

# Test Report

FCC ID: 2AT7I-S2

Date of issue: Apr. 03, 2020

Report Number:	MTi19081312-9E2
Sample Description:	4G Wireless Data Terminal
Model(s):	S2
Applicant:	iFREE GROUP (HK) Ltd
Address:	Suite 06, 19/F, Mira Place Tower A, 132 Nathan Road, Tsim Sha Tsui, Kowloon, Hong Kong.
Date of Test:	Sept. 19, 2019 to Apr. 03, 2020

Shenzhen Microtest Co., Ltd.  
<http://www.mtitest.com>

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# Test Result Certification

Applicant's name: iFREE GROUP (HK) Ltd

Address: Suite 06, 19/F, Mira Place Tower A, 132 Nathan Road, Tsim Sha Tsui, Kowloon, Hong Kong.

Manufacture's name: iFREE GROUP (HK) Ltd

Address: Suite 06, 19/F, Mira Place Tower A, 132 Nathan Road, Tsim Sha Tsui, Kowloon, Hong Kong.

Product name: 4G Wireless Data Terminal

Trademark: MOGO

Model name: S2

Standards: FCC CFR 47 Part 22H  
FCC CFR 47 Part 24E  
FCC CFR 47 Part 27

Test Procedure: ANSI C63.26:2015  
ANSI/TIA-603-E-2016  
KDB 971168 D01 Power Meas License Digital Systems v03r01

This device described above has been tested by Shenzhen Microtest Co., Ltd. and the test results show that the equipment under test (EUT) compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

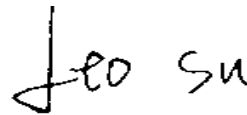
Tested by:



Danny Xu

Apr. 03, 2020

Reviewed by:



Leo Su

Apr. 03, 2020

Approved by:



Tom Xue

Apr. 03, 2020

# 1 General information

## 1.1 Feature of equipment under test (EUT)

Product name:	4G Wireless Data Terminal
Model name:	S2
Serial model:	N/A
Difference in series models:	N/A
Operating frequency range:	LTE FDD Band 2: 1850 - 1910MHz LTE FDD Band 4: 1710 - 1754MHz LTE FDD Band 5: 824 - 849MHz LTE FDD Band 7: 2500 - 2570MHz LTE FDD Band 12: 699 - 716MHz LTE FDD Band 13: 777 - 787MHz LTE TDD Band 38: 2570 - 2620MHz LTE TDD Band 40: 2300 - 2400MHz LTE TDD Band 41: 2555 - 2655MHz
Modulation type:	QPSK,16QAM
Antenna type:	FPC Antenna
Antenna gain:	Band 2 Gain: 0.33dBi Band 4 Gain: 0.52dBi Band 5 Gain: 0.76dBi Band 7 Gain: 2.20dBi Band 12 Gain: 0.74dBi Band 13 Gain: 0.74dBi Band 38 Gain: 2.20dBi Band 40 Gain: 2.11dBi Band 41 Gain: 2.11dBi
Power supply:	DC 5V from adapter or DC 3.8V from battery
Battery:	DC 3.8V 2000mAh
Adapter information:	N/A
Hardware Version:	S2M1_VER.A
Software Version:	S2_V03.02.07.19101T

**1.2 Test frequency channel**

LTE Band	Channel	Channel Bandwidth (MHz)	Channel No.	Frequency (MHz)
LTE Band 2	Low	1.4	18607	1850.7
		3	18615	1851.5
		5	18625	1852.5
		10	18650	1855
		15	18675	1857.5
		20	18700	1860
	Middle	1.4/3/5/10/15/20	18900	1880
	High	1.4	19193	1909.3
		3	19185	1908.5
		5	19175	1907.5
		10	19150	1905
		15	19125	1902.5
		20	19100	1900
LTE Band 4	Low	1.4	19957	1710.7
		3	19965	1711.5
		5	19975	1712.5
		10	20000	1715
		15	20025	1717.5
		20	20050	1720
	Middle	1.4/3/5/10/15/20	20175	1732.5
	High	1.4	20393	1754.3
		3	20385	1753.5
		5	20375	1752.5
		10	20350	1750
		15	20325	1747.5
		20	20300	1745
LTE Band 5	Low	1.4	20407	824.7
		3	20415	825.5
		5	20425	826.5
		10	20450	829



	Middle	1.4/3/5/10	20525	836.5
	High	1.4	20643	848.3
		3	20635	847.5
		5	20625	846.5
		10	20600	844
LTE Band 7	Low	5	20775	2502.5
		10	20800	2505
		15	20825	2507.5
		20	20850	2510
	Middle	5/10/15/20	21100	2535
	High	5	21425	2567.5
		10	21400	2565
		15	21375	2562.5
		20	21350	2560
LTE Band 12	Low	1.4	23017	699.7
		3	23025	700.5
		5	23035	701.5
		10	23060	704
	Middle	1.4/3/5/10	23095	707.5
	High	1.4	23173	715.3
		3	23165	714.5
		5	23155	713.5
		10	23130	711
LTE Band 13	Low	5	23205	779.5
		10	23230	782
	Middle	5/10	23230	782
	High	5	23255	784.5
		10	23230	782
LTE Band 38	Low	5	37775	2572.5
		10	37800	2575
		15	37820	2577.5
		20	37850	2580
	Middle	5/10/15/20	38000	2595
	High	5	38225	2617.5
		10	38200	2615



