

Appendix D-Radiated Spurious Emissions

Test Data:

External Antenna:

FDD LTE Band 66:

Low Channel					
Frequency	Spurious Emission Level			Limit	Over limit
(MHz)	(Deg)	Polaxis	(dBm)	dBm	(dB)
132.6	36.0	Horizontal	-58.3	-13.0	-45.3
314.1	197.0	Horizontal	-56.7	-13.0	-43.7
831.5	136.0	Horizontal	-52.6	-13.0	-39.6
2497.6	194.0	Horizontal	-49.9	-13.0	-36.9
6345.6	164.0	Horizontal	-49.4	-13.0	-36.4
10828.3	70.0	Horizontal	-50.2	-13.0	-37.2
91.0	227.0	Vertical	-55.4	-13.0	-42.4
430.5	338.0	Vertical	-54.1	-13.0	-41.1
674.0	166.0	Vertical	-52.6	-13.0	-39.6
2488.7	271.0	Vertical	-50.9	-13.0	-37.9
6331.5	143.0	Vertical	-47.9	-13.0	-34.9
12112.6	232.0	Vertical	-49.2	-13.0	-36.2

Middle Channel					
Frequency	Spurious Emission Level			Limit	Over limit
(MHz)	(Deg)	Polaxis	(dBm)	dBm	(dB)
113.6	111.0	Horizontal	-56.6	-13.0	-43.6
337.5	177.0	Horizontal	-54.2	-13.0	-41.2
712.6	268.0	Horizontal	-53.9	-13.0	-40.9
2499.5	122.0	Horizontal	-50.1	-13.0	-37.1
6341.4	15.0	Horizontal	-49.8	-13.0	-36.8
9805.4	9.0	Horizontal	-49.4	-13.0	-36.4
159.4	328.0	Vertical	-56.3	-13.0	-43.3
341.0	257.0	Vertical	-54.0	-13.0	-41.0
731.1	207.0	Vertical	-51.5	-13.0	-38.5
2495.5	68.0	Vertical	-49.2	-13.0	-36.2
6337.2	175.0	Vertical	-50.0	-13.0	-37.0
11115.4	146.0	Vertical	-48.4	-13.0	-35.4

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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN_Doccheck@sgs.com



Compliance Certification Services (Kunshan) Inc.
EMC Laboratory

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

(86-512)57355888 (86-512)57370818 www.sgsgroup.com.cn
(86-512)57355888 (86-512)57370818 sgs.china@sgs.com

High Channel					
Frequency	Spurious Emission Level			Limit	Over limit
(MHz)	(Deg)	Polaxis	(dBm)	dBm	(dB)
154.8	257.0	Horizontal	-56.7	-13.0	-43.7
329.3	20.0	Horizontal	-55.5	-13.0	-42.5
797.4	243.0	Horizontal	-52.9	-13.0	-39.9
2482.2	206.0	Horizontal	-47.8	-13.0	-34.8
6332.3	152.0	Horizontal	-48.2	-13.0	-35.2
12191.2	205.0	Horizontal	-48.9	-13.0	-35.9
115.5	101.0	Vertical	-58.8	-13.0	-45.8
369.1	213.0	Vertical	-53.3	-13.0	-40.3
684.9	347.0	Vertical	-54.4	-13.0	-41.4
2493.9	252.0	Vertical	-50.9	-13.0	-37.9
6345.8	172.0	Vertical	-50.4	-13.0	-37.4
9572.6	85.0	Vertical	-49.7	-13.0	-36.7



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN_Doccheck@sgs.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

(86-512)57355888 (86-512)57370818 www.sgsgroup.com.cn
(86-512)57355888 (86-512)57370818 sgs.china@sgs.com

