



No.:
FCCSZ2025-0044-RF4

TEST REPORT

FCC ID : 2A7DX-SHARKTIGER

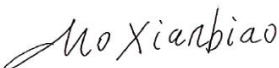
NAME OF SAMPLE : Mobile Phone

APPLICANT : DOKE COMMUNICATION (HK) LIMITED

CLASSIFICATION OF TEST : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.



Applicant	Name: DOKE COMMUNICATION (HK) LIMITED Address: 19H MAXGRAND PLAZA NO 3 TAI YAU STREET SAN PO KONG KL		
Manufacturer	Name: Shenzhen DOKE Electronic Co., Ltd Address: 801, Building3, 7th Industrial Zone, Yulv Community, Yutang Road, Guangming District, Shenzhen, China.		
Equipment Under Test	Product Name: Mobile Phone Model Name: SHARK 6 Additional Model Name: TIGER 8 Brand Name: Blackview, OSCAL Serial NO.: N/A Sample NO.: 202505200770-2		
Date of Receipt.	May. 20, 2025	Date of Testing	May. 20, 2025 ~ Jul. 23, 2025
Test Specification		Test Result	
FCC 47 CFR Part 2,22,24,27,90 ANSI/TIA-603-E, ANSI C63.26-2015		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC Issue Date: Jul. 23, 2025		
Compiled by:  Zhu Yulin Name Signature	Reviewed by:  Mo Xianbiao Name Signature	Approved by:  Dong Sanbi Name Signature	
Other Aspects: NONE.			
Abbreviations: OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCCSZ2025-0044-RF5	Original release	Jul. 23, 2025



1 SUMMARY OF TEST RESULTS

1.1 LTE BAND 2/ WCDMA B2/GSM1900

FCC PART SECTION	TEST TYPE AND LIMIT	LIMIT	Report Section	RESULT
§2.1046	Conducted power output	---	Annex A of FCCSZ2025-0044-RF4-A1&A7&A8	Report Only
§24.232(c)	Equivalent Isotropic Radiated Power	EIRP < 2Watt	Annex A of FCCSZ2025-0044-RF4-A1&A7&A8	PASS
§2.1049	Occupied Bandwidth	---	Annex C of FCCSZ2025-0044-RF4-A1&A7&A8	Report Only
---	Peak-to-Average Power Ratio	<13 dB	Annex B of FCCSZ2025-0044-RF4-A1&A7&A8	PASS
§2.1055 24.235	Frequency Stability	Within authorized bands of operation/frequency block.	Annex F of FCCSZ2025-0044-RF4-A1&A7&A8	PASS
§2.1051 §24.238(a)	Band Edge Compliance	< $43+10\log_{10}(P[\text{Watts}])$	Annex D of FCCSZ2025-0044-RF4-A1&A7&A8	PASS
§2.1051 §24.238(a)	Conducted Spurious Emission	< $43+10\log_{10}(P[\text{Watts}])$	Annex E of FCCSZ2025-0044-RF4-A1&A7&A8	PASS
§2.1051 §24.238(a)	Radiates Spurious Emission	< $43+10\log_{10}(P[\text{Watts}])$	See section 3.1	PASS



1.2 LTE BAND 4/ LTE BAND 66

FCC PART SECTION	TEST TYPE AND LIMIT	LIMIT	Report Section	RESULT
§2.1046	Conducted power output	---	Annex A of FCCSZ2025-0044-RF4-A2&A7&A9	Report Only
§27.50(d)(4)	Equivalent Isotropic Radiated Power	EIRP < 1Watt	Annex A of FCCSZ2025-0044-RF4-A2&A7&A9	PASS
§2.1049	Occupied Bandwidth	---	Annex C of FCCSZ2025-0044-RF4-A2&A7&A9	Report Only
---	Peak-to-Average Power Ratio	<13 dB	Annex B of FCCSZ2025-0044-RF4-A2&A7&A9	PASS
§2.1055 §27.54	Frequency Stability	Within authorized bands of operation/frequency block.	Annex F of FCCSZ2025-0044-RF4-A2&A7&A9	PASS
§2.1051 §27.53(h)	Band Edge Compliance	< 43+10log10(P[Watts])	Annex D of FCCSZ2025-0044-RF4-A2&A7&A9	PASS
§2.1051 §27.53(h)	Conducted Spurious Emission	< 43+10log10(P[Watts])	Annex E of FCCSZ2025-0044-RF4-A2&A7&A9	PASS
§2.1051 §27.53(h)	Radiates Spurious Emission	< 43+10log10(P[Watts])	See section 3.1	PASS



1.3 LTE BAND 5/ WCDMA B5/GSM850

FCC PART SECTION	TEST TYPE AND LIMIT	LIMIT	Report Section	RESULT
§2.1046	Conducted power output	---	Annex A of FCCSZ2025-0044-RF4-A3&A7&A8	Report Only
§22.913(a)(5)	Equivalent Radiated Power	EIRP < 7Watt	Annex A of FCCSZ2025-0044-RF4-A3&A7&A8	PASS
§2.1049	Occupied Bandwidth	---	Annex C of FCCSZ2025-0044-RF4-A3&A7&A8	Report Only
---	Peak-to-Average Power Ratio	<13 dB	Annex B of FCCSZ2025-0044-RF4-A3&A7&A8	PASS
§2.1055 §22.355	Frequency Stability	< 2.5 ppm	Annex F of FCCSZ2025-0044-RF4-A3&A7&A8	PASS
§2.1051 §22.917	Band Edge Compliance	< 43+10log10(P[Watts])	Annex D of FCCSZ2025-0044-RF4-A3&A7&A8	PASS
§2.1051 §22.917	Conducted Spurious Emission	< 43+10log10(P[Watts])	Annex E of FCCSZ2025-0044-RF4-A3&A7&A8	PASS
§2.1051 §22.917	Radiates Spurious Emission	< 43+10log10(P[Watts])	See section 3.1	PASS



1.4 LTE BAND 7

FCC PART SECTION	TEST TYPE AND LIMIT	LIMIT	Report Section	RESULT
§2.1046	Conducted power output	---	Annex A of FCCSZ2024-0064-RF4-A4	Report Only
§27.50(h)(2)	Equivalent Isotropic Radiated Power	EIRP < 2Watt	Annex A of FCCSZ2024-0064-RF4-A4	PASS
§2.1049	Occupied Bandwidth	>1MHz	Annex C of FCCSZ2024-0064-RF4-A4	PASS
---	Peak-to-Average Power Ratio	<13 dB	Annex B of FCCSZ2024-0064-RF4-A4	PASS
§2.1055 §27.54	Frequency Stability	Within authorized bands of operation/frequency block.	Annex F of FCCSZ2024-0064-RF4-A4	PASS
§2.1051 §27.53(m4)	Band Edge Compliance	For mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least: (i) 40 + 10 log ₁₀ p from the channel edges to 5 MHz away (ii) 43 + 10 log ₁₀ p between 5 MHz and X MHz from the channel edges, and (iii) 55 + 10 log ₁₀ p at X MHz and beyond from the channel edges In addition, the attenuation shall not be less than 43 + 10 log(p) on all frequencies between 2490.5 MHz and 2496 MHz, and 55 + 10 log ₁₀ p at or below 2490.5 MHz	Annex D of FCCSZ2024-0064-RF4-A4	PASS
§2.1051 §27.53(m4)	Conducted Spurious Emission		Annex E of FCCSZ2024-0064-RF4-A4	PASS
§2.1051 §27.53(m4)	Radiates Spurious Emission		See section 3.1	PASS



1.5 LTE BAND 12

FCC PART SECTION	TEST TYPE AND LIMIT	LIMIT	Report Section	RESULT
§2.1046	Conducted power output	---	Annex A of FCCSZ2025-0044-RF4-A5	Report Only
§27.50(c)(10)	Effective Radiated Power	ERP < 3Watt	Annex A of FCCSZ2025-0044-RF4-A5	PASS
§2.1049	Occupied Bandwidth	---	Annex C of FCCSZ2025-0044-RF4-A5	Report Only
---	Peak-to-Average Power Ratio	<13 dB	Annex B of FCCSZ2025-0044-RF4-A5	PASS
§2.1055 §27.54	Frequency Stability	Within authorized bands of operation/frequency block.	Annex F of FCCSZ2025-0044-RF4-A5	PASS
§2.1051 §27.53(g)	Band Edge Compliance	< 43+10log10(P[Watts])	Annex D of FCCSZ2025-0044-RF4-A5	PASS
§2.1051 §27.53(g)	Conducted Spurious Emission	< 43+10log10(P[Watts])	Annex E of FCCSZ2025-0044-RF4-A5	PASS
§2.1051 §27.53(g)	Radiates Spurious Emission	< 43+10log10(P[Watts])	See section 3.1	PASS



1.6 LTE BAND 17

FCC PART SECTION	TEST TYPE AND LIMIT	LIMIT	Report Section	RESULT
§2.1046	Conducted power output	---	Annex A of FCCSZ2025-0044-RF4-A6	Report Only
§27.50(c)(10)	Effective Radiated Power	ERP < 3Watt	Annex A of FCCSZ2025-0044-RF4-A6	PASS
§2.1049	Occupied Bandwidth	---	Annex C of FCCSZ2025-0044-RF4-A6	Report Only
---	Peak-to-Average Power Ratio	<13 dB	Annex B of FCCSZ2025-0044-RF4-A6	PASS
§2.1055 §27.54	Frequency Stability	Within authorized bands of operation/frequency block.	Annex F of FCCSZ2025-0044-RF4-A6	PASS
§2.1051 §27.53(g)	Band Edge Compliance	< 43+10log10(P[Watts])	Annex D of FCCSZ2025-0044-RF4-A6	PASS
§2.1051 §27.53(g)	Conducted Spurious Emission	< 43+10log10(P[Watts])	Annex E of FCCSZ2025-0044-RF4-A6	PASS
§2.1051 §27.53(g)	Radiates Spurious Emission	< 43+10log10(P[Watts])	See section 3.1	PASS