		15	38175	2612.5
		20	38150	2610
LTE Band 41	Low	5	40265	2557.5
		10	40290	2560
		15	40315	2562.5
		20	40340	2565
		5/10/15/20	40740	2605
	High	5	41215	2652.5
		10	41190	2650
		15	41165	2647.5
		20	41140	2645

LTE Band 40 2305-2315MHz	Low	5	38725	2307.5
	High	5	38775	2312.5

LTE Band 40 2350-2360MHz	Low	5	39175	2352.5
	High	5	39225	2357.5

LTE Band 40	2305-2315MHz	10	38750	2310
	2350-2360MHz	10	39200	2355





### 1.3 EUT operation mode

LTE band 2	Keep the EUT in data communicating mode on LTE band2. (LTE band2(1.4MHz), LTE band2(3MHz), LTE band2(5MHz), LTE band2(10MHz), band2(15MHz), band2(20MHz)
LTE band 4	Keep the EUT in data communicating mode on LTE band4. (LTE band4(1.4MHz), LTE band4(3MHz), LTE band4(5MHz), LTE band4(10MHz), band4(15MHz), band4(20MHz)
LTE band 5	Keep the EUT in data communicating mode on LTE band5. (LTE band5(1.4MHz), LTE band5(3MHz), LTE band5(5MHz), LTE band5(10MHz)
LTE band 7	Keep the EUT in data communicating mode on LTE band7. (LTE band7(5MHz), LTE band7(10MHz), LTE band7(15MHz), LTE band7(20MHz)
LTE band 12	Keep the EUT in data communicating mode on LTE band12. (LTE band12(1.4MHz), LTE band12(3MHz), LTE band12(5MHz), LTE band12(10MHz)
LTE band 13	Keep the EUT in data communicating mode on LTE band13. (LTE band13(5MHz), LTE band13(10MHz)
LTE band 38	Keep the EUT in data communicating mode on LTE band 38. (LTE band 38(5MHz), LTE band 38(10MHz), LTE band 38(15MHz), LTE band 38(20MHz)
LTE band 40	Keep the EUT in data communicating mode on LTE band 40. (LTE band 40(5MHz), LTE band 40(10MHz)
LTE band 41	Keep the EUT in data communicating mode on LTE band17. (LTE band 41(5MHz), LTE band 41(10MHz),LTE band 41(15MHz), LTE band 41(20MHz)

Note: Only the worst case data were shown in the report.

### 1.4 Ancillary equipment list

Equipment	Model	S/N	Manufacturer	Certificate type
Adapter	/	/	/	/

## 2 Summary of test results

Item	FCC Part No.	Description of Test	Result
1	part2.1046 Part 22.913(a)(2) Part 24.232(c) Part 27.50 (c)(10) Part 27.50 (d)(4) Part 27.50 (h)(2)	RF Output Power	Pass
2	Part 22.913(a) Part 24.232(c) Part 27.50(h)(2) Part 27.50(b)(10) Part 27.50(c)(10) Part 27.50(d)(4) Part 27.50(a)(3)	Radiated Power (ERP/EIRP)	Pass
3	Part 22.913(a) Part 24.232(c) Part 27.50(d)(5)	Peak-to-Average Ratio	Pass
4	Part 2.1049 Part 22.917(b) Part 24.238(b) Part 27.53(g) Part 27.53(h) Part 27.53(m)	99% and -26 dB Occupied Bandwidth	Pass
5	part 2.1051 part 22.917(a); part 24.238(a) part 27.53 (g)(h)	Spurious emissions at antenna terminals	Pass
6	part 2.1051 part 22.917(b); part 24.238(b) part 27.53(c)(2)(4) part 27.53(g) part 27.53(h)	Band edge at antenna terminals	Pass
7	Part 2.1053 Part 22.917(a) Part 24.238(a) Part 27.53 (g) Part 27.53 (h) Part 27.53(m)	Field strength of spurious radiation measurement	Pass
8	Part 22.355 Part 24.235 Part 27.54 Part 2.1055(a)(1)(b) Part 2.1055(d)(2)	Frequency Stability for Temperature & Voltage	Pass

### 3 Test facilities and accreditations

#### 3.1 Test laboratory

Test Laboratory	Shenzhen Microtest Co., Ltd
Location	No.102A & 302A, East Block, Hengfang Industrial Park, Xingye Road, Xixiang, Bao'an District, Shenzhen, Guangdong, China
FCC Registration No.:	448573

#### 3.2 Environmental conditions

Temperature:	15°C~35°C
Humidity	20%~75%
Atmospheric pressure	98kPa~101kPa

#### 3.3 Measurement uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %,  $U=2xUc(y)$

RF frequency	1 x 10 <sup>-7</sup>
RF power, conducted	± 1 dB
Conducted emission(150kHz~30MHz)	± 2.5 dB
Radiated emission(30MHz~1GHz)	± 4.2 dB
Radiated emission (above 1GHz)	± 4.3 dB
Temperature	±1 degree
Humidity	± 5 %

