

FCC REPORT

(LTE)

Applicant: TCL Communication Ltd.

Address of Applicant: 7/F, Block F4, TCL Communication Technology Building, TCL International E City, Zhong Shan Yuan Road, Nanshan District, Shenzhen, Guangdong, P.R. China 518052

Equipment Under Test (EUT)

Product Name: LTE/UMTS/GSM mobile phone

Model No.: 5048A

Trade mark: alcatel

FCC ID: 2ACCJH107

Applicable standards: FCC CFR Title 47 Part 2
FCC CFR Title 47 Part 22 Subpart H
FCC CFR Title 47 Part 24 Subpart E
FCC CFR Title 47 Part 27 Subpart L & M & F & H

Date of sample receipt: 17 Jan., 2022

Date of Test: 18 Jan., to 01 Mar., 2022

Date of report issued: 04 Mar., 2022

Test Result: PASS*

*In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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 90 days only.

2. Version

Version No.	Date	Description
00	04 Mar., 2022	Original

Tested by:

Mike.ou
Test Engineer

Date:

04 Mar., 2022

Reviewed by:

Winner Zhang
Project Engineer

Date:

04 Mar., 2022

3. Contents

	Page
1. COVER PAGE	1
2. VERSION.....	2
3. CONTENTS.....	3
4. TEST SUMMARY	4
5. GENERAL INFORMATION	5
5.1 CLIENT INFORMATION.....	5
5.2 GENERAL DESCRIPTION OF E.U.T.....	5
5.3 TEST ENVIRONMENT AND MODE	14
5.4 DESCRIPTION OF SUPPORT UNITS.....	14
5.5 MEASUREMENT UNCERTAINTY.....	14
5.6 RELATED SUBMITTAL(S) / GRANT (S)	14
5.7 ADDITIONS TO, DEVIATIONS, OR EXCLUSIONS FROM THE METHOD	14
5.8 LABORATORY FACILITY	15
5.9 LABORATORY LOCATION	15
5.10 TEST INSTRUMENTS LIST	16
6. TEST RESULTS.....	17
6.1 CONDUCTED OUTPUT POWER	17
6.1.1 RE-TEST STATEMENT	17
6.1.2 TEST RESULTS	17
6.2 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT.....	19
7. APPENDIX	65
8. TEST SETUP PHOTOGRAPH-PCE.....	66
8.1 TEST SETUP OF JIANYAN TESTING GROUP SHENZHEN CO., LTD.	66

4. Test Summary

Test Items	FCC Part Section(s)	Result
RF Output Power	Part 2.1046 Part 22.913 (a)(5) Part 24.232 (c) Part 27.50 (c)(10) Part 27.50 (d)(4) Part 27.50 (h)(2)	Pass ²
Peak-to-Average Power Ratio	Part 24.232 (d) Part 27.50 (d)(5)	Pass ¹
Modulation Characteristics	Part 2.1047	Pass ¹
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 22.917 (b) Part 24.238 (b) Part 27.53 (g) Part 27.53 (h) Part 27.53 (m)	Pass ¹
Out of band emission at antenna terminals	Part 2.1051 Part 22.917 (a) Part 24.238 (a) Part 27.53 (g) Part 27.53 (h) Part 27.53 (m)	Pass ¹
Field strength of spurious radiation	Part 2.1053 Part 22.917 (a) Part 24.238 (a) Part 27.53 (g) Part 27.53 (h) Part 27.53 (m)	Pass ²
Frequency stability vs. temperature	Part 2.1055 (a)(1)(b) Part 22.355 Part 24.235 Part 27.54	Pass ¹
Frequency stability vs. voltage	Part 2.1055 (d)(2) Part 22.355 Part 24.235 Part 27.54	Pass ¹
Remark: 1. Pass ¹ : Items data are refer from the original report issued by SGS-CSTC Standards Technical Services, Co., Ltd.Shenzhen Branch.(Date of Test: 2019/8/2-2019/8/21).The detailed data refer to Appendix B.3 -LTE Band 2, Appendix B.4 -LTE Band 4, Appendix B.5 -LTE Band 5, Appendix B.6 -LTE Band 7, Appendix B.7 -LTE Band 12, Appendix B.8 -LTE Band 13, Appendix B.9 -LTE Band 17, Appendix B.10 -LTE Band 66. 2. Pass ² : These items are tested by JianYan Testing Group Shenzhen Co., Ltd. 3. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB(Fundamental Frequency below 1GHz)/1.0dB(Fundamental Frequency above 1GHz) (provided by the customer).		
Test Method:	ANSI/TIA-603-E-2016 ANSI C63.26-2015	

5. General Information

5.1 Client Information

Applicant:	TCL Communication Ltd.
Address:	7/F, Block F4, TCL Communication Technology Building, TCL International E City, Zhong Shan Yuan Road, Nanshan District, Shenzhen, Guangdong, P.R. China 518052
Manufacturer:	TCL Communication Ltd.
Address:	7/F, Block F4, TCL Communication Technology Building, TCL International E City, Zhong Shan Yuan Road, Nanshan District, Shenzhen, Guangdong, P.R. China 518052
Factory:	Huizhou TCL Mobile Communication Co, Ltd
Address:	No. 86, Hechang 7th West Road, Zhongkai Hi-Tech Development District, Huizhou, Guangdong

5.2 General Description of E.U.T.

Product Name:	LTE/UMTS/GSM mobile phone		
Model No.:	5048A		
Operation Frequency range:	LTE Band 2: TX: 1850MHz-1910MHz RX: 1930MHz-1990MHz LTE Band 4: TX: 1710MHz-1755MHz RX: 2110MHz-2155MHz LTE Band 5: TX: 824MHz-849MHz RX: 869MHz-894MHz LTE Band 7: TX: 2500MHz-2570MHz RX: 2620MHz-2690MHz LTE band 12: Tx: 699 MHz - 716 MHz Rx: 729 MHz - 746 MHz LTE Band 13: TX: 777MHz-787MHz RX: 746MHz-756MHz LTE Band 17: TX: 704MHz-716MHz RX: 734MHz-746MHz LTE Band 66: TX: 1710MHz-1780MHz RX: 2110MHz-2200MHz		
Modulation type:	☒ QPSK	☒ 16QAM	☒ 64QAM
Antenna type:	Integrated Antenna		
Antenna gain:	LTE Band 2: -0.96dBi(declare by Applicant) LTE Band 4: -0.78dBi(declare by Applicant) LTE Band 5: -3.12dBi(declare by Applicant) LTE Band 7: -0.65dBi(declare by Applicant) LTE Band 12: -3.92dBi(declare by Applicant) LTE Band 13: -3.95dBi(declare by Applicant) LTE Band 17: -3.90dBi(declare by Applicant) LTE Band 66: -0.78dBi(declare by Applicant)		
Power supply:	☒ AC/DC Adapter		
Test Sample Condition:	The applicant provided engineering samples for staying in continuously transmitting for testing.		

Operation Frequency List:

LTE Band 2 (1.4MHz)		LTE Band 2 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18607	1850.70	18615	1851.50
18608	1850.80	18616	1851.60
....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19193	1909.20	19185	1908.40
19194	1909.30	19186	1908.50
LTE Band 2 (5MHz)		LTE Band 2 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18625	1852.50	18650	1855.00
18626	1852.60	18651	1855.10
....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19175	1907.40	19150	1904.90
19176	1907.50	19151	1905.00
LTE Band 2 (15MHz)		LTE Band 2 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18675	1857.50	18700	1860.00
18676	1857.60	18701	1860.10
....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19125	1902.40	19100	1899.90
19126	1902.50	19101	1900.00

LTE Band 4 (1.4MHz)		LTE Band 4 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19957	1710.70	19965	1711.50
19958	1710.80	19966	1711.60
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20392	1754.20	20384	1753.40
20393	1754.30	20385	1753.50
LTE Band 4 (5MHz)		LTE Band 4 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19975	1712.50	20000	1715.00
19976	1712.60	20001	1715.10
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20374	1752.40	20349	1749.90
20375	1752.50	20350	1750.00
LTE Band 4 (15MHz)		LTE Band 4 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20025	1717.50	20050	1720.00
20026	1717.60	20051	1720.10
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20324	1747.40	20299	1744.90
20325	1747.50	20300	1745.00

LTE Band 5 (1.4MHz)		LTE Band 5 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20407	824.70	20415	825.50
20408	824.80	20416	825.60
....			
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
...	...	...	...
20642	848.20	20634	847.40
20643	848.30	20635	847.50
LTE Band 5 (5MHz)		LTE Band 5 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20425	826.50	20450	829.00
20426	826.60	20451	829.10
....			
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
...	...	...	...
20624	846.40	20599	839.90
20625	846.50	20600	844.00

LTE Band 7 (5MHz)		LTE Band 7 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20775	2502.50	20800	2505.00
20776	2502.60	20801	2502.10
....			
21099	2534.90	21099	2534.90
21100	2535.00	21100	2535.00
21101	2535.20	21101	2535.20
...	...	...	...
21424	2567.40	21399	2564.90
21425	2567.50	21400	2565.00
LTE Band 7 (15MHz)		LTE Band 7 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20825	2507.50	20850	2510.00
20826	2507.60	20851	2510.10
....			
21099	2534.90	21099	2534.90
21100	2535.00	21100	2535.00
21101	2535.20	21101	2535.20
...	...	...	...
21374	2562.40	21349	2559.90
21375	2562.50	21350	2560.00

LTE Band 12 (1.4MHz)		LTE Band 12 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23017	699.70	23025	700.50
23756	699.80	23026	700.60
....			
23094	707.40	23094	707.40
23095	707.50	23095	707.50
23096	707.60	23096	707.60
...	...	...	...
23172	715.20	23164	714.40
23173	715.30	23165	714.50
LTE Band 12 (5MHz)		LTE Band 12 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23035	701.50	23060	704.00
23036	701.60	23061	704.10
....			
23094	707.40	23094	707.40
23095	707.50	23095	707.50
23096	707.60	23096	707.60
...	...	...	...
23154	713.40	23129	710.90
23155	713.50	23130	711.00

LTE Band 13 (5MHz)		LTE Band 13 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23205	779.50	/	/
23206	779.60	/	/
....		/	/
23229	781.90	/	/
23230	782.00	23230	782.00
23231	782.10	/	/
...	...	/	/
23255	784.50	/	/
23256	784.60	/	/

LTE Band 17 (5MHz)		LTE Band 17 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23755	706.50	23780	709.00
23756	706.60	23781	709.10
....			
23789	709.90	23789	709.90
23790	710.00	23790	710.00
23791	710.10	23791	710.10
...	...	...	...
23824	713.40	23799	710.90
23825	713.50	23800	711.00

LTE Band 66 (1.4MHz)		LTE Band 66 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
131979	1710.70	131987	1711.50
131980	1710.80	131988	1711.60
....			
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
...	...	...	...
132664	1779.20	132656	1778.40
132665	1779.30	132657	1778.50
LTE Band 66 (5MHz)		LTE Band 66 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
131997	1712.50	132022	1715.00
131998	1712.60	132023	1715.10
....			
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
...	...	...	...
136246	1777.40	132621	1774.90
136247	1777.50	132622	1775.00
LTE Band 66 (15MHz)		LTE Band 66 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
132047	1717.50	132072	1720.00
132048	1717.60	132073	1720.10
....			
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
...	...	...	...
132596	1772.40	132571	1769.90
132597	1772.50	132572	1770.00

Regards to the operating frequency range, the lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channels as below:

LTE Band 2 (1.4MHz)			LTE Band 2 (3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18607	1850.70	Lowest channel	18615	1851.50
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19193	1909.30	Highest channel	19185	1908.50
LTE Band 2 (5MHz)			LTE Band 2 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18625	1852.50	Lowest channel	18650	1855.00
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19175	1907.50	Highest channel	19150	1905.00
LTE Band 2 (15MHz)			LTE Band 2 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18675	1857.50	Lowest channel	18700	1860.00
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19125	1902.50	Highest channel	19100	1900.00

LTE Band 4 (1.4MHz)			LTE Band 4 (3MHz)		
Channel:		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	19957	1710.70	Lowest channel	19965	1711.50
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20393	1754.30	Highest channel	20385	1753.50
LTE Band 4 (5MHz)			LTE Band 4 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	19975	1712.50	Lowest channel	20000	1715.00
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20375	1752.50	Highest channel	20350	1750.00
LTE Band 4 (15MHz)			LTE Band 4 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20025	1717.50	Lowest channel	20050	1720.00
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20325	1747.50	Highest channel	20300	1745.00

LTE Band 5 (1.4MHz)			LTE Band 5 (3MHz)		
Channel:		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20407	824.70	Lowest channel	20415	825.50
Middle channel	20525	836.50	Middle channel	20525	836.50
Highest channel	20643	848.30	Highest channel	20635	847.50
LTE Band 5 (5MHz)			LTE Band 5 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20425	826.50	Lowest channel	20450	829.00
Middle channel	20525	836.50	Middle channel	20525	836.50
Highest channel	20625	846.50	Highest channel	20600	844.00

LTE Band 7 (5MHz)			LTE Band 7 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20775	2502.50	Lowest channel	20800	2505.00
Middle channel	21100	2535.00	Middle channel	21100	2535.00
Highest channel	21425	2567.50	Highest channel	21400	2565.00
LTE Band 7 (15MHz)			LTE Band 7 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20825	2507.50	Lowest channel	20850	2510.00
Middle channel	21100	2535.00	Middle channel	21100	2535.00
Highest channel	21375	2562.50	Highest channel	21350	2560.00

LTE Band 12(1.4MHz)			LTE Band 12(3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23017	699.70	Lowest channel	23025	700.50
Middle channel	23095	707.50	Middle channel	23095	707.50
Highest channel	23173	715.30	Highest channel	23165	714.50
LTE Band 12(5MHz)			LTE Band 12(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23035	701.50	Lowest channel	23060	704.00
Middle channel	23095	707.50	Middle channel	23095	707.50
Highest channel	23155	713.50	Highest channel	23130	711.00

LTE Band 13(5MHz)			LTE Band 13(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23205	779.5	Lowest channel	/	/
Middle channel	23230	782.0	Middle channel	23230	782.00
Highest channel	23255	784.5	Highest channel	/	/

LTE Band 17(5MHz)			LTE Band 17(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23755	706.50	Lowest channel	23780	709.00
Middle channel	23790	710.00	Middle channel	23790	710.00
Highest channel	23825	713.50	Highest channel	23800	711.00

LTE Band 66 (1.4MHz)			LTE Band 66 (3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	131979	1710.7	Lowest channel	131987	1711.5
Middle channel	132322	1745.0	Middle channel	132322	1745.0
Highest channel	132665	1779.3	Highest channel	132657	1778.5
LTE Band 66 (5MHz)			LTE Band 66 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	131997	1712.5	Lowest channel	132022	1715.0
Middle channel	132322	1745.5	Middle channel	132322	1745.0
Highest channel	132647	1777.5	Highest channel	132622	1775.0
LTE Band 66 (15MHz)			LTE Band 66 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	132047	1717.5	Lowest channel	132072	1720.0
Middle channel	132322	1745.0	Middle channel	132322	1745.0
Highest channel	132597	1772.5	Highest channel	132572	1770.0

5.3 Test environment and mode

Operating Environment:	
Temperature:	Normal: 15°C ~ 35°C, Extreme: -30°C ~ +50°C
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Test mode:	
LTE QPSK mode	Keep the EUT communication with simulated station in QPSK mode
LTE 16-QAM mode	Keep the EUT communication with simulated station in 16-QAM mode
Remark: The EUT has been tested under continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.	
<i>Remark: JianYan Testing Group Shenzhen Co., Ltd. is only responsible for the test project data of the above samples, and will keep the above samples for a month.</i>	

5.4 Description of Support Units

Test Equipment	Manufacturer	Model No.	Serial No.
Simulated Station	Anritsu	MT8820C	6201026545

