

Appendix B

E-UTRA BAND 12





CONTENT

1. EFFECTIVE (ISOTROPIC) RADIATED POWER	3
1.1. Test Result.....	3
2. PEAK-TO-AVERAGE RATIO(CCDF).....	10
2.1. Test Result.....	10
2.2. Test Plots.....	10
3. MODULATION CHARACTERISTICS	15
3.1. Test BAND = LTE BAND12.....	15
3.1.1. Test Mode = LTE /TM1 10MHz.....	15
3.1.1.1. Test Channel = MCH.....	15
3.1.2. Test Mode = LTE /TM2 10MHz.....	16
3.1.2.1. Test Channel = MCH.....	16
3.1.3. Test Mode = LTE /TM3 10MHz.....	17
3.1.3.1. Test Channel = MCH.....	17
4. 26dB BANDWIDTH AND OCCUPIED BANDWIDTH	18
4.1. Test Result.....	18
4.2. Test Plots.....	19
5. BAND EDGE COMPLIANCE	37
5.1. Test Plots.....	37
6. SPURIOUS EMISSION AT ANTENNA TERMINAL	61
6.1. Test Plots.....	61
7. FIELD STRENGTH OF SPURIOUS RADIATION.....	70
7.1. MAIN ANTENNA	70
7.1.1. Test BAND = LTE BAND 12.....	70
7.2. SECONDARY ANTENNA	76
7.2.1. Test BAND = LTE BAND 12.....	76
8. FREQUENCY STABILITY.....	82
8.1. Frequency Vs Voltage.....	82
8.2. Frequency Vs Temperature.....	82





1. Effective (Isotropic) Radiated Power

1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP (dBm)	limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.54	12.69	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.27	12.42	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.45	12.6	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.41	12.56	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.32	12.47	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.38	12.53	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.48	11.63	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.49	12.64	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.28	12.43	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.45	12.6	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.36	12.51	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.32	12.47	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.33	12.48	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.49	11.64	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.56	12.71	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.45	12.6	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.64	12.79	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.60	12.75	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.44	12.59	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.47	12.62	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.61	11.76	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#0	21.65	10.8	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#2	21.67	10.82	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#5	21.70	10.85	34.77	PASS
Band12	1.4MHz	64QAM	23017	3RB#0	21.42	10.57	34.77	PASS
Band12	1.4MHz	64QAM	23017	3RB#1	21.36	10.51	34.77	PASS
Band12	1.4MHz	64QAM	23017	3RB#3	21.32	10.47	34.77	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	20.41	9.56	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#0	21.66	10.81	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#2	21.50	10.65	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#5	21.68	10.83	34.77	PASS
Band12	1.4MHz	64QAM	23095	3RB#0	21.38	10.53	34.77	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
 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



Band12	1.4MHz	64QAM	23095	3RB#1	21.21	10.36	34.77	PASS
Band12	1.4MHz	64QAM	23095	3RB#3	21.40	10.55	34.77	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	20.36	9.51	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#0	21.86	11.01	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#2	21.58	10.73	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#5	21.87	11.02	34.77	PASS
Band12	1.4MHz	64QAM	23173	3RB#0	21.52	10.67	34.77	PASS
Band12	1.4MHz	64QAM	23173	3RB#1	21.52	10.67	34.77	PASS
Band12	1.4MHz	64QAM	23173	3RB#3	21.47	10.62	34.77	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	20.43	9.58	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.57	11.72	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.25	11.4	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.68	11.83	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.56	11.71	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.39	11.54	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.52	11.67	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.33	10.48	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.59	11.74	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.32	11.47	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.61	11.76	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.42	11.57	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.32	11.47	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.48	11.63	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.29	10.44	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.66	11.81	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.47	11.62	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.69	11.84	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.59	11.74	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.44	11.59	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.47	11.62	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.47	10.62	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.57	12.72	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.44	12.59	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.39	12.54	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.43	11.58	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.42	11.57	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.41	11.56	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.42	11.57	34.77	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 (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



Band12	3MHz	QPSK	23095	1RB#0	23.41	12.56	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.50	12.65	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.45	12.6	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.37	11.52	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.49	11.64	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.41	11.56	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.45	11.6	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.53	12.68	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.70	12.85	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.63	12.78	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.62	11.77	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.53	11.68	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.56	11.71	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.62	11.77	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#0	21.76	10.91	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#8	21.62	10.77	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#14	21.56	10.71	34.77	PASS
Band12	3MHz	64QAM	23025	8RB#0	20.39	9.54	34.77	PASS
Band12	3MHz	64QAM	23025	8RB#4	20.34	9.49	34.77	PASS
Band12	3MHz	64QAM	23025	8RB#7	20.41	9.56	34.77	PASS
Band12	3MHz	64QAM	23025	15RB#0	20.32	9.47	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#0	21.52	10.67	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#8	21.57	10.72	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#14	21.58	10.73	34.77	PASS
Band12	3MHz	64QAM	23095	8RB#0	20.37	9.52	34.77	PASS
Band12	3MHz	64QAM	23095	8RB#4	20.31	9.46	34.77	PASS
Band12	3MHz	64QAM	23095	8RB#7	20.38	9.53	34.77	PASS
Band12	3MHz	64QAM	23095	15RB#0	20.34	9.49	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#0	21.69	10.84	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#8	21.72	10.87	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#14	21.79	10.94	34.77	PASS
Band12	3MHz	64QAM	23165	8RB#0	20.43	9.58	34.77	PASS
Band12	3MHz	64QAM	23165	8RB#4	20.53	9.68	34.77	PASS
Band12	3MHz	64QAM	23165	8RB#7	20.50	9.65	34.77	PASS
Band12	3MHz	64QAM	23165	15RB#0	20.44	9.59	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.60	11.75	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.63	11.78	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.58	11.73	34.77	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
 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



Band12	3MHz	16QAM	23025	8RB#0	21.34	10.49	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.33	10.48	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.44	10.59	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.41	10.56	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.57	11.72	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.61	11.76	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.58	11.73	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.43	10.58	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.40	10.55	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.32	10.47	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.36	10.51	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.66	11.81	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.75	11.9	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.66	11.81	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.54	10.69	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.48	10.63	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.50	10.65	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.55	10.7	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.48	12.63	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	22.86	12.01	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.38	12.53	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.49	11.64	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.40	11.55	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.41	11.56	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.41	11.56	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.49	12.64	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	22.90	12.05	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.44	12.59	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.47	11.62	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.44	11.59	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.50	11.65	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.46	11.61	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.59	12.74	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.02	12.17	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.63	12.78	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.63	11.78	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.51	11.66	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.58	11.73	34.77	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 (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



Band12	5MHz	QPSK	23155	25RB#0	22.52	11.67	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#0	21.70	10.85	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#12	21.15	10.3	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#24	21.43	10.58	34.77	PASS
Band12	5MHz	64QAM	23035	12RB#0	20.54	9.69	34.77	PASS
Band12	5MHz	64QAM	23035	12RB#6	20.36	9.51	34.77	PASS
Band12	5MHz	64QAM	23035	12RB#13	20.32	9.47	34.77	PASS
Band12	5MHz	64QAM	23035	25RB#0	20.33	9.48	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#0	21.55	10.7	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#12	21.14	10.29	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#24	21.56	10.71	34.77	PASS
Band12	5MHz	64QAM	23095	12RB#0	20.41	9.56	34.77	PASS
Band12	5MHz	64QAM	23095	12RB#6	20.34	9.49	34.77	PASS
Band12	5MHz	64QAM	23095	12RB#13	20.41	9.56	34.77	PASS
Band12	5MHz	64QAM	23095	25RB#0	20.39	9.54	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#0	21.74	10.89	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#12	21.27	10.42	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#24	21.76	10.91	34.77	PASS
Band12	5MHz	64QAM	23155	12RB#0	20.58	9.73	34.77	PASS
Band12	5MHz	64QAM	23155	12RB#6	20.43	9.58	34.77	PASS
Band12	5MHz	64QAM	23155	12RB#13	20.52	9.67	34.77	PASS
Band12	5MHz	64QAM	23155	25RB#0	20.47	9.62	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.62	11.77	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.04	11.19	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.55	11.7	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.40	10.55	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.33	10.48	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.34	10.49	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.30	10.45	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.70	11.85	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.11	11.26	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.74	11.89	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.37	10.52	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.34	10.49	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.44	10.59	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.46	10.61	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.63	11.78	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.32	11.47	34.77	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 (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



Band12	5MHz	16QAM	23155	1RB#24	22.71	11.86	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.62	10.77	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.43	10.58	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.52	10.67	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.41	10.56	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.55	12.7	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.40	12.55	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.73	12.88	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.40	11.55	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.37	11.52	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.39	11.54	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.38	11.53	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.34	12.49	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.49	12.64	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.73	12.88	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.45	11.6	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.48	11.63	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.48	11.63	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.38	11.53	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.40	12.55	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.55	12.7	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.75	12.9	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.56	11.71	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.49	11.64	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.51	11.66	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.48	11.63	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#0	21.69	10.84	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#24	21.33	10.48	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#49	21.82	10.97	34.77	PASS
Band12	10MHz	64QAM	23060	25RB#0	20.35	9.5	34.77	PASS
Band12	10MHz	64QAM	23060	25RB#12	20.34	9.49	34.77	PASS
Band12	10MHz	64QAM	23060	25RB#25	20.31	9.46	34.77	PASS
Band12	10MHz	64QAM	23060	50RB#0	20.32	9.47	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#0	21.51	10.66	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#24	21.26	10.41	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#49	21.82	10.97	34.77	PASS
Band12	10MHz	64QAM	23095	25RB#0	20.33	9.48	34.77	PASS
Band12	10MHz	64QAM	23095	25RB#12	20.36	9.51	34.77	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
 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



Band12	10MHz	64QAM	23095	25RB#25	20.40	9.55	34.77	PASS
Band12	10MHz	64QAM	23095	50RB#0	20.33	9.48	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#0	21.60	10.75	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#24	21.38	10.53	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#49	21.94	11.09	34.77	PASS
Band12	10MHz	64QAM	23130	25RB#0	20.52	9.67	34.77	PASS
Band12	10MHz	64QAM	23130	25RB#12	20.43	9.58	34.77	PASS
Band12	10MHz	64QAM	23130	25RB#25	20.41	9.56	34.77	PASS
Band12	10MHz	64QAM	23130	50RB#0	20.35	9.5	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.61	11.76	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.41	11.56	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.84	11.99	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.34	10.49	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.29	10.44	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.33	10.48	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.39	10.54	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.64	11.79	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.31	11.46	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.86	12.01	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.30	10.45	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.35	10.5	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.35	10.5	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.28	10.43	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.56	11.71	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.47	11.62	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	23.03	12.18	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.49	10.64	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.40	10.55	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.47	10.62	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.34	10.49	34.77	PASS

Remark:

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

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b: SGP=Signal Generator Level



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 (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

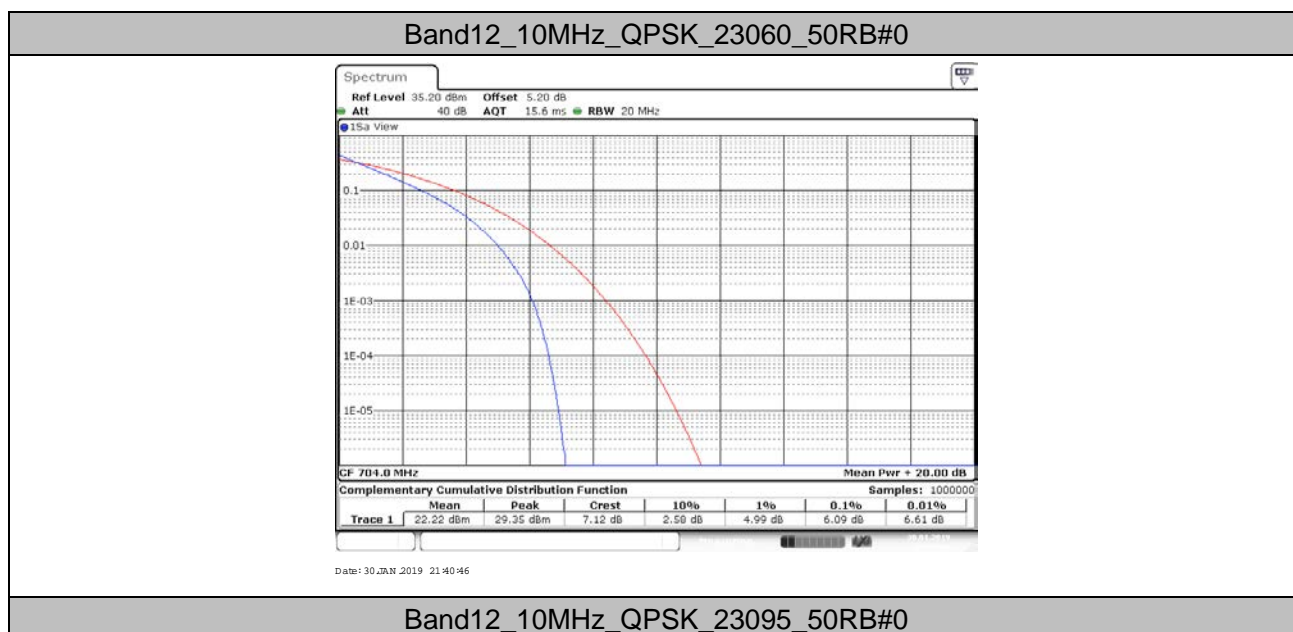


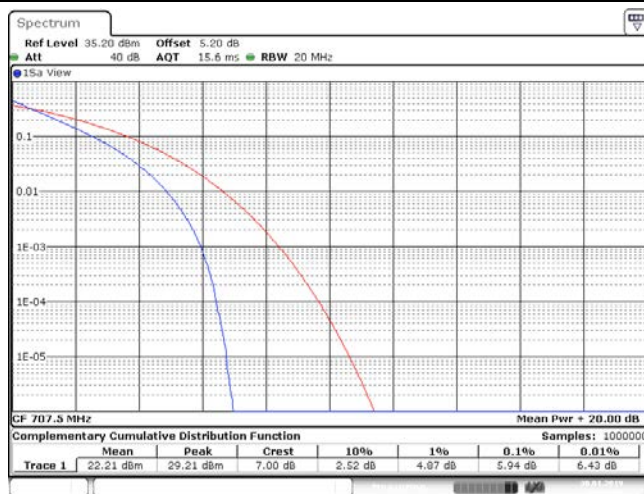
2. Peak-to-Average Ratio(CCDF)

