

# FCC RF TEST REPORT

For

**Mobile Computer**

**Model Number: M52 Luna**

**FCC ID: 2A398-M52Luna**

**Report Number : WT228000197**

Test Laboratory : Shenzhen Academy of Metrology and Quality Inspection  
Site Location : NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China  
Tel : 0086-755-86928965  
Fax : 0086-755-86009898-31396  
Web : [www.smq.com.cn](http://www.smq.com.cn)  
E-mail : [emcrf@smq.com.cn](mailto:emcrf@smq.com.cn)

## Test report declaration

Applicant : Suzhou MobyData Smart System Co., Ltd.  
Address : 3f,building E,Yida science Park,No.11 Jinpu Road,SIP, Suzhou,Jiangsu,China.  
Manufacturer : Suzhou MobyData Smart System Co., Ltd.  
Address : 3f,building E,Yida science Park,No.11 Jinpu Road,SIP, Suzhou,Jiangsu,China.  
EUT Description : Mobile Computer  
  
Model No. : M52 Luna  
Trade mark : MobyData  
FCC ID : 2A398-M52

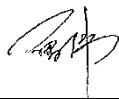
Test Standards:

**FCC PART 2, 22H , 24E , 27 & 90S (2020)**

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.26 (2015) & KDB971168 and the energy emitted by the sample EUT tested as described in this report is in compliance with FCC Rules Part 2, 22H, 24E, 27 & 90S.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

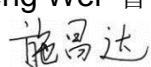
Project  
Engineer:



(Zeng Wei 曾伟)

Date: Mar.10, 2022

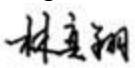
Checked by:



(Shi Changda 施昌达)

Date: Mar.10, 2022

Approved by:



(Lin Yixiang 林奕翔)

Date: Mar.10, 2022

## TABLE OF CONTENTS

<b>TEST REPORT DECLARATION .....</b>	<b>2</b>
<b>1. TEST RESULTS SUMMARY .....</b>	<b>4</b>
<b>2. GENERAL INFORMATION .....</b>	<b>5</b>
2.1. Report information.....	5
2.2. Laboratory Accreditation and Relationship to Customer .....	5
<b>3. PRODUCT DESCRIPTION.....</b>	<b>6</b>
3.1. EUT Description .....	6
3.2. Identification of Accessory equipment .....	7
3.3. Related Submittal(s) / Grant (s) .....	7
3.4. Operating Condition of EUT .....	7
3.5. Conducted Power.....	8
3.6. Environmental Conditions .....	36
3.7. Special Accessories.....	36
3.8. Equipment Modifications .....	36
<b>4. TEST EQUIPMENT USED .....</b>	<b>37</b>
<b>5. MEASUREMENT UNCERTAINTY .....</b>	<b>38</b>
<b>6. TEST ITEMS .....</b>	<b>39</b>
6.1. Conducted Power & Effective Radiated Power .....	39
6.2. Peak to Average Radio .....	41
6.3. Occupied Bandwidth & Emission Bandwidth .....	42
6.4. Conducted Band Edge .....	43
6.5. Conducted Spurious Emissions .....	46
6.6. Frequency Stability.....	49
6.7. Radiated Spurious Emissions .....	51
<b>7. APPENDIX A: CONDUCTED POWER &amp; EFFECTIVE RADIATED POWER .....</b>	<b>55</b>
<b>8. APPENDIX B: PEAK-TO-AVERAGE RATIO .....</b>	<b>86</b>
<b>9. APPENDIX C: OCCUPIED BANDWIDTH .....</b>	<b>90</b>
<b>10. APPENDIX D: CONDUCTED BAND EDGE .....</b>	<b>126</b>
<b>11. APPENDIX E: CONDUCTED SPURIOUS EMISSION .....</b>	<b>167</b>
<b>12. APPENDIX F: FREQUENCY STABILITY .....</b>	<b>235</b>
<b>13. APPENDIX G: RADIATED SPURIOUS EMISSION .....</b>	<b>255</b>

## 1. TEST RESULTS SUMMARY

FCC Measurement Specification	Limits Part(s)	Description	Result
2.1046	22.913 24.232 27.50(b) 27.50(c) 27.50(d) 27.50(h) 90.205 90.635	Conducted Power & Effective Radiated Power	PASS
2.1046	22.913 24.232 27.50(b) 27.50(c) 27.50(d) 27.50(h)	Peak to Average Ratio	PASS
2.1049	22.917(b) 24.238(b) 27.53 90.209	Occupied Bandwidth & Emission Bandwidth	PASS
2.1051	22.917 24.238 27.53 90.691	Conducted Spurious Emissions	PASS
2.1051	22.917 24.238 27.53 90.691	Conducted Band Edge	PASS
2.1055	22.355 24.235 27.54 90.213	Frequency Stability	PASS
2.1053	22.917 24.238 27.53 90.691	Radiated Spurious Emissions	PASS

Remark: "N/A" means "Not applicable."

The tests documented in this report were performed in accordance with ANSI C63.26 (2015), FCC PART 22H, 24E, 27 & 90S.

## 2. GENERAL INFORMATION

### 2.1. Report information

This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

The samples mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

The lab will not be liable for any loss or damage resulting from false, inaccurate, inappropriate or incomplete product information provided by the applicant/manufacturer.

### 2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is Accredited Testing Laboratory of FCC with Designation number CN1165 and Site registration number 582918.

The Laboratory is registered to perform emission tests with Innovation, Science and Economic Development (ISED), and the registration number is 11177A.

The Laboratory is registered to perform emission tests with VCCI, and the registration number are C-20048, G20076, R-20077, R-20078, and T-20047.

The Laboratory is Accredited Testing Laboratory of American Association for Laboratory Accreditation (A2LA) and certificate number is 3292.01.

### 3. PRODUCT DESCRIPTION

#### 3.1. EUT Description

Specification of the Equipment under Test

Hardware Revision:	H236WO_V02	
Software Revision:	M09.01.03.20220124	
Tx Frequency:	GSM850:	824 ~ 849 MHz
	PCS1900:	1850 ~ 1910 MHz
	WCDMA 850:	824 ~ 849 MHz
	WCDMA 1900:	1850 ~ 1910 MHz
	LTE Band 2:	1850 ~ 1910 MHz
	LTE Band 4:	1710 ~ 1755 MHz
	LTE Band 5:	824 ~ 849 MHz
	LTE Band 7:	2500 ~ 2570 MHz
	LTE Band 12:	699 ~ 716 MHz
	LTE Band 26:	814 ~ 849 MHz
Rx Frequency:	GSM850:	869 ~ 894 MHz
	PCS1900:	1930 ~ 1990 MHz
	WCDMA 850:	869 ~ 894 MHz
	WCDMA 1900:	1930 ~ 1990 MHz
	LTE Band 2:	1930 ~ 1990 MHz
	LTE Band 4:	2110 ~ 2155 MHz
	LTE Band 5:	869 ~ 894 MHz
	LTE Band 7:	2620 ~ 2690 MHz
	LTE Band 12:	729 ~ 746 MHz
	LTE Band 26:	859 ~ 894 MHz
Type(s) of Modulation:	GSM: GMSK, 8PSK WCDMA: QPSK LTE: QPSK, 16QAM	
Remark:	--	

Antenna Type:	PIFA antenna	
Antenna Gain:	GSM850:	0.54 dBi
	PCS1900:	0.7 dBi
	WCDMA 850:	0.54 dBi
	WCDMA 1900:	0.7 dBi
	LTE Band 2:	0.7 dBi
	LTE Band 4:	0.76 dBi
	LTE Band 5:	0.54 dBi
	LTE Band 7:	1.14 dBi
	LTE Band 12:	0.48 dBi
	LTE Band 26:	0.52 dBi
Power Supply Voltage	DC: 3.60 V (Low)/ 3.80 V (Nominal)/ 4.35 V (Max)	

NOTE: The extreme test conditions for temperature and antenna gain were declared by the manufacturer.

### 3.2. Identification of Accessory equipment

AE #	Type	Manufacturer	Model	Serial Number
--	--	--	--	--

### 3.3. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: 2A398-M52 filing to comply with FCC PART 2, 22H, 24E, 27 and 90S.

### 3.4. Operating Condition of EUT

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission (Y plane).

Radiated spurious emissions were investigated below 30MHz, 30MHz-1GHz and above 1GHz. There were no emissions found on below 30MHz and 30MHz-1GHz.

- TM1:** GSM Mode with GMSK Modulation
- TM2:** EDGE Mode with 8PSK Modulation
- TM3:** WCDMA Mode with QPSK Modulation
- TM4:** LTE Mode with QPSK Modulation
- TM5:** LTE Mode with 16QAM Modulation

### 3.5. Conducted Power

#### GSM:

Band: GSM850	Measured (dBm)		
Test Condition	TNVN		
Channel	128	190	251
Frequency (MHz)	824.2	836.6	848.8
GSM (GMSK, 1 Tx slot)	<b>32.75</b>	<b>32.92</b>	<b>32.77</b>
GPRS (GMSK, 1 Tx slot)	<b>32.77</b>	<b>32.93</b>	<b>32.78</b>
GPRS (GMSK, 2 Tx slots)	31.99	32.16	32.03
GPRS (GMSK, 3 Tx slots)	30.25	30.45	30.24
GPRS (GMSK, 4 Tx slots)	29.18	29.41	29.17
EDGE (8PSK, 1 Tx slot)	<b>25.56</b>	<b>25.62</b>	<b>25.59</b>
EDGE (8PSK, 2 Tx slots)	24.18	24.29	24.15
EDGE (8PSK, 3 Tx slots)	21.90	21.91	21.89
EDGE (8PSK, 4 Tx slots)	20.68	20.77	20.68

Band: PCS1900	Measured (dBm)		
Test Condition	TNVN		
Channel	512	661	810
Frequency (MHz)	1850.2	1880	1909.8
GSM (GMSK, 1 Tx slot)	<b>29.64</b>	<b>29.64</b>	<b>29.66</b>
GPRS (GMSK, 1 Tx slot)	<b>29.65</b>	<b>29.63</b>	<b>29.69</b>
GPRS (GMSK, 2 Tx slots)	28.93	28.93	28.95
GPRS (GMSK, 3 Tx slots)	27.18	27.18	27.25
GPRS (GMSK, 4 Tx slots)	26.14	26.10	26.14
EDGE (8PSK, 1 Tx slot)	<b>24.59</b>	<b>24.38</b>	<b>24.40</b>
EDGE (8PSK, 2 Tx slots)	22.75	22.63	22.62
EDGE (8PSK, 3 Tx slots)	20.32	20.31	20.30
EDGE (8PSK, 4 Tx slots)	18.95	18.94	18.92

#### WCDMA:

Band: WCDMA Band II	Average Power [dBm]		
Channel	9262	9400	9538
Frequency (MHz)	1852.4	1880.0	1907.6
RMC 12.2K	<b>22.92</b>	<b>22.95</b>	<b>23.07</b>
HSDPA Subtest-1	21.92	21.94	22.08
HSDPA Subtest-2	21.30	21.24	21.40
HSDPA Subtest-3	21.18	21.24	21.35

<b>HSDPA Subtest-4</b>	21.10	21.22	21.25
<b>HSUPA Subtest-1</b>	20.17	20.62	20.75
<b>HSUPA Subtest-2</b>	19.69	19.73	19.81
<b>HSUPA Subtest-3</b>	20.68	20.65	20.81
<b>HSUPA Subtest-4</b>	19.27	19.25	19.41
<b>HSUPA Subtest-5</b>	20.63	20.62	20.75

<b>Band: WCDMA Band V</b>		<b>Average Power [dBm]</b>		
<b>Channel</b>	4,132	4,182	4,233	
<b>Frequency (MHz)</b>	<b>826.4</b>	<b>836.4</b>	<b>846.6</b>	
<b>RMC 12.2K</b>	<b>23.08</b>	<b>23.17</b>	<b>23.18</b>	
<b>HSDPA Subtest-1</b>	22.13	22.17	22.16	
<b>HSDPA Subtest-2</b>	21.40	21.45	21.41	
<b>HSDPA Subtest-3</b>	21.33	21.37	21.30	
<b>HSDPA Subtest-4</b>	21.23	21.26	21.24	
<b>HSUPA Subtest-1</b>	20.25	19.81	19.77	
<b>HSUPA Subtest-2</b>	19.87	19.90	19.92	
<b>HSUPA Subtest-3</b>	20.77	20.76	20.81	
<b>HSUPA Subtest-4</b>	19.34	19.41	19.38	
<b>HSUPA Subtest-5</b>	20.76	20.80	20.85	

### LTE:

Band	Bandwidth	Modulation	Channel	RB Config.	Power (dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	23.80	PASS
Band2	1.4MHz	QPSK	18607	1RB#3	23.89	PASS
Band2	1.4MHz	QPSK	18607	1RB#5	23.74	PASS
Band2	1.4MHz	QPSK	18607	3RB#0	23.54	PASS
Band2	1.4MHz	QPSK	18607	3RB#1	23.43	PASS
Band2	1.4MHz	QPSK	18607	3RB#3	23.87	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	22.39	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	23.28	PASS
Band2	1.4MHz	QPSK	18900	1RB#3	23.32	PASS
Band2	1.4MHz	QPSK	18900	1RB#5	23.28	PASS
Band2	1.4MHz	QPSK	18900	3RB#0	23.35	PASS
Band2	1.4MHz	QPSK	18900	3RB#1	23.39	PASS
Band2	1.4MHz	QPSK	18900	3RB#3	23.36	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	22.35	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	23.24	PASS
Band2	1.4MHz	QPSK	19193	1RB#3	23.32	PASS

Band2	1.4MHz	QPSK	19193	1RB#5	23.23	PASS
Band2	1.4MHz	QPSK	19193	3RB#0	23.33	PASS
Band2	1.4MHz	QPSK	19193	3RB#1	23.39	PASS
Band2	1.4MHz	QPSK	19193	3RB#3	23.37	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	22.34	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	23.03	PASS
Band2	1.4MHz	16QAM	18607	1RB#3	23.03	PASS
Band2	1.4MHz	16QAM	18607	1RB#5	22.78	PASS
Band2	1.4MHz	16QAM	18607	3RB#0	22.69	PASS
Band2	1.4MHz	16QAM	18607	3RB#1	22.57	PASS
Band2	1.4MHz	16QAM	18607	3RB#3	22.50	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	21.44	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	22.58	PASS
Band2	1.4MHz	16QAM	18900	1RB#3	22.60	PASS
Band2	1.4MHz	16QAM	18900	1RB#5	22.45	PASS
Band2	1.4MHz	16QAM	18900	3RB#0	22.45	PASS
Band2	1.4MHz	16QAM	18900	3RB#1	22.48	PASS
Band2	1.4MHz	16QAM	18900	3RB#3	22.43	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	21.46	PASS
Band2	1.4MHz	16QAM	19193	1RB#0	22.51	PASS
Band2	1.4MHz	16QAM	19193	1RB#3	22.46	PASS
Band2	1.4MHz	16QAM	19193	1RB#5	22.51	PASS
Band2	1.4MHz	16QAM	19193	3RB#0	22.34	PASS
Band2	1.4MHz	16QAM	19193	3RB#1	22.40	PASS
Band2	1.4MHz	16QAM	19193	3RB#3	22.34	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	21.37	PASS
Band2	3MHz	QPSK	18615	1RB#0	24.06	PASS
Band2	3MHz	QPSK	18615	1RB#7	24.24	PASS
Band2	3MHz	QPSK	18615	1RB#14	24.10	PASS
Band2	3MHz	QPSK	18615	8RB#0	23.08	PASS
Band2	3MHz	QPSK	18615	8RB#4	23.10	PASS
Band2	3MHz	QPSK	18615	8RB#7	23.08	PASS
Band2	3MHz	QPSK	18615	15RB#0	23.05	PASS
Band2	3MHz	QPSK	18900	1RB#0	24.00	PASS
Band2	3MHz	QPSK	18900	1RB#7	24.10	PASS
Band2	3MHz	QPSK	18900	1RB#14	24.00	PASS
Band2	3MHz	QPSK	18900	8RB#0	23.03	PASS
Band2	3MHz	QPSK	18900	8RB#4	23.06	PASS
Band2	3MHz	QPSK	18900	8RB#7	23.03	PASS
Band2	3MHz	QPSK	18900	15RB#0	23.03	PASS
Band2	3MHz	QPSK	19185	1RB#0	24.00	PASS
Band2	3MHz	QPSK	19185	1RB#7	24.09	PASS
Band2	3MHz	QPSK	19185	1RB#14	23.95	PASS
Band2	3MHz	QPSK	19185	8RB#0	23.02	PASS
Band2	3MHz	QPSK	19185	8RB#4	23.01	PASS

