

TEST REPORT

Product : Camera
Trade mark : STREAMAX
Model/Type reference : AD Plus2.0,AD Lite,C6 Lite
Test Model No. : AD Plus2.0
Serial Number : N/A
Report Number : EED32O80680302
FCC ID : 2AM6L-ADP2
Date of Issue : Jul.12, 2022
Test Standards : 47 CFR Part 2
47 CFR Part 22 subpart H
47 CFR Part 24 subpart E
47 CFR Part 27
Test result : PASS

Prepared for:

Streamax Technology Co.,Ltd
21-23/F,Building B1,Zhiyuan,No.1001,Xueyuan Avenue,Nanshan
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Jul.12, 2022

Aaron Ma



Check No.:3615170522

2 Version

Version No.	Date	Description
00	Jul.12, 2022	Original

3 Test Summary

LTE band 2			
Test Item	Test Requirement	Test method	Result
Field strength of spurious radiation	Part 2.1053 /Part 2.1057 / Part 24.238(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Conducted output power	Part 2.1046(a) /Part 24.232(c)	TIA-603-E-2016&KDB 971168 D01v03r01	Note1
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 24.232(c)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
peak-to-average ratio	Part 24.232(d)	KDB 971168 D01v03r01	Note1
99% &26dBOccupied Bandwidth	Part 2.1049(h)	Part 24.238(b) &KDB 971168 D01v03r01	Note1
Band Edge at antenna terminals	Part 2.1051/ Part 24.238(a)	Part 24.238(b) &KDB 971168 D01v03r01	Note1
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 24.238(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	Note1
Frequency stability	Part 2.1055/Part 24.235	TIA-603-E-2016&KDB 971168 D01v03r01	Note1

Note1:Refer to the report of Report No.:R2007A0434-R2,(LTE module' s FCC ID:XMR202008EC25AFXD) and Report No.:R1907A0408-R2,(LTE module' s FCC ID:XMR201909EC25AFX)

This test report (Ref. No.:EED32O80680302) is only valid with the original test report (Ref. No.: Report No.:R2007A0434-R2 and Report No.:R1907A0408-R2).

Review this report and original report,the module without changes in circuit and product function, therefore in this report the Radiated Spurious Emission were retested and shown the data in this report, other tests data please refer to original Report No.:R2007A0434-R2 and Report No.:R1907A0408-R2.

LTE band 4			
Test Item	Test Requirement	Test method	Result
Field strength of spurious radiation	Part 2.1053/ Part 27.53(h)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Conducted output power	Part 2.1046(a) /Part 27.50(d)	TIA-603-E-2016&KDB 971168 D01v03r01	Note2
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 27.50(d)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
peak-to-average ratio	Part 27.50(d)	KDB 971168 D01v03r01	Note2
99% &26dB Occupied Bandwidth	Part 2.1049(h)	Part 27.53(h) &KDB 971168 D01v03r01	Note2
Band Edge at antenna terminals	Part 2.1051/ Part 27.53(h)	Part 27.53(h) &KDB 971168 D01v03r01	Note2
Spurious emissions at antenna terminals	Part 2.1051/ Part 27.53(h)	TIA-603-E-2016&KDB 971168 D01v03r01	Note2
Frequency stability	Part 2.1055/Part 27.54	TIA-603-E-2016&KDB 971168 D01v03r01	Note2

Note2:Refer to the report of Report No.:R2007A0434-R3,(LTE module' s FCC ID:XMR202008EC25AFXD) and Report No.:R1907A0408-R3,(LTE module' s FCC ID:XMR201909EC25AFX).

This test report (Ref. No.:EED32O80680302) is only valid with the original test report (Ref. No.: Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3).

Review this report and original report,the module without changes in circuit and product function, therefore in this report the Radiated Spurious Emission were retested and shown the data in this report, other tests data please refer to original Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3.

LTE Band 5			
Test Item	Test Requirement	Test method	Result
Field strength of spurious radiation	Part 2.1053/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Conducted output power	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016&KDB 971168 D01v03r01	Note3
Effective Radiated Power of Transmitter(ERP)	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
99%&26dB Occupied Bandwidth	Part 2.1049(h)	Part 22.917(b) &KDB 971168 D01v03r01	Note3
Band Edge at antenna terminals	Part 2.1051/Part 22.917(a)	Part 22.917(b) &KDB 971168 D01v03r01	Note3
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	Note3
Frequency stability	Part 2.1055/ Part 22.355	TIA-603-E-2016&KDB 971168 D01v03r01	Note3

Note3:Refer to the report of Report No.:R2007A0434-R1,(LTE module' s FCC ID:XMR202008EC25AFXD) and Report No.:R1907A0408-R1,(LTE module' s FCC ID:XMR201909EC25AFX).

