

TEST REPORT

Product : MiFi
Trade mark : HORIZON
Model/Type reference : MH04
Serial Number : N/A
Report Number : EED32P81369102
FCC ID : 2A8I7MH04
Date of Issue : Nov. 02, 2023
Test Standards : 47 CFR Part 2
47 CFR Part 22 subpart H
47 CFR Part 24 subpart E
47 CFR Part 27
Test result : PASS

Prepared for:

Teleworld Fzco**Warehouse C16 Dubai Airport Freezone Dubai, UAE**

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China

TEL: +86-755-3368 3668**FAX: +86-755-3368 3385**

Compiled by:

Frazer Li

Reviewed by:

Tom Chen

Frazer Li

Tom Chen

Approved by:

Aaron Ma

Date:

Nov. 02, 2023

Aaron Ma



Check No.: 6222290823

2 Version

Version No.	Date	Description
00	Nov. 02, 2023	Original

3 Test Summary

Test Item	Test Requirement	Test method	Result
FCC Part 22 (WCDMA Band V,LTE Band 5,LTE Band 26)			
Conducted output power	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
Effective Radiated Power of Transmitter(ERP)	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
99% &26dBOccupied Bandwidth	Part 2.1049(h)	Part 22.917(b) &KDB 971168 D01v02r02	PASS
Band Edge at antenna terminals	Part 2.1051/Part 22.917(a)	Part 22.917(b) &KDB 971168 D01v02r02	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
Field strength of spurious radiation	Part 2.1053/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
Frequency stability	Part 2.1055/ Part 22.355	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
FCC Part 24 (WCDMA Band II,LTE Band 2,LTE Band 25)			
Conducted output power	Part 2.1046(a) /Part 24.232(c)	TIA-603-E-2016&KDB 971168 D01v02r02	PASS
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 24.232(c)	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
peak-to-average ratio	Part 24.232(d)	KDB 971168 D01v02r02	PASS
99% &26dBOccupied Bandwidth	Part 2.1049(h)	Part 24.238(b) &KDB 971168 D01v02r02	PASS
Band Edge at antenna terminals	Part 2.1051/ Part 24.238(a)	Part 24.238(b) &KDB 971168 D01v02r02	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 24.238(a)(b)	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
Field strength of spurious radiation	Part 2.1053 /Part 2.1057 / Part 24.238(a)(b)	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
Frequency stability	Part 2.1055/Part 24.235	TIA-603-E-2016 &KDB 971168 D01v02r02	PASS
FCC Part 27 (WCDMA Band IV,LTE Band 4,LTE Band 7,LTE Band 12, LTE Band 13,LTE Band 17,LTE Band 41,LTE Band 66)			
Conducted output power	Part 2.1046(a) /Part 27.50(d)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 27.50(d)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS

peak-to-average ratio	Part 27.50(d)	KDB 971168 D01v03r01	PASS
99% &26dB Occupied Bandwidth	Part 2.1049(h)	Part 27.53(h) &KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	Part 2.1051/ Part 27.53(h)	Part 27.53(h) &KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 27.53(h)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	Part 2.1053/ Part 27.53(h)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Frequency stability	Part 2.1055/Part 27.54	TIA-603-E-2016&KDB 971168 D01v03r01	PASS

Remark:

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

Tx: In this whole report Tx (or tx) means Transmitter.
 Rx: In this whole report Rx (or rx) means Receiver.
 RF: In this whole report RF means Radiated Frequency.
 CH: In this whole report CH means channel.
 Volt: In this whole report Volt means Voltage.
 Temp: In this whole report Temp means Temperature.
 Humid: In this whole report Humid means humidity.
 Press: In this whole report Press means Pressure.
 N/A: In this whole report not application