5.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%)
Radiated Emission (9kHz ~ 30MHz electric field) for 3m SAC	3.13 dB
Radiated Emission (9kHz ~ 30MHz magnetic field) for 3m SAC	3.13 dB
Radiated Emission (30MHz ~ 1GHz) for 3m SAC	4.45 dB
Radiated Emission (1GHz ~ 18GHz) for 3m SAC	5.34 dB
Radiated Emission (18GHz ~ 40GHz) for 3m SAC	5.34 dB

5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.
--

5.7 Additions to, deviations, or exclusions from the method

No

5.8 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

● **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

● **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

5.9 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://jyt.lets.com>

5.10 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal.Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	ETS	9m*6m*6m	WXJ001-1	01-19-2021	01-18-2024
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ002	03-03-2021	03-02-2022
				02-17-2022	02-16-2023
Biconical Antenna	Schwarzbeck	VUBA9117	WXJ002-1	06-20-2021	06-19-2022
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-2	03-03-2021	03-02-2022
				02-17-2022	02-16-2023
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-3	06-18-2021	06-17-2022
Pre-amplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9743B	WXG001-7	03-07-2021	03-06-2022
				02-17-2022	02-16-2023
Pre-amplifier (1GHz ~ 18GHz)	SKET	LNPA_0118G-50	WXG001-3	03-07-2021	03-06-2022
				02-17-2022	02-16-2023
Pre-amplifier (18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXG001-9	03-07-2021	03-06-2022
				02-17-2022	02-16-2023
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	03-03-2021	03-02-2022
				02-17-2022	02-16-2023
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ004-2	10-27-2022	10-26-2022
Simulated Station	Anritsu	MT8820C	WXJ008-4	03-03-2021	03-02-2023
Band Reject Filter Group	Tonscend	JS0806	21B8060367	04-06-2021	04-05-2022
Coaxial Cable (30MHz ~ 1GHz)	JYT	JYT3M-1G-NN-8M	WXG001-4	03-07-2021	03-06-2022
				02-17-2022	02-16-2023
Coaxial Cable (1GHz ~ 18GHz)	JYT	JYT3M-18G-NN-8M	WXG001-5	03-07-2021	03-06-2022
				02-17-2022	02-16-2023
Coaxial Cable (18GHz ~ 40GHz)	JYT	JYT3M-40G-SS-8M	WXG001-7	03-07-2021	03-06-2022
				02-17-2022	02-16-2023
Test Software	Tonscend	TS+	Version: 3.0.0.1		

Conducted Method:					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Simulated Station	Rohde & Schwarz	CMW500	WXJ081	07-02-2021	07-01-2022
DC Power Supply	Keysight	E3642A	WXJ025-2	10-25-2021	10-24-2022
Temperature Humidity Chamber	HONG ZHI	CZ-A-80D	WXJ032-3	03-19-2021	03-18-2022
RF Control Unit	Tonscend	JS0806-1	WXG010	N/A	
Test Software	Tonscend	TS+	Version: 2.6.9.0526		

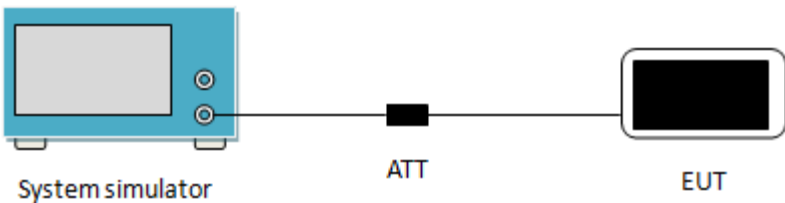
6. Test Results

6.1 Conducted Output Power

6.1.1 Re-test statement

Re-test statement: The EUT is operating at the same power level with the original testing of SGS-CSTC Standards Technical Services, Co Ltd. Shenzhen Branch.

6.1.2 Test Results

Test Requirement:	Part 2.1046, Part 22.913 (a)(5), Part 24.232 (c), Part 27.50 (c)(10),Part 27.50 (d)(4), Part 27.50 (h)(2), Part 27.50 (b)(10)
Limit:	LTE Band 2: 2W, LTE Band 4: 1W, LTE Band 5: 7W, LTE Band 7: 2W, LTE Band 17: 3W
Test Setup:	 System simulator ATT EUT
Test Procedure:	The transmitter output was connected to a calibrated attenuator, the other end of which was connected to the CMW500. Transmitter output power was read off in dBm.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

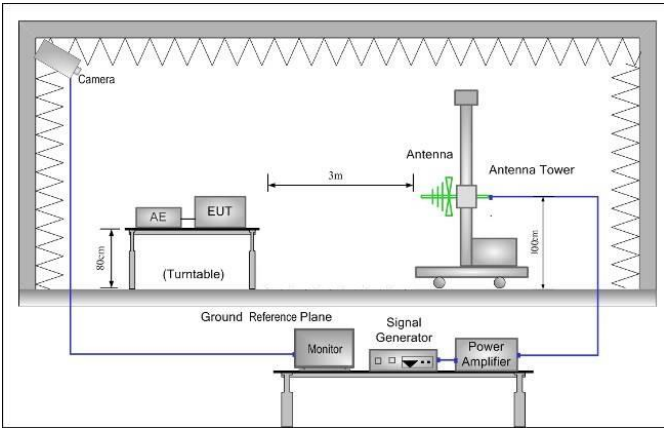
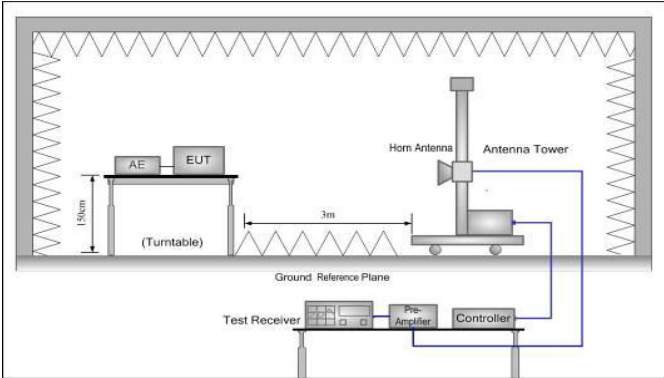
BAND	Bandwidth	Modulation	Channel	RB Configuration	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
LTE Band 2	20MHz	QPSK	18700	1RB#0	23.03	22.87
LTE Band 2	20MHz	QPSK	18900	1RB#0	23.01	22.89
LTE Band 2	20MHz	QPSK	19100	1RB#0	23.07	22.92
BAND	Bandwidth	Modulation	Channel	RB Configuration	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
LTE Band 4	20MHz	QPSK	20050	1RB#0	23.08	22.51
LTE Band 4	20MHz	QPSK	20175	1RB#0	23.09	22.52
LTE Band 4	20MHz	QPSK	20300	1RB#0	23.14	22.68
BAND	Bandwidth	Modulation	Channel	RB Configuration	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
LTE Band 5	10MHz	QPSK	20450	1RB#0	23.20	22.98
LTE Band 5	10MHz	QPSK	20525	1RB#0	23.16	22.85
LTE Band 5	10MHz	QPSK	20600	1RB#0	23.11	22.80
BAND	Bandwidth	Modulation	Channel	RB Configuration	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
LTE Band 7	20MHz	QPSK	20850	1RB#0	23.45	23.14
LTE Band 7	20MHz	QPSK	21100	1RB#0	23.61	23.26
LTE Band 7	20MHz	QPSK	21350	1RB#0	23.57	23.21

BAND	Bandwidth	Modulation	Channel	RB Configuration	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
LTE Band 12	10MHz	QPSK	23060	1RB#0	24.27	23.84
LTE Band 12	10MHz	QPSK	23095	1RB#0	24.15	23.66
LTE Band 12	10MHz	QPSK	23130	1RB#0	24.11	23.81
BAND	Bandwidth	Modulation	Channel	RB Configuration	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
LTE Band 13	10MHz	QPSK	23230	1RB#0	23.58	23.13
BAND	Bandwidth	Modulation	Channel	RB Configuration	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
LTE Band 17	10MHz	QPSK	23780	1RB#0	24.04	23.82
LTE Band 17	10MHz	QPSK	23790	1RB#0	24.02	23.77
LTE Band 17	10MHz	QPSK	23800	1RB#0	24.00	23.81
BAND	Bandwidth	Modulation	Channel	RB Configuration	Test Original Reports Level(dBm)	Re-Test Reports Level(dBm)
LTE Band 66	20MHz	QPSK	132072	1RB#0	22.92	22.71
LTE Band 66	20MHz	QPSK	132322	1RB#0	23.05	22.90
LTE Band 66	20MHz	QPSK	132572	1RB#0	23.03	22.86

Remark:

	The Original Reports	Re-Test Reports
File name:	test report LTE	Test Report LTE rev1
Test location:	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch	JianYan Testing Group Shenzhen Co., Ltd.
The output power is re-test at JianYan Testing Group Shenzhen Co., Ltd.		

6.2 Field strength of spurious radiation measurement

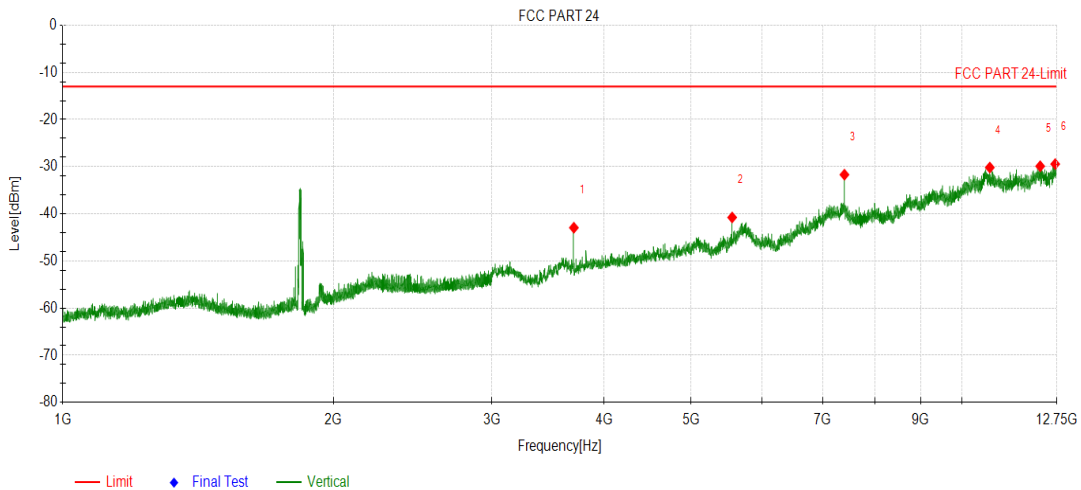
Test Requirement:	Part 22.917(a), Part 24.238 (a), Part 27.53(g), Part 27.53(m), Part 27.53(h), Part 27.53(m)
Limit:	LTE Band 2 & 4 & 5 & 7 & 12 & 13 & 17 & 66: The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB (-13 dBm). LTE Band 7: For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz.
Test setup:	Below 1GHz  Above 1GHz 
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission

	was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. ERP / EIRP = S.G. output (dBm) + Antenna Gain(dB/dBi) – Cable Loss (dB)
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details.
Environment:	Temp: 24.8℃, Humi: 59%
Test results:	Passed

Measurement Data:

Remark: During the test, use Band Reject Filter Group to filter out LTE Band 2 & 5 & 12 & 13 & 17 fundamental signal

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 2 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

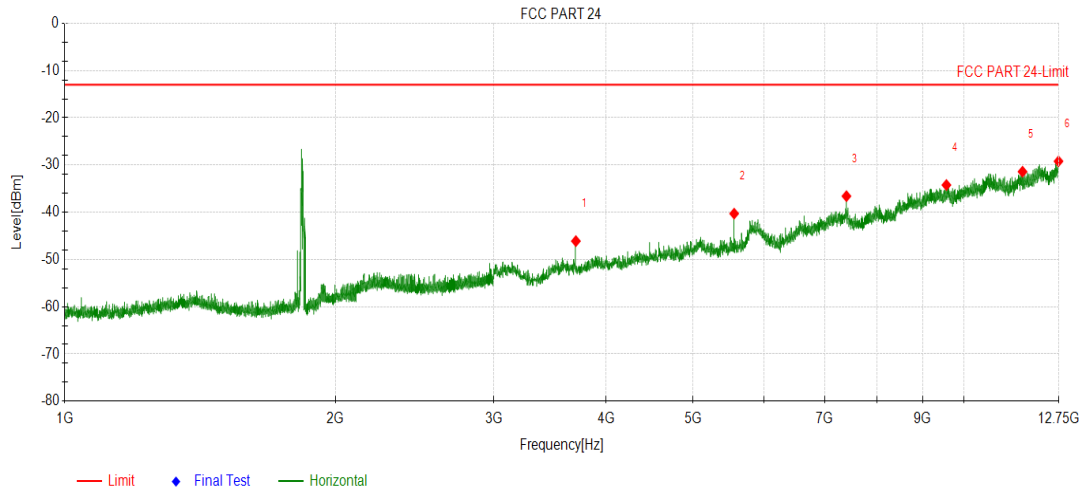


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3702.000	-41.34	-42.94	-13.00	29.94	-1.60	146	122	Vertical
2	5553.281	-46.19	-40.76	-13.00	27.76	5.43	159	137	Vertical
3	7404.562	-44.78	-31.69	-13.00	18.69	13.09	198	152	Vertical
4	10745.15	-50.30	-30.18	-13.00	17.18	20.12	203	146	Vertical
5	12225.93	-51.07	-29.90	-13.00	16.90	21.17	307	187	Vertical
6	12704.90	-51.30	-29.44	-13.00	16.44	21.86	315	195	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 2 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal



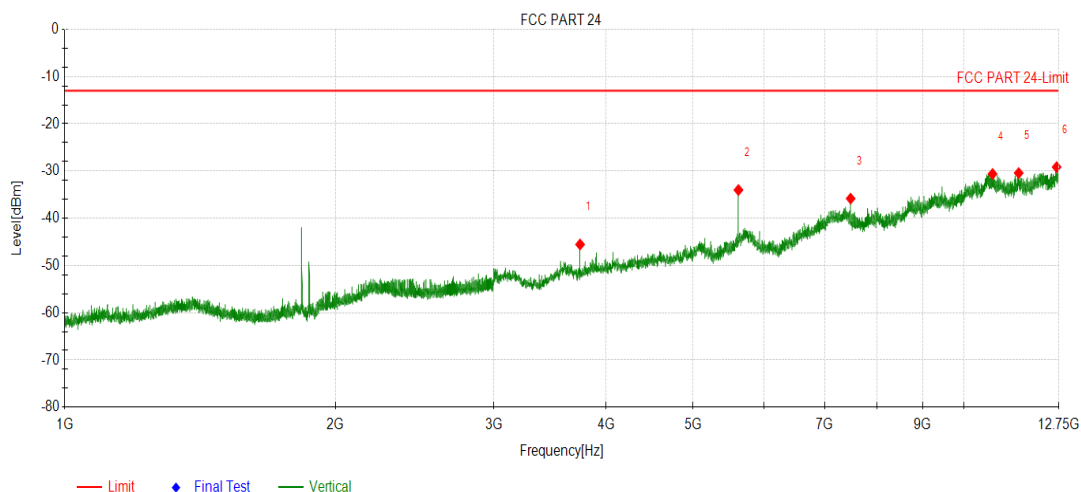
Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3702.000	-44.02	-46.11	-13.00	33.11	-2.09	146	131	Horizontal
2	5553.281	-44.10	-40.29	-13.00	27.29	3.81	139	142	Horizontal
3	7404.562	-47.96	-36.59	-13.00	23.59	11.37	155	149	Horizontal
4	9565.406	-50.33	-34.23	-13.00	21.23	16.10	139	153	Horizontal
5	11625.09	-51.11	-31.40	-13.00	18.40	19.71	305	165	Horizontal
6	12747.56	-51.44	-29.20	-13.00	16.20	22.24	311	138	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 2 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

