_Right	22.24	25.29	33	PASS
N38	30kHz	15MHz	CP-16QAM	Low	Inner_Full	22.28	25.33	33	PASS
N38	30kHz	15MHz	CP-16QAM	Mid	Inner_1RB_Left	22.02	25.07	33	PASS
N38	30kHz	15MHz	CP-16QAM	Mid	Inner_1RB_Right	21.86	24.91	33	PASS
N38	30kHz	15MHz	CP-16QAM	Mid	Inner_Full	22.12	25.17	33	PASS
N38	30kHz	15MHz	CP-16QAM	High	Inner_1RB_Left	22.08	25.13	33	PASS
N38	30kHz	15MHz	CP-16QAM	High	Inner_1RB_Right	22.12	25.17	33	PASS
N38	30kHz	15MHz	CP-16QAM	High	Inner_Full	22.41	25.46	33	PASS
N38	30kHz	15MHz	CP-64QAM	Low	Inner_1RB_Left	20.76	23.81	33	PASS
N38	30kHz	15MHz	CP-64QAM	Low	Inner_1RB_Right	20.87	23.92	33	PASS
N38	30kHz	15MHz	CP-64QAM	Low	Inner_Full	20.76	23.81	33	PASS
N38	30kHz	15MHz	CP-64QAM	Mid	Inner_1RB_Left	20.42	23.47	33	PASS
N38	30kHz	15MHz	CP-64QAM	Mid	Inner_1RB_Right	20.8	23.85	33	PASS
N38	30kHz	15MHz	CP-64QAM	Mid	Inner_Full	20.65	23.7	33	PASS
N38	30kHz	15MHz	CP-64QAM	High	Inner_1RB_Left	20.63	23.68	33	PASS
N38	30kHz	15MHz	CP-64QAM	High	Inner_1RB_Right	20.68	23.73	33	PASS
N38	30kHz	15MHz	CP-64QAM	High	Inner_Full	20.83	23.88	33	PASS
N38	30kHz	15MHz	CP-256QAM	Low	Inner_1RB_Left	20.52	23.57	33	PASS
N38	30kHz	15MHz	CP-256QAM	Low	Inner_1RB_Right	20.86	23.91	33	PASS
N38	30kHz	15MHz	CP-256QAM	Low	Inner_Full	20.76	23.81	33	PASS
N38	30kHz	15MHz	CP-256QAM	Mid	Inner_1RB_Left	20.43	23.48	33	PASS
N38	30kHz	15MHz	CP-256QAM	Mid	Inner_1RB_Right	20.82	23.87	33	PASS
N38	30kHz	15MHz	CP-256QAM	Mid	Inner_Full	20.67	23.72	33	PASS
N38	30kHz	15MHz	CP-256QAM	High	Inner_1RB_Left	20.62	23.67	33	PASS
N38	30kHz	15MHz	CP-256QAM	High	Inner_1RB_Right	20.88	23.93	33	PASS
N38	30kHz	15MHz	CP-256QAM	High	Inner_Full	20.86	23.91	33	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Inspection & Testing Services Laboratory

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



NR Band	Bandwidth	SCS	Modulation	Channel	RB Config	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
N38	20MHz	30KHz	TM1	516000	Inner Full	23.45	26.50	33	PASS
N38	20MHz	30KHz	TM1	516000	Inner 1RB Left	23.57	26.62	33	PASS
N38	20MHz	30KHz	TM1	516000	Inner 1RB Right	23.48	26.53	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner Full	22.19	25.24	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner 1RB Left	21.85	24.90	33	PASS
N38	20MHz	30KHz	TM1	519000	Inner 1RB Right	21.56	24.61	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner Full	23.24	26.29	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner 1RB Left	23.59	26.64	33	PASS
N38	20MHz	30KHz	TM1	522000	Inner 1RB Right	23.39	26.44	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner Full	23.47	26.52	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner 1RB Left	23.57	26.62	33	PASS
N38	20MHz	30KHz	TM2	516000	Inner 1RB Right	23.44	26.49	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner Full	22.15	25.20	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner 1RB Left	21.96	25.01	33	PASS
N38	20MHz	30KHz	TM2	519000	Inner 1RB Right	21.62	24.67	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner Full	22.96	26.01	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner 1RB Left	23.27	26.32	33	PASS
N38	20MHz	30KHz	TM2	522000	Inner 1RB Right	23.12	26.17	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner Full	22.67	25.72	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner 1RB Left	22.57	25.62	33	PASS
N38	20MHz	30KHz	TM3	516000	Inner 1RB Right	22.48	25.53	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner Full	21.44	24.49	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner 1RB Left	21.92	24.97	33	PASS
N38	20MHz	30KHz	TM3	519000	Inner 1RB Right	21.71	24.76	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner Full	21.72	24.77	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner 1RB Left	22.52	25.57	33	PASS
N38	20MHz	30KHz	TM3	522000	Inner 1RB Right	22.03	25.08	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner Full	20.78	23.83	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner 1RB Left	21.21	24.26	33	PASS
N38	20MHz	30KHz	TM4	516000	Inner 1RB Right	20.81	23.86	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner Full	19.90	22.95	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner 1RB Left	20.16	23.21	33	PASS
N38	20MHz	30KHz	TM4	519000	Inner 1RB Right	19.83	22.88	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner Full	20.11	23.16	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner 1RB Left	20.89	23.94	33	PASS
N38	20MHz	30KHz	TM4	522000	Inner 1RB Right	20.89	23.94	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner Full	20.93	23.98	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner 1RB Left	21.47	24.52	33	PASS
N38	20MHz	30KHz	TM5	516000	Inner 1RB Right	20.60	23.65	33	PASS
N38	20MHz	30KHz	TM5	519000	Inner Full	20.06	23.11	33	PASS
N38	20MHz	30KHz	TM5	519000	Inner 1RB Left	20.21	23.26	33	PASS
N38	20MHz	30KHz	TM5	519000	Inner 1RB Right	19.76	22.81	33	PASS
N38	20MHz	30KHz	TM5	522000	Inner Full	20.64	23.69	33	PASS
N38	20MHz	30KHz	TM5	522000	Inner 1RB Left	20.51	23.56	33	PASS
N38	20MHz	30KHz	TM5	522000	Inner 1RB Right	20.75	23.80	33	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8367 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Inspection & Testing Laboratory)

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	20MHz	30KHz	TM6	516000	Inner Full	23.54	26.59	33	PASS
N38	20MHz	30KHz	TM6	516000	Inner 1RB Left	23.84	26.89	33	PASS
N38	20MHz	30KHz	TM6	516000	Inner 1RB Right	23.51	26.56	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner Full	21.91	24.96	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner 1RB Left	22.09	25.14	33	PASS
N38	20MHz	30KHz	TM6	519000	Inner 1RB Right	22.20	25.25	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner Full	23.29	26.34	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner 1RB Left	23.52	26.57	33	PASS
N38	20MHz	30KHz	TM6	522000	Inner 1RB Right	23.30	26.35	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner Full	22.32	25.37	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner 1RB Left	22.29	25.34	33	PASS
N38	20MHz	30KHz	TM7	516000	Inner 1RB Right	22.29	25.34	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner Full	21.44	24.49	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner 1RB Left	21.44	24.49	33	PASS
N38	20MHz	30KHz	TM7	519000	Inner 1RB Right	21.32	24.37	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner Full	22.11	25.16	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner 1RB Left	22.57	25.62	33	PASS
N38	20MHz	30KHz	TM7	522000	Inner 1RB Right	22.09	25.14	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner Full	21.04	24.09	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner 1RB Left	21.11	24.16	33	PASS
N38	20MHz	30KHz	TM8	516000	Inner 1RB Right	20.63	23.68	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner Full	19.91	22.96	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner 1RB Left	20.26	23.31	33	PASS
N38	20MHz	30KHz	TM8	519000	Inner 1RB Right	20.05	23.10	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner Full	20.24	23.29	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner 1RB Left	20.72	23.77	33	PASS
N38	20MHz	30KHz	TM8	522000	Inner 1RB Right	20.61	23.66	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner Full	21.15	24.20	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner 1RB Left	21.15	24.20	33	PASS
N38	20MHz	30KHz	TM9	516000	Inner 1RB Right	21.02	24.07	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner Full	20.13	23.18	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner 1RB Left	19.90	22.95	33	PASS
N38	20MHz	30KHz	TM9	519000	Inner 1RB Right	19.97	23.02	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner Full	19.82	22.87	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner 1RB Left	19.62	22.67	33	PASS
N38	20MHz	30KHz	TM9	522000	Inner 1RB Right	19.69	22.74	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]

ERP [dBm] = Conducted Power [dBm] + Gain [dBi] - 2.15



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS-CSTC Laboratory)

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

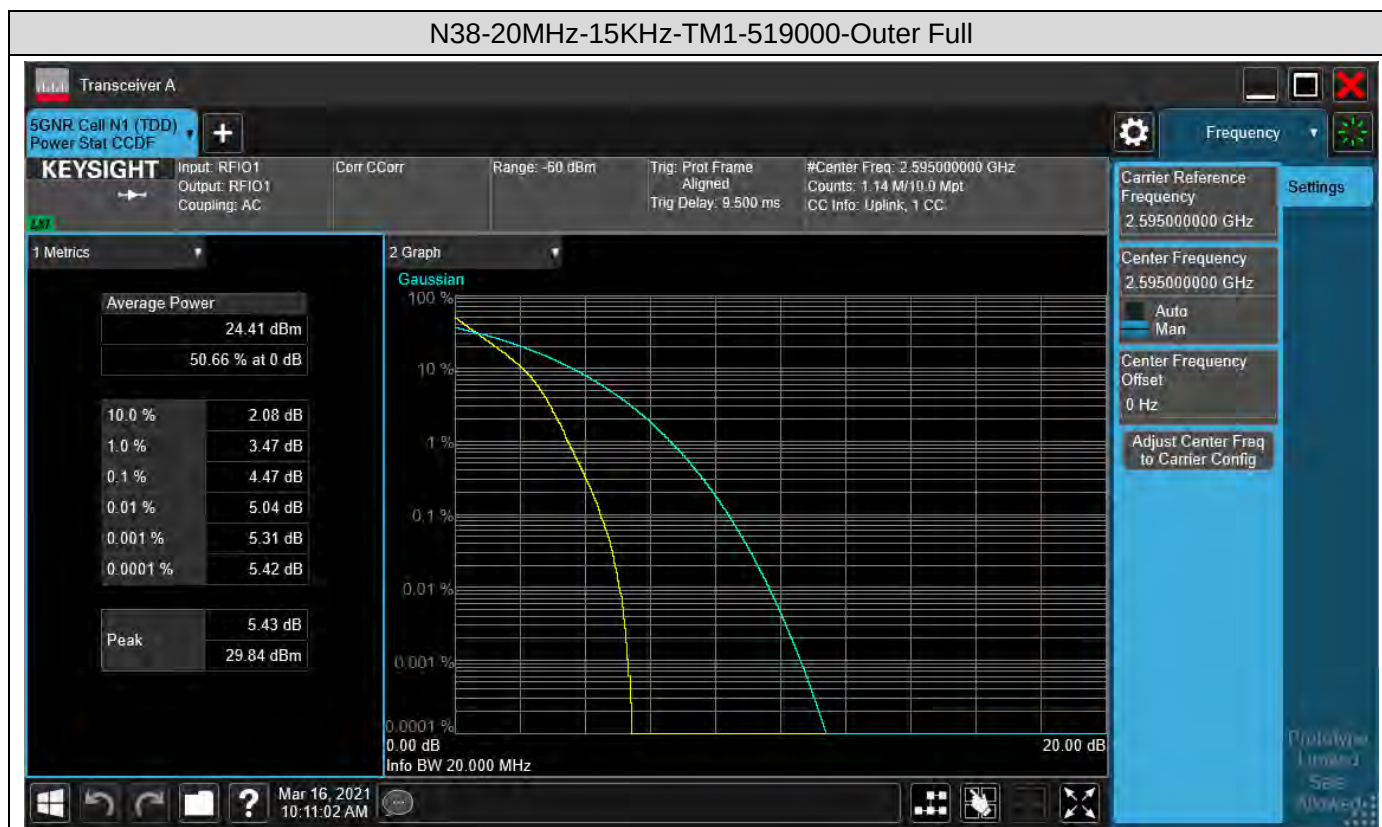


2 Peak-to-Average Ratio

2.1 Test Results

NR Band	Bandwidth h	SCS	Modulation	Channel	RB Config	Result (dB)	Limit (dBm)	Verdict
N38	20MHz	30KHz	TM1	519000	Outer Full	4.47	13	PASS
N38	20MHz	30KHz	TM6	519000	Outer Full	7.79	13	PASS

2.2 Test Plots



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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



REMARK:

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS-CSTC Laboratory)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.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

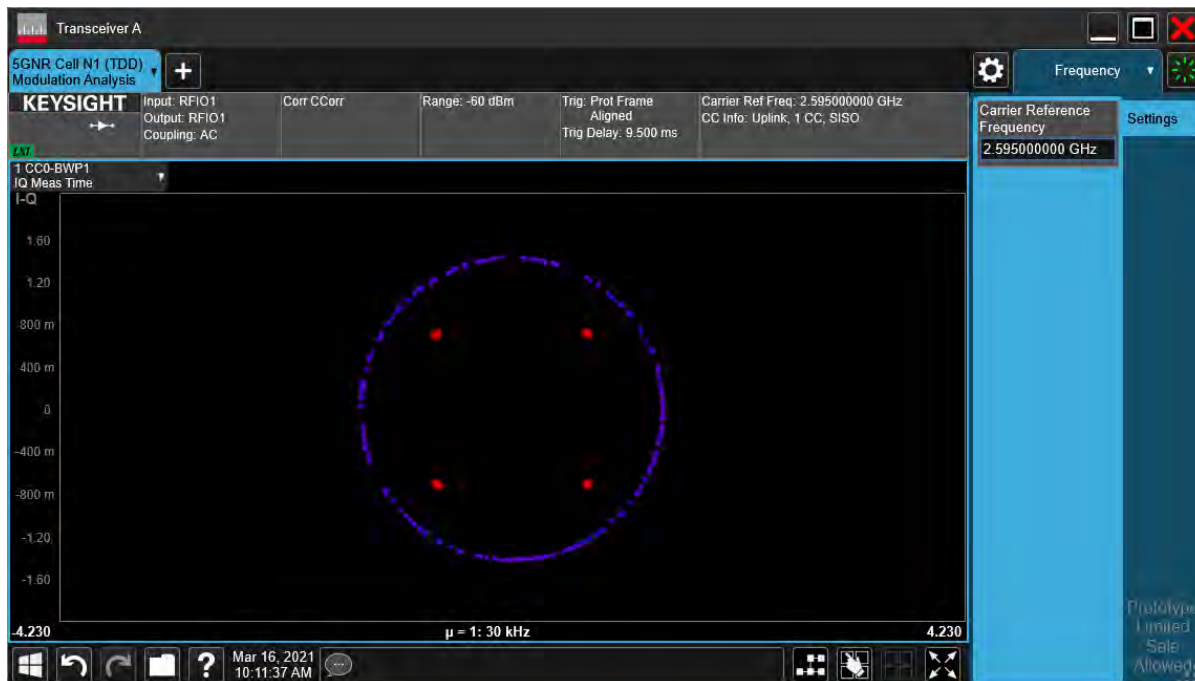
3 Modulation Characteristics

3.1 Test Plots

3.1.1 Test Band = N38

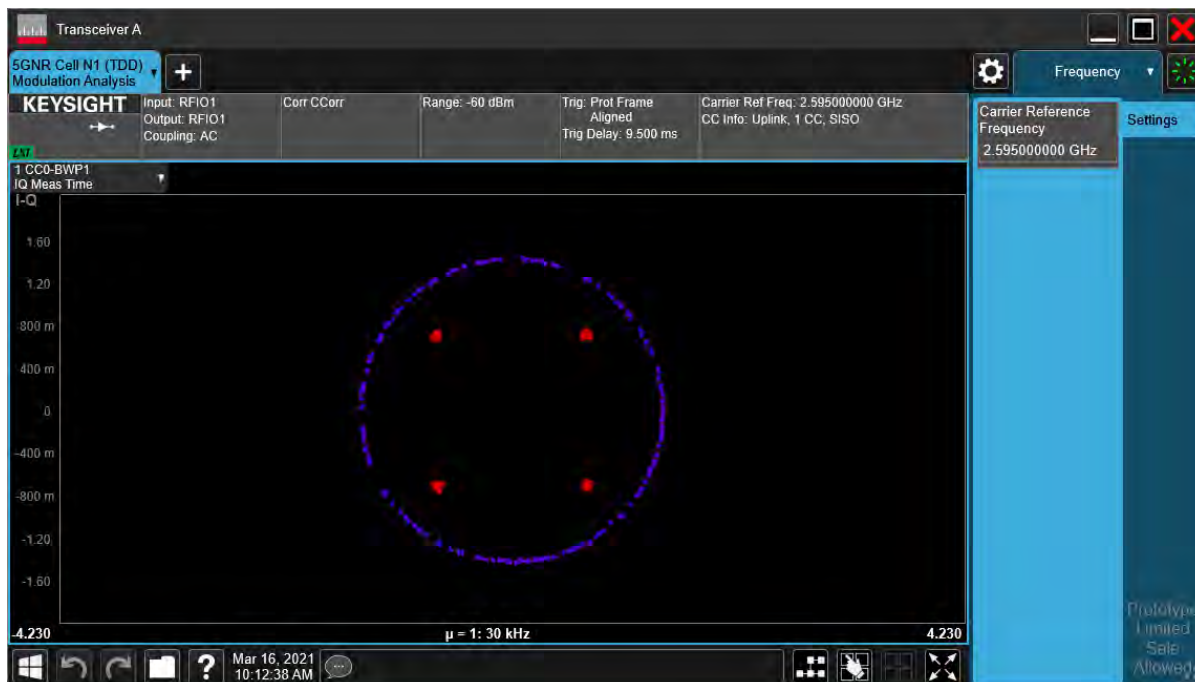
3.1.1.1 Test Mode = TM1 20MHz

3.1.1.1.1 Test Channel = MCH



3.1.1.2 Test Mode = TM2 20MHz

3.1.1.2.1 Test Channel = MCH



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

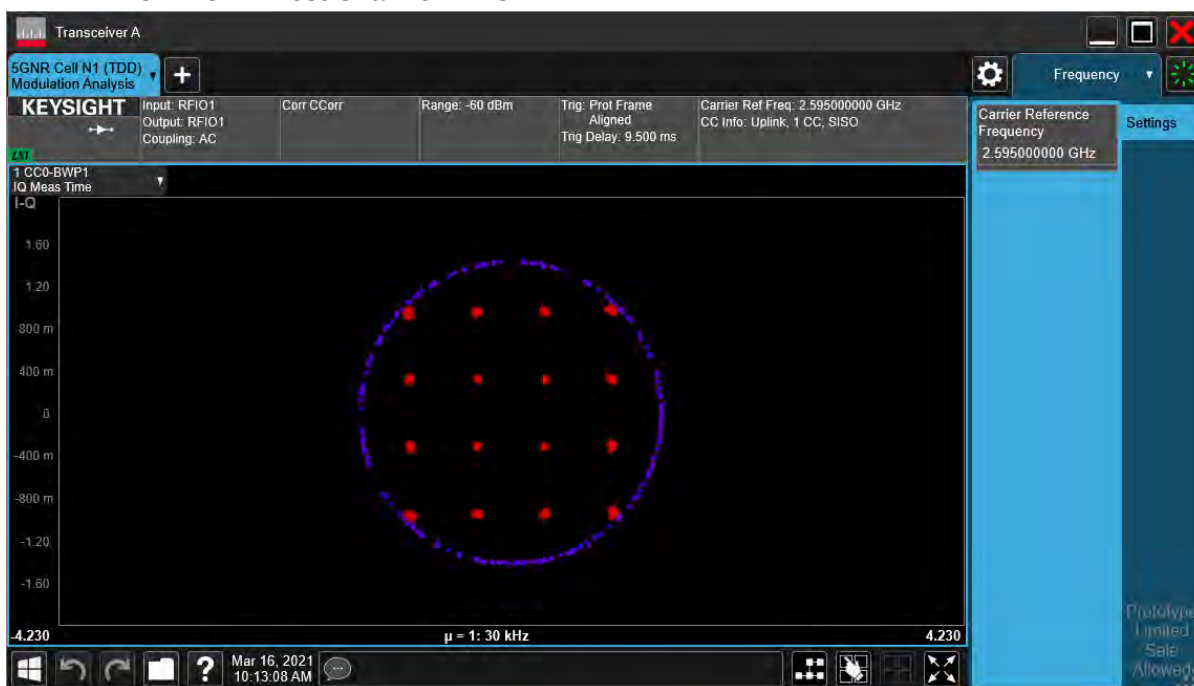
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS-CSTC) Laboratory