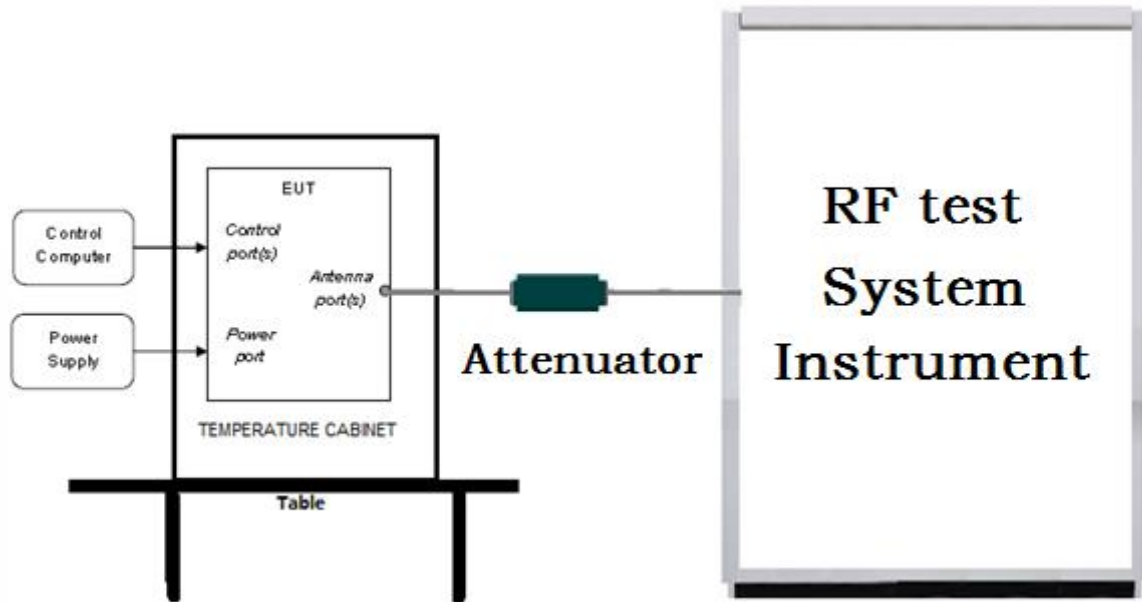
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5 Test Requirement

5.1 Test setup

5.1.1 For Conducted test setup



5.1.2 For Radiated Emissions test setup

Radiated Emissions setup:

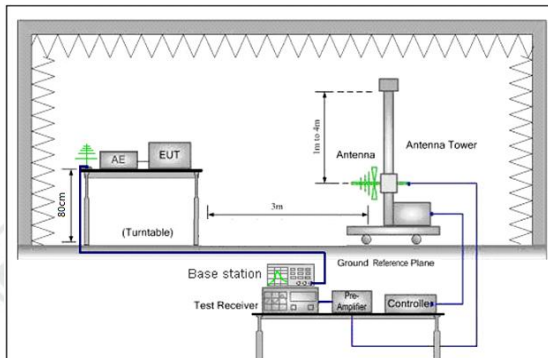


Figure 1.30MHz to 1GHz

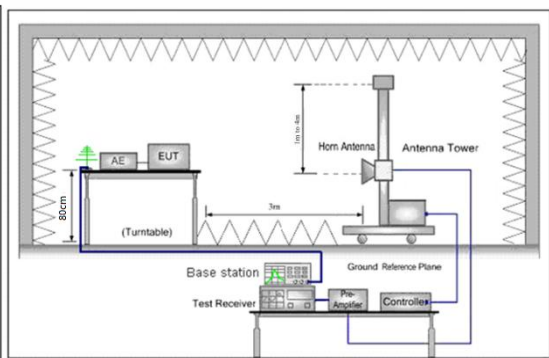


Figure 2. above 1GHz

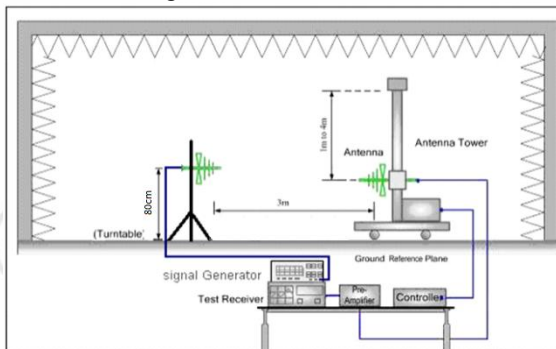


Figure 1. 30MHz to 1GHz

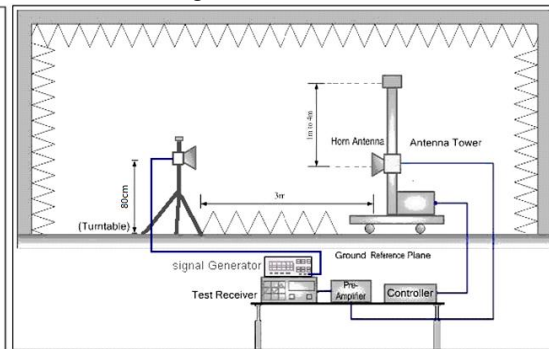


Figure 2. above 1GHz

5.2 Test Environment

Operating Environment:	
Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1010mbar

