



CE EMI REPORT

Prepared For :	Xin Jin cable Co., LTD Gongshan Industrial Zone, Meihu Town, Jiexi County, Jieyang City, Guangdong Province
Product Name:	Network Cable
Trade Mark:	N/A
Model :	SNA-1555HQ
Additional Models:	Cat.5, Cat.5e, Cat.6, Cat.6e, 5m, 10m, 15m, 20m, 25m, 30m
Prepared By :	Dongguan True Safety Testing Co., Ltd. Room 201, No.20, East of Houjie Avenue, Houjie, Dongguan, Guangdong, China
Test Date:	Jul. 04, 2023 To Jul. 08, 2023
Date of Report :	Jul. 08, 2023
Report No.:	TST20230690432-2ER



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TEST REPORT DECLARATION

Applicant	:	Xin Jin cable Co., LTD
Address	:	Gongshan Industrial Zone, Meihu Town, Jiexi County, Jieyang City, Guangdong Province
Manufacturer	:	Xin Jin cable Co., LTD
Address	:	Gongshan Industrial Zone, Meihu Town, Jiexi County, Jieyang City, Guangdong Province
EUT Description	:	Network Cable
Model Number	:	SNA-1555HQ
Rating	:	/

Test Standards:
EN 55022:2011/AC:2011

The EUT described above is tested by Dongguan True Safety Testing Co., Ltd. EMC Laboratory to determine the maximum emissions from the EUT and ensure the EUT to be compliance with the immunity requirements of the EUT. Dongguan True Safety Testing Co., Ltd. EMC Laboratory is assumed full responsibility for the accuracy of the test results. Also, this report shows that the EUT technically complies with the 2014/30/EU directive and its amendment requirements. The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Tested by:

Test Engineer

Reviewer :

Supervisor

Approved & Authorized Signer :

Andy/Manager





1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
Radiated Emission	PASS
Conducted Disturbance	N/A
Harmonic Current	N/A
Voltage Fluctuation and Flicker	N/A



2. GENERAL INFORMATION

2.1. Report information

- 2.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that TST approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that TST in any way guarantees the later performance of the product/equipment.
- 2.1.2. The sample/s mentioned in this report is/are supplied by Applicant, TST therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.
- 2.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through TST, unless the applicant has authorized TST in writing to do so.

2.2. Measurement Uncertainty

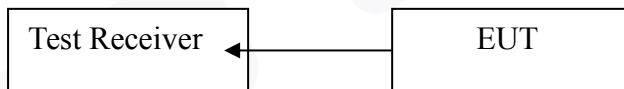
Available upon request.

3. PRODUCT DESCRIPTION

3.1.EUT Description

Applicant	:	Xin Jin cable Co., LTD
Address	:	Gongshan Industrial Zone, Meihu Town, Jiexi County, Jieyang City, Guangdong Province
Manufacturer	:	Xin Jin cable Co., LTD
Address	:	Gongshan Industrial Zone, Meihu Town, Jiexi County, Jieyang City, Guangdong Province
EUT Description	:	Network Cable
Model Number	:	SNA-1555HQ

3.2.Block Diagram of EUT Configuration



3.3.Operating Condition of EUT

Test mode 1: ON

3.4.Test Conditions

Temperature: 23-26°C
Relative Humidity: 55-68 %

3.5.Modifications

No modification was made.

3.6. Abbreviations

AC	Alternating Current
AMN	Artificial Mains Network
DC	Direct Current
EM	ElectroMagnetic
EMC	ElectroMagnetic Compatibility
EUT	Equipment Under Test
IF	Intermediate Frequency
RF	Radio Frequency
rms	root mean square
EMI	Electromagnetic Interference
EMS	Electromagnetic Susceptibility

3.7. Performance Criterion

Criterion A: The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance Level specified by the manufacturer when the equipment is used as intended.

Criterion B: After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended.

Criterion C: Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.



