



FCC TEST REPORT (PART 22)

Applicant:	PAX Technology Limited			
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Manufacturer or Supplier:	PAX Computer Technology (Shen:	zhen) Co., Ltd.		
Address:	4/F, No.3 Building, Software Park, industrial Park, Shenzhen, Guang	Second Central Science-Tech Road, High-Tech dong, P.R.C.		
Product:	Mobile Payment Terminal			
Brand Name:	PAX			
Model Name:	S920			
FCC ID:	V5PS920LTE			
Date of tests:	Jul. 25, 2018 ~ Sep. 05, 2018			
The tests have bee	en carried out according to the requi	rements of the following standard:		
⊠ FCC PART 22, ⊠ ANSI/TIA/EIA-6	Subpart H ⊠ ANSI C63.26-2015 603-D ⊠ ANSI/TIA/EIA-603-I	Ē		
CONCLUSION: Th	ne submitted sample was found to C	OMPLY with the test requirement		
Prepared by Roger Li Engineer / Mobile Department Approved by Sam Tung Manager / Mobile Department				
Roger				
Date: Sep. 07, 2018 Date: Sep. 07, 2018 This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at				
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RELEASE CONTROL RECORD

ISSUE NO.	O. REASON FOR CHANGE	
RF180724W016-3	Original release	Sep. 07, 2018

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SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 22 & Part 2						
STANDARD SECTION	TEST TYPE	RESULT	REMARK			
2.1046 22.913 (a)	Effective Radiated Power	PASS	Meet the requirement of limit.			
2.1055 22.355	Frequency Stability	N/A(see note)	Meet the requirement of limit.			
2.1049 22.917b	Occupied Bandwidth	N/A(see note)	Meet the requirement of limit.			
	Peak to average ratio*	N/A(see note)	Meet the requirement of limit.			
22.917	Band Edge Measurements	N/A(see note)	Meet the requirement of limit.			
2.1051 22.917	Conducted Spurious Emissions	N/A(see note)	Meet the requirement of limit.			
2.1053 22.917	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -15.67dB at 261.830MHz.			

Note: The product PAX S920 is fully integrated the LTE module Quectel BG96 (FCC ID: XMR201707BG96), no other modification on the LTE Module radio parameter such as power, frequency range, modulation etc., for this report only test Effective Radiated Power and Radiated Spurious Emissions, other test data are copied from the module report. Please refer to this report for details.

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:

MEASUREMENT FREQUENCY		UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.66dB
	9KHz ~ 30MHz	2.68dB
Radiated emissions	30MHz ~ 1GHz	3.26dB
Naulateu etilissions	1GHz ~ 18GHz	4.48dB
	18GHz ~ 40GHz	4.12dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

^{*} Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01.



1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 16,18	Mar. 15,19
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510322	Mar. 16,18	Mar. 15,19
Bilog Antenna 1	ETS-LINDGREN	3143B	00161964	Nov. 26,16	Nov. 25,18
Bilog Antenna 2	ETS-LINDGREN	3143B	00161965	Nov. 26,16	Nov. 25,18
Horn Antenna 1	ETS-LINDGREN	3117	00168728	Nov. 26,16	Nov. 25,18
Horn Antenna 2	ETS-LINDGREN	3117	00168692	Nov. 26,16	Nov. 25,18
Loop antenna	Daze	ZN30900A	0708	Nov. 20,17	Nov. 19,18
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40 -K-SG/QMS-00 361	15433	Dec. 16,16	Dec. 15,18
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Mar. 02,18	Mar. 01,19
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jul. 09,18	Jul. 08,19
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jul. 09,18	Jul. 08,19
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Jul. 09,18	Jul. 08,19
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn- CT0001143-1216	Apr. 21,18	Apr. 20,19
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	ADT	ADT_Radiated _V7.6.15.9.2	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SM A	1505	Jul. 09,18	Jul. 08,19
Power Meter	Anritsu	ML2495A	1506002	Mar. 02,18	Mar. 01,19
Power Sensor	Anritsu	MA2411B	1339352	Mar. 16,18	Mar. 15,19
Humid & Temp Programmable Tester	Juyi	ITH-120-45-CP -AR	IAA1504-001	Jul. 09,18	Jul. 08,19
MXG Analog Microvave Signal Generator	KEYSIGHT	N5183A	MY50143024	Mar. 13,18	Mar. 12,19

NOTE: 1. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

- 2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
- 3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
- 4. The FCC Site Registration No. is 525120.

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2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

EUT	Mobile Payment Terminal			
	·			
MODEL NAME	S920			
POWER SUPPLY	5Vdc (adapter or host equipment) 3.6Vdc (Li-ion, battery)			
MODULATION TYPE	GSM/GPRS/EDGE	GMSK		
NODOLATION TIPE	LTE	QPSK, 16QAM		
	GSM/GPRS/EDGE	824.2MHz ~ 848.8MHz		
	LTE Band 5 (Channel Bandwidth: 1.4MHz)	824.7MHz ~ 848.3MHz		
	LTE Band 5 (Channel Bandwidth: 3MHz)	825.5MHz ~ 847.5MHz		
	LTE Band 5 (Channel Bandwidth: 5MHz)	826.5MHz ~ 846.5MHz		
	LTE Band 5 (Channel Bandwidth: 10MHz)	829MHz ~ 844MHz		
FREQUENCY RANGE	LTE Band 26 (Channel Bandwidth: 1.4MHz)	824.7MHz ~ 848.3MHz		
	LTE Band 26 (Channel Bandwidth: 3MHz)	825.5MHz ~ 847.5MHz		
	LTE Band 26 (Channel Bandwidth: 5MHz)	826.5MHz ~ 846.5MHz		
	LTE Band 26 (Channel Bandwidth: 10MHz)	829MHz ~ 844MHz		
	LTE Band 26 (Channel Bandwidth: 15MHz)	831.5MHz ~ 841.5MHz		
	GSM	515mW		
	EDGE	251mW		
	LTE Band 5 (Channel Bandwidth: 1.4MHz)	94mW		
	LTE Band 5 (Channel Bandwidth: 3MHz)	96mW		
MAX. ERP POWER	LTE Band 5 (Channel Bandwidth: 5MHz)	94mW		
	LTE Band 5 (Channel Bandwidth: 10MHz)	85mW		
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	76mW		
	LTE Band 26 (Channel Bandwidth: 3MHz)	80mW		
	LTE Band 26 (Channel Bandwidth: 5MHz)	80mW		



	LTE Band 26 (Channel Bandwidth: 10MHz)	70mW	
	LTE Band 26 (Channel Bandwidth: 15MHz)	68mW	
	GSM	246KGXW	
	EDGE	249KG7W	
	LTE Band 5	QPSK: 1M11G7D	
	(Channel Bandwidth: 1.4MHz)	16QAM: 0M95W7D	
	LTE Band 5	QPSK: 1M16G7D	
	(Channel Bandwidth: 3MHz)	16QAM: 0M98W7D	
	LTE Band 5	QPSK: 1M16G7D	
	(Channel Bandwidth: 5MHz)	16QAM: 1M01W7D	
	LTE Band 5 (Channel Bandwidth: 10MHz)	QPSK: 1M20G7D	
EMISSION		16QAM: 1M05W7D	
DESIGNATOR	LTE Band 26 (Channel Bandwidth: 1.4MHz)	QPSK: 1M11G7D	
		16QAM: 0M95W7D	
	LTE Band 26 (Channel Bandwidth: 3MHz) LTE Band 26 (Channel Bandwidth: 5MHz) LTE Band 26	QPSK: 1M17G7D	
		16QAM: 0M99W7D	
		QPSK: 1M15G7D	
		16QAM: 1M02W7D	
		QPSK: 1M21G7D	
	(Channel Bandwidth: 10MHz)	16QAM: 1M06W7D	
	LTE Band 26	QPSK: 1M20G7D	
	(Channel Bandwidth: 15MHz)	16QAM: 1M06W7D	
ANTENNA TYPE	Fixed Internal antenna with 0.8dBi gain		
HW VERSION	S920-xxx-xxx-xxxx		
I/O PORTS	Refer to user's manual		
DATA CABLE	N/A		

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. The EUT was powered by the following adapter:

ADAPTER	· · · · · · · · · · · · · · · · · · ·
BRAND:	Shenzhen Sorghum red Electronics Technology Co., Ltd
MODEL:	GLH50D1000HW
INPUT:	AC 100-240V, 400mA
OUTPUT:	DC 5V, 1000mA

3. There were Sample A and B for this project, one carries a GPS module and the other removes it. The difference is as below, the sample A was worst and record in report

SAMPLE	SW VERSION	GPS
Α	V0.0.0.1	With GPS
В	V0.0.0.2	Without GPS

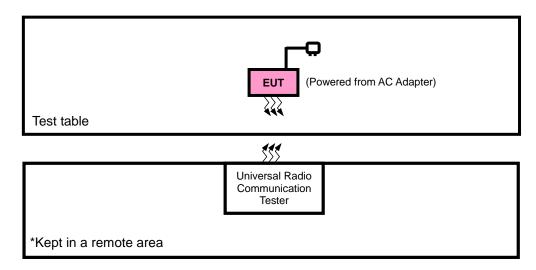


4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

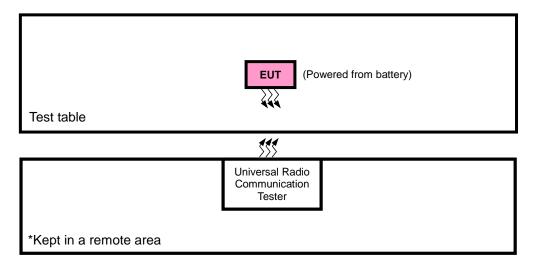


2.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION



FOR CONDUCTED & E.R.P. TEST



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2.3 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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	LONG WEI	PS-6403D	010934269	N/A
2	PC	HP	A6608CN	3CR83825X3	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable 1.0m
2	AC Line: Unshielded, Detachable 1.5m

