

FCC TEST REPORT

(PART 27)

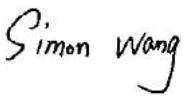
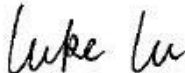
Applicant:	CPSpeed CO.,LTD.
Address:	3505 stLuke's Tower,8-1 Akashi-cho, Chuo-ku, Tokyo 104-0044

Manufacturer or Supplier:	MeiG Smart Technology Co., Ltd
Address:	2nd Floor,Office Building,No.5 Lingxia Road,Fenghuang,Fuyong Street,Bao'an District,Shenzhen
Product:	Speed Wi-Fi DOCK 5G 01
Brand Name:	CPSpeed
Model Name:	CPS01
FCC ID:	2BMKV-CPS01
Date of tests:	Nov. 12, 2024~Dec. 12, 2024

The tests have been carried out according to the requirements of the following standard:

- ☒ FCC Part 27 ☒ ANSI/TIA/EIA-603-D
☒ FCC Part 2 ☒ ANSI/TIA/EIA-603-E ☒ ANSI C63.26-2015

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
 Date: Dec. 12, 2024	 Date: Dec. 12, 2024

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1 SUMMARY OF TEST RESULTS	5
1.1 MEASUREMENT UNCERTAINTY	7
1.2 TEST SITE AND INSTRUMENTS	8
2 GENERAL INFORMATION	9
2.1 GENERAL DESCRIPTION OF EUT	9
2.2 CONFIGURATION OF SYSTEM UNDER TEST	13
2.3 DESCRIPTION OF SUPPORT UNITS	14
2.4 TEST ITEM AND TEST CONFIGURATION	14
2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS	21
3 TEST TYPES AND RESULTS	22
3.1 OUTPUT POWER MEASUREMENT	22
3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT	22
3.1.2 TEST PROCEDURES	22
3.1.3 TEST SETUP	23
3.1.4 TEST RESULTS	24
3.2 FREQUENCY STABILITY MEASUREMENT	43
3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT	43
3.2.2 TEST PROCEDURE	43
3.2.3 TEST SETUP	43
3.2.4 TEST RESULTS	44
3.3 OCCUPIED BANDWIDTH MEASUREMENT	45
3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT	45
3.3.2 TEST SETUP	45
3.3.3 TEST PROCEDURES	45
3.3.4 TEST RESULTS	46
3.4 BAND EDGE MEASUREMENT	47
3.4.1 LIMITS OF BAND EDGE MEASUREMENT	47
3.4.2 TEST SETUP	47
3.4.3 TEST PROCEDURES	48
3.4.4 TEST RESULTS	49
3.5 CONDUCTED SPURIOUS EMISSIONS	50
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	50
3.5.2 TEST PROCEDURE	50
3.5.3 TEST SETUP	50
3.5.4 TEST RESULTS	51
3.6 RADIATED EMISSION MEASUREMENT	52
3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT	52
3.6.2 TEST PROCEDURES	52
3.6.3 DEVIATION FROM TEST STANDARD	52
3.6.4 TEST SETUP	53
3.6.5 TEST RESULTS	55
3.7 PEAK TO AVERAGE RATIO	79
3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT	79
3.7.2 TEST SETUP	79
3.7.3 TEST PROCEDURES	79
3.7.4 TEST RESULTS	80
4 INFORMATION ON THE TESTING LABORATORIES	81



Test Report No.: W7L-P24090006RF06

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB... 82

6 APPENDIX 83

LTE BAND 17	83
PEAK-TO-AVERAGE RATIO(CCDF)	83
TEST RESULT	83
TEST GRAPHS	84
26DB BANDWIDTH AND OCCUPIED BANDWIDTH	87
TEST RESULT	87
TEST GRAPHS	88
BAND EDGE	90
TEST RESULT	90
TEST GRAPHS	91
CONDUCTED SPURIOUS EMISSION.....	94
TEST RESULT	94
TEST GRAPHS	95
FREQUENCY STABILITY	99
TEST RESULT	99
LTE BAND 41	101
PEAK-TO-AVERAGE RATIO(CCDF)	101
TEST RESULT	101
TEST GRAPHS	103
26DB BANDWIDTH AND OCCUPIED BANDWIDTH	109
TEST RESULT	109
TEST GRAPHS	110
BAND EDGE	113
TEST RESULT	113
TEST GRAPHS	114
CONDUCTED SPURIOUS EMISSION.....	118
TEST RESULT	118
TEST GRAPHS	121
FREQUENCY STABILITY	139
TEST RESULT	139
LTE BAND 41C.....	141
26DB BANDWIDTH AND OCCUPIED BANDWIDTH	141
TEST RESULT	141
TEST GRAPHS	143
BAND EDGE	151
TEST RESULT	151
TEST GRAPHS	151
CONDUCTED SPURIOUS EMISSION.....	152
TEST RESULT	152
TEST GRAPHS	152



Test Report No.: W7L-P24090006RF06

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P24090006RF06	Original release	Dec. 12, 2024

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 27 & PART 2			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	TEST LAB*
§2.1046	Conducted Output Power	Compliance	A
§27.50(c)(10)	Effective Radiated Power (Band 17)	Compliance	A
§27.50(h)(2)	Equivalent Isotropically Radiated Power (Band 41) (Band 41C)	Compliance	A
§2.1055 §27.54	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§2.1051 §27.53(g) §27.53(m)(4)(6)	Conducted Band Edge Measurements (Band 17) (Band 41) (Band 41C)	Compliance	A
§2.1051 §27.53(g) §27.53(m)(4)(6)	Conducted Spurious Emissions (Band 17) (Band 41) (Band 41C)	Compliance	A
§2.1053 §27.53(g) §27.53(m)(4)(6)	Radiated Spurious Emissions (Band 17) (Band 41) (Band 41C)	Compliance	A
NA	Peak to average ratio	Compliance	A

NOTE: The worst-case scenario for all measurements is based on an engineering evaluation made on different modulations. Then, QPSK and 16QAM were observed as the worst mode to LTE bands respectively and set for all conducted and radiated. Output power measurements were measured on QPSK, 16QAM and 64QAM modulations, and tests other than output power are performed only in worse-case QPSK and 16QAM modulations.



Test Report No.: W7L-P24090006RF06

***Test Lab Information Reference**

Lab A:

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Lab Address:

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Accredited Test Lab Cert 3939.01

The FCC Site Registration No. : 525120; Designation No. : CN1171;

1.1 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	UNCERTAINTY
Frequency Stability	$\pm 76.97\text{Hz}$
Radiated emissions (9KHz~30MHz)	$\pm 2.68\text{dB}$
Radiated emissions & Radiated Power (30MHz~1GHz)	$\pm 4.98\text{dB}$
Radiated emissions & Radiated Power (1GHz ~6GHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GHz ~18GHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GHz ~40GHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Conducted Output power	$\pm 2.06\text{dB}$
Band Edge Measurements	$\pm 4.70\text{dB}$

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

1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 27,24	Mar. 26,25
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.09,24	May.08,25
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.01,24	Aut.31,25
Bilog Antenna	ETS-LINDGRE N	3143B	00161965	Feb. 17,24	Feb. 16,25
Horn Antenna	ETS-LINDGRE N	3117	00168692	Feb. 17,24	Feb. 16,25
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K- SG/QMS-00361	15433	Sep.02, 24	Sep.01, 25
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 13,24	Feb. 12,25
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 05,24	May. 04,25
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.09,24	May.08,25
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 16,24	Feb.15,25
3m Semi-anechoic Chamber	ETS-LINDGRE N	9m*6m*6m	Euroshieldpn- CT0001143-121 6	Nov. 14,23	Nov. 13,26
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120	3.1.36	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	50HF-010-SMA	May. 05,24	May. 04,25
Power Meter	Anritsu	ML2495A	1506002	Feb. 13,24	Feb. 12,25
Power Sensor	Anritsu	MA2411B	1339352	Feb. 13,24	Feb. 12,25
Temperature Chamber	ESPEC	SH-242	93000855	May. 05,24	May. 04,25
MXG Analog Microwave Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 13,24	Feb. 12,25
Base station R&S CMW500	Rohde&Schwa rz	CMW500	153085	May.09,24	May.08,25
DC Source	Kikusui/JP	PMX18-5A	N/A	Aug. 10,24	Aug. 09,25
Power Divider	COM-MW	ZPD8-2M0-40G-1 942	04223131	Oct.08.24	Oct.07.25

- NOTE:**
1. The calibration interval of the above test instruments is 12 months or 36 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; The Designation No. is CN1171.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Speed Wi-Fi DOCK 5G 01	
BRAND NAME	CPSpeed	
MODEL NAME	CPS01	
NOMINAL VOLTAGE	5.0Vdc(adapter or host equipment) 3.85Vdc (Li-ion, battery)	
MODULATION TECHNOLOGY	LTE	QPSK, 16QAM, 64QAM
FREQUENCY RANGE	LTE Band 17 Channel Bandwidth: 5MHz	706.5MHz ~ 713.5MHz
	LTE Band 17 Channel Bandwidth: 10MHz	709MHz ~ 711 MHz
	LTE Band 41 Channel Bandwidth: 5MHz	2547.5MHz ~ 2652.5MHz
	LTE Band 41 Channel Bandwidth: 10MHz	2550MHz ~ 2650MHz
	LTE Band 41 Channel Bandwidth: 15MHz	2552.5MHz ~ 2647.5MHz
	LTE Band 41 Channel Bandwidth: 20MHz	2555MHz ~ 2645MHz
	LTE Band CA_41C Channel Bandwidth: 5MHz+20MHz	2548.3MHz ~ 2645MHz
	LTE Band CA_41C Channel Bandwidth: 10MHz+15MHz	2550.3MHz ~ 2647.5MHz
	LTE Band CA_41C Channel Bandwidth: 10MHz+20MHz	2550.5MHz ~ 2645MHz
	LTE Band CA_41C Channel Bandwidth:15MHz+10MHz	2552.5MHz ~ 2649.7MHz
	LTE Band CA_41C Channel Bandwidth15MHz+15MHz	2552.5MHz ~ 2647.5MHz
	LTE Band CA_41C Channel Bandwidth: 15MHz+20MHz	2552.8MHz ~ 2645MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+5MHz	2555MHz ~ 2651.7MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+10MHz	2555MHz ~ 2649.5MHz



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

	LTE Band CA_41C Channel Bandwidth: 20MHz+15MHz	2555MHz ~ 2647.2MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+20MHz	2555MHz ~ 2645MHz
MAX. EIRP POWER	LTE Band 17 Channel Bandwidth: 5MHz	138.04mW
	LTE Band 17 Channel Bandwidth: 10MHz	138.36mW
	LTE Band 41(HPUE) Channel Bandwidth: 5MHz	285.76mW
	LTE Band 41(HPUE) Channel Bandwidth: 10MHz	287.08mW
	LTE Band 41(HPUE) Channel Bandwidth: 15MHz	286.42mW
	LTE Band 41(HPUE) Channel Bandwidth: 20MHz	289.07mW
	LTE Band CA_41C Channel Bandwidth: 20M+20M	283.79mW
	LTE Band CA_41C Channel Bandwidth: 20M+15M	279.90mW
	LTE Band CA_41C Channel Bandwidth: 15M+20M	283.14mW
	LTE Band CA_41C Channel Bandwidth: 20M+10M	279.25mW
	LTE Band CA_41C Channel Bandwidth: 10M+20M	281.19mW
	LTE Band CA_41C Channel Bandwidth: 15M+15M	277.33mW
	LTE Band CA_41C Channel Bandwidth: 15M+10M	275.42mW
	LTE Band CA_41C Channel Bandwidth: 10M+15M	281.84mW
	LTE Band CA_41C Channel Bandwidth: 20M+5M	281.84mW
	LTE Band CA_41C Channel Bandwidth: 5M+20M	279.90mW
EMISSION DESIGNATOR	LTE Band 17 Channel Bandwidth: 5MHz	QPSK: 4M53G7D
		16QAM: 4M53W7D
	LTE Band 17 Channel Bandwidth: 10MHz	QPSK: 9M00G7D
		16QAM: 9M00W7D
	LTE Band 41 Channel Bandwidth: 5MHz	QPSK: 4M52G7D
		16QAM: 4M53W7D
	LTE Band 41 Channel Bandwidth: 10MHz	QPSK: 9M01G7D
		16QAM: 9M00W7D
	LTE Band 41 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

	LTE Band 41 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M0W7D
	LTE Band CA_41C Channel Bandwidth: 5MHz+20MHz	QPSK: 23M0G7D
		16QAM: 22M9W7D
	LTE Band CA_41C Channel Bandwidth: 20MHz+5MHz	QPSK: 23M0G7D
		16QAM: 23M0W7D
	LTE Band CA_41C Channel Bandwidth: 10MHz+15MHz	QPSK: 23M2G7D
		16QAM: 23M2W7D
	LTE Band CA_41C Channel Bandwidth: 15MHz+10MHz	QPSK: 23M2G7D
		16QAM: 23M2W7D
	LTE Band CA_41C Channel Bandwidth: 15MHz+15MHz	QPSK: 28M4G7D
		16QAM: 28M4W7D
	LTE Band CA_41C Channel Bandwidth: 10MHz+20MHz	QPSK: 52M6G7D
		16QAM: 54M2W7D
ANTENNA TYPE	Ant 0: IFA/Monopole Antenna with 0.6dBi gain for LTE B17 Ant 2: IFA/Monopole Antenna with 1.2dBi gain for LTE B41	QPSK: 32M8G7D
		16QAM: 32M7W7D
HW VERSION	CPS01_V1.03	
SW VERSION	CPS01_D.0.5_EQ101	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	
EXTREME TEMPERATURE	0-35 °C	
EXTREME VOLTAGE	3.6V - 4.3V	

NOTE:

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



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

2. The EUT incorporates a SISO function. Physically, the EUT LTE B17 provides one completed transmitter and two receiver. The EUT LTE B41 provides one completed transmitter and four receiver.

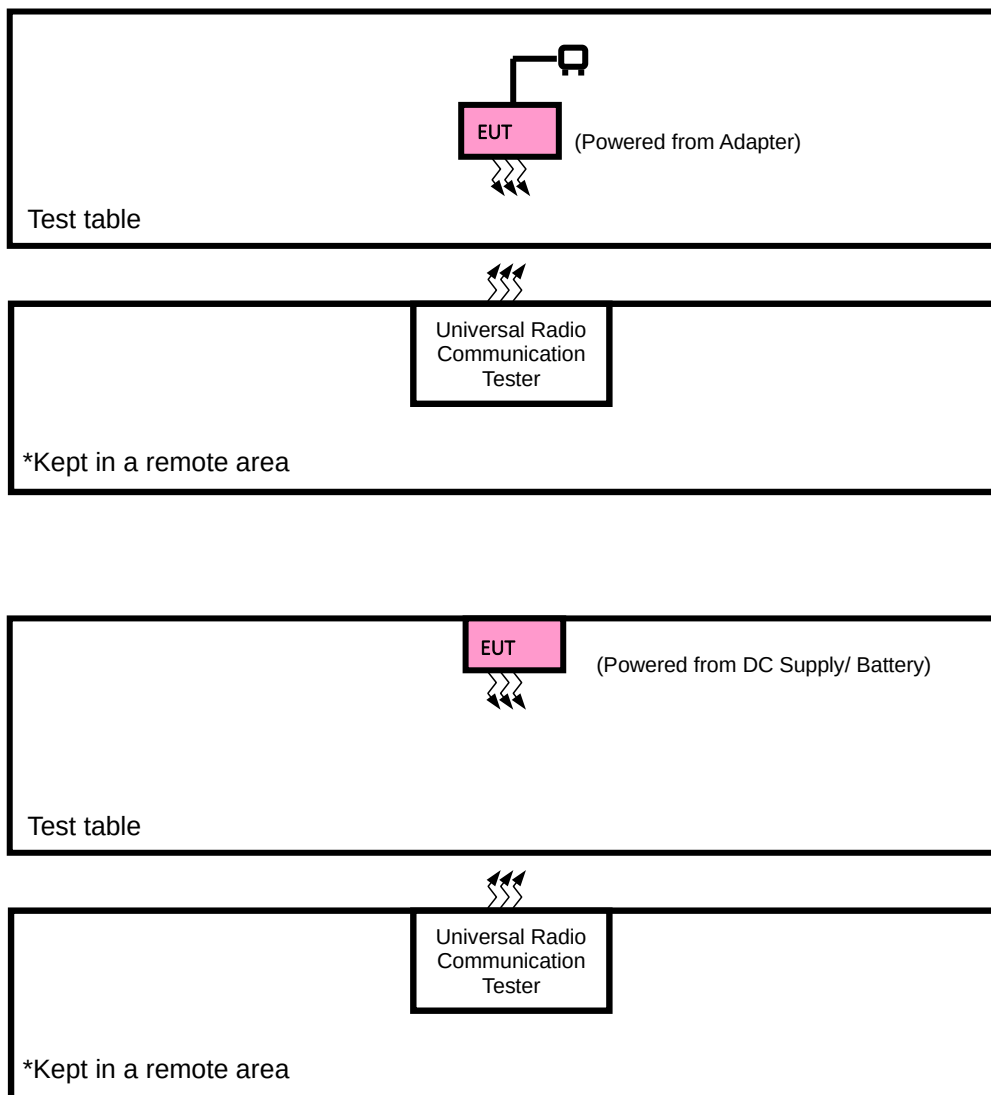
MODULATION MODE	TX FUNCTION
LTE B17	1TX/2RX
LTE B41	1TX/4RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
4. Antenna gain and EUT conducted cable loss are provided by the customer, and the laboratory will record the results based on these items that involve these two parameters.
5. Output power measurements were measured on QPSK, 16QAM and 64QAM modulations. And tests other than output power are performed only in worst-case QPSK and 16QAM modes.
6. **List of Accessory:**

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
LCD Panel 1	ZZW	Shenzhen Zoneway Technology Co., Ltd	ZZW240QBS-149 9A	N/A
LCD Panel 2	Rouxian	Chongqing Rouxian Intelligent Technology Co., Ltd	24JS1199-QT	N/A
LCD Panel 3	Yiou	Hubei Yiou Electronics Co., Ltd.	TBD	N/A
Battery 1	BYD	Shenzhen BYD Lithium Battery Company Limited	CPS01-CSL3456 83	Capacity: 5400mAh
Battery 2	ATL	Dongguan Amperex Technology Limited	CPS01-345683	Capacity: 5400mAh
AC Adapter 1	N/A	N/A	N/A	I/P: 100-240Vac, 500mA, 50-60Hz, O/P: 5 Vdc, 2.5A (Normal charge) O/P: 9Vdc, 1.7A or 12Vdc, 1.25A (Fast Charge)
AC Adapter 2	N/A	N/A	N/A	I/P: 100-240Vac, 500mA, 50-60Hz, O/P: 5 Vdc, 2.5A (Normal charge) O/P: 9Vdc, 1.7A or 12Vdc, 1.25A (Fast Charge)

2.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST



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	N/A	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A

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 was found when positioned on Y-plane for EIRP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + Adapter + USB Cable with LTE link
B	EUT + DC Supply with LTE link

LTE BAND 17

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23780 to 23800	23780,23800	10MHz	QPSK,16QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23755 to 23825	23755, 23790, 23825	5MHz	QPSK,16QAM	25 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10MHz	QPSK,16QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23755 to 23825	23755, 23790, 23825	5MHz	QPSK,16QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10MHz	QPSK,16QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
A	BAND EDGE	23755 to 23825	23755	5MHz	QPSK,16QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
			23825	5MHz	QPSK,16QAM	1 RB / 24 RB Offset 25 RB / 0 RB Offset
		23780 to 23800	23780	10MHz	QPSK,16QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
			23800	10MHz	QPSK,16QAM	1 RB / 49 RB Offset 50 RB / 0 RB Offset
		23755 to 23825	23755, 23790, 23825	5MHz	QPSK,16QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset 1 RB / 24 RB Offset
			23780, 23790, 23800	10MHz	QPSK,16QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset 1 RB / 49 RB Offset
A	RADIATED EMISSION	23755 to 23825	23790	5MHz	QPSK	1 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1 RB / 0 RB Offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. Output power measurements were measured on QPSK,16QAM and 64QAM modulations. And tests other than output power are performed only in worst-case QPSK and 16QAM modes.

LTE BAND 41 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	40165 to 41215	40165, 40690, 41215	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		40190 to 41190	40190, 40690, 41540	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		40215 to 41165	40215 40690, 41165	15MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		40240 to 41140	40240 40690, 41140	20MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	40190 to 41190	40190, 40690, 41540	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	40165 to 41215	40165, 40690, 41215	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
		40190 to 41190	40190, 40690, 41540	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
		40215 to 41165	40215 40690, 41165	15MHz	QPSK, 16QAM	75 RB / 0 RB Offset
		40240 to 41140	40240 40690, 41140	20MHz	QPSK, 16QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	40165 to 41215	40165, 40690, 41215	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
		40190 to 41190	40190, 40690, 41540	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
		40215 to 41165	40215 40690, 41165	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset 75 RB / 0 RB Offset
		40240 to 41140	40240 40690, 41140	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
A	BAND EDGE	39675 to 41565	39675	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
			41565	5MHz	QPSK, 16QAM	1 RB / 24 RB Offset 25 RB / 0 RB Offset
		39700 to 41540	39700	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
			41540	10MHz	QPSK, 16QAM	1 RB / 49 RB Offset 50 RB / 0 RB Offset
		39725 to 41515	39725	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

			41515	15MHz	QPSK, 16QAM	75 RB / 0 RB Offset
						1 RB / 74 RB Offset
						75 RB / 0 RB Offset
		39750 to 41490	39750	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						100 RB / 0 RB Offset
			41490	20MHz	QPSK, 16QAM	1 RB / 99 RB Offset
A	CONDCUDE TED EMISSION	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620,41540	10MHz	QPSK, 16QAM	1 RB / 0RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM,	1 RB / 0 RB Offset
A	RADIATED EMISSION	39675 to 41565	40620	5MHz	QPSK	1 RB / 0 RB Offset
		39700 to 41540	40190,40620,4119 0	10MHz	QPSK	1 RB / 0RB Offset
		39725 to 41515	40620	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	40620	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. Output power measurements were measured on QPSK,16QAM and 64QAM modulations.And tests other than output power are performed only in worst-case QPSK and 16QAM modes.

