

TEST REPORT

Applicant: JACS Solutions, Inc.
EUT Description: TD0231 5G Industrial Dongle
Model: TD0231
Brand: JACS
FCC ID: 2AGCDJACSTD0231
Standards: FCC CFR Title 47 Part 2
FCC CFR Title 47 Part 22
FCC CFR Title 47 Part 24
FCC CFR Title 47 Part 27
FCC CFR Title 47 Part 90
FCC CFR Title 47 Part 96
Date of Receipt: 2025/09/26
Date of Test: 2025/09/26 to 2025/11/26
Date of Issue: 2025/12/01

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.



Jim Huang
Approved By:



Carey Chen
Reviewed By:

Revision History

Rev.	Issue Date	Description	Revised by
01	2025/12/01	Original	Carey Chen

Summary of Test Results

FCC Part	Test Band	Test Item	Test Result
§2.1046 §22.913(a)(5) §27.50(b)(10) §27.50(c)(10) §90.542(a)	LTE Band 5/26(824 ~ 849MHz)/CA_5B LTE Band 13 LTE Band 12/17/71 LTE Band 14	Effective Radiated Power	Pass*
§2.1046 §24.232(c) §27.50(d)(4) §27.50(h)(2)	LTE Band 2/25/CA_2C LTE Band 4/66/CA_66B/CA_66C LTE Band 7/38/41/CA_7C/CA_38C/CA_41C	Effective Isotropic Radiated Power	Pass*
§27.50(a)(3) §96.41	LTE Band 30 LTE Band 48	Maximum EIRP and Maximum PSD	Pass*
§2.1046 §90.635(b)	LTE Band 26(814 ~ 824MHz)	Transmitter Conducted Output Power	Pass*
§22.913(d) §24.232(d) §96.41 §27.50(d)(5)	LTE Band 5/26(824 ~ 849MHz)/CA_5B LTE Band 2/25/CA_2C LTE Band 48 Others Band	Peak-Average Ratio	Pass*
§2.1049	All Band	Occupied Bandwidth	Pass*
§2.1051 §90.210(b) §90.691(a)	LTE Band 14 LTE Band 26(814 ~ 824MHz)	Emission Mask	Pass*
§2.1051 §22.917(a) §24.238(a) §27.53(c) §27.53(g) §27.53(h) §27.53(m) §90.543(e)(2)(3) §27.53(a)(4) §27.53(g) §96.41	LTE Band 5/26(824 ~ 849MHz)/CA_5B LTE Band 2/25/CA_2C LTE Band 13 LTE Band 12/17 LTE Band 4/66/CA_66B/CA_66C LTE Band 7/38/41/CA_7C/CA_38C/CA_41C LTE Band 14 LTE Band 30 LTE Band 71 LTE Band 48	Band Edge	Pass*
§2.1051 §22.917(a) §24.238(a) §27.53(c) §27.53(g) §27.53(h) §27.53(m) §90.691 §90.543(c)(f) §27.53(a)(4) §27.53(g) §96.41	LTE Band 5/26(824 ~ 849MHz)/CA_5B LTE Band 2/25/CA_2C LTE Band 13 LTE Band 12/17 LTE Band 4/66/CA_66B/CA_66C LTE Band 7/38/41/CA_7C/CA_38C/CA_41C LTE Band 26(814 ~ 824MHz) LTE Band 14 LTE Band 30 LTE Band 71 LTE Band 48	Spurious Emission at Antenna Terminals	Pass*

FCC Part	Test Band	Test Item	Test Result
§2.1053 §22.917(a) §24.238(a) §27.53(c)&(f) §27.53(g) §27.53(h) §27.53(m) §90.691 §90.543(c)(f) §27.53(a)(4) §27.53(g) §96.41	LTE Band 5/26(824 ~ 849MHz)/CA_5B LTE Band 2/25/CA_2C LTE Band 13 LTE Band 12/17 LTE Band 4/66/CA_66B/CA_66C LTE Band 7/38/41/CA_7C/CA_38C/CA_41C LTE Band 26(814 ~ 824MHz) LTE Band 14 LTE Band 30 LTE Band 71 LTE Band 48	Field Strength of Spurious Radiation	Pass
§2.1055 §22.355 §24.235 §27.54 §90.213 §96.41	LTE Band 5/26(824 ~ 849MHz)/CA_5B LTE Band 2/25/CA_2C Others Band LTE Band 26(814 ~ 824MHz)/14 LTE Band 48	Frequency Stability	Pass*
§96.41	LTE Band 48	Adjacent Channel Leakage Ratio	Pass*
Remark: 1. Pass: Meet the requirement. 2. Pass*: Refer to Module FCC ID: XMR2023RG520NNA, Detailed data reference Report No.: 2303RSU050-U7 & 2303RSU050-U8 & 2303RSU050-U9 & 2303RSU050-U10 & 2303RSU050-U11, provided by MRT Technology (Suzhou) Co., Ltd. 3. The items of power data refer to the previous report, updated the ERP/EIRP and only the maximum power of all frequency bands displayed in this report.			

Table of Contents

1	General Description	6
1.1	Lab Information	6
1.1.1	Testing Location	6
1.1.2	Test Facility / Accreditations	6
1.2	Client Information	6
1.2.1	Applicant	6
1.2.2	Manufacturer	6
1.3	Product Information	7
2	Test Configuration	9
2.1	Test Channel	9
2.2	Test Mode	19
2.3	Support Unit used in test	19
2.4	Test Environment	19
2.5	Test RF Cable	19
2.6	Modifications	19
2.7	Test Setup Diagram	20
2.7.1	Radiated Configuration	20
3	Equipment and Measurement Uncertainty	21
3.1	Test Equipment List	21
3.2	Measurement Uncertainty	21
4	Test Results	22
4.1	Field Strength of Spurious Radiation	22
5	Test Setup Photos	25
	Appendix	26

1 General Description

1.1 Lab Information

1.1.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014
Tel.: +86-755-27212361
Contact Email: info@towewireless.com

1.1.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)

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. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

FCC Designation No.: CN1353

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory. Designation Number: CN1353.

ISED CAB identifier: CN0152

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0152

Company Number: 31000

1.2 Client Information

1.2.1 Applicant

Applicant:	JACS Solutions, Inc.
Address:	809 Pinnacle Drive, Suite R, Linthicum Heights, MD 21090, USA

1.2.2 Manufacturer

Manufacturer:	JACS Solutions, Inc.
Address:	809 Pinnacle Drive, Suite R, Linthicum Heights, MD 21090, USA

1.3 Product Information

EUT Description:	TD0231 5G Industrial Dongle		
Model:	TD0231		
Brand:	JACS		
Hardware Version:	V1.0		
Software Version:	TD0231_JACS_V1.0.0		
IMEI:	863109050663678		
Device Capabilities:			
Modulation Type:	LTE:	☒ QPSK, ☒ 16QAM, ☒ 64QAM, ☒ 256QAM	
Operation Frequency Range:	Band	TX Frequency	RX Frequency
	LTE Band 2	1850 ~ 1910 MHz	1930 ~ 1990 MHz
	LTE Band 4	1710 ~ 1755 MHz	2110 ~ 2155 MHz
	LTE Band 5	824 ~ 849 MHz	869 ~ 894 MHz
	LTE Band 7	2500 ~ 2570 MHz	2620 ~ 2690 MHz
	LTE Band 12	699 ~ 716 MHz	729 ~ 746 MHz
	LTE Band 13	777 ~ 787 MHz	746 ~ 756 MHz
	LTE Band 14	788 ~ 798 MHz	758 ~ 768 MHz
	LTE Band 17	704 ~ 716 MHz	734 ~ 746 MHz
	LTE Band 25	1850 ~ 1915MHz	1930 ~ 1995 MHz
	LTE Band 26 (814 ~ 824 MHz)	814 ~ 824MHz	859 ~ 869 MHz
	LTE Band 26 (824 ~ 849 MHz)	824 ~ 849 MHz	869 ~ 894 MHz
	LTE Band 30	2305 ~ 2315 MHz	2350 ~ 2360 MHz
	LTE Band 38	2570 ~ 2620 MHz	2570 ~ 2620 MHz
	LTE Band 41	2496 ~ 2690MHz	2496 ~ 2690MHz
	LTE Band 48	3550 ~ 3700 MHz	3550 ~ 3700 MHz
	LTE Band 66	1710 ~ 1780 MHz	2110 ~ 2200 MHz
	LTE Band 71	663 ~ 698 MHz	617 ~ 652 MHz
LTE UL CA:	CA_2C, CA_5B, CA_7C, CA_38C, CA_41C, CA_66B, CA_66C;		
Power Class:	Class 2: LTE Band 38; LTE Band 41; Class 3: All		
Antenna Type:	☐ External, ☒ Integrated		
Antenna Gain:	Band	Ant (dBi)	
	LTE Band 2	4.92	
	LTE Band 4	4.94	
	LTE Band 5	1.63	
	LTE Band 7	2.4	
	LTE Band 12	1.36	
	LTE Band 13	2.07	
	LTE Band 14	1.76	
	LTE Band 17	1.32	

	LTE Band 25	4.92
	LTE Band 26	1.63
	LTE Band 30	1.33
	LTE Band 38	2.4
	LTE Band 41	2.4
	LTE Band 48	0.69
	LTE Band 66	4.94
	LTE Band 71	1.36
Remark: The above EUT's information was declared by applicant, please refer to the specifications or user manual for more detailed description.		

2 Test Configuration

2.1 Test Channel

Band	Bandwidth	TX Frequency			RX Frequency		
		Range	Channel	Frequency	Range	Channel	Frequency
LTE Band 2	1.4MHz	Low	18607	1850.7 MHz	Low	607	1930.7 MHz
		Middle	18900	1880 MHz	Middle	900	1960 MHz
		High	19193	1909.3 MHz	High	1193	1989.3 MHz
	3MHz	Low	18615	1851.5 MHz	Low	615	1931.5 MHz
		Middle	18900	1880 MHz	Middle	900	1960 MHz
		High	19185	1908.5 MHz	High	1185	1988.5 MHz
	5MHz	Low	18625	1852.5 MHz	Low	625	1932.5 MHz
		Middle	18900	1880 MHz	Middle	900	1960 MHz
		High	19175	1907.5 MHz	High	1175	1987.5 MHz
	10MHz	Low	18650	1855 MHz	Low	650	1935 MHz
		Middle	18900	1880 MHz	Middle	900	1960 MHz
		High	19150	1905 MHz	High	1150	1985 MHz
	15MHz	Low	18675	1857.5 MHz	Low	675	1937.5 MHz
		Middle	18900	1880 MHz	Middle	900	1960 MHz
		High	19125	1902.5 MHz	High	1125	1982.5 MHz
LTE Band 4	1.4MHz	Low	18700	1860 MHz	Low	700	1940 MHz
		Middle	18900	1880 MHz	Middle	900	1960 MHz
		High	19100	1900 MHz	High	1100	1980 MHz
	3MHz	Low	19957	1710.7 MHz	Low	1957	2110.7 MHz
		Middle	20175	1732.5 MHz	Middle	2175	2132.5MHz
		High	20393	1754.3 MHz	High	2393	2154.3 MHz
	5MHz	Low	19965	1711.5 MHz	Low	1965	2111.5 MHz
		Middle	20175	1732.5 MHz	Middle	2175	2132.5MHz
		High	20385	1753.5 MHz	High	2385	2153.5 MHz
	10MHz	Low	19975	1712.5 MHz	Low	1975	2112.5 MHz
		Middle	20175	1732.5 MHz	Middle	2175	2132.5MHz
		High	20375	1752.5 MHz	High	2375	2152.5 MHz
	15MHz	Low	20000	1715 MHz	Low	2115	2115 MHz
		Middle	20175	1732.5 MHz	Middle	2175	2132.5MHz
		High	20350	1750 MHz	High	2350	2150 MHz
LTE Band 5	1.4MHz	Low	20025	1717.5 MHz	Low	2025	2117.5 MHz
		Middle	20175	1732.5 MHz	Middle	2175	2132.5MHz
		High	20325	1747.5 MHz	High	2325	2147.5 MHz
	3MHz	Low	20050	1720 MHz	Low	2050	2120 MHz
		Middle	20175	1732.5 MHz	Middle	2175	2132.5MHz
		High	20300	1745 MHz	High	2300	2145 MHz
	5MHz	Low	20407	824.7 MHz	Low	2407	869.7 MHz
		Middle	20525	836.5 MHz	Middle	2525	881.5 MHz
		High	20643	848.3 MHz	High	2643	893.3 MHz
	10MHz	Low	20415	825.5 MHz	Low	2415	870.5 MHz
		Middle	20525	836.5 MHz	Middle	2525	881.5 MHz
		High	20635	847.5 MHz	High	2635	892.5 MHz
LTE Band 7	5MHz	Low	20425	826.5 MHz	Low	2425	871.5 MHz
		Middle	20525	836.5 MHz	Middle	2525	881.5 MHz
		High	20625	846.5 MHz	High	2625	891.5 MHz
	10MHz	Low	20450	829 MHz	Low	2450	874 MHz
		Middle	20525	836.5 MHz	Middle	2525	881.5 MHz
		High	20600	844 MHz	High	2600	889 MHz
	15MHz	Low	20775	2502.5 MHz	Low	2775	2622.5 MHz
		Middle	21100	2535 MHz	Middle	3100	2655 MHz
		High	21425	2567.5 MHz	High	3425	2687.5 MHz
LTE Band 7	10MHz	Low	20800	2505 MHz	Low	2800	2625 MHz

Band	Bandwidth	TX Frequency			RX Frequency		
		Range	Channel	Frequency	Range	Channel	Frequency
		Middle	21100	2535 MHz	Middle	3100	2655 MHz
		High	21400	2565 MHz	High	3400	2685 MHz
		Low	20825	2507.5 MHz	Low	2825	2627.5 MHz
	15MHz	Middle	21100	2535 MHz	Middle	3100	2655 MHz
		High	21375	2562.5 MHz	High	3375	2682.5 MHz
		Low	20850	2510 MHz	Low	2850	2630 MHz
	20MHz	Middle	21100	2535 MHz	Middle	3100	2655 MHz
		High	21350	2560 MHz	High	3350	2680 MHz
LTE Band 12	1.4MHz	Low	23017	699.7 MHz	Low	5017	729.7 MHz
		Middle	23095	707.5 MHz	Middle	5095	737.5 MHz
		High	23173	715.3 MHz	High	5173	745.3 MHz
	3MHz	Low	23025	700.5 MHz	Low	5025	730.5 MHz
		Middle	23095	707.5 MHz	Middle	5095	737.5 MHz
		High	23165	714.5 MHz	High	5165	744.5 MHz
	5MHz	Low	23035	701.5 MHz	Low	5035	731.5 MHz
		Middle	23095	707.5 MHz	Middle	5095	737.5 MHz
		High	23155	713.5 MHz	High	5155	743.5 MHz
	10MHz	Low	23060	704 MHz	Low	5060	734 MHz
		Middle	23095	707.5 MHz	Middle	5095	737.5 MHz
		High	23130	711 MHz	High	5130	741 MHz
LTE Band 13	5MHz	Low	23205	779.5 MHz	Low	5205	748.5 MHz
		Middle	23230	782 MHz	Middle	5230	751 MHz
		High	23255	784.5 MHz	High	5255	753.5 MHz
	10MHz	Low	23230	782 MHz	Low	5230	751 MHz
		Middle	23230	782 MHz	Middle	5230	751 MHz
		High	23230	782 MHz	High	5230	751 MHz
LTE Band 14	5MHz	Low	23305	790.5 MHz	Low	5305	760.5 MHz
		Middle	23330	793 MHz	Middle	5330	763 MHz
		High	23355	795.5 MHz	High	5355	765.5 MHz
	10MHz	Low	23330	793 MHz	Low	5330	763 MHz
		Middle	23330	793 MHz	Middle	5330	763 MHz
		High	23330	793 MHz	High	5330	763 MHz
LTE Band 17	5MHz	Low	23755	706.5 MHz	Low	5755	736.5 MHz
		Middle	23790	710 MHz	Middle	5790	740 MHz
		High	23825	713.5 MHz	High	5825	743.5 MHz
	10MHz	Low	23780	709 MHz	Low	5780	739 MHz
		Middle	23790	710 MHz	Middle	5790	740 MHz
		High	23800	711 MHz	High	5800	741 MHz
LTE Band 25	1.4MHz	Low	26047	1850.7 MHz	Low	8047	1930.7 MHz
		Middle	26365	1882.5 MHz	Middle	8365	1962.5 MHz
		High	26683	1914.3 MHz	High	8683	1994.3 MHz
	3MHz	Low	26055	1851.5 MHz	Low	8055	1931.5 MHz
		Middle	26365	1882.5 MHz	Middle	8365	1962.5 MHz
		High	26675	1913.5 MHz	High	8675	1993.5 MHz
	5MHz	Low	26065	1852.5 MHz	Low	8065	1932.5 MHz
		Middle	26365	1882.5 MHz	Middle	8365	1962.5 MHz
		High	26665	1912.5 MHz	High	8665	1992.5 MHz
	10MHz	Low	26090	1855 MHz	Low	8090	1935 MHz
		Middle	26365	1882.5 MHz	Middle	8365	1962.5 MHz
		High	26640	1910 MHz	High	8640	1990 MHz
	15MHz	Low	26115	1857.5 MHz	Low	8115	1937.5 MHz
		Middle	26365	1882.5 MHz	Middle	8365	1962.5 MHz
		High	26615	1907.5 MHz	High	8615	1987.5 MHz
	20MHz	Low	26140	1860 MHz	Low	8140	1940 MHz
		Middle	26365	1882.5 MHz	Middle	8365	1962.5 MHz
		High	26590	1905 MHz	High	8590	1985 MHz

Band	Bandwidth	TX Frequency			RX Frequency		
		Range	Channel	Frequency	Range	Channel	Frequency
LTE Band 26 (814-824)	1.4MHz	Low	26697	814.7 MHz	Low	8697	859.7 MHz
		Middle	26740	819 MHz	Middle	8740	864MHz
		High	26783	823.3 MHz	High	8783	868.3 MHz
	3MHz	Low	26705	815.5 MHz	Low	8705	860.5 MHz
		Middle	26740	819 MHz	Middle	8740	864MHz
		High	26775	822.5 MHz	High	8775	867.5 MHz
	5MHz	Low	26715	816.5 MHz	Low	8715	861.5 MHz
		Middle	26740	819 MHz	Middle	8740	864MHz
		High	26765	821.5 MHz	High	8765	866.5 MHz
	10MHz	Low	26740	819 MHz	Low	8740	864MHz
		Middle	26740	819 MHz	Middle	8740	864MHz
		High	26740	819 MHz	High	8740	864MHz
LTE Band 26 (824-849)	1.4MHz	Low	26797	824.7 MHz	Low	8797	869.7 MHz
		Middle	26915	836.5 MHz	Middle	8915	881.5 MHz
		High	27033	848.3 MHz	High	9033	893.3 MHz
	3MHz	Low	26805	825.5 MHz	Low	8805	870.5 MHz
		Middle	26915	836.5 MHz	Middle	8915	881.5 MHz
		High	27025	847.5 MHz	High	9025	892.5 MHz
	5MHz	Low	26815	826.5 MHz	Low	8815	871.5 MHz
		Middle	26915	836.5 MHz	Middle	8915	881.5 MHz
		High	27015	846.5 MHz	High	9015	891.5 MHz
	10MHz	Low	26840	829 MHz	Low	8840	844 MHz
		Middle	26915	836.5 MHz	Middle	8915	881.5 MHz
		High	26990	844 MHz	High	8990	889 MHz
	15MHz	Low	26865	831.5 MHz	Low	8865	876.5 MHz
		Middle	26915	836.5 MHz	Middle	8915	881.5 MHz
		High	26965	841.5 MHz	High	8965	886.5 MHz
LTE Band 30	5MHz	Low	27685	2307.5 MHz	Low	9795	2352.5MHz
		Middle	27710	2310MHz	Middle	9820	2355 MHz
		High	27735	2312.5 MHz	High	9845	2357.5MHz
	10MHz	Low	27710	2310 MHz	Low	9820	2355 MHz
		Middle	27710	2310 MHz	Middle	9820	2355 MHz
		High	27710	2310 MHz	High	9820	2355 MHz
LTE Band 38	5MHz	Low	37775	2572.5 MHz	Low	37775	2572.5 MHz
		Middle	38000	2595 MHz	Middle	38000	2595 MHz
		High	38225	2617.5 MHz	High	38225	2617.5 MHz
	10MHz	Low	37800	2575 MHz	Low	37800	2575 MHz
		Middle	38000	2595 MHz	Middle	38000	2595 MHz
		High	38200	2615 MHz	High	38200	2615 MHz
	15MHz	Low	37825	2577.5 MHz	Low	37825	2577.5 MHz
		Middle	38000	2595 MHz	Middle	38000	2595 MHz
		High	38175	2612.5 MHz	High	38175	2612.5 MHz
	20MHz	Low	37850	2580 MHz	Low	37850	2580 MHz
		Middle	38000	2595 MHz	Middle	38000	2595 MHz
		High	38150	2610 MHz	High	38150	2610 MHz
LTE Band 41 (2496-2690)	5MHz	Low	39675	2498.5 MHz	Low	39675	2498.5 MHz
		Middle	40620	2593 MHz	Middle	40620	2593 MHz
		High	41565	2687.5 MHz	High	41565	2687.5 MHz
	10MHz	Low	39700	2501 MHz	Low	39700	2501 MHz
		Middle	40620	2593 MHz	Middle	40620	2593 MHz
		High	41540	2685 MHz	High	41540	2685 MHz
	15MHz	Low	39725	2503.5 MHz	Low	39725	2503.5 MHz
		Middle	40620	2593 MHz	Middle	40620	2593 MHz
		High	41515	2682.5 MHz	High	41515	2682.5 MHz
	20MHz	Low	39750	2506 MHz	Low	39750	2506 MHz
		Middle	40620	2593 MHz	Middle	40620	2593 MHz