Band2	3MHz	QPSK	19185	8RB#7	22.97	PASS
Band2	3MHz	QPSK	19185	15RB#0	23.02	PASS
Band2	3MHz	16QAM	18615	1RB#0	23.26	PASS
Band2	3MHz	16QAM	18615	1RB#7	23.38	PASS
Band2	3MHz	16QAM	18615	1RB#14	23.36	PASS
Band2	3MHz	16QAM	18615	8RB#0	22.15	PASS
Band2	3MHz	16QAM	18615	8RB#4	22.13	PASS
Band2	3MHz	16QAM	18615	8RB#7	22.12	PASS
Band2	3MHz	16QAM	18615	15RB#0	22.03	PASS
Band2	3MHz	16QAM	18900	1RB#0	23.24	PASS
Band2	3MHz	16QAM	18900	1RB#7	23.29	PASS
Band2	3MHz	16QAM	18900	1RB#14	23.26	PASS
Band2	3MHz	16QAM	18900	8RB#0	22.13	PASS
Band2	3MHz	16QAM	18900	8RB#4	22.11	PASS
Band2	3MHz	16QAM	18900	8RB#7	22.09	PASS
Band2	3MHz	16QAM	18900	15RB#0	22.02	PASS
Band2	3MHz	16QAM	19185	1RB#0	23.21	PASS
Band2	3MHz	16QAM	19185	1RB#7	23.25	PASS
Band2	3MHz	16QAM	19185	1RB#14	23.11	PASS
Band2	3MHz	16QAM	19185	8RB#0	22.08	PASS
Band2	3MHz	16QAM	19185	8RB#4	22.02	PASS
Band2	3MHz	16QAM	19185	8RB#7	22.00	PASS
Band2	3MHz	16QAM	19185	15RB#0	21.97	PASS
Band2	5MHz	QPSK	18625	1RB#0	23.84	PASS
Band2	5MHz	QPSK	18625	1RB#12	24.18	PASS
Band2	5MHz	QPSK	18625	1RB#24	23.89	PASS
Band2	5MHz	QPSK	18625	12RB#0	22.95	PASS
Band2	5MHz	QPSK	18625	12RB#6	23.03	PASS
Band2	5MHz	QPSK	18625	12RB#13	22.98	PASS
Band2	5MHz	QPSK	18625	25RB#0	22.97	PASS
Band2	5MHz	QPSK	18900	1RB#0	23.83	PASS
Band2	5MHz	QPSK	18900	1RB#12	24.10	PASS
Band2	5MHz	QPSK	18900	1RB#24	23.82	PASS
Band2	5MHz	QPSK	18900	12RB#0	22.94	PASS
Band2	5MHz	QPSK	18900	12RB#6	22.99	PASS
Band2	5MHz	QPSK	18900	12RB#13	22.90	PASS
Band2	5MHz	QPSK	18900	25RB#0	22.96	PASS
Band2	5MHz	QPSK	19175	1RB#0	23.82	PASS
Band2	5MHz	QPSK	19175	1RB#12	24.10	PASS
Band2	5MHz	QPSK	19175	1RB#24	23.78	PASS
Band2	5MHz	QPSK	19175	12RB#0	22.97	PASS
Band2	5MHz	QPSK	19175	12RB#6	23.03	PASS
Band2	5MHz	QPSK	19175	12RB#13	22.87	PASS
Band2	5MHz	QPSK	19175	25RB#0	22.98	PASS
Band2	5MHz	16QAM	18625	1RB#0	23.05	PASS

Band2	5MHz	16QAM	18625	1RB#12	23.37	PASS
Band2	5MHz	16QAM	18625	1RB#24	23.06	PASS
Band2	5MHz	16QAM	18625	12RB#0	21.97	PASS
Band2	5MHz	16QAM	18625	12RB#6	22.05	PASS
Band2	5MHz	16QAM	18625	12RB#13	21.99	PASS
Band2	5MHz	16QAM	18625	25RB#0	21.96	PASS
Band2	5MHz	16QAM	18900	1RB#0	23.01	PASS
Band2	5MHz	16QAM	18900	1RB#12	23.30	PASS
Band2	5MHz	16QAM	18900	1RB#24	23.06	PASS
Band2	5MHz	16QAM	18900	12RB#0	21.93	PASS
Band2	5MHz	16QAM	18900	12RB#6	22.03	PASS
Band2	5MHz	16QAM	18900	12RB#13	21.94	PASS
Band2	5MHz	16QAM	18900	25RB#0	21.94	PASS
Band2	5MHz	16QAM	19175	1RB#0	23.07	PASS
Band2	5MHz	16QAM	19175	1RB#12	23.32	PASS
Band2	5MHz	16QAM	19175	1RB#24	22.99	PASS
Band2	5MHz	16QAM	19175	12RB#0	21.97	PASS
Band2	5MHz	16QAM	19175	12RB#6	22.05	PASS
Band2	5MHz	16QAM	19175	12RB#13	21.87	PASS
Band2	5MHz	16QAM	19175	25RB#0	21.97	PASS
Band2	10MHz	QPSK	18650	1RB#0	23.86	PASS
Band2	10MHz	QPSK	18650	1RB#24	24.08	PASS
Band2	10MHz	QPSK	18650	1RB#49	23.86	PASS
Band2	10MHz	QPSK	18650	25RB#0	22.95	PASS
Band2	10MHz	QPSK	18650	25RB#12	23.00	PASS
Band2	10MHz	QPSK	18650	25RB#25	23.00	PASS
Band2	10MHz	QPSK	18650	50RB#0	22.99	PASS
Band2	10MHz	QPSK	18900	1RB#0	23.87	PASS
Band2	10MHz	QPSK	18900	1RB#24	24.04	PASS
Band2	10MHz	QPSK	18900	1RB#49	23.85	PASS
Band2	10MHz	QPSK	18900	25RB#0	22.99	PASS
Band2	10MHz	QPSK	18900	25RB#12	23.02	PASS
Band2	10MHz	QPSK	18900	25RB#25	22.95	PASS
Band2	10MHz	QPSK	18900	50RB#0	22.98	PASS
Band2	10MHz	QPSK	19150	1RB#0	23.80	PASS
Band2	10MHz	QPSK	19150	1RB#24	24.06	PASS
Band2	10MHz	QPSK	19150	1RB#49	23.53	PASS
Band2	10MHz	QPSK	19150	25RB#0	22.93	PASS
Band2	10MHz	QPSK	19150	25RB#12	23.03	PASS
Band2	10MHz	QPSK	19150	25RB#25	22.94	PASS
Band2	10MHz	QPSK	19150	50RB#0	22.82	PASS
Band2	10MHz	16QAM	18650	1RB#0	23.18	PASS
Band2	10MHz	16QAM	18650	1RB#24	23.20	PASS
Band2	10MHz	16QAM	18650	1RB#49	23.08	PASS
Band2	10MHz	16QAM	18650	25RB#0	21.94	PASS

Band2	10MHz	16QAM	18650	25RB#12	22.02	PASS
Band2	10MHz	16QAM	18650	25RB#25	21.98	PASS
Band2	10MHz	16QAM	18650	50RB#0	21.97	PASS
Band2	10MHz	16QAM	18900	1RB#0	23.01	PASS
Band2	10MHz	16QAM	18900	1RB#24	23.25	PASS
Band2	10MHz	16QAM	18900	1RB#49	23.08	PASS
Band2	10MHz	16QAM	18900	25RB#0	21.97	PASS
Band2	10MHz	16QAM	18900	25RB#12	21.99	PASS
Band2	10MHz	16QAM	18900	25RB#25	21.96	PASS
Band2	10MHz	16QAM	18900	50RB#0	21.96	PASS
Band2	10MHz	16QAM	19150	1RB#0	23.06	PASS
Band2	10MHz	16QAM	19150	1RB#24	23.15	PASS
Band2	10MHz	16QAM	19150	1RB#49	22.72	PASS
Band2	10MHz	16QAM	19150	25RB#0	21.99	PASS
Band2	10MHz	16QAM	19150	25RB#12	22.03	PASS
Band2	10MHz	16QAM	19150	25RB#25	21.83	PASS
Band2	10MHz	16QAM	19150	50RB#0	21.95	PASS
Band2	15MHz	QPSK	18675	1RB#0	23.77	PASS
Band2	15MHz	QPSK	18675	1RB#38	23.89	PASS
Band2	15MHz	QPSK	18675	1RB#74	23.79	PASS
Band2	15MHz	QPSK	18675	38RB#0	23.74	PASS
Band2	15MHz	QPSK	18675	38RB#18	23.41	PASS
Band2	15MHz	QPSK	18675	38RB#37	23.55	PASS
Band2	15MHz	QPSK	18675	75RB#0	22.42	PASS
Band2	15MHz	QPSK	18900	1RB#0	23.22	PASS
Band2	15MHz	QPSK	18900	1RB#38	23.40	PASS
Band2	15MHz	QPSK	18900	1RB#74	23.28	PASS
Band2	15MHz	QPSK	18900	38RB#0	23.21	PASS
Band2	15MHz	QPSK	18900	38RB#18	23.39	PASS
Band2	15MHz	QPSK	18900	38RB#37	23.53	PASS
Band2	15MHz	QPSK	18900	75RB#0	22.44	PASS
Band2	15MHz	QPSK	19125	1RB#0	23.22	PASS
Band2	15MHz	QPSK	19125	1RB#38	23.41	PASS
Band2	15MHz	QPSK	19125	1RB#74	23.24	PASS
Band2	15MHz	QPSK	19125	38RB#0	23.21	PASS
Band2	15MHz	QPSK	19125	38RB#18	23.33	PASS
Band2	15MHz	QPSK	19125	38RB#37	23.53	PASS
Band2	15MHz	QPSK	19125	75RB#0	22.45	PASS
Band2	15MHz	16QAM	18675	1RB#0	22.95	PASS
Band2	15MHz	16QAM	18675	1RB#38	23.16	PASS
Band2	15MHz	16QAM	18675	1RB#74	23.07	PASS
Band2	15MHz	16QAM	18675	38RB#0	22.55	PASS
Band2	15MHz	16QAM	18675	38RB#18	22.66	PASS
Band2	15MHz	16QAM	18675	38RB#37	22.85	PASS
Band2	15MHz	16QAM	18675	75RB#0	21.43	PASS

Band2	15MHz	16QAM	18900	1RB#0	22.49	PASS
Band2	15MHz	16QAM	18900	1RB#38	22.72	PASS
Band2	15MHz	16QAM	18900	1RB#74	22.55	PASS
Band2	15MHz	16QAM	18900	38RB#0	22.38	PASS
Band2	15MHz	16QAM	18900	38RB#18	22.59	PASS
Band2	15MHz	16QAM	18900	38RB#37	22.72	PASS
Band2	15MHz	16QAM	18900	75RB#0	21.46	PASS
Band2	15MHz	16QAM	19125	1RB#0	22.43	PASS
Band2	15MHz	16QAM	19125	1RB#38	22.63	PASS
Band2	15MHz	16QAM	19125	1RB#74	22.40	PASS
Band2	15MHz	16QAM	19125	38RB#0	22.36	PASS
Band2	15MHz	16QAM	19125	38RB#18	22.49	PASS
Band2	15MHz	16QAM	19125	38RB#37	22.65	PASS
Band2	15MHz	16QAM	19125	75RB#0	21.42	PASS
Band2	20MHz	QPSK	18700	1RB#0	23.55	PASS
Band2	20MHz	QPSK	18700	1RB#49	23.97	PASS
Band2	20MHz	QPSK	18700	1RB#99	23.40	PASS
Band2	20MHz	QPSK	18700	50RB#0	22.35	PASS
Band2	20MHz	QPSK	18700	50RB#25	22.45	PASS
Band2	20MHz	QPSK	18700	50RB#50	22.45	PASS
Band2	20MHz	QPSK	18700	100RB#0	22.37	PASS
Band2	20MHz	QPSK	18900	1RB#0	23.04	PASS
Band2	20MHz	QPSK	18900	1RB#49	23.48	PASS
Band2	20MHz	QPSK	18900	1RB#99	23.08	PASS
Band2	20MHz	QPSK	18900	50RB#0	22.44	PASS
Band2	20MHz	QPSK	18900	50RB#25	22.46	PASS
Band2	20MHz	QPSK	18900	50RB#50	22.44	PASS
Band2	20MHz	QPSK	18900	100RB#0	22.46	PASS
Band2	20MHz	QPSK	19100	1RB#0	23.06	PASS
Band2	20MHz	QPSK	19100	1RB#49	23.47	PASS
Band2	20MHz	QPSK	19100	1RB#99	23.13	PASS
Band2	20MHz	QPSK	19100	50RB#0	22.48	PASS
Band2	20MHz	QPSK	19100	50RB#25	22.46	PASS
Band2	20MHz	QPSK	19100	50RB#50	22.34	PASS
Band2	20MHz	QPSK	19100	100RB#0	22.44	PASS
Band2	20MHz	16QAM	18700	1RB#0	22.82	PASS
Band2	20MHz	16QAM	18700	1RB#49	23.11	PASS
Band2	20MHz	16QAM	18700	1RB#99	22.62	PASS
Band2	20MHz	16QAM	18700	50RB#0	21.42	PASS
Band2	20MHz	16QAM	18700	50RB#25	21.45	PASS
Band2	20MHz	16QAM	18700	50RB#50	21.46	PASS
Band2	20MHz	16QAM	18700	100RB#0	21.39	PASS
Band2	20MHz	16QAM	18900	1RB#0	22.35	PASS
Band2	20MHz	16QAM	18900	1RB#49	22.81	PASS
Band2	20MHz	16QAM	18900	1RB#99	22.46	PASS

Band2	20MHz	16QAM	18900	50RB#0	21.42	PASS
Band2	20MHz	16QAM	18900	50RB#25	21.47	PASS
Band2	20MHz	16QAM	18900	50RB#50	21.45	PASS
Band2	20MHz	16QAM	18900	100RB#0	21.48	PASS
Band2	20MHz	16QAM	19100	1RB#0	22.39	PASS
Band2	20MHz	16QAM	19100	1RB#49	22.61	PASS
Band2	20MHz	16QAM	19100	1RB#99	22.34	PASS
Band2	20MHz	16QAM	19100	50RB#0	21.48	PASS
Band2	20MHz	16QAM	19100	50RB#25	21.45	PASS
Band2	20MHz	16QAM	19100	50RB#50	21.32	PASS
Band2	20MHz	16QAM	19100	100RB#0	21.41	PASS
Band4	1.4MHz	QPSK	19957	1RB#0	23.67	PASS
Band4	1.4MHz	QPSK	19957	1RB#3	23.82	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	23.71	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	23.81	PASS
Band4	1.4MHz	QPSK	19957	3RB#2	23.85	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	23.79	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	22.81	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	23.63	PASS
Band4	1.4MHz	QPSK	20175	1RB#3	23.72	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	23.63	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	23.74	PASS
Band4	1.4MHz	QPSK	20175	3RB#2	23.78	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	23.75	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	22.76	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	23.66	PASS
Band4	1.4MHz	QPSK	20393	1RB#3	23.62	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	23.20	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	23.26	PASS
Band4	1.4MHz	QPSK	20393	3RB#2	23.29	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	23.27	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	22.25	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	22.82	PASS
Band4	1.4MHz	16QAM	19957	1RB#3	23.07	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	22.85	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	22.86	PASS
Band4	1.4MHz	16QAM	19957	3RB#2	22.83	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	22.85	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	21.82	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	22.87	PASS
Band4	1.4MHz	16QAM	20175	1RB#3	22.90	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	22.78	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	22.80	PASS
Band4	1.4MHz	16QAM	20175	3RB#2	22.77	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	22.75	PASS