NOTE:

2.4 TEST ITEM AND TEST CONFIGURATION

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 The worst case in ERP and radiated emission was found when positioned on X-plane for GSM/EDGE/LTE. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
Α	EUT + Adapter + USB Cable with GSM or LTE link
В	EUT + Battery with GSM or LTE link

GSM MODE

EUT CONFIGURE MODE	TEST ITEM AVAILABLE CHANNEL		TESTED CHANNEL	MODE
В	ERP	128 to 251	128, 189, 251	GSM, EDGE
В	FREQUENCY STABILITY	128 to 251	128, 251	GSM, EDGE
В	OCCUPIED BANDWIDTH	128 to 251	128, 189, 251	GSM, EDGE
В	BAND EDGE	128 to 251	128, 251	GSM, EDGE
В	CONDCUDETED EMISSION	128 to 251	128, 189, 251	GSM, EDGE
А	RADIATED EMISSION	128 to 251	128, 189, 251	GSM, EDGE

^{1.} All power cords of the above support units are non shielded (1.8m).



LTE BAND 5 MODE

TEST ITEM	Available Channel	Tested Channel	Channel bandwidth	modulation	mode
	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
ERP	20415 to 20635	20415, 20525, 20635	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
EKP	20425 to 20625	20425, 20525, 20625	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
	20407 to 20643	20407, 20643	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
FREQUENCY	20415 to 20635	20415, 20635	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
STABILITY	20425 to 20625	20425, 20625	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
	20450 to 20600	20450, 20600	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK	6 RB / 0 RB Offset
	20407 10 20043	20407, 20323, 20043		16QAM	6 RB / 0 RB Offset
	20415 to 20635 20	20445 20525 20625	3MHz	QPSK	15 RB / 0 RB Offset
OCCUPIED	20413 to 20033	20415, 20525, 20635		16QAM	15 RB / 0 RB Offset
BANDWIDTH	20425 to 20625	20425, 20525, 20625	5MHz	QPSK	25 RB / 0 RB Offset
	20423 10 20023	20423, 20323, 20023	SIVII 12	16QAM	25 RB / 0 RB Offset
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK	50 RB / 0 RB Offset
	20430 10 20000	20430, 20323, 20000	TOWN 12	16QAM	50 RB / 0 RB Offset
	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
PEAK TO	20415 to 20635	20415, 20525, 20635	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
AVERAGE RATIO	20425 to 20625	20425, 20525, 20625	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK,16QAM	1 RB / 0 RB Offset



			4.4.841.1-	0.701/	1 RB / 0 RB Offset
	20407 to 20643	20407	1.4 MHz	QPSK	6 RB / 0 RB Offset
	20407 to 20643	20642	1.4 MHz	QPSK	1 RB / 5 RB Offset
	20407 10 20643	20643	1.4 IVIDZ	QPSK	6 RB / 0 RB Offset
	20415 to 20635	20415	3 MHz	QPSK	1 RB / 0 RB Offset
	20413 to 20033	20413	3 IVII IZ	QFSK	15 RB / 0 RB Offset
	20415 to 20635	20635	3 MHz	QPSK	1 RB / 14 RB Offset
BAND EDGE	20413 to 20033	20055	3 IVII IZ	QI SIN	15 RB / 0 RB Offset
	20425 to 20625	20425	5MHz	QPSK	1 RB / 0 RB Offset
	20423 10 20023	20425	SIVII 12	QFSK	25 RB / 0 RB Offset
	20425 to 20625	20625	5MHz	QPSK	1 RB / 24 RB Offset
	20423 10 20023	20023		QFSN	25 RB / 0 RB Offset
	20450 to 20600	20450	10MHz	QPSK	1 RB / 0 RB Offset
	20450 10 20600	20430		QI OIL	50 RB / 0 RB Offset
	20450 to 20600	20600	10MHz	QPSK	1 RB / 49 RB Offset
	20430 10 20000			QI SIN	50 RB / 0 RB Offset
	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK	1 RB / 0 RB Offset
CONDCUDETED	20415 to 20635	20415, 20525, 20635	3MHz	QPSK	1 RB / 0 RB Offset
EMISSION	20425 to 20625	20425, 20525, 20625	5MHz	QPSK	1 RB / 0 RB Offset
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK	1 RB / 0 RB Offset
	20407 to 20643	20525	1.4MHz	QPSK	1 RB / 0 RB Offset
RADIATED	20415 to 20635	20525	3MHz	QPSK	1 RB / 0 RB Offset
EMISSION	20425 to 20625	20425, 20525, 20625	5MHz	QPSK	1 RB / 0 RB Offset
	20450 to 20600	20525	10MHz	QPSK	1 RB / 0 RB Offset



LTE BAND 26 MODE

TEST ITEM	Available Channel	Tested Channel	Channel bandwidth	modulation	mode
	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
ERP	26815 to 270155	26815, 26915, 27015	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
	20450 to 20600	26865, 26915, 26965	15MHz	QPSK,16QAM	1 RB / 0 RB Offset
	26797 to 27033	26797, 27033	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
	26805 to 27025	26805, 27025	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
FREQUENCY STABILITY	26815 to 270155	26815, 270155	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
	26840 to 26990	26840, 26990	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
	20450 to 20600	20450, 20600	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
	26707 to 27022	26707 26045 27022	1.4MHz	QPSK	6 RB / 0 RB Offset
	26797 to 27033	26797, 26915, 27033		16QAM	6 RB / 0 RB Offset
	26805 to 27025	26005 26045 27025	3MHz	QPSK	15 RB / 0 RB Offset
		26805, 26915, 27025		16QAM	15 RB / 0 RB Offset
OCCUPIED	20045 to 270455 20045	26815, 26915, 27015	5MHz	QPSK	25 RB / 0 RB Offset
BANDWIDTH	26815 to 270155	20015, 20915, 27015	SIVIEZ	16QAM	25 RB / 0 RB Offset
	26940 to 26000	26040 26045 26000	10MLI=	QPSK	50 RB / 0 RB Offset
	26840 to 26990	26840, 26915, 26990	10MHz	16QAM	50 RB / 0 RB Offset
	20450 to 20600	26065 26045 26065	15MH=	QPSK	75 RB / 0 RB Offset
	20450 to 20600	26865, 26915, 26965	15MHz	16QAM	75 RB / 0 RB Offset
	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	26815 to 270155	26815, 26915, 27015	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
	20450 to 20600	26865, 26915, 26965	15MHz	QPSK,16QAM	1 RB / 0 RB Offset

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P		-			
	26797 to 27033	26797	1.4 MHz	QPSK	1 RB / 0 RB Offset
	20/3/ 10/2/003	20131	1.7 1/11/12	QI OIL	6 RB / 0 RB Offset
	26797 to 27033	27033	1.4 MHz	QPSK	1 RB / 5 RB Offset
	20191 10 21033	27000	1.4 1/11 12	QI SIN	6 RB / 0 RB Offset
	26805 to 27025	26805	3 MHz	QPSK	1 RB / 0 RB Offset
	20003 to 27023	20003	3 IVII 12	QI SIN	15 RB / 0 RB Offset
	26805 to 27025	27025	3 MHz	QPSK	1 RB / 14 RB Offset
	20003 10 27023	27023	3 IVII IZ	QFSN	15 RB / 0 RB Offset
	26915 to 270155	26945	EMU-	QPSK	1 RB / 0 RB Offset
BAND EDGE	26815 to 270155	26815	5MHz	QPSK	25 RB / 0 RB Offset
BAND EDGE	26815 to 270155	270155	5MHz	QPSK	1 RB / 24 RB Offset
	20015 to 270155	270133	SIVITZ	QF3K	25 RB / 0 RB Offset
	26840 to 26990	20010	401411	QPSK	1 RB / 0 RB Offset
	20040 10 20990	26840	10MHz	QPSK	50 RB / 0 RB Offset
	26840 to 26990	26990	10MHz	QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
	20450 to 20600	20450	15MHz	QPSK	1 RB / 49 RB Offset
	20450 10 20600	20430		Q1 OIX	75 RB / 0 RB Offset
	20450 to 20600	20600	15MHz	QPSK	1 RB / 49 RB Offset
	20430 10 20000	20600	131011 12	QFSN	75 RB / 0 RB Offset
	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK	1 RB / 0 RB Offset
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK	1 RB / 0 RB Offset
CONDCUDETED EMISSION	26815 to 270155	26815, 26915, 27015	5MHz	QPSK	1 RB / 0 RB Offset
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK	1 RB / 0 RB Offset
	20450 to 20600	26865, 26915, 26965	15MHz	QPSK	1 RB / 0 RB Offset
	26797 to 27033	26915	1.4MHz	QPSK	1 RB / 0 RB Offset
	26805 to 27025	26915	3MHz	QPSK	1 RB / 0 RB Offset
RADIATED EMISSION	26815 to 270155	26915	5MHz	QPSK	1 RB / 0 RB Offset
	26840 to 26990	26915	10MHz	QPSK	1 RB / 0 RB Offset
	20450 to 20600	26865, 26915, 26965	15MHz	QPSK	1 RB / 0 RB Offset
	20450 to 20600	26865, 26915, 26965	15MHz	QPSK	1 RB / 0 RB Offset



TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	23deg. C, 62%RH	3.6Vdc from Battery	Vincent Chen
FREQUENCY STABILITY	23deg. C, 62%RH	DC 4.75V/5V/5.25V	Bert Ma
OCCUPIED BANDWIDTH	23deg. C, 62%RH	3.6Vdc from Battery	Bert Ma
BAND EDGE	23deg. C, 62%RH	3.6Vdc from Battery	Bert Ma
CONDCUDETED EMISSION	23deg. C, 62%RH	3.6Vdc from Battery	Bert Ma
RADIATED EMISSION	25deg. C, 63.6%RH	DC 5V from adaptor	Vincent Chen

2.5 EUT OPERATING CONDITIONS

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

2.6 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2
FCC 47 CFR Part 22
KDB 971168 D01 Power Meas License Digital Systems v03r01
ANSI/TIA/EIA-603-D
ANSI/TIA/EIA-603-E
ANSI C63.26-2015

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

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TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Mobile / Portable station are limited to 7 watts e.r.p.

3.1.2 TEST PROCEDURES

EIRP / ERP MEASUREMENT:

- a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 1MHz for GSM, GPRS, EDGE, and 10MHz for LTE mode.
- b. 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.
- c. 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 b. Record the power level of S.G
- d. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.

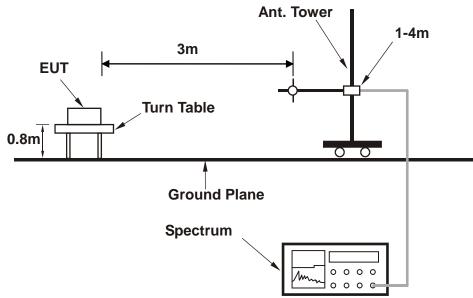
CONDUCTED POWER MEASUREMENT:

The EUT was set up for the maximum power with GSM, GPRS, EDGE 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.

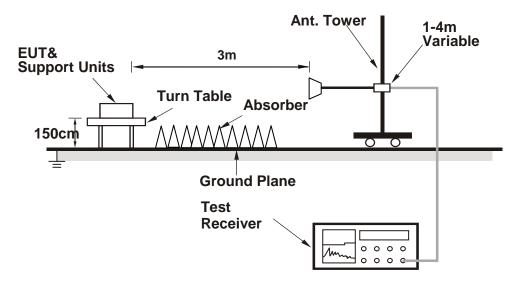


3.1.3 TEST SETUP

ERP MEASUREMENT:

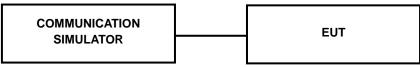


EIRP MEASUREMENT:



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

CONDUCTED POWER MEASUREMENT:



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



3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

The test results was recorded in Report No.:RXA1706-0199RF05.

ERP POWER (dBm)

GSM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
128	824.2	-4.34	33.56	27.07	509.21	Н
189	836.4	-4.36	33.63	27.12	515.11	Н
251	848.8	-4.38	33.57	27.04	505.59	Н
128	824.2	-16.74	34.24	15.35	34.25	V
189	836.4	-16.88	34.59	15.56	35.94	V
251	848.8	-15.76	34.62	16.71	46.91	V

REMARKS: 1. ERP Output Power (dBm) = SPA LVL (dBm) + Correction Factor (dB) -2.15(dB). 2. Correction factor (dB) = Free Space Loss + Antenna Factor + Cable Loss

EDGE

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
128	824.2	-7.45	33.56	23.96	248.83	Н
189	836.4	-7.48	33.63	24.00	251.13	Н
251	848.8	-7.96	33.57	23.46	221.72	Н
128	824.2	-16.54	34.24	15.55	35.86	V
189	836.4	-16.42	34.59	16.02	39.96	V
251	848.8	-15.75	34.62	16.72	47.02	V

REMARKS: 1. ERP Output Power (dBm) = SPA LVL (dBm) + Correction Factor (dB) -2.15(dB). 2. Correction factor (dB) = Free Space Loss + Antenna Factor + Cable Loss



LTE BAND 5

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
20407	824.7	-12.05	33.67	19.47	88.57	Н	7
20525	836.5	-11.72	33.62	19.75	94.49	Н	7
20643	848.3	-11.95	33.65	19.55	90.05	Н	7
20407	824.7	-18.05	34.25	14.05	25.40	V	7
20525	836.5	-18.19	34.60	14.26	26.66	V	7
20643	848.3	-18.15	34.63	14.33	27.10	V	7

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
20407	824.7	-12.88	33.67	18.64	73.16	Н	7
20525	836.5	-12.74	33.62	18.73	74.71	Н	7
20643	848.3	-13.05	33.65	18.45	69.90	Н	7
20407	824.7	-18.88	34.25	13.22	20.98	V	7
20525	836.5	-19.21	34.60	13.24	21.08	V	7
20643	848.3	-19.25	34.63	13.23	21.04	V	7

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
20415	825.5	-11.86	33.72	19.71	93.56	Н	7
20525	836.5	-11.66	33.62	19.81	95.81	Н	7
20635	847.5	-11.82	33.65	19.68	92.88	Н	7
20415	825.5	-17.86	34.30	14.29	26.86	V	7
20525	836.5	-18.13	34.60	14.32	27.03	V	7
20635	847.5	-18.02	34.57	14.40	27.55	V	7



CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
20415	825.5	-13.01	33.72	18.56	71.80	Н	7
20525	836.5	-12.76	33.62	18.71	74.37	Н	7
20635	847.5	-12.98	33.65	18.52	71.10	Н	7
20415	825.5	-19.01	34.30	13.14	20.61	V	7
20525	836.5	-19.23	34.60	13.22	20.98	V	7
20635	847.5	-19.18	34.57	13.24	21.09	V	7

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
20425	826.5	-11.87	33.69	19.67	92.77	Н	7
20525	836.5	-11.73	33.62	19.74	94.28	Н	7
20625	846.5	-11.89	33.66	19.62	91.64	Н	7
20425	826.5	-17.87	34.85	14.83	30.40	V	7
20525	836.5	-18.20	34.60	14.25	26.60	V	7
20625	846.5	-18.09	34.59	14.35	27.25	V	7

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
20425	826.5	-12.73	33.69	18.81	76.10	Н	7
20525	836.5	-12.60	33.62	18.87	77.16	Н	7
20625	846.5	-12.74	33.66	18.77	75.35	Н	7
20425	826.5	-18.73	34.85	13.97	24.94	V	7
20525	836.5	-19.07	34.60	13.38	21.77	V	7
20625	846.5	-18.94	34.59	13.50	22.41	V	7



CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
20450	829	-12.45	33.73	19.13	81.75	Н	7
20525	836.5	-12.18	33.62	19.29	85.00	Н	7
20600	844	-12.47	33.51	18.89	77.50	Н	7
20450	829	-18.45	34.54	13.94	24.75	V	7
20525	836.5	-18.65	34.60	13.80	23.98	V	7
20600	844	-18.67	34.46	13.64	23.09	V	7

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
20450	829	-13.38	33.73	18.20	65.99	Н	7
20525	836.5	-13.25	33.62	18.22	66.44	Н	7
20600	844	-13.30	33.51	18.06	64.02	Н	7
20450	829	-19.38	34.54	13.01	19.98	V	7
20525	836.5	-19.72	34.60	12.73	18.74	V	7
20600	844	-19.50	34.46	12.81	19.08	V	7

LTE BAND 26

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26797	824.7	-12.72	33.67	18.80	75.91	Н	7
26915	836.5	-12.78	33.62	18.69	74.03	Н	7
27033	848.3	-13.22	33.65	18.28	67.22	Н	7
26797	824.7	-18.48	34.25	13.62	23.00	V	7
26915	836.5	-17.99	34.60	14.46	27.91	V	7
27033	848.3	-18.05	34.63	14.43	27.73	V	7



CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26797	824.7	-13.55	33.67	17.97	62.70	Н	7
26915	836.5	-13.80	33.62	17.67	58.53	Н	7
27033	848.3	-14.32	33.65	17.18	52.18	Н	7
26797	824.7	-19.31	34.25	12.79	19.00	V	7
26915	836.5	-19.01	34.60	13.44	22.07	V	7
27033	848.3	-19.15	34.63	13.33	21.53	V	7

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26805	825.5	-12.53	33.72	19.04	80.19	Н	7
26915	836.5	-12.72	33.62	18.75	75.06	Н	7
27025	847.5	-13.09	33.65	18.41	69.33	Н	7
26805	825.5	-18.29	34.30	13.86	24.33	V	7
26915	836.5	-17.93	34.60	14.52	28.30	V	7
27025	847.5	-17.92	34.57	14.50	28.19	V	7

