



TEST REPORT FOR RF TESTING

Report No.: SRTC2015-9004(B)-0020

Product Name: GSM/GPRS/EDGE/UMTS/LTE Digital Mobile Phone

with Bluetooth and WiFi

Product Model: Philips Xenium V526

Applicant: Shenzhen Sang Fei Consumer Communications Co.,Ltd.

Manufacturer: Shenzhen Sang Fei Consumer Communications Co.,Ltd.

Specification: FCC Part 24E, Part 22H Part 2 Part 27 (August 20, 2015

edition)

FCC ID: VQRCTS358

The State Radio_monitoring_center Testing Center (SRTC)

15th Building, No.30 Shixing Street, Shijingshan District, Beijing, China

Tel: 86-10-57996181 Fax: 86-10-57996288



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1. GENERAL INFORMATION

1.1 Notes of the test report

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The test results relate only to individual items of the samples which have been tested.

1.2 Information about the testing laboratory

Company:	The State Radio_monitoring_center Testing Center (SRTC)
Address:	15th Building, No.30 Shixing Street, Shijingshan District
City:	Beijing
Country or Region:	P.R.China
Contacted person:	liujia
Tel:	+86 10 5799 6181
Fax:	+86 10 5799 6288
Email:	liujiaf@srtc.org.cn

1.3 Applicant's details

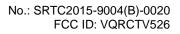
Company:	Shenzhen Sang Fei Consumer Communications Co.,Ltd.
Address:	11 Science & Technology Rd., Shenzhen Hi-tech Industrial Park, Nanshan
	District
City:	Shenzhen
Country or Region:	China
Grantee Code:	VQR
Contacted person:	linda zhang
Tel:	010-68300097
Fax:	010-68300097
Email:	linda.zhang@sangfei.com

1.4 Manufacturer's details

Company:	Shenzhen Sang Fei Consumer Communications Co.,Ltd.		
Address:	11 Science & Technology Rd., Shenzhen Hi-tech Industrial Park, Nanshan		
	District		
City:	Shenzhen		
Country or Region:	China		
Contacted person:	linda zhang		
Tel:	010-68300097		
Fax:	010-68300097		
Email:	linda.zhang@sangfei.com		

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1.5 Test Environment

Date of Receipt of test sample at SRTC:	2015.10.14
Testing Start Date:	2015.11.04
Testing End Date:	2015.11.18

Environmental Data:	Temperature (°C)	Humidity (%)
Ambient	25	38
Maximum Extreme	55	80
Minimum Extreme	-10	

Normal Supply Voltage (V d.c.):	3.8
Maximum Extreme Supply Voltage (V d.c.):	4.35
Minimum Extreme Supply Voltage (V d.c.):	3.5

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2 DESCRIPTION OF THE EQUIPMENT UNDER TEST

2.1 Final Equipment Build Status

Frequency Range	LTE Band 2: Tx:1850~1910MHz Rx:1930~1990MHz LTE Band 4: Tx:1710~1755MHz Rx:2110~2155MHz LTE Band 7: Tx:2500~2570MHz Rx:2620~2690MHz	
Modulation Type	QPSK 16QAM	
Duplex Mode	FDD	
Antenna Type	Fixed Internal	
Power Supply	Battery	
HW Version	WMCTb	
SW Version	Philips_V526_1539_V01_AG_FCC	
IMEI 867767020192544		

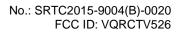
2.2 Summary table.

FCC	Frequency	Output	Frequency	Emission	Emission	Communication
Rule	Range(MHz)	Power(W)	Tolerance	Designator	Bandwidth	Type
Part				_	(MHz)	
			GSM			
22H	824.2-848.8	1.82	0.015	300KGXW		GPRS 850
2211	824.2-848.8	1.90	0.012	300KG7W		EGPRS850
24E	1850.2-1909.8	0.90	0.016	300KGXW		GPRS 1900
24E	1850.2-1909.8	0.90	0.017	300KG7W		EGPRS1900
			WCDM	A		
22H	826.4-846.6	0.17	0.017	4M50F9W		WCDMA
2211	826.4-846.6	0.13	0.017	4M50F9W		HSDPA/UPA
24E	1852.4-1907.6	0.17	0.019	4M50F9W		WCDMA
24E	1852.4-1907.6	0.11	0.017	4M50F9W		HSDPA/UPA
	LTE BAND2					
	1850.7-1909.3	0.19	0.007	1M40G7D	1.4M	QPSK
	1850.7-1909.3	0.16	0.007	1M40D7W	1.4M	16QAM
	1851.5-1908.5	0.19	0.007	3M00G7D	3M	QPSK
24E	1851.5-1908.5	0.15	0.007	3M00D7W	3M	16QAM
	1852.5-1907.5	0.19	0.007	5M00G7D	5M	QPSK
	1852.5-1907.5	0.15	0.007	5M00D7W	5M	16QAM
	1855-1905	0.19	0.007	10M0G7D	10M	QPSK