1.7 LTE BAND 41

FCC PART SECTION	TEST TYPE AND LIMIT	LIMIT	Report Section	RESULT
§2.1046	Conducted power output	---	Annex A of FCCSZ2025-0044-RF4-A9	Report Only
§27.50(h)(2)	Equivalent Isotropic Radiated Power	EIRP < 2Watt	Annex A of FCCSZ2025-0044-RF4-A9	PASS
§2.1049	Occupied Bandwidth	>1MHz	Annex C of FCCSZ2025-0044-RF4-A9	PASS
---	Peak-to-Average Power Ratio	<13 dB	Annex B of FCCSZ2025-0044-RF4-A9	PASS
§2.1055 §27.54	Frequency Stability	Within authorized bands of operation/frequency block.	Annex F of FCCSZ2025-0044-RF4-A9	PASS
§2.1051 §27.53(m4)	Band Edge Compliance	For mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least: (i) 40 + 10 log ₁₀ p from the channel edges to 5 MHz away (ii) 43 + 10 log ₁₀ p between 5 MHz and X MHz from the channel edges, and (iii) 55 + 10 log ₁₀ p at X MHz and beyond from the channel edges In addition, the attenuation shall not be less than 43 + 10 log(p) on all frequencies between 2490.5 MHz and 2496 MHz, and 55 + 10 log ₁₀ p at or below 2490.5 MHz	Annex D of FCCSZ2025-0044-RF4-A9	PASS
§2.1051 §27.53(m4)	Conducted Spurious Emission		Annex E of FCCSZ2025-0044-RF4-A9	PASS
§2.1051 §27.53(m4)	Radiates Spurious Emission		See section 3.1	PASS



2 GENERAL INFORMATION

2.1 GENERAL PRODUCT INFORMATION

PRODUCT NAME	Mobile Phone			
BRAND NAME (Remark 6)	Blackview, OSCAL			
MODEL NAME	SHARK 6			
ADDITIONAL MODEL NAME (Remark 6)	TIGER 8			
POWER SUPPLY	1. DC 3.89V (1*3.89V Rechargeable Li-ion battery) 2. DC 5/9/12V From Adapter			
MODULATION TYPE	GSM	GMSK,8PSK		
	WCDMA	BPSK, QPSK		
	LTE	QPSK,16QAM		
OPERATING FREQUENCY AND MAXIMUM OUTPUT POWER	Band	TX(MHz)	RX(MHz)	Maximum Output Power to Antenna (dBm)
	GSM850	824 ~ 849	869 ~ 894	33.51
	GSM1900	1850 ~ 1910	1930 ~ 1990	31.36
	WCDMA B2	1850 ~ 1910	1930 ~ 1990	23.60
	WCDMA B5	824 ~ 849	869 ~ 894	24.90
	LTE B2	1850 ~ 1910	1930 ~ 1990	23.58
	LTE B4	1710 ~ 1755	2110 ~ 2155	23.44
	LTE B5	824 ~ 849	869 ~ 894	23.77
	LTE B7	2500 ~ 2570	2620 ~ 2690	23.43
	LTE B12	699 ~ 716	729 ~ 746	23.71
	LTE B17	704 ~ 716	734 ~ 746	23.86
	LTE B41	2496 ~ 2690	2496 ~ 2690	23.31
	LTE B66	1710 ~ 1780	2110 ~ 2180	24.31
ANTENNA TYPE (Remrk4/5)	See section 2.2			
I/O PORTS	Refer to User's Manual.			
CABLE SUPPLIED	N/A			
Remark: 1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual. 2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report. 3. EUT photo refer to the report (Report NO.: FCCSZ2025-0044-EUT). 4. Please refer to the antenna report. 5. Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, CVC is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion. 6. SHARK 6 and TIGER 8 differ only in the rear camera ID lens and brands (Blackview vs. OSCAL); all other specs are identical.				

**2.2 DESCRIPTION OF ACCESSORIES**

	Adapter
Brand	N/A
Model No.:	QZ-0180AAA00
Input:	100-240V~50/60Hz 0.5A
Output:	5.0V $\Rightarrow$ 3.0A, 15.0W 9.0V $\Rightarrow$ 2.0A, 18.0W 12.0V $\Rightarrow$ 1.5A, 18.0W
SN	N/A
AC Cable:	N/A
DC Cable:	N/A

2.3 ANTENNA TYPE AND GAIN

Mode	Band	TX(MHz)	RX(MHz)	Antenna Type	Antenna	Antenna Gain
GSM	GSM 850	824 ~ 849	869 ~ 894	FPC Antenna	ANT1	-1.77
	GSM 1900	1850 ~ 1910	1930 ~ 1990	FPC Antenna	ANT2	0.62
WCDMA	WCDMA B2	1850 ~ 1910	1930 ~ 1990	FPC Antenna	ANT2	0.62
	WCDMA B5	824 ~ 849	869 ~ 894	FPC Antenna	ANT1	-1.77
LTE	LTE B2	1850 ~ 1910	1930 ~ 1990	FPC Antenna	ANT2	0.62
	LTE B4	1710 ~ 1755	2110 ~ 2155	FPC Antenna	ANT2	0.77
	LTE B5	824 ~ 849	869 ~ 894	FPC Antenna	ANT1	-1.77
	LTE B7	2500 ~ 2570	2620 ~ 2690	FPC Antenna	ANT5	2.33
	LTE B12	699 ~ 716	729 ~ 746	FPC Antenna	ANT1	-3.16
	LTE B17	704 ~ 716	734 ~ 746	FPC Antenna	ANT1	-3.16
	LTE B41	2496 ~ 2690	2496 ~ 2690	FPC Antenna	ANT5	2.33
	LTE B66	1710 ~ 1780	2110 ~ 2180	FPC Antenna	ANT2	0.77



2.4 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports.

EUT CONFIGURE MODE	DESCRIPTION
-	EUT + Adapter + with WCDMA or LTE link

Test modes are chosen as the worst case configuration below for WCDMA

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	RF power output	4132 to 4233	9262, 9400, 9538	WCDMA Band 2
		9262 to 9538	4132, 4182, 4233	WCDMA Band 5
-	Equivalent Isotropic Radiated Power	4132 to 4233	9262, 9400, 9538	WCDMA Band 2
-	Effective Radiated Power	9262 to 9538	4132, 4182, 4233	WCDMA Band 5
-	Frequency Stability	4132 to 4233	9262, 9400, 9538	WCDMA Band 2
		9262 to 9538	4132, 4182, 4233	WCDMA Band 5
-	Occupied Bandwidth	4132 to 4233	9262, 9400, 9538	WCDMA Band 2
		9262 to 9538	4132, 4182, 4233	WCDMA Band 5
-	Band Edge Compliance	4132 to 4233	9262, 9538	WCDMA Band 2
		9262 to 9538	4132, 4233	WCDMA Band 5
-	Conducted Spurious Emission	4132 to 4233	9262, 9400, 9538	WCDMA Band 2
		9262 to 9538	4132, 4182, 4233	WCDMA Band 5
-	Radiates Spurious Emission	4132 to 4233	9262, 9400, 9538	WCDMA Band 2
		9262 to 9538	4132, 4182, 4233	WCDMA Band 5
-	Peak-to-Average Power Ratio	4132 to 4233	9262, 9400, 9538	WCDMA Band 2
		9262 to 9538	4132, 4182, 4233	WCDMA Band 5



Test modes are chosen as the worst case configuration below for LTE

Test items	LTE	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1%	50%	100%	L	M	H
RF power output	2	O	O	O	O	O	O	O	O	-	O	O	O	O	O	O
	4	O	O	O	O	O	O	O	O	-	O	O	O	O	O	O
	5	O	O	O	O	-	-	O	O	-	O	O	O	O	O	O
	7	-	-	O	O	O	O	O	O	-	O	O	O	O	O	O
	12	O	O	O	O	-	-	O	O	-	O	O	O	O	O	O
	17	-	-	O	O	-	-	O	O	-	O	O	O	O	O	O
	41	-	-	O	O	O	O	O	O	-	O	O	O	O	O	O
Test items	LTE	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1%	50%	100%	L	M	H
ERP/ EIRP (Note3)	2	O	O	O	O	O	O	O	O	-	O	O	O	O	O	O
	4	O	O	O	O	O	O	O	O	-	O	O	O	O	O	O
	5	O	O	O	O	-	-	O	O	-	O	O	O	O	O	O
	7	-	-	O	O	O	O	O	O	-	O	O	O	O	O	O
	12	O	O	O	O	-	-	O	O	-	O	O	O	O	O	O
	17	-	-	O	O	-	-	O	O	-	O	O	O	O	O	O
	41	-	-	O	O	O	O	O	O	-	O	O	O	O	O	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing. 3. Only the worst case was shown in test report															



Test items	LTE	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1%	50%	100%	L	M	H
Occupied Bandwidth	2	O	O	O	O	O	O	O	O	-	-	-	O	O	O	O
	4	O	O	O	O	O	O	O	O	-	-	-	O	O	O	O
	5	O	O	O	O	-	-	O	O	-	-	-	O	O	O	O
	7	-	-	O	O	O	O	O	O	-	-	-	O	O	O	O
	12	O	O	O	O	-	-	O	O	-	-	-	O	O	O	O
	17	-	-	O	O	-	-	O	O	-	-	-	O	O	O	O
	41	-	-	O	O	O	O	O	O	-	-	-	O	O	O	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing. 3. Only the worst case was shown in test report															

Test items	LTE	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1%	50%	100%	L	M	H
Band Edge Compliance	2	O	O	O	O	O	O	O	-	-	O	-	O	O	-	O
	4	O	O	O	O	O	O	O	-	-	O	-	O	O	-	O
	5	O	O	O	O	-	-	O	-	-	O	-	O	O	-	O
	7	-	-	O	O	O	O	O	-	-	O	-	O	O	-	O
	12	O	O	O	O	-	-	O	-	-	O	-	O	O	-	O
	17	-	-	O	O	-	-	O	-	-	O	-	O	O	-	O
	41	-	-	O	O	O	O	O	-	-	O	-	O	O	-	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing. 3. Only the worst case was shown in test report															



Test items	LTE	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1%	50%	100%	L	M	H
Peak-to-Average Power Ratio	2	O	O	O	O	O	O	O	O	O	O	-	O	O	O	O
	4	O	O	O	O	O	O	O	O	O	O	-	O	O	O	O
	5	O	O	O	O	-	-	O	O	O	O	-	O	O	O	O
	7	-	-	O	O	O	O	O	O	O	O	-	O	O	O	O
	12	O	O	O	O	-	-	O	O	O	O	-	O	O	O	O
	17	-	-	O	O	-	-	O	O	O	O	-	O	O	O	O
	41	-	-	O	O	O	O	O	O	O	O	-	O	O	O	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing. 3. Only the worst case was shown in test report															