Band4	1.4MHz	16QAM	20175	6RB#0	21.81	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	22.94	PASS
Band4	1.4MHz	16QAM	20393	1RB#3	22.83	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	22.35	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	22.30	PASS
Band4	1.4MHz	16QAM	20393	3RB#2	22.39	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	22.30	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	21.34	PASS
Band4	3MHz	QPSK	19965	1RB#0	23.72	PASS
Band4	3MHz	QPSK	19965	1RB#7	23.74	PASS
Band4	3MHz	QPSK	19965	1RB#14	23.21	PASS
Band4	3MHz	QPSK	19965	8RB#0	22.25	PASS
Band4	3MHz	QPSK	19965	8RB#4	22.29	PASS
Band4	3MHz	QPSK	19965	8RB#7	22.26	PASS
Band4	3MHz	QPSK	19965	15RB#0	22.24	PASS
Band4	3MHz	QPSK	20175	1RB#0	23.16	PASS
Band4	3MHz	QPSK	20175	1RB#7	23.35	PASS
Band4	3MHz	QPSK	20175	1RB#14	23.17	PASS
Band4	3MHz	QPSK	20175	8RB#0	22.23	PASS
Band4	3MHz	QPSK	20175	8RB#4	22.24	PASS
Band4	3MHz	QPSK	20175	8RB#7	22.19	PASS
Band4	3MHz	QPSK	20175	15RB#0	22.20	PASS
Band4	3MHz	QPSK	20385	1RB#0	23.18	PASS
Band4	3MHz	QPSK	20385	1RB#7	23.33	PASS
Band4	3MHz	QPSK	20385	1RB#14	23.21	PASS
Band4	3MHz	QPSK	20385	8RB#0	22.24	PASS
Band4	3MHz	QPSK	20385	8RB#4	22.26	PASS
Band4	3MHz	QPSK	20385	8RB#7	22.22	PASS
Band4	3MHz	QPSK	20385	15RB#0	22.22	PASS
Band4	3MHz	16QAM	19965	1RB#0	23.00	PASS
Band4	3MHz	16QAM	19965	1RB#7	22.60	PASS
Band4	3MHz	16QAM	19965	1RB#14	22.47	PASS
Band4	3MHz	16QAM	19965	8RB#0	21.32	PASS
Band4	3MHz	16QAM	19965	8RB#4	21.31	PASS
Band4	3MHz	16QAM	19965	8RB#7	21.32	PASS
Band4	3MHz	16QAM	19965	15RB#0	21.23	PASS
Band4	3MHz	16QAM	20175	1RB#0	22.36	PASS
Band4	3MHz	16QAM	20175	1RB#7	22.54	PASS
Band4	3MHz	16QAM	20175	1RB#14	22.46	PASS
Band4	3MHz	16QAM	20175	8RB#0	21.28	PASS
Band4	3MHz	16QAM	20175	8RB#4	21.32	PASS
Band4	3MHz	16QAM	20175	8RB#7	21.26	PASS
Band4	3MHz	16QAM	20175	15RB#0	21.22	PASS
Band4	3MHz	16QAM	20385	1RB#0	22.36	PASS
Band4	3MHz	16QAM	20385	1RB#7	22.61	PASS

Band4	3MHz	16QAM	20385	1RB#14	22.46	PASS
Band4	3MHz	16QAM	20385	8RB#0	21.31	PASS
Band4	3MHz	16QAM	20385	8RB#4	21.32	PASS
Band4	3MHz	16QAM	20385	8RB#7	21.30	PASS
Band4	3MHz	16QAM	20385	15RB#0	21.22	PASS
Band4	5MHz	QPSK	19975	1RB#0	23.64	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.93	PASS
Band4	5MHz	QPSK	19975	1RB#24	23.61	PASS
Band4	5MHz	QPSK	19975	12RB#0	22.72	PASS
Band4	5MHz	QPSK	19975	12RB#6	22.78	PASS
Band4	5MHz	QPSK	19975	12RB#13	22.71	PASS
Band4	5MHz	QPSK	19975	25RB#0	22.75	PASS
Band4	5MHz	QPSK	20175	1RB#0	23.46	PASS
Band4	5MHz	QPSK	20175	1RB#12	23.54	PASS
Band4	5MHz	QPSK	20175	1RB#24	23.04	PASS
Band4	5MHz	QPSK	20175	12RB#0	22.20	PASS
Band4	5MHz	QPSK	20175	12RB#6	22.26	PASS
Band4	5MHz	QPSK	20175	12RB#13	22.16	PASS
Band4	5MHz	QPSK	20175	25RB#0	22.20	PASS
Band4	5MHz	QPSK	20375	1RB#0	23.08	PASS
Band4	5MHz	QPSK	20375	1RB#12	23.28	PASS
Band4	5MHz	QPSK	20375	1RB#24	23.10	PASS
Band4	5MHz	QPSK	20375	12RB#0	22.22	PASS
Band4	5MHz	QPSK	20375	12RB#6	22.28	PASS
Band4	5MHz	QPSK	20375	12RB#13	22.19	PASS
Band4	5MHz	QPSK	20375	25RB#0	22.23	PASS
Band4	5MHz	16QAM	19975	1RB#0	22.91	PASS
Band4	5MHz	16QAM	19975	1RB#12	23.01	PASS
Band4	5MHz	16QAM	19975	1RB#24	22.87	PASS
Band4	5MHz	16QAM	19975	12RB#0	21.67	PASS
Band4	5MHz	16QAM	19975	12RB#6	21.79	PASS
Band4	5MHz	16QAM	19975	12RB#13	21.69	PASS
Band4	5MHz	16QAM	19975	25RB#0	21.60	PASS
Band4	5MHz	16QAM	20175	1RB#0	22.63	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.57	PASS
Band4	5MHz	16QAM	20175	1RB#24	22.38	PASS
Band4	5MHz	16QAM	20175	12RB#0	21.27	PASS
Band4	5MHz	16QAM	20175	12RB#6	21.31	PASS
Band4	5MHz	16QAM	20175	12RB#13	21.20	PASS
Band4	5MHz	16QAM	20175	25RB#0	21.22	PASS
Band4	5MHz	16QAM	20375	1RB#0	22.34	PASS
Band4	5MHz	16QAM	20375	1RB#12	22.59	PASS
Band4	5MHz	16QAM	20375	1RB#24	22.25	PASS
Band4	5MHz	16QAM	20375	12RB#0	21.26	PASS
Band4	5MHz	16QAM	20375	12RB#6	21.32	PASS

Band4	5MHz	16QAM	20375	12RB#13	21.23	PASS
Band4	5MHz	16QAM	20375	25RB#0	21.27	PASS
Band4	10MHz	QPSK	20000	1RB#0	23.72	PASS
Band4	10MHz	QPSK	20000	1RB#24	23.83	PASS
Band4	10MHz	QPSK	20000	1RB#49	23.73	PASS
Band4	10MHz	QPSK	20000	25RB#0	22.75	PASS
Band4	10MHz	QPSK	20000	25RB#12	22.79	PASS
Band4	10MHz	QPSK	20000	25RB#25	22.76	PASS
Band4	10MHz	QPSK	20000	50RB#0	22.77	PASS
Band4	10MHz	QPSK	20175	1RB#0	23.47	PASS
Band4	10MHz	QPSK	20175	1RB#24	23.42	PASS
Band4	10MHz	QPSK	20175	1RB#49	23.19	PASS
Band4	10MHz	QPSK	20175	25RB#0	22.24	PASS
Band4	10MHz	QPSK	20175	25RB#12	22.30	PASS
Band4	10MHz	QPSK	20175	25RB#25	22.26	PASS
Band4	10MHz	QPSK	20175	50RB#0	22.22	PASS
Band4	10MHz	QPSK	20350	1RB#0	23.14	PASS
Band4	10MHz	QPSK	20350	1RB#24	23.28	PASS
Band4	10MHz	QPSK	20350	1RB#49	23.22	PASS
Band4	10MHz	QPSK	20350	25RB#0	22.31	PASS
Band4	10MHz	QPSK	20350	25RB#12	22.26	PASS
Band4	10MHz	QPSK	20350	25RB#25	22.21	PASS
Band4	10MHz	QPSK	20350	50RB#0	22.27	PASS
Band4	10MHz	16QAM	20000	1RB#0	22.86	PASS
Band4	10MHz	16QAM	20000	1RB#24	23.00	PASS
Band4	10MHz	16QAM	20000	1RB#49	22.92	PASS
Band4	10MHz	16QAM	20000	25RB#0	21.70	PASS
Band4	10MHz	16QAM	20000	25RB#12	21.76	PASS
Band4	10MHz	16QAM	20000	25RB#25	21.71	PASS
Band4	10MHz	16QAM	20000	50RB#0	21.72	PASS
Band4	10MHz	16QAM	20175	1RB#0	22.42	PASS
Band4	10MHz	16QAM	20175	1RB#24	22.58	PASS
Band4	10MHz	16QAM	20175	1RB#49	22.39	PASS
Band4	10MHz	16QAM	20175	25RB#0	21.22	PASS
Band4	10MHz	16QAM	20175	25RB#12	21.28	PASS
Band4	10MHz	16QAM	20175	25RB#25	21.22	PASS
Band4	10MHz	16QAM	20175	50RB#0	21.23	PASS
Band4	10MHz	16QAM	20350	1RB#0	22.29	PASS
Band4	10MHz	16QAM	20350	1RB#24	22.52	PASS
Band4	10MHz	16QAM	20350	1RB#49	22.36	PASS
Band4	10MHz	16QAM	20350	25RB#0	21.30	PASS
Band4	10MHz	16QAM	20350	25RB#12	21.30	PASS
Band4	10MHz	16QAM	20350	25RB#25	21.23	PASS
Band4	10MHz	16QAM	20350	50RB#0	21.30	PASS
Band4	15MHz	QPSK	20025	1RB#0	23.36	PASS

Band4	15MHz	QPSK	20025	1RB#38	23.23	PASS
Band4	15MHz	QPSK	20025	1RB#74	23.15	PASS
Band4	15MHz	QPSK	20025	38RB#0	23.10	PASS
Band4	15MHz	QPSK	20025	38RB#18	23.20	PASS
Band4	15MHz	QPSK	20025	38RB#37	23.40	PASS
Band4	15MHz	QPSK	20025	75RB#0	22.24	PASS
Band4	15MHz	QPSK	20175	1RB#0	23.09	PASS
Band4	15MHz	QPSK	20175	1RB#38	23.20	PASS
Band4	15MHz	QPSK	20175	1RB#74	23.12	PASS
Band4	15MHz	QPSK	20175	38RB#0	23.07	PASS
Band4	15MHz	QPSK	20175	38RB#18	23.17	PASS
Band4	15MHz	QPSK	20175	38RB#37	23.34	PASS
Band4	15MHz	QPSK	20175	75RB#0	22.23	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.06	PASS
Band4	15MHz	QPSK	20325	1RB#38	23.21	PASS
Band4	15MHz	QPSK	20325	1RB#74	23.20	PASS
Band4	15MHz	QPSK	20325	38RB#0	23.06	PASS
Band4	15MHz	QPSK	20325	38RB#18	23.18	PASS
Band4	15MHz	QPSK	20325	38RB#37	23.38	PASS
Band4	15MHz	QPSK	20325	75RB#0	22.27	PASS
Band4	15MHz	16QAM	20025	1RB#0	22.26	PASS
Band4	15MHz	16QAM	20025	1RB#38	22.45	PASS
Band4	15MHz	16QAM	20025	1RB#74	22.35	PASS
Band4	15MHz	16QAM	20025	38RB#0	22.26	PASS
Band4	15MHz	16QAM	20025	38RB#18	22.45	PASS
Band4	15MHz	16QAM	20025	38RB#37	22.61	PASS
Band4	15MHz	16QAM	20025	75RB#0	21.26	PASS
Band4	15MHz	16QAM	20175	1RB#0	22.27	PASS
Band4	15MHz	16QAM	20175	1RB#38	22.36	PASS
Band4	15MHz	16QAM	20175	1RB#74	22.41	PASS
Band4	15MHz	16QAM	20175	38RB#0	22.25	PASS
Band4	15MHz	16QAM	20175	38RB#18	22.45	PASS
Band4	15MHz	16QAM	20175	38RB#37	22.64	PASS
Band4	15MHz	16QAM	20175	75RB#0	21.26	PASS
Band4	15MHz	16QAM	20325	1RB#0	22.28	PASS
Band4	15MHz	16QAM	20325	1RB#38	22.50	PASS
Band4	15MHz	16QAM	20325	1RB#74	22.42	PASS
Band4	15MHz	16QAM	20325	38RB#0	22.27	PASS
Band4	15MHz	16QAM	20325	38RB#18	22.37	PASS
Band4	15MHz	16QAM	20325	38RB#37	22.55	PASS
Band4	15MHz	16QAM	20325	75RB#0	21.30	PASS
Band4	20MHz	QPSK	20050	1RB#0	22.93	PASS
Band4	20MHz	QPSK	20050	1RB#49	23.31	PASS
Band4	20MHz	QPSK	20050	1RB#99	23.04	PASS
Band4	20MHz	QPSK	20050	50RB#0	22.25	PASS

Band4	20MHz	QPSK	20050	50RB#25	22.34	PASS
Band4	20MHz	QPSK	20050	50RB#50	22.32	PASS
Band4	20MHz	QPSK	20050	100RB#0	22.28	PASS
Band4	20MHz	QPSK	20175	1RB#0	22.90	PASS
Band4	20MHz	QPSK	20175	1RB#49	23.28	PASS
Band4	20MHz	QPSK	20175	1RB#99	23.01	PASS
Band4	20MHz	QPSK	20175	50RB#0	22.26	PASS
Band4	20MHz	QPSK	20175	50RB#25	22.30	PASS
Band4	20MHz	QPSK	20175	50RB#50	22.19	PASS
Band4	20MHz	QPSK	20175	100RB#0	22.23	PASS
Band4	20MHz	QPSK	20300	1RB#0	22.91	PASS
Band4	20MHz	QPSK	20300	1RB#49	23.29	PASS
Band4	20MHz	QPSK	20300	1RB#99	23.05	PASS
Band4	20MHz	QPSK	20300	50RB#0	22.30	PASS
Band4	20MHz	QPSK	20300	50RB#25	22.25	PASS
Band4	20MHz	QPSK	20300	50RB#50	22.16	PASS
Band4	20MHz	QPSK	20300	100RB#0	22.21	PASS
Band4	20MHz	16QAM	20050	1RB#0	22.20	PASS
Band4	20MHz	16QAM	20050	1RB#49	22.46	PASS
Band4	20MHz	16QAM	20050	1RB#99	22.20	PASS
Band4	20MHz	16QAM	20050	50RB#0	21.22	PASS
Band4	20MHz	16QAM	20050	50RB#25	21.31	PASS
Band4	20MHz	16QAM	20050	50RB#50	21.31	PASS
Band4	20MHz	16QAM	20050	100RB#0	21.28	PASS
Band4	20MHz	16QAM	20175	1RB#0	22.07	PASS
Band4	20MHz	16QAM	20175	1RB#49	22.54	PASS
Band4	20MHz	16QAM	20175	1RB#99	22.24	PASS
Band4	20MHz	16QAM	20175	50RB#0	21.26	PASS
Band4	20MHz	16QAM	20175	50RB#25	21.31	PASS
Band4	20MHz	16QAM	20175	50RB#50	21.21	PASS
Band4	20MHz	16QAM	20175	100RB#0	21.24	PASS
Band4	20MHz	16QAM	20300	1RB#0	22.15	PASS
Band4	20MHz	16QAM	20300	1RB#49	22.43	PASS
Band4	20MHz	16QAM	20300	1RB#99	22.24	PASS
Band4	20MHz	16QAM	20300	50RB#0	21.31	PASS
Band4	20MHz	16QAM	20300	50RB#25	21.29	PASS
Band4	20MHz	16QAM	20300	50RB#50	21.19	PASS
Band4	20MHz	16QAM	20300	100RB#0	21.25	PASS
Band5	1.4MHz	QPSK	20407	1RB#0	23.01	PASS
Band5	1.4MHz	QPSK	20407	1RB#3	23.09	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	23.00	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	22.87	PASS
Band5	1.4MHz	QPSK	20407	3RB#2	22.62	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	22.59	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	21.59	PASS

