TEST REPORT

EN 60601-1-2:2017

Medical electrical equipment – Part 1-2: General requirements for safety – Collateral standard: Electromagnetic compatibility – Requirements and tests

Report Reference No. ..... :	**RBT200320211SR-1**
Compiled by (position+printed name+signature) . :	File administrators Tommy Ma
Supervised by (position+printed name+signature) . :	Technique principal Toddy Tian
Approved by (position+printed name+signature) . :	Manager Amy Zhang
Date of issue ..... :	2020-03-20
Testing Laboratory Name ..... :	**SHENZHEN RONGBIAO TESTING SERVICES CO., LTD**
Address ..... :	LIANTAN INDUSTRIAL No.95 OF LUOHU SHENZHEN CHINA.
Testing location/ procedure ..... :	Full application of Harmonised standards Partial application of Harmonised standards Other standard testing methods
Applicant's name ..... :	**Jiangxi AICARE Medical Technology Co., Ltd.**
Address ..... :	South Side of South Ring Road, Le'an County, Fuzhou City, Jiangxi Province (Building No. 1, New Era Home Group, Le' an County).
Test specification:	
Standard ..... :	**EN 60601-1:2006+A12:2014,** **EN 60601-1-2:2015,** **EN ISO 13485:2016+AC:2016,** **EN ISO 14971:2012,** **EN ISO 15223-1:2016,** **EN ISO 10993-1:2009+AC:2010**
Non-standard test method ..... :	/
Test item description ..... :	Infrared Thermometer
Manufacturer ..... :	Jiangxi AICARE Medical Technology Co., Ltd.
Model/Type reference ..... :	A66,A68,A69
Trade name ..... :	N/A
Ratings ..... :	DC 3V
Result ..... :	**Positive**

EMC -- T E S T R E P O R T

Equipment under Test	:	Infrared Thermometer
Model /Type	:	A66
Applicant	:	Jiangxi AICARE Medical Technology Co., Ltd.
Address	:	South Side of South Ring Road, Le'an County, Fuzhou City, Jiangxi Province (Building No. 1, New Era Home Group, Le' an County).
Manufacturer	:	Jiangxi AICARE Medical Technology Co., Ltd.
Address	:	South Side of South Ring Road, Le'an County, Fuzhou City, Jiangxi Province (Building No. 1, New Era Home Group, Le' an County).

Test Result according to the standards on page 4:	**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.

Contents

1. TEST STANDARDS

The tests were performed according to following standards:

EN 60601-1-2:2017 Medical electrical equipment – Part 1-2: General requirements for safety – Collateral standard: Electromagnetic compatibility – Requirements and tests.

Remark: This EUT is ranged to the Group 1 Class B apparatus according to the standard of EN 55011:2016+A1:2017 clause 5.2

2. SUMMARY

• – Specified by manufacturer
O – Not specified

21. General Remarks

Date of receipt of test sample : 2020-03-12

Testing commenced on : 2020-03-12

Testing concluded on : 2020-03-20

22. Equipment Under Test

Power supply system utilised

Power supply voltage : o 230V / 50 Hz o 115V / 60Hz
■ 3 V DC o 24 V DC

23. Short description of the Equipment under Test (EUT)

The EUT is a Infrared Thermometer, all tests were conducted on Model A66,

Serial number: prototype

24. EUT operation mode

The equipment under test was operated during the measurement under the following conditions:

Test program (customer specific)

Emissions tests……..…..: According to EN 60601-1-2, searching for the highest disturbance.
Immunity tests ……..: According to EN 60601-1-2, searching for the highest susceptivity.
Harmonics current……. : According to EN 61000-3-2, searching for the highest disturbance.
Voltage fluctuation……. : According to EN 61000-3-3, searching for the highest disturbance.

25. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- - supplied by the manufacturer

o - supplied by the lab

•	Power adapter	Length(m) : 1.4 Shield : Unshielded Detachable: Detachable M/N: GS2T-006-060
o	Non_invasive Blood Pressure Simulator and Tester	Manufacturer: FLUKE M/N: BP Pump 2

26. Compliance criteria

Under the test conditions specified in 6.2.1.10 of EN 60601-1-2:2017, the equipment of system shall be able to provide the essential performance and remain safe. The following degradations associated with essential performance and safety shall not be allowed:

- component failures;
- changes in programmable parameters;
- reset to factory defaults (manufacturer's presets);
- change of operating mode;
- false alarms;
- cessation or interruption of any intended operation, even if accompanied by an alarm;
- initiation of any unintended operation, including unintended or uncontrolled motion, even if accompanied by an alarm
- error of a displayed numerical value sufficiently large to affect diagnosis or treatment;
- noise on a waveform in which the noise would interfere with diagnosis, treatment or monitoring;
- artifact or distortion in an image in which the artifact would interfere with diagnosis, treatment or monitoring;
- failure of automatic diagnosis or treatment equipment and systems to diagnose or treat, even if accompanied by an alarm.

For equipment and systems with multiple functions, the criteria apply to each function, parameter and channel.
The equipment or system may exhibit degradation of performance (e.g. deviation from manufacturer's specifications) that does not affect essential performance or safety.

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

SHENZHEN RONGBIAO TESTING SERVICES CO., LTD
Address: LIANTAN INDUSTRIAL No.95 OF LUOHU SHENZHEN CHINA.
The Test Site is constructed and calibrated to meet the CE requirements.

3.2. Environmental conditions

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

Temperature: 22-25 ° C

Humidity: 40-54 %

Atmospheric pressure: 950-1050mbar

3.3. Test Description

Emission Measurement		
Radiated Emission	EN 60601-1-2:2017 EN 55011:2016+A1:2017	PASS
Conducted Disturbance (0.15-30MHz)	EN 60601-1-2:2017 EN 55011:2016+A1:2017	PASS
Harmonic Current	EN 60601-1-2:2017 EN 61000-3-2: 2014	PASS
Voltage Fluctuation and Flicker	EN 60601-1-2:2017 EN 61000-3-3: 2013	PASS
Immunity Measurement		
Electrostatic Discharge	EN 60601-1-2:2017 EN 61000-4-2: 2009	PASS
RF Field Strength Susceptibility (80~2500MHz)	EN 60601-1-2:2017 EN 61000-4-3:2006+A2:2010	PASS
Electrical Fast Transient/Burst Test	EN 60601-1-2:2017 EN 61000-4-4:2012	PASS
Surge Test	EN 60601-1-2:2017 EN 61000-4-5:2014	PASS
Conducted Susceptibility Test	EN 60601-1-2:2017 EN 61000-4-6:2014+AC:2015	PASS
Power Frequency Magnetic Field Susceptibility Test	EN 60601-1-2:2017 EN 61000-4-8: 2010	PASS
Voltage Dips and Interruptions Test	EN 60601-1-2:2017 EN 61000-4-11:2004+A1:2017	PASS

Note: “N/A” means “not applicable”.
The measurement uncertainty is not included in the test result.

