



Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

TEST REPORT C2PC

FCC Part 27

Report Reference No.....: CTA26062900803

FCC ID.....: 2BVLN-QS

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Date of issue.....: Jul. 27, 2026

Testing Laboratory Name **Shenzhen CTA Testing Technology Co., Ltd.**

Address Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

Applicant's name **Wuhan Qinggou Intelligent Technology Co., Ltd.**

Address No. 64, Jiukang Avenue, Caidian Economic Development Zone, Caidian District Wuhan City, Hubei Province, 430120 China

Test specification

FCC CFR Title 47 Part 2, Part 27

Standard **ANSI/TIA-603-E-2016**
KDB 971168 D01

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Test item description.....: Qingo AI Vending

Trade Mark N/A

Manufacturer Wuhan Qinggou Intelligent Technology Co., Ltd.

Model/Type reference.....: QS-669CRSW(G)-US

Listed Models QS-409CRSW(G)-US, QS-509CRSWD-US, QS-509CREWD-US

Ratings AC 120V, 60Hz

Modulation QPSK, 16QAM

Frequency.....: E-UTRA Band 4

Result.....: **PASS**

TEST REPORT

Equipment under Test : Qingo AI Vending

Model /Type : QS-669CRSW(G)-US

Listed Models : QS-409CRSW(G)-US, QS-509CRSWD-US, QS-509CREWD-US

Model difference : The PCB board, circuit, structure and internal of these models are the same, only model number and colour are different for these models. So the tests were performed on model QS-669CRSW(G)-US and the test results for the main test model can cover the listed models.

Applicant : **Wuhan Qinggou Intelligent Technology Co., Ltd.**

Address : No. 64, Jiukang Avenue, Caidian Economic Development Zone, Caidian District Wuhan City, Hubei Province, 430120 China

Manufacturer : **Wuhan Qinggou Intelligent Technology Co., Ltd.**

Address : No. 64, Jiukang Avenue, Caidian Economic Development Zone, Caidian District Wuhan City, Hubei Province, 430120 China

Test result	Pass *
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* In the configuration tested, the EUT complied with the standards specified page 4.

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1 SUMMARY

1.1 TEST STANDARDS

The tests were performed according to following standards:

[FCC Part 2](#): FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

[FCC Part 27](#): MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

[ANSI/TIA-603-E-2016](#): Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

[ANSI C63.26-2015](#): IEEE/ANSI Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

[FCC KDB971168D01](#) Power Meas License Digital Systems

1.2 Test Description

Test Item	Section in CFR 47	Result
RF Output Power	Part 2.1046 Part 27.50(d)(4)	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 27.53(h)	Pass

1.3 Address of the test laboratory

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.4:2014 and CISPR 16-1-4:2010 SVSWR requirement for radiated emission above 1GHz.

1.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 517856 Designation Number: CN1318

Shenzhen CTA Testing Technology Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

Industry Canada Registration Number. Is: 27890 CAB identifier: CN0127

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

A2LA-Lab Cert. No.: 6534.01

Shenzhen CTA Testing Technology Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

1.5 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the Shenzhen CTA Testing Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen CTA Testing Technology Co., Ltd. is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	9KHz~30MHz	3.02 dB	(1)
Radiated Emission	30~1000MHz	4.06 dB	(1)
Radiated Emission	1~18GHz	5.14 dB	(1)
Radiated Emission	18-40GHz	5.38 dB	(1)
Conducted Disturbance	0.15~30MHz	2.14 dB	(1)
Output Peak power	30MHz~18GHz	0.55 dB	(1)
Power spectral density	/	0.57 dB	(1)
Spectrum bandwidth	/	1.1%	(1)
Radiated spurious emission (30MHz-1GHz)	30~1000MHz	4.10 dB	(1)
Radiated spurious emission (1GHz-18GHz)	1~18GHz	4.32 dB	(1)
Radiated spurious emission (18GHz-40GHz)	18-40GHz	5.54 dB	(1)
Time	/	±2%	(1)

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.