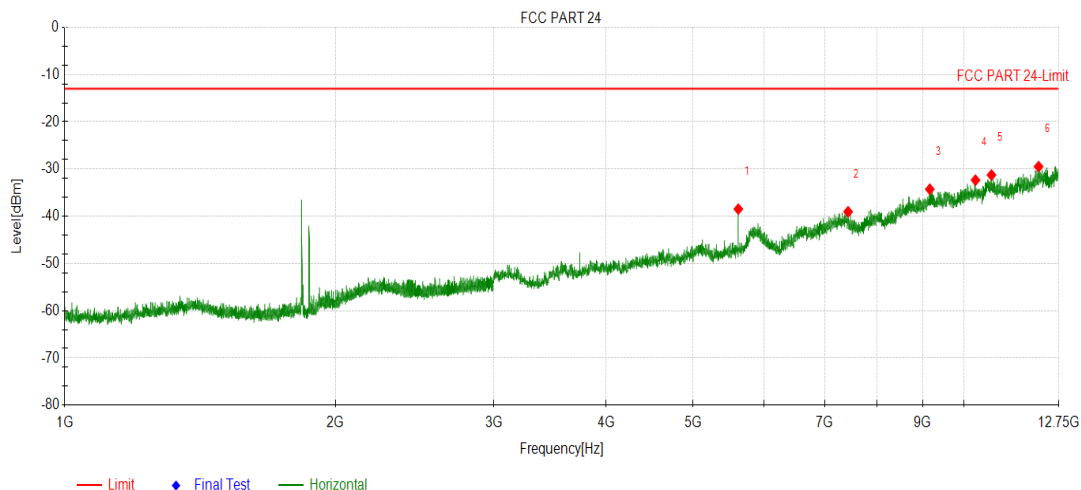


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3742.218	-44.14	-45.54	-13.00	32.54	-1.40	129	145	Vertical
2	5614.218	-40.41	-34.02	-13.00	21.02	6.39	116	132	Vertical
3	7483.781	-47.87	-35.83	-13.00	22.83	12.04	177	160	Vertical
4	10764.65	-50.72	-30.61	-13.00	17.61	20.11	163	169	Vertical
5	11511.75	-51.04	-30.42	-13.00	17.42	20.62	288	188	Vertical
6	12686.62	-50.91	-29.15	-13.00	16.15	21.76	297	196	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 2 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

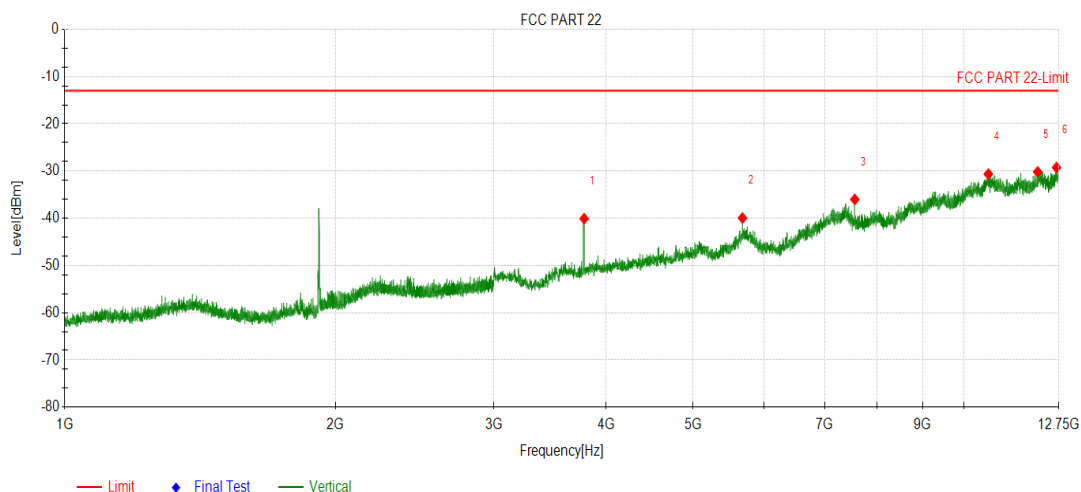


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5613.000	-42.61	-38.47	-13.00	25.47	4.14	130	134	Horizontal
2	7435.031	-50.05	-39.04	-13.00	26.04	11.01	125	140	Horizontal
3	9166.875	-49.90	-34.27	-13.00	21.27	15.63	168	149	Horizontal
4	10305.18	-50.42	-32.34	-13.00	19.34	18.08	151	151	Horizontal
5	10735.40	-50.19	-31.27	-13.00	18.27	18.92	279	186	Horizontal
6	12112.59	-50.42	-29.49	-13.00	16.49	20.93	283	199	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 2 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

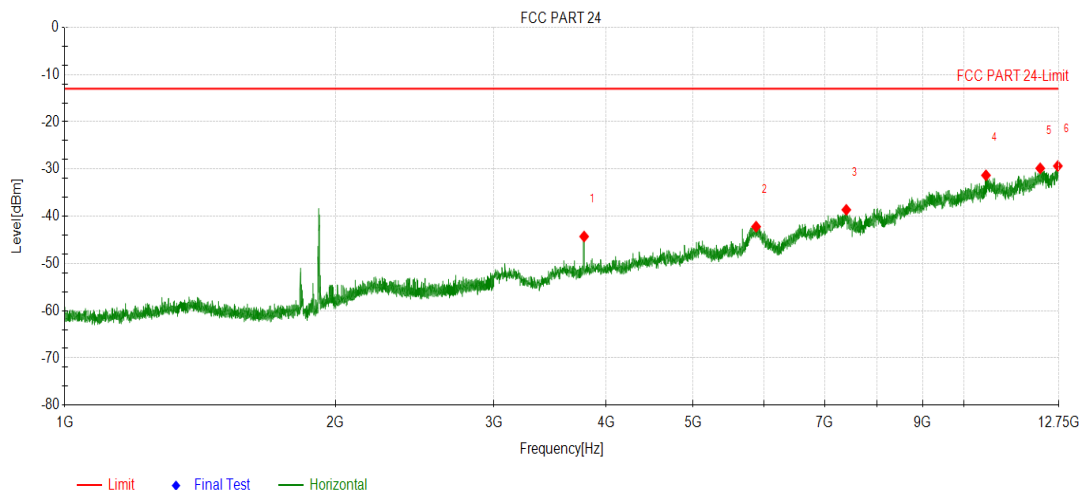


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3781.218	-38.88	-40.08	-13.00	27.08	-1.20	152	139	Vertical
2	5672.718	-47.63	-39.95	-13.00	26.95	7.68	166	154	Vertical
3	7564.218	-47.55	-36.01	-13.00	23.01	11.54	166	176	Vertical
4	10650.09	-50.87	-30.65	-13.00	17.65	20.22	172	173	Vertical
5	12084.56	-50.85	-30.17	-13.00	17.17	20.68	307	203	Vertical
6	12684.18	-51.01	-29.26	-13.00	16.26	21.75	312	215	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 2 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

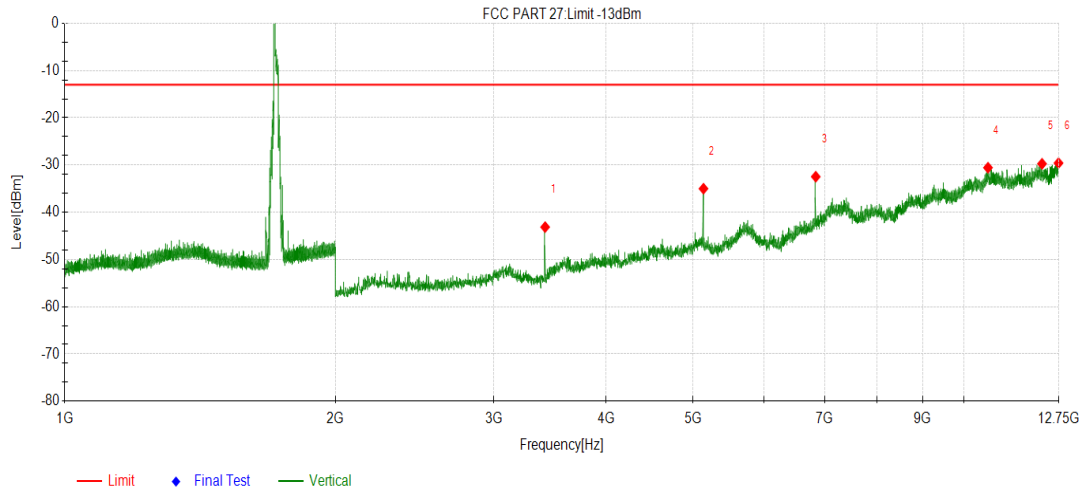


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3781.218	-42.59	-44.29	-13.00	31.29	-1.70	146	138	Horizontal
2	5875.031	-50.68	-42.20	-13.00	29.20	8.48	139	155	Horizontal
3	7402.125	-50.03	-38.63	-13.00	25.63	11.40	157	170	Horizontal
4	10585.50	-49.88	-31.33	-13.00	18.33	18.55	145	163	Horizontal
5	12165.00	-50.97	-29.85	-13.00	16.85	21.12	286	197	Horizontal
6	12726.84	-51.47	-29.36	-13.00	16.36	22.11	297	205	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 4 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

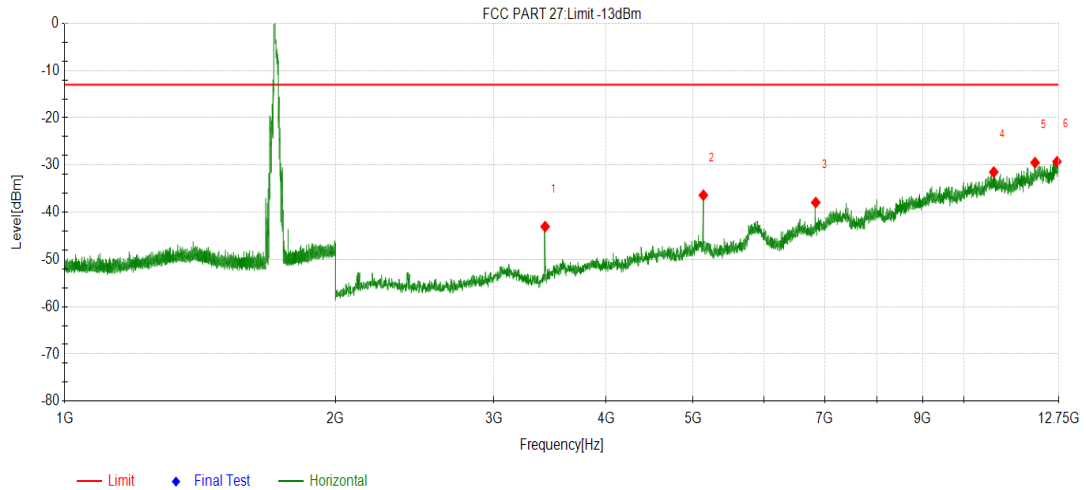


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3421.687	-38.60	-43.14	-13.00	30.14	-4.54	163	137	Vertical
2	5133.625	-39.52	-35.00	-13.00	22.00	4.52	155	122	Vertical
3	6844.218	-42.38	-32.47	-13.00	19.47	9.91	196	162	Vertical
4	10640.31	-50.31	-30.56	-13.00	17.56	19.75	183	145	Vertical
5	12220.56	-50.95	-29.74	-13.00	16.74	21.21	321	180	Vertical
6	12748.65	-52.00	-29.58	-13.00	16.58	22.42	339	173	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 4 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

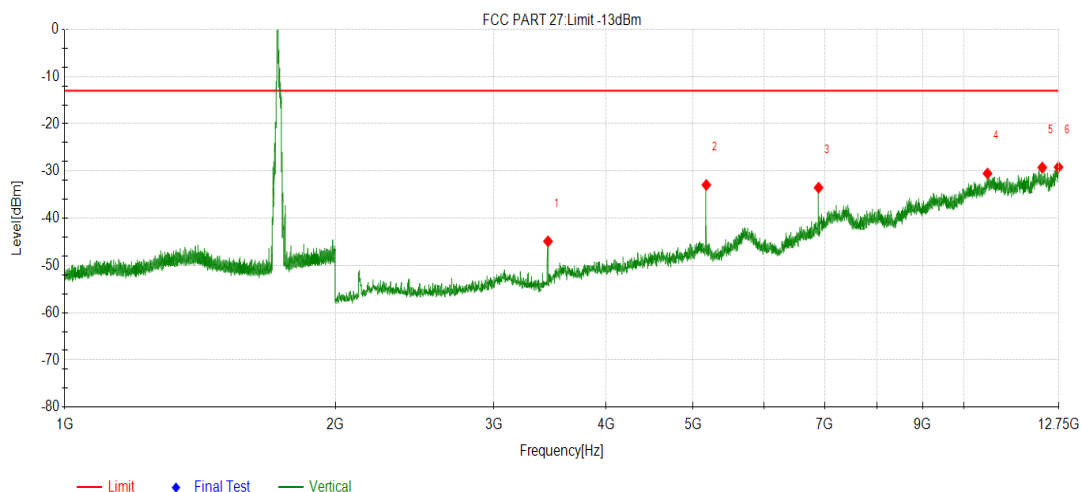


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3421.687	-38.39	-43.04	-13.00	30.04	-4.65	183	137	Horizontal
2	5132.281	-40.45	-36.38	-13.00	23.38	4.07	175	145	Horizontal
3	6844.218	-46.79	-37.93	-13.00	24.93	8.86	214	186	Horizontal
4	10800.21	-50.41	-31.48	-13.00	18.48	18.93	198	169	Horizontal
5	12002.87	-50.49	-29.49	-13.00	16.49	21.00	346	176	Horizontal
6	12697.59	-51.58	-29.29	-13.00	16.29	22.29	359	165	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 4 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

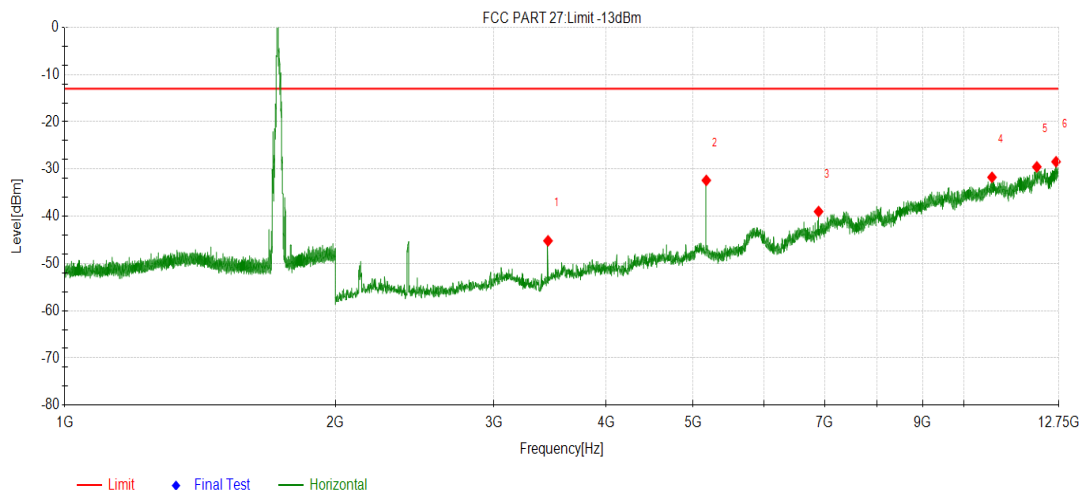


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3447.218	-40.92	-44.87	-13.00	31.87	-3.95	179	130	Vertical
2	5171.250	-37.16	-32.94	-13.00	19.94	4.22	169	123	Vertical
3	6893.937	-44.06	-33.52	-13.00	20.52	10.54	216	178	Vertical
4	10626.87	-50.30	-30.52	-13.00	17.52	19.78	228	169	Vertical
5	12228.62	-50.43	-29.24	-13.00	16.24	21.19	314	195	Vertical
6	12747.31	-51.59	-29.18	-13.00	16.18	22.41	305	183	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 4 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

