

TEST REPORT

Report No..... : KS2306S3146ER104

FCC ID..... : 2BBQH-ZQC-P1

Applicant..... : Shenzhen Zhong Qing Chuang Technology Co.,Ltd

Address..... : 5F Building D, No. 18 Guangyao Industrial Plant, Fourth Industrial Zone,
Zhulongtian Road, Shuitian Community, Shiyan Street, Baoan District,
Shenzhen

Manufacturer..... : Shenzhen Zhong Qing Chuang Technology Co.,Ltd

Address..... : 5F Building D, No. 18 Guangyao Industrial Plant, Fourth Industrial Zone,
Zhulongtian Road, Shuitian Community, Shiyan Street, Baoan District,
Shenzhen

Product Name..... : Tablet

Model/Type reference..... : **ZQC-P1**,M104,M105,M107,M108,M109,M112,M113,M114,M115,M116,
M117,M118,M119,M20,H717,H719,H720,H821,H822,H823,H824,H825,
H826,H827,P701

Standard..... : 47 CFR Part 15E

Date of Receipt..... : November 06, 2023

Date of Test Date..... : November 06, 2023 to December 01, 2023

Date of issue..... : December 01, 2023

Test result..... : Pass

Prepared by:
(Printed name + Signature) Pai Zheng *Pai Zheng*

Approved by:
(Printed name + Signature) Sky Dong *Sky Dong*

Testing Laboratory Name....: KSIGN(Guangdong) Testing Co., Ltd.

Address..... : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial
Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong,
China

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1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

47 CFR Part 15E: Unlicensed National Information Infrastructure Devices

1.2. Report Version

Revised No.	Date of issue	Description
01	June 26, 2023	Original
02	December 01, 2023	Change adapter

Note:

The original test report No.KS2306S3146E04 issued on June 26, 2023 was modified on December 01, 2023 to include the following changes:

- Change the EUT photos and test photos;
- The Emissions in restricted frequency bands (below 1GHz) and Conducted Emission at AC power line tests have been updated.
- Original report valid.

1.3. Test Description

Test Item	Standard	Requirement	Result
Antenna requirement	47 CFR Part 15E	Part 15.203	Pass
Conducted Emission at AC power line	47 CFR Part 15E	47 CFR Part 15.207(a)	Pass
Duty Cycle	47 CFR Part 15E		Pass
Maximum conducted output power	47 CFR Part 15E	47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(1)(iii) 47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)	Pass
Power spectral density	47 CFR Part 15E	47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(1)(iii) 47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)	Pass
Emission bandwidth and occupied bandwidth	47 CFR Part 15E	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use. 47 CFR Part 15.407(e)	Pass
Band edge emissions (Radiated)	47 CFR Part 15E	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)	Pass
Undesirable emission limits (below 1GHz)	47 CFR Part 15E	47 CFR Part 15.407(b)(9)	Pass
Undesirable emission limits (above 1GHz)	47 CFR Part 15E	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)	Pass

Note:

RF conducted data direct reference FCC ID: 2BBQH-ZQC-P1 (Date of grant: 07/03/2023).

1.4. Test Facility

KSIGN(Guangdong) Testing Co., Ltd.

West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

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

CNAS-Lab Code: L13261

KSIGN(Guangdong) Testing Co., Ltd. has been assessed and proved to be in Compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 5457.01

KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing

ISED#: 25693 CAB identifier.: CN0096

KSIGN(Guangdong) Testing Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

FCC-Registration No.: 294912 Designation Number: CN1328

KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

1.5. Measurement Uncertainty

Test Items	Measurement Uncertainty
Conducted Emission (150k-30MHz)	$\pm 3.34\text{dB}$
Output Power, Conducted	$\pm 1.4\text{dB}$
PSD, Conducted	$\pm 1.0\text{dB}$
RSE (1-18GHz)	$\pm 4.68\text{dB}$
RSE (30-1000MHz)	$\pm 5.7\text{dB}$
RSE (18-40GHz)	$\pm 5.18\text{dB}$