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26805	825.5	-13.68	33.72	17.89	61.53	Н	7
26915	836.5	-13.82	33.62	17.65	58.26	Н	7
27025	847.5	-14.25	33.65	17.25	53.08	Н	7
26805	825.5	-19.44	34.30	12.71	18.67	V	7
26915	836.5	-19.03	34.60	13.42	21.97	V	7
27025	847.5	-19.08	34.57	13.34	21.58	V	7



CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26815	826.5	-12.54	33.69	19.00	79.51	Н	7
26915	836.5	-12.79	33.62	18.68	73.86	Н	7
27015	846.5	-13.16	33.66	18.35	68.41	Н	7
26815	826.5	-18.30	34.85	14.40	27.54	V	7
26915	836.5	-18.00	34.60	14.45	27.85	V	7
27015	846.5	-17.99	34.59	14.45	27.89	V	7

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26815	826.5	-13.40	33.69	18.14	65.22	Н	7
26915	836.5	-13.66	33.62	17.81	60.45	Н	7
27015	846.5	-14.01	33.66	17.50	56.25	Н	7
26815	826.5	-19.16	34.85	13.54	22.59	V	7
26915	836.5	-18.87	34.60	13.58	22.79	V	7
27015	846.5	-18.84	34.59	13.60	22.93	V	7

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26840	829.0	-13.12	33.73	18.46	70.06	Н	7
26915	836.5	-13.24	33.62	18.23	66.59	Н	7
26990	844.0	-13.74	33.51	17.62	57.85	Н	7
26840	829.0	-18.88	34.54	13.51	22.42	V	7
26915	836.5	-18.45	34.60	14.00	25.11	V	7
26990	844.0	-18.57	34.46	13.74	23.63	V	7



CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26840	829.0	-14.05	33.73	17.53	56.56	Н	7
26915	836.5	-14.31	33.62	17.16	52.05	Н	7
26990	844.0	-14.57	33.51	16.79	47.79	Н	7
26840	829.0	-19.81	34.54	12.58	18.10	V	7
26915	836.5	-19.52	34.60	12.93	19.62	V	7
26990	844.0	-19.40	34.46	12.91	19.52	V	7

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26865	831.5	-13.23	33.74	18.36	68.47	Н	7
26915	836.5	-13.53	33.62	17.94	62.29	Н	7
26965	841.5	-13.99	33.47	17.33	54.11	Н	7
26865	831.5	-18.33	34.55	14.07	25.50	V	7
26915	836.5	-18.45	34.60	14.00	25.11	V	7
26965	841.5	-18.65	34.42	13.62	22.99	V	7

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	SPA LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)	LIMIT (W)
26865	831.5	-14.05	33.74	17.54	56.69	Н	7
26915	836.5	-14.31	33.62	17.16	52.05	Н	7
26965	841.5	-14.57	33.47	16.75	47.35	Н	7
26865	831.5	-19.81	34.55	12.59	18.14	V	7
26915	836.5	-19.52	34.60	12.93	19.62	V	7
26965	841.5	-19.40	34.42	12.87	19.34	V	7



3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

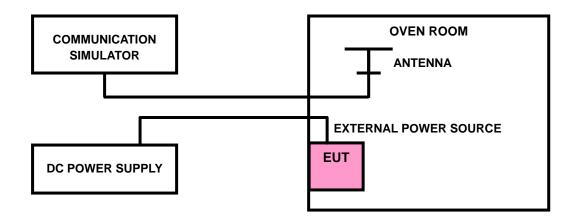
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

3.2.2 TEST PROCEDURE

- a. 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.
- b. 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.
- c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}$ 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.

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

3.2.3 TEST SETUP



3.2.4 TEST RESULTS

BV 7Layers Communications Technology

(Shenzhen) Co. Ltd

The test results was recorded in Report No.:RXA1706-0199RF01R1.

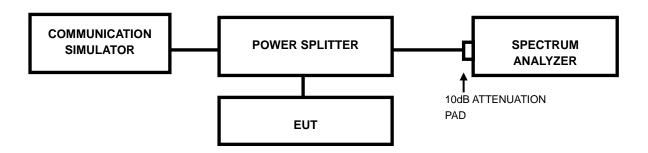


3.3 OCCUPIED BANDWIDTH MEASUREMENT

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



3.3.3 TEST RESULTS

The test results was recorded in Report No.:RXA1706-0199RF01R1.

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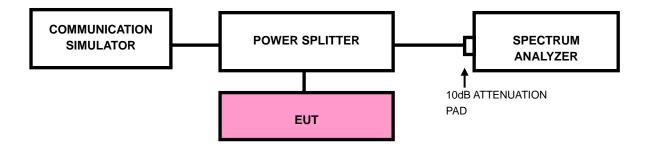


BAND EDGE MEASUREMENT 3.4

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

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. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

3.4.2 TEST SETUP



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3.4.3 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 10kHz and VBW of the spectrum is 30kHz (GSM/GPRS/ EDGE).
- c. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 20kHz and VBW of the spectrum is 100 kHz. (LTE bandwidth 1.4MHz).
- d. 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)
- e. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 50kHz and VBW of the spectrum is 200kHz. (LTE bandwidth 5MHz)
- f. 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)
- g. 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 1MHz. (LTE bandwidth 15MHz)
- h. Record the max trace plot into the test report.

3.4.4 TEST RESULTS

The test results was recorded in Report No.:RXA1706-0199RF01R1.



CONDUCTED SPURIOUS EMISSIONS

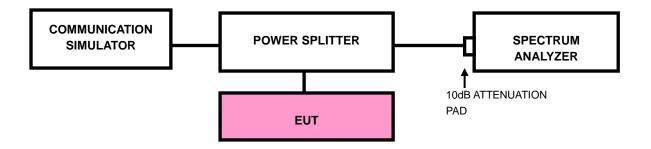
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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. The emission limit equal to -13dBm.

3.5.2 TEST PROCEDURE

- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 9 kHz to 9GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.3 TEST SETUP



3.5.4 TEST RESULTS

The test results was recorded in Report No.:RXA1706-0199RF01R1.



3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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. The emission limit equal to -13dBm.

3.6.2 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 = Output power level of S.G TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.

NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

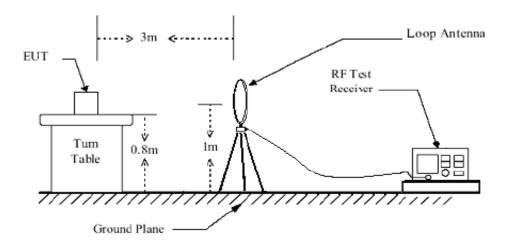
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

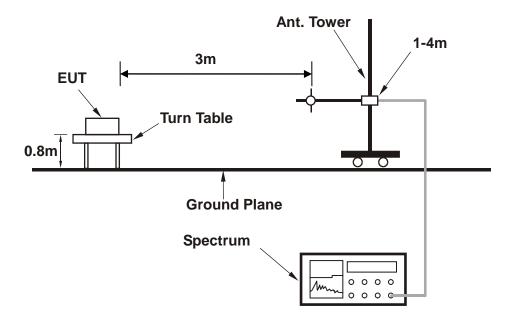


3.6.4 TEST SETUP

<Below 30MHz>

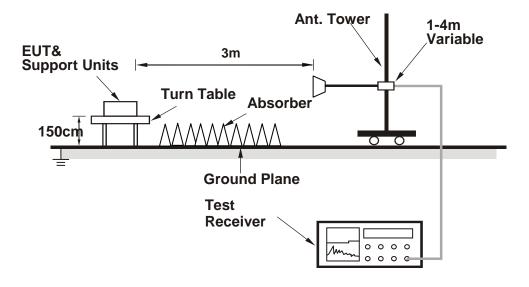


< Frequency Range 30MHz~1GHz >





< Frequency Range above 1GHz >



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



3.6.5 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

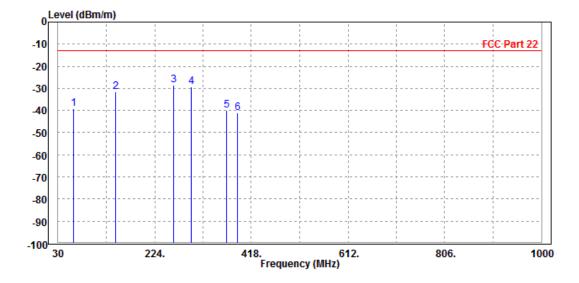
9 KHz – 30 MHz data: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

30 MHz – 1GHz data:

GSM 850:

MODE TX channel 189		FREQUENCY RANGE	Below 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							

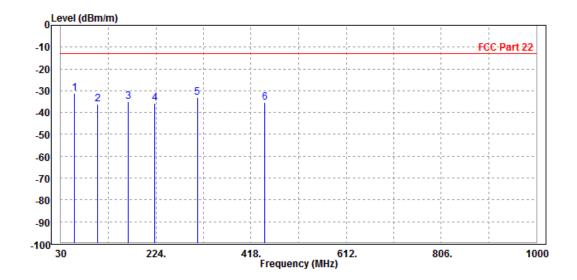
	Freq	Level	Read Level		Over Limit	Factor	Remark	Pol/Phase
_	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	61.040	-39.26	-46.14	-13.00	-26.26	6.88	Peak	Horizontal
2	145.430	-31.70	-40.99	-13.00	-18.70	9.29	Peak	Horizontal
3 PP	261.830	-28.67	-41.63	-13.00	-15.67	12.96	Peak	Horizontal
4	296.750	-29.22	-42.95	-13.00	-16.22	13.73	Peak	Horizontal
5	367.560	-39.86	-55.89	-13.00	-26.86	16.03	Peak	Horizontal
6	390.840	-41.08	-57.88	-13.00	-28.08	16.80	Peak	Horizontal