Test items	LTE	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1%	50%	100%	L	M	H
Frequency Stability	2	-	-	-	-	-	O	O	-	-	-	-	O	O	O	O
	4	-	-	-	-	-	O	O	-	-	-	-	O	O	O	O
	5	-	-	-	O	-	-	O	-	-	-	-	O	O	O	O
	7	-	-	-	-	-	O	O	-	-	-	-	O	O	O	O
	12	-	-	-	O	-	-	O	-	-	-	-	O	O	O	O
	17	-	-	-	O	-	-	O	-	-	-	-	O	O	O	O
	41	-	-	-	-	-	O	O	-	-	-	-	O	O	O	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing. 3. Only the worst case was shown in test report															



Test items	LTE	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1%	50%	100%	L	M	H
Conducted Spurious Emission	2	O	O	O	O	O	O	O	-	-	O	-	-	O	O	O
	4	O	O	O	O	O	O	O	-	-	O	-	-	O	O	O
	5	O	O	O	O	-	-	O	-	-	O	-	-	O	O	O
	7	-	-	O	O	O	O	O	-	-	O	-	-	O	O	O
	12	O	O	O	O	-	-	O	-	-	O	-	-	O	O	O
	17	-	-	O	O	-	-	O	-	-	O	-	-	O	O	O
	41	-	-	O	O	O	O	O	-	-	O	-	-	O	O	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing. 3. Only the worst case was shown in test report															

Test items	LTE	Bandwidth (MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1%	50%	100%	L	M	H
Radiates Spurious Emission (Note3)	2	O	O	O	O	O	O	O	-	-	O	-	-	O	O	O
	4	O	O	O	O	O	O	O	-	-	O	-	-	O	O	O
	5	O	O	O	O	-	-	O	-	-	O	-	-	O	O	O
	7	-	-	O	O	O	O	O	-	-	O	-	-	O	O	O
	12	O	O	O	O	-	-	O	-	-	O	-	-	O	O	O
	17	-	-	O	O	-	-	O	-	-	O	-	-	O	O	O
	41	-	-	O	O	O	O	O	-	-	O	-	-	O	O	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing. 3. Only the worst case was shown in test report															

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RF power output	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Zhu Yulin
Effective Radiated Power	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Zhu Yulin
Equivalent Isotropic Radiated Power	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Zhu Yulin
Frequency Stability	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Zhu Yulin
Occupied Bandwidth	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Zhu Yulin
Band Edge Compliance	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Zhu Yulin
Conducted Spurious Emission	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Zhu Yulin
Radiates Spurious Emission	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Liu Yuan
Peak-to-Average Power Ratio	25.6deg. C, 55%RH	DC 5/9/12V From Adapter	Zhu Yulin



2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

FCC 47 CFR PART 2

FCC 47 CFR PART 22,24,27,90

KDB 971168 D01 POWER MEAS LICENSE DIGITAL SYSTEMS V03R01

ANSI/TIA-603-E

ANSI C63.26-2015

ANSI C63.4-2014

Note: All test items have been performed and recorded as per the above standards

2.6 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support Equipment							
NO	Description	Brand		Model No.	Serial Number	Supplied by	
1	N/A	N/A		N/A	N/A	N/A	
Support Cable							
NO	Description	Quantity (Number)	Length (cm)	Detachable (Yes/ No)	Shielded (Yes/ No)	Cores (Number)	Supplied by
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2.7 TEST LOCATION

The tests and measurements refer to this report were performed by EMC testing Lab of CVC Testing Technology (Shenzhen) Co., Ltd.

Address: No. 1301-14&16, Guanguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

Post Code: 518110 Tel: 0755-23763060-8805

Fax: 0755-23763060 E-mail: sz-kf@cvc.org.cn

FCC(Test firm designation number: CN1363)

IC(Test firm CAB identifier number: CN0137)

CNAS(Test firm designation number: L16091)

**2.8 LIST OF TEST AND MEASUREMENT INSTRUMENTS**

Equipment	Manufacturer	Model No.	Serial Number	Cal. interval	Cal. Day	Cal. Due
Antenna Port Conducted Test (WWAN)						
Spectrum Analyzer	R&S	FSVA 3044	CS030004	1 year	2025/05/22	2026/05/21
Spectrum Analyzer	Prosund	SP926B	SP912322051	1 year	2024/08/27	2025/08/26
Comprehensive Test Instrument	R&S	CMW 500	CS0300012	1 year	2025/06/06	2026/06/05
Analog signal Generator	R&S	SMB 100A	CS0300016	1 year	2025/04/23	2026/04/22
Vector signal Generator	R&S	SMBV 100B	CS0300018	1 year	2025/04/23	2026/04/22
DC power supply	R&S	HMC8041-G	CS0300025	1 year	2025/04/23	2026/04/22
RF control unit(2/3/4/5G)	Tonscend	JS0806-1	CS0300027	1 year	2025/04/23	2026/04/22
Automatic filter bank(2/3/4G/5G)	Tonscend	JS0806-F	CS0300028	1 year	2025/04/23	2026/04/22
Digital multimeter	FLUKE	18B+	CS0200056	1 year	2025/05/22	2026/05/21
Comprehensive Test Instrument	R&S	CMW 500	123970	1 year	2025/01/01	2025/12/31
#4Shielding room	MORI	443	CS0300010	3 year	2023/05/17	2026/05/16
Constant temperature humidity chamber	TEELONG	TL-HW-225B	20220518-01	1 year	2025/06/06	2026/06/05
4G Comprehensive Test Instrument	Anritsu	MT8821C	CS0300034	1 year	2025/01/08	2026/01/07
5G Comprehensive Test Instrument	Anritsu	MT8000A	CS0300035	1 year	2025/01/08	2026/01/07
Power splitter	Anritsu	K240CPOWERDIVIDER	012334	1 year	2025/06/06	2026/06/05
Radiation Spurious Test - 3M Chamber #2						
Spectrum Analyzer	R&S	FSV 40	CS0300001	1 year	2025/04/23	2026/04/22
Spectrum Analyzer	R&S	FSVA 3044	CS0300004	1 year	2025/05/22	2026/05/21
EMI Test Receiver	R&S	ESR3	CS0300005	1 year	2025/05/22	2026/05/21
Horn antenna(1GHz-18GHz)	ETS-Lindgren	3117	CS0300007	1 year	2025/03/29	2026/03/28
Horn antenna(18GHz-40GHz)	STEATITE	QMS-00880	CS0300008	1 year	2025/03/22	2026/03/21
Automatic control unit(RSE)	R&S	OSP220	CS0300019	1 year	2025/06/06	2026/06/05
Filter group(RSE-BT/WiFi)	R&S	WiFi/BT Variant 1	CS0300020	1 year	2025/04/23	2026/04/22
Filter group(RSE-Cellular)	R&S	Cellular Variant 1	CS0300021	1 year	2025/04/23	2026/04/22
Preamplifier(1GHz-18GHz)	R&S	SCU18F	CS0300031-1	1 year	2025/04/23	2026/04/22
Preamplifier(1GHz-18GHz)	R&S	SCU-18F	CS0300031	1 year	2025/04/23	2026/04/22
Comprehensive Test Instrument	R&S	CMW 500	CS0300033	1 year	2025/05/23	2026/05/22
Antenna(30MHz~1001MHz)	SCHWARZBECK	VULB9168	CS0200006	1 year	2025/01/23	2026/01/22
Preamplifier(1GHz-18GHz)	R&S	SCU-01F	CS0200042	1 year	2025/04/23	2026/04/22
Preamplifier(18GHz-40GHz)	R&S	SCU40A	CS0200045	1 year	2025/04/23	2026/04/22
Attenuator	boyang	BY--N-2W-5dB	/	1 year	2025/01/23	2026/01/22
Temperature and humidity meter	yuhuaze	/	WK0001	1 year	2025/04/29	2026/04/28
#2 control room	MORI	433	CS0300028	3 year	2023/05/17	2026/05/16
3m anechoic chamber	MORI	966	CS0300011	3 year	2023/05/17	2026/05/16



Radiation Spurious Test - 3M Chamber #1						
EMI Test Receiver	Rohde&Schwarz	ESR 26	101718	1 year	2025/05/22	2026/05/21
Loop antenna (8.3k~30MHz)	Rohde&Schwarz	HFH2-Z2E	100951	1 year	2025/06/19	2026/06/18
Antenna(30MHz~1000MHz)	SCHWARZBECK	VULB 9168	1132	1 year	2025/02/28	2026/02/27
3m anechoic chamber	MORI	966	N/A	1 year	2025/05/19	2026/05/18
Preamplifier(10kHz-1GHz)	Rohde&Schwarz	SCU-01F	100298	1 year	2025/04/23	2026/04/22
Preamplifier(1GHz-18GHz)	Rohde&Schwarz	SCU-18F	100799	1 year	2025/04/23	2026/04/22
#1 control room	MORI	433	/	3year	2023/05/17	2026/05/16
Temperature and humidity meter	/	C193561473	C193561473	1 year	2025/04/29	2026/04/28

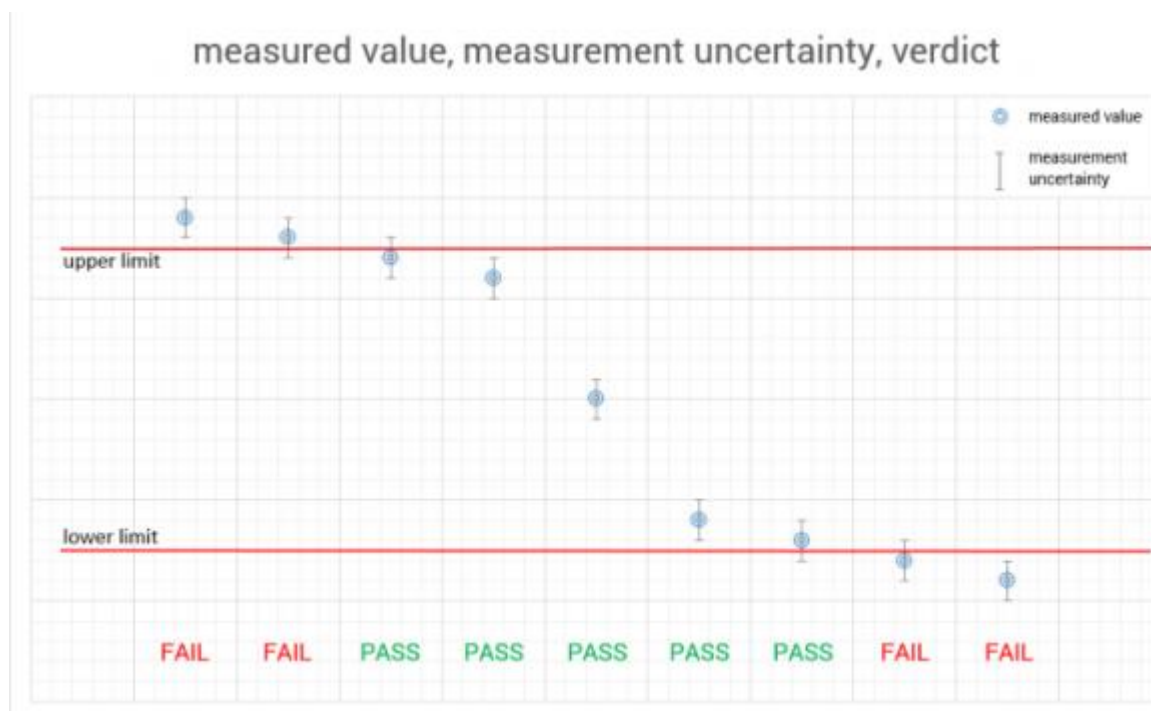
2.9 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