LTE BAND CA_41C MODE								
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE PCC CHANNEL	AVAILABLE SCC CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(PCC)	MODE(SCC)
A	EIRP	40240 to 40991	40411 to 41162	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		40218 to 40969	40389 to 41140	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		40240 to 41041	40384 to 41185	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		40195 to 40996	40339 to 41140	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset
		40215 to 41015	40365 to 41165	Low, Middle, High	15MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		40215 to 41067	40335 to 41187	Low, Middle, High	15MHz+10MHz	QPSK, 16QAM, 64QAM	1RB / 74RB Offset	1RB / 0RB Offset
		40193 to 41045	40313 to 41165	Low, Middle, High	10MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset
		40240 to 41090	40357 to 41207	Low, Middle, High	20MHz +5MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		40173 to 41023	40290 to 41140	Low, Middle, High	5MHz +20MHz	QPSK, 16QAM, 64QAM	1RB/ 24RB Offset	1RB/ 0RB Offset
		40240 to 40942	40438 to 41140	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB / 99RB Offset 1RB / 0RB Offset	1RB/ 0RB Offset
A	OCCUPIED BANDWIDTH	40240 to 40991	40411 to 41162	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM	100RB/ 0RB Offset	75RB/ 0RB Offset
		40218 to 40969	40389 to 41140	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM	75RB/ 0RB Offset	100RB/ 0RB Offset
		40240 to 41041	40384 to 41185	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM	100RB/ 0RB Offset	50RB/ 0RB Offset
		40195 to 40996	40339 to 41140	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM	50RB/ 0RB Offset	100RB/ 0RB Offset
		40215 to 41015	40365 to 41165	Low, Middle, High	15MHz +15MHz	QPSK, 16QAM	75RB/ 0RB Offset	75RB/ 0RB Offset
		40215 to 41067	40335 to 41187	Low, Middle, High	15MHz +10MHz	QPSK, 16QAM	75RB/ 0RB Offset	50RB/ 0RB Offset
		40193 to 41045	40313 to 41165	Low, Middle, High	10MHz +15MHz	QPSK, 16QAM	50RB/ 0RB Offset	75RB/ 0RB Offset
		40240 to 41090	40357 to 41207	Low, Middle, High	20MHz +5MHz	QPSK, 16QAM	100RB/ 0RB Offset	25RB/ 0RB Offset
		40173 to 41023	40290 to 41140	Low, Middle, High	5MHz +20MHz	QPSK, 16QAM	25RB/ 0RB Offset	100RB/ 0RB Offset
		40240 to 40942	40438 to 41140	Low, Middle, High	20MHz +20MHz	QPSK, 16QAM	100RB/ 0RB Offset	100RB/ 0RB Offset
A	BAND EDGE	40240 to 40942	40438 to 41140	Low	20MHz+20MHz	QPSK, 16QAM,	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	100RB/ 0RB Offset
				High	20MHz+20MHz		1RB/ 0RB Offset	1RB/ 99RB Offset



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	100RB/ 0RB Offset
A	CONDUCTED EMISSION	40240 to 40942	40438 to 41140	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
A	RADIATED EMISSION	40240 to 40942	40438 to 41140	Middle	20MHz+20MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. Output power measurements were measured on QPSK,16QAM and 64QAM modulations.And tests other than output power are performed only in worst-case QPSK and 16QAM modes.



Test Report No.: W7L-P24090006RF06

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	DC 5V By Adapter	Jace Hu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 3.85V By Battery	James Fu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC5V By Adapter	James Fu
BAND EDGE	23deg. C, 70%RH	DC 5V By Adapter	James Fu
CONDUCTED EMISSION	23deg. C, 70%RH	DC5V By Adapter	James Fu
RADIATED EMISSION	23deg. C, 70%RH	DC5V By Adapter	Jace Hu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC5V By Adapter	James Fu



Test Report No.: W7L-P24090006RF06

2.5 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 27

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.

3 TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

§27.50(h)(2) :

The radiated peak output power shall be according to the specific rule Part 27.50(h)(2) that “User stations are limited to 2 watts” and 27.50(i) specific that “Peak transmit power must be measure over any interval of continuous transmission using instrumentation calibration in terms of rms-equivalent voltage.

§27.50(c)(10):

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

3.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

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

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T - L_C$$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively
(expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

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

CONDUCTED POWER MEASUREMENT:

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

3.1.3 TEST SETUP

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)

LTE Band 17

Band/BW	Modulation	RB Size	RB Offset	Low CH 23755	Mid CH 23790	High CH 23825
				Frequency 706.5 MHz	Frequency 710 MHz	Frequency 713.5 MHz
17/ 5	QPSK	1	0	22.65	22.95	22.74
		1	12	22.79	22.93	22.88
		1	24	22.69	22.73	22.57
		12	0	21.89	21.91	21.76
		12	6	21.86	21.73	21.78
		12	13	21.86	21.67	21.59
		25	0	21.72	21.85	21.73
	16QAM	1	0	21.79	21.92	21.76
		1	12	21.77	21.90	22.15
		1	24	21.70	22.16	22.13
		12	0	20.57	20.87	20.68
		12	6	20.71	20.70	20.59
		12	13	21.13	21.00	20.83
		25	0	20.81	20.92	20.66
	64QAM	1	0	20.70	20.86	20.60
		1	12	20.93	21.04	20.79
		1	24	20.70	21.09	21.07
		12	0	19.68	19.96	19.96
		12	6	19.76	19.89	19.63
		12	13	19.96	19.97	19.91
		25	0	19.78	19.84	19.65
Band/BW	Modulation	RB Size	RB Offset	Low CH 23780	Mid CH 23790	High CH 23800
				Frequency 709 MHz	Frequency 710 MHz	Frequency 711 MHz
17/ 10	QPSK	1	0	22.87	22.90	22.89
		1	24	22.92	22.96	22.94
		1	49	22.83	22.93	22.85
		25	0	21.82	21.89	21.86
		25	12	21.91	21.99	21.95
		25	25	21.89	21.94	21.84
		50	0	21.73	21.96	21.95
	16QAM	1	0	21.95	22.02	21.94
		1	24	21.86	22.09	22.09
		1	49	21.94	22.08	22.14
		25	0	20.85	20.92	20.75
		25	12	20.96	20.95	20.78
		25	25	21.08	21.04	20.94
		50	0	20.94	20.94	20.75
	64QAM	1	0	20.85	21.03	20.77
		1	24	20.85	21.07	20.99
		1	49	20.89	21.12	21.18
		25	0	19.88	19.91	19.91
		25	12	19.88	19.96	19.79
		25	25	20.03	20.01	19.97
		50	0	19.79	19.92	19.70

LTE Band 41 PC3						
Band/BW	Modulation	RB Size	RB Offset	Low CH (40165)	Mid CH (40690)	High CH (41215)
				Frequency (2547.5)MHz	Frequency (2600)MHz	Frequency (2652.5)MHz
41/ 5	QPSK	1	0	23.22	23.13	23.15
		1	12	23.30	23.20	23.06
		1	24	23.36	23.28	23.36
		12	0	22.07	22.28	22.04
		12	6	22.09	22.40	22.04
		12	13	22.06	22.43	22.18
		25	0	22.07	22.30	22.27
	16QAM	1	0	22.19	22.11	22.10
		1	12	22.05	22.12	22.03
		1	24	22.20	22.48	22.31
		12	0	21.11	21.15	21.12
		12	6	21.16	21.42	21.14
		12	13	21.39	21.41	21.31
		25	0	21.11	21.16	21.06
	64QAM	1	0	21.22	21.29	21.10
		1	12	21.40	21.36	21.26
		1	24	21.28	21.70	21.44
		12	0	20.25	20.26	20.54
		12	6	20.17	20.23	20.12
		12	13	20.13	20.38	20.10
		25	0	20.27	20.25	20.01
Band/BW	Modulation	RB Size	RB Offset	Low CH (40190)	Mid CH (40690)	High CH (41190)
				Frequency (2550)MHz	Frequency (2600)MHz	Frequency (2650)MHz
41/ 10	QPSK	1	0	23.18	23.14	23.30
		1	24	23.15	23.38	23.16
		1	49	23.32	23.31	23.29
		25	0	22.10	22.25	22.07
		25	12	22.28	22.06	22.09
		25	25	22.09	22.34	22.03
		50	0	22.11	22.02	22.25
	16QAM	1	0	22.13	22.17	22.02
		1	24	22.03	22.06	22.07
		1	49	22.40	22.33	22.41
		25	0	21.10	21.15	21.13
		25	12	21.19	21.46	21.08
		25	25	21.30	21.33	21.04
		50	0	21.14	21.37	21.02
	64QAM	1	0	21.08	21.44	21.22
		1	24	21.33	21.50	21.44
		1	49	21.56	21.62	21.45
		25	0	20.23	20.39	20.23
		25	12	20.30	20.26	20.10
		25	25	20.24	20.10	20.05
		50	0	20.08	20.21	20.02



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

LTE Band 41 PC3						
Band/BW	Modulation	RB Size	RB Offset	Low CH (40215)	Mid CH (40690)	High CH(41165)
				Frequency (2552.5)MHz	Frequency (2600)MHz	Frequency (2647.5)MHz
41/ 15	QPSK	1	0	23.27	23.25	23.27
		1	37	23.07	23.35	23.27
		1	74	23.06	23.37	23.19
		36	0	22.09	22.14	22.26
		36	19	22.35	22.43	22.13
		36	39	22.25	22.03	22.04
		75	0	22.33	22.34	22.03
	16QAM	1	0	22.07	22.20	22.04
		1	37	22.03	22.18	22.30
		1	74	22.41	22.21	22.16
		36	0	21.16	21.28	21.25
		36	19	21.25	21.08	21.23
		36	39	21.27	21.44	21.13
		75	0	21.12	21.34	21.02
	64QAM	1	0	21.18	21.17	21.08
		1	37	21.45	21.51	21.47
		1	74	21.41	21.32	21.18
		36	0	20.16	20.16	20.49
		36	19	20.04	20.20	20.03
		36	39	20.02	20.37	20.05
		75	0	20.23	20.36	20.04
Band/BW	Modulation	RB Size	RB Offset	Low CH(40240)	Mid CH (40690)	High CH(41140)
				Frequency (2555)MHz	Frequency (2600)MHz	Frequency (2645)MHz
41/ 20	QPSK	1	0	23.30	23.33	23.26
		1	50	23.25	23.29	23.22
		1	99	23.31	23.41	23.32
		50	0	22.25	22.29	22.25
		50	25	22.27	22.37	22.28
		50	50	22.26	22.36	22.25
		100	0	22.25	22.34	22.27
	16QAM	1	0	22.15	22.30	22.04
		1	50	22.06	22.35	22.31
		1	99	22.46	22.46	22.36
		50	0	21.17	21.38	21.36
		50	25	21.19	21.31	21.24
		50	50	21.36	21.43	21.25
		100	0	21.21	21.31	21.19
	64QAM	1	0	21.15	21.44	21.26
		1	50	21.53	21.51	21.53
		1	99	21.48	21.55	21.38
		50	0	20.36	20.36	20.47
		50	25	20.24	20.38	20.11
		50	50	20.17	20.38	20.14
		100	0	20.19	20.38	20.09



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

LTE Band 41 PC2						
Band/BW	Modulation	RB Size	RB Offset	Low CH (40165)	Mid CH (40690)	High CH (41215)
				Frequency (2547.5)MHz	Frequency (2600)MHz	Frequency (2652.5)MHz
41/ 5	QPSK	1	0	25.16	25.36	25.29
		1	12	25.03	25.20	25.24
		1	24	25.36	25.23	25.26
		12	0	24.29	24.20	24.14
		12	6	24.34	24.22	24.23
		12	13	24.27	24.28	24.11
		25	0	24.13	24.19	24.19
	16QAM	1	0	24.28	24.38	24.48
		1	12	24.56	24.40	24.40
		1	24	24.13	24.49	24.16
		12	0	23.37	23.29	23.45
		12	6	23.24	23.52	23.31
		12	13	23.33	23.53	23.41
		25	0	23.19	23.41	23.42
	64QAM	1	0	23.64	23.73	23.22
		1	12	23.44	23.64	23.47
		1	24	23.30	23.62	23.31
		12	0	22.34	22.36	22.30
		12	6	22.55	22.46	22.23
		12	13	22.11	22.59	22.39
		25	0	22.43	22.25	22.46
Band/BW	Modulation	RB Size	RB Offset	Low CH (40190)	Mid CH (40690)	High CH (41190)
				Frequency (2550)MHz	Frequency (2600)MHz	Frequency (2650)MHz
41/ 10	QPSK	1	0	25.20	25.25	25.16
		1	24	25.11	25.23	25.26
		1	49	25.30	25.42	25.29
		25	0	24.13	24.24	24.17
		25	12	24.33	24.35	24.29
		25	25	24.29	24.30	24.19
		50	0	24.30	24.24	24.20
	16QAM	1	0	24.19	24.41	24.46
		1	24	24.53	24.48	24.30
		1	49	24.30	24.53	24.33
		25	0	23.31	23.28	23.48
		25	12	23.22	23.41	23.31
		25	25	23.44	23.58	23.39
		50	0	23.31	23.38	23.52
	64QAM	1	0	23.61	23.61	23.14
		1	24	23.60	23.56	23.38
		1	49	23.33	23.49	23.33
		25	0	22.42	22.34	22.28
		25	12	22.51	22.45	22.25
		25	25	22.24	22.62	22.30
		50	0	22.46	22.24	22.45



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

LTE Band 41 PC2						
Band/BW	Modulation	RB Size	RB Offset	Low CH (40215)	Mid CH (40690)	High CH(41165)
				Frequency (2552.5)MHz	Frequency (2600)MHz	Frequency (2647.5)MHz
41/ 15	QPSK	1	0	25.25	25.38	25.23
		1	37	25.23	25.32	25.24
		1	74	25.40	25.25	25.35
		36	0	24.14	24.24	24.20
		36	19	24.30	24.40	24.25
		36	39	24.31	24.20	24.21
		75	0	24.11	24.33	24.34
	16QAM	1	0	24.23	24.40	24.41
		1	37	24.61	24.35	24.41
		1	74	24.22	24.44	24.21
		36	0	23.47	23.40	23.40
		36	19	23.08	23.44	23.20
		36	39	23.44	23.50	23.50
		75	0	23.35	23.56	23.47
	64QAM	1	0	23.57	23.62	23.26
		1	37	23.49	23.73	23.49
		1	74	23.36	23.61	23.18
		36	0	22.30	22.25	22.33
		36	19	22.53	22.57	22.41
		36	39	22.28	22.63	22.40
		75	0	22.38	22.35	22.45
Band/BW	Modulation	RB Size	RB Offset	Low CH(40240)	Mid CH (40690)	High CH(41140)
				Frequency (2555)MHz	Frequency (2600)MHz	Frequency (2645)MHz
41/ 20	QPSK	1	0	25.34	25.41	25.33
		1	50	25.21	25.40	25.40
		1	99	25.41	25.44	25.42
		50	0	24.34	24.40	24.31
		50	25	24.36	24.41	24.38
		50	50	24.35	24.39	24.31
		100	0	24.32	24.37	24.35
	16QAM	1	0	24.29	24.44	24.61
		1	50	24.69	24.52	24.48
		1	99	24.34	24.64	24.35
		50	0	23.48	23.45	23.60
		50	25	23.27	23.59	23.38
		50	50	23.50	23.65	23.51
		100	0	23.36	23.58	23.58
	64QAM	1	0	23.65	23.79	23.32
		1	50	23.62	23.75	23.56
		1	99	23.40	23.64	23.37
		50	0	22.46	22.42	22.45
		50	25	22.60	22.62	22.42
		50	50	22.29	22.68	22.47
		100	0	22.57	22.41	22.48

CA_41C Ant2(2545 - 2655)									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40240	2555	40438	2574.8	QPSK	1	99	1	0	23.24
				16QAM	1	99	1	0	22.31
				64QAM	1	99	1	0	21.39
40591	2590.1	40789	2609.9	QPSK	1	99	1	0	23.33
				16QAM	1	99	1	0	22.46
				64QAM	1	99	1	0	21.44
40942	2625.2	41140	2645	QPSK	1	99	1	0	23.27
				16QAM	1	99	1	0	22.28
				64QAM	1	99	1	0	21.30
Combination 20MHz+15MHz (100RB+75RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40240	2555	40411	2572.1	QPSK	1	99	1	0	23.22
				16QAM	1	99	1	0	22.18
				64QAM	1	99	1	0	21.37
40616	2592.6	40787	2609.7	QPSK	1	99	1	0	23.27
				16QAM	1	99	1	0	22.31
				64QAM	1	99	1	0	21.40
40991	2630.1	41162	2647.2	QPSK	1	99	1	0	23.15
				16QAM	1	99	1	0	22.17
				64QAM	1	99	1	0	21.15
Combination 15MHz+20MHz (75RB+100RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40218	2552.8	40389	2569.9	QPSK	1	74	1	0	23.10
				16QAM	1	74	1	0	22.22
				64QAM	1	74	1	0	21.28
40593	2590.3	40764	2607.4	QPSK	1	74	1	0	23.32
				16QAM	1	74	1	0	22.44
				64QAM	1	74	1	0	21.42
40969	2627.9	41140	2645	QPSK	1	74	1	0	23.20
				16QAM	1	74	1	0	22.25
				64QAM	1	74	1	0	21.28
Combination 15MHz+15MHz (75RB+75RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40215	2552.5	40365	2567.5	QPSK	1	74	1	0	23.12
				16QAM	1	74	1	0	22.19
				64QAM	1	74	1	0	21.36
40615	2592.5	40765	2607.5	QPSK	1	74	1	0	23.23
				16QAM	1	74	1	0	22.44
				64QAM	1	74	1	0	21.40
41015	2632.5	41165	2647.5	QPSK	1	74	1	0	23.18
				16QAM	1	74	1	0	22.15
				64QAM	1	74	1	0	21.20



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

Combination 20MHz+10MHz (100RB+50RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40240	2555	40384	2569.4	QPSK	1	99	1	0	23.09
				16QAM	1	99	1	0	22.24
				64QAM	1	99	1	0	21.34
40641	2595.1	40785	2609.5	QPSK	1	99	1	0	23.26
				16QAM	1	99	1	0	22.33
				64QAM	1	99	1	0	21.36
41041	2635.1	41185	2649.5	QPSK	1	99	1	0	23.16
				16QAM	1	99	1	0	22.16
				64QAM	1	99	1	0	21.21
Combination 10MHz+20MHz (50RB+100RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40195	2550.5	40339	2564.9	QPSK	1	49	1	0	23.14
				16QAM	1	49	1	0	22.19
				64QAM	1	49	1	0	21.26
40596	2590.6	40740	2605	QPSK	1	49	1	0	23.29
				16QAM	1	49	1	0	22.39
				64QAM	1	49	1	0	21.32
40996	2630.6	41140	2645	QPSK	1	49	1	0	23.15
				16QAM	1	49	1	0	22.23
				64QAM	1	49	1	0	21.18
Combination 15MHz+10MHz (75RB+50RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40215	2552.5	40335	2564.5	QPSK	1	74	1	0	23.15
				16QAM	1	74	1	0	22.26
				64QAM	1	74	1	0	21.26
40641	2595.1	40761	2607.1	QPSK	1	74	1	0	23.20
				16QAM	1	74	1	0	22.31
				64QAM	1	74	1	0	21.43
41067	2637.7	41187	2649.7	QPSK	1	74	1	0	23.12
				16QAM	1	74	1	0	22.13
				64QAM	1	74	1	0	21.15
Combination 10MHz+15MHz (50RB+75RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40193	2550.3	40313	2562.3	QPSK	1	49	1	0	23.11
				16QAM	1	49	1	0	22.21
				64QAM	1	49	1	0	21.27
40619	2592.9	40739	2604.9	QPSK	1	49	1	0	23.30
				16QAM	1	49	1	0	22.43
				64QAM	1	49	1	0	21.40
41045	2635.5	41165	2647.5	QPSK	1	49	1	0	23.20
				16QAM	1	49	1	0	22.27
				64QAM	1	49	1	0	21.22



**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

Combination 20MHz+5MHz (100RB+25RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40240	2555	40357	2566.7	QPSK	1	99	1	0	23.22
				16QAM	1	99	1	0	22.27
				64QAM	1	99	1	0	21.27
40665	2597.5	40782	2609.2	QPSK	1	99	1	0	23.30
				16QAM	1	99	1	0	22.34
				64QAM	1	99	1	0	21.43
41090	2640	41207	2651.7	QPSK	1	99	1	0	23.25
				16QAM	1	99	1	0	22.15
				64QAM	1	99	1	0	21.20
Combination 5MHz+20MHz (25RB+100RB)									
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
40173	2548.3	40290	2560	QPSK	1	24	1	0	23.19
				16QAM	1	24	1	0	22.16
				64QAM	1	24	1	0	21.29
40598	2590.8	40715	2602.5	QPSK	1	24	1	0	23.27
				16QAM	1	24	1	0	22.42
				64QAM	1	24	1	0	21.30
41023	2633.3	41140	2645	QPSK	1	24	1	0	23.16
				16QAM	1	24	1	0	22.18
				64QAM	1	24	1	0	21.20

EIRP

LTE BAND 17

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23755	706.5	22.79	0.6	21.24	133.05	3
23790	710	22.95	0.6	21.4	138.04	3
23825	713.5	22.88	0.6	21.33	135.83	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23755	706.5	21.79	0.6	20.24	105.68	3
23790	710	22.16	0.6	20.61	115.08	3
23825	713.5	22.15	0.6	20.6	114.82	3