MODE	TX channel 189	FREQUENCY RANGE	Below 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

			Read	Limit	0ver			
	Freq	Level	Level	Line	Limit	Factor	Remark	Pol/Phase
_								
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	57.160	-31.02	-37.82	-13.00	-18.02	6.80	Peak	Vertical
2	105.660	-36.23	-45.20	-13.00	-23.23	8.97	Peak	Vertical
3	167.740	-35.17	-45.58	-13.00	-22.17	10.41	Peak	Vertical
4	221.090	-35.85	-47.34	-13.00	-22.85	11.49	Peak	Vertical
5	308.390	-33.13	-47.21	-13.00	-20.13	14.08	Peak	Vertical
6	445.160	-35.37	-52.88	-13.00	-22.37	17.51	Peak	Vertical



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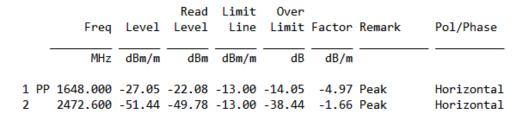
ABOVE 1GHz DATA

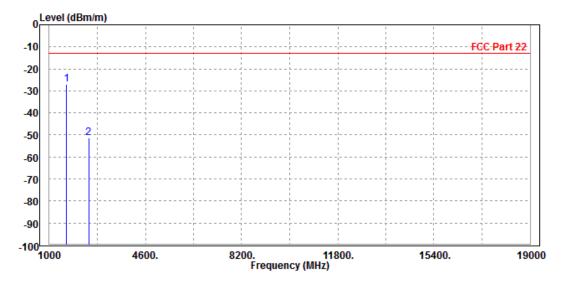
Note: For higher frequency, the emission is too low to be detected.

GSM 850

CH 128:

MODE	TX channel 128	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	IINPIII POWER	DC 5V from adapter				
TESTED BY Vincent Chen							
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							



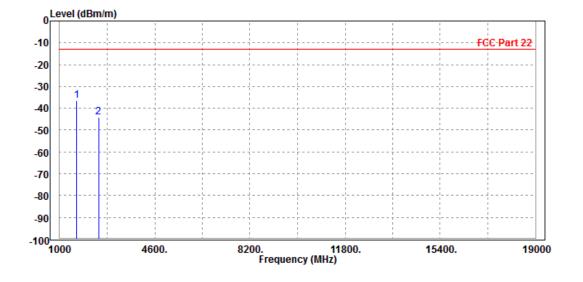


Tel: +86 755 8869 6566



MODE	TX channel 128	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	123deg C 70%RH		DC 5V from adapter				
TESTED BY	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

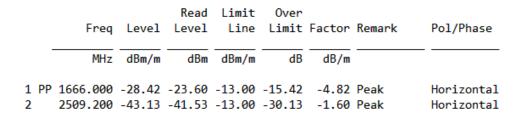
			Read	Limit	0ver			
	Freq	Level	Level	Line	Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP 16	48.000	-36.60	-33.05	-13.00	-23.60	-3.55	Peak	Vertical
2 24	72.600	-43.96	-43.79	-13.00	-30.96	-0.17	Peak	Vertical

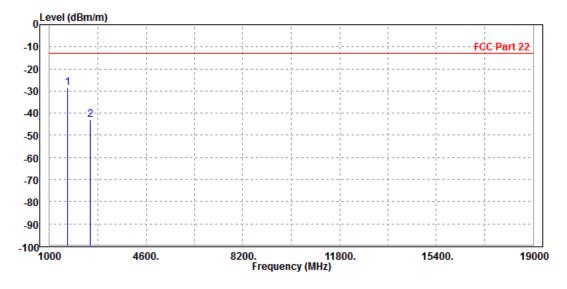




CH 189:

MODE	TX channel 189	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	IINPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							

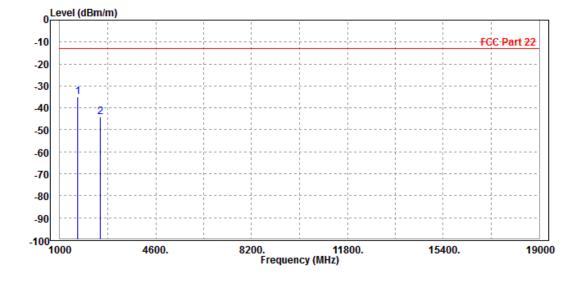






MODE	TX channel 189	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	123deg C 70%RH		DC 5V from adapter				
TESTED BY	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

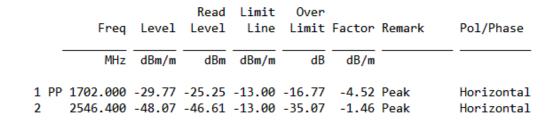
	Freq	Level		Limit Line		Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP 2	1666.000 2509.200							Vertical Vertical

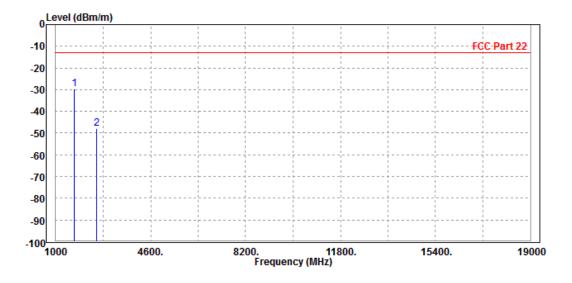




CH 251:

MODE	TX channel 251	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	123deg C 70%RH		DC 5V from adapter					
TESTED BY	Vincent Chen							
ANTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							

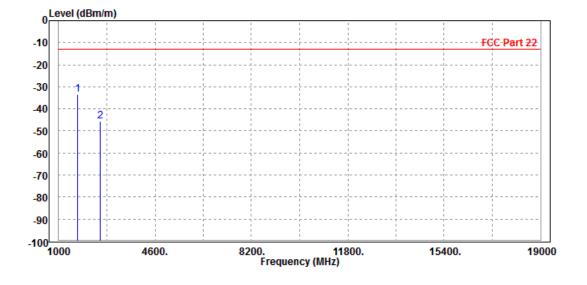






MODE	TX channel 251	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter					
TESTED BY	Vincent Chen							
ANTEN	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

		Read	Limit	0ver				
Fr	eq Level	Level	Line	Limit	Factor	Remark	Pol/Phase	
M	Hz dBm/m	dBm	dBm/m	dB	dB/m			١
	,							
1 PP 1702.0	00 -33.58	-30.53	-13.00	-20.58	-3.05	Peak	Vertical	
1 11 1702.0	00 33.30	50.55	13.00	20.50	3.03	· cuit	ver execu	
2 2546.4	00 -45.58	-45.61	-13.00	-32.58	0.03	Peak	Vertical	



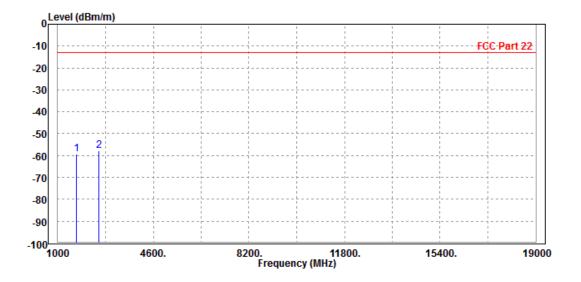


EDGE 850:

CH 128:

MODE	TX channel 128	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter					
TESTED BY	Vincent Chen							
ANTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							

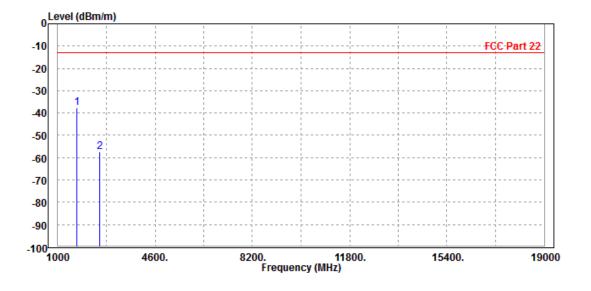
			Read	Limit	0ver			
	Freq	Level	Level	Line	Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	1702.000	-59.40	-54.88	-13.00	-46.40	-4.52	Peak	Horizontal
2 PP	2546.400	-57.79	-56.33	-13.00	-44.79	-1.46	Peak	Horizontal





MODE	TX channel 128	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter					
TESTED BY	Vincent Chen							
ANTEN	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

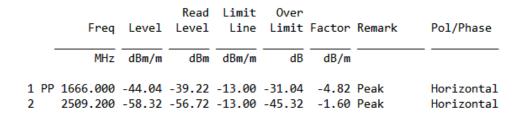
	Freq	Level		Limit Line		Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	——dB	dB/m		
1	PP 1702.000 2 2546.400							Vertical Vertical

