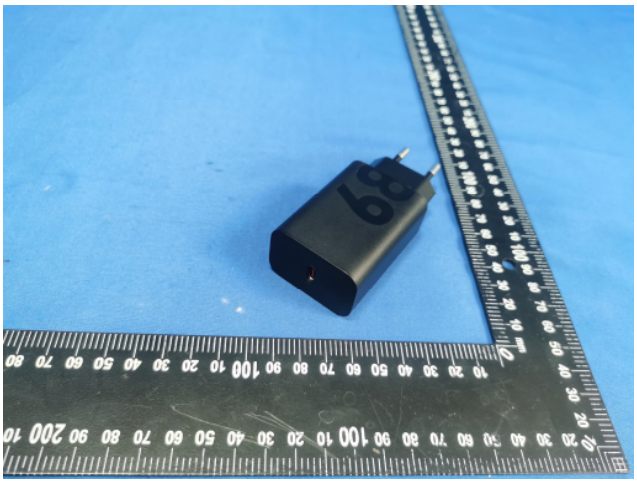
Prüfbericht-Nr.: *Test report no.:*	**CN2271EN 001**	**Auftrags-Nr.:** *Order no.:*	170314214	Seite 1 von **38** *Page 1 of 38*
Kunden-Referenz-Nr.: *Client Reference No.:*	2157421	**Auftragsdatum:** *Order date.:*	2022.07.27	
Auftraggeber: *Client:*	Jiangsu Chenyang Electron Co., Ltd. No.58 Chenyang Road, Hexi Industrial Park, Huangtang Town, Danyang City, 212364 Jiangsu, P.R.China			
Prüfgegenstand: *Test item:*	AC POWER SUPPLY			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	MC-682N, MC-685N			
Auftrags-Inhalt: *Order content:*	TÜV Rheinland EMC service			
Prüfgrundlage: *Test specification:*	EN 55032:2015+A11+A1 EN 55035:2017+A11 EN IEC 61000-3-2:2019+A1 EN 61000-3-3:2013+A1+A2			
Wareneingangsdatum: *Date of sample receipt:*	2022.07.27			
Prüfmuster-Nr.: *Test sample No.:*	170314214-001			
Prüfzeitraum: *Testing period:*	Refer to test report			
Ort der Prüfung: *Place of testing:*	Refer to section 2.1			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Guangdong) Ltd.			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von: *tested by:*		**genehmigt von:** authorized by:	
Datum: *Date: 2022.08.30*		**Ausstelldatum:** *Issue date: 2022.09.02*	
Stellung/*Position:*	Paul Pang/Project Manager	**Stellung**/*Position:*	Cherry He/TC

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: Test item complete and undamaged

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhalt
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient	5 = poor
	P(ass) = passed a.m. test specifications(s)		F(ail) = failed a.m. test specifications(s)	N/A = not applicable	N/T = not tested

TEST SUMMARY

5.1.1 HARMONICS CURRENT EMISSION ON AC MAINS
RESULT: Pass

5.1.2 VOLTAGE CHANGES, VOLTAGE FLUCTUATIONS AND FLICKER
RESULT: Pass

5.1.3 DISTURBANCE VOLTAGE AT THE MAINS TERMINALS
RESULT: Pass

5.1.4 CONDUCTED EMISSIONS ON WIRED NETWORK PORTS
RESULT: N/A

5.1.5 CONDUCTED EMISSIONS ON OPTICAL FIBRE PORTS
RESULT: N/A

5.1.6 CONDUCTED EMISSIONS ON BROADCAST RECEIVER TUNER PORTS
RESULT: N/A

5.1.7 CONDUCTED EMISSIONS ON ANTENNA PORTS
RESULT: N/A

5.2.1 CONDUCTED EMISSIONS ON TV BROADCAST RECEIVER TUNER PORTS
RESULT: N/A

5.2.2 CONDUCTED EMISSIONS ON RF MODULATOR OUTPUT PORTS
RESULT: N/A

5.2.3 CONDUCTED EMISSIONS ON FM BROADCAST RECEIVER TUNER PORTS
RESULT: N/A

5.2.4 RADIATED DISTURBANCES
RESULT: Pass

5.2.5 RADIATED EMISSIONS FROM FM RECEIVERS
RESULT: N/A

5.2.6 RADIATED EMISSIONS FROM OUTDOOR UNITS OF HOME SATELLITE RECEIVERS
RESULT: N/A

6.2.1 RADIO-FREQUENCY COMMON MODE / CONDUCTED SUSCEPTIBILITY (CS)
RESULT: Pass

6.2.2 RADIO-FREQUENCY ELECTROMAGNETIC FIELDS (RS)
RESULT: Pass

6.2.3 POWER-FREQUENCY MAGNETIC FIELDS
RESULT: N/A

6.3.1 BROADBAND IMPULSE NOISE DISTURBANCES, REPETITIVE
RESULT: N/A

6.3.2 BROADBAND IMPULSE NOISE DISTURBANCES, ISOLATED
RESULT: N/A

6.3.3 TRANSIENT DISTURBANCES(EFT)

RESULT: Pass

6.3.4 SURGE

RESULT: Pass

6.3.5 ELECTROSTATIC DISCHARGES (ESD)

RESULT: Pass

6.4.1 VOLTAGE DIPS AND INTERRUPTIONS

RESULT: Pass

Contents

1. General Remarks

When applying the basic standards in this test report, please refer to the applied generic or product family standards for edition information:
For dated basic standards, only the edition cited applies. For undated basic standards, the latest edition (including any amendments) applies.
For all EMI tests (When included in this report),as measurement uncertainties are less than the values UCISPR given in CISPR 16-4-2,compliance with the limits is determined by comparing measurement results directly with corresponding limits without taking into consideration of measurement uncertainties. For all EMS tests (When included in this report), measurement uncertainties are not considered as well according to corresponding test standards.

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test Result
Appendix 2: List of Test and measurement Instruments

2. Test Sites

2.1 Test Facilities

Waltek Testing Group Co., Ltd. Dongguan Branch
No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China

The tests at these test sites have been conducted under the supervision of a TÜV Rheinland engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and measurement Instruments

Refer to attached Appendix 2.

3. General Product Information

The submitted sample is AC POWER SUPPLY used for class B multimedia equipment.

All models are identical except for model name and plug portion. Model MC-682N is with EU plug while model MC-685N is with AU plug.

Based on the above information, all EMC tests were performed on model MC-682N.

3.1 Product Function and Intended Use

Refer to the Technical Documentation and user manual.

3.2 Ratings and System Details

Model	Rated input	Rated Output	Protection class	Plug type
MC-682N	100-240V~, 50/60Hz, 2.0A Max.	Input: 100-240V~, 50/60Hz, 2.0A Output: 5V⎓3A, 15W; 9V⎓3A, 27W; 15V⎓3A, 45W; 20V⎓3.4A, 68W; 11V⎓6.2A, 68.2W	II	EU Plug
MC-685N				AU Plug

Refer to Technical Documentationfor further details.

3.3 Independent Operation Modes

The basic operation modes are:

A. On, Full Load

The EUT was terminated with an appropriate load in order to make the output current of the EUTs reach the rated values.

B. On, Half load

The EUT was terminated with an appropriate load in order to make the output current of the EUTs reach half of the rated values.

C. On, no Load

Refer to User Manual for further details.

3.4 Noise Generating and Noise Suppressing Parts

Refer to Technical Documentation.

3.5 Submitted Documents

Circuit diagram
PCB layouts
Label
User manual

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Immunity: The equipment under test (EUT) was configured to have its highest possible susceptibility against the tested phenomena. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Refer to test set-up in chapter 5 and chapter 6.

4.3 Special Accessories and Auxiliary Equipment

None.

4.4 Countermeasures to achieve EMC Compliance

No additional countermeasures to the submitted test sample(s) were employed to achieve compliance.

5. Test Results of EMISSION

5.1 Emission in the Frequency Range up to 30 MHz

5.1.1 Harmonics Current Emission on AC Mains

RESULT: **Pass**

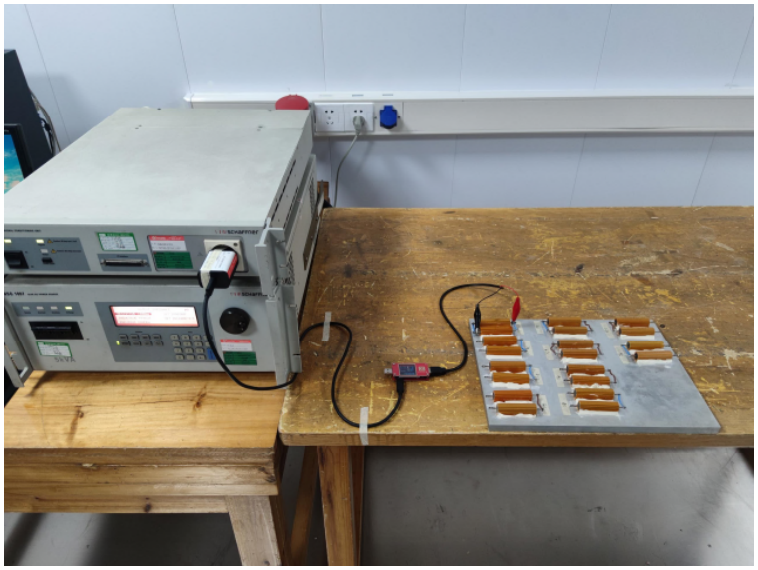
Test Specification

Basic standard	:	EN IEC 61000-3-2:2019+A1
Measurement equipment requirement	:	IEC 61000-4-7
Measured harmonics	:	1 – 40
Equipment class	:	A
Limits	:	EN IEC 61000-3-2:2019 +A1Clause 7.2, Table1; Clause 7.5, Table 3

Test Setup

Date of testing	:	2022.08.24
Input voltage	:	AC 230V/50Hz
Operation mode	:	A
Artificial hand	:	N/A
Test configuration	:	Table-top
Temperature	:	23.6°C
Humidity	:	52.4%
Air pressure	:	101.1kPa

Photograph 1: Set-up for Harmonic Current Emission on AC Mains



For test results, please refer to the attached appendix 1.