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

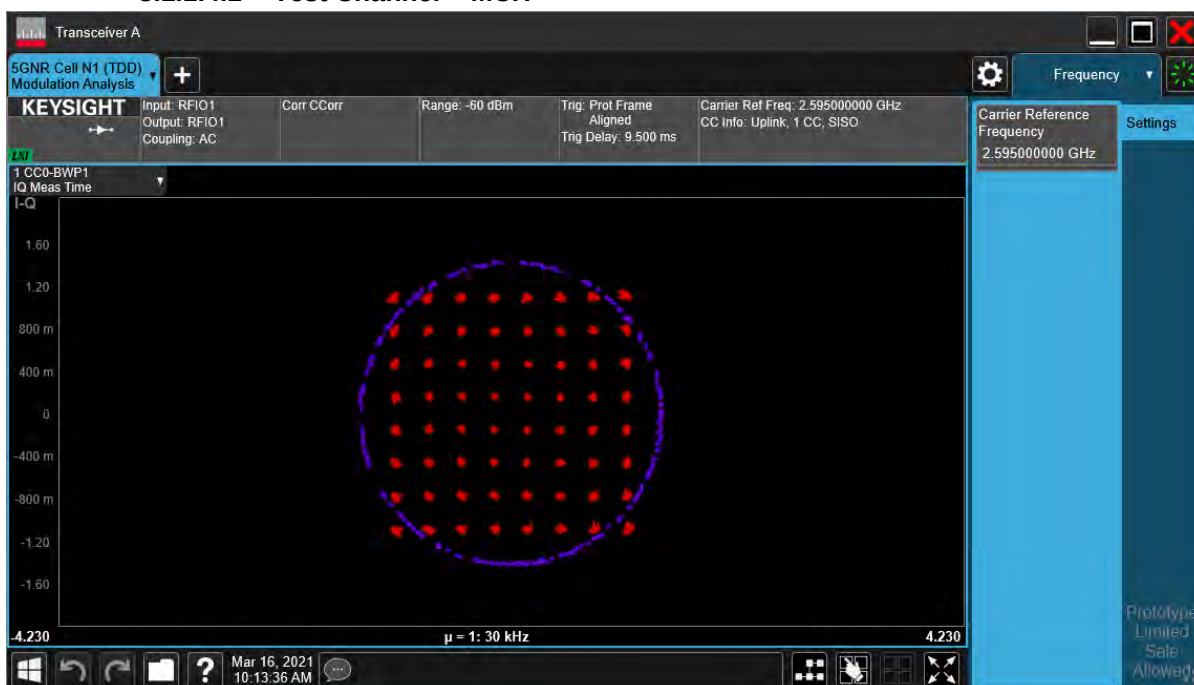
3.1.1.3 Test Mode = TM3 20MHz

3.1.1.3.1 Test Channel = MCH



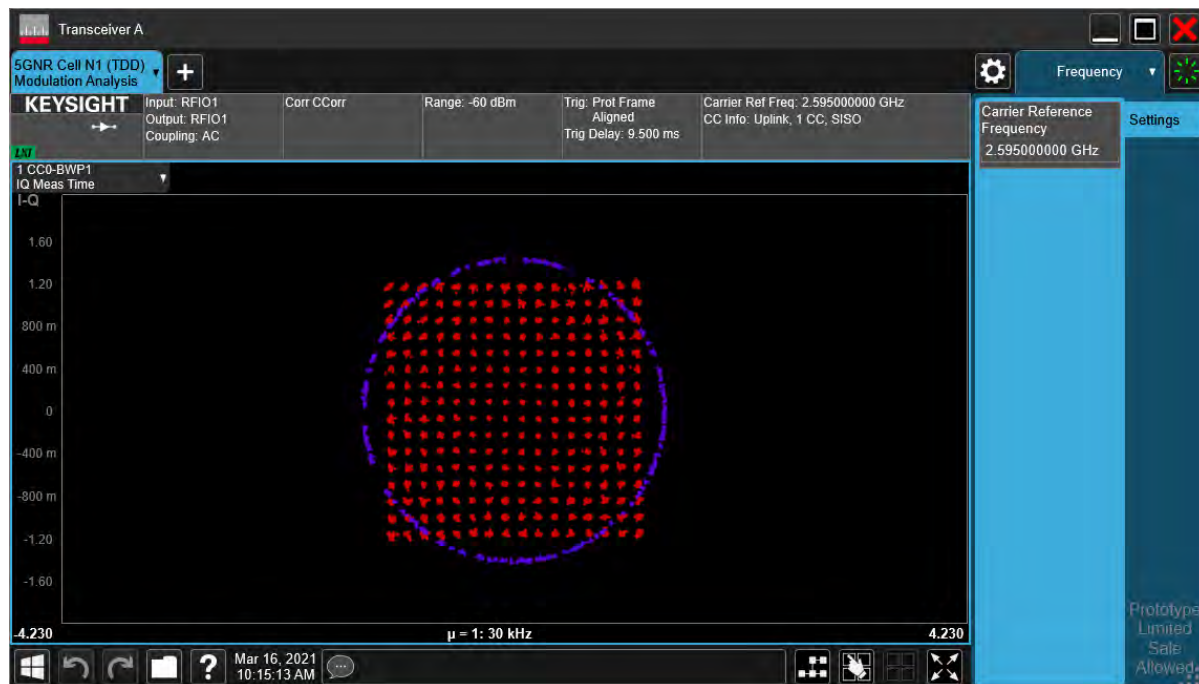
3.1.1.4 Test Mode = TM4 20MHz

3.1.1.4.1 Test Channel = MCH



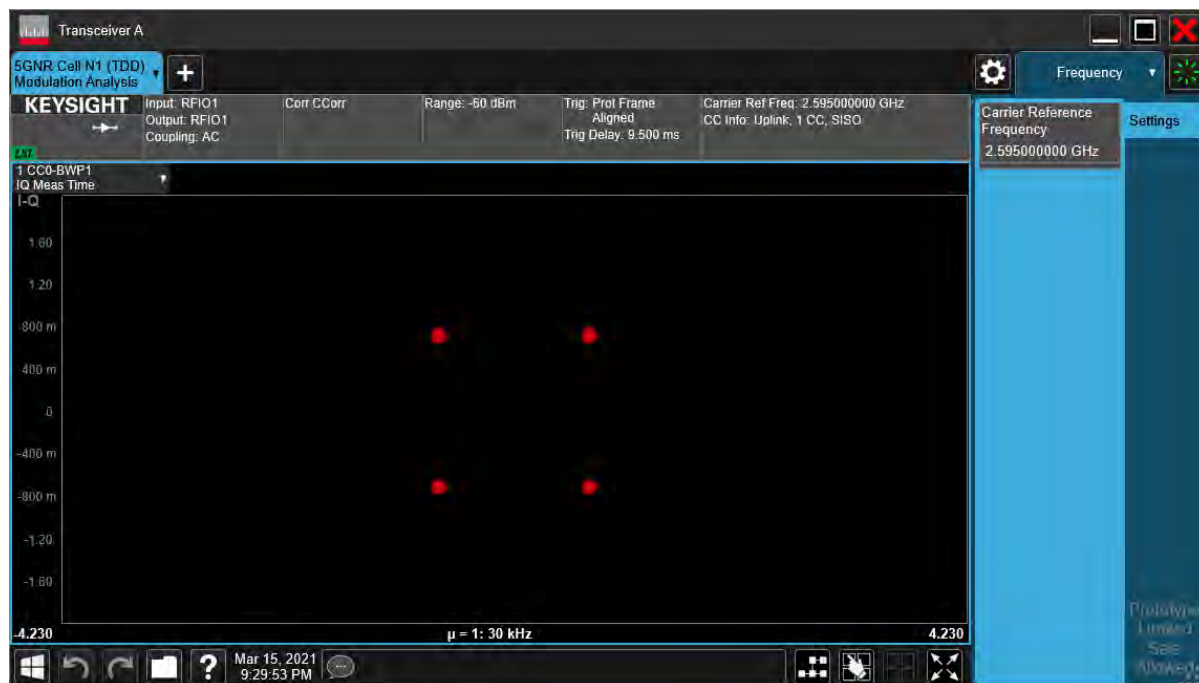
3.1.1.5 Test Mode = TM5 20MHz

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
 Shenzhen Branch Inspection & Testing Services Laboratory

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



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	17.79	19.15	PASS
N38	20MHz	30KHz	TM2	519000	Outer Full	17.79	19.02	PASS
N38	20MHz	30KHz	TM3	519000	Outer Full	17.76	18.59	PASS
N38	20MHz	30KHz	TM4	519000	Outer Full	17.79	18.93	PASS
N38	20MHz	30KHz	TM5	519000	Outer Full	17.79	18.65	PASS
N38	20MHz	30KHz	TM6	519000	Outer Full	18.18	19.17	PASS
N38	20MHz	30KHz	TM7	519000	Outer Full	18.17	19.23	PASS
N38	20MHz	30KHz	TM8	519000	Outer Full	18.25	19.19	PASS
N38	20MHz	30KHz	TM9	519000	Outer Full	18.18	18.95	PASS

BandName	SCS	Bandwidth	Modulation	Channel	RBSIZE	26dB	OBW	Verdict
N38	30kHz	10MHz	DFT-PI2BPSK	Mid	Outer Full	8.5618	9.398	PASS
N38	30kHz	10MHz	DFT-QPSK	Mid	Outer Full	8.5998	9.114	PASS
N38	30kHz	10MHz	DFT-16QAM	Mid	Outer Full	8.5516	9.015	PASS
N38	30kHz	10MHz	DFT-64QAM	Mid	Outer Full	8.5239	9.026	PASS
N38	30kHz	10MHz	DFT-256QAM	Mid	Outer Full	8.5646	9.099	PASS
N38	30kHz	10MHz	CP-QPSK	Mid	Outer Full	8.5902	9.052	PASS
N38	30kHz	10MHz	CP-16QAM	Mid	Outer Full	8.5356	8.912	PASS
N38	30kHz	10MHz	CP-64QAM	Mid	Outer Full	8.6201	9.117	PASS
N38	30kHz	10MHz	CP-256QAM	Mid	Outer Full	8.5538	8.943	PASS
N38	30kHz	15MHz	DFT-PI2BPSK	Mid	Outer Full	12.824	13.45	PASS
N38	30kHz	15MHz	DFT-QPSK	Mid	Outer Full	12.862	13.61	PASS
N38	30kHz	15MHz	DFT-16QAM	Mid	Outer Full	12.851	13.41	PASS
N38	30kHz	15MHz	DFT-64QAM	Mid	Outer Full	12.869	13.58	PASS
N38	30kHz	15MHz	DFT-256QAM	Mid	Outer Full	12.837	13.41	PASS
N38	30kHz	15MHz	CP-QPSK	Mid	Outer Full	12.821	13.44	PASS
N38	30kHz	15MHz	CP-16QAM	Mid	Outer Full	13.588	14.12	PASS
N38	30kHz	15MHz	CP-64QAM	Mid	Outer Full	13.577	14.23	PASS
N38	30kHz	15MHz	CP-256QAM	Mid	Outer Full	13.525	14.07	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

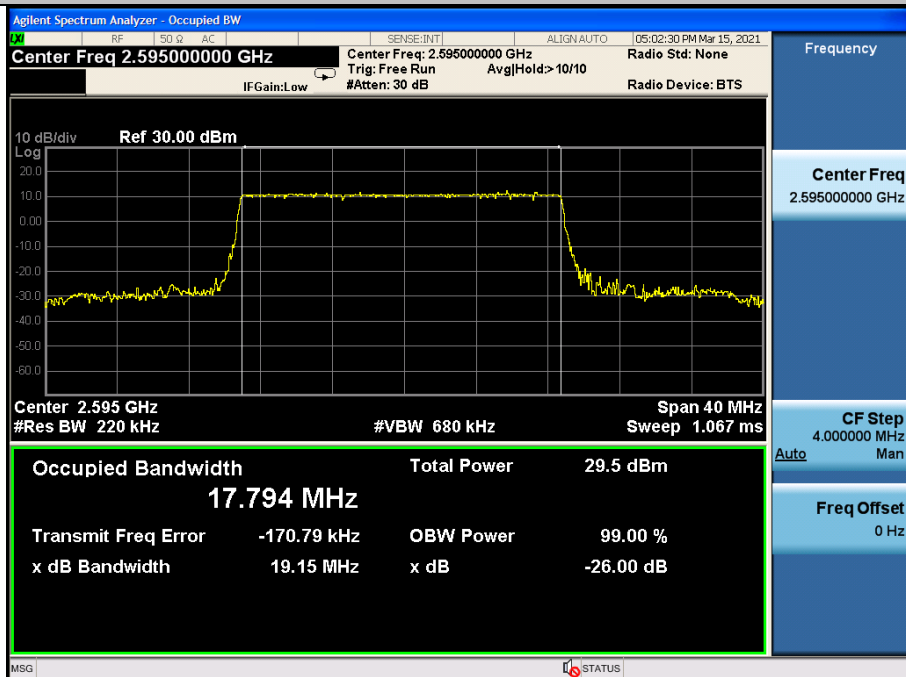
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Laboratory

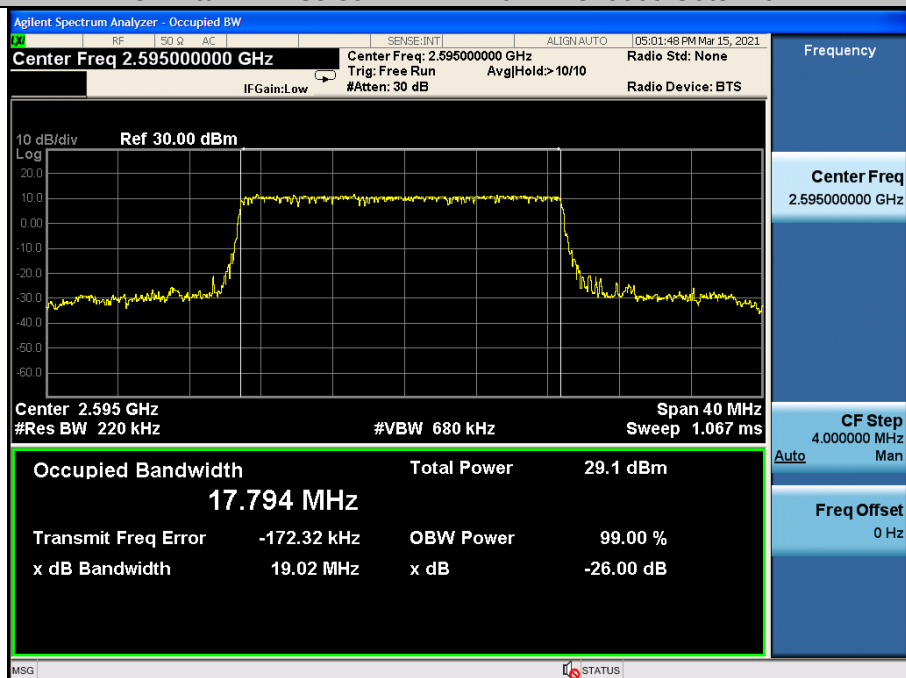
No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4.2 Test Plots

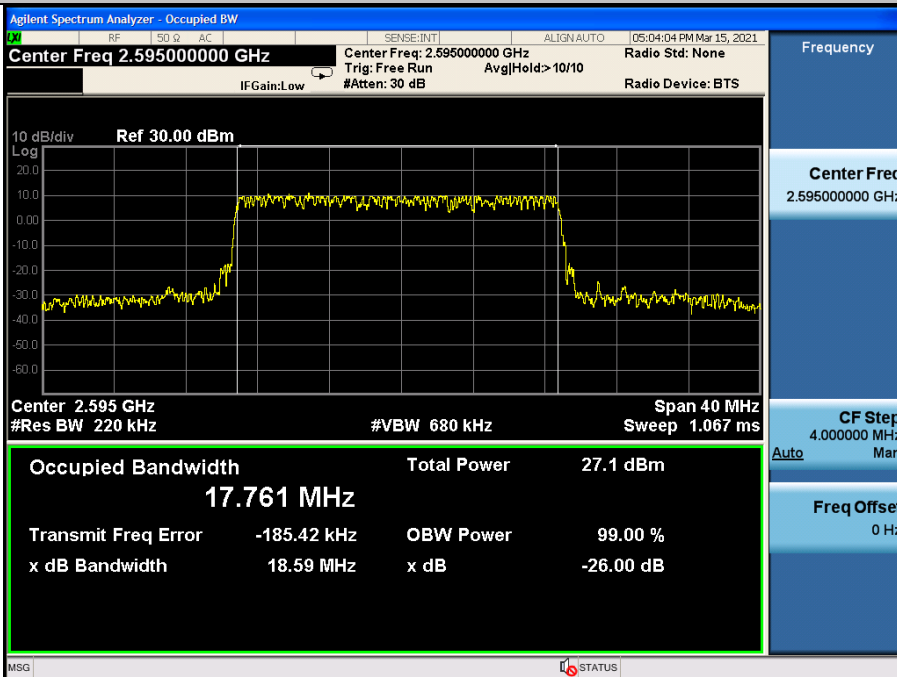
OBW&EBW N38 30KHz TM1 20MHz 519000 Outer Full



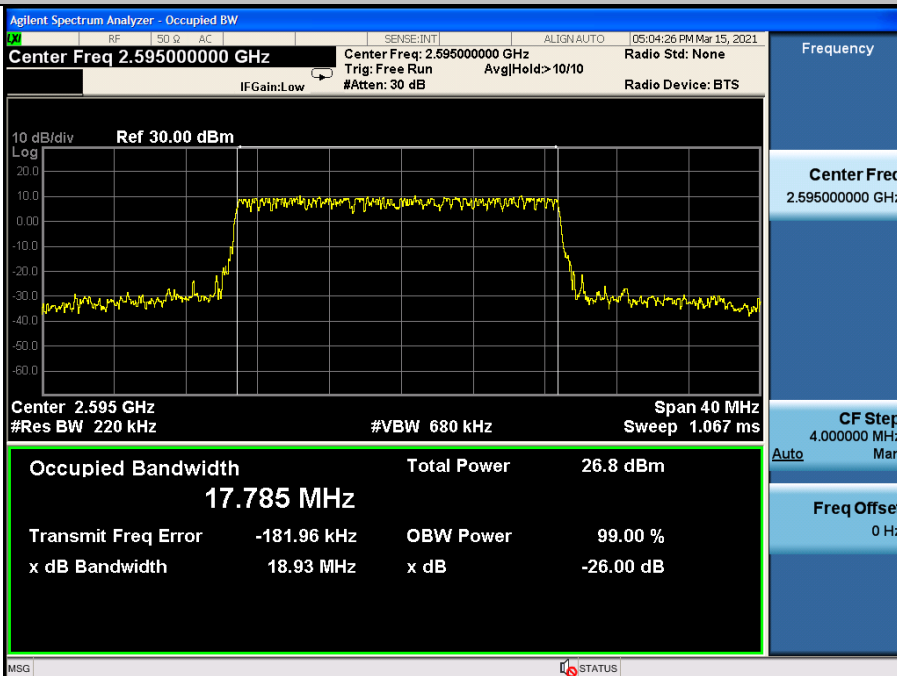
OBW&EBW N38 30KHz TM2 20MHz 519000 Outer Full



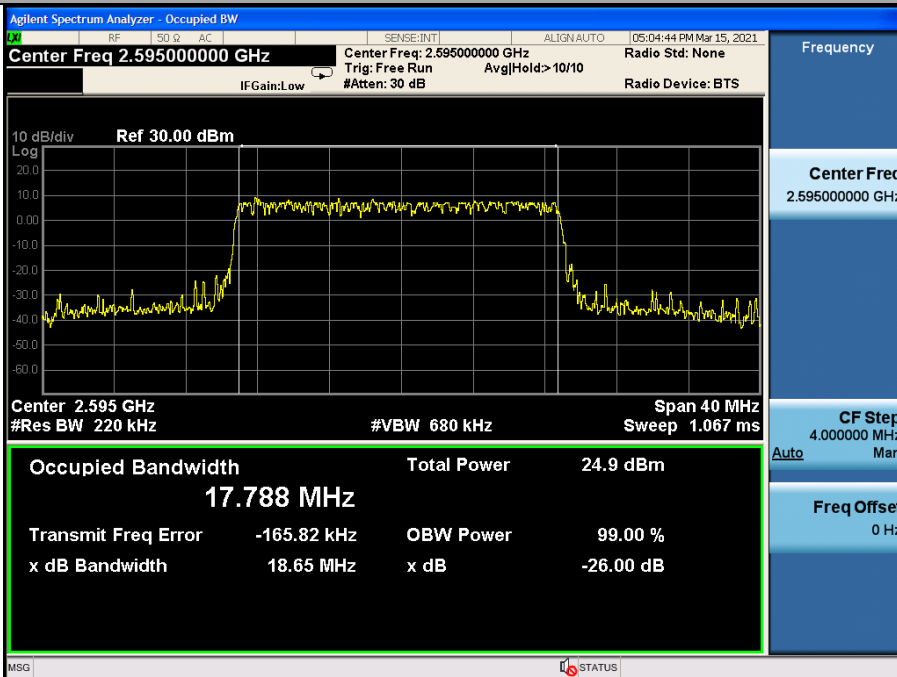
OBW&EBW N38 30KHz TM3 20MHz 519000 Outer Full



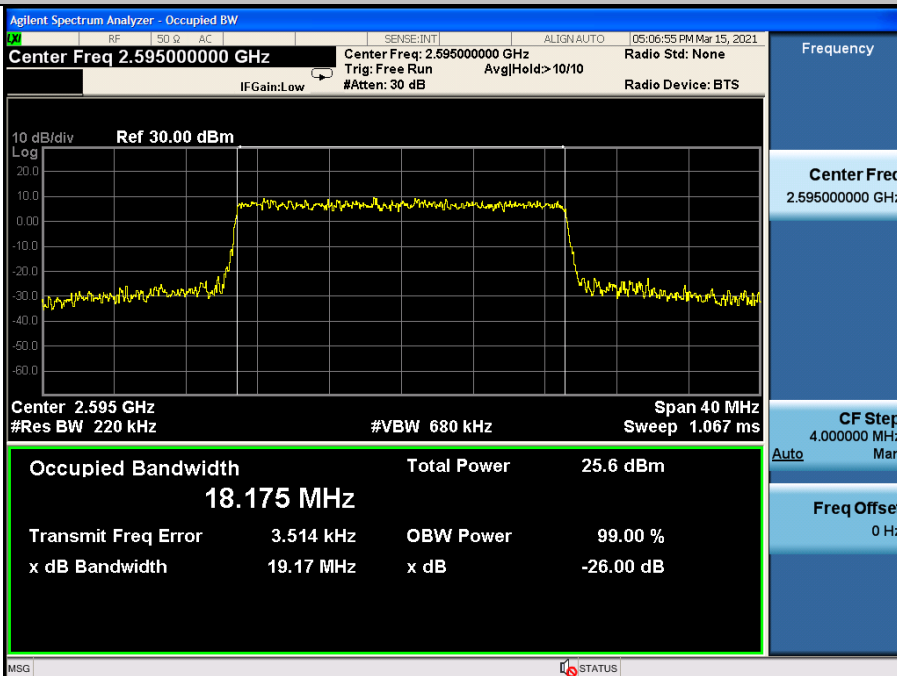
OBW&EBW N38 30KHz TM4 20MHz 519000 Outer Full



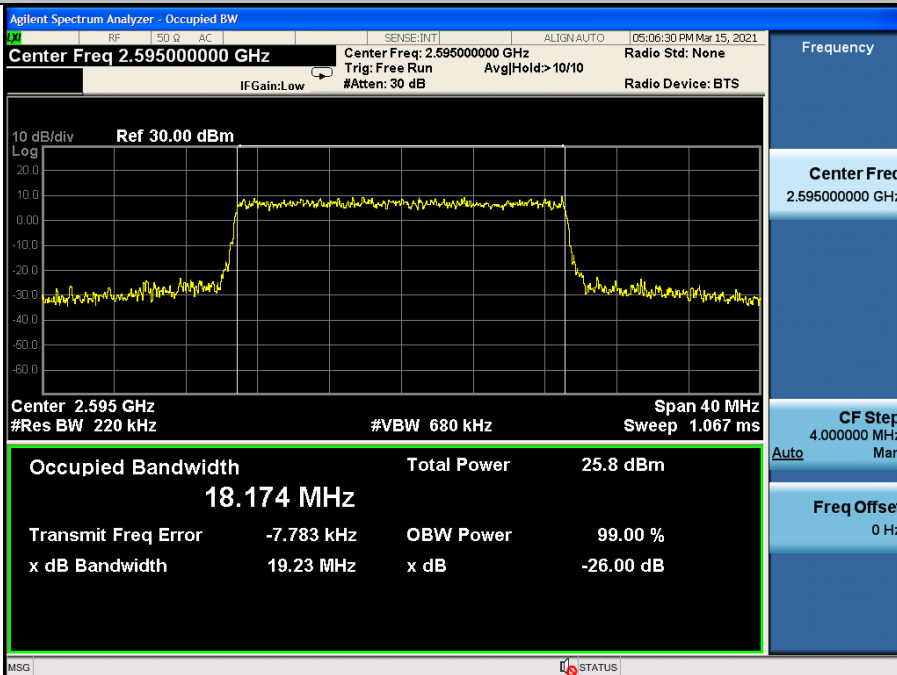
OBW&EBW N38 30KHz TM5 20MHz 519000 Outer Full