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

2. GENERAL INFORMATION

2.1. General Description Of EUT

Test Sample Number:	1-1(Normal Sample), 1-2(Engineering Sample)
Product Name:	Tablet
Model / Type reference:	ZQC-P1 ,M104,M105,M107,M108,M109,M112,M113,M114,M115,M116,M117,M118,M119,M20,H717,H719,H720,H821,H822,H823,H824,H825,H826,H827,P701
Power Supply:	DC 3.8V from battery/ DC 5.0V from adapter
Operation Frequency:	802.11a/n(HT20)/ac(HT20): U-NII-1: 5180MHz to 5240MHz; U-NII-3: 5745MHz to 5825MHz; 802.11n(HT40)/ac(HT40): U-NII-1: 5190MHz to 5230MHz; U-NII-3: 5755MHz to 5795MHz; 802.11ac(HT80): U-NII-1: 5210MHz; U-NII-3: 5775MHz
Number of Channels:	802.11a/n(HT20)/ac(HT20): U-NII-1: 4; U-NII-3: 5; 802.11n(HT40)/ac(HT40): U-NII-1: 2; U-NII-3: 2; 802.11ac(HT80): U-NII-1: 1; U-NII-3: 1
Modulation Type:	802.11a: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM);
Antenna Type:	FPC
Antenna Gain:	U-NII-1:3.22dBi, U-NII-3:1.96dBi
Max TX Power:	4.70dBm

2.2. Accessory Equipment Information

The EUT was tested as an independent device.

2.3. Description of Test Modes

No.	Title	Description of Mode
Test Mode1	802.11a mode	Keep the EUT in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.
Test Mode2	802.11n mode	Keep the EUT in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
Test Mode3	802.11ac mode	Keep the EUT in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

2.4. Measurement Instruments List

Conducted Emission at AC power line				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
LISN	R&S	ENV432	1326.6105.02	2024-02-17
EMI Test Receiver	R&S	ESR	102524	2024-02-17
Manual RF Switch	JS TOYO	/	MSW-01/002	2024-02-17
ISN CAT6	Schwarzbeck	CAT5 8158	227	2024-02-17
Color Signal Generator	Philips	PM5418	672926	2024-02-17
Power Absorbing Clamp	R&S	MDS-21	100925	2024-02-19

Duty Cycle				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wideband Radio Communication Tester	R&S	CMU200	115297	2024-02-17
Audio Analyzer	R&S	UPL16	100001	2024-02-17
Shielding box	Gxiong	GX-5915A	2201113	2024-02-17
High Pass Filter	COM-MW Technology Co., Ltd	ZHPF-M1.2-9G-1 87	09203403	2024-02-17
Band Stop Filter	COM-MW Technology Co., Ltd	ZBSF6-C820-920 -188	09203401	2024-02-17
Splitter	COM-MW Technology Co., Ltd	ZPD-M1-8-2103	09203407	2024-02-17
Coaxial Cable	BEBES	A40-2.92M2.92F-4.5M	1907021	2024-02-17
Hygrothermograph	Anymetre	JB913	/	2024-02-17
Climate Chamber	Angul	AGNH80L	1903042120	2024-02-17
Spectrum Analyzer	HP	8593E	3831U02087	2024-02-17
Dual Output DC Power Supply	Agilent	E3646A	MY40009992	2024-02-17
RF Control Unit	Tonscend	JS0806-2	/	2024-02-17
Analog Signal Generator	HP	83752A	3344A00337	2024-02-17
Vector Signal Generator	Agilent	N5182A	MY50142520	2024-02-17
Wideband Radio Communication Tester	R&S	CMW500	157282	2024-02-17
Spectrum Analyzer	R&S	FSV40-N	101798	2024-02-17