No.	Item	Measurement Uncertainty
1	Occupied Channel Bandwidth	± 1.86 %
2	RF output power, conducted	± 0.9 dB
3	Power Spectral Density, conducted	± 0.8 dB
4	Conducted emission test	± 2.7 dB
5	Radiated emission 9kHz-30MHz	± 5.6 dB
	Radiated emission 30MHz-1GHz	± 4.6 dB
	Radiated emission 1GHz-18GHz	± 4.4 dB
	Radiated emission 18GHz-40GHz	± 5.1 dB
6	Temperature	± 0.73 °C
7	Humidity	± 3.90 %
8	Supply voltages	± 0.37 %
9	Time	± 0.27 %
Remark: 95% Confidence Levels, k=2.		

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed.

The measurement uncertainty is mentioned in this test report, but is not taken into account - neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong.





3 TEST TYPES AND RESULTS

3.1 RADIATED EMISSION MEASUREMENT

3.6.1 TEST PROCEDURES

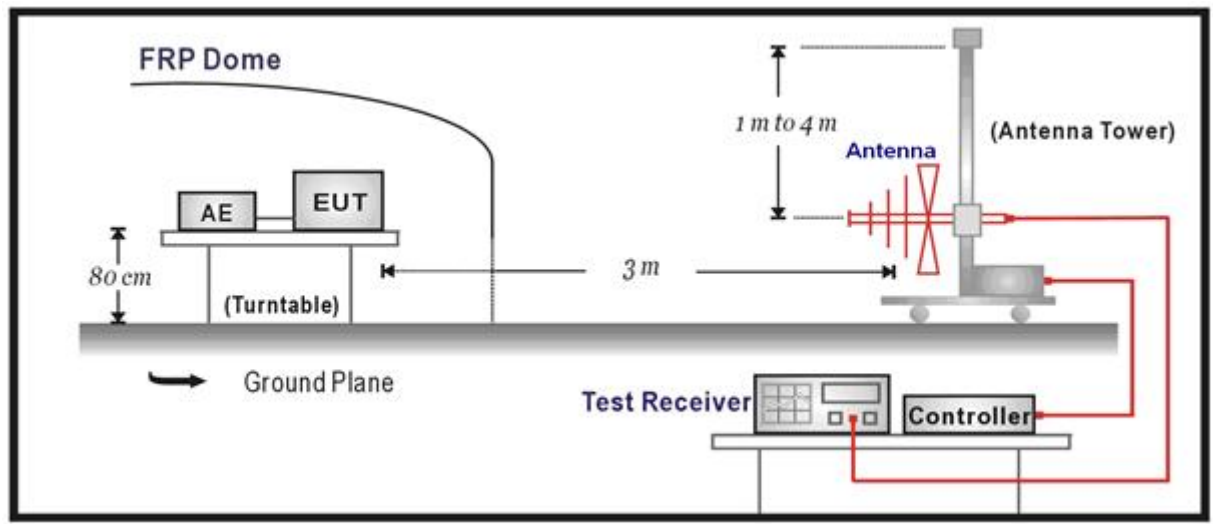
- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step a. Record the power level of S.G
- c. $EIRP(dBm) = S.G.POWER - TX \text{ cable loss} + \text{Antenna gain.}$
- d. $E.R.P(dBm) = E.I.P.R - 2.15dBi.$

NOTE:

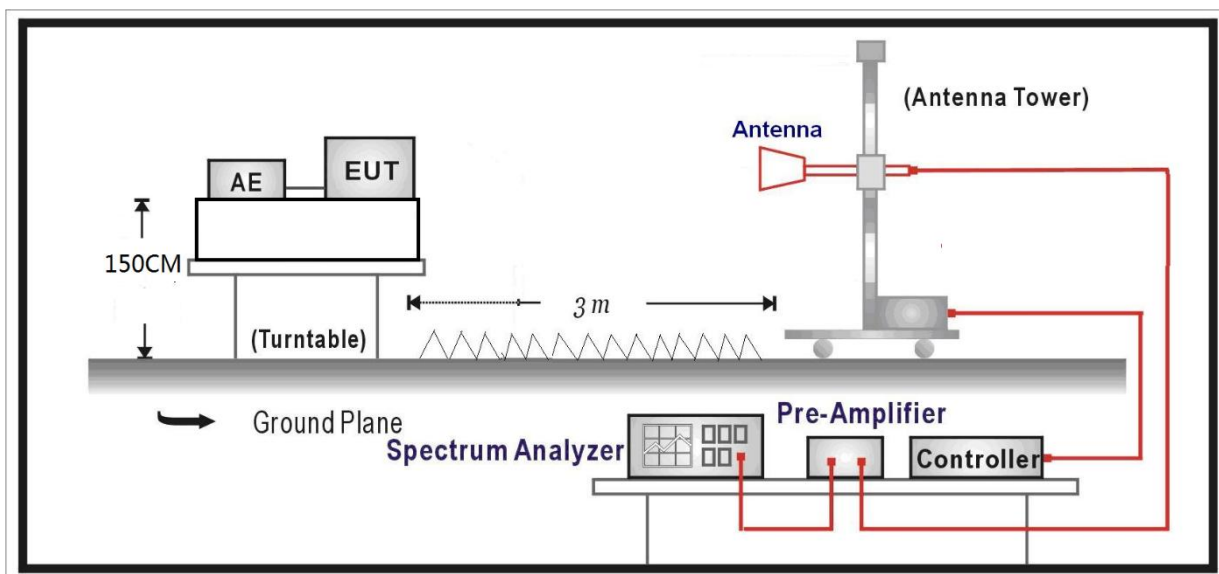
- 1.The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
- 2.Only the worst case was shown in test report

3.6.2 TEST SETUP

Below 1GHz Test Setup:



Above 1GHz Test Setup:



Note: Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).



3.6.3 TEST RESULTS - GSM

Test Mode		GSM-850-CH 128					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	40.112	-97.92	-71.52	-13.00	58.52	26.40	192
2	57.1794	-96.64	-69.48	-13.00	56.48	27.16	253
3	164.7197	-96.35	-71.05	-13.00	58.05	25.30	313
4	316.2928	-96.85	-70.63	-13.00	57.63	26.22	313
5	475.3563	-96.98	-66.89	-13.00	53.89	30.09	71
6	15663.7442	-84.64	-55.30	-13.00	42.30	29.34	50
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.7794	-98.36	-70.00	-13.00	57.00	28.36	318
2	104.4222	-96.52	-76.30	-13.00	63.30	20.22	75
3	311.4241	-95.60	-69.01	-13.00	56.01	26.59	198
4	616.6568	-96.06	-63.31	-13.00	50.31	32.75	14
5	11982.6788	-81.58	-58.02	-13.00	45.02	23.56	0
6	17411.8408	-86.79	-53.43	-13.00	40.43	33.36	110
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		GSM-850-CH 190					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	33.2102	-97.33	-73.20	-13.00	60.20	24.13	192
2	82.8606	-96.41	-74.43	-13.00	61.43	21.98	132
3	204.2582	-95.96	-73.52	-13.00	60.52	22.44	71
4	388.1469	-96.86	-68.31	-13.00	55.31	28.55	313
5	689.688	-96.59	-62.93	-13.00	49.93	33.66	71
6	6296.8794	-71.29	-51.29	-13.00	38.29	20.00	132
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	39.898	-98.19	-71.04	-13.00	58.04	27.15	198
2	73.7652	-98.31	-76.21	-13.00	63.21	22.10	360
3	187.5119	-97.02	-75.08	-13.00	62.08	21.94	318
4	518.8004	-96.51	-65.39	-13.00	52.39	31.12	318
5	6034.7469	-69.46	-49.01	-13.00	36.01	20.45	318
6	10561.4241	-81.42	-60.39	-13.00	47.39	21.03	48
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		GSM-850-CH 251					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	57.1794	-97.14	-69.98	-13.00	56.98	27.16	253
2	1673.1546	-54.74	-50.70	-13.00	37.70	4.04	192
3	2511.5623	-43.25	-32.45	-13.00	19.45	10.80	71
4	4185.2571	-64.84	-49.86	-13.00	36.86	14.98	71
5	7533.2622	-73.00	-54.56	-13.00	41.56	18.44	0
6	10880.4654	-79.28	-57.70	-13.00	44.70	21.58	50
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.7794	-97.86	-69.50	-13.00	56.50	28.36	318
2	161.2421	-97.13	-71.06	-13.00	58.06	26.07	258
3	1673.1546	-55.24	-50.65	-13.00	37.65	4.59	14
4	2510.5221	-46.52	-37.37	-13.00	24.37	9.15	258
5	4186.2973	-63.62	-48.22	-13.00	35.22	15.40	14
6	7534.0423	-75.41	-57.02	-13.00	44.02	18.39	0
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		GSM-1900-CH 512					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	154.8217	-97.06	-71.97	-13.00	58.97	25.09	71
2	1079.7225	-95.03	-55.80	-13.00	42.80	39.23	315
3	3759.812	-52.08	-37.66	-13.00	24.66	14.42	0
4	5639.868	-64.12	-44.99	-13.00	31.99	19.13	357
5	7520.0013	-73.61	-55.28	-13.00	42.28	18.33	131
6	11279.852	-74.96	-53.03	-13.00	40.03	21.93	360
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	1074.8537	-95.37	-56.30	-13.00	43.30	39.07	52
2	3759.812	-54.50	-40.74	-13.00	27.74	13.76	360
3	5640.5281	-67.91	-48.97	-13.00	35.97	18.94	134
4	7520.0013	-72.04	-53.75	-13.00	40.75	18.29	0
5	11279.852	-78.83	-57.30	-13.00	44.30	21.53	56
6	13160.5574	-82.12	-57.76	-13.00	44.76	24.36	56
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		GSM-1900-CH 661					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	62.7436	-95.47	-68.22	-13.00	55.22	27.25	255
2	84.4122	-94.57	-72.76	-13.00	59.76	21.81	255
3	135.3468	-96.33	-72.30	-13.00	59.30	24.03	315
4	393.9787	-97.66	-68.97	-13.00	55.97	28.69	315
5	903.6452	-94.95	-58.23	-13.00	45.23	36.72	255
6	17187.9659	-87.89	-54.83	-13.00	41.83	33.06	11
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	57.6609	-96.78	-69.40	-13.00	56.40	27.38	174
2	162.5261	-97.87	-72.05	-13.00	59.05	25.82	114
3	506.1203	-96.11	-65.10	-13.00	52.10	31.01	0
4	1074.8537	-95.87	-56.80	-13.00	43.80	39.07	52
5	9987.3058	-82.55	-61.26	-13.00	48.26	21.29	176
6	15176.2117	-85.84	-58.73	-13.00	45.73	27.11	238
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		GSM-1900-CH 810					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	42.7336	-95.07	-69.77	-13.00	56.77	25.30	71
2	165.8968	-97.68	-72.45	-13.00	59.45	25.23	360
3	495.4733	-96.60	-66.10	-13.00	53.10	30.50	71
4	1079.7225	-95.03	-55.80	-13.00	42.80	39.23	315
5	6290.098	-72.70	-52.45	-13.00	39.45	20.25	295
6	13582.5655	-84.75	-58.16	-13.00	45.16	26.59	71
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.9934	-98.12	-69.80	-13.00	56.80	28.32	0
2	132.5111	-98.40	-75.36	-13.00	62.36	23.04	0
3	441.7566	-97.25	-67.91	-13.00	54.91	29.34	52
4	888.5574	-96.68	-59.90	-13.00	46.90	36.78	114
5	6033.9668	-73.37	-52.92	-13.00	39.92	20.45	257
6	17417.3012	-89.03	-55.67	-13.00	42.67	33.36	116
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