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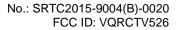
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1855-1905	0.15	0.007	10M0D7W	10M	16QAM
1857.5-1902.5	0.20	0.007	15M0G7D	15M	QPSK
1857.5-1902.5	0.15	0.007	15M0D7W	15M	16QAM
1860-1900	0.20	0.007	20M0G7D	20M	QPSK
1860-1900	0.15	0.007	20M0D7W	20M	16QAM
		LTE BAN	ID4		
1710.7-1754.3	0.19	0.006	1M40G7D	1.4M	QPSK
1710.7-1754.3	0.15	0.006	1M40D7W	1.4M	16QAM
1711.5-1753.5	0.19	0.006	3M00G7D	3M	QPSK
1711.5-1753.5	0.15	0.006	3M00D7W	3M	16QAM
1712.5-1752.5	0.19	0.006	5M00G7D	5M	QPSK
1712.5-1752.5	0.15	0.006	5M00D7W	5M	16QAM
1715-1750	0.19	0.006	10M0G7D	10M	QPSK
1715-1750	0.15	0.006	10M0D7W	10M	16QAM
1717.5-1747.5	0.19	0.006	15M0G7D	15M	QPSK
1717.5-1747.5	0.15	0.006	15M0D7W	15M	16QAM
1720-1745	0.19	0.006	20M0G7D	20M	QPSK
1720-1745	0.15	0.006	20M0D7W	20M	16QAM
		LTE BAN	ID7		
2502.5-2567.5	0.20	0.005	5M00G7D	5M	QPSK
2502.5-2567.5	0.15	0.005	5M00D7W	5M	16QAM
2505-2565	0.20	0.005	10M0G7D	10M	QPSK
2505-2565	0.15	0.005	10M0D7W	10M	16QAM
2507.5-2562.5	0.20	0.005	15M0G7D	15M	QPSK
2507.5-2562.5	0.15	0.005	15M0D7W	15M	16QAM
2510-2560	0.20	0.005	20M0G7D	20M	QPSK
2510-2560	0.15	0.005	20M0D7W	20M	16QAM
	1855-1905 1857.5-1902.5 1857.5-1902.5 1860-1900 1860-1900 1710.7-1754.3 1710.7-1754.3 1711.5-1753.5 1711.5-1752.5 1712.5-1752.5 1715-1750 1717.5-1747.5 1717.5-1747.5 1720-1745 1720-1745 2502.5-2567.5 2505-2565 2507.5-2562.5 2510-2560	1855-1905 0.15 1857.5-1902.5 0.20 1857.5-1902.5 0.15 1860-1900 0.20 1860-1900 0.15 1710.7-1754.3 0.19 1710.7-1754.3 0.19 1711.5-1753.5 0.19 1712.5-1752.5 0.19 1712.5-1752.5 0.19 1715-1750 0.15 1717.5-1747.5 0.19 1717.5-1747.5 0.19 1720-1745 0.15 1720-1745 0.15 2502.5-2567.5 0.20 2502.5-2565 0.20 2507.5-2562.5 0.20 2507.5-2562.5 0.20 2507.5-2562.5 0.15 2510-2560 0.20	1855-1905 0.15 0.007 1857.5-1902.5 0.20 0.007 1857.5-1902.5 0.15 0.007 1860-1900 0.20 0.007 1860-1900 0.15 0.007 LTE BAN 1710.7-1754.3 0.19 0.006 1710.7-1754.3 0.19 0.006 1711.5-1753.5 0.19 0.006 1711.5-1753.5 0.19 0.006 1712.5-1752.5 0.15 0.006 1715-1750 0.19 0.006 1717.5-1747.5 0.19 0.006 1717.5-1747.5 0.15 0.006 1720-1745 0.15 0.006 1720-1745 0.19 0.006 1720-1745 0.19 0.006 1720-1745 0.15 0.006 2502.5-2567.5 0.20 0.005 2505-2565 0.20 0.005 2507.5-2562.5 0.20 0.005 2507.5-2562.5 0.15 0.005 2507.5-2562.5 0.15 <td>1855-1905 0.15 0.007 10M0D7W 1857.5-1902.5 0.20 0.007 15M0G7D 1857.5-1902.5 0.15 0.007 15M0D7W 1860-1900 0.20 0.007 20M0G7D 1860-1900 0.15 0.007 20M0D7W LTE BAND4 1710.7-1754.3 0.19 0.006 1M40G7D 1710.7-1754.3 0.15 0.006 1M40D7W 1711.5-1753.5 0.19 0.006 3M00G7D 1711.5-1753.5 0.15 0.006 3M00D7W 1712.5-1752.5 0.19 0.006 5M00G7D 1715-1750 0.15 0.006 5M00D7W 1715-1750 0.15 0.006 15M0G7D 1717.5-1747.5 0.15 0.006 15M0G7D 1717.5-1747.5 0.15 0.006 15M0G7D 1720-1745 0.19 0.006 20M0G7D 2502.5-2567.5 0.20 0.005 5M00G7D 2505-2565 0.20 0.005 <</td> <td>1855-1905 0.15 0.007 10M0D7W 10M 1857.5-1902.5 0.20 0.007 15M0G7D 15M 1857.5-1902.5 0.15 0.007 15M0D7W 15M 1860-1900 0.20 0.007 20M0G7D 20M 1860-1900 0.15 0.007 20M0D7W 20M LTE BAND4 1710.7-1754.3 0.19 0.006 1M40G7D 1.4M 1710.7-1754.3 0.15 0.006 1M40D7W 1.4M 1711.5-1753.5 0.19 0.006 3M00G7D 3M 1711.5-1753.5 0.15 0.006 3M00G7D 3M 1712.5-1752.5 0.19 0.006 3M00G7D 5M 1712.5-1752.5 0.15 0.006 5M00G7D 5M 1715-1750 0.19 0.006 10M0G7D 10M 1717.5-1747.5 0.19 0.006 15M0G7D 15M 1720-1745 0.15 0.006 15M0D7W 15M 1720-1745</td>	1855-1905 0.15 0.007 10M0D7W 1857.5-1902.5 0.20 0.007 15M0G7D 1857.5-1902.5 0.15 0.007 15M0D7W 1860-1900 0.20 0.007 20M0G7D 1860-1900 0.15 0.007 20M0D7W LTE BAND4 1710.7-1754.3 0.19 0.006 1M40G7D 1710.7-1754.3 0.15 0.006 1M40D7W 1711.5-1753.5 0.19 0.006 3M00G7D 1711.5-1753.5 0.15 0.006 3M00D7W 1712.5-1752.5 0.19 0.006 5M00G7D 1715-1750 0.15 0.006 5M00D7W 1715-1750 0.15 0.006 15M0G7D 1717.5-1747.5 0.15 0.006 15M0G7D 1717.5-1747.5 0.15 0.006 15M0G7D 1720-1745 0.19 0.006 20M0G7D 2502.5-2567.5 0.20 0.005 5M00G7D 2505-2565 0.20 0.005 <	1855-1905 0.15 0.007 10M0D7W 10M 1857.5-1902.5 0.20 0.007 15M0G7D 15M 1857.5-1902.5 0.15 0.007 15M0D7W 15M 1860-1900 0.20 0.007 20M0G7D 20M 1860-1900 0.15 0.007 20M0D7W 20M LTE BAND4 1710.7-1754.3 0.19 0.006 1M40G7D 1.4M 1710.7-1754.3 0.15 0.006 1M40D7W 1.4M 1711.5-1753.5 0.19 0.006 3M00G7D 3M 1711.5-1753.5 0.15 0.006 3M00G7D 3M 1712.5-1752.5 0.19 0.006 3M00G7D 5M 1712.5-1752.5 0.15 0.006 5M00G7D 5M 1715-1750 0.19 0.006 10M0G7D 10M 1717.5-1747.5 0.19 0.006 15M0G7D 15M 1720-1745 0.15 0.006 15M0D7W 15M 1720-1745



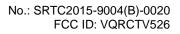


2.3 Support Equipment

The following support equipment was used to exercise the EUT during testing:

Equipment	Battery
Manufacturer	Shenzhen cyclelong power-tech Co., ltd.
Model Number	AB5000AWML
Serial Number	

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3 REFERENCE SPECIFICATION

Specification	Version	Title
2.1046	July 7, 1998	Measurements required: RF power output.
2.1049	July 7, 1998	Measurements required: Occupied bandwidth.
2.1051	July 7, 1998	Measurements required: Spurious emissions at antenna terminals.
2.1053	July 7, 1998	Measurements required: Field strength of spurious radiation.
2.1055	Dec. 9, 2003	Measurements required: Frequency stability.
22.355	Oct. 17, 1996	Frequency tolerance.
22.913	Dec. 15, 2004	Effective radiated power limits.
22.917	Dec. 17, 2002	Emission limitations for cellular equipment.
24.232	May 2, 2008	Power and antenna height limits.
24.235/27.54	N/A	Frequency stability.
24.238	Dec. 17, 2002	Emission limitations for Broadband PCS equipment.
27.50	Apr. 7, 1997	Power limits and duty cycle.
27.53	Apr. 7, 1997	Emission limits.