Maximum conducted output power				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wideband Radio Communication Tester	R&S	CMU200	115297	2024-02-17
Audio Analyzer	R&S	UPL16	100001	2024-02-17
Shielding box	Gxiong	GX-5915A	2201113	2024-02-17
High Pass Filter	COM-MW Technology Co., Ltd	ZHPF-M1.2-9G-1 87	09203403	2024-02-17
Band Stop Filter	COM-MW Technology Co., Ltd	ZBSF6-C820-920 -188	09203401	2024-02-17
Splitter	COM-MW Technology Co., Ltd	ZPD-M1-8-2103	09203407	2024-02-17
Coaxial Cable	BEBES	A40-2.92M2.92F-4.5M	1907021	2024-02-17
Hygrothermograph	Anymetre	JB913	/	2024-02-17

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Climate Chamber	Angul	AGNH80L	1903042120	2024-02-17
Spectrum Analyzer	HP	8593E	3831U02087	2024-02-17
Dual Output DC Power Supply	Agilent	E3646A	MY40009992	2024-02-17
RF Control Unit	Tonscend	JS0806-2	/	2024-02-17
Analog Signal Generator	HP	83752A	3344A00337	2024-02-17
Vector Signal Generator	Agilent	N5182A	MY50142520	2024-02-17
Wideband Radio Communication Tester	R&S	CMW500	157282	2024-02-17
Spectrum Analyzer	R&S	FSV40-N	101798	2024-02-17

Power spectral density				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wideband Radio Communication Tester	R&S	CMU200	115297	2024-02-17
Audio Analyzer	R&S	UPL16	100001	2024-02-17
Shielding box	Gxiong	GX-5915A	2201113	2024-02-17
High Pass Filter	COM-MW Technology Co., Ltd	ZHPF-M1.2-9G-187	09203403	2024-02-17
Band Stop Filter	COM-MW Technology Co., Ltd	ZBSF6-C820-920-188	09203401	2024-02-17
Splitter	COM-MW Technology Co., Ltd	ZPD-M1-8-2103	09203407	2024-02-17
Coaxial Cable	BEBES	A40-2.92M2.92F-4.5M	1907021	2024-02-17
Hygrothermograph	Anymetre	JB913	/	2024-02-17
Climate Chamber	Angul	AGNH80L	1903042120	2024-02-17
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Wideband Radio Communication Tester	R&S	CMW500	157282	2024-02-17
Spectrum Analyzer	R&S	FSV40-N	101798	2024-02-17

Emission bandwidth and occupied bandwidth				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wideband Radio Communication Tester	R&S	CMU200	115297	2024-02-17
Audio Analyzer	R&S	UPL16	100001	2024-02-17
Shielding box	Gxiong	GX-5915A	2201113	2024-02-17
High Pass Filter	COM-MW Technology Co., Ltd	ZHPF-M1.2-9G-187	09203403	2024-02-17
Band Stop Filter	COM-MW Technology Co., Ltd	ZBSF6-C820-920-188	09203401	2024-02-17
Splitter	COM-MW Technology Co., Ltd	ZPD-M1-8-2103	09203407	2024-02-17
Coaxial Cable	BEBES	A40-2.92M2.92F-4.5M	1907021	2024-02-17
Hygrothermograph	Anymetre	JB913	/	2024-02-17

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Climate Chamber	Angul	AGNH80L	1903042120	2024-02-17
Spectrum Analyzer	HP	8593E	3831U02087	2024-02-17
Dual Output DC Power Supply	Agilent	E3646A	MY40009992	2024-02-17
RF Control Unit	Tonscend	JS0806-2	/	2024-02-17
Analog Signal Generator	HP	83752A	3344A00337	2024-02-17
Vector Signal Generator	Agilent	N5182A	MY50142520	2024-02-17
Wideband Radio Communication Tester	R&S	CMW500	157282	2024-02-17
Spectrum Analyzer	R&S	FSV40-N	101798	2024-02-17