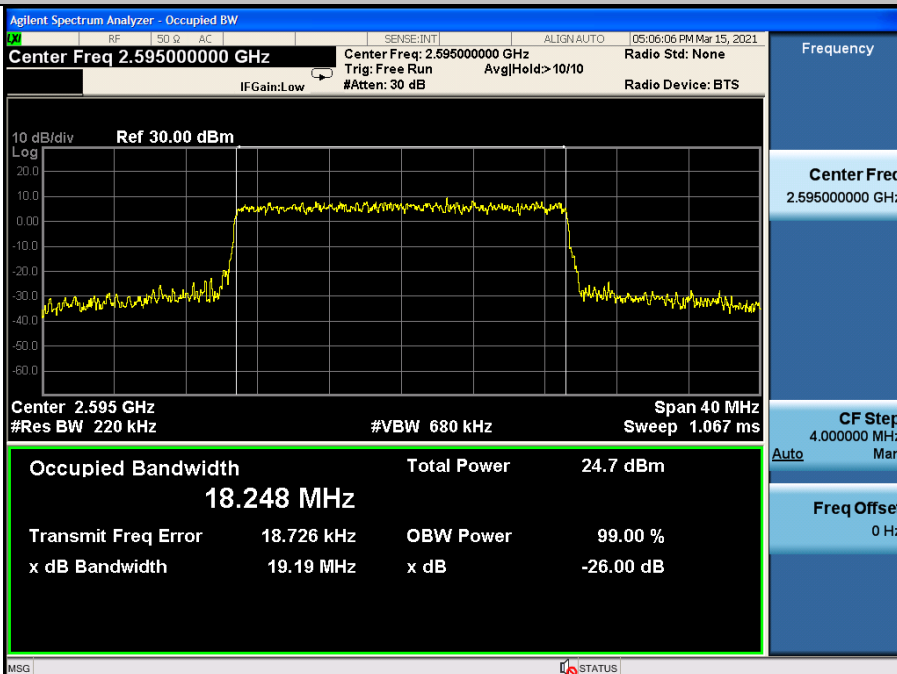
OBW&EBW N38 30KHz TM6 20MHz 519000 Outer Full



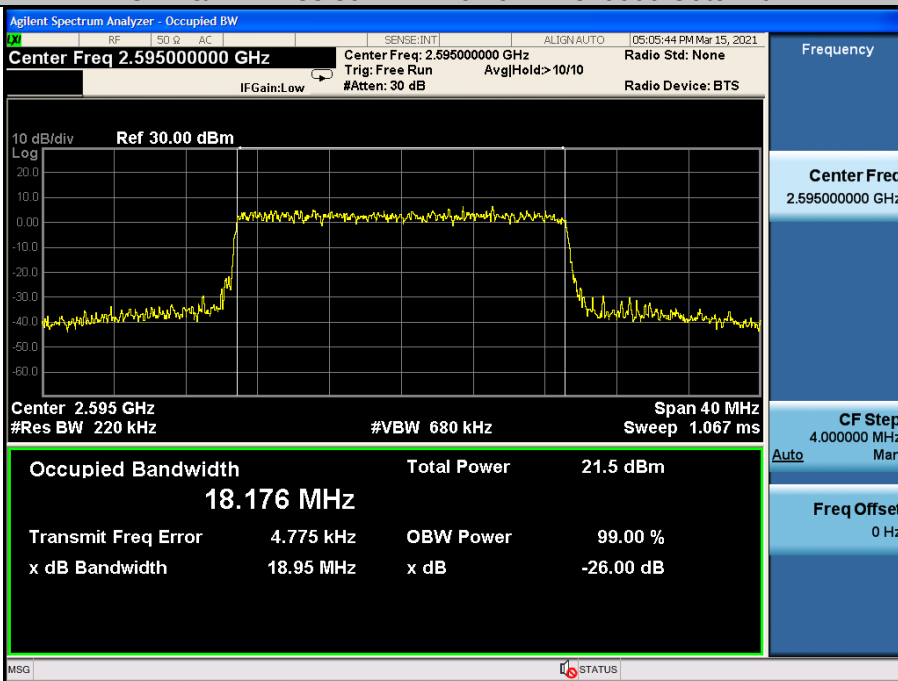
OBW&EBW N38 30KHz TM7 20MHz 519000 Outer Full



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



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





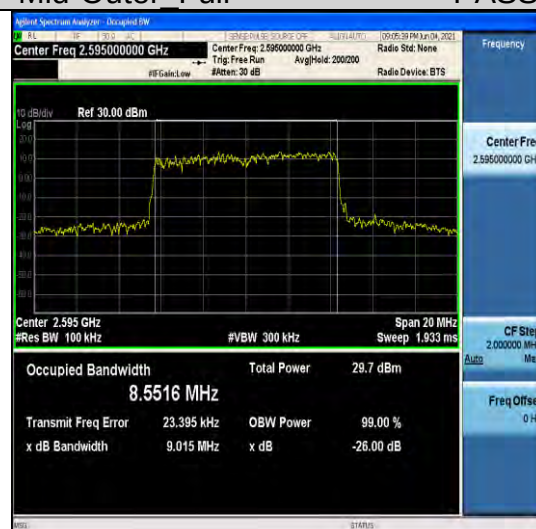
NTNV-N38-30kHz-10MHz-DFT-QPSK-Mid-Outer Full-----PASS



NTNV-N38-30kHz-10MHz-DFT-PI2BPSK-Mid-Outer Full-----PASS



NTNV-N38-30kHz-10MHz-DFT-64QAM-Mid-Outer Full-----PASS

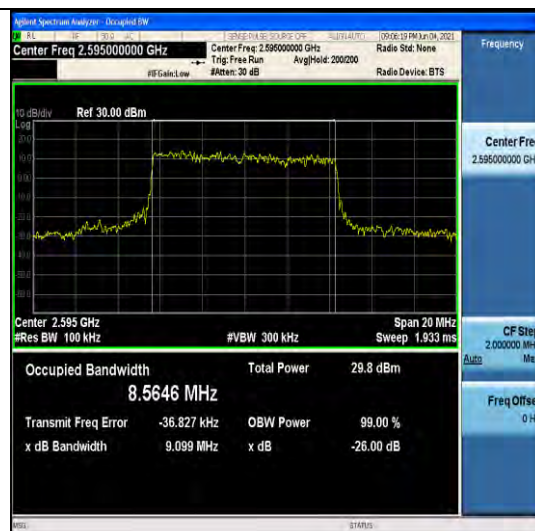


NTNV-N38-30kHz-10MHz-DFT-16QAM-Mid-Outer Full-----PASS





NTNV-N38-30kHz-10MHz-CP-QPSK-Mid-Outer Full-----PASS



NTNV-N38-30kHz-10MHz-DFT-256QAM-Mid-Outer Full-----PASS



NTNV-N38-30kHz-10MHz-CP-64QAM-Mid-Outer Full-----PASS

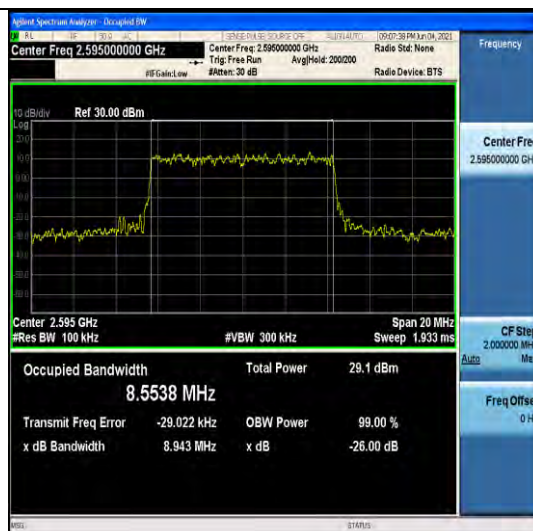


NTNV-N38-30kHz-10MHz-CP-16QAM-Mid-Outer Full-----PASS





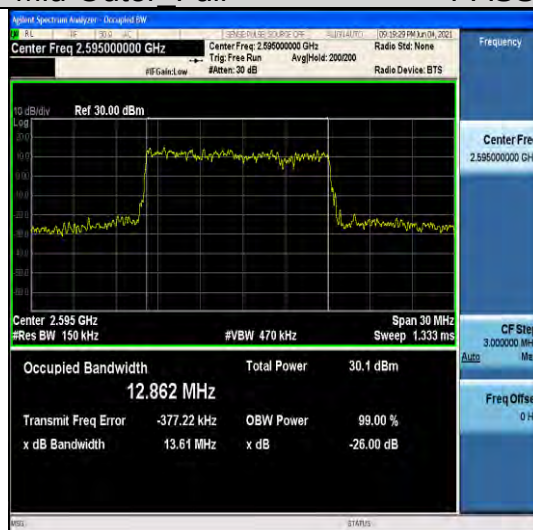
NTNV-N38-30kHz-15MHz-DFT-PI2BPSK-Mid-Outer Full-----PASS



NTNV-N38-30kHz-10MHz-CP-256QAM-Mid-Outer Full-----PASS



NTNV-N38-30kHz-15MHz-DFT-16QAM-Mid-Outer Full-----PASS



NTNV-N38-30kHz-15MHz-DFT-QPSK-Mid-Outer Full-----PASS





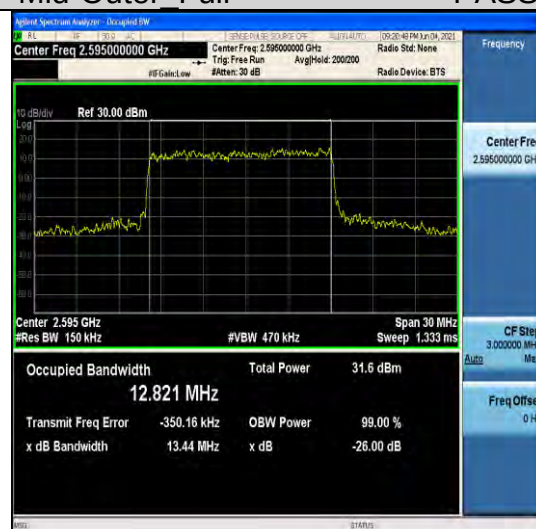
NTNV-N38-30kHz-15MHz-DFT-256QAM-
Mid-Outer Full-----PASS



NTNV-N38-30kHz-15MHz-DFT-64QAM-
Mid-Outer Full-----PASS

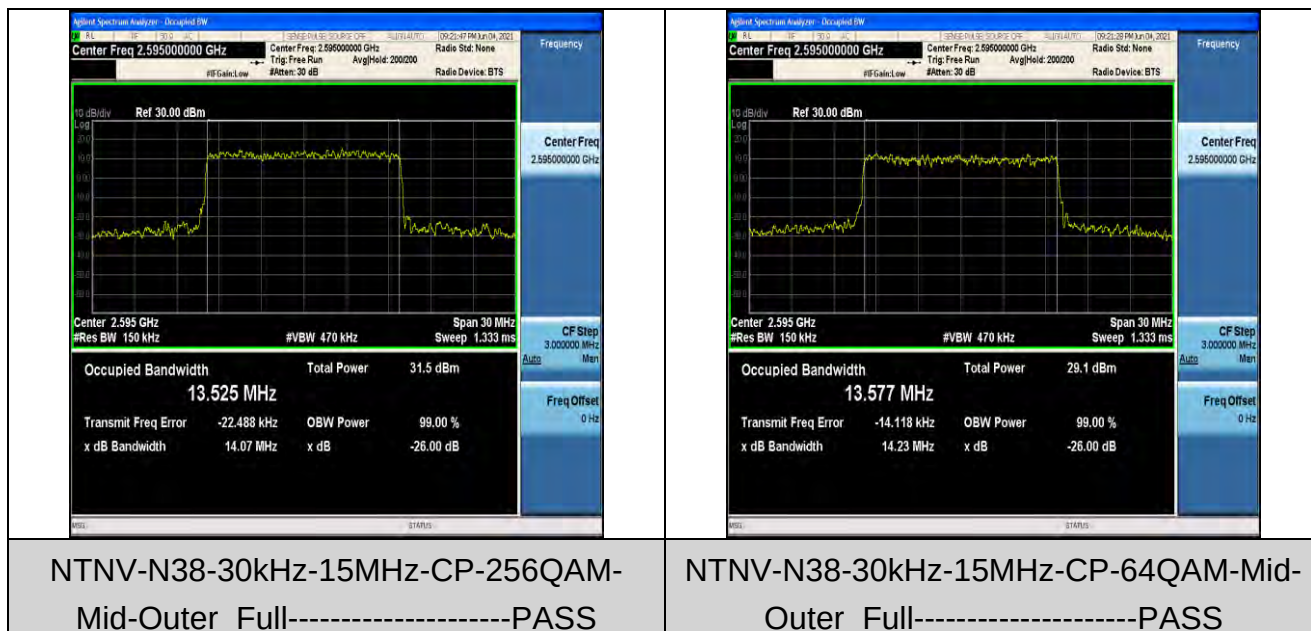


NTNV-N38-30kHz-15MHz-CP-16QAM-Mid-
Outer Full-----PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-Mid-
Outer Full-----PASS



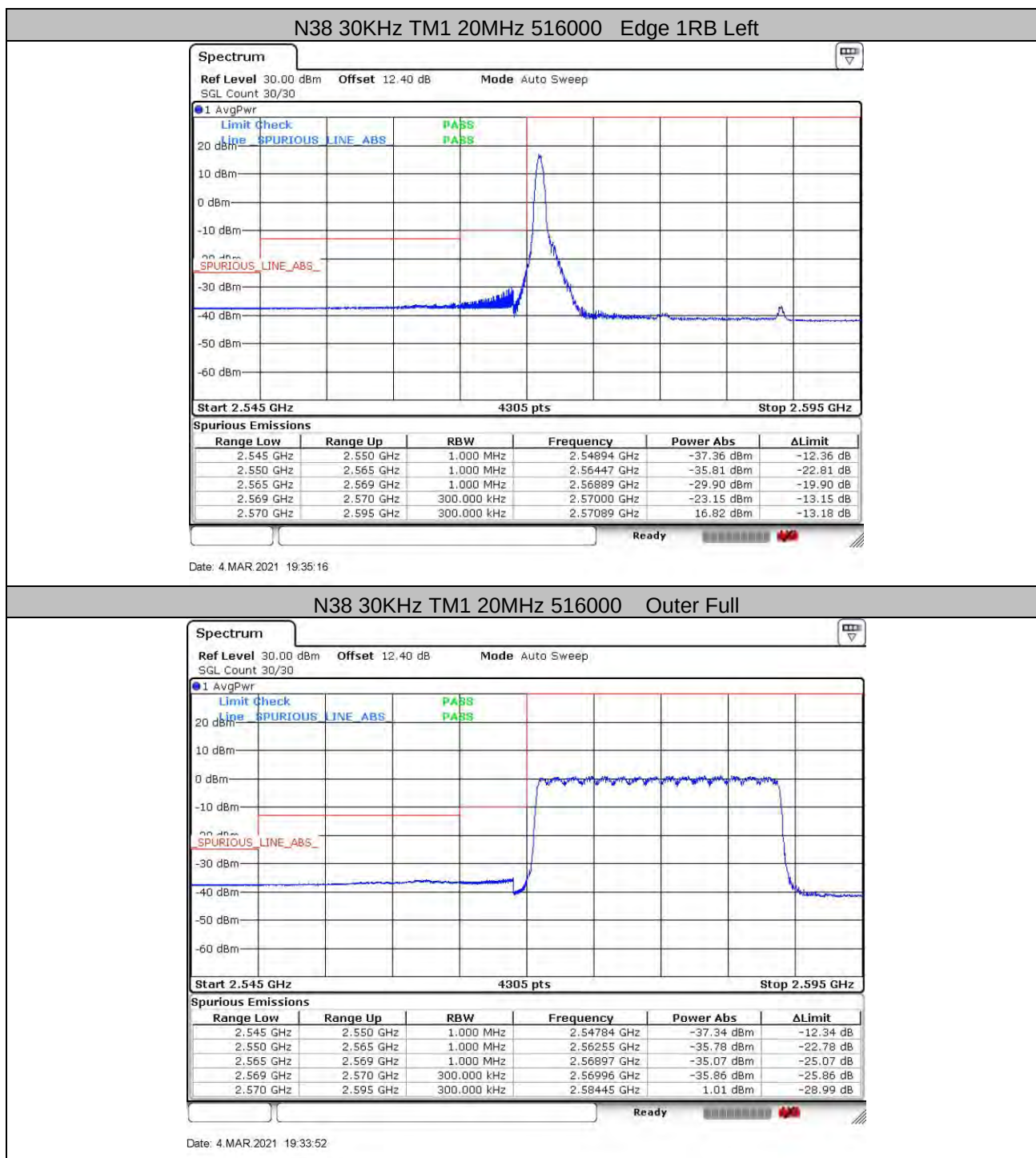


REMARK:

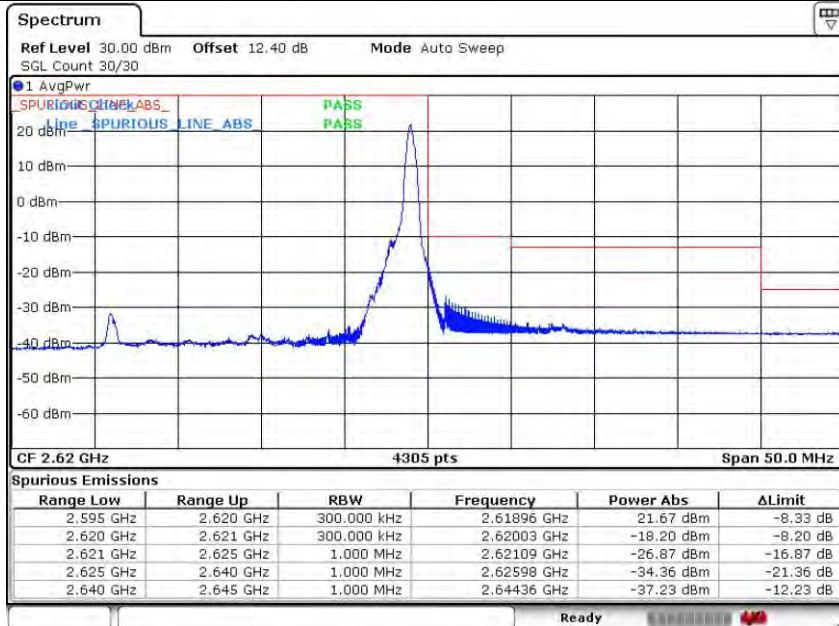
All antenna and all modulation had been tested, but only the worst case data displayed in this report