Band	Bandwidth	TX Frequency			RX Frequency		
		Range	Channel	Frequency	Range	Channel	Frequency
LTE Band 66	1.4MHz	High	41490	2680 MHz	High	41490	2680 MHz
		Low	131979	1710.7 MHz	Low	66443	2110.7 MHz
		Middle	132322	1745 MHz	Middle	66786	2145MHz
	3MHz	High	132665	1779.3 MHz	High	67329	2199.3 MHz
		Low	131987	1711.5 MHz	Low	66451	2111.5 MHz
		Middle	132322	1745 MHz	Middle	66786	2145MHz
	5MHz	High	132657	1778.5MHz	High	67321	2198.5MHz
		Low	131997	1712.5 MHz	Low	66461	2112.5 MHz
		Middle	132322	1745 MHz	Middle	66786	2145MHz
	10MHz	High	132647	1777.5 MHz	High	67311	2197.5 MHz
		Low	132022	1715 MHz	Low	66486	2115 MHz
		Middle	132322	1745 MHz	Middle	66786	2145MHz
	15MHz	High	132622	1775 MHz	High	67286	2195 MHz
		Low	132047	1717.5 MHz	Low	66511	2117.5 MHz
		Middle	132322	1745 MHz	Middle	66786	2145MHz
	20MHz	High	132597	1772.5 MHz	High	67261	2192.5 MHz
		Low	132072	1720 MHz	Low	66536	2120 MHz
		Middle	132322	1745 MHz	Middle	66786	2145MHz
LTE Band 71	5MHz	High	132572	1770 MHz	High	67236	2190 MHz
		Low	133147	665.5 MHz	Low	68611	619.5 MHz
		Middle	133297	680.5 MHz	Middle	68761	634.5 MHz
	10MHz	High	133447	695.5 MHz	High	68911	649.5 MHz
		Low	133172	668 MHz	Low	68636	622 MHz
		Middle	133297	680.5 MHz	Middle	68761	634.5 MHz
	15MHz	High	133422	693 MHz	High	68886	647 MHz
		Low	133197	670.5 MHz	Low	68661	624.5 MHz
		Middle	133297	680.5 MHz	Middle	68761	634.5 MHz
	20MHz	High	133397	690.5 MHz	High	68861	644.5 MHz
		Low	133222	673 MHz	Low	68686	627 MHz
		Middle	133297	680.5 MHz	Middle	68761	634.5 MHz
		High	133372	688 MHz	High	68836	642 MHz

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band 48	5MHz	TX/RX	Channel 55265	Channel55990	Channel 56715
			3552.5 MHz	3625.0 MHz	3697.5 MHz
	10MHz	TX/RX	Channel 55290	Channel55990	Channel 56690
			3555.0 MHz	3625.0 MHz	3695.0 MHz
	15MHz	TX/RX	Channel 55315	Channel55990	Channel 56665
			3557.5 MHz	3625.0 MHz	3692.5 MHz
	20MHz	TX/RX	Channel 55340	Channel55990	Channel 56640
			3560.0 MHz	3625.0 MHz	3690.0 MHz

Table 4.3.1.1.2A-2: Test frequencies for CA_2C

Range	CC-Combo / N _{RB_agg} [RB]	CC1 Note1					CC2 Note1				
		BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]	BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]
Low	25+100	25	18633	1853.3	633	1933.3	100	18750	1865	750	1945
		100	18700	1860	700	1940	25	18817	1871.7	817	1951.7
	50+75	50	18653	1855.3	653	1935.3	75	18773	1867.3	773	1947.3
		75	18675	1857.5	675	1937.5	50	18795	1869.5	795	1949.5
	50+100	50	18655	1855.5	655	1935.5	100	18799	1869.9	799	1949.9
		100	18700	1860	700	1940	50	18844	1874.4	844	1954.4
	75+75	75	18675	1857.5	675	1937.5	75	18825	1872.5	825	1952.5
		75	18678	1857.8	678	1937.8	100	18849	1874.9	849	1954.9
	75+100	75	18678	1857.8	678	1937.8	100	18849	1874.9	849	1954.9
		100	18700	1860	700	1940	75	18871	1877.1	871	1957.1
Mid	100+100	100	18700	1860	700	1940	100	18898	1879.8	898	1959.8
		100	18700	1860	700	1940	100	18898	1879.8	898	1959.8
	25+100	25	18808	1870.8	808	1950.8	100	18925	1882.5	925	1962.5
		100	18875	1877.5	875	1957.5	25	18992	1889.2	992	1969.2
	50+75	50	18829	1872.9	829	1952.9	75	18949	1884.9	949	1964.9
		75	18851	1875.1	851	1955.1	50	18971	1887.1	971	1967.1
	50+100	50	18806	1870.6	806	1950.6	100	18950	1885	950	1965
		100	18851	1875.1	851	1955.1	50	18995	1889.5	995	1969.5
	75+75	75	18825	1872.5	825	1952.5	75	18975	1887.5	975	1967.5
		75	18803	1870.3	803	1950.3	100	18974	1887.4	974	1967.4
High	75+100	75	18826	1872.6	826	1952.6	75	18997	1889.7	997	1969.7
		100	18801	1870.1	801	1950.1	100	18999	1889.9	999	1969.9
	100+100	100	18801	1870.1	801	1950.1	100	18999	1889.9	999	1969.9
		100	18801	1870.1	801	1950.1	100	18999	1889.9	999	1969.9
	25+100	25	18983	1888.3	983	1968.3	100	19100	1900	1100	1980
		100	19050	1895	1050	1975	25	19167	1906.7	1167	1986.7
	50+75	50	19005	1890.5	1005	1970.5	75	19125	1902.5	1125	1982.5
		75	19027	1892.7	1027	1972.7	50	19147	1904.7	1147	1984.7
	50+100	50	18956	1885.6	956	1965.6	100	19100	1900	1100	1980
		100	19001	1890.1	1001	1970.1	50	19145	1904.5	1145	1984.5
	75+75	75	18975	1887.5	975	1967.5	75	19125	1902.5	1125	1982.5
		75	18975	1887.5	975	1967.5	75	19125	1902.5	1125	1982.5
	75+100	75	18929	1882.9	929	1962.9	100	19100	1900	1100	1980
		100	18951	1885.1	951	1965.1	75	19122	1902.2	1122	1982.2
	100+100	100	18951	1885.1	951	1965.1	75	19122	1902.2	1122	1982.2
		100	18902	1880.2	902	1960.2	100	19100	1900	1100	1980

Note 1: Carriers in increasing frequency order.

Table 4.3.1.1.5A-1: Test frequencies for CA_5B

Range	CC-Combo / N _{RB_agg} [RB]	CC1 Note1					CC2 Note1				
		BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]	BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]
Low	15+25	15	20416	825.6	2416	870.6	25	20455	829.5	2455	874.5
		25	20425	826.5	2425	871.5	15	20464	830.4	2464	875.4
	25+50	25	20428	826.8	2428	871.8	50	20500	834	2500	879
	50+25	50	20450	829	2450	874	25	20522	836.2	2522	881.2
	50+50	50	20450	829	2450	874	50	20549	838.9	2549	883.9
Mid	15+25	15	20501	834.1	2501	879.1	25	20540	838.0	2540	883.0
		25	20510	835.0	2510	880.0	15	20549	838.9	2549	883.9
	25+50	25	20478	831.8	2478	876.8	50	20550	839	2550	884
	50+25	50	20500	834	2500	879	25	20572	841.2	2572	886.2
	50+50	50	20476	831.6	2476	876.6	50	20575	841.5	2575	886.5
High	15+25	15	20586	842.6	2586	887.6	25	20625	846.5	2625	891.5
		25	20595	843.5	2595	888.5	15	20634	847.4	2634	892.4
	25+50	25	20528	836.8	2528	881.8	50	20600	844	2600	889
	50+25	50	20550	839	2550	884	25	20622	846.2	2622	891.2
	50+50	50	20501	834.1	2501	879.1	50	20600	844	2600	889

Note 1: Carriers in increasing frequency order.

Table 4.3.1.1.7A-1: Test frequencies for CA_7C

Range	CC-Combo / N _{RB_agg} [RB]	CC1 Note1					CC2 Note1				
		BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]	BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]
Low	50+100	50	20805	2505.5	2805	2625.5	100	20949	2519.9	2949	2639.9
		100	20850	2510	2850	2630	50	20994	2524.4	2994	2644.4
	75+50	75	20825	2507.5	2825	2627.5	50	20945	2519.5	2945	2639.5
	75+75	75	20825	2507.5	2825	2627.5	75	20975	2522.5	2975	2642.5
	75+100	75	20828	2507.8	2828	2627.8	100	20999	2524.9	2999	2644.9
		100	20850	2510	2850	2630	75	21021	2527.1	3021	2647.1
	100+100	100	20850	2510	2850	2630	100	21048	2529.8	3048	2649.8
Mid	50+100	50	21006	2525.6	3006	2645.6	100	21150	2540	3150	2660
		100	21051	2530.1	3051	2650.1	50	21195	2544.5	3195	2664.5
	75+50	75	21051	2530.1	3051	2650.1	50	21171	2542.1	3171	2662.1
	75+75	75	21025	2527.5	3025	2647.5	75	21175	2542.5	3175	2662.5
	75+100	75	21003	2525.3	3003	2645.3	100	21174	2542.4	3174	2662.4
		100	21026	2527.6	3026	2647.6	75	21197	2544.7	3197	2664.7
	100+100	100	21001	2525.1	3001	2645.1	100	21199	2544.9	3199	2664.9
High	50+100	50	21206	2545.6	3206	2665.6	100	21350	2560	3350	2680
		100	21251	2550.1	3251	2670.1	50	21395	2564.5	3395	2684.5
	75+50	75	21277	2552.7	3277	2672.7	50	21397	2564.7	3397	2684.7
	75+75	75	21225	2547.5	3225	2667.5	75	21375	2562.5	3375	2682.5
	75+100	75	21179	2542.9	3179	2662.9	100	21350	2560	3350	2680
		100	21201	2545.1	3201	2665.1	75	21372	2562.2	3372	2682.2
	100+100	100	21152	2540.2	3152	2660.2	100	21350	2560	3350	2680

Note 1: Carriers in increasing frequency order.

Table 4.3.1.2.6A-1: Test frequencies for CA_38C

Range	CC-Combo / N _{RB_agg} [RB]	CC1 Note1			CC2 Note1		
		BW [RB]	N _{UL/DL}	f _{UL/DL} [MHz]	BW [RB]	N _{UL/DL}	f _{UL/DL} [MHz]
Low	75+75	75	37825	2577.5	75	37975	2592.5
	100+100	100	37850	2580	100	38048	2599.8
Mid	75+75	75	37925	2587.5	75	38075	2602.5
	100+100	100	37901	2585.1	100	38099	2604.9
High	75+75	75	38025	2597.5	75	38175	2612.5
	100+100	100	37952	2590.2	100	38150	2610
Note 1: Carriers in increasing frequency order.							

Table 4.3.1.2.9A-1: Test frequencies for CA_41C

Range	CC-Combo / N _{RB_agg} [RB]	CC1 Note1			CC2 Note1		
		BW [RB]	N _{UL/DL}	f _{UL/DL} [MHz]	BW [RB]	N _{UL/DL}	f _{UL/DL} [MHz]
Low	25+100	25	39683	2499.3	100	39800	2511
		100	39750	2506	25	39867	2517.7
	50+75	50	39703	2501.3	75	39823	2513.3
		75	39725	2503.5	50	39845	2515.5
	50+100	50	39705	2501.5	100	39849	2515.9
		100	39750	2506	50	39894	2520.4
	75+75	75	39725	2503.5	75	39875	2518.5
	75+100	75	39728	2503.8	100	39899	2520.9
		100	39750	2506	75	39921	2523.1
	100+100	100	39750	2506	100	39948	2525.8
Mid	25+100	25	40528	2583.8	100	40645	2595.5
		100	40595	2590.5	25	40712	2602.2
	50+75	50	40549	2585.9	75	40669	2597.9
		75	40571	2588.1	50	40691	2600.1
	50+100	50	40526	2583.6	100	40670	2598.0
		100	40571	2588.1	50	40715	2602.5
	75+75	75	40545	2585.5	75	40695	2600.5
	75+100	75	40523	2583.3	100	40694	2600.4
		100	40546	2585.6	75	40717	2602.7
	100+100	100	40521	2583.1	100	40719	2602.9
High	25+100	25	41373	2668.3	100	41490	2680
		100	41440	2675	25	41557	2686.7
	50+75	50	41395	2670.5	75	41515	2682.5
		75	41417	2672.7	50	41537	2684.7
	50+100	50	41346	2665.6	100	41490	2680
		100	41391	2670.1	50	41535	2684.5
	75+75	75	41365	2667.5	75	41515	2682.5
	75+100	75	41319	2662.9	100	41490	2680
		100	41341	2665.1	75	41512	2682.2
	100+100	100	41292	2660.2	100	41490	2680
Note 1: Carriers in increasing frequency order.							

Table 4.3.1.1.66A-1: Test frequencies for CA_66B

Range	CC-Combo / N _{RB_agg} [RB]	CC1 Note1					CC2 Note1				
		BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]	BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]
Low	25+25	25	131997	1712.5	66461	2112.5	25	132045	1717.3	66509	2117.3
	25+50	25	132000	1712.8	66464	2112.8	50	132072	1720	66536	2120
		50	132022	1715	66486	2115	25	132094	1722.2	66558	2122.2
	25+75	25	132002	1713	66466	2113	75	132095	1722.3	66559	2122.3
		75	132047	1717.5	66511	2117.5	25	132140	1726.8	66604	2126.8
	50+50	50	132022	1715	66486	2115	50	132121	1724.9	66585	2124.9
Mid	25+25	25	132398	1752.6	66862	2152.6	25	132446	1757.4	66910	2157.4
	25+50	25	132375	1750.3	66839	2150.3	50	132447	1757.5	66911	2157.5
		50	132397	1752.5	66861	2152.5	25	132469	1759.7	66933	2159.7
	25+75	25	132353	1748.1	66817	2148.1	75	132446	1757.4	66910	2157.4
		75	132398	1752.6	66862	2152.6	25	132491	1761.9	66955	2161.9
	50+50	50	132373	1750.1	66837	2150.1	50	132472	1760	66936	2160
High ²	25+25	25	132647	1777.5	67111	2177.5	25	NA	NA	67159	2182.3
	25+50	25	132647	1777.5	67111	2177.5	50	NA	NA	67183	2184.7
		50	132622	1775	67086	2175	25	NA	NA	67158	2182.2
	25+75	25	132647	1777.5	67111	2177.5	75	NA	NA	67204	2186.8
		75	132597	1772.5	67061	2172.5	25	NA	NA	67154	2181.8
	50+50	50	132622	1775	67086	2175	50	NA	NA	67185	2184.9
High ³	25+25	25	132599	1772.7	67063	2172.7	25	132647	1777.5	67111	2177.5
	25+50	25	132550	1767.8	67014	2167.8	50	132622	1775	67086	2175
		50	132572	1770	67036	2170	25	132644	1777.2	67108	2177.2
	25+75	25	132504	1763.2	66968	2163.2	75	132597	1772.5	67061	2172.5
		75	132549	1767.7	67013	2167.7	25	132642	1777	67106	2177
	50+50	50	132523	1765.1	66987	2165.1	50	132622	1775	67086	2175
Note 1: Carriers in increasing frequency order.											
Note 2: Applicable for intra-band contiguous CA without UL CA.											
Note 3: Applicable for intra-band contiguous CA with UL CA.											

LTE CA_66C:

Range	CC-Combo / N _{RB,agg} [RB]	CC1 Note1					CC2 Note1				
		BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]	BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]
Low	50+75	50	132025	1715.3	66489	2115.3	75	132145	1727.3	66609	2127.3
		75	132047	1717.5	66511	2117.5	50	132167	1729.5	66631	2129.5
	50+100	50	132027	1715.5	66491	2115.5	100	132171	1729.9	66635	2129.9
		100	132072	1720	66536	2120	50	132216	1734.4	66680	2134.4
	75+75	75	132047	1717.5	66511	2117.5	75	132197	1732.5	66661	2132.5
		75	132050	1717.8	66514	2117.8	100	132221	1734.9	66685	2134.9
	75+100	100	132072	1720	66536	2120	75	132243	1737.1	66707	2137.1
		100	132072	1720	66536	2120	25	132189	1731.7	66653	2131.7
	100+25	25	132005	1713.3	66469	2113.3	100	132122	1725.0	66586	2125.0
		100	132072	1720	66536	2120	100	132270	1739.8	66734	2139.8
Mid	50+75	50	132351	1747.9	66815	2147.9	75	132471	1759.9	66935	2159.9
		75	132373	1750.1	66837	2150.1	50	132493	1762.1	66957	2162.1
	50+100	50	132328	1745.6	66792	2145.6	100	132472	1760	66936	2160
		100	132373	1750.1	66837	2150.1	50	132517	1764.5	66981	2164.5
	75+75	75	132347	1747.5	66811	2147.5	75	132497	1762.5	66961	2162.5
		75	132325	1745.3	66789	2145.3	100	132496	1762.4	66960	2162.4
	75+100	100	132348	1747.6	66812	2147.6	75	132519	1764.7	66983	2164.7
		100	132397	1752.5	66861	2152.5	25	132514	1764.2	66978	2164.2
	100+25	25	132330	1745.8	66794	2145.8	100	132447	1757.5	66911	2157.5
		100	132323	1745.1	66787	2145.1	100	132521	1764.9	66985	2164.9
High ²	50+75	50	132622	1775	67086	2175	75	NA	NA	67206	2187
		75	132597	1772.5	67061	2172.5	50	NA	NA	67181	2184.5
	50+100	50	132622	1775	67086	2175	100	NA	NA	67230	2189.4
		100	132572	1770	67036	2170	50	NA	NA	67180	2184.4
	75+75	75	132597	1772.5	67061	2172.5	75	NA	NA	67211	2187.5
		75	132597	1772.5	67061	2172.5	100	NA	NA	67232	2189.6
	75+100	100	132572	1770	67036	2170	75	NA	NA	67207	2187.1
		100	132572	1770	67036	2170	25	NA	NA	67153	2181.7
	100+25	25	132647	1777.5	67111	2177.5	100	NA	NA	67228	2189.2
		100	132572	1770	67036	2170	100	NA	NA	67234	2189.8
High ³	50+75	50	132477	1760.5	66941	2160.5	75	132597	1772.5	67061	2172.5
		75	132499	1762.7	66963	2162.7	50	132619	1774.7	67083	2174.7
	50+100	50	132428	1755.6	66892	2155.6	100	132572	1770	67036	2170
		100	132473	1760.1	66937	2160.1	50	132617	1774.5	67081	2174.5
	75+75	75	132447	1757.5	66911	2157.5	75	132597	1772.5	67061	2172.5
		75	132401	1752.9	66885	2152.9	100	132572	1770	67036	2170
	75+100	100	132423	1755.1	66887	2155.1	75	132594	1772.2	67058	2172.2
		100	132522	1765	66986	2165	25	132639	1776.7	67103	2176.7
	100+25	25	132455	1758.3	66919	2158.3	100	132572	1770.0	67036	2170.0
		100	132374	1750.2	66838	2150.2	100	132572	1770	67036	2170

Note 1: Carriers in increasing frequency order.

Note 2: Applicable for intra-band contiguous CA without UL CA.

Note 3: Applicable for intra-band contiguous CA with UL CA.

2.2 Test Mode

Test Mode	Description
TM 1	EUT communication with simulated station in LTE/QPSK mode
TM 2	EUT communication with simulated station in LTE/16QAM mode
TM 3	EUT communication with simulated station in LTE/64QAM mode
TM 4	EUT communication with simulated station in LTE/256QAM mode

2.3 Support Unit used in test

The EUT has been tested as an independent unit.