EN 60601-1-2:2017			
Clause	**Requirement + Test**	**Result - Remark**	**Verdict**
5	**IDENTIFICATION, MARKING AND DOCUMENTS**		PASS
5.1	**Marking on the outside of ME EQUIPMENT OR ME EQUIPMENT parts**		N/A
5.1.1	RF equipment marked with symbol IEC 60417-5140		N/A
5.1.2	Equipment for which the connector testing exemption is used marked with symbol IEC 60417-5134		N/A
5.1.3	Equipment specified for use only in shielded location has appropriate marking		N/A
5.2	**ACCOMPANYING DOCUMENTS**		PASS
5.2.1	Instructions for use		PASS
5.2.1.1	All equipment and systems:		PASS
a)	A statements that medical electrical equipment needs special precautions regarding EMC and needs to be installed according to EMC information	Please refer to User manual	PASS
b)	A statement that RF communications equipment can effect medical electrical equipment	Please refer to User manual	PASS
5.2.1.2	Equipment for which the connector testing exemption is used:		N/A
a)	A reproduction of the ESD warning symbol (IEC 60417-5134)		N/A
b)	A warning that pins of connectors marked with the warning symbol shall not be touched and connections shall not be made without special precautions		N/A
c)	A specification of precautionary procedures		N/A
d)	A recommendation that all staff receive explanation and training in ESD procedures		N/A
e)	A specification of the minimum contents of ESD precautions procedure training		N/A
5.2.1.3	For equipment and systems without a manual sensitivity adjustment and for which the manufacturer specifies a minimum amplitude or signal:		PASS
a)	The minimum amplitude or value of signal	Please refer to User manual	PASS
b)	A warning that operation of the equipment below that value may cause incorrect results	Please refer to User manual	PASS
5.2.1.4	Requirements applicable to TYPE A PROFESSIONAL SYSTEMS		N/A
5.2.2	Technical description		PASS
5.2.2.1	All equipment and systems:		PASS
a)	List of cables and accessories	Please refer to User manual	PASS
b)	A warning that other cables and accessories may affect EMC performance	Please refer to User manual	PASS
c)	Table 1, modified as appropriate	Please refer to User manual	PASS
d)	A warning regarding stacking and location close to other equipment	Please refer to User manual	PASS

e)	A justification for each immunity compliance level below 60601 test level		N/A
f)	Table 2, completed as appropriate		N/A
5.2.2.2	Equipment not specified for use only in shielded location		PASS
	Table 3 and Table 5 shall be used for LIFE-SUPPORTING , Table 4 and Table 6 shall be used are not LIFE-SUPPORTING , selected and completed as appropriate	Please refer to User manual	PASS
a)	ME EQUIPMENT or ME SYSTEM shall be replaced with the MODEL OR TYPE REFERENCE of the ME EQUIPMENT or SYSTEM	Please refer to User manual	PASS
b)	Table 3or Table 4,as applicable shall be filled in with the IMMUNITY COMPLIMENT LEVEL in accordance with the requirements of 5.2.2 and 6.2	Please refer to User manual	PASS
c)	The expressions of Table 3 Table 4 and Table 5 Table 6,as applicable, shall be calculated,the results substituted in place of the COMPLIANCE LEVELS for IEC61000-4-6and IEC61000-4-3 test	Please refer to User manual	PASS
d)	Table 5 and Table 6,as applicable,shall be completed by calculating the distance corresponding to each entry in columns 2 through 5 in Table 5 or in columns 2 through 4 in Table 6	Please refer to User manual	PASS
e)	If,according to 6.2 or the scope of the EMC basic standard not apply to,the corresponding entries shall state “not applicable”	Please refer to User manual	PASS
5.2.2.3	Equipment specified for use only in shielded location		N/A
a)	A warning that equipment should be used only in the specified type of shielded location		N/A
b)	Tables modified if disturbance allowance according in 6.1.1.1 d) is used		N/A
c)	A specification of allowed emission of other equipment located within the shielded location		N/A
d)	Table 7 shall be used for LIFE-SUPPORTING, Table 8 shall be used are not LIFE-SUPPORTING		N/A
5.2.2.4	Equipment that intentionally apply RF energy		N/A
5.2.2.5	Equipment that intentionally receive RF energy		N/A
5.2.2.6	Equipment that includes RF transmitters		N/A
5.2.2.7	Requirements of cables and accessories	Please refer to User manual	PASS
5.2.2.8	Requirements applicable to large permanently installed equipment and systems		N/A
5.2.2.9	Requirements applicable to equipment that has no essential performance		N/A
5.2.2.10	Requirements applicable to TYPE A PROFESSIONAL SYSTEMS		N/A
6	**ELECTROMAGNETIC COMPATIBILITY**	(see appended table)	

3.4. 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 Shenzhen Huatongwei International Inspection 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 Huatongwei laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.65dB	(1)
Conducted Disturbance	0.15~30MHz	3.42dB	(1)

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

3.5. Equipments Used during the Test

Radiated Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ULTRA-BROADBAND ANTENNA	ROHDE & SCHWARZ	HL562	100015	2019/05
2	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESI 26	100009	2019/10
3	RF TEST PANEL	ROHDE & SCHWARZ	TS / RSP	335015/ 0017	2019/10
4	TURNTABLE	ETS	2088	2149	2019/10
5	ANTENNA MAST	ETS	2075	2346	2019/10
6	EMI TEST SOFTWARE	ROHDE & SCHWARZ	ESK1	N/A	2019/10

Conducted Disturbance					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCS30	100038	2019/10
2	Artificial Mains	ROHDE & SCHWARZ	ESH3-Z5	100049	2019/10
3	Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	100044	2019/10
4	EMI TEST SOFTWARE	ROHDE & SCHWARZ	ESK1	N/A	2019/10

Harmonic Current					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	Purified Power Source	CALIFORNIA INSTRUMENTS	HFS500	54513	2019/10
2	Harmonic And Flicker Analyzer	EM TEST	DPA503S1	0500-10	2019/10

Voltage Fluctuation and Flicker					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	Purified Power Source	CALIFORNIA INSTRUMENTS	HFS500	54513	2019/10
2	Harmonic And Flicker Analyzer	EM TEST	DPA503S1	0500-10	2019/10