5 Band Edges Compliance

5.1 Test Plots

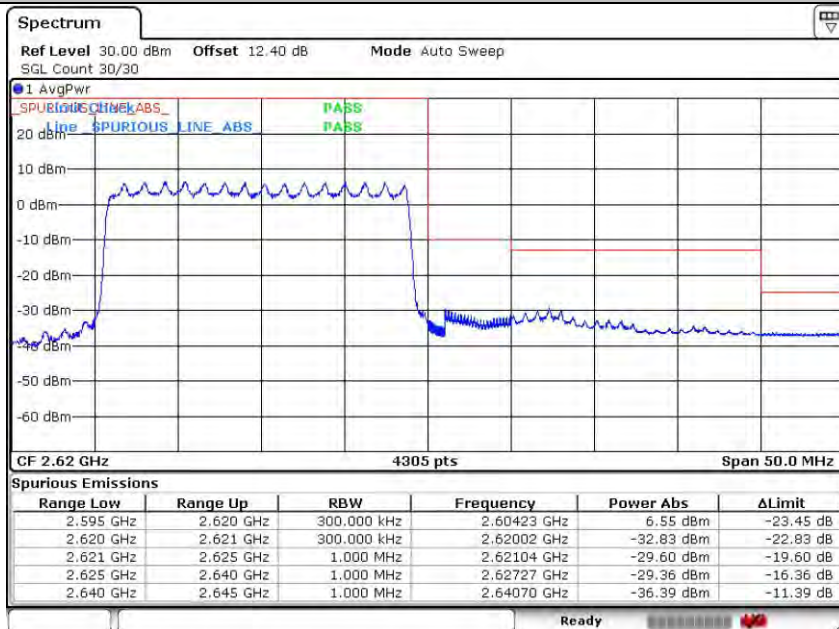


N38 30KHz TM1 20MHz 522000 Edge 1RB Right



Date: 4 MAR 2021 19:48:36

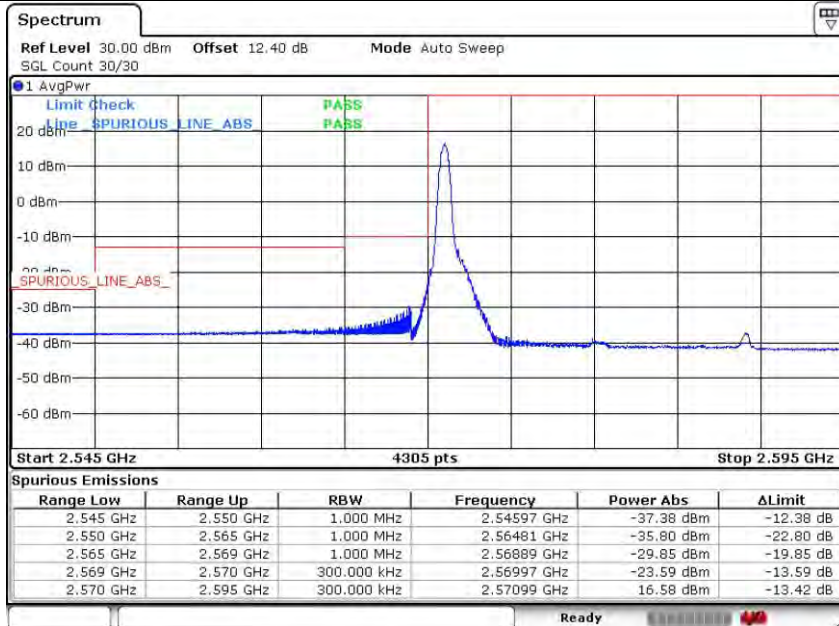
N38 30KHz TM1 20MHz 522000 Outer Full



Date: 4 MAR 2021 19:49:11

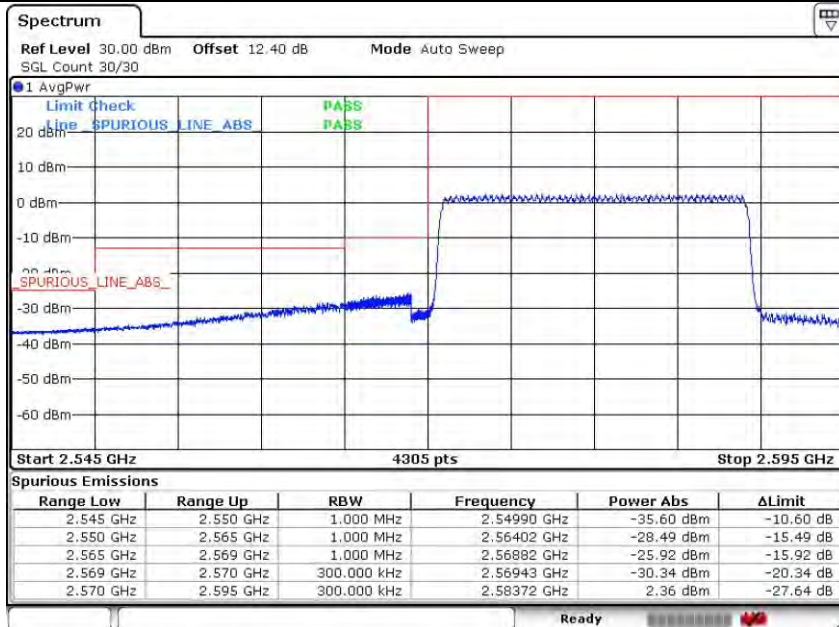


N38 30KHz TM6 20MHz 516000 Edge 1RB Left



Date: 4 MAR 2021 19:35:57

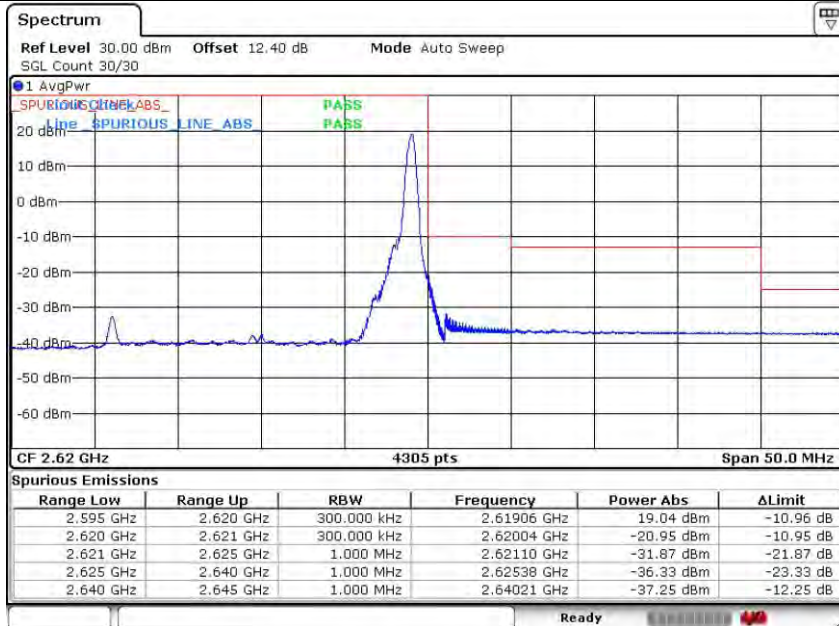
N38 30KHz TM6 20MHz 516000 Outer Full



Date: 4 MAR 2021 19:43:42

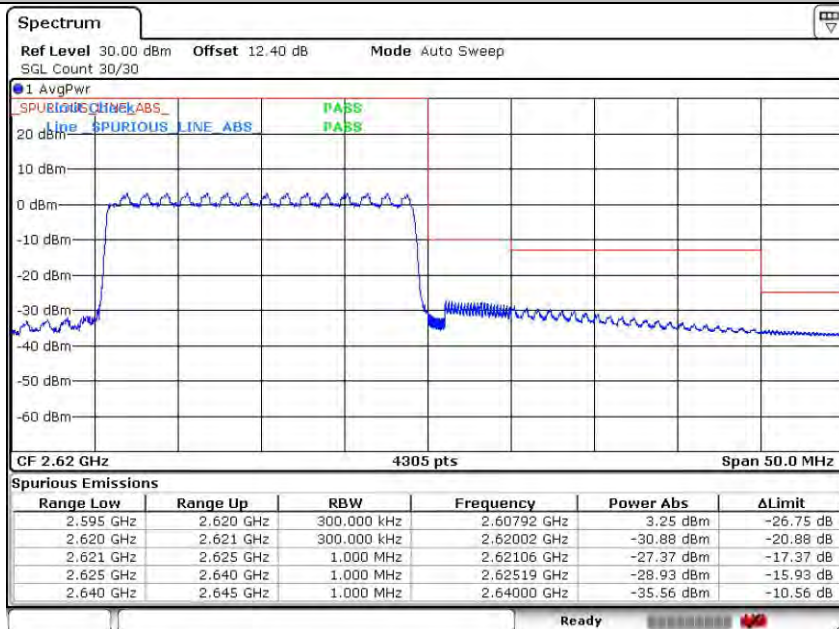


N38 30KHz TM6 20MHz 522000 Edge 1RB Right



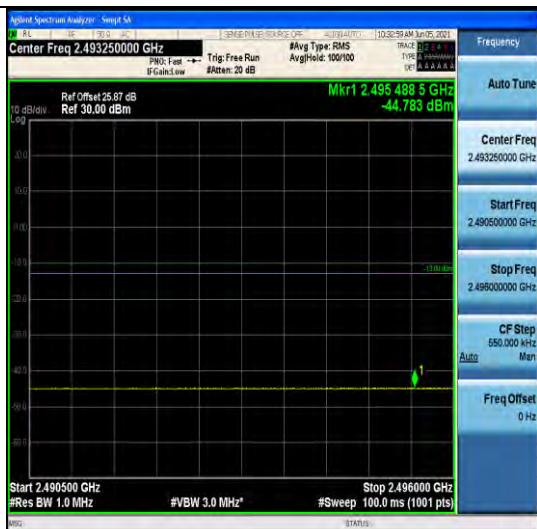
Date: 4 MAR 2021 19:47:35

N38 30KHz TM6 20MHz 522000 Outer Full



Date: 4 MAR 2021 19:46:51

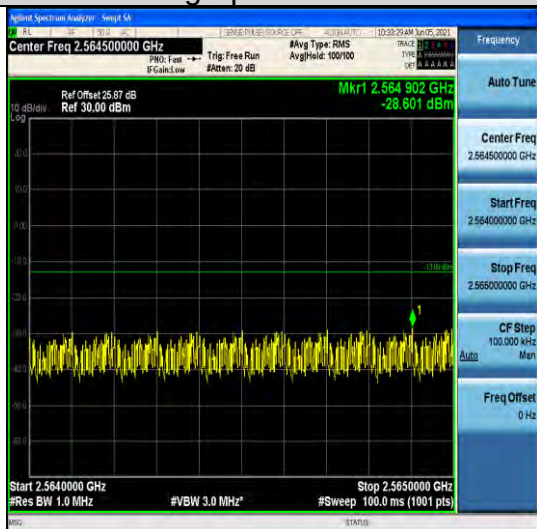




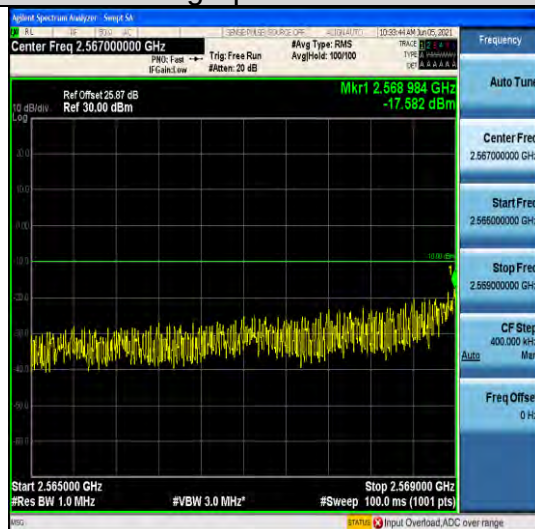
NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Edge_1RB_Left-----2490.5-2496-----see graph-PASS



NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Edge_1RB_Left-----2496-2564-----see graph-PASS

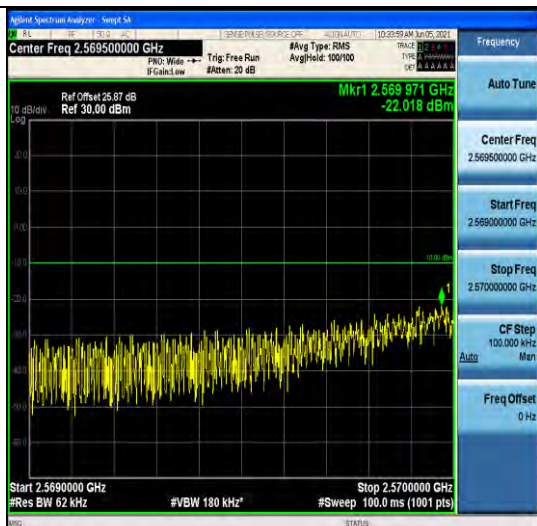


NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Edge_1RB_Left-----2564-2565-----see graph-PASS

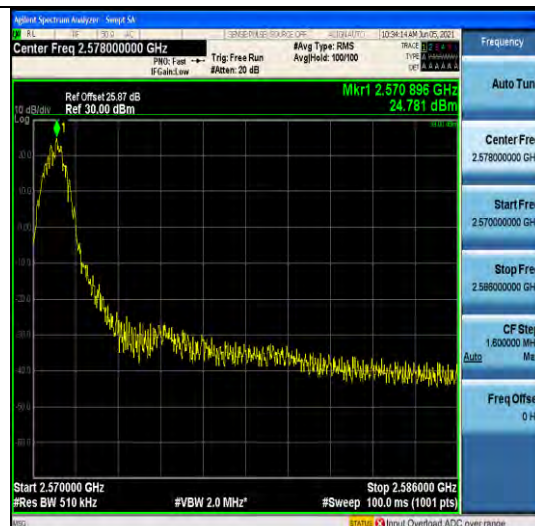


NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Edge_1RB_Left-----2565-2569-----see graph-PASS

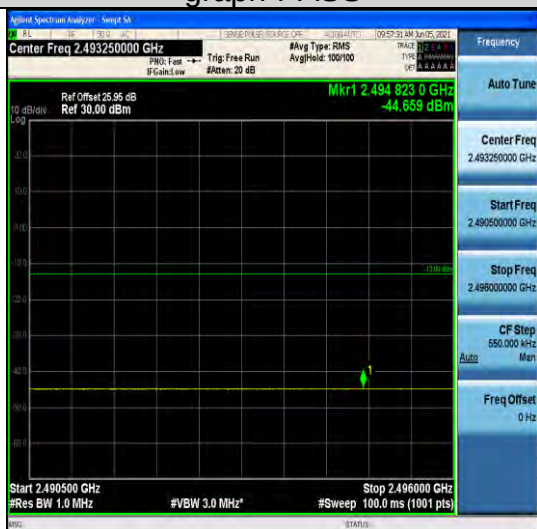




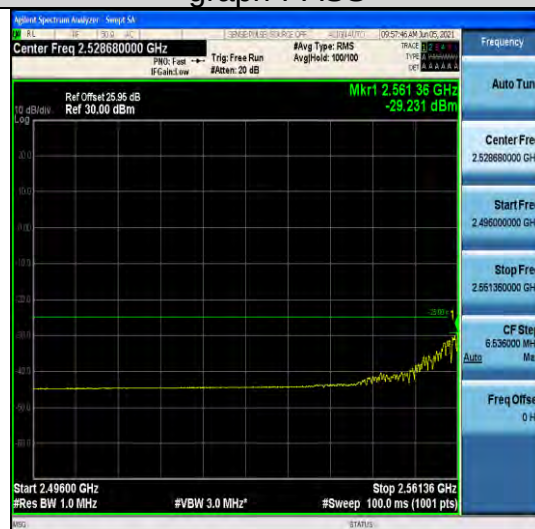
NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Edge_1RB_Left-----2569-2570-----see graph-PASS



NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Edge_1RB_Left-----2570-2586-----see graph-PASS

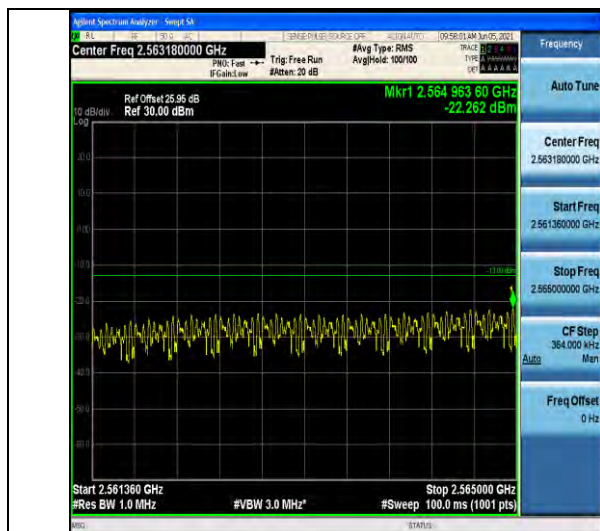


NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Outer_Full-----2490.5-2496-----see graph-PASS



NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Outer_Full-----2496-2561.36-----see graph-PASS

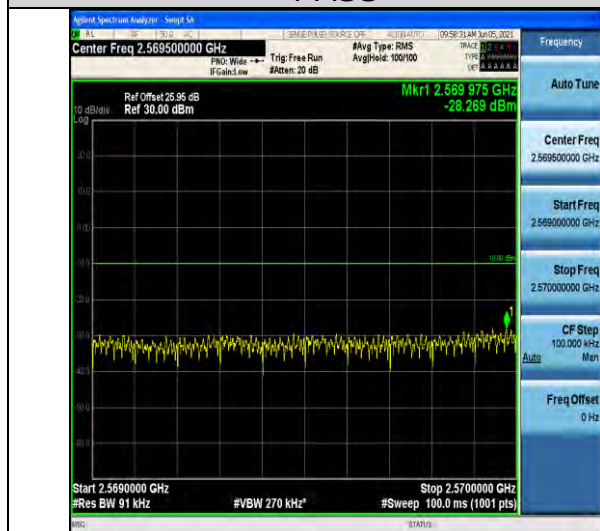




NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Outer_Full-----2561.36-2565-----see graph-PASS



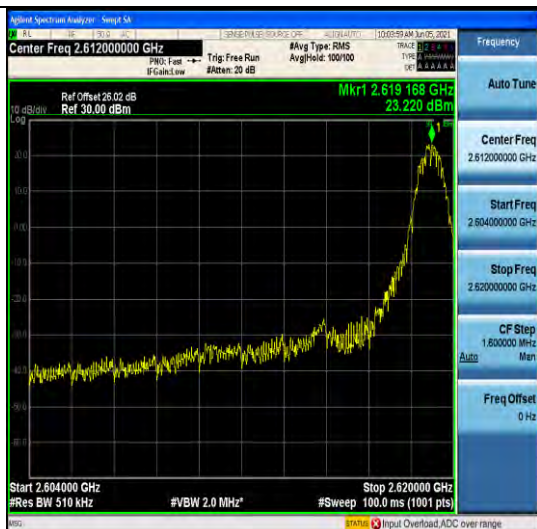
NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Outer_Full-----2565-2569-----see graph-PASS



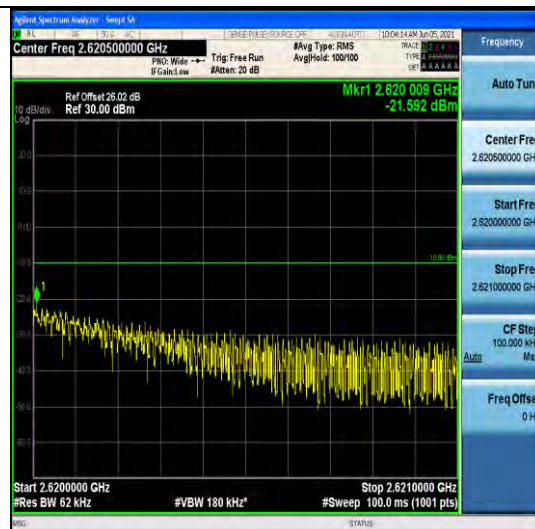
NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Outer_Full-----2569-2570-----see graph-PASS



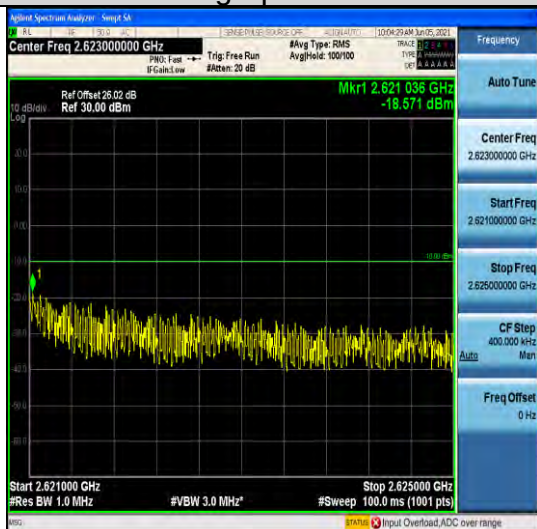
NTNV-N38-30kHz-10MHz-DFT-QPSK-Low-Outer_Full-----2570-2588.64-----see graph-PASS



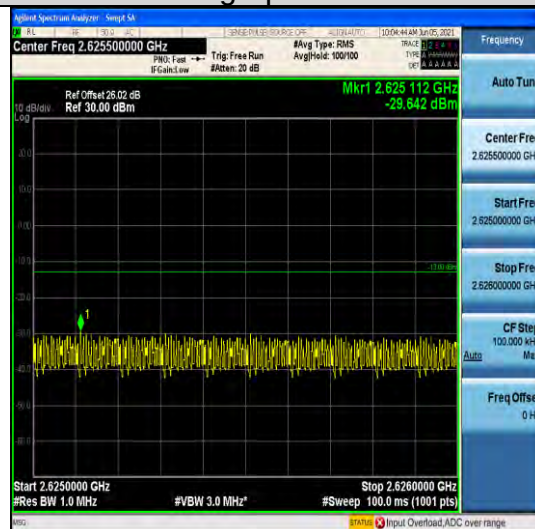
NTNV-N38-30kHz-10MHz-DFT-QPSK-
High-Edge_1RB_Right-----2604-2620-----
see graph-PASS



NTNV-N38-30kHz-10MHz-DFT-QPSK-
High-Edge_1RB_Right-----2620-2621-----
see graph-PASS

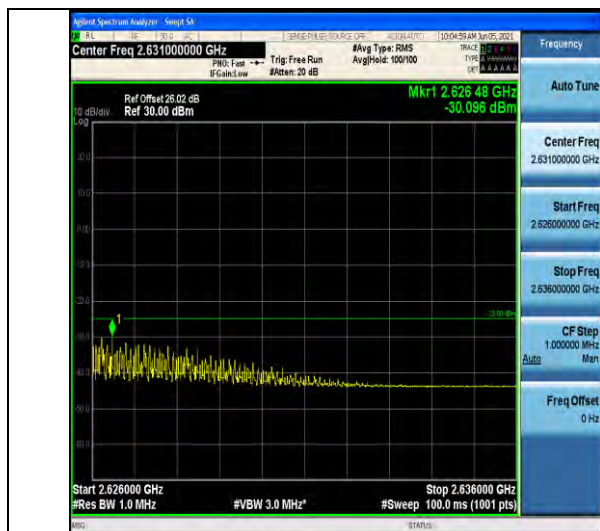


NTNV-N38-30kHz-10MHz-DFT-QPSK-
High-Edge_1RB_Right-----2621-2625-----
see graph-PASS



NTNV-N38-30kHz-10MHz-DFT-QPSK-
High-Edge_1RB_Right-----2625-2626-----
see graph-PASS

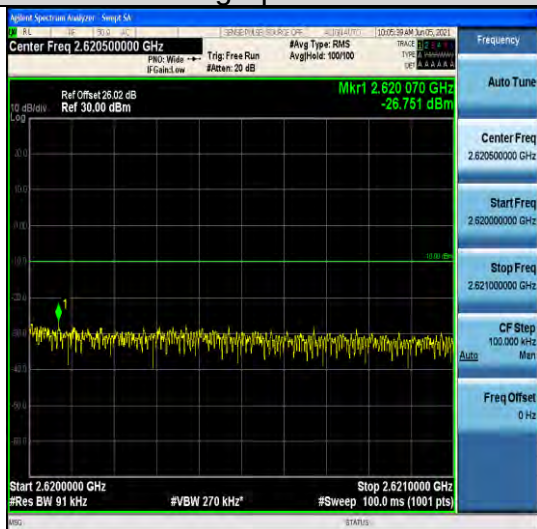




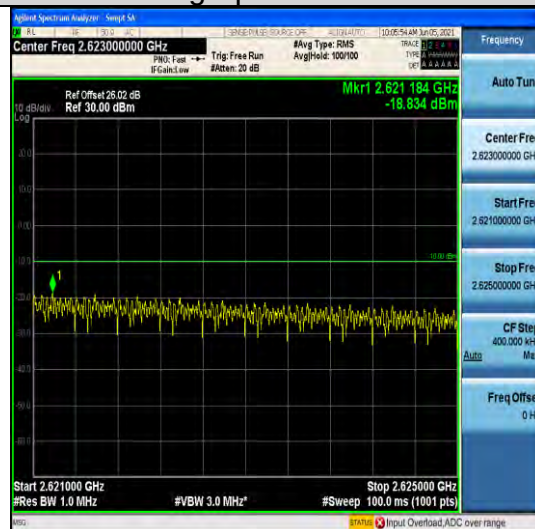
NTNV-N38-30kHz-10MHz-DFT-QPSK-High-Edge_1RB_Right-----2626-2636-----see graph-PASS



NTNV-N38-30kHz-10MHz-DFT-QPSK-High-Outer_Full-----2601.36-2620-----see graph-PASS