This test report (Ref. No.:EED32O80680302) is only valid with the original test report (Ref. No.: Report No.:R2007A0434-R1 and Report No.:R1907A0408-R1).

Review this report and original report,the module without changes in circuit and product function, therefore in this report the Radiated Spurious Emission were retested and shown the data in this report, other tests data please refer to original Report No.:R2007A0434-R1 and Report No.:R1907A0408-R1.

LTE Band 12			
Test Item	Test Requirement	Test method	Result
Field strength of spurious radiation	Part 2.1053/ Part 27.53(g)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Conducted output power	Part 2.1046(a) /Part 27.50(c)	TIA-603-E-2016 & KDB 971168 D01v03r01	Note4
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 27.50(c)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
99% & 26dB Occupied Bandwidth	Part 2.1049(h)	KDB 971168 D01v03r01	Note4
Band Edge at antenna terminals	Part 2.1051/ Part 27.53(g)	KDB 971168 D01v03r01	Note4
Spurious emissions at antenna terminals	Part 2.1051/ Part 27.53(g)	TIA-603-E-2016 & KDB 971168 D01v03r01	Note4
Frequency stability	Part 2.1055/Part 27.54	TIA-603-E-2016 & KDB 971168 D01v03r01	Note4

Note4:Refer to the report of Report No.:R2007A0434-R3,(LTE module' s FCC ID:XMR202008EC25AFXD) and Report No.:R1907A0408-R3,(LTE module' s FCC ID:XMR201909EC25AFX).

This test report (Ref. No.:EED32O80680302) is only valid with the original test report (Ref. No.: Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3).

Review this report and original report,the module without changes in circuit and product function, therefore in this report the Radiated Spurious Emission were retested and shown the data in this report, other tests data please refer to original Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3.

LTE Band 13			
Test Item	Test Requirement	Test method	Result
Field strength of spurious radiation	Part 2.1053/ Part 27.53(g)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Conducted output power	Part 2.1046(a) /Part 27.50(c)	TIA-603-E-2016 & KDB 971168 D01v03r01	Note5
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 27.50(c)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
99% & 26dB Occupied Bandwidth	Part 2.1049(h)	KDB 971168 D01v03r01	Note5
Band Edge at antenna terminals	Part 2.1051/ Part 27.53(g)	KDB 971168 D01v03r01	Note5
Spurious emissions at antenna terminals	Part 2.1051/ Part 27.53(g)	TIA-603-E-2016 & KDB 971168 D01v03r01	Note5
Frequency stability	Part 2.1055/Part 27.54	TIA-603-E-2016 & KDB 971168 D01v03r01	Note5

Note5:Refer to the report of Report No.:R2007A0434-R3,(LTE module' s FCC ID:XMR202008EC25AFXD) and Report No.:R1907A0408-R3,(LTE module' s FCC ID:XMR201909EC25AFX).

This test report (Ref. No.:EED32O80680302) is only valid with the original test report (Ref. No.: Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3).

Review this report and original report,the module without changes in circuit and product function, therefore in this report the Radiated Spurious Emission were retested and shown the data in this report, other tests data please refer to original Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3.

LTE Band 66			
Test Item	Test Requirement	Test method	Result
Field strength of spurious radiation	Part 2.1053/ Part 27.53(g)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Conducted output power	Part 2.1046(a) /Part 27.50(c)	TIA-603-E-2016 & KDB 971168 D01v03r01	Note6
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 27.50(c)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
99% & 26dB Occupied Bandwidth	Part 2.1049(h)	KDB 971168 D01v03r01	Note6
Band Edge at antenna terminals	Part 2.1051/ Part 27.53(g)	KDB 971168 D01v03r01	Note6
Spurious emissions at antenna terminals	Part 2.1051/ Part 27.53(g)	TIA-603-E-2016 & KDB 971168 D01v03r01	Note6
Frequency stability	Part 2.1055/Part 27.54	TIA-603-E-2016 & KDB 971168 D01v03r01	Note6

Note6:Refer to the report of Report No.:R2007A0434-R3,(LTE module' s FCC ID:XMR202008EC25AFXD) and Report No.:R1907A0408-R3,(LTE module' s FCC ID:XMR201909EC25AFX).

This test report (Ref. No.:EED32O80680302) is only valid with the original test report (Ref. No.: Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3).

Review this report and original report,the module without changes in circuit and product function, therefore in this report the Radiated Spurious Emission were retested and shown the data in this report, other tests data please refer to original Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3.