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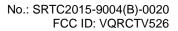
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4 KEY TO NOTES AND RESULT CODES

The following are the definition of the test result.

Code	Meaning
PASS	Test result shows that the requirements of the relevant specification have been met.
FAIL	Test result shows that the requirements of the relevant specification have not been met.
N/T	Test case is not tested.
NTNV	Nominal voltage, Normal Temperature
HV	High voltage, Normal Temperature
LV	Low voltage, Normal Temperature
HTHV	high voltage, High Temperature
LTHV	High voltage, Low Temperature
HTLV	Low voltage, High Temperature
LTLV	Low voltage, Low Temperature





5 RESULT SUMMARY

The following table summarizes the test results obtained.

No.	Test case	FCC reference	Verdict
1	RF Power Output	2.1046	Pass
2	Effective Radiated Power and Effective Isotropic Radiated Power	24.232(c) /27.50(d)(4)/27.50(h)	Pass
3	Occupied Bandwidth	2.1049/27.53(h)(1)	Pass
4	Peak-Average Ratio	27.50(d)(5)	Pass
5	Emission Bandwidth	24.238(b)/27.53(h)	Pass
6	Spurious Emissions at antenna terminals	2.1051/22.917(a)/ 22.53(m)/24.238(a)/ 27.53(h)	Pass
7	Band Edges Compliance	2.1051/22.917(a)/	Pass
		22.53(m)/24.238(a)/ 27.53(h)	
8	Frequency Stability	2.1055/22.355/24.235/27.54	Pass
9	Radiated Spurious Emissions	2.1053/22.917(a)/24.238(a)/ 27.53(h)	Pass

This Test Report Is Issued by: Ms. Xu Qiaochun	Checked by: Mr. Li Boyu
净込春	李傅子
Tested by:	Issued date:
Mr. Jiang Shuo	20151130

Tel: 86-10-5799 6181 Fax: 86-10-5799 6288

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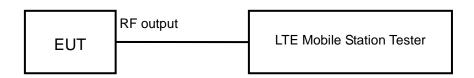
6 TEST RESULT

6.1 RF Power Output-FCC Part 2.1046

Ambient condition:

Temperature	Relative humidity	Pressure
23°C	42%	101.9kPa

Test Setup:



Test procedure:

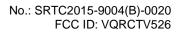
After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. Then the test data can be read at the tester screen. The loss between RF output port of the EUT and the input port of the tester will be taken into consideration.

Limits	≤30dBm
--------	--------

Test result:

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size		RF Power Output (dBm)	
						QPSK	16-QAM
		0.7 18607	1.4	1	0	22.83	21.85
2	1850.7			1	5	22.88	21.86
	1630.7			3	2	22.90	21.92
				6	0	21.82	20.89

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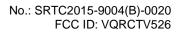
Band	Carrier	Carrier frequency (MHz)	BW	RB Size	RB	RF Powe (dE	•
	•				Offset	QPSK	16-QAM
		18900	1.4	1	0	22.75	21.72
2	1880			1	5	22.79	21.76
	1880			3	2	22.85	21.87
				6	0	22.88	21.82

Band freque	Carrier	ncy Channel			Channel _{RW} RB RB (d		RF Powe (dE	er Output Bm)
	(MHz)		DVV	Size	Offset	QPSK	16-QAM	
			1	0	22.73	21.49		
2	1000.2	1909.3 19193	1.4	1	5	22.72	21.51	
2 1909.3	1909.3			3	2	22.42	21.22	
				6	0	21.78	20.70	

Band	Carrier frequency	Channel (Low)	BW RB				er Output Bm)
Danu	(MHz)		DVV	Size	Offset	QPSK	16-QAM
		18615	3	1	0	22.88	21.87
2	1851.5			1	14	22.90	21.82
2 10.	1651.5			8	4	21.89	20.88
				15	0	21.90	20.94

Band freque	Carrier	cy Channel (Mid)												BW	_{BW} RB	RB	RF Power Output (dBm)	
	(MHz)		DVV	Size	Size Offset	QPSK	16-QAM											
			1	0	22.72	21.68												
2	1880	18900	3	1	14	22.78	21.75											
2	1000			8	4	21.83	20.77											
				15	0	21.82	20.83											

Band frequ	Carrier frequency (MHz)	requency Channel	Channel BW		V RB Size	RB RB	RB	RF Powe (dB	-
			DVV	Size Offset		QPSK	16-QAM		
		1908.5 19185	3	1	0	22.68	21.41		
2	1009 5			1	14	22.71	21.48		
2	1906.3			8	4	21.79	20.70		
				15	0	21.80	20.72		





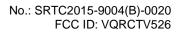
Band	Carrier frequency	Channel BW RB RB			RF Powe (dE	<u>-</u>	
	(MHz)	(Low)	DVV	Size	Offset	QPSK	16-QAM
		18625	5	1	0	22.88	21.83
2	1852.5			1	24	22.83	21.74
2	1632.3			12	6	21.90	20.93
				25	0	21.84	20.84

Band freq	Carrier frequency	Channel	BW	RB		RF Power Output (dBm)	
	(MHz)	(Mid)		Size		QPSK	16-QAM
		380 18900	5	1	0	22.81	21.69
2	1000			1	24	22.79	21.75
2	1000			12	6	21.84	20.86
				25	0	21.80	20.74

Band	Carrier frequency	Channel	BW	RB		RF Power Output (dBm)	
Danu	(MHz) (H	(High)	טעע	Size		QPSK	16-QAM
		19175	5	1	0	22.71	21.45
2	1907.5			1	24	22.66	21.49
2	1907.3		3	12	6	21.78	20.61
				25	0	21.72	20.62