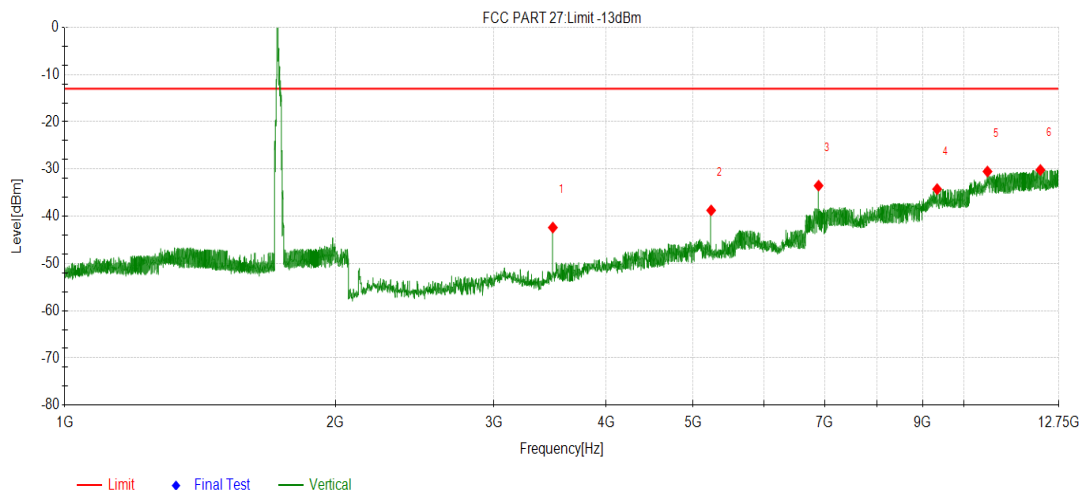


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3447.218	-41.15	-45.20	-13.00	32.20	-4.05	136	129	Horizontal
2	5171.250	-36.13	-32.40	-13.00	19.40	3.73	120	113	Horizontal
3	6893.937	-48.31	-39.00	-13.00	26.00	9.31	186	162	Horizontal
4	10750.50	-50.45	-31.75	-13.00	18.75	18.70	167	143	Horizontal
5	12059.31	-50.71	-29.54	-13.00	16.54	21.17	291	179	Horizontal
6	12668.03	-50.53	-28.45	-13.00	15.45	22.08	275	186	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 4 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

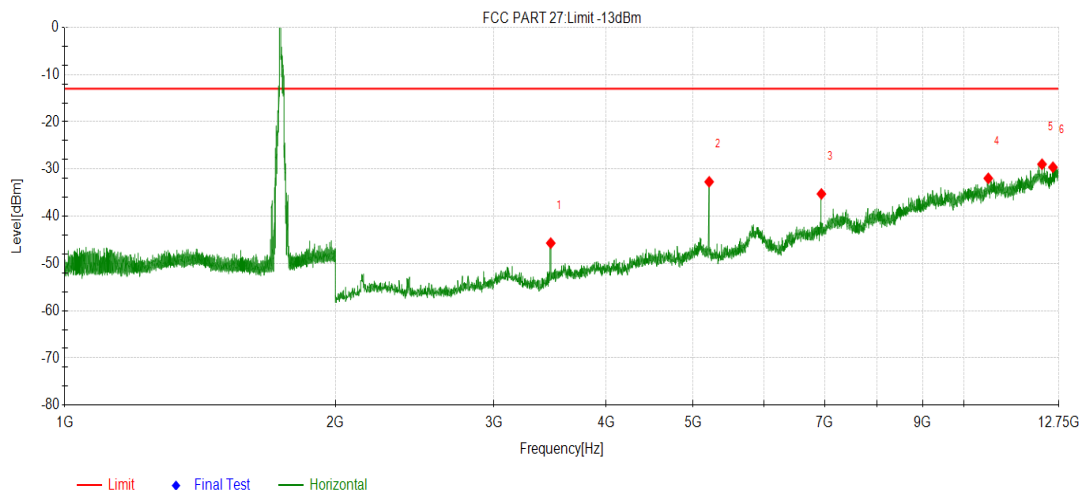


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3490.218	-39.44	-42.39	-13.00	29.39	-2.95	135	134	Vertical
2	5235.750	-42.53	-38.75	-13.00	25.75	3.78	126	126	Vertical
3	6893.937	-44.06	-33.52	-13.00	20.52	10.54	158	158	Vertical
4	9340.906	-50.17	-34.25	-13.00	21.25	15.92	192	137	Vertical
5	10626.87	-50.30	-30.52	-13.00	17.52	19.78	217	161	Vertical
6	12170.84	-51.45	-30.20	-13.00	17.20	21.25	258	178	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 4 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

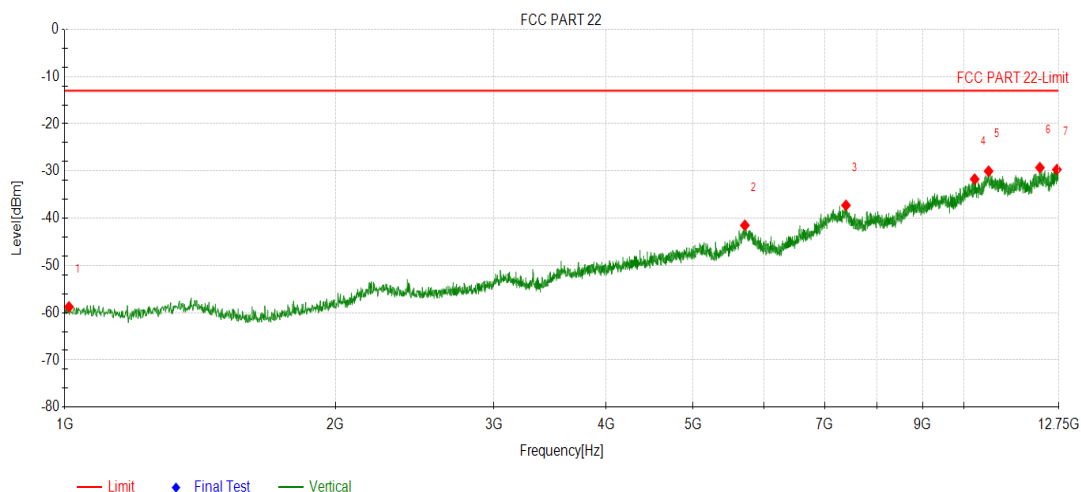


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3471.406	-42.19	-45.68	-13.00	32.68	-3.49	142	119	Horizontal
2	5208.875	-36.15	-32.70	-13.00	19.70	3.45	136	126	Horizontal
3	6945.000	-44.81	-35.27	-13.00	22.27	9.54	172	158	Horizontal
4	10649.71	-50.28	-31.97	-13.00	18.97	18.31	159	146	Horizontal
5	12220.56	-50.18	-28.98	-13.00	15.98	21.20	306	171	Horizontal
6	12568.59	-50.81	-29.62	-13.00	16.62	21.19	318	180	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 5 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

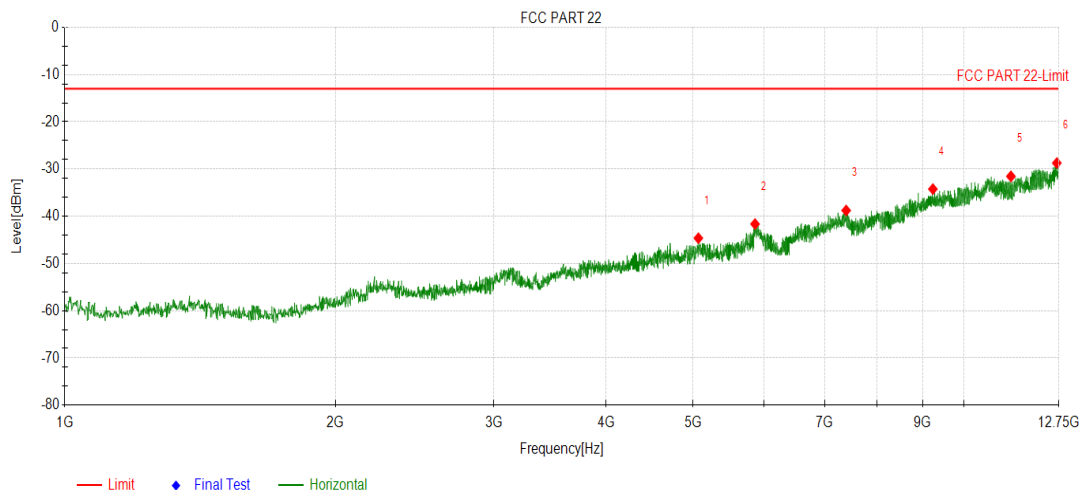


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1010.281	-49.08	-58.77	-13.00	45.77	-9.69	116	129	Vertical
2	5707.343	-50.16	-41.50	-13.00	28.50	8.66	134	134	Vertical
3	7394.937	-50.53	-37.26	-13.00	24.26	13.27	152	162	Vertical
4	10283.96	-51.08	-31.71	-13.00	18.71	19.37	162	158	Vertical
5	10657.03	-50.67	-30.03	-13.00	17.03	20.64	246	171	Vertical
6	12153.68	-50.45	-29.28	-13.00	16.28	21.17	271	125	Vertical
7	12695.65	-51.75	-29.68	-13.00	16.68	22.07	301	169	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 5 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

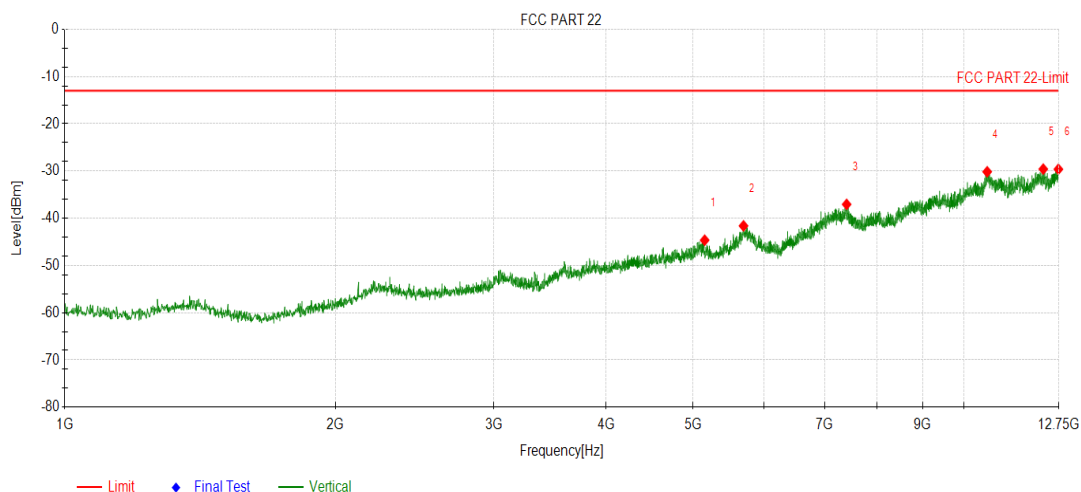


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5066.968	-48.50	-44.64	-13.00	31.64	3.86	129	136	Horizontal
2	5858.625	-50.35	-41.64	-13.00	28.64	8.71	143	147	Horizontal
3	7399.343	-50.35	-38.77	-13.00	25.77	11.58	167	165	Horizontal
4	9239.687	-49.79	-34.24	-13.00	21.24	15.55	189	184	Horizontal
5	11284.18	-50.58	-31.54	-13.00	18.54	19.04	205	190	Horizontal
6	12692.71	-50.90	-28.73	-13.00	15.73	22.17	243	167	Horizontal
7	12695.65	-51.75	-29.68	-13.00	16.68	22.07	279	180	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 5 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

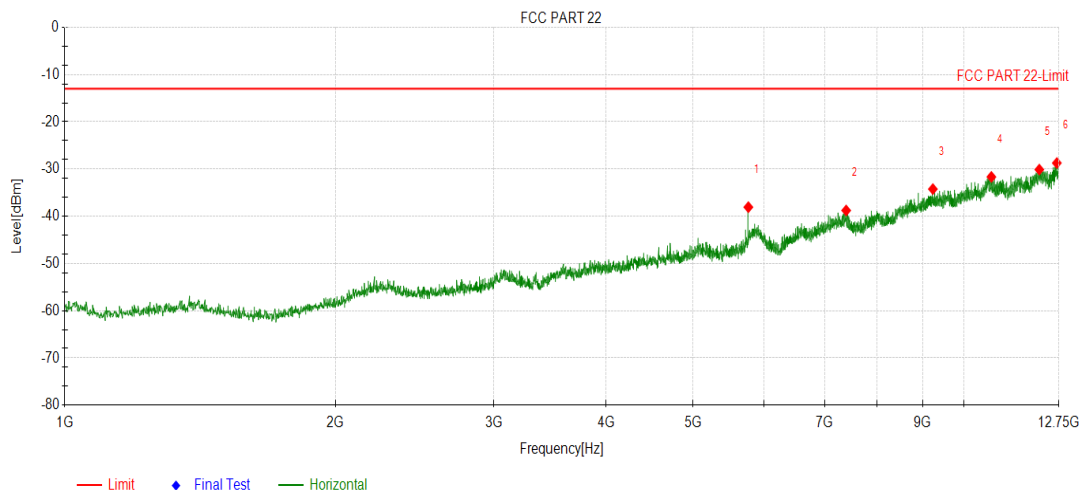


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5149.218	-49.04	-44.64	-13.00	31.64	4.40	137	134	Vertical
2	5688.250	-50.00	-41.61	-13.00	28.61	8.39	166	120	Vertical
3	7408.156	-50.27	-37.06	-13.00	24.06	13.21	128	146	Vertical
4	10618.84	-50.80	-30.16	-13.00	17.16	20.64	195	158	Vertical
5	12259.43	-50.80	-29.58	-13.00	16.58	21.22	241	179	Vertical
6	12744.12	-51.90	-29.62	-13.00	16.62	22.28	285	166	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 5 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

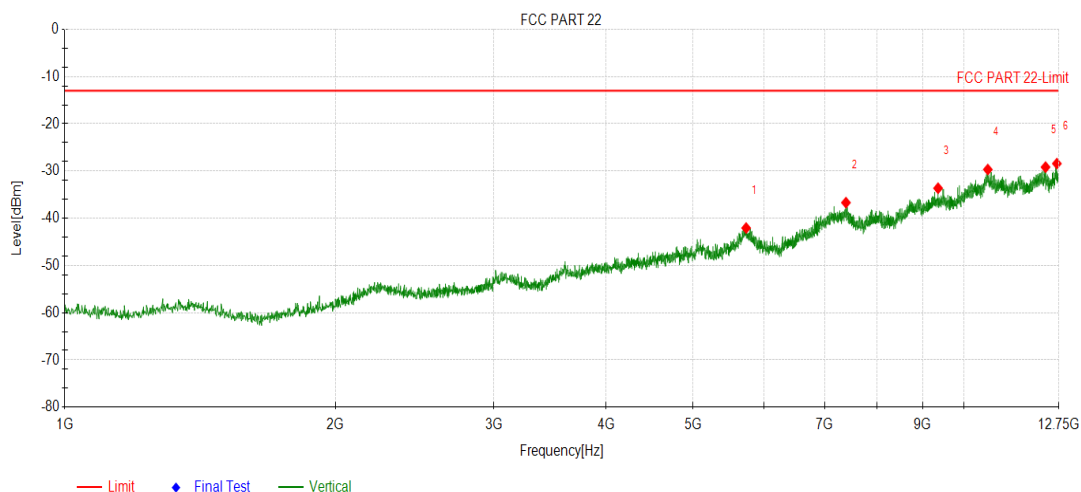


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5758.750	-45.01	-38.07	-13.00	25.07	6.94	150	129	Horizontal
2	7399.343	-50.35	-38.77	-13.00	25.77	11.58	139	116	Horizontal
3	9239.687	-49.79	-34.24	-13.00	21.24	15.55	105	142	Horizontal
4	10733.40	-50.88	-31.66	-13.00	18.66	19.22	133	165	Horizontal
5	12136.06	-51.26	-30.11	-13.00	17.11	21.15	207	178	Horizontal
6	12692.71	-50.90	-28.73	-13.00	15.73	22.17	216	166	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 5 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

