1 of 67 Page:

# Appendix B

E-UTRA Band 66



2 of 67 Page:

#### CONTENT

1	EFFI	ECTIVE (ISOTROPIC) RADIATED POWER	3
	1.1.	TEST RESULT	3
2.	PEA	AK-TO-AVERAGE RATIO (CCDF)	<u>c</u>
	2.1.	TEST RESULT	
	2.2.	TEST PLOTS	<u>c</u>
3.	МО	DULATION CHARACTERISTICS	13
	3.1.	TEST MODE = LTE /TM1 20MHz	13
	3.1.1.	Test Channel = MCH	13
	3.2.	TEST MODE = LTE /TM2 20MHz	14
	3.2.1.	TEST CHANNEL = MCH	14
4.	26D	OB BANDWIDTH AND OCCUPIED BANDWIDTH	15
	4.1.	TEST RESULT	15
	4.2.	TEST PLOTS	16
5.	BAN	ND EDGE COMPLIANCE	34
	5.1.	TEST PLOTS	34
6.	SPU	JRIOUS EMISSION AT ANTENNA TERMINAL	58
	6.1.	TEST PLOTS	58
7.	FIEL	LD STRENGTH OF SPURIOUS RADIATION	64
	7.1.	TEST MODE =LTE/TM1 20MHz	64
	7.1.1.	Test Channel = LCH	64
	7.1.2.	Test Channel = MCH	64
	7.1.3.	TEST CHANNEL = HCH	65
8.	FRE	QUENCY STABILITY	66
	8.1.	Frequency Vs Voltage	66
	8.2.	Frequency Vs Temperature	66



Page: 3 of 67

#### 1 Effective (Isotropic) Radiated Power

#### 1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band66	1.4MHz	QPSK	131979	1RB#0	23.26	25.10	30.00	PASS
Band66	1.4MHz	QPSK	131979	1RB#2	23.45	25.29	30.00	PASS
Band66	1.4MHz	QPSK	131979	1RB#5	23.32	25.16	30.00	PASS
Band66	1.4MHz	QPSK	131979	3RB#1	23.15	24.99	30.00	PASS
Band66	1.4MHz	QPSK	131979	3RB#0	23.42	25.26	30.00	PASS
Band66	1.4MHz	QPSK	131979	3RB#3	23.23	25.07	30.00	PASS
Band66	1.4MHz	QPSK	131979	6RB#0	22.27	24.11	30.00	PASS
Band66	1.4MHz	QPSK	132322	1RB#5	23.05	24.89	30.00	PASS
Band66	1.4MHz	QPSK	132322	1RB#0	23.47	25.31	30.00	PASS
Band66	1.4MHz	QPSK	132322	1RB#2	23.16	25.00	30.00	PASS
Band66	1.4MHz	QPSK	132322	3RB#0	23.12	24.96	30.00	PASS
Band66	1.4MHz	QPSK	132322	3RB#1	23.43	25.27	30.00	PASS
Band66	1.4MHz	QPSK	132322	3RB#3	23.03	24.87	30.00	PASS
Band66	1.4MHz	QPSK	132322	6RB#0	22.33	24.17	30.00	PASS
Band66	1.4MHz	QPSK	132665	1RB#2	23.08	24.92	30.00	PASS
Band66	1.4MHz	QPSK	132665	1RB#5	23.35	25.19	30.00	PASS
Band66	1.4MHz	QPSK	132665	1RB#0	23.24	25.19	30.00	PASS
Band66	1.4MHz	QPSK	132665	3RB#0	23.12	24.96	30.00	PASS
Band66	1.4MHz	QPSK	132665	3RB#3	23.32	25.16	30.00	PASS
Band66	1.4MHz	QPSK	132665	3RB#1	23.20	25.10	30.00	PASS
Band66	1.4MHz	QPSK	132665	6RB#0	22.28	24.12	30.00	PASS
Band66	1.4MHz	16QAM	131979	1RB#2	22.70	24.12	30.00	PASS
Band66	1.4MHz	16QAM	131979	1RB#2 1RB#5	21.96	23.80	30.00	PASS
Band66	1.4MHz	16QAM	131979	1RB#0	21.90	24.63	30.00	PASS
	1.4MHz							PASS
Band66 Band66	1.4MHz	16QAM 16QAM	131979 131979	3RB#0 3RB#1	22.30 22.31	24.14 24.15	30.00 30.00	PASS
Band66	1.4MHz	16QAM	131979	3RB#3	22.35	24.19	30.00	PASS
	1.4MHz							PASS
Band66 Band66	1.4MHz	16QAM 16QAM	131979 132322	6RB#0 1RB#5	21.36 22.65	23.20	30.00	PASS
	1.4MHz			1RB#0		24.49 24.63		
Band66		16QAM	132322		22.79		30.00	PASS
Band66	1.4MHz	16QAM	132322	1RB#2	22.76	24.60	30.00	PASS
Band66	1.4MHz	16QAM	132322	3RB#3	22.07	23.91	30.00	PASS
Band66	1.4MHz	16QAM	132322	3RB#1	22.28	24.12	30.00	PASS
Band66	1.4MHz	16QAM	132322	3RB#0	22.31	24.15	30.00	PASS
Band66	1.4MHz	16QAM	132322	6RB#0	21.31	23.15	30.00	PASS
Band66	1.4MHz	16QAM	132665	1RB#2	22.63	24.47	30.00	PASS
Band66	1.4MHz	16QAM	132665	1RB#5	22.70	24.54	30.00	PASS
Band66	1.4MHz	16QAM	132665	1RB#0	22.66	24.50	30.00	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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.com

or email: CM.Doccheck@sgs\_com Mo.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・科技図中区M-10栋一号厂房 邮第: 518057 t (86–755) 26012053 f (86–755) 26710594 sgs.china@sgs.com



Report No.: ZR/2019/A000601

4 of 67 Page:

Band66	1.4MHz	16QAM	132665	3RB#3	22.26	24.10	30.00	PASS
Band66	1.4MHz	16QAM	132665	3RB#1	22.34	24.18	30.00	PASS
Band66	1.4MHz	16QAM	132665	3RB#0	22.35	24.19	30.00	PASS
Band66	1.4MHz	16QAM	132665	6RB#0	21.32	23.16	30.00	PASS
Band66	3MHz	QPSK	131987	1RB#14	23.18	25.02	30.00	PASS
Band66	3MHz	QPSK	131987	1RB#0	23.43	25.27	30.00	PASS
Band66	3MHz	QPSK	131987	1RB#8	23.23	25.07	30.00	PASS
Band66	3MHz	QPSK	131987	8RB#7	22.36	24.20	30.00	PASS
Band66	3MHz	QPSK	131987	8RB#4	22.28	24.12	30.00	PASS
Band66	3MHz	QPSK	131987	8RB#0	22.41	24.25	30.00	PASS
Band66	3MHz	QPSK	131987	15RB#0	22.37	24.21	30.00	PASS
Band66	3MHz	QPSK	132322	1RB#14	23.18	25.02	30.00	PASS
Band66	3MHz	QPSK	132322	1RB#8	23.51	25.35	30.00	PASS
Band66	3MHz	QPSK	132322	1RB#0	23.16	25.00	30.00	PASS
Band66	3MHz	QPSK	132322	8RB#7	22.08	23.92	30.00	PASS
Band66	3MHz	QPSK	132322	8RB#0	22.32	24.16	30.00	PASS
Band66	3MHz	QPSK	132322	8RB#4	22.33	24.17	30.00	PASS
Band66	3MHz	QPSK	132322	15RB#0	22.32	24.16	30.00	PASS
Band66	3MHz	QPSK	132657	1RB#14	23.08	24.92	30.00	PASS
Band66	3MHz	QPSK	132657	1RB#8	23.40	25.24	30.00	PASS
Band66	3MHz	QPSK	132657	1RB#0	23.18	25.02	30.00	PASS
Band66	3MHz	QPSK	132657	8RB#4	22.19	24.03	30.00	PASS
Band66	3MHz	QPSK	132657	8RB#0	22.31	24.15	30.00	PASS
Band66	3MHz	QPSK	132657	8RB#7	22.41	24.25	30.00	PASS
Band66	3MHz	QPSK	132657	15RB#0	22.34	24.18	30.00	PASS
Band66	3MHz	16QAM	131987	1RB#8	22.76	24.60	30.00	PASS
Band66	3MHz	16QAM	131987	1RB#14	21.98	23.82	30.00	PASS
Band66	3MHz	16QAM	131987	1RB#0	22.70	24.54	30.00	PASS
Band66	3MHz	16QAM	131987	8RB#0	21.44	23.28	30.00	PASS
Band66	3MHz	16QAM	131987	8RB#7	21.44	23.28	30.00	PASS
Band66	3MHz	16QAM	131987	8RB#4	21.33	23.17	30.00	PASS
Band66	3MHz	16QAM	131987	15RB#0	21.37	23.21	30.00	PASS
Band66	3MHz	16QAM	132322	1RB#8	22.60	24.44	30.00	PASS
Band66	3MHz	16QAM	132322	1RB#14	22.78	24.62	30.00	PASS
Band66	3MHz	16QAM	132322	1RB#0	22.73	24.57	30.00	PASS
Band66	3MHz	16QAM	132322	8RB#4	21.15	22.99	30.00	PASS
Band66	3MHz	16QAM	132322	8RB#0	21.17	23.01	30.00	PASS
Band66	3MHz	16QAM	132322	8RB#7	21.17	23.07	30.00	PASS
Band66	3MHz	16QAM	132322	15RB#0	21.18	23.02	30.00	PASS
Band66	3MHz	16QAM	132657	1RB#14	22.61	24.45	30.00	PASS
Band66	3MHz	16QAM	132657	1RB#0	22.70	24.54	30.00	PASS
Band66	3MHz	16QAM	132657	1RB#8	22.72	24.56	30.00	PASS
Band66	3MHz	16QAM	132657	8RB#0	21.34	23.18	30.00	PASS
Band66	3MHz	16QAM	132657	8RB#7	21.34	23.16	30.00	PASS
Band66	3MHz	16QAM	132657	8RB#4	21.39	23.23	30.00	PASS
Band66								
-	3MHz	16QAM	132657	15RB#0	21.32	23.16	30.00	PASS
Band66	5MHz	QPSK	131997	1RB#24	23.24	25.08	30.00	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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx.and">http://www.sgs.com/en/Terms-and-Conditions.aspx.and</a>, or electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.</a>
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 south sample(s) extend as uncharged the retained for 30 days only.

Attention: To check the authenticity of testing inspection report a certificate, please contact us at telephone: (85-755) 8307 1443,

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



Report No.: ZR/2019/A000601

5 of 67 Page:

		T	ı		T	T	1	T
Band66	5MHz	QPSK	131997	1RB#12	23.46	25.30	30.00	PASS
Band66	5MHz	QPSK	131997	1RB#0	23.32	25.16	30.00	PASS
Band66	5MHz	QPSK	131997	12RB#6	22.27	24.11	30.00	PASS
Band66	5MHz	QPSK	131997	12RB#0	22.38	24.22	30.00	PASS
Band66	5MHz	QPSK	131997	12RB#13	22.38	24.22	30.00	PASS
Band66	5MHz	QPSK	131997	25RB#0	22.34	24.18	30.00	PASS
Band66	5MHz	QPSK	132322	1RB#24	23.17	25.01	30.00	PASS
Band66	5MHz	QPSK	132322	1RB#0	23.43	25.27	30.00	PASS
Band66	5MHz	QPSK	132322	1RB#12	23.03	24.87	30.00	PASS
Band66	5MHz	QPSK	132322	12RB#6	22.16	24.00	30.00	PASS
Band66	5MHz	QPSK	132322	12RB#0	22.37	24.21	30.00	PASS
Band66	5MHz	QPSK	132322	12RB#13	22.39	24.23	30.00	PASS
Band66	5MHz	QPSK	132322	25RB#0	22.32	24.16	30.00	PASS
Band66	5MHz	QPSK	132647	1RB#0	23.08	24.92	30.00	PASS
Band66	5MHz	QPSK	132647	1RB#12	23.37	25.21	30.00	PASS
Band66	5MHz	QPSK	132647	1RB#24	23.12	24.96	30.00	PASS
Band66	5MHz	QPSK	132647	12RB#0	22.20	24.04	30.00	PASS
Band66	5MHz	QPSK	132647	12RB#6	22.42	24.26	30.00	PASS
Band66	5MHz	QPSK	132647	12RB#13	22.39	24.23	30.00	PASS
Band66	5MHz	QPSK	132647	25RB#0	22.40	24.24	30.00	PASS
Band66	5MHz	16QAM	131997	1RB#0	22.71	24.24	30.00	PASS
Band66	5MHz	16QAM	131997	1RB#12	22.04	23.88	30.00	PASS
Band66	5MHz	16QAM	131997	1RB#24	22.74	24.58	30.00	PASS
Band66	5MHz	16QAM	131997	12RB#13	21.49	23.33	30.00	PASS
Band66	5MHz	16QAM	131997	12RB#13	21.49	23.28	30.00	PASS
Band66	5MHz	16QAM	131997	12RB#6	21.31	23.15	30.00	PASS
Band66	5MHz	16QAM	131997	25RB#0	21.33	23.17	30.00	PASS
Band66	5MHz	16QAM	132322	1RB#0	22.65	24.49	30.00	PASS
Band66	5MHz	16QAM	132322	1RB#12	22.69	24.53	30.00	PASS
Band66	5MHz	16QAM	132322	1RB#24	22.69	24.53	30.00	PASS
Band66	5MHz	16QAM	132322	12RB#0	21.01	22.85	30.00	PASS
Band66	5MHz	16QAM	132322	12RB#13	21.28	23.12	30.00	PASS
Band66	5MHz	16QAM	132322	12RB#6	21.20	23.04	30.00	PASS
Band66	5MHz	16QAM	132322	25RB#0	21.31	23.15	30.00	PASS
Band66	5MHz	16QAM	132647	1RB#0	22.60	24.44	30.00	PASS
Band66	5MHz	16QAM	132647	1RB#24	22.77	24.61	30.00	PASS
Band66	5MHz	16QAM	132647	1RB#12	22.68	24.52	30.00	PASS
Band66	5MHz	16QAM	132647	12RB#0	21.33	23.17	30.00	PASS
Band66	5MHz	16QAM	132647	12RB#6	21.39	23.23	30.00	PASS
Band66	5MHz	16QAM	132647	12RB#13	21.38	23.22	30.00	PASS
Band66	5MHz	16QAM	132647	25RB#0	21.44	23.28	30.00	PASS
Band66	10MHz	QPSK	132022	1RB#0	23.19	25.03	30.00	PASS
Band66	10MHz	QPSK	132022	1RB#24	23.49	25.33	30.00	PASS
Band66	10MHz	QPSK	132022	1RB#49	23.28	25.12	30.00	PASS
Band66	10MHz	QPSK	132022	25RB#12	22.27	24.11	30.00	PASS
Band66	10MHz	QPSK	132022	25RB#0	22.34	24.18	30.00	PASS
Band66	10MHz	QPSK	132022	25RB#25	22.42	24.26	30.00	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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue 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 attention, 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 2 certificate, please contact us at telephone: (86-755) 8307 1443, versual: Company and the content of the