Band edge emissions (Radiated)				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Color Signal Generator	Philips	PM5418	672926	2024-02-17
Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	1230	2025-02-18
Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	2024-02-17
Broadcast Television Signal Generator	R&S	SFE100	141038	2024-02-17
Analog Signal Generator	Agilent	8648A	3847M00445	2024-02-17
EMI Test Receiver	R&S	ESR	102525	2024-02-17
Loop Antenna	Beijin ZHINAN	ZN30900C	18050	2024-02-19
Horn Antenna	Schwarzbeck	BBHA 9120 D	2023	2026-02-19
Pre-Amplifier	EMCI	EMC051835SE	980662	2024-02-17
Spectrum Analyzer	Keysight	N9020A	MY46471971	2024-02-17

Undesirable emission limits (below 1GHz)				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Color Signal Generator	Philips	PM5418	672926	2024-02-17
Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	1230	2025-02-18
Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	2024-02-17
Broadcast Television Signal Generator	R&S	SFE100	141038	2024-02-17
Analog Signal Generator	Agilent	8648A	3847M00445	2024-02-17
EMI Test Receiver	R&S	ESR	102525	2024-02-17
Loop Antenna	Beijin ZHINAN	ZN30900C	18050	2024-02-19
Horn Antenna	Schwarzbeck	BBHA 9120 D	2023	2026-02-19
Pre-Amplifier	EMCI	EMC051835SE	980662	2024-02-17
Spectrum Analyzer	Keysight	N9020A	MY46471971	2024-02-17

Undesirable emission limits (above 1GHz)				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Color Signal Generator	Philips	PM5418	672926	2024-02-17
Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	1230	2025-02-18
Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	2024-02-17

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Broadcast Television Signal Generator	R&S	SFE100	141038	2024-02-17
Analog Signal Generator	Agilent	8648A	3847M00445	2024-02-17
EMI Test Receiver	R&S	ESR	102525	2024-02-17
Loop Antenna	Beijin ZHINAN	ZN30900C	18050	2024-02-19
Horn Antenna	Schwarzbeck	BBHA 9120 D	2023	2026-02-19
Pre-Amplifier	EMCI	EMC051835SE	980662	2024-02-17
Spectrum Analyzer	Keysight	N9020A	MY46471971	2024-02-17

3. Evaluation Results (Evaluation)

3.1. Antenna requirement

Test Requirement:	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
Conclusion:	The directional gain of the antenna less than 6dBi, please refer to the EUT internal photographs antenna photo.

4. Radio Spectrum Matter Test Results (RF)

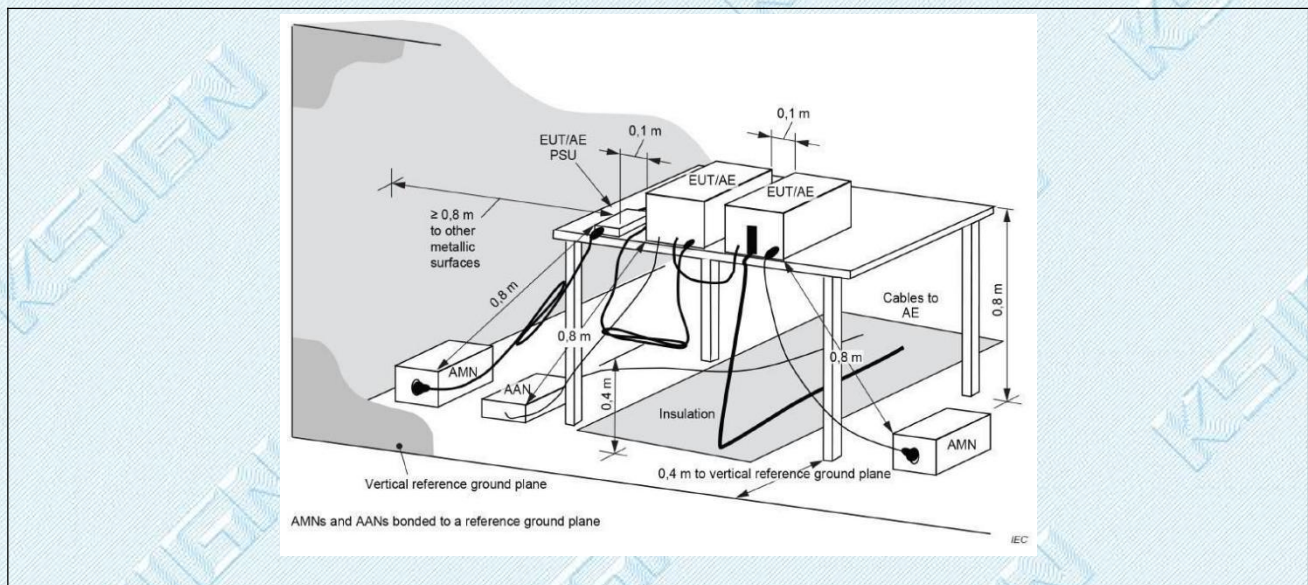
4.1. Conducted Emission at AC power line