3.6.4 TEST RESULTS - WCDMA

Test Mode		WCDMA(RMC) B2-CH 9262					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	39.524	-99.52	-72.98	-13.00	59.98	26.54	0
2	154.1324	-99.24	-74.22	-13.00	61.22	25.02	297
3	490.039	-97.57	-67.20	-13.00	54.20	30.37	297
4	6238.9439	-72.81	-52.83	-13.00	39.83	19.98	360
5	11984.4284	-83.59	-59.46	-13.00	46.46	24.13	0
6	15662.1062	-84.80	-55.47	-13.00	42.47	29.33	233
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	73.3393	-98.81	-76.57	-13.00	63.57	22.24	254
2	112.0772	-97.60	-76.91	-13.00	63.91	20.69	132
3	311.4381	-98.19	-71.60	-13.00	58.60	26.59	11
4	562.2712	-95.82	-64.18	-13.00	51.18	31.64	360
5	6066.6667	-70.39	-49.84	-13.00	36.84	20.55	0
6	17735.5536	-87.97	-53.78	-13.00	40.78	34.19	360
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		WCDMA(RMC) B2-CH 9400					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	47.2287	-98.61	-72.13	-13.00	59.13	26.48	176
2	259.645	-97.99	-73.02	-13.00	60.02	24.97	55
3	1082.1292	-97.02	-57.80	-13.00	44.80	39.22	357
4	3702.6403	-65.85	-51.27	-13.00	38.27	14.58	360
5	6238.9439	-71.31	-51.33	-13.00	38.33	19.98	360
6	17213.6814	-88.12	-55.29	-13.00	42.29	32.83	295
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	44.7675	-99.00	-72.53	-13.00	59.53	26.47	71
2	112.0772	-97.60	-76.91	-13.00	63.91	20.69	132
3	469.4929	-98.75	-68.41	-13.00	55.41	30.34	314
4	1099.572	-97.52	-58.06	-13.00	45.06	39.46	360
5	3702.9703	-66.64	-53.03	-13.00	40.03	13.61	234
6	6066.6667	-71.39	-50.84	-13.00	37.84	20.55	0
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		WCDMA(RMC) B2-CH 9538					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	55.0405	-98.71	-71.98	-13.00	58.98	26.73	116
2	136.7967	-98.63	-74.61	-13.00	61.61	24.02	55
3	440.279	-98.62	-69.69	-13.00	56.69	28.93	0
4	1057.8378	-96.67	-57.82	-13.00	44.82	38.85	176
5	5294.7195	-71.71	-53.33	-13.00	40.33	18.38	312
6	9963.6364	-81.76	-60.76	-13.00	47.76	21.00	52
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	45.0885	-100.43	-73.78	-13.00	60.78	26.65	360
2	139.9	-98.87	-75.23	-13.00	62.23	23.64	314
3	422.6223	-99.18	-70.57	-13.00	57.57	28.61	71
4	926.2146	-96.75	-59.58	-13.00	46.58	37.17	314
5	4619.4719	-70.44	-53.79	-13.00	40.79	16.65	295
6	11853.3753	-83.93	-60.52	-13.00	47.52	23.41	254
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		WCDMA(RMC) B5-CH 4132					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	37.1697	-98.58	-73.41	-13.00	60.41	25.17	12
2	111.2211	-96.78	-74.31	-13.00	61.31	22.47	258
3	388.0578	-97.78	-69.24	-13.00	56.24	28.54	360
4	2524.0448	-70.23	-59.47	-13.00	46.47	10.76	134
5	6238.6277	-72.54	-52.66	-13.00	39.66	19.88	360
6	8566.1066	-81.31	-62.42	-13.00	49.42	18.89	51
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	57.0737	-98.28	-70.89	-13.00	57.89	27.39	135
2	106.0846	-98.87	-78.53	-13.00	65.53	20.34	360
3	159.3759	-99.81	-73.44	-13.00	60.44	26.37	360
4	257.1837	-98.77	-73.95	-13.00	60.95	24.82	320
5	2793.4587	-69.74	-58.44	-13.00	45.44	11.30	360
6	6027.4655	-73.45	-53.00	-13.00	40.00	20.45	320
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		WCDMA(RMC) B5-CH 4182					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	61.9962	-98.52	-71.21	-13.00	58.21	27.31	258
2	174.2504	-98.06	-73.31	-13.00	60.31	24.75	72
3	604.3264	-98.12	-65.53	-13.00	52.53	32.59	12
4	3433.1866	-70.91	-58.20	-13.00	45.20	12.71	197
5	4885.3171	-71.83	-53.77	-13.00	40.77	18.06	72
6	7321.3021	-81.08	-62.29	-13.00	49.29	18.79	113
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	40.9151	-97.71	-70.88	-13.00	57.88	26.83	197
2	86.0736	-98.67	-79.26	-13.00	66.26	19.41	260
3	441.3491	-98.57	-69.26	-13.00	56.26	29.31	74
4	643.0643	-99.28	-65.84	-13.00	52.84	33.44	197
5	2793.4587	-69.74	-58.44	-13.00	45.44	11.30	360
6	4169.6539	-72.10	-56.80	-13.00	43.80	15.30	74
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		WCDMA(RMC) B5-CH 4233					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	61.9962	-99.52	-72.21	-13.00	59.21	27.31	258
2	161.7302	-98.93	-73.45	-13.00	60.45	25.48	12
3	373.3973	-98.27	-70.59	-13.00	57.59	27.68	321
4	1082.0222	-97.46	-58.24	-13.00	45.24	39.22	197
5	1651.3103	-68.24	-64.36	-13.00	51.36	3.88	258
6	6238.6277	-72.54	-52.66	-13.00	39.66	19.88	360
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	47.0147	-99.81	-72.11	-13.00	59.11	27.70	320
2	159.3759	-98.31	-71.94	-13.00	58.94	26.37	360
3	470.028	-97.80	-67.44	-13.00	54.44	30.36	74
4	1096.2546	-97.42	-58.07	-13.00	45.07	39.35	12
5	5407.5015	-72.08	-53.44	-13.00	40.44	18.64	73
6	6027.4655	-72.45	-52.00	-13.00	39.00	20.45	320
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