Electrostatic Discharge					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ESD Simulator	EM TEST	DITOC0103Z	0301-04	2019/10

RF Field Strength Susceptibility					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	SIGNAL GENERATOR	IFR	2032	203002/100	2019/10
2	AMPLIFIER	AR	150W1000	301584	2019/10
3	DUAL DIRECTIONAL COUPLER	AR	DC6080	301508	2019/10
4	POWER HEAD	AR	PH2000	301193	2019/10
5	POWER METER	AR	PM2002	302799	2019/10
6	TRANSMITTING AERIAL	AR	AT1080	28570	2019/10
7	POWER AMPLIFIER	AR	25S1G4A	0325511	2019/10
8	DUAL DIRECTIONAL COUPLER	AR	DC7144A	0325100	2019/10
9	TRANSMITTING AERIAL	AR	AT4002A	0324848	2019/10

Electrical Fast Transient/Burst					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	Ultra Compact Simulator	EM TEST	UCS500M6	0500-19	2019/10

Surge					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ULTRA COMPACT SIMULATOR	EM TEST	UCS500M6	0500-19	2019/10

Conducted Susceptibility					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	Signal Generator	IFR	2023A	202304/060	2019/10
2	Amplifier	AR	75A250	302205	2019/10
3	Dual Directional Coupler	AR	DC2600	302389	2019/10
4	6db Attenuator	EMTEST	ATT6/75	0010230A	2019/10
5	CDN	EMTEST	CDN M3	0802-03	2019/10
6	EM CLAMP	LÜTHI	EM101	335625	2019/10

Power Frequency Magnetic Field Susceptibility					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ULTRA COMPACT SIMULATOR	EM TEST	UCS500M6	202304/060	2019/10
2	MOTOR DRIVEN VOLTAGE TRANSFORMER	EM TEST	MV2616	302205	2019/10
3	CURRENT TRANSFORMER	EM TEST	MC2630	302389	2019/10
4	MAGNETIC COIL	EM TEST	MS100	0010230A	2019/10

Voltage Dips and Interruptions					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	Ultra Compact Simulator	EM TEST	UCS500M6	0500-19	2019/10
2	Motor Driven Voltage Transformer	EM TEST	MV2616	0301-11	2019/10

4. TEST CONDITIONS AND RESULTS

41. Radiated Emission

For test instruments and accessories used see section 3.6.

4.1.1. Description of the test location

Test location: Shielded room No. 4

4.1.2. Limits of disturbance (Class B)

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dBμV/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 test instrument antenna and the closest point of any part of the E.U.T.

4.1.3. Description of the test set-up

4.1.3.1. Operating Condition

The EUT is turned on during the test, and the maximum emanating results are recorded.

4.1.3.2. Test Configuration and Procedure

EUT is tested in Semi-Anechoic Chamber. EUT is placed on a nonmetal table above a grounded turntable. The turntable can rotate 360 degrees to determine the azimuth of the maximum emission level. EUT is set 3 meters away from the center of receiving antenna. The antenna can move up and down from 1 to 4 meter to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna are set on the test.

4.1.4. Test result

The requirements are **Fulfilled**

Band Width: 120kHz

Frequency Range: 30MHz to 1000MHz

Remarks: The limits are kept. For detailed results, please see the following page(s).

Margin=limit-level

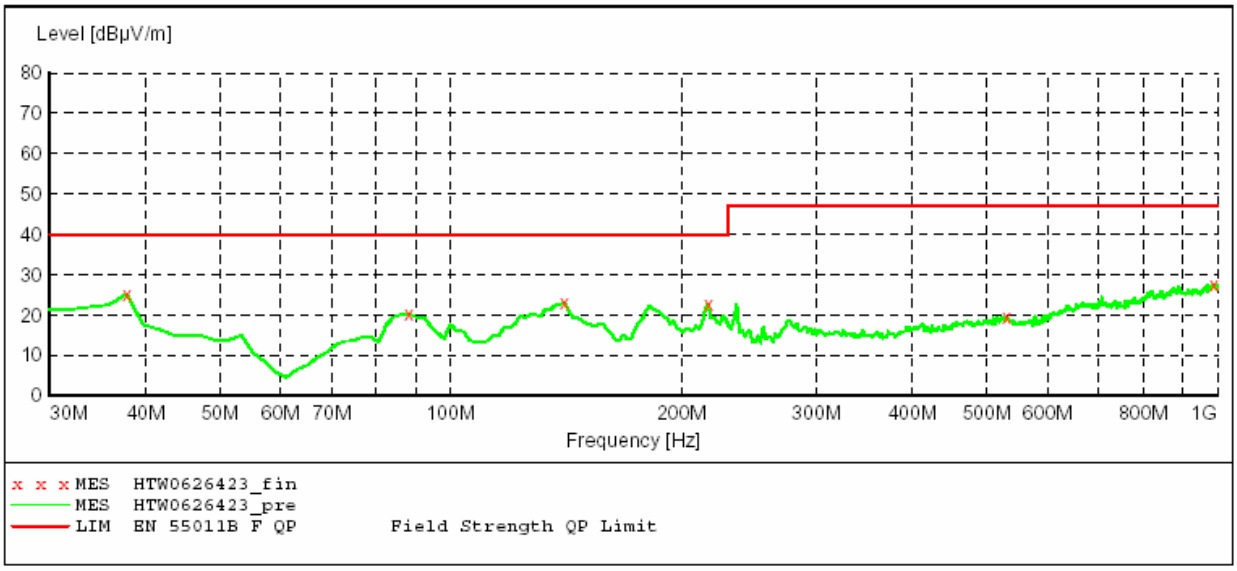
Level=read values+transducer

Transducer=antenna factor+pre-amplifier factor+cable loss

SCAN TABLE: "test Field(30M-1G)QP"

Short Description: Field Strength(30M-1G)