#### 3.4 Test software

Software Name	Manufacturer	Model	Version
LTE	Shenzhen JS tonscond co,.ltd	JS1120-1	2.6.8.0518

#### 4 LIST OF TEST EQUIPMENT

Equipment No.	Equipment Name	Manufacturer	Model	Serial No.	Calibration date	Due date
MTI-E004	EMI Test Receiver	Rohde&schwarz	ESPI7	100314	2018/10/09	2019/10/08
					2019/10/09	2020/10/08
MTI-E006	TRILOG Broadband Antenna	schwarzbeck	VULB 9163	9163-872	2018/10/15	2019/10/14
					2019/10/15	2020/10/14
MTI-E007	Double Ridged Broadband Horn Antenna	schwarzbeck	BBHA 9120 D	9120D-1145	2018/10/13	2019/10/12
					2019/10/13	2020/10/12
MTI-E014	amplifier	Hewlett-Packard	8447D	3113A06150	2018/10/09	2019/10/08
					2019/10/09	2020/10/08
MTI-E036	Single path vehicle AMN(LISN)	Schwarzbeck	NNBM 8124	01175	2018/10/09	2019/10/08
					2019/10/09	2020/10/08
MTI-E038	Low noise active vertical monopole antenna	Schwarzbeck	VAMP 9243	#565	2018/10/16	2019/10/15
					2019/10/16	2020/10/15
MTI-E039	Biconical antenna	Schwarzbeck	BBA 9106	#164	2018/10/15	2019/10/14
					2019/10/15	2020/10/14
MTI-E041	MXG Vector Signal Generator	Agilent	N5182A	MY49060455	2019/04/16	2020/04/15
MTI-E042	ESG Series Analog signal generator	Agilent	E4421B	GB40051240	2019/05/21	2020/05/20
MTI-E044	Thermometer clock humidity monitor	-	HTC-1	/	2019/04/17	2020/04/16
MTI-E062	Log Periodic Antenna	Schwarzbeck	VUSLP 9111B	#312	2018/04/11	2020/04/10
MTI-E063	Log Periodic Dipole Array Antenna	ETS-LINDGREN	3148B	00224524	2018/04/11	2020/04/10
MTI-E065	Amplifier	EMtrace	RP06A	00117	2019/04/29	2020/04/28
MTI-E066	Comprehensive test instrument	Rohde&schwarz	CMW500	149155	2019/04/16	2020/04/15
MTI-E071	PXA Signal Analyzer	Agilent	N9030A	MY51350296	2018/10/25	2019/10/24
					2019/10/25	2020/10/24
MTI-E076	EMI Test Receiver	Rohde&schwarz	ESIB26	100273	2019/04/16	2020/04/15
MTI-E078	Synthesized Sweeper	Agilent	83752A	3610A01957	2019/04/16	2020/04/15
MTI-E079	DC Power Supply	Agilent	E3632A	MY40027695	2019/04/16	2020/04/15
MTI-E093	Artificial mains network	3ctest	LISN J50	ES3911805	2019/04/16	2020/04/15
MTI-E096	Power amplifier	Space-Dtronics	EWLNA0 118G-P40	1852001	2019/04/29	2020/04/28
MTI-E097	Current Probe	SOLAR ELECTRONICS CO.	9207-1	220095-1	2019/04/17	2020/04/16
MTI-E098	Loop Sensor	SOLAR ELECTRONICS CO.	7334-1	220095-2	2019/04/21	2020/04/20
MTI-E080	Temperature & Humidity test chamber	Safety test	AG80L	171200018	2019/04/16	2020/04/15



Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

## 5 Test result

### 5.1 RF output power

#### 5.1.1 Limit

**For FCC Part 22.913(a)(2):**

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

**For FCC Part 24.232(c):**

The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

**For FCC Part 27.50(d):**

The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 1 Watt.

**For FCC Part 27.50(c):**

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 3 Watts.

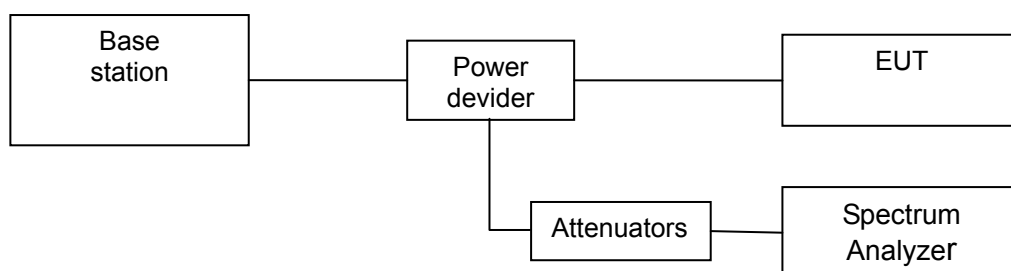
**For FCC Part 27.50(a)(3):**

For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

#### 5.1.2 Test procedure

- 1) The EUT's RF output port was connected to base station.
- 2) A call is set up by the SS according to the generic call set up procedure.
- 3) Set EUT at maximum power level through base station by power level command.
- 4) Measure the maximum output power of EUT at each frequency band and mode by base station.
- 5) The EUT was set up for the max output power with pseudo random data modulation.
- 6) These measurements were done at 3 frequencies (bottom, middle and top of operational frequency range) for each bandwidth.