2.4 Test Environment

Temperature:	Normal: 15°C ~ 35°C
Relative Humidity	45 ~ 56 % RH Ambient
Voltage:	AC 110V

2.5 Test RF Cable

For all conducted test items: The offset level is set spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

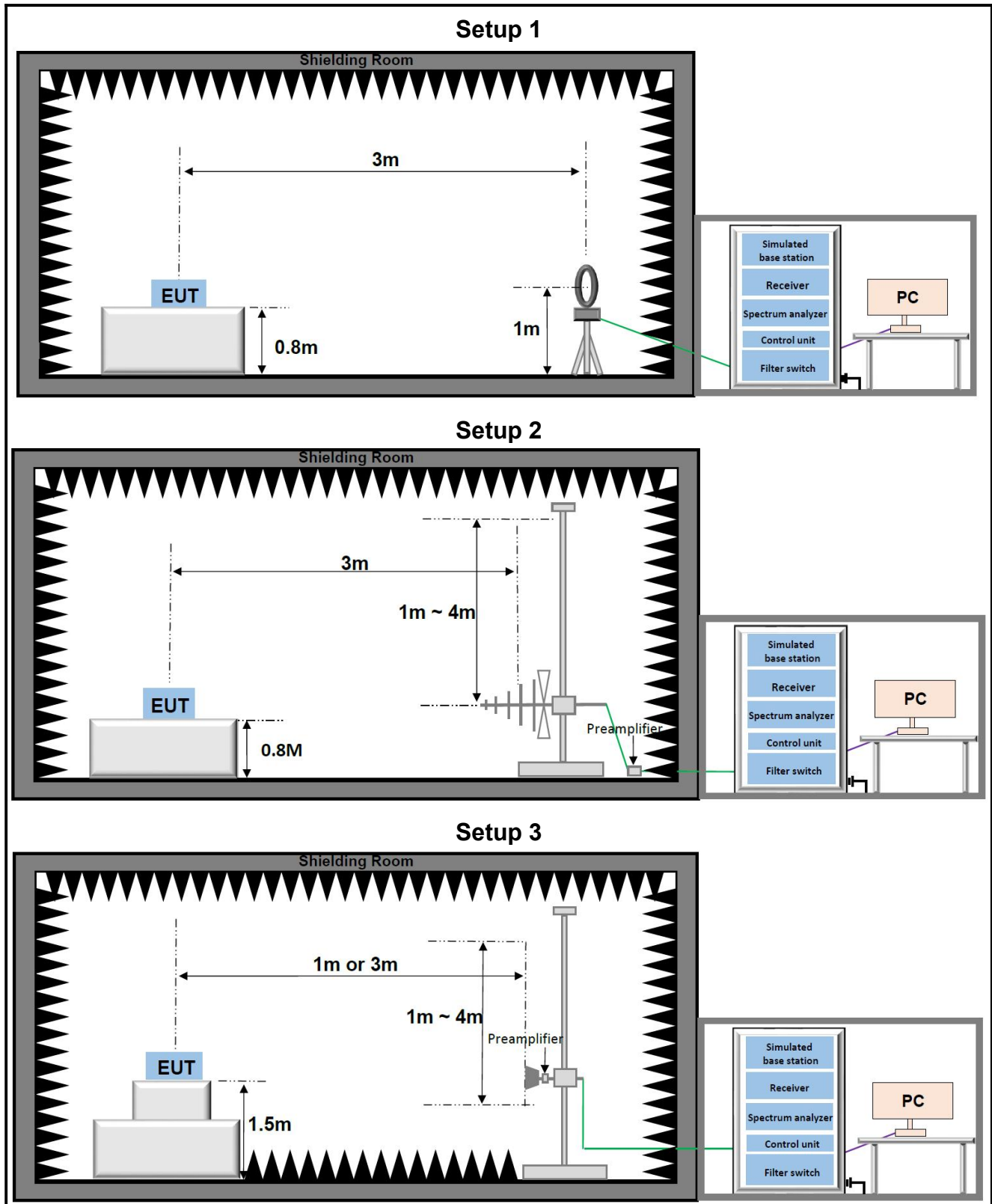
Offset = RF cable loss + attenuator factor.

2.6 Modifications

No modifications were made during testing.

2.7 Test Setup Diagram

2.7.1 Radiated Configuration



3 Equipment and Measurement Uncertainty

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, whichever is less, and where applicable is traceable recognized national standards.

3.1 Test Equipment List

Radiated Emission					
Description	Manufacturer	Model	S.N.	Last Due	Cal Due
Biconic Logarithmic Periodic Antennas	Schwarzbeck	VULB9163	1643	2023/06/25	2026/06/24
Double-Ridged Horn Antennas	Schwarzbeck	BBHA 9120D	2809	2023/06/25	2026/06/24
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	1290	2023/06/25	2026/06/24
Loop Antenna	Schwarzbeck	FMZB 1519C	1519C-028	2023/06/29	2026/06/28
Signal Analyzer	Keysight	N9020A	MY49100252	2025/03/11	2026/03/10
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY63440541	2025/05/29	2026/05/28
Wideband Radio Communication Tester	R&S	CMW500	150645	2025/03/11	2026/03/10
Low Noise Amplifier	Tonscend	TAP9K3G40	AP23A8060273	2025/03/11	2027/03/10
Low Noise Amplifier	Tonscend	TAP01018050	AP22G806258	2025/03/11	2027/03/10
Low Noise Amplifier	Tonscend	TAP18040048	AP22G806247	2025/03/11	2027/03/10
Hygrometer	BINGYU	HTC-1	N/A	2025/07/25	2026/07/24
Test Software	Tonscend	TS+	Version: 5.0.0	N/A	N/A

3.2 Measurement Uncertainty

Parameter	U _{lab}
Radiated Emissions(9kHz~30MHz)	2.40dB
Radiated Emissions(30MHz~1000MHz)	4.66dB
Radiated Emissions(1GHz~18GHz)	5.42dB
Radiated Emissions(18GHz~40GHz)	5.46dB

Uncertainty figures are valid to a confidence level of 95%

4 Test Results

4.1 Field Strength of Spurious Radiation

Limits

FCC part	Test Band	Limit
§2.1053 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	LTE Band 5/26(824 ~ 849MHz)/CA_5B LTE Band 2/25/CA_2C LTE Band 12/17/71 LTE Band 4/66/CA_66B/CA_66C	The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.
§27.53(c)(f)	LTE Band 13	On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB; For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.
§90.543(e)(f)	LTE Band 14	least $43 + 10 \log(P)$ dB. For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals.
§27.53(m)	LTE Band 7/38/41/CA_7C/CA_38C/CA_41C	All frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz.
§90.691	LTE Band 26(814~824MHz)	The power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log(P)$ decibels or 80 decibels, whichever is the lesser attenuation.
§27.53(a)	LTE Band 30	By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz; By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and

FCC part	Test Band	Limit
		2300 MHz, $61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log (P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz; By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz.
§96.41	LTE Band 48	for channel and frequency assignments made by the SAS to CBSDs, the conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any emission shall not exceed -25 dBm/MHz. (2) Additional protection levels. Notwithstanding paragraph (d)(1) of this section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

Test Procedure

KDB 971168 D01 V03r01 Section 7

Test Settings

- For radiated emissions measurements performed at frequencies less than or equal to 1GHz, the EUT shall be placed on a RF-transparent table or support at a nominal height of 80cm above the reference ground plane.
- For radiated emissions measurements performed at frequencies above 1GHz, the EUT shall be placed on a RF-transparent table or support at a nominal height of 150cm above the ground plane.
- Radiated measurements shall be made with the measurement antenna positioned in both horizontal and vertical polarization. The measurement antenna shall be varied from 1m to 4m in height above the reference ground in a search for the relative positioning that produces the maximum radiated signal level (i.e, field strength or received power), when orienting the measurement antenna in vertical polarization, the minimum height of the lowest element of the antenna shall clear the site reference ground plane by at least 25cm.
- For each suspected emission, the EUT was ranged its worst case and then tune the antenna tower(from 1~4m) and turntable(from 0~360°) find the maximum reading. Preamplifier and a high pass filter are used for the test in order get better signal level comply with the guidelines.
- The simulated base station was set to force the EUT to its maximum transmitting power.
- spectrum analyzer setting:
Measurements 9kHz ~150kHz: RBW = 300Hz; VBW $\geq$ 3kHz; Detector = RMS
Measurements 150kHz ~30MHz: RBW = 10kHz; VBW $\geq$ 30kHz; Detector = RMS
Measurements 30MHz~1000MHz: RBW = 100kHz or 1MHz; VBW $\geq$ 1MHz or 3MHz; Detector = RMS
Measurements Above 1000MHz: RBW = 1 MHz; VBW $\geq$ 3 MHz; Detector = RMS
- The field strength is calculated by adding the Antenna Factor, Cable Factor. The basic equation with a sample calculation is as follows:
 $E(\text{dB}\mu\text{V}/\text{m}) = \text{Measured amplitude level (dB}\mu\text{V}) + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}.$
 $E(\text{dB}\mu\text{V}/\text{m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}.$
 $E(\text{dB}\mu\text{V}/\text{m}) = \text{EIRP(dBm)} - 20\log(D) + 104.8;$ where D is the measurement distance(in the far field region) in m.

$EIRP(dBm) = E(dB\mu V/m) + 20\log(D) - 104.8$; where D is the measurement distance(in the far field region) in m.

So, from d: The measuring distance is usually at 3m, then $20*\log(3)=9.5424$

Then, $EIRP(dBm) = E(dB\mu V/m) + 9.5424 - 104.8 = E(dB\mu V/m) - 95.2576$

8. Repeat above procedures until all frequencies measured was complete.
9. Measure and record the results in the test report.

Test notes

1. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst-case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
2. Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1-meter test distance with the application of a distance correction factor.
3. Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and above 1GHz. the disturbance between 9kHz to 30MHz, 30MHz-1GHz and 18GHz to 40GHz was very low. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be recorded, so only the harmonics had been displayed.
4. The "-" shown in the following RSE tables are used to denote a noise floor measurement.

Test Setup

Refer to section 2.7.1 for details.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: **Appendix**.

5 Test Setup Photos

The detailed test data see: **Appendix A - WWAN Setup Photos**

Appendix

Maximum Power

Frequency Band	Frequency Range (MHz)		Emission Designator	Conducted Power dBm	Conducted Power (W)	Gain dBi	EIRP/ERP		Limit dBm
	Low	High					dBm	W	
LTE Band 2	1860	1900	17M0G7D	23.45	0.2213	4.92	28.37	0.6871	33.01
LTE Band 2	1860	1900	17M9W7D	23.38	0.2178	4.92	28.3	0.6761	33.01
LTE Band 25	1860	1905	17M9G7D	23.45	0.2213	4.92	28.37	0.6871	33.01
LTE Band 25	1860	1905	17MW7D	23.38	0.2178	4.92	28.3	0.6761	33.01
LTE Band 4	1712.5	1752.5	4M47G7D	23.2	0.2089	4.94	28.14	0.6516	30.00
LTE Band 4	1720	1745	17M9G7D	23.11	0.2046	4.94	28.05	0.6383	30.00
LTE Band 4	1711.5	1753.5	2M68W7D	23.05	0.2018	4.94	27.99	0.6295	30.00
LTE Band 4	1720	1745	17M9W7D	23.01	0.2000	4.94	27.95	0.6237	30.00
LTE Band 66	1712.5	1777.5	4M48G7D	23.2	0.2089	4.94	28.14	0.6516	30.00
LTE Band 66	1720	1770	17M9G7D	23.11	0.2046	4.94	28.05	0.6383	30.00
LTE Band 66	1711.5	1778.5	2M68W7D	23.05	0.2018	4.94	27.99	0.6295	30.00
LTE Band 66	1720	1770	17M9W7D	23.01	0.2000	4.94	27.95	0.6237	30.00
LTE Band 5/26	826.5	846.5	4M47G7D	22.81	0.1910	1.63	22.29	0.1694	38.45
LTE Band 5/26	821.5	841.5	13M4G7D	22.55	0.1799	1.63	22.03	0.1596	38.45
LTE Band 5/26	826.5	846.5	4M48W7D	22.64	0.1837	1.63	22.12	0.1629	38.45
LTE Band 5/26	821.5	841.5	13M4W7D	22.17	0.1648	1.63	21.65	0.1462	38.45
LTE Band 7	2507.5	2562.5	13M4G7D	23.5	0.2239	2.4	25.9	0.3890	33.01
LTE Band 7	2510	2560	17M9G7D	23.46	0.2218	2.4	25.86	0.3855	33.01
LTE Band 7	2505	2565	8M95W7D	23.38	0.2178	2.4	25.78	0.3784	33.01
LTE Band 7	2510	2560	17M9W7D	23.13	0.2056	2.4	25.53	0.3573	33.01
LTE Band 12	704	711	8M93G7D	22.5	0.1778	1.36	21.71	0.1483	34.77
LTE Band 12	701.5	713.5	4M48W7D	22.3	0.1698	1.36	21.51	0.1416	34.77
LTE Band 12	704	711	8M93W7D	22.25	0.1679	1.36	21.46	0.1400	34.77
LTE Band 13	779.5	784.5	4M48G7D	22.38	0.1730	2.07	22.3	0.1698	34.77
LTE Band 13	782	782	8M92G7D	22.37	0.1726	2.07	22.29	0.1694	34.77
LTE Band 13	779.5	784.5	4M47W7D	22.44	0.1754	2.07	22.36	0.1722	34.77
LTE Band 13	782	782	8M92W7D	21.16	0.1306	2.07	21.08	0.1282	34.77
LTE Band 17	706.5	713.5	4M49G7D	22.61	0.1824	1.32	21.78	0.1507	34.77
LTE Band 17	709	711	8M95G7D	22.47	0.1766	1.32	21.64	0.1459	34.77
LTE Band 17	706.5	713.5	4M48W7D	22.63	0.1832	1.32	21.8	0.1514	34.77
LTE Band 17	709	711	8M97W7D	22.15	0.1641	1.32	21.32	0.1355	34.77
LTE Band 38	2572.5	2617.5	4M48G7D	26.41	0.4375	2.4	28.81	0.7603	33.01
LTE Band 38	2580	2610	17M9G7D	26.33	0.4295	2.4	28.73	0.7464	33.01
LTE Band 38	2580	2610	17M9W7D	25.67	0.3690	2.4	28.07	0.6412	33.01

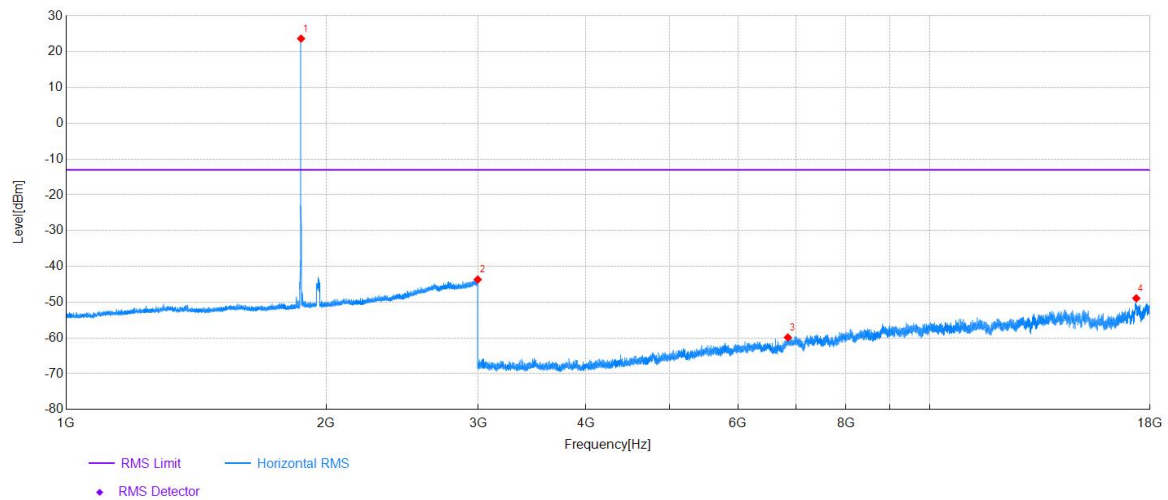
Frequency Band	Frequency Range (MHz)		Emission Designator	Conducted Power dBm	Conducted Power (W)	Gain dBi	EIRP/ERP		Limit dBm
	Low	High					dBm	W	
LTE Band 41	2498.5	2687.5	4M46G7D	26.41	0.4375	2.4	28.81	0.7603	33.01
LTE Band 41	2506	2680	17M9G7D	26.33	0.4295	2.4	28.73	0.7464	33.01
LTE Band 41	2506	2680	17M9W7D	25.67	0.3690	2.4	28.07	0.6412	33.01
LTE Band 71	665.5	695.5	4M48G7D	22.45	0.1758	1.36	21.66	0.1466	34.77
LTE Band 71	673	688	17M8G7D	22.44	0.1754	1.36	21.65	0.1462	34.77
LTE Band 71	670.5	690.5	13M4W7D	22.34	0.1714	1.36	21.55	0.1429	34.77
LTE Band 71	673	688	17M8W7D	21.99	0.1581	1.36	21.2	0.1318	34.77
LTE Band 14	793	793	8M91G7D	22.51	0.1782	1.76	22.12	0.1629	34.77
LTE Band 14	790.5	795.5	4M47W7D	22.32	0.1706	1.76	21.93	0.1560	34.77
LTE Band 14	793	793	8M92W7D	22.21	0.1663	1.76	21.82	0.1521	34.77
LTE Band 26 (814 ~ 824 MHz)	819	819	8M94G7D	22.55	0.1799	/	/	/	50.00
LTE Band 26 (814 ~ 824 MHz)	821.5	821.5	13M4G7D	22.51	0.1782	/	/	/	50.00
LTE Band 26 (814 ~ 824 MHz)	816.5	821.5	4M47W7D	22.32	0.1706	/	/	/	50.00
LTE Band 26 (814 ~ 824 MHz)	821.5	821.5	13M4W7D	22.26	0.1683	/	/	/	50.00
LTE Band 30	2307.5	2312.5	4M48G7D	22.32	0.1706	1.33	23.65	0.2317	23.98
LTE Band 30	2310	2310	8M94G7D	19.7	0.0933	1.33	21.03	0.1268	23.98
LTE Band 30	2307.5	2312.5	4M48W7D	21.38	0.1374	1.33	22.71	0.1866	23.98
LTE Band 30	2310	2310	8M94W7D	18.83	0.0764	1.33	20.16	0.1038	23.98
LTE Band 48	3557.5	3692.5	13M4G7D	21.7	0.1479	0.69	22.39	0.1734	23.00
LTE Band 48	3560	3690	17M9G7D	20.31	0.1074	0.69	21	0.1259	23.00
LTE Band 48	3557.5	3692.5	13M4W7D	20.71	0.1178	0.69	21.4	0.1380	23.00
LTE Band 48	3560	3690	17M9W7D	19.27	0.0845	0.69	19.96	0.0991	23.00

Field Strength of Spurious Radiation

Test Result for LTE

Project Information			
Mode:	LTE	Band:	B2
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph

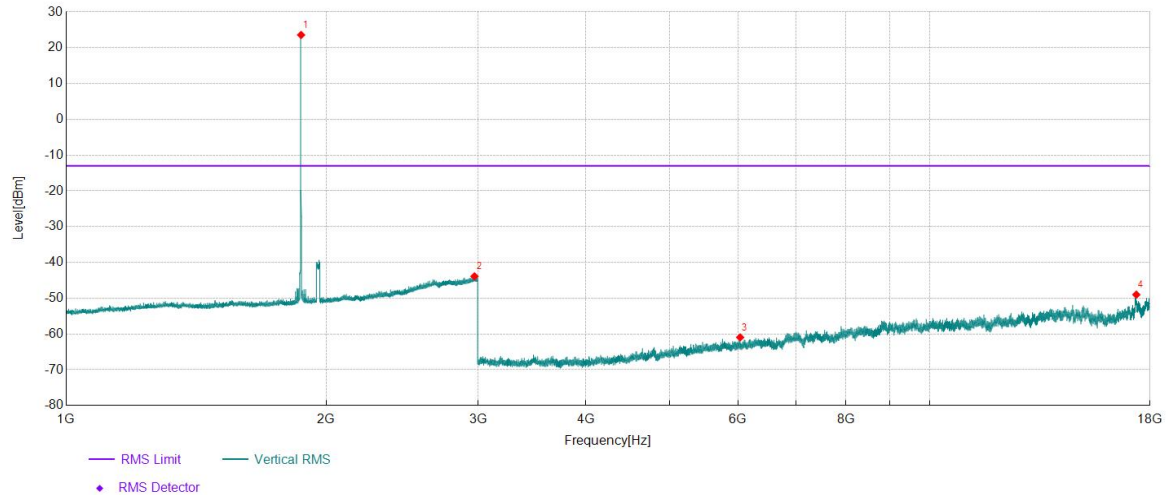


Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1871.00	108.65	-84.97	23.68	-	-	Horizontal	NA
2	2997.20	36.59	-80.27	-43.68	-13.00	30.68	Horizontal	PASS
3	6852.00	37.70	-97.57	-59.87	-13.00	46.87	Horizontal	PASS
4	17351.50	33.55	-82.46	-48.91	-13.00	35.91	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B2
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