5.1.2 Voltage Changes, Voltage Fluctuations and Flicker

RESULT: **Pass**

Test Specification

Basic standard	:	EN 61000-3-3:2013+A1+A2
Measurement equipment requirement	:	IEC 61000-4-15
Limits	:	EN 61000-3-3:2013+A1+A2, Clause 5

The EUT does not contain any automatic switching component and the power consumption is low.

According to the electrical construction, the EUT does not produce inrush current, which may exceed 20A. The supply current will not fluctuate more than 1.5A either.

According to EN 61000-3-3:2013+A1+A2, clause 6.1*, the EUT deems to fulfil the requirement without further testing.

*) EN 61000-3-3:2013+A1+A2, clause 6.1: “For voltage changes caused by manual switching, equipment is deemed to comply without further testing if the maximum r.m.s. input current evaluated over each 10ms half-period between zero-crossings does not exceed 20A, and the supply current after inrush is within a variation band of 1,5A.”

5.1.3 Disturbance Voltage at the mains terminals

RESULT: **Pass**

Test Specification

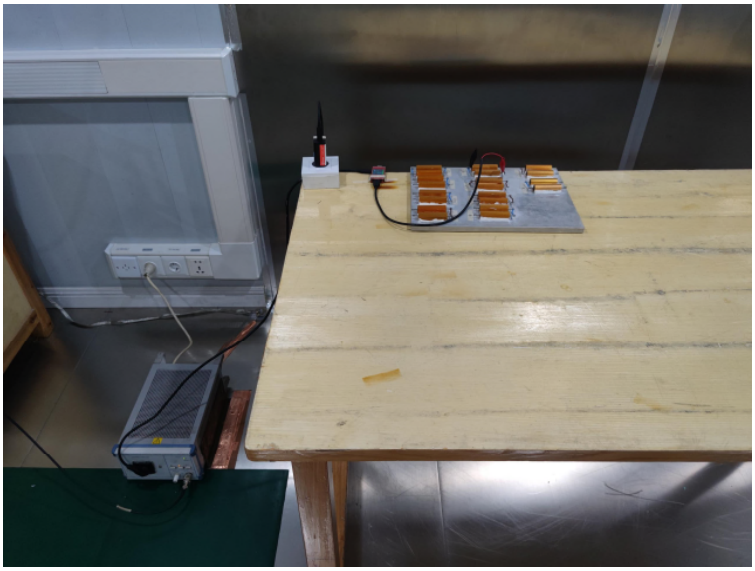
Test procedure	:	EN 55032:2015+A11+A1, Class B
Ports	:	AC Mains
Frequency range	:	150kHz-30MHz
Test site	:	Shielded Room
Limits	:	EN 55032:2015+A11+A1, table A.10

Test Setup

Date of testing	:	Refer to Appendix 1
Input voltage	:	AC 120V/60Hz; AC 230V/50Hz
Operation mode	:	Refer to remark below
Test configuration	:	Table top
Temperature	:	Refer to Appendix 1
Humidity	:	Refer to Appendix 1
Air pressure	:	102.3kPa

Remark:
The worst cases are full load mode for 11V6.2A at 120Vac, 60Hz and 230Vac, 50Hz.
The worst cases are half load mode for 20V3.4A at 120Vac, 60Hz and full load at 230Vac, 50Hz.
The worst cases are full load mode for 5V3A at 120Vac, 60Hz and 230Vac, 50Hz.

Photograph 2: Set-up for Disturbance Voltage at the mains terminals



Test Result

Measurement uncertainty: 3.64 dB (k=2, σ =95%)

If the result of the measurement with the Quasi Peak detector is below the Average limit, the measurement with Average Detector will be omitted.

Disturbances other than those mentioned are small or not detectable.

For test results, please refer to the attached Appendix 1.

5.1.4 Conducted Emissions on Wired Network Ports

RESULT: **N/A**

Test Specification

Family Standard(s)	:	EN 55032:2015+A11+A1
Equipment Class	:	Class B
Ports	:	Tele. and network ports
Frequency range	:	150kHz-30MHz
Test site	:	Shielded Room
Limits	:	EN 55032:2015+A11+A1 table A.12

According to electrical character and usage of EUT, there is no Wired Network Ports with the EUT. Therefore this test is not applicable for this EUT.

5.1.5 Conducted Emissions on Optical Fibre ports

RESULT: **N/A**

Test Specification

Family Standard(s)	:	EN 55032:2015+A11+A1
Equipment Class	:	Class B
Ports	:	Optical Fibre Ports
Frequency range	:	150kHz-30MHz
Test site	:	Shielded Room
Limits	:	EN 55032:2015+A11+A1 table A.12

According to electrical character and usage of EUT, there is no Optical Fibre ports with metallic shield or tension members incorporated. Therefore this test is not applicable for this EUT.

5.1.6 Conducted Emissions on Broadcast Receiver Tuner Ports

RESULT: **N/A**

Test Specification

Family Standard(s)	:	EN 55032:2015+A11+A1
Equipment Class	:	Class B
Ports	:	Broadcast Receiver Tuner Ports
Frequency range	:	150kHz-30MHz
Test site	:	Shielded Room
Limits	:	EN 55032:2015+A11+A1 table A.12

According to electrical character and usage of EUT, there is no Broadcast Receiver Tuner Ports incorporated. Therefore this test is not applicable for this EUT.

5.1.7 Conducted Emissions on Antenna Ports

RESULT: **N/A**

Test Specification

Family Standard(s)	:	EN 55032:2015+A11+A1
Equipment Class	:	Class B
Ports	:	Antenna port
Frequency range	:	150kHz-30MHz
Test site	:	Shielded Room
Limits	:	EN 55032:2015+A11+A1, table A.12

According to electrical character and usage of EUT, there is no antenna ports incorporated. Therefore this test is not applicable for this EUT.

5.2 Emission in the Frequency Range above 30 MHz

5.2.1 Conducted Emissions on TV Broadcast Receiver Tuner Ports

RESULT: **N/A**

Test Specification

Test procedure	:	EN 55032:2015+A11+A1
Ports	:	TV Broadcast Receiver Tuner Ports
Frequency range	:	30MHz-2,150MHz
Test site	:	Shielded Room
Limits	:	EN 55032:2015+A11+A1 table A.13
Equipment Class	:	Class B

According to electrical character and usage of EUT, there is no TV Broadcast Receiver Tuner Port with an accessible connector incorporated. Therefore this test is not applicable for this EUT.

5.2.2 Conducted Emissions on RF Modulator Output Ports

RESULT: **N/A**

Test Specification

Test procedure	:	EN 55032:2015+A11+A1
Ports	:	RF modulator output ports
Frequency range	:	30 MHz-2,150 MHz
Test site	:	Shielded Room
Limits	:	EN 55032:2015+A11+A1 table A.13
Equipment Class	:	Class B

According to electrical character and usage of EUT, there is no RF modulator output ports incorporated. Therefore this test is not applicable for this EUT.

5.2.3 Conducted Emissions on FM Broadcast Receiver Tuner Ports

RESULT: **N/A**

Test Specification

Family Standard(s)	:	EN 55032:2015+A11+A1
Equipment Class	:	Class B
Ports	:	FM Broadcast Receiver Tuner Ports
Frequency range	:	30MHz-2150MHz
Test site	:	Shielded Room
Limits	:	EN 55032:2015+A11+A1 table A.13

According to electrical character and usage of EUT, there is no FM Broadcast Receiver Tuner Port with an accessible connector incorporated. Therefore this test is not applicable for this EUT.

5.2.4 Radiated Disturbances

RESULT: **Pass**

Test Specification

Test procedure	:	EN 55032:2015+A11+A1, Class B
Ports	:	Enclosure
Frequency range	:	30MHz-1GHz*
Test site	:	SAC
Limits	:	EN 55032:2015+A11+A1, Table A.4+A.5

*: The highest frequency of the internal sources of the EUT is less than 108MHz, The measurement shall only be made up to 1000MHz.

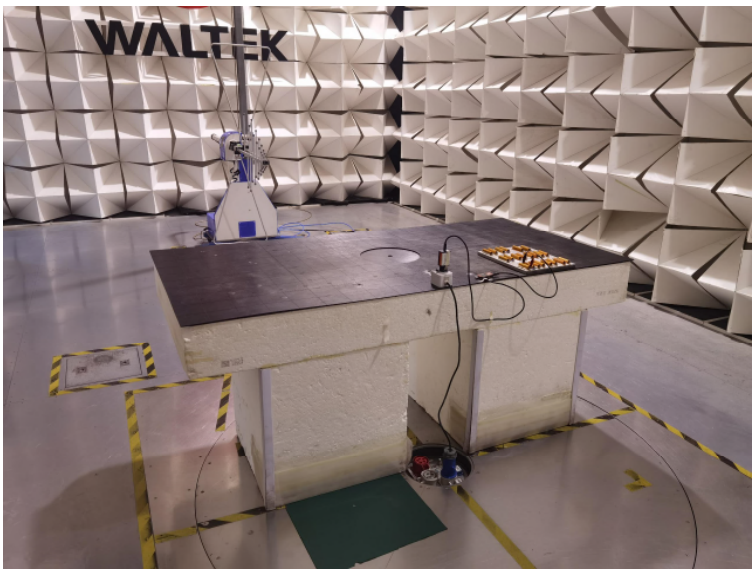
Test Setup

Date of testing	:	Refer to Appendix 1
Input voltage	:	AC 120V/60Hz; AC 230V/50Hz
Operation mode	:	Refer to remark below
Test configuration	:	Table top
Temperature	:	Refer to Appendix 1
Humidity	:	Refer to Appendix 1
Air pressure	:	101.2kPa

Remark:

The worst cases are half load mode for 11V6.2A at 120Vac, 60Hz and 230Vac, 50Hz.
The worst cases are full load mode for 20V3.4A at 120Vac, 60Hz and 230Vac, 50Hz.
The worst cases are half load mode for 5V3A at 120Vac, 60Hz and full load mode at 230Vac, 50Hz.

