# FCC TEST REPORT

# For

# CHOICE FORTUNE HOLDINGS LIMITED

# LED TV

# Model No.: SC-32HK700N

Prepared for Address	:	CHOICE FORTUNE HOLDINGS LIMITED Room 1315, 13/F, Tin King Estate, Tin Lok House, Tuen Mun, N.T., HongKong
Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	:	1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, Bao'an District, Shenzhen, Guangdong, China
Tel	:	(+86)755-82591330
Fax	:	(+86)755-82591332
Web	:	www.LCS-cert.com
Mail	:	webmaster@LCS-cert.com
Date of receipt of test sample	:	September 20, 2017
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	September 21 ~ 26, 2017
Date of Report	:	September 27, 2017

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## FCC TEST REPORT FCC CFR 47 PART 15 C(15.247): 2016

Report Reference No	: LCS170906025AE
Date of Issue	September 27, 2017
Testing Laboratory Name	Shenzhen LCS Compliance Testing Laboratory Ltd.
	<ul> <li>1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue,</li> <li>Bao'an District, Shenzhen, Guangdong, China</li> <li>Full application of Harmonised standards</li> </ul>
Testing Location/ Procedure	Partial application of Harmonised standards   Other standard testing method
Applicant's Name	CHOICE FORTUNE HOLDINGS LIMITED
Address	Room 1315, 13/F, Tin King Estate, Tin Lok House, Tuen Mun, N.T., HongKong
Test Specification	
Standard	FCC CFR 47 PART 15 C(15.247): 2016
Test Report Form No	LCSEMC-1.0
TRF Originator	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF	Dated 2011-03
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EUT Description	ELED TV
Trade Mark	SEIKI, SEIKI pro, SEIKI HOME
Model/ Type reference	SC-32HK700N
Ratings	AC 120V~ 50/60Hz
Result	Positive

Compiled by:

Chaz Liy

Chaz Liu / File administrators

Supervised by:

1)

Approved by:

Dick Su / Technique principal

Gavin Liang/ Manager

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# FCC -- TEST REPORT

Test Report No. :	LCS170906025AE	<u>September 27, 2017</u> Date of issue
Type / Model	: SC-32HK700N	
EUT	: LED TV	
Applicant	: CHOICE FORTUNE HO	LDINGS LIMITED
Address	: Room 1315, 13/F, Tin Ki	ng Estate, Tin Lok House, Tuen Mun, N.T.,
	HongKong	
Telephone	: /	
Fax	: /	
Manufacturer	: CHOICE FORTUNE HO	LDINGS LIMITED
Address	: Room 1315, 13/F, Tin Ki	ng Estate, Tin Lok House, Tuen Mun, N.T.,
	HongKong	
Telephone	: /	
Fax	: /	

Test Result Positive	
	Positive

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.

## **Revision History**

Revision	Issue Date	Revisions	Revised By	
000	September 27, 2017	Initial Issue	Gavin Liang	

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# **1. GENERAL INFORMATION**

1.1. Description of Device (EUT)				
EUT	: LED TV	: LED TV		
Model Number	: SC-32HK700N			
Test Model	: SC-32HK700N			
Power Supply	: AC 120V~ 50/60Hz	: AC 120V~ 50/60Hz		
Frequency Range	: IEEE 802.11b/g: 2412 ~ 2462 MHz IEEE 802.11n HT20 : 2412 ~ 2462 MHz IEEE 802.11n HT40: 2422 ~ 2452 MHz			
Channel Number	: IEEE 802.11b 2412 ~ 2462 MHz: 11 Channels IEEE 802.11g 2412 ~ 2462 MHz: 11 Channels IEEE 802.11n HT20 2412 ~ 2462 MHz: 11 Channels IEEE 802.11n HT40 2422 ~ 2452 MHz: 7 Channels			
Modulation Technology	: IEEE 802.11b mode: DSSS(CCK,QPSK, BPSK) IEEE 802.11g mode: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE 802.11n HT20 mode: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE 802.11n HT40 mode: OFDM (BPSK/QPSK/16QAM/64QAM)			
Data Rates	: IEEE 802.11b: 1-11Mt IEEE 802.11g: 6-54Mt IEEE 802.11n: MCS0-	ops		
Antenna Type And Gain	: Internal antenna Frequency Range 2400~2483.5 MHz Directional gain Note: 11b,g,n uses Ante 11n uses MIMO	Antenna 0 2.94 dBi 5.95dBi enna 0 / Antenna 1	Antenna 1 2.94 dBi	