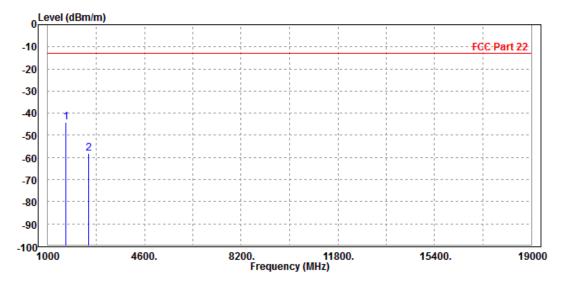




CH 189:

MODE	TX channel 189	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	IINPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							



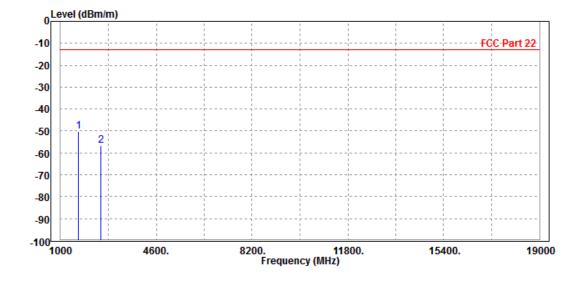


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MODE	TX channel 189	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen	Vincent Chen					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

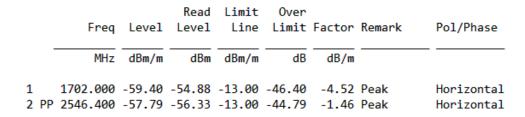
		Freq	Level		Limit Line		Factor	Remark	Pol/Phase	
	-	MHz	dBm/m	dBm	dBm/m	dB	dB/m			
1 2		1666.000 2509.200							Vertical Vertical	

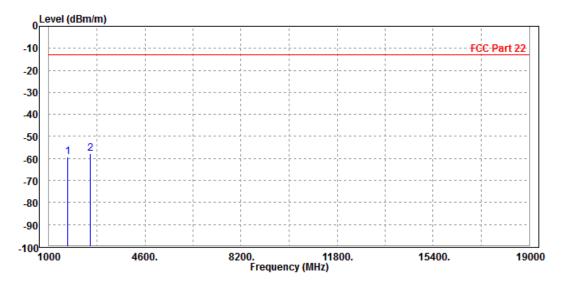




CH 251:

MODE	TX channel 251	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter					
TESTED BY	Vincent Chen	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								

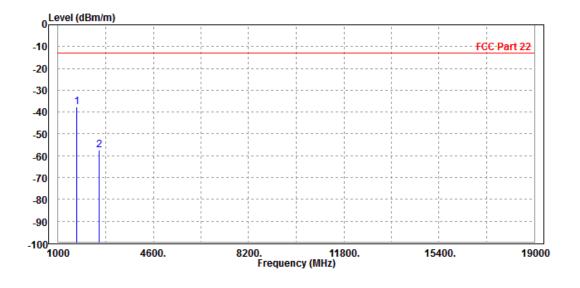






MODE	TX channel 251	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter			
TESTED BY	Vincent Chen					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

	Freq	Level		Limit Line		Factor	Remark	Pol/Phase	
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m			
	1702.000 2546.400							Vertical Vertical	

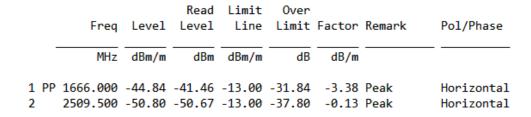


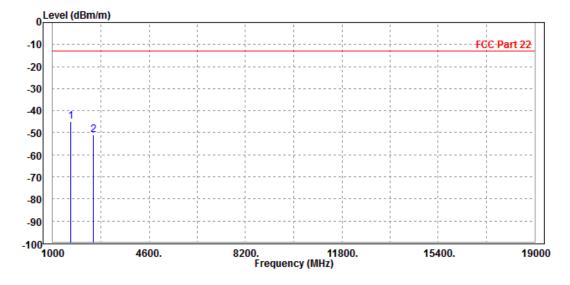


LTE Band 5

CHANNEL BANDWIDTH: 1.4MHz / QPSK

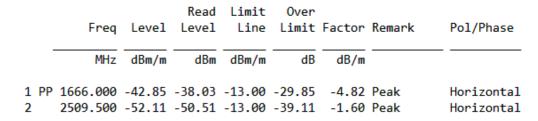
MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter			
TESTED BY	Vincent Chen					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

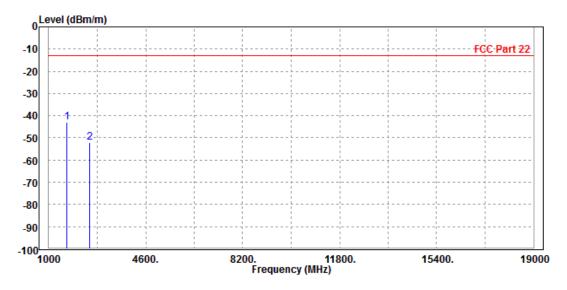






MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen	Vincent Chen					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

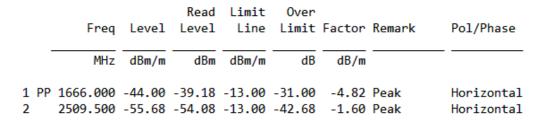


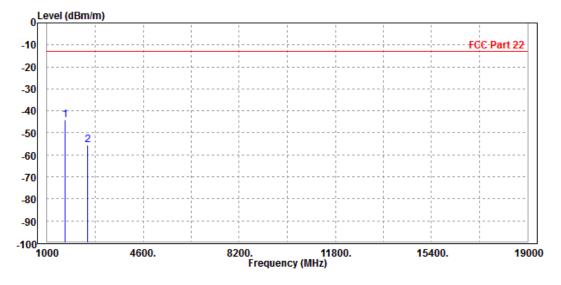




CHANNEL BANDWIDTH: 3MHz / QPSK

MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter			
TESTED BY	Vincent Chen					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

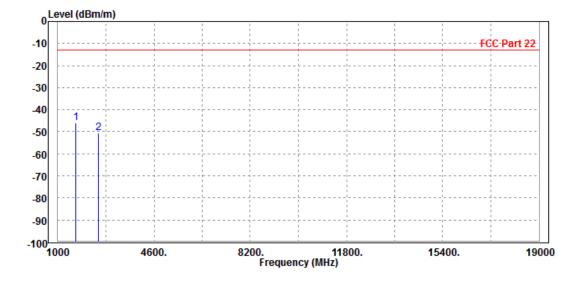






MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen	Vincent Chen					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

	Freq	Level		Limit Line		Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	1666.000 2509.500							Vertical Vertical

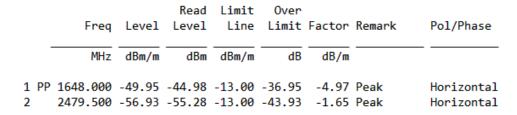


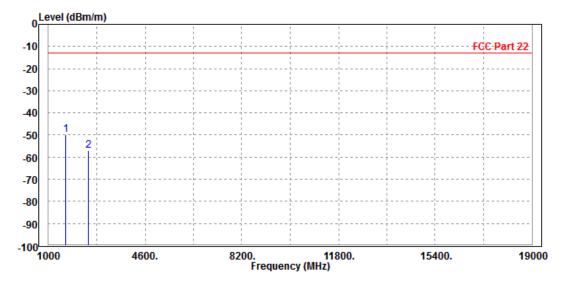


CHANNEL BANDWIDTH: 5MHz / QPSK

CH20425

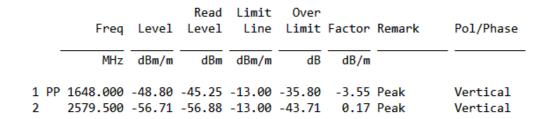
MODE	TX channel 20425	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter			
TESTED BY	Vincent Chen					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

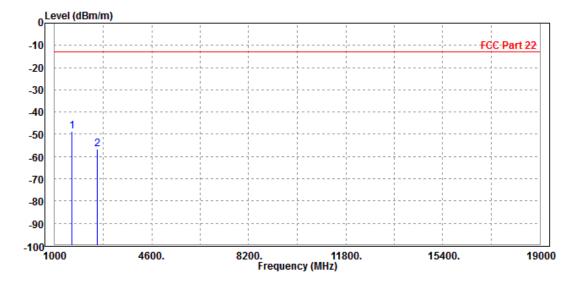






MODE	TX channel 20425	FREQUENCY RANGE	Above 1000MHz	
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter	
TESTED BY	Vincent Chen			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M				

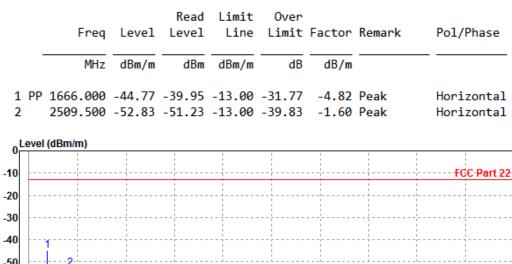






CH20525

MODE	TX channel 20525 FREQUENCY RANGE		Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Vincent Chen		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