Band	Carrier frequency	, Channel	1 8 1/1/	RB RB Size Offset	RF Power Output (dBm)		
Danu	(MHz)	(Low)			Offset	QPSK	16-QAM
				1	0	22.87	21.87
2	1855	18650	10	1	49	22.84	21.74
	1633	18030	10	24	12	21.80	20.80
				50	0	21.84	20.83

Band	Carrier	uency Channel BV	R\//	RB Size		RF Power Output (dBm)	
Danu	(MHz)		DVV			QPSK	16-QAM
		18900	10	1	0	22.87	21.75
2	1880			1	49	22.83	21.68
2	1000	10900	10	24	12	21.66	20.66
				50	0	21.63	20.61





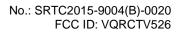
Band	Carrier frequency	Channel (High)	BW	RB	RB RB Size Offset	RF Power Output (dBm)	
Danu	(MHz)			Size		QPSK	16-QAM
				1	0	22.75	21.44
2	1905	19150	10	1	49	22.68	21.42
2	1903	19130	10	24	12	21.70	20.57
				50	0	21.52	20.37

Band	Carrier frequency	Channel	BW	RB	RB RB Size Offset	RF Power Output (dBm)	
Dana	(MHz)	(Low)	DVV	Size		QPSK	16-QAM
		10675	1.5	1	0	22.94	21.83
2	1857.5			1	74	22.92	21.66
2	1637.3	18675	15	38	18	21.92	20.84
				75	0	21.92	20.86

Band	Carrier frequency	ncy Channel BW	R\M	RB		RF Power Output (dBm)	
Danu	(MHz)		DVV	Size		QPSK	16-QAM
			15	1	0	22.83	21.58
2	1880	18900		1	74	22.85	21.70
2	1000	18900	13	38	18	21.67	20.68
				75	0	21.69	20.68

Band freque	Carrier	Channel	BW	RB	RB RB Size Offset	RF Power Output (dBm)	
	(MHz)	(High)		Size		QPSK	16-QAM
			15	1	0	22.97	21.79
2	1902.5	19125		1	74	22.85	21.60
2	1902.3	19123		38	18	21.61	20.50
				75	0	21.73	20.63

Band free	Carrier frequency	Channel (Low)	BW	RB Size		RF Power Output (dBm)	
	(MHz)					QPSK	16-QAM
			20	1	0	22.93	21.91
2	1860	18700		1	99	22.86	21.69
2	1800	10/00	20	50	25	21.76	20.71
				100	0	21.77	20.68





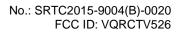
Band	Carrier frequency	Channel (Mid)	BW	RB		RF Power Output (dBm)	
Danu	(MHz)			Size		QPSK	16-QAM
				1	0	22.89	21.67
2	1880	18900	20	1	99	22.82	21.83
2	1000	18900	20	50	25	21.72	20.75
				100	0	21.70	20.76

Band frequer	Carrier	Channel	BW	RB		RF Power Output (dBm)	
	(MHz)	(High)		Size		QPSK	16-QAM
		19100	20	1	0	23.02	21.91
2	1900			1	99	22.84	21.60
2	1900			50	25	21.73	20.66
				100	0	21.74	20.70

Band	Carrier frequency	Channel	BW	RB	RB RB Size Offset	RF Power Output (dBm)	
Danu	(MHz) (Low)	(Low)		Size		QPSK	16-QAM
				1	0	22.48	21.53
4	1710.7	19957	1 /	1	5	22.50	21.49
4	1710.7	19937	1.4	3	2	22.48	21.48
				6	0	21.56	20.52

Band frequen	Carrier	Channel (Mid)	BW	RB		RF Power Output (dBm)		
	(MHz)			Size		QPSK	16-QAM	
			1.4	1	0	22.54	21.36	
4	1732.5	20175		1	5	22.53	21.35	
4	1/32.3	20173		3	2	22.40	21.36	
				6	0	21.58	20.47	

Band Carrier frequency (MHz)		Channel (High)	BW	RB Size		RF Power Output (dBm)	
	•					QPSK	16-QAM
		20393	1.4	1	0	22.71	21.67
4	1754.3			1	5	22.74	21.65
4	1734.3	20393	1.4	3	2	22.71	21.70
				6	0	21.78	20.74





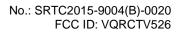
Band Carrier frequency (MHz)		Channel	BW	RB	RB RB	RF Power Output (dBm)	
	(Low)	DVV	Size	Offset	QPSK	16-QAM	
		1.5 19965	3	1	0	22.48	21.45
4	1711.5			1	14	22.46	21.40
4	1/11.5			8	4	21.48	20.45
				15	0	21.50	20.49

Band Carrier frequency (MHz)		Channel	BW	RB RB Size Offset	RF Power Output (dBm)		
		(Mid)			Offset	QPSK	16-QAM
			3	1	0	22.51	21.32
4	1732.5	20175		1	14	22.50	21.35
4	1/32.3	20173		8	4	21.52	20.42
				15	0	21.42	20.36

I and I tredilency I		Channel	BW	RB		RF Power Output (dBm)	
	(High)	טעע	Size	Offset	QPSK	16-QAM	
				1	0	22.70	21.65
4	1753.5	20385	2	1	14	22.77	21.66
4	1733.3	20363	3	8	4	21.76	20.73
				15	0	21.73	20.79

Band frequen	Carrier	Channel (Low)	BW	RB		RF Power Output (dBm)		
	(MHz)			Size		QPSK	16-QAM	
		712.5 19975	5	1	0	22.51	21.47	
4	1712.5			1	24	22.38	21.33	
4	1/12.3			12	6	21.48	20.50	
				25	0	21.45	20.43	

Band frequ	Carrier frequency	Channel (Mid)	BW	RB Size		RF Power Output (dBm)	
	(MHz)					QPSK	16-QAM
		20175	ل	1	0	22.56	21.34
4	1732.5			1	24	22.50	21.36
4	1732.3	20173	5	12	6	21.43	20.41
				25	0	21.41	20.44





Band Carrier frequency (MHz)		Channel	BW	RB		RF Power Output (dBm)	
	(High)	DVV	Size	Offset	QPSK	16-QAM	
		20375	5	1	0	22.72	21.69
4	1752.5			1	24	22.75	21.63
4 1732.3	1732.3		3	12	6	21.74	20.80
				25	0	21.70	20.69

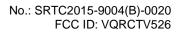
Band Carrier frequency (MHz)		Channel	BW	RB		RF Power Output (dBm)	
	(Low)	DVV	Size	Offset	QPSK	16-QAM	
			10	1	0	22.54	21.50
4	1715	20000		1	49	22.43	21.32
4	1/13	∠0000		24	12	21.41	20.43
				50	0	21.43	20.45