4. TEST EQUIPMENT USED

4.1. For Conducted Emission Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS30	828985/018	Apr. 11, 24	1 Year
2.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100006	Apr. 11, 24	1 Year
3.	L.I.S.N.	Rohde & Schwarz	ESH2-Z5	834549/005	Apr. 11, 24	1 Year
4.	Conical	Emtek	N/A	N/A	N/A	N/A
5.	Voltage Probe	Schwarzbeck	TK9416	N/A	Apr. 11, 24	1 Year
6.	Coaxial Switch	Anritsu	MP59B	6100214550	Apr. 11, 24	1 Year

4.2. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	ANRITSU	MS2661C	6200140915	Apr. 11, 24	1 Year
2.	Test Receiver	Rohde&Schwarz	ESC830	828982/018	Apr. 11, 24	1 Year
3.	Bilog Antenna	Schwarzbeck	VULB9163	142	Apr. 11, 24	1 Year
4.	50 Coaxial Switch	Anritsu Corp	MP59B	6100237248	Apr. 11, 24	1 Year
5.	Cable	Schwarzbeck	AK9513	ACRX1	Apr. 11, 24	1 Year
6.	Cable	Rosenberger	N/A	FR2RX2	Apr. 11, 24	1 Year
7.	Cable	Schwarzbeck	AK9513	CRRX2	Apr. 11, 24	1 Year
8.	Cable	Schwarzbeck	AK9513	CRRX2	Apr. 11, 24	1 Year
9.	Signal Generator	HP	864A	3625U00573	Apr. 11, 24	1 Year

4.3. For Harmonic / Flicker Test

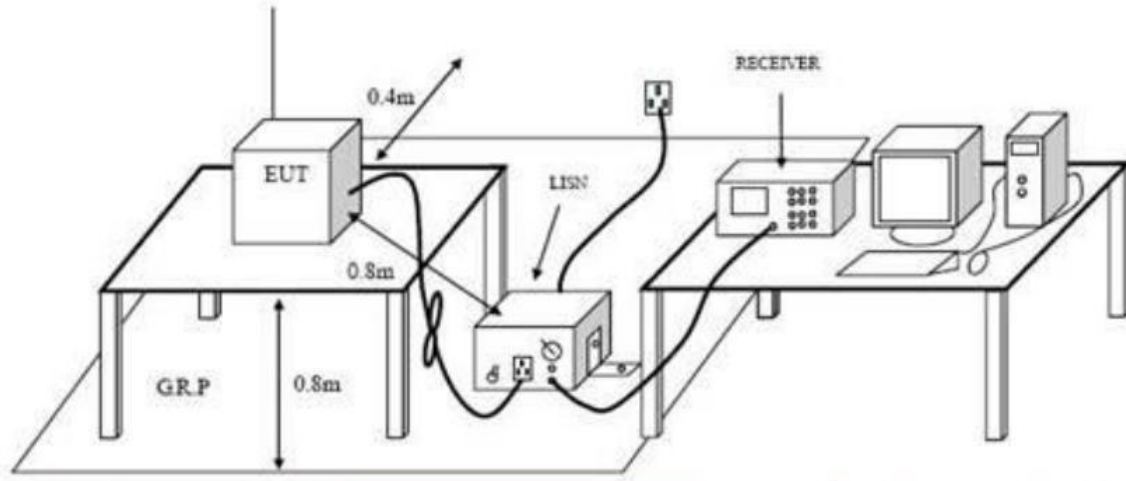
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power Frequency test system	HAEFELY	PHF555	080419-03	Apr. 11, 24	1 Year

4.4. For Electrostatic Discharge Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	ESD Tester	HAEFELY	Noiseken	H911'292	Apr. 11, 24	1 Year

5. POWER LINE CONDUCTED EMISSION TEST

5.1. Block Diagram of Test Setup



5.2. Test Standard

EN 55022:2011/AC:2011

5.3. Power Line Conducted Emission Limit

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

5.4. EUT Configuration on Test

The following equipments are installed on conducted emission test to meet EN 55032 requirement and operating in a manner, which tends to maximize its emission characteristics in a normal application.

5.4.1. EUT Information

Model Number : SNA-1555HQ
 Serial Number : Cat.5, Cat.5e, Cat.6, Cat.6e, 5m, 10m, 15m, 20m, 25m, 30m
 Manufacturer : Xin Jin cable Co., LTD



5.5. Operating Condition of EUT

- 5.5.1. Setup the EUT and simulators as shown in Section 5.1.
- 5.5.2. Turn on the power of all equipments.
- 5.5.3. Let the EUT work in test modes (ON) and test it.

5.6. Test Procedure

The EUT is put on the ground and connected to the AC mains through a Artificial Mains Network (AMN). This provided 50ohm-coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission Levels according to the EN 55032 regulations during conducted emission test.

The bandwidth of the test receiver (R&S Test Receiver ESHS30) is set at 10KHz.