2 GENERAL INFORMATION

2.1 Environmental conditions

Date of receipt of test sample	:	Jun. 29, 2026
Testing commenced on	:	Jun. 29, 2026
Testing concluded on	:	Jul. 27, 2026

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	25°C
Relative Humidity:	55 %
Air Pressure:	101 kPa

2.2 General Description of EUT

Product Name:	Qingo AI Vending
Model/Type reference:	QS-669CRSW(G)-US
Power supply:	AC 120V, 60Hz
Hardware version:	V1.0
Software version:	V1.0
Testing sample ID :	CTA260629008-1# (Engineer sample) CTA260629008-2# (Normal sample)
LTE	
Operation Band:	E-UTRA Band 4
Support Bandwidth:	Band 4: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
TX/RX Frequency Range:	E-UTRA Band 4(TX: 1710 MHz - 1755MHz, RX: 2110-2155MHz)
Modulation Type:	QPSK, 16QAM
Release Version:	Release 9
Category:	Cat 4
Antenna Type:	External Antenna
Antenna Gain:	1.6 dBi(Max)

Note: For more details, refer to the user's manual of the EUT.

2.3 Description of Test Modes and Test Frequency

The EUT has been tested under typical operating condition. The CMW500 used to control the EUT staying in continuous transmitting and receiving mode for testing. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

2.4 Equipments Used during the Test

Item.	Test Equipment	Manufacturer	Model No.	Equipment No.	Calibration Date	Calibration Due Date
RF Radiation Test Equipment						
☒ 1	EMI Test Receiver	R&S	ESCI	CTA-306	2025/07/30	2026/07/29
☒ 2	Spectrum analyzer	R&S	FSV40-N	CTA-344	2026/05/16	2027/05/15
☒ 3	Ultra-Broadband Antenna	Schwarzbeck	VULB9163	CTA-310	2023/10/17	2026/10/16
☒ 4	Horn Antenna	Schwarzbeck	BBHA 9120D	CTA-309	2023/10/13	2026/10/12
☒ 5	Loop Antenna	Zhinan	ZN30900C	CTA-311	2023/10/17	2026/10/16
☒ 6	Horn Antenna	Schwarzbeck	BBHA 9170	CTA-346	2025/05/18	2028/05/17
☒ 7	Amplifier	Schwarzbeck	BBV9745	CTA-312	2025/07/30	2026/07/29
☒ 8	Amplifier	Tonscend	TAP-011840	CTA-313	2025/07/30	2026/07/29
☒ 9	Amplifier	SKET	LNPA 1840G-50	CTA-345	2026/05/16	2027/05/15
☒ 10	6dB attenuator	Shanghaihuaxiang	GZL-TS5-6-6	CTA-347	2026/05/16	2027/05/15
☒ 11	RF cable	SKET	RF Cable (9kHz-1GHz)	CTA-360	2025/09/25	2026/09/24
☒ 12	RF cable	SKET	RF Cable (1GHz-18GHz)	CTA-361	2025/09/25	2026/09/24
☒ 13	Coaxialcable (1GHz-40GHz)	SKET	RE-04-D	CTA-348	2026/05/16	2027/05/15
☒ 14	Coaxialcable (1GHz-40GHz)	SKET	RE-04-M	CTA-349	2026/05/16	2027/05/15
☒ 15	Coaxialcable (1GHz-40GHz)	SKET	RE-04-L	CTA-350	2026/05/16	2027/05/15
☒ 16	Temperature and humidity meter	Chigo	ZG-7020	CTA-328	2025/07/31	2026/07/30
☐ 17	2.4GFilter	HX Microwave	HXLBQ-DZA61	CTA-365	2025/07/31	2026/07/30
☐ 18	5GFilter	CONCEPT	CNF05150M058 50Q16A	CTA-366	2025/07/31	2026/07/30
☒ 19	High-Pass Filter	XingBo	XBLBQ-GTA18	CTA-402	2025/07/30	2026/07/29
☒ 20	High-Pass Filter	XingBo	XBLBQ-GTA27	CTA-403	2025/07/30	2026/07/29
☒ 21	High-Pass Filter	XingBo	XBLBQ-GTA10	CTA-364	2025/07/30	2026/07/29
☒ 22	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW500	CTA-302	2025/07/30	2026/07/29
☒ 23	EMI Test Software	Tonscend	TS@JS32-RE	5.0.0.2	N/A	N/A
RF Conducted Test Equipment						
☒ 1	Spectrum Analyzer	Agilent	N9020A	CTA-342	2025/07/30	2026/07/29
☐ 2	Spectrum analyzer	R&S	FSV40-N	CTA-344	2026/05/16	2027/05/15
☒ 3	RF Coaxial Cable	SKET	RF Cable (9kHz-40GHz)	CTA-368	2025/07/30	2026/07/29
☒ 4	Temperature and humidity meter	ZG-7020	Chigo	CTA-329	2025/07/31	2026/07/30
☒ 5	Programmable Constant Temperature And Humidity Test Chamber	DONGGUAN JINGYU	HT-H-408	CTA-053	2025/07/30	2026/07/29
☐ 6	Vector Signal generator	Agilent	N5182A	CTA-305	2025/07/30	2026/07/29
☐ 7	Analog Signal Generator	R&S	E4421B	CTA-304	2025/07/30	2026/07/29