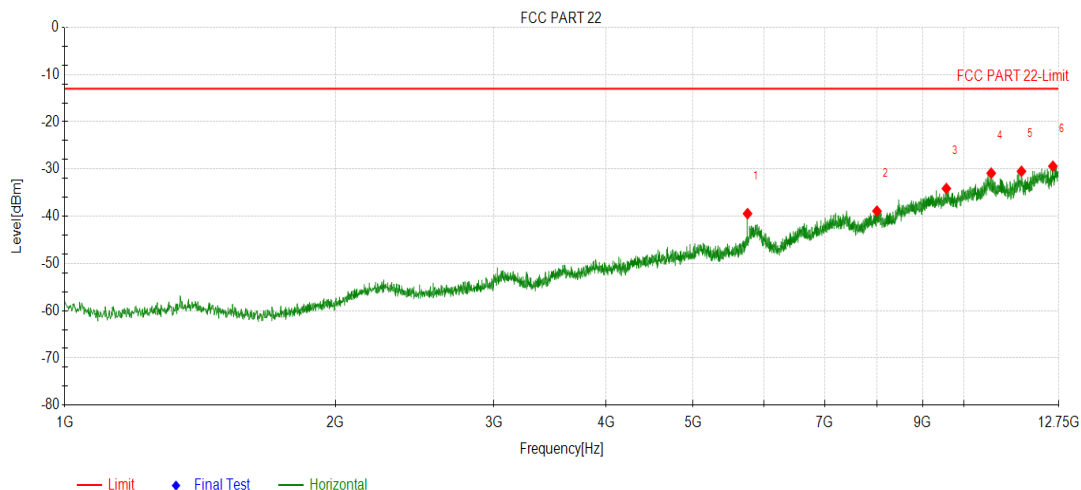


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5726.437	-50.58	-42.06	-13.00	29.06	8.52	108	134	Vertical
2	7394.937	-49.96	-36.69	-13.00	23.69	13.27	137	150	Vertical
3	9363.062	-49.58	-33.64	-13.00	20.64	15.94	146	171	Vertical
4	10636.46	-50.32	-29.68	-13.00	16.68	20.64	175	156	Vertical
5	12329.93	-50.19	-29.17	-13.00	16.17	21.02	227	138	Vertical
6	12694.18	-50.49	-28.42	-13.00	15.42	22.07	295	178	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 5 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

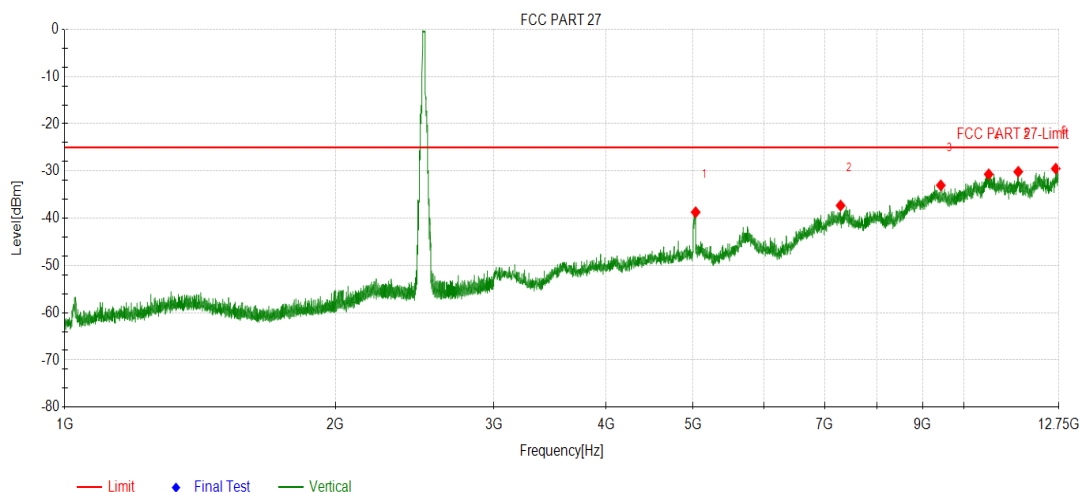


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5747.000	-46.01	-39.45	-13.00	26.45	6.56	130	135	Horizontal
2	8005.937	-50.95	-38.91	-13.00	25.91	12.04	150	112	Horizontal
3	9564.281	-50.26	-34.13	-13.00	21.13	16.13	178	145	Horizontal
4	10729.00	-50.14	-30.88	-13.00	17.88	19.26	163	169	Horizontal
5	11594.09	-50.44	-30.48	-13.00	17.48	19.96	234	140	Horizontal
6	12566.40	-50.67	-29.40	-13.00	16.40	21.27	272	179	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 7 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

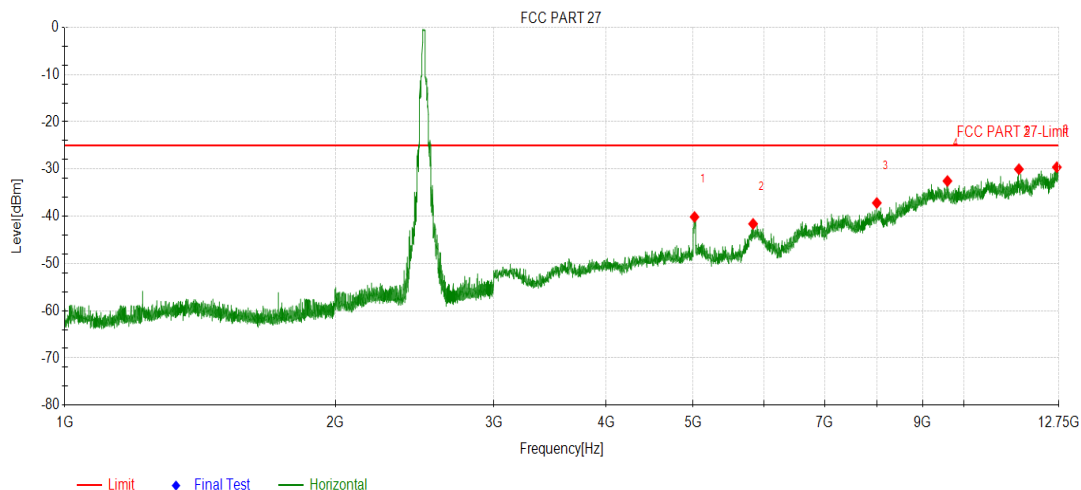


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5031.656	-42.38	-38.71	-25.00	13.71	3.67	123	136	Vertical
2	7293.656	-49.28	-37.31	-25.00	12.31	11.97	146	125	Vertical
3	9428.906	-49.90	-33.02	-25.00	8.02	16.88	137	149	Vertical
4	10659.84	-50.72	-30.68	-25.00	5.68	20.04	179	120	Vertical
5	11498.34	-50.60	-30.14	-25.00	5.14	20.46	237	176	Vertical
6	12658.59	-50.38	-29.48	-25.00	4.48	20.90	295	189	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 7 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

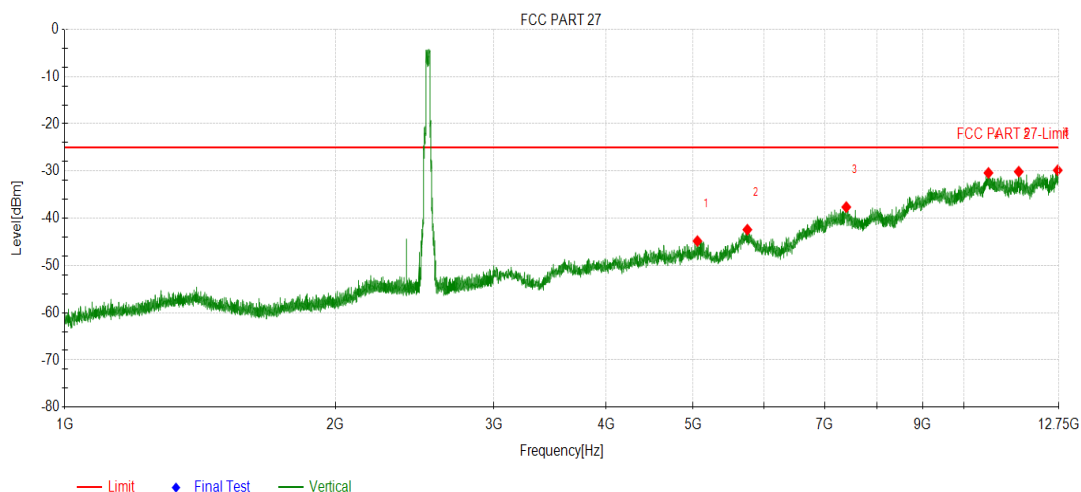


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5017.031	-43.23	-40.14	-25.00	15.14	3.09	137	120	Horizontal
2	5829.937	-49.48	-41.61	-25.00	16.61	7.87	145	134	Horizontal
3	8004.187	-49.37	-37.18	-25.00	12.18	12.19	176	152	Horizontal
4	9591.000	-49.76	-32.53	-25.00	7.53	17.23	180	166	Horizontal
5	11517.84	-49.88	-30.04	-25.00	5.04	19.84	234	178	Horizontal
6	12692.71	-50.85	-29.61	-25.00	4.61	21.24	271	159	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 7 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

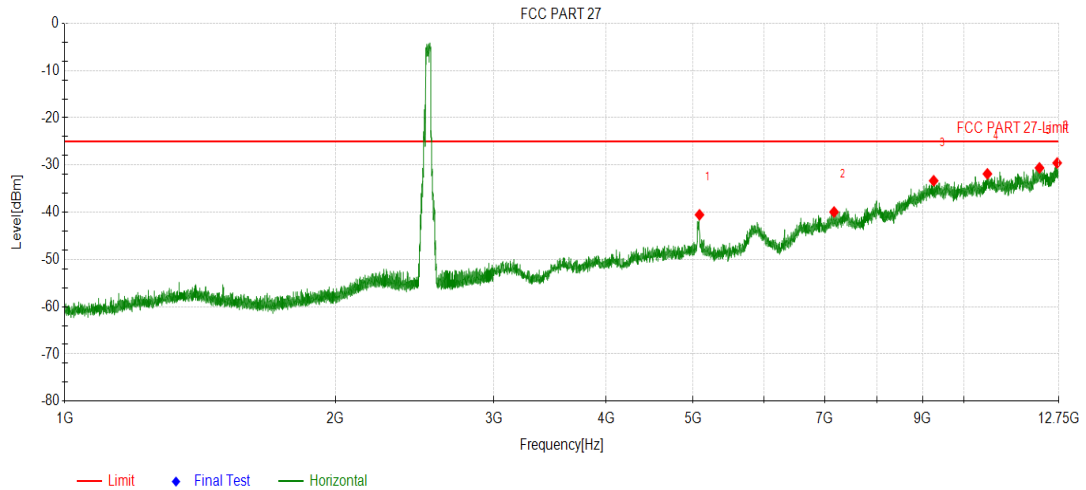


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5054.812	-48.71	-44.82	-25.00	19.82	3.89	125	118	Vertical
2	5744.625	-49.97	-42.42	-25.00	17.42	7.55	131	130	Vertical
3	7400.906	-50.33	-37.63	-25.00	12.63	12.70	179	162	Vertical
4	10653.75	-50.46	-30.40	-25.00	5.40	20.06	162	150	Vertical
5	11512.96	-50.51	-30.13	-25.00	5.13	20.38	208	190	Vertical
6	12721.96	-51.21	-29.83	-25.00	4.83	21.38	233	162	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 7 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

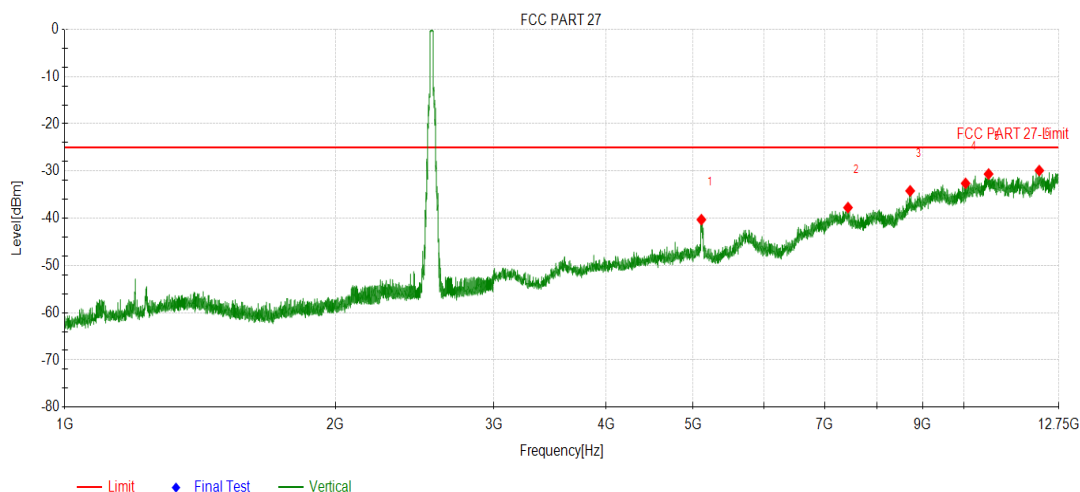


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5081.625	-44.22	-40.53	-25.00	15.53	3.69	125	118	Horizontal
2	7173.000	-50.54	-39.94	-25.00	14.94	10.60	131	130	Horizontal
3	9258.281	-49.85	-33.33	-25.00	8.33	16.52	179	162	Horizontal
4	10624.50	-50.48	-31.87	-25.00	6.87	18.61	162	150	Horizontal
5	12141.84	-51.00	-30.61	-25.00	5.61	20.39	208	190	Horizontal
6	12703.68	-50.90	-29.57	-25.00	4.57	21.33	233	162	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 7 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

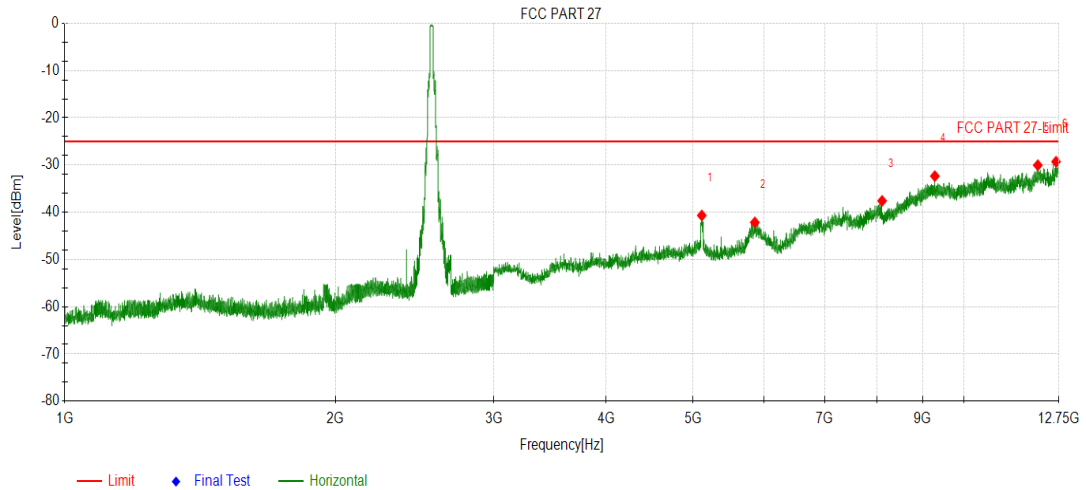


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5106.000	-44.54	-40.29	-25.00	15.29	4.25	146	126	Vertical
2	7433.812	-50.12	-37.74	-25.00	12.74	12.38	158	108	Vertical
3	8717.156	-48.99	-34.21	-25.00	9.21	14.78	170	137	Vertical
4	10046.81	-50.14	-32.61	-25.00	7.61	17.53	150	152	Vertical
5	10656.18	-50.69	-30.63	-25.00	5.63	20.06	196	169	Vertical
6	12134.53	-50.20	-29.90	-25.00	4.90	20.30	233	155	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 7 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