Test Requirement:	47 CFR Part 15.207(a)		
Test Limit:	Frequency of emission (MHz)	Conducted limit (dBμV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
*Decreases with the logarithm of the frequency.			
Test Method:	Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

4.1.1. E.U.T. Operation:

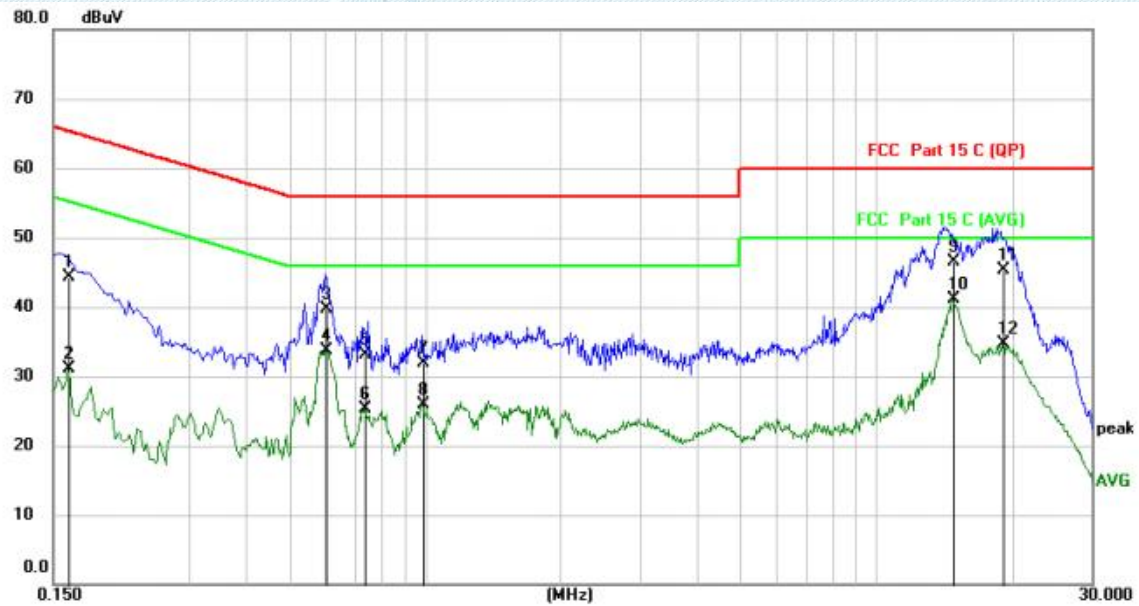
Operating Environment:	
Temperature:	24.2 °C
Humidity:	48.1 %
Atmospheric Pressure:	101 kPa
Final test mode:	Test Mode1