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23755	706.5	20.93	0.6	19.38	86.7	3
23790	710	21.09	0.6	19.54	89.95	3
23825	713.5	21.07	0.6	19.52	89.54	3

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23780	709	22.92	0.6	21.37	137.09	3
23790	710	22.96	0.6	21.41	138.36	3
23800	711	22.94	0.6	21.39	137.72	3

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23780	709	21.95	0.6	20.4	109.65	3
23790	710	22.09	0.6	20.54	113.24	3
23800	711	22.14	0.6	20.59	114.55	3

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23780	709	20.89	0.6	19.34	85.9	3
23790	710	21.12	0.6	19.57	90.57	3
23800	711	21.18	0.6	19.63	91.83	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

LTE BAND 41 (2.6G Band)

5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40165	2547.5	23.36	1.2	24.56	285.76	2
40690	2600	23.28	1.2	24.48	280.54	2
41215	2652.5	23.36	1.2	24.56	285.76	2

5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40165	2547.5	22.2	1.2	23.4	218.78	2
40690	2600	22.48	1.2	23.68	233.35	2
41215	2652.5	22.31	1.2	23.51	224.39	2

5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40165	2547.5	21.4	1.2	22.6	181.97	2
40690	2600	21.7	1.2	22.9	194.98	2
41215	2652.5	21.44	1.2	22.64	183.65	2

10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40190	2550	23.32	1.2	24.52	283.14	2
40690	2600	23.38	1.2	24.58	287.08	2
41190	2650	23.3	1.2	24.5	281.84	2

10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40190	2550	22.4	1.2	23.6	229.09	2
40690	2600	22.33	1.2	23.53	225.42	2
41190	2650	22.41	1.2	23.61	229.61	2

10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40190	2550	21.56	1.2	22.76	188.8	2
40690	2600	21.62	1.2	22.82	191.43	2
41190	2650	21.45	1.2	22.65	184.08	2

15MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40215	2552.5	23.27	1.2	24.47	279.9	2
40690	2600	23.37	1.2	24.57	286.42	2
41165	2647.5	23.27	1.2	24.47	279.9	2

15MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40215	2552.5	22.41	1.2	23.61	229.61	2
40690	2600	22.21	1.2	23.41	219.28	2
41165	2647.5	22.3	1.2	23.5	223.87	2

15MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40215	2552.5	21.45	1.2	22.65	184.08	2
40690	2600	21.51	1.2	22.71	186.64	2
41165	2647.5	21.47	1.2	22.67	184.93	2

20MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40240	2555	23.31	1.2	24.51	282.49	2
40690	2600	23.41	1.2	24.61	289.07	2
41140	2645	23.32	1.2	24.52	283.14	2

20MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40240	2555	22.46	1.2	23.66	232.27	2
40690	2600	22.46	1.2	23.66	232.27	2
41140	2645	22.36	1.2	23.56	226.99	2

20 MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40240	2555	21.53	1.2	22.73	187.5	2
40690	2600	21.55	1.2	22.75	188.36	2
41140	2645	21.53	1.2	22.73	187.5	2

LTE BAND 41 (2.6G Band) HPUE

5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40165	2547.5	25.36	1.2	26.56	452.9	2
40690	2600	25.36	1.2	26.56	452.9	2
41215	2652.5	25.29	1.2	26.49	445.66	2

5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40165	2547.5	24.56	1.2	25.76	376.7	2
40690	2600	24.49	1.2	25.69	370.68	2
41215	2652.5	24.48	1.2	25.68	369.83	2

5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40165	2547.5	23.64	1.2	24.84	304.79	2
40690	2600	23.73	1.2	24.93	311.17	2
41215	2652.5	23.47	1.2	24.67	293.09	2

10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40190	2550	25.3	1.2	26.5	446.68	2
40690	2600	25.42	1.2	26.62	459.2	2
41190	2650	25.29	1.2	26.49	445.66	2

10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40190	2550	24.53	1.2	25.73	374.11	2
40690	2600	24.53	1.2	25.73	374.11	2
41190	2650	24.46	1.2	25.66	368.13	2

10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40190	2550	23.61	1.2	24.81	302.69	2
40690	2600	23.61	1.2	24.81	302.69	2
41190	2650	23.38	1.2	24.58	287.08	2

15MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40215	2552.5	25.4	1.2	26.6	457.09	2
40690	2600	25.38	1.2	26.58	454.99	2
41165	2647.5	25.35	1.2	26.55	451.86	2

15MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40215	2552.5	24.61	1.2	25.81	381.07	2
40690	2600	24.44	1.2	25.64	366.44	2
41165	2647.5	24.41	1.2	25.61	363.92	2

15MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40215	2552.5	23.57	1.2	24.77	299.92	2
40690	2600	23.73	1.2	24.93	311.17	2
41165	2647.5	23.49	1.2	24.69	294.44	2

20MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40240	2555	25.41	1.2	26.61	458.14	2
40690	2600	25.44	1.2	26.64	461.32	2
41140	2645	25.42	1.2	26.62	459.2	2

20MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40240	2555	24.69	1.2	25.89	388.15	2
40690	2600	24.64	1.2	25.84	383.71	2
41140	2645	24.61	1.2	25.81	381.07	2

20 MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
40240	2555	23.65	1.2	24.85	305.49	2
40690	2600	23.79	1.2	24.99	315.5	2
41140	2645	23.56	1.2	24.76	299.23	2



BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

CA 41CEIRP

CA_41C Ant2(2545 - 2655)

Combination 20MHz+20MHz (100RB+100RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40240	2555	40438	2574.8	QPSK	1	99	1	0	23.24	1.20	24.44	277.97	2
				16QAM	1	99	1	0	22.31	1.20	23.51	224.39	2
				64QAM	1	99	1	0	21.39	1.20	22.59	181.55	2
40591	2590.1	40789	2609.9	QPSK	1	99	1	0	23.33	1.20	24.53	283.79	2
				16QAM	1	99	1	0	22.46	1.20	23.66	232.27	2
				64QAM	1	99	1	0	21.44	1.20	22.64	183.65	2
40942	2625.2	41140	2645	QPSK	1	99	1	0	23.27	1.20	24.47	279.90	2
				16QAM	1	99	1	0	22.28	1.20	23.48	222.84	2
				64QAM	1	99	1	0	21.30	1.20	22.50	177.83	2
Combination 20MHz+15MHz (100RB+75RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40240	2555	40411	2572.1	QPSK	1	99	1	0	23.22	1.20	24.42	276.69	2
				16QAM	1	99	1	0	22.18	1.20	23.38	217.77	2
				64QAM	1	99	1	0	21.37	1.20	22.57	180.72	2
40616	2592.6	40787	2609.7	QPSK	1	99	1	0	23.27	1.20	24.47	279.90	2
				16QAM	1	99	1	0	22.31	1.20	23.51	224.39	2
				64QAM	1	99	1	0	21.40	1.20	22.60	181.97	2
40991	2630.1	41162	2647.2	QPSK	1	99	1	0	23.15	1.20	24.35	272.27	2
				16QAM	1	99	1	0	22.17	1.20	23.37	217.27	2
				64QAM	1	99	1	0	21.15	1.20	22.35	171.79	2



BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

CA_41C Ant2(2545 - 2655)													
Combination 15MHz+20MHz (75RB+100RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40218	2552.8	40389	2569.9	QPSK	1	74	1	0	23.10	1.20	24.30	269.15	2
				16QAM	1	74	1	0	22.22	1.20	23.42	219.79	2
				64QAM	1	74	1	0	21.28	1.20	22.48	177.01	2
40593	2590.3	40764	2607.4	QPSK	1	74	1	0	23.32	1.20	24.52	283.14	2
				16QAM	1	74	1	0	22.44	1.20	23.64	231.21	2
				64QAM	1	74	1	0	21.42	1.20	22.62	182.81	2
40969	2627.9	41140	2645	QPSK	1	74	1	0	23.20	1.20	24.40	275.42	2
				16QAM	1	74	1	0	22.25	1.20	23.45	221.31	2
				64QAM	1	74	1	0	21.28	1.20	22.48	177.01	2
Combination 15MHz+15MHz (75RB+75RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40215	2552.5	40365	2567.5	QPSK	1	74	1	0	23.12	1.20	24.32	270.40	2
				16QAM	1	74	1	0	22.19	1.20	23.39	218.27	2
				64QAM	1	74	1	0	21.36	1.20	22.56	180.30	2
40615	2592.5	40765	2607.5	QPSK	1	74	1	0	23.23	1.20	24.43	277.33	2
				16QAM	1	74	1	0	22.44	1.20	23.64	231.21	2
				64QAM	1	74	1	0	21.40	1.20	22.60	181.97	2
41015	2632.5	41165	2647.5	QPSK	1	74	1	0	23.18	1.20	24.38	274.16	2
				16QAM	1	74	1	0	22.15	1.20	23.35	216.27	2
				64QAM	1	74	1	0	21.20	1.20	22.40	173.78	2



BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

CA_41C Ant2(2545 - 2655)													
Combination 20MHz+10MHz (100RB+50RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40240	2555	40384	2569.4	QPSK	1	99	1	0	23.09	1.20	24.29	268.53	2
				16QAM	1	99	1	0	22.24	1.20	23.44	220.80	2
				64QAM	1	99	1	0	21.34	1.20	22.54	179.47	2
40641	2595.1	40785	2609.5	QPSK	1	99	1	0	23.26	1.20	24.46	279.25	2
				16QAM	1	99	1	0	22.33	1.20	23.53	225.42	2
				64QAM	1	99	1	0	21.36	1.20	22.56	180.30	2
41041	2635.1	41185	2649.5	QPSK	1	99	1	0	23.16	1.20	24.36	272.90	2
				16QAM	1	99	1	0	22.16	1.20	23.36	216.77	2
				64QAM	1	99	1	0	21.21	1.20	22.41	174.18	2
Combination 10MHz+20MHz (50RB+100RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40195	2550.5	40339	2564.9	QPSK	1	49	1	0	23.14	1.20	24.34	271.64	2
				16QAM	1	49	1	0	22.19	1.20	23.39	218.27	2
				64QAM	1	49	1	0	21.26	1.20	22.46	176.20	2
40596	2590.6	40740	2605	QPSK	1	49	1	0	23.29	1.20	24.49	281.19	2
				16QAM	1	49	1	0	22.39	1.20	23.59	228.56	2
				64QAM	1	49	1	0	21.32	1.20	22.52	178.65	2
40996	2630.6	41140	2645	QPSK	1	49	1	0	23.15	1.20	24.35	272.27	2
				16QAM	1	49	1	0	22.23	1.20	23.43	220.29	2
				64QAM	1	49	1	0	21.18	1.20	22.38	172.98	2



BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

CA_41C Ant2(2545 - 2655)													
Combination 15MHz+10MHz (75RB+50RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40215	2552.5	40335	2564.5	QPSK	1	74	1	0	23.15	1.20	24.35	272.27	2
				16QAM	1	74	1	0	22.26	1.20	23.46	221.82	2
				64QAM	1	74	1	0	21.26	1.20	22.46	176.20	2
40641	2595.1	40761	2607.1	QPSK	1	74	1	0	23.20	1.20	24.40	275.42	2
				16QAM	1	74	1	0	22.31	1.20	23.51	224.39	2
				64QAM	1	74	1	0	21.43	1.20	22.63	183.23	2
41067	2637.7	41187	2649.7	QPSK	1	74	1	0	23.12	1.20	24.32	270.40	2
				16QAM	1	74	1	0	22.13	1.20	23.33	215.28	2
				64QAM	1	74	1	0	21.15	1.20	22.35	171.79	2
Combination 10MHz+15MHz (50RB+75RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40193	2550.3	40313	2562.3	QPSK	1	49	1	0	23.11	1.20	24.31	269.77	2
				16QAM	1	49	1	0	22.21	1.20	23.41	219.28	2
				64QAM	1	49	1	0	21.27	1.20	22.47	176.60	2
40619	2592.9	40739	2604.9	QPSK	1	49	1	0	23.30	1.20	24.50	281.84	2
				16QAM	1	49	1	0	22.43	1.20	23.63	230.67	2
				64QAM	1	49	1	0	21.40	1.20	22.60	181.97	2
41045	2635.5	41165	2647.5	QPSK	1	49	1	0	23.20	1.20	24.40	275.42	2
				16QAM	1	49	1	0	22.27	1.20	23.47	222.33	2
				64QAM	1	49	1	0	21.22	1.20	22.42	174.58	2



BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

CA_41C Ant2(2545 - 2655)													
Combination 20MHz+5MHz (100RB+25RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40240	2555	40357	2566.7	QPSK	1	99	1	0	23.22	1.20	24.42	276.69	2
				16QAM	1	99	1	0	22.27	1.20	23.47	222.33	2
				64QAM	1	99	1	0	21.27	1.20	22.47	176.60	2
40665	2597.5	40782	2609.2	QPSK	1	99	1	0	23.30	1.20	24.50	281.84	2
				16QAM	1	99	1	0	22.34	1.20	23.54	225.94	2
				64QAM	1	99	1	0	21.43	1.20	22.63	183.23	2
41090	2640	41207	2651.7	QPSK	1	99	1	0	23.25	1.20	24.45	278.61	2
				16QAM	1	99	1	0	22.15	1.20	23.35	216.27	2
				64QAM	1	99	1	0	21.20	1.20	22.40	173.78	2
Combination 5MHz+20MHz (25RB+100RB)													
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset					
40173	2548.3	40290	2560	QPSK	1	24	1	0	23.19	1.20	24.39	274.79	2
				16QAM	1	24	1	0	22.16	1.20	23.36	216.77	2
				64QAM	1	24	1	0	21.29	1.20	22.49	177.42	2
40598	2590.8	40715	2602.5	QPSK	1	24	1	0	23.27	1.20	24.47	279.90	2
				16QAM	1	24	1	0	22.42	1.20	23.62	230.14	2
				64QAM	1	24	1	0	21.30	1.20	22.50	177.83	2
41023	2633.3	41140	2645	QPSK	1	24	1	0	23.16	1.20	24.36	272.90	2
				16QAM	1	24	1	0	22.18	1.20	23.38	217.77	2
				64OAM	1	24	1	0	21.20	1.20	22.40	173.78	2

3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

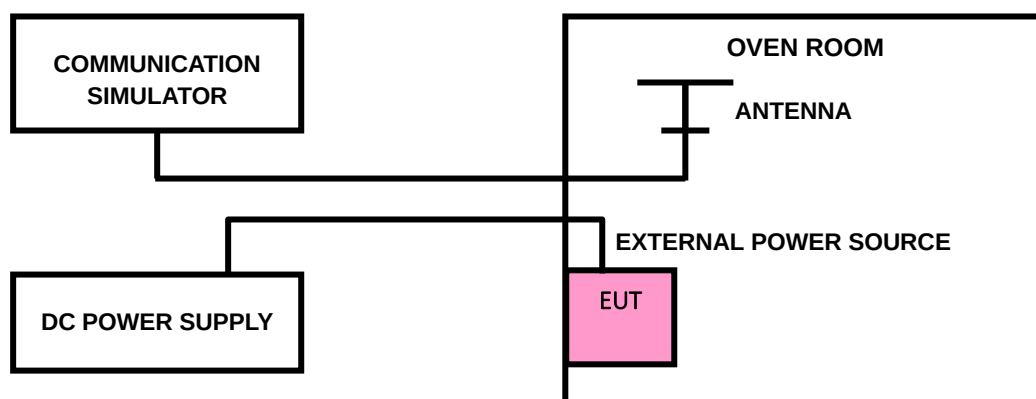
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

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

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

3.2.3 TEST SETUP





Test Report No.: W7L-P24090006RF06

3.2.4 TEST RESULTS

Please Refer to Appendix Of this test report.

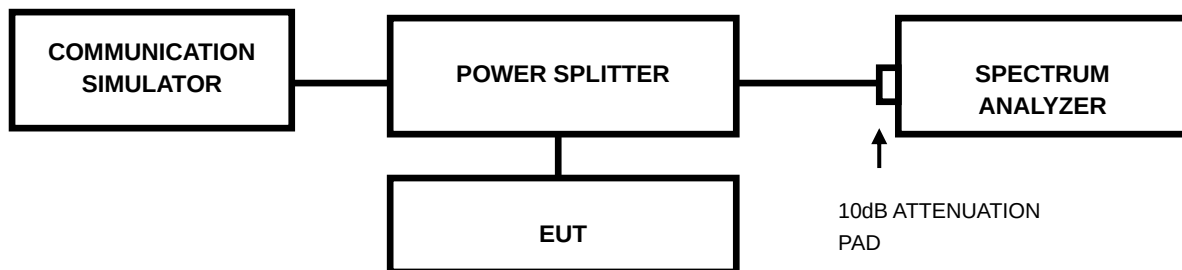
Note: VL = Low voltage(3.6V); VN/NV = Normal voltage(3.85V); VH = High voltage(4.3V);
NT = Normal temperature (25°C)

3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

- The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.



Test Report No.: W7L-P24090006RF06

3.3.4 TEST RESULTS

Please Refer to Appendix Of this test report.

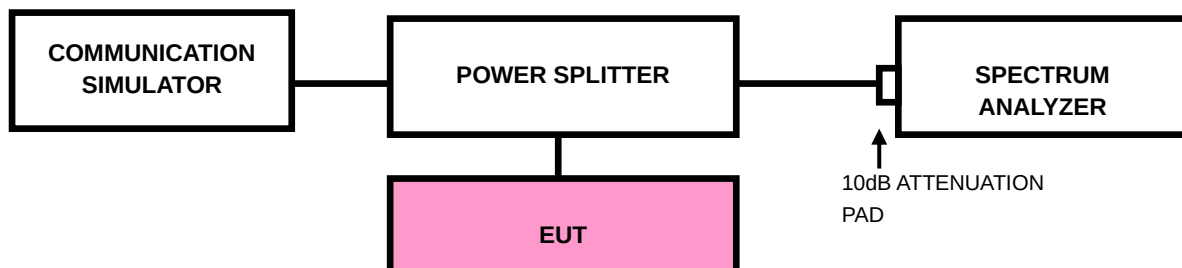
3.4 BAND EDGE MEASUREMENT

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

According to FCC 27.53(g) specified that For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

3.4.2 TEST SETUP



3.4.3 TEST PROCEDURES

- a) All measurements were done at low and high operational frequency range
- b) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- c) Tune the analyzer to the nominal center frequency of the emission bandwidth
(EBW)
- d) .Set the resolution bandwidth (RBW) $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- e) Beyond the 1MHz band from the band edge, RBW=1MHz was used.
- f) Set the video bandwidth (VBW) to $\geq 3 \times$ RBW.
- g) Select the average power (RMS) display detector.
- h) Set the number of measurement points to ≥ 1001 .
- i) Use auto-coupled sweep time.
- j) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
- k) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.
- l) Record the max trace plot into the test report.



Test Report No.: W7L-P24090006RF06

3.4.4 TEST RESULTS

Please Refer to Appendix Of this test report.

3.5 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 .

For: LTE Band7

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm .

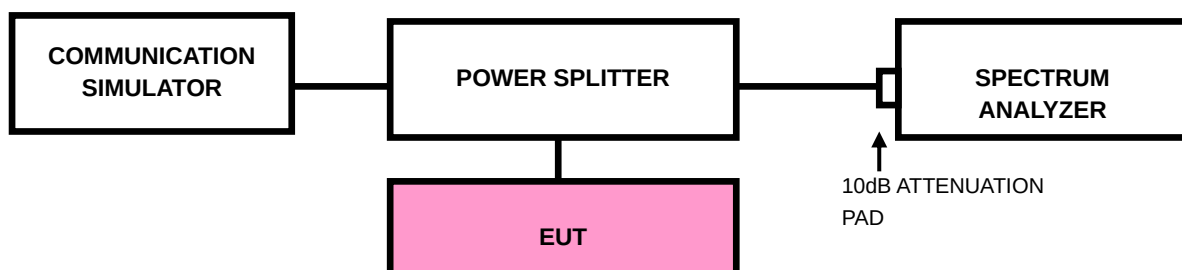
For: LTE Band30

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $70 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -40dBm .

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 9kHz up to a frequency including its 10th harmonic. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.3 TEST SETUP





**BUREAU
VERITAS**

Test Report No.: W7L-P24090006RF06

3.5.4 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

Please Refer to Appendix Of this test report.

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 .

For: LTE Band41

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm .

3.6.2 TEST PROCEDURES

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

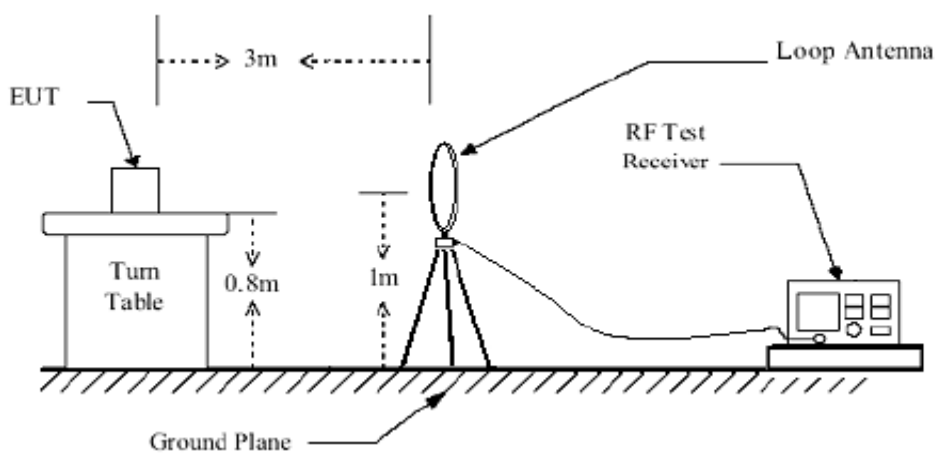
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.6.3 DEVIATION FROM TEST STANDARD

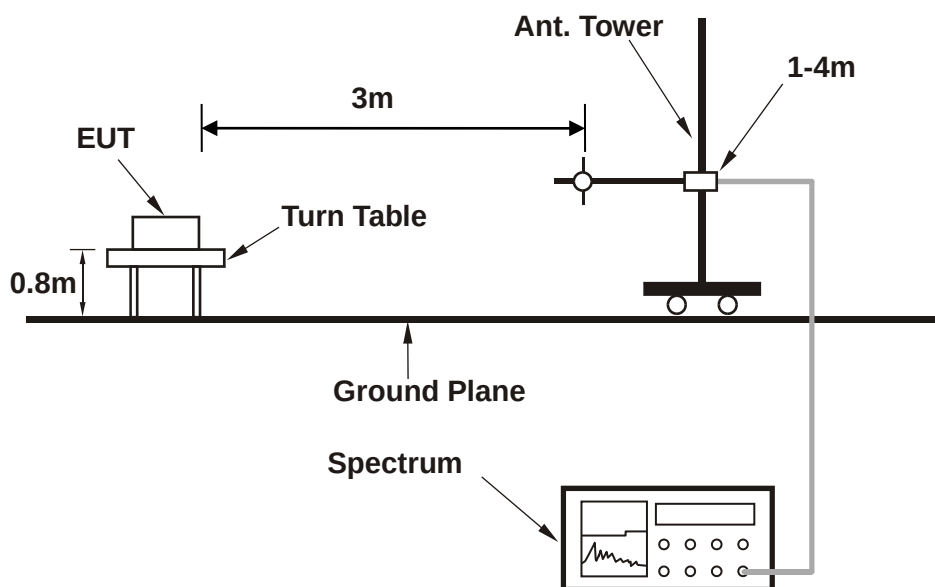
No deviation

3.6.4 TEST SETUP

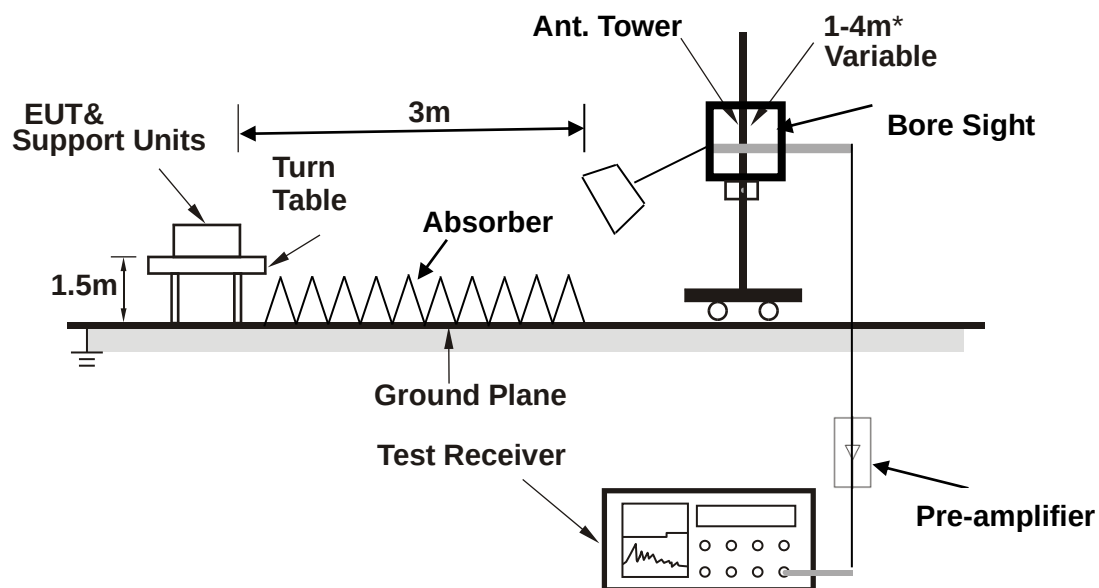
< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



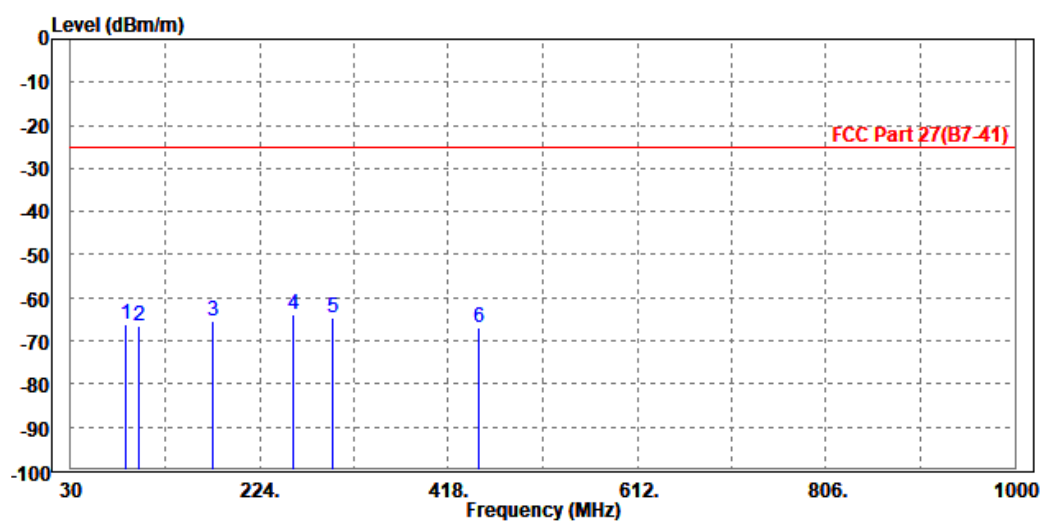
Note: Above 1G is a directional antenna depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

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

CHANNEL BANDWIDTH	(20+20) MHz / QPSK	MODE	TX channel PCC 40591
			TX channel SCC 40789
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V/60Hz	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	86.260	-66.31	-48.34	-25.00	-41.31	-17.97	Peak	Vertical
2	100.810	-66.52	-49.95	-25.00	-41.52	-16.57	Peak	Vertical
3	176.470	-65.41	-54.77	-25.00	-40.41	-10.64	Peak	Vertical
4 PP	258.920	-63.80	-60.12	-25.00	-38.80	-3.68	Peak	Vertical
5	298.690	-64.72	-61.30	-25.00	-39.72	-3.42	Peak	Vertical
6	450.010	-67.07	-62.37	-25.00	-42.07	-4.70	Peak	Vertical



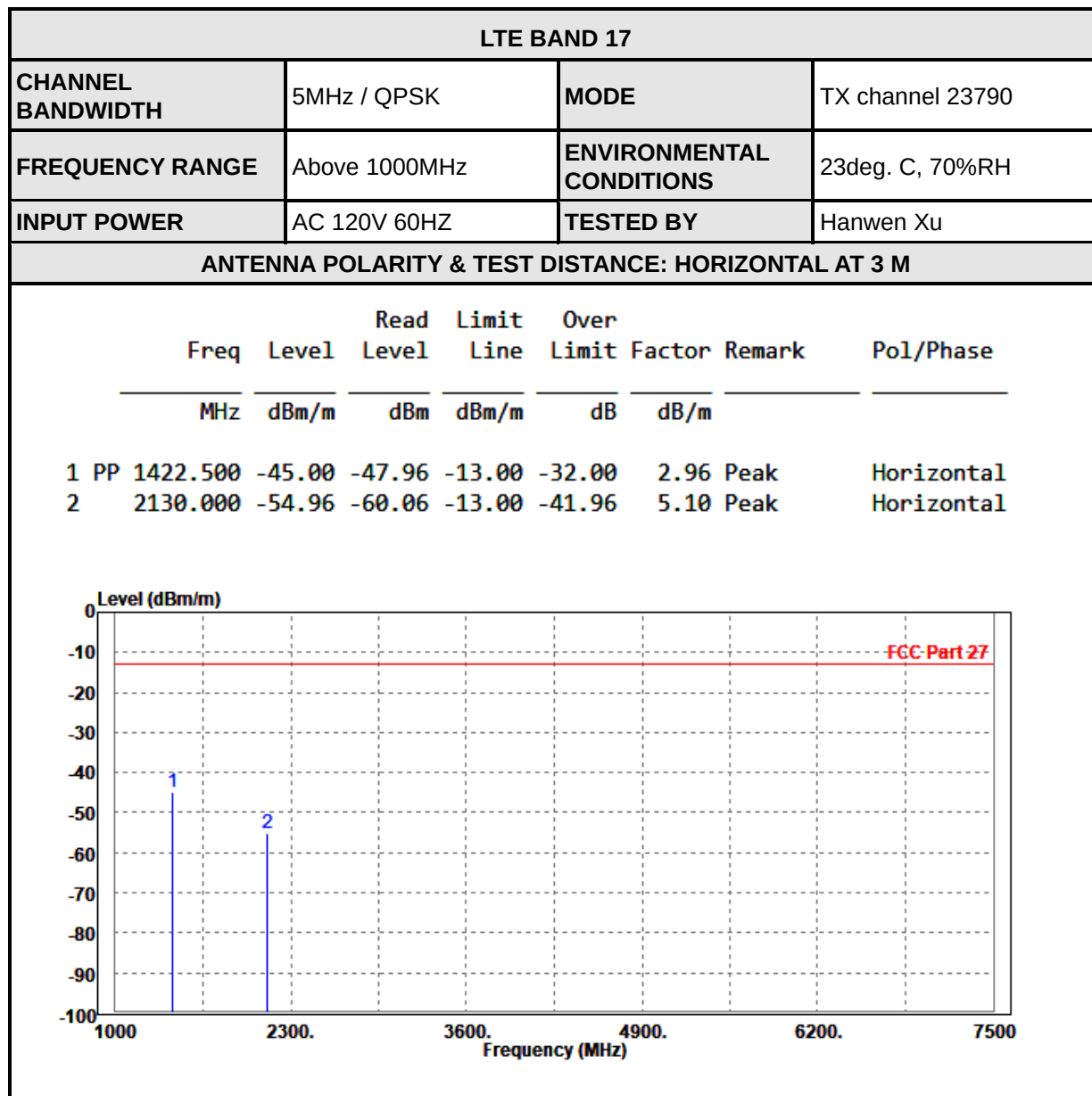


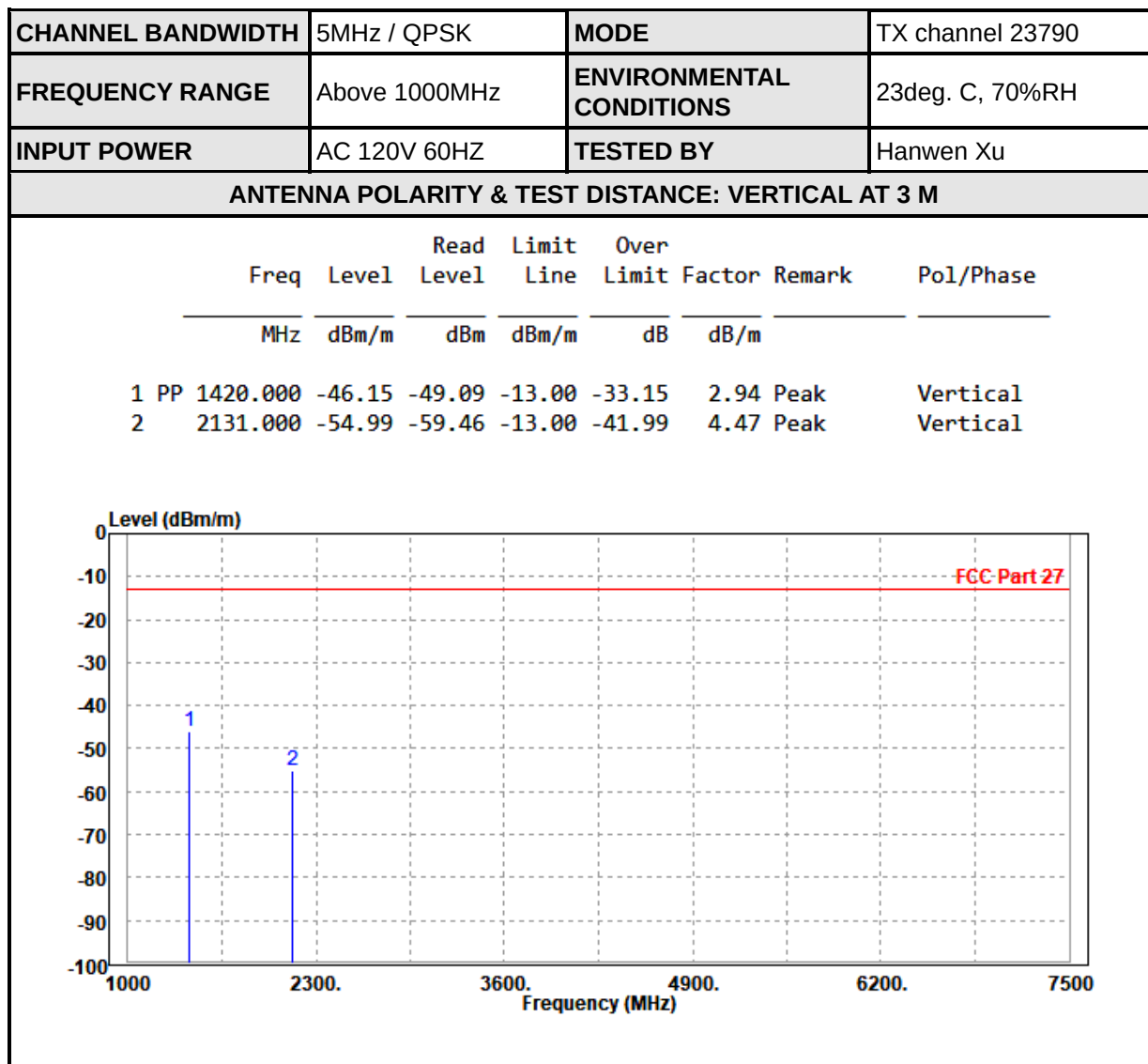
**BUREAU
VERITAS**

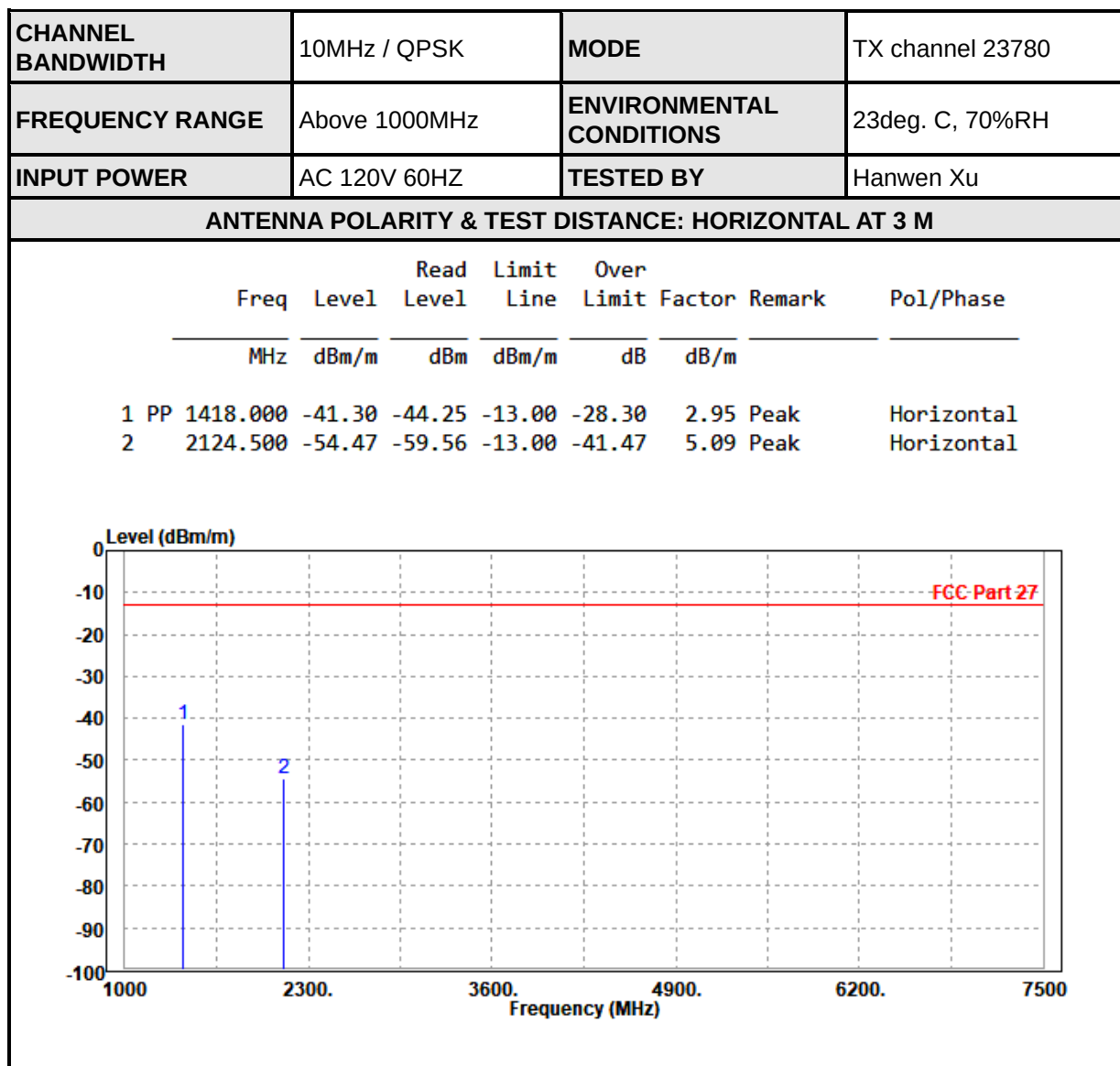
Test Report No.: W7L-P24090006RF06

ABOVE 1GHz

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



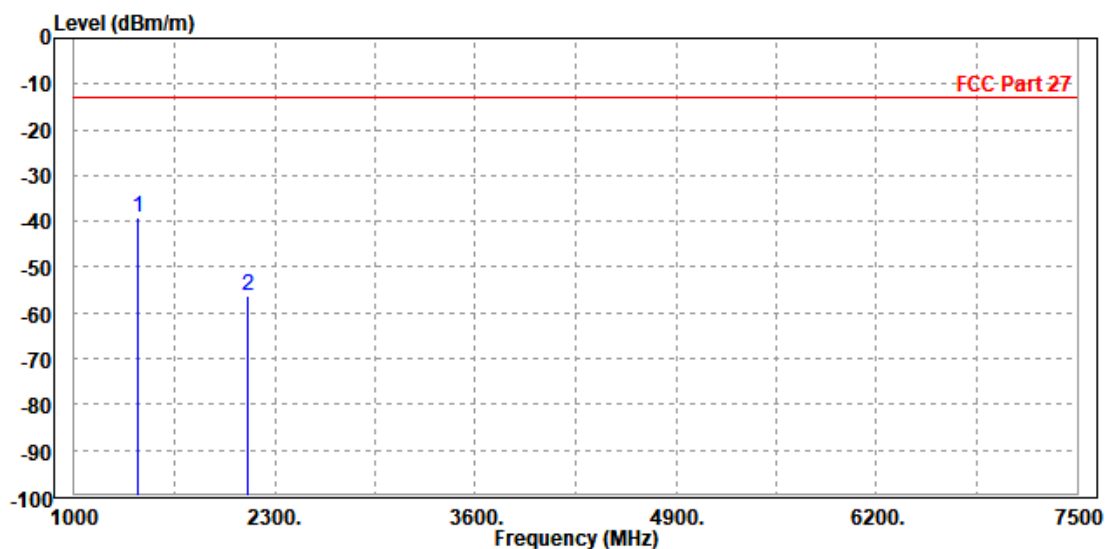




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 23780
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

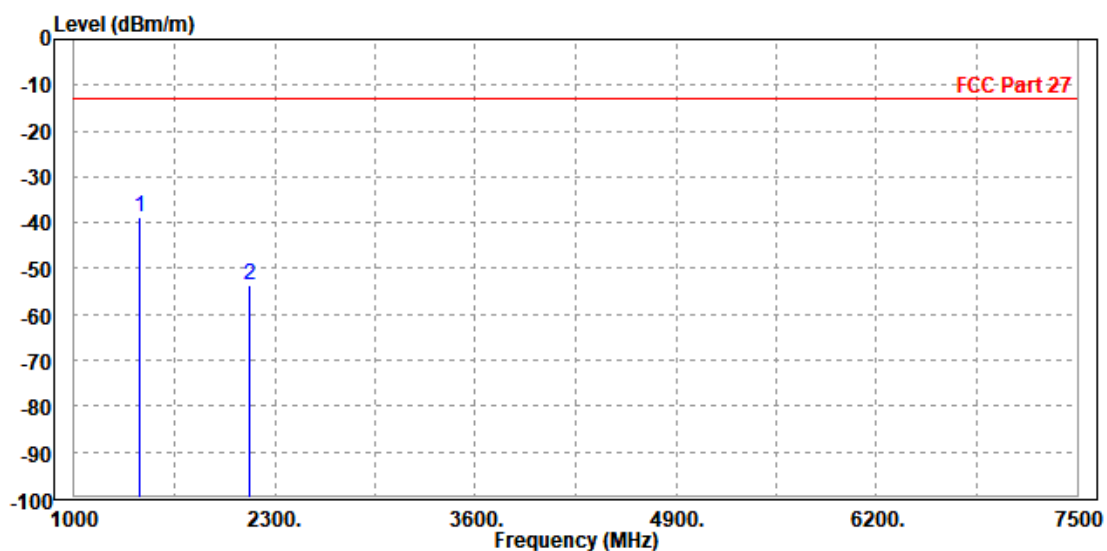
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1416.000	-39.15	-42.08	-13.00	-26.15	2.93	Peak	Vertical
2		2124.500	-56.25	-60.69	-13.00	-43.25	4.44	Peak	Vertical



CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 23790
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

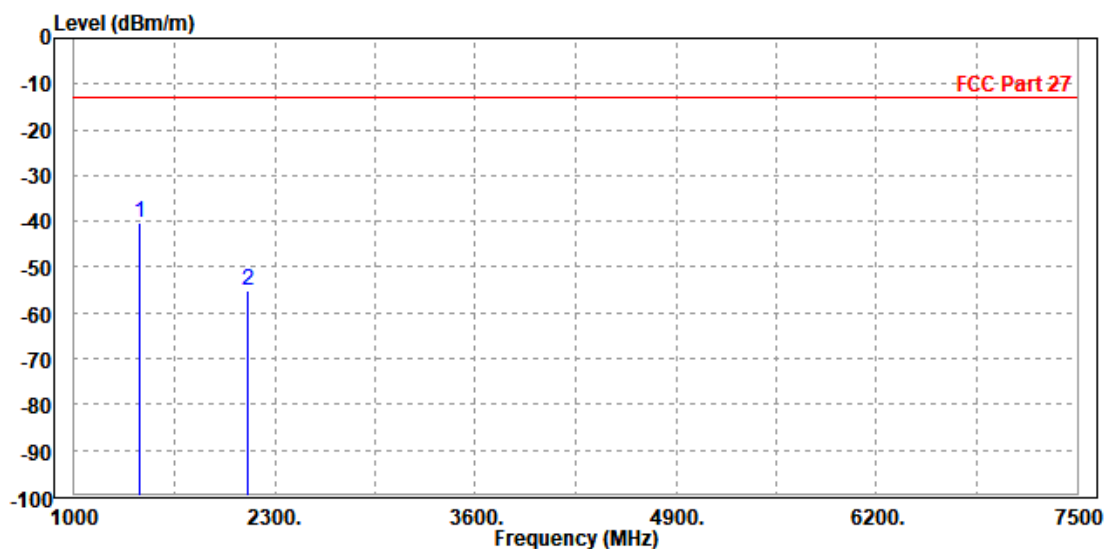
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	1420.000	-38.79	-41.74	-13.00	-25.79	2.95	Peak	Horizontal
2	2131.000	-53.80	-58.90	-13.00	-40.80	5.10	Peak	Horizontal



CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 23790
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

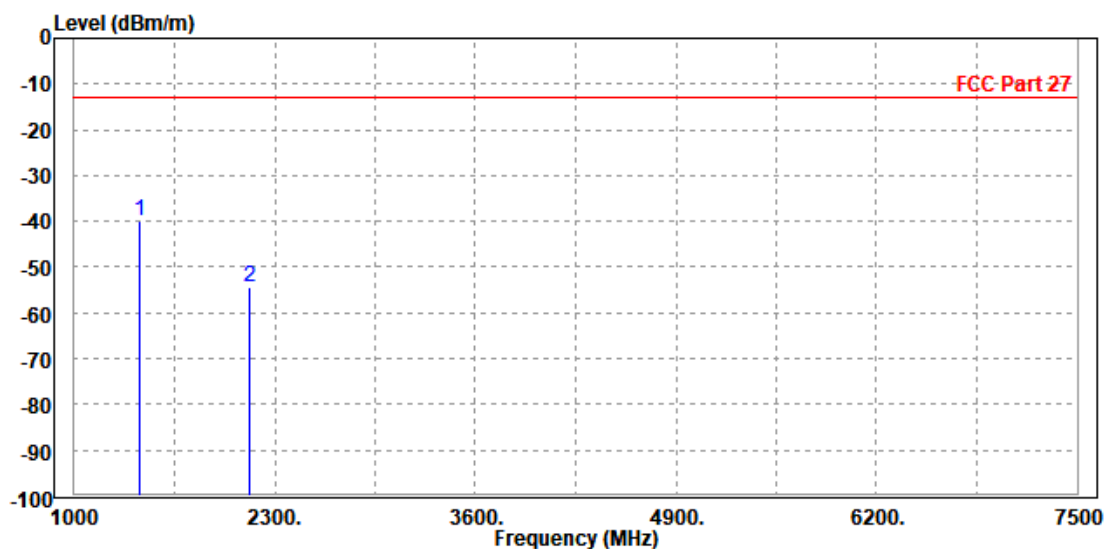
			Read	Limit	Over			
	Freq	Level	Level	Line	Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 1422.500	-40.42	-43.36	-13.00	-27.42	2.94	Peak	Vertical
2	2130.000	-55.13	-59.59	-13.00	-42.13	4.46	Peak	Vertical



CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 23800
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

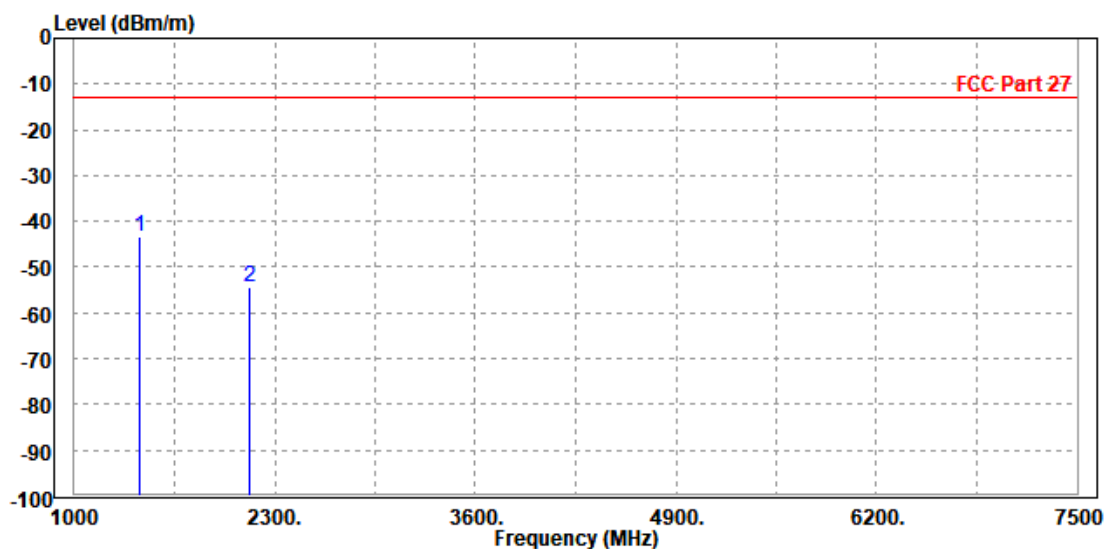
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	1422.500	-39.78	-42.74	-13.00	-26.78	2.96	Peak	Horizontal
2		2133.000	-54.30	-59.41	-13.00	-41.30	5.11	Peak	Horizontal

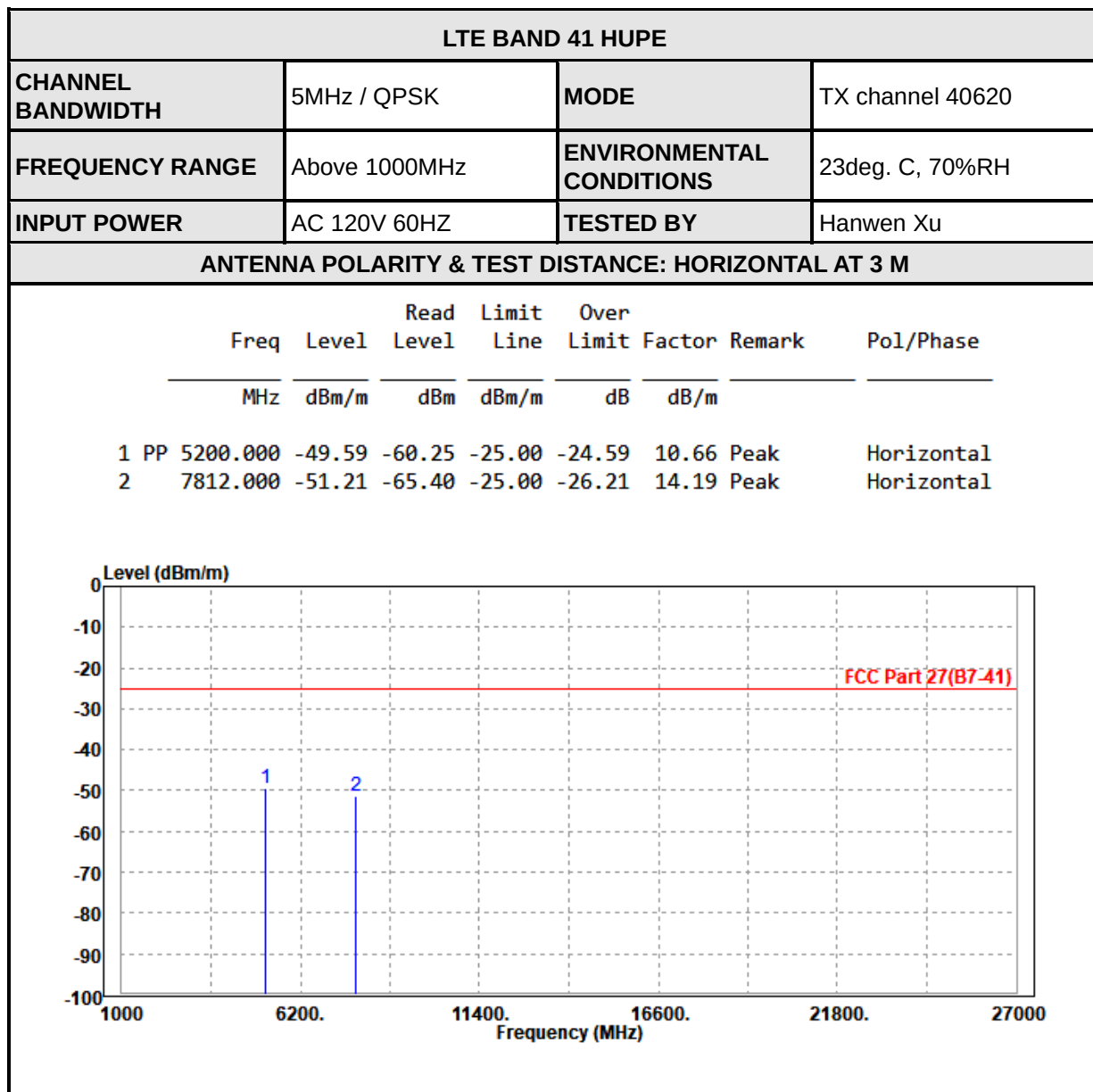


CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 23800
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

			Read	Limit	Over			
	Freq	Level	Level	Line	Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 1422.000	-43.39	-46.33	-13.00	-30.39	2.94	Peak	Vertical
2	2131.000	-54.38	-58.85	-13.00	-41.38	4.47	Peak	Vertical

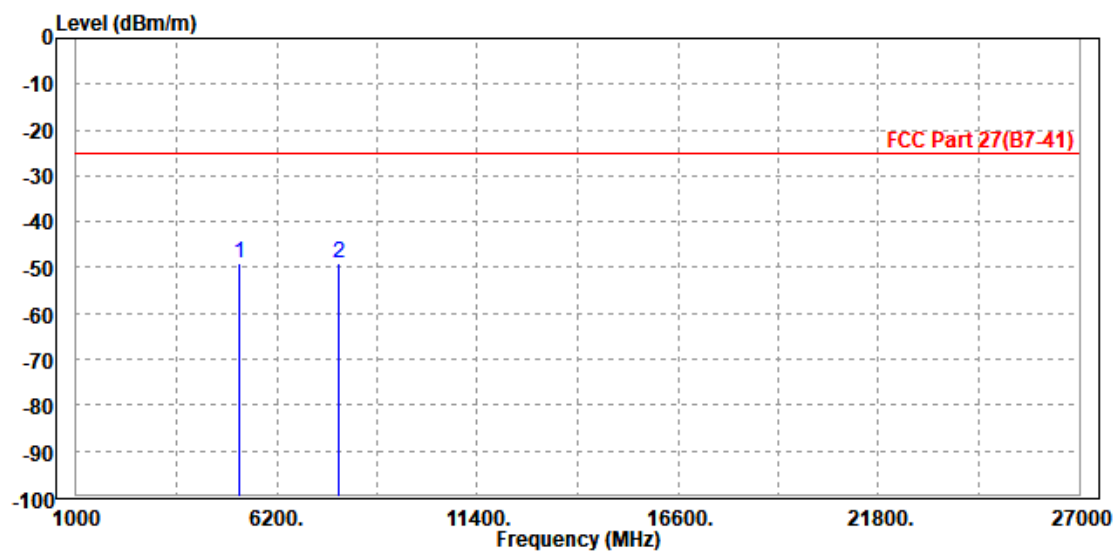


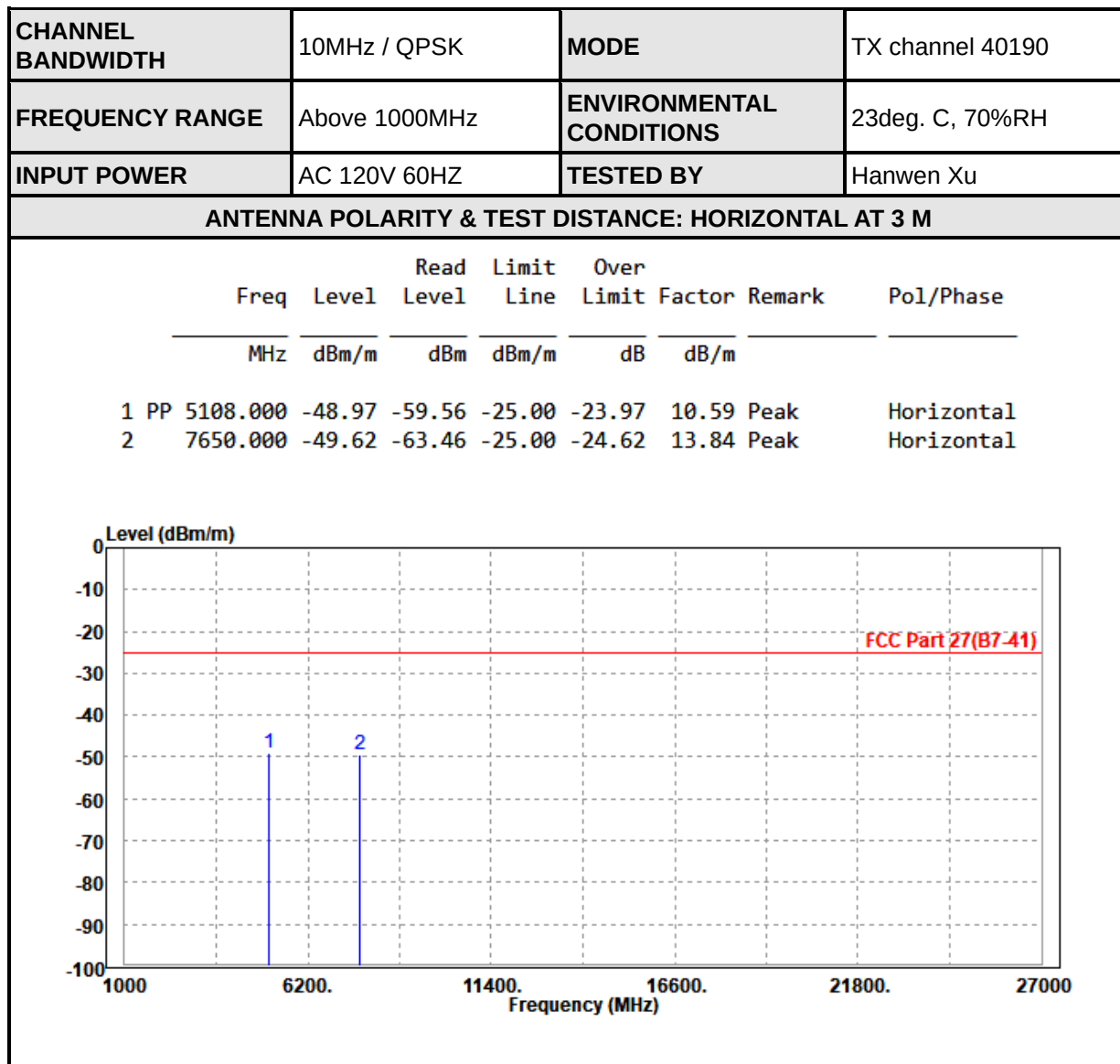


CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-48.92	-59.94	-25.00	-23.92	11.02	Peak	Vertical
2		7800.000	-49.17	-63.58	-25.00	-24.17	14.41	Peak	Vertical

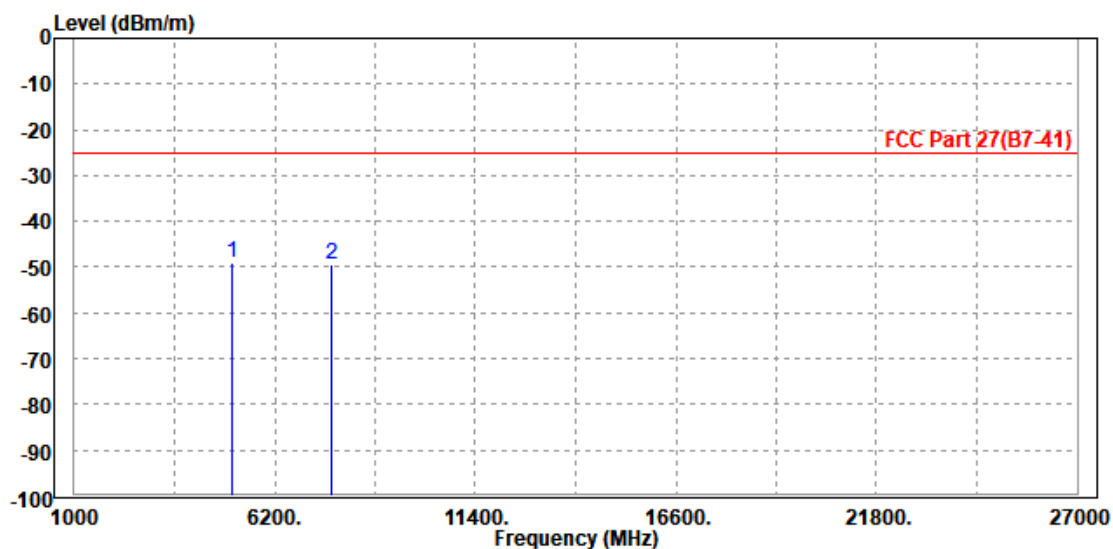




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 40190
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

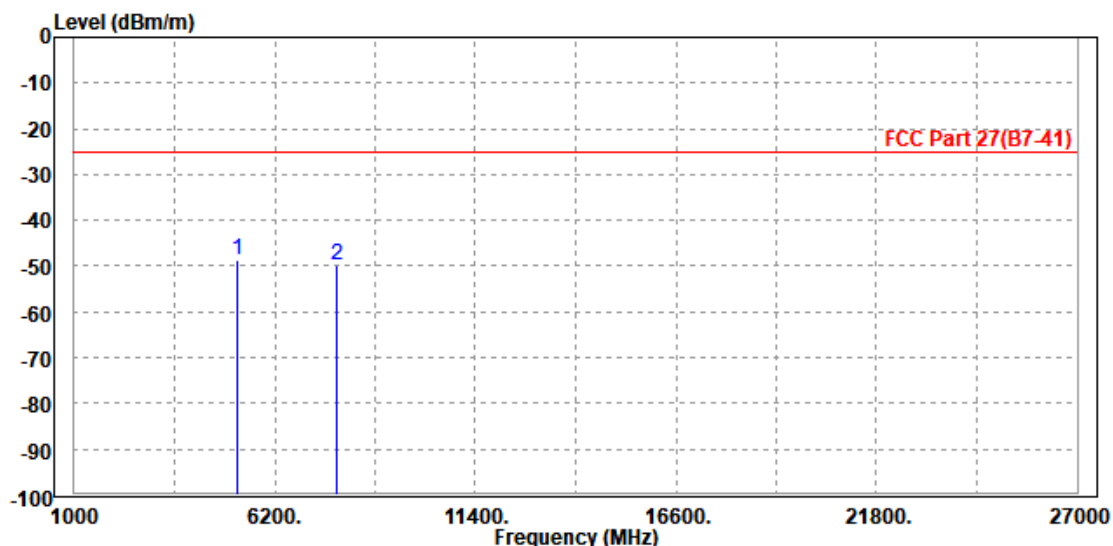
		Read	Limit	Over			
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	PP 5100.000	-49.17	-60.18	-25.00	-24.17	11.01	Peak
2	7656.000	-49.51	-63.84	-25.00	-24.51	14.33	Peak
							Pol/Phase
							Vertical
							Vertical



CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

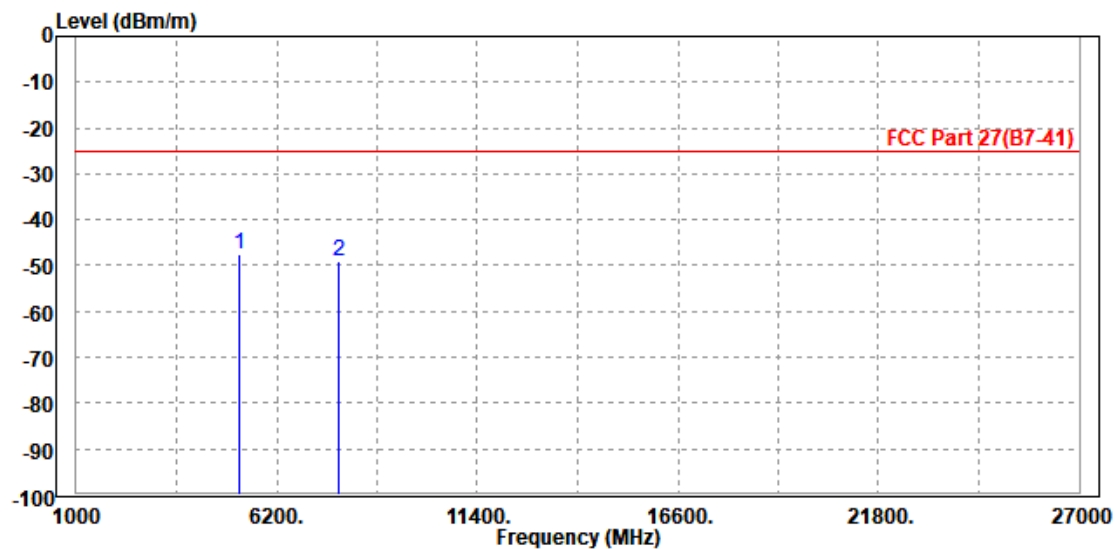
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 5212.000	-48.67	-59.34	-25.00	-23.67	10.67	Peak	Horizontal
2	7800.000	-49.95	-64.12	-25.00	-24.95	14.17	Peak	Horizontal



CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

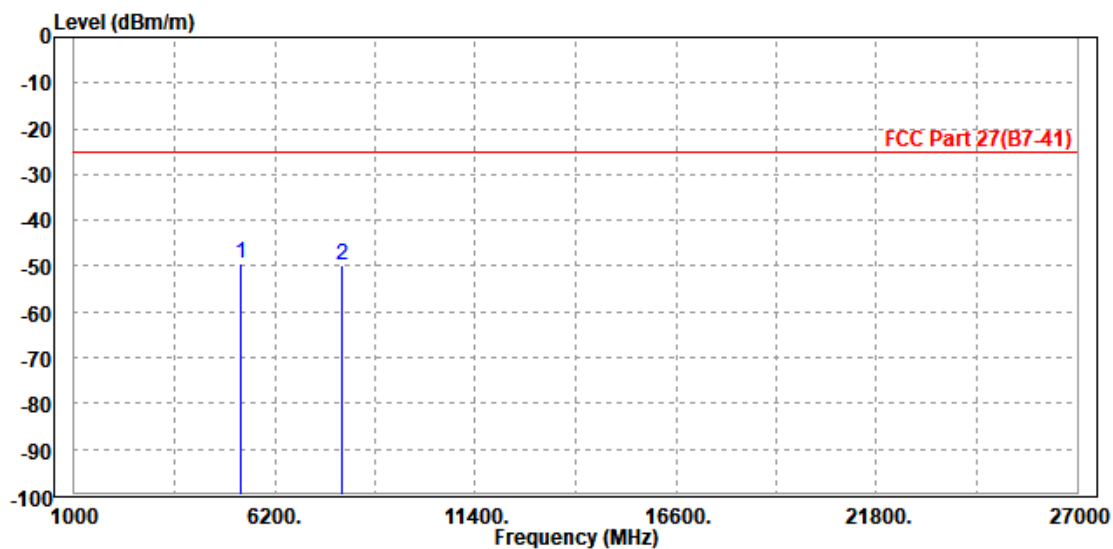
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5212.000	-47.63	-58.65	-25.00	-22.63	11.02	Peak	Vertical
2		7800.000	-49.23	-63.64	-25.00	-24.23	14.41	Peak	Vertical



CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 41190
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

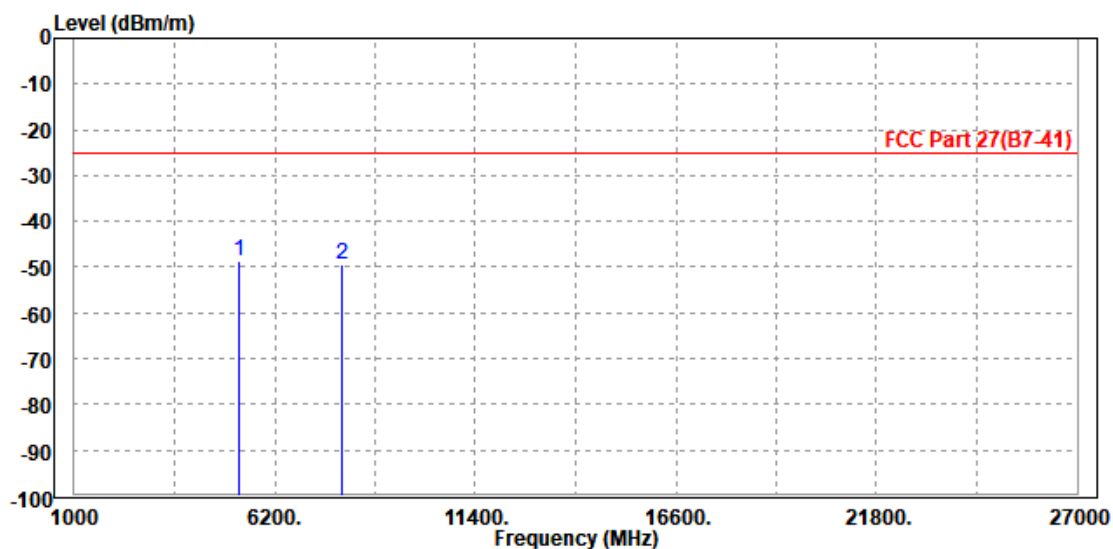
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP 5300.000	-49.58	-60.32	-25.00	-24.58	10.74	Peak	Horizontal
2	7942.000	-49.65	-64.13	-25.00	-24.65	14.48	Peak	Horizontal



CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 41190
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

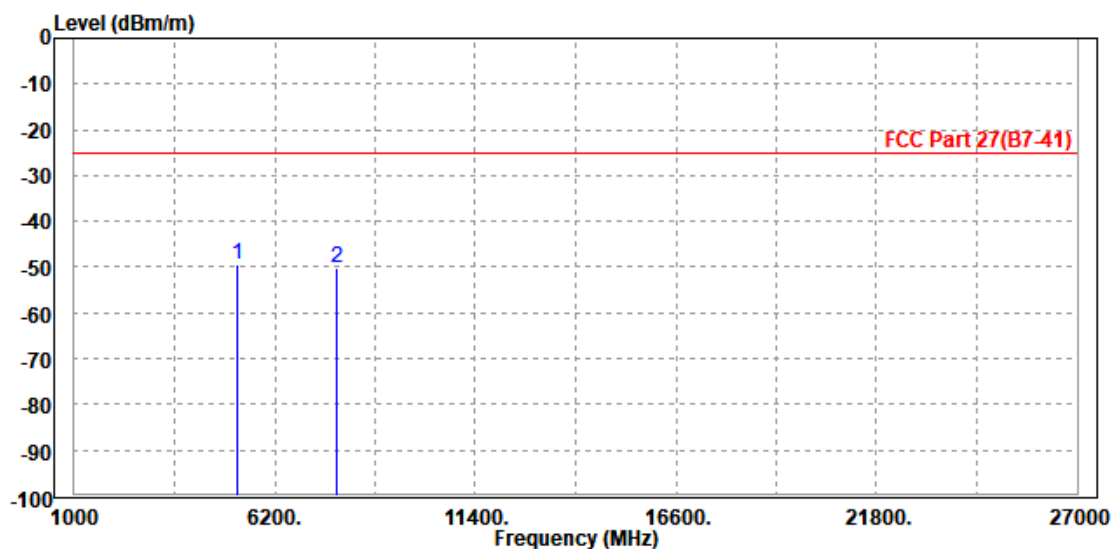
		Read	Limit	Over			
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	PP 5290.000	-48.65	-59.67	-25.00	-23.65	11.02	Peak
2	7950.000	-49.59	-64.08	-25.00	-24.59	14.49	Peak
							Pol/Phase
							Vertical
							Vertical



CHANNEL BANDWIDTH	15MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

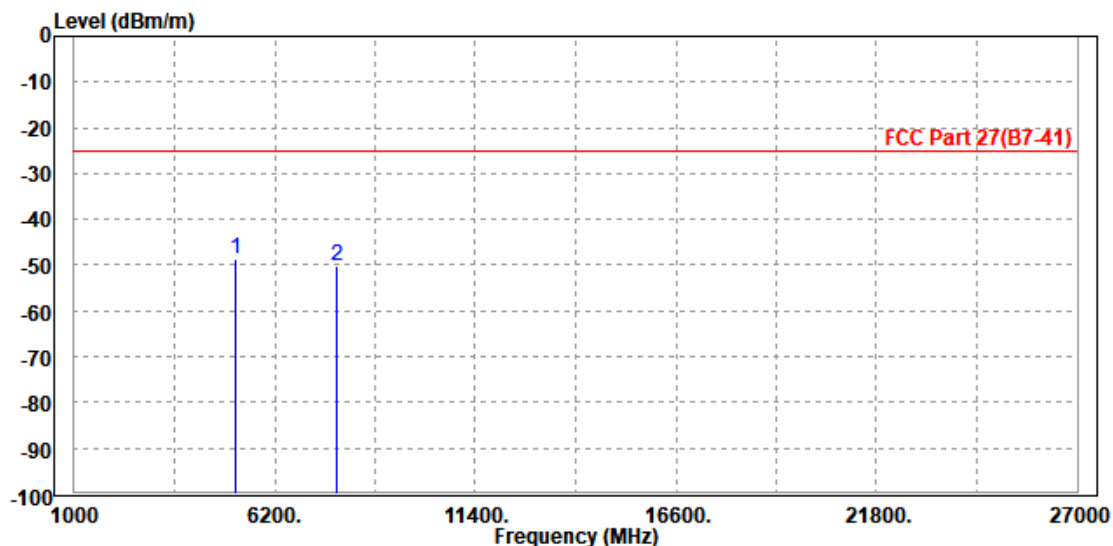
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	5212.000	-49.31	-59.98	-25.00	-24.31	10.67	Peak	Horizontal
2	7800.000	-50.11	-64.28	-25.00	-25.11	14.17	Peak	Horizontal

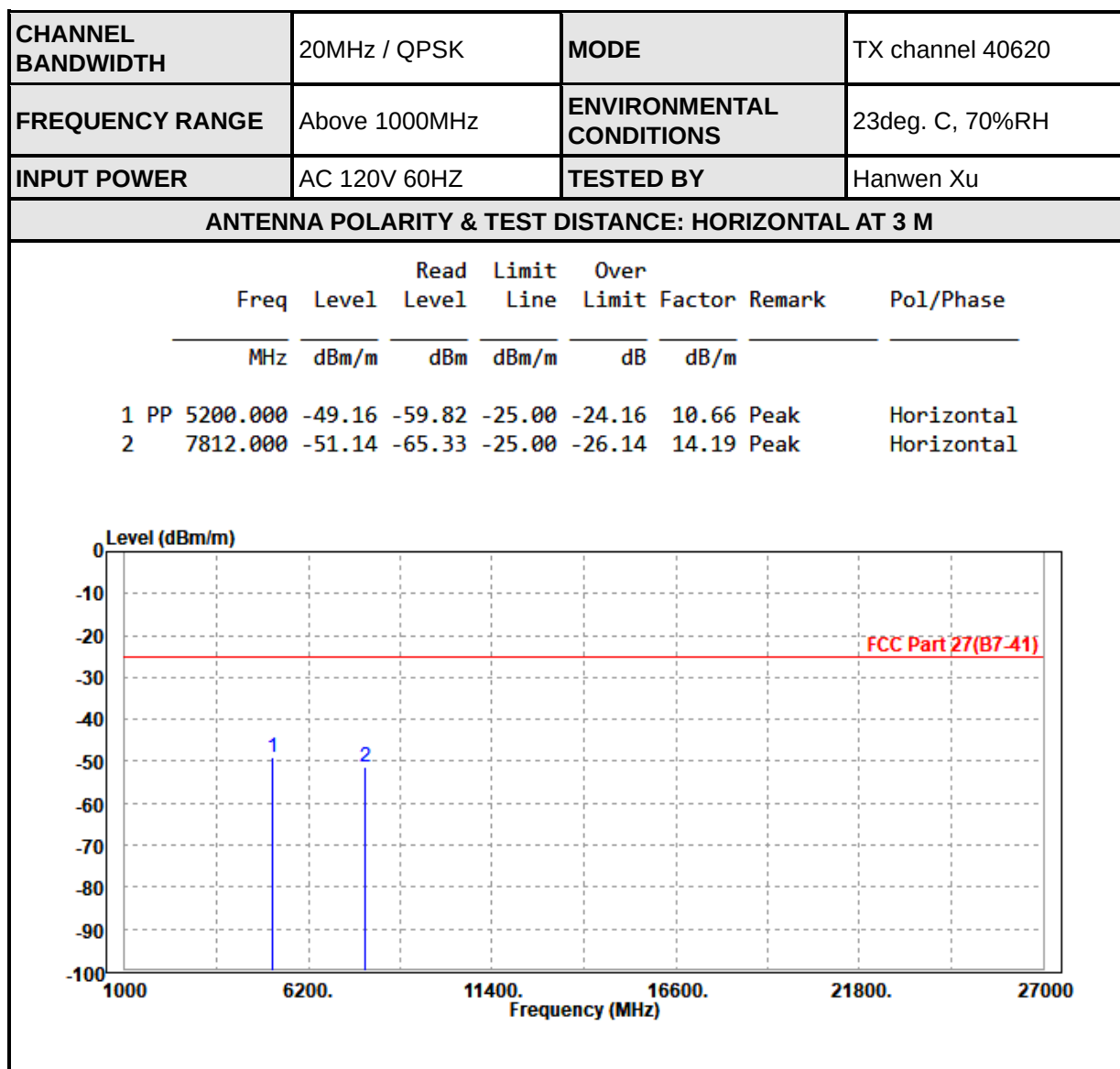


CHANNEL BANDWIDTH	15MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5200.000	-48.85	-59.87	-25.00	-23.85	11.02	Peak	Vertical
2		7812.000	-50.25	-64.66	-25.00	-25.25	14.41	Peak	Vertical

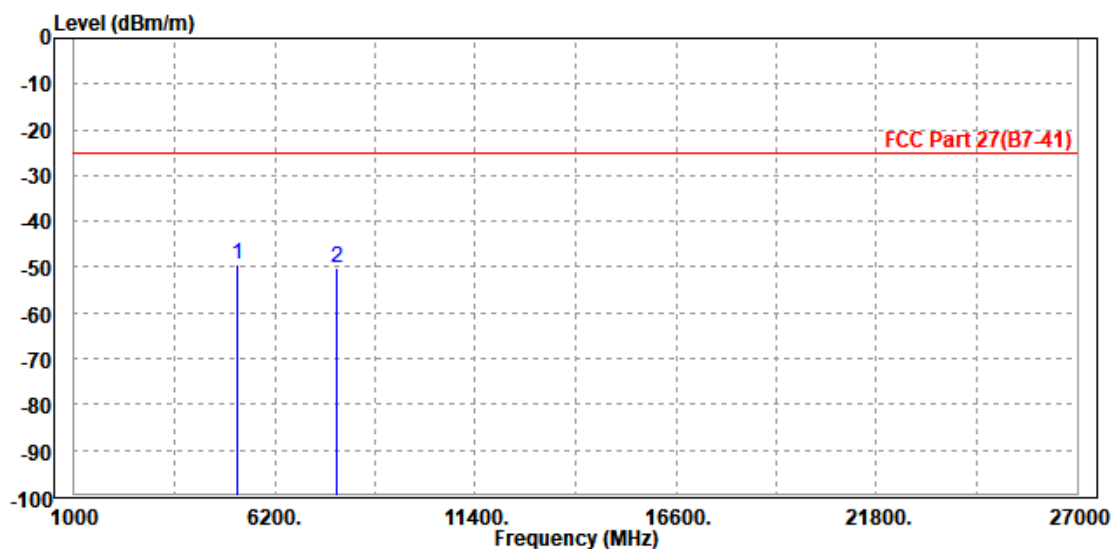


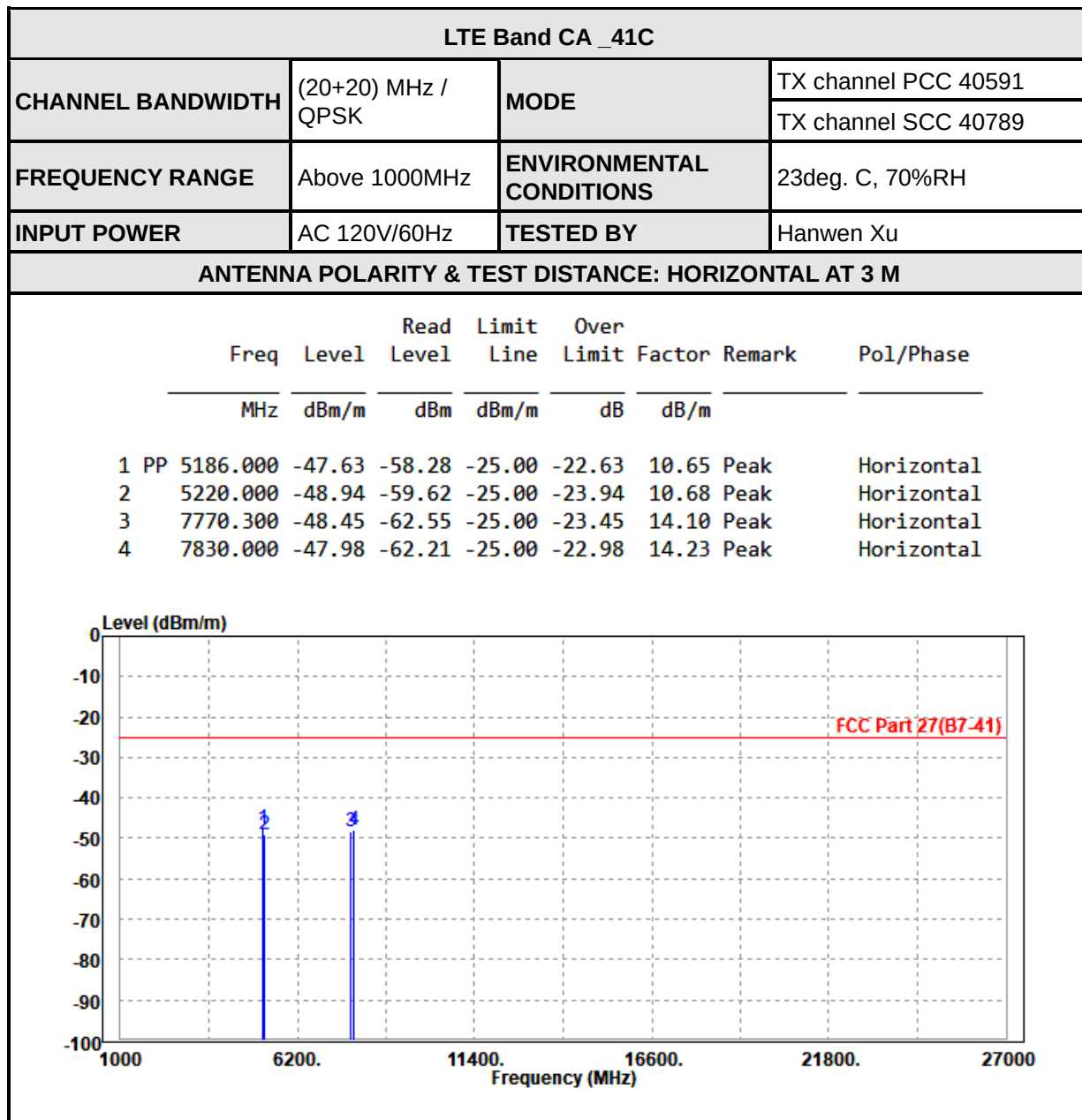


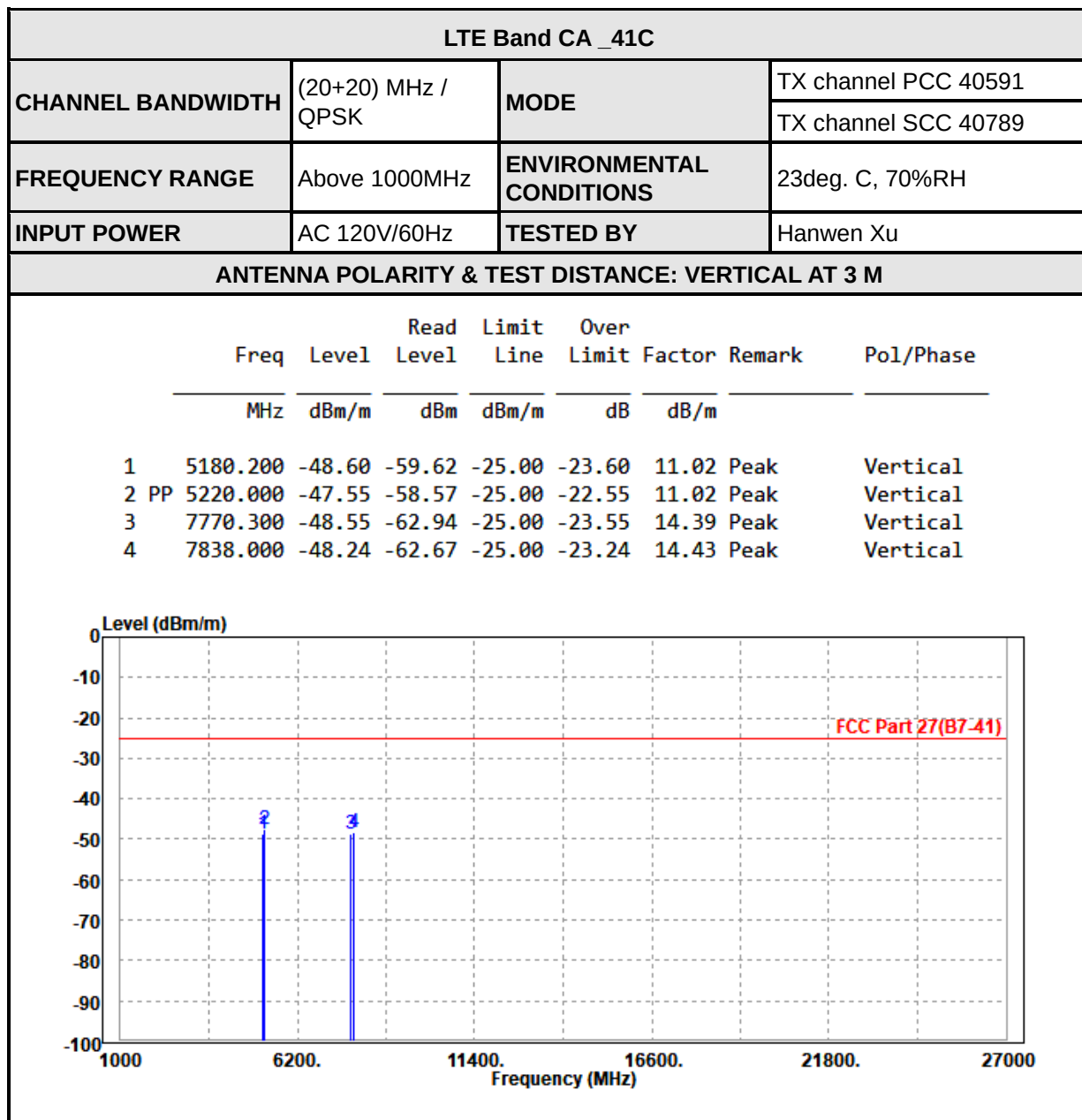
CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

		Read	Limit	Over			
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	PP 5212.000	-49.43	-60.45	-25.00	-24.43	11.02	Peak
2	7800.000	-50.07	-64.48	-25.00	-25.07	14.41	Peak
							Pol/Phase
							Vertical
							Vertical





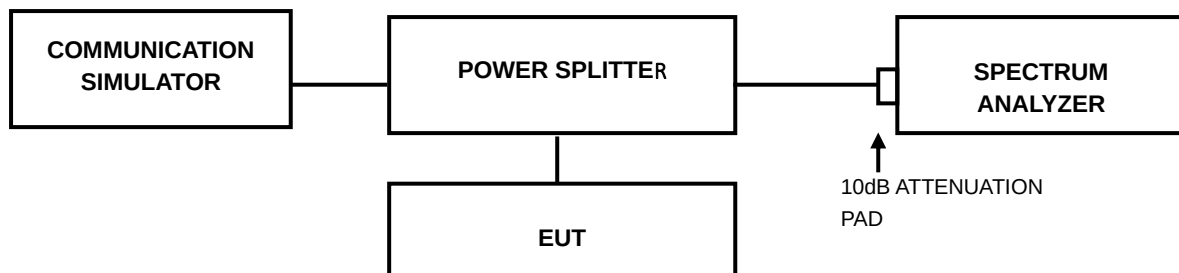


3.7 PEAK TO AVERAGE RATIO

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



Test Report No.: W7L-P24090006RF06

3.7.4 TEST RESULTS

Please Refer to Appendix Of this test report.