L Rand tredilency		Channel	BW	RB	3 RB	RF Power Output (dBm)	
	(Mid)	טעע	Size	Offset	QPSK	16-QAM	
			75 10	1	0	22.56	21.36
4	1732.5	20175		1	49	22.61	21.46
4	1732.3	20173	10	24	12	21.42	20.33
				50	0	21.41	20.33

		Channel	BW	RB		RF Power Output (dBm)	
	(High)	DVV	Size	Offset	QPSK	16-QAM	
		20350		1	0	22.72	21.71
4	1750		10	1	49	22.83	21.70
4	1730		10	24	12	21.74	20.74
				50	0	21.74	20.74

Band	Carrier frequency	Channel	BW	RB		RF Power Output (dBm)	
Dana	(MHz) (Low)	(Low)		Size		QPSK	16-QAM
			15	1	0	22.54	21.50
4	1717.5	20025		1	74	22.14	21.33
4	1/1/.3	20023		38	18	21.54	20.49
				75	0	21.50	20.48

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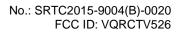
Rand	Band Carrier frequency (Mid)	Channel	BW	RB		RF Power Output (dBm)	
Danu		DVV	Size	Offset	QPSK	16-QAM	
		2.5 20175	15	1	0	22.51	21.33
4	1732.5			1	74	22.60	21.52
4	1732.3		15	38	18	21.63	20.53
				75	0	21.61	20.50

Band frequen	Carrier	Channel (High)	BW	RB	RB RB Size Offset	RF Power Output (dBm)	
	(MHz)		500	Size		QPSK	16-QAM
		20325	1.5	1	0	22.72	21.67
4	1747.5			1	74	22.83	21.71
4	1/4/.3	20323	15	38	18	21.78	20.83
				75	0	21.78	20.78

Band	Carrier frequency	Channel	BW	RB Size		RF Power Output (dBm)	
Danu	(MHz) (Low)	(Low)				QPSK	16-QAM
		20050	20	1	0	22.58	21.56
4	1720			1	99	22.12	21.36
4	1720		20	50	25	21.40	20.37
				100	0	21.40	20.37

Band frequen	Carrier	Channel (Mid)	BW	RB	RB RB Size Offset	RF Power Output (dBm)	
	(MHz)			Size		QPSK	16-QAM
				1	0	22.52	21.33
4	1732.5	20175	20	1	99	22.59	21.53
4	1732.3			50	25	21.40	20.34
				100	0	21.46	20.35

Band Carrier frequency (MHz)		Channel (High)	BW	RB Size	RB Offset	RF Powe (dB	-
	•					QPSK	16-QAM
				1	0	22.71	21.60
4	1745	20300	20	1	99	22.82	21.70
4	1743	20300	20	50	25	21.66	20.68
				100	0	21.69	20.67





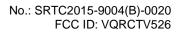
Rand	Rand I tredilency I	Channel	1 8 1/1/	RB		RF Power Output (dBm)	
Danu		(Low)		Size		QPSK	16-QAM
				1	0	22.91	21.82
7	2502.5	20775	5	1	24	22.94	21.78
/	2302.3	20773	5	12	6	21.92	20.87
				25	0	21.87	20.82

Band Carrier frequency (MHz)		Channel	BW	RB	RB RB	RF Power Output (dBm)	
	(Mid)	DVV	Size	Offset	QPSK	16-QAM	
				1	0	22.91	21.77
7	2535	21100	5	1	24	22.73	21.61
/	2333	21100		12	6	21.79	20.82
				25	0	21.74	20.75

Band	Carrier frequency	Channel (High)	BW	RB	RB RB Size Offset	RF Power Output (dBm)	
Danu	(MHz)			Size		QPSK	16-QAM
		21425	5	1	0	22.68	21.66
7	2567.5			1	24	22.77	21.64
/	2307.3			12	6	21.74	20.76
				25	0	21.71	20.68

Band Carrier frequency (MHz)		Channel	BW	RB		RF Power Output (dBm)	
	(Low)	DVV	Size	Offset	QPSK	16-QAM	
		20800	10	1	0	22.83	21.81
7	2505			1	49	23.05	21.90
/	2303		10	24	12	21.86	20.86
				50	0	21.86	20.85

Band freque	Carrier	Channel	BW	RB		RF Power Output (dBm)	
	(MHz)	(Mid)		Size		QPSK	16-QAM
		2535 21100	10	1	0	22.97	21.86
7	2535			1	49	22.94	21.61
'	2333	21100	10	24	12	22.90	20.75
				50	0	21.79	20.76





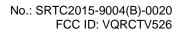
Band Carrier frequency (MHz)		Channel	BW	RB		RF Power Output (dBm)	
	(High)	DVV	Size	Offset	QPSK	16-QAM	
		2565 21400	10	1	0	22.65	21.68
7	2565			1	49	22.74	21.74
/	2303	21400	10	24	12	21.70	20.65
				50	0	21.72	20.67

Band Carrier frequency (MHz)		Channel	BW	RB		RF Power Output (dBm)	
	(Low)	DVV	Size	Offset	QPSK	16-QAM	
			1.5	1	0	22.79	21.73
7	2507.5	20825		1	74	22.82	21.85
/	2307.3	20823	15	38	18	21.93	20.87
				75	0	21.92	20.86

Rand	Band Carrier frequency (MHz) Chann	Channel	BW	RB	RB Offset	RF Power Output (dBm)	
Danu		(Mid)		Size		QPSK	16-QAM
			1	0	22.95	21.89	
7	2535	21100	15	1	74	22.69	21.58
	2333	21100	13	38	18	21.85	20.85
				75	0	21.86	20.82

Carrier Band frequency		Channel	BW	RB	RB	RF Power Output (dBm)	
Dana	(MHz)	(High)	טעע	Size	Offset	QPSK	16-QAM
				1	0	22.71	21.74
7	7 2562.5 21375	21375	15	1	74	22.87	21.78
2302.3	2302.3	2302.3		38	18	21.90	20.73
				75	0	21.90	20.76

Carrier Band frequency	Channel	BW	RB	RB	RF Power Output (dBm)		
Danu	(MHz)	(Low)	DVV	Size	Offset	QPSK	16-QAM
				1	0	22.82	21.73
7	7 2510 20850	20850	20	1	99	22.78	21.83
7 2310	2310	2310 20830		50	25	21.83	20.79
				100	0	21.82	20.75