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



Report No.: ZR/2019/A000601

6 of 67 Page:

		T	T		Τ	1	1	
Band66	10MHz	QPSK	132022	50RB#0	22.36	24.20	30.00	PASS
Band66	10MHz	QPSK	132322	1RB#49	23.10	24.94	30.00	PASS
Band66	10MHz	QPSK	132322	1RB#0	23.50	25.34	30.00	PASS
Band66	10MHz	QPSK	132322	1RB#24	23.03	24.87	30.00	PASS
Band66	10MHz	QPSK	132322	25RB#0	22.09	23.93	30.00	PASS
Band66	10MHz	QPSK	132322	25RB#12	22.43	24.27	30.00	PASS
Band66	10MHz	QPSK	132322	25RB#25	22.34	24.18	30.00	PASS
Band66	10MHz	QPSK	132322	50RB#0	22.37	24.21	30.00	PASS
Band66	10MHz	QPSK	132622	1RB#24	23.12	24.96	30.00	PASS
Band66	10MHz	QPSK	132622	1RB#49	23.35	25.19	30.00	PASS
Band66	10MHz	QPSK	132622	1RB#0	23.21	25.05	30.00	PASS
Band66	10MHz	QPSK	132622	25RB#0	22.19	24.03	30.00	PASS
Band66	10MHz	QPSK	132622	25RB#25	22.39	24.23	30.00	PASS
Band66	10MHz	QPSK	132622	25RB#12	22.36	24.20	30.00	PASS
Band66	10MHz	QPSK	132622	50RB#0	22.38	24.22	30.00	PASS
Band66	10MHz	16QAM	132022	1RB#24	22.76	24.60	30.00	PASS
Band66	10MHz	16QAM	132022	1RB#49	22.05	23.89	30.00	PASS
Band66	10MHz	16QAM	132022	1RB#0	22.73	24.57	30.00	PASS
Band66	10MHz	16QAM	132022	25RB#0	21.37	23.21	30.00	PASS
Band66	10MHz	16QAM	132022	25RB#12	21.44	23.28	30.00	PASS
Band66	10MHz	16QAM	132022	25RB#25	21.37	23.21	30.00	PASS
Band66	10MHz	16QAM	132022	50RB#0	21.37	23.21	30.00	PASS
Band66	10MHz	16QAM	132322	1RB#49	22.60	24.44	30.00	PASS
Band66	10MHz	16QAM	132322	1RB#0	22.78	24.62	30.00	PASS
Band66	10MHz	16QAM	132322	1RB#24	22.78	24.62	30.00	PASS
Band66	10MHz	16QAM	132322	25RB#25	21.01	22.85	30.00	PASS
Band66	10MHz	16QAM	132322	25RB#12	21.28	23.12	30.00	PASS
Band66	10MHz	16QAM	132322	25RB#0	21.34	23.18	30.00	PASS
Band66	10MHz	16QAM	132322	50RB#0	21.32	23.16	30.00	PASS
Band66	10MHz	16QAM	132622	1RB#24	22.55	24.39	30.00	PASS
Band66	10MHz	16QAM	132622	1RB#49	22.69	24.53	30.00	PASS
Band66	10MHz	16QAM	132622	1RB#0	22.68	24.52	30.00	PASS
Band66	10MHz	16QAM	132622	25RB#25	21.41	23.25	30.00	PASS
Band66	10MHz	16QAM	132622	25RB#12	21.28	23.12	30.00	PASS
Band66	10MHz	16QAM	132622	25RB#0	21.42	23.26	30.00	PASS
Band66	10MHz	16QAM	132622	50RB#0	21.40	23.24	30.00	PASS
Band66	15MHz	QPSK	132047	1RB#74	23.28	25.12	30.00	PASS
Band66	15MHz	QPSK	132047	1RB#0	23.36	25.20	30.00	PASS
Band66	15MHz	QPSK	132047	1RB#38	23.20	25.04	30.00	PASS
Band66	15MHz	QPSK	132047	36RB#39	22.32	24.16	30.00	PASS
Band66	15MHz	QPSK	132047	36RB#18	22.31	24.15	30.00	PASS
Band66	15MHz	QPSK	132047	36RB#0	22.39	24.23	30.00	PASS
Band66	15MHz	QPSK	132047	75RB#0	22.30	24.14	30.00	PASS
Band66	15MHz	QPSK	132322	1RB#74	23.13	24.97	30.00	PASS
Band66	15MHz	QPSK	132322	1RB#38	23.45	25.29	30.00	PASS
Band66	15MHz	QPSK	132322	1RB#0	23.16	25.29	30.00	PASS
Band66	15MHz	QPSK	132322	36RB#0	22.07	23.91	30.00	PASS
Dariuuu	I JIVII IZ	QI SIN	102022	30110#0	22.01	20.81	30.00	1 733



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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx.and">http://www.sgs.com/en/Terms-and-Conditions.aspx.and</a>, or electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.</a>
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 souch sample(s) extend as any letal processes and the sample of the company. Attention. To check the authenticity of testing inspection report a certificate, please contact us at telephone: (85-75) 8307 1443,

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



Report No.: ZR/2019/A000601

7 of 67 Page:

Г			ı		ı	1	ı	1
Band66	15MHz	QPSK	132322	36RB#39	22.33	24.17	30.00	PASS
Band66	15MHz	QPSK	132322	36RB#18	22.30	24.14	30.00	PASS
Band66	15MHz	QPSK	132322	75RB#0	22.34	24.18	30.00	PASS
Band66	15MHz	QPSK	132597	1RB#74	23.08	24.92	30.00	PASS
Band66	15MHz	QPSK	132597	1RB#38	23.45	25.29	30.00	PASS
Band66	15MHz	QPSK	132597	1RB#0	23.20	25.04	30.00	PASS
Band66	15MHz	QPSK	132597	36RB#18	22.32	24.16	30.00	PASS
Band66	15MHz	QPSK	132597	36RB#0	22.40	24.24	30.00	PASS
Band66	15MHz	QPSK	132597	36RB#39	22.35	24.19	30.00	PASS
Band66	15MHz	QPSK	132597	75RB#0	22.33	24.17	30.00	PASS
Band66	15MHz	16QAM	132047	1RB#0	22.73	24.57	30.00	PASS
Band66	15MHz	16QAM	132047	1RB#74	21.91	23.75	30.00	PASS
Band66	15MHz	16QAM	132047	1RB#38	22.77	24.61	30.00	PASS
Band66	15MHz	16QAM	132047	36RB#0	21.39	23.23	30.00	PASS
Band66	15MHz	16QAM	132047	36RB#39	21.40	23.24	30.00	PASS
Band66	15MHz	16QAM	132047	36RB#18	21.43	23.27	30.00	PASS
Band66	15MHz	16QAM	132047	75RB#0	21.40	23.24	30.00	PASS
Band66	15MHz	16QAM	132322	1RB#38	22.60	24.44	30.00	PASS
Band66	15MHz	16QAM	132322	1RB#74	22.77	24.44	30.00	PASS
Band66	15MHz	16QAM	132322	1RB#0	22.71	24.55	30.00	PASS
	15MHz	· ·	132322					
Band66		16QAM		36RB#18	21.11	22.95	30.00	PASS
Band66	15MHz	16QAM	132322	36RB#0	21.26	23.10	30.00	PASS
Band66	15MHz	16QAM	132322	36RB#39	21.33	23.17	30.00	PASS
Band66	15MHz	16QAM	132322	75RB#0	21.22	23.06	30.00	PASS
Band66	15MHz	16QAM	132597	1RB#74	22.69	24.53	30.00	PASS
Band66	15MHz	16QAM	132597	1RB#0	22.75	24.59	30.00	PASS
Band66	15MHz	16QAM	132597	1RB#38	22.63	24.47	30.00	PASS
Band66	15MHz	16QAM	132597	36RB#0	21.33	23.17	30.00	PASS
Band66	15MHz	16QAM	132597	36RB#39	21.38	23.22	30.00	PASS
Band66	15MHz	16QAM	132597	36RB#18	21.30	23.14	30.00	PASS
Band66	15MHz	16QAM	132597	75RB#0	21.36	23.20	30.00	PASS
Band66	20MHz	QPSK	132072	1RB#99	23.39	25.23	30.00	PASS
Band66	20MHz	QPSK	132072	1RB#49	23.61	25.45	30.00	PASS
Band66	20MHz	QPSK	132072	1RB#0	23.43	25.27	30.00	PASS
Band66	20MHz	QPSK	132072	50RB#25	22.50	24.34	30.00	PASS
Band66	20MHz	QPSK	132072	50RB#0	22.53	24.37	30.00	PASS
Band66	20MHz	QPSK	132072	50RB#50	22.52	24.36	30.00	PASS
Band66	20MHz	QPSK	132072	100RB#0	22.51	24.35	30.00	PASS
Band66	20MHz	QPSK	132322	1RB#99	23.29	25.13	30.00	PASS
Band66	20MHz	QPSK	132322	1RB#0	23.65	25.49	30.00	PASS
Band66	20MHz	QPSK	132322	1RB#49	23.28	25.12	30.00	PASS
Band66	20MHz	QPSK	132322	50RB#25	22.30	24.14	30.00	PASS
Band66	20MHz	QPSK	132322	50RB#0	22.54	24.38	30.00	PASS
Band66	20MHz	QPSK	132322	50RB#50	22.50	24.34	30.00	PASS
Band66	20MHz	QPSK	132322	100RB#0	22.52	24.36	30.00	PASS
Band66	20MHz	QPSK	132572	1RB#0	23.23	25.07	30.00	PASS
Band66	20MHz	QPSK	132572	1RB#49	23.59	25.43	30.00	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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue 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 attention, 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 2 certificate, please contact us at telephone: (86-755) 8307 1443, and many the content of the company and the content of the content of

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



Report No.: ZR/2019/A000601

8 of 67 Page:

Band66         20MHz         QPSK         132572         1RB#99         23.35         25.19         30.00         PASS           Band66         20MHz         QPSK         132572         50RB#0         22.42         24.26         30.00         PASS           Band66         20MHz         QPSK         132572         50RB#25         22.53         24.37         30.00         PASS           Band66         20MHz         QPSK         132572         50RB#50         22.51         24.35         30.00         PASS           Band66         20MHz         QPSK         132572         100RB#0         22.50         24.34         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#0         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#99         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.51         23.38         30.00         PASS									
Band66         20MHz         QPSK         132572         50RB#25         22.53         24.37         30.00         PASS           Band66         20MHz         QPSK         132572         50RB#50         22.51         24.35         30.00         PASS           Band66         20MHz         QPSK         132572         100RB#0         22.50         24.34         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#0         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#99         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132072         100RB#0         21.54         23.38         30.00         PASS	Band66	20MHz	QPSK	132572	1RB#99	23.35	25.19	30.00	PASS
Band66         20MHz         QPSK         132572         50RB#50         22.51         24.35         30.00         PASS           Band66         20MHz         QPSK         132572         100RB#0         22.50         24.34         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#0         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#49         22.16         24.00         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#99         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#0         21.55         23.39         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#25         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS	Band66	20MHz	QPSK	132572	50RB#0	22.42	24.26	30.00	PASS
Band66         20MHz         QPSK         132572         100RB#0         22.50         24.34         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#0         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#49         22.16         24.00         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#0         21.55         23.39         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#25         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.80         24.77         30.00         PASS	Band66	20MHz	QPSK	132572	50RB#25	22.53	24.37	30.00	PASS
Band66         20MHz         16QAM         132072         1RB#0         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#49         22.16         24.00         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#0         21.55         23.39         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#25         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132072         100RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS	Band66	20MHz	QPSK	132572	50RB#50	22.51	24.35	30.00	PASS
Band66         20MHz         16QAM         132072         1RB#49         22.16         24.00         30.00         PASS           Band66         20MHz         16QAM         132072         1RB#99         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#0         21.55         23.39         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#25         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132072         100RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS	Band66	20MHz	QPSK	132572	100RB#0	22.50	24.34	30.00	PASS
Band66         20MHz         16QAM         132072         1RB#99         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#0         21.55         23.39         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#25         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132072         100RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.77         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.42         23.26         30.00         PASS	Band66	20MHz	16QAM	132072	1RB#0	22.90	24.74	30.00	PASS
Band66         20MHz         16QAM         132072         50RB#50         21.61         23.45         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#0         21.55         23.39         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#25         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132072         100RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#49         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS	Band66	20MHz	16QAM	132072	1RB#49	22.16	24.00	30.00	PASS
Band66         20MHz         16QAM         132072         50RB#0         21.55         23.39         30.00         PASS           Band66         20MHz         16QAM         132072         50RB#25         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132072         100RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#49         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.44         23.28         30.00         PASS	Band66	20MHz	16QAM	132072	1RB#99	22.93	24.77	30.00	PASS
Band66         20MHz         16QAM         132072         50RB#25         21.54         23.38         30.00         PASS           Band66         20MHz         16QAM         132072         100RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#49         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#25         21.44         23.28         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS <td>Band66</td> <td>20MHz</td> <td>16QAM</td> <td>132072</td> <td>50RB#50</td> <td>21.61</td> <td>23.45</td> <td>30.00</td> <td>PASS</td>	Band66	20MHz	16QAM	132072	50RB#50	21.61	23.45	30.00	PASS
Band66         20MHz         16QAM         132072         100RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#49         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#25         21.44         23.28         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS	Band66	20MHz	16QAM	132072	50RB#0	21.55	23.39	30.00	PASS
Band66         20MHz         16QAM         132322         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#49         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#25         21.44         23.28         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS	Band66	20MHz	16QAM	132072	50RB#25	21.54	23.38	30.00	PASS
Band66         20MHz         16QAM         132322         1RB#49         22.93         24.77         30.00         PASS           Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#25         21.44         23.28         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS	Band66	20MHz	16QAM	132072	100RB#0	21.58	23.42	30.00	PASS
Band66         20MHz         16QAM         132322         1RB#99         22.88         24.72         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#25         21.44         23.28         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#99         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS	Band66	20MHz	16QAM	132322	1RB#0	22.80	24.64	30.00	PASS
Band66         20MHz         16QAM         132322         50RB#0         21.25         23.09         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#25         21.44         23.28         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#99         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS	Band66	20MHz	16QAM	132322	1RB#49	22.93	24.77	30.00	PASS
Band66         20MHz         16QAM         132322         50RB#50         21.42         23.26         30.00         PASS           Band66         20MHz         16QAM         132322         50RB#25         21.44         23.28         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#99         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS <td>Band66</td> <td>20MHz</td> <td>16QAM</td> <td>132322</td> <td>1RB#99</td> <td>22.88</td> <td>24.72</td> <td>30.00</td> <td>PASS</td>	Band66	20MHz	16QAM	132322	1RB#99	22.88	24.72	30.00	PASS
Band66         20MHz         16QAM         132322         50RB#25         21.44         23.28         30.00         PASS           Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#99         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS	Band66	20MHz	16QAM	132322	50RB#0	21.25	23.09	30.00	PASS
Band66         20MHz         16QAM         132322         100RB#0         21.43         23.27         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#99         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS	Band66	20MHz	16QAM	132322	50RB#50	21.42	23.26	30.00	PASS
Band66         20MHz         16QAM         132572         1RB#0         22.80         24.64         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#99         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS	Band66	20MHz	16QAM	132322	50RB#25	21.44	23.28	30.00	PASS
Band66         20MHz         16QAM         132572         1RB#99         22.90         24.74         30.00         PASS           Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS	Band66	20MHz	16QAM	132322	100RB#0	21.43	23.27	30.00	PASS
Band66         20MHz         16QAM         132572         1RB#49         22.86         24.70         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS	Band66	20MHz	16QAM	132572	1RB#0	22.80	24.64	30.00	PASS
Band66         20MHz         16QAM         132572         50RB#0         21.58         23.42         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS	Band66	20MHz	16QAM	132572	1RB#99	22.90	24.74	30.00	PASS
Band66         20MHz         16QAM         132572         50RB#25         21.50         23.34         30.00         PASS           Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS	Band66	20MHz	16QAM	132572	1RB#49	22.86	24.70	30.00	PASS
Band66         20MHz         16QAM         132572         50RB#50         21.54         23.38         30.00         PASS	Band66	20MHz	16QAM	132572	50RB#0	21.58	23.42	30.00	PASS
	Band66	20MHz	16QAM	132572	50RB#25	21.50	23.34	30.00	PASS
Band66         20MHz         16QAM         132572         100RB#0         21.56         23.40         30.00         PASS	Band66	20MHz	16QAM	132572	50RB#50	21.54	23.38	30.00	PASS
	Band66	20MHz	16QAM	132572	100RB#0	21.56	23.40	30.00	PASS