3.6.5 TEST RESULTS - LTE

Test Mode		LTE B2-QPSK-5MHz-CH 18625-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.5129	-100.07	-73.07	-13.00	60.07	27.00	111
2	160.5531	-98.64	-73.09	-13.00	60.09	25.55	295
3	493.0353	-98.18	-67.74	-13.00	54.74	30.44	0
4	1042.2142	-96.45	-57.64	-13.00	44.64	38.81	173
5	3750.8251	-59.24	-44.80	-13.00	31.80	14.44	360
6	6281.8482	-71.52	-51.31	-13.00	38.31	20.21	256
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	39.3099	-98.78	-71.75	-13.00	58.75	27.03	71
2	160.446	-99.38	-73.14	-13.00	60.14	26.24	131
3	462.9653	-98.62	-68.48	-13.00	55.48	30.14	191
4	1096.5757	-97.84	-58.49	-13.00	45.49	39.35	191
5	3751.1551	-62.91	-49.17	-13.00	36.17	13.74	298
6	6031.0231	-71.35	-50.91	-13.00	37.91	20.44	51
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B2-QPSK-5MHz-CH 18900-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	72.8043	-100.97	-76.68	-13.00	63.68	24.29	235
2	388.2718	-99.76	-71.21	-13.00	58.21	28.55	357
3	964.6315	-98.98	-61.18	-13.00	48.18	37.80	295
4	5298.0198	-72.50	-54.11	-13.00	41.11	18.39	11
5	7727.5428	-81.38	-62.12	-13.00	49.12	19.26	53
6	13612.0612	-86.40	-60.06	-13.00	47.06	26.34	113
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.5129	-99.37	-70.95	-13.00	57.95	28.42	253
2	160.446	-99.88	-73.64	-13.00	60.64	26.24	131
3	318.9289	-98.05	-71.27	-13.00	58.27	26.78	253
4	1074.5315	-96.97	-57.90	-13.00	44.90	39.07	360
5	5403.6304	-71.81	-53.05	-13.00	40.05	18.76	358
6	17691.0891	-89.02	-54.88	-13.00	41.88	34.14	258
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B2-QPSK-5MHz-CH 19175-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	40.166	-100.69	-74.31	-13.00	61.31	26.38	235
2	160.5531	-99.64	-74.09	-13.00	61.09	25.55	295
3	493.0353	-99.68	-69.24	-13.00	56.24	30.44	0
4	753.5792	-98.35	-63.71	-13.00	50.99	34.64	131
5	6281.8482	-73.02	-52.81	-13.00	39.81	20.21	256
6	13612.0612	-86.40	-60.06	-13.00	47.06	26.34	113
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	53.4353	-99.37	-71.91	-13.00	58.91	27.46	71
2	136.3686	-99.44	-76.08	-13.00	63.08	23.36	131
3	422.7293	-98.90	-70.29	-13.00	57.29	28.61	131
4	712.9423	-98.65	-63.99	-13.00	50.99	34.66	253
5	6031.0231	-72.85	-52.41	-13.00	39.41	20.44	51
6	15483.0783	-85.87	-57.97	-13.00	44.97	27.90	134
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B4-QPSK-5MHz-CH 19975-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	102.9813	-99.13	-77.06	-13.00	64.06	22.07	314
2	377.5708	-98.65	-70.70	-13.00	57.70	27.95	314
3	1069.716	-98.20	-59.10	-13.00	46.10	39.10	10
4	5184.4884	-70.47	-52.14	-13.00	39.14	18.33	47
5	8640.234	-81.02	-62.04	-13.00	49.04	18.98	73
6	11201.6202	-83.62	-61.51	-13.00	48.51	22.11	320
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	39.631	-99.35	-72.12	-13.00	59.12	27.23	53
2	228.5048	-99.35	-76.60	-13.00	63.60	22.75	296
3	726.5327	-99.86	-65.06	-13.00	52.06	34.80	356
4	4358.0858	-72.28	-56.54	-13.00	43.54	15.74	360
5	7333.2133	-79.89	-60.97	-13.00	47.97	18.92	50
6	13951.3951	-85.55	-59.05	-13.00	46.05	26.50	113
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B4-QPSK-5MHz-CH 20175-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	66.2766	-99.93	-73.27	-13.00	60.27	26.66	252
2	262.6413	-97.39	-72.21	-13.00	59.21	25.18	192
3	597.0497	-98.17	-65.70	-13.00	52.70	32.47	360
4	5715.8416	-71.86	-52.28	-13.00	39.28	19.58	109
5	8640.234	-81.02	-62.04	-13.00	49.04	18.98	73
6	15667.9568	-86.88	-57.53	-13.00	44.53	29.35	196
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	64.7785	-97.98	-72.25	-13.00	59.25	25.73	356
2	277.3017	-98.44	-72.97	-13.00	59.97	25.47	236
3	844.1374	-99.71	-63.59	-13.00	50.59	36.12	296
4	6061.0561	-74.51	-53.98	-13.00	40.98	20.53	314
5	8640.234	-78.34	-59.15	-13.00	46.15	19.19	0
6	16590.009	-88.56	-56.24	-13.00	43.24	32.32	176
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B4-QPSK-5MHz-CH 20375-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	56.8597	-99.47	-72.37	-13.00	59.37	27.10	252
2	262.6413	-96.89	-71.71	-13.00	58.71	25.18	192
3	1069.716	-97.20	-58.10	-13.00	45.10	39.10	10
4	3456.4356	-62.15	-48.59	-13.00	35.59	13.56	357
5	6280.8581	-72.02	-51.82	-13.00	38.82	20.20	233
6	12096.7597	-80.10	-56.07	-13.00	43.07	24.03	135
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	47.8708	-99.23	-71.06	-13.00	58.06	28.17	113
2	158.9479	-97.96	-71.66	-13.00	58.66	26.30	296
3	1083.1993	-97.14	-57.99	-13.00	44.99	39.15	113
4	3455.7756	-64.07	-51.10	-13.00	38.10	12.97	314
5	5184.4884	-68.51	-50.40	-13.00	37.40	18.11	73
6	8640.234	-78.34	-59.15	-13.00	46.15	19.19	0
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B5-QPSK-5MHz-CH 20425-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	59.1069	-98.98	-71.45	-13.00	58.45	27.53	135
2	161.1951	-99.29	-73.78	-13.00	60.78	25.51	135
3	441.6702	-97.67	-68.68	-13.00	55.68	28.99	12
4	1663.7928	-65.84	-61.86	-13.00	48.86	3.98	198
5	3274.0348	-70.95	-58.91	-13.00	45.91	12.04	258
6	6232.3865	-72.38	-52.52	-13.00	39.52	19.86	12
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.6199	-99.46	-71.07	-13.00	58.07	28.39	133
2	159.2689	-98.92	-72.57	-13.00	59.57	26.35	10
3	490.039	-98.16	-67.32	-13.00	54.32	30.84	360
4	1095.7196	-97.93	-58.60	-13.00	45.60	39.33	196
5	2231.7463	-70.35	-61.62	-13.00	48.62	8.73	196
6	6024.3449	-72.51	-52.07	-13.00	39.07	20.44	360
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B5-QPSK-5MHz-CH 20525-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	39.631	-98.53	-71.93	-13.00	58.93	26.60	12
2	97.4167	-99.09	-77.28	-13.00	64.28	21.81	135
3	441.6702	-98.17	-69.18	-13.00	56.18	28.99	12
4	618.5589	-97.93	-65.11	-13.00	52.11	32.82	318
5	3710.9222	-70.56	-56.62	-13.00	43.62	13.94	135
6	9965.9566	-81.98	-60.97	-13.00	47.97	21.01	117
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	57.6088	-99.25	-71.86	-13.00	58.86	27.39	256
2	124.4904	-99.92	-77.95	-13.00	64.95	21.97	10
3	346.5377	-99.16	-72.22	-13.00	59.22	26.94	10
4	2659.2719	-69.95	-59.76	-13.00	46.76	10.19	10
5	5334.6869	-72.65	-54.26	-13.00	41.26	18.39	316
6	7604.3804	-80.17	-61.32	-13.00	48.32	18.85	169
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B5-QPSK-5MHz-CH 20625-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	59.1069	-98.98	-71.45	-13.00	58.45	27.53	135
2	148.0328	-99.20	-74.84	-13.00	61.84	24.36	75
3	266.2796	-97.70	-72.60	-13.00	59.60	25.10	360
4	2550.05	-69.51	-58.83	-13.00	45.83	10.68	135
5	4884.2769	-71.93	-53.87	-13.00	40.87	18.06	360
6	7313.1613	-80.32	-61.49	-13.00	48.49	18.83	177
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	39.4169	-99.02	-71.92	-13.00	58.92	27.10	70
2	148.3538	-100.62	-75.96	-13.00	62.96	24.66	133
3	411.6002	-98.99	-70.89	-13.00	57.89	28.10	316
4	2231.7463	-69.35	-60.62	-13.00	47.62	8.73	196
5	6024.3449	-73.01	-52.57	-13.00	39.57	20.44	360
6	9608.1308	-81.36	-61.58	-13.00	48.58	19.78	0
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B7-QPSK-5MHz-CH 20775-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	39.952	-98.86	-72.39	-25.00	47.39	26.47	360
2	159.4829	-98.39	-72.80	-25.00	47.80	25.59	360
3	619.2009	-97.99	-65.17	-25.00	40.17	32.82	193
4	2973.3947	-60.79	-50.27	-25.00	25.27	10.52	72
5	7591.8092	-74.21	-55.32	-25.00	30.32	18.89	260
6	17216.0216	-88.16	-55.35	-25.00	30.35	32.81	199
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.8339	-99.13	-70.78	-25.00	45.78	28.35	357
2	158.9479	-99.26	-72.96	-25.00	47.96	26.30	106
3	1111.0222	-61.81	-57.38	-25.00	32.38	4.43	294
4	2998.4797	-60.87	-49.18	-25.00	24.18	11.69	233
5	7591.8092	-72.54	-53.76	-25.00	28.76	18.78	54
6	17712.1512	-89.05	-54.84	-25.00	29.84	34.21	357
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B7-QPSK-5MHz-CH 21100-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	104.8005	-99.13	-76.97	-25.00	51.97	22.16	360
2	325.2425	-96.63	-70.17	-25.00	45.17	26.46	316
3	799.942	-95.08	-59.26	-25.00	34.26	35.82	132
4	1289.6579	-60.32	-56.11	-25.00	31.11	4.21	316
5	4906.9307	-68.21	-49.94	-25.00	24.94	18.27	294
6	12652.5653	-79.21	-55.33	-25.00	30.33	23.88	74
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.8339	-97.63	-69.28	-25.00	44.28	28.35	357
2	128.1288	-95.95	-73.44	-25.00	48.44	22.51	233
3	604.8615	-95.00	-62.57	-25.00	37.57	32.43	167
4	1914.883	-62.18	-54.70	-25.00	29.70	7.48	0
5	3889.769	-69.63	-54.98	-25.00	29.98	14.65	254
6	14248.6049	-81.83	-54.84	-25.00	29.84	26.99	236
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B7-QPSK-5MHz-CH 21425-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	61.4611	-98.69	-71.33	-25.00	46.33	27.36	316
2	553.9244	-96.79	-65.10	-25.00	40.10	31.69	193
3	1108.3617	-61.64	-56.86	-25.00	31.86	4.78	253
4	6248.8449	-69.35	-49.32	-25.00	24.32	20.03	294
5	15659.766	-82.03	-52.71	-25.00	27.71	29.32	137
6	21720.6	-64.51	-78.34	-25.00	53.34	-13.83	12