2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	6.09	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.94	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	6.06	13	PASS
Band12	10MHz	64QAM	23060	50RB#0	6.81	13	PASS
Band12	10MHz	64QAM	23095	50RB#0	6.72	13	PASS
Band12	10MHz	64QAM	23130	50RB#0	6.72	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.81	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.70	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.72	13	PASS

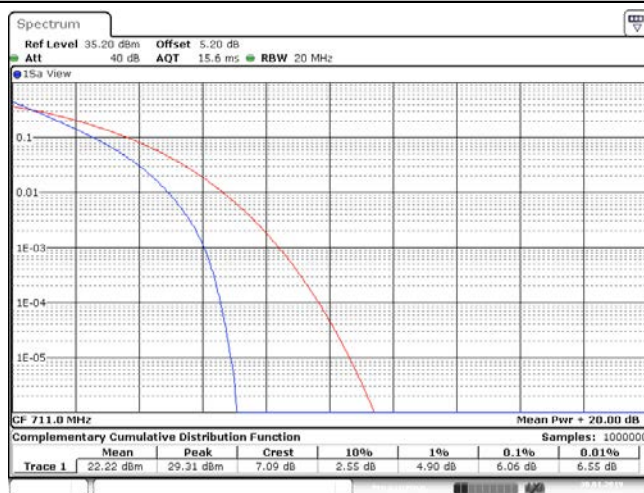
2.2. Test Plots





Date: 30 JAN 2019 21:40:59

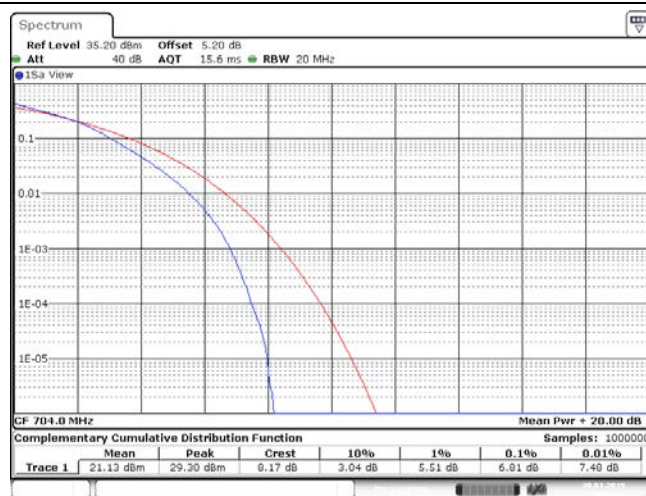
Band12_10MHz_QPSK_23130_50RB#0



Date: 30 JAN 2019 21:41:12

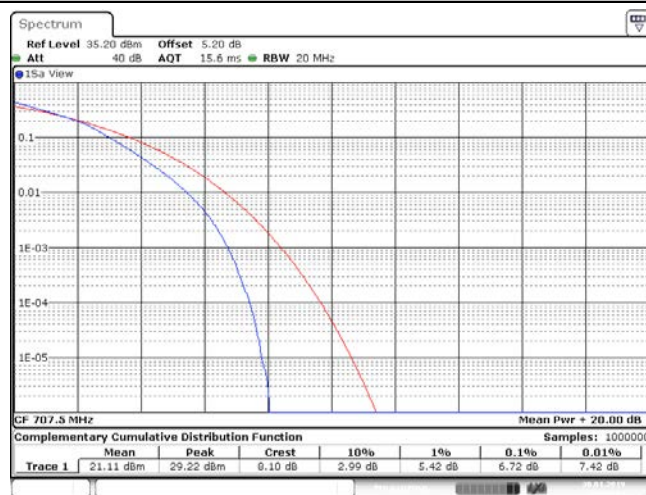
Band12_10MHz_64QAM_23060_50RB#0





Date: 30 JAN 2019 21:42:02

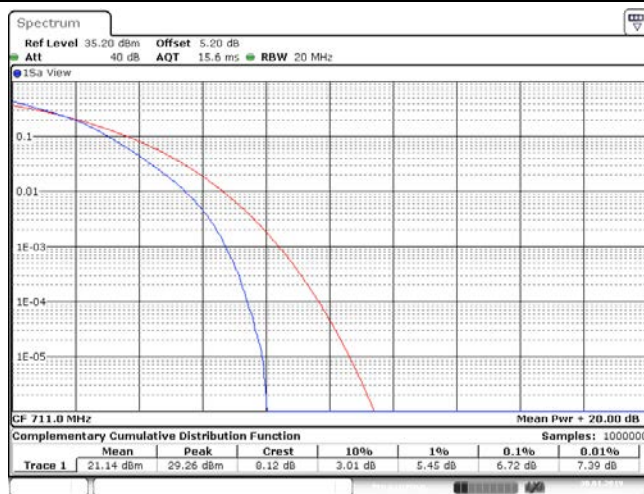
Band12_10MHz_64QAM_23095_50RB#0



Date: 30 JAN 2019 21:42:15

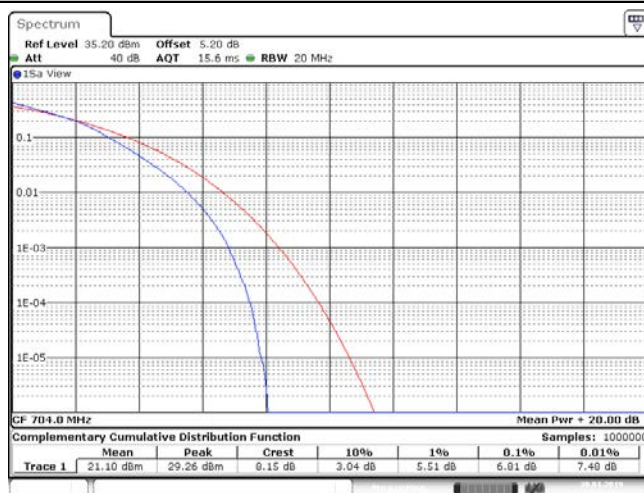
Band12_10MHz_64QAM_23130_50RB#0





Date: 30 JAN 2019 21:42:07

Band12_10MHz_16QAM_23060_50RB#0



Date: 30 JAN 2019 21:41:05

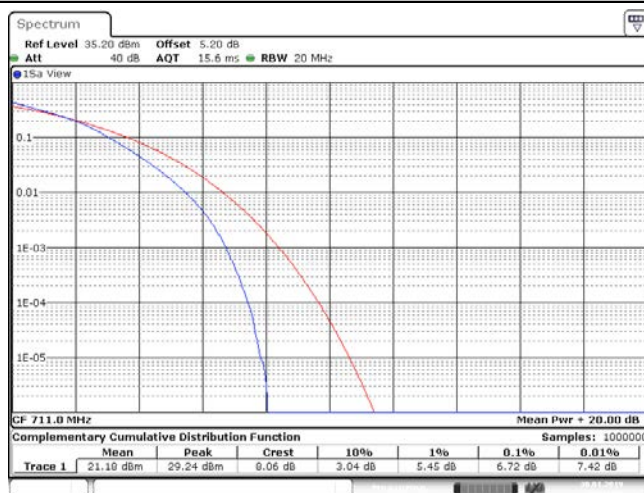
Band12_10MHz_16QAM_23095_50RB#0





Date: 30 JAN 2019 21:41:37

Band12_10MHz_16QAM_23130_50RB#0



Date: 30 JAN 2019 21:41:49

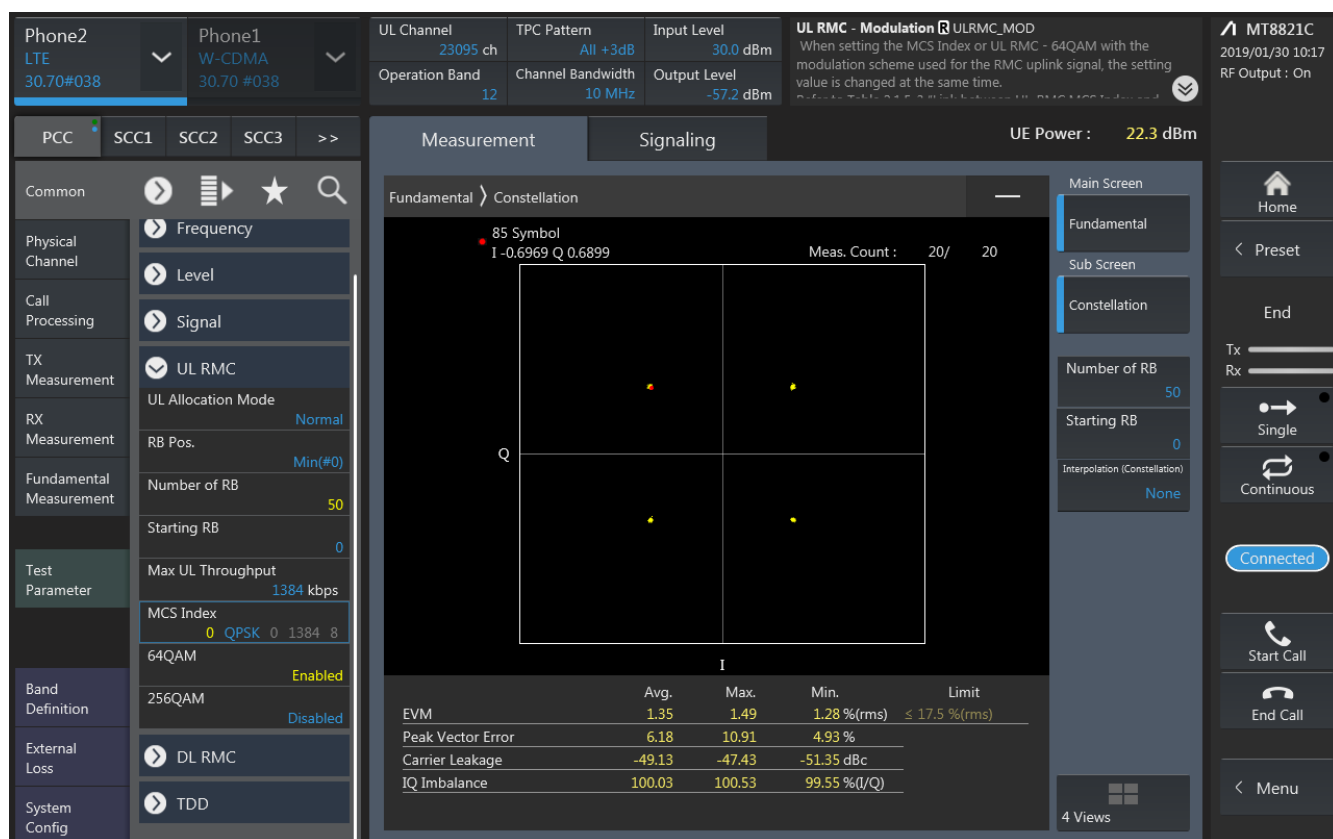


3. Modulation Characteristics

3.1. Test BAND = LTE BAND12

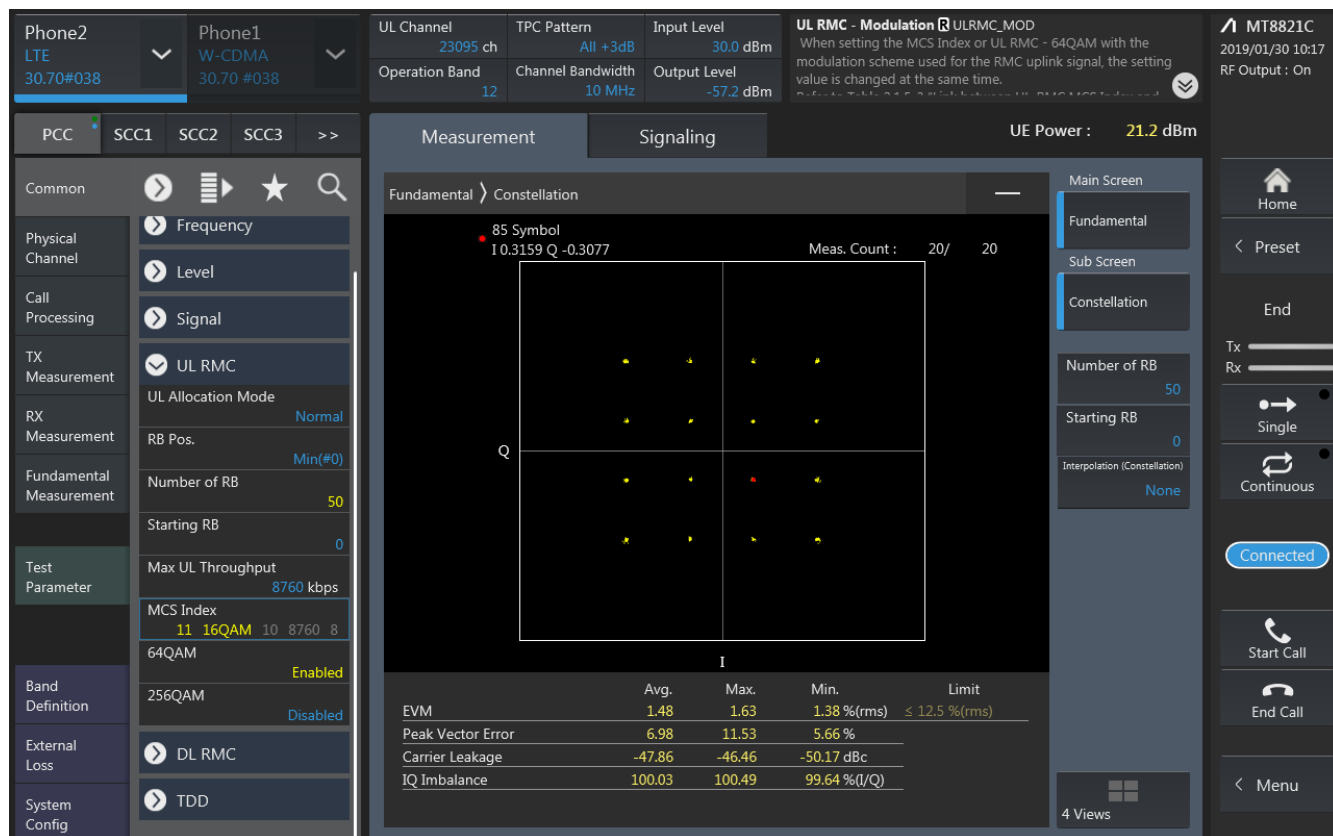
3.1.1. Test Mode = LTE /TM1 10MHz

3.1.1.1. Test Channel = MCH



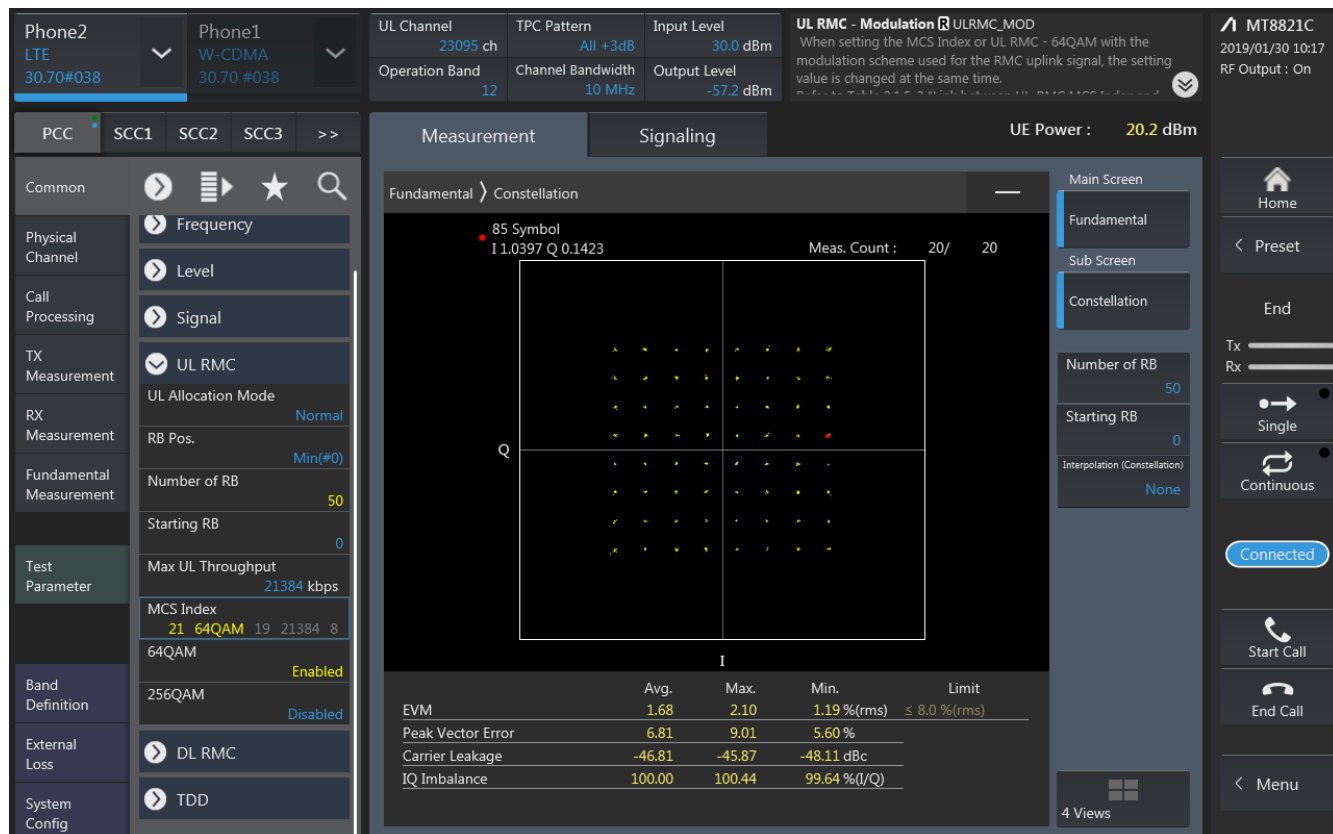
3.1.2. Test Mode = LTE /TM2 10MHz

3.1.2.1. Test Channel = MCH



3.1.3. Test Mode = LTE /TM3 10MHz

3.1.3.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.100	1.248	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.094	1.245	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.109	1.488	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	1.097	1.245	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	1.091	1.251	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	1.097	1.245	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.097	1.248	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.091	1.245	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.103	1.254	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.697	2.964	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.691	2.964	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.709	2.976	PASS
Band12	3MHz	64QAM	23025	15RB#0	2.697	2.982	PASS
Band12	3MHz	64QAM	23095	15RB#0	2.691	2.970	PASS
Band12	3MHz	64QAM	23165	15RB#0	2.703	2.982	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.697	2.982	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.703	2.976	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.709	2.970	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.486	4.930	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.476	4.870	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.486	4.900	PASS
Band12	5MHz	64QAM	23035	25RB#0	4.476	4.900	PASS
Band12	5MHz	64QAM	23095	25RB#0	4.486	4.890	PASS
Band12	5MHz	64QAM	23155	25RB#0	4.486	4.920	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.486	4.900	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.476	4.900	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.486	4.900	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.951	9.800	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.911	9.740	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.931	9.740	PASS
Band12	10MHz	64QAM	23060	50RB#0	8.951	9.840	PASS



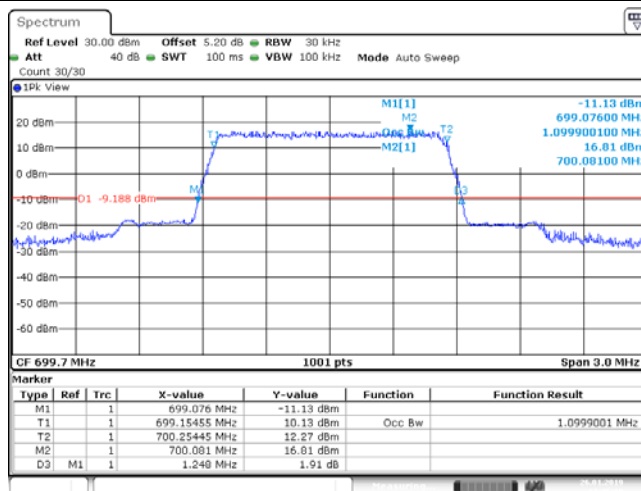
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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
 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

Band12	10MHz	64QAM	23095	50RB#0	8.931	9.760	PASS
Band12	10MHz	64QAM	23130	50RB#0	8.931	9.780	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.971	9.800	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.951	9.800	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.931	9.760	PASS