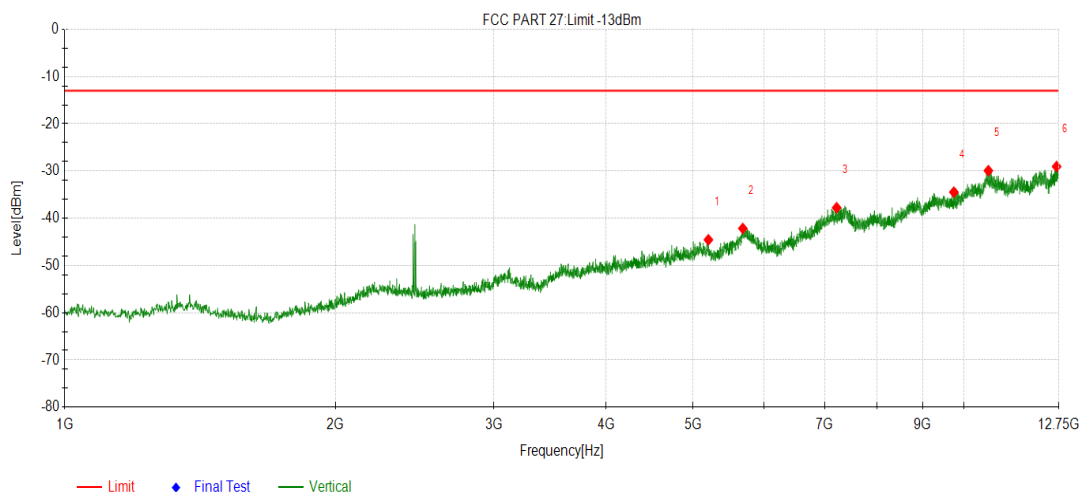


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5110.875	-44.42	-40.67	-25.00	15.67	3.75	139	140	Horizontal
2	5855.531	-50.13	-42.14	-25.00	17.14	7.99	152	136	Horizontal
3	8112.656	-49.79	-37.58	-25.00	12.58	12.21	170	182	Horizontal
4	9286.312	-48.71	-32.35	-25.00	7.35	16.36	188	165	Horizontal
5	12088.21	-50.28	-30.04	-25.00	5.04	20.24	208	190	Horizontal
6	12667.12	-50.33	-29.29	-25.00	4.29	21.04	237	142	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 12 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

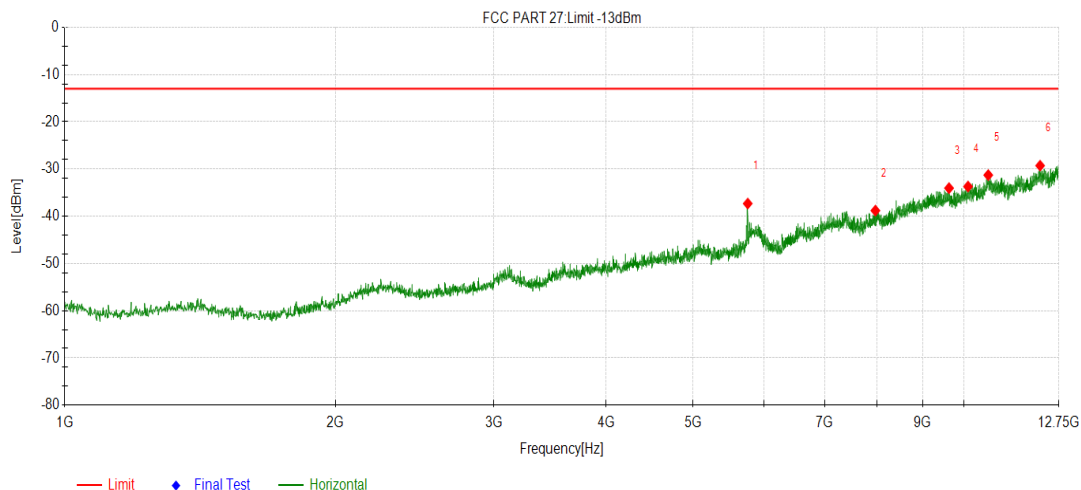


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5199.156	-48.65	-44.56	-13.00	31.56	4.09	137	123	Vertical
2	5677.968	-50.27	-42.15	-13.00	29.15	8.12	160	145	Vertical
3	7221.625	-50.76	-37.77	-13.00	24.77	12.99	170	171	Vertical
4	9749.343	-50.41	-34.47	-13.00	21.47	15.94	109	155	Vertical
5	10651.15	-50.56	-29.92	-13.00	16.92	20.64	136	190	Vertical
6	12685.37	-51.09	-29.05	-13.00	16.05	22.04	198	153	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 12 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

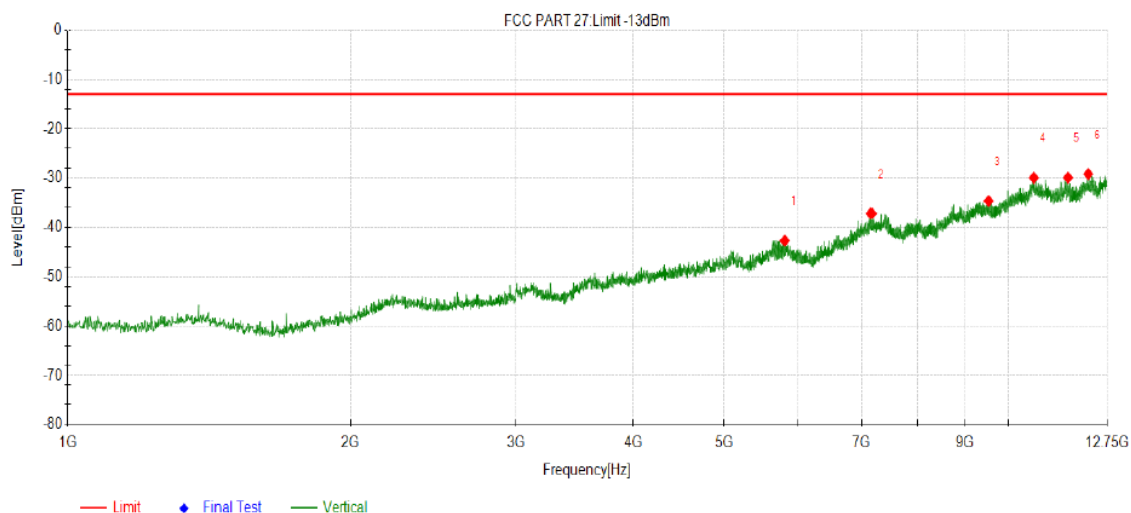


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5749.937	-43.97	-37.31	-13.00	24.31	6.66	123	132	Horizontal
2	7973.625	-50.62	-38.80	-13.00	25.80	11.82	185	125	Horizontal
3	9630.375	-50.32	-34.04	-13.00	21.04	16.28	126	174	Horizontal
4	10110.65	-50.71	-33.70	-13.00	20.70	17.01	146	159	Horizontal
5	10646.75	-50.48	-31.28	-13.00	18.28	19.20	201	180	Horizontal
6	12161.03	-50.52	-29.28	-13.00	16.28	21.24	177	199	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 12 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

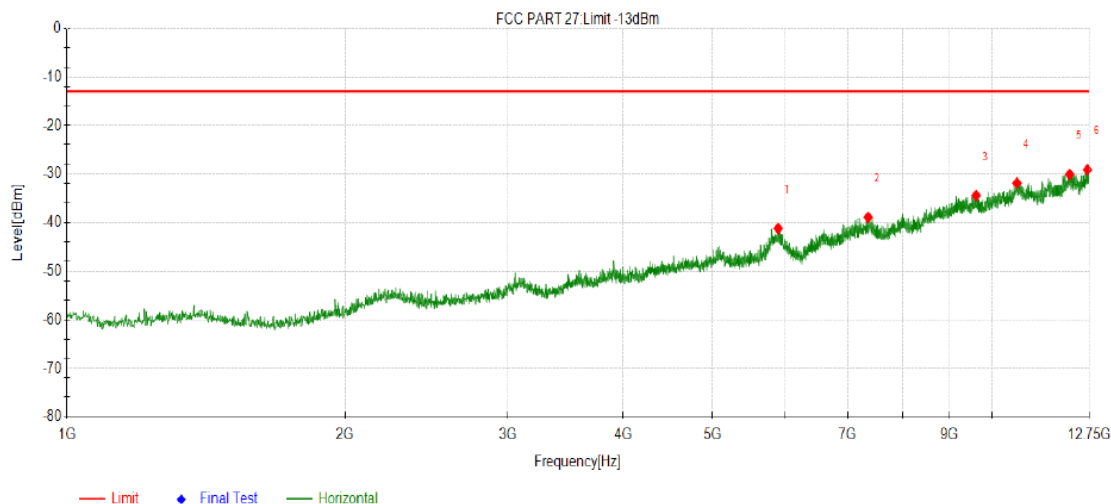


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5798.406	-50.69	-42.68	-13.00	29.68	8.01	122	134	Vertical
2	7161.406	-50.04	-37.18	-13.00	24.18	12.86	146	122	Vertical
3	9531.968	-50.66	-34.64	-13.00	21.64	16.02	182	157	Vertical
4	10652.62	-50.57	-29.93	-13.00	16.93	20.64	153	149	Vertical
5	11583.81	-50.32	-29.90	-13.00	16.90	20.42	196	180	Vertical
6	12174.25	-50.44	-29.16	-13.00	16.16	21.28	247	196	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 12 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

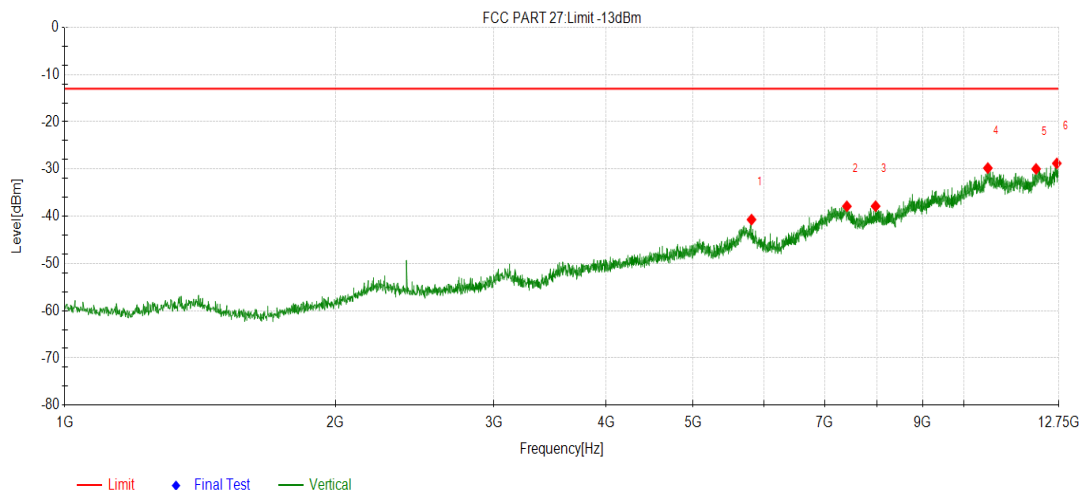


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5888.000	-50.17	-41.22	-13.00	28.22	8.95	115	126	Horizontal
2	7346.466	-50.20	-38.93	-13.00	25.93	11.27	139	147	Horizontal
3	9617.156	-50.84	-34.42	-13.00	21.42	16.42	162	150	Horizontal
4	10651.15	-51.11	-31.88	-13.00	18.88	19.23	180	168	Horizontal
5	12146.34	-51.27	-30.08	-13.00	17.08	21.19	196	179	Horizontal
6	12698.59	-51.32	-29.13	-13.00	16.13	22.19	204	185	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 12 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

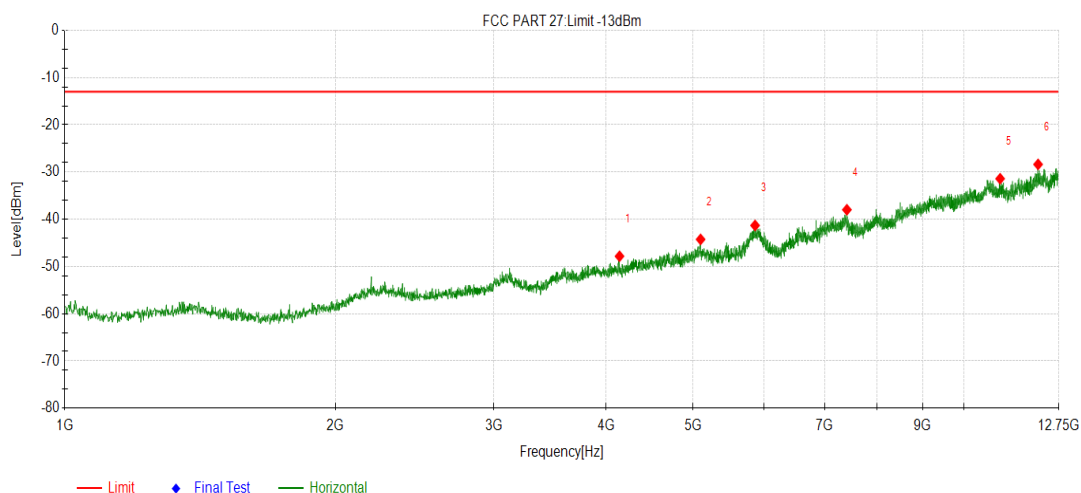


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5805.750	-48.63	-40.71	-13.00	27.71	7.92	131	109	Vertical
2	7412.562	-51.05	-37.89	-13.00	24.89	13.16	168	137	Vertical
3	7978.031	-50.01	-37.87	-13.00	24.87	12.14	150	124	Vertical
4	10637.93	-50.44	-29.80	-13.00	16.80	20.64	183	159	Vertical
5	12036.18	-50.76	-29.97	-13.00	16.97	20.79	230	184	Vertical
6	12692.71	-50.86	-28.80	-13.00	15.80	22.06	271	192	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 12 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

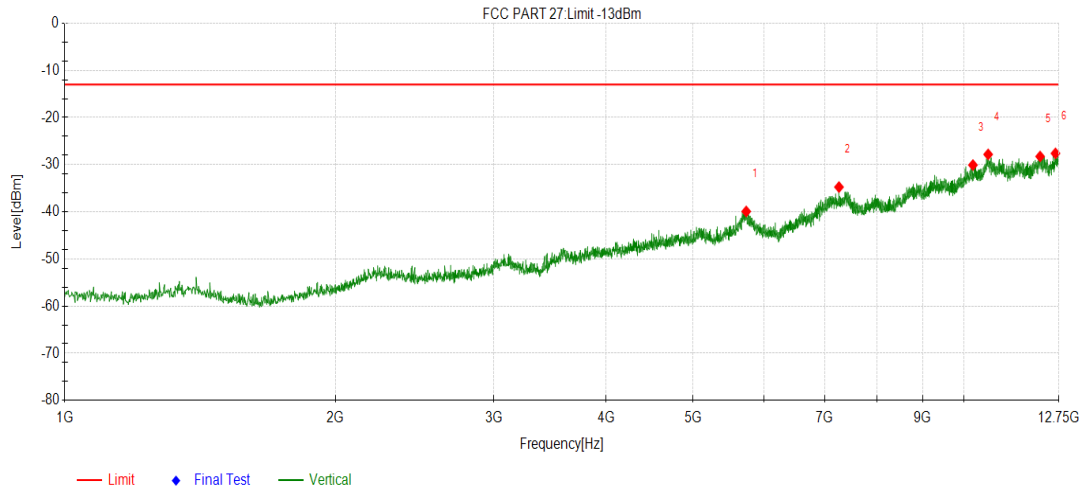


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	4140.187	-47.41	-47.83	-13.00	34.83	-0.42	138	129	Horizontal
2	5096.343	-48.48	-44.26	-13.00	31.26	4.22	160	140	Horizontal
3	5858.625	-50.02	-41.31	-13.00	28.31	8.71	125	162	Horizontal
4	7412.562	-49.43	-37.98	-13.00	24.98	11.45	196	177	Horizontal
5	10977.21	-50.45	-31.41	-13.00	18.41	19.04	241	189	Horizontal
6	12097.87	-49.39	-28.38	-13.00	15.38	21.01	263	204	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 13 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