LTE Band 71			
Test Item	Test Requirement	Test method	Result
Field strength of spurious radiation	Part 2.1053/ Part 27.53(g)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Conducted output power	Part 2.1046(a) /Part 27.50(c)	TIA-603-E-2016 & KDB 971168 D01v03r01	Note7
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 27.50(c)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
99% & 26dB Occupied Bandwidth	Part 2.1049(h)	KDB 971168 D01v03r01	Note7
Band Edge at antenna terminals	Part 2.1051/ Part 27.53(g)	KDB 971168 D01v03r01	Note7
Spurious emissions at antenna terminals	Part 2.1051/ Part 27.53(g)	TIA-603-E-2016 & KDB 971168 D01v03r01	Note7
Frequency stability	Part 2.1055/Part 27.54	TIA-603-E-2016 & KDB 971168 D01v03r01	Note7

Note7:Refer to the report of Report No.:R2007A0434-R3,(LTE module' s FCC ID:XMR202008EC25AFXD) and Report No.:R1907A0408-R3,(LTE module' s FCC ID:XMR201909EC25AFX).

This test report (Ref. No.:EED32O80680302) is only valid with the original test report (Ref. No.: Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3).

Review this report and original report,the module without changes in circuit and product function, therefore in this report the Radiated Spurious Emission were retested and shown the data in this report, other tests data please refer to original Report No.:R2007A0434-R3 and Report No.:R1907A0408-R3.

Remark:

The module only applies LTE band 2,LTE band 4,LTE Band 5,LTE Band 12,LTE Band 13,LTE Band 66 and LTE Band 71,Other frequency bands are not in use.

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.

RF: In this whole report RF means Radiated Frequency.

Volt: In this whole report Volt means Voltage.

Temp: In this whole report Temp means Temperature.

Humid: In this whole report Humid means humidity.

Press: In this whole report Press means Pressure.

N/A: In this whole report not application

Model No.: AD Plus2.0,AD Lite,C6 Lite

This application product has single lens and double lens optional.Only the model AD Plus2.0 of double lens was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being model's names, Lens resolution and appearance color are different for marketing requirements.

4 Content

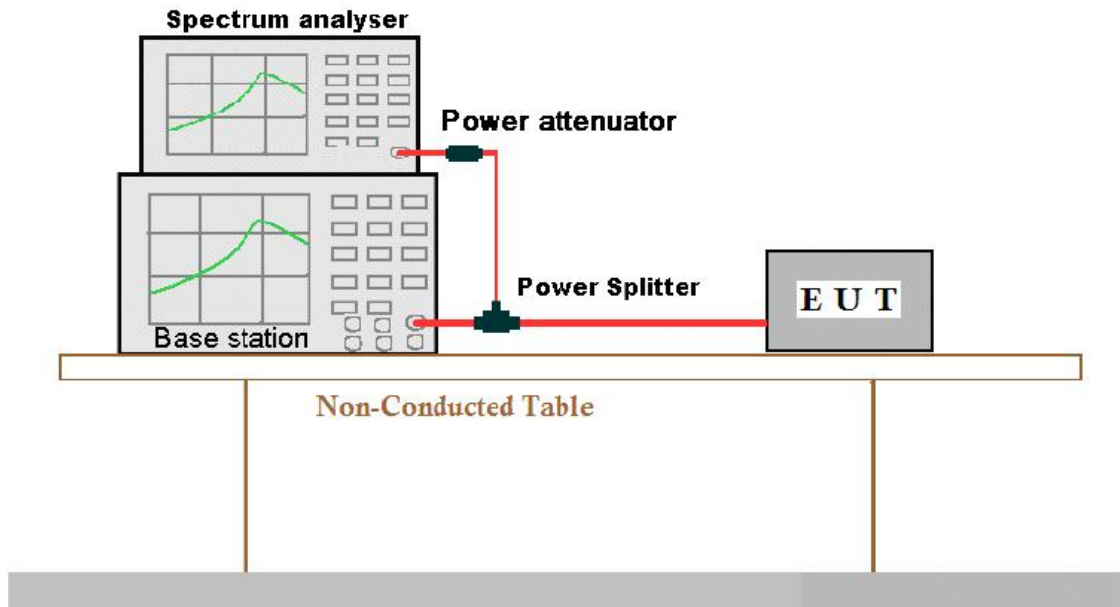
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5 Test Requirement

5.1 Test setup

5.1.1 For Radiated Emissions test setup

Test setup 1:



Radiated Emissions setup:

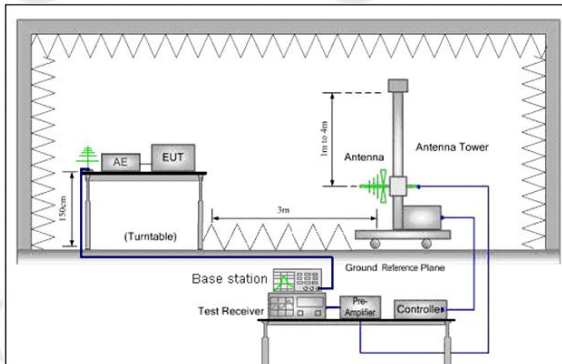


Figure 1. 30MHz to 1GHz

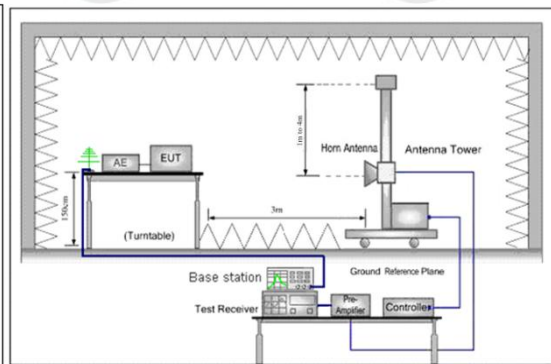


Figure 2. above 1GHz

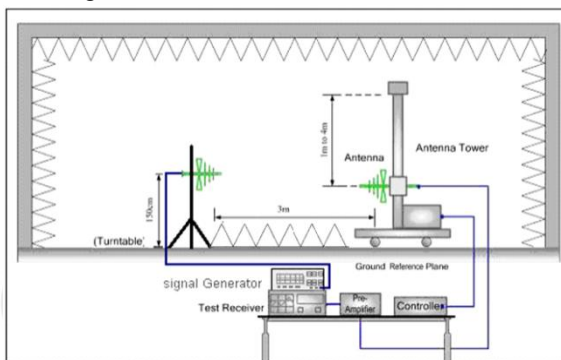


Figure 1. 30MHz to 1GHz

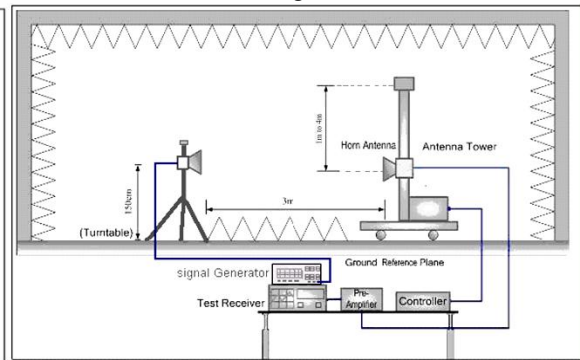


Figure 2. above 1GHz

5.2 Test Environment

Operating Environment:	
Radiated Spurious Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~56 % RH
Atmospheric Pressure:	1010mbar

5.3 Test Condition

Test channel:

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band2 TX:1850-1910MHz	Low Range	1.4	18607	1850.7
		3	18615	1851.5
		5	18625	1852.5
		10	18650	1855
		15	18675	1857.5
		20	18700	1860
	Mid Range	1.4/3/5/10/15/20	18900	1880
	High Range	1.4	19193	1909.3
		3	19185	1908.5
		5	19175	1907.5
		10	19150	1905
		15	19125	1902.5
		20	19100	1900

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 4 TX:1710-1755 MHz	Low Range	1.4	19957	1710.7
		3	19965	1711.5
		5	19976	1712.5
		10	20000	1715
		15	20025	1717.5
		20	20050	1720
	Mid Range	1.4/3/5/10/15/20	20175	1732.5
	High Range	1.4	20393	1754.3
		3	20385	1753.5
		5	20375	1752.5
		10	20350	1750
		15	20325	1747.5
		20	20300	1745

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 5 TX:824-849 MHz	Low Range	1.4	20407	824.7
		3	20415	825.5
		5	20425	826.5
		10	20450	829
	Mid Range	1.4/3/5/10	20525	836.5
	High Range	1.4	20643	848.3
		3	20635	847.5
		5	20625	846.5
		10	20600	844

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 12 TX:699 to 716 MHz	Low Range	1.4	23017	699.7
		3	23025	700.5
		5	23035	701.5
		10	23060	704
	Mid Range	1.4/3/5/10	23095	707.5
	High Range	1.4	23173	715.3
		3	23165	714.5
		5	23155	713.5
		10	23130	711

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 13 TX:777 to 787 MHz	Low Range	5	23205	779.5
		10	23230	782
	Mid Range	5/10	23230	782
	High Range	5	23255	784.5
		10	23230	782