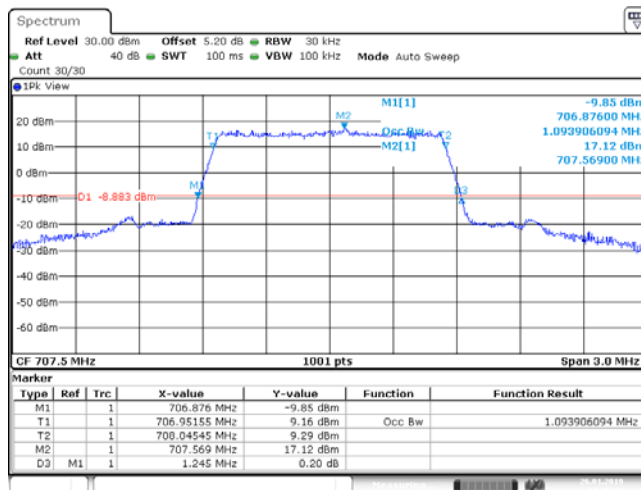
4.2. Test Plots

Band12_1.4MHz_QPSK_23017_6RB#0



Date: 26 JAN 2019 17:25:19

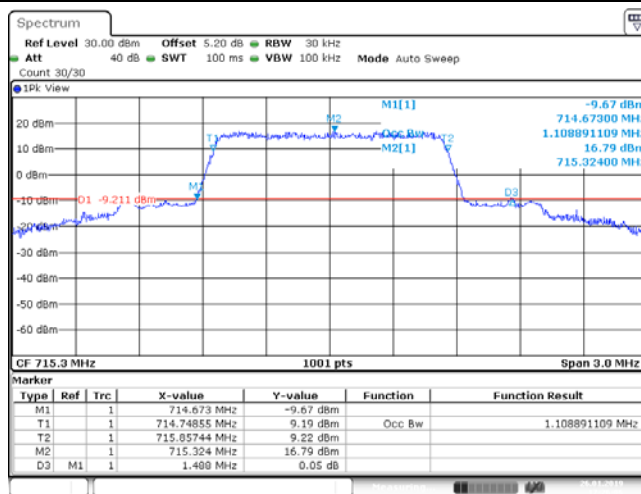
Band12_1.4MHz_QPSK_23095_6RB#0



Date: 26 JAN 2019 17:25:42

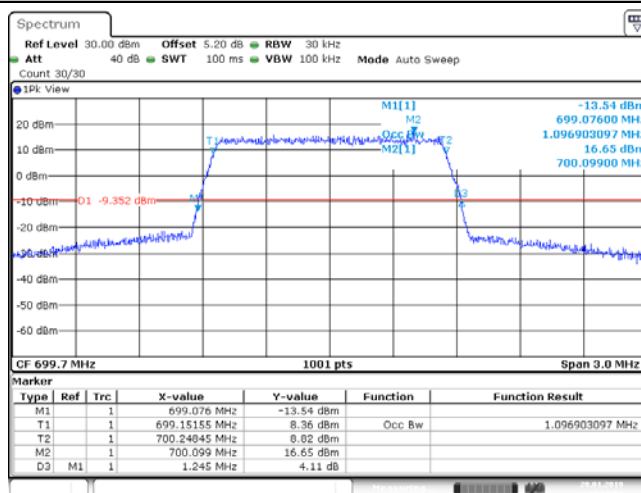
Band12_1.4MHz_QPSK_23173_6RB#0





Date: 26 JAN 2019 17:26:06

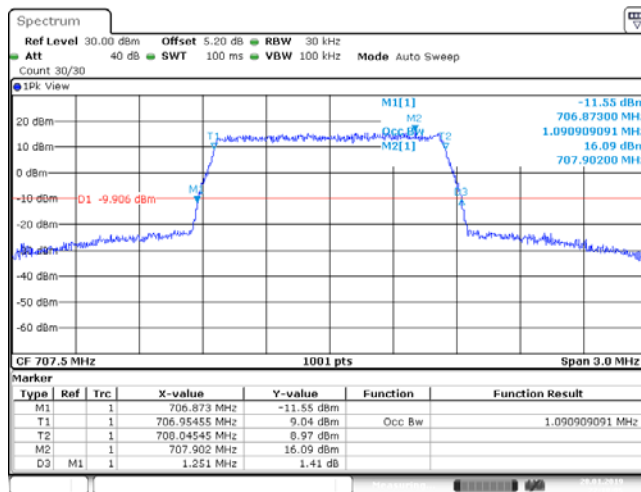
Band12_1.4MHz_64QAM_23017_6RB#0



Date: 28 JAN 2019 22:17:53

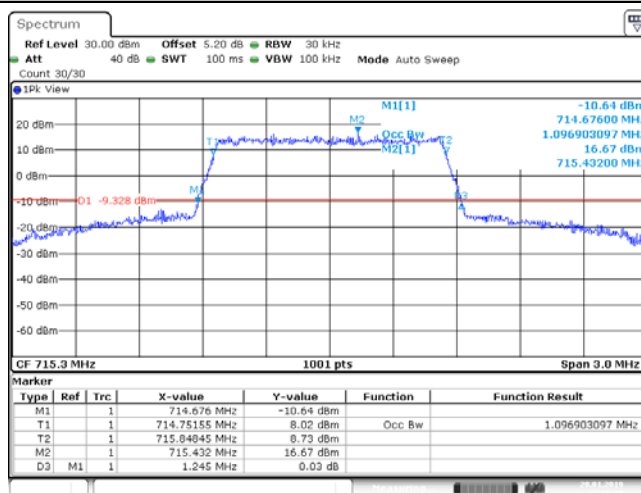
Band12_1.4MHz_64QAM_23095_6RB#0





Date: 28 JAN 2019 22:18:06

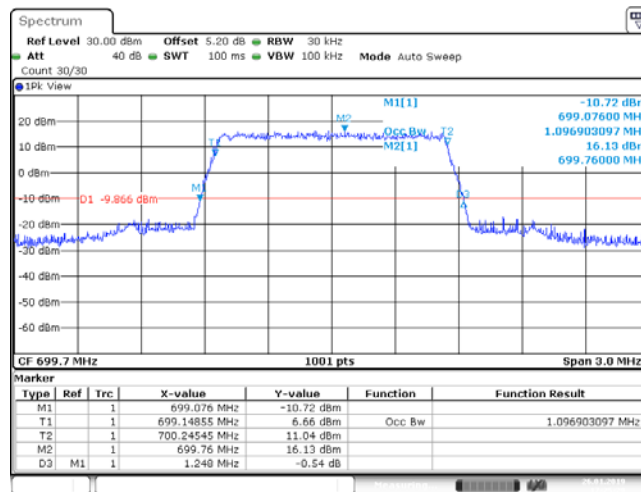
Band12_1.4MHz_64QAM_23173_6RB#0



Date: 28 JAN 2019 22:18:00

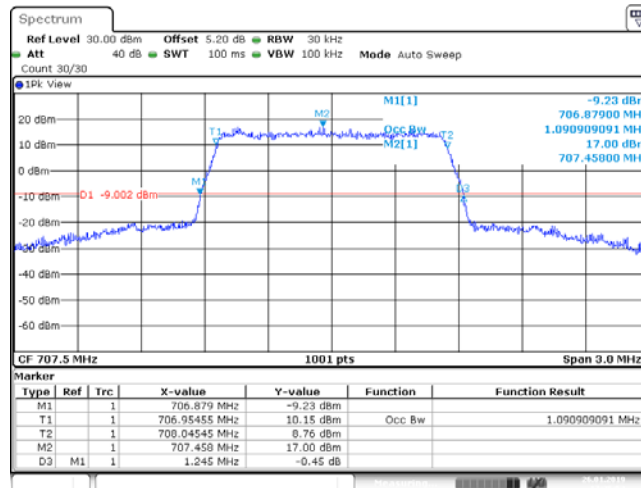
Band12_1.4MHz_16QAM_23017_6RB#0





Date: 26 JAN 2019 17:25:29

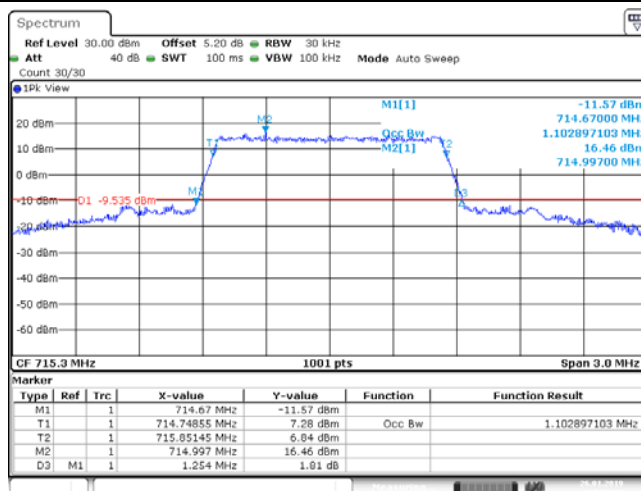
Band12_1.4MHz_16QAM_23095_6RB#0



Date: 26 JAN 2019 17:25:53

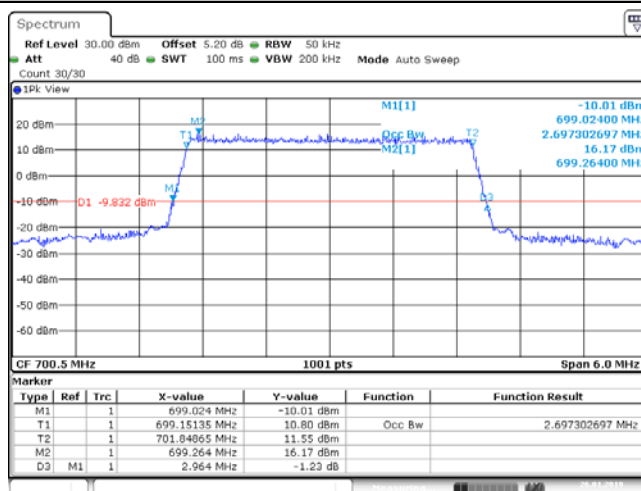
Band12_1.4MHz_16QAM_23173_6RB#0





Date: 26 JAN 2019 17:26:16

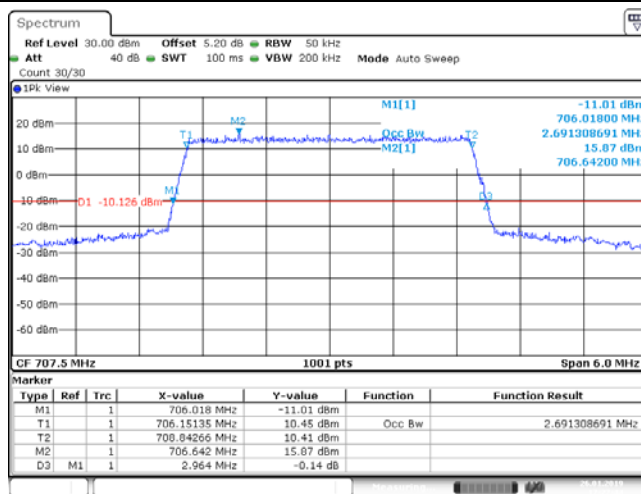
Band12_3MHz_QPSK_23025_15RB#0



Date: 26 JAN 2019 17:27:01

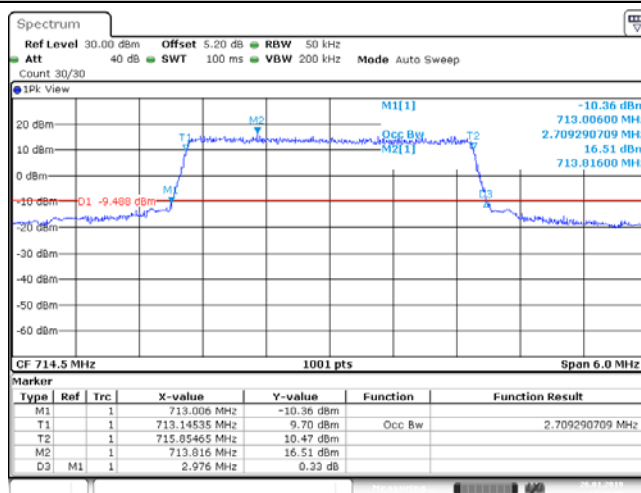
Band12_3MHz_QPSK_23095_15RB#0





Date: 26 JAN 2019 17:27:44

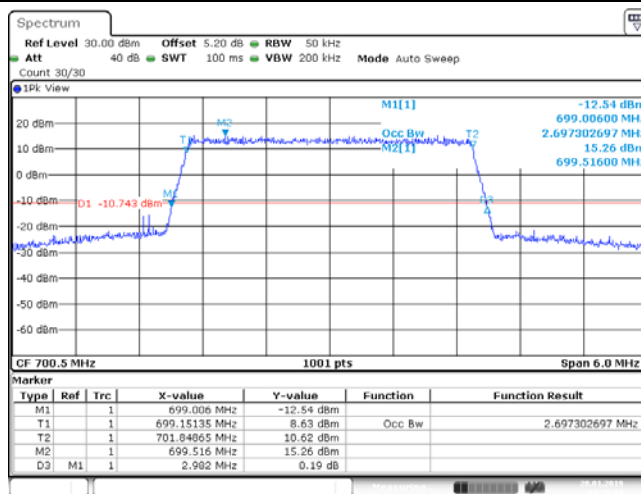
Band12_3MHz_QPSK_23165_15RB#0



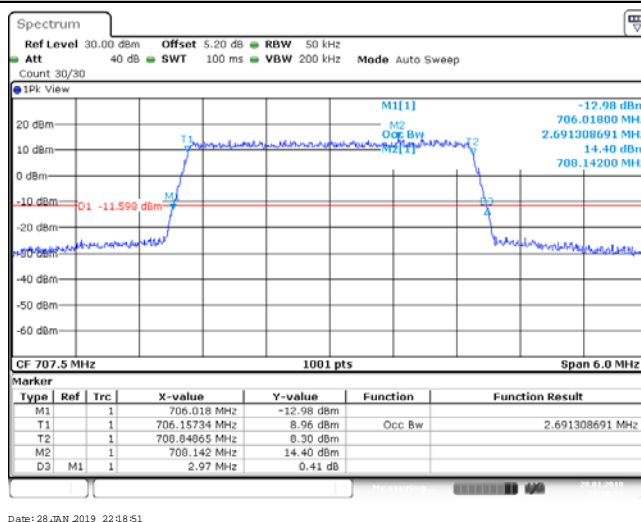
Date: 26 JAN 2019 17:28:07

Band12_3MHz_64QAM_23025_15RB#0



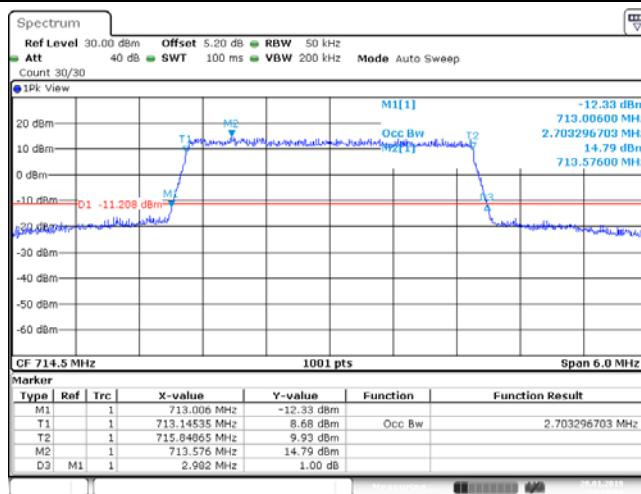


Band12_3MHz_64QAM_23095_15RB#0