#### Remark:

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

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

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



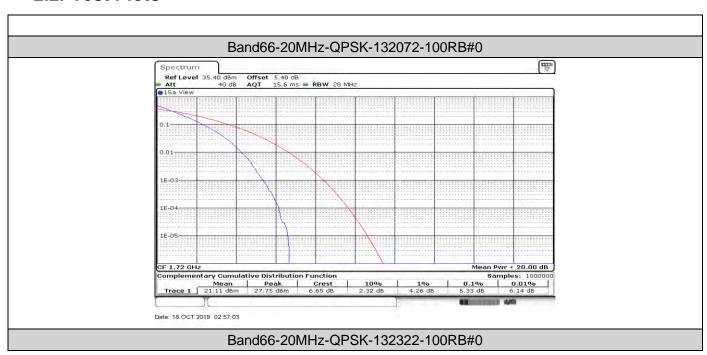
Page: 9 of 67

#### 2. Peak-to-Average Ratio (CCDF)

#### 2.1. Test Result

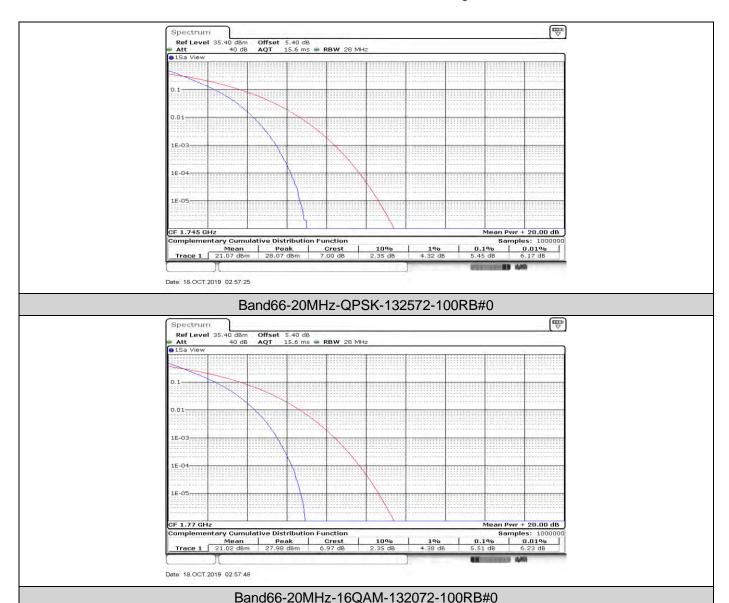
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band66	20MHz	QPSK	132072	100RB#0	5.33	13	PASS
Band66	20MHz	QPSK	132322	100RB#0	5.45	13	PASS
Band66	20MHz	QPSK	132572	100RB#0	5.51	13	PASS
Band66	20MHz	16QAM	132072	100RB#0	6.06	13	PASS
Band66	20MHz	16QAM	132322	100RB#0	6.14	13	PASS
Band66	20MHz	16QAM	132572	100RB#0	6.20	13	PASS

#### 2.2. Test Plots





Page: 10 of 67



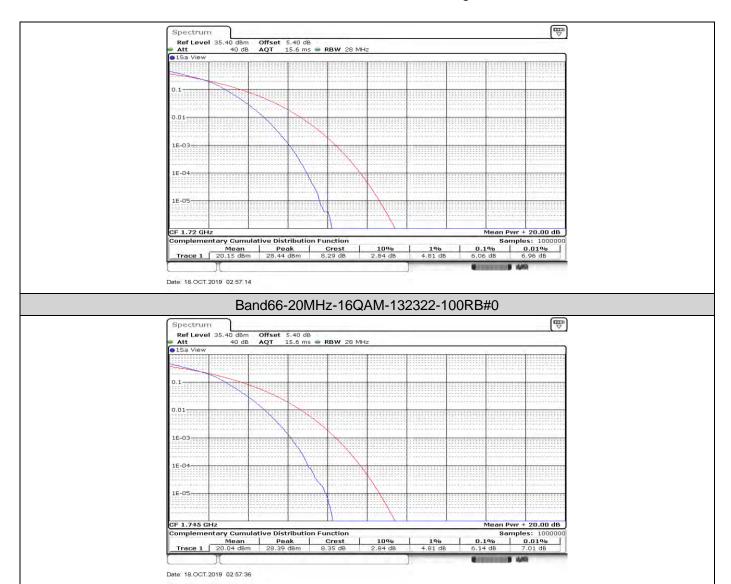


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.com

Member of the SGS Group (SGS SA)

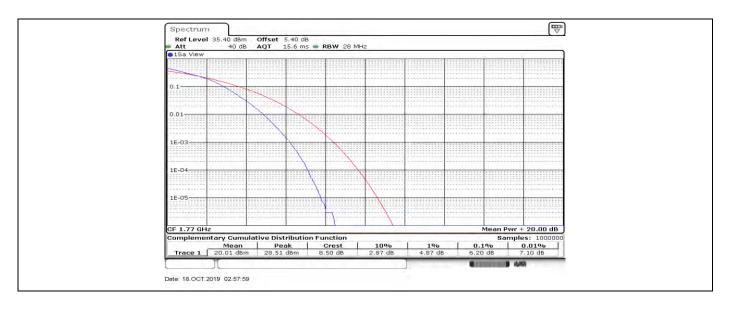
Page: 11 of 67



Band66-20MHz-16QAM-132572-100RB#0



Page: 12 of 67



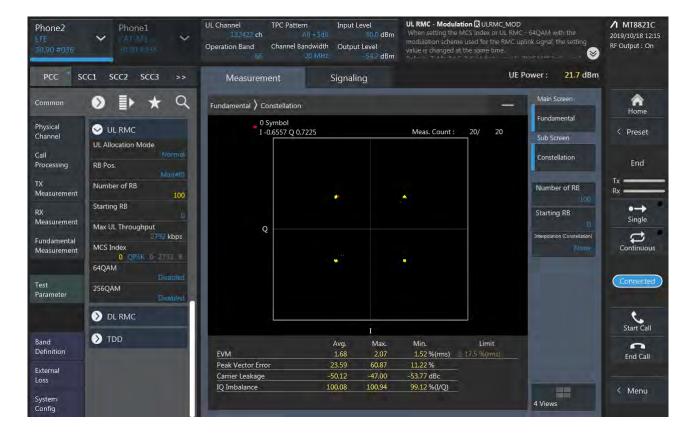


Page: 13 of 67

#### 3. Modulation Characteristics

#### 3.1. Test Mode = LTE /TM1 20MHz

#### 3.1.1.Test Channel = MCH

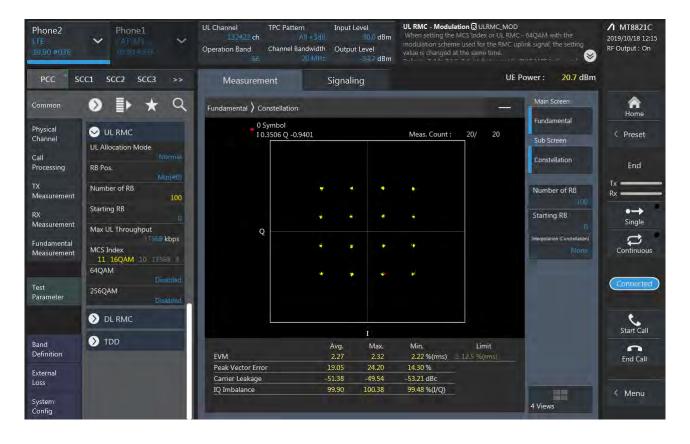




Page: 14 of 67

#### 3.2. Test Mode = LTE /TM2 20MHz

#### 3.2.1.Test Channel = MCH





Page: 15 of 67

#### 4. 26dB Bandwidth and Occupied Bandwidth

#### 4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band66	1.4MHz	QPSK	131979	6RB#0	1.091	1.293	PASS
Band66	1.4MHz	QPSK	132322	6RB#0	1.088	1.299	PASS
Band66	1.4MHz	QPSK	132665	6RB#0	1.088	1.293	PASS
Band66	1.4MHz	16QAM	131979	6RB#0	1.091	1.287	PASS
Band66	1.4MHz	16QAM	132322	6RB#0	1.088	1.293	PASS
Band66	1.4MHz	16QAM	132665	6RB#0	1.088	1.296	PASS
Band66	3MHz	QPSK	131987	15RB#0	2.691	2.922	PASS
Band66	3MHz	QPSK	132322	15RB#0	2.685	2.940	PASS
Band66	3MHz	QPSK	132657	15RB#0	2.685	2.922	PASS
Band66	3MHz	16QAM	131987	15RB#0	2.673	2.904	PASS
Band66	3MHz	16QAM	132322	15RB#0	2.673	2.910	PASS
Band66	3MHz	16QAM	132657	15RB#0	2.679	2.898	PASS
Band66	5MHz	QPSK	131997	25RB#0	4.476	5.060	PASS
Band66	5MHz	QPSK	132322	25RB#0	4.476	5.060	PASS
Band66	5MHz	QPSK	132647	25RB#0	4.486	5.060	PASS
Band66	5MHz	16QAM	131997	25RB#0	4.476	5.070	PASS
Band66	5MHz	16QAM	132322	25RB#0	4.486	5.090	PASS
Band66	5MHz	16QAM	132647	25RB#0	4.486	5.080	PASS
Band66	10MHz	QPSK	132022	50RB#0	8.931	9.960	PASS
Band66	10MHz	QPSK	132322	50RB#0	8.931	9.960	PASS
Band66	10MHz	QPSK	132622	50RB#0	8.951	9.920	PASS
Band66	10MHz	16QAM	132022	50RB#0	8.951	9.920	PASS
Band66	10MHz	16QAM	132322	50RB#0	8.931	10.020	PASS
Band66	10MHz	16QAM	132622	50RB#0	8.951	9.940	PASS
Band66	15MHz	QPSK	132047	75RB#0	13.516	15.030	PASS
Band66	15MHz	QPSK	132322	75RB#0	13.516	15.210	PASS
Band66	15MHz	QPSK	132597	75RB#0	13.487	15.060	PASS
Band66	15MHz	16QAM	132047	75RB#0	13.487	15.150	PASS
Band66	15MHz	16QAM	132322	75RB#0	13.487	14.820	PASS
Band66	15MHz	16QAM	132597	75RB#0	13.516	15.120	PASS
Band66	20MHz	QPSK	132072	100RB#0	17.902	19.680	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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue defined therein. Any holder of this document is advised that information contained hereon reflects 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 a certificate, please contact us at telephone: (86-755) 8307 1443, remails CMD Proceduced Responses.

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

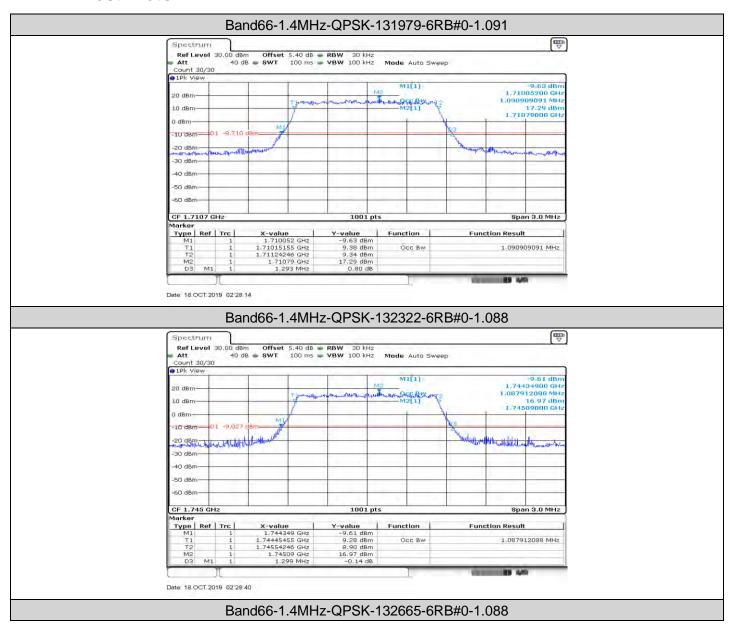


Report No.: ZR/2019/A000601

Page: 16 of 67

Band66	20MHz	QPSK	132322	100RB#0	17.902	19.680	PASS
Band66	20MHz	QPSK	132572	100RB#0	17.942	19.760	PASS
Band66	20MHz	16QAM	132072	100RB#0	17.942	19.560	PASS
Band66	20MHz	16QAM	132322	100RB#0	17.942	19.680	PASS
Band66	20MHz	16QAM	132572	100RB#0	17.902	19.680	PASS