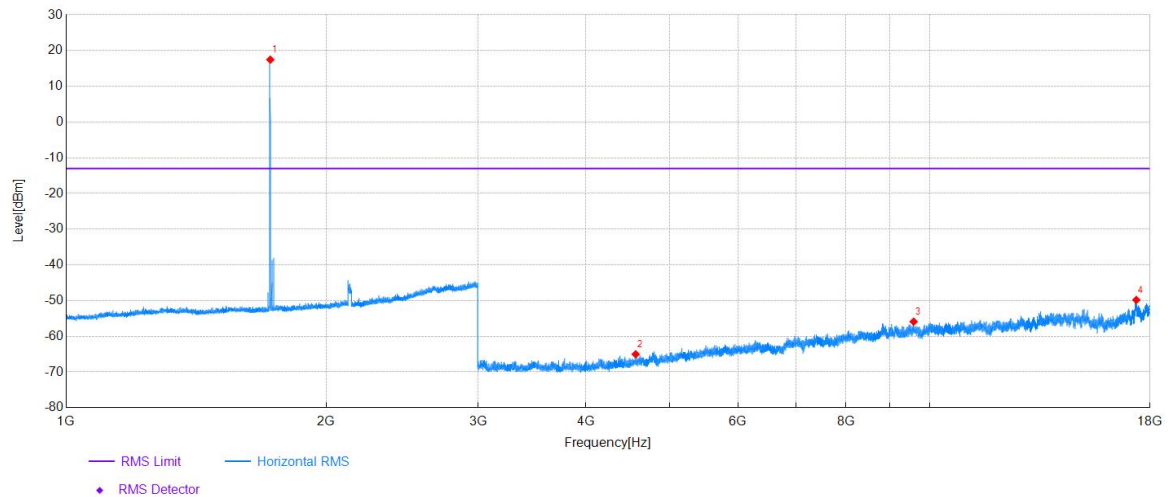
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1871.20	108.56	-84.97	23.59	-	-	Vertical	NA
2	2970.80	36.03	-79.92	-43.89	-13.00	30.89	Vertical	PASS
3	6033.50	39.02	-99.97	-60.95	-13.00	47.95	Vertical	PASS
4	17353.50	33.52	-82.54	-49.02	-13.00	36.02	Vertical	PASS

Project Information

Mode:	LTE	Band:	B4
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



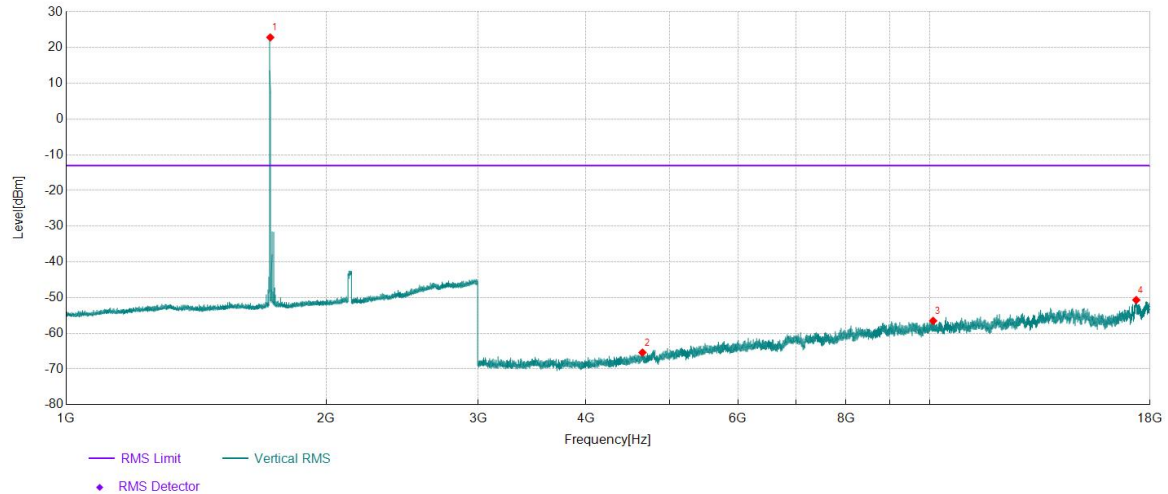
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1723.60	102.76	-85.28	17.48	-	-	Horizontal	NA
2	4566.00	39.16	-104.20	-65.04	-13.00	52.04	Horizontal	PASS
3	9584.00	36.62	-92.52	-55.90	-13.00	42.90	Horizontal	PASS
4	17353.50	32.72	-82.54	-49.82	-13.00	36.82	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B4
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



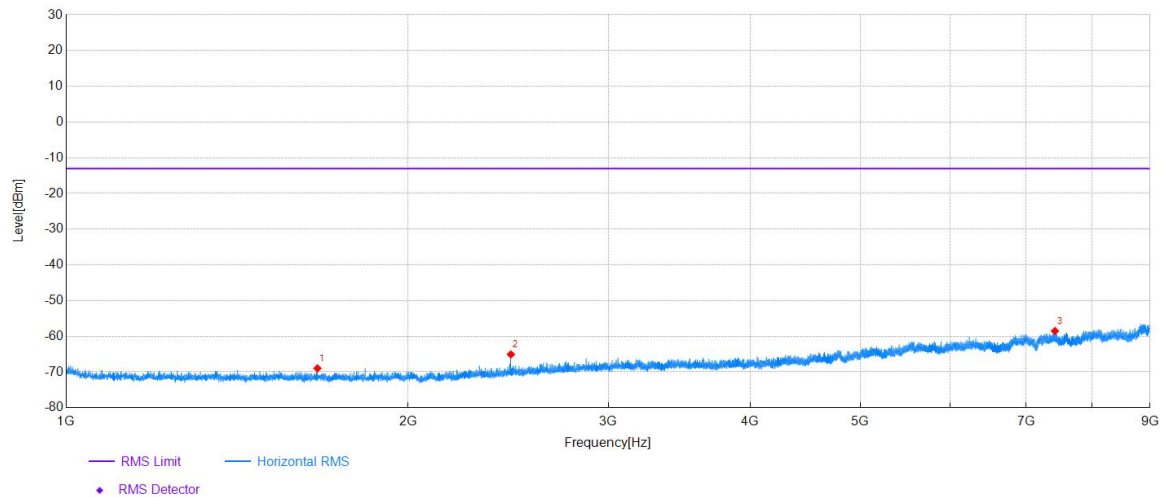
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1723.60	108.16	-85.28	22.88	-	-	Vertical	NA
2	4650.00	38.23	-103.63	-65.40	-13.00	52.40	Vertical	PASS
3	10094.00	35.50	-92.01	-56.51	-13.00	43.51	Vertical	PASS
4	17351.00	31.76	-82.44	-50.68	-13.00	37.68	Vertical	PASS

Project Information

Mode:	LTE	Band:	B5
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



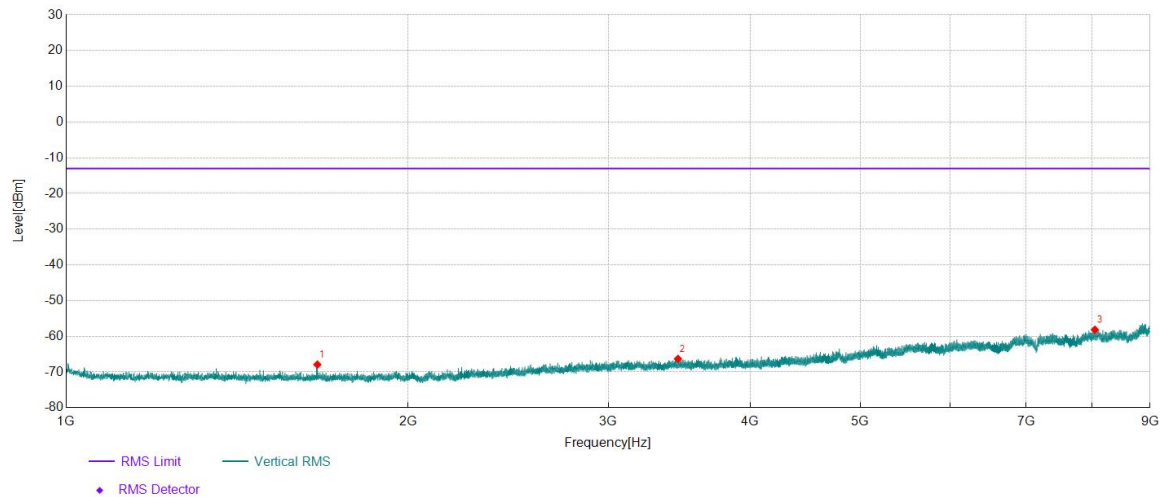
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1664.27	45.14	-114.12	-68.98	-13.00	55.98	Horizontal	PASS
2	2463.47	46.12	-111.19	-65.07	-13.00	52.07	Horizontal	PASS
3	7422.13	38.19	-96.72	-58.53	-13.00	45.53	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B5
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



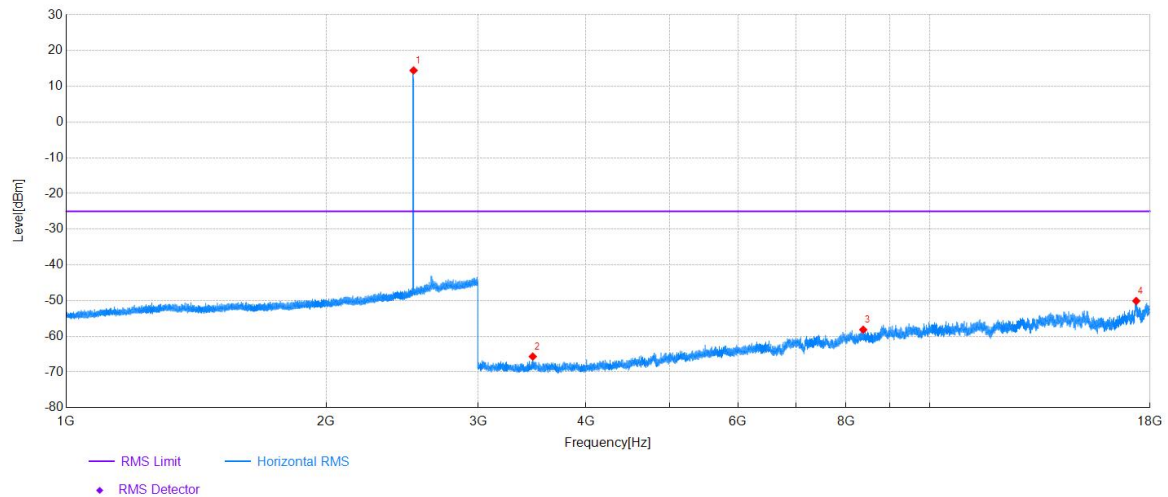
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1664.00	46.20	-114.12	-67.92	-13.00	54.92	Vertical	PASS
2	3456.53	41.10	-107.43	-66.33	-13.00	53.33	Vertical	PASS
3	8047.47	37.30	-95.45	-58.15	-13.00	45.15	Vertical	PASS

Project Information

Mode:	LTE	Band:	B7
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



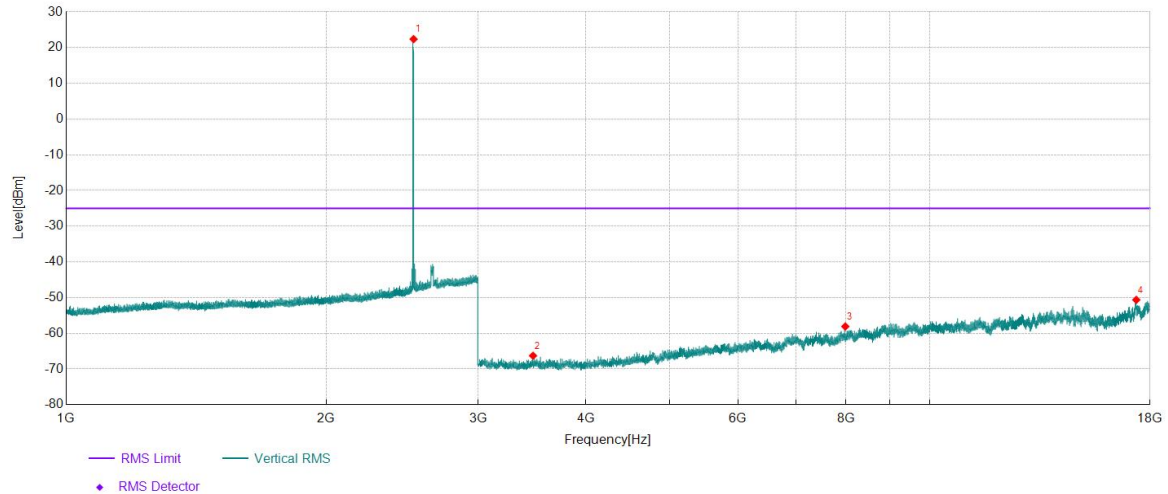
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2526.00	97.50	-83.04	14.46	-	-	Horizontal	NA
2	3470.50	41.48	-107.15	-65.67	-25.00	40.67	Horizontal	PASS
3	8377.50	36.44	-94.59	-58.15	-25.00	33.15	Horizontal	PASS
4	17349.00	32.34	-82.44	-50.10	-25.00	25.10	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B7
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



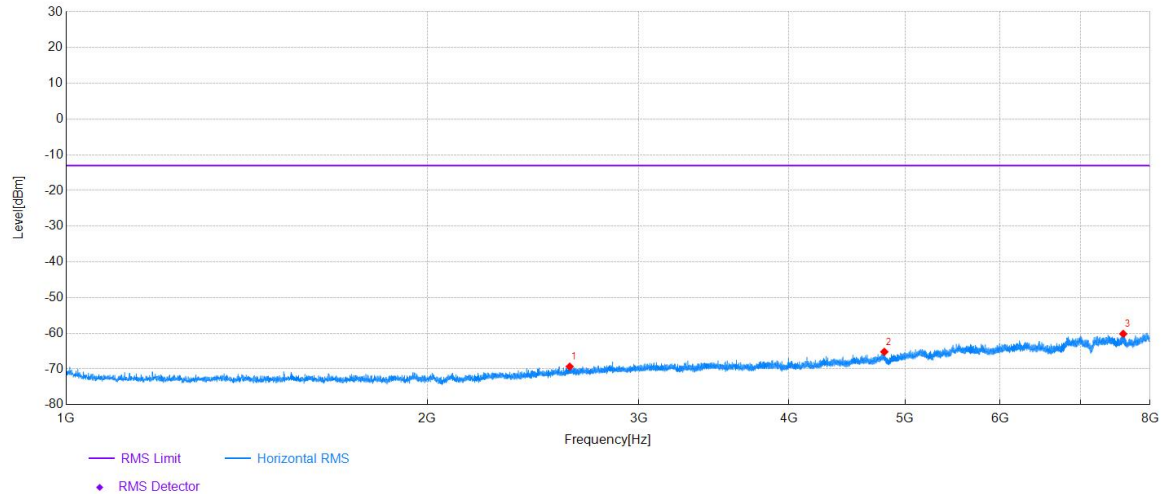
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2526.00	105.43	-83.04	22.39	-	-	Vertical	NA
2	3473.00	40.83	-107.13	-66.30	-25.00	41.30	Vertical	PASS
3	7986.50	37.30	-95.39	-58.09	-25.00	33.09	Vertical	PASS
4	17353.50	31.90	-82.54	-50.64	-25.00	25.64	Vertical	PASS

Project Information

Mode:	LTE	Band:	B12
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



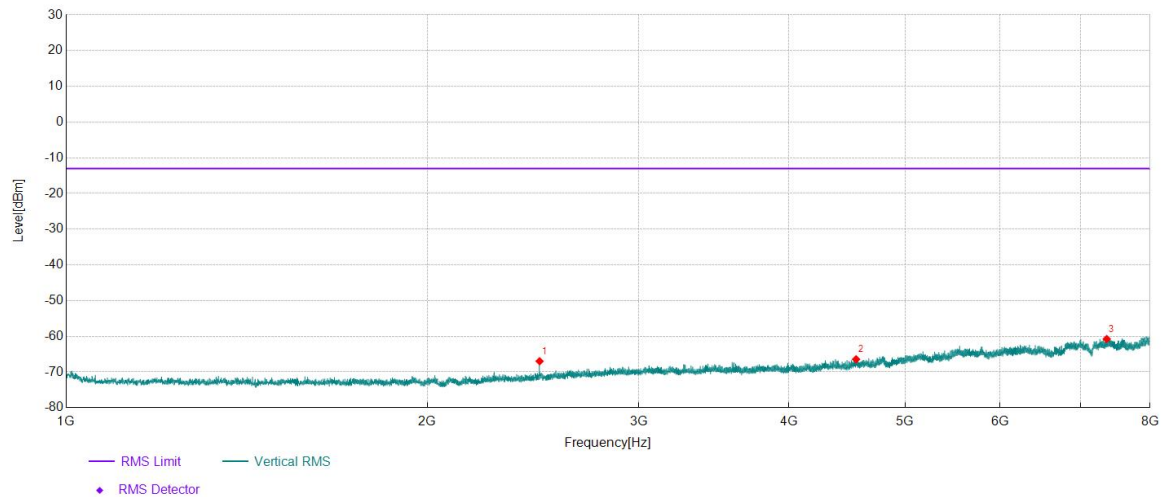
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2627.50	41.18	-110.52	-69.34	-13.00	56.34	Horizontal	PASS
2	4805.20	37.77	-102.96	-65.19	-13.00	52.19	Horizontal	PASS
3	7598.90	36.32	-96.48	-60.16	-13.00	47.16	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B12
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



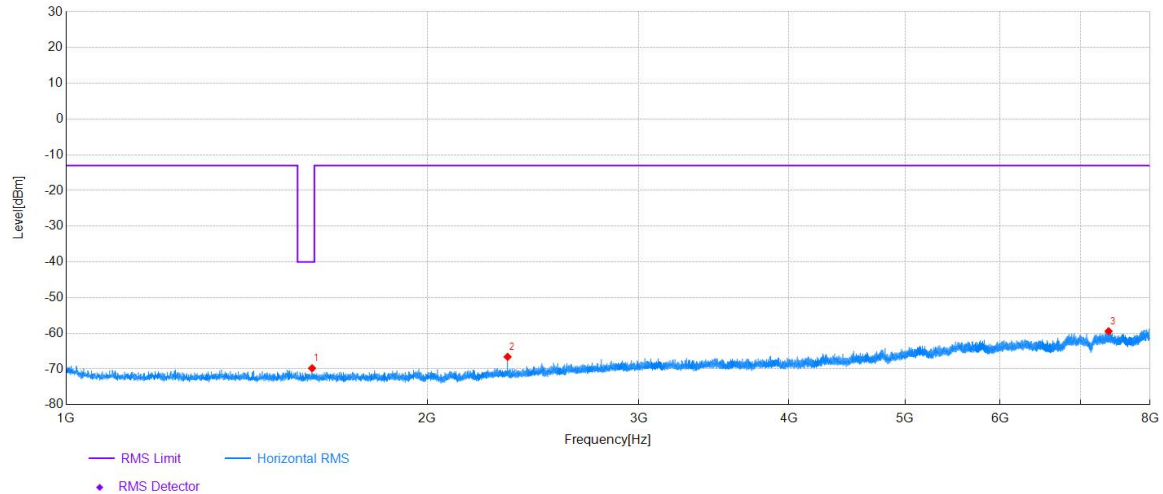
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2480.15	44.30	-111.29	-66.99	-13.00	53.99	Vertical	PASS
2	4551.45	37.77	-104.22	-66.45	-13.00	53.45	Vertical	PASS
3	7362.65	35.94	-96.71	-60.77	-13.00	47.77	Vertical	PASS