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## 1.2. Host System Configuration List and Details

Manufacturer	Description	Model	Serial Number	Certificate

## 1.3. External I/O Cable

I/O Port Description	Quantity	Cable
USB Port	1	N/A

## 1.4. Description of Test Facility

CNAS Registration Number. is L4595. FCC Registration Number. is 254912. Industry Canada Registration Number. is 9642A-1. ESMD Registration Number. is ARCB0108. UL Registration Number. is 100571-492. TUV SUD Registration Number. is SCN1081. TUV RH Registration Number. is UA 50296516-001

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010 SVSWR requirement for radiated emission above 1GHz.

### 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 CISPR 16 – 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the LCS 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.

### 1.6. Measurement Uncertainty

Test Item		Frequency Range	Uncertainty	Note
		9KHz~30MHz	±3.10dB	(1)
Radiation Uncertainty		30MHz~200MHz	±2.96dB	(1)
	:	200MHz~1000MHz	±3.10dB	(1)
		1GHz~26.5GHz	±3.80dB	(1)
		26.5GHz~40GHz	±3.90dB	(1)
Conduction Uncertainty	:	150kHz~30MHz	±1.63dB	(1)
Power disturbance	:	30MHz~300MHz	±1.60dB	(1)

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

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### 1.7. Description of Test Modes

The EUT has been tested under operating condition.

This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in X position.

Worst-case mode and channel used for 150 kHz-30 MHz power line conducted emissions was the mode and channel with the highest output power that was determined to be IEEE 802.11b mode (High Channel).

Worst-case mode and channel used for 9kHz-1000 MHz radiated emissions was the mode and channel with the highest output power, that was determined to be IEEE 802.11b mode(High Channel).

Worst-Case data rates were utilized from preliminary testing of the Chipset, worst-case data rates used during the testing are as follows:

IEEE 802.11b Mode: 1 Mbps, DSSS. IEEE 802.11g Mode: 6 Mbps, OFDM. IEEE 802.11n Mode HT20: MCS0, OFDM. IEEE 802.11n Mode HT40: MCS8, OFDM.

**Channel List & Frequency** 

IEEE 802.11b/g/n HT20

Frequency Band	Channel No.	Frequency(MHz)	Channel No.	Frequency(MHz)
	1	2412	7	2442
	2	2417	8	2447
2412~2462MHz	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		

IEEE 802.11n HT40

Frequency Band	Channel No.	Frequency(MHz)	Channel No.	Frequency(MHz)
	1		7	2442
	2		8	2447
2422~2452MHz -	3	2422	9	2452
	4	2427	10	
	5	2432	11	
	6	2437		

# 2. TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

The radiated testing was performed at an antenna-to-EUT distance of 3 meters. All radiated and conducted emissions measurement was performed at Shenzhen LCS Compliance Testing Laboratory Ltd.

## 2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

## 2.2. EUT Exercise

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to FCC's request, Test Procedure KDB 558074 D01 DTS Meas Guidance v04 and KDB 662911 are required to be used for this kind of FCC 15.247 digital modulation device.

According to its specifications, the EUT must comply with the requirements of RSS-247 Issue 1 and RSS-Gen Issue 4.

According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.205, 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

## 2.3. General Test Procedures

#### 2.3.1 Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using Quasi-peak and average detector modes.

#### 2.3.2 Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 6.3 of ANSI C63.10-2013

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# **3. SYSTEM TEST CONFIGURATION**

# 3.1. Justification

The system was configured for testing in a continuous transmits condition.

# 3.2. EUT Exercise Software

The system was configured for testing in a continuous transmits condition and change test channels by software (rtl8192DU\_linux\_v4.0.3\_10373.20140124\_MP) provided by application.

# 3.3. Special Accessories

No.	Equipment	Manufacturer	Model No.	Serial No.	Length	shielded/ unshielded	Notes
1							

# 3.4. Block Diagram/Schematics

Please refer to the related document

# 3.5. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

# 3.6. Test Setup

Please refer to the test setup photo.

