

Report No.: KSEM221200237701

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TEST REPORT

Application No.: KSEM2212002377AT

Applicant: Shanghai Xiyin Technology Co.,Ltd

Address of Applicant: Building C, No.888, Huanhu West Second Road, Lingang New Zone,

China(Shanghai) Pilot Free Trade Zone

Manufacturer: Shanghai Xiyin Technology Co.,Ltd

Address of Manufacturer: Building C, No.888, Huanhu West Second Road, Lingang New Zone,

China(Shanghai) Pilot Free Trade Zone

Factory: Shanghai Xiyin Technology Co.,Ltd

Address of Factory: Building C, No.888, Huanhu West Second Road, Lingang New Zone,

China(Shanghai) Pilot Free Trade Zone

Equipment Under Test (EUT):

EUT Name: CS30 Model No.: CS30

Standard(s): 47 CFR Part 15, Subpart B

Date of Receipt: 2022-12-07

Date of Test: 2022-12-08 to 2022-12-08

Date of Issue: 2022-12-16

Test Result: Pass*

Eric Lin Laboratory Manager

Jose fri



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^{*} In the configuration tested, the EUT complied with the standards specified above.



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Revision Record						
Version	Description	Date	Remark			
00	Original	2022-12-16	/			

Authorized for issue by:		
	Kun Gu	
	Kun_gu/Project Engineer	
	Eric fri	
	Eric Lin /Reviewer	



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2 Test Summary

Emission Part							
Item	Standard	Method	Requirement	Result			
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	15.109(a);Class B	Pass			



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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 5V ;0.6A;3W;100MHz
	Test voltage:DC 5V(Power by PC)

4.2 Description of Support Units

Description	Manufacturer Model No.		Serial No.	
Notebook	XIAOMI	Pro15	00342-35744-35614- AAOEM	

4.3 Measurement Uncertainty

	mode on one of the containing							
No.	ltem	Measurement Uncertainty $(U_{LAB})^*$	U _{CISPR}					
_	Conducted Emission	2.4dB (9kHz to 150kHz)	3.8dB (9kHz to 150kHz)					
1	at mains port using AMN	2.2dB (150kHz to 30MHz)	3.4dB (150kHz to 30MHz)					
2	Conducted Emission at telecommunication port using AAN	4.0 dB (150kHz to 30MHz)	5.0dB (150kHz to 30MHz)					
3	Radiated Power	3.2dB	4.5dB (30MHz to 300MHz)					
4	Radiated Emission (10m)	4.1 dB	6.3dB (30MHz-1GHz)					
		4.6 dB (30MHz-1GHz)	6.3dB (30MHz-1GHz)					
5	Padiated Emission (2m)	5.0dB (1GHz-6GHz)	5.2dB (1GHz-6GHz)					
3	Radiated Emission (3m)	5.2dB (6GHz-18GHz)	5.5dB (6GHz-18GHz)					
		5.3dB (18GHz-40GHz)	N/A					

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Decision Rule:

• CISPR 16-4-2 for emission measurements is as below described.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

 U_{LAB} less than U_{CISPR} , therefore:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit.
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.
- For immunity testing no decision rule is applicable.



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4.4 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1.SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).

2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

4.5 Test Facility

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

A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

Radiated Emissions (30MHz-1GHz)								
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date			
EMI Test Receiver	R&S	ESCI	KS301044	01/22/2022	01/21/2023			
EMI Test Receiver	R&S	ESCI	KS301195	08/22/2022	08/21/2023			
Bilog Antenna	Sunol	JB1	CZ301033	02/28/2022	02/27/2023			
Bilog Antenna	Sunol	JB1	KS301013	04/12/2022	04/11/2023			
Pre-Amplifier	Anritsu	MH648A	KS610098	01/22/2022	01/21/2023			
Pre-Amplifier	Mini-circuits	ZFL-1000VH2	CZ301013	01/22/2022	01/21/2023			
Software	Faratronic	EZ_EMC-v 3A1	N/A	N/A	N/A			

General used equipment							
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date		
Digital Pressure Meter	Mengde	DYM3	CZ750023	02/01/2022	01/31/2023		
			CZ720001-1 CZ720001-2				
Temperature & Humidity Recorder	Anymetre	TH603	CZ720001-3 CZ720001-4 CZ720001-5 CZ720001-6	10/13/2022	10/12/2023		
			CZ720001-7				