Band5	1.4MHz	QPSK	20525	1RB#0	22.69	PASS
Band5	1.4MHz	QPSK	20525	1RB#3	22.77	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	22.65	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	22.76	PASS
Band5	1.4MHz	QPSK	20525	3RB#2	22.76	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	22.75	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	21.73	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	22.67	PASS
Band5	1.4MHz	QPSK	20643	1RB#3	22.78	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.67	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	22.75	PASS
Band5	1.4MHz	QPSK	20643	3RB#2	22.79	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	22.74	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	21.75	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	22.17	PASS
Band5	1.4MHz	16QAM	20407	1RB#3	22.41	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	22.18	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	21.83	PASS
Band5	1.4MHz	16QAM	20407	3RB#2	21.71	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	21.64	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	20.66	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	21.90	PASS
Band5	1.4MHz	16QAM	20525	1RB#3	21.90	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.90	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	21.84	PASS
Band5	1.4MHz	16QAM	20525	3RB#2	21.87	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	21.81	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	20.79	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	21.88	PASS
Band5	1.4MHz	16QAM	20643	1RB#3	21.98	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	21.89	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	21.81	PASS
Band5	1.4MHz	16QAM	20643	3RB#2	21.88	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	21.80	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	20.80	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.06	PASS
Band5	3MHz	QPSK	20415	1RB#7	22.70	PASS
Band5	3MHz	QPSK	20415	1RB#14	22.62	PASS
Band5	3MHz	QPSK	20415	8RB#0	21.57	PASS
Band5	3MHz	QPSK	20415	8RB#4	21.62	PASS
Band5	3MHz	QPSK	20415	8RB#7	21.58	PASS
Band5	3MHz	QPSK	20415	15RB#0	21.54	PASS
Band5	3MHz	QPSK	20525	1RB#0	22.76	PASS
Band5	3MHz	QPSK	20525	1RB#7	22.85	PASS
Band5	3MHz	QPSK	20525	1RB#14	22.70	PASS

Band5	3MHz	QPSK	20525	8RB#0	21.75	PASS
Band5	3MHz	QPSK	20525	8RB#4	21.76	PASS
Band5	3MHz	QPSK	20525	8RB#7	21.72	PASS
Band5	3MHz	QPSK	20525	15RB#0	21.71	PASS
Band5	3MHz	QPSK	20635	1RB#0	22.73	PASS
Band5	3MHz	QPSK	20635	1RB#7	22.93	PASS
Band5	3MHz	QPSK	20635	1RB#14	22.71	PASS
Band5	3MHz	QPSK	20635	8RB#0	21.78	PASS
Band5	3MHz	QPSK	20635	8RB#4	21.79	PASS
Band5	3MHz	QPSK	20635	8RB#7	21.72	PASS
Band5	3MHz	QPSK	20635	15RB#0	21.73	PASS
Band5	3MHz	16QAM	20415	1RB#0	21.71	PASS
Band5	3MHz	16QAM	20415	1RB#7	21.95	PASS
Band5	3MHz	16QAM	20415	1RB#14	21.89	PASS
Band5	3MHz	16QAM	20415	8RB#0	20.59	PASS
Band5	3MHz	16QAM	20415	8RB#4	20.64	PASS
Band5	3MHz	16QAM	20415	8RB#7	20.61	PASS
Band5	3MHz	16QAM	20415	15RB#0	20.50	PASS
Band5	3MHz	16QAM	20525	1RB#0	21.94	PASS
Band5	3MHz	16QAM	20525	1RB#7	22.10	PASS
Band5	3MHz	16QAM	20525	1RB#14	21.97	PASS
Band5	3MHz	16QAM	20525	8RB#0	20.81	PASS
Band5	3MHz	16QAM	20525	8RB#4	20.80	PASS
Band5	3MHz	16QAM	20525	8RB#7	20.77	PASS
Band5	3MHz	16QAM	20525	15RB#0	20.72	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.01	PASS
Band5	3MHz	16QAM	20635	1RB#7	22.02	PASS
Band5	3MHz	16QAM	20635	1RB#14	21.95	PASS
Band5	3MHz	16QAM	20635	8RB#0	20.84	PASS
Band5	3MHz	16QAM	20635	8RB#4	20.80	PASS
Band5	3MHz	16QAM	20635	8RB#7	20.75	PASS
Band5	3MHz	16QAM	20635	15RB#0	20.74	PASS
Band5	5MHz	QPSK	20425	1RB#0	22.98	PASS
Band5	5MHz	QPSK	20425	1RB#12	22.69	PASS
Band5	5MHz	QPSK	20425	1RB#24	22.48	PASS
Band5	5MHz	QPSK	20425	12RB#0	21.55	PASS
Band5	5MHz	QPSK	20425	12RB#6	21.65	PASS
Band5	5MHz	QPSK	20425	12RB#13	21.64	PASS
Band5	5MHz	QPSK	20425	25RB#0	21.63	PASS
Band5	5MHz	QPSK	20525	1RB#0	22.67	PASS
Band5	5MHz	QPSK	20525	1RB#12	22.86	PASS
Band5	5MHz	QPSK	20525	1RB#24	22.60	PASS
Band5	5MHz	QPSK	20525	12RB#0	21.76	PASS
Band5	5MHz	QPSK	20525	12RB#6	21.80	PASS
Band5	5MHz	QPSK	20525	12RB#13	21.70	PASS

Band5	5MHz	QPSK	20525	25RB#0	21.75	PASS
Band5	5MHz	QPSK	20625	1RB#0	22.63	PASS
Band5	5MHz	QPSK	20625	1RB#12	22.87	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.65	PASS
Band5	5MHz	QPSK	20625	12RB#0	21.77	PASS
Band5	5MHz	QPSK	20625	12RB#6	21.84	PASS
Band5	5MHz	QPSK	20625	12RB#13	21.64	PASS
Band5	5MHz	QPSK	20625	25RB#0	21.76	PASS
Band5	5MHz	16QAM	20425	1RB#0	21.66	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.03	PASS
Band5	5MHz	16QAM	20425	1RB#24	21.63	PASS
Band5	5MHz	16QAM	20425	12RB#0	20.57	PASS
Band5	5MHz	16QAM	20425	12RB#6	20.65	PASS
Band5	5MHz	16QAM	20425	12RB#13	20.64	PASS
Band5	5MHz	16QAM	20425	25RB#0	20.59	PASS
Band5	5MHz	16QAM	20525	1RB#0	21.88	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.04	PASS
Band5	5MHz	16QAM	20525	1RB#24	21.84	PASS
Band5	5MHz	16QAM	20525	12RB#0	20.78	PASS
Band5	5MHz	16QAM	20525	12RB#6	20.81	PASS
Band5	5MHz	16QAM	20525	12RB#13	20.72	PASS
Band5	5MHz	16QAM	20525	25RB#0	20.74	PASS
Band5	5MHz	16QAM	20625	1RB#0	21.80	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.19	PASS
Band5	5MHz	16QAM	20625	1RB#24	21.91	PASS
Band5	5MHz	16QAM	20625	12RB#0	20.75	PASS
Band5	5MHz	16QAM	20625	12RB#6	20.84	PASS
Band5	5MHz	16QAM	20625	12RB#13	20.67	PASS
Band5	5MHz	16QAM	20625	25RB#0	20.75	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.08	PASS
Band5	10MHz	QPSK	20450	1RB#24	22.67	PASS
Band5	10MHz	QPSK	20450	1RB#49	22.57	PASS
Band5	10MHz	QPSK	20450	25RB#0	21.63	PASS
Band5	10MHz	QPSK	20450	25RB#12	21.64	PASS
Band5	10MHz	QPSK	20450	25RB#25	21.60	PASS
Band5	10MHz	QPSK	20450	50RB#0	21.62	PASS
Band5	10MHz	QPSK	20525	1RB#0	22.73	PASS
Band5	10MHz	QPSK	20525	1RB#24	22.82	PASS
Band5	10MHz	QPSK	20525	1RB#49	22.73	PASS
Band5	10MHz	QPSK	20525	25RB#0	21.83	PASS
Band5	10MHz	QPSK	20525	25RB#12	21.80	PASS
Band5	10MHz	QPSK	20525	25RB#25	21.77	PASS
Band5	10MHz	QPSK	20525	50RB#0	21.83	PASS
Band5	10MHz	QPSK	20600	1RB#0	22.75	PASS
Band5	10MHz	QPSK	20600	1RB#24	22.79	PASS

Band5	10MHz	QPSK	20600	1RB#49	22.72	PASS
Band5	10MHz	QPSK	20600	25RB#0	21.75	PASS
Band5	10MHz	QPSK	20600	25RB#12	21.76	PASS
Band5	10MHz	QPSK	20600	25RB#25	21.66	PASS
Band5	10MHz	QPSK	20600	50RB#0	21.71	PASS
Band5	10MHz	16QAM	20450	1RB#0	21.87	PASS
Band5	10MHz	16QAM	20450	1RB#24	21.84	PASS
Band5	10MHz	16QAM	20450	1RB#49	21.88	PASS
Band5	10MHz	16QAM	20450	25RB#0	20.63	PASS
Band5	10MHz	16QAM	20450	25RB#12	20.66	PASS
Band5	10MHz	16QAM	20450	25RB#25	20.60	PASS
Band5	10MHz	16QAM	20450	50RB#0	20.61	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.02	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.03	PASS
Band5	10MHz	16QAM	20525	1RB#49	21.97	PASS
Band5	10MHz	16QAM	20525	25RB#0	20.81	PASS
Band5	10MHz	16QAM	20525	25RB#12	20.80	PASS
Band5	10MHz	16QAM	20525	25RB#25	20.77	PASS
Band5	10MHz	16QAM	20525	50RB#0	20.80	PASS
Band5	10MHz	16QAM	20600	1RB#0	21.93	PASS
Band5	10MHz	16QAM	20600	1RB#24	21.99	PASS
Band5	10MHz	16QAM	20600	1RB#49	21.90	PASS
Band5	10MHz	16QAM	20600	25RB#0	20.73	PASS
Band5	10MHz	16QAM	20600	25RB#12	20.78	PASS
Band5	10MHz	16QAM	20600	25RB#25	20.67	PASS
Band5	10MHz	16QAM	20600	50RB#0	20.68	PASS
Band7	5MHz	QPSK	20775	1RB#0	24.17	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.91	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.71	PASS
Band7	5MHz	QPSK	20775	12RB#0	22.88	PASS
Band7	5MHz	QPSK	20775	12RB#6	22.89	PASS
Band7	5MHz	QPSK	20775	12RB#13	22.87	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.89	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.54	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.76	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.52	PASS
Band7	5MHz	QPSK	21100	12RB#0	22.68	PASS
Band7	5MHz	QPSK	21100	12RB#6	22.68	PASS
Band7	5MHz	QPSK	21100	12RB#13	22.62	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.65	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.78	PASS
Band7	5MHz	QPSK	21425	1RB#12	24.08	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.82	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.95	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.98	PASS

Band7	5MHz	QPSK	21425	12RB#13	22.94	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.94	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.85	PASS
Band7	5MHz	16QAM	20775	1RB#12	23.07	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.91	PASS
Band7	5MHz	16QAM	20775	12RB#0	21.86	PASS
Band7	5MHz	16QAM	20775	12RB#6	21.88	PASS
Band7	5MHz	16QAM	20775	12RB#13	21.79	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.84	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.75	PASS
Band7	5MHz	16QAM	21100	1RB#12	23.02	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.64	PASS
Band7	5MHz	16QAM	21100	12RB#0	21.66	PASS
Band7	5MHz	16QAM	21100	12RB#6	21.65	PASS
Band7	5MHz	16QAM	21100	12RB#13	21.56	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.62	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.95	PASS
Band7	5MHz	16QAM	21425	1RB#12	23.22	PASS
Band7	5MHz	16QAM	21425	1RB#24	22.93	PASS
Band7	5MHz	16QAM	21425	12RB#0	21.89	PASS
Band7	5MHz	16QAM	21425	12RB#6	21.90	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.85	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.86	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.81	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.94	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.79	PASS
Band7	10MHz	QPSK	20800	25RB#0	22.96	PASS
Band7	10MHz	QPSK	20800	25RB#12	22.93	PASS
Band7	10MHz	QPSK	20800	25RB#25	22.94	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.96	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.65	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.75	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.60	PASS
Band7	10MHz	QPSK	21100	25RB#0	22.82	PASS
Band7	10MHz	QPSK	21100	25RB#12	22.71	PASS
Band7	10MHz	QPSK	21100	25RB#25	22.66	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.78	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.81	PASS
Band7	10MHz	QPSK	21400	1RB#24	24.01	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.95	PASS
Band7	10MHz	QPSK	21400	25RB#0	22.95	PASS
Band7	10MHz	QPSK	21400	25RB#12	22.97	PASS
Band7	10MHz	QPSK	21400	25RB#25	22.94	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.92	PASS
Band7	10MHz	16QAM	20800	1RB#0	23.08	PASS

Band7	10MHz	16QAM	20800	1RB#24	23.15	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.98	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.94	PASS
Band7	10MHz	16QAM	20800	25RB#12	21.90	PASS
Band7	10MHz	16QAM	20800	25RB#25	21.89	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.91	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.87	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.99	PASS
Band7	10MHz	16QAM	21100	1RB#49	22.73	PASS
Band7	10MHz	16QAM	21100	25RB#0	21.77	PASS
Band7	10MHz	16QAM	21100	25RB#12	21.68	PASS
Band7	10MHz	16QAM	21100	25RB#25	21.66	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.73	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.93	PASS
Band7	10MHz	16QAM	21400	1RB#24	23.11	PASS
Band7	10MHz	16QAM	21400	1RB#49	23.20	PASS
Band7	10MHz	16QAM	21400	25RB#0	21.89	PASS
Band7	10MHz	16QAM	21400	25RB#12	21.90	PASS
Band7	10MHz	16QAM	21400	25RB#25	21.87	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.87	PASS
Band7	15MHz	QPSK	20825	1RB#0	23.73	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.88	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.67	PASS
Band7	15MHz	QPSK	20825	38RB#0	23.81	PASS
Band7	15MHz	QPSK	20825	38RB#18	23.90	PASS
Band7	15MHz	QPSK	20825	38RB#37	24.05	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.98	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.57	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.68	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.55	PASS
Band7	15MHz	QPSK	21100	38RB#0	23.59	PASS
Band7	15MHz	QPSK	21100	38RB#18	23.67	PASS
Band7	15MHz	QPSK	21100	38RB#37	23.86	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.78	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.68	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.88	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.83	PASS
Band7	15MHz	QPSK	21375	38RB#0	23.69	PASS
Band7	15MHz	QPSK	21375	38RB#18	23.86	PASS
Band7	15MHz	QPSK	21375	38RB#37	24.03	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.90	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.94	PASS
Band7	15MHz	16QAM	20825	1RB#38	23.06	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.88	PASS
Band7	15MHz	16QAM	20825	38RB#0	22.96	PASS

Band7	15MHz	16QAM	20825	38RB#18	23.11	PASS
Band7	15MHz	16QAM	20825	38RB#37	23.23	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.94	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.76	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.88	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.72	PASS
Band7	15MHz	16QAM	21100	38RB#0	22.74	PASS
Band7	15MHz	16QAM	21100	38RB#18	22.81	PASS
Band7	15MHz	16QAM	21100	38RB#37	22.96	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.74	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.85	PASS
Band7	15MHz	16QAM	21375	1RB#38	23.10	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.92	PASS
Band7	15MHz	16QAM	21375	38RB#0	22.82	PASS
Band7	15MHz	16QAM	21375	38RB#18	22.99	PASS
Band7	15MHz	16QAM	21375	38RB#37	23.19	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.85	PASS
Band7	20MHz	QPSK	20850	1RB#0	23.59	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.95	PASS
Band7	20MHz	QPSK	20850	1RB#99	23.48	PASS
Band7	20MHz	QPSK	20850	50RB#0	22.89	PASS
Band7	20MHz	QPSK	20850	50RB#25	22.95	PASS
Band7	20MHz	QPSK	20850	50RB#50	23.09	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.98	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.47	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.76	PASS
Band7	20MHz	QPSK	21100	1RB#99	23.39	PASS
Band7	20MHz	QPSK	21100	50RB#0	22.88	PASS
Band7	20MHz	QPSK	21100	50RB#25	22.76	PASS
Band7	20MHz	QPSK	21100	50RB#50	22.61	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.79	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.57	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.94	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.66	PASS
Band7	20MHz	QPSK	21350	50RB#0	22.73	PASS
Band7	20MHz	QPSK	21350	50RB#25	22.92	PASS
Band7	20MHz	QPSK	21350	50RB#50	22.89	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.80	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.81	PASS
Band7	20MHz	16QAM	20850	1RB#49	23.13	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.61	PASS
Band7	20MHz	16QAM	20850	50RB#0	21.84	PASS
Band7	20MHz	16QAM	20850	50RB#25	21.92	PASS
Band7	20MHz	16QAM	20850	50RB#50	22.05	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.93	PASS