# **4. SUMMARY OF TEST RESULTS**

Applicable Standards: FCC Part 15.247							
FCC Rules	Description of Test	Result					
§15.247(b)	Maximum Conducted Output Power	N/A					
§15.247(e)	Power Spectral Density	N/A					
§15.247(a)(2)	6dB Bandwidth	N/A					
§15.247(a)	Occupied Bandwidth	N/A					
§15.209, §15.247(d)	Radiated and Conducted Spurious Emissions	Compliant					
§15.205	Emissions at Restricted Band	N/A					
§15.207(a)	Conducted Emissions	Compliant					
§15.203	Antenna Requirements	N/A					
§15.247(i)§2.1093	RF Exposure	N/A					
Note: Because the electrically	/ and mechanically it self has not changed, (	Only the screen has					

been changed, So only need re-tested Conducted Emissions and Radiated(30-1000MHz), other test item needn't re-tested, Test data refer to test report "ESTE-R1708123".

# **5. TEST RESULT**

# 5.1. Radiated Emissions Measurement

#### 5.1.1. Standard Applicable

15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

por any or any or any	equeries surve noted ser	••••	
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
\1\ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293.	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(\2\)
13.36-13.41			

1\Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. \2\ Above 38.6

According to §15.247 (d): 20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

5.1.2. Measuring Instruments and Setting

Please refer to section 6 of equipment list in this report. The following table is the setting of spectrum analyzer and receiver.

Setting
Auto
1000 MHz
10 <sup>th</sup> carrier harmonic
1MHz / 1MHz for Peak, 1 MHz / 1/B kHz for Average
1MHz / 1MHz for Peak, 1 MHz / 1/B kHz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB/VB 200Hz/1KHz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB/VB 9kHz/30KHz for QP/AVG
Start ~ Stop Frequency	30MHz~1000MHz / RB/VB 120kHz/1MHz for QP

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### 5.1.3. Test Procedures

### 1) Sequence of testing 9 kHz to 30 MHz

#### Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions.

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

#### **Premeasurement:**

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna height is 1.5 meter.

--- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

#### Final measurement:

--- Identified emissions during the premeasurement the software maximizes by rotating the turntable position ( $0^{\circ}$  to  $360^{\circ}$ ) and by rotating the elevation axes ( $0^{\circ}$  to  $360^{\circ}$ ).

--- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

### 2) Sequence of testing 30 MHz to 1 GHz

#### Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

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FCC ID: 2AMYC-SC-32HK700N Report No.: LCS170906025AE

#### Premeasurement:

--- The turntable rotates from 0° to 315° using 45° steps.

- --- The antenna is polarized vertical and horizontal.
- --- The antenna height changes from 1 to 3 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

#### **Final measurement:**

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position ( $\pm$  45°) and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

### 3) Sequence of testing 1 GHz to 18 GHz

#### Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

#### **Premeasurement:**

--- The turntable rotates from 0° to 315° using 45° steps.

- --- The antenna is polarized vertical and horizontal.
- --- The antenna height scan range is 1 meter to 2.5 meter.

--- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

#### Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position  $(\pm 45^{\circ})$  and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.

--- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

### 4) Sequence of testing above 18 GHz

#### Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 1 meter.

--- The EUT was set into operation.

#### **Premeasurement:**

--- The antenna is moved spherical over the EUT in different polarizations of the antenna.

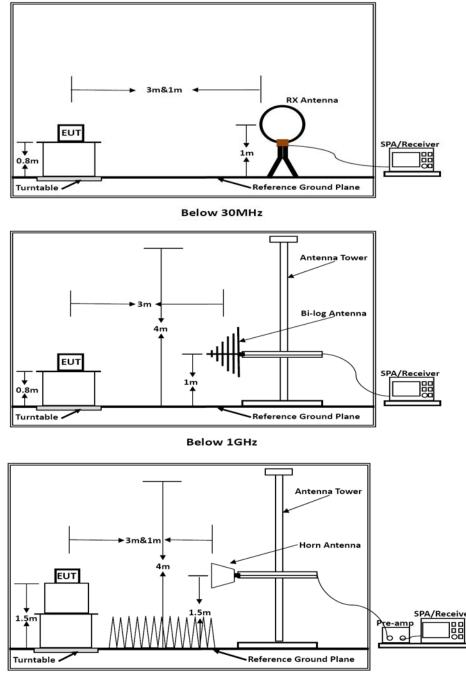
#### Final measurement:

--- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.

--- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

### 5.1.4. Test Setup Layout

For radiated emissions below 30MHz





Above 18 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1m.