Photograph 3: Set-up for Radiated Disturbance



Test Result

Measurement uncertainty: 5.03dB (k=2, σ=95%) for 30 MHz – 1000 MHz.

Measurements are made at closer distance, down to 3 m. An inverse proportionality factor of 20dB per decade is used to normalize the limits to the specified distance for determining compliance.

Disturbances other than those mentioned are small or not detectable.

For test results, please refer to the attached Appendix 1.

5.2.5 Radiated emissions from FM receivers

RESULT: **N/A**

Test Specification

Test procedure	:	EN 55032:2015+A11+A1, Annex C
Applicable Standard	:	EN 55032:2015+A11+A1
Frequency range	:	30MHz-1000MHz
Test port	:	Enclosure
Limits	:	EN 55032:2015+A11+A1, table A.6

According to electrical character and usage of EUT, there is no FM receivers incorporated. Therefore this test is not applicable for this EUT.

5.2.6 Radiated Emissions from Outdoor units of home Satellite Receivers

RESULT: **N/A**

Test Specification

Test procedure	:	EN 55032:2015+A11+A1, Annex H
Applicable Standard	:	EN 55032:2015+A11+A1
Frequency range	:	30MHz-18000MHz
Test port	:	Enclosure
Limits	:	EN 55032:2015+A11+A1, table A.7

According to electrical character and usage of EUT, there is no Outdoor units of home Satellite Receivers incorporated. Therefore this test is not applicable for this EUT.

6 Test Results IMMUNITY

6.1 Classification of Apparatus

According to EN 55035:2017+A11, the appliance shall fulfill the requirements of:

Continuous Disturbances	
Power-frequency Magnetic Field	**Criterion A**
Radio-frequency Electromagnetic Fields (RS)	**Criterion A**
Radio-Frequency Common Mode / Conducted Susceptibility(CS)	**Criterion A**
Transient Disturbances	
Broadband Impulse Noise Disturbances, Repetitive	**Criterion A**
Broadband Impulse Noise Disturbances, Isolated	**Criterion B**
Electrical Fast Transients (EFT)	**Criterion B**
Surge	**Criterion B**
Electrostatic Discharges (ESD)	**Criterion B**
Power Supply Alterations	
Voltage Dips and Interruptions	**Criterion B + C**

6.2 Continuous Disturbances

6.2.1 Radio-frequency Common Mode / Conducted Susceptibility (CS)

RESULT: **Pass**

Test Specification

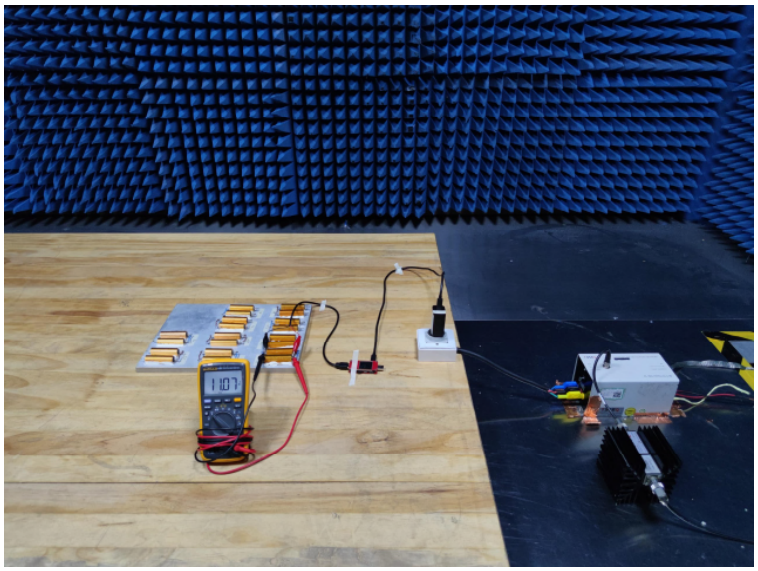
Family standard	:	EN 55035:2017+A11
Basic standard	:	IEC 61000-4-6
Characteristics of the test generator:		
Output impedance		50 Ω
Harmonics and distortion		Any spurious spectral line at least 15 dB below the carrier level
Amplitude modulation		80 % ± 5 % in depth, 1 kHz ± 10 % sine wave
Frequency bandwidth	:	150 kHz to 80MHz
Frequency step	:	1% with 1 s dwell time
Performance criterion	:	A

Test Setup

Date of testing	:	2022.08.03
Input voltage	:	AC 230V/50Hz
Operation mode	:	On mode
Artificial hand	:	N/A
Signal lines and control lines	:	N/A
Input and output dc power ports	:	N/A*
Input and output ac power ports	:	3V (rms)
Temperature	:	25.1°C
Humidity	:	49.6%
Air pressure	:	101kPa

*) The DC output cable is less than 3m, so the test on this terminal is not applicable.

Photograph 4: Set-up for Radio-frequency Common Mode / Conducted Susceptibility (CS)



Test Result

Table 2: Immunity against Radio-frequency Common Mode / Conducted Susceptibility (CS)

Coupling point	Application	Level (V(r.m.s))	Frequency(MHz)	Remark
Power ports				
AC power port	CDN-M2	3	0.15-10	Applied, *)
		3-1	10-30	Applied, *)
		1	30-80	Applied, *)
DC power port	N/A	3		N/A
		3		N/A
Signal lines				
Ethernet Lines	CDN-T8	3		N/A
USB Lines	Current Clamp	3		N/A
Parallel Lines	Current Clamp	3		N/A
Serial Lines	Current Clamp	3		N/A
Other Signal/Control lines (>3m)				
	Current Clamp	3		N/A
	EM clamp	3		N/A

*) Remark: No degradation was observed during and after the tests.

6.2.2 Radio-frequency Electromagnetic Fields (RS)

RESULT: **Pass**

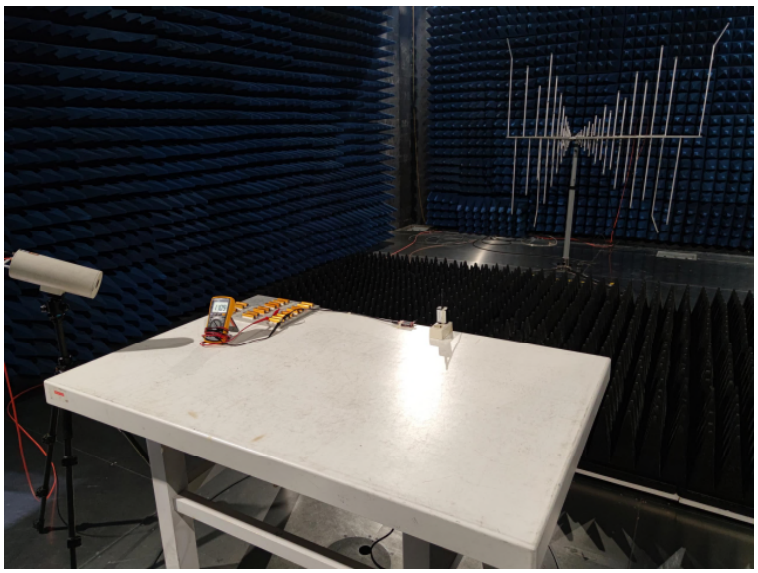
Test Specification

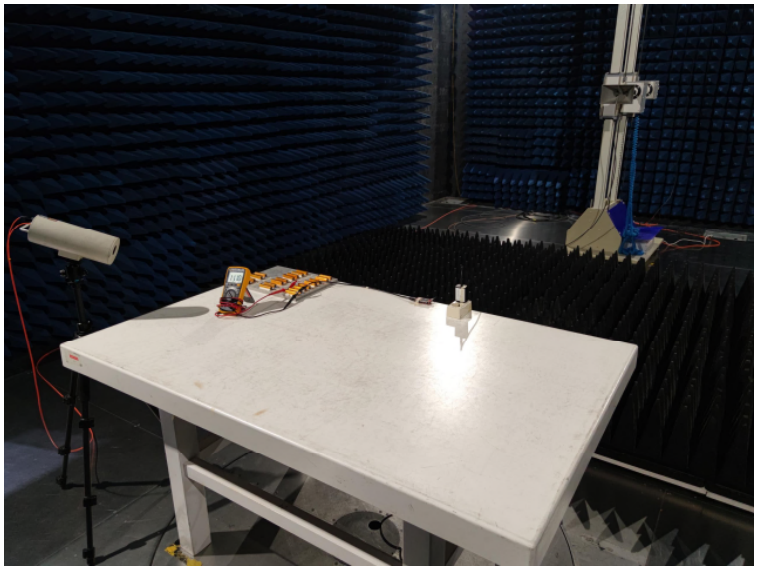
Family standard	:	EN 55035:2017+A11
Basic standard	:	IEC 61000-4-3
Test site		FAC
Uniform field area (UFA)		1.5 m x 1.5 m, 16 points with a minimum UFA size 0.5 m x 0.5 m,75 % of calibration points within specifications if UFA is larger than 0.5 m x 0.5 m . 100 % (all 4 points) in the specifications for 0.5 x 0.5 m UFA
Amplitude modulation	:	80 % ± 5 % in depth, 1 kHz ± 10 % sine wave
Frequency bandwidth	:	80MHz to 1000MHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz
Level	:	3 V/m(un-modulated)
Frequency step	:	1% with 1 s dwell time
Performance criterion	:	A