#### 5.1.3 Test setup



#### 5.1.4 Test results

The following table shows the conducted power measured:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	23.17	PASS
Band2	1.4MHz	QPSK	18607	1RB#2	23.31	PASS
Band2	1.4MHz	QPSK	18607	1RB#5	23.39	PASS
Band2	1.4MHz	QPSK	18607	3RB#3	23.17	PASS
Band2	1.4MHz	QPSK	18607	3RB#0	23.11	PASS
Band2	1.4MHz	QPSK	18607	3RB#1	23.09	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	22.11	PASS
Band2	1.4MHz	QPSK	18900	1RB#5	23.35	PASS
Band2	1.4MHz	QPSK	18900	1RB#2	23.60	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	23.28	PASS
Band2	1.4MHz	QPSK	18900	3RB#1	23.52	PASS
Band2	1.4MHz	QPSK	18900	3RB#3	23.46	PASS
Band2	1.4MHz	QPSK	18900	3RB#0	23.54	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	22.38	PASS
Band2	1.4MHz	QPSK	19193	1RB#2	23.31	PASS
Band2	1.4MHz	QPSK	19193	1RB#5	23.57	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	23.34	PASS
Band2	1.4MHz	QPSK	19193	3RB#0	23.35	PASS
Band2	1.4MHz	QPSK	19193	3RB#1	23.32	PASS
Band2	1.4MHz	QPSK	19193	3RB#3	23.18	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	22.34	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	22.37	PASS
Band2	1.4MHz	16QAM	18607	1RB#2	22.55	PASS
Band2	1.4MHz	16QAM	18607	1RB#5	22.32	PASS
Band2	1.4MHz	16QAM	18607	3RB#0	21.99	PASS
Band2	1.4MHz	16QAM	18607	3RB#1	21.79	PASS
Band2	1.4MHz	16QAM	18607	3RB#3	21.65	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	21.21	PASS
Band2	1.4MHz	16QAM	18900	1RB#5	22.29	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	22.69	PASS
Band2	1.4MHz	16QAM	18900	1RB#2	22.44	PASS
Band2	1.4MHz	16QAM	18900	3RB#1	22.36	PASS
Band2	1.4MHz	16QAM	18900	3RB#3	22.51	PASS
Band2	1.4MHz	16QAM	18900	3RB#0	22.40	PASS



Band2	1.4MHz	16QAM	18900	6RB#0	21.50	PASS
Band2	1.4MHz	16QAM	19193	1RB#0	22.52	PASS
Band2	1.4MHz	16QAM	19193	1RB#5	22.33	PASS
Band2	1.4MHz	16QAM	19193	1RB#2	22.46	PASS
Band2	1.4MHz	16QAM	19193	3RB#3	22.24	PASS
Band2	1.4MHz	16QAM	19193	3RB#1	22.41	PASS
Band2	1.4MHz	16QAM	19193	3RB#0	22.34	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	21.38	PASS
Band2	3MHz	QPSK	18615	1RB#0	23.28	PASS
Band2	3MHz	QPSK	18615	1RB#14	23.35	PASS
Band2	3MHz	QPSK	18615	1RB#8	23.03	PASS
Band2	3MHz	QPSK	18615	8RB#0	22.21	PASS
Band2	3MHz	QPSK	18615	8RB#4	22.20	PASS
Band2	3MHz	QPSK	18615	8RB#7	22.19	PASS
Band2	3MHz	QPSK	18615	15RB#0	22.19	PASS
Band2	3MHz	QPSK	18900	1RB#0	23.59	PASS
Band2	3MHz	QPSK	18900	1RB#14	23.36	PASS
Band2	3MHz	QPSK	18900	1RB#8	23.40	PASS
Band2	3MHz	QPSK	18900	8RB#4	22.39	PASS
Band2	3MHz	QPSK	18900	8RB#7	22.38	PASS
Band2	3MHz	QPSK	18900	8RB#0	22.50	PASS
Band2	3MHz	QPSK	18900	15RB#0	22.41	PASS
Band2	3MHz	QPSK	19185	1RB#0	23.39	PASS
Band2	3MHz	QPSK	19185	1RB#8	23.15	PASS
Band2	3MHz	QPSK	19185	1RB#14	23.37	PASS
Band2	3MHz	QPSK	19185	8RB#4	22.31	PASS
Band2	3MHz	QPSK	19185	8RB#7	22.43	PASS
Band2	3MHz	QPSK	19185	8RB#0	22.31	PASS
Band2	3MHz	QPSK	19185	15RB#0	22.51	PASS
Band2	3MHz	16QAM	18615	1RB#0	22.41	PASS
Band2	3MHz	16QAM	18615	1RB#14	22.58	PASS
Band2	3MHz	16QAM	18615	1RB#8	22.24	PASS
Band2	3MHz	16QAM	18615	8RB#0	21.46	PASS
Band2	3MHz	16QAM	18615	8RB#4	21.27	PASS
Band2	3MHz	16QAM	18615	8RB#7	21.46	PASS
Band2	3MHz	16QAM	18615	15RB#0	21.06	PASS
Band2	3MHz	16QAM	18900	1RB#14	22.82	PASS
Band2	3MHz	16QAM	18900	1RB#8	22.71	PASS
Band2	3MHz	16QAM	18900	1RB#0	23.10	PASS