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Rand	Rand tredilency	Channel	BW	RB	RB	RF Power Output (dBm)	
Danu	(MHz)	(Mid)	DVV	Size	Offset	QPSK	16-QAM
				1	0	23.00	21.88
7	2535	21100	20	1	99	22.56	21.54
2333	2333	2333 21100	20	50	25	21.73	20.75
				100	0	21.74	20.72

Band	Rand I fredilency I	Channel	BW	RB	RB	RF Power Output (dBm)	
Danu	(MHz)	(High)	DVV	Size	Offset	QPSK	16-QAM
				1	0	22.94	21.90
7	2560	21350	20	1	99	22.84	21.82
2300	2560	2300 21330	20	50	25	21.66	20.67
				100	0	21.72	20.73



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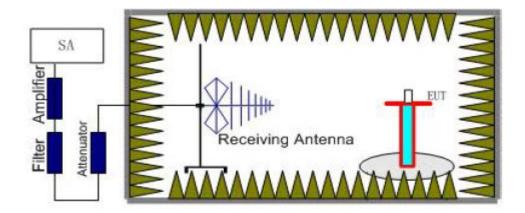


6.2 Effective Radiated Power-FCC Part 27.50(d)(4)

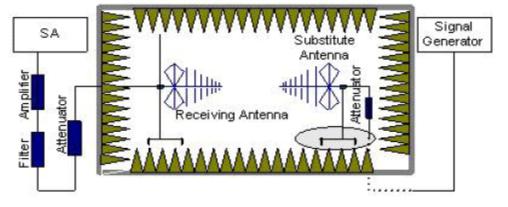
Ambient condition:

Temperature	Relative humidity	Pressure
20.8°C	36.5%	100.9kPa

Test setup:

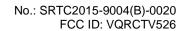


Step 1



Step 2

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Test procedure:

The measurements procedures in TIA-603C-2004 are used.

Step 1:

The measurement is carried out in the fully anechoic chamber. EUT was placed on a 2.4 meters high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. The height of receiving antenna is 2.4m and varies in certain range to find the maximum power value. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used and RBW is set to 3MHz. Then the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum power value on spectrum analyzer or receiver. And the maximum value of the receiver should be recorded as (Pr).

Step 2:

A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator. To repeat the same procedure as step1 and the level of signal generator will be adjusted till the same power value on the spectrum analyzer or receiver. The ERP/EIRP of the EUT can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

A power (Pmea) is applied to the input of the substitution antenna, and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (Pmea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

A "reference path loss" should be calculated after test. The attenuation of "reference path loss" is the cable loss between the Signal Source with the Substitution Antenna (Pca) and the Substitution Antenna Gain (Ga).

The measurement results are obtained as described below:

Power (EIRP) = Pmea + Pca + Ga

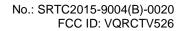
This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP - 2.15 (dB).

|--|

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LTE band 2 Test result:

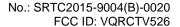
Frequency (MHz)	Peak EIRP(dBm)	Pca Cable loss	Ga Antenna Gain (dB)	Pmea (dBm)	Polarization
1851.5	23.42	-5.2	8.4	20.22	Vertical
1880.0	23.22	-5.2	8.6	19.82	Vertical
1907.5	23.41	-5.2	8.6	20.01	Vertical

LTE band 4
Test result:

Frequency (MHz)	Peak EIRP(dBm)	Pca Cable loss	Ga Antenna Gain (dB)	Pmea (dBm)	Polarization
1710.7	22.98	-5	8.6	19.38	Vertical
1732.5	23.19	-5	8.6	19.59	Vertical
1754.3	23.35	-5	8.6	19.75	Vertical

LTE band 7 Test result:

Frequency (MHz)	Peak EIRP(dBm)	Pca Cable loss	Ga Antenna Gain (dB)	Pmea (dBm)	Polarization
2502.5	22.18	-5.8	8.0	19.98	Vertical
2535	21.95	-5.8	8.0	19.75	Vertical
2560	22.01	-5.8	8.2	19.61	Vertical



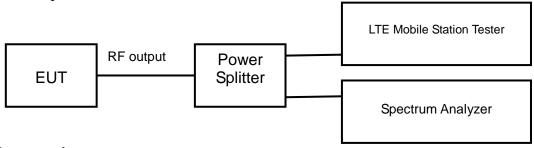


6.1.3 Occupied Bandwidth-FCC Part 2.1049/27.53(h)(1)

Ambient condition:

Temperature	Relative humidity	Pressure
23°C	42%	101.9kPa

Test Setup:



Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. The occupied bandwidth is measured using spectrum analyzer. RBW is set to 30kHz on spectrum analyzer. The bandwidth of 99% power can be read on spectrum analyzer.

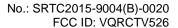
The measurement will be conducted at three channels (Bottom, middle and top channels of LTE band)

Limits: No specific occupied bandwidth requirements in part 2.1049

Test result:

Rand	Band Carrier frequency (MHz) Channel	Channel	BW	RB Size	RB	Bandwidth of 99% Power (MHz)			
Danu		(Low)			Offset	QPSI	<	16-Q <i>A</i>	M
	2 1850.7 18607			1	0	0.293	Fig.1	0.283	Fig.5
2		19607	1 /	1	5	0.283	Fig.2	0.286	Fig.6
2		18007	1.4	3	2	0.606	Fig.3	0.596	Fig.7
				6	0	1.101	Fig.4	1.095	Fig.8

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LTE Mode:

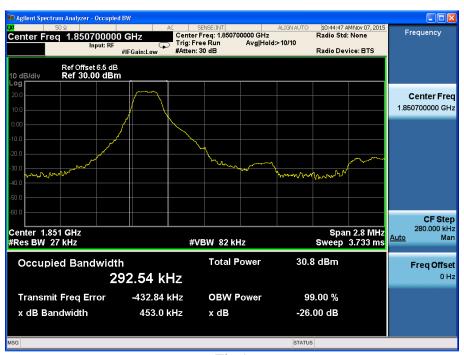
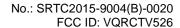


Fig.1



Fig.2



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Fig.3

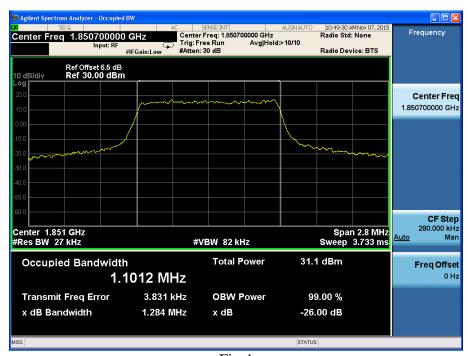
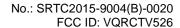