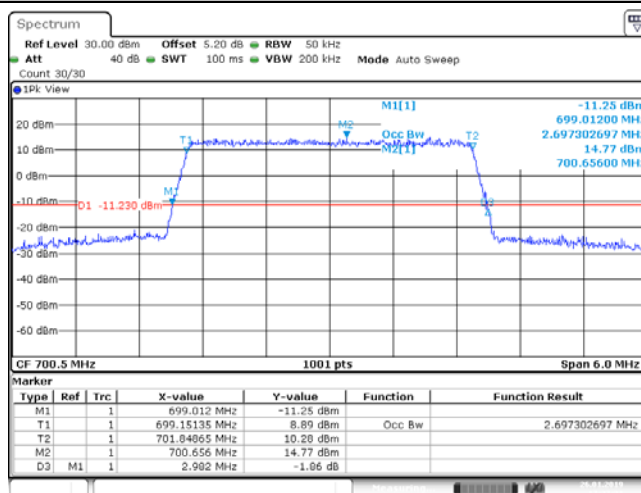
Band12_3MHz_64QAM_23165_15RB#0





Date: 28 JAN 2019 22:19:05

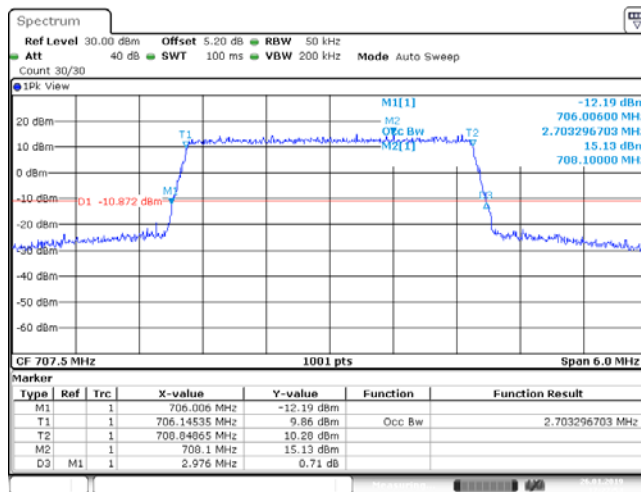
Band12_3MHz_16QAM_23025_15RB#0



Date: 26 JAN 2019 17:27:31

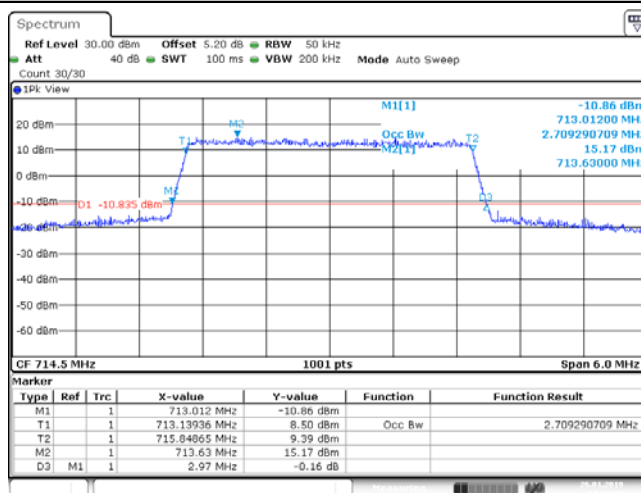
Band12_3MHz_16QAM_23095_15RB#0





Date: 26 JAN 2019 17:27:54

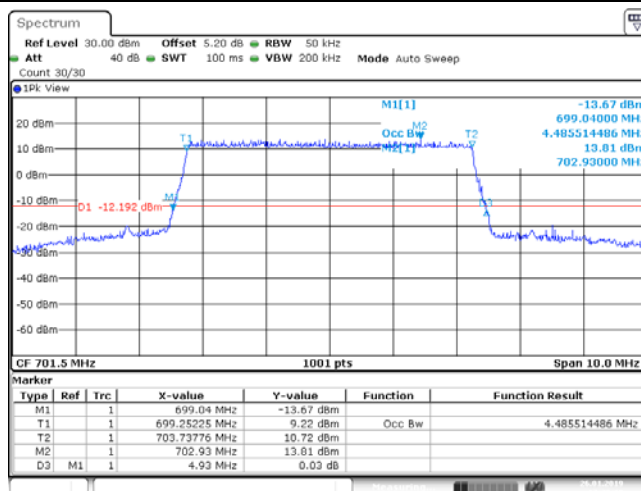
Band12_3MHz_16QAM_23165_15RB#0



Date: 26 JAN 2019 17:28:17

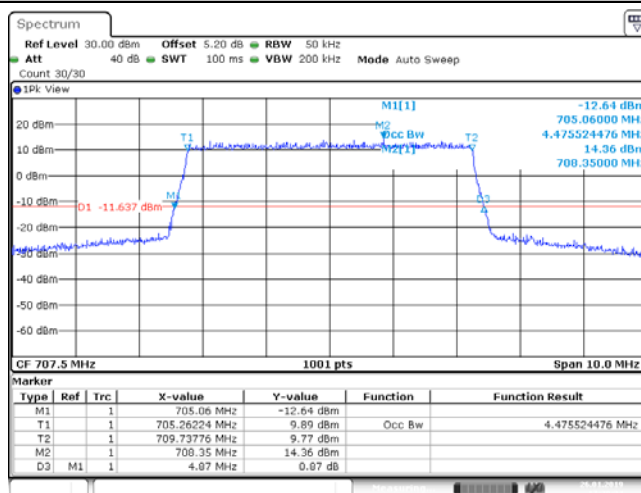
Band12_5MHz_QPSK_23035_25RB#0





Date: 26 JAN 2019 17:29:11

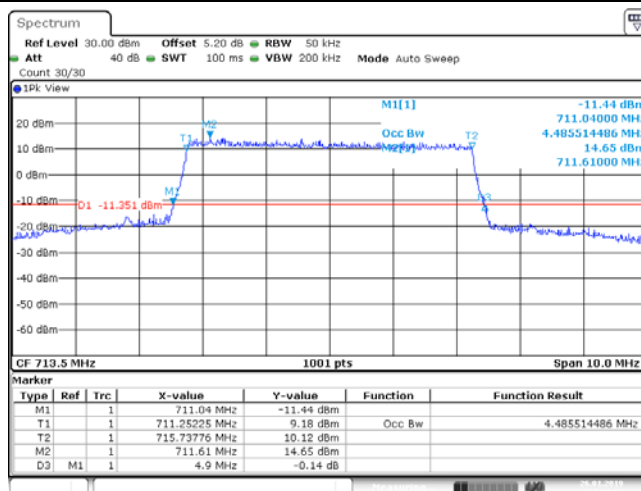
Band12_5MHz_QPSK_23095_25RB#0



Date: 26 JAN 2019 17:29:34

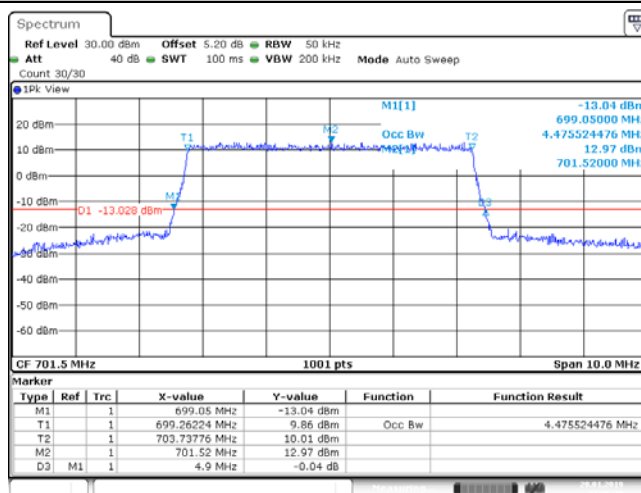
Band12_5MHz_QPSK_23155_25RB#0





Date: 26 JAN 2019 17:29:57

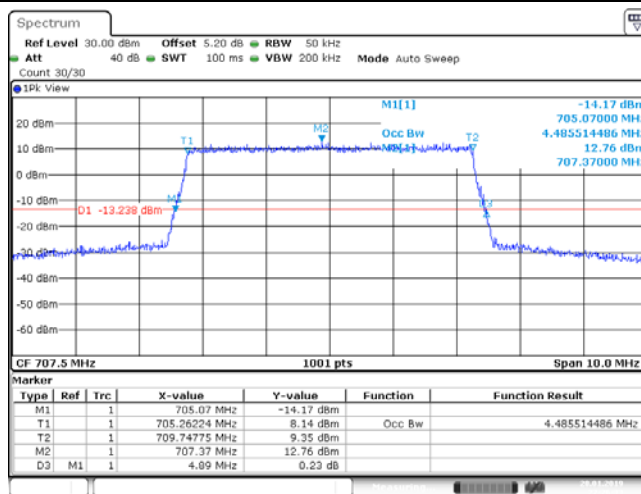
Band12_5MHz_64QAM_23035_25RB#0



Date: 28 JAN 2019 22:06:01

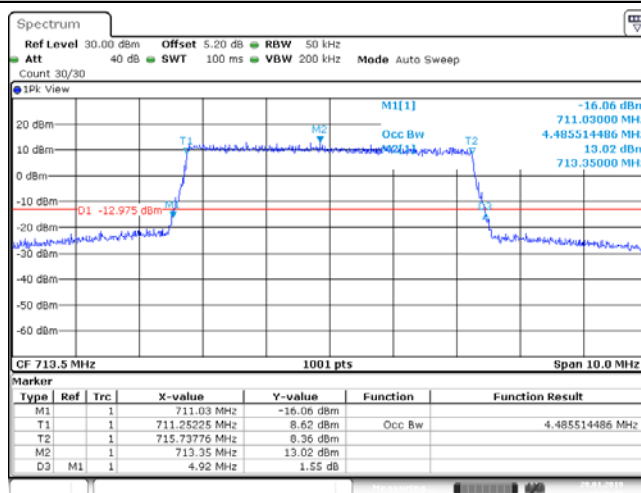
Band12_5MHz_64QAM_23095_25RB#0





Date: 28 JAN 2019 22:26:34

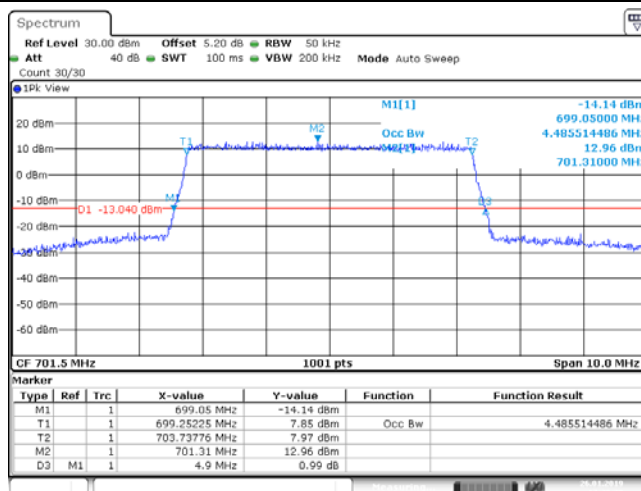
Band12_5MHz_64QAM_23155_25RB#0



Date: 28 JAN 2019 22:26:47

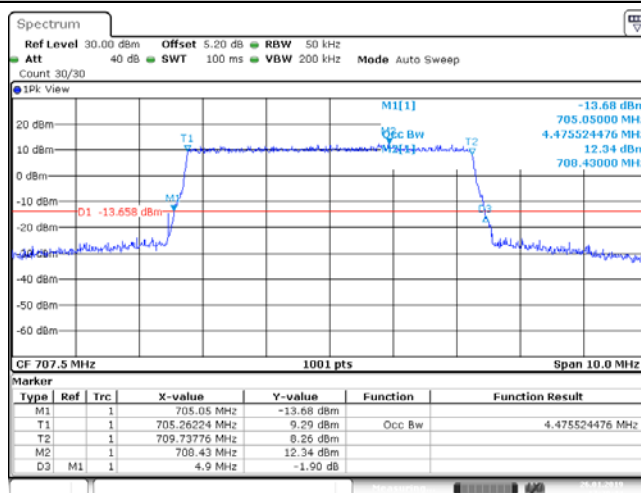
Band12_5MHz_16QAM_23035_25RB#0





Date: 26 JAN 2019 17:29:21

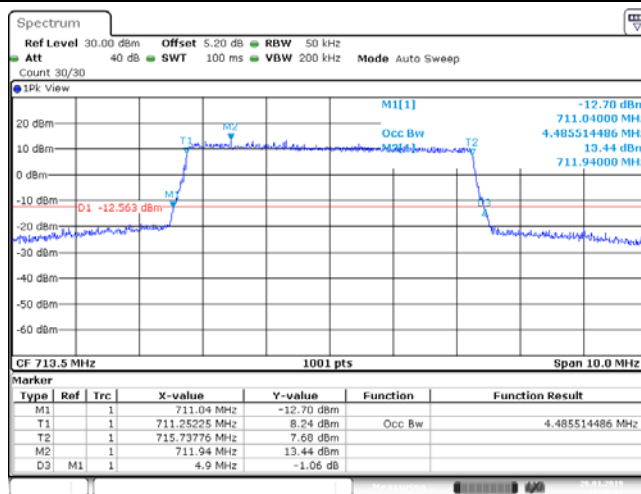
Band12_5MHz_16QAM_23095_25RB#0



Date: 26 JAN 2019 17:29:44

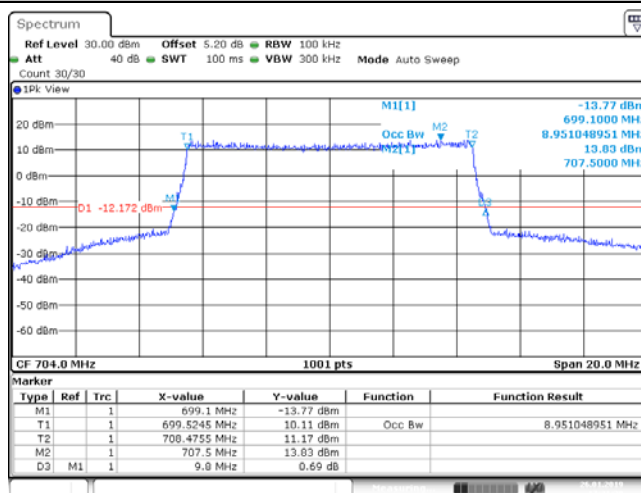
Band12_5MHz_16QAM_23155_25RB#0





Date: 26 JAN 2019 17:30:07

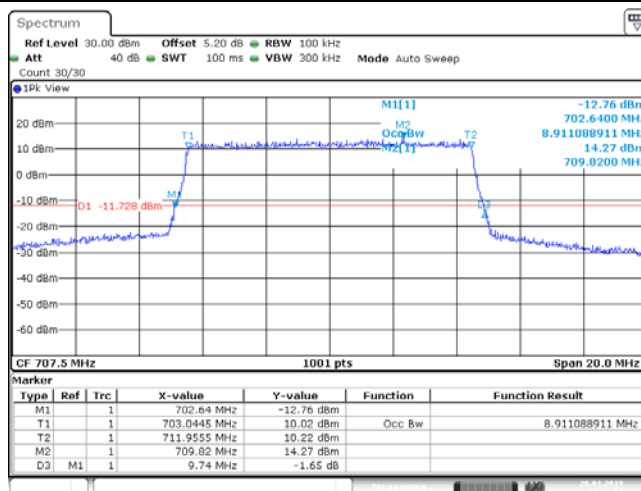