Project Information

Mode:	LTE	Band:	B13
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



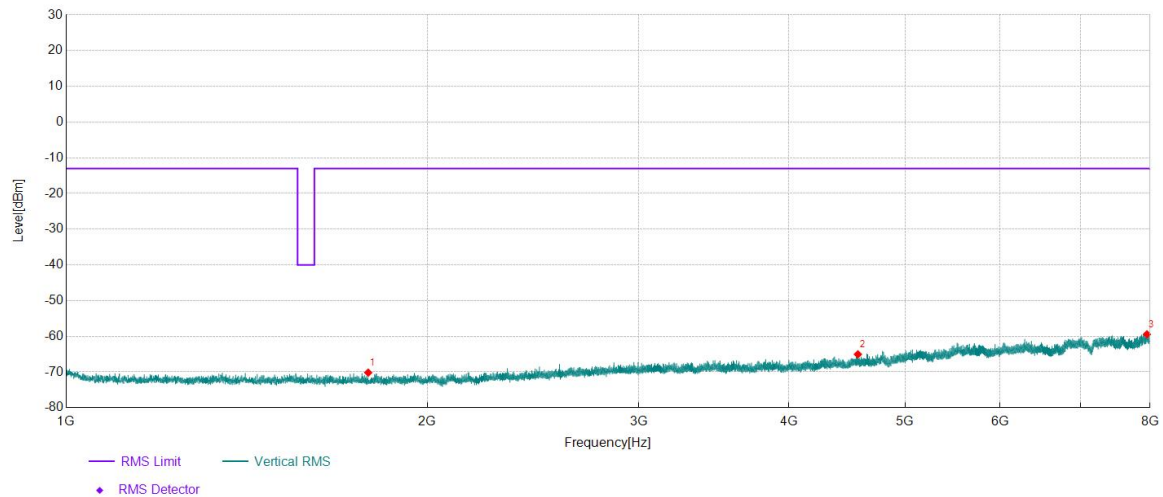
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1602.93	44.49	-114.29	-69.80	-40.00	29.80	Horizontal	PASS
2	2332.57	45.79	-112.39	-66.60	-13.00	53.60	Horizontal	PASS
3	7389.13	37.13	-96.56	-59.43	-13.00	46.43	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B13
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



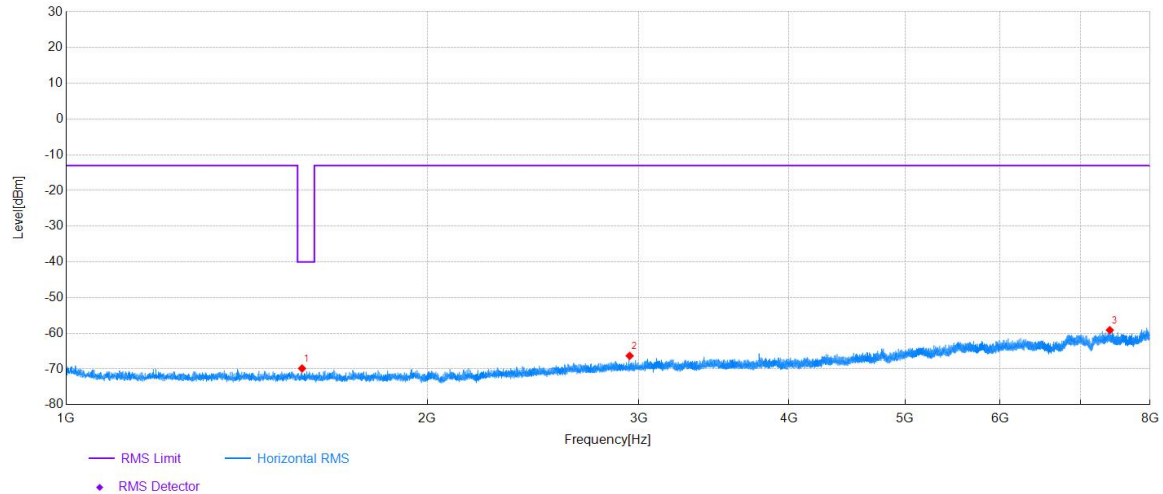
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1785.17	43.80	-113.98	-70.18	-13.00	57.18	Vertical	PASS
2	4567.43	39.07	-104.13	-65.06	-13.00	52.06	Vertical	PASS
3	7952.63	36.01	-95.46	-59.45	-13.00	46.45	Vertical	PASS

Project Information

Mode:	LTE	Band:	B14
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



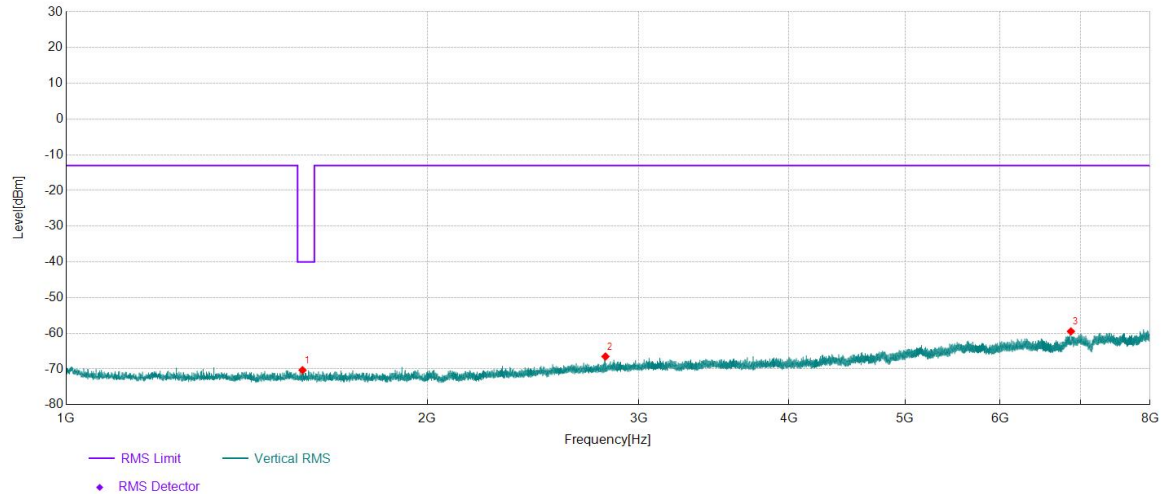
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1572.37	44.29	-114.15	-69.86	-40.00	29.86	Horizontal	PASS
2	2948.10	42.94	-109.26	-66.32	-13.00	53.32	Horizontal	PASS
3	7405.70	37.44	-96.55	-59.11	-13.00	46.11	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B14
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



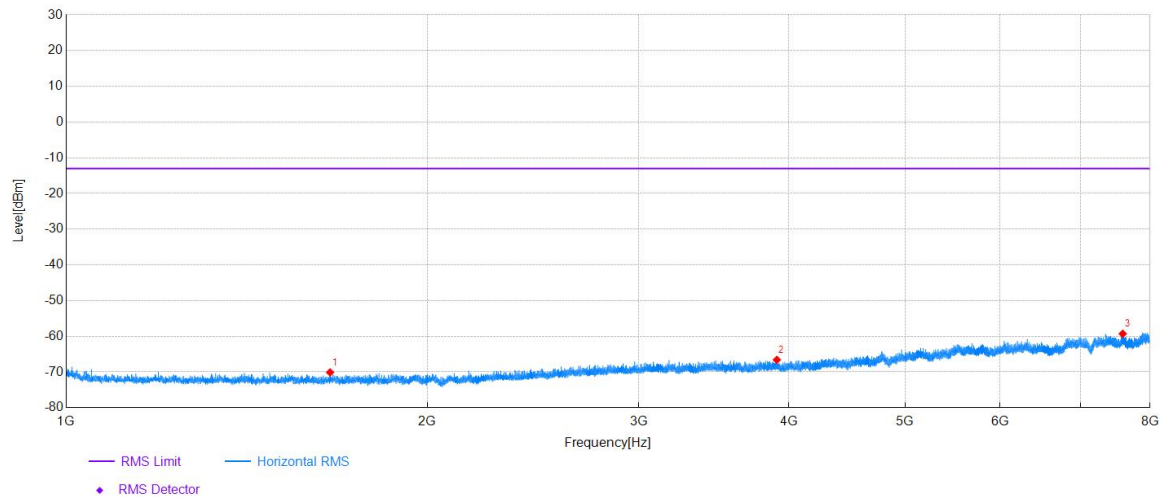
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1573.77	43.83	-114.17	-70.34	-40.00	30.34	Vertical	PASS
2	2814.17	43.29	-109.79	-66.50	-13.00	53.50	Vertical	PASS
3	6873.47	38.21	-97.69	-59.48	-13.00	46.48	Vertical	PASS

Project Information

Mode:	LTE	Band:	B17
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



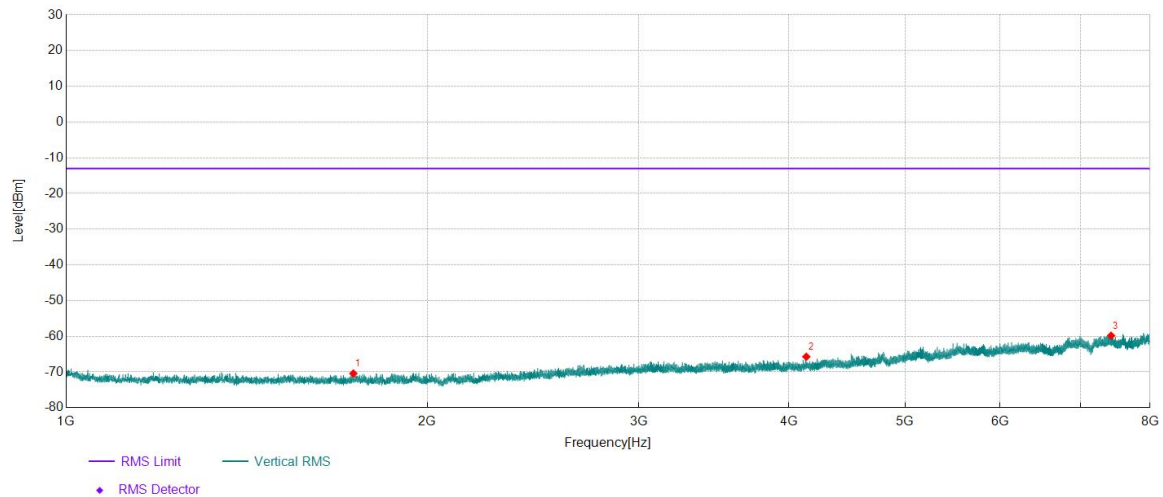
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1659.17	44.00	-114.11	-70.11	-13.00	57.11	Horizontal	PASS
2	3909.43	39.64	-106.24	-66.60	-13.00	53.60	Horizontal	PASS
3	7591.67	37.29	-96.58	-59.29	-13.00	46.29	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B17
Bandwidth:	10MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



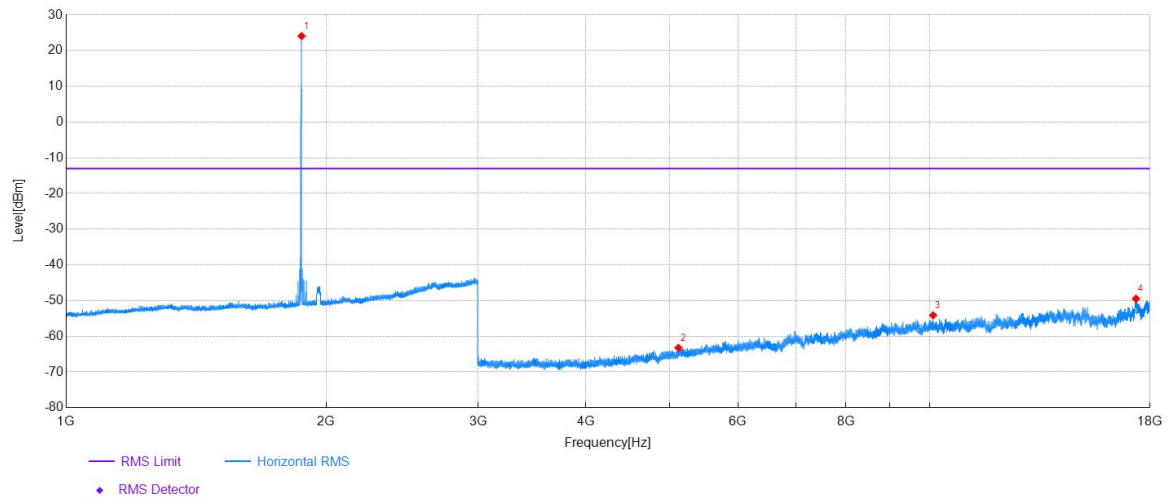
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1735.00	43.60	-114.03	-70.43	-13.00	57.43	Vertical	PASS
2	4137.40	39.82	-105.55	-65.73	-13.00	52.73	Vertical	PASS
3	7424.37	36.92	-96.75	-59.83	-13.00	46.83	Vertical	PASS

Project Information

Mode:	LTE	Band:	B25
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



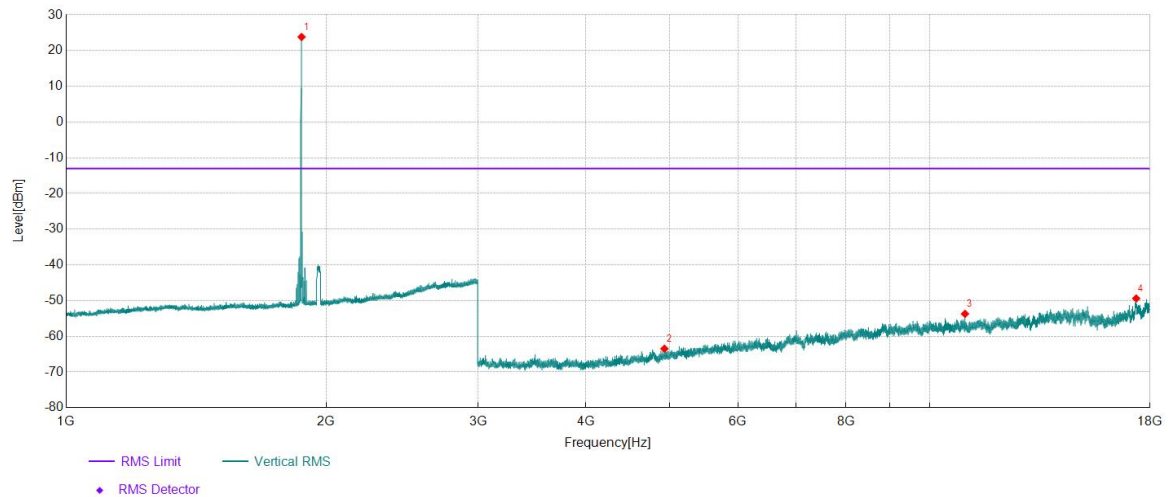
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1873.60	109.06	-84.97	24.09	-	-	Horizontal	NA
2	5118.50	39.20	-102.45	-63.25	-13.00	50.25	Horizontal	PASS
3	10093.00	37.86	-91.99	-54.13	-13.00	41.13	Horizontal	PASS
4	17340.00	33.39	-82.86	-49.47	-13.00	36.47	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B25
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



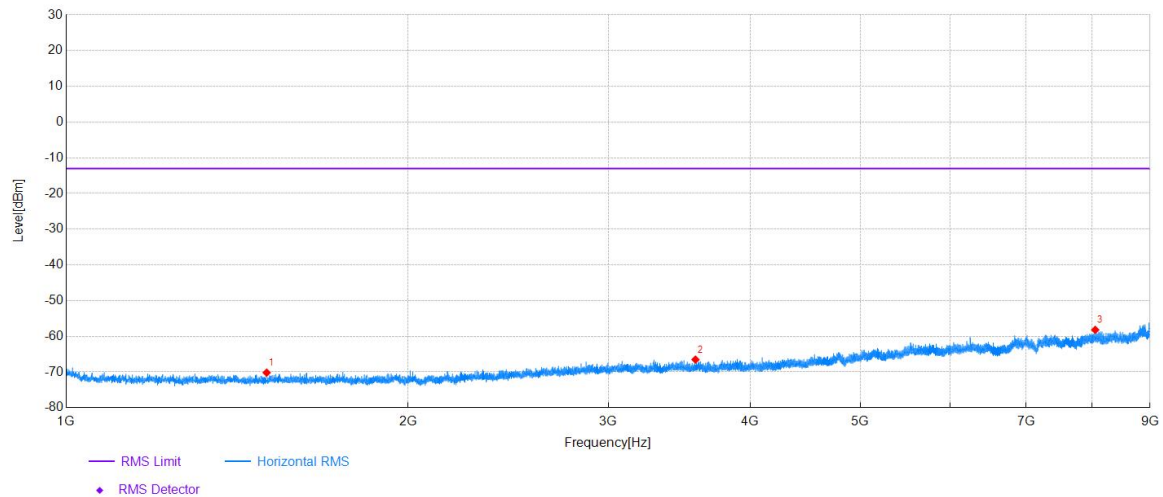
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1873.60	108.81	-84.97	23.84	-	-	Vertical	NA
2	4930.50	39.48	-102.97	-63.49	-13.00	50.49	Vertical	PASS
3	10989.50	36.80	-90.52	-53.72	-13.00	40.72	Vertical	PASS
4	17349.00	33.03	-82.44	-49.41	-13.00	36.41	Vertical	PASS

Project Information

Mode:	LTE	Band:	B26(814-824)
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



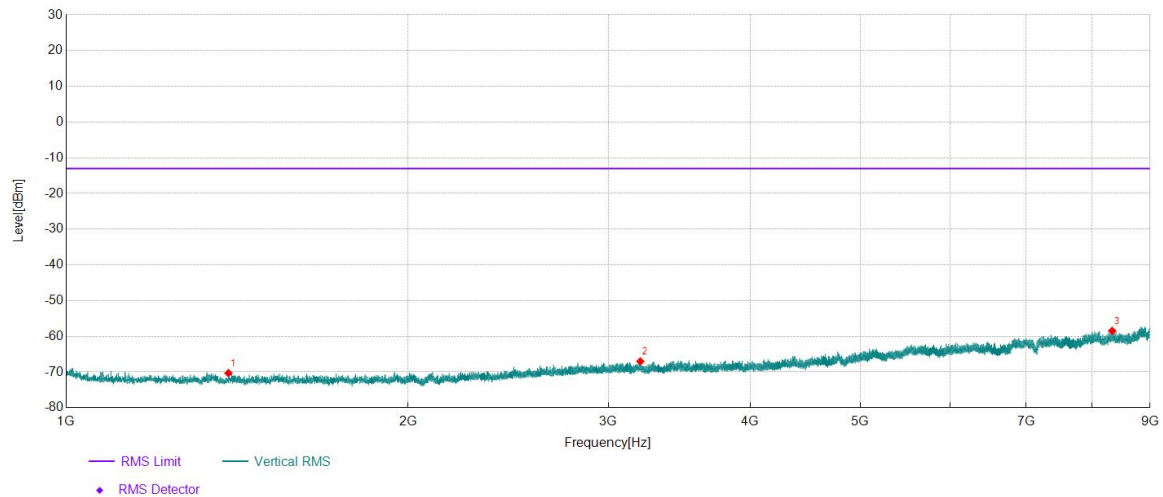
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1501.60	44.02	-114.21	-70.19	-13.00	57.19	Horizontal	PASS
2	3581.33	40.82	-107.35	-66.53	-13.00	53.53	Horizontal	PASS
3	8053.60	37.22	-95.43	-58.21	-13.00	45.21	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B26(814-824)
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



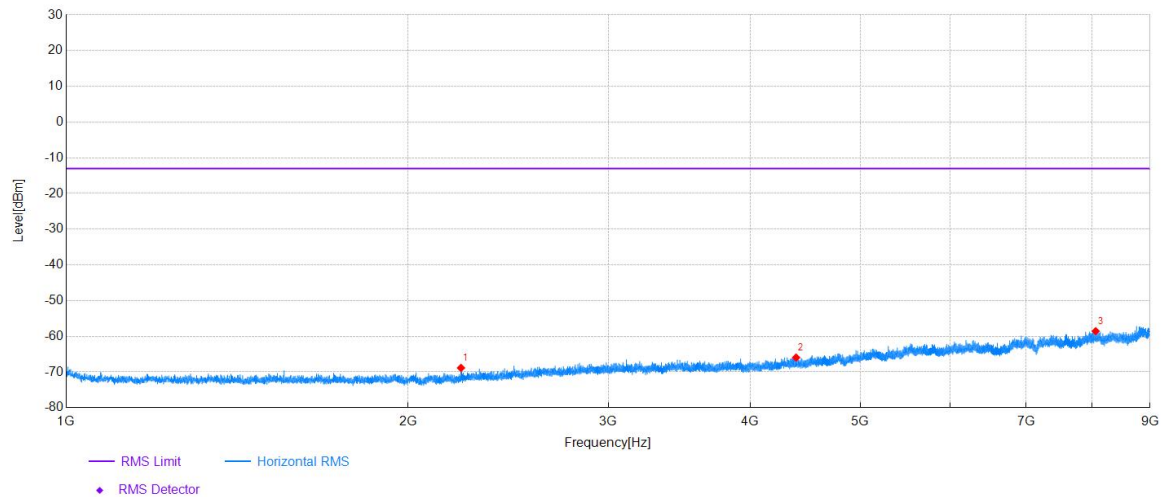
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1389.60	43.96	-114.28	-70.32	-13.00	57.32	Vertical	PASS
2	3202.67	41.14	-108.17	-67.03	-13.00	54.03	Vertical	PASS
3	8334.67	36.21	-94.69	-58.48	-13.00	45.48	Vertical	PASS