Test Setup

Date of testing	:	2022.08.03
Input voltage	:	AC 230V/50Hz
Operation mode	:	On mode
Temperature	:	24.8°C
Humidity	:	53.6%
Air pressure	:	101kPa

Photograph 5: Set-up for Radio-frequency Electromagnetic Fields (RS)





Test Result

Table 3: Immunity against Radio-frequency Electromagnetic Fields (RS)

Side of the equipment under test	Frequency (MHz)	Antenna polarization (Vertical/Horizontal)	Remark
Front	80-1000	V and H	Applied, *)
Rear	80-1000	V and H	Applied, *)
Right	80-1000	V and H	Applied, *)
Left	80-1000	V and H	Applied, *)
Front	1800	V and H	Applied, *)
Rear	1800	V and H	Applied, *)
Right	1800	V and H	Applied, *)
Left	1800	V and H	Applied, *)
Front	2600	V and H	Applied, *)
Rear	2600	V and H	Applied, *)
Right	2600	V and H	Applied, *)
Left	2600	V and H	Applied, *)
Front	3500	V and H	Applied, *)
Rear	3500	V and H	Applied, *)
Right	3500	V and H	Applied, *)
Left	3500	V and H	Applied, *)
Front	5000	V and H	Applied, *)
Rear	5000	V and H	Applied, *)
Right	5000	V and H	Applied, *)
Left	5000	V and H	Applied, *)

*) Remark: No degradation was observed during and after the tests.

6.2.3 Power-frequency Magnetic Fields

RESULT: **N/A**

Test Specification

Family Standard	:	EN 55035:2017+A11
Basic standard	:	IEC 61000-4-8
Test Level (A/m)	:	1A/m
Frequency	:	50 or 60Hz
Performance criterion		A

The EUT does not contain devices susceptible to magnetic fields, such as CRT monitors, Hall elements, electrodynamics microphones, magnetic field sensors, etc. Therefore, this test is not applicable and skipped.

6.3 Transient Disturbances

6.3.1 Broadband Impulse Noise Disturbances, Repetitive

RESULT: **N/A**

Test Specification

Family standard	:	EN 55035:2017+A11
Basic standard	:	Clause 4.2.7
Impulse frequency	:	0.15-0.5MHz; 0.5-10MHz; 10-30MHz
Test level	:	107dBµV; 107-36dBµV; 36-30dBµV
Burst duration	:	0.70 ms
Burst period	:	8.3 ms (60Hz), 10 ms (50Hz)
Performance criterion	:	A

According to electrical character and usage of EUT, there is no CPE xDSL ports incorporated. Therefore this test is not applicable for this EUT.

6.3.2 Broadband Impulse Noise Disturbances, Isolated

RESULT: **N/A**

Test Specification

Family standard	:	EN 55035:2017+A11
Basic standard	:	Clause 4.2.7
Impulse frequency	:	0.15-30MHz
Test level	:	110dBµV
Burst duration	:	0.24 ms, 10ms, 300ms
Performance criterion	:	B

According to electrical character and usage of EUT, there is no CPE xDSL ports incorporated. Therefore this test is not applicable for this EUT.

6.3.3 Transient Disturbances(EFT)

RESULT: **Pass**

Test Specification

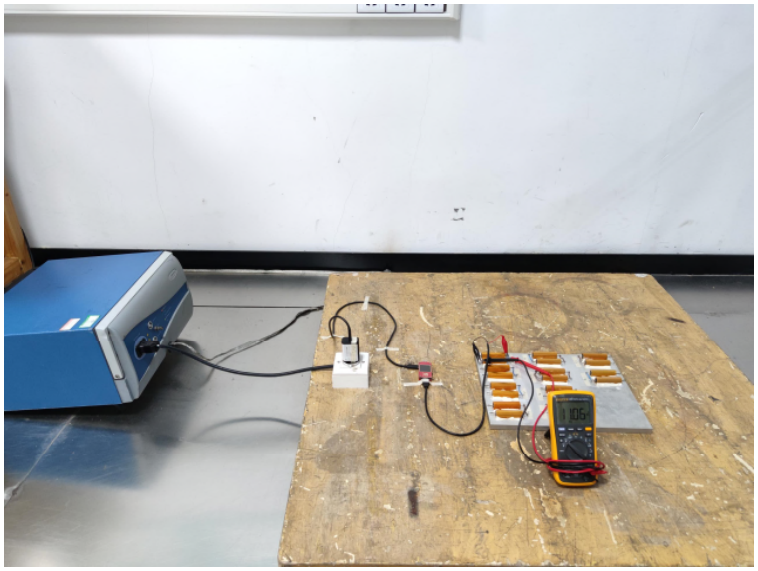
Family standard	:	EN 55035:2017+A11
Basic standard	:	IEC 61000-4-4
Wave shape of the pulse in 50 Ω load	:	
Rise time	:	5 ns ± 30 %
Duration		50 ns ± 30 %
Wave shape into 1 kΩ load	:	
Rise time:		5 ns ± 30 %
Duration	:	50 ns with a tolerance of -15 ns to + 100 ns
Burst duration	:	15 ms ± 20 % at 5 kHz
Burst period	:	300 ms ± 20 %
Repetition frequency:	:	5 kHz
Polarity	:	Positive and negative
Time of application	:	2 minutes
Performance criterion	:	B

Test Setup

Date of testing	:	2022.08.03
Input voltage	:	AC 230V/50Hz
Operation mode	:	On mode
Artificial hand	:	N/A
Input ac power ports	:	1KV
Input and output dc power ports	:	N/A*
Temperature	:	24.9°C
Humidity	:	51.8%
Air pressure	:	101kPa

*) The DC output cable is less than 3m, so the test on DC output terminal is not applicable.

Photograph 6: Set-up for Electrical Fast Transient (EFT)



Test Result

Table 4: Immunity against Electrical Fast Transients (EFT)

Coupling point	Application	Level (kV)	Polarity	Remark
Power ports				
AC power port	Coupling network	1	+	Applied, *)
		1	-	Applied, *)
DC power port	Coupling network	1, 2	+	N/A
		1, 2	-	N/A
Signal lines				
Ethernet Lines	Coupling clamp	0.5	+	N/A
		0.5	-	N/A
USB Lines	Coupling clamp	0.5	+	N/A
		0.5	-	N/A
Parallel Lines	Coupling clamp	0.5	+	N/A
		0.5	-	N/A
Serial Lines	Coupling clamp	0.5	+	N/A
		0.5	-	N/A
Control lines				
	Coupling clamp	0.5	+/-	N/A

*) Remark: No degradation was observed during and after the tests.

6.3.4 Surge

RESULT: **Pass**

Test Specification

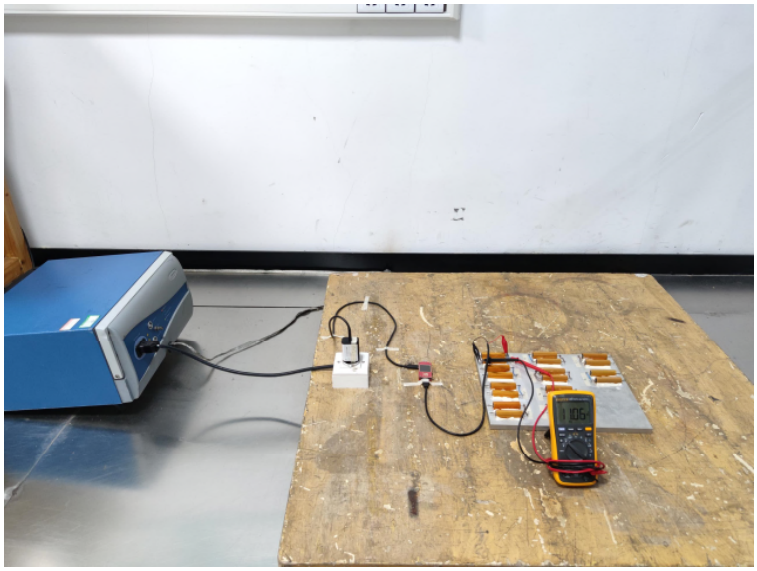
Family standard	:	EN 55035:2017+A11
Basic standard	:	IEC 61000-4-5
Definitions of the waveform parameters	:	
Front time		1.2 µs ± 30 % for mains 10 µs ± 30 % for telecommunication ports
Time to half value		50 µs ± 20 % for mains 700 µs ± 20 % for telecommunication ports
Source impedance		
Power line symmetrical	:	2 Ω + 18 µF
Power line unsymmetrical	:	12 Ω + 9 µF
interconnection lines symmetrical	:	160 Ω
interconnection lines unsymmetrical	:	40 Ω
Polarity	:	Positive and negative
Number of surges / polarity /phase angle:		5
Phase angles	:	0,π/2,π,3π/2
Repetition rate	:	60 s
Performance criterion	:	B or C

Test Setup

Date of testing	:	2022.08.03
Input voltage	:	AC 230V/50Hz
Operation mode	:	On mode
Temperature	:	25.1°C
Humidity	:	51.6%
Air pressure	:	101kPa

*) The DC output cable do not intend to connect directly to outdoor cables, so the test on DC output terminal is not applicable.