Band7	20MHz	16QAM	21100	1RB#0	22.63	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.92	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.63	PASS
Band7	20MHz	16QAM	21100	50RB#0	21.85	PASS
Band7	20MHz	16QAM	21100	50RB#25	21.75	PASS
Band7	20MHz	16QAM	21100	50RB#50	21.59	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.75	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.79	PASS
Band7	20MHz	16QAM	21350	1RB#49	23.16	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.92	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.71	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.85	PASS
Band7	20MHz	16QAM	21350	50RB#50	21.84	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.75	PASS
Band12	1.4MHz	QPSK	23017	1RB#0	23.07	PASS
Band12	1.4MHz	QPSK	23017	1RB#3	23.17	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.06	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.13	PASS
Band12	1.4MHz	QPSK	23017	3RB#2	23.15	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.14	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.07	PASS
Band12	1.4MHz	QPSK	23095	1RB#3	23.19	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.09	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.18	PASS
Band12	1.4MHz	QPSK	23095	3RB#2	23.19	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	22.79	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	21.82	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	22.59	PASS
Band12	1.4MHz	QPSK	23173	1RB#3	22.66	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	22.53	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	22.68	PASS
Band12	1.4MHz	QPSK	23173	3RB#2	22.68	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	22.66	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	21.68	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.29	PASS
Band12	1.4MHz	16QAM	23017	1RB#3	22.46	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.30	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.15	PASS
Band12	1.4MHz	16QAM	23017	3RB#2	22.20	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.18	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.19	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.33	PASS
Band12	1.4MHz	16QAM	23095	1RB#3	22.42	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.26	PASS

Band12	1.4MHz	16QAM	23095	3RB#0	22.23	PASS
Band12	1.4MHz	16QAM	23095	3RB#2	22.09	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	21.81	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	20.95	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	21.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#3	21.83	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	21.70	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	21.75	PASS
Band12	1.4MHz	16QAM	23173	3RB#2	21.68	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	21.67	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	20.72	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.11	PASS
Band12	3MHz	QPSK	23025	1RB#7	23.18	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.12	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.12	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.17	PASS
Band12	3MHz	QPSK	23025	8RB#7	21.81	PASS
Band12	3MHz	QPSK	23025	15RB#0	21.67	PASS
Band12	3MHz	QPSK	23095	1RB#0	22.63	PASS
Band12	3MHz	QPSK	23095	1RB#7	22.79	PASS
Band12	3MHz	QPSK	23095	1RB#14	22.60	PASS
Band12	3MHz	QPSK	23095	8RB#0	21.60	PASS
Band12	3MHz	QPSK	23095	8RB#4	21.72	PASS
Band12	3MHz	QPSK	23095	8RB#7	21.67	PASS
Band12	3MHz	QPSK	23095	15RB#0	21.62	PASS
Band12	3MHz	QPSK	23165	1RB#0	22.63	PASS
Band12	3MHz	QPSK	23165	1RB#7	22.79	PASS
Band12	3MHz	QPSK	23165	1RB#14	22.56	PASS
Band12	3MHz	QPSK	23165	8RB#0	21.67	PASS
Band12	3MHz	QPSK	23165	8RB#4	21.72	PASS
Band12	3MHz	QPSK	23165	8RB#7	21.67	PASS
Band12	3MHz	QPSK	23165	15RB#0	21.64	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.30	PASS
Band12	3MHz	16QAM	23025	1RB#7	22.48	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.44	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.13	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.13	PASS
Band12	3MHz	16QAM	23025	8RB#7	20.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	20.66	PASS
Band12	3MHz	16QAM	23095	1RB#0	21.87	PASS
Band12	3MHz	16QAM	23095	1RB#7	21.98	PASS
Band12	3MHz	16QAM	23095	1RB#14	21.88	PASS
Band12	3MHz	16QAM	23095	8RB#0	20.66	PASS
Band12	3MHz	16QAM	23095	8RB#4	20.73	PASS
Band12	3MHz	16QAM	23095	8RB#7	20.70	PASS

Band12	3MHz	16QAM	23095	15RB#0	20.59	PASS
Band12	3MHz	16QAM	23165	1RB#0	21.84	PASS
Band12	3MHz	16QAM	23165	1RB#7	22.00	PASS
Band12	3MHz	16QAM	23165	1RB#14	21.85	PASS
Band12	3MHz	16QAM	23165	8RB#0	20.71	PASS
Band12	3MHz	16QAM	23165	8RB#4	20.71	PASS
Band12	3MHz	16QAM	23165	8RB#7	20.67	PASS
Band12	3MHz	16QAM	23165	15RB#0	20.60	PASS
Band12	5MHz	QPSK	23035	1RB#0	22.99	PASS
Band12	5MHz	QPSK	23035	1RB#12	22.79	PASS
Band12	5MHz	QPSK	23035	1RB#24	22.51	PASS
Band12	5MHz	QPSK	23035	12RB#0	21.74	PASS
Band12	5MHz	QPSK	23035	12RB#6	21.72	PASS
Band12	5MHz	QPSK	23035	12RB#13	21.63	PASS
Band12	5MHz	QPSK	23035	25RB#0	21.67	PASS
Band12	5MHz	QPSK	23095	1RB#0	22.53	PASS
Band12	5MHz	QPSK	23095	1RB#12	22.79	PASS
Band12	5MHz	QPSK	23095	1RB#24	22.48	PASS
Band12	5MHz	QPSK	23095	12RB#0	21.56	PASS
Band12	5MHz	QPSK	23095	12RB#6	21.71	PASS
Band12	5MHz	QPSK	23095	12RB#13	21.71	PASS
Band12	5MHz	QPSK	23095	25RB#0	21.65	PASS
Band12	5MHz	QPSK	23155	1RB#0	22.49	PASS
Band12	5MHz	QPSK	23155	1RB#12	22.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	22.46	PASS
Band12	5MHz	QPSK	23155	12RB#0	21.74	PASS
Band12	5MHz	QPSK	23155	12RB#6	21.70	PASS
Band12	5MHz	QPSK	23155	12RB#13	21.66	PASS
Band12	5MHz	QPSK	23155	25RB#0	21.74	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.17	PASS
Band12	5MHz	16QAM	23035	1RB#12	21.93	PASS
Band12	5MHz	16QAM	23035	1RB#24	21.69	PASS
Band12	5MHz	16QAM	23035	12RB#0	20.69	PASS
Band12	5MHz	16QAM	23035	12RB#6	20.71	PASS
Band12	5MHz	16QAM	23035	12RB#13	20.61	PASS
Band12	5MHz	16QAM	23035	25RB#0	20.65	PASS
Band12	5MHz	16QAM	23095	1RB#0	21.84	PASS
Band12	5MHz	16QAM	23095	1RB#12	21.93	PASS
Band12	5MHz	16QAM	23095	1RB#24	21.72	PASS
Band12	5MHz	16QAM	23095	12RB#0	20.57	PASS
Band12	5MHz	16QAM	23095	12RB#6	20.66	PASS
Band12	5MHz	16QAM	23095	12RB#13	20.70	PASS
Band12	5MHz	16QAM	23095	25RB#0	20.63	PASS
Band12	5MHz	16QAM	23155	1RB#0	21.75	PASS
Band12	5MHz	16QAM	23155	1RB#12	21.94	PASS

Band12	5MHz	16QAM	23155	1RB#24	21.70	PASS
Band12	5MHz	16QAM	23155	12RB#0	20.72	PASS
Band12	5MHz	16QAM	23155	12RB#6	20.68	PASS
Band12	5MHz	16QAM	23155	12RB#13	20.66	PASS
Band12	5MHz	16QAM	23155	25RB#0	20.72	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.05	PASS
Band12	10MHz	QPSK	23060	1RB#24	22.72	PASS
Band12	10MHz	QPSK	23060	1RB#49	22.59	PASS
Band12	10MHz	QPSK	23060	25RB#0	21.85	PASS
Band12	10MHz	QPSK	23060	25RB#12	21.74	PASS
Band12	10MHz	QPSK	23060	25RB#25	21.80	PASS
Band12	10MHz	QPSK	23060	50RB#0	21.84	PASS
Band12	10MHz	QPSK	23095	1RB#0	22.61	PASS
Band12	10MHz	QPSK	23095	1RB#24	22.73	PASS
Band12	10MHz	QPSK	23095	1RB#49	22.58	PASS
Band12	10MHz	QPSK	23095	25RB#0	21.63	PASS
Band12	10MHz	QPSK	23095	25RB#12	21.70	PASS
Band12	10MHz	QPSK	23095	25RB#25	21.71	PASS
Band12	10MHz	QPSK	23095	50RB#0	21.69	PASS
Band12	10MHz	QPSK	23130	1RB#0	22.55	PASS
Band12	10MHz	QPSK	23130	1RB#24	22.68	PASS
Band12	10MHz	QPSK	23130	1RB#49	22.54	PASS
Band12	10MHz	QPSK	23130	25RB#0	21.61	PASS
Band12	10MHz	QPSK	23130	25RB#12	21.71	PASS
Band12	10MHz	QPSK	23130	25RB#25	21.55	PASS
Band12	10MHz	QPSK	23130	50RB#0	21.58	PASS
Band12	10MHz	16QAM	23060	1RB#0	21.78	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.03	PASS
Band12	10MHz	16QAM	23060	1RB#49	21.92	PASS
Band12	10MHz	16QAM	23060	25RB#0	20.87	PASS
Band12	10MHz	16QAM	23060	25RB#12	20.70	PASS
Band12	10MHz	16QAM	23060	25RB#25	20.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	20.83	PASS
Band12	10MHz	16QAM	23095	1RB#0	21.84	PASS
Band12	10MHz	16QAM	23095	1RB#24	21.91	PASS
Band12	10MHz	16QAM	23095	1RB#49	21.79	PASS
Band12	10MHz	16QAM	23095	25RB#0	20.61	PASS
Band12	10MHz	16QAM	23095	25RB#12	20.67	PASS
Band12	10MHz	16QAM	23095	25RB#25	20.69	PASS
Band12	10MHz	16QAM	23095	50RB#0	20.65	PASS
Band12	10MHz	16QAM	23130	1RB#0	21.81	PASS
Band12	10MHz	16QAM	23130	1RB#24	21.85	PASS
Band12	10MHz	16QAM	23130	1RB#49	21.81	PASS
Band12	10MHz	16QAM	23130	25RB#0	20.59	PASS
Band12	10MHz	16QAM	23130	25RB#12	20.65	PASS

Band12	10MHz	16QAM	23130	25RB#25	20.52	PASS
Band12	10MHz	16QAM	23130	50RB#0	20.56	PASS
Band26	1.4MHz	QPSK	26697	1RB#0	23.04	PASS
Band26	1.4MHz	QPSK	26697	1RB#3	23.15	PASS
Band26	1.4MHz	QPSK	26697	1RB#5	22.61	PASS
Band26	1.4MHz	QPSK	26697	3RB#0	22.63	PASS
Band26	1.4MHz	QPSK	26697	3RB#2	22.68	PASS
Band26	1.4MHz	QPSK	26697	3RB#3	22.63	PASS
Band26	1.4MHz	QPSK	26697	6RB#0	21.62	PASS
Band26	1.4MHz	QPSK	26740	1RB#0	22.52	PASS
Band26	1.4MHz	QPSK	26740	1RB#3	22.65	PASS
Band26	1.4MHz	QPSK	26740	1RB#5	22.50	PASS
Band26	1.4MHz	QPSK	26740	3RB#0	22.63	PASS
Band26	1.4MHz	QPSK	26740	3RB#2	22.65	PASS
Band26	1.4MHz	QPSK	26740	3RB#3	22.60	PASS
Band26	1.4MHz	QPSK	26740	6RB#0	21.59	PASS
Band26	1.4MHz	QPSK	26783	1RB#0	22.48	PASS
Band26	1.4MHz	QPSK	26783	1RB#3	22.64	PASS
Band26	1.4MHz	QPSK	26783	1RB#5	22.47	PASS
Band26	1.4MHz	QPSK	26783	3RB#0	22.61	PASS
Band26	1.4MHz	QPSK	26783	3RB#2	22.60	PASS
Band26	1.4MHz	QPSK	26783	3RB#3	22.58	PASS
Band26	1.4MHz	QPSK	26783	6RB#0	21.58	PASS
Band26	1.4MHz	16QAM	26697	1RB#0	22.28	PASS
Band26	1.4MHz	16QAM	26697	1RB#3	22.40	PASS
Band26	1.4MHz	16QAM	26697	1RB#5	21.71	PASS
Band26	1.4MHz	16QAM	26697	3RB#0	21.73	PASS
Band26	1.4MHz	16QAM	26697	3RB#2	21.72	PASS
Band26	1.4MHz	16QAM	26697	3RB#3	21.68	PASS
Band26	1.4MHz	16QAM	26697	6RB#0	20.70	PASS
Band26	1.4MHz	16QAM	26740	1RB#0	21.79	PASS
Band26	1.4MHz	16QAM	26740	1RB#3	21.80	PASS
Band26	1.4MHz	16QAM	26740	1RB#5	21.74	PASS
Band26	1.4MHz	16QAM	26740	3RB#0	21.61	PASS
Band26	1.4MHz	16QAM	26740	3RB#2	21.79	PASS
Band26	1.4MHz	16QAM	26740	3RB#3	21.73	PASS
Band26	1.4MHz	16QAM	26740	6RB#0	20.65	PASS
Band26	1.4MHz	16QAM	26783	1RB#0	21.64	PASS
Band26	1.4MHz	16QAM	26783	1RB#3	21.89	PASS
Band26	1.4MHz	16QAM	26783	1RB#5	21.65	PASS
Band26	1.4MHz	16QAM	26783	3RB#0	21.69	PASS
Band26	1.4MHz	16QAM	26783	3RB#2	21.72	PASS
Band26	1.4MHz	16QAM	26783	3RB#3	21.61	PASS
Band26	1.4MHz	16QAM	26783	6RB#0	20.61	PASS
Band26	3MHz	QPSK	26705	1RB#0	23.08	PASS