4.1.2. Test Setup Diagram:



4.1.3. Test Data:

Test Mode1 / Line: Line

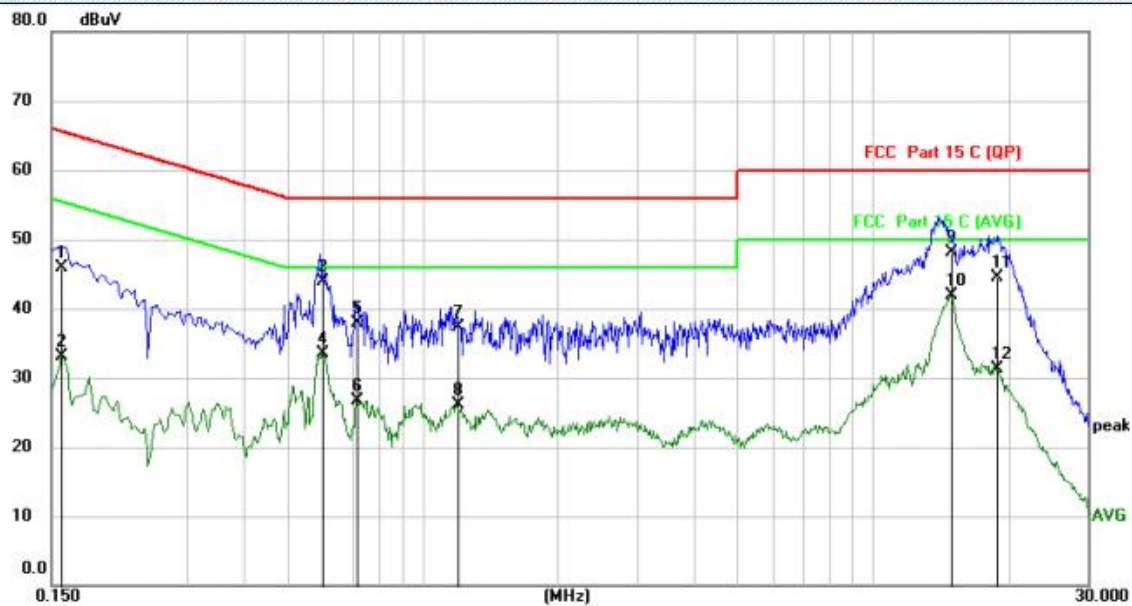


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.1620	33.96	10.41	44.37	65.36	-20.99	QP	
2	0.1620	20.74	10.41	31.15	55.36	-24.21	AVG	
3	0.6018	29.31	10.45	39.76	56.00	-16.24	QP	
4	0.6018	23.20	10.45	33.65	46.00	-12.35	AVG	
5	0.7338	22.74	10.44	33.18	56.00	-22.82	QP	
6	0.7338	14.91	10.44	25.35	46.00	-20.65	AVG	
7	0.9858	21.45	10.46	31.91	56.00	-24.09	QP	
8	0.9858	15.35	10.46	25.81	46.00	-20.19	AVG	
9	14.8018	35.55	11.03	46.58	60.00	-13.42	QP	
10 *	14.8018	30.09	11.03	41.12	50.00	-8.88	AVG	
11	19.1178	33.87	11.35	45.22	60.00	-14.78	QP	
12	19.1178	23.35	11.35	34.70	50.00	-15.30	AVG	

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Test Mode1 / Line: Neutral


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1580	35.54	10.39	45.93	65.57	-19.64	QP	
2	0.1580	22.81	10.39	33.20	55.57	-22.37	AVG	
3	0.5980	33.47	10.42	43.89	56.00	-12.11	QP	
4	0.5980	23.18	10.42	33.60	46.00	-12.40	AVG	
5	0.7140	27.56	10.41	37.97	56.00	-18.03	QP	
6	0.7140	16.38	10.41	26.79	46.00	-19.21	AVG	
7	1.1940	26.79	10.43	37.22	56.00	-18.78	QP	
8	1.1940	15.75	10.43	26.18	46.00	-19.82	AVG	
9	14.8819	37.10	10.99	48.09	60.00	-11.91	QP	
10 *	14.8819	30.84	10.99	41.83	50.00	-8.17	AVG	
11	18.8739	33.30	11.30	44.60	60.00	-15.40	QP	
12	18.8739	19.99	11.30	31.29	50.00	-18.71	AVG	

Remark:

1.Both 120 VAC, 50/60 Hz power supply have been tested, only the worst result of 120 VAC, 60 Hz was reported as below.