Band12_10MHz_QPSK_23060_50RB#0



Date: 26 JAN 2019 17:31:08

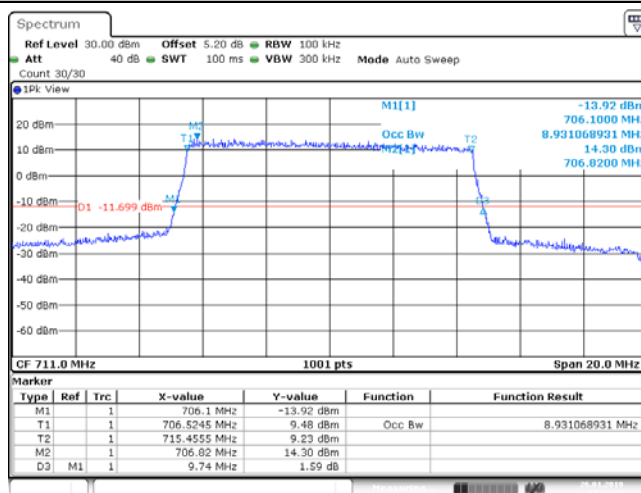
Band12_10MHz_QPSK_23095_50RB#0





Date: 26 JAN 2019 17:31:51

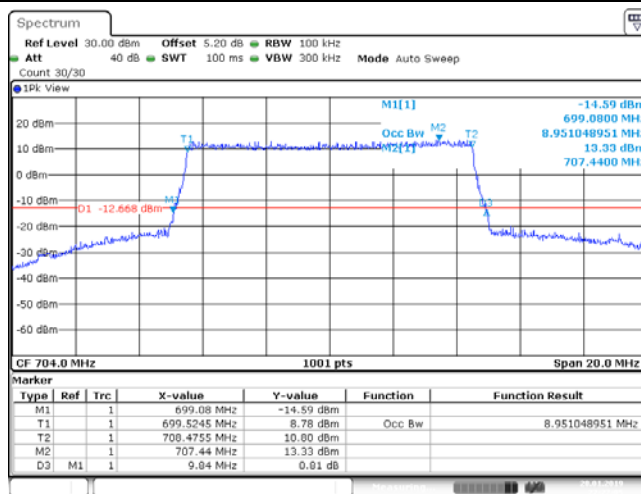
Band12_10MHz_QPSK_23130_50RB#0



Date: 26 JAN 2019 17:32:16

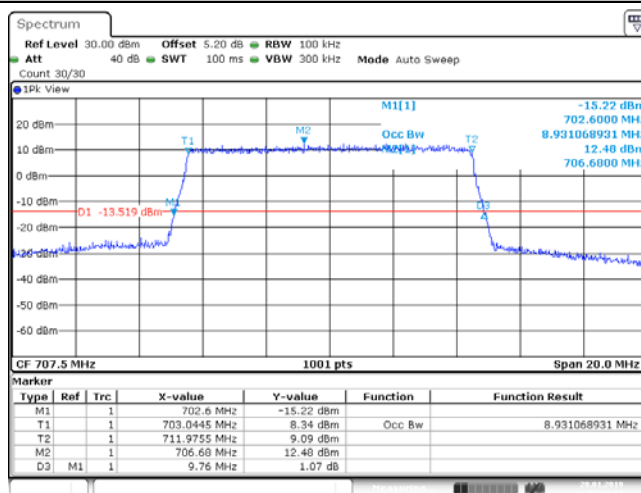
Band12_10MHz_64QAM_23060_50RB#0





Date: 28 JAN 2019 22:27:05

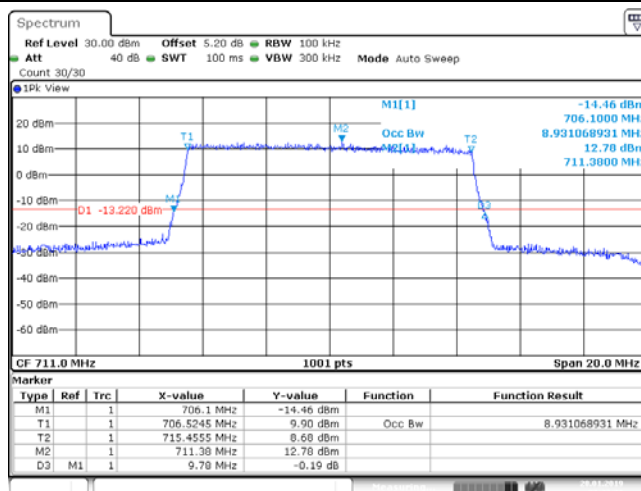
Band12_10MHz_64QAM_23095_50RB#0



Date: 28 JAN 2019 22:27:18

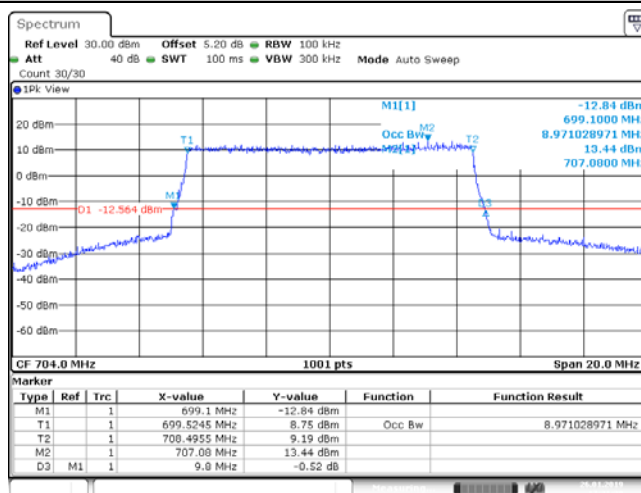
Band12_10MHz_64QAM_23130_50RB#0





Date: 28 JAN 2019 22:27:32

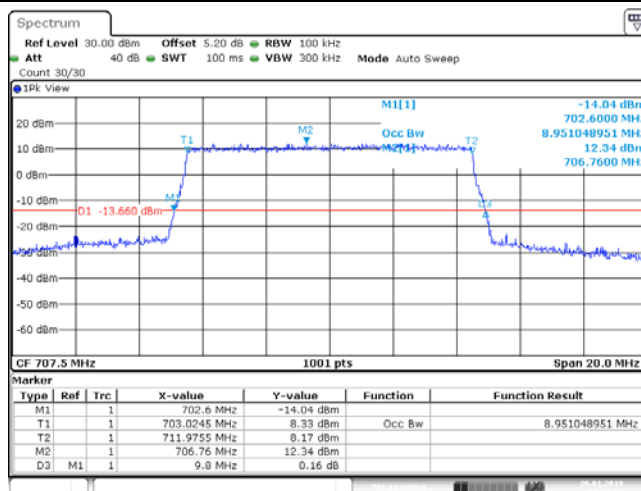
Band12_10MHz_16QAM_23060_50RB#0



Date: 26 JAN 2019 17:31:38

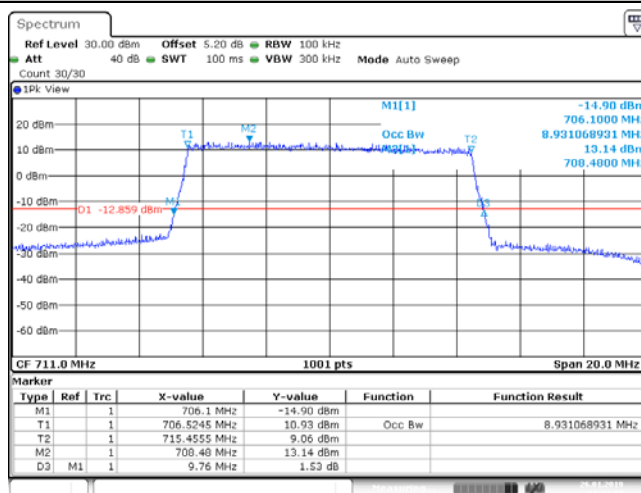
Band12_10MHz_16QAM_23095_50RB#0





Date: 26 JAN 2019 17:32:04

Band12_10MHz_16QAM_23130_50RB#0



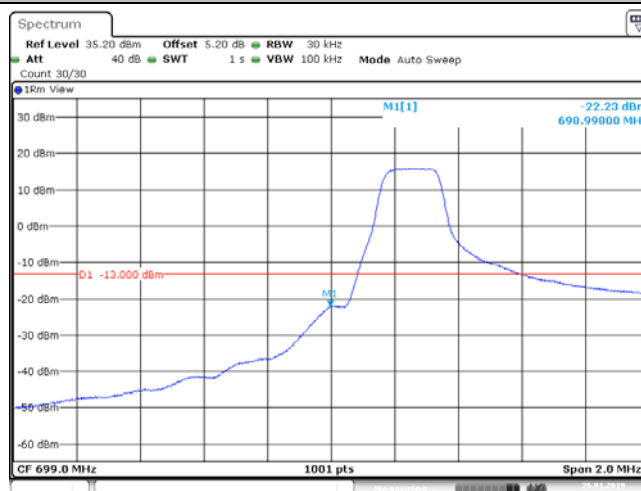
Date: 26 JAN 2019 17:32:27



5. Band Edge Compliance

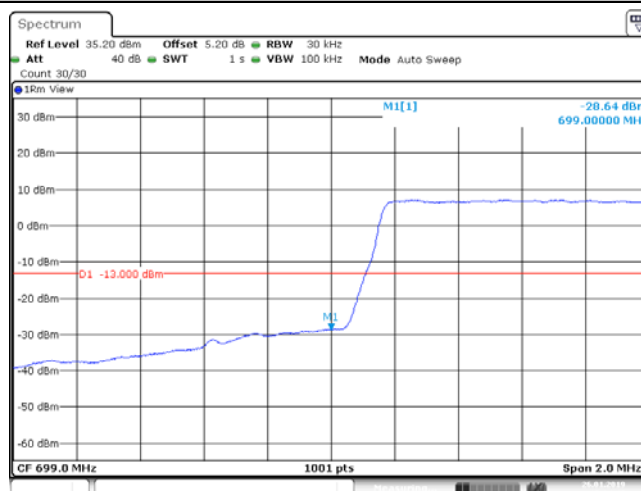
5.1. Test Plots

Band12_1.4MHz_QPSK_23017_1RB#0



Date: 26 JAN 2019 17:33:19

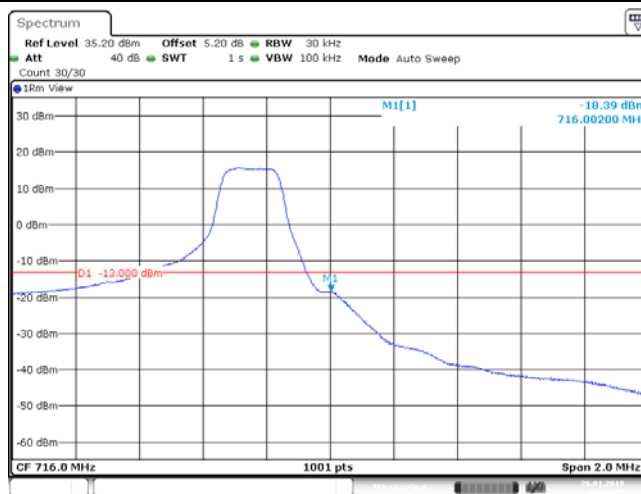
Band12_1.4MHz_QPSK_23017_6RB#0



Date: 26 JAN 2019 17:34:46

Band12_1.4MHz_QPSK_23173_1RB#5





Date: 26 JAN 2019 17:36:23

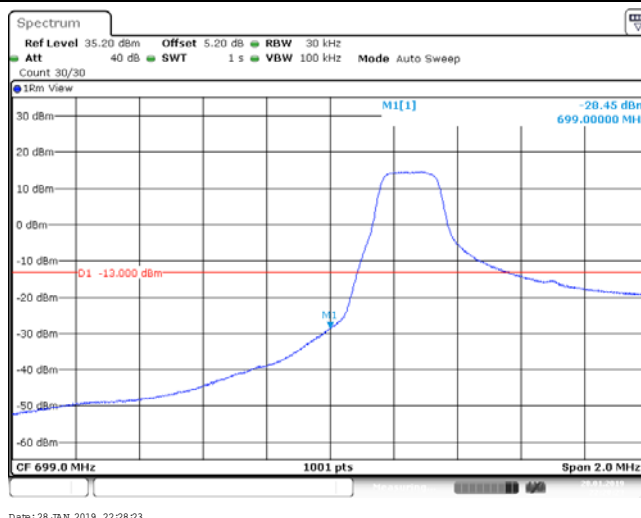
Band12_1.4MHz_QPSK_23173_6RB#0



Date: 26 JAN 2019 17:37:51

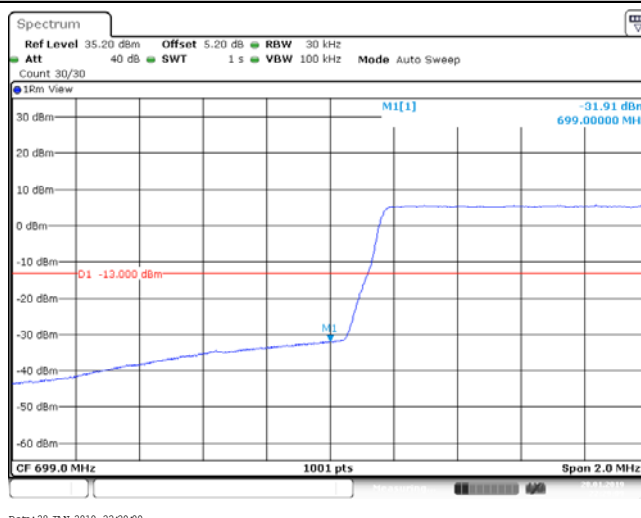
Band12_1.4MHz_64QAM_23017_1RB#0





Date: 28 JAN 2019 22:28:23