6 General Information

6.1 Client Information

Applicant:	Teleworld Fzco
Address of Applicant:	Warehouse C16 Dubai Airport Freezone Dubai, UAE
Manufacturer:	Teleworld Fzco
Address of Manufacturer:	Warehouse C16 Dubai Airport Freezone Dubai, UAE
Factory:	Teleworld Fzco
Address of Factory:	Warehouse C16 Dubai Airport Freezone Dubai, UAE

6.2 General Description of EUT

Product Name:	MiFi
Model No.:	MH04
Trade Mark:	HORIZON
Product Type:	☐ Mobile ☒ Portable ☐ Fix Location
Frequency Band:	WCDMA Band II: TX:1850-1910MHz, RX:1930-1990MHz WCDMA Band IV: TX:1710-1755MHz, RX:2110-2155MHz WCDMA Band V: TX:824-849MHz, RX:869-894MHz LTE Band 2: TX:1850-1910MHz, RX:1930-1990MHz LTE Band 4: TX:1710-1755MHz, RX:2110-2155MHz LTE Band 5: TX:824 - 849 MHz, RX:869-894MHz LTE Band 7: TX:2500-2570MHz, RX:2620-2690MHz LTE Band 12: TX:699-716MHz, RX:729-746MHz LTE Band 13: TX: 777-787MHz, RX:746-756MHz LTE Band 17: TX:704 - 716MHz, RX:734-746MHz LTE Band 25: TX:1850 - 1915MHz, RX:1930-1995 MHz LTE Band 26: TX:824-849 MHz, RX: 869-894MHz LTE Band 41: TX&RX:2496 MHz -2690 MHz LTE Band 66: TX:1710-1780 MHz, RX: 2110-2200MHz
Modulation Type:	QPSK,16QAM,64QAM
Antenna Type:	Internal Antenna
Antenna Gain:	WCDMA Band II: 0.36dBi WCDMA Band IV: 0.43dBi WCDMA Band V: -4.01dBi LTE Band 2: 0.36dBi LTE Band 4: 0.43dBi LTE Band 5: -4.01dBi LTE Band 7: 1.85dBi LTE Band 12: -4.14dBi LTE Band 13: -3.12dBi LTE Band 17: -4.14dBi LTE Band 25: 0.36dBi LTE Band 26: -3.89dBi LTE Band 41: 2.37dBi

	LTE Band 66: 0.43dBi	
Power Supply:	USB port:	DC 5.0V
	Battery:	DC 3.8V,2100mAh,7.98Wh
Test Voltage:	DC 3.8V	
Sample Received Date:	Sep. 01, 2023	
Sample tested Date:	Sep. 01, 2023 to Oct. 30, 2023	

6.3 Description of Support Units

The EUT has been tested independently.

6.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

6.5 Deviation from Standards

None.

6.6 Abnormalities from Standard Conditions

None.

6.7 Other Information Requested by the Customer

None.

6.8 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.3dB (30MHz-1GHz)
		4.5dB (1GHz-12.75GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

7 Equipment List

Communication RF test system					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Spectrum Analyzer	Agilent	E4440A	MY46185649	10-24-2022 10-23-2023	10-23-2023 10-22-2024
Signal Generator	Keysight	E8257D	MY53401106	12-19-2022	12-18-2023
Signal Generator	Agilent	E4438C	MY45095744	12-19-2022	12-18-2023
Communication test set	R&S	CMW500	120765	12-23-2022	12-22-2023
DC Power	Keysight	E3642A	MY56376035	12-19-2022	12-18-2023
RF control unit	JS Tonscend	JS0806-1	158060004	12-23-2022	12-22-2023
DC power Box	JS Tonscend	JS0806-4	158060007	---	---
high-low temperature test chamber	Dong Guang Qin Zhuo	LK-80GA	QZ20150611 879	12-19-2022	12-18-2023
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	06-01-2023	05-31-2024
Automatic test software	JS Tonscend	JS1120	2.6.9.0518	---	---
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002	---	---	---
High-pass filter	MICRO- TRONICS	SPA-F-63029-4	---	---	---
band rejection filter	Sinoscite	FL5CX01CA09C L12-0395-001	---	---	---
band rejection filter	Sinoscite	FL5CX01CA08C L12-0393-001	---	---	---
band rejection filter	Sinoscite	FL5CX02CA04C L12-0396-002	---	---	---
band rejection filter	Sinoscite	FL5CX02CA03C L12-0394-001	---	---	---