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6 Emission Test Results

6.1 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Measurement Distance: 10m

Limit:

Class B

Test Distance: 3m

30 MHz - 88 MHz $40.0 (\text{dB}\mu\text{V/m}) \text{ quasi-peak}$ 88 MHz - 216 MHz $43.5 (\text{dB}\mu\text{V/m}) \text{ quasi-peak}$ 216 MHz - 960 MHz $46.0 (\text{dB}\mu\text{V/m}) \text{ quasi-peak}$ 960 MHz - 1000 MHz $54.0 (\text{dB}\mu\text{V/m}) \text{ quasi-peak}$

Detector: Peak for pre-scan (120kHz resolution bandwidth) 30MHz to1000MHz

Class B

Test Distance: 10m

30 MHz -88MHz $29.5 (\text{dB}\mu\text{V/m})$ quasi-peak 88 MHz-216MHz $33.1 (\text{dB}\mu\text{V/m})$ quasi-peak 216 MHz-960MHz $35.6 (\text{dB}\mu\text{V/m})$ quasi-peak $43.5 (\text{dB}\mu\text{V/m})$ quasi-peak

Detector: Peak for pre-scan (120kHz resolution bandwidth) 30MHz to1000MHz

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21.8 °C Humidity: 43.0 % RH Atmospheric Pressure: 1010 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Normally Operating.



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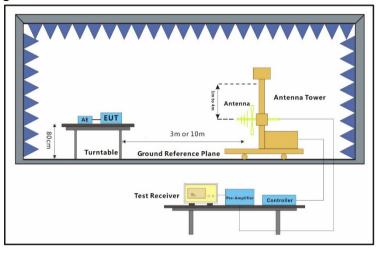
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6.1.3 Test Setup Diagram



6.1.4 Measurement Procedure and Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



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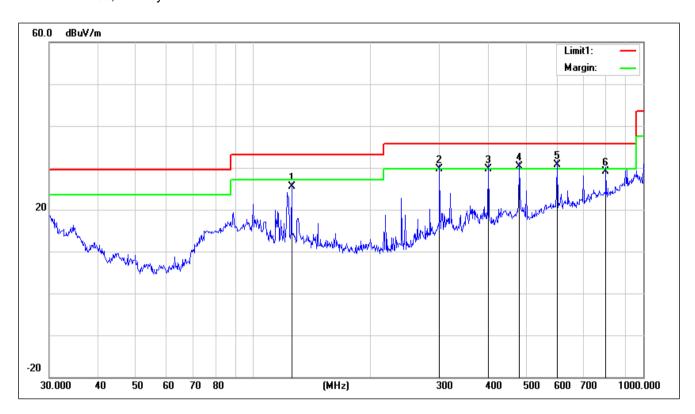
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Test Mode: 00; Polarity: Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg)	
1	125.4457	40.10	-14.62	25.48	33.10	-7.62	300	339	QP
2	300.3673	43.72	-14.02	29.70	35.60	-5.90	100	35	QP
3	400.4318	41.73	-11.93	29.80	35.60	-5.80	100	118	QP
4	480.5276	39.80	-9.46	30.34	35.60	-5.26	200	294	QP
5	601.4265	38.39	-7.78	30.61	35.60	-4.99	400	37	QP
6	801.7862	33.47	-4.46	29.01	35.60	-6.59	100	206	QP



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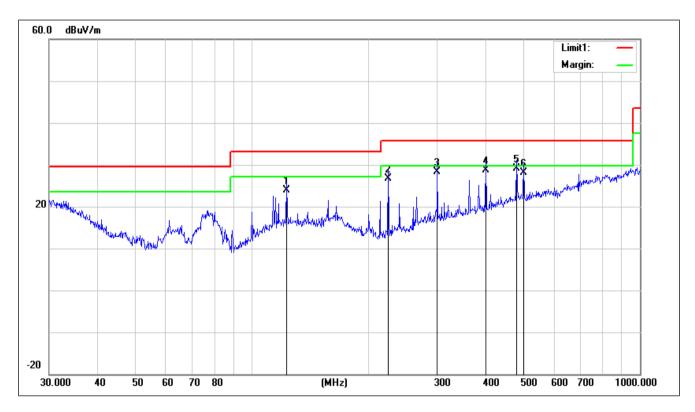
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Test Mode: 00; Polarity: Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg)	
1	122.8340	32.08	-8.10	23.98	33.10	-9.12	400	108	QP
2	224.5192	37.34	-10.70	26.64	35.60	-8.96	200	274	QP
3	300.3673	35.52	-7.18	28.34	35.60	-7.26	100	325	QP
4	400.4318	33.69	-4.98	28.71	35.60	-6.89	300	119	QP
5	480.5276	31.52	-2.46	29.06	35.60	-6.54	200	91	QP
6	501.1790	30.46	-2.45	28.01	35.60	-7.59	100	187	QP