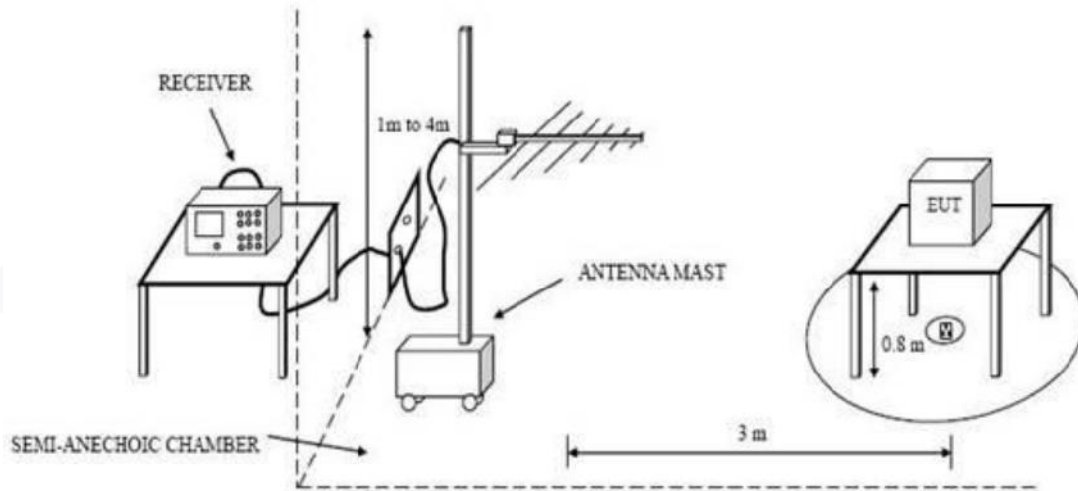
The frequency range from 150 KHz to 30 MHz is investigated.

5.7. Test Result

N/A

6. RADIATED EMISSION TEST

6.1. Open Site Setup Diagram



6.2. Test Standard

EN 55022:2011/AC:2011

6.3. Radiated Emission Limit

All emanations from a Class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the Level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 230	3	40
230 ~ 1000	3	47

Note:(1) The tighter limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instruments antenna and the closed point of any part of the EUT.

6.4. EUT Configuration on Test

The EN 55032 Class B regulations test method must be used to find the maximum emission during radiated emission test.

6.5. Operating Condition of EUT

6.5.1. Setup the EUT as shown on Section 6.1.



6.5.2. Turn on the power of all equipments.

6.5.3. Let the EUT work in test mode and measure it.

6.6. Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission Level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission Level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth setting on the test receiver (R&S TEST RECEIVER ESCS20) is 120 KHz.

The EUT is tested in Semi-Anechoic Chamber. and all the scanning waveform is put in

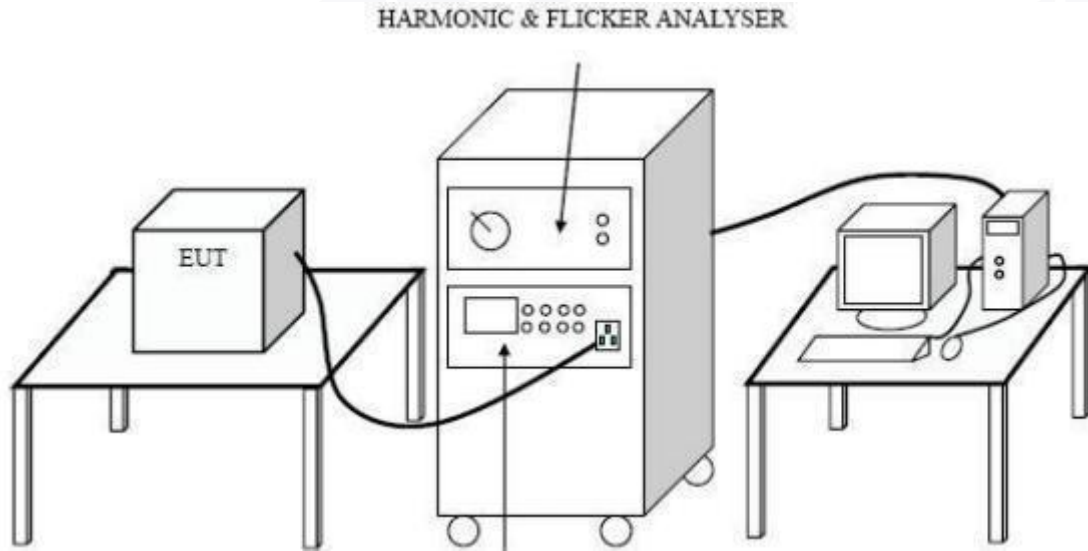
Appendix I.