3M Semi-anechoic Chamber (2)- Radiated disturbance Test					
Equipment	Manufacturer	Model	Serial No.	Cal. Date	Due Date
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05/22/2022	05/21/2025
Receiver	R&S	ESCI7	100938-003	09/28/2022 09/22/2023	09/27/2023 09/21/2024
Spectrum Analyzer	R&S	FSV40	101200	07/25/2023	07/24/2024
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	9163-618	05/22/2022	05/21/2025
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04/15/2021	04/14/2024
Microwave Preamplifier	Tonscend	EMC051845SE	980380	12/23/2022	12/23/2023
Horn Antenna	A.H.SYSTEMS	SAS-574	374	05/29/2021	05/28/2024
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04/15/2021	04/14/2024
Preamplifier	Agilent	11909A	12-1	03/28/2023	03/27/2024
Preamplifier	CD	PAP-1840-60	6041.6042	07/03/2023	07/02/2024
Test software	Fara	EZ-EMC	EMEC-3A1-Pre	---	---
Cable line	Fulai(7M)	SF106	5219/6A	---	---
Cable line	Fulai(6M)	SF106	5220/6A	---	---
Cable line	Fulai(3M)	SF106	5216/6A	---	---
Cable line	Fulai(3M)	SF106	5217/6A	---	---

3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
RSE Automatic test software	JS Tonscend	JS36-RSE	10166	---	---
Receiver	Keysight	N9038A	MY57290136	02-27-2023	02-26-2024
Spectrum Analyzer	Keysight	N9020B	MY57111112	02-21-2023	02-20-2024
Spectrum Analyzer	Keysight	N9030B	MY57140871	02-21-2023	02-20-2024
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-28-2021	04-27-2024
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-15-2021	04-14-2024
Horn Antenna	ETS-LINDGREN	3117	57407	07-04-2021	07-03-2024
Preamplifier	EMCI	EMC184055SE	980597	04-13-2023	04-12-2024
Preamplifier	EMCI	EMC001330	980563	03-28-2023	03-27-2024
Preamplifier	JS Tonscend	TAP-011858	AP21B806112	07-25-2023	07-24-2024
Communication test set	R&S	CMW500	102898	12-23-2022	12-22-2023
Temperature/Humidity Indicator	biaozhi	GM1360	EE1186631	04-11-2023	04-10-2024
Fully Anechoic Chamber	TDK	FAC-3	---	01-09-2021	01-08-2024
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	---	---
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	---	---
Cable line	Times	EMC104-NMNM-1000	SN160710	---	---
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	---	---
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	---	---
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	---	---
Cable line	Times	HF160-KMKM-3.00M	393493-0001	---	---

8 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title
1	PART 22	PART 22 – PUBLIC MOBILE SERVICES Subpart H – Cellular Radiotelephone Service
2	PART 24	PART 24 – PERSONAL COMMUNICATIONS SERVICES Subpart E – Broadband PCS
3	PART 27	PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES Subpart C – Technical Standards
4	PART 2	Frequency allocations and radio treaty matters; general rules and regulations
5	TIA-603-E-2016	Land Mobile FM or PM -Communications Equipment -Measurement and Performance Standards
6	KDB971168 D01	KDB 971168 D01 Power Meas License Digital Systems v02r02
7	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

Test Results List:

Test Method:		Test Descriptions & Test Conditions	Verdict	Note
ANSI C63.26-2015	Clause 5.2	RF output power		Note 1
		NT/NV	PASS	
ANSI C63.26-2015	Clause 5.4	99% & 26dB Occupied Bandwidth		Note 1
		NT/NV	PASS	
ANSI C63.26-2015	Clause 5.2	Peak to average power ratio		Note 1
		NT/NV	PASS	
ANSI C63.26-2015	Clause 5.5	Spurious emissions		Appendix A
		NT/NV	PASS	
ANSI C63.26-2015	Clause 5.7	Spurious emissions at antenna terminals		Note 1
		NT/NV	PASS	
ANSI C63.26-2015	Clause 5.6	Frequency stability		Note 1
		NT/NV	PASS	
		LT/LV	PASS	
		LT/HV	PASS	
		HT/LV	PASS	
		HT/HV	PASS	

Note 1:

The test data please refer to
Appendix: WCDMA of EED32P81369102,
Appendix: LTE Band2 of EED32P81369102, Appendix: LTE Band4 of EED32P81369102,
Appendix: LTE Band5 of EED32P81369102, Appendix: LTE Band7 of EED32P81369102,
Appendix: LTE Band12 of EED32P81369102, Appendix: LTE Band13 of EED32P81369102,
Appendix: LTE Band17 of EED32P81369102, Appendix: LTE Band25 of EED32P81369102,
Appendix: LTE Band26 of EED32P81369102.