Test Report No.: W7L-P24090006RF06

4 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:

Shenzhen EMC/RF Lab:

Tel: +86-755-88696566

Fax: +86-755-88696577

Email: customerservice.sw@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.



Test Report No.: W7L-P24090006RF06

5 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.

6 APPENDIX

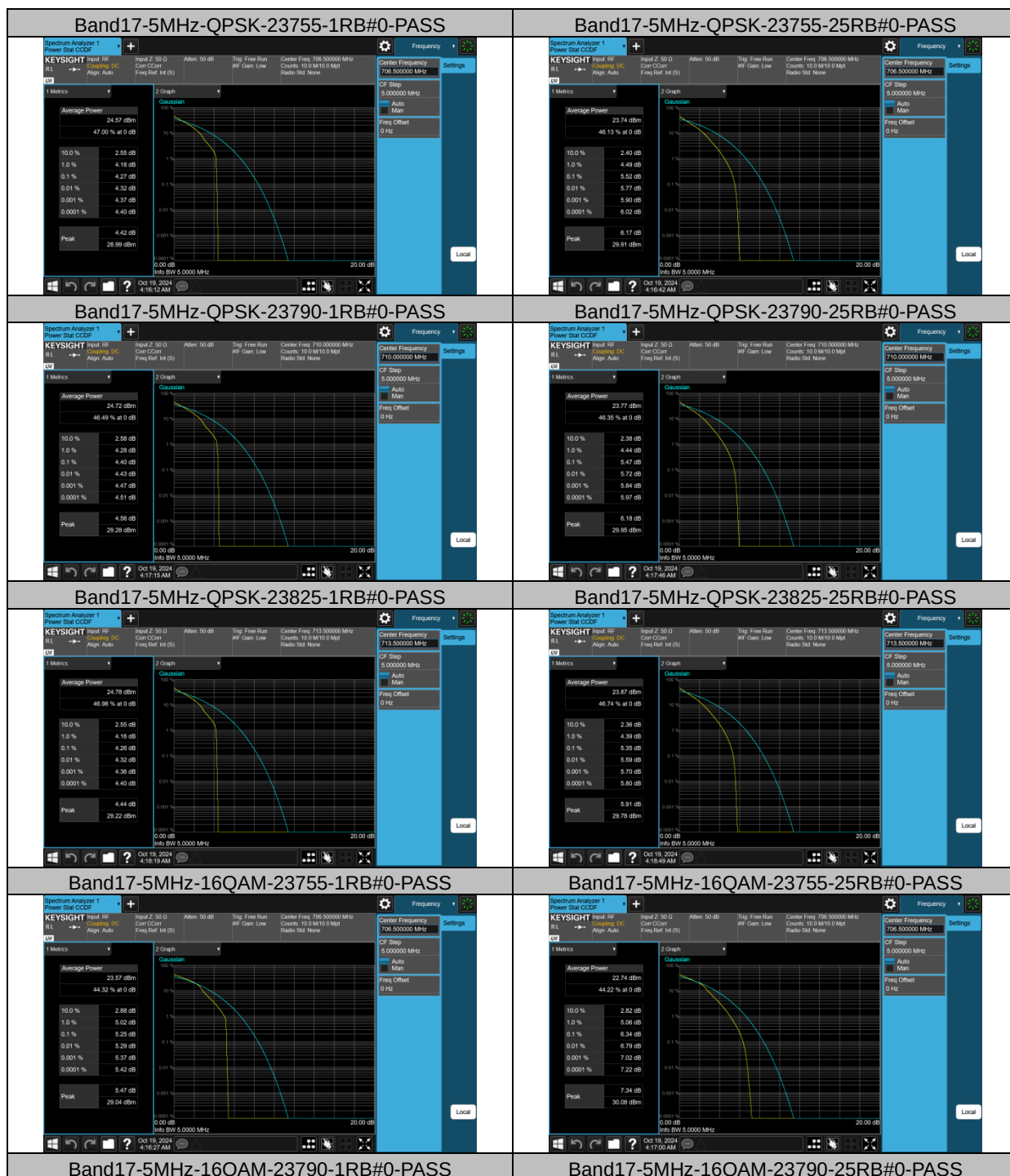
LTE BAND 17

PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	4.27	13	PASS
Band17	5MHz	QPSK	23755	25RB#0	5.52	13	PASS
Band17	5MHz	QPSK	23790	1RB#0	4.40	13	PASS
Band17	5MHz	QPSK	23790	25RB#0	5.47	13	PASS
Band17	5MHz	QPSK	23825	1RB#0	4.26	13	PASS
Band17	5MHz	QPSK	23825	25RB#0	5.35	13	PASS
Band17	5MHz	16QAM	23755	1RB#0	5.25	13	PASS
Band17	5MHz	16QAM	23755	25RB#0	6.34	13	PASS
Band17	5MHz	16QAM	23790	1RB#0	5.37	13	PASS
Band17	5MHz	16QAM	23790	25RB#0	6.31	13	PASS
Band17	5MHz	16QAM	23825	1RB#0	5.24	13	PASS
Band17	5MHz	16QAM	23825	25RB#0	6.15	13	PASS
Band17	10MHz	QPSK	23780	1RB#0	4.26	13	PASS
Band17	10MHz	QPSK	23780	50RB#0	5.46	13	PASS
Band17	10MHz	QPSK	23790	1RB#0	4.33	13	PASS
Band17	10MHz	QPSK	23790	50RB#0	5.45	13	PASS
Band17	10MHz	QPSK	23800	1RB#0	4.36	13	PASS
Band17	10MHz	QPSK	23800	50RB#0	5.39	13	PASS
Band17	10MHz	16QAM	23780	1RB#0	5.29	13	PASS
Band17	10MHz	16QAM	23780	50RB#0	6.26	13	PASS
Band17	10MHz	16QAM	23790	1RB#0	5.36	13	PASS
Band17	10MHz	16QAM	23790	50RB#0	6.26	13	PASS
Band17	10MHz	16QAM	23800	1RB#0	5.40	13	PASS
Band17	10MHz	16QAM	23800	50RB#0	6.22	13	PASS

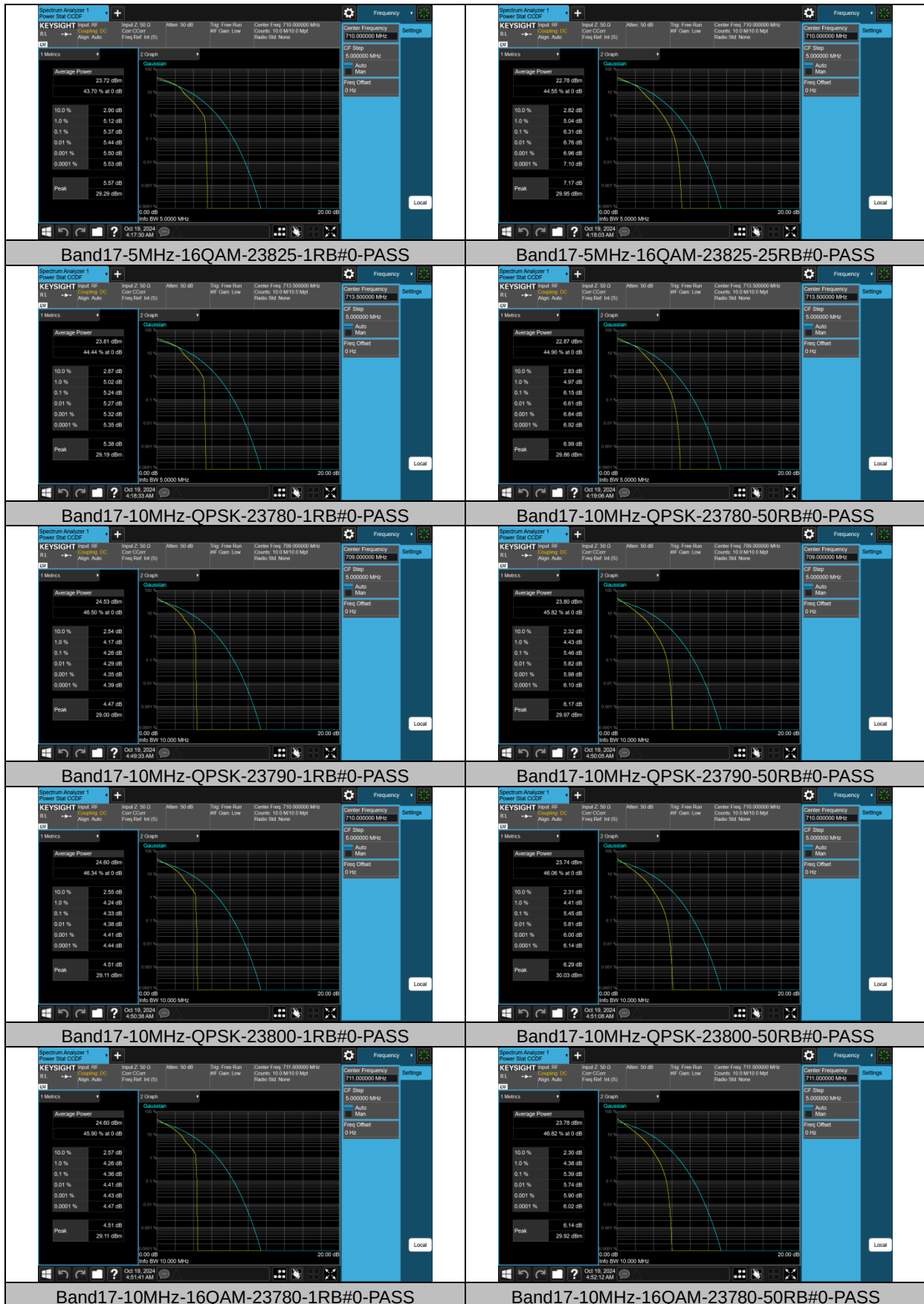
Test Graphs





BUREAU
VERITAS

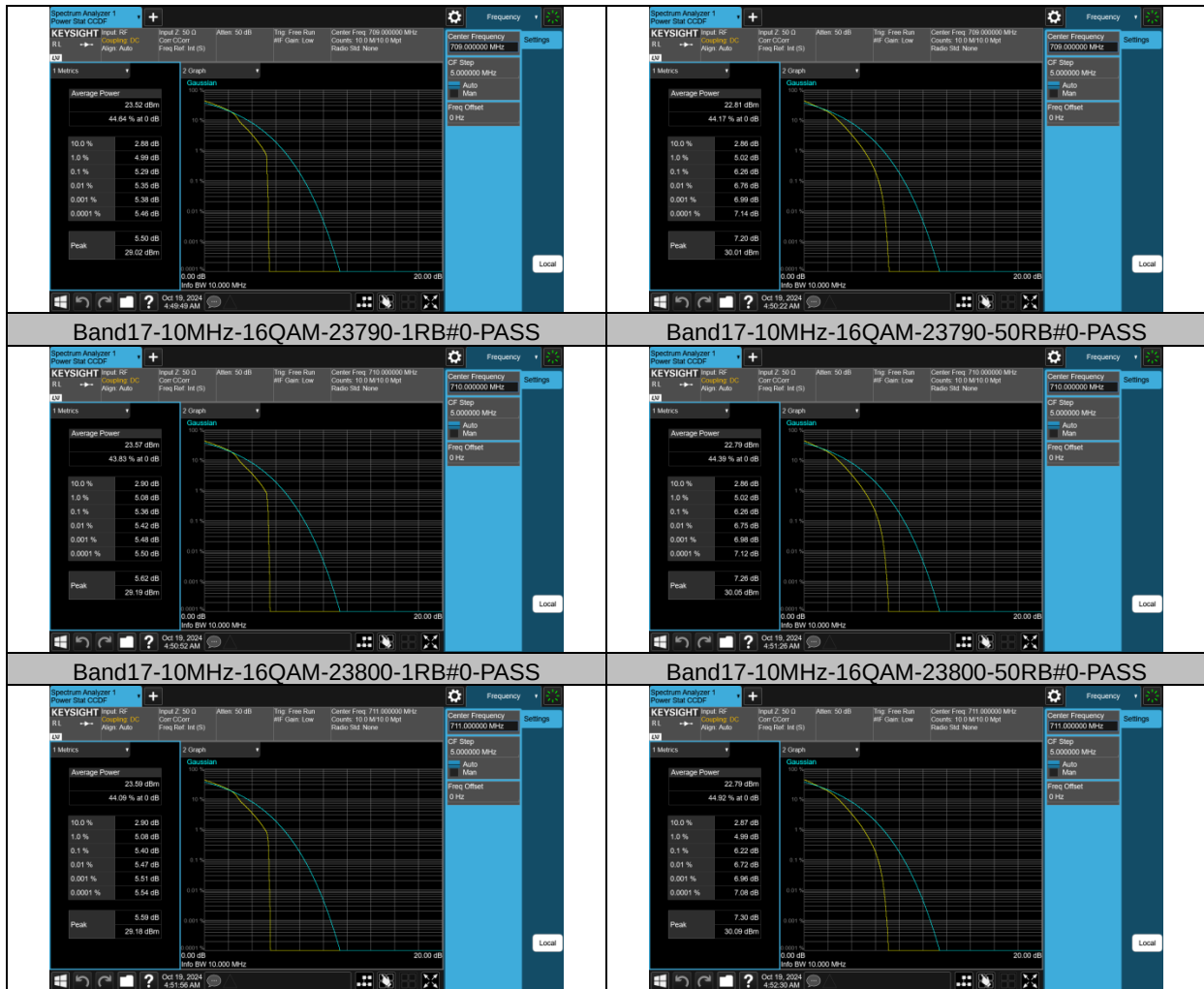
Test Report No.: W7L-P24090006RF06





BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

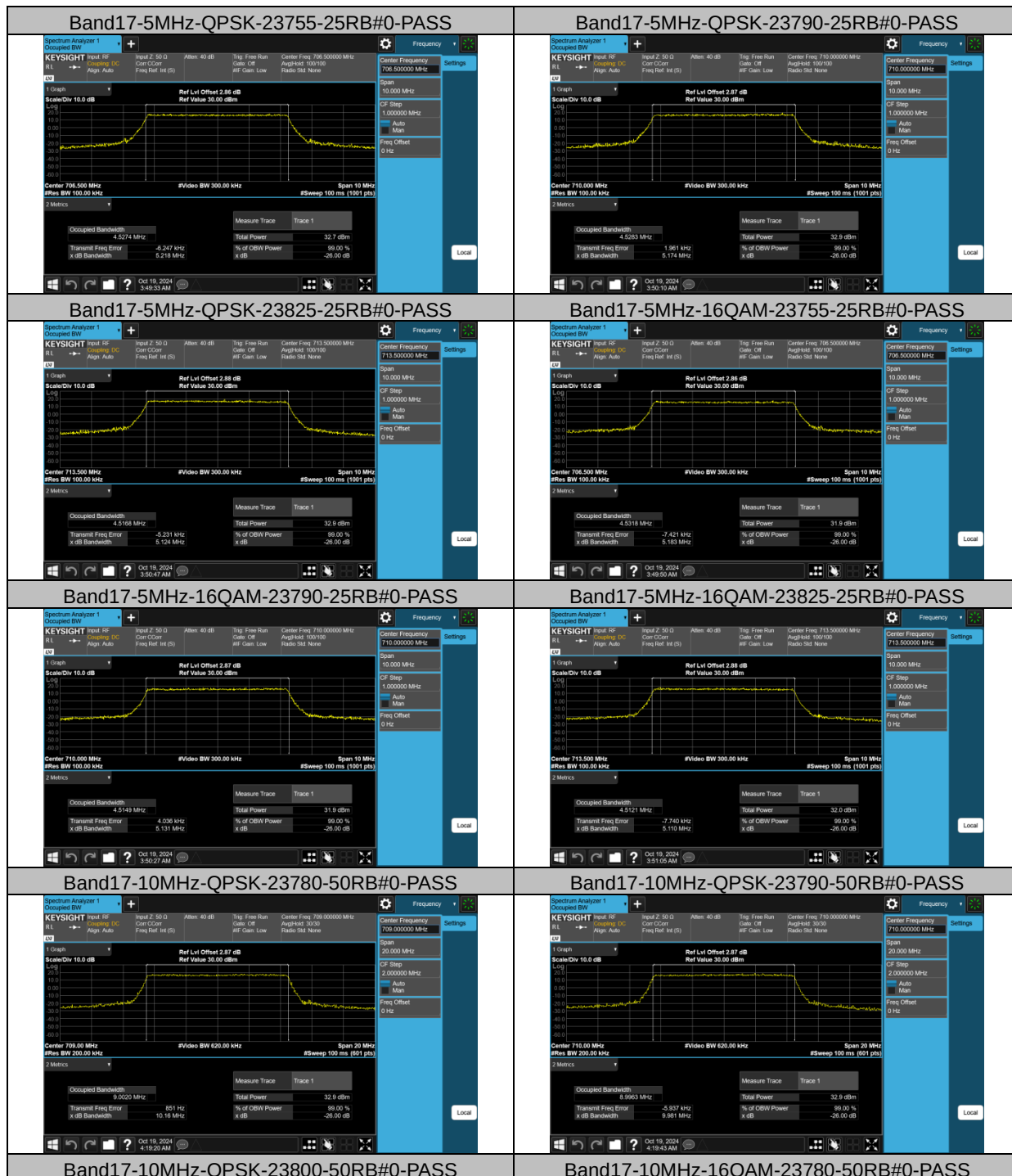


26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	4.5274	5.218	PASS
Band17	5MHz	QPSK	23790	25RB#0	4.5283	5.174	PASS
Band17	5MHz	QPSK	23825	25RB#0	4.5168	5.124	PASS
Band17	5MHz	16QAM	23755	25RB#0	4.5318	5.183	PASS
Band17	5MHz	16QAM	23790	25RB#0	4.5149	5.131	PASS
Band17	5MHz	16QAM	23825	25RB#0	4.5121	5.110	PASS
Band17	10MHz	QPSK	23780	50RB#0	9.0020	10.16	PASS
Band17	10MHz	QPSK	23790	50RB#0	8.9963	9.981	PASS
Band17	10MHz	QPSK	23800	50RB#0	8.9713	10.03	PASS
Band17	10MHz	16QAM	23780	50RB#0	9.0013	10.03	PASS
Band17	10MHz	16QAM	23790	50RB#0	8.9877	10.02	PASS
Band17	10MHz	16QAM	23800	50RB#0	8.9696	10.01	PASS