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562



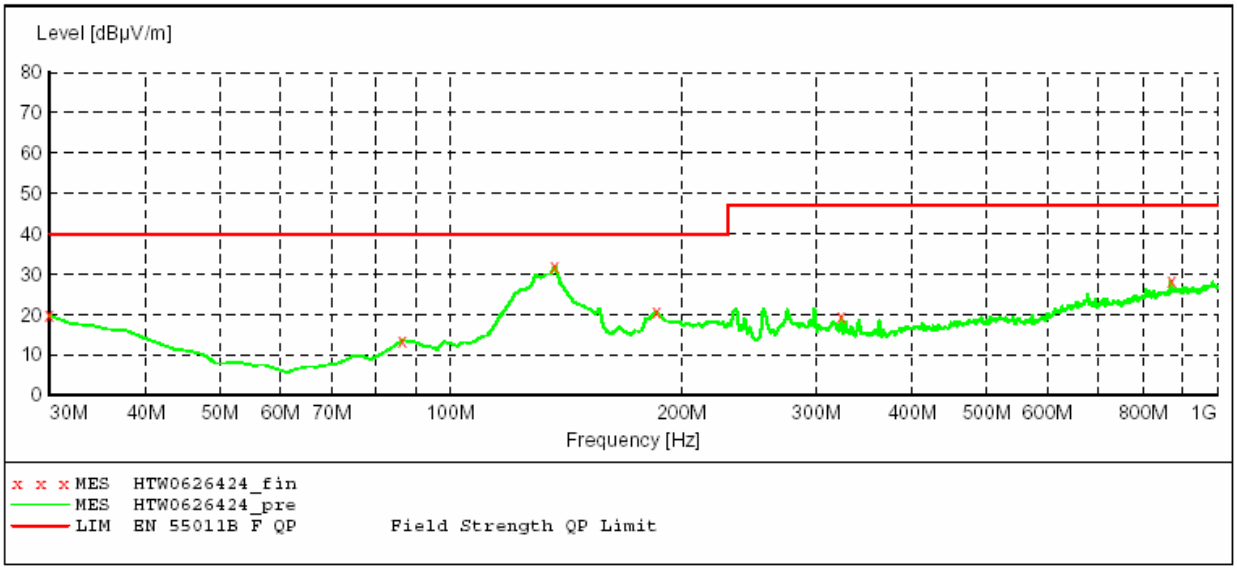
MEASUREMENT RESULT:

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
37.770000	25.20	-15.3	40.0	14.8	QP	100.0	106.00	VERTICAL
88.310000	20.30	-20.4	40.0	19.7	QP	100.0	112.00	VERTICAL
140.800000	23.20	-21.6	40.0	16.8	QP	100.0	0.00	VERTICAL
216.610000	22.60	-20.6	40.0	17.4	QP	100.0	177.00	VERTICAL
529.570000	19.50	-13.1	47.0	27.5	QP	100.0	118.00	VERTICAL
988.330000	27.60	-5.9	47.0	19.4	QP	100.0	231.00	VERTICAL

SCAN TABLE: "test Field(30M-1G)QP"

Short Description: Field Strength(30M-1G)

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562



MEASUREMENT RESULT:

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	19.80	-11.3	40.0	20.2	QP	100.0	215.00	HORIZONTAL
86.370000	13.60	-20.8	40.0	26.4	QP	100.0	63.00	HORIZONTAL
136.910000	32.00	-21.1	40.0	8.0	QP	300.0	7.00	HORIZONTAL
185.510000	20.80	-22.2	40.0	19.2	QP	100.0	251.00	HORIZONTAL
323.520000	19.40	-16.2	47.0	27.6	QP	100.0	33.00	HORIZONTAL
869.750000	28.20	-6.9	47.0	18.8	QP	100.0	63.00	HORIZONTAL

4.2. Conducted disturbance

For test instruments and accessories used see section 3.6.

4.2.1. Description of the test location

Test location: Shielded room No. 2

4.2.2. Limits of disturbance

Limit of conducted disturbance at the mains ports(Class B)

Frequency Range (MHz)	Limits (dBuV)	
	Quasi-Peak	Average
0.150～0.500	66~56	56~46
0.5000~5.000	56	46
5.000~30.000	60	50

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

4.2.3. Description of the test set-up

4.2.3.1. Operating Condition

The EUT is turned on during the test, and the maximum emanating results are recorded.

4.2.3.2. Test Configuration and Procedure

EUT is placed on the grounded reference plane. Connect the power line of the EUT to the LISN which is connected to receiver by coaxial line, then disturbance of the neutral line and live line can be detected by the receiver.

4.2.4. Test result

The requirements are **Fulfilled**

Band Width: 9kHz

Frequency Range: 150kHz to 30MHz

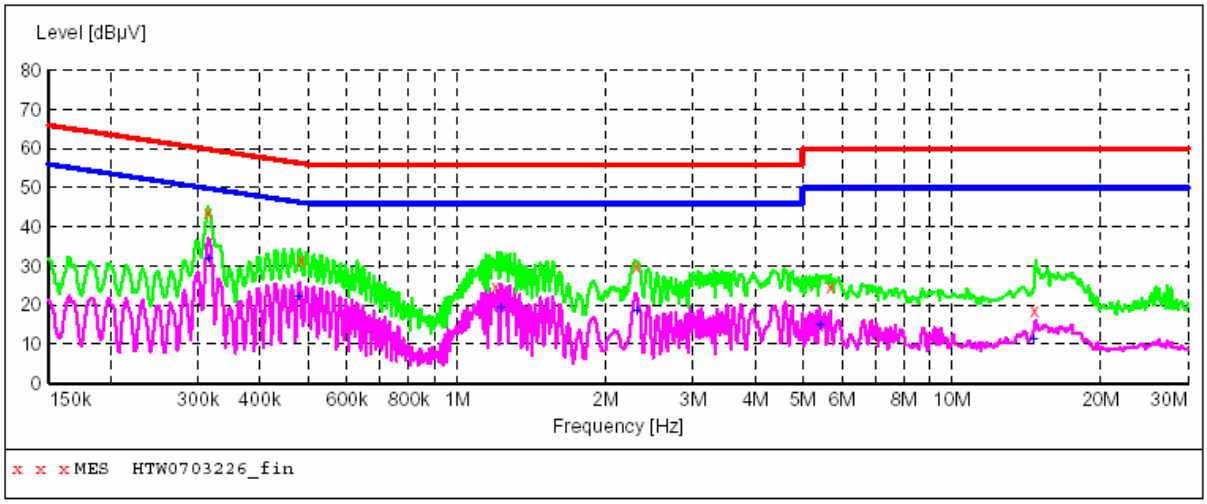
Remarks: The limits are kept. For detailed results, please see the following page(s).