Internal Antenna:**FDD LTE Band 66:**

Low Channel					
Frequency	Spurious Emission Level			Limit	Over limit
(MHz)	(Deg)	Polaxis	(dBm)	dBm	(dB)
132.7	36.0	Horizontal	-57.5	-13.0	-44.5
314.8	197.0	Horizontal	-57.0	-13.0	-44.0
830.4	137.0	Horizontal	-52.5	-13.0	-39.5
2497.7	195.0	Horizontal	-48.8	-13.0	-35.8
6344.8	165.0	Horizontal	-48.2	-13.0	-35.2
10827.6	69.0	Horizontal	-50.3	-13.0	-37.3
91.7	226.0	Vertical	-55.3	-13.0	-42.3
431.5	338.0	Vertical	-54.5	-13.0	-41.5
673.1	166.0	Vertical	-51.4	-13.0	-38.4
2487.5	270.0	Vertical	-50.6	-13.0	-37.6
6332.3	144.0	Vertical	-48.6	-13.0	-35.6
12113.5	231.0	Vertical	-50.2	-13.0	-37.2

Middle Channel					
Frequency	Spurious Emission Level			Limit	Over limit
(MHz)	(Deg)	Polaxis	(dBm)	dBm	(dB)
114.3	110.0	Horizontal	-56.2	-13.0	-43.2
336.5	177.0	Horizontal	-53.8	-13.0	-40.8
712.7	268.0	Horizontal	-55.0	-13.0	-42.0
2500.1	122.0	Horizontal	-50.2	-13.0	-37.2
6340.9	15.0	Horizontal	-50.2	-13.0	-37.2
9806.4	10.0	Horizontal	-49.3	-13.0	-36.3
160.2	328.0	Vertical	-56.1	-13.0	-43.1
341.2	257.0	Vertical	-54.0	-13.0	-41.0
732.0	207.0	Vertical	-51.8	-13.0	-38.8
2494.4	69.0	Vertical	-48.7	-13.0	-35.7
6337.8	174.0	Vertical	-49.6	-13.0	-36.6
11115.3	146.0	Vertical	-47.3	-13.0	-34.3

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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN_Doccheck@sgs.com



Compliance Certification Services (Kunshan) Inc.
EMC Laboratory

No.10, Weiyi Road, Innovation Park, Kunshan, Jiangsu, China 215300
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

(86-512)57355888 (86-512)57370818 www.sgsgroup.com.cn
(86-512)57355888 (86-512)57370818 sgs.china@sgs.com

High Channel					
Frequency	Spurious Emission Level			Limit	Over limit
(MHz)	(Deg)	Polaxis	(dBm)	dBm	(dB)
154.2	258.0	Horizontal	-55.6	-13.0	-42.6
329.8	19.0	Horizontal	-54.9	-13.0	-41.9
796.6	243.0	Horizontal	-51.8	-13.0	-38.8
2481.1	206.0	Horizontal	-48.6	-13.0	-35.6
6331.8	151.0	Horizontal	-49.2	-13.0	-36.2
12190.0	204.0	Horizontal	-49.5	-13.0	-36.5
115.3	101.0	Vertical	-57.9	-13.0	-44.9
368.5	213.0	Vertical	-53.3	-13.0	-40.3
684.0	348.0	Vertical	-54.8	-13.0	-41.8
2494.4	253.0	Vertical	-51.6	-13.0	-38.6
6345.0	171.0	Vertical	-49.5	-13.0	-36.5
9571.8	84.0	Vertical	-50.5	-13.0	-37.5

Remark:

There are two models of the EUT. The main difference is that one is a internal antenna, and the other is an external antenna. For External antenna, the test is with 50 ohm impedance.

No emissions were detected within 20dB below the limit for the Downlink direction.

The cabinet radiation was measured with the equipment transmitting a CW signal into a non-radiating 50 Ohm load at maximum output power on a signal frequency.

Measured were performed in the lowest, middle and highest frequency for the Downlink.

The spectrum was searched from 30MHz to 18GHz or 10th Harmonic for downlink.

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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CN_Doccheck@sgs.com



No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

(86-512)57355888 (86-512)57370818 www.sgsgroup.com.cn
(86-512)57355888 (86-512)57370818 sgs.china@sgs.com