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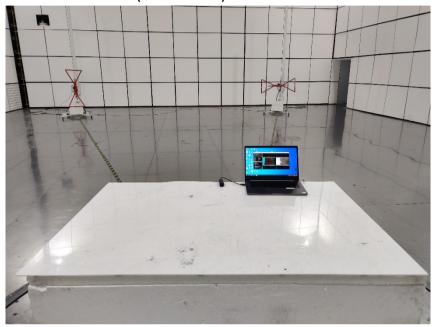


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7 Test Setup Photo

Radiated Emissions (30MHz-1GHz)





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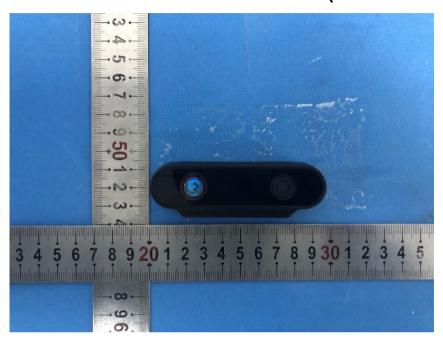
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8 EUT Constructional Details (EUT Photos)







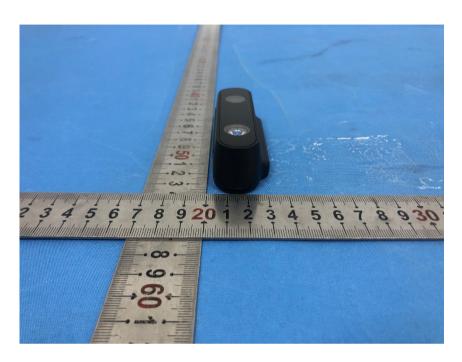
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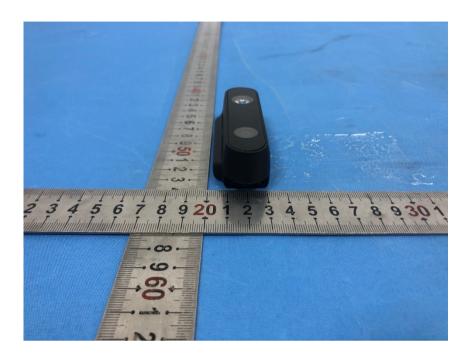
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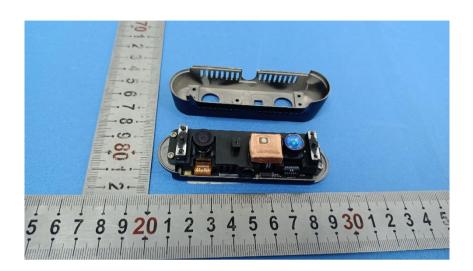
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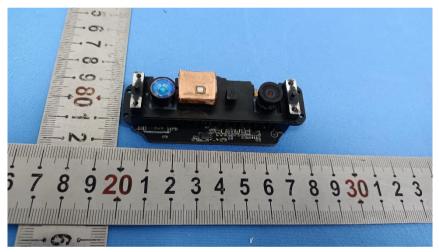
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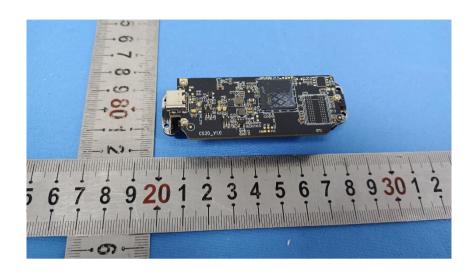
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