Fig.4



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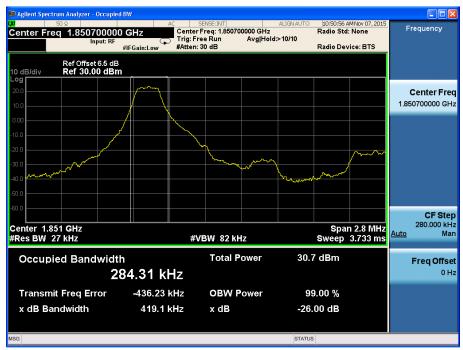
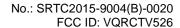


Fig.5



Fig.6



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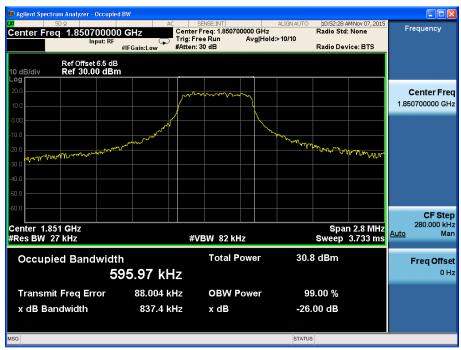
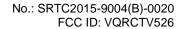


Fig.7



Fig.8



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Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1880	18900	1.4	1	0	0.297	Fig.1	0.286	Fig.5
				1	5	0.278	Fig.2	0.276	Fig.6
				3	2	0.599	Fig.3	0.601	Fig.7
				6	0	1.102	Fig.4	1.095	Fig.8

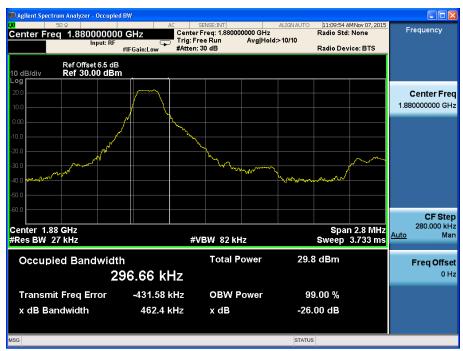
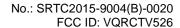


Fig.1



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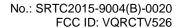




Fig.2



Fig.3



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Fig.4

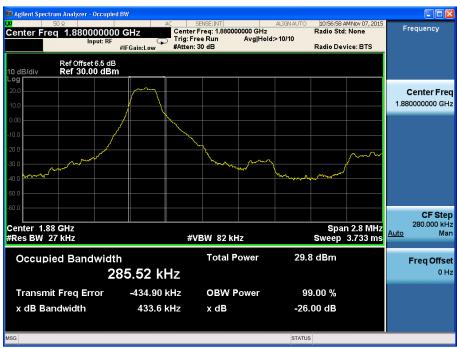
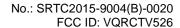


Fig.5



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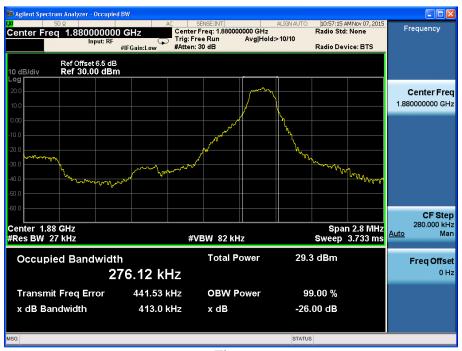


Fig.6

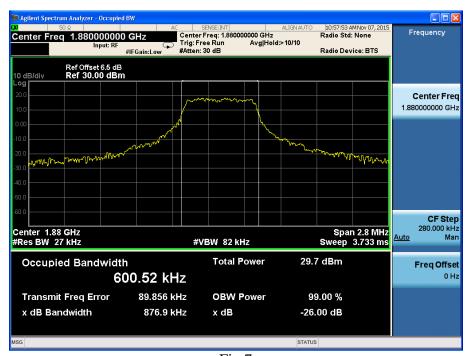


Fig.7



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Fig.8



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Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1909.3	19193	1.4	1	0	0.296	Fig.1	0.297	Fig.5
				1	5	0.277	Fig.2	0.284	Fig.6
				3	2	0.603	Fig.3	0.605	Fig.7
				6	0	1.103	Fig.4	1.103	Fig.8

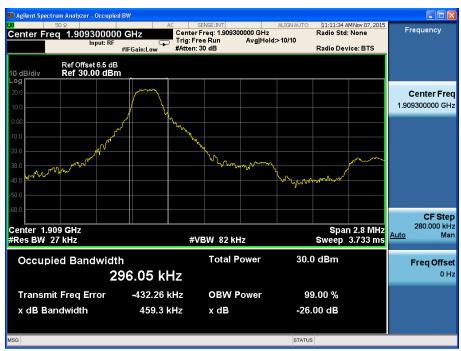
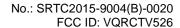


Fig.1



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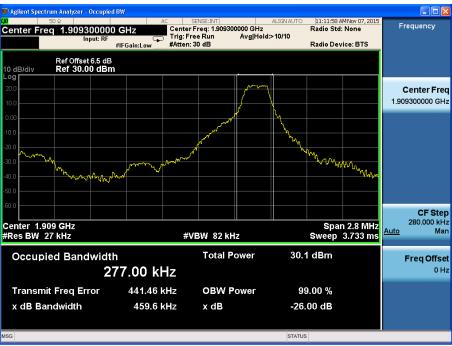
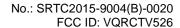


Fig.2



Fig.3



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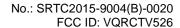




Fig.4



Fig.5



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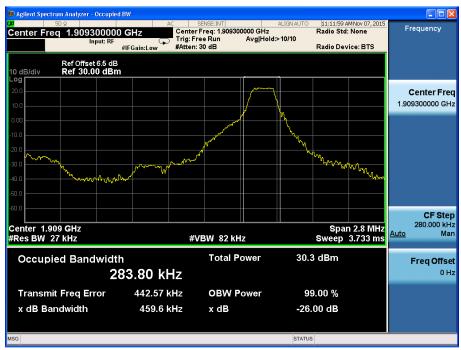