Appendix A:Field strength of spurious radiation

Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-30MHz	Peak	10kHz	30kHz	Peak
	30MHz-1GHz	Peak	120kHz	300kHz	Peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
Measurement Procedure:	1. Scan up to 10th harmonic, find the maximum radiation frequency to measure. 2. The technique used to find the Spurious Emissions of the transmitter was the antenna substitution method. Substitution method was performed to determine the actual ERP/EIRP emission levels of the EUT. Test procedure as below: 1) The EUT was powered ON and placed on a 0.8m high table at a 3 meter fully Anechoic Chamber. The antenna of the transmitter was extended to its maximum length. modulation mode and the measuring receiver shall be tuned to the frequency of the transmitter under test. 2) The EUT was set 3 meters(above 18GHz the distance is 1 meter) away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3) The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made. 4) Steps 1) to 3) were performed with the EUT and the receive antenna in both vertical and horizontal polarization. 5) The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter. 6) A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 3) is obtained for this set of conditions. 7) The output power into the substitution antenna was then measured. 8) Steps 6) and 7) were repeated with both antennas polarized. 9) Calculate power in dBm by the following formula: $\text{ERP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBd)}$ $\text{EIRP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBi)}$ $\text{EIRP} = \text{ERP} + 2.15\text{dB}$ where: Pg is the generator output power into the substitution antenna. 10) Test the EUT in the lowest channel, the middle channel the Highest channel 11) The radiation measurements are performed in X, Y, Z axis positioning for EUT operation mode, And found the X axis positioning which it is worse case. 12) Repeat above procedures until all frequencies measured was complete.				
Limit:	Attenuated at least 43+10log(P)				

Measurement Data:

Remark: Only the worst case data was recorded in the report.

Mode	WCDMA	Remark	
Band	II	Channel	9537

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	80.062	150	3	-68.17	-13.00	55.17	PASS	Horizontal
2	120.034	150	3	-60.25	-13.00	47.25	PASS	Horizontal
3	453.1986	150	120	-70.13	-13.00	57.13	PASS	Horizontal
4	1270.027	150	285	-48.73	-13.00	35.73	PASS	Horizontal
5	5004.1002	150	130	-55.09	-13.00	42.09	PASS	Horizontal
6	14393.8197	150	252	-46.23	-13.00	33.23	PASS	Horizontal
7	120.034	150	3	-59.27	-13.00	46.27	PASS	Vertical
8	208.9038	150	20	-66.74	-13.00	53.74	PASS	Vertical
9	738.4357	150	3	-57.58	-13.00	44.58	PASS	Vertical
10	1281.2281	150	304	-48.72	-13.00	35.72	PASS	Vertical
11	5022.1011	150	150	-54.54	-13.00	41.54	PASS	Vertical
12	14399.07	150	303	-46.67	-13.00	33.67	PASS	Vertical

Mode	WCDMA	Remark	
Band	IV	Channel	1312

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	120.034	150	3	-59.44	-13.00	46.44	PASS	Horizontal
2	160.006	150	3	-68.48	-13.00	55.48	PASS	Horizontal
3	733.1966	150	3	-61.06	-13.00	48.06	PASS	Horizontal
4	1253.0253	150	154	-49.52	-13.00	36.52	PASS	Horizontal
5	5008.6004	150	339	-55.29	-13.00	42.29	PASS	Horizontal
6	14357.8179	150	290	-46.46	-13.00	33.46	PASS	Horizontal
7	35.6271	150	316	-61.16	-13.00	48.16	PASS	Vertical
8	120.034	150	3	-59.30	-13.00	46.30	PASS	Vertical
9	732.6145	150	3	-48.71	-13.00	35.71	PASS	Vertical
10	1292.6293	150	344	-48.80	-13.00	35.80	PASS	Vertical
11	7427.4714	150	178	-51.65	-13.00	38.65	PASS	Vertical
12	15934.3967	150	145	-45.49	-13.00	32.49	PASS	Vertical