Band2	3MHz	16QAM	18900	8RB#7	21.65	PASS
Band2	3MHz	16QAM	18900	8RB#0	21.78	PASS
Band2	3MHz	16QAM	18900	8RB#4	21.35	PASS
Band2	3MHz	16QAM	18900	15RB#0	21.35	PASS
Band2	3MHz	16QAM	19185	1RB#14	22.06	PASS
Band2	3MHz	16QAM	19185	1RB#8	21.97	PASS
Band2	3MHz	16QAM	19185	1RB#0	22.56	PASS
Band2	3MHz	16QAM	19185	8RB#4	21.38	PASS
Band2	3MHz	16QAM	19185	8RB#7	21.51	PASS
Band2	3MHz	16QAM	19185	8RB#0	21.38	PASS
Band2	3MHz	16QAM	19185	15RB#0	21.27	PASS
Band2	5MHz	QPSK	18625	1RB#12	23.38	PASS
Band2	5MHz	QPSK	18625	1RB#24	23.49	PASS
Band2	5MHz	QPSK	18625	1RB#0	23.20	PASS
Band2	5MHz	QPSK	18625	12RB#0	22.19	PASS
Band2	5MHz	QPSK	18625	12RB#6	22.10	PASS
Band2	5MHz	QPSK	18625	12RB#13	22.19	PASS
Band2	5MHz	QPSK	18625	25RB#0	22.28	PASS
Band2	5MHz	QPSK	18900	1RB#0	23.55	PASS
Band2	5MHz	QPSK	18900	1RB#24	23.38	PASS
Band2	5MHz	QPSK	18900	1RB#12	23.40	PASS
Band2	5MHz	QPSK	18900	12RB#6	22.38	PASS
Band2	5MHz	QPSK	18900	12RB#13	22.35	PASS
Band2	5MHz	QPSK	18900	12RB#0	22.47	PASS
Band2	5MHz	QPSK	18900	25RB#0	22.37	PASS
Band2	5MHz	QPSK	19175	1RB#0	23.37	PASS
Band2	5MHz	QPSK	19175	1RB#12	23.38	PASS
Band2	5MHz	QPSK	19175	1RB#24	23.29	PASS
Band2	5MHz	QPSK	19175	12RB#6	22.53	PASS
Band2	5MHz	QPSK	19175	12RB#13	22.41	PASS
Band2	5MHz	QPSK	19175	12RB#0	22.52	PASS
Band2	5MHz	QPSK	19175	25RB#0	22.38	PASS
Band2	5MHz	16QAM	18625	1RB#12	22.58	PASS
Band2	5MHz	16QAM	18625	1RB#0	22.45	PASS
Band2	5MHz	16QAM	18625	1RB#24	22.36	PASS
Band2	5MHz	16QAM	18625	12RB#0	21.13	PASS
Band2	5MHz	16QAM	18625	12RB#6	21.12	PASS
Band2	5MHz	16QAM	18625	12RB#13	21.23	PASS
Band2	5MHz	16QAM	18625	25RB#0	21.33	PASS



Band2	5MHz	16QAM	18900	1RB#24	22.35	PASS
Band2	5MHz	16QAM	18900	1RB#12	22.32	PASS
Band2	5MHz	16QAM	18900	1RB#0	22.82	PASS
Band2	5MHz	16QAM	18900	12RB#13	21.40	PASS
Band2	5MHz	16QAM	18900	12RB#0	21.52	PASS
Band2	5MHz	16QAM	18900	12RB#6	21.52	PASS
Band2	5MHz	16QAM	18900	25RB#0	21.52	PASS
Band2	5MHz	16QAM	19175	1RB#24	21.92	PASS
Band2	5MHz	16QAM	19175	1RB#12	21.91	PASS
Band2	5MHz	16QAM	19175	1RB#0	22.29	PASS
Band2	5MHz	16QAM	19175	12RB#6	21.27	PASS
Band2	5MHz	16QAM	19175	12RB#13	21.29	PASS
Band2	5MHz	16QAM	19175	12RB#0	21.28	PASS
Band2	5MHz	16QAM	19175	25RB#0	21.35	PASS
Band2	10MHz	QPSK	18650	1RB#49	23.23	PASS
Band2	10MHz	QPSK	18650	1RB#0	23.38	PASS
Band2	10MHz	QPSK	18650	1RB#24	23.56	PASS
Band2	10MHz	QPSK	18650	25RB#25	22.38	PASS
Band2	10MHz	QPSK	18650	25RB#0	22.31	PASS
Band2	10MHz	QPSK	18650	25RB#12	22.30	PASS
Band2	10MHz	QPSK	18650	50RB#0	22.27	PASS
Band2	10MHz	QPSK	18900	1RB#0	23.70	PASS
Band2	10MHz	QPSK	18900	1RB#24	23.54	PASS
Band2	10MHz	QPSK	18900	1RB#49	23.42	PASS
Band2	10MHz	QPSK	18900	25RB#25	22.33	PASS
Band2	10MHz	QPSK	18900	25RB#0	22.47	PASS
Band2	10MHz	QPSK	18900	25RB#12	22.39	PASS
Band2	10MHz	QPSK	18900	50RB#0	22.40	PASS
Band2	10MHz	QPSK	19150	1RB#24	23.27	PASS
Band2	10MHz	QPSK	19150	1RB#0	23.20	PASS
Band2	10MHz	QPSK	19150	1RB#49	23.24	PASS
Band2	10MHz	QPSK	19150	25RB#0	22.51	PASS
Band2	10MHz	QPSK	19150	25RB#12	22.41	PASS
Band2	10MHz	QPSK	19150	25RB#25	22.41	PASS
Band2	10MHz	QPSK	19150	50RB#0	22.68	PASS
Band2	10MHz	16QAM	18650	1RB#49	22.07	PASS
Band2	10MHz	16QAM	18650	1RB#24	22.36	PASS
Band2	10MHz	16QAM	18650	1RB#0	21.98	PASS
Band2	10MHz	16QAM	18650	25RB#25	21.46	PASS