Distance extrapolation factor = 20 log (specific distanc [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

### 5.1.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

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### 5.1.6. Results of Radiated Emissions (30MHz~1GHz)

Temperature	25℃	Humidity	60%
Test Engineer	Chaz Liu	Configurations	TX Mode

#### Horizontal:

2 184.230

280.260

304.510

455.780

6 531.020

3

4

5

8.57

12.37

13.10

16.69

18.34

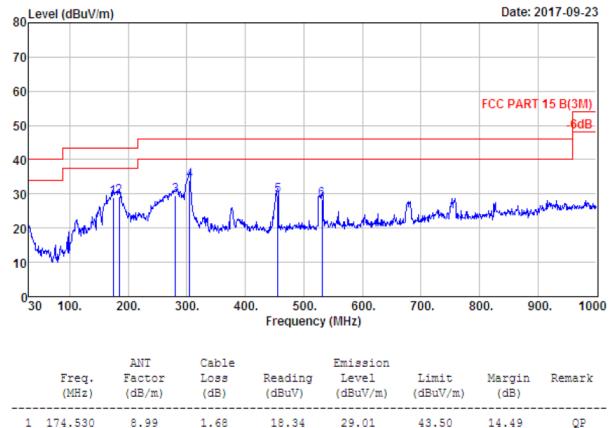
1.71

2.28

2.89

3.21

2.37



18.90

14.74

18.40

9.88

6.93

29.18

29.39

29.46

28.48

33.87

43.50

46.00

46.00

46.00

46.00

14.32

16.61

12.13

16.54

17.52

QP

QP

QP

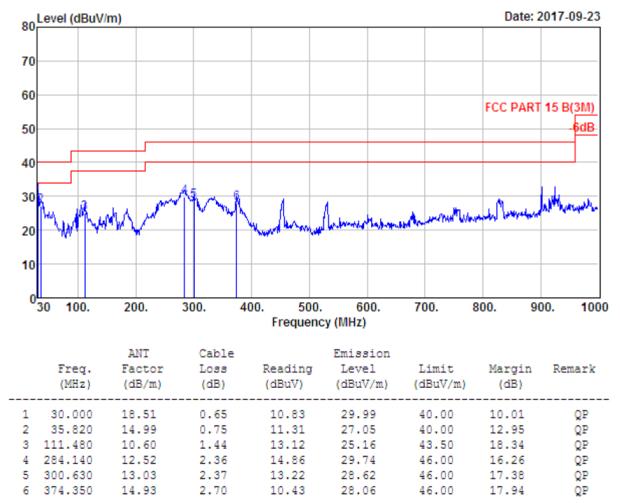
QP

QP

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Temperature	25°C	Humidity	60%
Test Engineer	Chaz Liu	Configurations	TX Mode

Vertical:



# 5.2. Power line conducted emissions

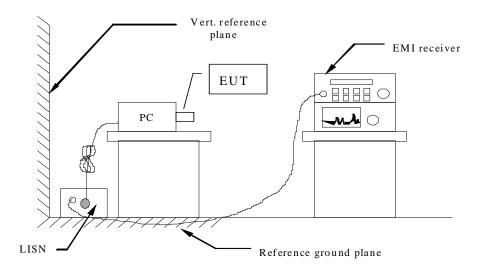
## 5.2.1 Standard Applicable

According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range are listed as follows:

Frequency Range	Limits (dBµV)			
(MHz)	Quasi-peak	Average		
0.15 to 0.50	66 to 56*	56 to 46*		
0.50 to 5	56	46		
5 to 30	60	50		

\* Decreasing linearly with the logarithm of the frequency

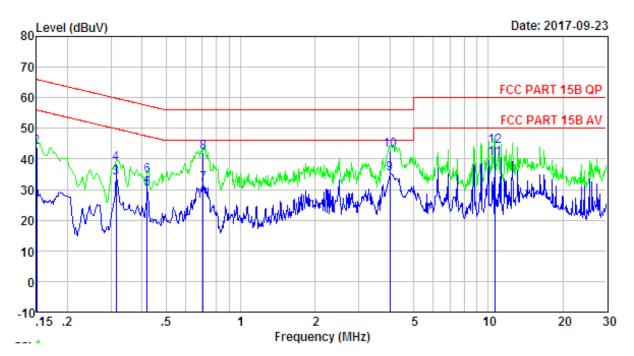
### 5.2.2 Block Diagram of Test Setup



### 5.2.3 Test Results

PASS.