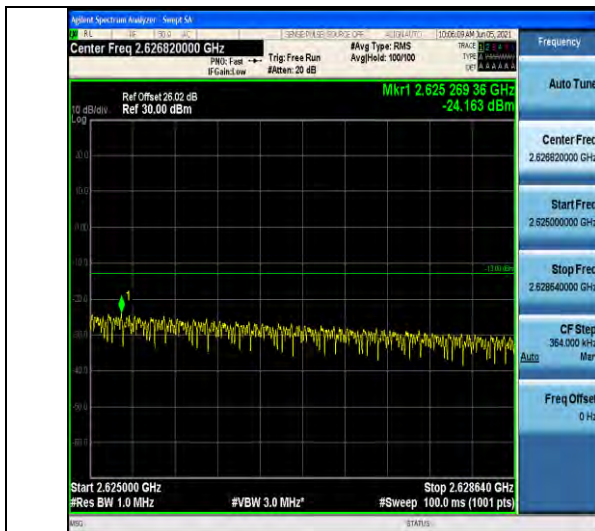


NTNV-N38-30kHz-10MHz-DFT-QPSK-High-Outer_Full-----2620-2621-----see graph-PASS

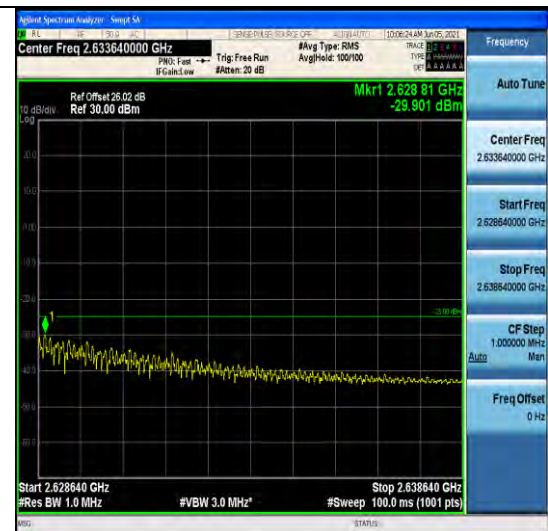


NTNV-N38-30kHz-10MHz-DFT-QPSK-High-Outer_Full-----2621-2625-----see graph-PASS

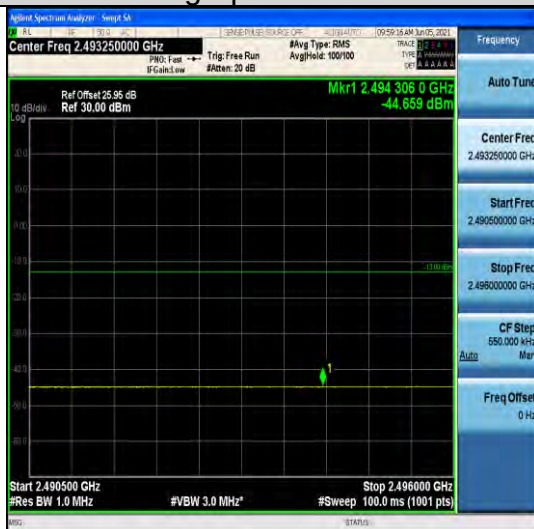




NTNV-N38-30kHz-10MHz-DFT-QPSK-High-Outer_Full-----2625-2628.64-----see graph-PASS



NTNV-N38-30kHz-10MHz-DFT-QPSK-High-Outer_Full-----2628.64-2638.64-----see graph-PASS

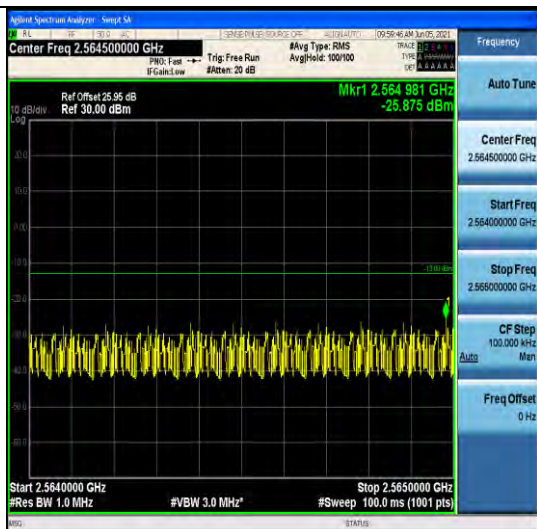


NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Edge_1RB_Left-----2490.5-2496-----see graph-PASS

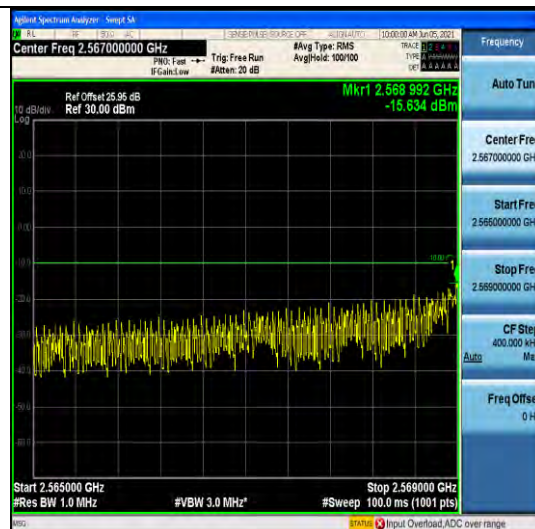


NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Edge_1RB_Left-----2496-2564-----see graph-PASS

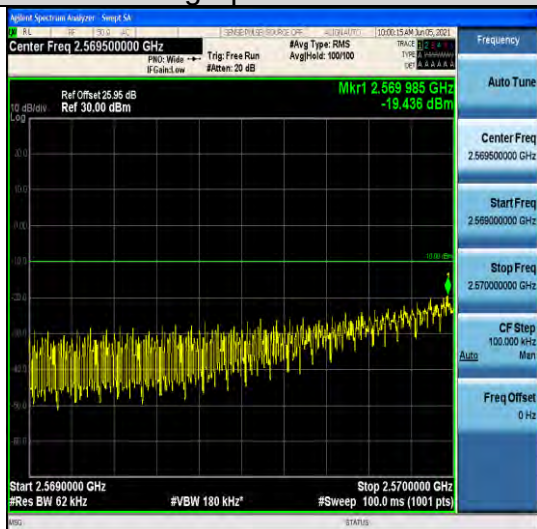




NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Edge_1RB_Left-----2564-2565-----see graph-PASS



NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Edge_1RB_Left-----2565-2569-----see graph-PASS

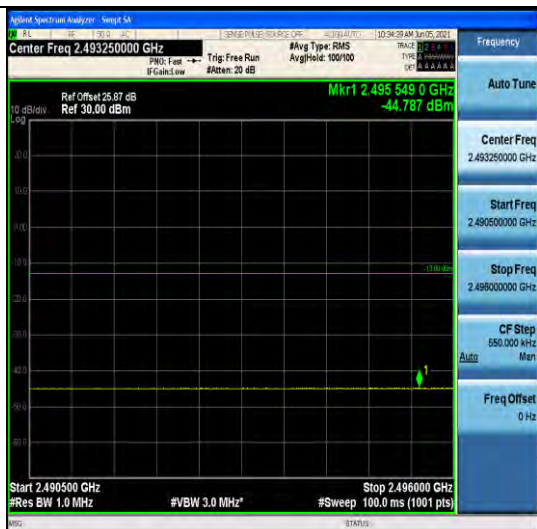


NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Edge_1RB_Left-----2569-2570-----see graph-PASS



NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Edge_1RB_Left-----2570-2586-----see graph-PASS

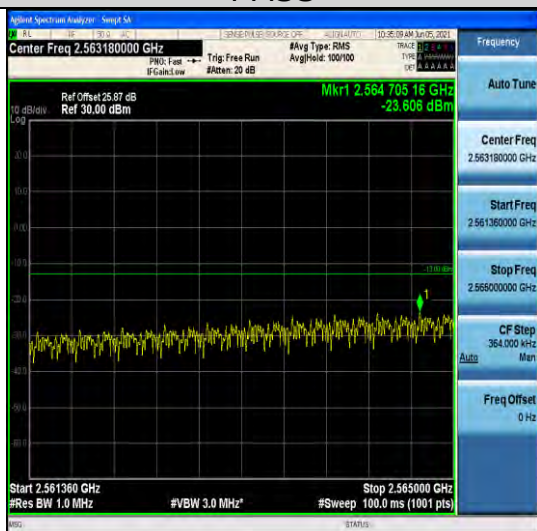




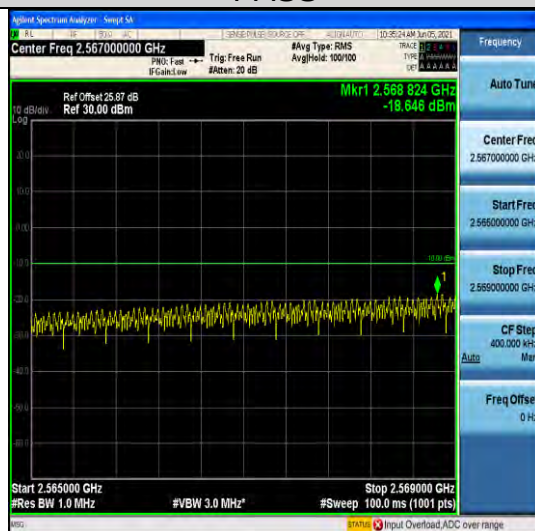
NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Outer_Full-----2490.5-2496-----see graph-PASS



NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Outer_Full-----2496-2561.36-----see graph-PASS

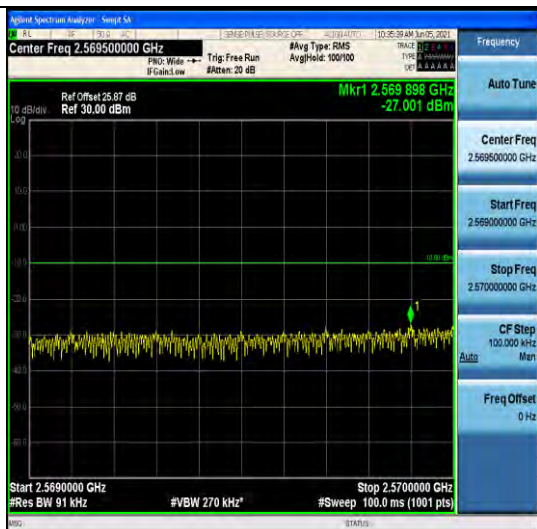


NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Outer_Full-----2561.36-2565-----see graph-PASS



NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Outer_Full-----2565-2569-----see graph-PASS

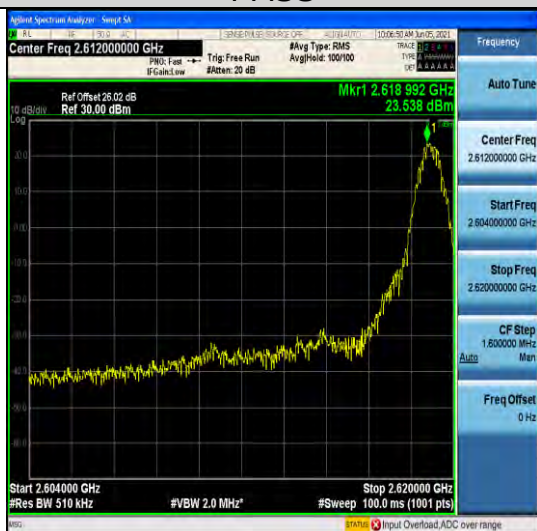




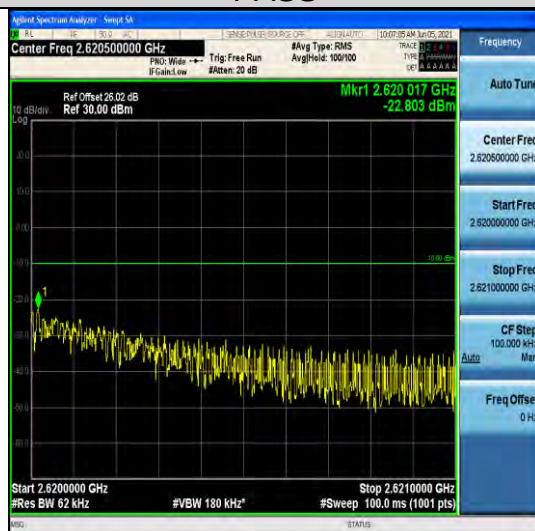
NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Outer_Full-----2569-2570-----see graph-PASS



NTNV-N38-30kHz-10MHz-CP-QPSK-Low-Outer_Full-----2570-2588.64-----see graph-PASS

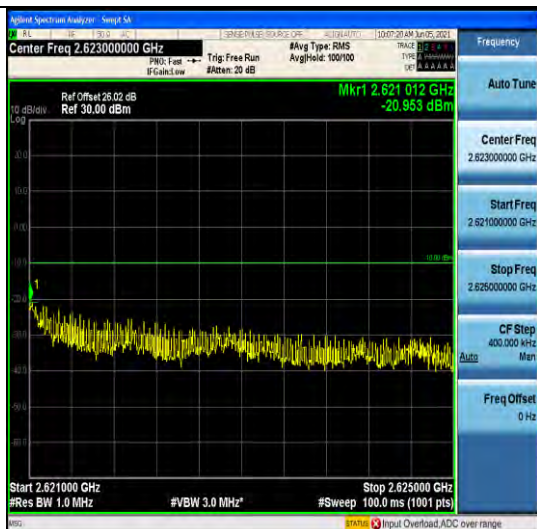


NTNV-N38-30kHz-10MHz-CP-QPSK-High-Edge_1RB_Right-----2604-2620-----see graph-PASS

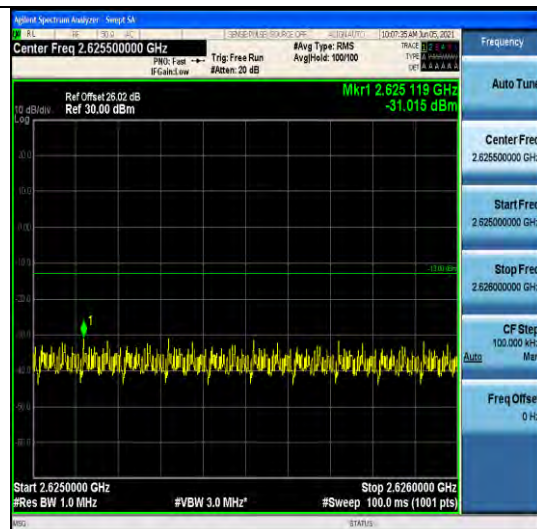


NTNV-N38-30kHz-10MHz-CP-QPSK-High-Edge_1RB_Right-----2620-2621-----see graph-PASS

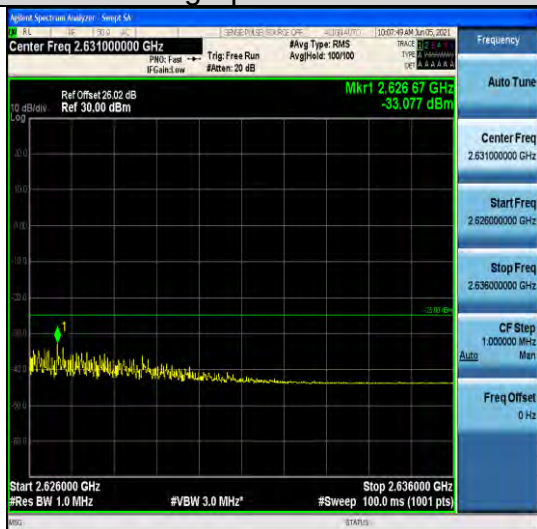




NTNV-N38-30kHz-10MHz-CP-QPSK-High-Edge_1RB_Right-----2621-2625-----see graph-PASS



NTNV-N38-30kHz-10MHz-CP-QPSK-High-Edge_1RB_Right-----2625-2626-----see graph-PASS

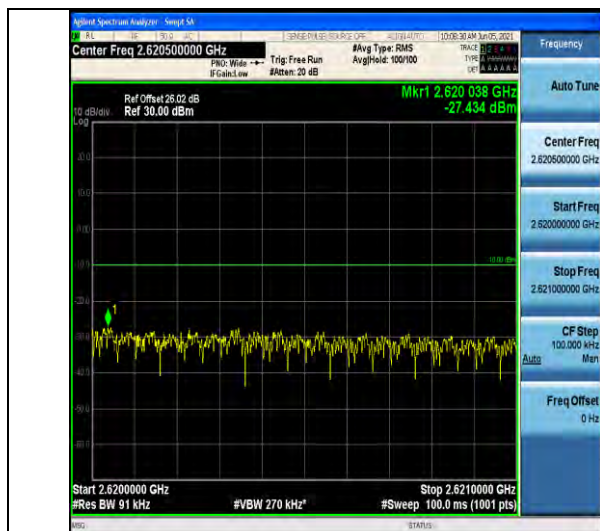


NTNV-N38-30kHz-10MHz-CP-QPSK-High-Edge_1RB_Right-----2626-2636-----see graph-PASS

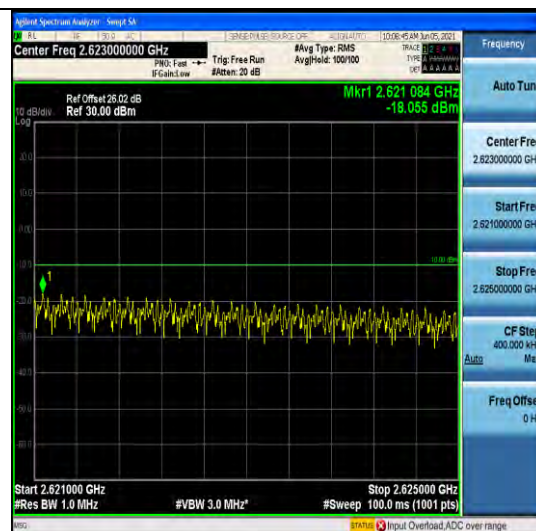


NTNV-N38-30kHz-10MHz-CP-QPSK-High-Outer_Full-----2601.36-2620-----see graph-PASS

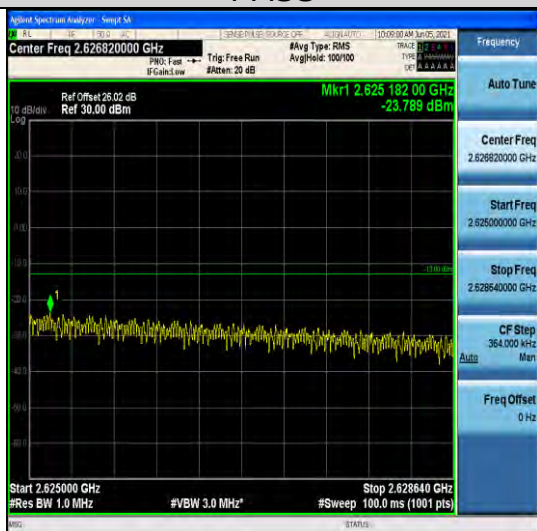




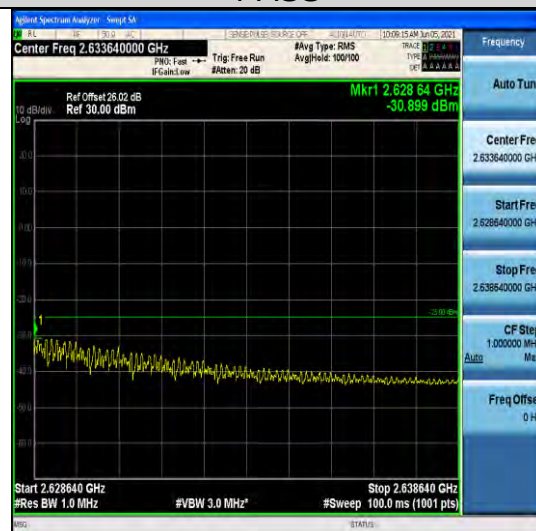
NTNV-N38-30kHz-10MHz-CP-QPSK-High-Outer_Full-----2620-2621-----see graph-PASS



NTNV-N38-30kHz-10MHz-CP-QPSK-High-Outer_Full-----2621-2625-----see graph-PASS

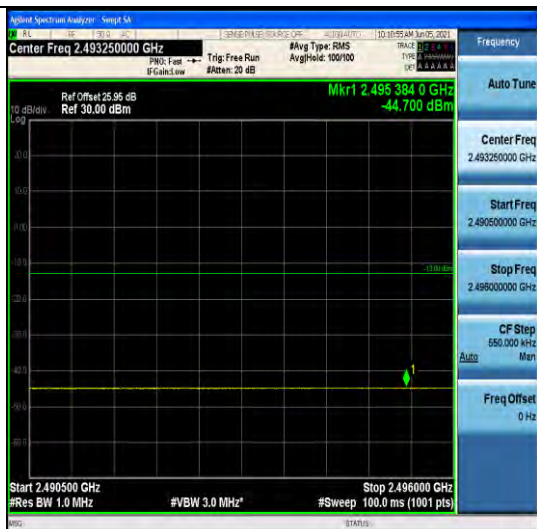


NTNV-N38-30kHz-10MHz-CP-QPSK-High-Outer_Full-----2625-2628.64-----see graph-PASS



NTNV-N38-30kHz-10MHz-CP-QPSK-High-Outer_Full-----2628.64-2638.64-----see graph-PASS

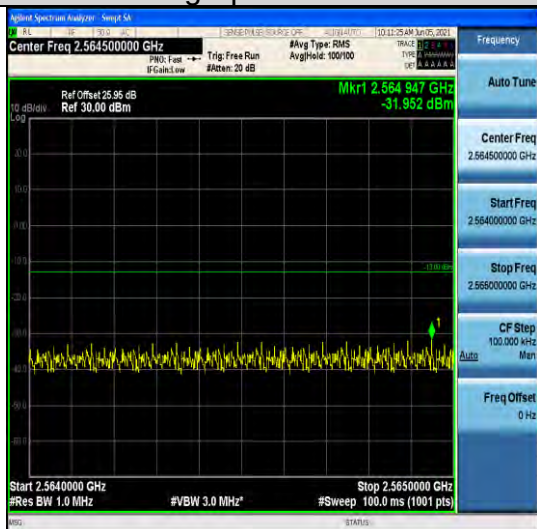




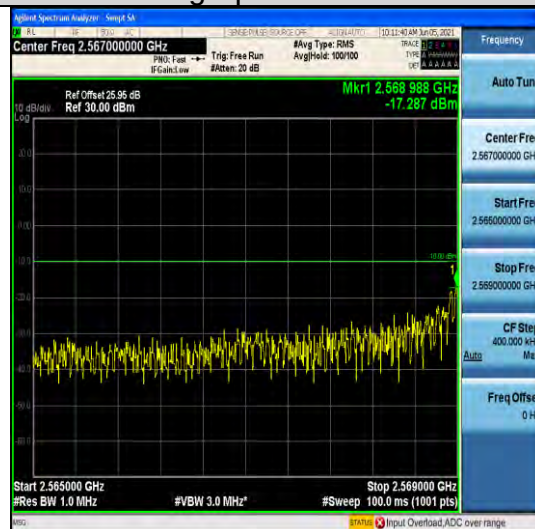
NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Edge_1RB_Left-----2490.5-2496-----see graph-PASS



NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Edge_1RB_Left-----2496-2564-----see graph-PASS