Margin=limit-level

Level=read values+transducer

Transducer=insertion loss of LISN+cable loss+insertion loss of pulse limiter

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



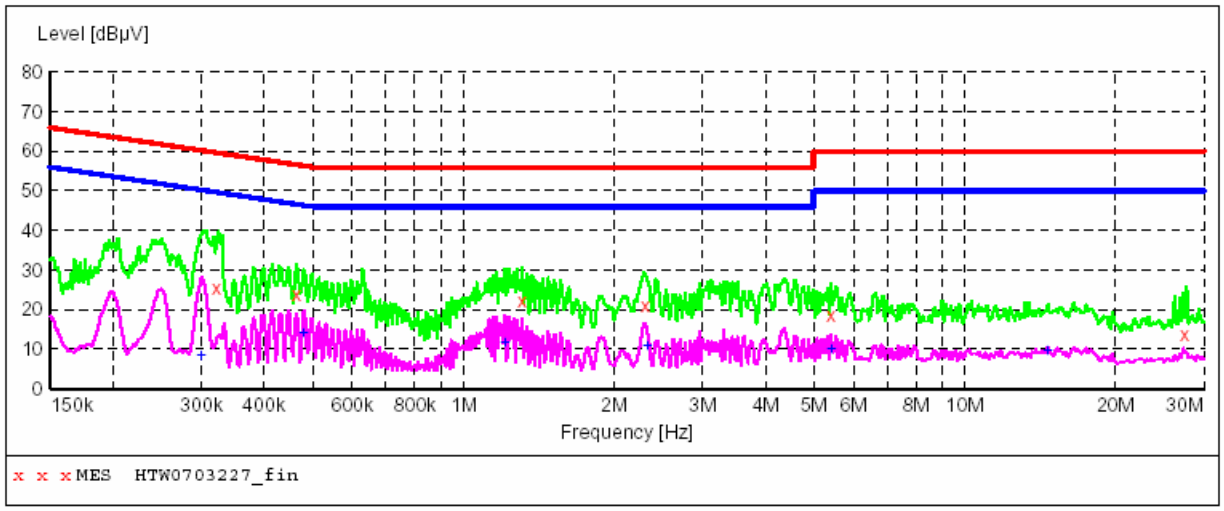
MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.314708	43.70	9.7	60	16.1	QP	N	GND
0.483930	31.40	9.7	56	24.9	QP	N	GND
1.200300	24.80	9.9	56	31.2	QP	N	GND
2.307024	29.70	9.8	56	26.3	QP	N	GND
5.676673	24.50	9.8	60	35.5	QP	N	GND
14.652010	18.40	9.7	60	41.6	QP	N	GND

MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.314708	31.80	9.7	50	18.0	AV	N	GND
0.480090	22.00	9.7	46	24.3	AV	N	GND
1.229337	19.50	9.9	46	26.5	AV	N	GND
2.307024	18.40	9.8	46	27.6	AV	N	GND
5.411660	15.00	9.8	50	35.0	AV	N	GND
14.652010	11.10	9.7	50	38.9	AV	N	GND

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.322330	25.60	9.7	60	34.0	QP	L1	GND
0.465031	23.90	9.7	57	32.7	QP	L1	GND
1.310249	22.00	9.9	56	34.0	QP	L1	GND
2.307030	21.00	9.8	56	35.0	QP	L1	GND
5.411660	18.50	9.8	60	41.5	QP	L1	GND
27.496610	13.60	9.6	60	46.4	QP	L1	GND

MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.300021	8.60	9.7	50	41.6	AV	L1	GND
0.480090	14.30	9.7	46	32.0	AV	L1	GND
1.209902	11.60	9.9	46	34.4	AV	L1	GND
2.325480	10.80	9.8	46	35.2	AV	L1	GND
5.411660	9.90	9.8	50	40.1	AV	L1	GND
14.652006	9.70	9.7	50	40.3	AV	L1	GND

4.3. Harmonic current

For test instruments and accessories used see section 3.6.

4.3.1. Description of the test location

Test location: Shielded room No. 2

4.3.2. Limits of harmonic current

Test configuration and procedure see clause 7.1 of standard EN 61000-3-2: 2014.

4.3.3. Description of the test set-up

4.3.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum emanation are recorded.

4.3.4. Test result

The requirements are **Fulfilled**

Remarks: The limits are kept. For detailed results, please see the following page(s).

Test Report of HTW

Standard used:	EN 61000-3-2 Ed.3 Quasi-stationary Equipment class A <= 150% of the limit
Observation time:	150s
Windows width:	10 periods – (EN 61000-4-7: 2002+A1: 2009)
Customer:	Chongqing Gient Heating Industry Co., Ltd.
Mains supply voltage:	DC 3V
E. U. T.:	Infrared Thermometer M/N: HEL-Y5
Date of test:	2020-03-10
Tester:	LuoRin

Test Result	
E. U. T.:	PASS
Power Source:	PASS

E. U. T. Result

Check harmonics 2..40 [exception odd 21..39]:

Harmonic(s) > 150%:	
Order (n):	None
Harmonic(s) with average > 100%:	
Order (n):	None

Check odd harmonics 21..39:

All Partial Odd Harmonics below partial limits.	
Harmonic(s) > 150%:	
Order (n):	None
Harmonic(s) with average > 150%:	
Order (n):	None

Power Source Result

First dataset out of limit:	
DS (time):	None
Harmonic(s) out of limit:	
Order (n):	None

Average harmonic current results

Hn	Ieff [A]	% of Limit	Limit [A]	Result
1	5.740E-3			
2	386.968E-6	0.036	1.08	PASS
3	4.037E-3	0.176	2.30	PASS
4	371.040E-6	0.086	430.00E-3	PASS
5	4.042E-3	0.355	1.14	PASS
6	366.627E-6	0.122	300.00E-3	PASS
7	4.051E-3	0.526	770.00E-3	PASS
8	346.094E-6	0.150	230.00E-3	PASS
9	3.845E-3	0.961	400.00E-3	PASS
10	350.535E-6	0.191	184.00E-3	PASS
11	3.668E-3	1.112	330.00E-3	PASS
12	320.355E-6	0.209	153.33E-3	PASS
13	3.492E-3	1.663	210.00E-3	PASS
14	375.551E-6	0.286	131.43E-3	PASS
15	3.292E-3	2.195	150.00E-3	PASS
16	312.866E-6	0.272	115.00E-3	PASS
17	3.073E-3	2.322	132.35E-3	PASS
18	298.782E-6	0.292	102.22E-3	PASS
19	2.839E-3	2.397	118.42E-3	PASS
20	306.398E-6	0.333	92.00E-3	PASS
21	2.596E-3	1.615	160.71E-3	PASS
22	273.383E-6	0.327	83.64E-3	PASS
23	2.348E-3	1.600	146.74E-3	PASS
24	268.805E-6	0.351	76.66E-3	PASS
25	2.099E-3	1.555	135.00E-3	PASS
26	255.362E-6	0.361	70.77E-3	PASS
27	1.857E-3	1.486	124.99E-3	PASS
28	234.689E-6	0.357	65.71E-3	PASS
29	1.614E-3	1.387	116.39E-3	PASS
30	217.790E-6	0.355	61.33E-3	PASS
31	1.383E-3	1.270	108.87E-3	PASS
32	202.076E-6	0.351	57.50E-3	PASS
33	1.164E-3	1.138	102.27E-3	PASS
34	197.436E-6	0.365	54.12E-3	PASS
35	958.718E-6	0.994	96.44E-3	PASS
36	179.758E-6	0.352	51.11E-3	PASS
37	769.051E-6	0.843	91.21E-3	PASS
38	172.393E-6	0.356	48.42E-3	PASS
39	612.961E-6	0.708	86.53E-3	PASS
40	168.315E-6	0.366	46.00E-3	PASS