Project Information

Mode:	LTE	Band:	B26(824-849)
Bandwidth:	15MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



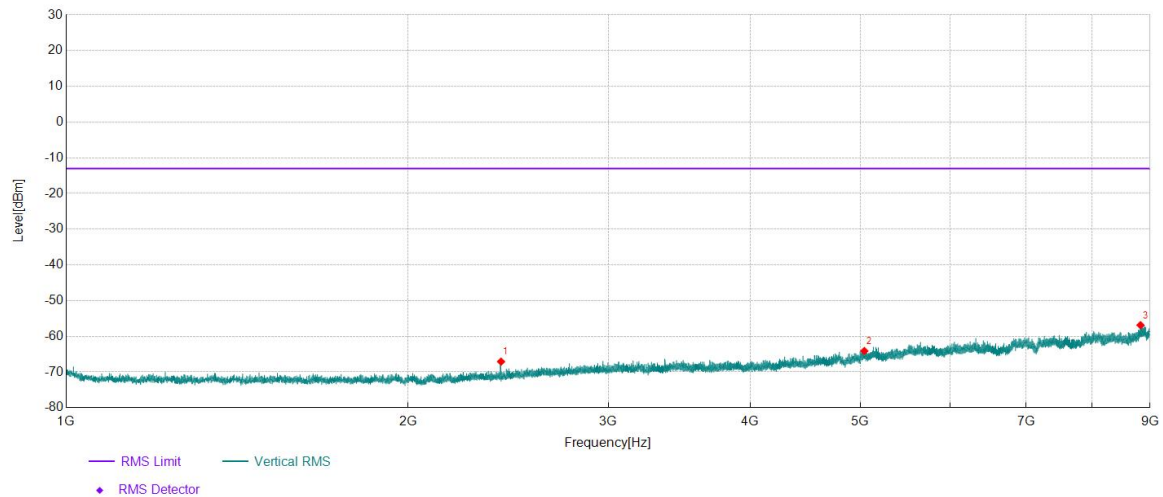
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2226.40	44.10	-112.96	-68.86	-13.00	55.86	Horizontal	PASS
2	4391.73	38.34	-104.30	-65.96	-13.00	52.96	Horizontal	PASS
3	8061.07	36.84	-95.40	-58.56	-13.00	45.56	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B26(824-849)
Bandwidth:	15MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



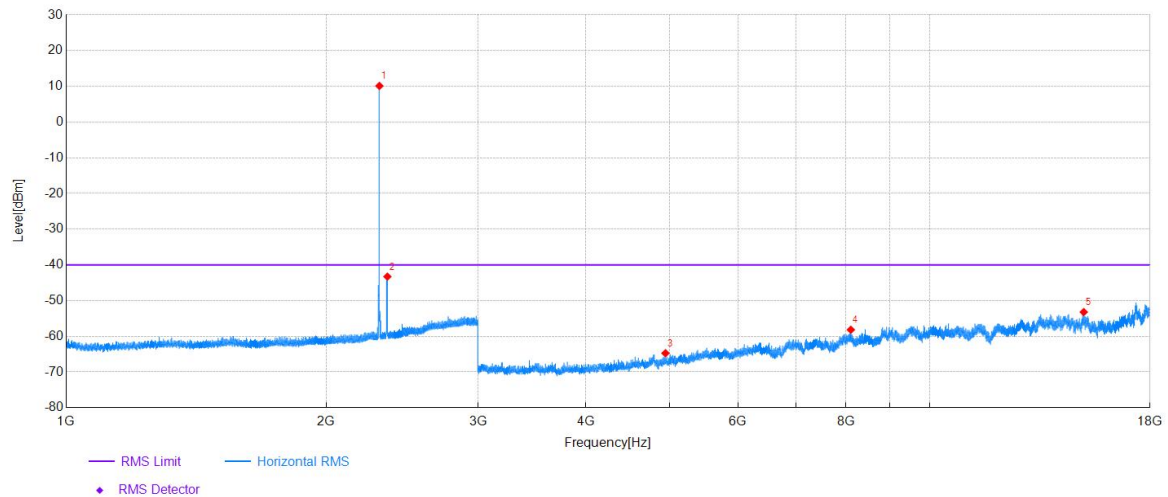
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2414.93	44.81	-111.91	-67.10	-13.00	54.10	Vertical	PASS
2	5043.20	38.18	-102.30	-64.12	-13.00	51.12	Vertical	PASS
3	8827.47	36.36	-93.25	-56.89	-13.00	43.89	Vertical	PASS

Project Information

Mode:	LTE	Band:	B30
Bandwidth:	10MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



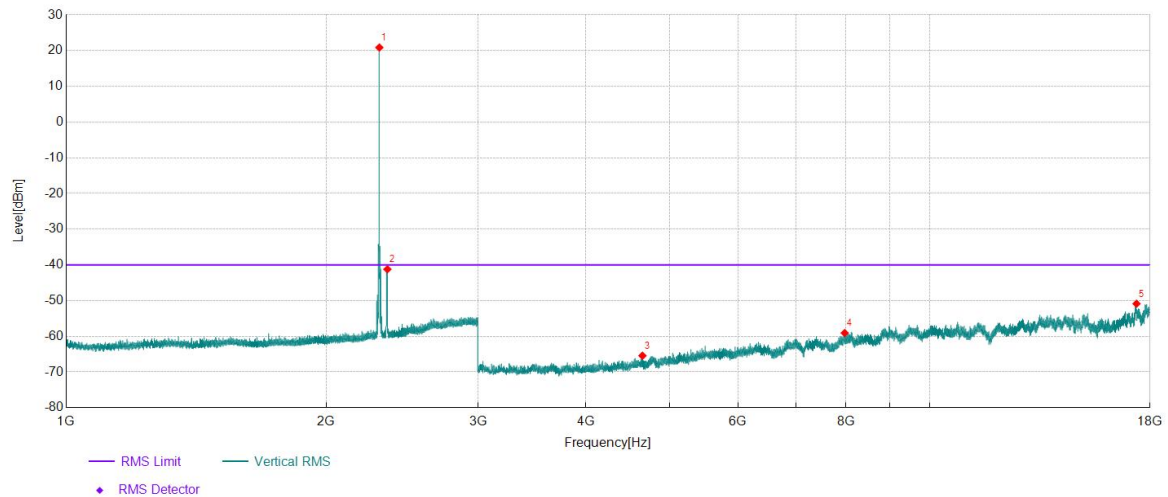
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2305.60	104.31	-94.19	10.12	-	-	Horizontal	NA
2	2355.30	50.52	-93.81	-43.29	-	-	Horizontal	NA
3	4944.00	38.11	-102.85	-64.74	-40.00	24.74	Horizontal	PASS
4	8105.00	36.71	-94.89	-58.18	-40.00	18.18	Horizontal	PASS
5	15083.50	33.04	-86.26	-53.22	-40.00	13.22	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B30
Bandwidth:	10MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



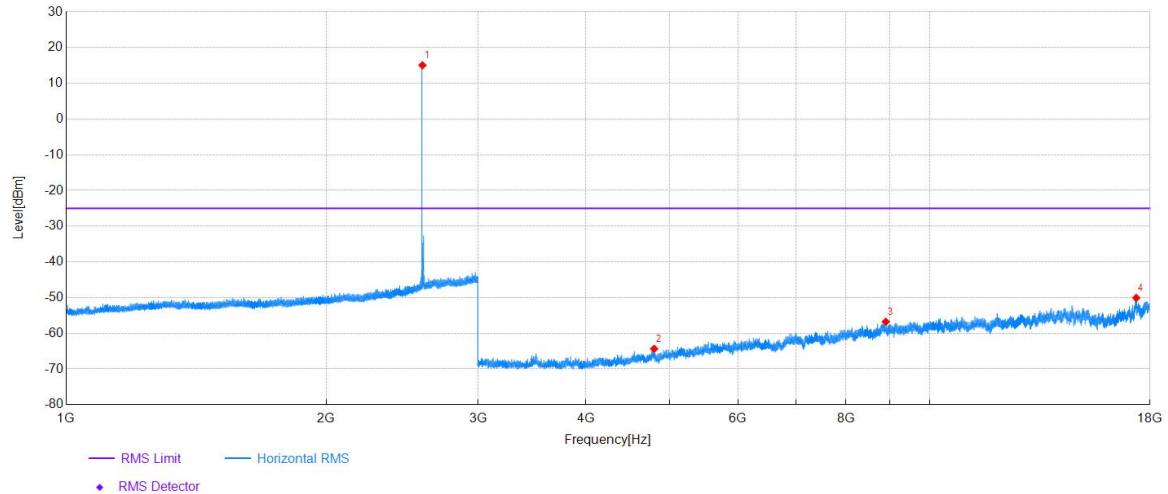
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2305.50	115.07	-94.19	20.88	-	-	Vertical	NA
2	2355.10	52.58	-93.81	-41.23	-	-	Vertical	NA
3	4649.50	38.19	-103.63	-65.44	-40.00	25.44	Vertical	PASS
4	7974.00	36.28	-95.36	-59.08	-40.00	19.08	Vertical	PASS
5	17361.50	31.97	-82.85	-50.88	-40.00	10.88	Vertical	PASS

Project Information

Mode:	LTE	Band:	B38
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



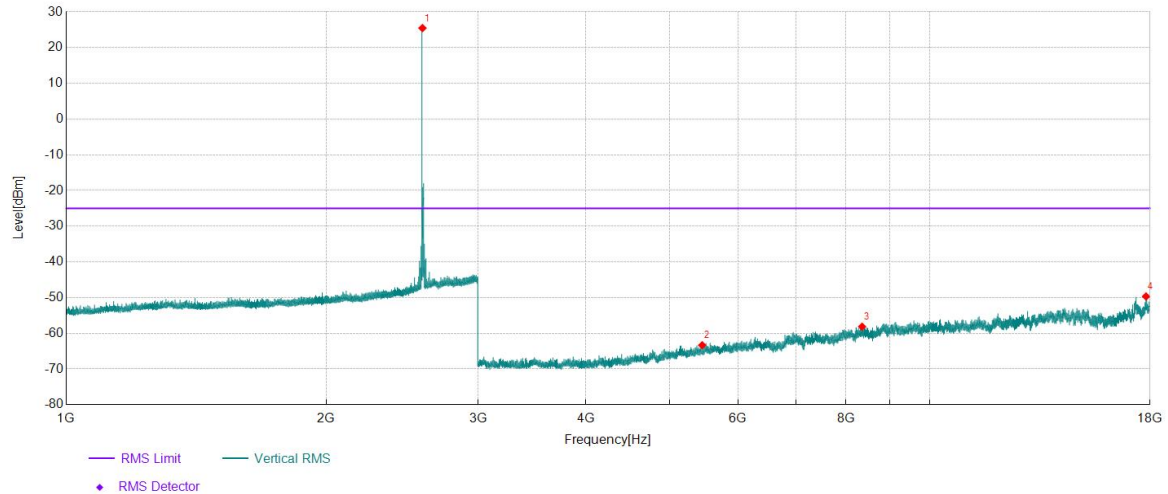
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2585.90	97.47	-82.40	15.07	-	-	Horizontal	NA
2	4797.00	38.47	-102.82	-64.35	-25.00	39.35	Horizontal	PASS
3	8897.00	36.62	-93.39	-56.77	-25.00	31.77	Horizontal	PASS
4	17350.00	32.32	-82.40	-50.08	-25.00	25.08	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B38
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



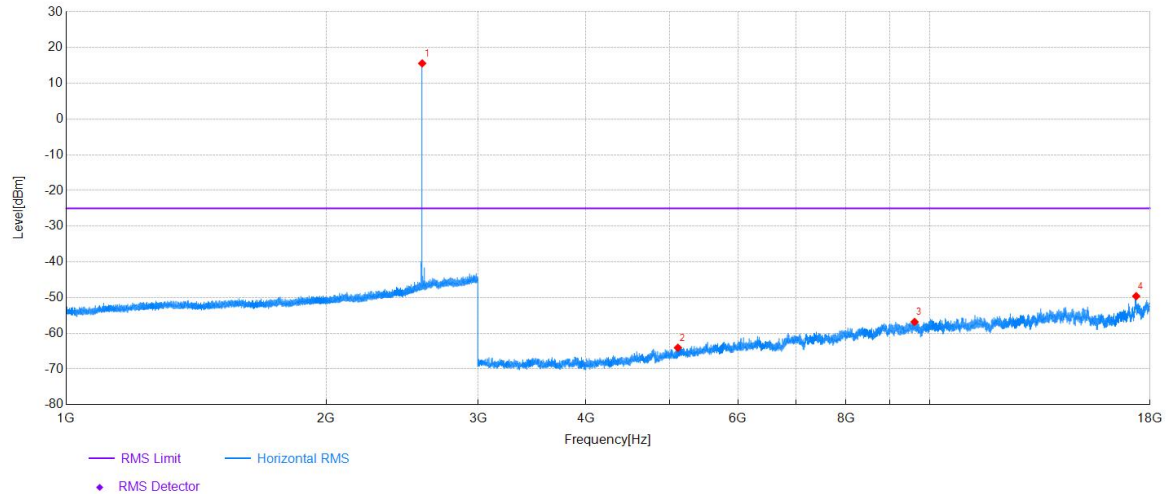
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2586.10	107.90	-82.41	25.49	-	-	Vertical	NA
2	5452.00	38.26	-101.61	-63.35	-25.00	38.35	Vertical	PASS
3	8352.50	36.12	-94.27	-58.15	-25.00	33.15	Vertical	PASS
4	17808.50	33.38	-83.06	-49.68	-25.00	24.68	Vertical	PASS

Project Information

Mode:	LTE	Band:	B41(2496-2690)
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



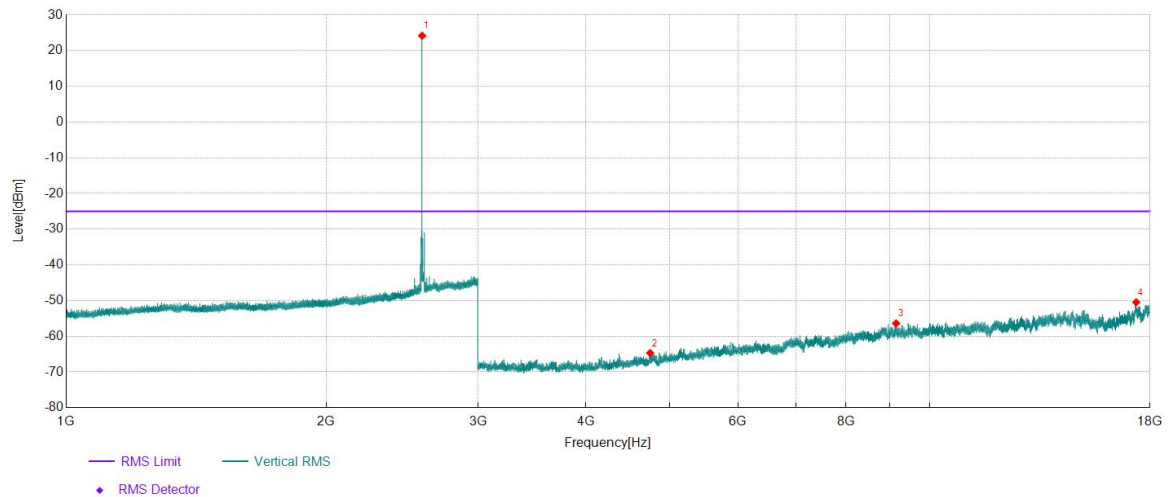
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2584.20	98.01	-82.41	15.60	-	-	Horizontal	NA
2	5111.00	38.52	-102.57	-64.05	-25.00	39.05	Horizontal	PASS
3	9606.50	35.60	-92.42	-56.82	-25.00	31.82	Horizontal	PASS
4	17349.00	32.83	-82.44	-49.61	-25.00	24.61	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B41(2496-2690)
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



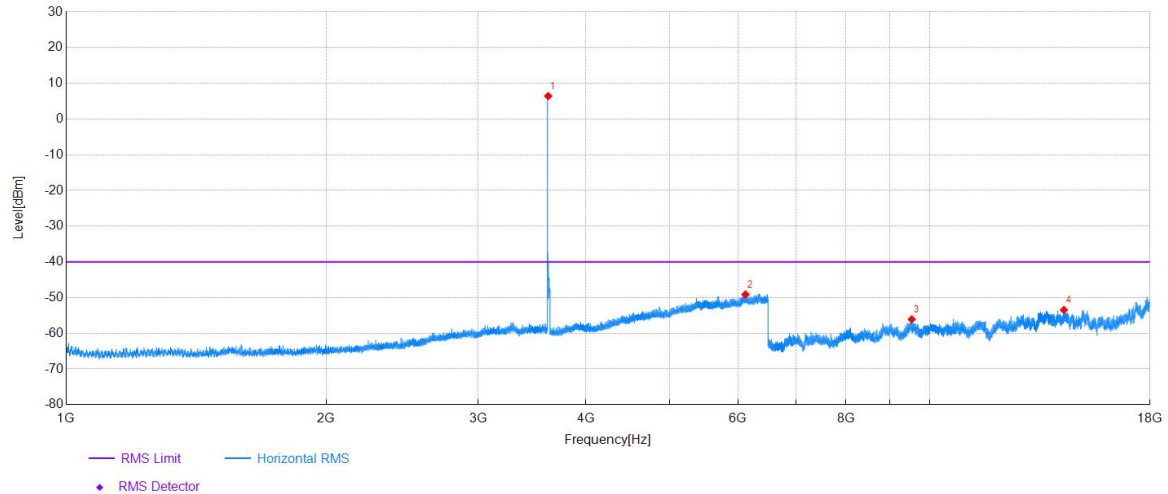
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2584.10	106.57	-82.40	24.17	-	-	Vertical	NA
2	4746.50	38.60	-103.30	-64.70	-25.00	39.70	Vertical	PASS
3	9145.50	35.73	-92.13	-56.40	-25.00	31.40	Vertical	PASS
4	17348.50	32.00	-82.47	-50.47	-25.00	25.47	Vertical	PASS

Project Information

Mode:	LTE	Band:	B48
Bandwidth:	20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



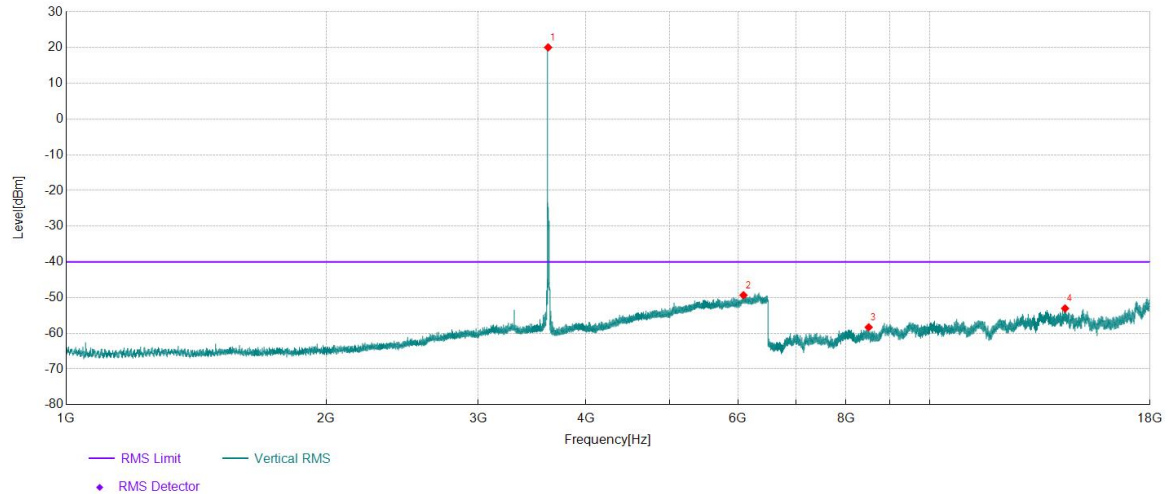
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	3616.08	95.08	-88.64	6.44	-	-	Horizontal	NA
2	6119.13	31.61	-80.75	-49.14	-40.00	9.14	Horizontal	PASS
3	9534.18	36.62	-92.70	-56.08	-40.00	16.08	Horizontal	PASS
4	14305.69	33.10	-86.56	-53.46	-40.00	13.46	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B48
Bandwidth:	20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