#### 4.2. Test Plots





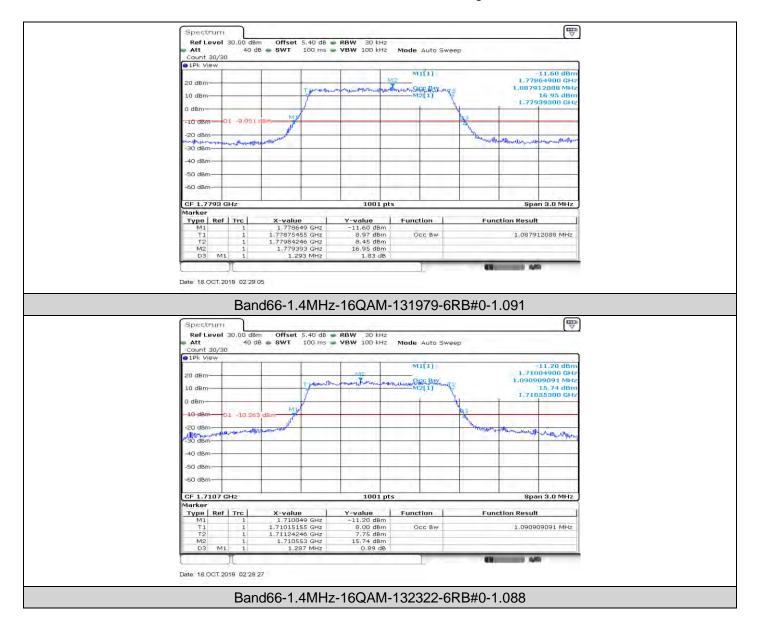
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic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

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

Report No.: ZR/2019/A000601

Page: 17 of 67





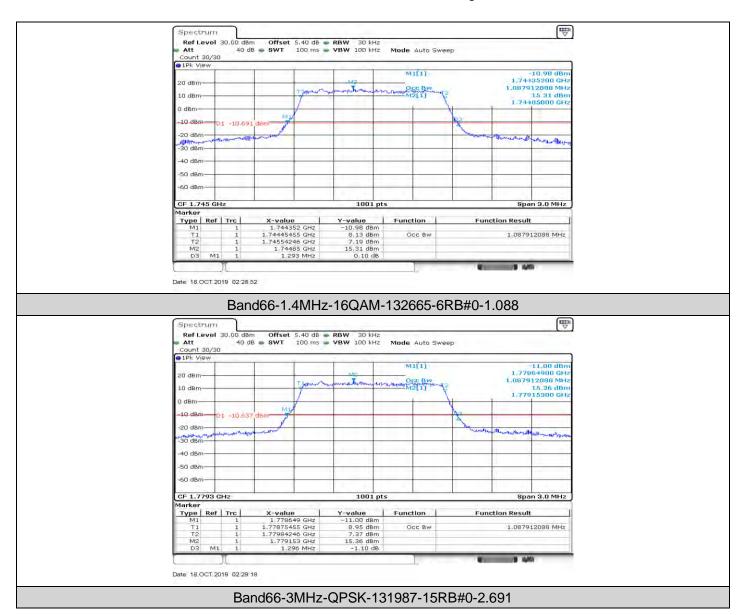
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.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

Report No.: ZR/2019/A000601

Page: 18 of 67





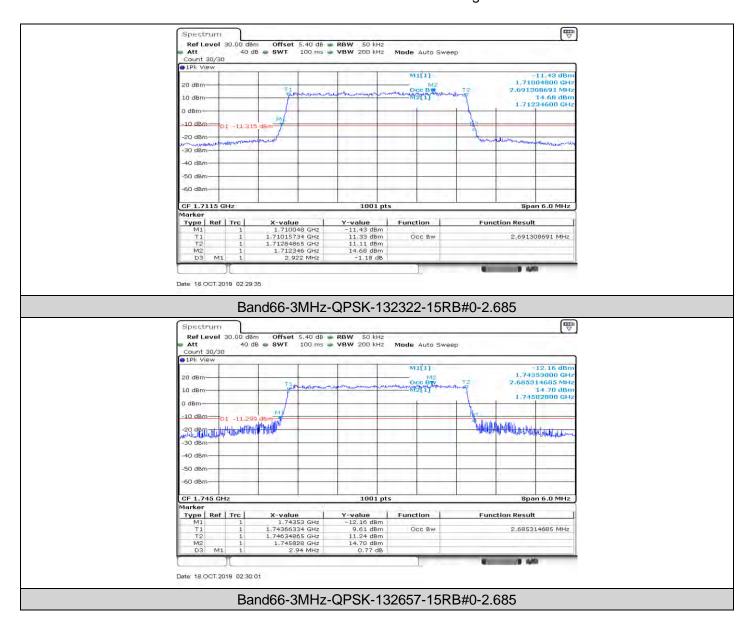
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.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

Report No.: ZR/2019/A000601

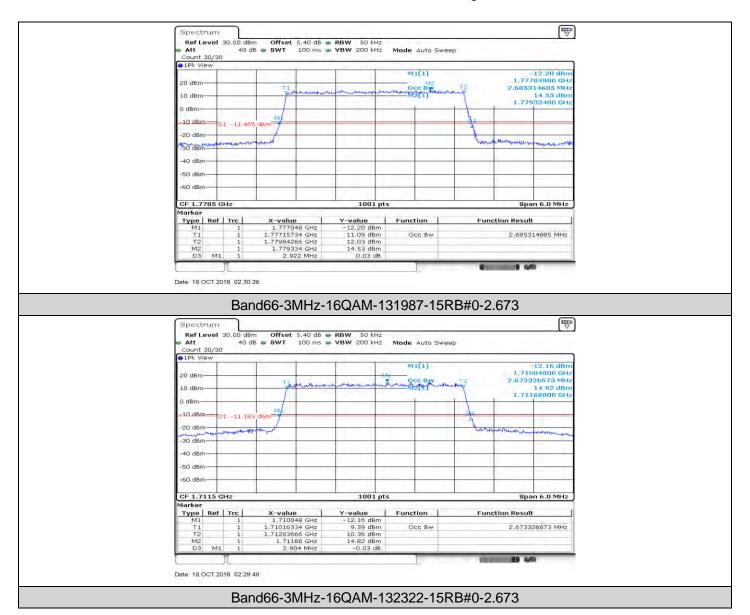
Page: 19 of 67





Report No.: ZR/2019/A000601

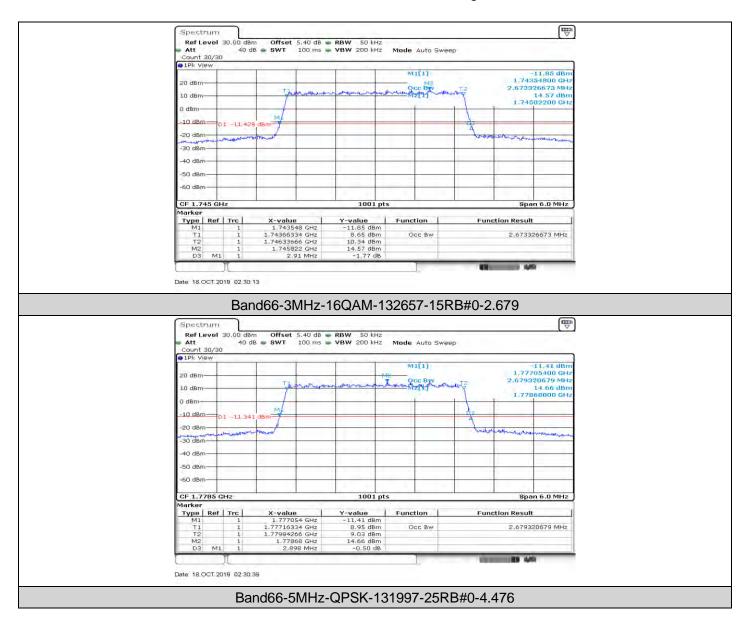
Page: 20 of 67





Report No.: ZR/2019/A000601

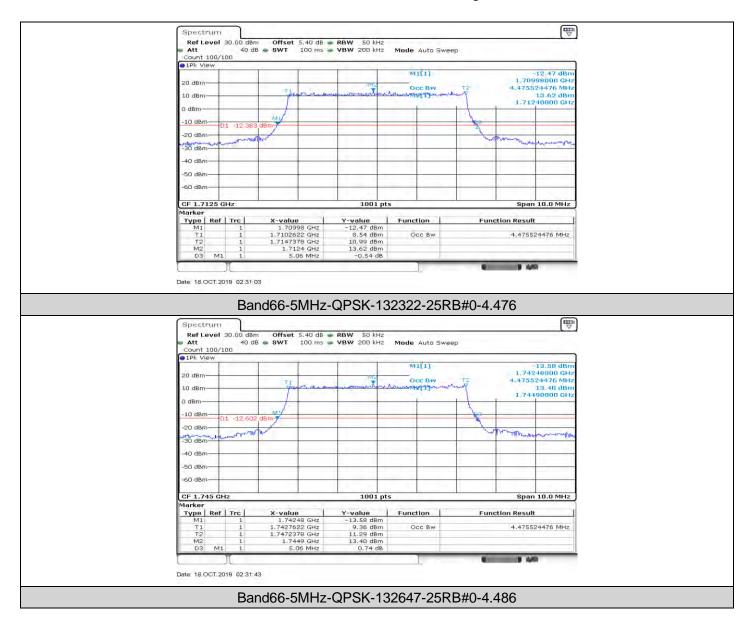
Page: 21 of 67





Report No.: ZR/2019/A000601

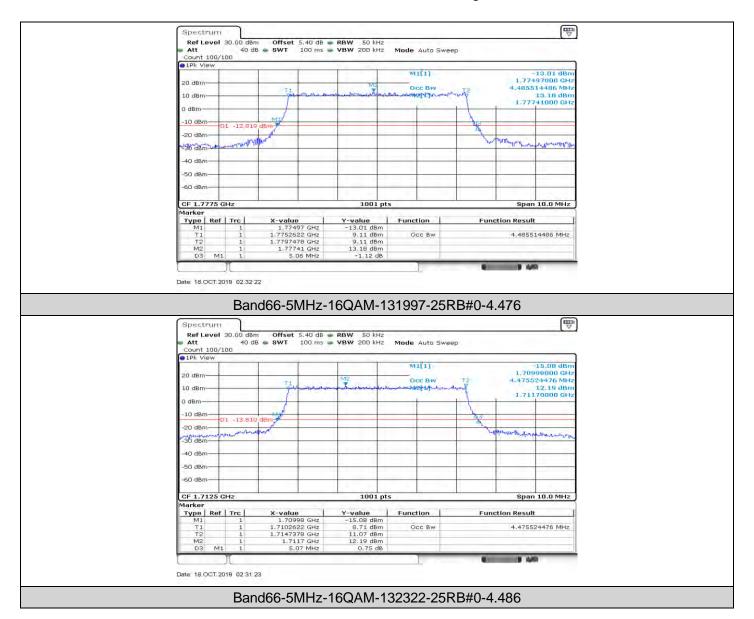
Page: 22 of 67





Report No.: ZR/2019/A000601

Page: 23 of 67





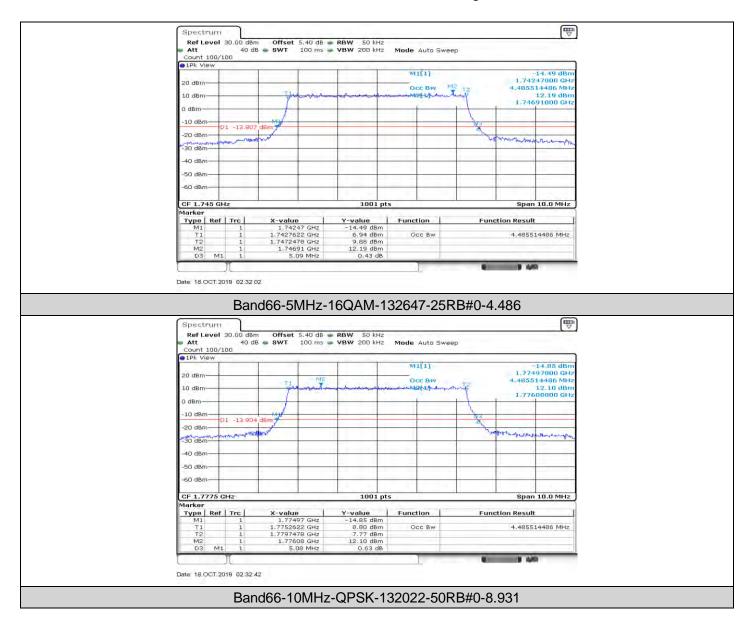
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.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

Report No.: ZR/2019/A000601

Page: 24 of 67





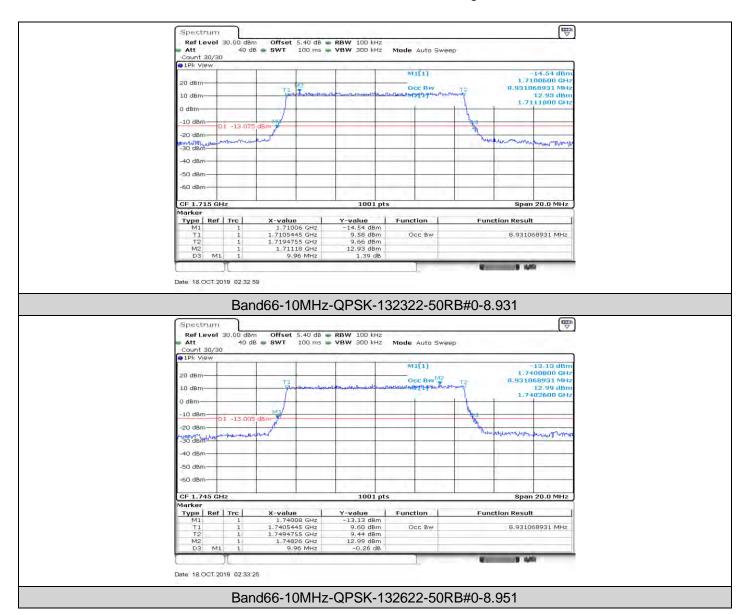
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.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

Report No.: ZR/2019/A000601

Page: 25 of 67





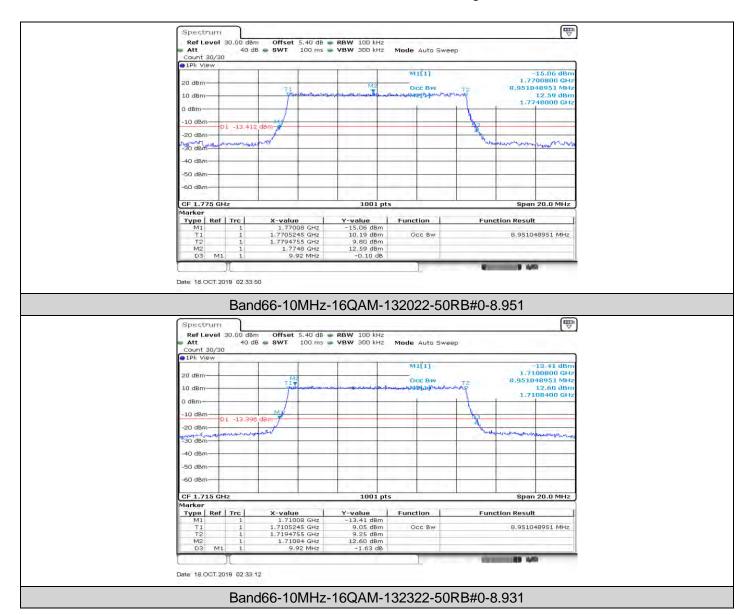
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.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