Maximum harmonic current results

Hn	Ieff [A]	% of Limit	Limit [A]	Result
1	14.115E-3			
2	1.154E-3	0.071	1.62	PASS
3	13.398E-3	0.388	3.45	PASS
4	1.027E-3	0.159	645.00E-3	PASS
5	12.922E-3	0.756	1.71	PASS
6	960.341E-6	0.213	450.00E-3	PASS
7	12.473E-3	1.080	1.15	PASS
8	956.311E-6	0.277	345.00E-3	PASS
9	11.980E-3	1.997	600.00E-3	PASS
10	937.460E-6	0.340	276.00E-3	PASS
11	11.349E-3	2.293	495.00E-3	PASS
12	843.377E-6	0.367	229.99E-3	PASS
13	10.614E-3	3.369	315.00E-3	PASS
14	831.830E-6	0.422	197.15E-3	PASS
15	9.802E-3	4.356	225.00E-3	PASS
16	779.854E-6	0.452	172.50E-3	PASS
17	8.947E-3	4.507	198.52E-3	PASS
18	755.841E-6	0.493	153.33E-3	PASS
19	8.048E-3	4.531	177.63E-3	PASS
20	720.444E-6	0.522	138.00E-3	PASS
21	7.115E-3	4.427	160.71E-3	PASS
22	675.475E-6	0.538	125.46E-3	PASS
23	6.170E-3	4.205	146.74E-3	PASS
24	629.570E-6	0.547	114.99E-3	PASS
25	5.235E-3	3.878	135.00E-3	PASS
26	545.160E-6	0.514	106.16E-3	PASS
27	4.334E-3	3.467	124.99E-3	PASS
28	476.852E-6	0.484	98.57E-3	PASS
29	3.463E-3	2.976	116.39E-3	PASS
30	410.848E-6	0.447	92.00E-3	PASS
31	2.644E-3	2.429	108.87E-3	PASS
32	353.995E-6	0.410	86.25E-3	PASS
33	1.988E-3	1.943	102.27E-3	PASS
34	321.678E-6	0.396	81.18E-3	PASS
35	1.457E-3	1.510	96.44E-3	PASS
36	299.113E-6	0.390	76.66E-3	PASS
37	1.015E-3	1.113	91.21E-3	PASS
38	285.005E-6	0.392	72.63E-3	PASS
39	797.722E-6	0.922	86.53E-3	PASS
40	274.831E-6	0.398	69.00E-3	PASS

Maximum harmonic voltage results

Hn	Ueff [V]	Ueff [%]	Limit [%]	Result
1	230.30	100.131		
2	149.00E-3	0.065	0.2	PASS
3	418.99E-3	0.182	0.9	PASS
4	52.87E-3	0.023	0.2	PASS
5	29.30E-3	0.013	0.4	PASS
6	44.42E-3	0.019	0.2	PASS
7	26.09E-3	0.011	0.3	PASS
8	24.53E-3	0.011	0.2	PASS
9	18.64E-3	0.008	0.2	PASS
10	21.55E-3	0.009	0.2	PASS
11	16.51E-3	0.007	0.1	PASS
12	16.60E-3	0.007	0.1	PASS
13	15.27E-3	0.007	0.1	PASS
14	14.63E-3	0.006	0.1	PASS
15	14.01E-3	0.006	0.1	PASS
16	16.62E-3	0.007	0.1	PASS
17	15.56E-3	0.007	0.1	PASS
18	15.86E-3	0.007	0.1	PASS
19	17.78E-3	0.008	0.1	PASS
20	16.51E-3	0.007	0.1	PASS
21	10.66E-3	0.005	0.1	PASS
22	10.95E-3	0.005	0.1	PASS
23	14.23E-3	0.006	0.1	PASS
24	8.69E-3	0.004	0.1	PASS
25	11.44E-3	0.005	0.1	PASS
26	13.14E-3	0.006	0.1	PASS
27	12.32E-3	0.005	0.1	PASS
28	11.06E-3	0.005	0.1	PASS
29	10.26E-3	0.004	0.1	PASS
30	10.78E-3	0.005	0.1	PASS
31	15.57E-3	0.007	0.1	PASS
32	10.42E-3	0.005	0.1	PASS
33	9.93E-3	0.004	0.1	PASS
34	9.61E-3	0.004	0.1	PASS
35	9.28E-3	0.004	0.1	PASS
36	9.59E-3	0.004	0.1	PASS
37	10.75E-3	0.005	0.1	PASS
38	9.29E-3	0.004	0.1	PASS
39	10.08E-3	0.004	0.1	PASS
40	11.60E-3	0.005	0.1	PASS

4.4. Voltage Fluctuation and Flicker

For test instruments and accessories used see section 3.6.

4.4.1. Description of the test location

Test location: Shielded room No. 2

4.4.2. Limits of voltage fluctuation and flicker

Test configuration and procedure see clause 5 of standard EN 61000-3-3: 2013.

4.4.3. Description of the test set-up

4.4.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum emanation are recorded.

4.4.4. Test result

The requirements are **Fulfilled**

Remarks: The limits are kept. For detailed results, please see the following page(s).