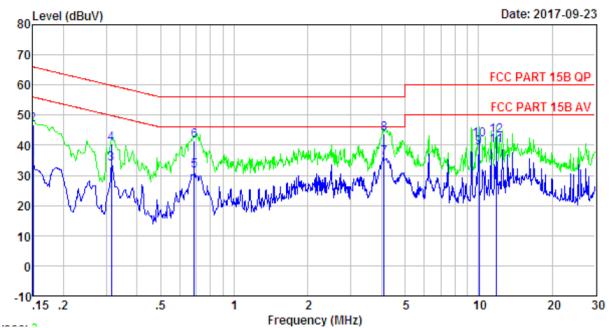
The test data please refer to following page.



AC Conducted Emission @ AC 120V/60Hz @ TX Mode @ Neuiral

	Freq. (MHz)	LISN Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.15	9.73	0.04	20.64	30.41	56.00	25.59	Average
2	0.15	9.73	0.04	33.98	43.75	66.00	22.25	QP
3	0.31	9.52	0.05	24.14	33.71	49.84	16.13	Average
4	0.31	9.52	0.05	28.97	38.54	59.84	21.30	QP
5	0.42	9.55	0.05	20.74	30.34	47.46	17.12	Average
6	0.42	9.55	0.05	24.87	34.47	57.46	22.99	QP
7	0.70	9.53	0.05	22.24	31.82	46.00	14.18	Average
8	0.70	9.53	0.05	32.53	42.11	56.00	13.89	QP
9	4.01	9.54	0.07	25.65	35.26	46.00	10.74	Average
10	4.01	9.54	0.07	33.27	42.88	56.00	13.12	QP
11	10.62	9.63	0.08	30.43	40.14	50.00	9.86	Average
12	10.62	9.63	0.08	34.32	44.03	60.00	15.97	QP

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### AC Conducted Emission @ AC 120V/60Hz @ TX Mode @ Line

	Freq. (MHz)	LISN Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.15	9.51	0.04	25.69	35.24	56.00	20.76	Average
2	0.15	9.51	0.04	37.24	46.79	66.00	19.21	QP
3	0.31	9.54	0.05	24.32	33.91	49.84	15.93	Average
4	0.31	9.54	0.05	30.81	40.40	59.84	19.44	QP
5	0.69	9.54	0.05	21.90	31.49	46.00	14.51	Average
6	0.69	9.54	0.05	31.73	41.32	56.00	14.68	QP
7	4.11	9.56	0.07	26.11	35.74	46.00	10.26	Average
8	4.11	9.56	0.07	34.32	43.95	56.00	12.05	QP
9	10.02	9.61	0.08	29.56	39.25	50.00	10.75	Average
10	10.02	9.61	0.08	32.19	41.88	60.00	18.12	QP
11	11.87	9.62	0.08	30.03	39.73	50.00	10.27	Average
12	11.87	9.62	0.08	33.54	43.24	60.00	16.76	QP

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# 6. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal Date	Due Date
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	June 18, 2017	June 17, 2018
Signal analyzer	Agilent	E4448A(External mixers to 40GHz)	US44300469	9kHz~40GHz	July 16, 2017	July 15, 2018
Signal analyzer	Agilent	N9020A	MY50510140	9kHz~26.5GHz	October 27, 2016	October 27, 2017
LISN	MESS Tec	NNB-2/16Z	99079	9KHz-30MHz	June 18, 2017	June 17, 2018
LISN (Support Unit)	EMCO	3819/2NM	9703-1839	9KHz-30MHz	June 18, 2017	June 17, 2018
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9KHz-30MHz	June 18, 2017	June 17, 2018
ISN	SCHAFFNER	ISN ST08	21653	9KHz-30MHz	June 18, 2017	June 17, 2018
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30M-18GHz 3m	June 18, 2017	June 17, 2018
Amplifier	SCHAFFNER	COA9231A	18667	9kHz-2GHzz	June 18, 2017	June 17, 2018
Amplifier	Agilent	8449B	3008A02120	1GHz-26.5GHz	July 16, 2017	July 15, 2018
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5GHz-40GHz	July 16, 2017	July 15, 2018
Loop Antenna	R&S	HFH2-Z2	860004/001	9k-30MHz	June 18, 2017	June 17, 2018
By-log Antenna	SCHWARZBEC	VULB9163	9163-470	30MHz-1GHz	June 10, 2017	June 09, 2018
Horn Antenna	EMCO	3115	6741	1GHz-18GHz	June 10, 2017	June 09, 2018
Horn Antenna	SCHWARZBEC	BBHA9170	BBHA9170154	15GHz-40GHz	June 10, 2017	June 09, 2018
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz-1GHz	June 18, 2017	June 17, 2018
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz-40GHz	June 18, 2017	June 17, 2018
Power Meter	R&S	NRVS	100444	DC-40GHz	June 18, 2017	June 17, 2018
Power Sensor	R&S	NRV-Z51	100458	DC-30GHz	June 18, 2017	June 17, 2018
Power Sensor	R&S	NRV-Z32	10057	30MHz-6GHz	June 18, 2017	June 17, 2018
AC Power Source	HPC	HPA-500E	HPA-9100024	AC 0~300V	June 18, 2017	June 17, 2018
DC power source	GW	GPC-6030D	C671845	DC 1V-60V	June 18, 2017	June 17, 2018
Temp. and Humidify Chamber	Giant Force	GTH-225-20-S	MAB0103-00	N/A	June 18, 2017	June 17, 2018
RF CABLE-1m	JYE Bao	RG142	CB034-1m	20MHz-7GHz	June 18, 2017	June 17, 2018
RF CABLE-2m	JYE Bao	RG142	CB)35-2m	20MHz-1GHz	June 18, 2017	June 17, 2018
EMC Test software	Audix	E3	N/A	N/A	N/A	N/A