2.Measurement = Reading Level+ Correct Factor

3.Over = Measurement -Limit

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4.2. Undesirable emission limits (below 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(9)		
Test Limit:	Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.		
	Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:		
	Frequency (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
Test Method:	ANSI C63.10-2013, section 12.7.4, 12.7.5, 12.7.6		
Procedure:	Below 1GHz: a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel, the middle channel, the Highest channel. h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete. Remark: 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor 2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. 3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.		

TRF RF_R1

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	Above 1GHz: a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel, the middle channel, the Highest channel. h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete. Remark: 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor 2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. 3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report. 4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
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4.2.1. E.U.T. Operation:

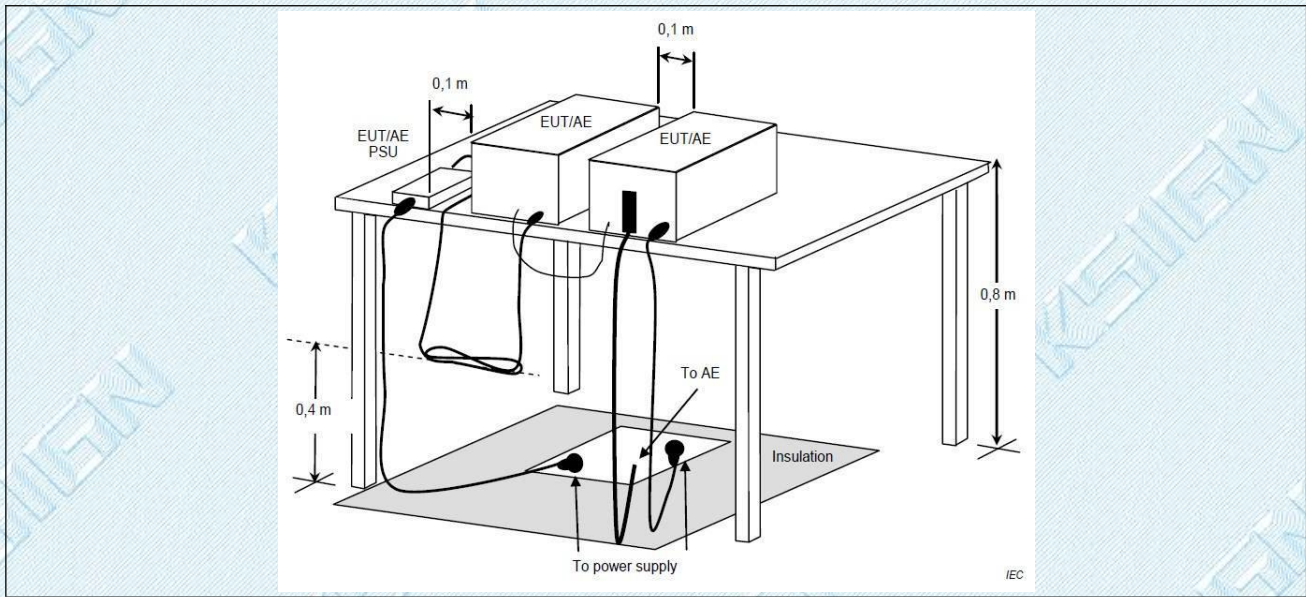
Operating Environment:	
Temperature:	24.2 °C
Humidity:	48.1 %
Atmospheric Pressure:	101 kPa
Final test mode:	Test Mode1, Test Mode2, Test Mode3