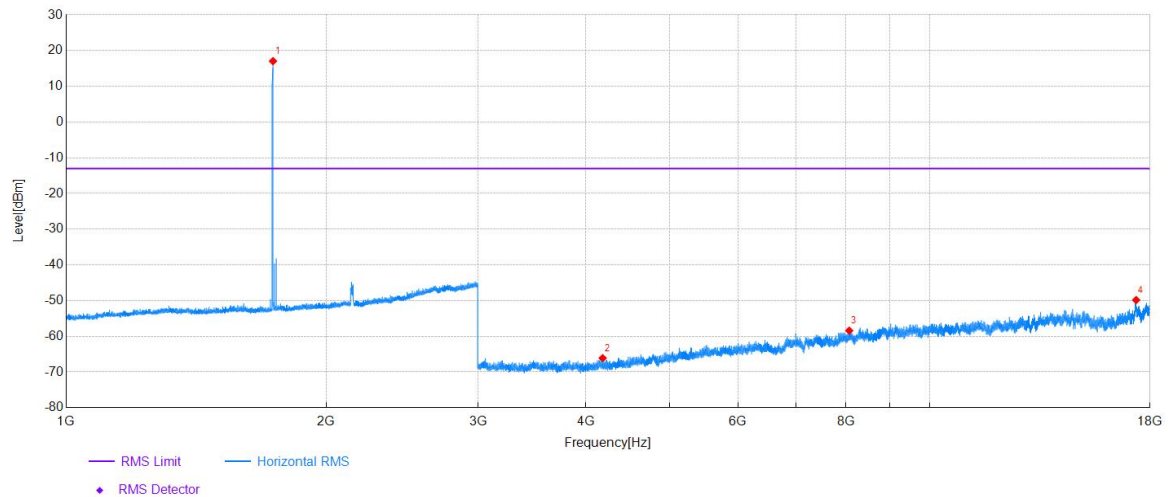
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	3616.08	108.71	-88.64	20.07	-	-	Vertical	NA
2	6087.78	31.60	-80.93	-49.33	-40.00	9.33	Vertical	PASS
3	8500.30	35.29	-93.61	-58.32	-40.00	18.32	Vertical	PASS
4	14350.55	33.23	-86.26	-53.03	-40.00	13.03	Vertical	PASS

Project Information

Mode:	LTE	Band:	B66
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



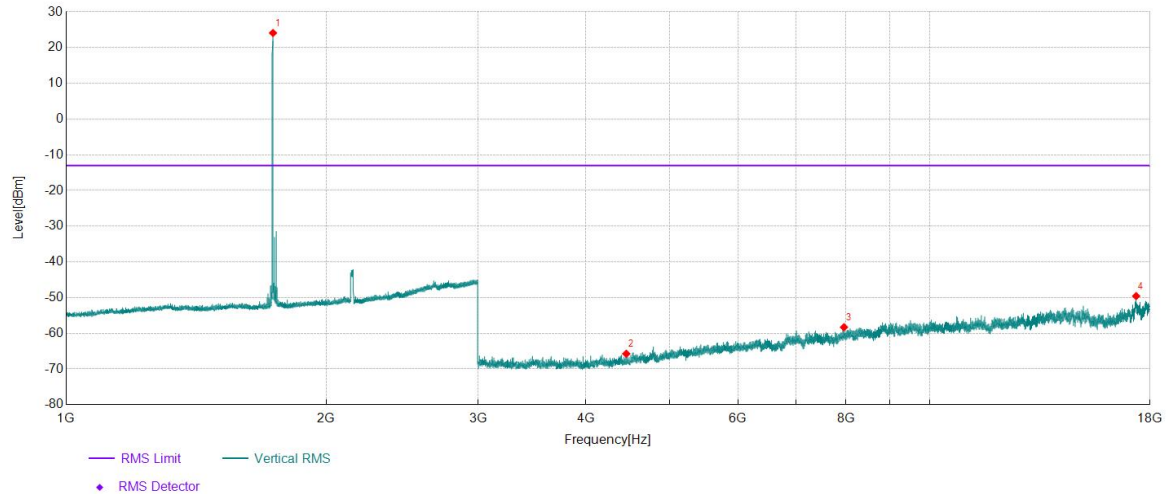
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1736.20	102.25	-85.18	17.07	-	-	Horizontal	NA
2	4181.50	39.10	-105.23	-66.13	-13.00	53.13	Horizontal	PASS
3	8070.00	36.74	-95.16	-58.42	-13.00	45.42	Horizontal	PASS
4	17344.50	32.81	-82.66	-49.85	-13.00	36.85	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B66
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



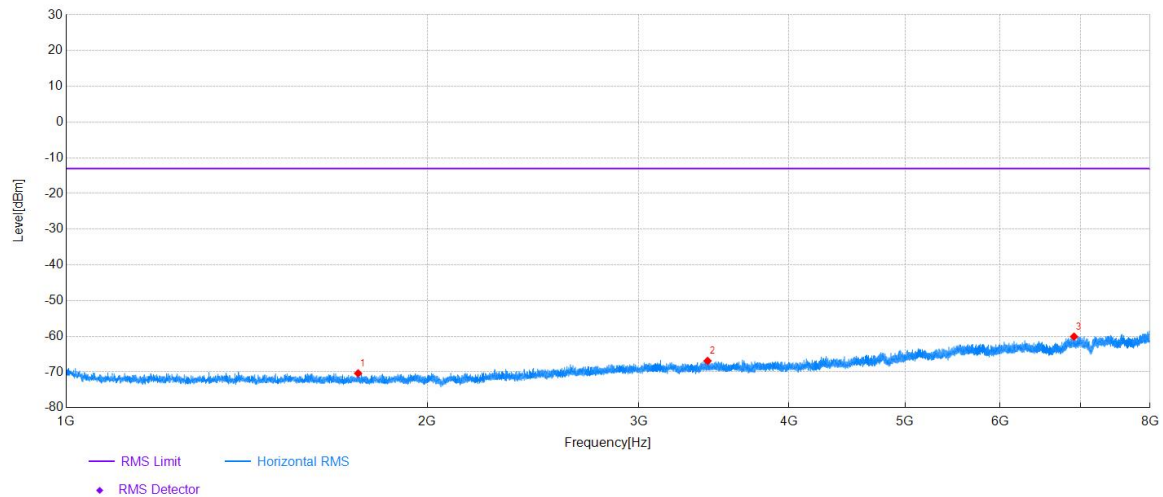
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1736.00	109.29	-85.18	24.11	-	-	Vertical	NA
2	4453.50	38.90	-104.64	-65.74	-13.00	52.74	Vertical	PASS
3	7958.00	37.01	-95.32	-58.31	-13.00	45.31	Vertical	PASS
4	17345.00	33.04	-82.62	-49.58	-13.00	36.58	Vertical	PASS

Project Information

Mode:	LTE	Band:	B71
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



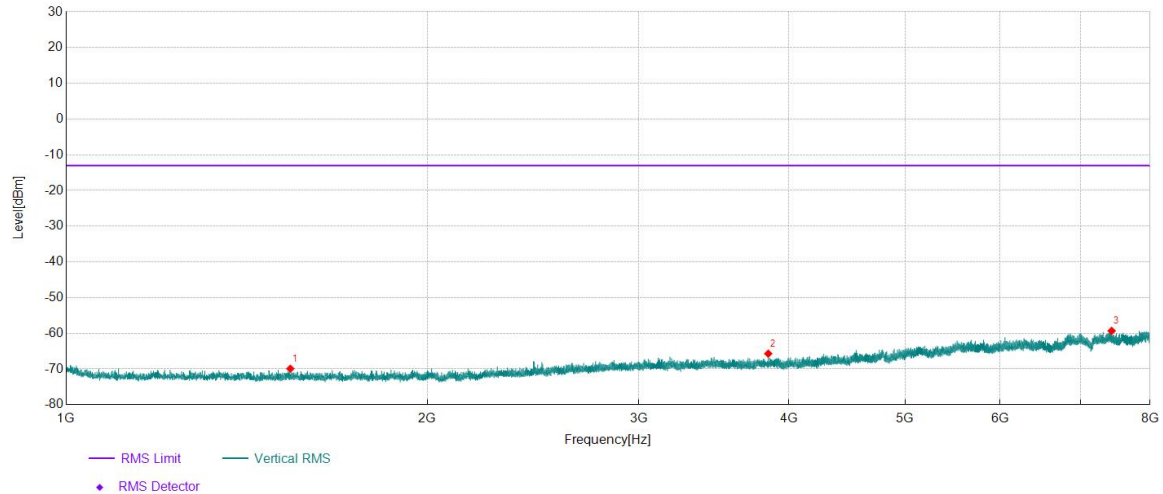
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1750.87	43.58	-113.95	-70.37	-13.00	57.37	Horizontal	PASS
2	3423.17	40.58	-107.48	-66.90	-13.00	53.90	Horizontal	PASS
3	6914.07	37.61	-97.71	-60.10	-13.00	47.10	Horizontal	PASS

Project Information

Mode:	LTE	Band:	B71
Bandwidth:	20MHz	Channel:	MID
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



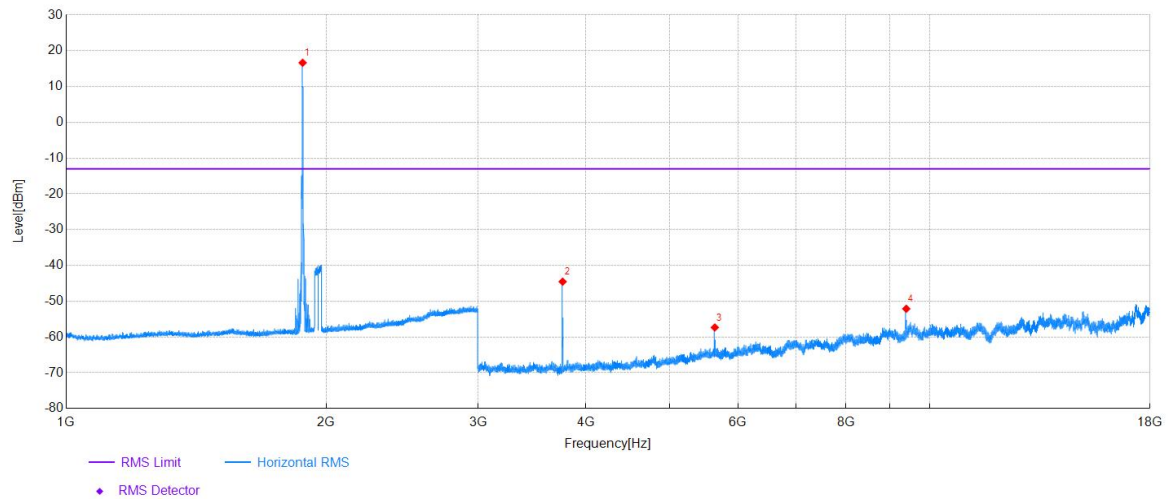
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1537.37	44.15	-114.08	-69.93	-13.00	56.93	Vertical	PASS
2	3845.73	40.67	-106.37	-65.70	-13.00	52.70	Vertical	PASS
3	7432.07	37.50	-96.82	-59.32	-13.00	46.32	Vertical	PASS

Test Result for LTE CA

Project Information			
Mode:	LTE CA	Band:	CA_2C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph

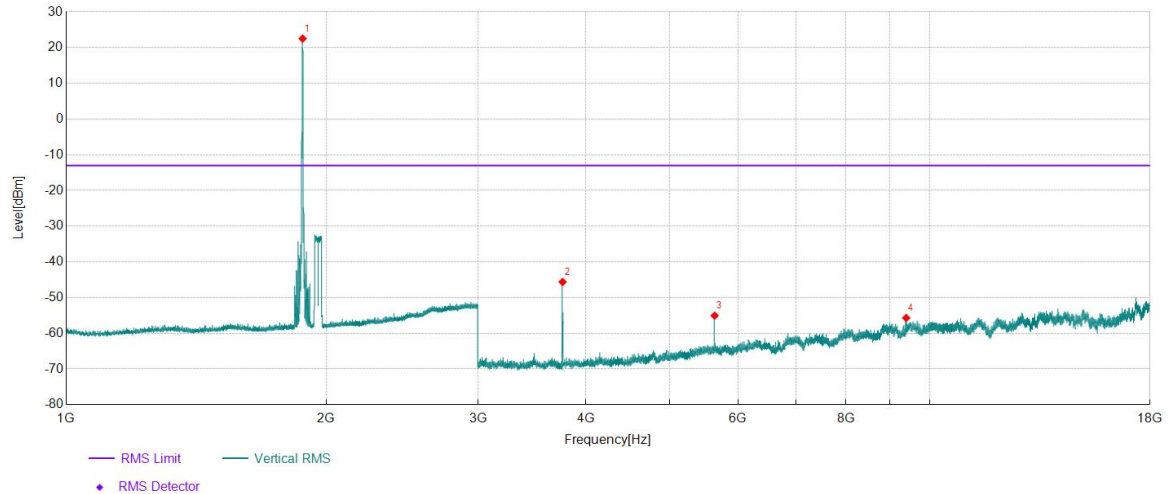


Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1879.00	111.67	-95.02	16.65	-	-	Horizontal	NA
2	3758.50	62.72	-107.27	-44.55	-13.00	31.55	Horizontal	PASS
3	5639.00	43.49	-100.84	-57.35	-13.00	44.35	Horizontal	PASS
4	9397.00	41.22	-93.34	-52.12	-13.00	39.12	Horizontal	PASS

Project Information

Mode:	LTE CA	Band:	CA_2C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



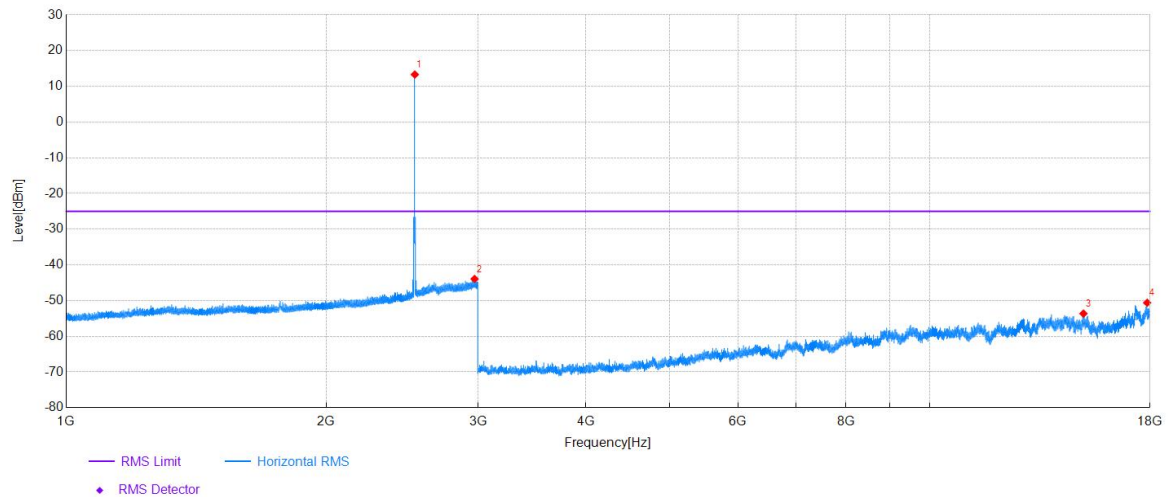
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1879.00	117.55	-95.02	22.53	-	-	Vertical	NA
2	3758.00	61.66	-107.28	-45.62	-13.00	32.62	Vertical	PASS
3	5637.00	45.81	-100.87	-55.06	-13.00	42.06	Vertical	PASS
4	9395.00	37.62	-93.33	-55.71	-13.00	42.71	Vertical	PASS

Project Information

Mode:	LTE CA	Band:	CA_7C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



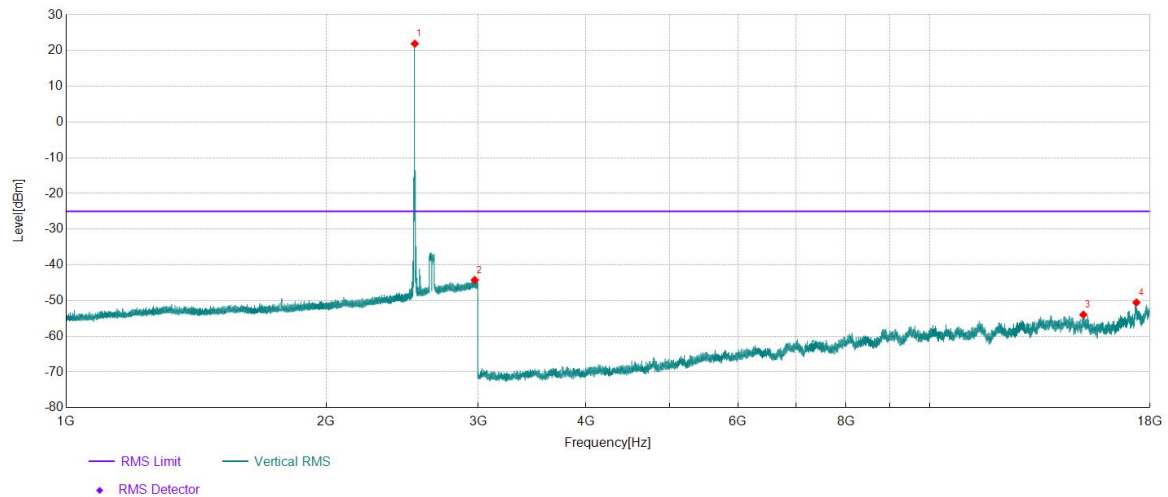
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2534.00	96.21	-82.90	13.31	-	-	Horizontal	NA
2	2971.70	35.97	-79.91	-43.94	-25.00	18.94	Horizontal	PASS
3	15070.50	32.66	-86.30	-53.64	-25.00	28.64	Horizontal	PASS
4	17864.50	32.02	-82.63	-50.61	-25.00	25.61	Horizontal	PASS

Project Information

Mode:	LTE CA	Band:	CA_7C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



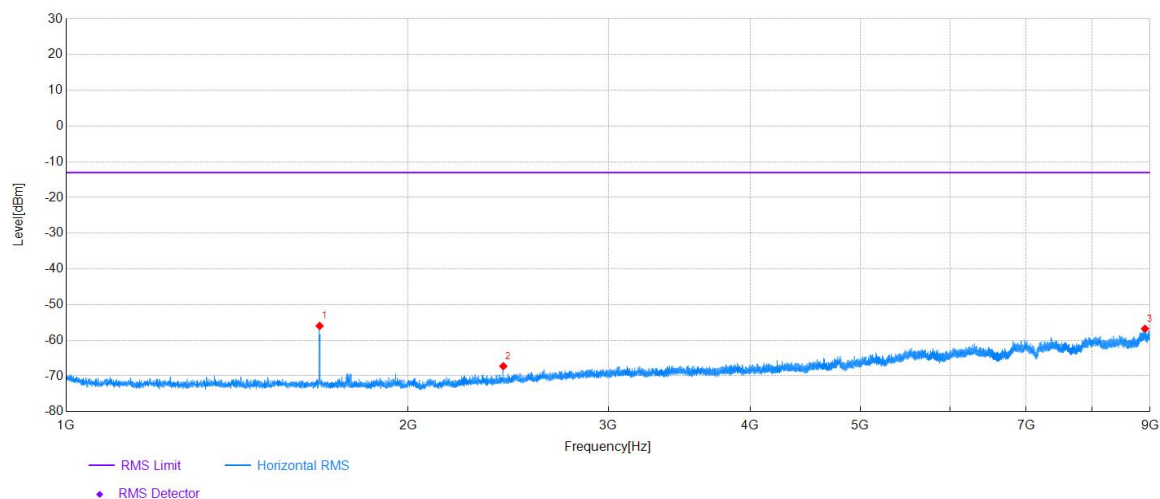
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2533.90	104.85	-82.90	21.95	-	-	Vertical	NA
2	2973.40	35.66	-79.91	-44.25	-25.00	19.25	Vertical	PASS
3	15068.50	32.36	-86.31	-53.95	-25.00	28.95	Vertical	PASS
4	17358.00	32.17	-82.71	-50.54	-25.00	25.54	Vertical	PASS

Project Information

Mode:	LTE CA	Band:	CA_5B
Bandwidth:	10MHz+10MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