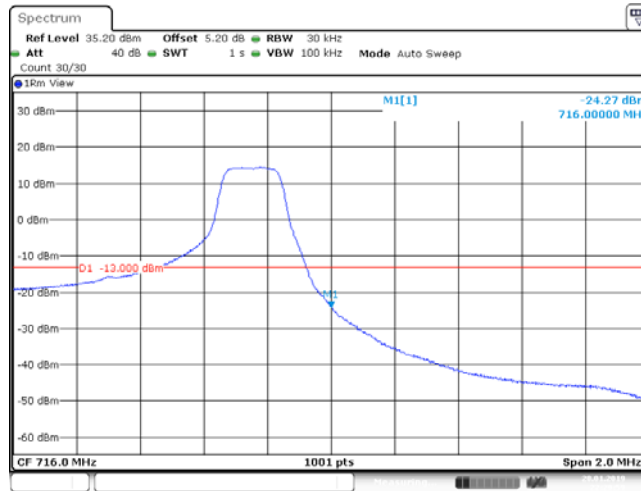
Band12_1.4MHz_64QAM_23017_6RB#0



Date: 28 JAN 2019 22:29:09

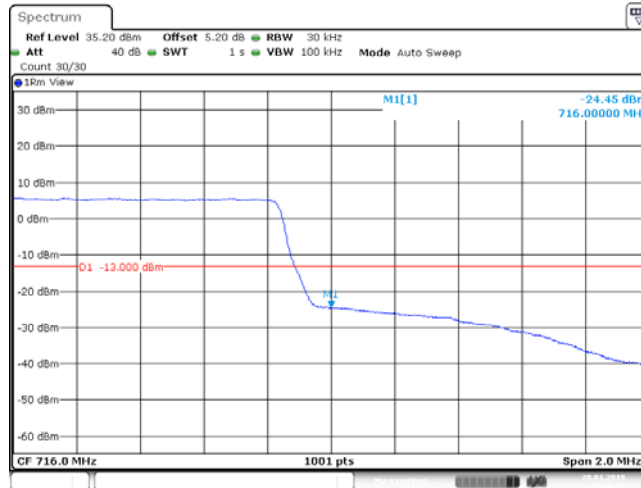
Band12_1.4MHz_64QAM_23173_1RB#5





Date: 28 JAN 2019 22:29:59

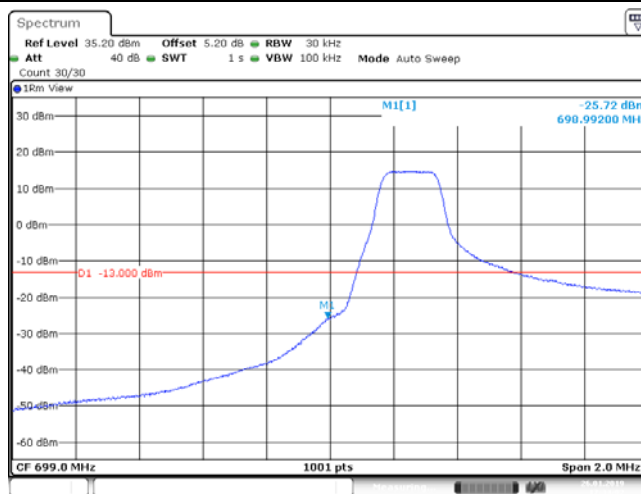
Band12_1.4MHz_64QAM_23173_6RB#0



Date: 28 JAN 2019 22:30:45

Band12_1.4MHz_16QAM_23017_1RB#0





Date: 26 JAN 2019 17:34:02

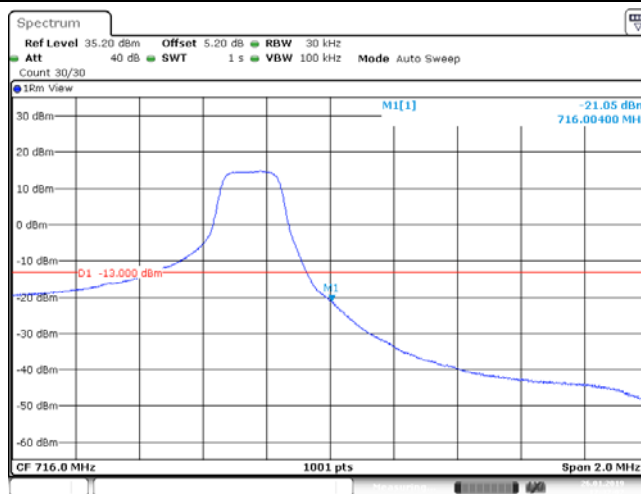
Band12_1.4MHz_16QAM_23017_6RB#0



Date: 26 JAN 2019 17:35:29

Band12_1.4MHz_16QAM_23173_1RB#5





Date: 26 JAN 2019 17:37:08

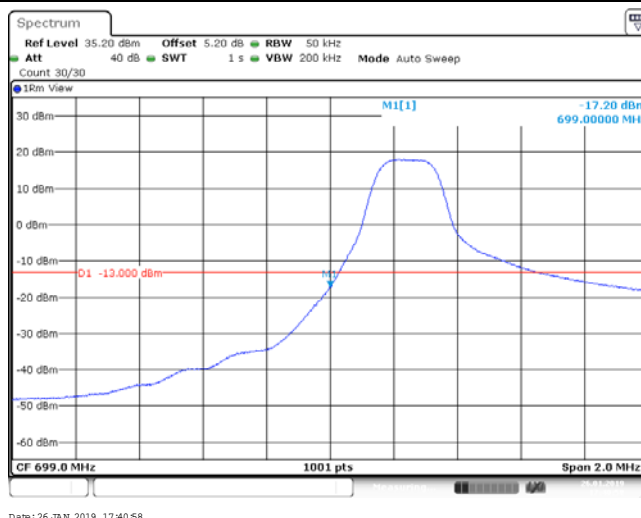
Band12_1.4MHz_16QAM_23173_6RB#0



Date: 26 JAN 2019 17:38:35

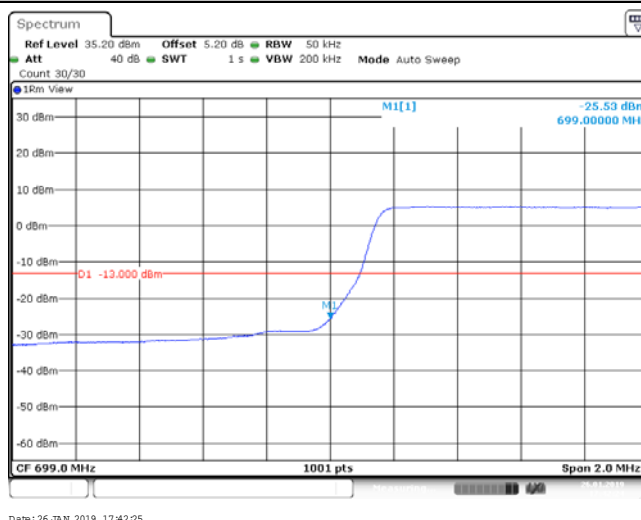
Band12_3MHz_QPSK_23025_1RB#0





Date: 26 JAN 2019 17:40:58

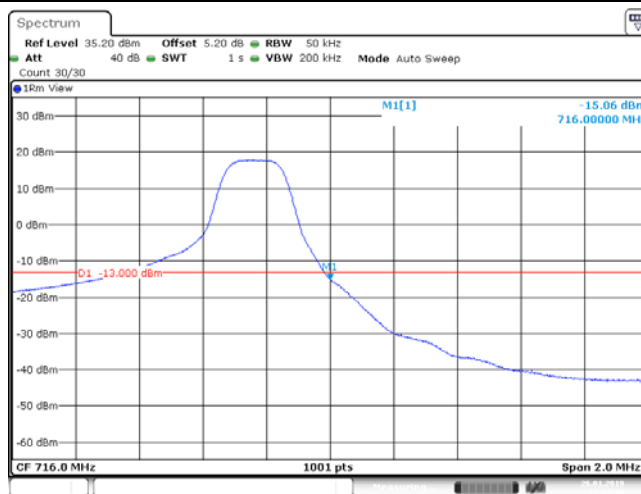
Band12_3MHz_QPSK_23025_15RB#0



Date: 26 JAN 2019 17:42:25

Band12_3MHz_QPSK_23165_1RB#14





Date: 26 JAN 2019 17:43:59

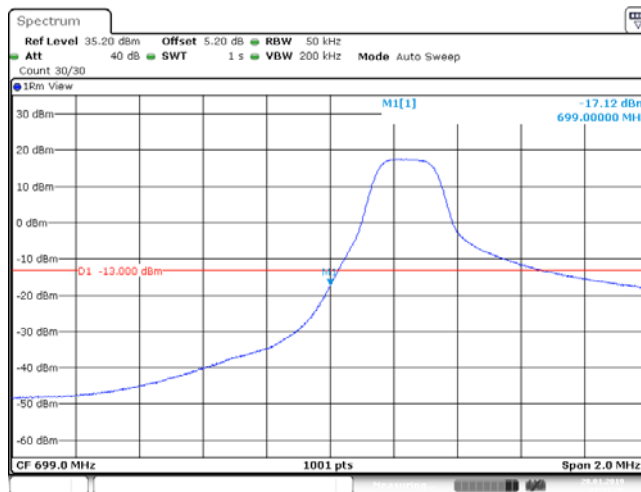
Band12_3MHz_QPSK_23165_15RB#0



Date: 26 JAN 2019 17:45:26

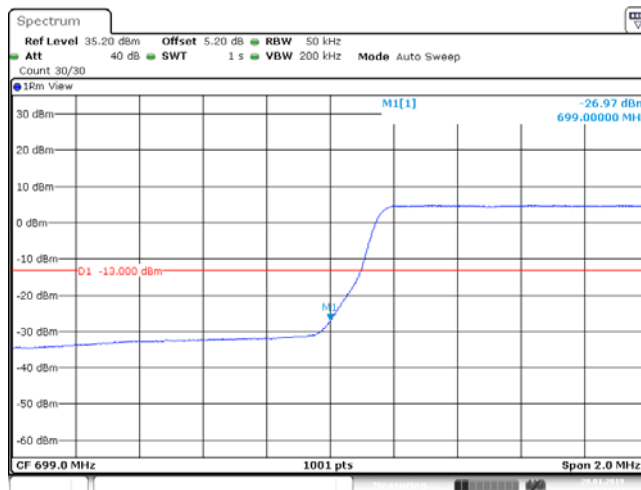
Band12_3MHz_64QAM_23025_1RB#0





Date: 28 JAN 2019 22:31:36

Band12_3MHz_64QAM_23025_15RB#0



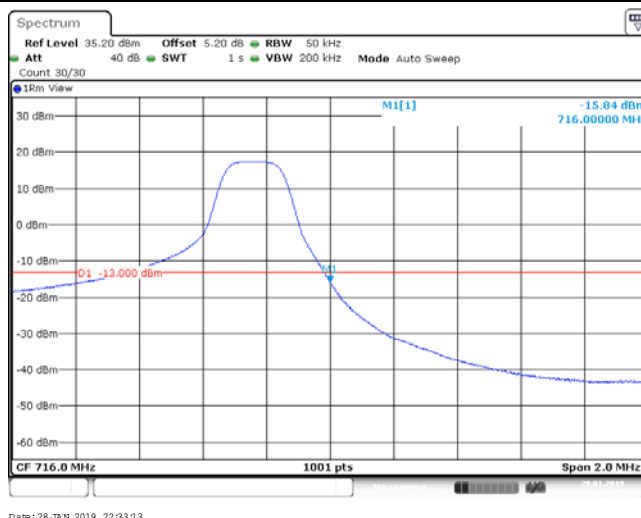
Date: 28 JAN 2019 22:32:23

Band12_3MHz_64QAM_23165_1RB#14

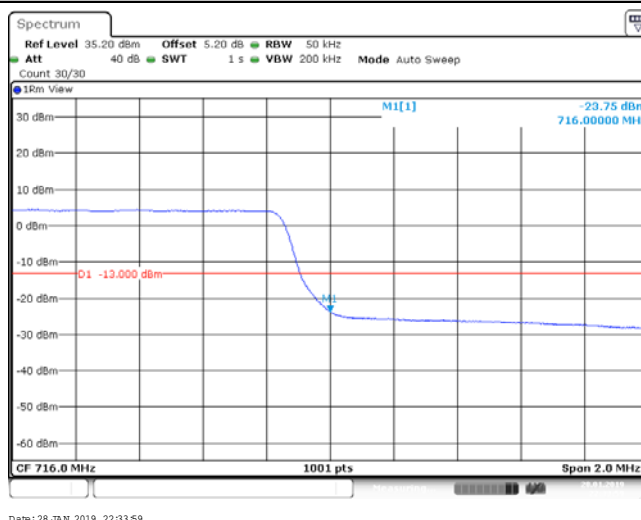


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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