Mode	WCDMA	Remark	
Band	V	Channel	4132

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	80.062	150	3	-65.70	-13.00	52.70	PASS	Horizontal
2	120.034	150	3	-57.62	-13.00	44.62	PASS	Horizontal
3	455.139	150	106	-70.58	-13.00	57.58	PASS	Horizontal
4	1295.4295	150	3	-57.91	-13.00	44.91	PASS	Horizontal
5	4923.8462	150	28	-52.09	-13.00	39.09	PASS	Horizontal
6	14377.3189	150	296	-45.24	-13.00	32.24	PASS	Horizontal
7	37.1794	150	348	-61.30	-13.00	48.30	PASS	Vertical
8	120.034	150	3	-60.38	-13.00	47.38	PASS	Vertical
9	447.1834	150	324	-70.71	-13.00	57.71	PASS	Vertical
10	1273.0273	150	261	-58.20	-13.00	45.20	PASS	Vertical
11	5039.352	150	146	-55.88	-13.00	42.88	PASS	Vertical
12	16529.9265	150	10	-46.54	-13.00	33.54	PASS	Vertical

Mode	LTE	Remark	
Band	Band=2 BW=20MHz	Channel	18900

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	80.062	150	3	-70.77	-13.00	57.77	PASS	Horizontal
2	120.034	150	3	-58.28	-13.00	45.28	PASS	Horizontal
3	160.006	150	3	-71.47	-13.00	58.47	PASS	Horizontal
4	1283.0283	150	241	-59.26	-13.00	46.26	PASS	Horizontal
5	5032.1355	150	18	-65.30	-13.00	52.30	PASS	Horizontal
6	14395.7597	150	270	-56.12	-13.00	43.12	PASS	Horizontal
7	120.034	150	3	-60.66	-13.00	47.66	PASS	Vertical
8	160.006	150	3	-68.33	-13.00	55.33	PASS	Vertical
9	208.9038	150	116	-68.83	-13.00	55.83	PASS	Vertical
10	1284.8285	150	11	-59.43	-13.00	46.43	PASS	Vertical
11	3760.0507	150	340	-60.39	-13.00	47.39	PASS	Vertical
12	7520.3014	150	288	-54.17	-13.00	41.17	PASS	Vertical

Mode	LTE	Remark	
Band	Band=4 BW=20MHz	Channel	20175

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	79.96	150	3	-70.47	-13.00	57.47	PASS	Horizontal
2	120.025	150	3	-59.15	-13.00	46.15	PASS	Horizontal
3	159.993	150	3	-69.64	-13.00	56.64	PASS	Horizontal
4	1282.8283	150	112	-60.06	-13.00	47.06	PASS	Horizontal
5	3466.0311	150	322	-46.29	-13.00	33.29	PASS	Horizontal
6	6930.262	150	322	-47.09	-13.00	34.09	PASS	Horizontal
7	36.8877	150	211	-65.45	-13.00	52.45	PASS	Vertical
8	120.025	150	3	-61.21	-13.00	48.21	PASS	Vertical
9	208.8859	150	3	-67.10	-13.00	54.10	PASS	Vertical
10	1280.428	150	130	-60.04	-13.00	47.04	PASS	Vertical
11	3465.031	150	90	-43.61	-13.00	30.61	PASS	Vertical
12	6930.262	150	8	-49.93	-13.00	36.93	PASS	Vertical

Mode	LTE	Remark	
Band	Band=5 BW=20MHz	Channel	20525

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	79.96	150	3	-67.99	-13.00	54.99	PASS	Horizontal
2	120.025	150	3	-58.67	-13.00	45.67	PASS	Horizontal
3	208.8859	150	313	-72.97	-13.00	59.97	PASS	Horizontal
4	1668.7112	150	180	-61.77	-13.00	48.77	PASS	Horizontal
5	3346.1564	150	235	-54.32	-13.00	41.32	PASS	Horizontal
6	4170.1447	150	30	-51.33	-13.00	38.33	PASS	Horizontal
7	120.025	150	357	-64.04	-13.00	51.04	PASS	Vertical
8	159.993	150	357	-65.54	-13.00	52.54	PASS	Vertical
9	208.8859	150	119	-68.35	-13.00	55.35	PASS	Vertical
10	3346.1564	150	94	-52.12	-13.00	39.12	PASS	Vertical
11	4180.3454	150	67	-51.18	-13.00	38.18	PASS	Vertical
12	16582.1055	150	294	-51.38	-13.00	38.38	PASS	Vertical