Band26	3MHz	QPSK	26705	1RB#7	22.69	PASS
Band26	3MHz	QPSK	26705	1RB#14	22.50	PASS
Band26	3MHz	QPSK	26705	8RB#0	21.55	PASS
Band26	3MHz	QPSK	26705	8RB#4	21.58	PASS
Band26	3MHz	QPSK	26705	8RB#7	21.55	PASS
Band26	3MHz	QPSK	26705	15RB#0	21.53	PASS
Band26	3MHz	QPSK	26740	1RB#0	22.53	PASS
Band26	3MHz	QPSK	26740	1RB#7	22.65	PASS
Band26	3MHz	QPSK	26740	1RB#14	22.51	PASS
Band26	3MHz	QPSK	26740	8RB#0	21.54	PASS
Band26	3MHz	QPSK	26740	8RB#4	21.57	PASS
Band26	3MHz	QPSK	26740	8RB#7	21.53	PASS
Band26	3MHz	QPSK	26740	15RB#0	21.51	PASS
Band26	3MHz	QPSK	26775	1RB#0	22.53	PASS
Band26	3MHz	QPSK	26775	1RB#7	22.64	PASS
Band26	3MHz	QPSK	26775	1RB#14	22.50	PASS
Band26	3MHz	QPSK	26775	8RB#0	21.51	PASS
Band26	3MHz	QPSK	26775	8RB#4	21.52	PASS
Band26	3MHz	QPSK	26775	8RB#7	21.51	PASS
Band26	3MHz	QPSK	26775	15RB#0	21.48	PASS
Band26	3MHz	16QAM	26705	1RB#0	21.78	PASS
Band26	3MHz	16QAM	26705	1RB#7	22.05	PASS
Band26	3MHz	16QAM	26705	1RB#14	21.73	PASS
Band26	3MHz	16QAM	26705	8RB#0	20.60	PASS
Band26	3MHz	16QAM	26705	8RB#4	20.63	PASS
Band26	3MHz	16QAM	26705	8RB#7	20.59	PASS
Band26	3MHz	16QAM	26705	15RB#0	20.52	PASS
Band26	3MHz	16QAM	26740	1RB#0	21.80	PASS
Band26	3MHz	16QAM	26740	1RB#7	22.05	PASS
Band26	3MHz	16QAM	26740	1RB#14	21.73	PASS
Band26	3MHz	16QAM	26740	8RB#0	20.60	PASS
Band26	3MHz	16QAM	26740	8RB#4	20.62	PASS
Band26	3MHz	16QAM	26740	8RB#7	20.59	PASS
Band26	3MHz	16QAM	26740	15RB#0	20.51	PASS
Band26	3MHz	16QAM	26775	1RB#0	21.73	PASS
Band26	3MHz	16QAM	26775	1RB#7	21.79	PASS
Band26	3MHz	16QAM	26775	1RB#14	21.78	PASS
Band26	3MHz	16QAM	26775	8RB#0	20.55	PASS
Band26	3MHz	16QAM	26775	8RB#4	20.57	PASS
Band26	3MHz	16QAM	26775	8RB#7	20.52	PASS
Band26	3MHz	16QAM	26775	15RB#0	20.46	PASS
Band26	5MHz	QPSK	26715	1RB#0	22.95	PASS
Band26	5MHz	QPSK	26715	1RB#12	23.21	PASS
Band26	5MHz	QPSK	26715	1RB#24	22.40	PASS
Band26	5MHz	QPSK	26715	12RB#0	21.58	PASS

Band26	5MHz	QPSK	26715	12RB#6	21.59	PASS
Band26	5MHz	QPSK	26715	12RB#13	21.54	PASS
Band26	5MHz	QPSK	26715	25RB#0	21.57	PASS
Band26	5MHz	QPSK	26740	1RB#0	22.41	PASS
Band26	5MHz	QPSK	26740	1RB#12	22.71	PASS
Band26	5MHz	QPSK	26740	1RB#24	22.36	PASS
Band26	5MHz	QPSK	26740	12RB#0	21.51	PASS
Band26	5MHz	QPSK	26740	12RB#6	21.59	PASS
Band26	5MHz	QPSK	26740	12RB#13	21.55	PASS
Band26	5MHz	QPSK	26740	25RB#0	21.55	PASS
Band26	5MHz	QPSK	26765	1RB#0	22.40	PASS
Band26	5MHz	QPSK	26765	1RB#12	22.64	PASS
Band26	5MHz	QPSK	26765	1RB#24	22.37	PASS
Band26	5MHz	QPSK	26765	12RB#0	21.51	PASS
Band26	5MHz	QPSK	26765	12RB#6	21.54	PASS
Band26	5MHz	QPSK	26765	12RB#13	21.48	PASS
Band26	5MHz	QPSK	26765	25RB#0	21.49	PASS
Band26	5MHz	16QAM	26715	1RB#0	22.23	PASS
Band26	5MHz	16QAM	26715	1RB#12	21.96	PASS
Band26	5MHz	16QAM	26715	1RB#24	21.72	PASS
Band26	5MHz	16QAM	26715	12RB#0	20.57	PASS
Band26	5MHz	16QAM	26715	12RB#6	20.61	PASS
Band26	5MHz	16QAM	26715	12RB#13	20.56	PASS
Band26	5MHz	16QAM	26715	25RB#0	20.58	PASS
Band26	5MHz	16QAM	26740	1RB#0	21.62	PASS
Band26	5MHz	16QAM	26740	1RB#12	21.93	PASS
Band26	5MHz	16QAM	26740	1RB#24	21.55	PASS
Band26	5MHz	16QAM	26740	12RB#0	20.49	PASS
Band26	5MHz	16QAM	26740	12RB#6	20.62	PASS
Band26	5MHz	16QAM	26740	12RB#13	20.56	PASS
Band26	5MHz	16QAM	26740	25RB#0	20.58	PASS
Band26	5MHz	16QAM	26765	1RB#0	21.67	PASS
Band26	5MHz	16QAM	26765	1RB#12	21.99	PASS
Band26	5MHz	16QAM	26765	1RB#24	21.55	PASS
Band26	5MHz	16QAM	26765	12RB#0	20.51	PASS
Band26	5MHz	16QAM	26765	12RB#6	20.54	PASS
Band26	5MHz	16QAM	26765	12RB#13	20.55	PASS
Band26	5MHz	16QAM	26765	25RB#0	20.49	PASS
Band26	10MHz	QPSK	26740	1RB#0	23.07	PASS
Band26	10MHz	QPSK	26740	1RB#24	23.22	PASS
Band26	10MHz	QPSK	26740	1RB#49	23.03	PASS
Band26	10MHz	QPSK	26740	25RB#0	22.13	PASS
Band26	10MHz	QPSK	26740	25RB#12	22.14	PASS
Band26	10MHz	QPSK	26740	25RB#25	22.10	PASS
Band26	10MHz	QPSK	26740	50RB#0	21.74	PASS

Band26	10MHz	16QAM	26740	1RB#0	22.27	PASS
Band26	10MHz	16QAM	26740	1RB#24	22.46	PASS
Band26	10MHz	16QAM	26740	1RB#49	22.20	PASS
Band26	10MHz	16QAM	26740	25RB#0	21.12	PASS
Band26	10MHz	16QAM	26740	25RB#12	21.10	PASS
Band26	10MHz	16QAM	26740	25RB#25	20.93	PASS
Band26	10MHz	16QAM	26740	50RB#0	20.67	PASS

Note: FCC rule Part 22.905 of LTE Band 26 (824-849MHz) is covered by LTE band 5 of same rule ,since they have the same output power and supported bandwidths. In this report, only test FCC rule Part 90S of LTE Band 26 (814-824MHz).

### **3.6. Environmental Conditions**

Date of test : Jan.19, 2022 – Mar.07, 2022

Date of EUT Receive : Jan.19, 2022

Temperature: (22-26) °C

Relative Humidity: (44-51)%

Air Pressure: (100.7-101.9) kPa

### **3.7. Special Accessories**

Not available for this EUT intended for grant.

### **3.8. Equipment Modifications**

Not available for this EUT intended for grant.

## 4. TEST EQUIPMENT USED

### Conducted test equipment

No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal. Interval
SB18827	Wideband Radio communication Tester	Rohde & Schwarz	CMW500	Jan.25, 2021	1 Year
SB9721/02	Signal Analyzer	Agilent	N9020A	May 17, 2021	1 Year
SB7941/02	Signal Analyzer	Rohde & Schwarz	FSV30	May 17, 2021	1 Year
SB9721/07	DC Power Supply	Agilent	66319D	Mar.29, 2021	--
SB11818	Temperature & Humidity Test chamber	Espec	EH-010U	Mar.19, 2021	1 Year
--	Test Software	Tonscend	JS1120	--	--

### Radiated spurious test equipment

No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal. Interval
SB8501/09	EMI Test Receiver	Rohde & Schwarz	ESU40	Feb.05, 2021	1 Year
SB5472/02	Bilog Antenna	Schwarzbeck	VULB9163	Nov.15, 2020	1 Year
SB3435	Horn Antenna	Rohde & Schwarz	HF906	Dec.16, 2020	1 Year
SB8501/17	Preamplifier	Rohde & Schwarz	SCU-18	Feb.05, 2021	1 Year
SB8501/14	Preamplifier	Rohde & Schwarz	SCU-03	Feb.05, 2021	1 Year
SB12724/06	Wideband Radio communication Tester	Rohde & Schwarz	CMW500	May 17, 2021	1 Year
--	Radiated Test Software	Rohde & Schwarz	EMC 32	--	--
SB9555/02	Fully Anechoic Chamber	Albatross	10.0*5.2*5.4(m)	Aug.25,2021	1 Year
SB15044/01	Test Receiver	Rohde & Schwarz	ESW8	Oct.09,2020	1 Year
SB15044/01	Test Receiver	Rohde & Schwarz	ESW8	Oct.08,2021	1 Year
SB12944	Broadband Antenna	Rohde & Schwarz	VULB9163	Jan.08,2021	1 Year
SB18844	Semi Anechoic Chamber	Albatross	9×6×6(m)	Mar.23,2021	1 Year

## 5. MEASUREMENT UNCERTAINTY

For a 95% confidence level ( $k = 2$ ), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

26dB & Occupied Bandwidth:  $\pm 0.39\%$

Frequency Stability:  $\pm 0.42\%$

Peak to Average Ratio:  $\pm 0.45$  dB

Conducted power:  $\pm 0.3$  dB

Conducted Spurious Emissions:  $\pm 2.0$  dB

Conducted Band Edge:  $\pm 2.0$  dB

Temperature:  $\pm 0.698$  °C

Supply voltages:  $\pm 0.15\%$

Radiated Emission:

30MHz~1000MHz 4.5dB

1GHz~6GHz 4.6dB

6GHz~18GHz 5.1dB

18GHz~26.5GHz 5.1dB

## 6. TEST ITEMS

### 6.1. Conducted Power & Effective Radiated Power

#### 6.1.1. Test Standard

FCC: CFR Part 2.1046, CFR Part 22.913, CFR Part 24.232 CFR Part 27.50, CFR Part 90.635

#### 6.1.2. Test Limit

22.913 (a) Effective radiated power limits.

The effective radiated power (ERP) of mobile transmitters must not exceed 7 Watts.

24.232 (b)(c) Power limits.

(b) Mobile/portable stations are limited to 2 Watts effective isotropic radiated power (EIRP). (c) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms equivalent voltage. The measurement results shall be properly adjusted for any limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement over the full bandwidth of the channel.

27.50 (b)(10) Portable stations (hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

27.50 (d)(4) The following power and antenna height requirements apply to stations transmitting in the 1710–1755 MHz and 2110–2155 MHz bands: Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP.

27.50 (c) The following power and antenna height requirements apply to stations transmitting in the 698–746 MHz band (10) Portable stations (hand-held devices) are limited to 3 watts ERP.

27.50 (h) (2) Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

90.635 (b) Power limits.

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

#### 6.1.3. Test Procedure

KDB 971168 Section 5.6

EIRP (dBm) = ERP (dBm) + 2.15 (dB)

ERP/EIRP = PMeas + GT – LC

where: ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

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

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

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations average conducted and ERP/EIRP output powers.

#### 6.1.4. Test Data

Please refer to Appendix A

## **6.2. Peak to Average Radio**

### **6.2.1. Test Standard**

FCC: CFR 47 (FCC) part 22.913, 24.232, 27.50

### **6.2.2. Test Limit**

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

### **6.2.3. Test Procedure**

A peak to average ratio measurement is performed at the conducted port of the EUT. For WCDMA signals, the spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

For LTE operating mode: a. The EUT was connected to spectrum and system simulator via a power divider. b. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer. c. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1%. d. Record the deviation as Peak to Average Ratio.

### **6.2.4. Test Data**

Please refer to Appendix B

## **6.3. Occupied Bandwidth & Emission Bandwidth**

### **6.3.1. Test Standard**

FCC: CFR Part 2.1049, Part 22.913, Part 24.238, Part 27.53, Part 90.209

### **6.3.2. Test Limit**

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable.

Transmitters employing digital modulation techniques-when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated.

### **6.3.3. Test Procedure**

1. Connect the equipment as shown in the above diagram.
2. Adjust the settings of the Universal Radio Communication Tester (CMU/CMW) to set the EUT to its maximum power at the required channel.
3. Set the spectrum analyzer to measure the 99% occupied bandwidth. Record the value.
4. Set the spectrum analyzer to measure the -26 dB emission bandwidth. Record the value.
5. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

Spectrum analyzer settings: Measurement bandwidth of at least 1% of the occupied bandwidth.

### **6.3.4. Test Data**

Please refer to Appendix C

## 6.4. Conducted Band Edge

### 6.4.1. Test Standard

FCC: CFR Part 2.1051, 22.917, 24.238, 27.53, 90.691

### 6.4.2. Test Limit

The radio frequency voltage or power generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in FCC 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

#### §22.917:

The rules in this section govern the spectral characteristics of emissions in the Cellular Radio telephone Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### §24.238:

specifies that “on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log_{10} (P)$  dB.”

#### §27.53:

(c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the 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, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than  $76 + 10 \log (P)$  dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less

than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations;

(g) 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. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. 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.

(h) AWS emission limits—(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10} (P)$  dB.

(m)(4) For mobile digital stations, the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge and  $55 + 10 \log (P)$  dB at 5.5 megahertz from the channel edges. (Channel edges are defined under §27.5 (i) Frequency assignment for the BRS/EBS band)

(m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### §90.691:

(a) Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $116 \log_{10}(f/6.1)$  decibels or  $50 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

The power of any emission shall be attenuated below the mean output power P (dBW) by at least  $43 + 10 \log_{10}(p)$ , measured in a 100 kHz bandwidth for

frequencies less than or equal to 1 GHz, and in a 1 MHz bandwidth for frequencies greater than 1 GHz.

#### 6.4.3. Test Procedure

1. Connect the equipment as shown in the above diagram with the EUT's antenna in a horizontal orientation.
2. Adjust the settings of the Wideband Radio Communication Tester (CMW500) to set the EUT to its maximum power at the required channel.
3. Set the spectrum analyzer to measure peak hold with the required settings.
4. Place the measurement antenna in a horizontal orientation. Rotate the EUT 360. Raise the measurement antenna up to 4 meters in 0.5 meters increments and rotate the EUT 360 at each height to maximize all emissions. Measure and record all spurious emissions (LVL) up to the tenth harmonic of the carrier frequency.
5. Replace the EUT with a horizontally polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.
6. Connect the antenna to a signal generator with known output power and record the path loss in dB (LOSS). LOSS = Generator Output Power (dBm) – Analyzer reading (dBm).
7. Determine the level of spurious emissions using the following equation:  
Spurious (dBm) = LVL (dBm) + LOSS (dB):
8. Repeat steps 4, 5 and 6 with all antennas vertically polarized.
9. Determine the level of spurious emissions using the following equation:  
Spurious (dBm) = LVL (dBm) + LOSS (dB):
10. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.  
(Note: Steps 5 and 6 above are performed prior to testing and LOSS is recorded by test software. Steps 3, 4 and 7 above are performed with test software.)  
Spectrum analyzer settings: RBW=1MHz, VBW=3\*RBW

#### 6.4.4. Test Data

Please refer to Appendix D

## 6.5. Conducted Spurious Emissions

### 6.5.1. Test Standard

FCC: CFR Part 2.1051, 22.917, 24.238, 27.53, 90.691

### 6.5.2. Test Limit

The radio frequency voltage or power generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in FCC 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

(a) Out of band emissions. 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. For all power levels +30dBm to 0dBm, this becomes a constant specification of -13dBm.

#### §22.917:

The rules in this section govern the spectral characteristics of emissions in the Cellular Radio telephone Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### §24.238:

The rules in this section govern the spectral characteristics of emissions in the Broadband Personal Communications Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

§27.53:

(c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the 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, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than  $76 + 10 \log (P)$  dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations;

(g) 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. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. 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.

(h) AWS emission limits—(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log (P)$  dB.

(m)(4) For mobile digital stations, the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge and  $55 + 10 \log (P)$  dB at 5.5 megahertz from the channel edges. (Channel edges are defined under

§27.5 (i) Frequency assignment for the BRS/EBS band)

(m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

§90.691:

(a) Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $116 \text{ Log10}(f/6.1)$  decibels or  $50 + 10 \text{ Log10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \text{ Log10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

The power of any emission shall be attenuated below the mean output power P (dBW) by at least  $43 + 10 \text{ log10}(p)$ , measured in a 100 kHz bandwidth for frequencies less than or equal to 1 GHz, and in a 1 MHz bandwidth for frequencies greater than 1 GHz.