Standard used:	EN 60601-1-2: 2007 EN 61000-3-3: 2008
Short time (Pst):	10 mins
Observation time:	120 mins (12 Flicker measurement)
Customer:	Chongqing Gient Heating Industry Co., Ltd.
Flickermeter:	DC 3V
Ambient Temperature:	23℃
Humidity:	51%
Barometric Pressure:	1017mbar
E. U. T.:	Infrared Thermometer M/N: HEL-Y5
Date of test:	2020-03-10
Tester:	LuoRin

Test Result	PASS

Maximum Flicker results

	EUT values	Limit	Result
Pst	0.028	1.00	PASS
Plt	0.028	0.65	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.110	4.00	PASS
dt [s]	0.000	0.50	PASS

Detail Flicker data

Flicker measurement 1	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.110	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 2	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.077	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 3	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.072	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 4	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.070	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 5	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.073	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 6	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.076	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 7	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.074	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 8	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.071	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 9	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.070	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 10	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.070	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 11	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.062	4.00	PASS
dt [s]	0.000	0.50	PASS

Flicker measurement 12	EUT values	Limit	Result
Pst	0.028	1.00	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.076	4.00	PASS
dt [s]	0.000	0.50	PASS

4.5. Electrostatic discharge

For test instruments and accessories used see section 3.6.

4.5.1. Description of the test location and date

Test location: Shielded room No. 1

Date of test: J2020-03-12

Operator: LuoRin

4.5.2. Severity levels of electrostatic discharge

Level	Test Voltage Contact Discharge (KV)	Test Voltage Air Discharge (KV)
1	2	2
2	4	4
3	6	8
4	8	15
X	Special	Special

Note: equipment and systems shall comply with the requirements of 6.2.2 of EN 60601-1-2:2017 at immunity test levels of ± 2KV, ± 4KV and ±8KV for air discharge and ± 2KV, ± 4KV and ± 6KV for contact discharge.

4.5.3. Description of the test set-up

4.5.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum susceptive results are recorded.

4.5.3.2. Test Configuration and Procedure:

Air Discharge:

—This test is done on a non-conductive surfaces. The round discharge tip of the Electrostatic Discharge simulator shall be approached as fast as possible then to touch the EUT. After each discharge, the simulator shall be removed from the EUT. The simulator is then re-triggered for a new single discharge and repeated 25 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed

Contact Discharge:

—All the procedure shall be same as air discharge, except using the acute discharge tip. The top end of the Electrostatic Discharge simulator is touch the EUT all the time when the simulator is re-triggered for a new single discharge and repeated 10 times for each pre-selected test point.

Indirect Discharge:

—The vertical coupling plane(VCP) is placed 0.1m away from EUT. The top end of Electrostatic Discharge simulator should aim at the center of one border of the VCP for at least 10 times discharge.

－The top end of Electrostatic Discharge simulator should place at the point 0.1m away from EUT on the horizontal coupling plane(HCP). At least 10 times discharge should be done for every pre-selected point around EUT.

Record any performance degradation of the EUT during the test and judge the test result according to performance criterion.

4.5.4. Test specification:

Contact discharge voltage:	• 2 kV	• 4 kV	• 6 kV
Number of discharges:	• 10	□ 25	
Air discharge voltage:	• 2 kV	• 4 kV	• 8 kV
Number of discharges:	□ 10	• 25	
Type of discharge:	Direct discharge	• Air discharge • Contact discharge	
	Indirect discharge	• Contact discharge	
Polarity:	• Positive	• Negative	
Discharge location:	• see photo documentation of the test set-up		
	• all external locations accessible by hand		
	• horizontal coupling plane (HCP)		
	• vertical coupling plane (VCP)		

4.5.5. Test result

No degradation of function. Comply with EN 60601-1-2:2017.

4.6. Radiated, radio-frequency, electromagnetic field

For test instruments and accessories used see section 3.6.

4.6.1. Description of the test location and date

Test location: Shielded room No. 4

Date of test: 2020-03-12

Operator: LuoRin

4.6.2. Severity levels of radiated, radio-frequency, electromagnetic field

Level	Field Strength (V/m)
1.	1
2.	3
3.	10
X	Special

Note: equipment and systems shall comply with the requirements of 6.2.3 of EN 60601-1-2:2017 at immunity test levels of 3V/m.

4.6.3. Description of the test set-up

4.6.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum susceptive results are recorded.

4.6.3.2. Test Procedure

EUT and its auxiliary instrument are placed on a turntable above ground. Transmitting antenna mounted on an antenna mast is set 3 meter away from the EUT. During the test, each of the four sides of EUT will face the transmitting antenna with the turntable cycled. Both horizontal and vertical polarization of the antenna are set on test and measured individually.

In order to judge the performance of the EUT, a set of monitor system is used.

Record any performance degradation of the EUT during the test and judge the test result according to performance criterion.

4.6.4. Test specification:

Frequency range: • 80 MHz to 2500 MHz

Field strength: • 3 V/m

EUT - antenna separation: • 3 m

Modulation: • AM: 80 %
• sinusoidal 2Hz

Frequency step: • 1 % with 3s dwell time

Antenna polarisation: • horizontal • vertical

4.6.5. Test result

No degradation of function. Comply with EN 60601-1-2:2017.

4.7. Electrical fast transients / Burst

For test instruments and accessories used see section 3.6.

4.7.1. Description of the test location and date

Test location: Shielded room No. 1

Date of test: 2020-03-12

Operator: LuoRin

4.7.2. Severity levels of electrical fast transients / Burst

Open circuit output test voltage and repetition rate of the impulses		
Level	On power port, PE	
	V peak(KV)	Repetition Frequency (kHz)
1.	0.5	5 or 100
2.	1	5 or 100
3.	2	5 or 100
4.	4	5 or 100
X	Special	Special

Note: equipment and systems shall comply with the requirements of 6.2.4 of EN 60601-1-2:2017 at immunity test levels of ± 2KV for a.c. power lines.

4.7.3. Description of the test set-up

4.7.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum susceptive results are recorded.

4.7.3.2. Test Requirements

EUT and its simulators shall be placed above the ground reference plane which is a minimum 1m*1m with minimum 0.65mm thickness. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

4.7.3.3. Test Configuration and Procedure

For AC power input ports:

EUT is connected to coupling/decoupling network which couples the EFT signal to power input lines. During the test, both positive and negative polarities of the test voltage should be applied and the duration of the test can't be less than 1mins.

The EUT is unnecessary to test on these signal / control lines.

Record any performance degradation of the EUT during the test and judge the test result according to performance criterion.

4.7.4. Test specification:

Coupling network:	• 0.5 kV	• 1 kV	• 2 kV
Coupling clamp:	□ 0.5 kV	□ 1 kV	
Burst frequency:	• 5.0 kHz		
Coupling duration:	• 60 s		
Polarity:	• positive	• negative	

4.7.5. Coupling points

Cable description: AC power line : L, N, L-N

Screening:	o screened	• unscreened
Status:	o passive	• active
Signal transmission:	• analogue	o digital
Length:	• 1.4 m	

4.7.6. Test result

No degradation of function. Comply with EN 60601-1-2:2017.