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTEband66 Tx: 1710- 1780MHz	Low Range	1.4	131979	1710.7
		3	131987	1711.5
		5	131997	1712.5
		10	132022	1715
		15	132047	1717.5
		20	132072	1720
	Mid Range	1.4/3/5/10/15/20	132322	1745
	High Range	1.4	132665	1779.3
		3	132657	1778.5
		5	132647	1777.5
		10	132622	1775
		15	132597	1772.5
		20	132572	1770

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTEband71 Tx: 663- 698MHz	Low Range	5	133147	665.5
		10	133172	668
		15	133197	670.5
		20	133222	673
	Mid Range	5/10/15/20	133297	680.5
	High Range	5	133447	695.5
		10	133422	693
		15	133397	690.5
		20	133372	688

6 General Information

6.1 Client Information

Applicant:	Streamax Technology Co.,Ltd
Address of Applicant:	21-23/F,Building B1,Zhiyuan,No.1001,Xueyuan Avenue,Nanshan District,Shenzhen City,Guangdong Province,P.R.China
Manufacturer:	Streamax Technology Co.,Ltd
Address of Manufacturer:	21-23/F,Building B1,Zhiyuan,No.1001,Xueyuan Avenue,Nanshan District,Shenzhen City,Guangdong Province,P.R.China

6.2 General Description of EUT

Product Name:	Camera
Model No.(EUT):	AD Plus2.0,AD Lite,C6 Lite
Test Model No.:	AD Plus2.0
Trade mark:	STREAMAX
Power Supply:	9-36V  2A
Sample Received Date:	May 17, 2022
Sample tested Date:	May 25, 2022 to Jun. 06, 2022

6.3 Product Specification subjective to this standard

Frequency Band:	LTE Band 2: Tx: 1850-1910MHz; LTE Band 4: Tx: 1710-1755 MHz; LTE Band 5: Tx: 824-849 MHz; LTE Band 12: Tx: 699-716 MHz; LTE band 13:TX:777 -787 MHz; LTEband66:Tx: 1710- 1780MHz; LTEband71:Tx: 663- 698MHz;
Modulation Type:	QPSK, 16QAM
Antenna Type	Internal antenna
Antenna Gain:	LTE B2: 3dBi, LTE B4: 3dBi, LTE B5:3dBi, LTE B12: 3dBi, LTE B13 :3dBi, LTE B66:3dBi, LTE B71:3dBi

6.4 Description of Support Units

The EUT has been tested with associated equipment below.

1) support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
/	/	/	/	/

6.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

6.6 Deviation from Standards

None.

6.7 Abnormalities from Standard Conditions

None.

6.8 Other Information Requested by the Customer

None.

6.9 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.3dB (30MHz-1GHz)
		4.5dB (1GHz-12.75GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

7 Equipment List

3M Semi/full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
RSE Automatic test software	JS Tonscend	JS36-RSE	10166	---	---
Receiver	Keysight	N9038A	MY5729013 6	03-01-2022	02-28-2023
Spectrum Analyzer	Keysight	N9020B	MY5711111 2	02-23-2022	02-22-2023
Spectrum Analyzer	Keysight	N9030B	MY5714087 1	02-23-2022	02-22-2023
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-30-2021	04-29-2024
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-15-2021	04-14-2024
Horn Antenna	ETS-LINDGREN	3117	57407	07-04-2021	07-03-2024
Preamplifier	EMCI	EMC184055 SE	980597	04-20-2022	04-19-2023
Preamplifier	EMCI	EMC001330	980563	04-01-2022	03-31-2023
Preamplifier	JS Tonscend	980380	EMC051845 SE	12-24-2021	12-23-2022
Communication test set	R&S	CMW500	102898	12-24-2021	12-23-2022
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	04-11-2022	04-10-2023
Fully Anechoic Chamber	TDK	FAC-3	---	01-09-2021	01-08-2024
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	---	---
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	---	---
Cable line	Times	EMC104-NMNM-1000	SN160710	---	---
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	---	---
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	---	---
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	---	---
Cable line	Times	HF160-KMKM-3.00M	393493-0001	---	---
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-075	04/17/2021	04/16/2024