Report No.: ZR/2019/A000601

Page: 26 of 67





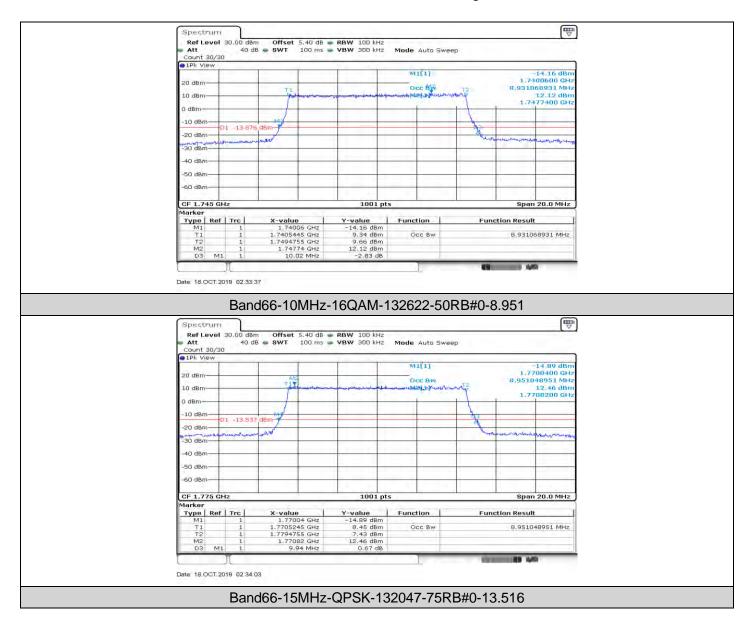
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.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

Report No.: ZR/2019/A000601

Page: 27 of 67





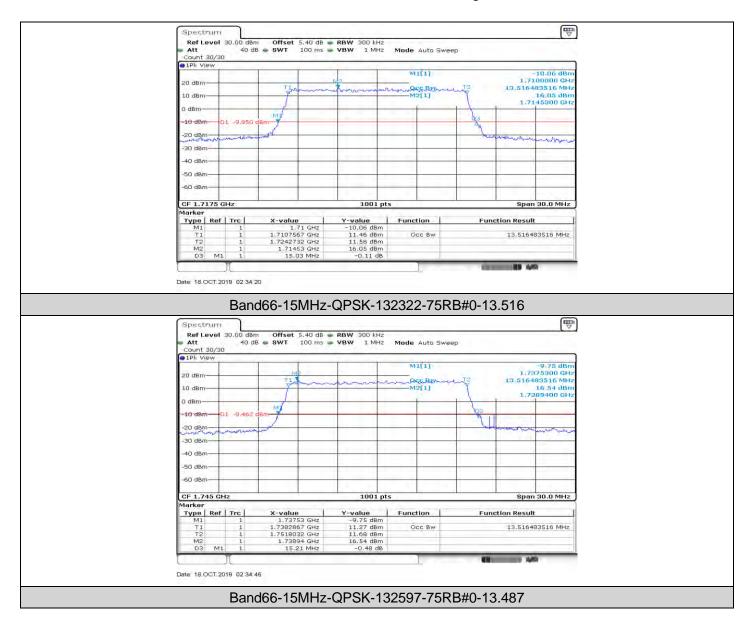
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.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

Report No.: ZR/2019/A000601

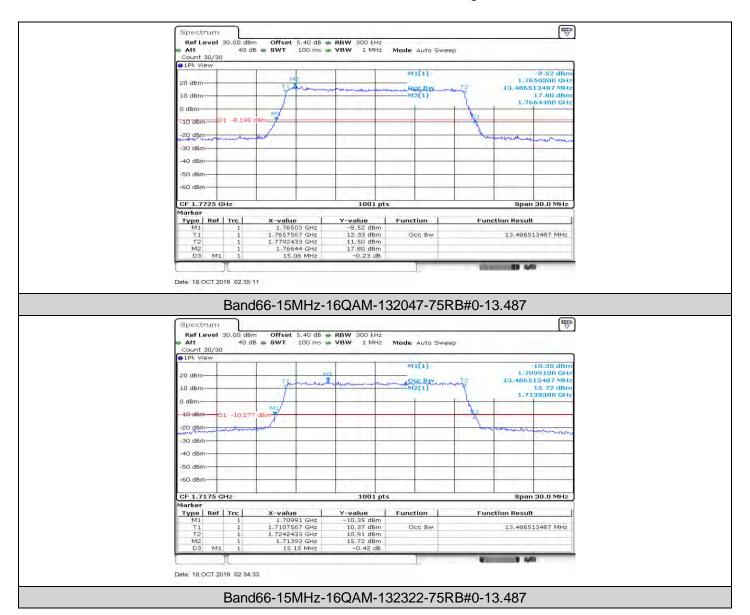
Page: 28 of 67





Report No.: ZR/2019/A000601

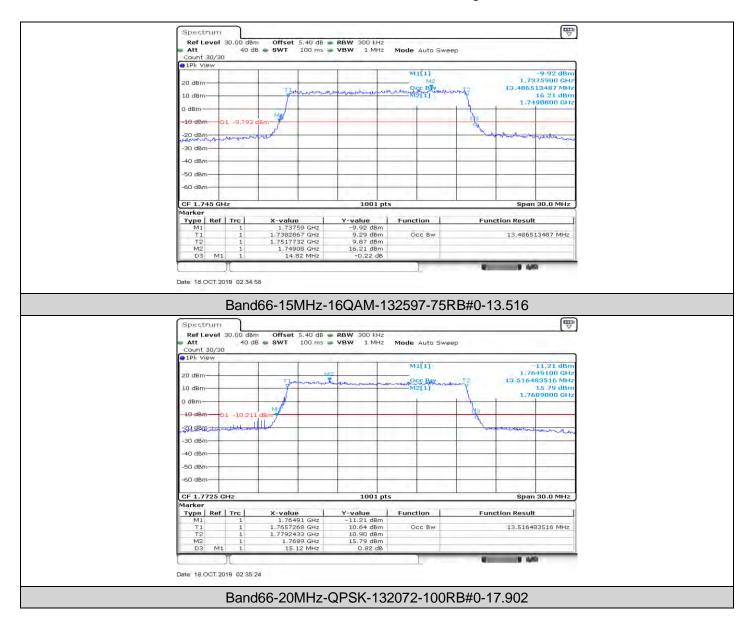
Page: 29 of 67





Report No.: ZR/2019/A000601

Page: 30 of 67





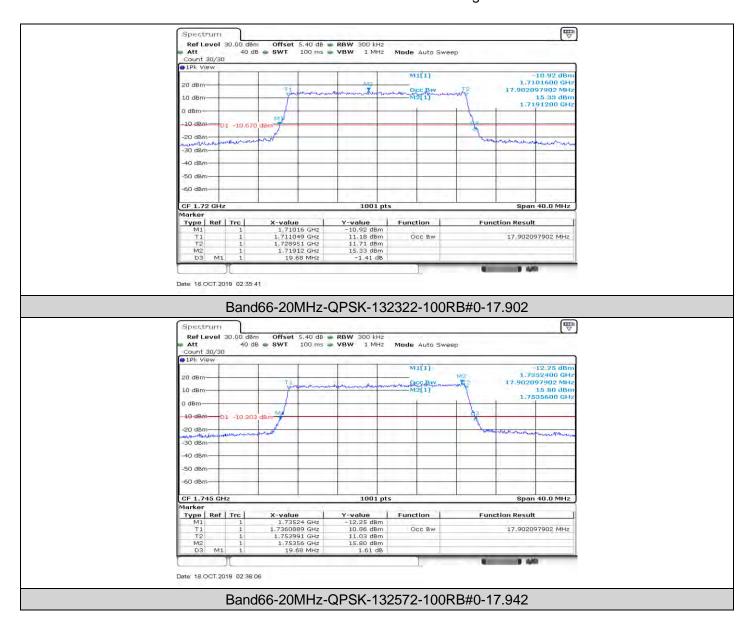
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.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

Report No.: ZR/2019/A000601

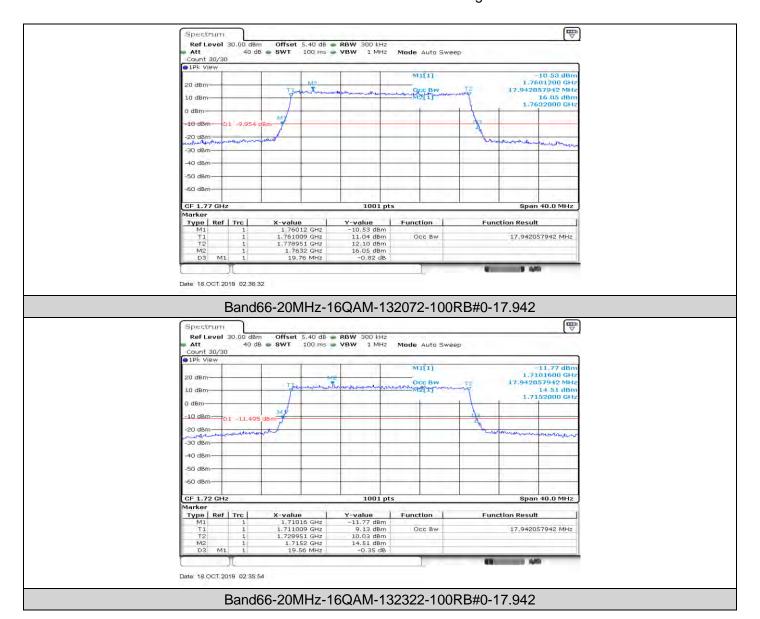
Page: 31 of 67





Report No.: ZR/2019/A000601

Page: 32 of 67







Report No.: ZR/2019/A000601

Page: 33 of 67





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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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.

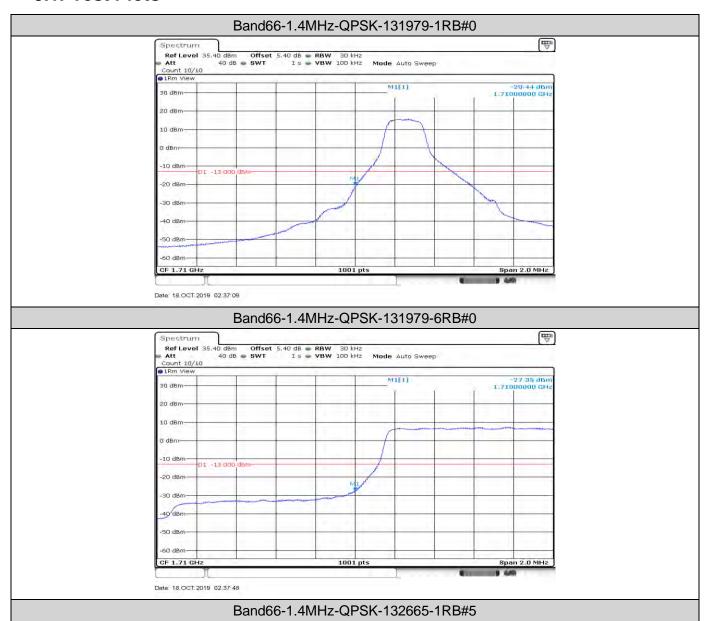
Attention. To check the authenticity of testing inspection report 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck.ed@as.com