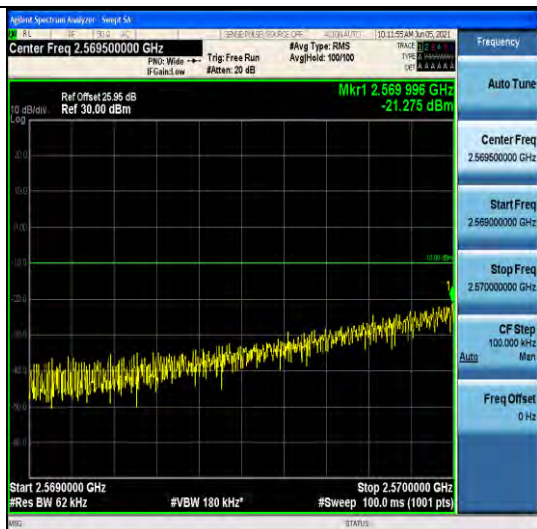


NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Edge_1RB_Left-----2564-2565-----see graph-PASS

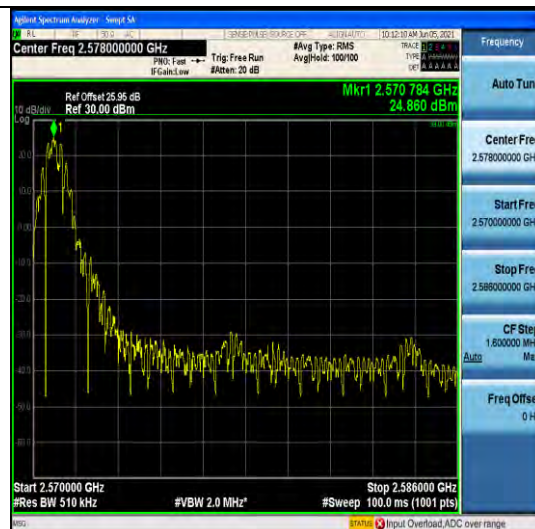


NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Edge_1RB_Left-----2565-2569-----see graph-PASS

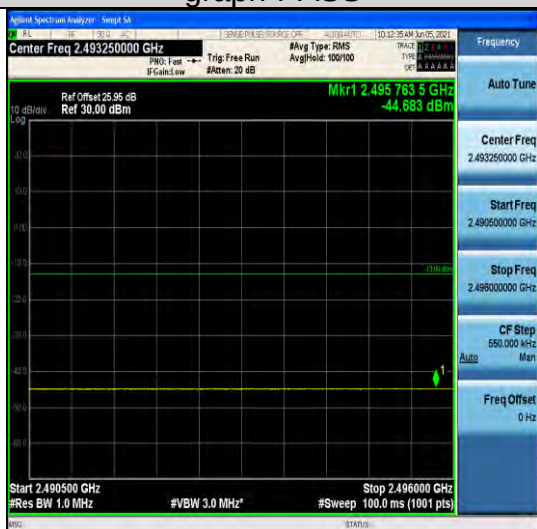




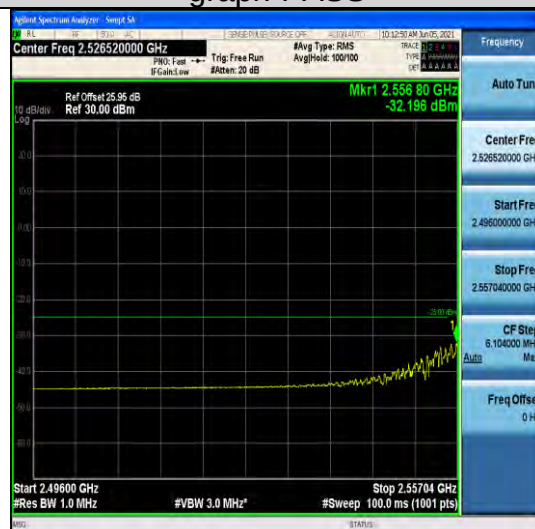
NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Edge_1RB_Left-----2569-2570-----see graph-PASS



NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Edge_1RB_Left-----2570-2586-----see graph-PASS

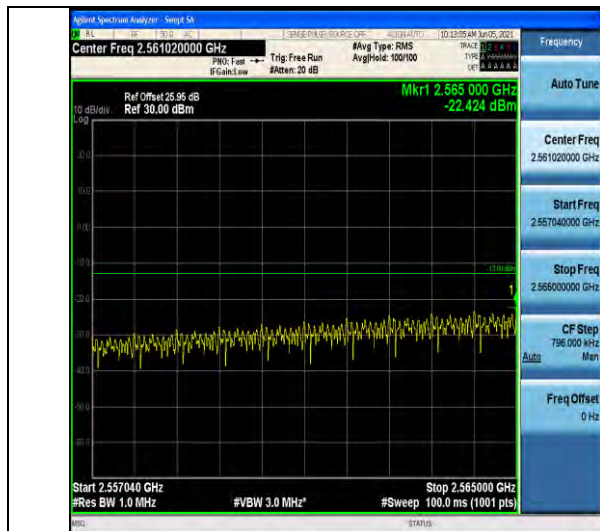


NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Outer_Full-----2490.5-2496-----see graph-PASS

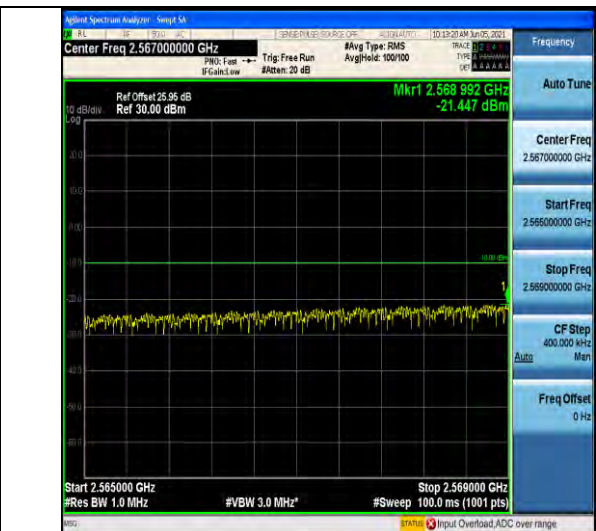


NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Outer_Full-----2496-2557.04-----see graph-PASS

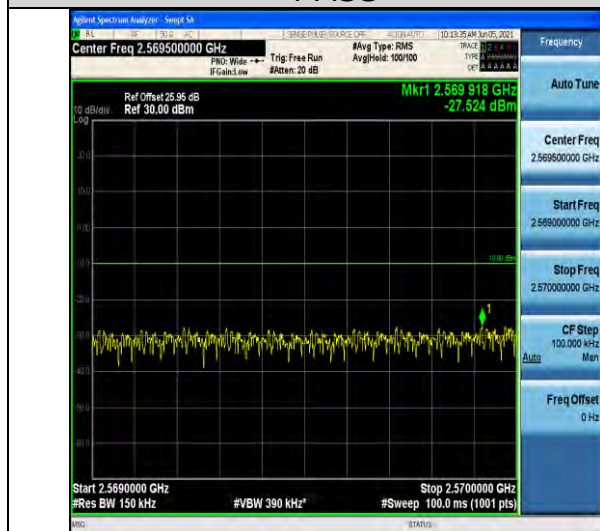




NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Outer_Full-----2557.04-2565-----see graph-PASS



NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Outer_Full-----2565-2569-----see graph-PASS



NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Outer_Full-----2569-2570-----see graph-PASS

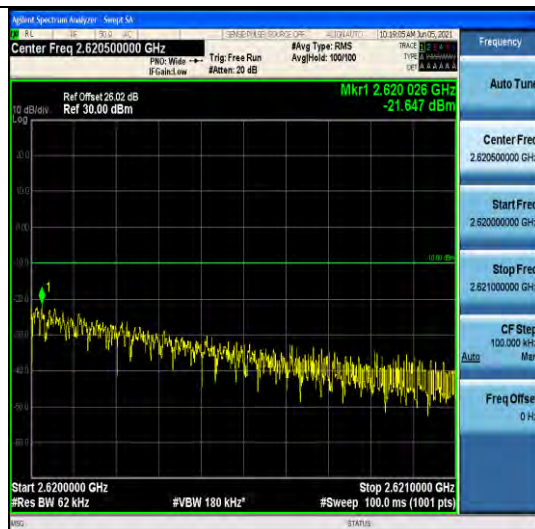


NTNV-N38-30kHz-15MHz-DFT-QPSK-Low-Outer_Full-----2570-2592.96-----see graph-PASS

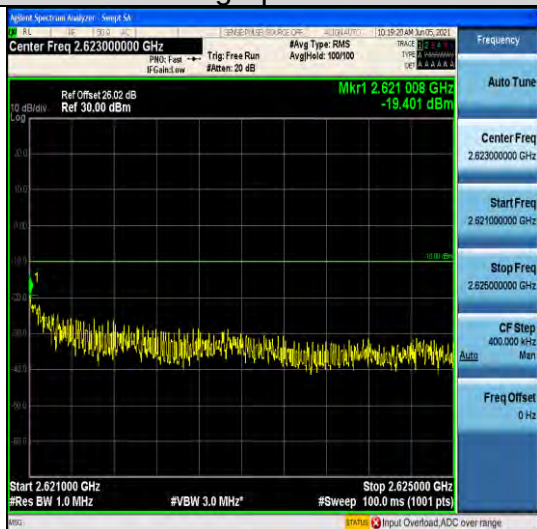




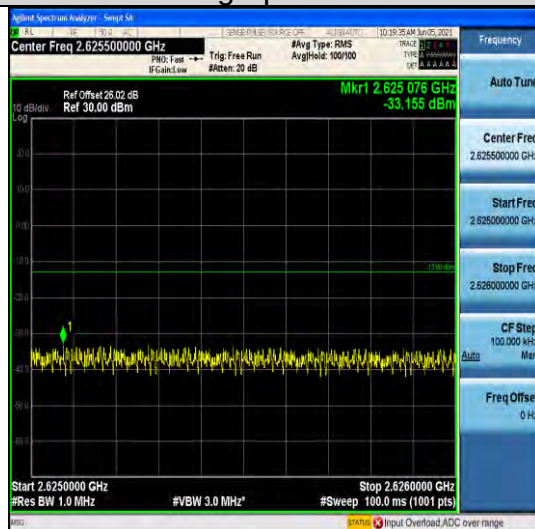
NTNV-N38-30kHz-15MHz-DFT-QPSK-
High-Edge_1RB_Right-----2604-2620-----
see graph-PASS



NTNV-N38-30kHz-15MHz-DFT-QPSK-
High-Edge_1RB_Right-----2620-2621-----
see graph-PASS

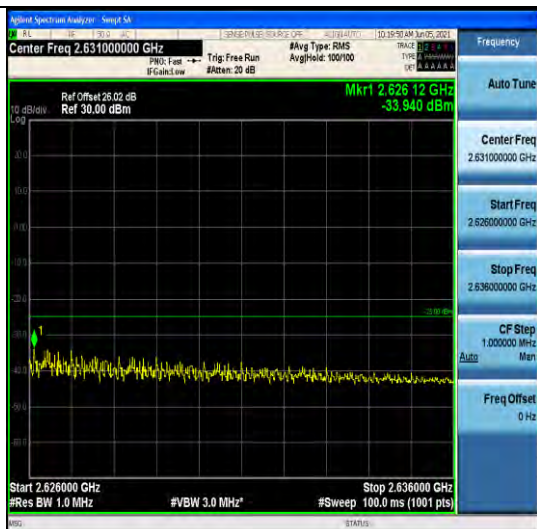


NTNV-N38-30kHz-15MHz-DFT-QPSK-
High-Edge_1RB_Right-----2621-2625-----
see graph-PASS

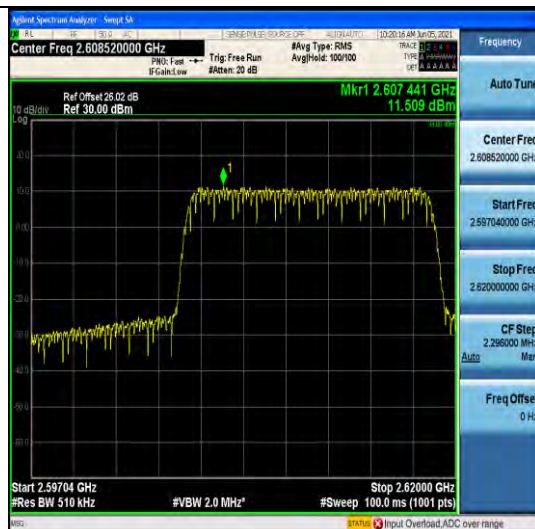


NTNV-N38-30kHz-15MHz-DFT-QPSK-
High-Edge_1RB_Right-----2625-2626-----
see graph-PASS

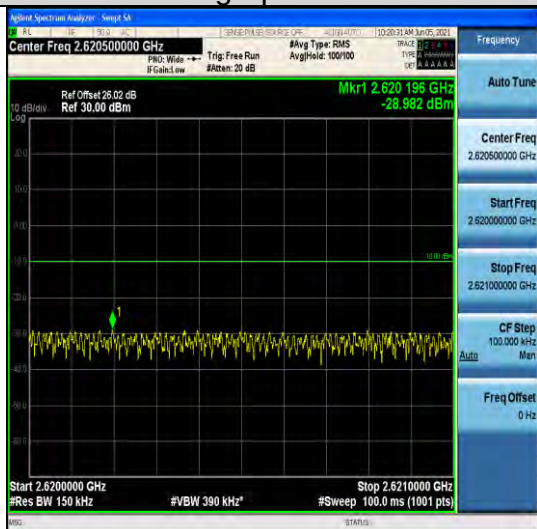




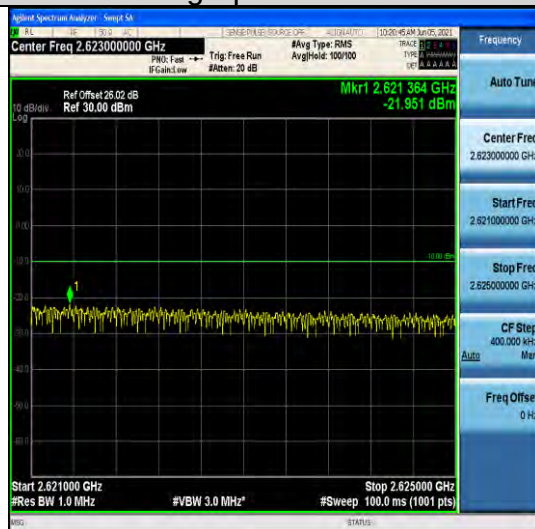
NTNV-N38-30kHz-15MHz-DFT-QPSK-High-Edge_1RB_Right-----2626-2636-----see graph-PASS



NTNV-N38-30kHz-15MHz-DFT-QPSK-High-Outer_Full-----2597.04-2620-----see graph-PASS

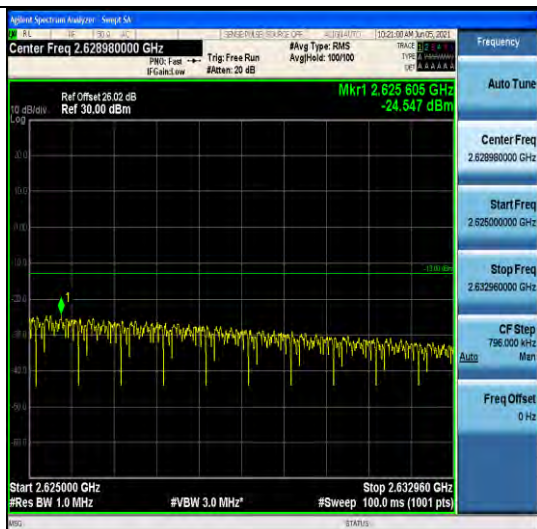


NTNV-N38-30kHz-15MHz-DFT-QPSK-High-Outer_Full-----2620-2621-----see graph-PASS

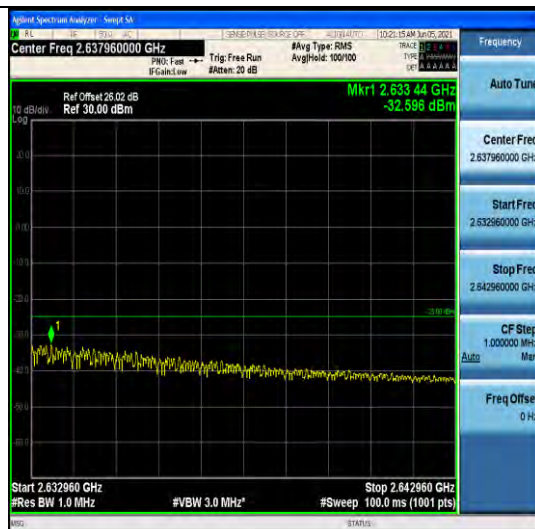


NTNV-N38-30kHz-15MHz-DFT-QPSK-High-Outer_Full-----2621-2625-----see graph-PASS

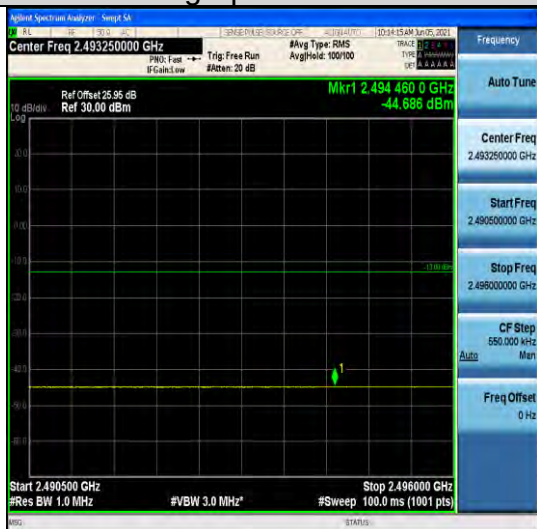




NTNV-N38-30kHz-15MHz-DFT-QPSK-High-Outer_Full-----2625-2632.96-----see graph-PASS



NTNV-N38-30kHz-15MHz-DFT-QPSK-High-Outer_Full-----2632.96-2642.96-----see graph-PASS

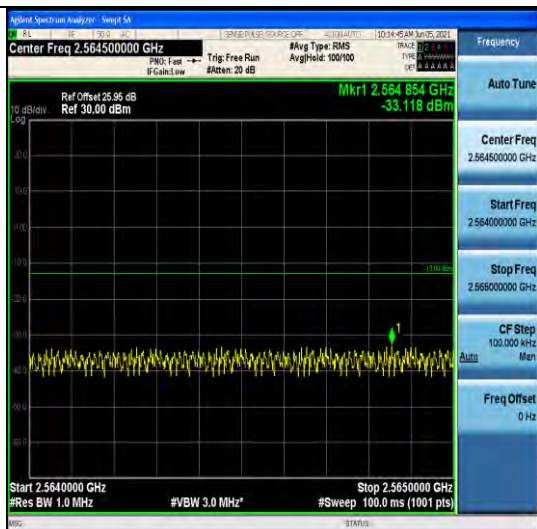


NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Edge_1RB_Left-----2490.5-2496-----see graph-PASS

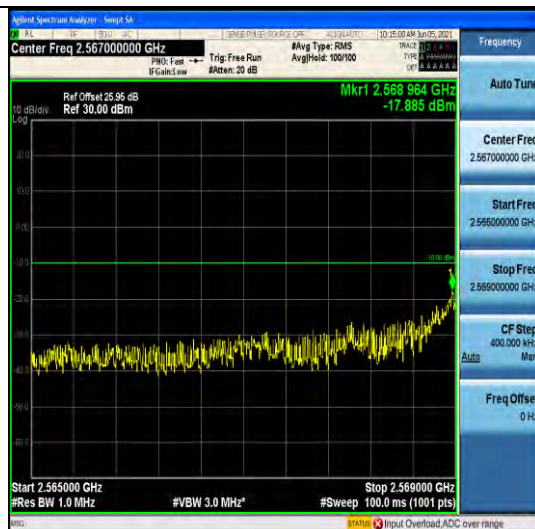


NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Edge_1RB_Left-----2496-2564-----see graph-PASS

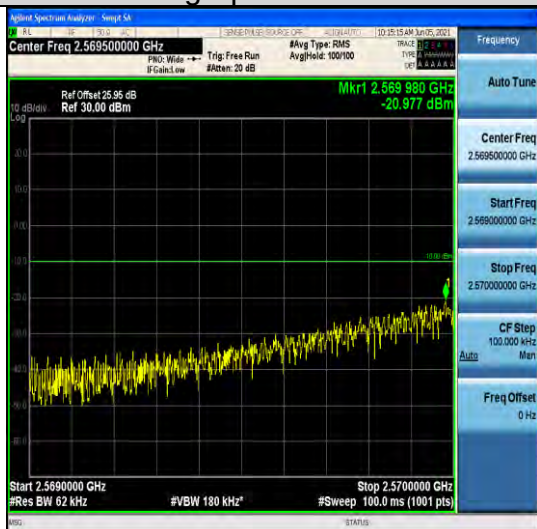




NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Edge_1RB_Left-----2564-2565-----see graph-PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Edge_1RB_Left-----2565-2569-----see graph-PASS

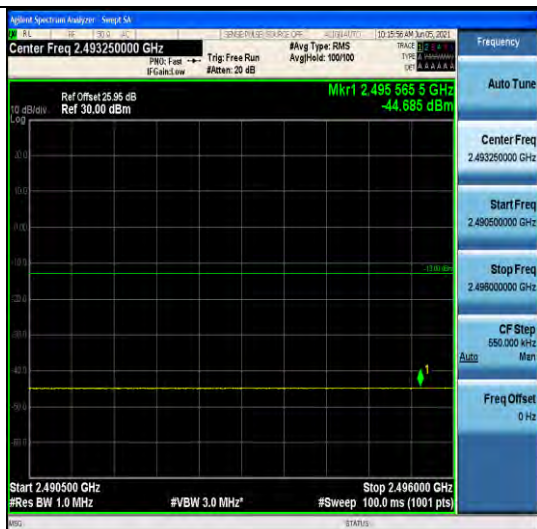


NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Edge_1RB_Left-----2569-2570-----see graph-PASS

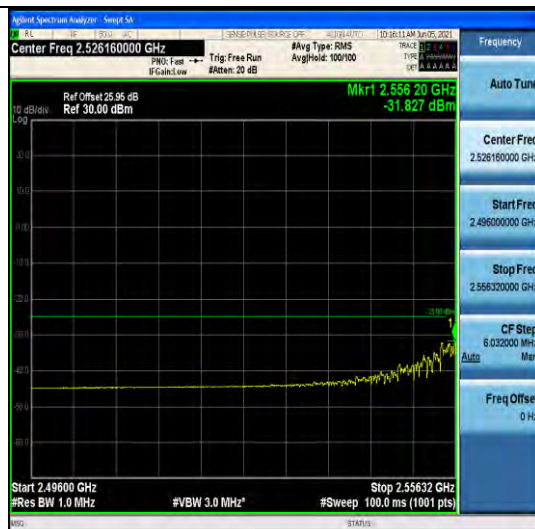


NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Edge_1RB_Left-----2570-2586-----see graph-PASS