☒ 8	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW500	CTA-302	2025/07/30	2026/07/29
☒ 9	Automatic control unit	Tonscend	JS0806-2	CTA-351	2025/07/30	2026/07/29
☒ 10	RF Test Software	Tonscend	TS@JS1120-3	3.1.65	N/A	N/A
☒ 11	RF Test Software	Tonscend	TS@JS1120	3.1.46	N/A	N/A
☒ 12	RF Connection Cable	N/A	N/A	1#	Each time	N/A

2.5 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for filing to comply with of the FCC Part 27 Rules.

2.6 Modifications

No modifications were implemented to meet testing criteria.

3 TEST CONDITIONS AND RESULTS

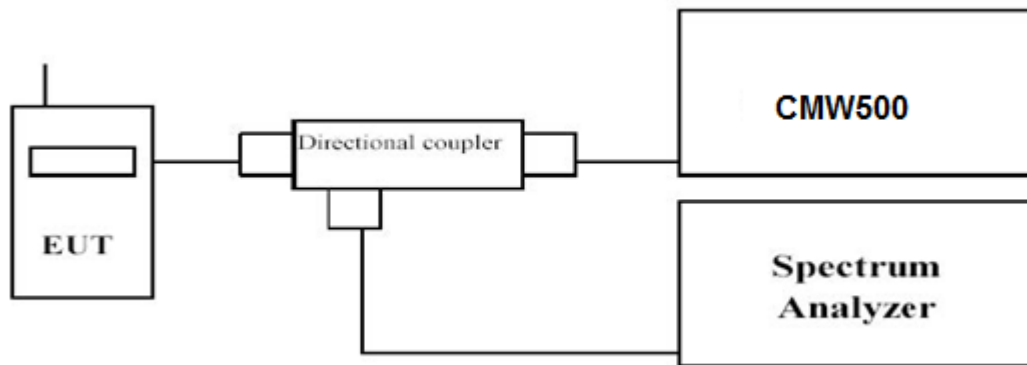
3.1 Output Power

LIMIT

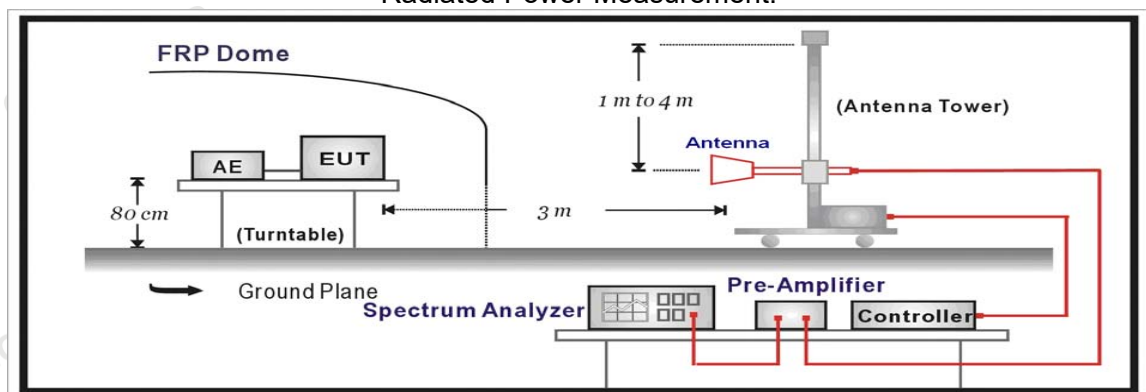
According to §27.50 (d) (4): Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP.