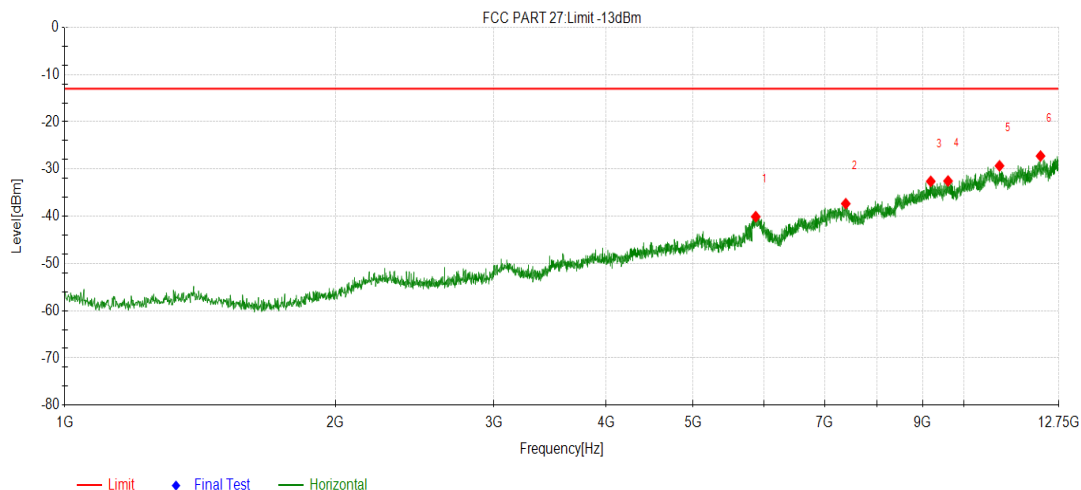


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5727.906	-48.42	-39.91	-13.00	26.91	8.51	140	125	Vertical
2	7264.218	-47.43	-34.75	-13.00	21.75	12.68	156	138	Vertical
3	10238.43	-48.89	-30.08	-13.00	17.08	18.81	182	164	Vertical
4	10645.28	-48.46	-27.82	-13.00	14.82	20.64	167	159	Vertical
5	12161.03	-49.46	-28.25	-13.00	15.25	21.21	192	176	Vertical
6	12648.65	-49.51	-27.60	-13.00	14.60	21.91	231	192	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 13 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

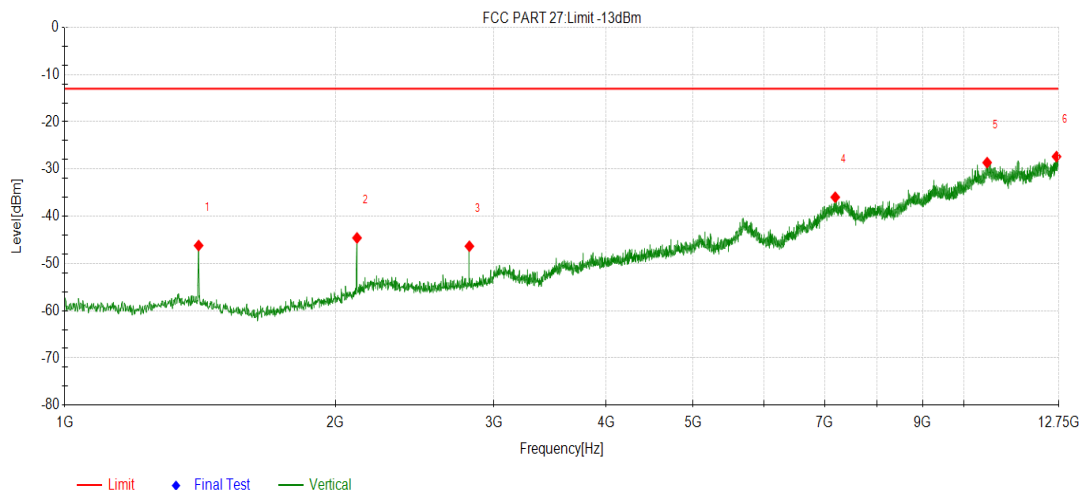


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	5868.906	-48.88	-40.09	-13.00	27.09	8.79	119	137	Horizontal
2	7392.000	-48.87	-37.34	-13.00	24.34	11.53	142	152	Horizontal
3	9189.750	-48.29	-32.61	-13.00	19.61	15.68	168	166	Horizontal
4	9605.406	-49.08	-32.53	-13.00	19.53	16.55	192	147	Horizontal
5	10959.59	-48.31	-29.32	-13.00	16.32	18.99	241	181	Horizontal
6	12174.25	-48.53	-27.24	-13.00	14.24	21.29	265	195	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 17 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

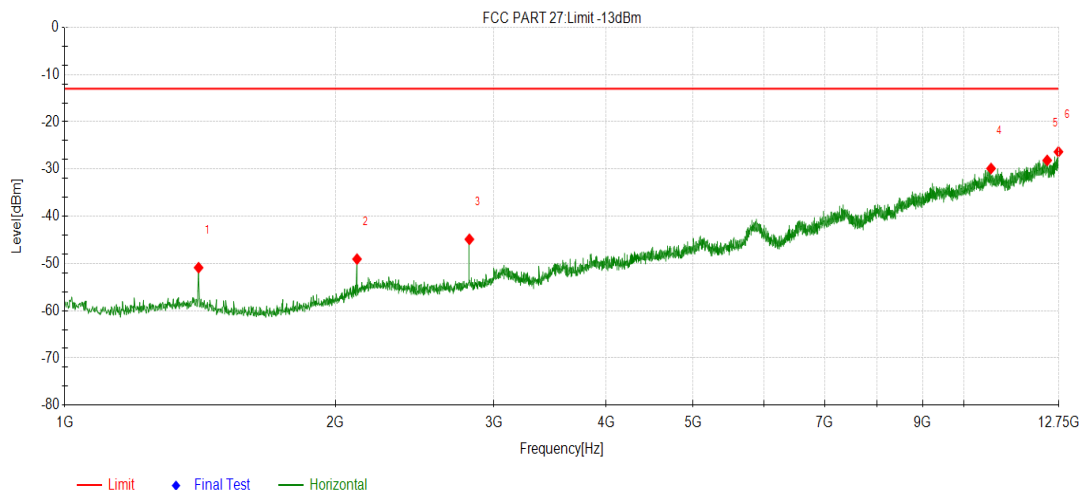


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1408.312	-37.45	-46.20	-13.00	33.20	-8.75	108	134	Vertical
2	2113.312	-37.73	-44.58	-13.00	31.58	-6.85	137	125	Vertical
3	2818.312	-40.97	-46.34	-13.00	33.34	-5.37	162	167	Vertical
4	7195.187	-49.07	-35.97	-13.00	22.97	13.10	179	138	Vertical
5	10617.37	-49.28	-28.64	-13.00	15.64	20.64	208	192	Vertical
6	12682.43	-49.39	-27.36	-13.00	14.36	22.03	234	175	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 17 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

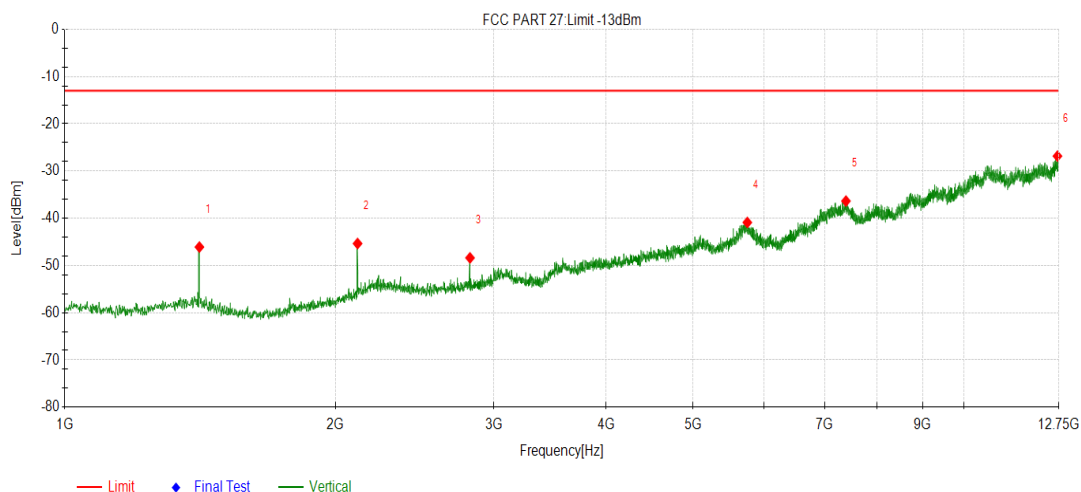


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1408.312	-41.67	-50.88	-13.00	37.88	-9.21	149	125	Horizontal
2	2113.312	-42.45	-49.07	-13.00	36.07	-6.62	162	148	Horizontal
3	2818.312	-39.47	-44.87	-13.00	31.87	-5.40	135	167	Horizontal
4	10724.59	-49.17	-29.88	-13.00	16.88	19.29	180	178	Horizontal
5	12384.28	-49.15	-28.17	-13.00	15.17	20.98	236	193	Horizontal
6	12745.59	-48.72	-26.35	-13.00	13.35	22.37	252	201	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 17 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

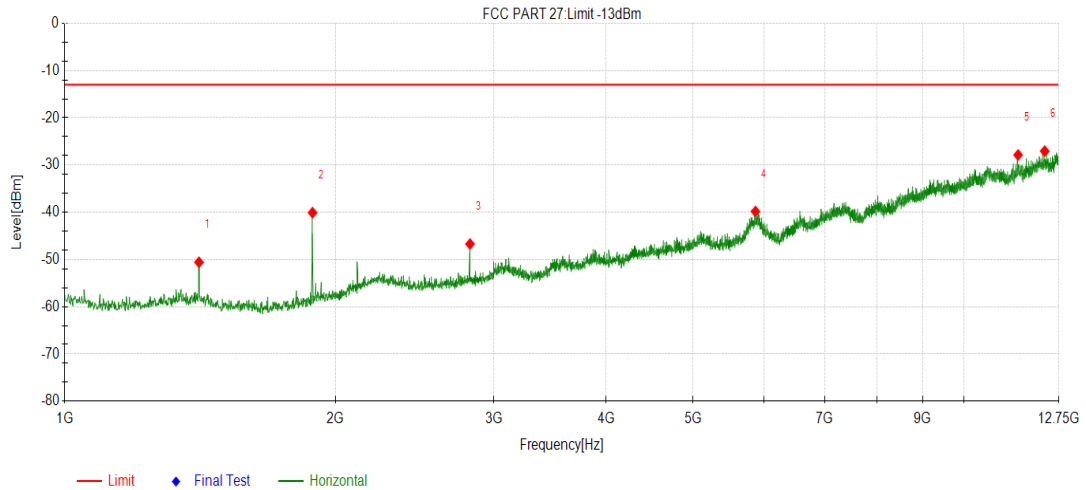


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1411.250	-37.29	-46.09	-13.00	33.09	-8.80	145	125	Vertical
2	2116.250	-38.55	-45.35	-13.00	32.35	-6.80	126	131	Vertical
3	2822.718	-43.03	-48.38	-13.00	35.38	-5.35	174	146	Vertical
4	5744.062	-49.29	-40.89	-13.00	27.89	8.40	195	157	Vertical
5	7394.937	-49.62	-36.35	-13.00	23.35	13.27	203	185	Vertical
6	12713.28	-48.98	-26.83	-13.00	13.83	22.15	246	196	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 17 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

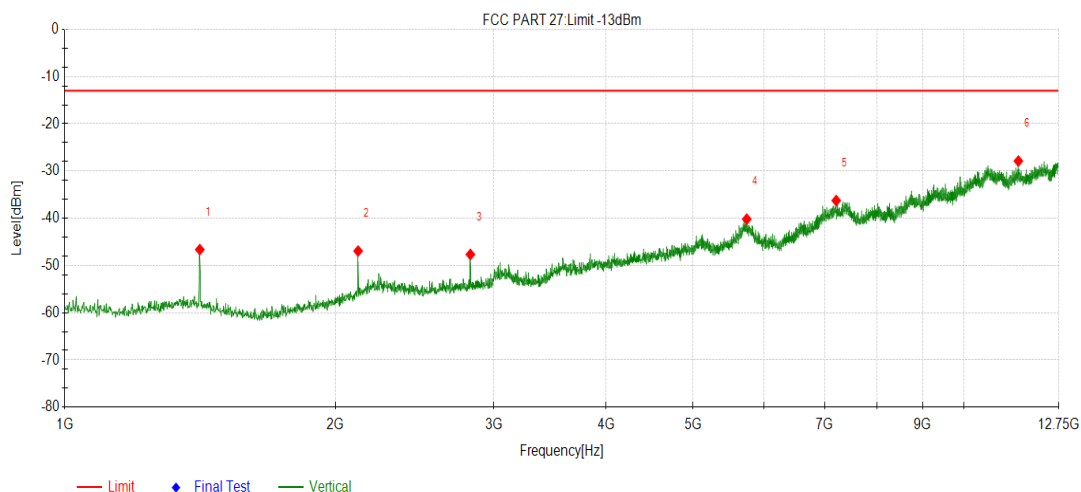


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1409.781	-41.35	-50.58	-13.00	37.58	-9.23	143	120	Horizontal
2	1885.656	-30.69	-40.08	-13.00	27.08	-9.39	116	164	Horizontal
3	2822.718	-41.32	-46.71	-13.00	33.71	-5.39	157	144	Horizontal
4	5864.500	-48.58	-39.82	-13.00	26.82	8.76	190	170	Horizontal
5	11492.75	-48.24	-27.86	-13.00	14.86	20.38	203	195	Horizontal
6	12304.96	-48.22	-27.05	-13.00	14.05	21.17	285	163	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 17 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

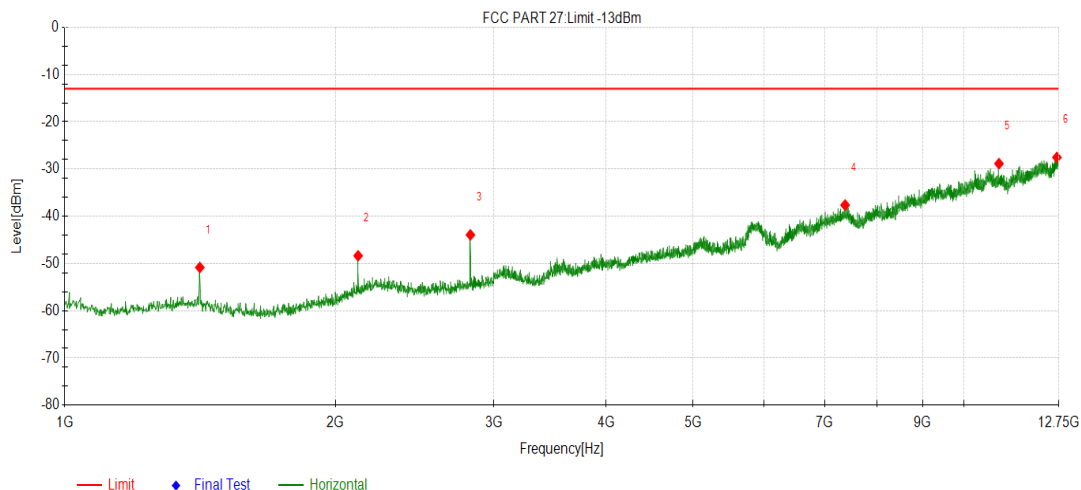


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1412.718	-37.80	-46.63	-13.00	33.63	-8.83	161	140	Vertical
2	2119.187	-40.19	-46.93	-13.00	33.93	-6.74	138	158	Vertical
3	2825.656	-42.32	-47.66	-13.00	34.66	-5.34	199	137	Vertical
4	5735.250	-48.64	-40.18	-13.00	27.18	8.46	213	125	Vertical
5	7212.812	-49.29	-36.24	-13.00	23.24	13.05	247	169	Vertical
6	11501.56	-48.91	-27.88	-13.00	14.88	21.03	186	182	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 17 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