3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
RSE Automatic test software	JS Tonscend	JS36-RSE	10166	---	---
Receiver	Keysight	N9038A	MY57290136	03-01-2022	02-28-2023
Spectrum Analyzer	Keysight	N9020B	MY57111112	02-23-2022	02-22-2023
Spectrum Analyzer	Keysight	N9030B	MY57140871	02-23-2022	02-22-2023
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-28-2021	04-27-2024
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-15-2021	04-14-2024
Horn Antenna	ETS-LINDGREN	3117	57407	07-04-2021	07-03-2024
Preamplifier	EMCI	EMC184055SE	980597	04-20-2022	04-19-2023
Preamplifier	EMCI	EMC001330	980563	04-01-2022	03-31-2023
Preamplifier	JS Tonscend	980380	EMC051845SE	12-24-2021	12-23-2022
Communication test set	R&S	CMW500	102898	12-24-2021	12-23-2022
Temperature/Humidity Indicator	biaozhi	GM1360	EE1186631	04-11-2022	04-10-2023
Fully Anechoic Chamber	TDK	FAC-3	---	01-09-2021	01-08-2024
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	---	---
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	---	---
Cable line	Times	EMC104-NMNM-1000	SN160710	---	---
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	---	---
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	---	---
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	---	---
Cable line	Times	HF160-KMKM-3.00M	393493-0001	---	---

7.1 Effective Radiated Power of Transmitter(EIRP)

Band	Conducted power (dBm)	Antenna gain (dBi)	ERP/EIRP (dBm)	Limit (dBm)	Conclusion
LTE Band2	23.84	3	26.84	33	Pass
LTE Band4	23.72	3	26.72	30	Pass
LTE Band5	24.19	3	27.19	38.45	Pass
LTE Band12	23.74	3	26.74	34.77	Pass
LTE Band13	23.85	3	26.85	34.77	Pass
LTE Band66	23.82	3	26.82	30	Pass
LTE Band71	23.47	3	26.47	34.77	Pass

Remark:

1.The Conducted power refer to the report of Report No.:R2007A0434-R1,R2007A0434-R2,R2007A0434-R3,R1907A0408-R1,R1907A0408-R2,R1907A0408-R3..Only the worst case was recorded in the report.

2.According to KDB 412172 D01 Power Approach,Calculate power in dBm by the following formula:

$ERP(dBm) = \text{Conducted output power}(dBm) + \text{antenna gain (dBd)}$

$EIRP(dBm) = \text{Conducted output power}(dBm) + \text{antenna gain (dBi)}$

$EIRP=ERP+2.15dB$

7.2 Field strength of spurious radiation

Receiver Setup:	<table><tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr><tr><td>0.009MHz-30MHz</td><td>Peak</td><td>10kHz</td><td>30kHz</td><td>Peak</td></tr><tr><td>30MHz-1GHz</td><td>Peak</td><td>120kHz</td><td>300kHz</td><td>Peak</td></tr><tr><td>Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr></table>	Frequency	Detector	RBW	VBW	Remark	0.009MHz-30MHz	Peak	10kHz	30kHz	Peak	30MHz-1GHz	Peak	120kHz	300kHz	Peak	Above 1GHz	Peak	1MHz	3MHz	Peak
Frequency	Detector	RBW	VBW	Remark																	
0.009MHz-30MHz	Peak	10kHz	30kHz	Peak																	
30MHz-1GHz	Peak	120kHz	300kHz	Peak																	
Above 1GHz	Peak	1MHz	3MHz	Peak																	
Measurement Procedure:	1. Scan up to 10th harmonic, find the maximum radiation frequency to measure. 2. The technique used to find the Spurious Emissions of the transmitter was the antenna substitution method. Substitution method was performed to determine the actual ERP/EIRP emission levels of the EUT. Test procedure as below: The EUT was powered ON and placed on a 1.5m hight table at a 3 meter fully Anechoic Chamber. The antenna of the transmitter was extended to its maximum length. modulation mode and the measuring receiver shall be tuned to the frequency of the transmitter under test. The EUT was set 3 meters(above 18GHz the distance is 1 meter) away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made. Steps 1) to 3) were performed with the EUT and the receive antenna in both vertical and horizontal polarization. The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter. A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 3) is obtained for this set of conditions. The output power into the substitution antenna was then measured. Steps 6) and 7)were repeated with both antennas polarized. Calculate power in dBm by the following formula: ERP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBd) EIRP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBi) EIRP=ERP+2.15dB where: Pg is the generator output power into the substitution antenna. Test the EUT in the lowest channel, the middle channel the Highest channel The radiation measurements are performed in X, Y, Z axis positioning for EUT operation mode,And found the X axis positioning which it is worse case. Repeat above procedures until all frequencies measured was complete.																				
Limit:	Attenuated at least 43+10log(P)																				

Measurement Data

Remark: Only the worst case was recorded in the report.