TRF RF_R1

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4.2.2. Test Setup Diagram:



4.2.3. Test Data:

Test Mode1 / Polarization: Horizontal

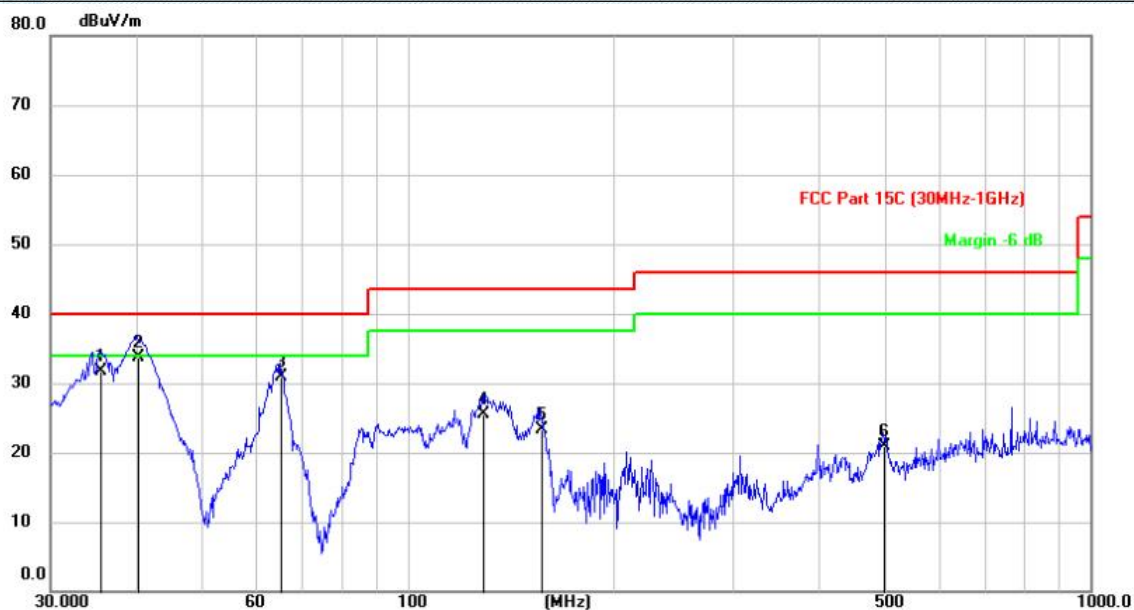


No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		39.5757	30.60	-16.87	13.73	40.00	-26.27	QP
2		65.2057	28.92	-16.99	11.93	40.00	-28.07	QP
3		111.3858	38.57	-18.46	20.11	43.50	-23.39	QP
4		126.6390	41.25	-20.67	20.58	43.50	-22.92	QP
5		209.7537	36.70	-18.57	18.13	43.50	-25.37	QP
6	*	322.1885	37.36	-14.25	23.11	46.00	-22.89	QP

TRF RF_R1

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Test Mode1 / Polarization: Vertical


No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		35.4868	49.25	-17.61	31.64	40.00	-8.36	QP
2	*	40.1910	50.41	-16.76	33.65	40.00	-6.35	QP
3		65.1145	47.95	-16.96	30.99	40.00	-9.01	QP
4		129.3317	46.51	-20.94	25.57	43.50	-17.93	QP
5		156.5126	44.14	-20.80	23.34	43.50	-20.16	QP
6		498.5498	30.62	-9.74	20.88	46.00	-25.12	QP

Note:

1. Measurement = Reading level + Correct Factor
2. Correct Factor = Antenna Factor + Cable Loss - Preamplifier Factor

5. EUT TEST PHOTOS

Conducted Emission at AC power line



Undesirable emission limits (below 1GHz)



6. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

Refer to Appendix - EUT Photos for KS2306S3146ER1.

--THE END--