Band2	10MHz	16QAM	18650	25RB#12	21.41	PASS
Band2	10MHz	16QAM	18650	25RB#0	21.42	PASS
Band2	10MHz	16QAM	18650	50RB#0	21.35	PASS
Band2	10MHz	16QAM	18900	1RB#49	23.24	PASS
Band2	10MHz	16QAM	18900	1RB#24	22.54	PASS
Band2	10MHz	16QAM	18900	1RB#0	22.84	PASS
Band2	10MHz	16QAM	18900	25RB#12	21.52	PASS
Band2	10MHz	16QAM	18900	25RB#0	21.52	PASS
Band2	10MHz	16QAM	18900	25RB#25	21.60	PASS
Band2	10MHz	16QAM	18900	50RB#0	21.50	PASS
Band2	10MHz	16QAM	19150	1RB#0	22.35	PASS
Band2	10MHz	16QAM	19150	1RB#49	22.12	PASS
Band2	10MHz	16QAM	19150	1RB#24	22.53	PASS
Band2	10MHz	16QAM	19150	25RB#0	21.48	PASS
Band2	10MHz	16QAM	19150	25RB#12	21.48	PASS
Band2	10MHz	16QAM	19150	25RB#25	21.37	PASS
Band2	10MHz	16QAM	19150	50RB#0	21.34	PASS
Band2	15MHz	QPSK	18675	1RB#74	23.37	PASS
Band2	15MHz	QPSK	18675	1RB#38	23.27	PASS
Band2	15MHz	QPSK	18675	1RB#0	23.10	PASS
Band2	15MHz	QPSK	18675	38RB#0	21.96	PASS
Band2	15MHz	QPSK	18675	38RB#18	22.17	PASS
Band2	15MHz	QPSK	18675	38RB#37	22.42	PASS
Band2	15MHz	QPSK	18675	75RB#0	22.35	PASS
Band2	15MHz	QPSK	18900	1RB#74	23.40	PASS
Band2	15MHz	QPSK	18900	1RB#38	23.33	PASS
Band2	15MHz	QPSK	18900	1RB#0	23.45	PASS
Band2	15MHz	QPSK	18900	38RB#0	22.84	PASS
Band2	15MHz	QPSK	18900	38RB#18	22.79	PASS
Band2	15MHz	QPSK	18900	38RB#37	23.28	PASS
Band2	15MHz	QPSK	18900	75RB#0	22.33	PASS
Band2	15MHz	QPSK	19125	1RB#74	23.12	PASS
Band2	15MHz	QPSK	19125	1RB#38	23.25	PASS
Band2	15MHz	QPSK	19125	1RB#0	23.32	PASS
Band2	15MHz	QPSK	19125	38RB#18	22.31	PASS
Band2	15MHz	QPSK	19125	38RB#0	22.25	PASS
Band2	15MHz	QPSK	19125	38RB#37	21.85	PASS
Band2	15MHz	QPSK	19125	75RB#0	22.49	PASS
Band2	15MHz	16QAM	18675	1RB#38	22.30	PASS