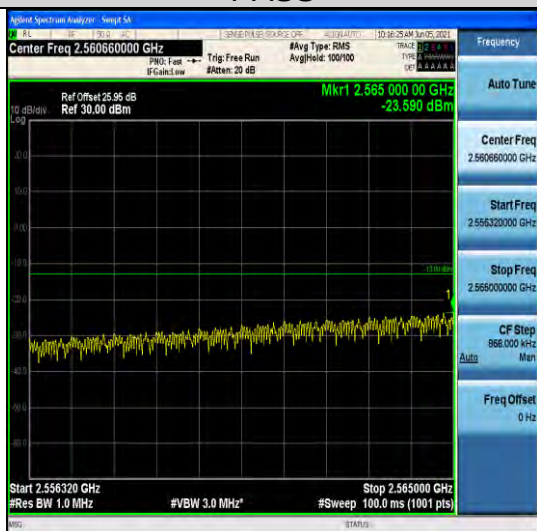




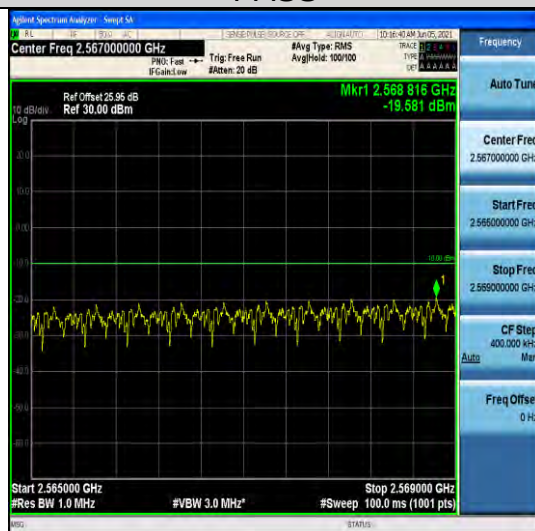
NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Outer_Full-----2490.5-2496-----see graph-PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Outer_Full-----2496-2556.32-----see graph-PASS

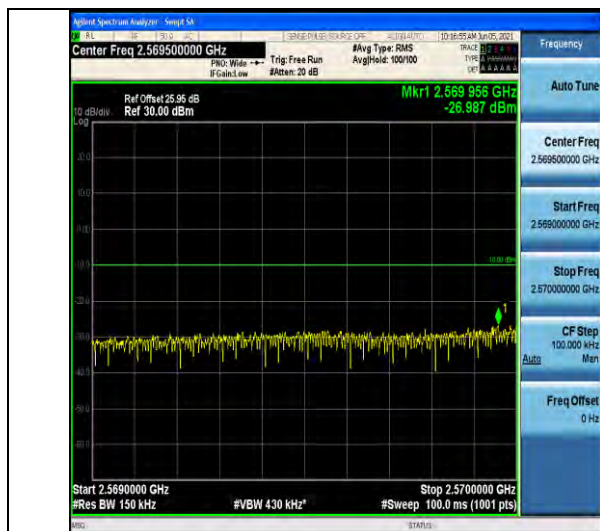


NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Outer_Full-----2556.32-2565-----see graph-PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Outer_Full-----2565-2569-----see graph-PASS





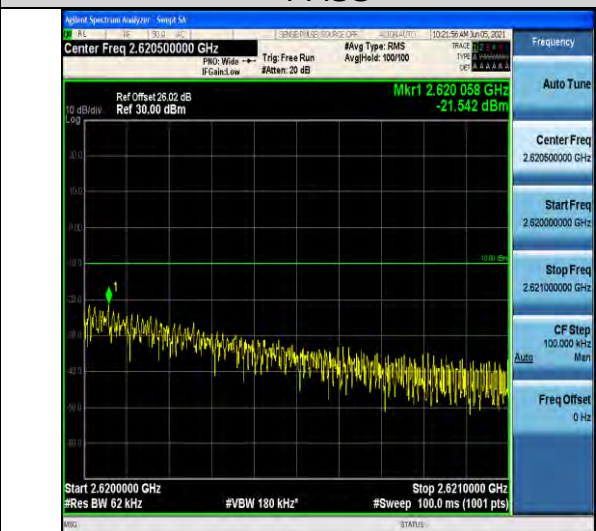
NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Outer_Full-----2569-2570-----see graph-PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-Low-Outer_Full-----2570-2593.68-----see graph-PASS

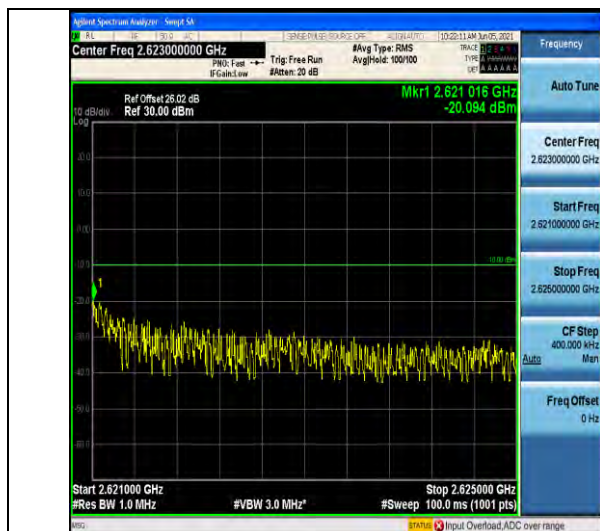


NTNV-N38-30kHz-15MHz-CP-QPSK-High-Edge_1RB_Right-----2604-2620-----see graph-PASS

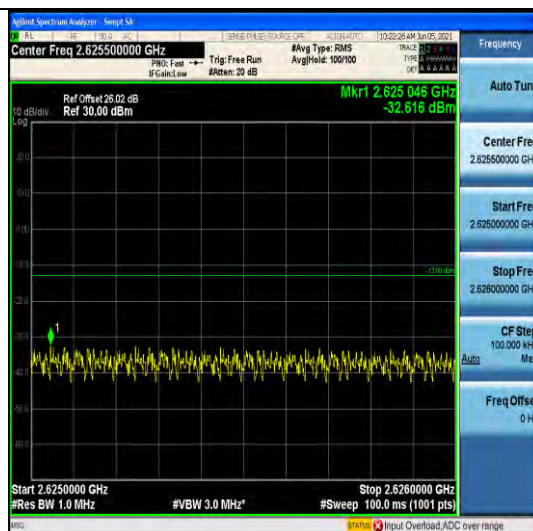


NTNV-N38-30kHz-15MHz-CP-QPSK-High-Edge_1RB_Right-----2620-2621-----see graph-PASS

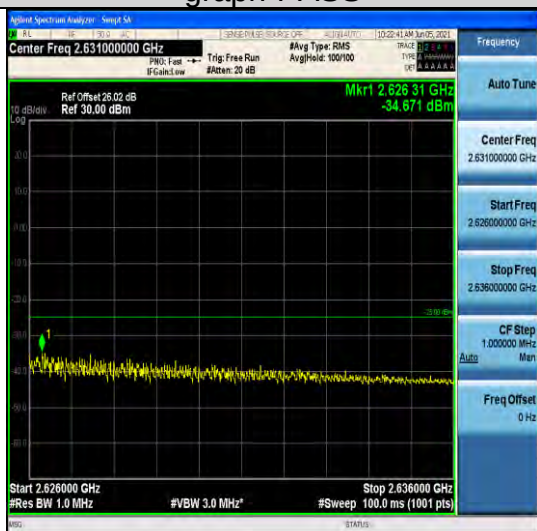




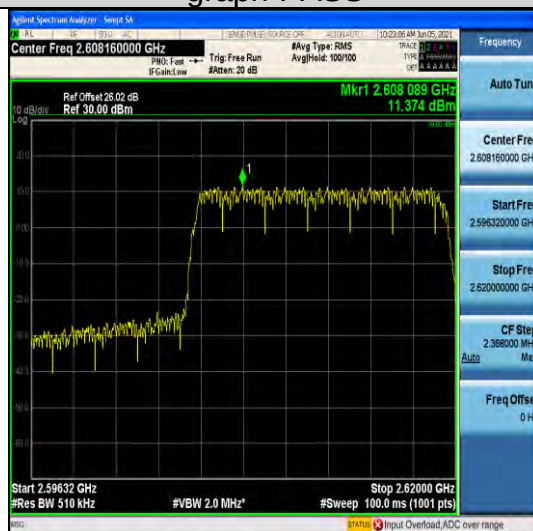
NTNV-N38-30kHz-15MHz-CP-QPSK-High-Edge_1RB_Right-----2621-2625-----see graph-PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-High-Edge_1RB_Right-----2625-2626-----see graph-PASS

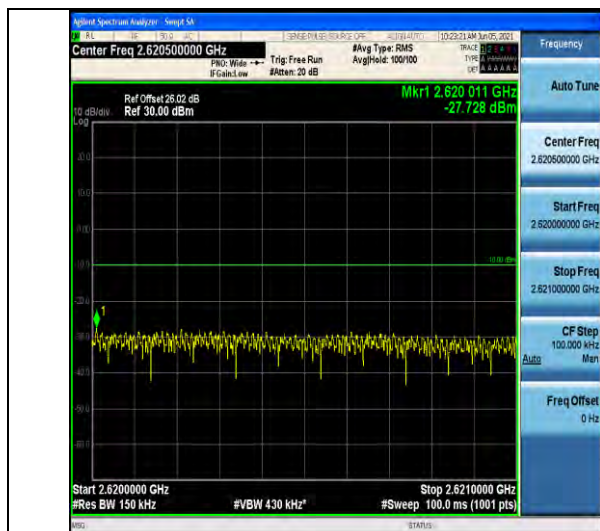


NTNV-N38-30kHz-15MHz-CP-QPSK-High-Edge_1RB_Right-----2626-2636-----see graph-PASS

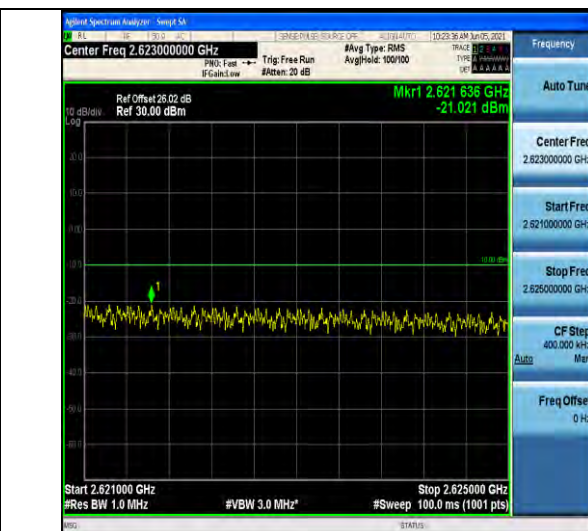


NTNV-N38-30kHz-15MHz-CP-QPSK-High-Outer_Full-----2596.32-2620-----see graph-PASS

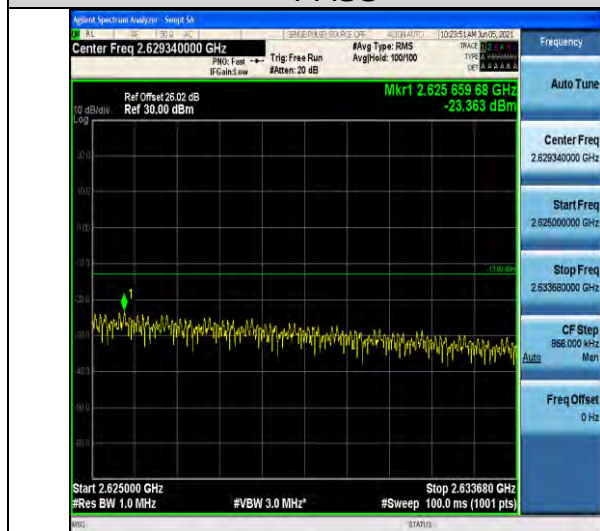




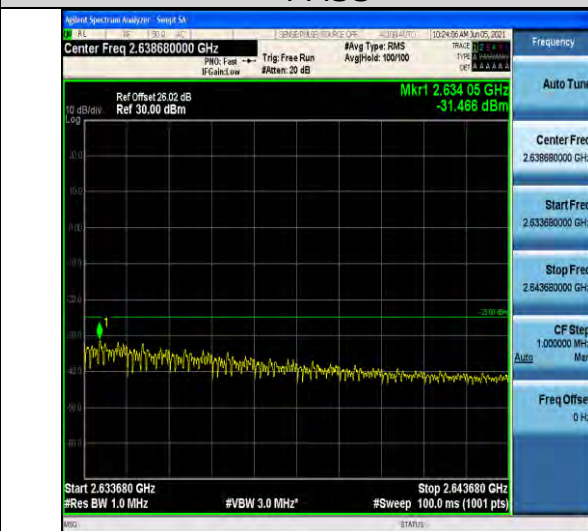
NTNV-N38-30kHz-15MHz-CP-QPSK-High-Outer_Full-----2620-2621-----see graph-PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-High-Outer_Full-----2621-2625-----see graph-PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-High-Outer_Full-----2625-2633.68-----see graph-PASS



NTNV-N38-30kHz-15MHz-CP-QPSK-High-Outer_Full-----2633.68-2643.68-----see graph-PASS

REMARK:

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions. If any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8367 1443, or email: CN.Doccheck@sgs.com

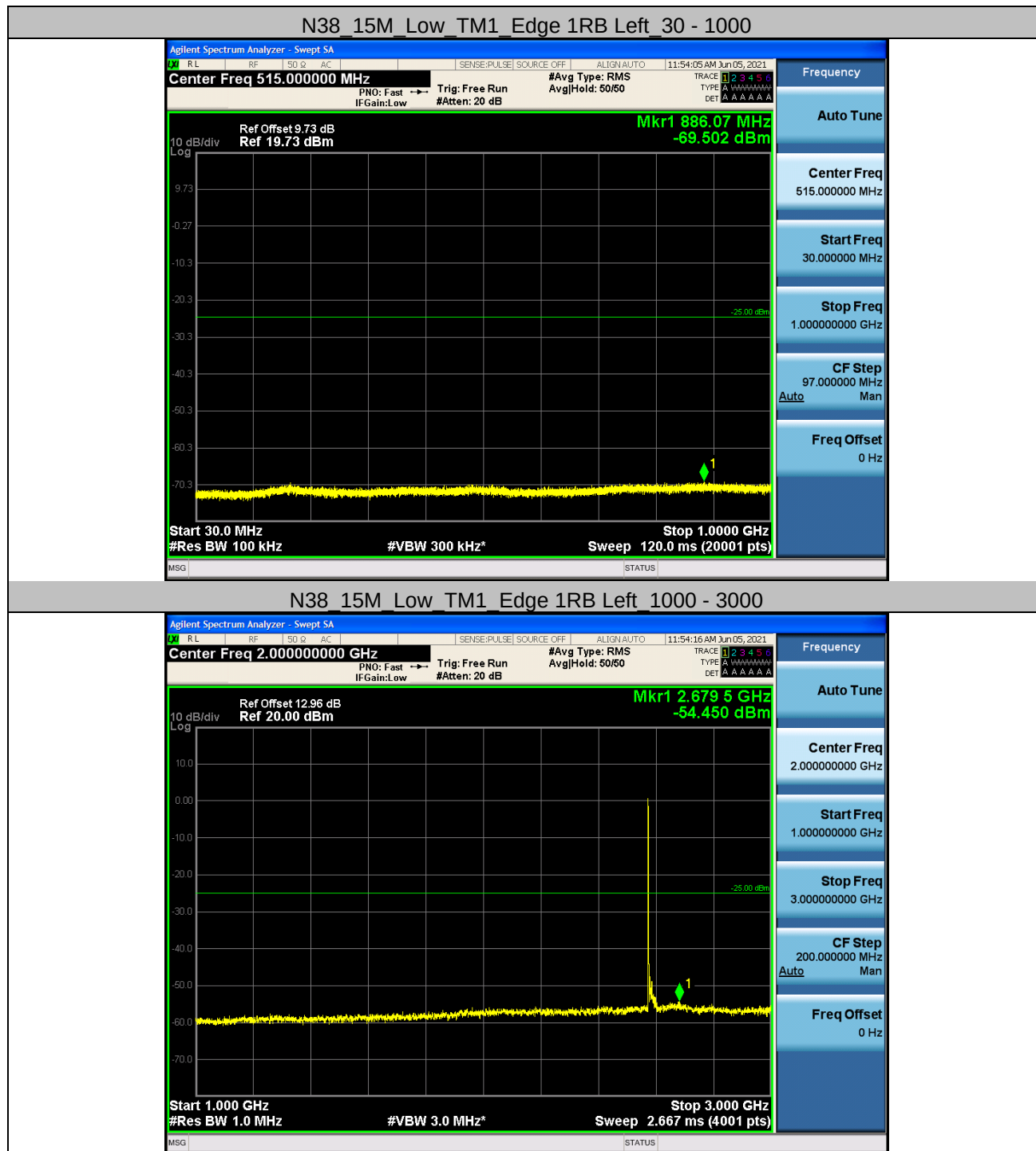
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS-CSTC Shenzhen Laboratory)

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.

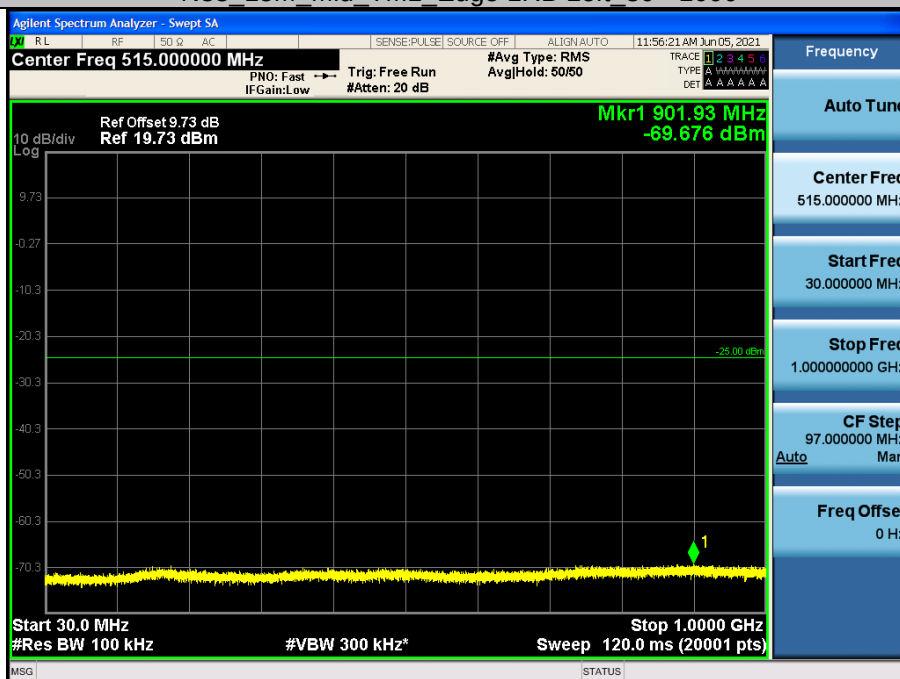
6.1 Test Plots



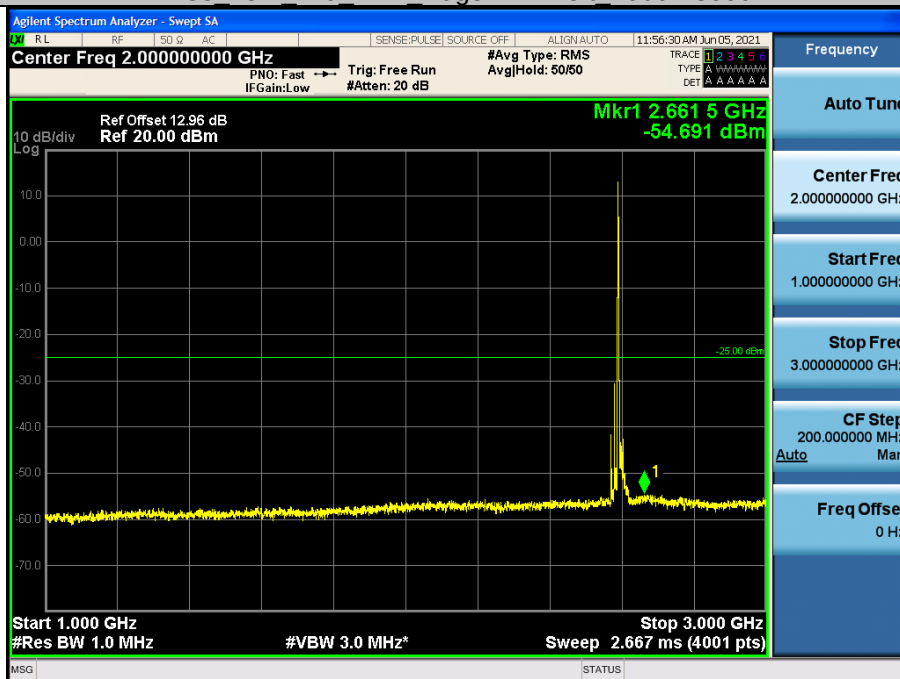
N38 15M Low TM1 Edge 1RB Left 3000 - 26500



N38 15M Mid TM1 Edge 1RB Left 30 - 1000



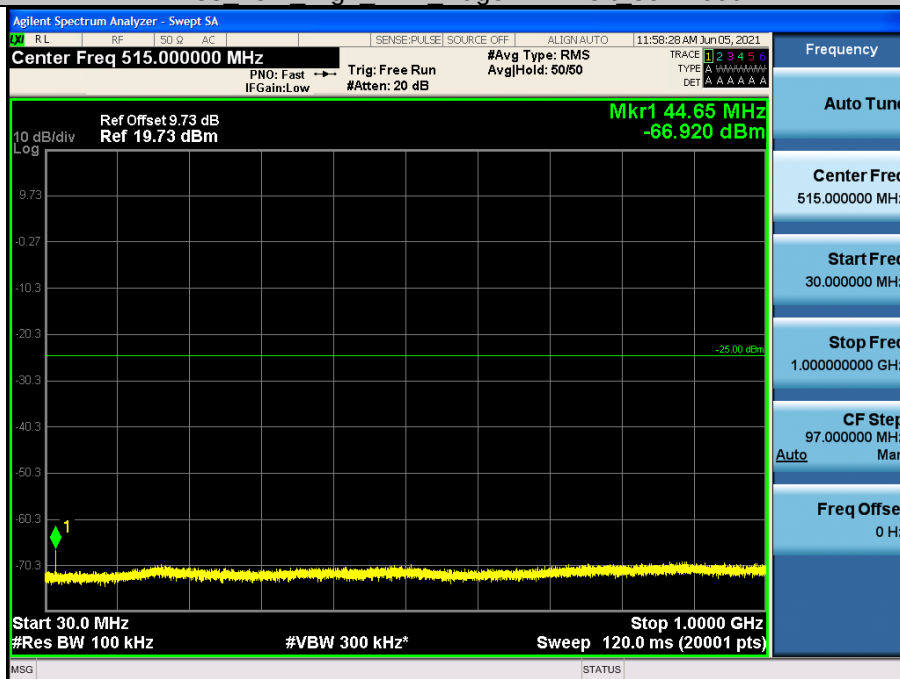
N38 15M Mid TM1 Edge 1RB Left 1000 - 3000