Photograph 7: Set-up for Surge



Test Result

Table 5: Surge Immunity Tests

Coupling point	Application	Level (kV)	Polarity	Remark
AC power port	Between phase and neutral	0.5/1	+	Applied, *)
		0.5/1	-	Applied, *)
AC power port	Between phase and protective earth	0.5/1/2	+	N/A
		0.5/1/2	-	N/A
AC power port	Between neutral and protective earth	0.5/1/2	+	N/A
		0.5/1/2	-	N/A
Ethernet port	Signal in	0.5/1	+	N/A
		0.5/1	-	N/A

*) Remark: No degradation was observed during and after the tests.

6.3.5 Electrostatic Discharges (ESD)

RESULT: **Pass**

Test Specification

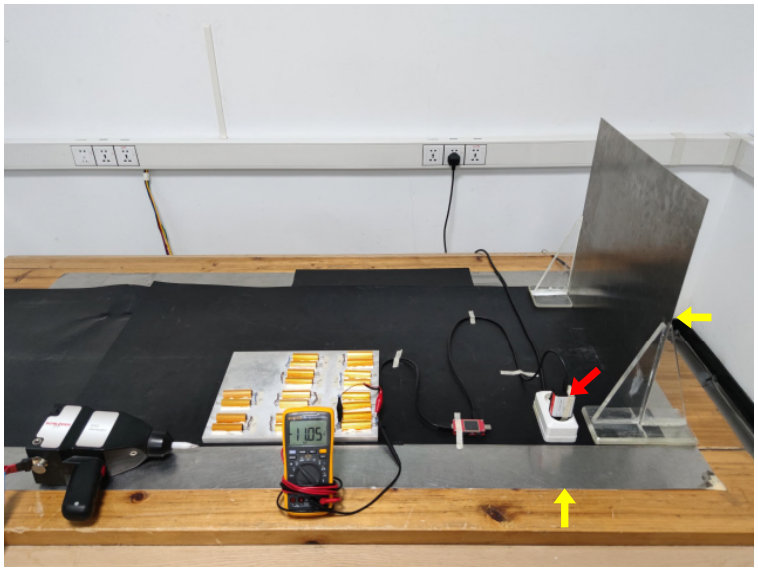
Family standard	:	EN 55035:2017+A11
Basic standard	:	IEC 61000-4-2
Discharge impedance	:	330 Ω / 150 pF
No. of discharges	:	Contact discharge:≥25
		Air discharge: ≥10
Type of discharge	:	
Direct discharge		Air discharge, ±2, 4, 8kV
		Contact discharge, ±4kV
Indirect discharge		Contact discharge, ±4kV
Polarity	:	Positive and negative
Discharge location	:	See photo documentation of the test set-up
		All external locations accessible by hand
		Horizontal coupling plate (HCP)
		Vertical coupling plate (VCP)
Performance criterion	:	B

Test Setup

Date of testing	:	2022.08.03
Input voltage	:	AC 230V/50Hz
Operation mode	:	On mode
Temperature	:	25.2°C
Humidity	:	51.5%
Air pressure	:	101kPa

Photograph 8: Set-up for Electrostatic Discharge

Contact Discharge ±4kV Air Discharge ±2, 4, 8kV



Test Result

Table 6: Electrostatic Discharge

Direct discharges			
Air discharges Discharge location	Air discharge voltage (kV)	Polarity	Remark
Refer to Photograph of ESD	2, 4, 8	±	Applied, *)
Non-conducted parts	2, 4, 8	±	Applied, *)
Contact discharges Discharge location	Contact discharge voltage (kV)	Polarity	Remark
Refer to Photograph of ESD	4	±	N/A
Conducted parts	4	±	N/A
Indirect discharges			
Contact discharges Discharge location	Contact discharge voltage (kV)	Polarity	Remark
VCP	4	±	Applied, *)
HCP	4	±	Applied, *)

*) Remark: No degradation was observed during and after the tests.

6.4 Power Supply Alterations

6.4.1 Voltage Dips and Interruptions

RESULT: **Pass**

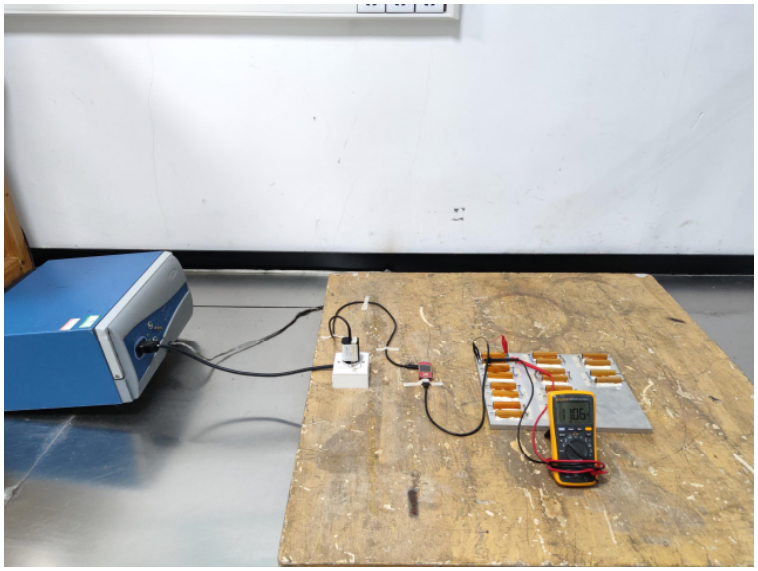
Test Specification

Family standard	:	EN 55035:2017+A11
Basic standard	:	IEC 61000-4-11
Test voltage generator characteristics for interruptions	:	
Rise time		Between 1 µs and 5 µs
Fall time		Between 1 µs and 5 µs
Output impedance of the test voltage generator	:	<(0.4 + j 0.25 Ω)
Phase angle	:	0°
Nominal mains voltage (Ut)	:	AC 100-240V
Rated frequency	:	50Hz/60Hz
Test level:		
Test level in % Ut		Duration (cycle)
0		0.5, 250/300
70		25/30
No. of interruptions	:	3
No. of voltage dips	:	3
Interval	:	>10s
Performance criterion	:	B +C

Test Setup

Date of testing	:	2022.08.03
Input voltage	:	AC 120V/60Hz, AC 230V/50Hz
Operation mode	:	On mode
Temperature	:	25.2°C
Humidity	:	51.8%
Air pressure	:	101kPa

Photograph 9: Set-up for Voltage Dips and Interruptions



Test Result

Table 7: Voltage Dip and Interruptions Immunity

Interruptions			
Test level (% Ut)	Duration (in periods)	Number of interruptions	Result
0	250(50Hz)/300(60Hz)	3	Applied, ***)
Voltage dips			
Test level (% Ut)	Duration (in periods)	Number of voltage dips	Result
0	0.5	3	Applied, *)
70	25(50Hz)	3	Applied, **)
70	30(60Hz)	3	Applied, *)

*) Remark: No degradation was observed during and after the tests.
**) Remark: The voltage of the EUT varied during the test of 70%UT, 25 cycles and self-recovered after tests.
***) Remark: The EUT shut down during the tests of 0%UT, 250 cycles and 300 cycles, and self-recovered after tests.

7 List of Tables

8 List of Photographs

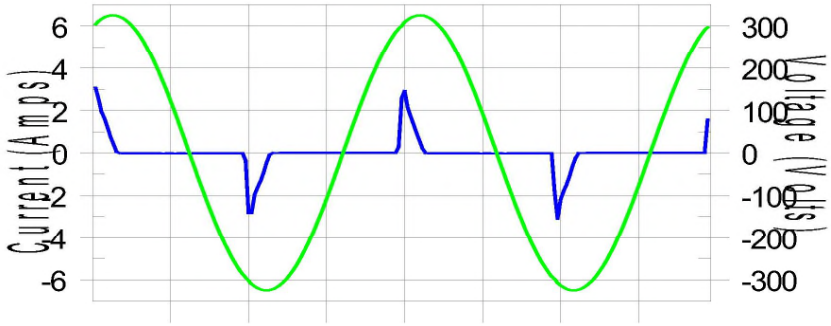
Project No. CN2271EN 001

Harmonics – Class-A per IEC 61000-3-2:2018/AMD1:2020(Run time)

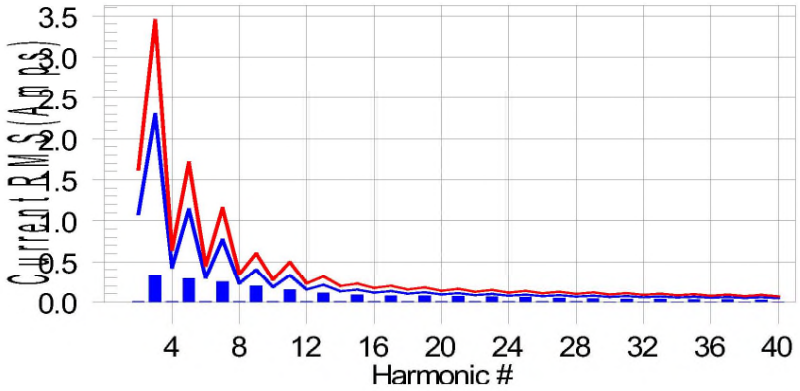
EUT: AC POWER SUPPLY **Tested by:** larker Liu
Test category: Class-A (European limits) **Test Margin: 100**
Test date: 2022-8-24 **Start time: 15:07:30** **End time: 15:10:11**
Test duration (min): 2.5 **Data file name: H-000850.cts_data**
Comment: Full load mode
Customer: MC-682N

Test Result: Pass **Source qualification: Normal**

Current & voltage waveforms



Harmonics and Class A limit line **European Limits**



Test result: Pass **Worst harmonics H23-49.2% of 150% limit, H23-69.7% of 100% limit**

Project No. CN2271EN 001

Current Test Result Summary (Run time)