4.8. Surge

For test instruments and accessories used see section 3.6.

4.8.1. Description of the test location and date

Test location: Test location No. 1

Date of test: 2020-03-12

Operator: LuoRin

4.8.2. Severity levels of surge

Level	Test Voltage (KV)
1	0.5
2	1.0
3	2.0
4	4.0
*	Special

Note: equipment and systems shall comply with the requirements of 6.2.5 of EN 60601-1-2:2017 at immunity test levels of ± 0.5KV, ± 1KV and ± 2KV for a.c. power line(s) to earth and ± 0.5KV and ± 1KV for a.c. power line(s) to line(s).

4.8.3. Description of the test set-up

4.8.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum susceptive results are recorded.

4.8.3.2. Test Configuration and Procedure

In this test, the 1.2/50us& 8/20us surge generator must be used for AC power ports. The voltage for line to earth coupling mode is twice of that for line to line. At least 5 positive and 5 negative (polarity) surge signal with a maximum 1/min repetition rate are injected to AC power lines from 4 different phase angles (0°, 90°, 180°, 270°) during the test.

Record any performance degradation of the EUT during the test and judge the test result according to performance criterion.

4.8.4. Test specification:

Pulse amplitude-Power line sym.:	• 0.5 kV	• 1 kV	☐ 2 kV	☐ 4 kV
Source impedance: 2 ∧ + 18μF				
Pulse amplitude-Power line unsym:	☐ 0.5 kV	☐ 1 kV	☐ 2 kV	☐ 4 kV
Source impedance: 12 ∧ + 9μF				
Number of surges:	• 5 Surges/Phase angle			
Phase angle:	• 0 °	• 90 °	• 180 °	• 270 °
Repetition rate:	• 60 s			
Polarity:	• positive	• negative		

4.8.5. Coupling points

Cable description: AC power line: L-N

Screening:	o screened	•unscreened
Status:	o passive	• active
Signal transmission:	• analogue	o digital
Length:	• 1.4 m	

4.8.6. Test result

No degradation of function. Comply with EN 60601-1-2:2017.

4.9. Conducted disturbances induced by radio-frequency fields

For test instruments and accessories used see section 3.6.

4.9.1. Description of the test location and date

Test location: Shielded room No. 2

Date of test: 2020-03-12

Operator: LuoRin

4.9.2. Severity levels of conducted disturbances induced by radio-frequency fields discharge

Level	Field Strength （V）
1.	1
2.	3
3.	10
X	Special

Note: equipment and systems shall comply with the requirements of 6.2.6 of EN 60601-1-2:2017 at immunity test levels of 3Vrms over the frequency range beginning at the start frequency and extending to 80 MHz.

4.9.3. Description of the test set-up

4.9.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum susceptive results are recorded.

4.9.3.2. Test Configuration and Procedure

For AC power input lines:

—EUT is placed on an insulating support above a ground reference plane. It must be 0.3m away the CDN (coupling and decoupling network) of which the bottom is made of metallic material and placed directly on the ground plane. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50 mm (where possible). The disturbance signal amplified by amplifier is injected to EUT through CDN.

Record any performance degradation of the EUT during the test and judge the test result according to performance criterion.

4.9.4. Test specification:

Frequency range: • 0.15 MHz to 80 MHz

Test voltage : • 3 V

Modulation: • AM: 80 %
• sinusoidal 2Hz

Frequency step: • 1 % with 3s dwell time

4.9.5. Coupling points

Cable description : AC power line

Screening:	o screened	•unscreened
Status:	o passive	• active
Signal transmission:	• analogue	o digital
Length:	• 1.4 m	

4.9.6. Test result

No degradation of function comply with EN 60601-1-2:2017.

4.10. Magnetic Field Immunity

For test instruments and accessories used see section 3.6.

4.10.1. Description of the test location and date

Test location: Shielded room No. 1

Date of test: 2020-03-12

Operator: LuoRin

4.10.2. Severity levels of magnetic field immunity

Level	Magnetic Field Strength (A/m)
1	1
2	3
3	10
4	30
5	100
X.	Special

Note: equipment and systems shall comply with the requirements of 6.2.8 of EN 60601-1-2:2017 at immunity test levels of 3A /m.

4.10.3. Description of the test set-up

4.10.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum susceptive results are recorded.

4.10.3.2. Test Configuration and Procedure:

EUT is placed on an insulating support of 0.1m high above a table of 0.8m high. There is a minimum 1m*1m ground metallic plane put on this table. EUT is put in the center of the magnetic coil then three orientations of the magnetic coil, X, Y and Z, shall be rotated in order to expose the EUT to the difference polarization magnetic field.

Record any performance degradation of the EUT during the test and judge the test result according to performance criterion.

4.10.4. Test specification:

Test frequency: • 50 Hz • 60 Hz

Continuous field: • 3 A/m

Test duration: • 5 mins

Antenna factor: 0.917 A/m

Axis: • x-axis • y-axis • z-axis

4.10.5. Test result

No degradation of function. Comply with EN 60601-1-2:2017.

4.11. Voltage Dips and Interruptions

For test instruments and accessories used see section 3.6.

4.11.1. Description of the test location and date

Test location: Test location No. 1

Date of test: 2020-03-12

Operator: LuoRin

4.11.2. Severity levels of voltage dips and interruptions

Test Level for Voltage Dips		
Test Level (%Ut)	**Voltage Dip And Short Interruptions (%Ut)**	**Duration (In Period)**
<5	>95	0.5
40	60	5
70	30	25

Test Level for Voltage Interruption		
Test Level (%Ut)	**Voltage Dip And Short Interruptions (%Ut)**	**Duration (In Period)**
<5	>95	250

4.11.3. Description of the test set-up

4.11.3.1. Operating Condition

The EUT is turned on during the test, and the results of the maximum susceptive results are recorded.

4.11.3.2. Test Configuration and Procedure

EUT is connected to the simulator according to the test photo. When conducting this test ,the power supply shall be set at the minimum and maximum rated input voltages and test voltage changes shall be step changes and start at the phase angle of 0° and 180° .

4.11.4. Test specification:

Nominal Mains Voltage (V_N): • 380 V AC

Number of voltage fluctuations: • 3

Level of reduction(dip) / duration: • 100 % / 10ms • 60 % / 100ms • 30 % / 500ms

Nominal Mains Voltage (V_N): • 380 V AC

Number of Interruptions: • 3

Duration of the Interruption: • 5000 ms

4.11.5. Test result

No degradation of function. Comply with EN 60601-1-2:2017.

5. Photos of the EUT

..... End of Report.....