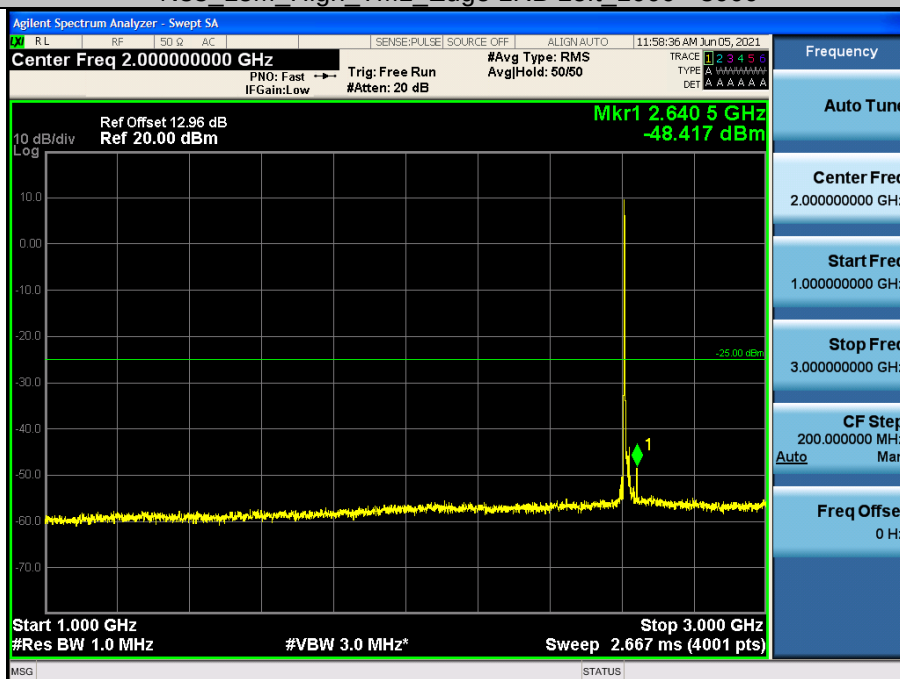
N38 15M Mid TM1 Edge 1RB Left 3000 - 26500



N38 15M High TM1 Edge 1RB Left 30 - 1000



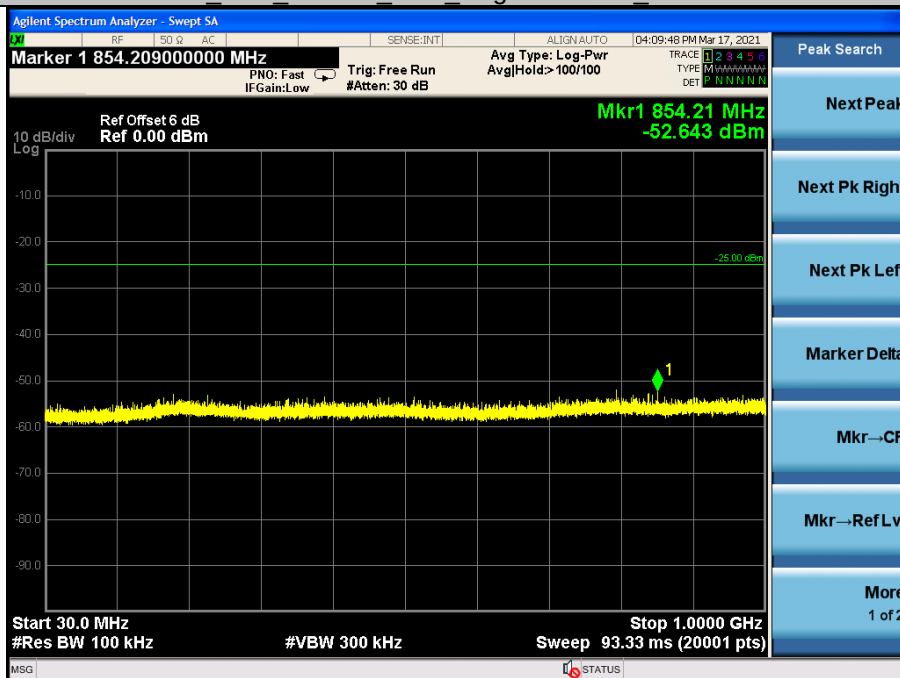
N38 15M High TM1 Edge 1RB Left 1000 - 3000



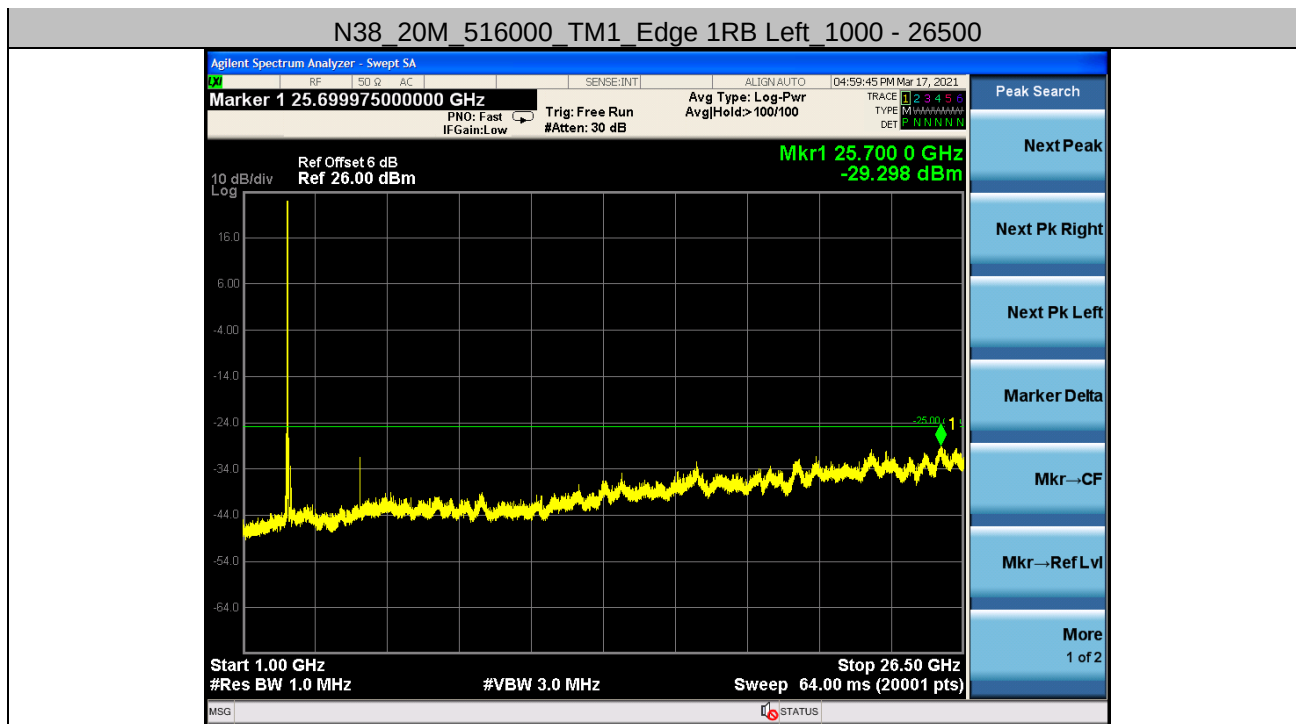
N38 15M High TM1 Edge 1RB Left 3000 - 26500



N38 20M 516000 TM1 Edge 1RB Left 30 - 1000



N38 20M 516000 TM1 Edge 1RB Left 1000 - 26500

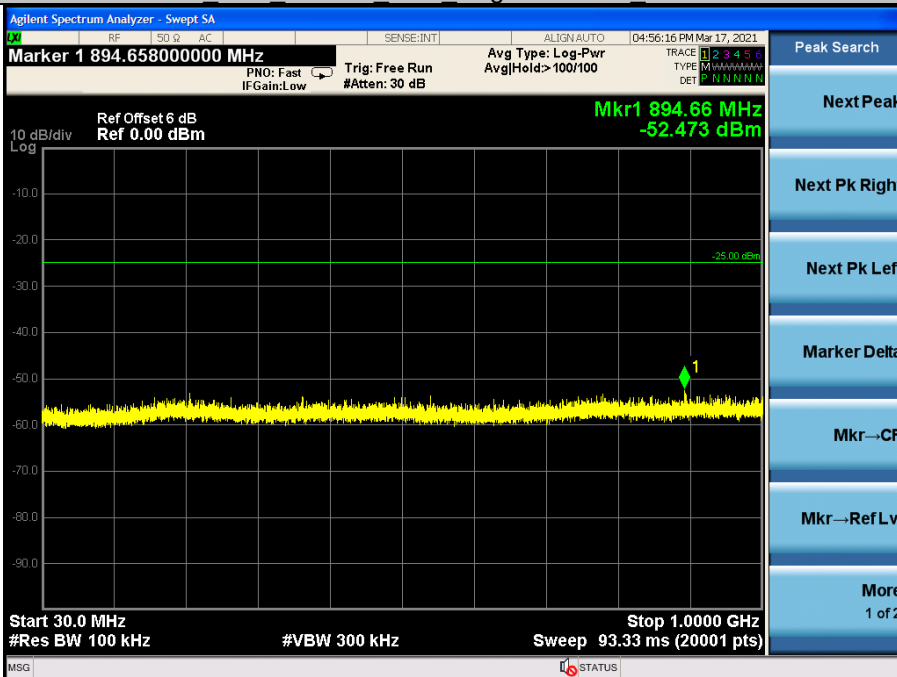


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Internal Use Only) Laboratory

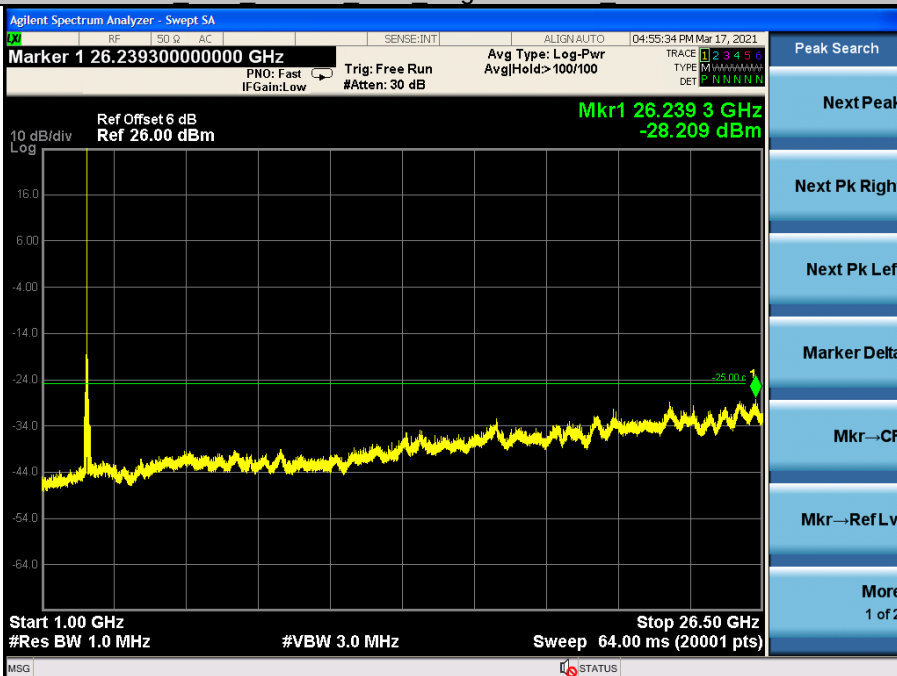
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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

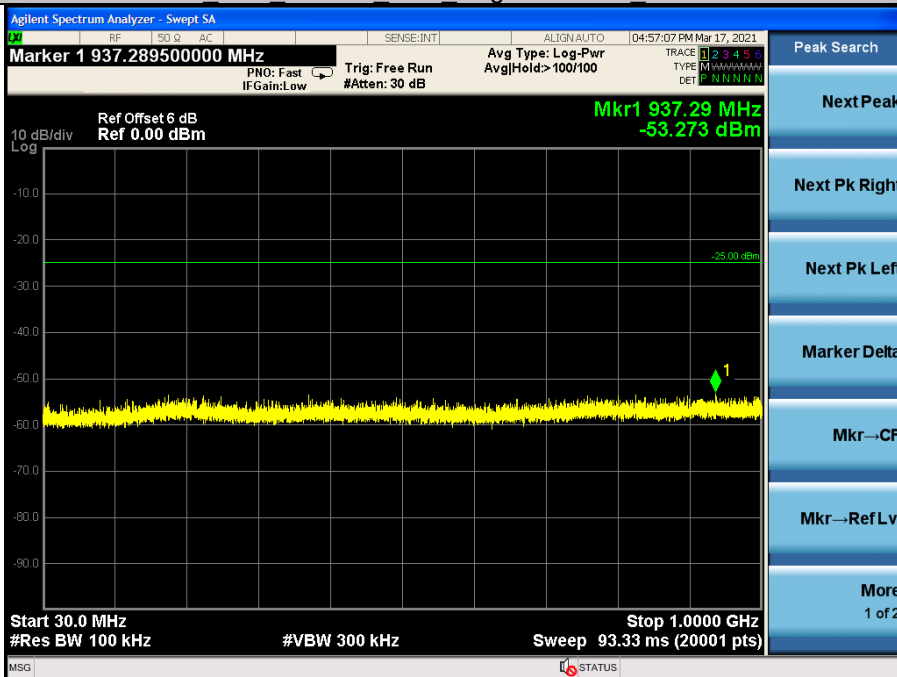
N38 20M 519000 TM1 Edge 1RB Left 30 - 1000



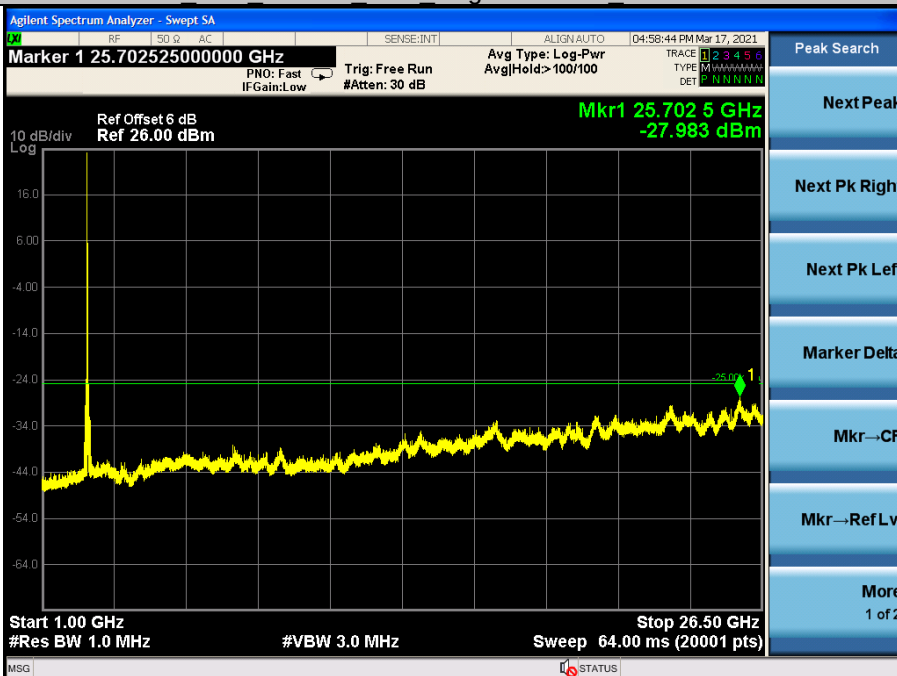
N38 20M 519000 TM1 Edge 1RB Left 1000 - 265000



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 = SA_Band=38_TM1

7.1.1 Test Channel = Low Channel TRAFFIC

Suspected Data List						
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	41.1550	-65.66	-77.26	-25.00	52.26	Horizontal
2	87.9575	-55.11	-77.22	-25.00	52.22	Horizontal
3	165.3150	-60.83	-78.12	-25.00	53.12	Horizontal
4	1746.2373	-67.30	-50.52	-25.00	25.52	Horizontal
5	6760.6880	-61.39	-55.85	-25.00	30.85	Horizontal
6	12895.244	-62.11	-50.12	-25.00	25.12	Horizontal



7.2 Test Band = SA_Band=38_TM1

7.2.1 Test Channel = Low Channel TRAFFIC

Suspected Data List						
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	40.4275	-54.29	-73.00	-25.00	48.00	Vertical
2	76.0750	-56.56	-71.49	-25.00	46.49	Vertical
3	185.2000	-58.42	-76.59	-25.00	51.59	Vertical
4	1647.8324	-68.92	-54.94	-25.00	29.94	Vertical
5	6561.9281	-61.50	-56.46	-25.00	31.46	Vertical
6	12928.246	-62.56	-52.40	-25.00	27.40	Vertical



7.3 Test Band = SA_Band=38_TM1**7.3.1 Test Channel = Mid Channel TRAFFIC**

Suspected Data List						
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	41.1550	-65.64	-77.24	-25.00	52.24	Horizontal
2	87.9575	-57.89	-80.00	-25.00	55.00	Horizontal
3	163.3750	-62.47	-76.90	-25.00	51.90	Horizontal
4	1758.4379	-68.13	-51.15	-25.00	26.15	Horizontal
5	7935.9968	-61.67	-54.99	-25.00	29.99	Horizontal
6	13442.772	-62.26	-49.48	-25.00	24.48	Horizontal



7.4 Test Band = SA_Band=38_TM1

7.4.1 Test Channel = Mid Channel TRAFFIC

Suspected Data List						
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	40.4275	-57.17	-75.88	-25.00	50.88	Vertical
2	71.4675	-55.35	-69.46	-25.00	44.46	Vertical
3	516.2125	-73.26	-83.03	-25.00	58.03	Vertical
4	1746.1373	-66.10	-52.75	-25.00	27.75	Vertical
5	9572.5786	-62.48	-51.59	-25.00	26.59	Vertical



7.5 Test Band = SA_Band=38_TM1

7.5.1 Test Channel = High Channel TRAFFIC

Suspected Data List						
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	41.1550	-66.22	-77.82	-25.00	52.82	Horizontal
2	86.9875	-57.33	-79.43	-25.00	54.43	Horizontal
3	174.5300	-57.09	-76.45	-25.00	51.45	Horizontal
4	1744.2372	-67.95	-51.28	-25.00	26.28	Horizontal
5	5674.6337	-59.54	-55.89	-25.00	30.89	Horizontal
6	13475.773	-62.59	-49.46	-25.00	24.46	Horizontal



7.6 Test Band = SA_Band=38_TM1**7.6.1 Test Channel = High Channel TRAFFIC**

Suspected Data List						
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	41.1550	-55.44	-73.59	-25.00	48.59	Vertical
2	74.8625	-55.12	-69.84	-25.00	44.84	Vertical
3	175.2575	-59.20	-77.31	-25.00	52.31	Vertical
4	1745.5373	-62.89	-49.54	-25.00	24.54	Vertical
5	6786.9393	-61.72	-54.40	-25.00	29.40	Vertical
6	10111.8556	-64.27	-51.16	-25.00	26.16	Vertical

Remark:all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.





8 Frequency Stability

8.1 Frequency Error VS. Voltage

NR Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage [Vdc]	Temperature(°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
N38	30KHz	20MHz	TM1	516000	Outer Full	VL	NT	-12.23	-0.00474	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	NT	12.28	0.00476	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VH	NT	3.50	0.00136	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VL	NT	9.07	0.00350	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	NT	5.77	0.00222	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VH	NT	-1.62	-0.00062	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VL	NT	-10.50	-0.00402	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	NT	6.83	0.00262	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VH	NT	4.52	0.00173	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VL	NT	13.46	0.00522	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	NT	-0.25	-0.00010	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VH	NT	12.65	0.00490	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VL	NT	1.29	0.00050	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	NT	-10.16	-0.00392	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VH	NT	8.70	0.00335	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VL	NT	-6.55	-0.00251	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	NT	1.81	0.00069	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VH	NT	7.00	0.00268	±2.5	PASS

8.2 Frequency Error VS. Temperature

NR Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage [Vdc]	Temperature(°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	-30	9.64	0.00374	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	-20	3.68	0.00143	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	-10	-9.61	-0.00372	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	0	-6.93	-0.00269	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	10	-6.71	-0.00260	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	20	-0.02	-0.00001	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	30	-9.56	-0.00371	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	40	-11.49	-0.00445	±2.5	PASS
N38	30KHz	20MHz	TM1	516000	Outer Full	VN	50	-4.55	-0.00176	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	-30	-6.27	-0.00242	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	-20	7.72	0.00297	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	-10	9.57	0.00369	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	0	-12.28	-0.00473	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	10	-5.00	-0.00193	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	20	-2.78	-0.00107	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	30	13.65	0.00526	±2.5	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8367 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Inspection & Testing Services Laboratory)

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	5.95	0.00229	±2.5	PASS
N38	30KHz	20MHz	TM1	519000	Outer Full	VN	50	9.68	0.00373	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	-30	-4.33	-0.00166	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	-20	0.50	0.00019	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	-10	-6.10	-0.00234	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	0	-4.76	-0.00182	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	10	3.23	0.00124	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	20	10.16	0.00389	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	30	1.48	0.00057	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	40	-5.38	-0.00206	±2.5	PASS
N38	30KHz	20MHz	TM1	522000	Outer Full	VN	50	7.85	0.00301	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	-30	14.65	0.00568	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	-20	-11.17	-0.00433	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	-10	-7.40	-0.00287	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	0	-8.72	-0.00338	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	10	-8.93	-0.00346	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	20	-7.77	-0.00301	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	30	-2.96	-0.00115	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	40	14.57	0.00565	±2.5	PASS
N38	30KHz	20MHz	TM6	516000	Outer Full	VN	50	-2.27	-0.00088	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	-30	-9.31	-0.00359	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	-20	-9.10	-0.00351	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	-10	4.74	0.00183	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	0	-4.22	-0.00163	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	10	1.64	0.00063	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	20	11.84	0.00456	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	30	7.55	0.00291	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	40	14.43	0.00556	±2.5	PASS
N38	30KHz	20MHz	TM6	519000	Outer Full	VN	50	-5.00	-0.00193	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	-30	9.86	0.00378	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	-20	-0.13	-0.00005	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	-10	4.24	0.00162	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	0	3.79	0.00145	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	10	3.55	0.00136	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	20	-3.51	-0.00134	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	30	5.45	0.00209	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	40	-8.67	-0.00332	±2.5	PASS
N38	30KHz	20MHz	TM6	522000	Outer Full	VN	50	1.45	0.00056	±2.5	PASS

REMARK:

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

The End



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Technical Services Laboratory

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