EUT: AC POWER SUPPLY **Tested by: Test Operator**
Test category: Class-A (European limits) **Test Margin: 100**
Test date: 2022-8-24 **Start time: 15:07:30** **End time: 15:10:11**
Test duration (min): 2.5 **Data file name: H-000850.cts_data**
Comment: Full load mode
Customer: MC-682N

Test Result: Pass **Source qualification: Normal**
THC(A): 0.608 **I-THD(%): 176.1** **POHC(A): 0.154** **POHC Limit(A): 0.251**

Highest parameter values during test:

V_RMS (Volts):	230.02	Frequency(Hz):	50.00
I_Peak (Amps):	3.267	I_RMS (Amps):	0.705
I_Fund (Amps):	0.345	Crest Factor:	4.639
Power (Watts):	76.5	Power Factor:	0.481

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.006	1.080	0.5	0.007	1.620	0.4	Pass
3	0.325	2.300	14.1	0.326	3.450	9.5	Pass
4	0.006	0.430	1.3	0.007	0.645	1.1	Pass
5	0.292	1.140	25.6	0.293	1.710	17.1	Pass
6	0.006	0.300	1.9	0.007	0.450	1.5	Pass
7	0.248	0.770	32.2	0.249	1.155	21.6	Pass
8	0.006	0.230	2.4	0.007	0.345	1.9	Pass
9	0.198	0.400	49.5	0.200	0.600	33.3	Pass
10	0.005	0.184	3.0	0.006	0.276	2.3	Pass
11	0.150	0.330	45.4	0.152	0.495	30.7	Pass
12	0.005	0.153	3.6	0.006	0.230	2.8	Pass
13	0.111	0.210	52.7	0.113	0.315	35.9	Pass
14	0.006	0.131	4.2	0.006	0.197	3.2	Pass
15	0.087	0.150	57.8	0.089	0.225	39.7	Pass
16	0.006	0.115	4.8	0.006	0.173	3.7	Pass
17	0.078	0.132	59.1	0.081	0.198	40.9	Pass
18	0.006	0.102	5.5	0.007	0.153	4.3	Pass
19	0.077	0.118	64.7	0.080	0.178	45.0	Pass
20	0.006	0.092	6.2	0.007	0.138	5.0	Pass
21	0.074	0.107	69.3	0.078	0.161	48.5	Pass
22	0.006	0.084	6.8	0.007	0.125	5.5	Pass
23	0.068	0.098	69.7	0.072	0.147	49.2	Pass
24	0.006	0.077	7.3	0.007	0.115	5.9	Pass
25	0.059	0.090	65.9	0.064	0.135	47.1	Pass
26	0.005	0.071	7.7	0.006	0.107	6.1	Pass
27	0.050	0.083	60.3	0.054	0.125	43.5	Pass
28	0.005	0.066	8.0	0.006	0.099	6.3	Pass
29	0.043	0.078	55.9	0.047	0.116	40.5	Pass
30	0.005	0.061	8.2	0.006	0.092	6.4	Pass
31	0.039	0.073	54.3	0.043	0.109	39.1	Pass
32	0.005	0.058	N/A	0.006	0.086	N/A	Pass
33	0.037	0.068	54.2	0.040	0.102	38.9	Pass
34	0.005	0.054	N/A	0.005	0.081	N/A	Pass
35	0.034	0.064	53.0	0.037	0.096	38.2	Pass
36	0.004	0.051	N/A	0.005	0.077	N/A	Pass
37	0.030	0.061	49.5	0.033	0.091	36.0	Pass
38	0.004	0.048	N/A	0.005	0.073	N/A	Pass
39	0.025	0.058	43.9	0.028	0.087	32.2	Pass
40	0.004	0.046	N/A	0.005	0.069	N/A	Pass

Project No. CN2271EN 001

Voltage Source Verification Data (Run time)

EUT: AC POWER SUPPLY — **Tested by: Test Operator**
Test category: Class-A (European limits) — **Test Margin: 100**
Test date: 2022-8-24 **Start time: 15:07:30** **End time: 15:10:11**
Test duration (min): 2.5 **Data file name: H-000850.cts_data**
Comment: Full load mode
Customer: MC-682N

Test Result: Pass **Source qualification: Normal**

Highest parameter values during test:

Voltage (Vrms):	230.02	Frequency(Hz):	50.00
I_Peak (Amps):	3.267	I_RMS (Amps):	0.705
I_Fund (Amps):	0.345	Crest Factor:	4.639
Power (Watts):	76.5	Power Factor:	0.481

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.061	0.460	13.21	OK
3	0.407	2.070	19.67	OK
4	0.036	0.460	7.76	OK
5	0.088	0.920	9.55	OK
6	0.021	0.460	4.64	OK
7	0.072	0.690	10.49	OK
8	0.011	0.460	2.32	OK
9	0.125	0.460	27.23	OK
10	0.012	0.460	2.56	OK
11	0.063	0.230	27.31	OK
12	0.011	0.230	4.61	OK
13	0.060	0.230	25.95	OK
14	0.009	0.230	3.81	OK
15	0.064	0.230	27.99	OK
16	0.014	0.230	5.98	OK
17	0.049	0.230	21.35	OK
18	0.016	0.230	6.84	OK
19	0.067	0.230	29.04	OK
20	0.022	0.230	9.55	OK
21	0.070	0.230	30.64	OK
22	0.010	0.230	4.33	OK
23	0.066	0.230	28.81	OK
24	0.007	0.230	3.21	OK
25	0.066	0.230	28.63	OK
26	0.007	0.230	3.25	OK
27	0.057	0.230	24.71	OK
28	0.009	0.230	3.77	OK
29	0.054	0.230	23.60	OK
30	0.007	0.230	3.18	OK
31	0.052	0.230	22.76	OK
32	0.008	0.230	3.53	OK
33	0.052	0.230	22.66	OK
34	0.008	0.230	3.44	OK
35	0.052	0.230	22.46	OK
36	0.008	0.230	3.44	OK
37	0.050	0.230	21.59	OK
38	0.009	0.230	3.73	OK
39	0.048	0.230	20.71	OK
40	0.013	0.230	5.84	OK

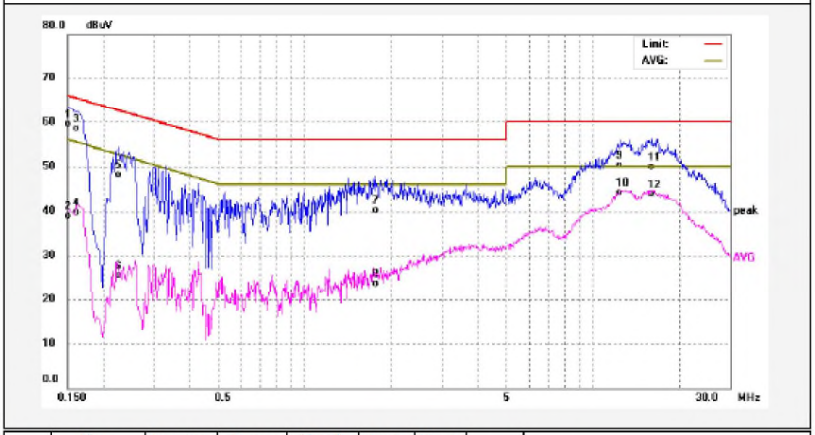
Project No. CN2271EN 001

WALTEK TESTING GROUP CO., LTD.
No.77, Houjie Section,Guantai Rd.,Houjie Town,
Dongguan City,Guangdong,China.
TEL: +86-769-22676998
FAX: +86-769-22676828

Job No.: WTD22D07151646E
Standard: EN55032 CE-Class B_QP
Test item: Conduction Test
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %
EUT: AC POWER SUPPLY
Mode: Full load mode
Model: MC-682N

Phase: L1
Power Source: AC 120V/60Hz
Date: 2022-8-2
Time: 11/20/18
Engineer Signature: Parker Liu

Note: 11V6.2A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1500	49.26	10.24	59.50	65.99	-6.49	QP	
2	0.1500	28.69	10.24	38.93	55.99	-17.06	AVG	
3	0.1620	48.34	10.23	58.57	65.36	-6.79	QP	
4	0.1620	29.48	10.23	39.71	55.36	-15.65	AVG	
5	0.2260	37.95	10.21	48.16	62.59	-14.43	QP	
6	0.2260	15.23	10.21	25.44	52.59	-27.15	AVG	
7	1.7540	29.78	10.30	40.08	56.00	-15.92	QP	
8	1.7540	13.44	10.30	23.74	46.00	-22.26	AVG	
9	12.5740	39.70	10.57	50.27	60.00	-9.73	QP	
10	12.5740	33.60	10.57	44.17	50.00	-5.83	AVG	
11	15.9700	39.39	10.49	49.88	60.00	-10.12	QP	
12	15.9700	33.17	10.49	43.66	50.00	-6.34	AVG	

Project No. CN2271EN 001

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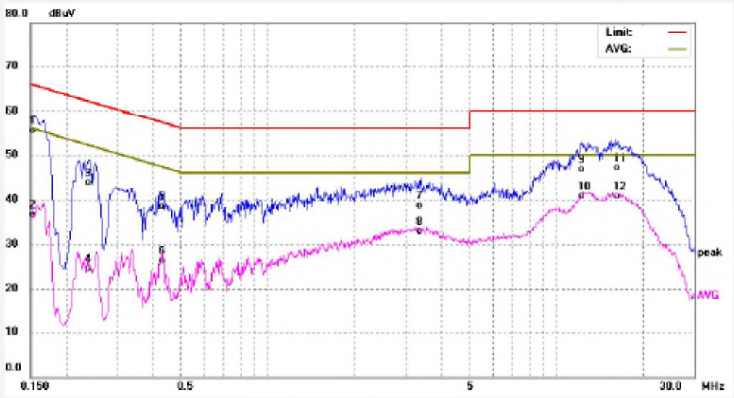
FAX: +86-769-22676828