#### 6.5.3. Test Procedure

1. Connect the equipment as shown in the above diagram.
2. Set the spectrum analyzer to measure peak hold with the required settings.
3. Set the signal generator to a known output power and record the path loss in dB (LOSS) for frequencies up to the tenth harmonic of the EUT's carrier frequency.  
LOSS = Generator Output Power (dBm) – Analyzer reading (dBm).
4. Replace the signal generator with the EUT.
5. Adjust the settings of the Universal Radio Communication Tester (CMU) to set the EUT to its maximum power at the required channel.
6. Set the spectrum analyzer to measure peak hold with the required settings. Offset the spectrum analyzer reference level by the path loss measured above.
7. Measure and record all spurious emissions up to the tenth harmonic of the carrier frequency.
8. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.
9. If necessary steps 6 and 7 may be performed with the spectrum analyzer set to average detector.

(Note: Step 3 above is performed prior to testing and LOSS is recorded by test software. Steps 2, 6, and 7 above are performed with test software.)

#### 6.5.4. Test Data

Please refer to Appendix E

## 6.6. Frequency Stability

### 6.6.1. Test Standard

FCC: CFR 47 (FCC) part 2.1055, 22.355, 24.235, 27.54, 90.213

### 6.6.2. Test Limit

According to part 22.355, from 821MHz to 896MHz, for mobile device, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances 2.5ppm.

FCC: §24.235 & §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

FCC 90.213, The carrier frequency shall not depart from the reference frequency in excess of  $\pm 2.5$  ppm for mobile stations.

### 6.6.3. Test Setup

#### Frequency Stability (Temperature Variation)

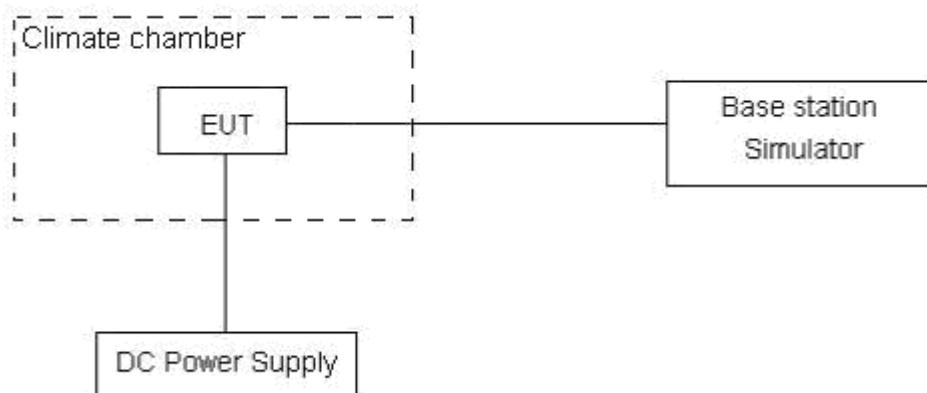
The temperature inside the climate chamber is varied from  $-30^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  in  $10^{\circ}\text{C}$  step size,

- (1) With all power removed, the temperature was decreased to  $0^{\circ}\text{C}$  and permitted to stabilize for three hours.
- (2) Measure the carrier frequency with the test equipment in a "call mode". These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.
- (3) Repeat the above measurements at  $10^{\circ}\text{C}$  increments from  $-30^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ . Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

#### Frequency Stability (Voltage Variation)

The frequency stability shall be measured with variation of primary supply voltage as follows:

- (1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.
- (2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery-operating end point which shall be specified by the manufacturer.



#### 6.6.4. Test Data

Please refer to Appendix F

## **6.7. Radiated Spurious Emissions**

### **6.7.1. Test Standard**

FCC: CFR Part 2.1051, 22.917, 24.238, 27.53, 90.691

### **6.7.2. Test Limit**

The radio frequency voltage or power generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in FCC 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

(a) Out of band emissions. 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. For all power levels +30dBm to 0dBm, this becomes a constant specification of -13dBm.

#### **§22.917:**

The rules in this section govern the spectral characteristics of emissions in the Cellular Radio telephone Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### **§24.238:**

The rules in this section govern the spectral characteristics of emissions in the Broadband Personal Communications Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

§27.53:

(c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the 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, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than  $76 + 10 \log (P)$  dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations;
- (g) 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. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. 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.

(h) AWS emission limits—(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10} (P)$  dB.

(m)(4) For mobile digital stations, the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge and  $55 + 10 \log (P)$  dB at 5.5 megahertz from the channel edges. (Channel edges are defined under §27.5 (i) Frequency assignment for the BRS/EBS band)

(m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

§90.691:

(a) Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent

licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $116 \log_{10}(f/6.1)$  decibels or  $50 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

The power of any emission shall be attenuated below the mean output power P (dBW) by at least  $43 + 10 \log_{10}(P)$ , measured in a 100 kHz bandwidth for frequencies less than or equal to 1 GHz, and in a 1 MHz bandwidth for frequencies greater than 1 GHz.

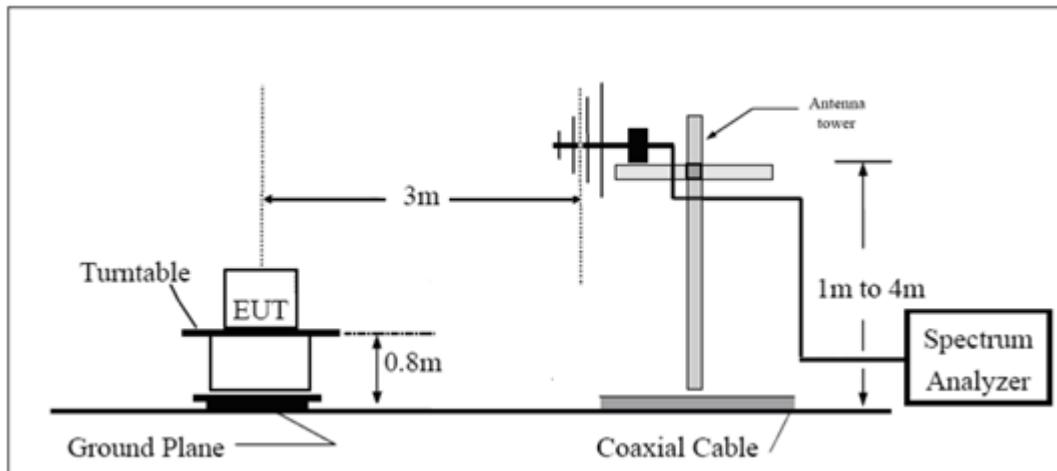
#### 6.7.3. Test Procedure

1. Connect the equipment as shown in the above diagram with the EUT's antenna in a horizontal orientation.
2. Adjust the settings of the Wideband Radio Communication Tester (CMW500) to set the EUT to its maximum power at the required channel.
3. Set the spectrum analyzer to measure peak hold with the required settings.
4. Place the measurement antenna in a horizontal orientation. Rotate the EUT 360°. Raise the measurement antenna up to 4 meters in 0.5 meters increments and rotate the EUT 360° at each height to maximize all emissions. Measure and record all spurious emissions (LVL) up to the tenth harmonic of the carrier frequency.
5. Replace the EUT with a horizontally polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.
6. Connect the antenna to a signal generator with known output power and record the path loss in dB (LOSS). LOSS = Generator Output Power (dBm) – Analyzer reading (dBm).
7. Determine the level of spurious emissions using the following equation:  
Spurious (dBm) = LVL (dBm) + LOSS (dB):
8. Repeat steps 4, 5 and 6 with all antennas vertically polarized.
9. Determine the level of spurious emissions using the following equation:  
Spurious (dBm) = LVL (dBm) + LOSS (dB):
10. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.  
(Note: Steps 5 and 6 above are performed prior to testing and LOSS is recorded by test software. Steps 3, 4 and 7 above are performed with test software.)

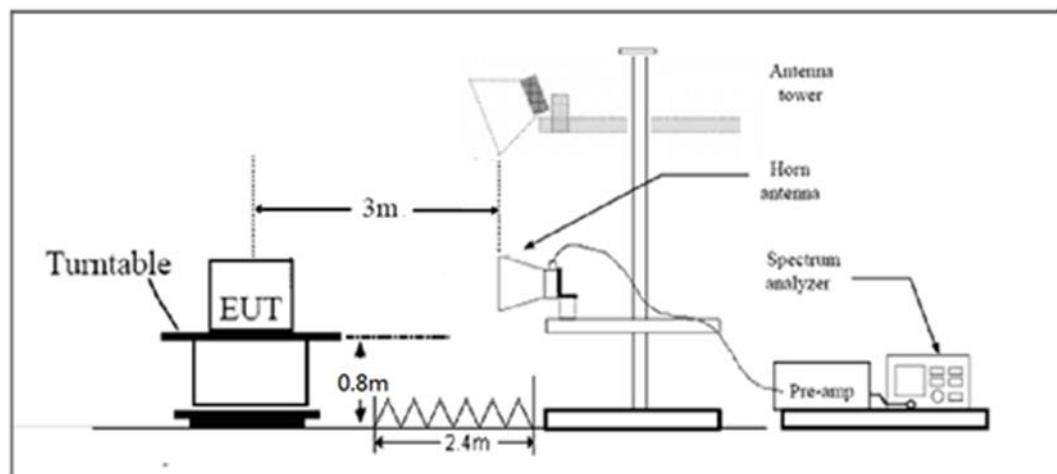
Spectrum analyzer settings: RBW=VBW=1MHz

#### 6.7.4. Test Setup

For Radiated test from 30MHz to 1GHz



For Radiated test above 1GHz



#### 6.7.5. Test Data

Please refer to Appendix G

## 7. APPENDIX A: CONDUCTED POWER & EFFECTIVE RADIATED POWER

### GSM:

Band	Channel	Frequency (MHz)	Conducted Power(dBm)	ERP/EIRP (dBm)	Limit(dBm)	Verdict
GSM850	128	824.2	32.75	31.14	38.5	PASS
GSM850	190	836.6	<b>32.92</b>	<b>31.31</b>	38.5	PASS
GSM850	251	848.8	32.77	31.16	38.5	PASS
GSM1900	512	1850.2	29.64	30.34	33	PASS
GSM1900	661	1880	29.64	30.34	33	PASS
GSM1900	810	1909.8	<b>29.66</b>	<b>30.36</b>	33	PASS
GPRS850	128	824.2	32.77	31.16	38.5	PASS
GPRS850	190	836.6	<b>32.93</b>	<b>31.32</b>	38.5	PASS
GPRS850	251	848.8	32.78	31.17	38.5	PASS
GPRS1900	512	1850.2	29.65	30.35	33	PASS
GPRS1900	661	1880	29.63	30.33	33	PASS
GPRS1900	810	1909.8	<b>29.69</b>	<b>30.39</b>	33	PASS
EGPRS850	128	824.2	25.56	23.95	38.5	PASS
EGPRS850	190	836.6	<b>25.62</b>	<b>24.01</b>	38.5	PASS
EGPRS850	251	848.8	25.59	23.98	38.5	PASS
EGPRS1900	512	1850.2	<b>24.59</b>	<b>25.29</b>	33	PASS
EGPRS1900	661	1880	24.38	25.08	33	PASS
EGPRS1900	810	1909.8	24.40	25.10	33	PASS

### WCDMA:

Band	Channel	Frequency (MHz)	Conducted Power(dBm)	ERP/EIRP (dBm)	Limit(dBm)	Verdict
Band2	9262	1852.4	22.92	23.62	33	PASS
Band2	9400	1880.0	22.95	23.65	33	PASS
Band2	9538	1907.6	<b>23.07</b>	<b>23.77</b>	33	PASS
Band5	4132	826.4	23.08	21.47	38.5	PASS
Band5	4182	836.4	23.17	21.56	38.5	PASS
Band5	4233	846.6	<b>23.18</b>	<b>21.57</b>	38.5	PASS

**LTE:**

LTE Band 2 ,Channel Bandwidth: 1.4 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna	EIRP	EIRP	Verdict
						Gain [dBi]	[dBm]	Limit	
			Size	Offset				[dBm]	
QPSK	18607	1850.7	1	0	23.80	0.7	24.50	33	Pass
			1	3	<b>23.89</b>	0.7	<b>24.59</b>	33	Pass
			1	5	23.74	0.7	24.44	33	Pass
			3	0	23.54	0.7	24.24	33	Pass
			3	2	23.43	0.7	24.13	33	Pass
			3	3	23.87	0.7	24.57	33	Pass
			6	0	22.39	0.7	23.09	33	Pass
	18900	1880	1	0	23.28	0.7	23.98	33	Pass
			1	3	23.32	0.7	24.02	33	Pass
			1	5	23.28	0.7	23.98	33	Pass
			3	0	23.35	0.7	24.05	33	Pass
			3	2	23.39	0.7	24.09	33	Pass
			3	3	23.36	0.7	24.06	33	Pass
			6	0	22.35	0.7	23.05	33	Pass
	19193	1909.3	1	0	23.24	0.7	23.94	33	Pass
			1	3	23.32	0.7	24.02	33	Pass
			1	5	23.23	0.7	23.93	33	Pass
			3	0	23.33	0.7	24.03	33	Pass
			3	2	23.39	0.7	24.09	33	Pass
			3	3	23.37	0.7	24.07	33	Pass
			6	0	22.34	0.7	23.04	33	Pass
16QAM	18607	1850.7	1	0	<b>23.03</b>	0.7	<b>23.73</b>	33	Pass
			1	3	<b>23.03</b>	0.7	<b>23.73</b>	33	Pass
			1	5	22.78	0.7	23.48	33	Pass
			3	0	22.69	0.7	23.39	33	Pass
			3	2	22.57	0.7	23.27	33	Pass
			3	3	22.50	0.7	23.20	33	Pass
			6	0	21.44	0.7	22.14	33	Pass
	18900	1880	1	0	22.58	0.7	23.28	33	Pass
			1	3	22.60	0.7	23.30	33	Pass
			1	5	22.45	0.7	23.15	33	Pass
			3	0	22.45	0.7	23.15	33	Pass
			3	2	22.48	0.7	23.18	33	Pass
			3	3	22.43	0.7	23.13	33	Pass
			6	0	21.46	0.7	22.16	33	Pass
	19193	1909.3	1	0	22.51	0.7	23.21	33	Pass
			1	3	22.46	0.7	23.16	33	Pass
			1	5	22.51	0.7	23.21	33	Pass

			3	0	22.34	0.7	23.04	33	Pass
			3	2	22.40	0.7	23.10	33	Pass
			3	3	22.34	0.7	23.04	33	Pass
			6	0	21.37	0.7	22.07	33	Pass

LTE Band 2, Channel Bandwidth: 3 MHz										
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna	EIRP	EIRP	Verdict	
			Size	Offset		Gain [dBi]	[dBm]	Limit		
								[dBm]		
QPSK	18615	1851.5	1	0	24.06	0.7	24.76	33	Pass	
			1	7	<b>24.24</b>	0.7	<b>24.94</b>	33	Pass	
			1	14	24.10	0.7	24.80	33	Pass	
			8	0	23.08	0.7	23.78	33	Pass	
			8	4	23.10	0.7	23.80	33	Pass	
			8	7	23.08	0.7	23.78	33	Pass	
			15	0	23.05	0.7	23.75	33	Pass	
	18900	1880	1	0	24.00	0.7	24.70	33	Pass	
			1	7	24.10	0.7	24.80	33	Pass	
			1	14	24.00	0.7	24.70	33	Pass	
			8	0	23.03	0.7	23.73	33	Pass	
			8	4	23.06	0.7	23.76	33	Pass	
			8	7	23.03	0.7	23.73	33	Pass	
			15	0	23.03	0.7	23.73	33	Pass	
	19185	1908.5	1	0	24.00	0.7	24.70	33	Pass	
			1	7	24.09	0.7	24.79	33	Pass	
			1	14	23.95	0.7	24.65	33	Pass	
			8	0	23.02	0.7	23.72	33	Pass	
			8	4	23.01	0.7	23.71	33	Pass	
			8	7	22.97	0.7	23.67	33	Pass	
			15	0	23.02	0.7	23.72	33	Pass	
16QAM	18615	1851.5	1	0	23.26	0.7	23.96	33	Pass	
			1	7	<b>23.38</b>	0.7	<b>24.08</b>	33	Pass	
			1	14	23.36	0.7	24.06	33	Pass	
			8	0	22.15	0.7	22.85	33	Pass	
			8	4	22.13	0.7	22.83	33	Pass	
			8	7	22.12	0.7	22.82	33	Pass	
			15	0	22.03	0.7	22.73	33	Pass	
	18900	1880	1	0	23.24	0.7	23.94	33	Pass	
			1	7	23.29	0.7	23.99	33	Pass	
			1	14	23.26	0.7	23.96	33	Pass	
			8	0	22.13	0.7	22.83	33	Pass	
			8	4	22.11	0.7	22.81	33	Pass	
			8	7	22.09	0.7	22.79	33	Pass	