TEST CONFIGURATION

Conducted Power Measurement



Radiated Power Measurement:



TEST PROCEDURE

The EUT was setup according to ANSI/TIA-603-E-2016

Conducted Power Measurement:

- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMW500 by a Directional Coupler.
- EUT Communicate with CMW500 then selects a channel for testing.
- Add a correction factor to the display of spectrum, and then test.

Radiated Power Measurement:

- The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
- The output of the test antenna shall be connected to the measuring receiver.
- The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.

- f) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- g) The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- h) The maximum signal level detected by the measuring receiver shall be noted.
- i) The transmitter shall be replaced by a substitution antenna.
- j) The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- k) The substitution antenna shall be connected to a calibrated signal generator.
- l) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- m) The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- n) The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- o) The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- p) The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- q) Test site anechoic chamber refer to ANSI C63.4.

TEST RESULTS**Radiated Measurement:**

Remark:

1. We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 4; recorded worst case for each Channel Bandwidth of LTE FDD Band 4.
2. $EIRP = P_{Mea}(dBm) - P_{cl}(dB) + P_{Ag}(dB) + G_a(dBi)$

LTE FDD Band 4 Channel Bandwidth 1.4MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1710.7	-20.13	2.75	8.98	35.7	21.80	30.00	-8.20	V
1732.5	-20.08	2.81	9.15	35.7	21.96	30.00	-8.04	V
1754.3	-20.75	2.85	9.47	35.7	21.57	30.00	-8.43	V

LTE FDD Band 4 Channel Bandwidth 3MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1711.5	-20.96	2.75	8.98	35.7	20.97	30.00	-9.03	V
1732.5	-20.35	2.81	9.15	35.7	21.69	30.00	-8.31	V
1753.5	-20.20	2.85	9.47	35.7	22.12	30.00	-7.88	V

LTE FDD Band 4 Channel Bandwidth 5MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1712.5	-20.41	2.75	8.98	35.7	21.52	30.00	-8.48	V
1732.5	-20.60	2.81	9.15	35.7	21.44	30.00	-8.56	V
1752.5	-20.53	2.85	9.47	35.7	21.79	30.00	-8.21	V

LTE FDD Band 4 Channel Bandwidth 10MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1715	-20.63	2.75	8.98	35.7	21.30	30.00	-8.70	V
1732.5	-20.69	2.81	9.15	35.7	21.35	30.00	-8.65	V
1750	-20.09	2.85	9.47	35.7	22.23	30.00	-7.77	V

LTE FDD Band 4 Channel Bandwidth 15MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1717.5	-20.50	2.75	8.98	35.7	21.43	30.00	-8.57	V
1732.5	-20.24	2.81	9.15	35.7	21.80	30.00	-8.20	V
1747.5	-20.36	2.85	9.47	35.7	21.96	30.00	-8.04	V

LTE FDD Band 4 Channel Bandwidth 20MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1720	-20.20	2.75	8.98	35.7	21.73	30.00	-8.27	V
1732.5	-20.06	2.81	9.15	35.7	21.98	30.00	-8.02	V
1745	-20.25	2.85	9.47	35.7	22.07	30.00	-7.93	V

LTE FDD Band 4 Channel Bandwidth 1.4MHz 16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	G _a Antenna Gain(dB)	P _{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1710.7	-21.30	2.75	8.98	35.7	20.63	30.00	-9.37	V
1732.5	-21.73	2.81	9.15	35.7	20.31	30.00	-9.69	V
1754.3	-21.85	2.85	9.47	35.7	20.47	30.00	-9.53	V

LTE FDD Band 4 Channel Bandwidth 3MHz 16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	G _a Antenna Gain(dB)	P _{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1711.5	-21.16	2.75	8.98	35.7	20.77	30.00	-9.23	V
1732.5	-21.07	2.81	9.15	35.7	20.97	30.00	-9.03	V
1753.5	-21.79	2.85	9.47	35.7	20.53	30.00	-9.47	V

LTE FDD Band 4 Channel Bandwidth 5MHz 16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	G _a Antenna Gain(dB)	P _{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1712.5	-21.42	2.75	8.98	35.7	20.51	30.00	-9.49	V
1732.5	-21.26	2.81	9.15	35.7	20.78	30.00	-9.22	V
1752.5	-21.64	2.85	9.47	35.7	20.68	30.00	-9.32	V