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

Page: 34 of 67

#### 5. Band Edge Compliance

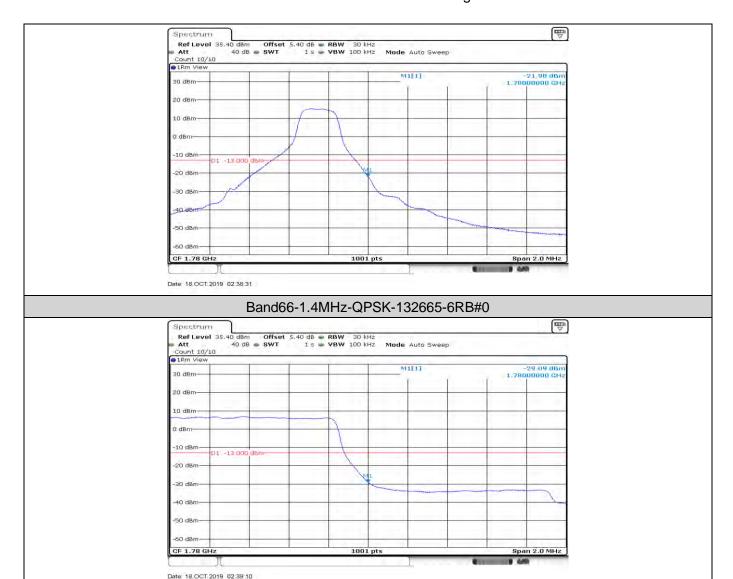
#### 5.1. Test Plots





Report No.: ZR/2019/A000601

Page: 35 of 67

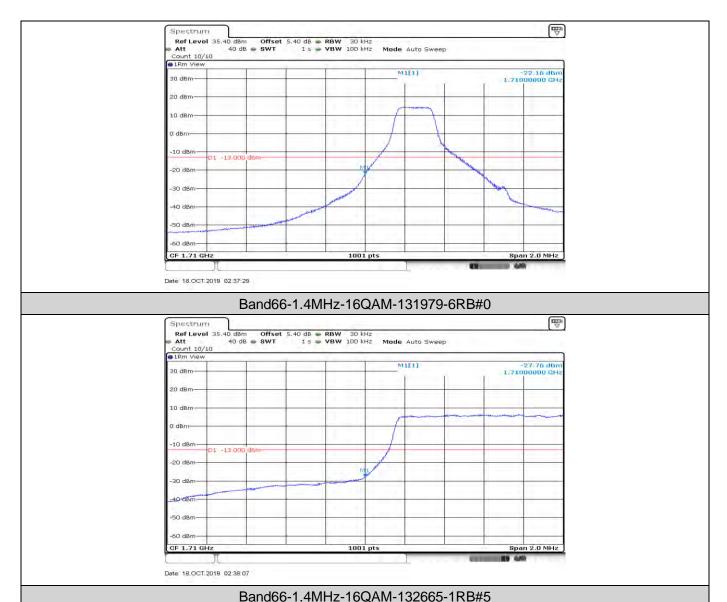


Band66-1.4MHz-16QAM-131979-1RB#0



Report No.: ZR/2019/A000601

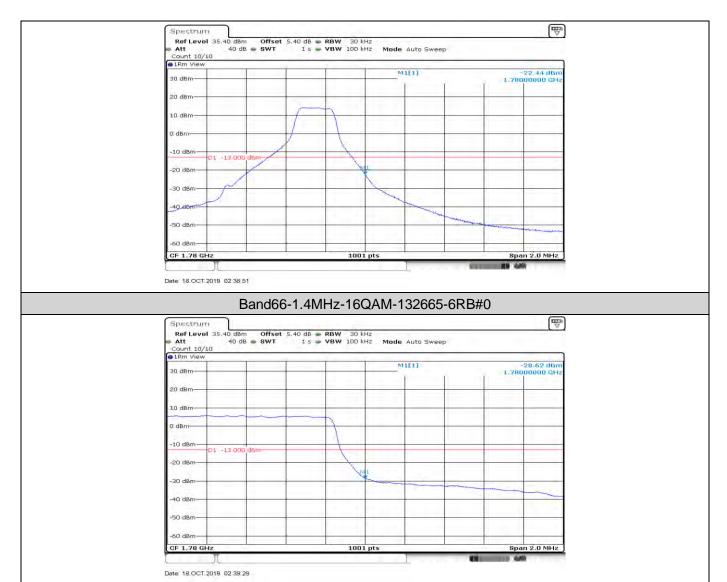
Page: 36 of 67





Report No.: ZR/2019/A000601

Page: 37 of 67

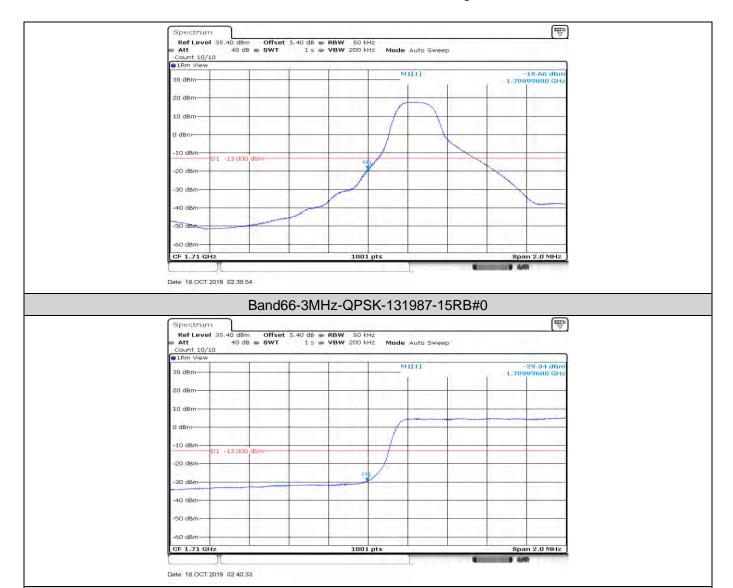


Band66-3MHz-QPSK-131987-1RB#0



Report No.: ZR/2019/A000601

Page: 38 of 67

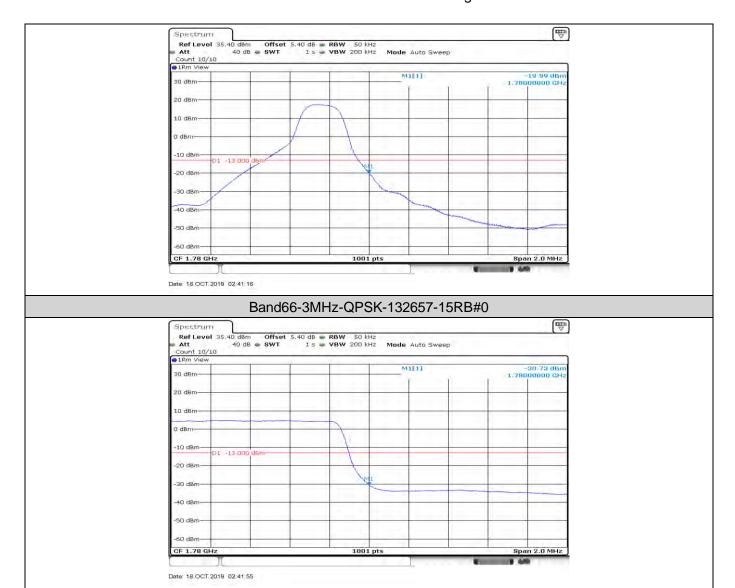


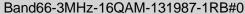
Band66-3MHz-QPSK-132657-1RB#14



Report No.: ZR/2019/A000601

Page: 39 of 67

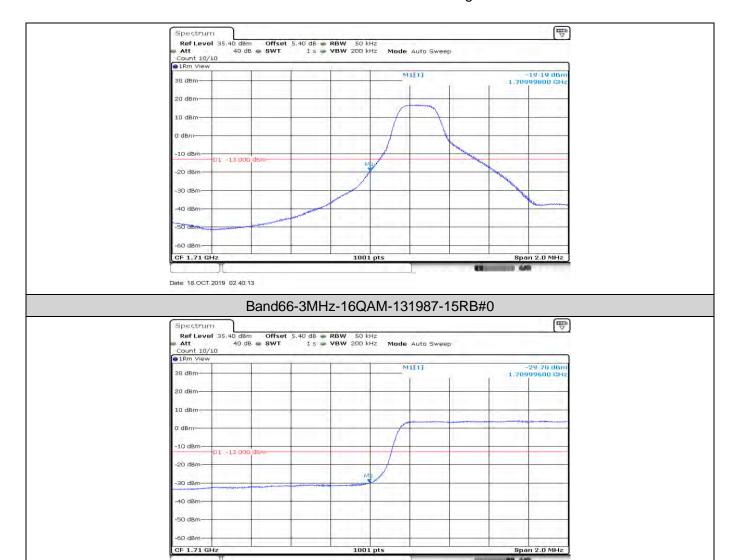






Report No.: ZR/2019/A000601

Page: 40 of 67



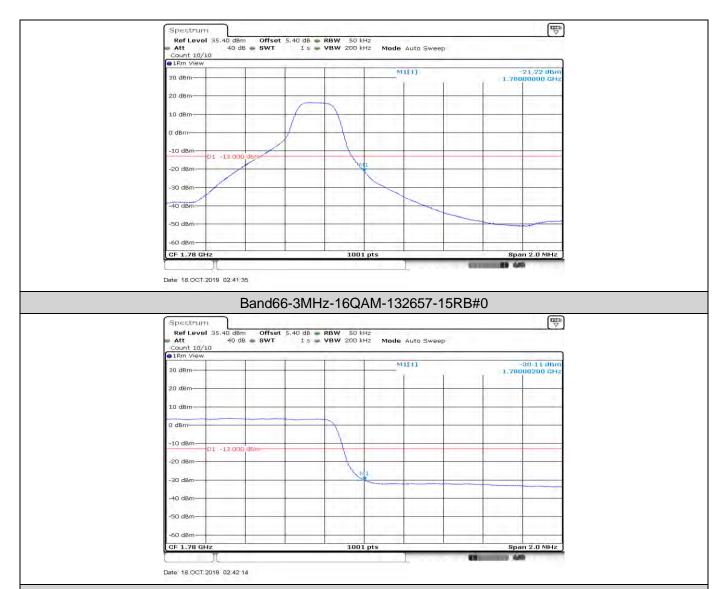
Band66-3MHz-16QAM-132657-1RB#14



Date: 18.OCT.2019 02:40:52

Report No.: ZR/2019/A000601

Page: 41 of 67

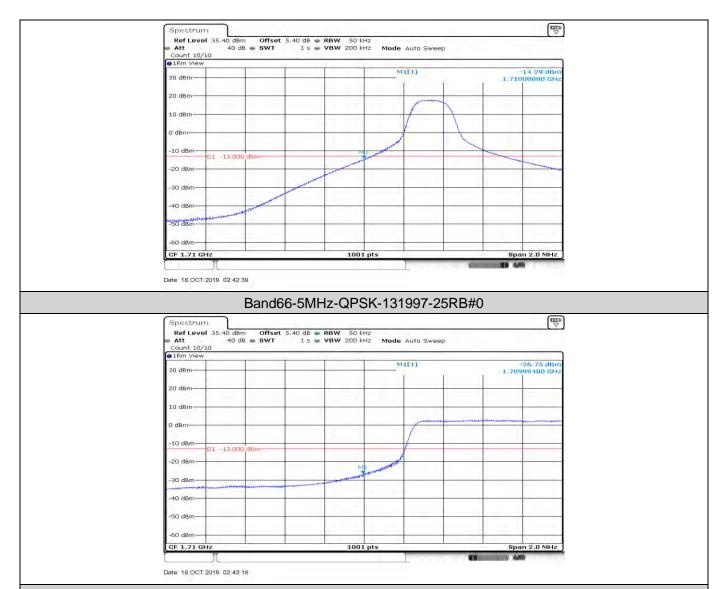


Band66-5MHz-QPSK-131997-1RB#0



Report No.: ZR/2019/A000601

Page: 42 of 67

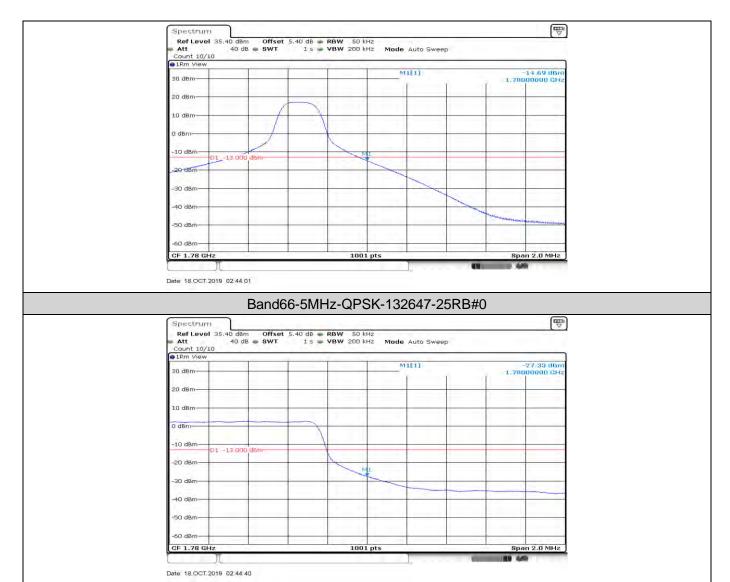


Band66-5MHz-QPSK-132647-1RB#24



Report No.: ZR/2019/A000601

Page: 43 of 67

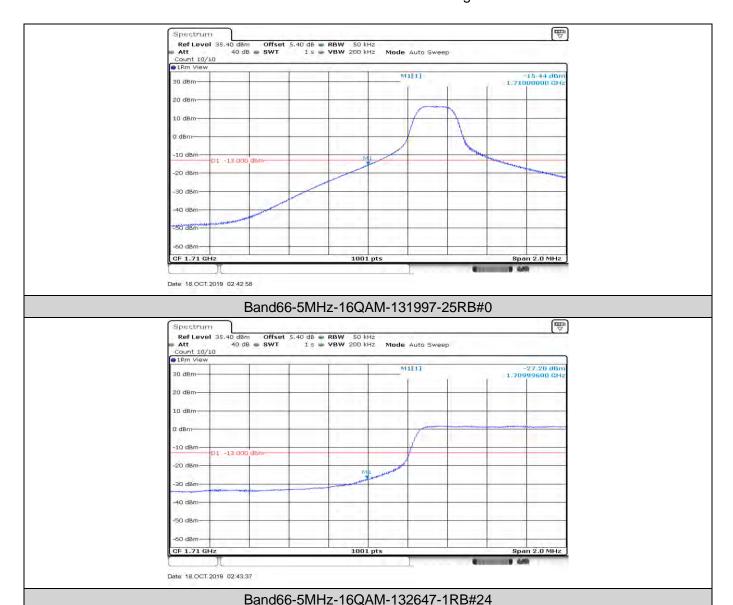


Band66-5MHz-16QAM-131997-1RB#0



Report No.: ZR/2019/A000601

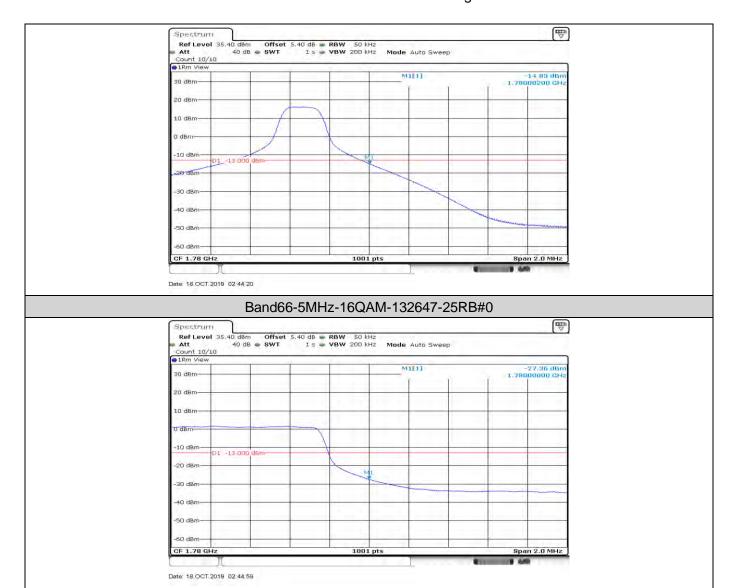
Page: 44 of 67





Report No.: ZR/2019/A000601

Page: 45 of 67

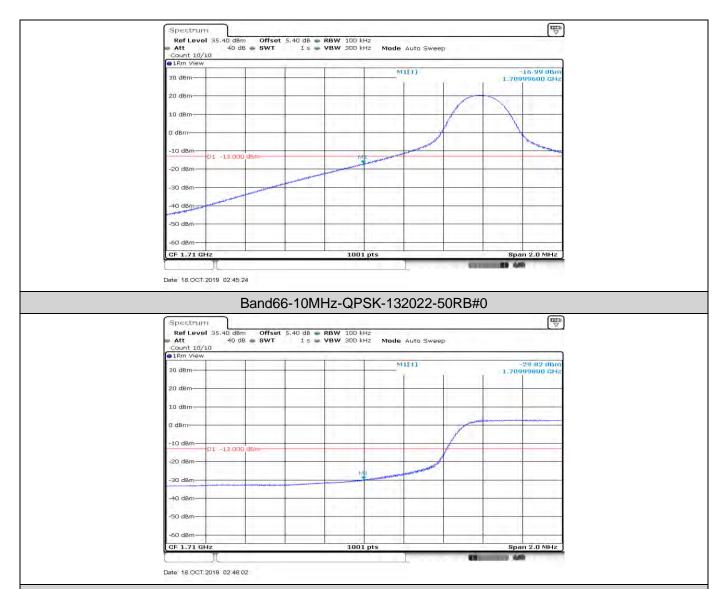