QPSK:

Mode:		LTE Traffic						
Band:		2		Channel:			18700	
Remark:		20MHz						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	100.0480	150	250	-64.19	-13.00	51.19	PASS	Horizontal
2	179.9920	150	135	-60.00	-13.00	47.00	PASS	Horizontal
3	312.1324	150	39	-55.57	-13.00	42.57	PASS	Horizontal
4	1536.4536	150	135	-37.45	-13.00	24.45	PASS	Horizontal
5	6145.6573	150	120	-52.56	-13.00	39.56	PASS	Horizontal
6	21543.5417	150	91	-53.83	-13.00	40.83	PASS	Horizontal
7	39.7019	150	346	-64.32	-13.00	51.32	PASS	Vertical
8	179.9920	150	130	-59.64	-13.00	46.64	PASS	Vertical
9	312.1324	150	42	-56.34	-13.00	43.34	PASS	Vertical
10	1536.4536	150	154	-40.03	-13.00	27.03	PASS	Vertical
11	6146.4073	150	82	-51.59	-13.00	38.59	PASS	Vertical
12	21192.4077	150	198	-53.42	-13.00	40.42	PASS	Vertical

Mode:		LTE Traffic						
Band:		4		Channel:			20050	
Remark:		20MHz						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	40.0900	150	273	-67.87	-13.00	54.87	PASS	Horizontal
2	179.9920	150	166	-60.90	-13.00	47.90	PASS	Horizontal
3	312.1324	150	36	-55.87	-13.00	42.87	PASS	Horizontal
4	1536.4536	150	122	-37.36	-13.00	24.36	PASS	Horizontal
5	6145.6573	150	124	-52.43	-13.00	39.43	PASS	Horizontal
6	21801.1520	150	13	-53.86	-13.00	40.86	PASS	Horizontal
7	40.2841	150	49	-65.46	-13.00	52.46	PASS	Vertical
8	180.1860	150	187	-62.83	-13.00	49.83	PASS	Vertical
9	312.1324	150	38	-56.10	-13.00	43.10	PASS	Vertical
10	1536.4536	150	155	-40.25	-13.00	27.25	PASS	Vertical
11	6145.6573	150	136	-52.13	-13.00	39.13	PASS	Vertical
12	21604.3042	150	49	-54.54	-13.00	41.54	PASS	Vertical

Mode:		LTE Traffic						
Band:		5			Channel:		20450	
Remark:		10MHz						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	100.0480	150	53	-64.39	-13.00	51.39	PASS	Horizontal
2	179.9920	150	145	-59.49	-13.00	46.49	PASS	Horizontal
3	312.1324	150	22	-55.57	-13.00	42.57	PASS	Horizontal
4	3073.5037	150	163	-51.26	-13.00	38.26	PASS	Horizontal
5	9239.5620	150	114	-49.48	-13.00	36.48	PASS	Horizontal
6	22200.1680	150	114	-53.56	-13.00	40.56	PASS	Horizontal
7	40.0900	150	29	-64.79	-13.00	51.79	PASS	Vertical
8	179.9920	150	141	-58.35	-13.00	45.35	PASS	Vertical
9	312.1324	150	29	-56.18	-13.00	43.18	PASS	Vertical
10	1995.4996	150	296	-51.25	-13.00	38.25	PASS	Vertical
11	3160.5080	150	215	-50.48	-13.00	37.48	PASS	Vertical
12	20418.9768	150	155	-54.24	-13.00	41.24	PASS	Vertical

Mode:		LTE Traffic						
Band:		12			Channel:		23060	
Remark:		10MHz						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	100.0480	150	235	-63.54	-13.00	50.54	PASS	Horizontal
2	179.9920	150	85	-62.69	-13.00	49.69	PASS	Horizontal
3	264.0108	150	180	-56.57	-13.00	43.57	PASS	Horizontal
4	3072.7536	150	208	-50.35	-13.00	37.35	PASS	Horizontal
5	6919.6960	150	312	-53.63	-13.00	40.63	PASS	Horizontal
6	21403.9762	150	180	-53.19	-13.00	40.19	PASS	Horizontal
7	100.0480	150	114	-68.23	-13.00	55.23	PASS	Vertical
8	179.9920	150	100	-59.31	-13.00	46.31	PASS	Vertical
9	312.1324	150	39	-56.25	-13.00	43.25	PASS	Vertical
10	3160.5080	150	209	-49.95	-13.00	36.95	PASS	Vertical
11	6145.6573	150	68	-52.28	-13.00	39.28	PASS	Vertical
12	21296.1318	150	7	-53.19	-13.00	40.19	PASS	Vertical