Note: All equipment through GRGT EST calibration

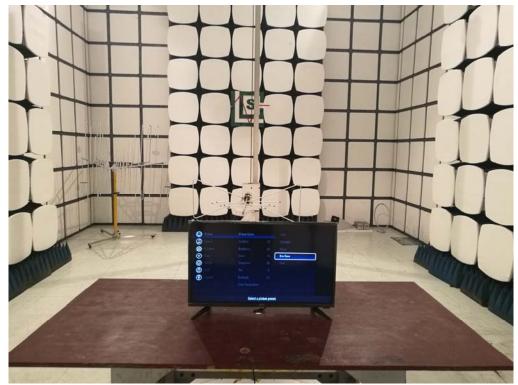
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# 7. TEST SETUP PHOTOGRAPHS

Conducted Test



### Radiated Test (30-1000 MHz)



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# 8. EXTERIOR PHOTOGRAPHS OF THE EUT

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# 9. INTERIOR PHOTOGRAPHS OF THE EUT

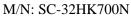




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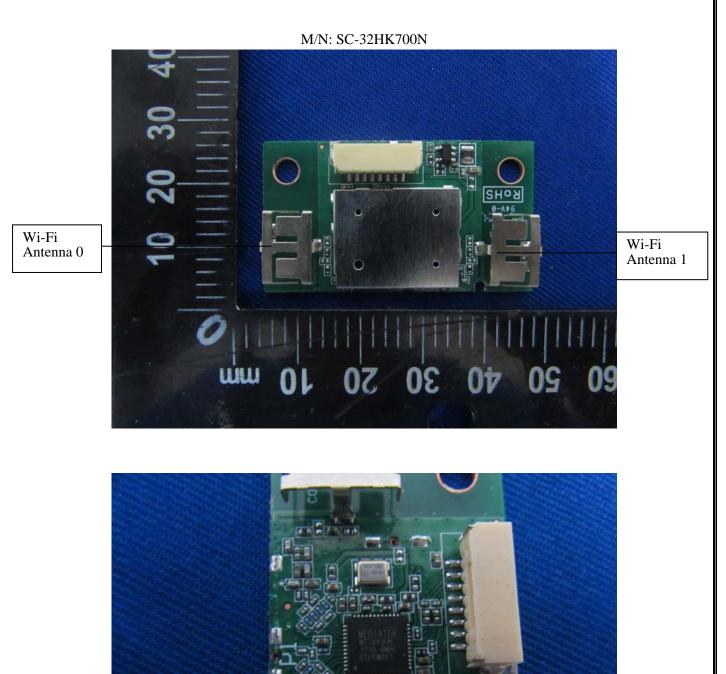
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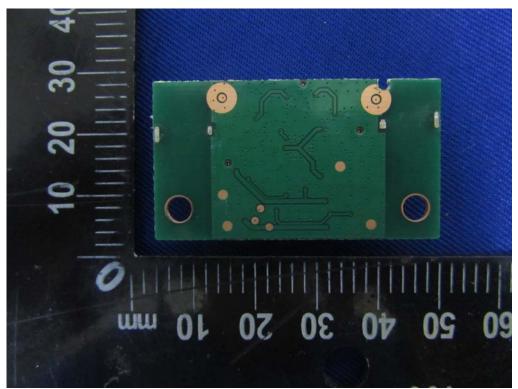
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