Band66-10MHz-QPSK-132022-1RB#0



Report No.: ZR/2019/A000601

Page: 46 of 67

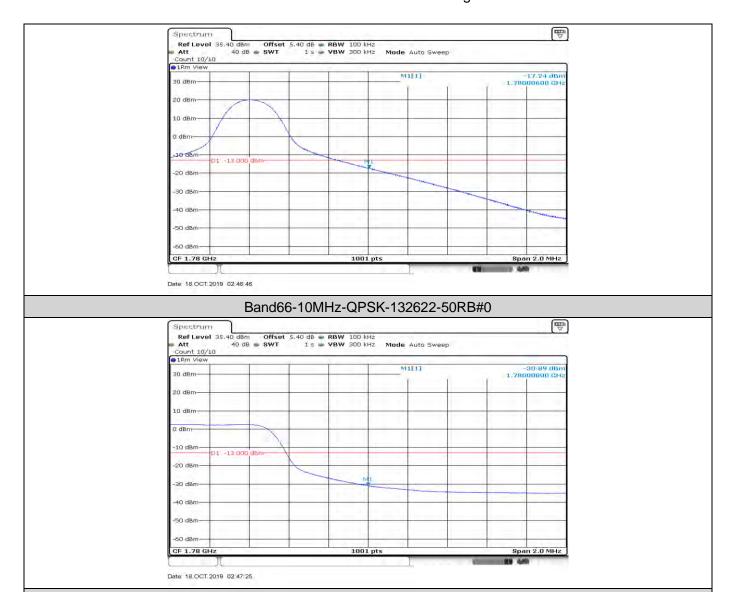


Band66-10MHz-QPSK-132622-1RB#49



Report No.: ZR/2019/A000601

Page: 47 of 67





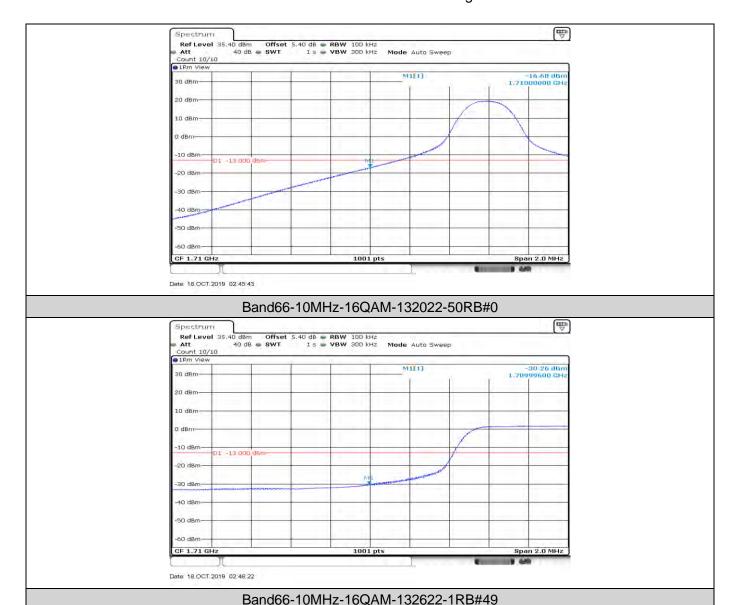


No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn 中国·深圳·科技园中区M-10栋一号厂房

邮编: 518057 t (86-755) 26012053 f (86-755) 26710594

Report No.: ZR/2019/A000601

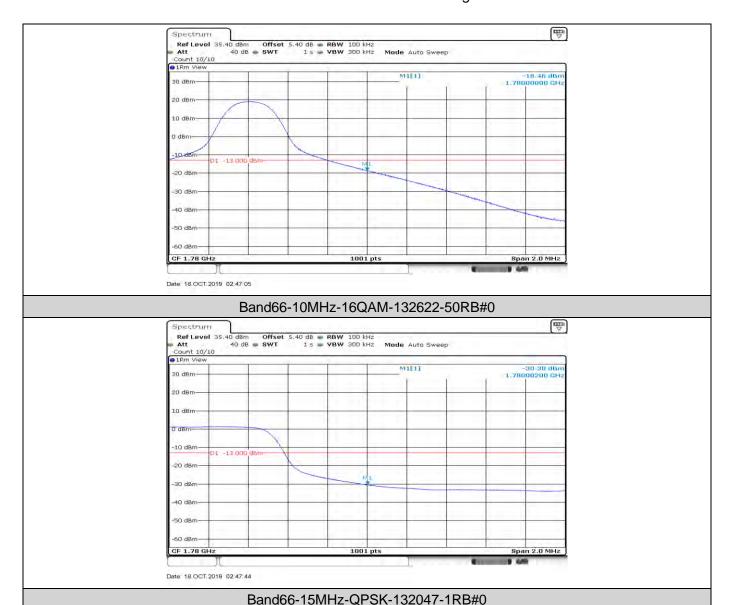
Page: 48 of 67





Report No.: ZR/2019/A000601

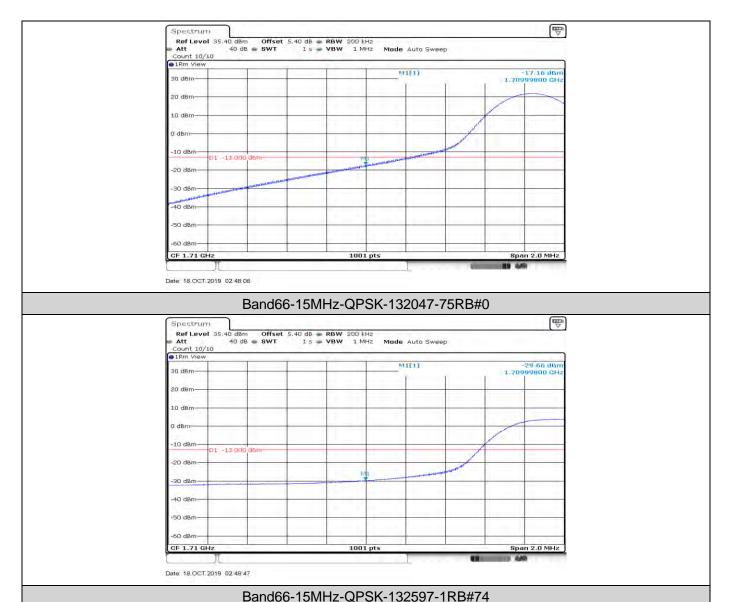
Page: 49 of 67





Report No.: ZR/2019/A000601

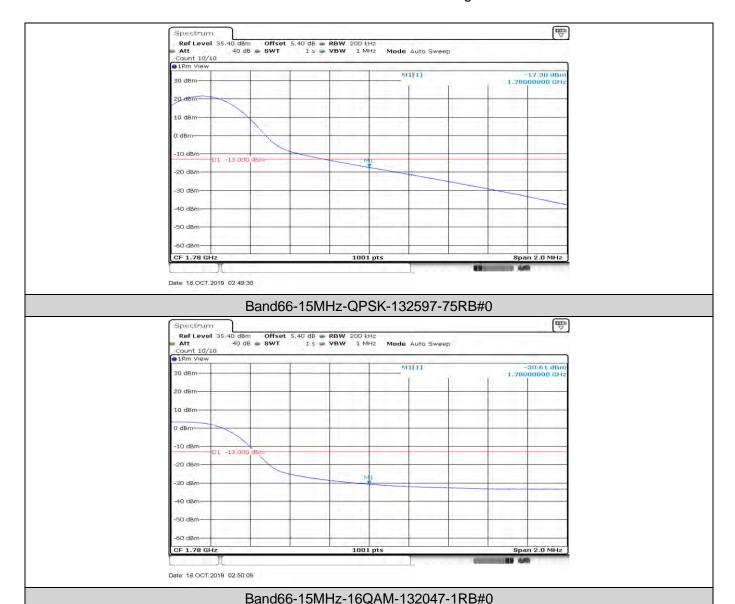
Page: 50 of 67





Report No.: ZR/2019/A000601

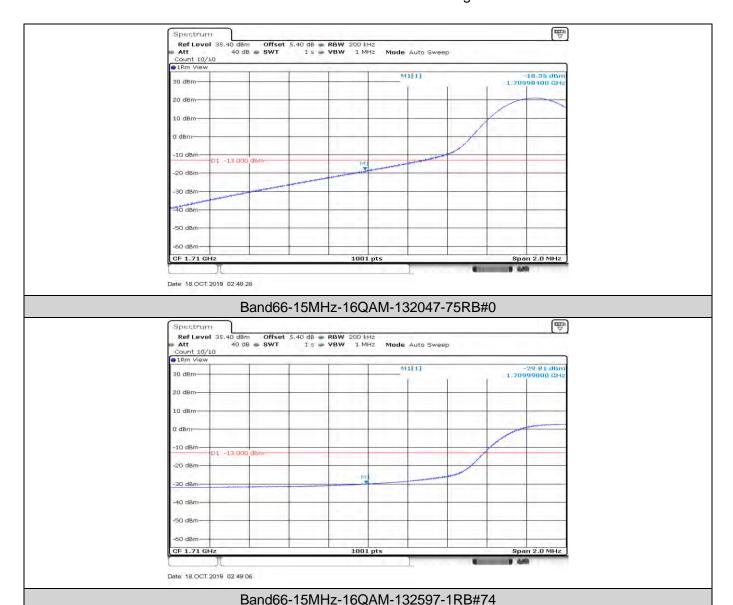
Page: 51 of 67





Report No.: ZR/2019/A000601

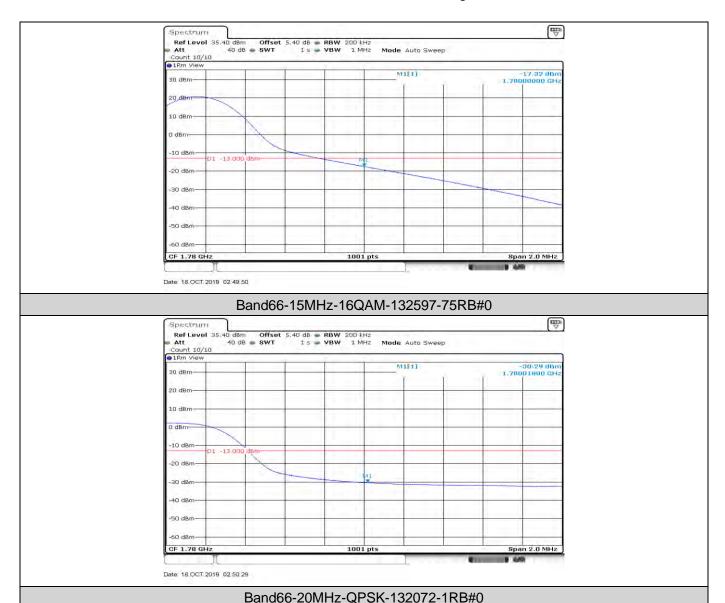
Page: 52 of 67





Report No.: ZR/2019/A000601

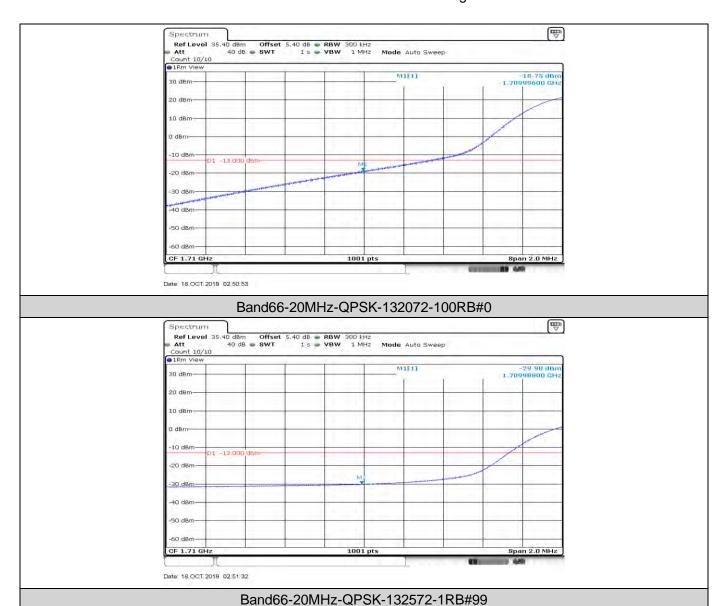
Page: 53 of 67





Report No.: ZR/2019/A000601

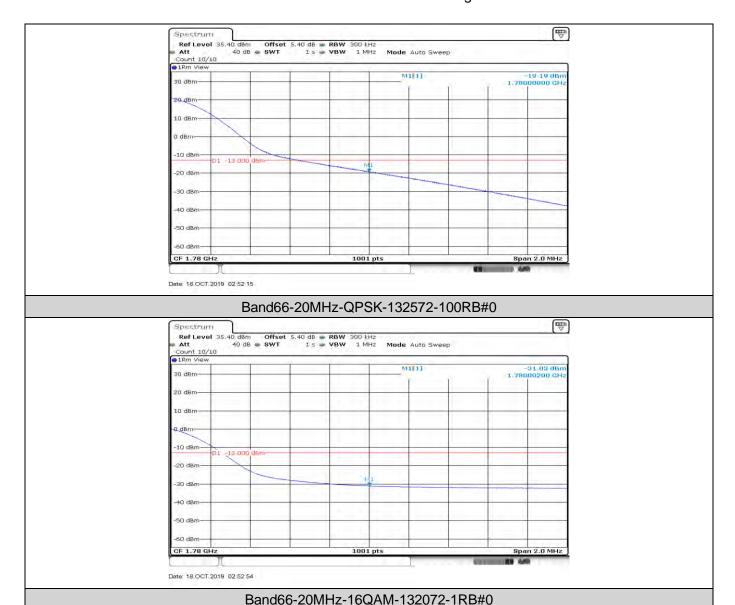
Page: 54 of 67





Report No.: ZR/2019/A000601

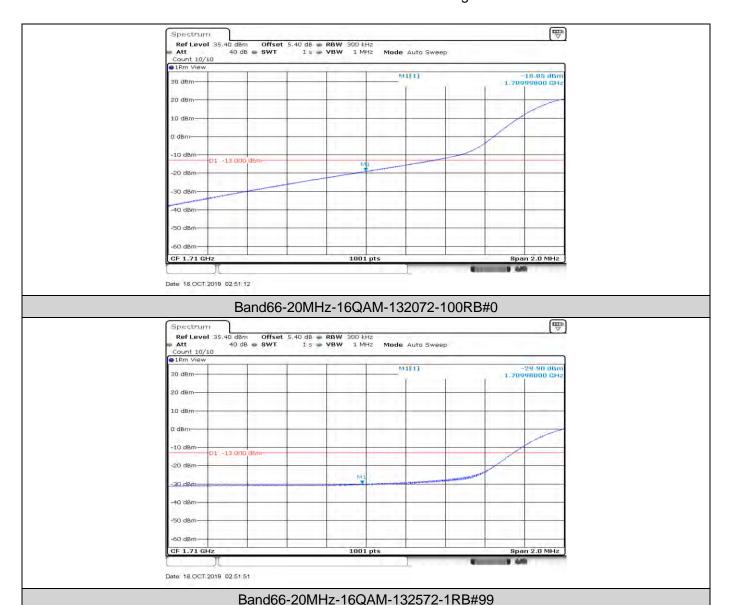
Page: 55 of 67





Report No.: ZR/2019/A000601

Page: 56 of 67

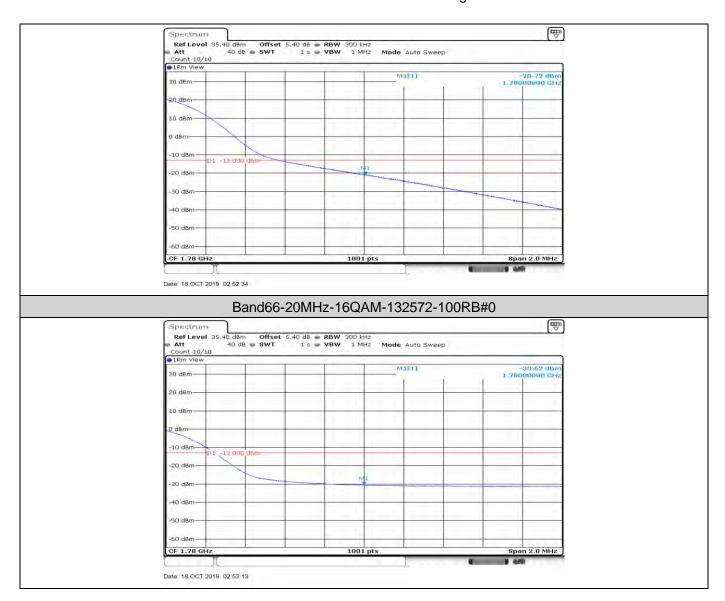






Report No.: ZR/2019/A000601

Page: 57 of 67





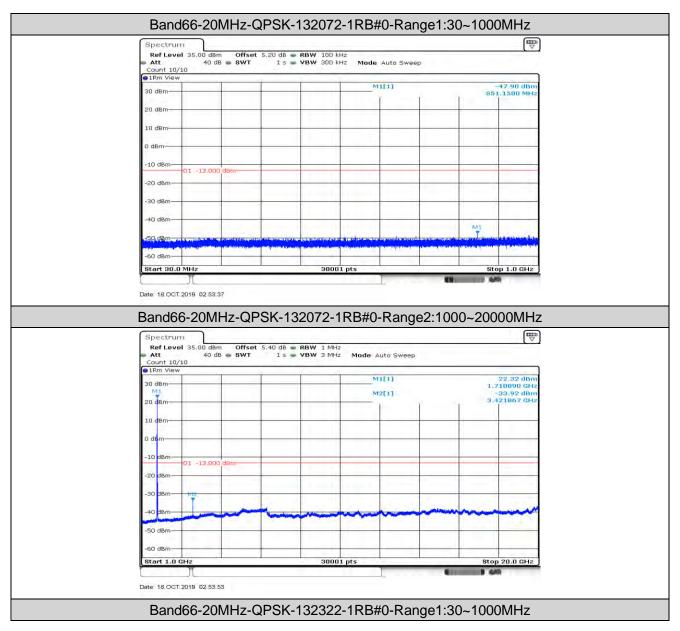
Page: 58 of 67

### 6. Spurious Emission at Antenna Terminal

Remark1: 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 narrowband 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.