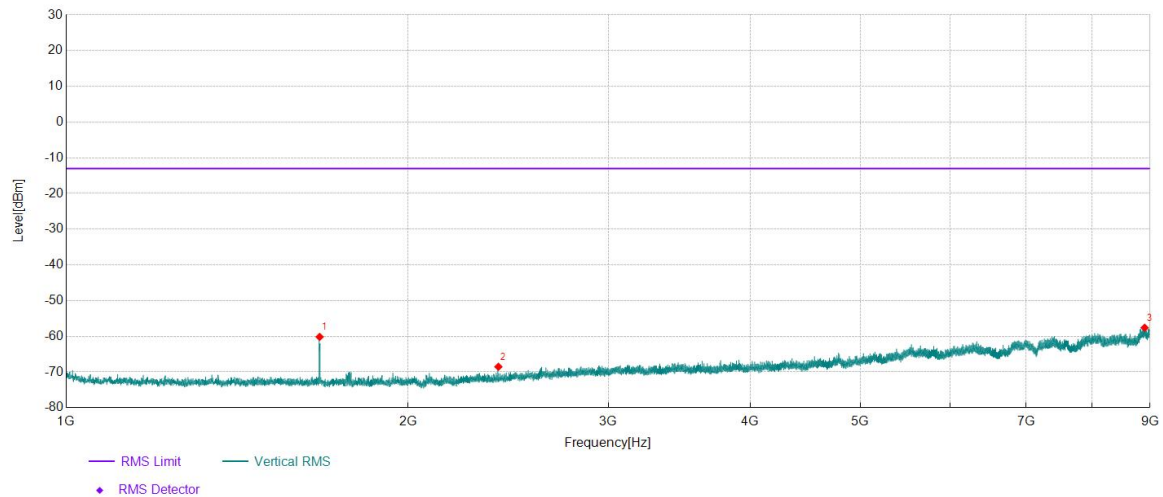
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1671.73	58.16	-114.13	-55.97	-13.00	42.97	Horizontal	PASS
2	2425.87	44.40	-111.66	-67.26	-13.00	54.26	Horizontal	PASS
3	8908.53	36.57	-93.33	-56.76	-13.00	43.76	Horizontal	PASS

Project Information

Mode:	LTE CA	Band:	CA_5B
Bandwidth:	10MHz+10MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



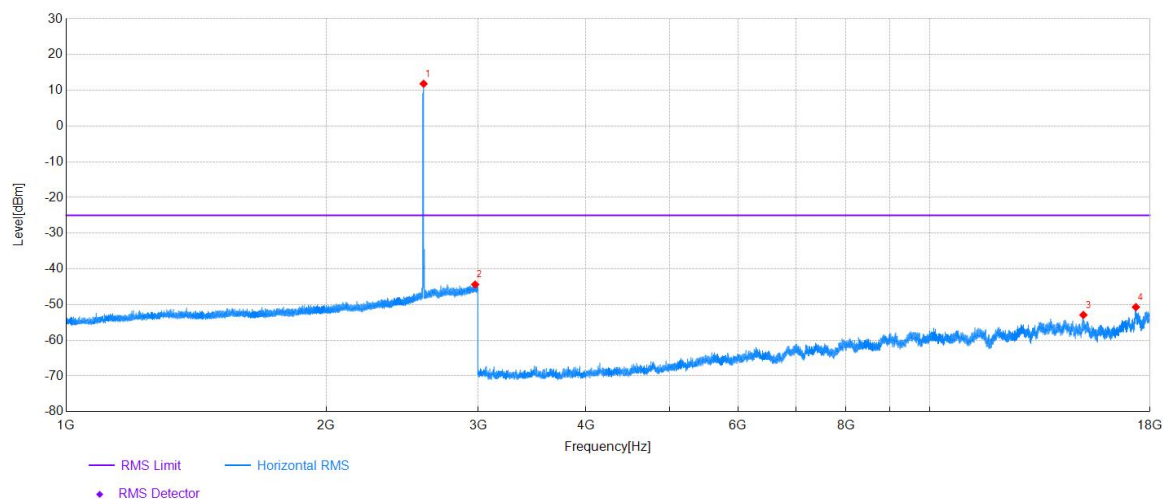
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1671.73	53.96	-114.13	-60.17	-13.00	47.17	Vertical	PASS
2	2401.87	43.66	-112.20	-68.54	-13.00	55.54	Vertical	PASS
3	8902.40	35.61	-93.21	-57.60	-13.00	44.60	Vertical	PASS

Project Information

Mode:	LTE CA	Band:	CA_38C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



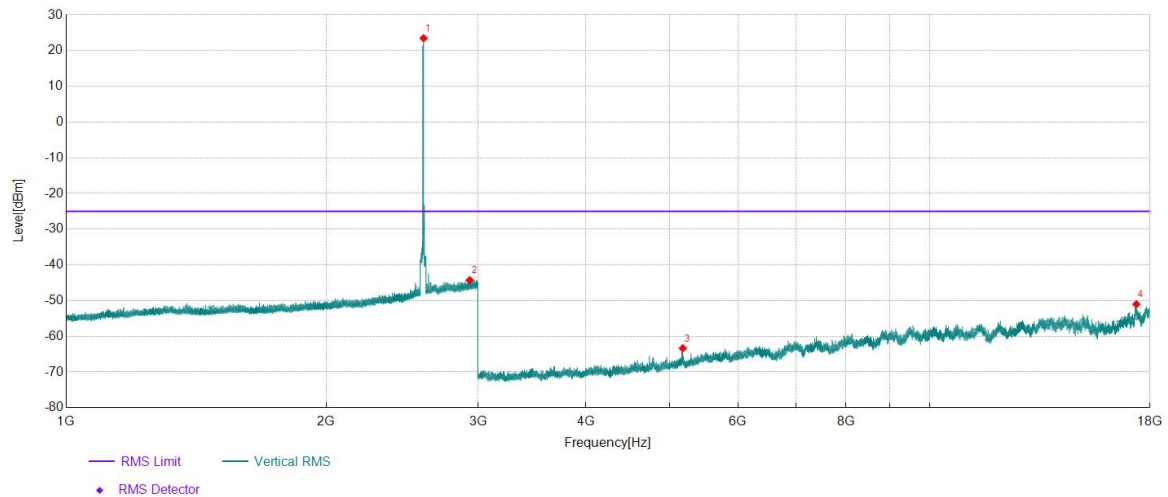
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2594.00	94.27	-82.43	11.84	-	-	Horizontal	NA
2	2976.30	35.55	-79.92	-44.37	-25.00	19.37	Horizontal	PASS
3	15070.00	33.40	-86.30	-52.90	-25.00	27.90	Horizontal	PASS
4	17335.50	32.36	-83.06	-50.70	-25.00	25.70	Horizontal	PASS

Project Information

Mode:	LTE CA	Band:	CA_38C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



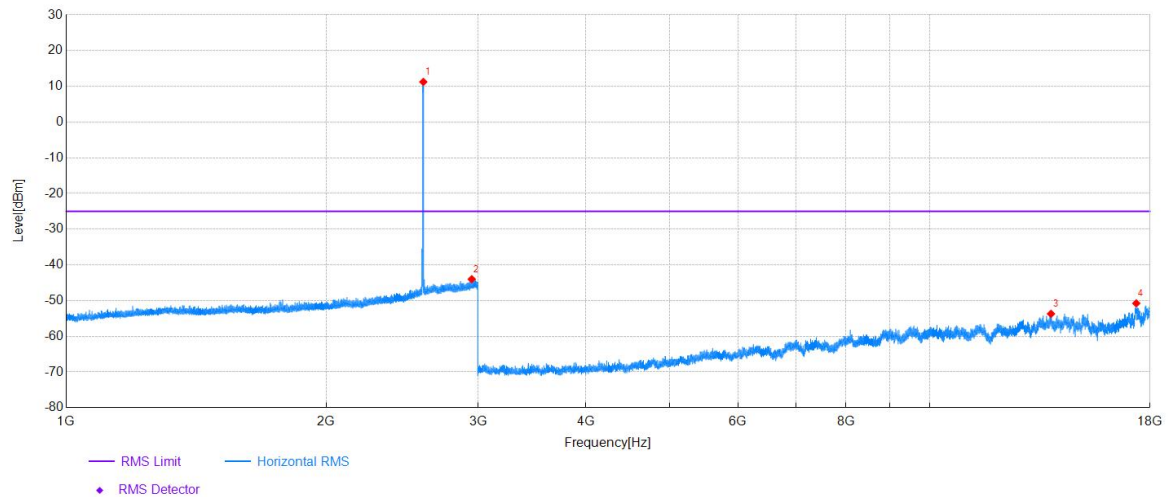
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2594.00	105.91	-82.43	23.48	-	-	Vertical	NA
2	2933.70	35.93	-80.20	-44.27	-25.00	19.27	Vertical	PASS
3	5178.50	38.74	-102.10	-63.36	-25.00	38.36	Vertical	PASS
4	17356.00	31.61	-82.63	-51.02	-25.00	26.02	Vertical	PASS

Project Information

Mode:	LTE CA	Band:	CA 41C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



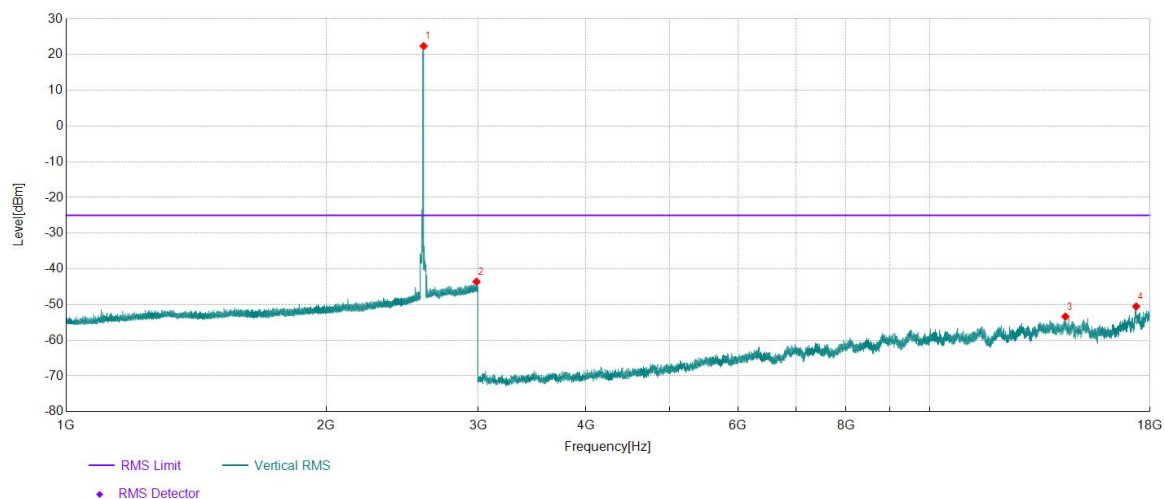
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2592.10	93.67	-82.42	11.25	-	-	Horizontal	NA
2	2949.20	36.00	-80.02	-44.02	-25.00	19.02	Horizontal	PASS
3	13823.00	33.25	-86.96	-53.71	-25.00	28.71	Horizontal	PASS
4	17351.00	31.67	-82.44	-50.77	-25.00	25.77	Horizontal	PASS

Project Information

Mode:	LTE CA	Band:	CA 41C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



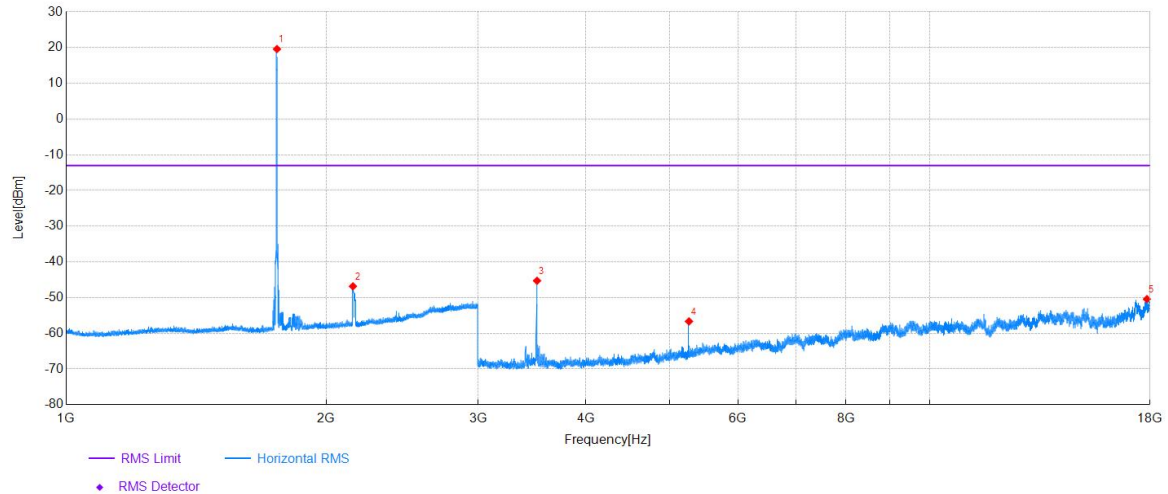
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	2594.10	104.82	-82.43	22.39	-	-	Vertical	NA
2	2986.80	36.52	-80.10	-43.58	-25.00	18.58	Vertical	PASS
3	14363.00	32.81	-86.18	-53.37	-25.00	28.37	Vertical	PASS
4	17346.50	32.04	-82.56	-50.52	-25.00	25.52	Vertical	PASS

Project Information

Mode:	LTE CA	Band:	CA_66B
Bandwidth:	10MHz+10MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



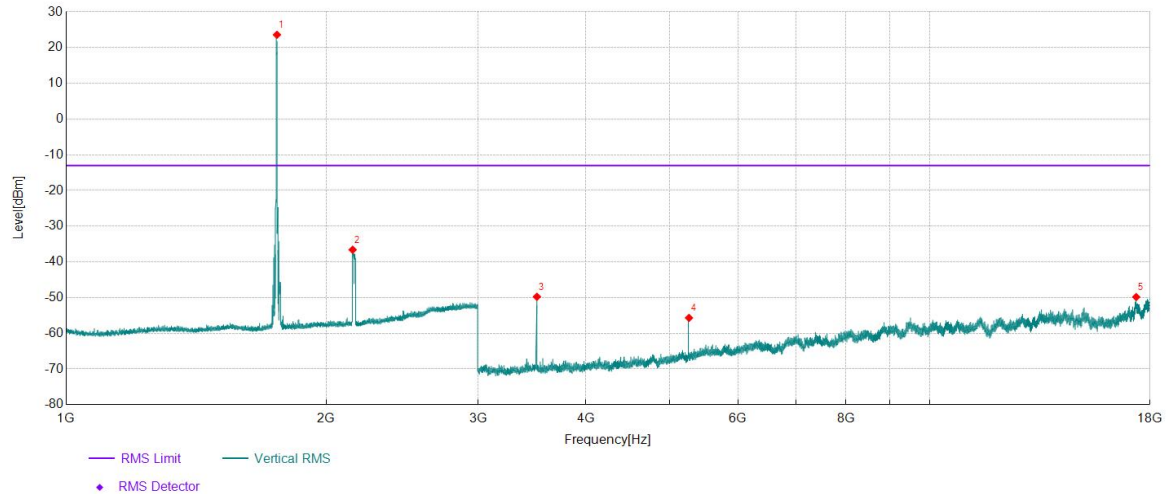
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1754.40	114.41	-94.80	19.61	-	-	Horizontal	NA
2	2148.40	47.82	-94.66	-46.84	-	-	Horizontal	NA
3	3510.00	61.82	-107.10	-45.28	-13.00	32.28	Horizontal	PASS
4	5264.50	45.28	-101.95	-56.67	-13.00	43.67	Horizontal	PASS
5	17851.00	32.05	-82.47	-50.42	-13.00	37.42	Horizontal	PASS

Project Information

Mode:	LTE CA	Band:	CA_66B
Bandwidth:	10MHz+10MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



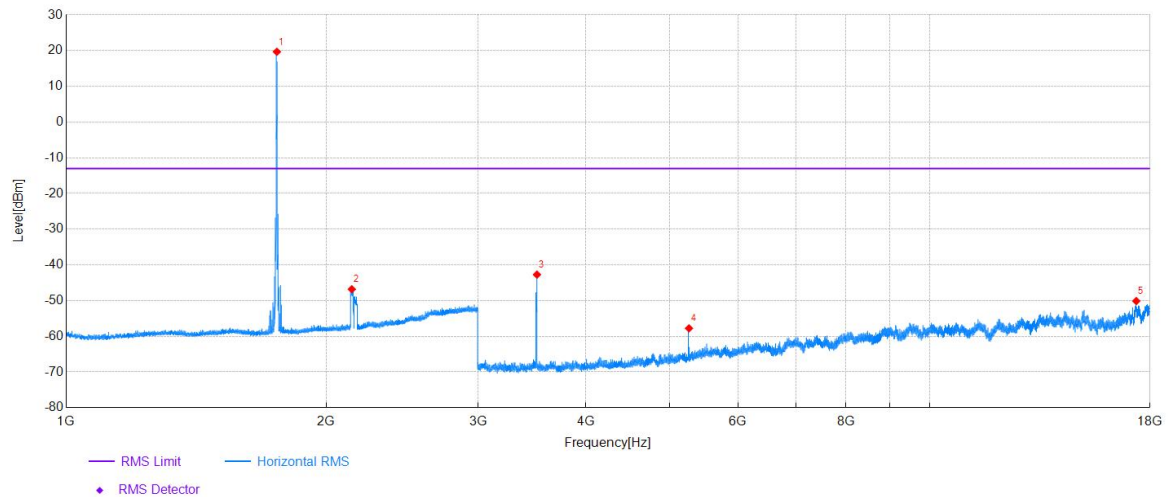
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1754.40	118.41	-94.80	23.61	-	-	Vertical	NA
2	2146.80	58.07	-94.67	-36.60	-	-	Vertical	NA
3	3509.00	57.31	-107.08	-49.77	-13.00	36.77	Vertical	PASS
4	5264.50	46.26	-101.95	-55.69	-13.00	42.69	Vertical	PASS
5	17347.50	32.66	-82.51	-49.85	-13.00	36.85	Vertical	PASS

Project Information

Mode:	LTE CA	Band:	CA_66C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



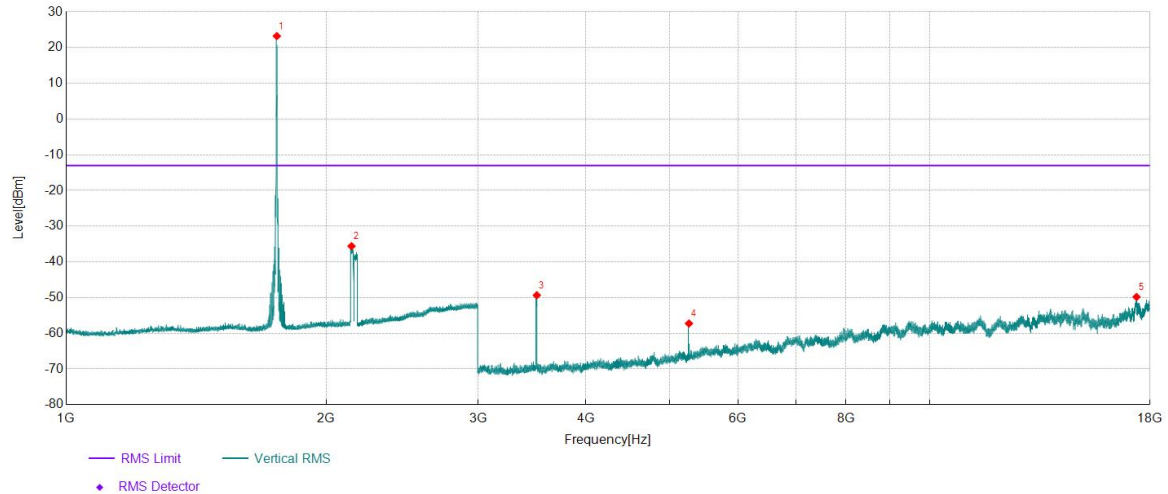
Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1754.00	114.49	-94.80	19.69	-	-	Horizontal	NA
2	2142.00	47.84	-94.67	-46.83	-	-	Horizontal	NA
3	3510.00	64.37	-107.10	-42.73	-13.00	29.73	Horizontal	PASS
4	5264.00	44.18	-101.95	-57.77	-13.00	44.77	Horizontal	PASS
5	17350.50	32.30	-82.42	-50.12	-13.00	37.12	Horizontal	PASS

Project Information

Mode:	LTE CA	Band:	CA_66C
Bandwidth:	20MHz+20MHz	Channel:	Mid
IMEI:	863109050663678	Engineer:	Tian Shuo
Remark:	-		

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity	Verdict
1	1754.00	118.05	-94.80	23.25	-	-	Vertical	NA
2	2140.40	59.08	-94.68	-35.60	-	-	Vertical	NA
3	3508.00	57.72	-107.07	-49.35	-13.00	36.35	Vertical	PASS
4	5264.00	44.70	-101.95	-57.25	-13.00	44.25	Vertical	PASS
5	17362.50	33.07	-82.89	-49.82	-13.00	36.82	Vertical	PASS

~The End~