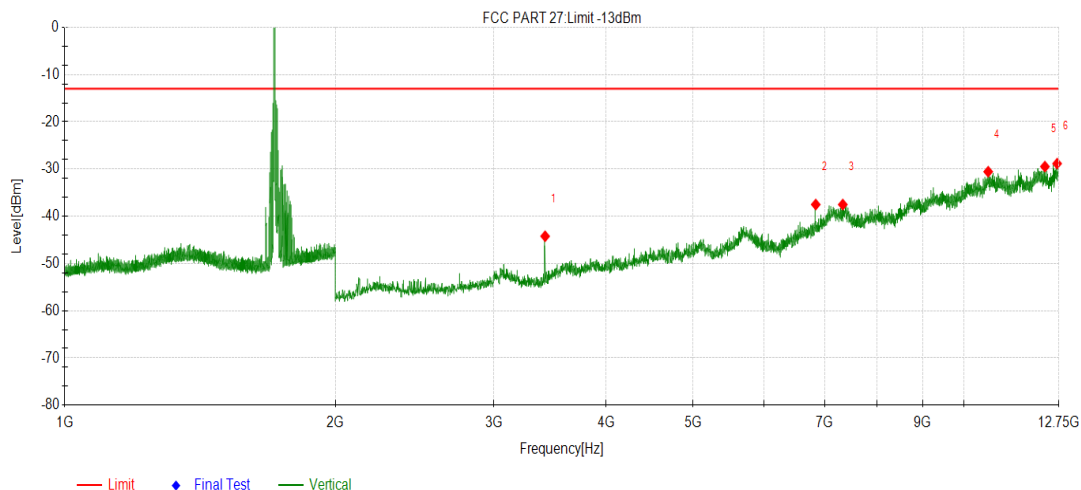


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	1412.718	-41.57	-50.84	-13.00	37.84	-9.27	120	137	Horizontal
2	2119.187	-41.83	-48.37	-13.00	35.37	-6.54	167	156	Horizontal
3	2825.656	-38.56	-43.94	-13.00	30.94	-5.38	158	182	Horizontal
4	7378.781	-49.09	-37.63	-13.00	24.63	11.46	192	160	Horizontal
5	10944.90	-47.80	-28.85	-13.00	15.85	18.95	217	131	Horizontal
6	12695.65	-49.71	-27.53	-13.00	14.53	22.18	273	157	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 66 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

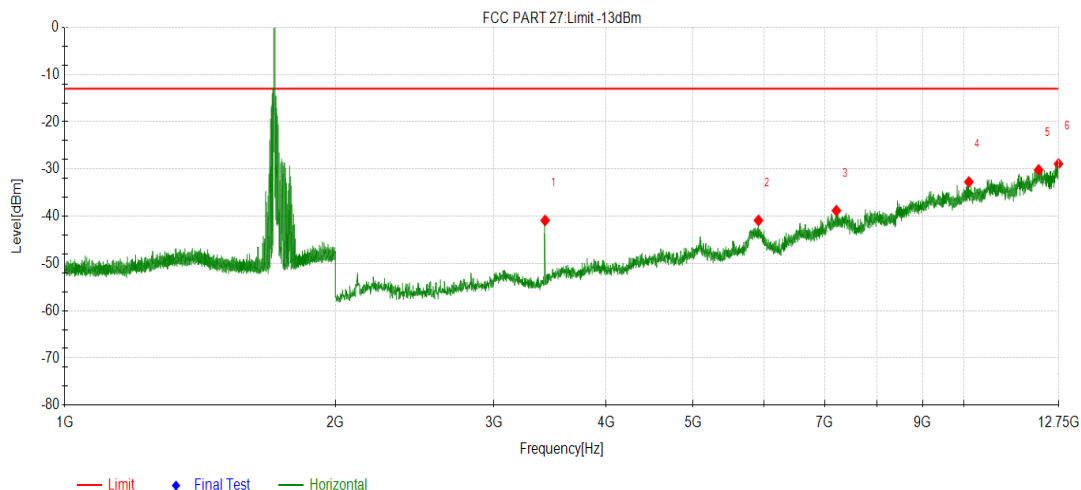


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3421.687	-39.69	-44.23	-13.00	31.23	-4.54	125	129	Vertical
2	6844.218	-47.42	-37.51	-13.00	24.51	9.91	163	133	Vertical
3	7336.031	-50.36	-37.52	-13.00	24.52	12.84	189	147	Vertical
4	10645.68	-50.30	-30.56	-13.00	17.56	19.74	208	160	Vertical
5	12311.93	-50.44	-29.48	-13.00	16.48	20.96	266	185	Vertical
6	12702.96	-51.06	-28.85	-13.00	15.85	22.21	234	189	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 66 Tx Low CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

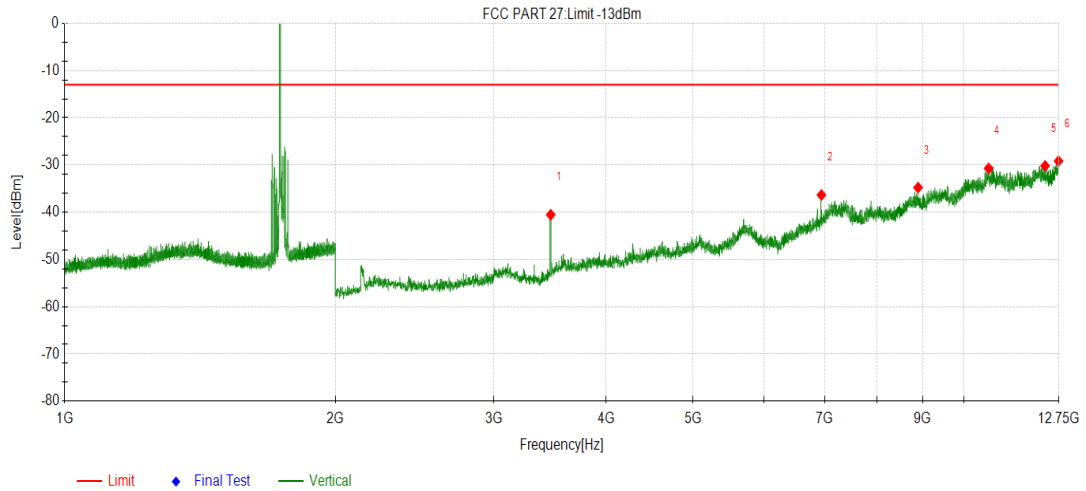


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3421.687	-36.23	-40.88	-13.00	27.88	-4.65	119	161	Horizontal
2	5910.312	-49.39	-40.87	-13.00	27.87	8.52	149	149	Horizontal
3	7216.437	-50.40	-38.80	-13.00	25.80	11.60	183	137	Horizontal
4	10132.37	-49.93	-32.74	-13.00	19.74	17.19	215	162	Horizontal
5	12115.75	-51.46	-30.17	-13.00	17.17	21.29	231	185	Horizontal
6	12745.96	-51.40	-28.91	-13.00	15.91	22.49	278	179	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 66 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

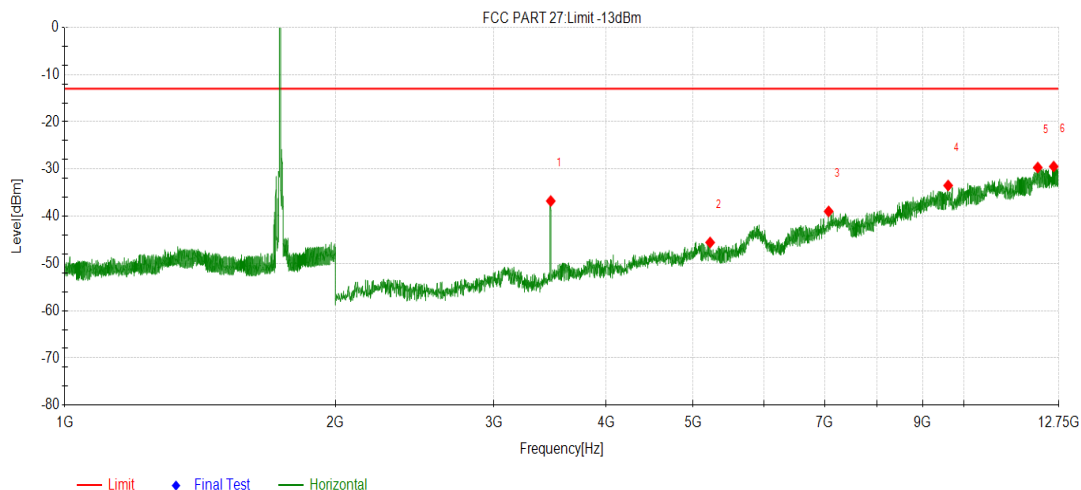


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3471.406	-37.13	-40.52	-13.00	27.52	-3.39	119	135	Vertical
2	6945.000	-47.23	-36.34	-13.00	23.34	10.89	136	149	Vertical
3	8894.781	-49.39	-34.78	-13.00	21.78	14.61	158	158	Vertical
4	10657.78	-50.42	-30.71	-13.00	17.71	19.71	170	192	Vertical
5	12317.31	-51.15	-30.18	-13.00	17.18	20.97	201	174	Vertical
6	12748.65	-51.57	-29.15	-13.00	16.15	22.42	273	156	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 66 Tx Mid CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal

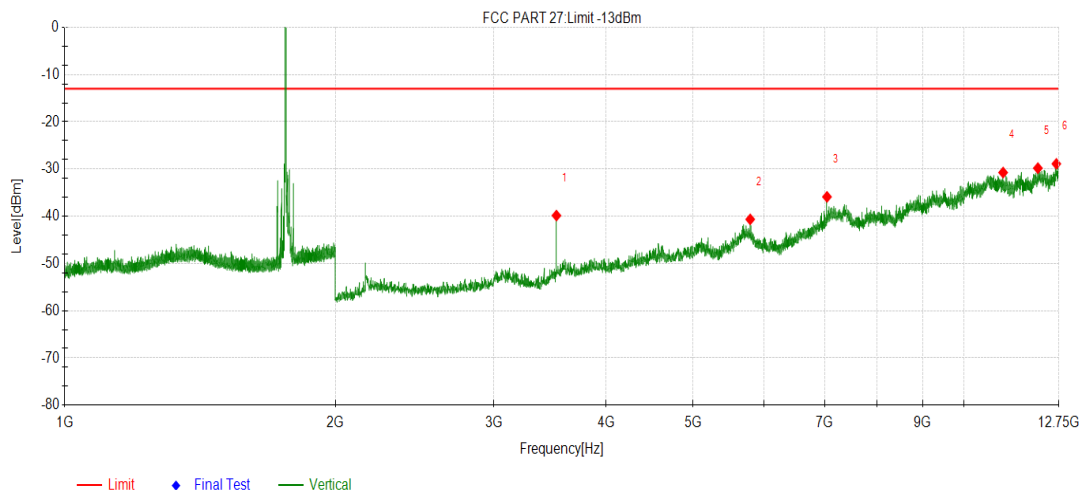


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3471.406	-33.28	-36.77	-13.00	23.77	-3.49	119	161	Horizontal
2	5222.312	-48.94	-45.55	-13.00	32.55	3.39	149	149	Horizontal
3	7074.000	-49.62	-38.97	-13.00	25.97	10.65	183	137	Horizontal
4	9608.312	-50.04	-33.49	-13.00	20.49	16.55	215	162	Horizontal
5	12087.53	-50.94	-29.68	-13.00	16.68	21.26	231	185	Horizontal
6	12591.43	-50.96	-29.47	-13.00	16.47	21.49	278	179	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 66 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Vertical

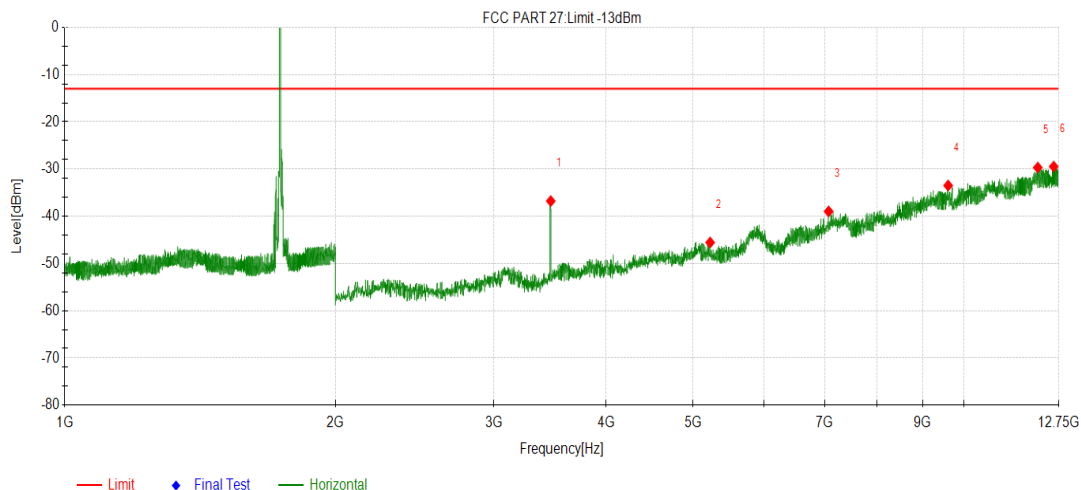


Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3522.468	-37.41	-39.85	-13.00	26.85	-2.44	106	115	Vertical
2	5786.687	-48.64	-40.65	-13.00	27.65	7.99	137	137	Vertical
3	7044.437	-47.80	-35.89	-13.00	22.89	11.91	189	165	Vertical
4	11060.90	-50.35	-30.74	-13.00	17.74	19.61	200	148	Vertical
5	12091.56	-50.95	-29.81	-13.00	16.81	21.14	168	172	Vertical
6	12677.43	-50.95	-28.89	-13.00	15.89	22.06	247	184	Vertical

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

Product Name:	LTE/UMTS/GSM mobile phone	Product model:	5048A
Test By:	Mike	Test mode:	Band 66 Tx High CH
Test Voltage:	DC 3.85V	Polarization:	Horizontal



Suspected Data List									
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Height [cm]	Polarity
1	3471.406	-33.28	-36.77	-13.00	23.77	-3.49	126	128	Horizontal
2	5222.312	-48.94	-45.55	-13.00	32.55	3.39	145	134	Horizontal
3	7074.000	-49.62	-38.97	-13.00	25.97	10.65	176	150	Horizontal
4	9608.312	-50.04	-33.49	-13.00	20.49	16.55	183	176	Horizontal
5	12087.53	-50.94	-29.68	-13.00	16.68	21.26	211	189	Horizontal
6	12591.43	-50.96	-29.47	-13.00	16.47	21.49	256	197	Horizontal

Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of below 1GHz and above 12.75GHz are lower than the limit 20dB and not show in test report.

7. Appendix

The below Appendix was detail result tested by SGS-CSTC Standards Technical Services, Co., Ltd.Shenzhen Branch.

(Date of Test: 2019/8/2-2019/8/21).

Appendix	Item
Appendix B.3 -LTE Band 2	LTE Band 2
Appendix B.4 -LTE Band 4	LTE Band 4
Appendix B.5 -LTE Band 5	LTE Band 5
Appendix B.6 -LTE Band 7	LTE Band 7
Appendix B.7 -LTE Band 12	LTE Band 12
Appendix B.8 -LTE Band 13	LTE Band 13
Appendix B.9 -LTE Band 17	LTE Band 17
Appendix B.10 -LTE Band 66	LTE Band 66