Mode:		LTE Traffic						
Band:		13		Channel:			23230	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	100.0480	150	105	-65.00	-13.00	52.00	PASS	Horizontal
2	179.9920	150	105	-60.14	-13.00	47.14	PASS	Horizontal
3	312.1324	150	24	-55.77	-13.00	42.77	PASS	Horizontal
4	3072.7536	150	142	-50.34	-13.00	37.34	PASS	Horizontal
5	9669.3335	150	67	-48.37	-13.00	35.37	PASS	Horizontal
6	23706.4683	150	193	-53.84	-13.00	40.84	PASS	Horizontal
7	40.0900	150	344	-64.87	-13.00	51.87	PASS	Vertical
8	167.9616	150	100	-65.49	-13.00	52.49	PASS	Vertical
9	312.1324	150	39	-55.68	-13.00	42.68	PASS	Vertical
10	1994.0994	150	8	-51.10	-13.00	38.10	PASS	Vertical
11	3160.5080	150	200	-50.41	-13.00	37.41	PASS	Vertical
12	21600.7840	150	330	-54.67	-13.00	41.67	PASS	Vertical

Mode:		LTE Traffic						
Band:		66		Channel:			132322	
Remark:		20M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	39.7019	150	343	-68.65	-13.00	55.65	PASS	Horizontal
2	100.0480	150	85	-63.58	-13.00	50.58	PASS	Horizontal
3	312.1324	150	34	-55.25	-13.00	42.25	PASS	Horizontal
4	3072.7536	150	178	-49.88	-13.00	36.88	PASS	Horizontal
5	6408.1704	150	96	-53.80	-13.00	40.80	PASS	Horizontal
6	22209.4484	150	102	-53.92	-13.00	40.92	PASS	Horizontal
7	39.8960	150	345	-65.79	-13.00	52.79	PASS	Vertical
8	168.1556	150	120	-63.59	-13.00	50.59	PASS	Vertical
9	312.1324	150	45	-55.82	-13.00	42.82	PASS	Vertical
10	1399.6400	150	73	-51.99	-13.00	38.99	PASS	Vertical
11	3160.5080	150	224	-49.61	-13.00	36.61	PASS	Vertical
12	21176.4471	150	195	-54.06	-13.00	41.06	PASS	Vertical

Mode:		LTE Traffic						
Band:		71		Channel:			133322	
Remark:		20M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	40.0900	150	198	-73.08	-13.00	60.08	Pass	Horizontal
2	137.1094	150	357	-75.40	-13.00	62.40	Pass	Horizontal
3	1272.0272	150	198	-57.31	-13.00	44.31	Pass	Horizontal
4	4701.8351	150	113	-56.65	-13.00	43.65	Pass	Horizontal
5	10221.3611	150	46	-47.18	-13.00	34.18	Pass	Horizontal
6	14536.3268	150	254	-43.88	-13.00	30.88	Pass	Horizontal
7	40.2841	150	143	-65.77	-13.00	52.77	Pass	Vertical
8	137.1094	150	338	-74.17	-13.00	61.17	Pass	Vertical
9	284.9670	150	26	-71.72	-13.00	58.72	Pass	Vertical
10	1907.4907	150	0	-60.09	-13.00	47.09	Pass	Vertical
11	5017.6009	150	360	-54.06	-13.00	41.06	Pass	Vertical
12	13680.5340	150	126	-45.88	-13.00	32.88	Pass	Vertical

Mode:		2.4G WiFi Channel 7+LTE B5						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	1375.2375	150	328	-56.19	-13.00	43.19	Pass	Horizontal
2	2484.1484	150	282	-58.83	-13.00	45.83	Pass	Horizontal
3	5018.3509	150	65	-53.68	-13.00	40.68	Pass	Horizontal
4	7359.9680	150	124	-52.27	-13.00	39.27	Pass	Horizontal
5	10426.8713	150	204	-47.65	-13.00	34.65	Pass	Horizontal
6	14403.5702	150	177	-45.10	-13.00	32.10	Pass	Horizontal
7	1625.0625	150	146	-56.41	-13.00	43.41	Pass	Vertical
8	2249.9250	150	319	-56.88	-13.00	43.88	Pass	Vertical
9	3024.7512	150	220	-56.94	-13.00	43.94	Pass	Vertical
10	5007.1004	150	84	-54.67	-13.00	41.67	Pass	Vertical
11	9784.0892	150	348	-48.95	-13.00	35.95	Pass	Vertical
12	14428.3214	150	49	-45.32	-13.00	32.32	Pass	Vertical

Note:

- 1.Scan from 9kHz to 25GHz, the disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 2.All modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.
- 3.Since 2.4G WiFi and LTE can transmit simultaneously, therefore have provided the test result of Radiated spurious emission under co-location condition.