Remark2: only the worst case data displayed in this report.

#### 6.1. 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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 attention, 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 south sample(s) are retained for 30 days only.

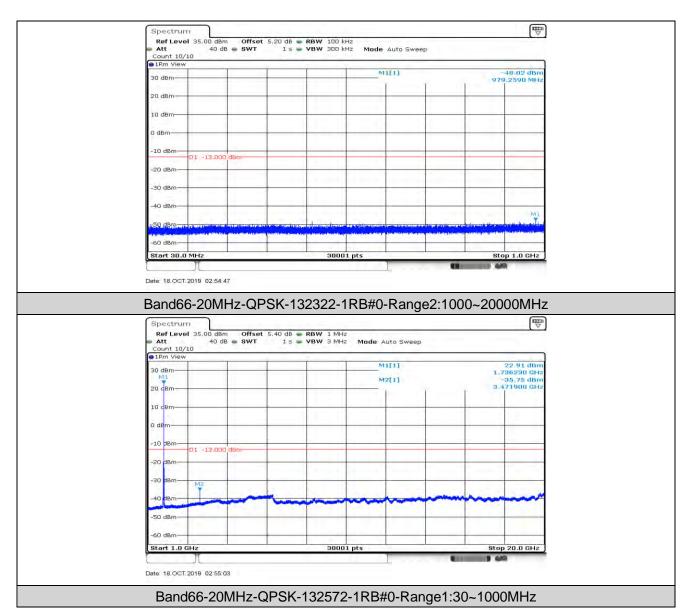
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or small? CND Doccheck-Rosa s.com.

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Sherzhen, China 518057 tt (86-755) 26012053 ft (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 tt (86-755) 26012053 ft (86-755) 26710594 sgs.china@sgs.com



Report No.: ZR/2019/A000601

Page: 59 of 67

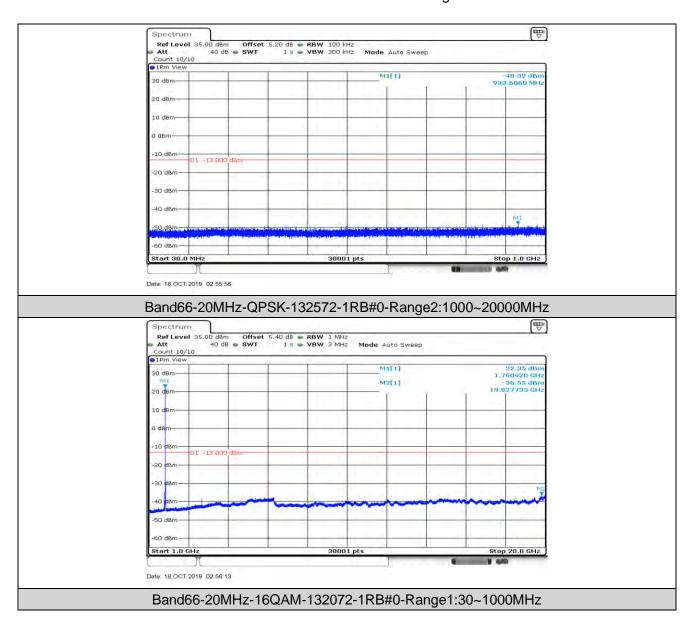






Report No.: ZR/2019/A000601

Page: 60 of 67

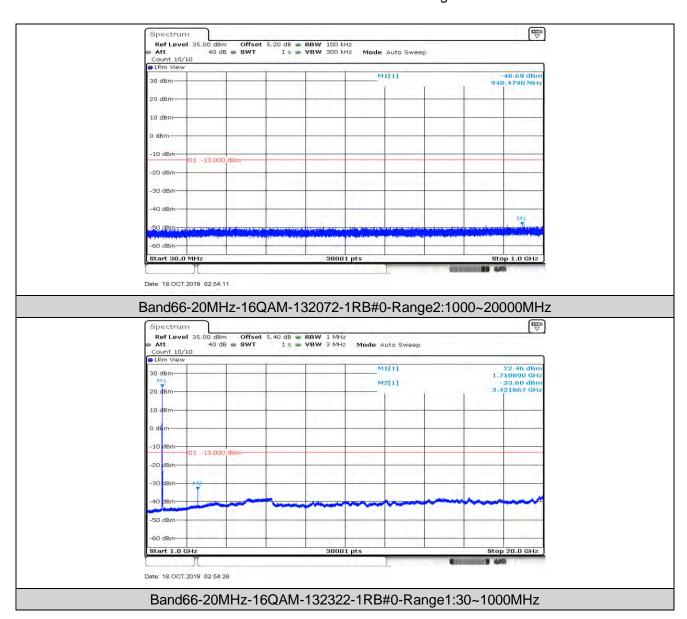






Report No.: ZR/2019/A000601

Page: 61 of 67

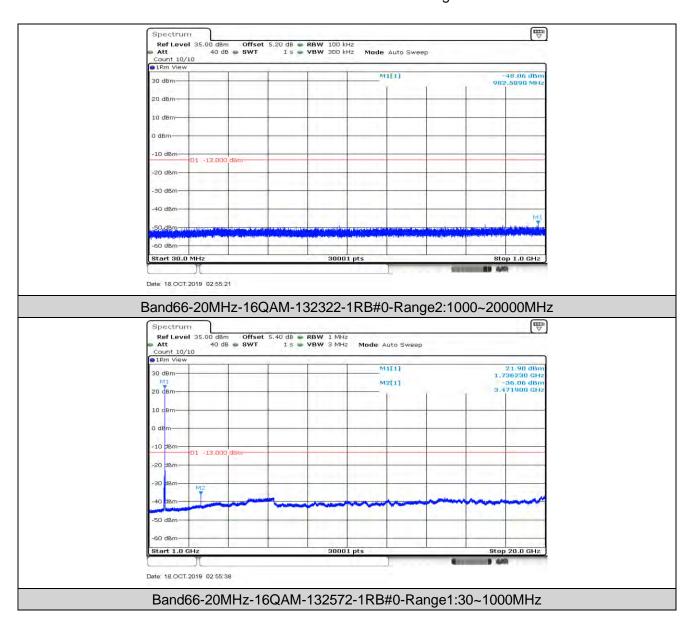






Report No.: ZR/2019/A000601

Page: 62 of 67

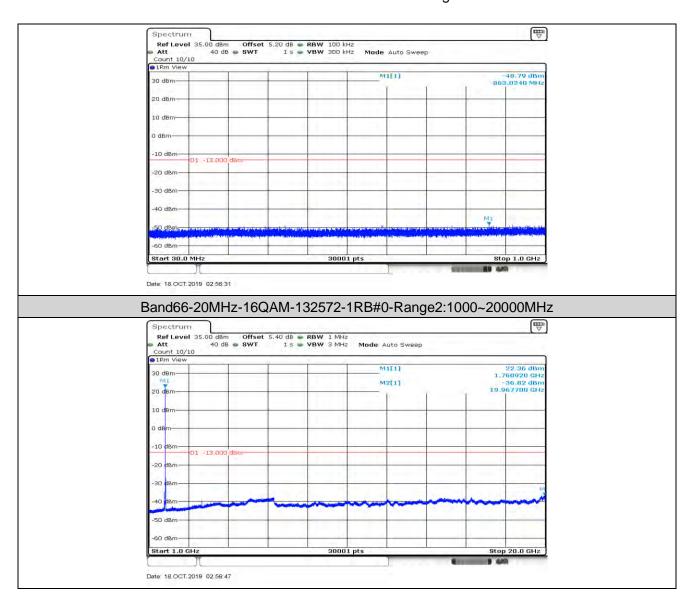






Report No.: ZR/2019/A000601

Page: 63 of 67





64 of 67 Page:

## 7. Field Strength of Spurious Radiation

### 7.1. Test Mode =LTE/TM1 20MHz

### 7.1.1.Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
48.7219	-75.62	-13.00	62.62	Vertical
92.9561	-76.14	-13.00	63.14	Vertical
250.0070	-86.19	-13.00	73.19	Vertical
2702.7405	-36.99	-13.00	23.99	Vertical
10510.2503	-47.82	-13.00	34.82	Vertical
17996.9999	-33.22	-13.00	20.22	Vertical
35.5778	-57.88	-13.00	44.88	Horizontal
94.0232	-80.89	-13.00	67.89	Horizontal
472.1481	-87.56	-13.00	74.56	Horizontal
2700.3401	-35.75	-13.00	22.75	Horizontal
3422.5141	-51.08	-13.00	38.08	Horizontal
16398.4466	-38.13	-13.00	25.13	Horizontal

### 7.1.2.Test Channel = MCH

_ (2511.)			()	
Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
48.7219	-76.55	-13.00	63.55	Vertical
92.9561	-75.66	-13.00	62.66	Vertical
250.0070	-85.97	-13.00	72.97	Vertical
2702.3405	-36.99	-13.00	23.99	Vertical
7375.6459	-53.09	-13.00	40.09	Vertical
17993.4998	-33.29	-13.00	20.29	Vertical
35.5778	-60.66	-13.00	47.66	Horizontal
92.9561	-80.70	-13.00	67.70	Horizontal
233.9527	-88.47	-13.00	75.47	Horizontal
3472.0157	-48.38	-13.00	35.38	Horizontal
8771.6924	-52.17	-13.00	39.17	Horizontal
17999.0000	-37.17	-13.00	24.17	Horizontal



Page: 65 of 67

### 7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
48.7704	-76.14	-13.00	63.14	Vertical
78.7934	-74.20	-13.00	61.20	Vertical
250.0070	-86.37	-13.00	73.37	Vertical
2698.7397	-36.66	-13.00	23.66	Vertical
8521.1840	-52.13	-13.00	39.13	Vertical
17997.9999	-33.29	-13.00	20.29	Vertical
35.5778	-60.58	-13.00	47.58	Horizontal
94.0232	-80.05	-13.00	67.05	Horizontal
232.2066	-88.66	-13.00	75.66	Horizontal
2709.1418	-35.80	-13.00	22.80	Horizontal
3522.0174	-49.36	-13.00	36.36	Horizontal
16403.9468	-38.37	-13.00	25.37	Horizontal

#### Remark:

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



66 of 67 Page:

## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temper ature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band66	20MHz	QPSK	132072	100RB#0	VL	NT	7.20	0.004186	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	VN	NT	0.00	0.000000	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	VH	NT	-7.90	-0.004593	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	VL	NT	6.30	0.003610	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	VN	NT	5.20	0.002980	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	VH	NT	-6.00	-0.003438	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	VL	NT	-4.80	-0.002712	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	VN	NT	1.30	0.000734	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	VH	NT	-10.70	-0.006045	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	VL	NT	-3.80	-0.002209	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	VN	NT	-3.40	-0.001977	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	VH	NT	0.00	0.000000	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	VL	NT	-11.80	-0.006762	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	VN	NT	-13.10	-0.007507	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	VH	NT	-7.90	-0.004527	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	VL	NT	-4.40	-0.002486	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	VN	NT	-12.80	-0.007232	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	VH	NT	0.00	0.000000	±2.5	PASS

### 8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temper ature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band66	20MHz	QPSK	132072	100RB#0	NV	-30	-7.40	-0.004302	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	NV	-20	-3.50	-0.002035	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	NV	0	-3.30	-0.001919	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	NV	10	-12.50	-0.007267	±2.5	PASS
Band66	20MHz	QPSK	132072	100RB#0	NV	20	-8.80	-0.005116	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	-30	-0.70	-0.000401	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	-20	-1.30	-0.000745	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	0	-14.00	-0.008023	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	10	-0.10	-0.000057	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	20	-3.70	-0.002120	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	-30	-3.70	-0.002090	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	-20	4.50	0.002542	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	0	-3.30	-0.001864	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	10	-7.90	-0.004463	±2.5	PASS
Band66	20MHz	QPSK	132572	100RB#0	NV	20	-6.40	-0.003616	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	-30	-4.20	-0.002442	±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 <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 2 certificate, please contact us at telephone: (86-755) 83071443, or email: CNDoccheck-0803s.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



Report No.: ZR/2019/A000601

67 of 67 Page:

Band66	20MHz	16QAM	132072	100RB#0	NV	-20	-0.30	-0.000174	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	0	2.90	0.001686	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	10	-5.90	-0.003430	±2.5	PASS
Band66	20MHz	16QAM	132072	100RB#0	NV	20	-7.00	-0.004070	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	-30	-7.40	-0.004241	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	-20	-1.20	-0.000688	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	0	-3.40	-0.001948	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	10	-1.70	-0.000974	±2.5	PASS
Band66	20MHz	16QAM	132322	100RB#0	NV	20	2.70	0.001547	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	-30	-7.00	-0.003955	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	-20	-0.40	-0.000226	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	0	-5.40	-0.003051	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	10	-14.90	-0.008418	±2.5	PASS
Band66	20MHz	16QAM	132572	100RB#0	NV	20	3.10	0.001751	±2.5	PASS

The End