Job No.: WTD22D07151646E	Phase: N
Standard: EN55032 CE-Class B_QP	Power Source: AC 120V/60Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 11/22/30
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	
Model: MC-882N	

Note: 11V6.2A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1539	45.16	10.26	55.42	65.78	-10.36	QP	
2	0.1539	26.46	10.26	36.72	55.78	-19.06	AVG	
3	0.2380	33.56	10.22	43.78	62.16	-18.38	QP	
4	0.2380	14.38	10.22	24.60	52.16	-27.56	AVG	
5	0.4300	28.34	10.20	38.54	57.25	-18.71	QP	
6	0.4300	16.04	10.20	26.24	47.25	-21.01	AVG	
7	3.3940	28.34	10.44	38.78	56.00	-17.22	QP	
8	3.3940	22.47	10.44	32.91	46.00	-13.09	AVG	
9	12.2420	36.16	10.63	46.79	60.00	-13.21	QP	
10	12.2420	29.98	10.63	40.61	50.00	-9.39	AVG	
11	16.0300	36.56	10.58	47.14	60.00	-12.86	QP	
12	16.0300	30.03	10.58	40.61	50.00	-9.39	AVG	

Project No. CN2271EN 001

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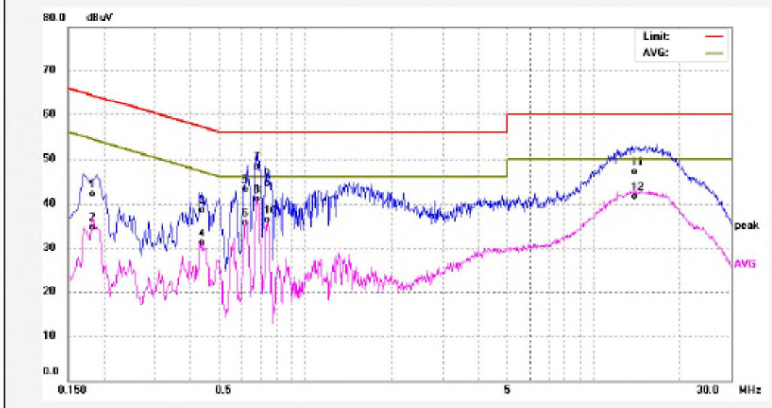
TEL: +86-769-22676998
FAX: +86-769-22676828

Job No.: WTD22D07151646E	Phase: L1
Standard: EN55032 CE-Class B_QP	Power Source: AC 120V/60Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 14/28/47
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Half load mode	
Model: MC-682N	

Note: 20V1.7A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1819	31.84	10.22	42.16	64.39	-22.23	QP	
2	0.1819	24.56	10.22	34.78	54.39	-19.61	AVG	
3	0.4380	28.35	10.19	38.54	57.10	-18.56	QP	
4	0.4380	20.94	10.19	31.13	47.10	-15.97	AVG	
5	0.6180	32.83	10.26	43.09	56.00	-12.91	QP	
6	0.6180	25.51	10.26	35.77	46.00	-10.23	AVG	
7	0.6820	38.02	10.28	48.30	56.00	-7.70	QP	
8	0.6820	30.58	10.28	40.86	46.00	-5.14	AVG	
9	0.7380	34.21	10.29	44.50	56.00	-11.50	QP	
10	0.7380	25.93	10.29	36.22	46.00	-9.78	AVG	
11	13.8780	36.58	10.55	47.13	60.00	-12.87	QP	
12	13.8780	30.94	10.55	41.49	50.00	-8.51	AVG	

Project No. CN2271EN 001

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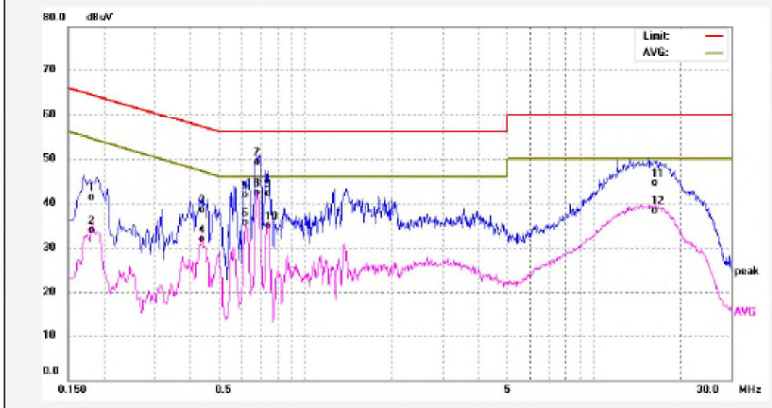
TEL: +86-769-22676998
FAX: +86-769-22676828

Job No.: WTD22D07151646E	Phase: N
Standard: EN55032 CE-Class B_QP	Power Source: AC 120V/60Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 14/31/41
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Half load mode	
Model: MC-692N	

Note: 20V1.7A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1819	31.03	10.24	41.27	64.39	-23.12	QP	
2	0.1819	23.59	10.24	33.83	54.39	-20.56	AVG	
3	0.4380	28.36	10.20	38.56	57.10	-18.54	QP	
4	0.4380	21.72	10.20	31.92	47.10	-15.18	AVG	
5	0.6220	31.35	10.26	41.61	56.00	-14.39	QP	
6	0.6220	25.47	10.26	35.73	46.00	-10.27	AVG	
7	0.6820	38.74	10.29	49.03	56.00	-6.97	QP	
8	0.6820	31.96	10.29	42.25	46.00	-3.75	AVG	
9	0.7460	31.86	10.30	42.16	56.00	-13.84	QP	
10	0.7460	24.60	10.30	34.90	46.00	-11.10	AVG	
11	16.3900	33.87	10.57	44.44	60.00	-15.56	QP	
12	16.3900	27.67	10.57	38.24	50.00	-11.76	AVG	

Project No. CN2271EN 001

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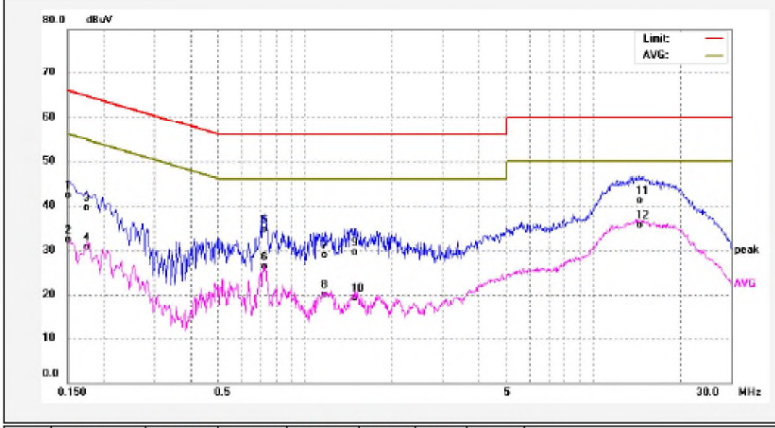
Job No.: WTD22D07151646E	Phase: L1
Standard: EN55032 CE-Class B_QP	Power Source: AC 120V/60Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 15/22/53
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	
Model: MC-682N	

Note: 5V3A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1500	32.16	10.24	42.40	65.99	-23.59	QP	
2	0.1500	22.07	10.24	32.31	55.99	-23.68	AVG	
3	0.1740	29.19	10.23	39.42	64.76	-25.34	QP	
4	0.1740	20.56	10.23	30.79	54.76	-23.97	AVG	
5	0.7220	24.44	10.29	34.73	56.00	-21.27	QP	
6	0.7220	15.94	10.29	26.23	46.00	-19.77	AVG	
7	1.1660	18.55	10.29	28.84	56.00	-27.16	QP	
8	1.1660	9.78	10.29	20.07	46.00	-25.93	AVG	
9	1.4819	19.12	10.29	29.41	56.00	-26.59	QP	
10	1.4819	9.00	10.29	19.29	46.00	-26.71	AVG	
11	14.4820	30.66	10.54	41.20	60.00	-18.80	QP	
12	14.4820	25.14	10.54	35.68	50.00	-14.32	AVG	

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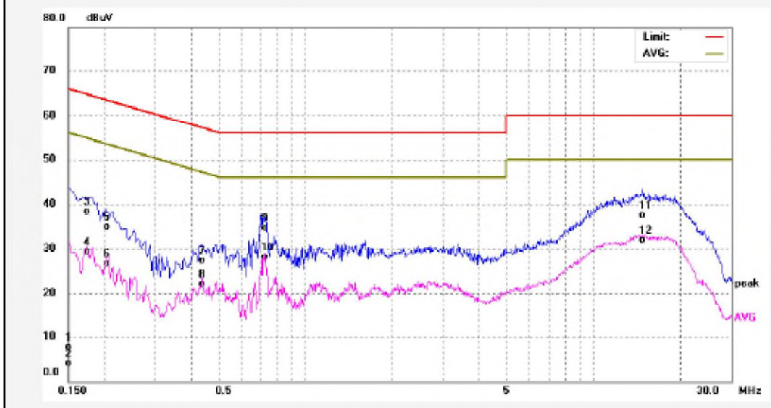
Job No.: WTD22D07151646E	Phase: N
Standard: EN55032 CE-Class B_QP	Power Source: AC 120V/60Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 15/25/06
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	
Model: MC-682N	