Band2	15MHz	16QAM	18675	1RB#0	22.01	PASS
Band2	15MHz	16QAM	18675	1RB#74	22.36	PASS
Band2	15MHz	16QAM	18675	38RB#0	21.95	PASS
Band2	15MHz	16QAM	18675	38RB#18	22.16	PASS
Band2	15MHz	16QAM	18675	38RB#37	22.41	PASS
Band2	15MHz	16QAM	18675	75RB#0	21.44	PASS
Band2	15MHz	16QAM	18900	1RB#74	22.47	PASS
Band2	15MHz	16QAM	18900	1RB#38	22.72	PASS
Band2	15MHz	16QAM	18900	1RB#0	22.49	PASS
Band2	15MHz	16QAM	18900	38RB#37	23.27	PASS
Band2	15MHz	16QAM	18900	38RB#0	22.84	PASS
Band2	15MHz	16QAM	18900	38RB#18	22.63	PASS
Band2	15MHz	16QAM	18900	75RB#0	21.42	PASS
Band2	15MHz	16QAM	19125	1RB#74	21.87	PASS
Band2	15MHz	16QAM	19125	1RB#38	22.34	PASS
Band2	15MHz	16QAM	19125	1RB#0	22.52	PASS
Band2	15MHz	16QAM	19125	38RB#18	22.31	PASS
Band2	15MHz	16QAM	19125	38RB#37	21.84	PASS
Band2	15MHz	16QAM	19125	38RB#0	22.19	PASS
Band2	15MHz	16QAM	19125	75RB#0	21.33	PASS
Band2	20MHz	QPSK	18700	1RB#99	23.41	PASS
Band2	20MHz	QPSK	18700	1RB#0	23.28	PASS
Band2	20MHz	QPSK	18700	1RB#49	23.69	PASS
Band2	20MHz	QPSK	18700	50RB#50	22.51	PASS
Band2	20MHz	QPSK	18700	50RB#0	22.38	PASS
Band2	20MHz	QPSK	18700	50RB#25	22.37	PASS
Band2	20MHz	QPSK	18700	100RB#0	22.42	PASS
Band2	20MHz	QPSK	18900	1RB#0	23.67	PASS
Band2	20MHz	QPSK	18900	1RB#49	23.39	PASS
Band2	20MHz	QPSK	18900	1RB#99	23.19	PASS
Band2	20MHz	QPSK	18900	50RB#0	22.45	PASS
Band2	20MHz	QPSK	18900	50RB#50	22.37	PASS
Band2	20MHz	QPSK	18900	50RB#25	22.45	PASS
Band2	20MHz	QPSK	18900	100RB#0	22.44	PASS
Band2	20MHz	QPSK	19100	1RB#49	23.39	PASS
Band2	20MHz	QPSK	19100	1RB#99	23.18	PASS
Band2	20MHz	QPSK	19100	1RB#0	23.14	PASS
Band2	20MHz	QPSK	19100	50RB#0	22.26	PASS
Band2	20MHz	QPSK	19100	50RB#25	22.25	PASS



Band2	20MHz	QPSK	19100	50RB#50	22.53	PASS
Band2	20MHz	QPSK	19100	100RB#0	22.31	PASS
Band2	20MHz	16QAM	18700	1RB#99	23.05	PASS
Band2	20MHz	16QAM	18700	1RB#49	22.82	PASS
Band2	20MHz	16QAM	18700	1RB#0	22.57	PASS
Band2	20MHz	16QAM	18700	50RB#50	21.62	PASS
Band2	20MHz	16QAM	18700	50RB#25	21.44	PASS
Band2	20MHz	16QAM	18700	50RB#0	21.46	PASS
Band2	20MHz	16QAM	18700	100RB#0	21.37	PASS
Band2	20MHz	16QAM	18900	1RB#99	22.29	PASS
Band2	20MHz	16QAM	18900	1RB#49	22.19	PASS
Band2	20MHz	16QAM	18900	1RB#0	22.31	PASS
Band2	20MHz	16QAM	18900	50RB#25	21.60	PASS
Band2	20MHz	16QAM	18900	50RB#0	21.60	PASS
Band2	20MHz	16QAM	18900	50RB#50	21.50	PASS
Band2	20MHz	16QAM	18900	100RB#0	21.55	PASS
Band2	20MHz	16QAM	19100	1RB#0	22.47	PASS
Band2	20MHz	16QAM	19100	1RB#99	22.41	PASS
Band2	20MHz	16QAM	19100	1RB#49	22.93	PASS
Band2	20MHz	16QAM	19100	50RB#50	21.47	PASS
Band2	20MHz	16QAM	19100	50RB#25	21.30	PASS
Band2	20MHz	16QAM	19100	50RB#0	21.30	PASS
Band2	20MHz	16QAM	19100	100RB#0	21.28	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#5	22.84	PASS
Band4	1.4MHz	QPSK	19957	1RB#0	23.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	22.95	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	23.07	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	22.83	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	23.08	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	21.97	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	23.15	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	23.15	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	23.14	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	22.97	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	23.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	22.97	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	21.98	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	23.16	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	23.37	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	23.10	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	23.16	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	23.06	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	23.12	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	22.17	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	22.15	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	22.02	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	21.91	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	22.11	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	21.76	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	21.89	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	20.71	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	22.49	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	22.21	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	22.32	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	21.87	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	21.98	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	21.88	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	21.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	21.94	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	21.92	PASS