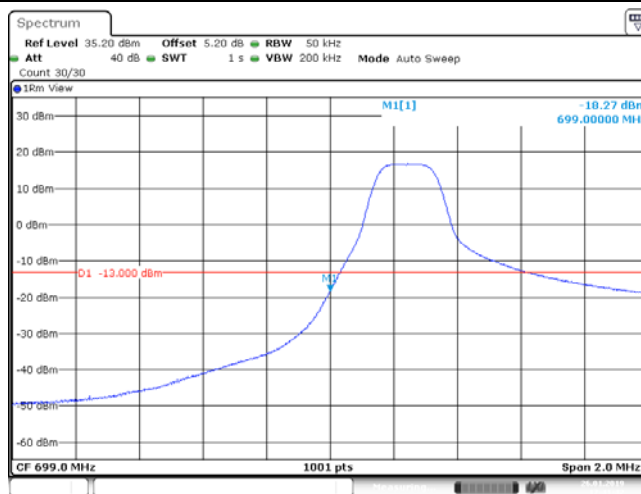


Band12_3MHz_64QAM_23165_15RB#0



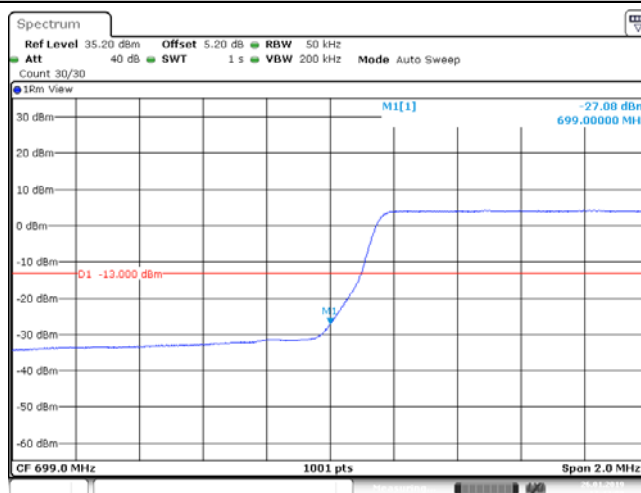
Band12_3MHz_16QAM_23025_1RB#0





Date: 26 JAN 2019 17:41:42

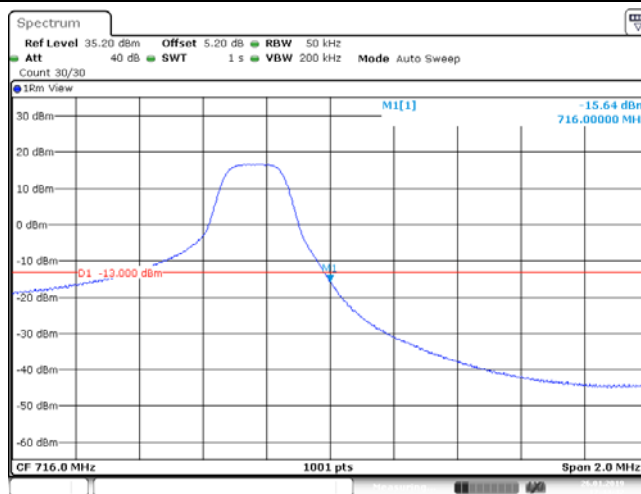
Band12_3MHz_16QAM_23025_15RB#0



Date: 26 JAN 2019 17:43:08

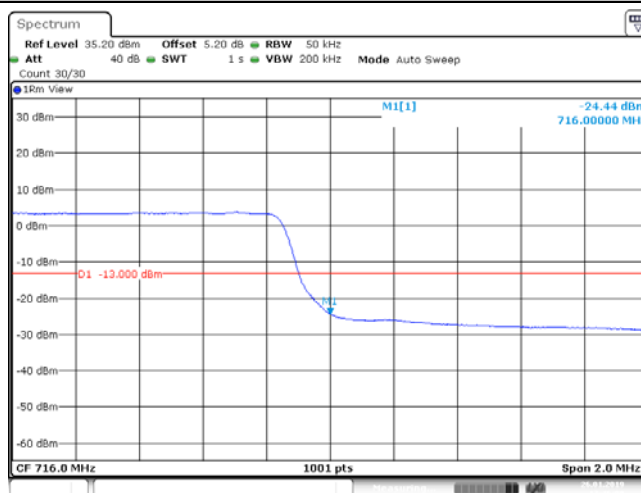
Band12_3MHz_16QAM_23165_1RB#14





Date: 26 JAN 2019 17:44:42

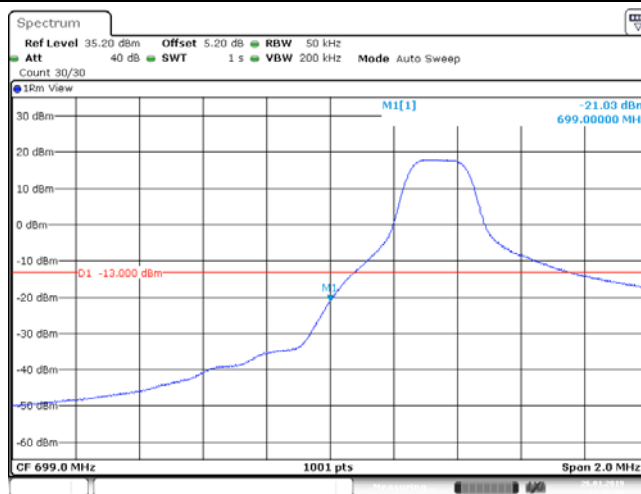
Band12_3MHz_16QAM_23165_15RB#0



Date: 26 JAN 2019 17:46:09

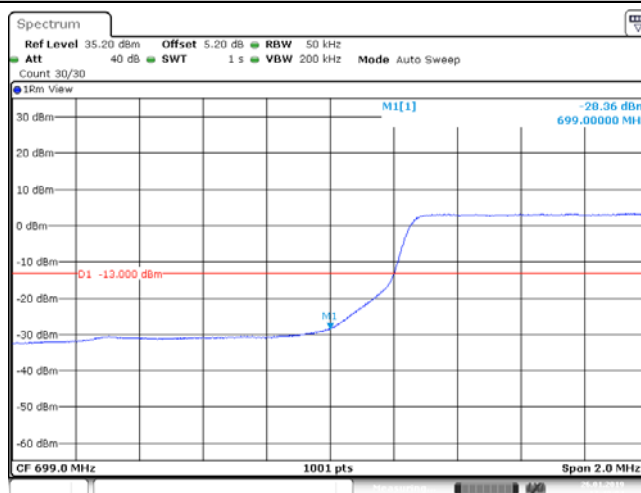
Band12_5MHz_QPSK_23035_1RB#0





Date: 26 JAN 2019 17:47:38

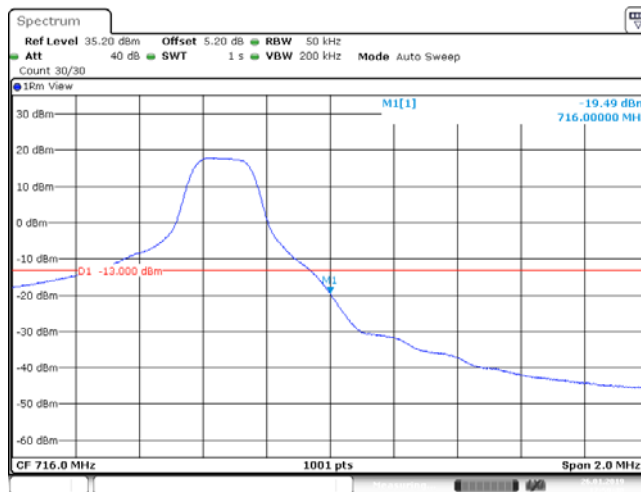
Band12_5MHz_QPSK_23035_25RB#0



Date: 26 JAN 2019 17:49:04

Band12_5MHz_QPSK_23155_1RB#24





Date: 26 JAN 2019 17:50:41

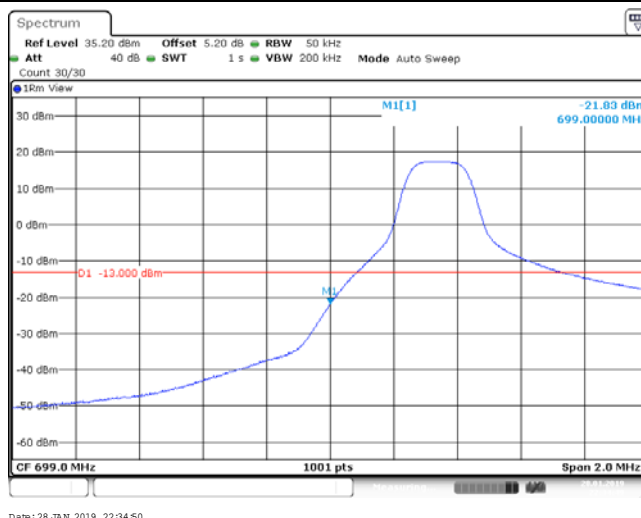
Band12_5MHz_QPSK_23155_25RB#0



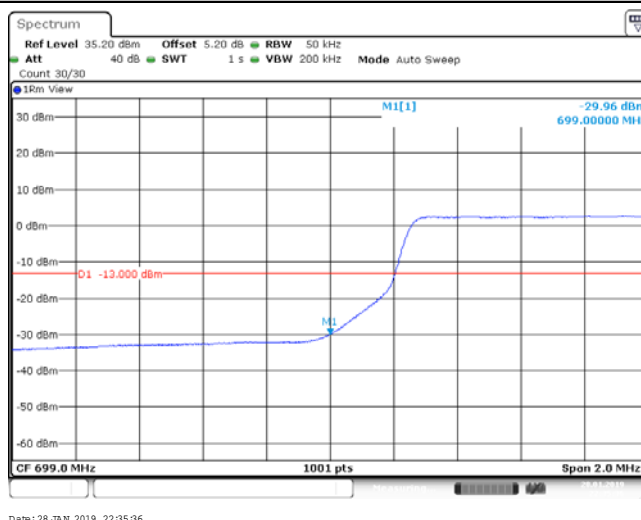
Date: 26 JAN 2019 17:52:10

Band12_5MHz_64QAM_23035_1RB#0



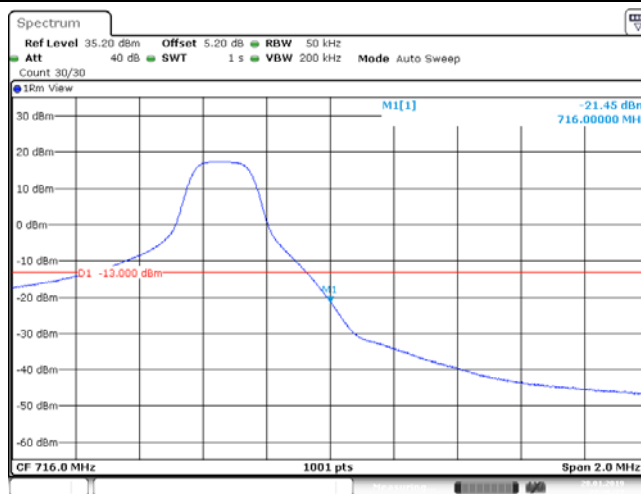


Band12_5MHz_64QAM_23035_25RB#0



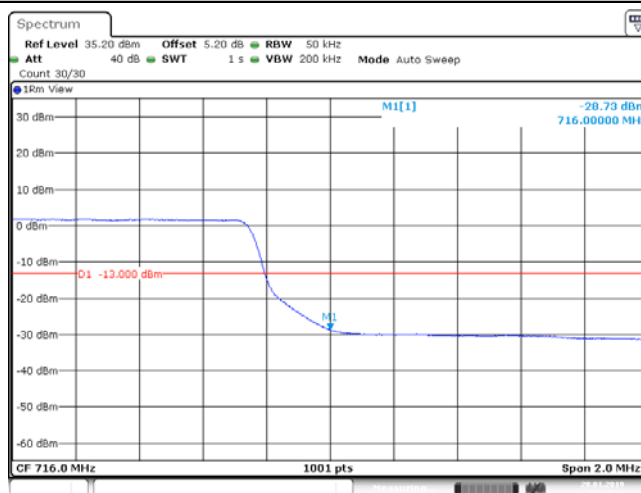
Band12_5MHz_64QAM_23155_1RB#24





Date: 28 JAN 2019 22:36:27

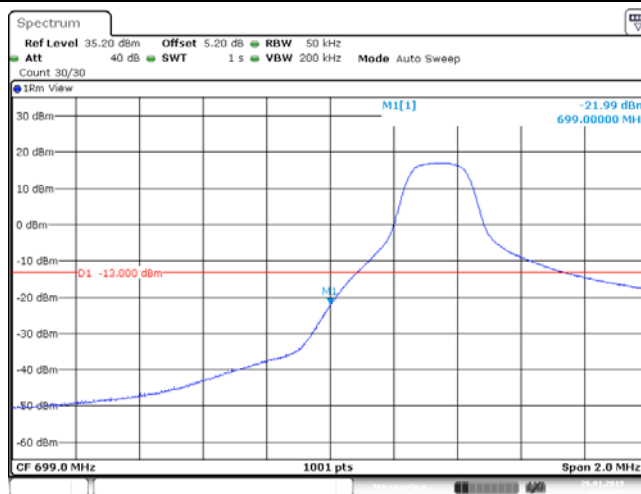