6.7. Test Results

PASS.

7. HARMONIC CURRENT EMISSION TEST

7.1. Block Diagram of Test Setup



7.2. Test Standard and Limit

7.2.1. Test Standard

EN IEC 61000-3-2:2019+A1:2021

7.2.2. Limits

Table 12 Harmonic Current Test Limit (Class A)



Harmonic order (n)	Maximum permissible harmonic current (A)
Odd harmonics	
3	2.30
5	1.14
7	0.77
9	0.40
11	0.33
13	0.21
$15 \leq n \leq 39$	$0.15 \times 15/n$
Even harmonics	
2	1.08
4	0.43
6	0.30
$8 \leq n \leq 40$	$0.23 \times 8/n$

7.3. Test Procedure

The power cord of the EUT is connected to the output of the test system. Turn on the Power of the EUT and use the test system to test the harmonic current Level.

7.4. Test Results

N/A

8. VOLTAGE FLUCTUATIONS & FLICKER TEST

8.1. Block Diagram of Test Setup

Same as Section 7.1..

8.2. Test Standard

EN 61000-3-3:2013+A1:2019

8.3. Operating Condition of EUT

Same as Section 7.3.. The power cord of the EUT is connected to the output of the test system. Turn on the power of the EUT and use the test system to test the harmonic current Level.

Flicker Test Limit

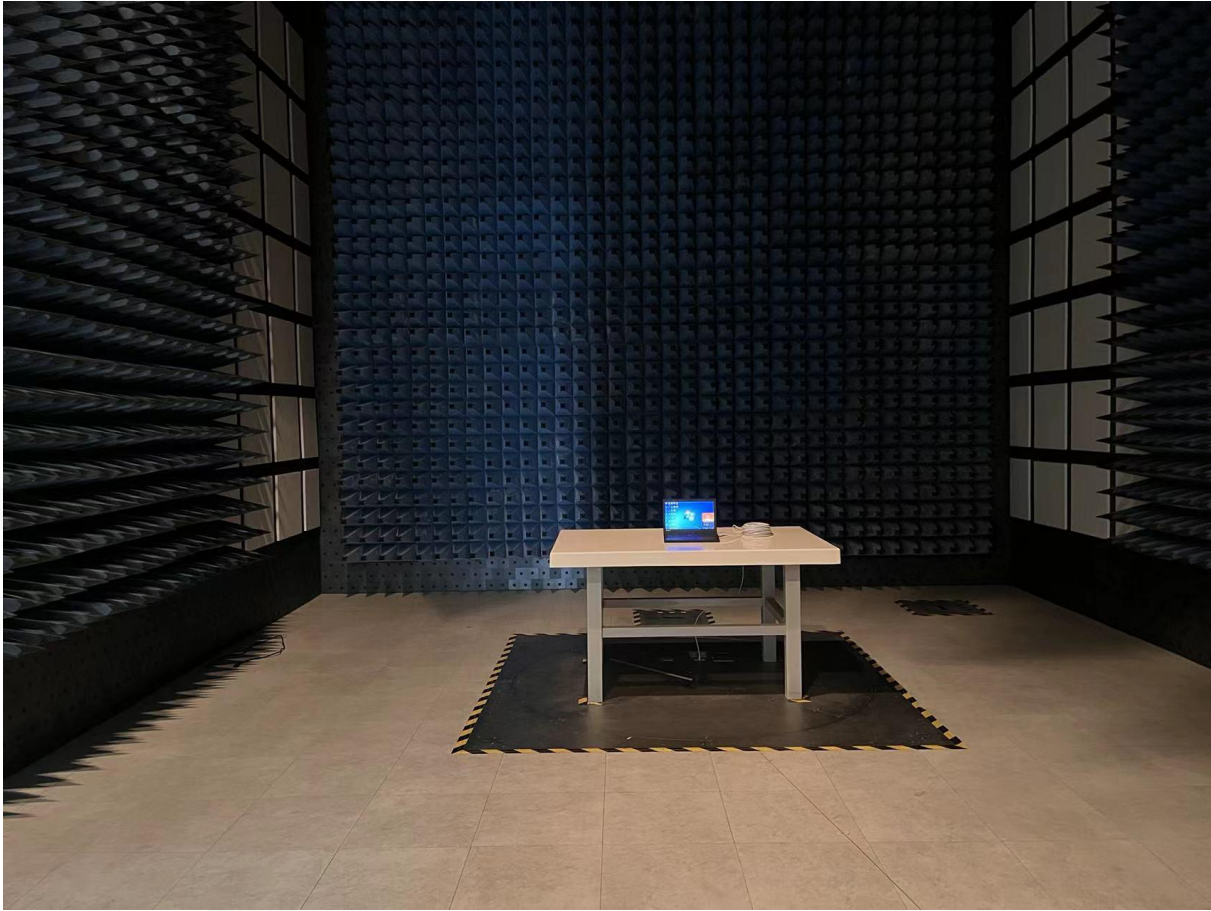
Test items	Limits
Pst	1.0
dc	3.3%
dmax	4.0%
dt	Not exceed 3.3% for 500ms