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	72.8043	-94.95	-72.54	-25.00	47.54	22.41	45
2	264.1394	-95.52	-70.42	-25.00	45.42	25.10	106
3	749.754	-94.90	-60.00	-25.00	35.00	34.90	357
4	4499.0099	-69.09	-52.84	-25.00	27.84	16.25	315
5	17712.1512	-85.55	-51.34	-25.00	26.34	34.21	357
6	23508.9	-64.01	-77.58	-25.00	52.58	-13.57	0
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B12-QPSK-5MHz-CH 23025-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	57.8228	-99.62	-72.33	-13.00	59.33	27.29	194
2	172.3242	-97.99	-73.14	-13.00	60.14	24.85	72
3	1081.9152	-97.49	-58.27	-13.00	45.27	39.22	194
4	2109.0018	-64.41	-56.26	-13.00	43.26	8.15	257
5	4013.6227	-69.86	-55.74	-13.00	42.74	14.12	257
6	6018.1036	-69.40	-49.66	-13.00	36.66	19.74	257
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	163.5494	-98.53	-72.93	-13.00	59.93	25.60	198
2	490.039	-95.04	-64.20	-13.00	51.20	30.84	74
3	1090.369	-97.25	-58.09	-13.00	45.09	39.16	259
4	1405.8212	-65.50	-62.49	-13.00	49.49	3.01	198
5	2109.0018	-66.19	-58.13	-13.00	45.13	8.06	259
6	6055.5511	-69.42	-48.97	-13.00	35.97	20.45	322
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B12-QPSK-5MHz-CH 23095-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	40.9151	-99.20	-73.14	-13.00	60.14	26.06	134
2	132.9443	-98.81	-74.76	-13.00	61.76	24.05	72
3	438.2458	-97.00	-68.13	-13.00	55.13	28.87	257
4	1249.79	-68.77	-64.49	-13.00	51.49	4.28	318
5	3478.9558	-70.69	-57.69	-13.00	44.69	13.00	257
6	7306.3906	-81.22	-62.36	-13.00	49.36	18.86	53
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	59.1069	-99.50	-72.17	-13.00	59.17	27.33	198
2	137.5458	-99.65	-76.20	-13.00	63.20	23.45	259
3	293.9954	-97.28	-71.23	-13.00	58.23	26.05	198
4	1882.2364	-67.68	-60.28	-13.00	47.28	7.40	360
5	4176.9354	-67.77	-52.43	-13.00	39.43	15.34	74
6	7631.5032	-79.92	-60.99	-13.00	47.99	18.93	295
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B12-QPSK-5MHz-CH 23165-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	57.8228	-99.12	-71.83	-13.00	58.83	27.29	194
2	81.6862	-99.72	-77.62	-13.00	64.62	22.10	257
3	327.2757	-97.65	-71.18	-13.00	58.18	26.47	318
4	4166.5333	-71.53	-56.68	-13.00	43.68	14.85	360
5	6018.1036	-70.90	-51.16	-13.00	38.16	19.74	257
6	8490.189	-80.80	-62.03	-13.00	49.03	18.77	53
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	41.9852	-97.85	-71.35	-13.00	58.35	26.50	198
2	163.7634	-98.41	-72.84	-13.00	59.84	25.57	259
3	351.8882	-95.93	-68.98	-13.00	55.98	26.95	137
4	2822.5845	-65.92	-54.66	-13.00	41.66	11.26	259
5	5924.4849	-66.06	-46.44	-13.00	33.44	19.62	360
6	7631.5032	-79.92	-60.99	-13.00	47.99	18.93	295
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B17-QPSK-10MHz-CH 23780-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	64.2434	-98.99	-71.85	-13.00	58.85	27.14	136
2	159.3759	-99.34	-73.76	-13.00	60.76	25.58	319
3	1089.834	-97.04	-57.86	-13.00	44.86	39.18	136
4	2116.2833	-63.84	-55.57	-13.00	42.57	8.27	258
5	3927.2855	-69.69	-55.62	-13.00	42.62	14.07	76
6	5967.1334	-69.34	-49.68	-13.00	36.68	19.66	136
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	343.8624	-98.55	-71.61	-13.00	58.61	26.94	317
2	1096.2546	-97.64	-58.29	-13.00	45.29	39.35	254
3	1411.0222	-66.03	-63.00	-13.00	50.00	3.03	194
4	2116.2833	-65.03	-56.92	-13.00	43.92	8.11	317
5	3532.0064	-69.41	-56.93	-13.00	43.93	12.48	13
6	6023.3047	-69.25	-48.80	-13.00	35.80	20.45	254
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B17-QPSK-10MHz-CH 23790-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	51.4021	-98.59	-71.94	-13.00	58.94	26.65	198
2	201.0031	-98.78	-76.03	-13.00	63.03	22.75	319
3	383.7774	-98.53	-70.22	-13.00	57.22	28.31	76
4	1728.2857	-67.44	-63.06	-13.00	50.06	4.38	76
5	4487.9576	-69.26	-53.65	-13.00	40.65	15.61	319
6	7313.1413	-81.12	-62.29	-13.00	49.29	18.83	174
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	57.5018	-98.60	-71.21	-13.00	58.21	27.39	254
2	109.4019	-99.76	-79.23	-13.00	66.23	20.53	194
3	242.2022	-97.64	-73.42	-13.00	60.42	24.22	73
4	1947.7696	-68.37	-60.81	-13.00	47.81	7.56	194
5	4377.6955	-65.96	-50.42	-13.00	37.42	15.54	254
6	7596.6697	-80.74	-61.93	-13.00	48.93	18.81	357
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B17-QPSK-10MHz-CH 23800-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	38.8819	-98.79	-72.63	-13.00	59.63	26.16	136
2	242.5233	-99.18	-75.40	-13.00	62.40	23.78	136
3	503.5224	-98.15	-67.50	-13.00	54.50	30.65	258
4	3108.6417	-70.33	-59.32	-13.00	46.32	11.01	360
5	5967.1334	-69.84	-50.18	-13.00	37.18	19.66	136
6	8519.892	-80.39	-61.55	-13.00	48.55	18.84	52
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	40.487	-97.00	-70.04	-13.00	57.04	26.96	73
2	153.0623	-99.67	-74.28	-13.00	61.28	25.39	317
3	336.2646	-96.09	-69.16	-13.00	56.16	26.93	317
4	2821.5443	-65.80	-54.53	-13.00	41.53	11.27	194
5	6023.3047	-65.25	-44.80	-13.00	31.80	20.45	254
6	7596.6697	-80.74	-61.93	-13.00	48.93	18.81	357
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B41-QPSK-5MHz-CH 39675-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	163.0143	-99.22	-73.82	-25.00	48.82	25.40	0
2	1033.5464	-95.74	-56.98	-25.00	31.98	38.76	234
3	2996.5793	-60.99	-50.29	-25.00	25.29	10.70	234
4	6252.8053	-71.54	-51.49	-25.00	26.49	20.05	316
5	7764.9865	-72.44	-53.17	-25.00	28.17	19.27	235
6	17194.9595	-88.30	-55.29	-25.00	30.29	33.01	175
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	153.8114	-98.21	-72.70	-25.00	47.70	25.51	75
2	291.8552	-98.41	-72.42	-25.00	47.42	25.99	138
3	1106.4613	-62.05	-57.57	-25.00	32.57	4.48	200
4	6017.1617	-71.51	-51.11	-25.00	26.11	20.40	235
5	7764.9865	-74.89	-55.77	-25.00	30.77	19.12	136
6	17403.2403	-88.13	-54.78	-25.00	29.78	33.35	198
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B41-QPSK-5MHz-CH 40620-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	39.738	-100.87	-74.31	-25.00	49.31	26.56	52
2	102.7673	-99.26	-77.19	-25.00	52.19	22.07	357
3	336.5857	-99.56	-73.07	-25.00	48.07	26.49	112
4	1223.1446	-63.49	-59.25	-25.00	34.25	4.24	0
5	4869.967	-71.78	-53.55	-25.00	28.55	18.23	133
6	13612.0612	-85.99	-59.65	-25.00	34.65	26.34	52
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.8339	-100.49	-72.14	-25.00	47.14	28.35	200
2	175.5346	-98.00	-74.82	-25.00	49.82	23.18	263
3	607.2157	-99.55	-67.05	-25.00	42.05	32.50	200
4	1618.4237	-61.67	-57.90	-25.00	32.90	3.77	12
5	4637.6238	-70.58	-53.92	-25.00	28.92	16.66	112
6	14263.8164	-85.36	-58.46	-25.00	33.46	26.90	360
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B41-QPSK-5MHz-CH 41565-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	47.5498	-100.75	-74.11	-25.00	49.11	26.64	295
2	163.0143	-100.72	-75.32	-25.00	50.32	25.40	0
3	773.6174	-97.51	-62.01	-25.00	37.01	35.50	234
4	6008.2508	-73.01	-53.29	-25.00	28.29	19.72	194
5	17194.9595	-89.30	-56.29	-25.00	31.29	33.01	175
6	23598	-65.00	-78.64	-25.00	53.64	-13.64	52
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	75.8006	-99.76	-78.31	-25.00	53.31	21.45	360
2	159.804	-99.26	-72.89	-25.00	47.89	26.37	326
3	1106.4613	-61.55	-57.07	-25.00	32.07	4.48	200
4	11971.5572	-83.14	-59.56	-25.00	34.56	23.58	318
5	17403.2403	-88.13	-54.78	-25.00	29.78	33.35	198
6	23591.7	-65.01	-78.51	-25.00	53.51	-13.50	200
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B66-QPSK-1.4MHz-CH 131979-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	48.5129	-99.16	-72.16	-13.00	59.16	27.00	360
2	77.6198	-100.03	-77.15	-13.00	64.15	22.88	12
3	267.9918	-98.28	-73.20	-13.00	60.20	25.08	313
4	916.6907	-96.23	-59.23	-13.00	46.23	37.00	73
5	5732.0132	-70.37	-50.75	-13.00	37.75	19.62	235
6	7642.1242	-81.16	-62.09	-13.00	49.09	19.07	360
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	38.2398	-98.88	-72.48	-13.00	59.48	26.40	296
2	72.0552	-99.43	-76.77	-13.00	63.77	22.66	53
3	246.4826	-99.69	-75.30	-13.00	62.30	24.39	173
4	920.9711	-98.51	-61.30	-13.00	48.30	37.21	173
5	6026.7327	-70.26	-49.84	-13.00	36.84	20.42	135
6	13619.0819	-85.42	-59.58	-13.00	46.58	25.84	52
Remark:							
1. Level (dBm) = Reading (dBm) + Factor (dB).							
2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B66-QPSK-1.4MHz-CH 132322-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	38.3468	-99.83	-73.97	-13.00	60.97	25.86	313
2	114.2174	-100.15	-77.53	-13.00	64.53	22.62	253
3	392.7663	-98.30	-69.60	-13.00	56.60	28.70	133
4	5732.0132	-70.37	-50.75	-13.00	37.75	19.62	235
5	8702.2502	-79.76	-60.73	-13.00	47.73	19.03	73
6	15665.6166	-85.64	-56.30	-13.00	43.30	29.34	73
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	160.5531	-100.47	-74.25	-13.00	61.25	26.22	0
2	276.1246	-98.22	-72.77	-13.00	59.77	25.45	0
3	489.932	-95.99	-65.15	-13.00	52.15	30.84	357
4	6026.7327	-70.26	-49.84	-13.00	36.84	20.42	135
5	8702.2502	-79.66	-60.43	-13.00	47.43	19.23	0
6	15670.297	-85.61	-56.02	-13.00	43.02	29.59	173
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