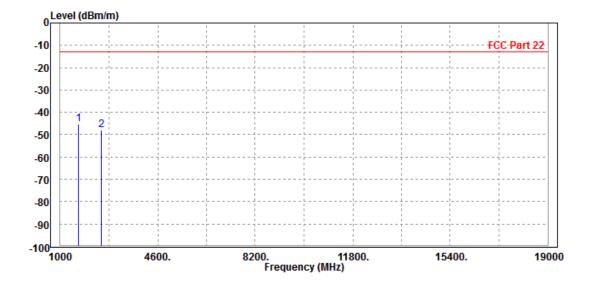


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MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Vincent Chen		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

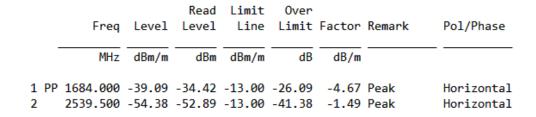
	Read	Limit	0ver			
Freq I	Level Level	Line	Limit	Factor	Remark	Pol/Phase
·						
MHz (dBm/m dBm	dRm/m	dB	dR/m		
1112	abiii) iii abiii	abiliy ili	u.	ub/ III		
4 DD 4666 000	45 30 40 04	43.00	20.20	2 20	ъ	
1 PP 1666.000 -4	45.39 -42.01	-13.00	-32.39	-3.38	Peak	Vertical
2 2509.500 -4	47.88 -47.75	-13.00	-34.88	-0.13	Peak	Vertical

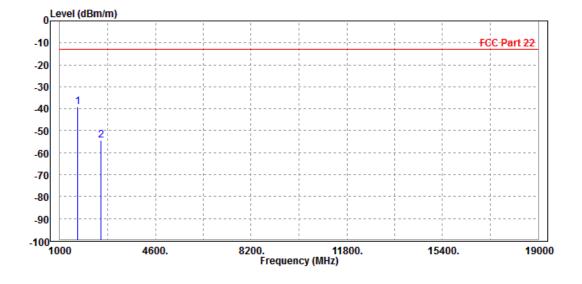




CH20625

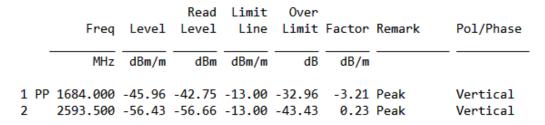
MODE	TX channel 20625	FREQUENCY RANGE	Above 1000MHz	
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter	
TESTED BY	Vincent Chen			
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M				

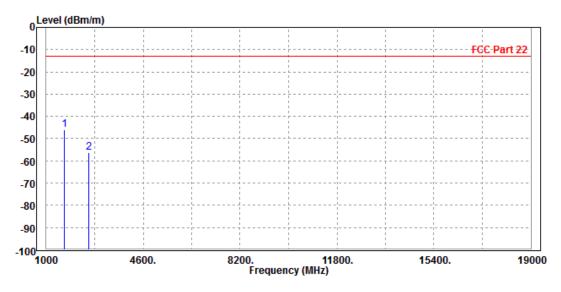






MODE	TX channel 20625	FREQUENCY RANGE	Above 1000MHz	
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter	
TESTED BY	Vincent Chen			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M				

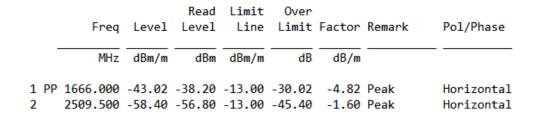


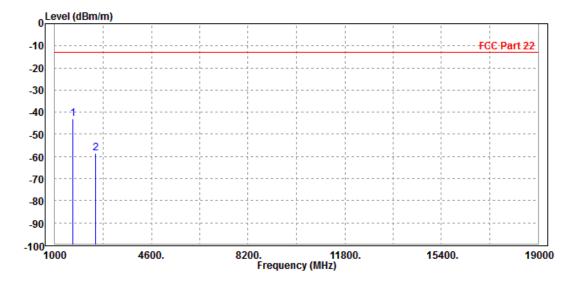




CHANNEL BANDWIDTH: 10MHz/QPSK

MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	i, 56%RH INPUT POWER	
TESTED BY	Vincent Chen		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

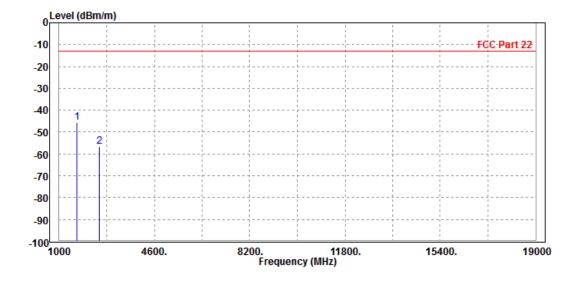






MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz	
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	%RH INPUT POWER		
TESTED BY	Vincent Chen			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M				

	Freq	Level		Limit Line		Factor	Remark	Pol/Phase	
-	MHz	dBm/m	dBm	dBm/m	——dB	dB/m			
	1666.000 2509.500							Vertical Vertical	

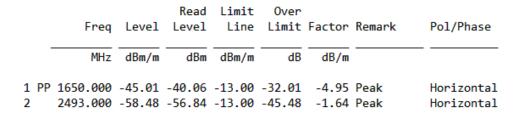


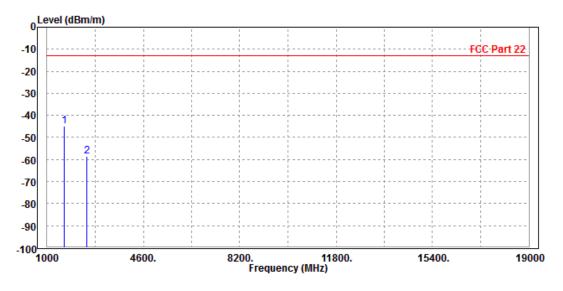


LTE Band 26

CHANNEL BANDWIDTH: 1.4MHz/QPSK

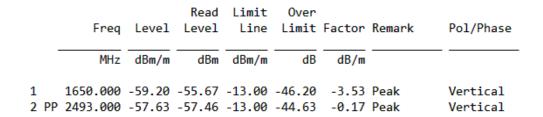
MODE	TX channel 26915	nannel 26915 FREQUENCY RANGE	
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	g. C, 56%RH INPUT POWER	
TESTED BY	Vincent Chen		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

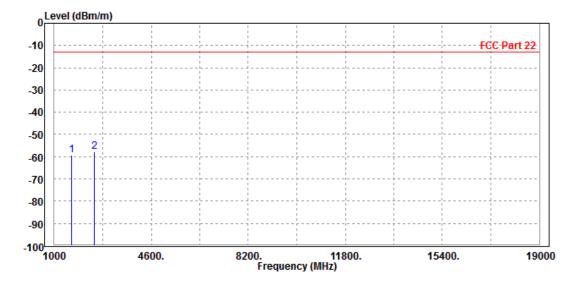






MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz	
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter	
TESTED BY	Vincent Chen			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M				

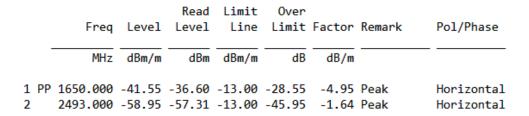


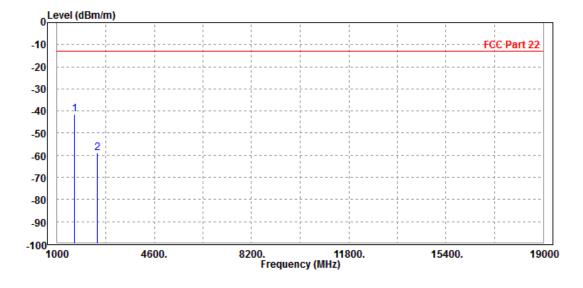




CHANNEL BANDWIDTH: 3MHz / QPSK

MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz	
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter	
TESTED BY	Vincent Chen			
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M				

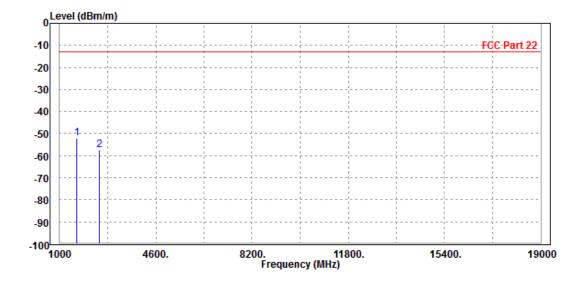






MODE	TX channel 26915	X channel 26915 FREQUENCY RANGE			
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	6%RH INPUT POWER			
TESTED BY	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M					

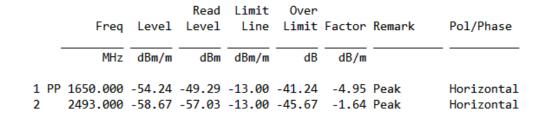
Freq	Level		Limit Line		Factor	Remark	Pol/Phase
MHz	dBm/m	dBm	dBm/m	——dB	dB/m		
1650.000 2493.000							Vertical Vertical