8.4. Test Results

N/A



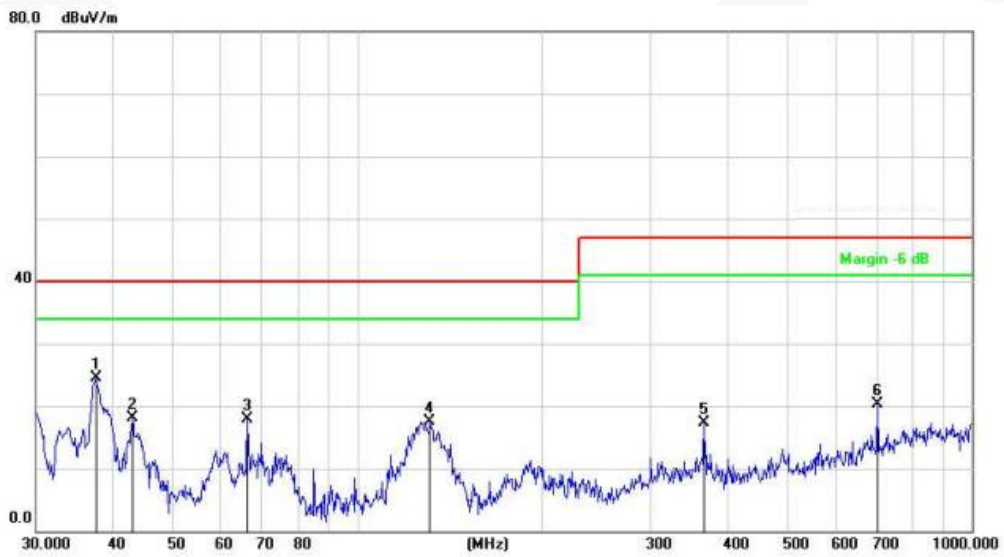
APPENDIX I





Site LAB	Polarization: Vertical	Temperature:
Limit:	Power:	Humidity:
EUT:	Distance:	
M/N:		
Mode:		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree
1	*	37.6798	53.31	-18.12	35.19	40.00	-4.81	peak		
2		42.4508	50.51	-18.13	32.38	40.00	-7.62	peak		
3		59.2325	43.42	-18.73	24.69	40.00	-15.31	peak		
4		66.0342	44.01	-19.46	24.55	40.00	-15.45	peak		
5		130.3789	45.39	-19.27	26.12	40.00	-13.88	peak		
6		501.1790	35.13	-14.73	20.40	47.00	-26.60	peak		



Site LAB
 Limit:
 EUT:
 M/N:
 Mode:
 Note:

Polarization: **Horizontal** Temperature:
 Power: Humidity:
 Distance:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	37.5479	42.56	-18.13	24.43	40.00	-15.57	peak		
2		43.0505	36.11	-17.92	18.19	40.00	-21.81	peak		
3		66.2662	37.33	-19.49	17.84	40.00	-22.16	peak		
4		131.2965	36.66	-19.20	17.46	40.00	-22.54	peak		
5		366.8231	35.04	-17.67	17.37	47.00	-29.63	peak		
6		701.7610	32.19	-11.84	20.35	47.00	-26.65	peak		



APPENDIX II

Photo 1 General appearance of the EUT



Photo 2 General appearance of the EUT



*****End of report*****