Band12_5MHz_64QAM_23155_25RB#0



Date: 28 JAN 2019 22:37:13

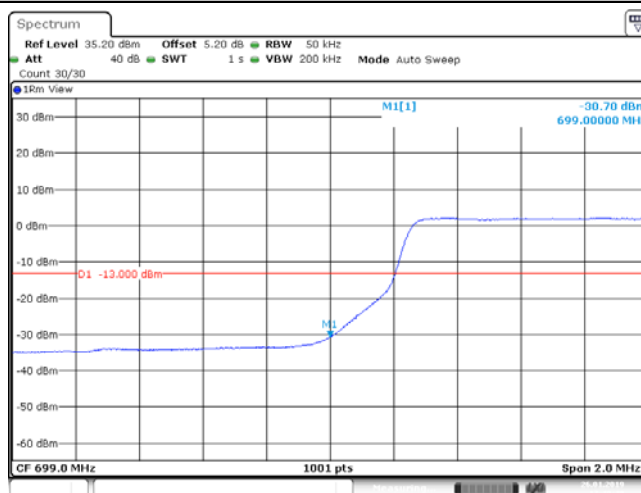
Band12_5MHz_16QAM_23035_1RB#0





Date: 26 JAN 2019 17:48:21

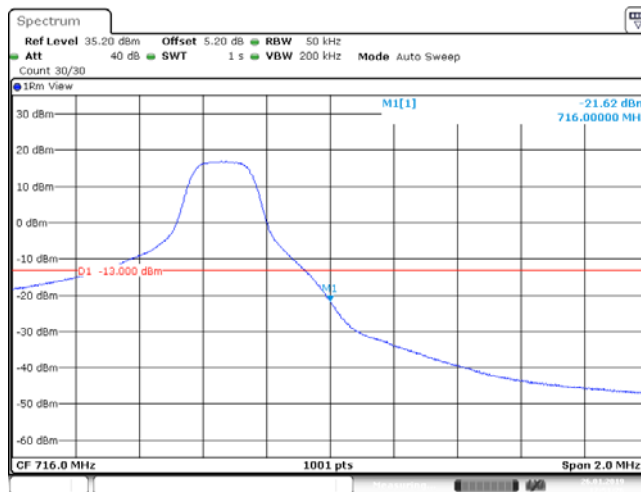
Band12_5MHz_16QAM_23035_25RB#0



Date: 26 JAN 2019 17:49:49

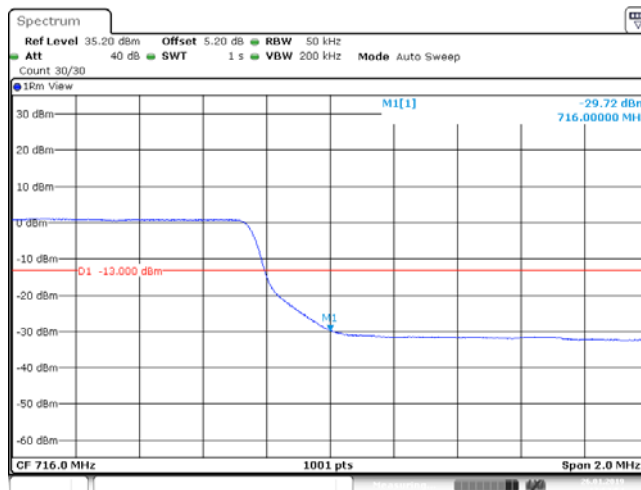
Band12_5MHz_16QAM_23155_1RB#24





Date: 26 JAN 2019 17:51:26

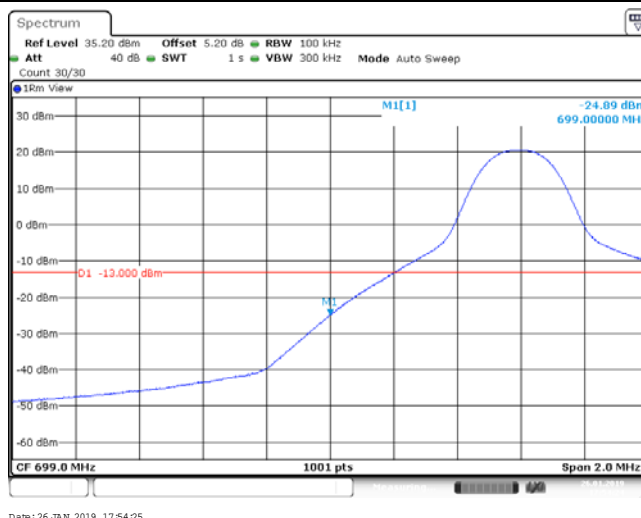
Band12_5MHz_16QAM_23155_25RB#0



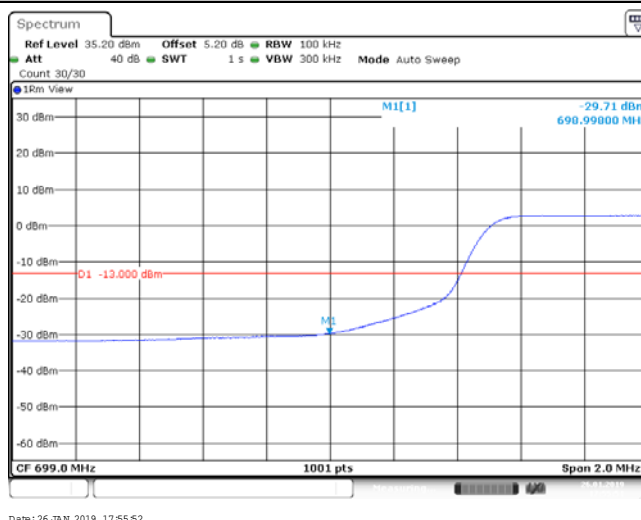
Date: 26 JAN 2019 17:52:54

Band12_10MHz_QPSK_23060_1RB#0





Band12_10MHz_QPSK_23060_50RB#0

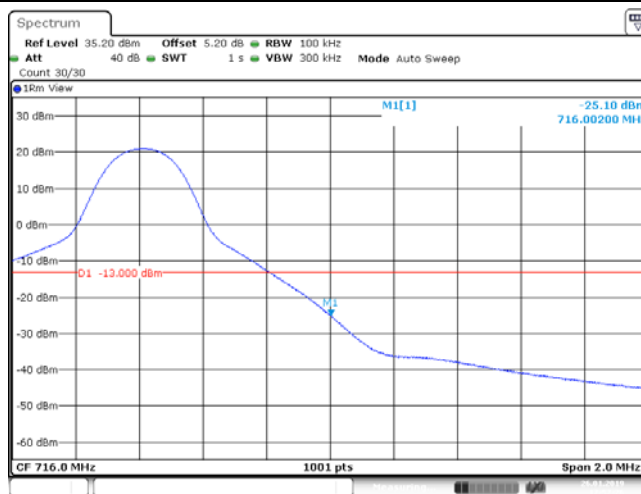


Band12_10MHz_QPSK_23130_1RB#49



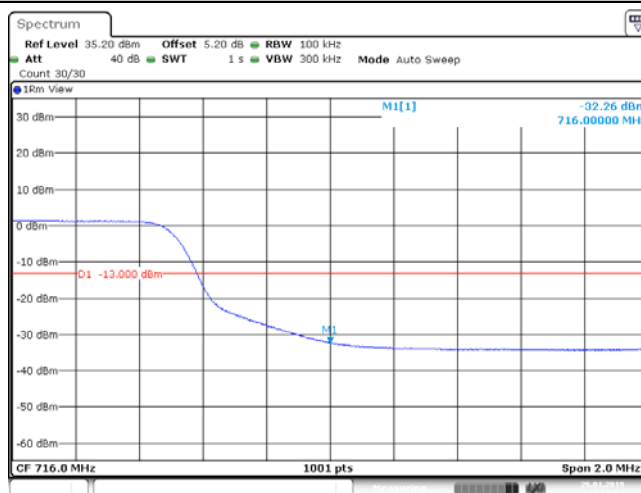
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic 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



Date: 26 JAN 2019 17:57:26

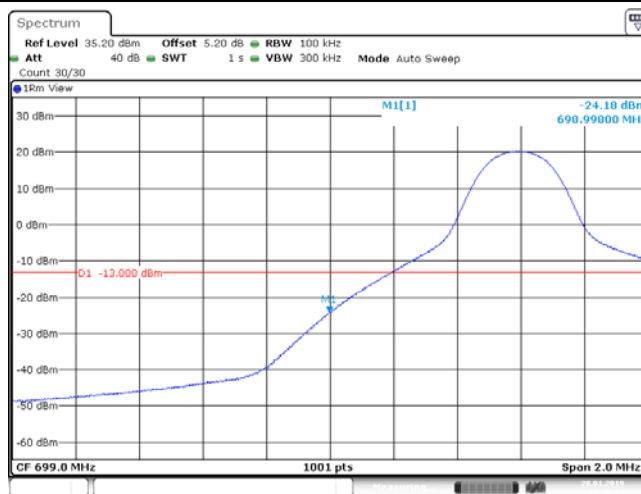
Band12_10MHz_QPSK_23130_50RB#0



Date: 26 JAN 2019 17:58:54

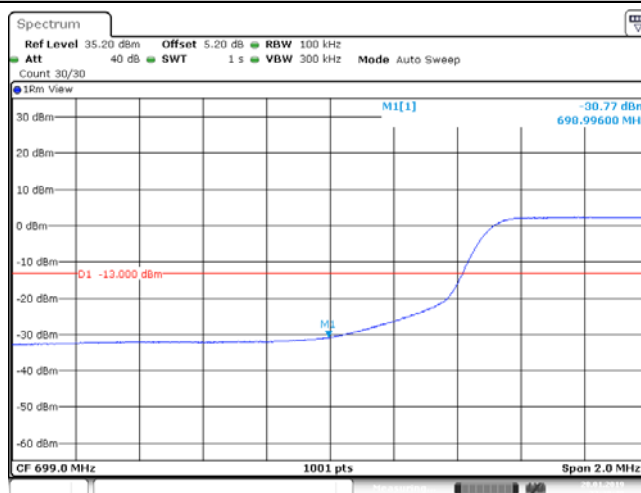
Band12_10MHz_64QAM_23060_1RB#0





Date: 28 JAN 2019 22:38:04

Band12_10MHz_64QAM_23060_50RB#0



Date: 28 JAN 2019 22:38:49

Band12_10MHz_64QAM_23130_1RB#49