Band4	1.4MHz	16QAM	20393	1RB#2	22.27	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	22.09	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	22.13	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	22.09	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	21.24	PASS
Band4	3MHz	QPSK	19965	1RB#14	22.68	PASS
Band4	3MHz	QPSK	19965	1RB#0	22.88	PASS
Band4	3MHz	QPSK	19965	1RB#8	22.58	PASS
Band4	3MHz	QPSK	19965	8RB#7	21.78	PASS
Band4	3MHz	QPSK	19965	8RB#0	21.74	PASS
Band4	3MHz	QPSK	19965	8RB#4	21.75	PASS
Band4	3MHz	QPSK	19965	15RB#0	21.87	PASS
Band4	3MHz	QPSK	20175	1RB#0	22.96	PASS
Band4	3MHz	QPSK	20175	1RB#14	23.05	PASS
Band4	3MHz	QPSK	20175	1RB#8	22.93	PASS
Band4	3MHz	QPSK	20175	8RB#0	21.84	PASS
Band4	3MHz	QPSK	20175	8RB#4	21.82	PASS
Band4	3MHz	QPSK	20175	8RB#7	21.95	PASS
Band4	3MHz	QPSK	20175	15RB#0	21.98	PASS
Band4	3MHz	QPSK	20385	1RB#0	23.17	PASS
Band4	3MHz	QPSK	20385	1RB#8	22.93	PASS
Band4	3MHz	QPSK	20385	1RB#14	23.12	PASS
Band4	3MHz	QPSK	20385	8RB#4	22.15	PASS
Band4	3MHz	QPSK	20385	8RB#7	21.98	PASS
Band4	3MHz	QPSK	20385	8RB#0	22.07	PASS
Band4	3MHz	QPSK	20385	15RB#0	22.09	PASS
Band4	3MHz	16QAM	19965	1RB#14	21.84	PASS
Band4	3MHz	16QAM	19965	1RB#0	21.63	PASS
Band4	3MHz	16QAM	19965	1RB#8	21.88	PASS
Band4	3MHz	16QAM	19965	8RB#7	20.77	PASS
Band4	3MHz	16QAM	19965	8RB#0	20.77	PASS
Band4	3MHz	16QAM	19965	8RB#4	20.75	PASS
Band4	3MHz	16QAM	19965	15RB#0	20.85	PASS
Band4	3MHz	16QAM	20175	1RB#14	21.91	PASS
Band4	3MHz	16QAM	20175	1RB#8	21.75	PASS
Band4	3MHz	16QAM	20175	1RB#0	21.73	PASS
Band4	3MHz	16QAM	20175	8RB#7	21.16	PASS
Band4	3MHz	16QAM	20175	8RB#0	21.13	PASS
Band4	3MHz	16QAM	20175	8RB#4	21.03	PASS



Band4	3MHz	16QAM	20175	15RB#0	21.06	PASS
Band4	3MHz	16QAM	20385	1RB#0	22.00	PASS
Band4	3MHz	16QAM	20385	1RB#14	22.06	PASS
Band4	3MHz	16QAM	20385	1RB#8	21.76	PASS
Band4	3MHz	16QAM	20385	8RB#0	21.05	PASS
Band4	3MHz	16QAM	20385	8RB#4	21.05	PASS
Band4	3MHz	16QAM	20385	8RB#7	21.00	PASS
Band4	3MHz	16QAM	20385	15RB#0	21.07	PASS
Band4	5MHz	QPSK	19975	1RB#12	22.75	PASS
Band4	5MHz	QPSK	19975	1RB#24	22.72	PASS
Band4	5MHz	QPSK	19975	1RB#0	23.06	PASS
Band4	5MHz	QPSK	19975	12RB#0	21.75	PASS
Band4	5MHz	QPSK	19975	12RB#6	21.75	PASS
Band4	5MHz	QPSK	19975	12RB#13	21.68	PASS
Band4	5MHz	QPSK	19975	25RB#0	21.78	PASS
Band4	5MHz	QPSK	20175	1RB#12	22.99	PASS
Band4	5MHz	QPSK	20175	1RB#0	22.88	PASS
Band4	5MHz	QPSK	20175	1RB#24	22.95	PASS
Band4	5MHz	QPSK	20175	12RB#13	22.15	PASS
Band4	5MHz	QPSK	20175	12RB#6	21.93	PASS
Band4	5MHz	QPSK	20175	12RB#0	21.94	PASS
Band4	5MHz	QPSK	20175	25RB#0	21.93	PASS
Band4	5MHz	QPSK	20375	1RB#0	23.33	PASS
Band4	5MHz	QPSK	20375	1RB#12	23.12	PASS
Band4	5MHz	QPSK	20375	1RB#24	23.40	PASS
Band4	5MHz	QPSK	20375	12RB#13	22.21	PASS
Band4	5MHz	QPSK	20375	12RB#0	22.10	PASS
Band4	5MHz	QPSK	20375	12RB#6	22.11	PASS
Band4	5MHz	QPSK	20375	25RB#0	22.20	PASS
Band4	5MHz	16QAM	19975	1RB#12	21.92	PASS
Band4	5MHz	16QAM	19975	1RB#0	21.74	PASS
Band4	5MHz	16QAM	19975	1RB#24	21.76	PASS
Band4	5MHz	16QAM	19975	12RB#0	20.84	PASS
Band4	5MHz	16QAM	19975	12RB#13	20.89	PASS
Band4	5MHz	16QAM	19975	12RB#6	20.84	PASS
Band4	5MHz	16QAM	19975	25RB#0	20.92	PASS
Band4	5MHz	16QAM	20175	1RB#0	21.27	PASS
Band4	5MHz	16QAM	20175	1RB#24	21.50	PASS
Band4	5MHz	16QAM	20175	1RB#12	21.56	PASS