Mode	LTE	Remark	
Band	Band=7 BW=20MHz	Channel	21100

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	79.96	150	3	-69.04	-13.00	56.04	PASS	Horizontal
2	119.928	150	3	-57.19	-13.00	44.19	PASS	Horizontal
3	159.993	150	3	-69.27	-13.00	56.27	PASS	Horizontal
4	1311.8312	150	329	-50.39	-13.00	37.39	PASS	Horizontal
5	7603.3069	150	237	-50.20	-13.00	37.20	PASS	Horizontal
6	10139.476	150	237	-45.56	-13.00	32.56	PASS	Horizontal
7	119.928	150	3	-60.08	-13.00	47.08	PASS	Vertical
8	159.993	150	3	-66.44	-13.00	53.44	PASS	Vertical
9	208.8859	150	3	-66.94	-13.00	53.94	PASS	Vertical
10	1278.6279	150	212	-49.24	-13.00	36.24	PASS	Vertical
11	7605.307	150	9	-49.55	-13.00	36.55	PASS	Vertical
12	10139.476	150	25	-49.16	-13.00	36.16	PASS	Vertical

Mode	LTE	Remark	
Band	Band=12 BW=20MHz	Channel	23095

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	94.809	150	320	-67.62	-13.00	54.62	PASS	Horizontal
2	120.034	150	3	-59.24	-13.00	46.24	PASS	Horizontal
3	179.992	150	302	-66.80	-13.00	53.80	PASS	Horizontal
4	1412.8413	150	260	-53.69	-13.00	40.69	PASS	Horizontal
5	2435.7436	150	320	-36.14	-13.00	23.14	PASS	Horizontal
6	3526.5263	150	214	-52.94	-13.00	39.94	PASS	Horizontal
7	37.5675	150	3	-61.03	-13.00	48.03	PASS	Vertical
8	120.034	150	3	-58.27	-13.00	45.27	PASS	Vertical
9	160.006	150	3	-64.38	-13.00	51.38	PASS	Vertical
10	1419.4419	150	188	-54.71	-13.00	41.71	PASS	Vertical
11	3525.7763	150	39	-52.38	-13.00	39.38	PASS	Vertical
12	16492.4246	150	338	-45.59	-13.00	32.59	PASS	Vertical

Mode	LTE	Remark	
Band	Band=13 BW=20MHz	Channel	23230

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	120.025	150	3	-56.86	-13.00	43.86	PASS	Horizontal
2	159.993	150	3	-71.04	-13.00	58.04	PASS	Horizontal
3	208.8859	150	316	-73.70	-13.00	60.70	PASS	Horizontal
4	1563.3042	150	226	-61.25	-13.00	48.25	PASS	Horizontal
5	5002.0668	150	237	-64.64	-13.00	51.64	PASS	Horizontal
6	16580.9721	150	146	-51.45	-13.00	38.45	PASS	Horizontal
7	36.8877	150	127	-65.27	-13.00	52.27	PASS	Vertical
8	120.025	150	357	-58.63	-13.00	45.63	PASS	Vertical
9	208.8859	150	357	-66.56	-13.00	53.56	PASS	Vertical
10	1559.904	150	6	-66.20	-13.00	53.20	PASS	Vertical
11	4873.9916	150	192	-60.05	-13.00	47.05	PASS	Vertical
12	16579.8387	150	82	-50.90	-13.00	37.90	PASS	Vertical

Mode	LTE	Remark	
Band	Band=17 BW=20MHz	Channel	23790

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	95.003	150	89	-66.82	-13.00	53.82	PASS	Horizontal
2	120.034	150	3	-57.17	-13.00	44.17	PASS	Horizontal
3	182.1264	150	311	-67.00	-13.00	54.00	PASS	Horizontal
4	1426.0426	150	276	-56.06	-13.00	43.06	PASS	Horizontal
5	2438.5439	150	293	-35.62	-13.00	22.62	PASS	Horizontal
6	3546.0273	150	40	-52.59	-13.00	39.59	PASS	Horizontal
7	37.1794	150	148	-61.48	-13.00	48.48	PASS	Vertical
8	120.034	150	3	-61.42	-13.00	48.42	PASS	Vertical
9	160.006	150	3	-63.73	-13.00	50.73	PASS	Vertical
10	1416.4416	150	190	-55.25	-13.00	42.25	PASS	Vertical
11	2438.5439	150	172	-48.17	-13.00	35.17	PASS	Vertical
12	3548.2774	150	95	-52.37	-13.00	39.37	PASS	Vertical