LTE FDD Band 4 Channel Bandwidth 10MHz 16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	G _a Antenna Gain(dB)	P _{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1715	-21.82	2.75	8.98	35.7	20.11	30.00	-9.89	V
1732.5	-21.77	2.81	9.15	35.7	20.27	30.00	-9.73	V
1750	-21.51	2.85	9.47	35.7	20.81	30.00	-9.19	V

LTE FDD Band 4 Channel Bandwidth 15MHz 16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	G _a Antenna Gain(dB)	P _{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1717.5	-21.91	2.75	8.98	35.7	20.02	30.00	-9.98	V
1732.5	-21.77	2.81	9.15	35.7	20.27	30.00	-9.73	V
1747.5	-21.97	2.85	9.47	35.7	20.35	30.00	-9.65	V

LTE FDD Band 4 Channel Bandwidth 20MHz 16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	G _a Antenna Gain(dB)	P _{Ag} (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1720	-21.63	2.75	8.98	35.7	20.30	30.00	-9.70	V
1732.5	-21.79	2.81	9.15	35.7	20.25	30.00	-9.75	V
1745	-21.50	2.85	9.47	35.7	20.82	30.00	-9.18	V

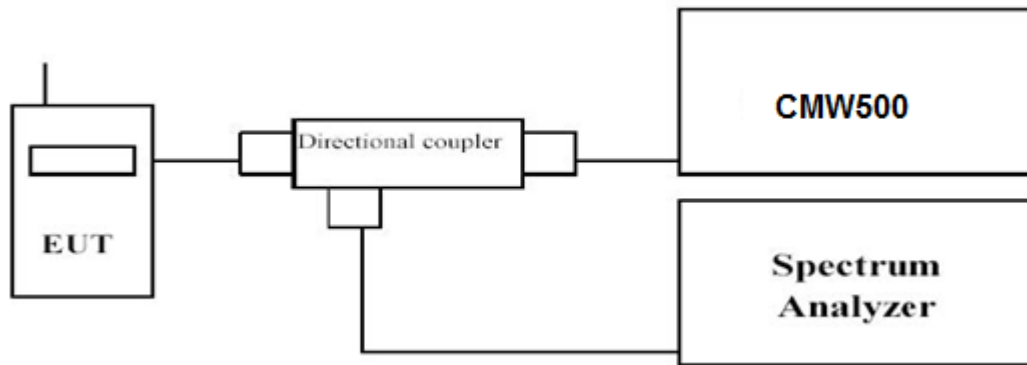
3.2 Spurious Emission

LIMIT

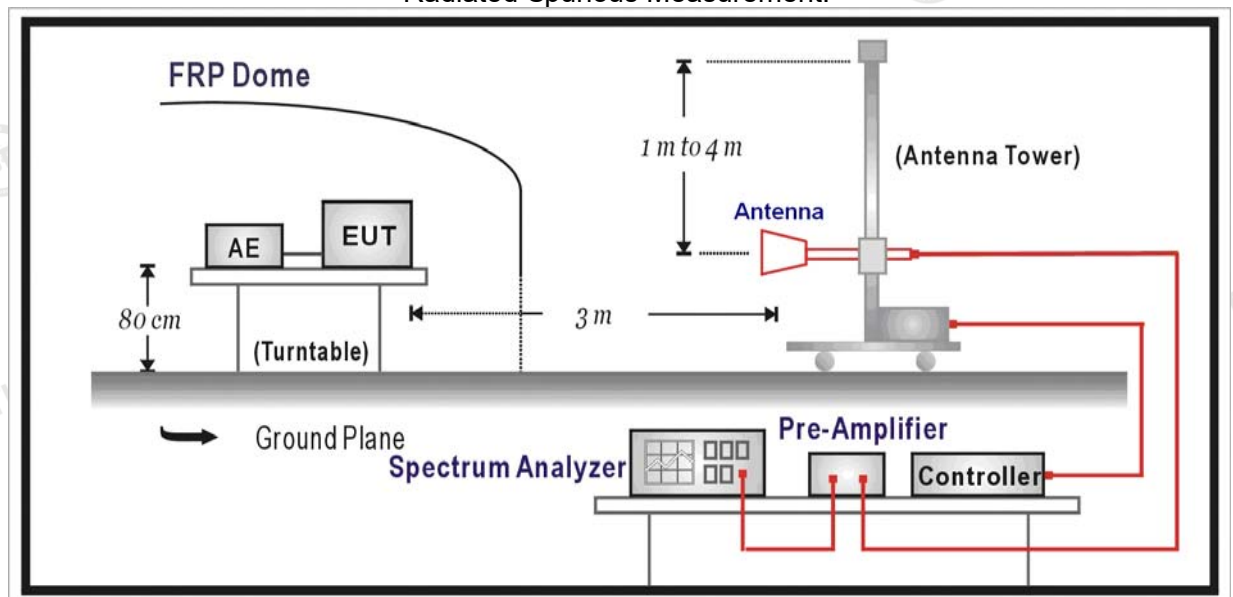
According to §27.53 (h): For operations in the 1710–1755 MHz and 2110–2155 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB.