Fig.6

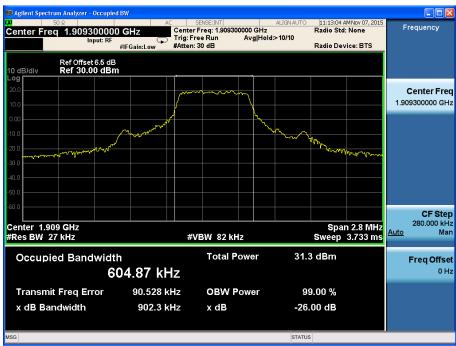


Fig.7



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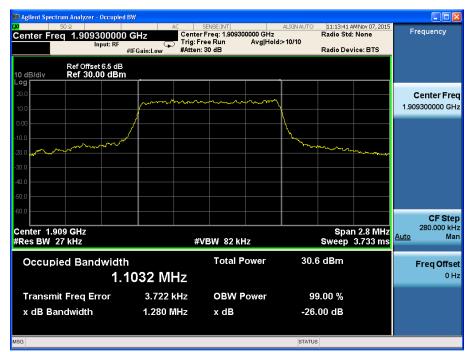
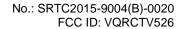


Fig.8



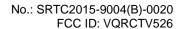
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Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1851.5	18615	3	1	0	0.405	Fig.1	0.390	Fig.5
				1	14	0.393	Fig.2	0.401	Fig.6
				8	4	1.490	Fig.3	1.493	Fig.7
				15	0	2.707	Fig.4	2.708	Fig.8



Fig.1



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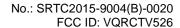




Fig.2



Fig.3



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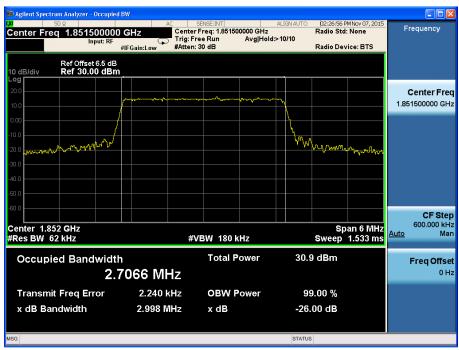
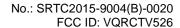


Fig.4



Fig.5



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Fig.6

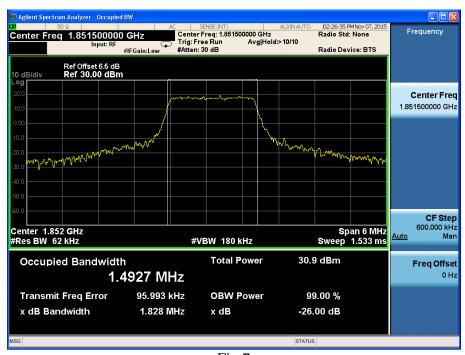


Fig.7



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Fig.8



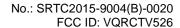
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Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1880	18900	3	1	0	0.388	Fig.1	0.399	Fig.5
				1	14	0.391	Fig.2	0.396	Fig.6
				8	4	1.483	Fig.3	1.488	Fig.7
				15	0	2.705	Fig.4	2.704	Fig.8



Fig.1



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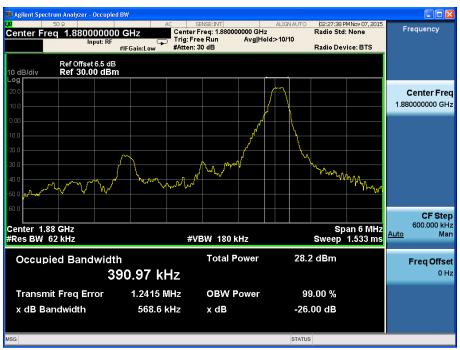


Fig.2

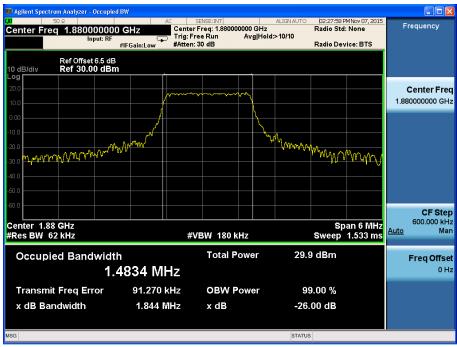
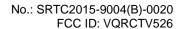


Fig.3



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Fig.4

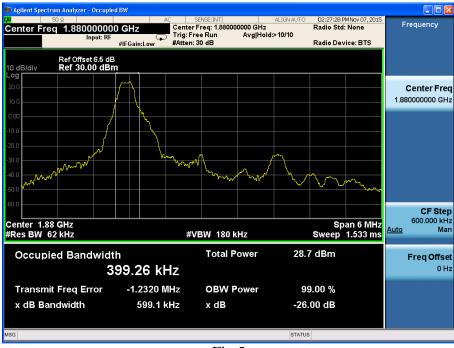
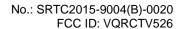


Fig.5



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Fig.6



Fig.7

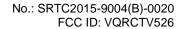


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Fig.8



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Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB	Bandwidth of 99% Power (MHz)			
					Offset	QPSK		16-QAM	
2	1908.5	19185	3	1	0	0.411	Fig.1	0.413	Fig.5
				1	14	0.401	Fig.2	0.412	Fig.6
				8	4	1.487	Fig.3	1.490	Fig.7
				15	0	2.696	Fig.4	2.694	Fig.8

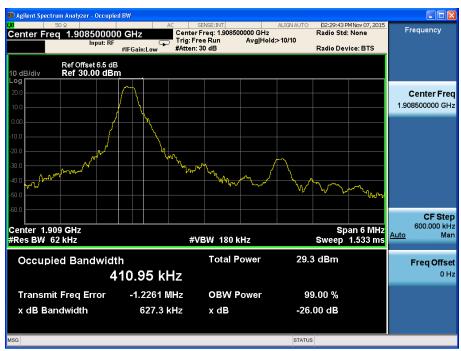
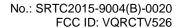


Fig.1



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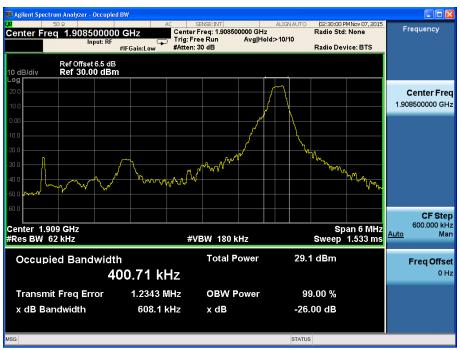


Fig.2

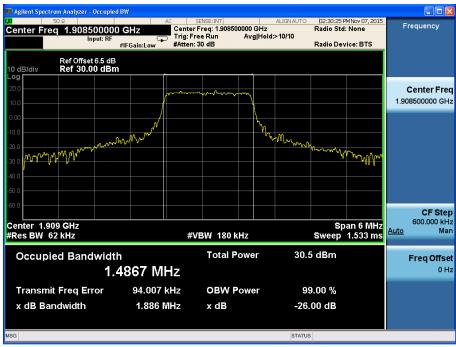


Fig.3