Test Mode		LTE B66-QPSK-1.4MHz-CH 132665-1RB					
Horizontal							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	60.498	-99.52	-72.09	-13.00	59.09	27.43	73
2	166.4386	-99.06	-73.86	-13.00	60.86	25.20	133
3	2488.4177	-60.69	-49.78	-13.00	36.78	10.91	133
4	3480.8581	-54.56	-40.94	-13.00	27.94	13.62	295
5	5221.7822	-68.66	-50.31	-13.00	37.31	18.35	51
6	12184.5185	-80.75	-57.09	-13.00	44.09	23.66	134
Vertical							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]
1	56.0036	-99.07	-71.65	-13.00	58.65	27.42	236
2	489.932	-95.49	-64.65	-13.00	51.65	30.84	357
3	1064.9005	-96.52	-57.67	-13.00	44.67	38.85	0
4	3481.1881	-58.73	-45.78	-13.00	32.78	12.95	256
5	5222.1122	-67.61	-49.39	-13.00	36.39	18.22	73
6	8702.2502	-79.66	-60.43	-13.00	47.43	19.23	0
Remark: 1. Level (dBm) = Reading (dBm) + Factor (dB). 2. Margin (dB) = Limit (dBm) - Level (dBm)							



3.2 OUT POWER MEASUREMENT

3.1.1 TEST PROCEDURES

Subclause 5.6 of Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$EIRP = PT + GT - LC$, $ERP = EIRP - 2.15\text{dBi}$, where

PT = transmitter output power dBm;

GT = gain of the transmitting antenna dBi;

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

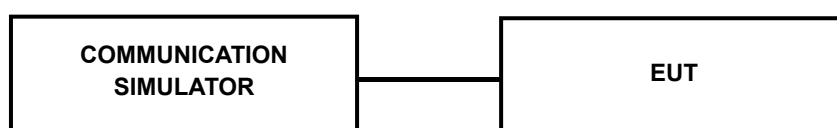
CONDUCTED POWER MEASUREMENT:

The EUT was set up for the maximum power with LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

3.1.2 TEST SETUP

EIRP / ERP Measurement:

CONDUCTED POWER MEASUREMENT:



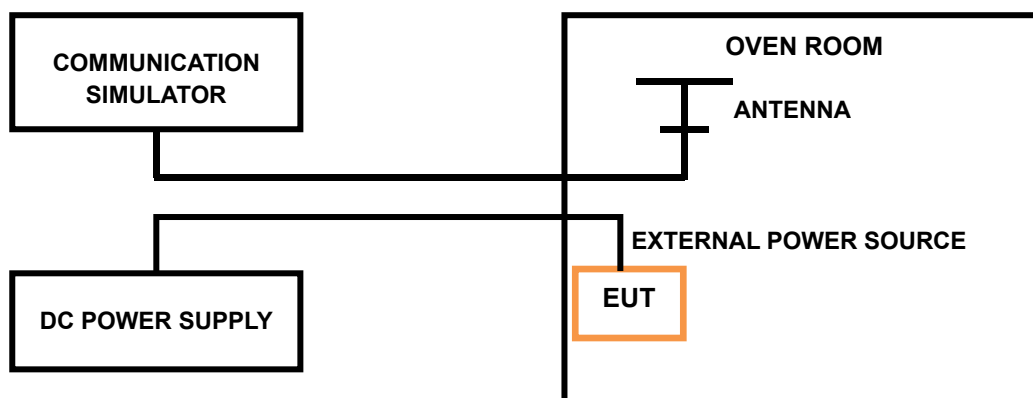
3.3 FREQUENCY STABILITY

3.2.1 TEST PROCEDURE

- Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

3.2.2 TEST SETUP

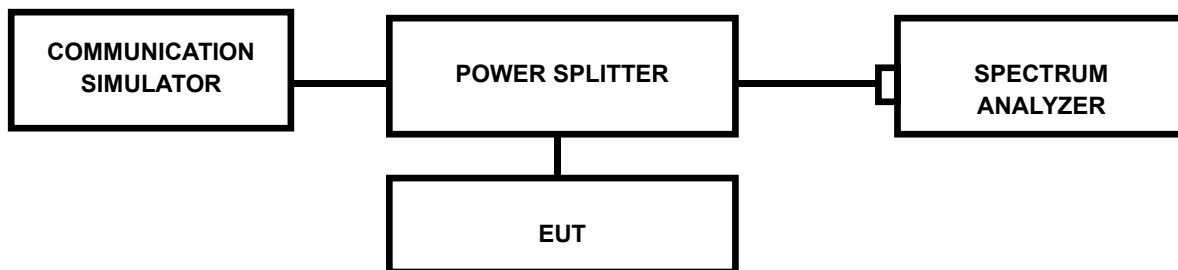


3.4 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 TEST PROCEDURES

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

3.3.2 TEST SETUP



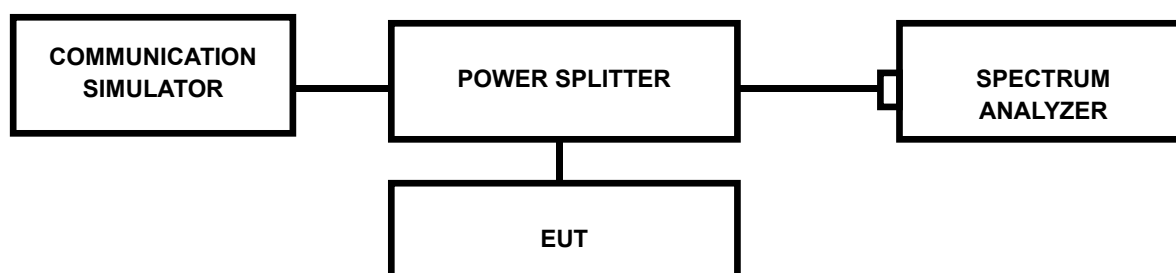


3.5 BAND EDGE MEASUREMENT

3.4.1 TEST PROCEDURES

- a. All measurements were done at low and high operational frequency range.
- b. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 30kHz and VBW of the spectrum is 100kHz. (LTE bandwidth 1.4MHz).
- c. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 30kHz and VBW of the spectrum is 100kHz. (LTE bandwidth 3MHz).
- d. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 100kHz and VBW of the spectrum is 300kHz. (LTE bandwidth 5MHz).
- e. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 100kHz and VBW of the spectrum is 300kHz. (LTE bandwidth 10MHz).
- f. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 200kHz and VBW of the spectrum is 600kHz. (LTE bandwidth 15MHz).
- g. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 300kHz and VBW of the spectrum is 1000kHz. (LTE bandwidth 20MHz).
- h. Set the spectrum with RMS detector.
- i. Record the AVG trace plot into the test report.

3.4.2 TEST SETUP



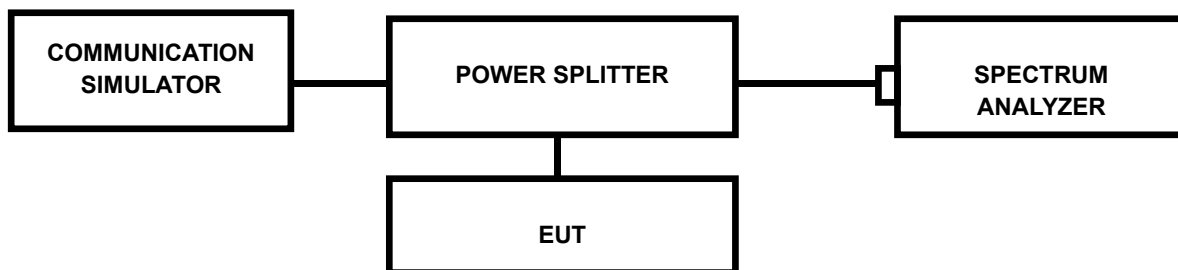


3.6 CONDUCTED SPURIOUS EMISSIONS

3.5.1 TEST PROCEDURE

- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 30 MHz up to a frequency including its 10th harmonic. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.2 TEST SETUP



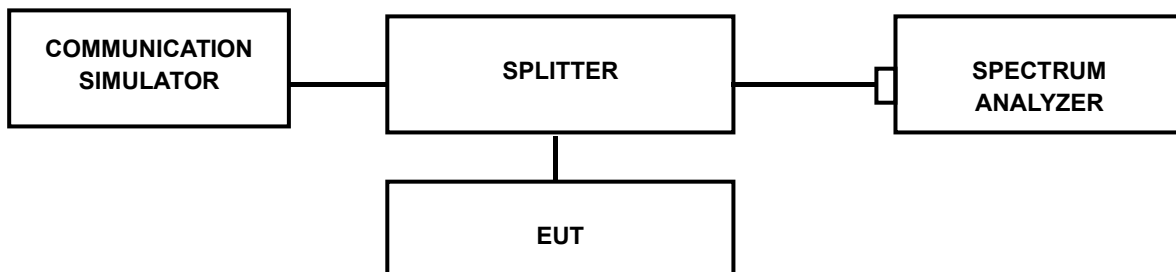


3.7 PEAK TO AVERAGE RATIO

3.7.1 TEST PROCEDURES

1. Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

3.7.2 TEST SETUP





4 PHOTOGRAPHS OF TEST SETUP

Please refer to the attached file (Test Setup Photo).



5 PHOTOGRAPHS OF THE EUT

Please refer to the attached file (External Photos report and Internal Photos).

----- End of the Report -----



Important

- (1) The test report is invalid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of Approval and Reviewer;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days.
- (6) Generally, commission test is responsible for the tested samples only.
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

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