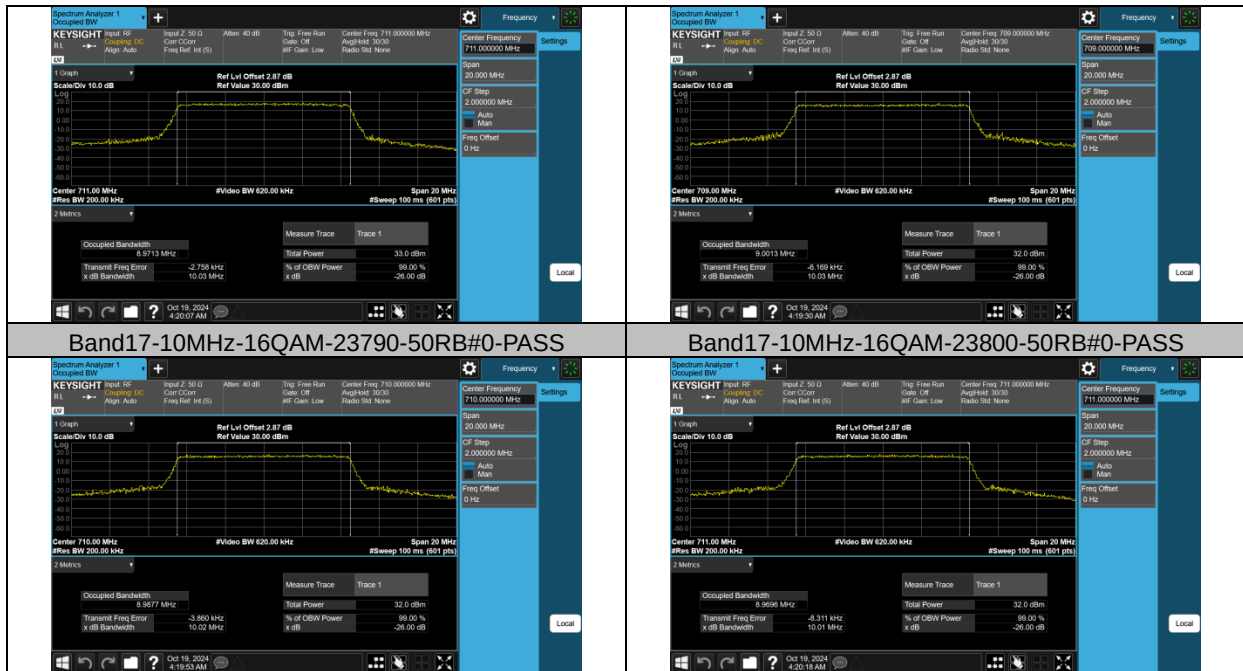
Test Graphs





BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

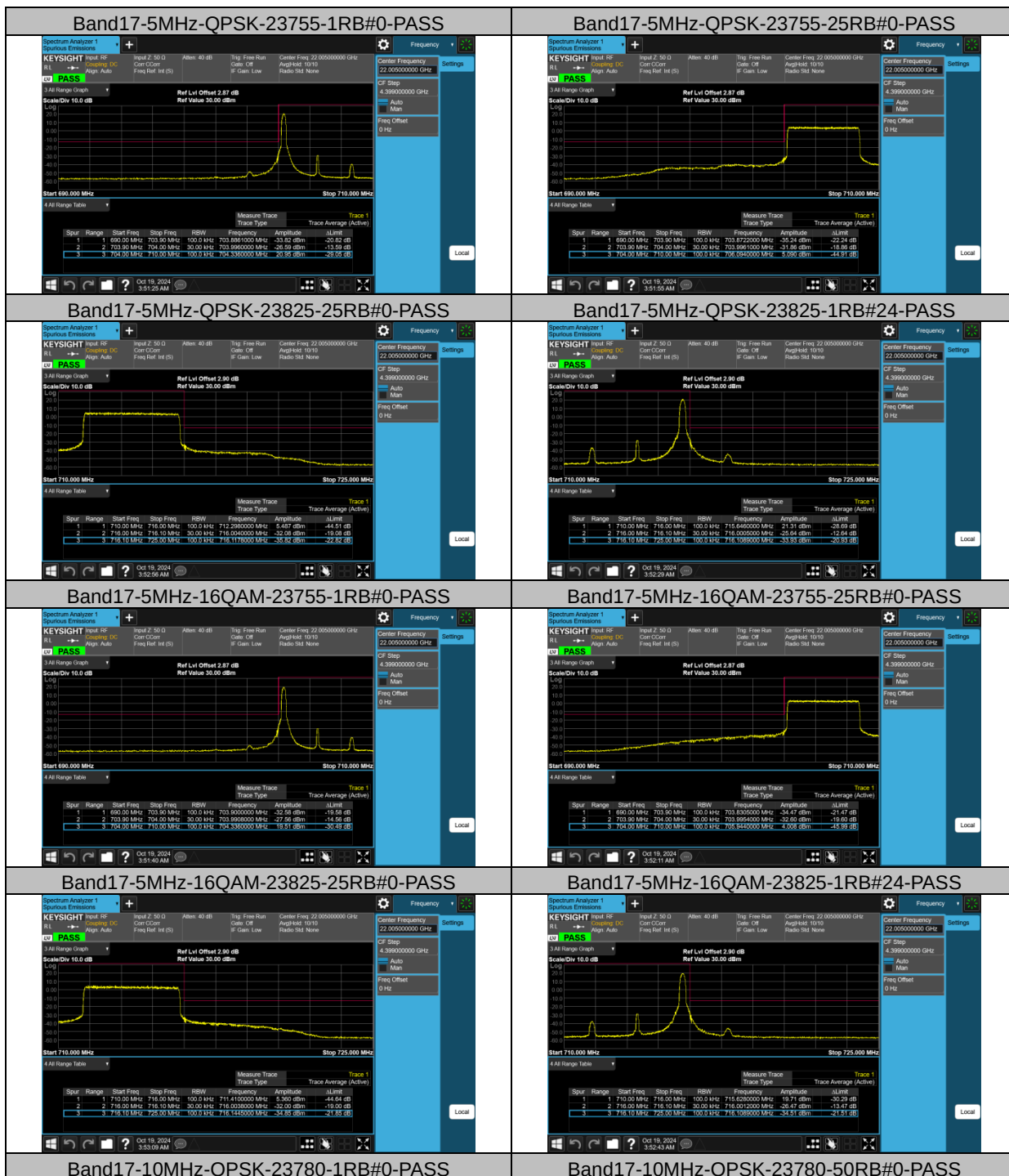


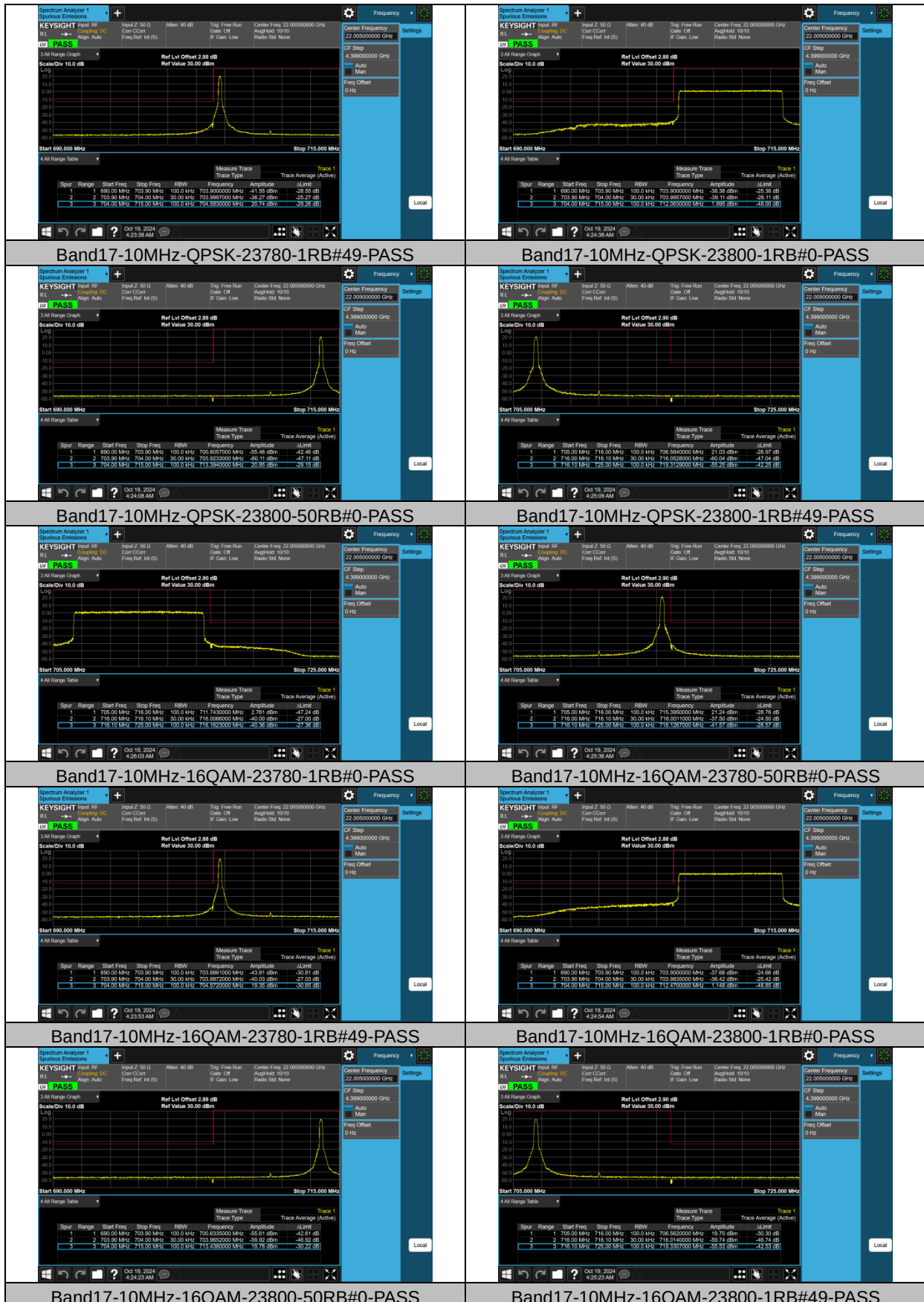
BAND EDGE

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	-26.59	PASS
Band17	5MHz	QPSK	23755	25RB#0	-31.86	PASS
Band17	5MHz	QPSK	23825	25RB#0	-32.08	PASS
Band17	5MHz	QPSK	23825	1RB#24	-25.64	PASS
Band17	5MHz	16QAM	23755	1RB#0	-27.56	PASS
Band17	5MHz	16QAM	23755	25RB#0	-32.60	PASS
Band17	5MHz	16QAM	23825	25RB#0	-32.00	PASS
Band17	5MHz	16QAM	23825	1RB#24	-26.47	PASS
Band17	10MHz	QPSK	23780	1RB#0	-38.27	PASS
Band17	10MHz	QPSK	23780	50RB#0	-38.38	PASS
Band17	10MHz	QPSK	23780	1RB#49	-55.46	PASS
Band17	10MHz	QPSK	23800	1RB#0	-55.25	PASS
Band17	10MHz	QPSK	23800	50RB#0	-40.00	PASS
Band17	10MHz	QPSK	23800	1RB#49	-37.50	PASS
Band17	10MHz	16QAM	23780	1RB#0	-40.03	PASS
Band17	10MHz	16QAM	23780	50RB#0	-37.66	PASS
Band17	10MHz	16QAM	23780	1RB#49	-55.61	PASS
Band17	10MHz	16QAM	23800	1RB#0	-55.53	PASS
Band17	10MHz	16QAM	23800	50RB#0	-39.12	PASS
Band17	10MHz	16QAM	23800	1RB#49	-39.27	PASS

Test Graphs







BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

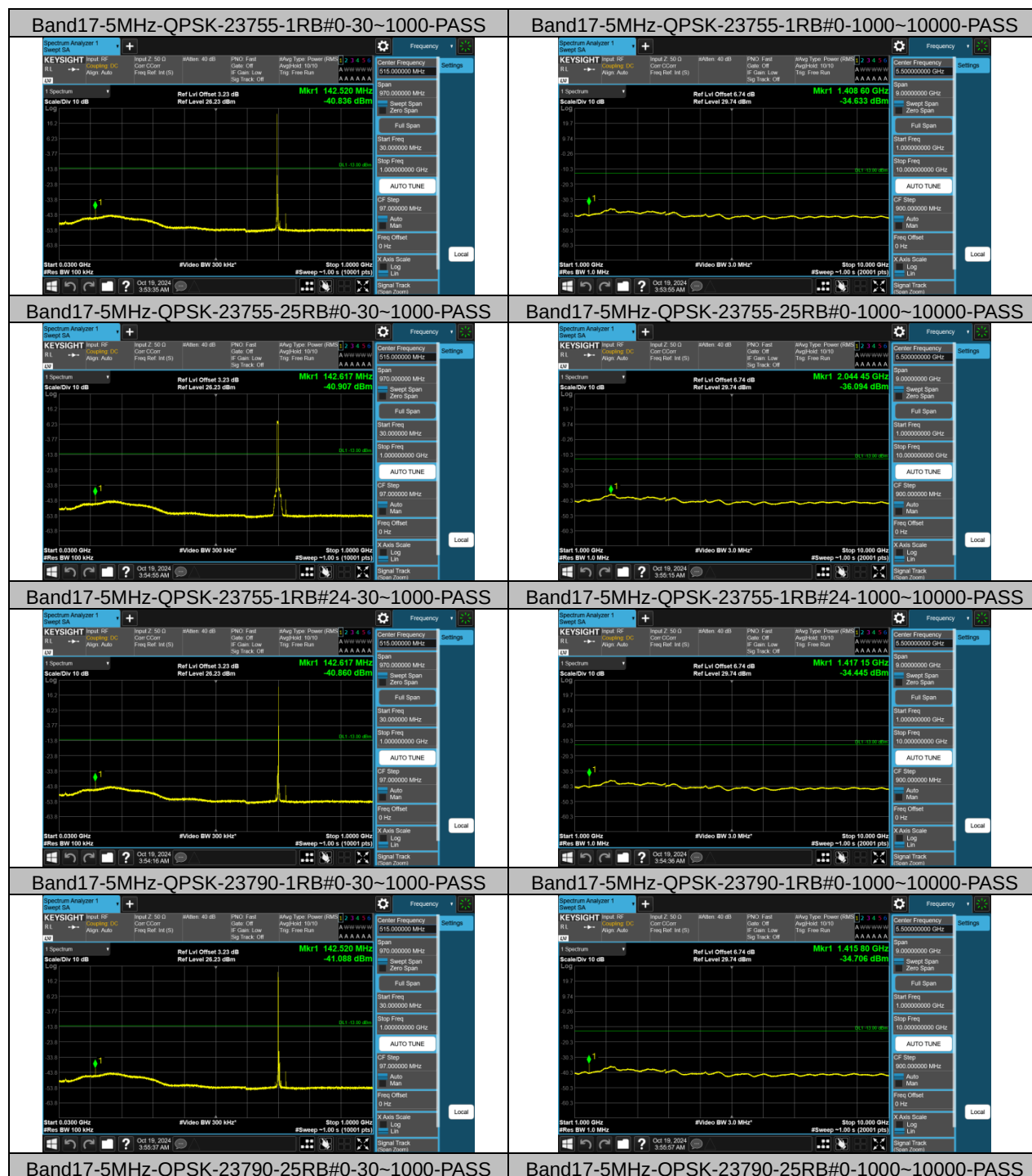


CONDUCTED SPURIOUS EMISSION

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	30~1000	-40.84	PASS
Band17	5MHz	QPSK	23755	1RB#0	1000~10000	-34.63	PASS
Band17	5MHz	QPSK	23755	25RB#0	30~1000	-40.91	PASS
Band17	5MHz	QPSK	23755	25RB#0	1000~10000	-36.09	PASS
Band17	5MHz	QPSK	23755	1RB#24	30~1000	-40.86	PASS
Band17	5MHz	QPSK	23755	1RB#24	1000~10000	-34.45	PASS
Band17	5MHz	QPSK	23790	1RB#0	30~1000	-41.09	PASS
Band17	5MHz	QPSK	23790	1RB#0	1000~10000	-34.71	PASS
Band17	5MHz	QPSK	23790	25RB#0	30~1000	-40.96	PASS
Band17	5MHz	QPSK	23790	25RB#0	1000~10000	-36.24	PASS
Band17	5MHz	QPSK	23790	1RB#24	30~1000	-41.41	PASS
Band17	5MHz	QPSK	23790	1RB#24	1000~10000	-34.28	PASS
Band17	5MHz	QPSK	23825	1RB#0	30~1000	-40.85	PASS
Band17	5MHz	QPSK	23825	1RB#0	1000~10000	-34.41	PASS
Band17	5MHz	QPSK	23825	25RB#0	30~1000	-40.94	PASS
Band17	5MHz	QPSK	23825	25RB#0	1000~10000	-36.22	PASS
Band17	5MHz	QPSK	23825	1RB#24	30~1000	-41.18	PASS
Band17	5MHz	QPSK	23825	1RB#24	1000~10000	-33.52	PASS
Band17	10MHz	QPSK	23780	1RB#0	30~1000	-41.43	PASS
Band17	10MHz	QPSK	23780	1RB#0	1000~10000	-35.01	PASS
Band17	10MHz	QPSK	23780	50RB#0	30~1000	-41.00	PASS
Band17	10MHz	QPSK	23780	50RB#0	1000~10000	-36.18	PASS
Band17	10MHz	QPSK	23780	1RB#49	30~1000	-41.23	PASS
Band17	10MHz	QPSK	23780	1RB#49	1000~10000	-33.52	PASS
Band17	10MHz	QPSK	23790	1RB#0	30~1000	-41.17	PASS
Band17	10MHz	QPSK	23790	1RB#0	1000~10000	-34.54	PASS
Band17	10MHz	QPSK	23790	50RB#0	30~1000	-41.16	PASS
Band17	10MHz	QPSK	23790	50RB#0	1000~10000	-36.15	PASS
Band17	10MHz	QPSK	23790	1RB#49	30~1000	-41.50	PASS
Band17	10MHz	QPSK	23790	1RB#49	1000~10000	-32.51	PASS
Band17	10MHz	QPSK	23800	1RB#0	30~1000	-41.11	PASS
Band17	10MHz	QPSK	23800	1RB#0	1000~10000	-34.76	PASS
Band17	10MHz	QPSK	23800	50RB#0	30~1000	-40.88	PASS
Band17	10MHz	QPSK	23800	50RB#0	1000~10000	-36.14	PASS
Band17	10MHz	QPSK	23800	1RB#49	30~1000	-41.55	PASS
Band17	10MHz	QPSK	23800	1RB#49	1000~10000	-33.63	PASS

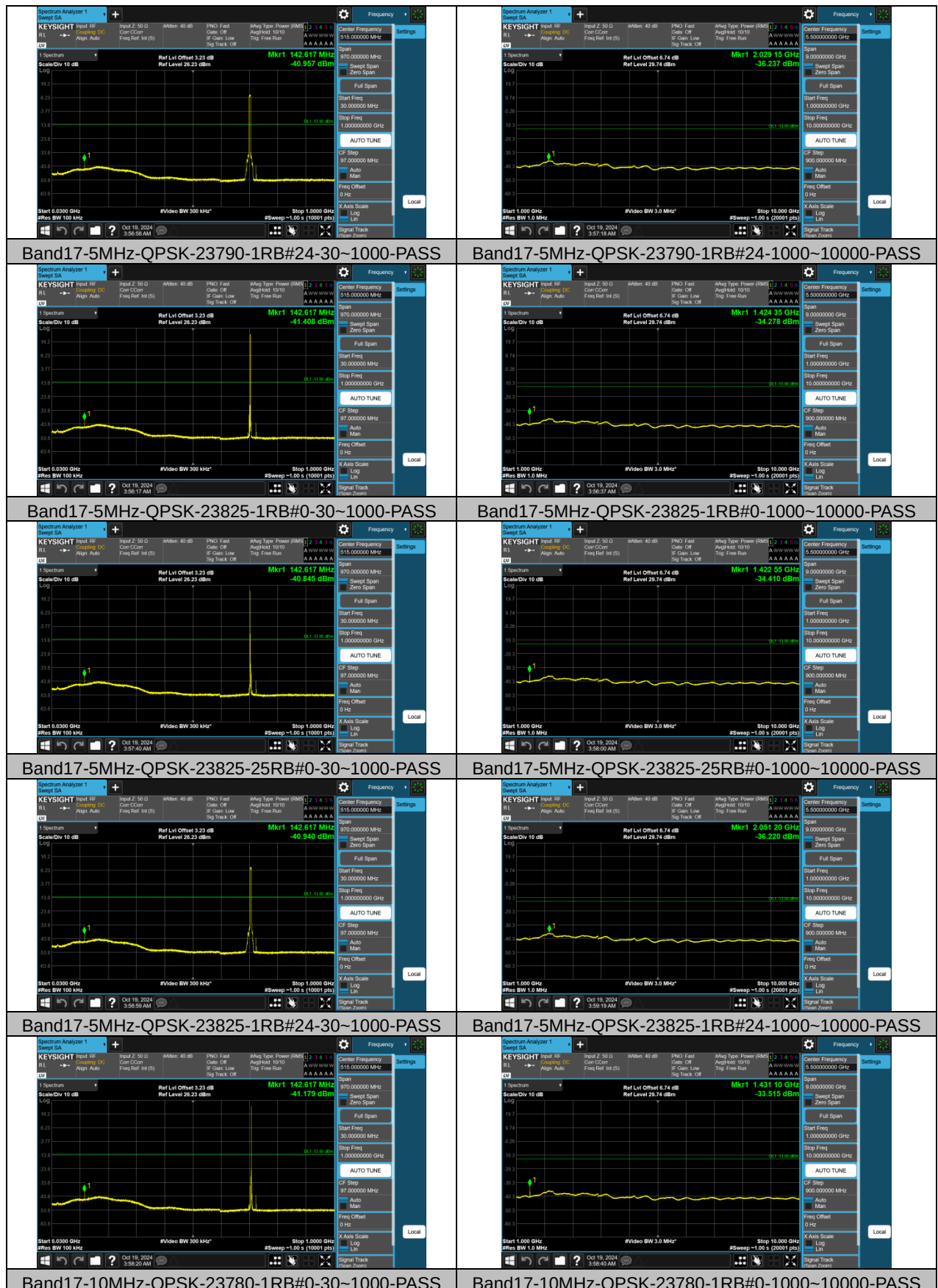
Test Graphs





BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06





BUREAU
VERITAS

Test Report No.: W7L-P24090006RF06