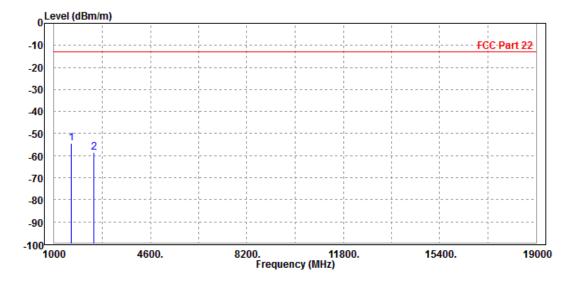




CHANNEL BANDWIDTH: 5MHz/QPSK

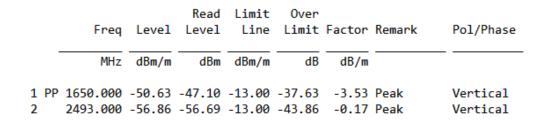
MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter		
TESTED BY	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M					

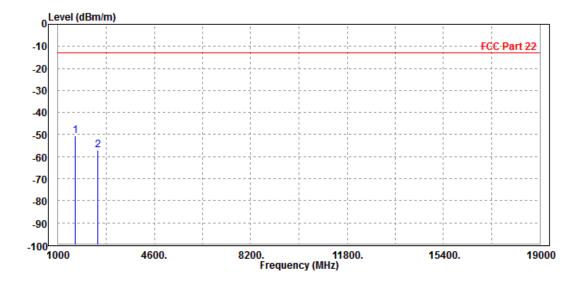






MODE	TX channel 26915	nnel 26915 FREQUENCY RANGE			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter		
TESTED BY	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M					

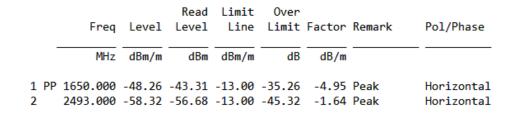


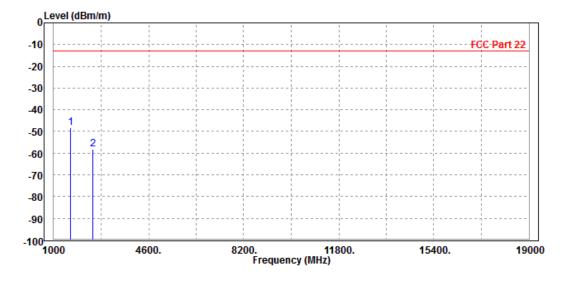




CHANNEL BANDWIDTH: 10MHz/QPSK

MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter			
TESTED BY	Vincent Chen	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

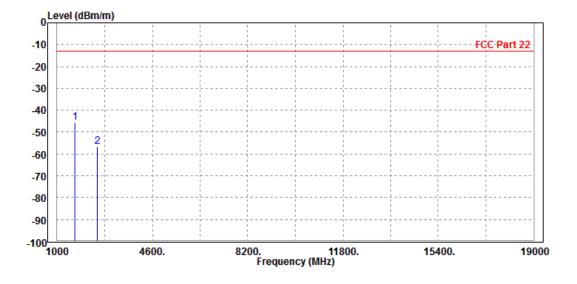






MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz		
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	56%RH INPUT POWER			
TESTED BY	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M					

		Freq	Level		Limit Line		Factor	Remark	Pol/Phase
	-	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		1666.000 2509.500							Vertical Vertical

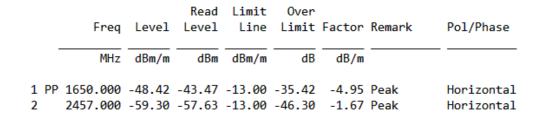


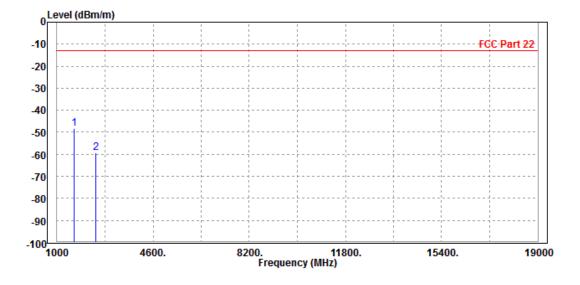


CHANNEL BANDWIDTH: 15MHz / QPSK

CH26865

MODE	TX channel 26865	C channel 26865 FREQUENCY RANGE			
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter		
TESTED BY	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M					



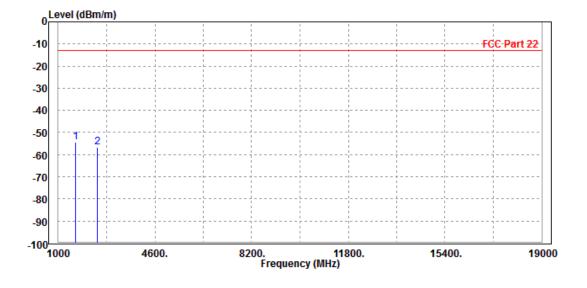


Tel: +86 755 8869 6566



MODE	TX channel 26865	FREQUENCY RANGE	Above 1000MHz		
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter		
TESTED BY	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M					

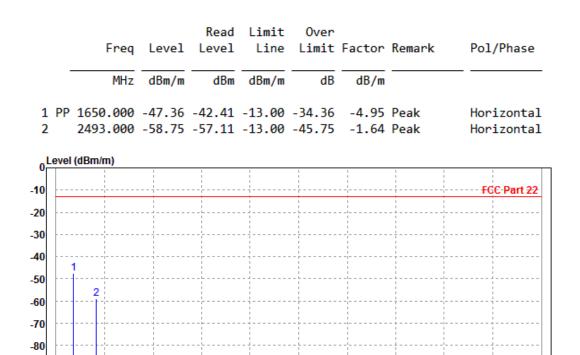
		Freq	Level		Limit Line		Factor	Remark	Pol/Phase
	-	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	L PP	1650.000 2457.000							Vertical Vertical





CH26915

MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter			
TESTED BY	Vincent Chen	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						



8200. Frequency (MHz)

11800.

15400.

19000

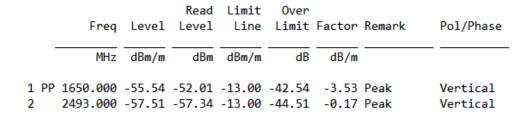
-90

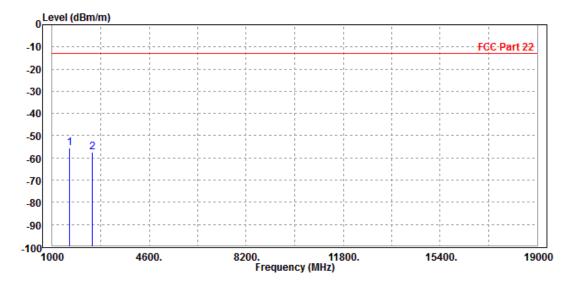
-100 1000

4600.



MODE	TX channel 26915 FREQUENCY RANGE A		Above 1000MHz		
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter		
TESTED BY	Vincent Chen				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M					

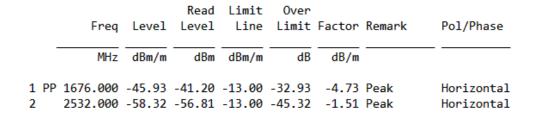


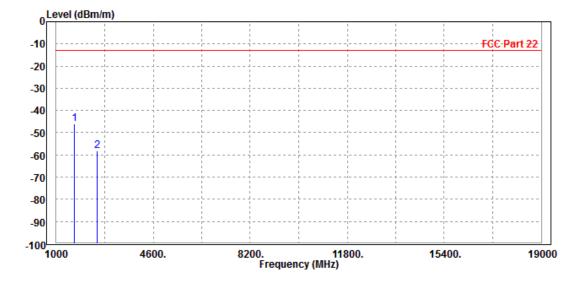




CH26965

MODE	TX channel 26965	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							

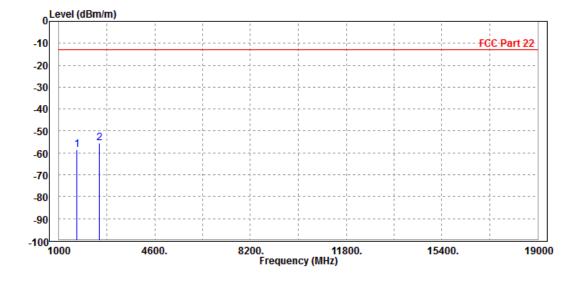






MODE	TX channel 26965	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH	INPUT POWER	DC 5V from adapter				
TESTED BY	Vincent Chen						
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

	Freq	Level		Limit Line		Factor	Remark	Pol/Phase
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 2 PP	1676.000 2532.000							Vertical Vertical



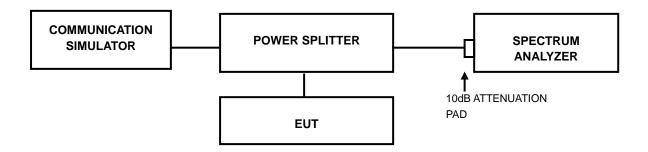


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

- 1. Set resolution/measurement bandwidth ≥ 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%.

3.7.4 TEST RESULTS

The test results was recorded in Report No.:RXA1706-0199RF01R1.



PHOTOGRAPHS OF THE TEST CONFIGURATION

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



5 INFORMATION ON THE TESTING LABORATORIES

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Email: customerservice.dg@cn.bureauveritas.com

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.

Tel: +86 755 8869 6566

Fax: +86 755 8869 6577



6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

---END---

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