TEST CONFIGURATION

Conducted Spurious Measurement:



Radiated Spurious Measurement:



TEST PROCEDURE

The EUT was setup according to ANSI/TIA-603-E-2016

Conducted Spurious Measurement:

- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMW500 by a Directional Couple.
- EUT Communicate with CMW500 then selects a channel for testing.
- Add a correction factor to the display of spectrum, and then test.
- The resolution bandwidth of the spectrum analyzer was set sufficient scans were taken to show the out of band Emission if any up to 10th harmonic.

Radiated Spurious Measurement:

- a. The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- b. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
- c. The output of the test antenna shall be connected to the measuring receiver.
- d. The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- e. The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- f. The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- g. The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- h. The maximum signal level detected by the measuring receiver shall be noted.
- i. The transmitter shall be replaced by a substitution antenna.
- j. The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- k. The substitution antenna shall be connected to a calibrated signal generator.
- l. If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- m. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- n. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- o. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- p. The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- q. The resolution bandwidth of the spectrum analyzer was set at 100 kHz for below 1GHz and 1MHz for above 1GHz. The frequency range was checked up to 10th harmonic.
- r. Test site anechoic chamber refer to ANSI C63.4.

TEST RESULTS

Radiated Measurement:*Remark:*

1. We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 4;

LTE FDD Band 4 Channel Bandwidth 20MHz QPSK Low Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Distance (m)	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3440.0	-41.20	4.02	3.00	12.5	-32.72	-13.00	-19.72	H
5160.0	-46.57	5.11	3.00	13.38	-38.30	-13.00	-25.30	H
3440.0	-43.36	4.02	3.00	12.5	-34.88	-13.00	-21.88	V
5160.0	-49.07	5.11	3.00	13.38	-40.80	-13.00	-27.80	V

LTE FDD Band 4 Channel Bandwidth 20MHz QPSK Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Distance (m)	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3465.0	-40.57	4.02	3.00	12.45	-32.14	-13.00	-19.14	H
5197.5	-47.98	5.11	3.00	13.38	-39.71	-13.00	-26.71	H
3465.0	-42.20	4.02	3.00	12.45	-33.77	-13.00	-20.77	V
5197.5	-48.90	5.11	3.00	13.38	-40.63	-13.00	-27.63	V

LTE FDD Band 4 Channel Bandwidth 20MHz QPSK High Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Distance (m)	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3490.0	-41.51	4.02	3.00	12.21	-33.32	-13.00	-20.32	H
5235.0	-46.82	5.11	3.00	13.26	-38.67	-13.00	-25.67	H
3490.0	-44.94	4.02	3.00	12.21	-36.75	-13.00	-23.75	V
5235.0	-48.91	5.11	3.00	13.26	-40.76	-13.00	-27.76	V

Notes:

1. All channel bandwidth were tested, the report recorded the worst data.
2. $EIRP = P_{Mea}(dBm) - P_{cl}(dB) + P_{Ag}(dB) + G_a(dBi)$
3. $ERP = EIRP - 2.15dB$ as EIRP by subtracting the gain of the dipole.
4. $Margin = EIRP - Limit$
5. We measured all modes and only recorded the worst case.

4 Test Setup Photos of the EUT



5 Photos of the EUT

Reference to the test report No. CTA26062900801

***** End of Report *****