Mode	LTE	Remark	
Band	Band=25 BW=20MHz	Channel	26365

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	96.1672	150	294	-66.78	-13.00	53.78	PASS	Horizontal
2	120.034	150	3	-58.47	-13.00	45.47	PASS	Horizontal
3	178.8278	150	268	-65.34	-13.00	52.34	PASS	Horizontal
4	1327.2327	150	251	-48.19	-13.00	35.19	PASS	Horizontal
5	3765.0383	150	271	-47.76	-13.00	34.76	PASS	Horizontal
6	10300.115	150	39	-49.09	-13.00	36.09	PASS	Horizontal
7	16649.9325	150	325	-45.62	-13.00	32.62	PASS	Horizontal
8	40.09	150	253	-61.86	-13.00	48.86	PASS	Vertical
9	120.034	150	220	-63.50	-13.00	50.50	PASS	Vertical
10	172.2304	150	35	-64.70	-13.00	51.70	PASS	Vertical
11	1283.6284	150	313	-47.95	-13.00	34.95	PASS	Vertical
12	5044.6022	150	61	-54.57	-13.00	41.57	PASS	Vertical
13	14400.57	150	336	-46.48	-13.00	33.48	PASS	Vertical

Mode	LTE	Remark	
Band	Band=26 BW=20MHz	Channel	26865

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	80.006	150	3	-68.51	-13.00	55.51	PASS	Horizontal
2	120.0205	150	3	-54.73	-13.00	41.73	PASS	Horizontal
3	160.035	150	3	-69.42	-13.00	56.42	PASS	Horizontal
4	1663.0332	150	170	-58.56	-13.00	45.56	PASS	Horizontal
5	2436.5718	150	196	-42.47	-13.00	29.47	PASS	Horizontal
6	4155.3578	150	108	-46.55	-13.00	33.55	PASS	Horizontal
7	37.0814	150	13	-62.22	-13.00	49.22	PASS	Vertical
8	120.0205	150	3	-60.32	-13.00	47.32	PASS	Vertical
9	200.001	150	3	-63.18	-13.00	50.18	PASS	Vertical
10	2435.7218	150	196	-43.16	-13.00	30.16	PASS	Vertical
11	4159.608	150	86	-52.87	-13.00	39.87	PASS	Vertical
12	16582.9791	150	269	-46.03	-13.00	33.03	PASS	Vertical

Mode	LTE	Remark	
Band	Band=41 BW=20MHz	Channel	40620

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	80.062	150	357	-72.85	-13.00	59.85	PASS	Horizontal
2	120.034	150	357	-61.95	-13.00	48.95	PASS	Horizontal
3	208.9038	150	309	-75.43	-13.00	62.43	PASS	Horizontal
4	1266.8267	150	291	-61.21	-13.00	48.21	PASS	Horizontal
5	5004.1336	150	124	-64.80	-13.00	51.80	PASS	Horizontal
6	14417.7612	150	30	-56.27	-13.00	43.27	PASS	Horizontal
7	120.034	150	357	-64.12	-13.00	51.12	PASS	Vertical
8	160.006	150	357	-67.38	-13.00	54.38	PASS	Vertical
9	733.0026	150	357	-64.48	-13.00	51.48	PASS	Vertical
10	1279.828	150	315	-61.03	-13.00	48.03	PASS	Vertical
11	7774.3183	150	214	-55.45	-13.00	42.45	PASS	Vertical
12	10371.4914	150	332	-48.13	-13.00	35.13	PASS	Vertical

Mode	LTE	Remark	
Band	Band=66 BW=20MHz	Channel	132322

Suspected List								
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	80.062	150	357	-68.23	-13.00	55.23	PASS	Horizontal
2	120.034	150	357	-58.13	-13.00	45.13	PASS	Horizontal
3	208.9038	150	141	-72.19	-13.00	59.19	PASS	Horizontal
4	1303.6304	150	357	-48.87	-13.00	35.87	PASS	Horizontal
5	5006.3503	150	186	-54.62	-13.00	41.62	PASS	Horizontal
6	14356.3178	150	275	-44.86	-13.00	31.86	PASS	Horizontal
7	35.8212	150	211	-61.17	-13.00	48.17	PASS	Vertical
8	120.034	150	20	-61.30	-13.00	48.30	PASS	Vertical
9	160.006	150	357	-63.84	-13.00	50.84	PASS	Vertical
10	1251.8252	150	220	-49.96	-13.00	36.96	PASS	Vertical
11	4988.3494	150	273	-55.21	-13.00	42.21	PASS	Vertical
12	14395.3198	150	23	-45.76	-13.00	32.76	PASS	Vertical