			15	0	22.02	0.7	22.72	33	Pass
19185	1908.5		1	0	23.21	0.7	23.91	33	Pass
			1	7	23.25	0.7	23.95	33	Pass
			1	14	23.11	0.7	23.81	33	Pass
			8	0	22.08	0.7	22.78	33	Pass
			8	4	22.02	0.7	22.72	33	Pass
			8	7	22.00	0.7	22.70	33	Pass
			15	0	21.97	0.7	22.67	33	Pass

LTE Band 2 ,Channel Bandwidth: 5 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna	EIRP	EIRP	Verdict
						Gain [dBi]	[dBm]	Limit	
			Size	Offset				[dBm]	
QPSK	18625	1852.5	1	0	23.84	0.7	24.54	33	Pass
			1	12	<b>24.18</b>	0.7	<b>24.88</b>	33	Pass
			1	24	23.89	0.7	24.59	33	Pass
			12	0	22.95	0.7	23.65	33	Pass
			12	6	23.03	0.7	23.73	33	Pass
			12	13	22.98	0.7	23.68	33	Pass
			25	0	22.97	0.7	23.67	33	Pass
	18900	1880	1	0	23.83	0.7	24.53	33	Pass
			1	12	24.10	0.7	24.80	33	Pass
			1	24	23.82	0.7	24.52	33	Pass
			12	0	22.94	0.7	23.64	33	Pass
			12	6	22.99	0.7	23.69	33	Pass
			12	13	22.90	0.7	23.60	33	Pass
			25	0	22.96	0.7	23.66	33	Pass
	19175	1907.5	1	0	23.82	0.7	24.52	33	Pass
			1	12	24.10	0.7	24.80	33	Pass
			1	24	23.78	0.7	24.48	33	Pass
			12	0	22.97	0.7	23.67	33	Pass
			12	6	23.03	0.7	23.73	33	Pass
			12	13	22.87	0.7	23.57	33	Pass
			25	0	22.98	0.7	23.68	33	Pass
16QAM	18625	1852.5	1	0	23.05	0.7	23.75	33	Pass
			1	12	<b>23.37</b>	0.7	<b>24.07</b>	33	Pass
			1	24	23.06	0.7	23.76	33	Pass
			12	0	21.97	0.7	22.67	33	Pass
			12	6	22.05	0.7	22.75	33	Pass
			12	13	21.99	0.7	22.69	33	Pass
			25	0	21.96	0.7	22.66	33	Pass
	18900	1880	1	0	23.01	0.7	23.71	33	Pass
			1	12	23.30	0.7	24.00	33	Pass

			1	24	23.06	0.7	23.76	33	Pass
			12	0	21.93	0.7	22.63	33	Pass
			12	6	22.03	0.7	22.73	33	Pass
			12	13	21.94	0.7	22.64	33	Pass
			25	0	21.94	0.7	22.64	33	Pass
	19175	1907.5	1	0	23.07	0.7	23.77	33	Pass
			1	12	23.32	0.7	24.02	33	Pass
			1	24	22.99	0.7	23.69	33	Pass
			12	0	21.97	0.7	22.67	33	Pass
			12	6	22.05	0.7	22.75	33	Pass
			12	13	21.87	0.7	22.57	33	Pass
			25	0	21.97	0.7	22.67	33	Pass

LTE Band 2 ,Channel Bandwidth: 10 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna	EIRP	EIRP	Verdict
			Size	Offset		Gain [dBi]	[dBm]	[dBm]	
QPSK	18650	1855	1	0	23.86	0.7	24.56	33	Pass
			1	24	<b>24.08</b>	0.7	<b>24.78</b>	33	Pass
			1	49	23.86	0.7	24.56	33	Pass
			25	0	22.95	0.7	23.65	33	Pass
			25	12	23.00	0.7	23.70	33	Pass
			25	25	23.00	0.7	23.70	33	Pass
			50	0	22.99	0.7	23.69	33	Pass
	18900	1880	1	0	23.87	0.7	24.57	33	Pass
			1	24	24.04	0.7	24.74	33	Pass
			1	49	23.85	0.7	24.55	33	Pass
			25	0	22.99	0.7	23.69	33	Pass
			25	12	23.02	0.7	23.72	33	Pass
			25	25	22.95	0.7	23.65	33	Pass
			50	0	22.98	0.7	23.68	33	Pass
	19150	1905	1	0	23.80	0.7	24.50	33	Pass
			1	24	24.06	0.7	24.76	33	Pass
			1	49	23.53	0.7	24.23	33	Pass
			25	0	22.93	0.7	23.63	33	Pass
			25	12	23.03	0.7	23.73	33	Pass
			25	25	22.94	0.7	23.64	33	Pass
			50	0	22.82	0.7	23.52	33	Pass
16QAM	18650	1855	1	0	23.18	0.7	23.88	33	Pass
			1	24	23.20	0.7	23.90	33	Pass
			1	49	23.08	0.7	23.78	33	Pass
			25	0	21.94	0.7	22.64	33	Pass
			25	12	22.02	0.7	22.72	33	Pass
			25	25	21.98	0.7	22.68	33	Pass

			50	0	21.97	0.7	22.67	33	Pass
18900	1880	1	0	23.01	0.7	23.71	33	Pass	
		1	24	<b>23.25</b>	0.7	<b>23.95</b>	33	Pass	
		1	49	23.08	0.7	23.78	33	Pass	
		25	0	21.97	0.7	22.67	33	Pass	
		25	12	21.99	0.7	22.69	33	Pass	
		25	25	21.96	0.7	22.66	33	Pass	
		50	0	21.96	0.7	22.66	33	Pass	
19150	1905	1	0	23.06	0.7	23.76	33	Pass	
		1	24	23.15	0.7	23.85	33	Pass	
		1	49	22.72	0.7	23.42	33	Pass	
		25	0	21.99	0.7	22.69	33	Pass	
		25	12	22.03	0.7	22.73	33	Pass	
		25	25	21.83	0.7	22.53	33	Pass	
		50	0	21.95	0.7	22.65	33	Pass	

LTE Band 2 ,Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna	EIRP	EIRP	Verdict
						Gain [dBi]	[dBm]	[dBm]	
			Size	Offset				[dBm]	
QPSK	18675	1857.5	1	0	23.77	0.7	24.47	33	Pass
			1	37	<b>23.89</b>	0.7	<b>24.59</b>	33	Pass
			1	74	23.79	0.7	24.49	33	Pass
			37	0	23.74	0.7	24.44	33	Pass
			37	18	23.41	0.7	24.11	33	Pass
			37	38	23.55	0.7	24.25	33	Pass
			75	0	22.42	0.7	23.12	33	Pass
	18900	1880	1	0	23.22	0.7	23.92	33	Pass
			1	37	23.40	0.7	24.10	33	Pass
			1	74	23.28	0.7	23.98	33	Pass
			37	0	23.21	0.7	23.91	33	Pass
			37	18	23.39	0.7	24.09	33	Pass
			37	38	23.53	0.7	24.23	33	Pass
			75	0	22.44	0.7	23.14	33	Pass
16QAM	18675	1857.5	1	0	23.22	0.7	23.92	33	Pass
			1	37	23.41	0.7	24.11	33	Pass
			1	74	23.24	0.7	23.94	33	Pass
	19125	1902.5	37	0	23.21	0.7	23.91	33	Pass
			37	18	23.33	0.7	24.03	33	Pass
			37	38	23.53	0.7	24.23	33	Pass
			75	0	22.45	0.7	23.15	33	Pass

			37	0	22.55	0.7	23.25	33	Pass
			37	18	22.66	0.7	23.36	33	Pass
			37	38	22.85	0.7	23.55	33	Pass
			75	0	21.43	0.7	22.13	33	Pass
	18900	1880	1	0	22.49	0.7	23.19	33	Pass
			1	37	22.72	0.7	23.42	33	Pass
			1	74	22.55	0.7	23.25	33	Pass
			37	0	22.38	0.7	23.08	33	Pass
			37	18	22.59	0.7	23.29	33	Pass
			37	38	22.72	0.7	23.42	33	Pass
			75	0	21.46	0.7	22.16	33	Pass
	19125	1902.5	1	0	22.43	0.7	23.13	33	Pass
			1	37	22.63	0.7	23.33	33	Pass
			1	74	22.40	0.7	23.10	33	Pass
			37	0	22.36	0.7	23.06	33	Pass
			37	18	22.49	0.7	23.19	33	Pass
			37	38	22.65	0.7	23.35	33	Pass
			75	0	21.42	0.7	22.12	33	Pass

LTE Band 2 ,Channel Bandwidth: 20 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna	EIRP	EIRP	Verdict
			Size	Offset		Gain [dBi]	[dBm]	Limit	
								[dBm]	
QPSK	18700	1860	1	0	23.55	0.7	24.25	33	Pass
			1	49	<b>23.97</b>	0.7	<b>24.67</b>	33	Pass
			1	99	23.40	0.7	24.10	33	Pass
			50	0	22.35	0.7	23.05	33	Pass
			50	25	22.45	0.7	23.15	33	Pass
			50	50	22.45	0.7	23.15	33	Pass
			100	0	22.37	0.7	23.07	33	Pass
	18900	1880	1	0	23.04	0.7	23.74	33	Pass
			1	49	23.48	0.7	24.18	33	Pass
			1	99	23.08	0.7	23.78	33	Pass
			50	0	22.44	0.7	23.14	33	Pass
			50	25	22.46	0.7	23.16	33	Pass
			50	50	22.44	0.7	23.14	33	Pass
			100	0	22.46	0.7	23.16	33	Pass
	19100	1900	1	0	23.06	0.7	23.76	33	Pass
			1	49	23.47	0.7	24.17	33	Pass
			1	99	23.13	0.7	23.83	33	Pass
			50	0	22.48	0.7	23.18	33	Pass
			50	25	22.46	0.7	23.16	33	Pass
			50	50	22.34	0.7	23.04	33	Pass
			100	0	22.44	0.7	23.14	33	Pass

16QAM	18700	1860	1	0	22.82	0.7	23.52	33	Pass
			1	49	<b>23.11</b>	0.7	<b>23.81</b>	33	Pass
			1	99	22.62	0.7	23.32	33	Pass
			50	0	21.42	0.7	22.12	33	Pass
			50	25	21.45	0.7	22.15	33	Pass
			50	50	21.46	0.7	22.16	33	Pass
			100	0	21.39	0.7	22.09	33	Pass
	18900	1880	1	0	22.35	0.7	23.05	33	Pass
			1	49	22.81	0.7	23.51	33	Pass
			1	99	22.46	0.7	23.16	33	Pass
			50	0	21.42	0.7	22.12	33	Pass
			50	25	21.47	0.7	22.17	33	Pass
			50	50	21.45	0.7	22.15	33	Pass
			100	0	21.48	0.7	22.18	33	Pass
	19100	1900	1	0	22.39	0.7	23.09	33	Pass
			1	49	22.61	0.7	23.31	33	Pass
			1	99	22.34	0.7	23.04	33	Pass
			50	0	21.48	0.7	22.18	33	Pass
			50	25	21.45	0.7	22.15	33	Pass
			50	50	21.32	0.7	22.02	33	Pass
			100	0	21.41	0.7	22.11	33	Pass

LTE Band 4 ,Channel Bandwidth: 1.4 MHz										
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna	EIRP	EIRP	Verdict	
			Size	Offset		Gain [dBi]	[dBm]	Limit		
								[dBm]		
QPSK	19957	1710.7	1	0	23.67	0.76	24.43	30	Pass	
			1	3	23.82	0.76	24.58	30	Pass	
			1	5	23.71	0.76	24.47	30	Pass	
			3	0	23.81	0.76	24.57	30	Pass	
			3	2	<b>23.85</b>	0.76	<b>24.61</b>	30	Pass	
			3	3	23.79	0.76	24.55	30	Pass	
			6	0	22.81	0.76	23.57	30	Pass	
	20175	1732.5	1	0	23.63	0.76	24.39	30	Pass	
			1	3	23.72	0.76	24.48	30	Pass	
			1	5	23.63	0.76	24.39	30	Pass	
			3	0	23.74	0.76	24.50	30	Pass	
			3	2	23.78	0.76	24.54	30	Pass	
			3	3	23.75	0.76	24.51	30	Pass	
			6	0	22.76	0.76	23.52	30	Pass	
	20393	1754.3	1	0	23.66	0.76	24.42	30	Pass	
			1	3	23.62	0.76	24.38	30	Pass	
			1	5	23.20	0.76	23.96	30	Pass	
			3	0	23.26	0.76	24.02	30	Pass	

			3	2	23.29	0.76	24.05	30	Pass
			3	3	23.27	0.76	24.03	30	Pass
			6	0	22.25	0.76	23.01	30	Pass
16QAM	19957	1710.7	1	0	22.82	0.76	23.58	30	Pass
			1	3	<b>23.07</b>	0.76	<b>23.83</b>	30	Pass
			1	5	22.85	0.76	23.61	30	Pass
			3	0	22.86	0.76	23.62	30	Pass
			3	2	22.83	0.76	23.59	30	Pass
			3	3	22.85	0.76	23.61	30	Pass
			6	0	21.82	0.76	22.58	30	Pass
	20175	1732.5	1	0	22.87	0.76	23.63	30	Pass
			1	3	22.90	0.76	23.66	30	Pass
			1	5	22.78	0.76	23.54	30	Pass
			3	0	22.80	0.76	23.56	30	Pass
			3	2	22.77	0.76	23.53	30	Pass
			3	3	22.75	0.76	23.51	30	Pass
			6	0	21.81	0.76	22.57	30	Pass
	20393	1754.3	1	0	22.94	0.76	23.70	30	Pass
			1	3	22.83	0.76	23.59	30	Pass
			1	5	22.35	0.76	23.11	30	Pass
			3	0	22.30	0.76	23.06	30	Pass
			3	2	22.39	0.76	23.15	30	Pass
			3	3	22.30	0.76	23.06	30	Pass
			6	0	21.34	0.76	22.10	30	Pass

#### LTE Band 4 ,Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna	EIRP	EIRP	Verdict	
			Size	Offset		Gain [dBi]	[dBm]	Limit		
								[dBm]		
QPSK	19965	1711.5	1	0	23.72	0.76	24.48	30	Pass	
			1	7	<b>23.74</b>	0.76	<b>24.50</b>	30	Pass	
			1	14	23.21	0.76	23.97	30	Pass	
			8	0	22.25	0.76	23.01	30	Pass	
			8	4	22.29	0.76	23.05	30	Pass	
			8	7	22.26	0.76	23.02	30	Pass	
			15	0	22.24	0.76	23.00	30	Pass	
	20175	1732.5	1	0	23.16	0.76	23.92	30	Pass	
			1	7	23.35	0.76	24.11	30	Pass	
			1	14	23.17	0.76	23.93	30	Pass	
			8	0	22.23	0.76	22.99	30	Pass	
			8	4	22.24	0.76	23.00	30	Pass	
			8	7	22.19	0.76	22.95	30	Pass	
			15	0	22.20	0.76	22.96	30	Pass	
	20385	1753.5	1	0	23.18	0.76	23.94	30	Pass	