Note: 5V3A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1499	-2.61	10.26	7.65	66.00	-58.35	QP	
2	0.1499	-6.15	10.26	4.11	56.00	-51.89	AVG	
3	0.1740	28.13	10.24	38.37	64.76	-26.39	QP	
4	0.1740	19.12	10.24	29.36	54.76	-25.40	AVG	
5	0.2060	24.78	10.22	35.00	63.36	-28.36	QP	
6	0.2060	16.49	10.22	26.71	53.36	-26.65	AVG	
7	0.4380	17.14	10.20	27.34	57.10	-29.76	QP	
8	0.4380	11.92	10.20	22.12	47.10	-24.98	AVG	
9	0.7260	24.47	10.30	34.77	56.00	-21.23	QP	
10	0.7260	17.79	10.30	28.09	46.00	-17.91	AVG	
11	14.8899	26.80	10.61	37.41	60.00	-22.59	QP	
12	14.8899	21.37	10.61	31.98	50.00	-18.02	AVG	

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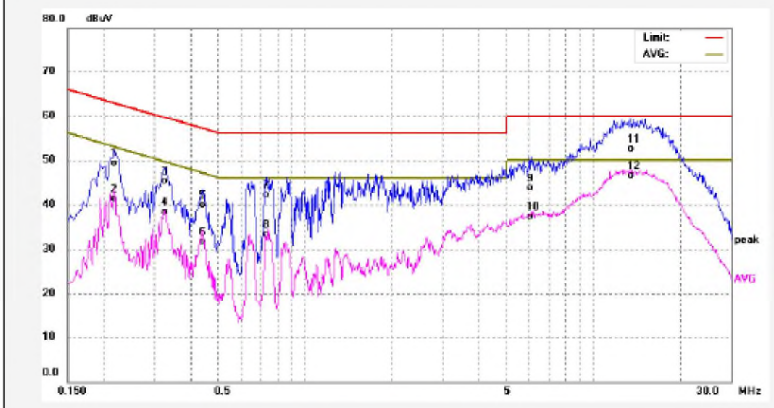
Job No.: WTD22D07151646E	Phase: L1
Standard: EN55032 CE-Class B_QP	Power Source: AC 230V/50Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 11/27/50
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	
Model: MC-682N	

Note: 11V6.2A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.2180	39.11	10.20	49.31	62.89	-13.58	QP	
2	0.2180	31.06	10.20	41.26	52.89	-11.63	AVG	
3	0.3260	35.17	10.18	45.35	59.55	-14.20	QP	
4	0.3260	28.07	10.18	38.25	49.55	-11.30	AVG	
5	0.4460	29.74	10.19	39.93	56.95	-17.02	QP	
6	0.4460	21.43	10.19	31.62	46.95	-15.33	AVG	
7	0.7340	31.85	10.29	42.14	56.00	-13.86	QP	
8	0.7340	22.92	10.29	33.21	46.00	-12.79	AVG	
9	6.1140	33.37	10.42	43.79	60.00	-16.21	QP	
10	6.1140	26.81	10.42	37.23	50.00	-12.77	AVG	
11	13.5220	41.98	10.56	52.54	60.00	-7.46	QP	
12	13.5220	35.85	10.56	46.41	50.00	-3.59	AVG	

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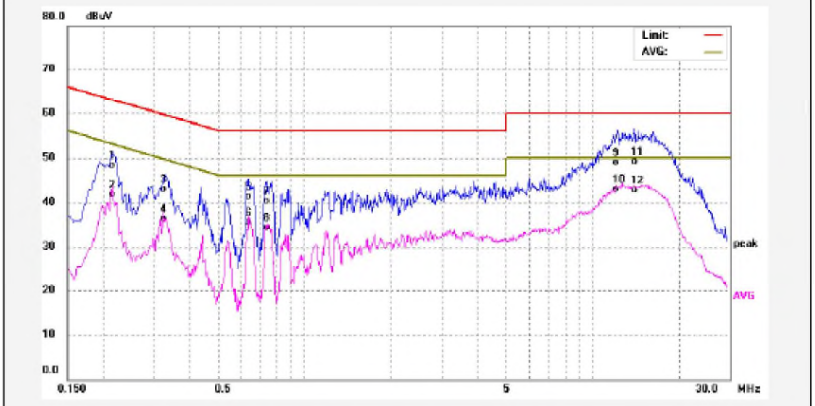
Job No.: WTD22D07151646E
Standard: EN55032 CE-Class B_QP
Test item: Conduction Test
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %
EUT: AC POWER SUPPLY
Mode: Full load mode
Model: MC-682N

Phase: N
Power Source: AC 230V/50Hz
Date: 2022-8-2
Time: 11/30/11
Engineer Signature:

Note: 11V6.2A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.2140	38.08	10.22	48.30	63.04	-14.74	QP	
2	0.2140	31.52	10.22	41.74	53.04	-11.30	AVG	
3	0.3220	32.75	10.21	42.96	59.65	-16.69	QP	
4	0.3220	26.15	10.21	36.36	49.65	-13.29	AVG	
5	0.6380	31.12	10.27	41.39	56.00	-14.61	QP	
6	0.6380	25.32	10.27	35.59	46.00	-10.41	AVG	
7	0.7380	29.96	10.30	40.26	56.00	-15.74	QP	
8	0.7380	24.02	10.30	34.32	46.00	-11.68	AVG	
9	12.1899	38.37	10.63	49.00	60.00	-11.00	QP	
10	12.1899	32.27	10.63	42.90	50.00	-7.10	AVG	
11	13.9420	38.52	10.61	49.13	60.00	-10.87	QP	
12	13.9420	32.17	10.61	42.78	50.00	-7.22	AVG	

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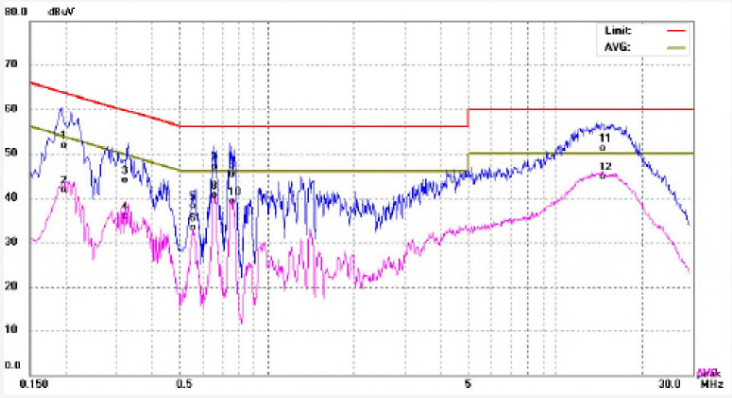
Job No.: WTD22D07151646E	Phase: L1
Standard: EN55032 CE-Class B_QP	Power Source: AC 230V/50Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 14/12/17
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	
Model: MC-682N	

Note: 20V3.4A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1980	41.49	10.21	51.70	63.69	-11.99	QP	
2	0.1980	31.55	10.21	41.76	53.69	-11.93	AVG	
3	0.3220	33.73	10.18	43.91	59.65	-15.74	QP	
4	0.3220	25.67	10.18	35.85	49.65	-13.80	AVG	
5	0.5540	27.94	10.22	38.16	56.00	-17.84	QP	
6	0.5540	23.15	10.22	33.37	46.00	-12.63	AVG	
7	0.6580	36.71	10.27	46.98	56.00	-9.02	QP	
8	0.6580	30.26	10.27	40.53	46.00	-5.47	AVG	
9	0.7580	35.04	10.29	45.33	56.00	-10.67	QP	
10	0.7580	28.81	10.29	39.10	46.00	-6.90	AVG	
11	14.4780	40.49	10.54	51.03	60.00	-8.97	QP	
12	14.4780	34.10	10.54	44.64	50.00	-5.36	AVG	

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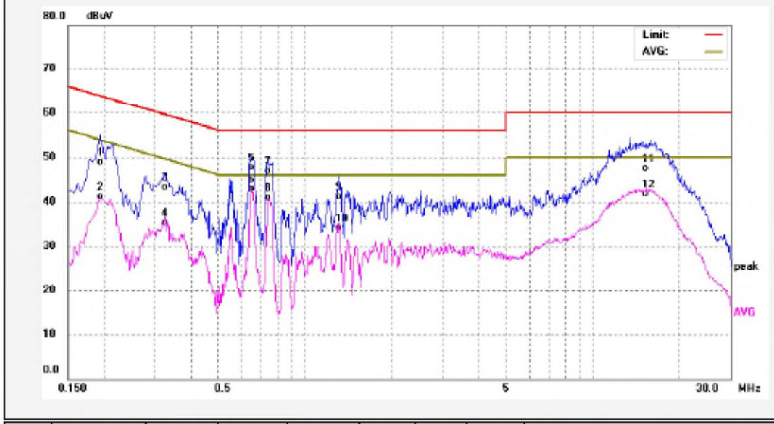
Job No.: WTD22D07151646E	Phase: N
Standard: EN55032 CE-Class B_QP	Power Source: AC 230V/50Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 14/15/19
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	
Model: MC-682N	

Note: 20V3.4A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1940	38.58	10.23	48.81	63.86	-15.05	QP	
2	0.1940	30.89	10.23	41.12	53.86	-12.74	AVG	
3	0.3260	33.13	10.21	43.34	59.55	-16.21	QP	
4	0.3260	25.08	10.21	35.29	49.55	-14.26	AVG	
5	0.6500	37.45	10.27	47.72	56.00	-8.28	QP	
6	0.6500	32.72	10.27	42.99	46.00	-3.01	AVG	
7	0.7460	36.52	10.30	46.82	56.00	-9.18	QP	
8	0.7460	30.65	10.30	40.95	46.00	-5.05	AVG	
9	1.3099	30.78	10.30	41.08	56.00	-14.92	QP	
10	1.3099	23.75	10.30	34.05	46.00	-11.95	AVG	
11	15.3060	36.95	10.60	47.55	60.00	-12.45	QP	
12	15.3060	31.17	10.60	41.77	50.00	-8.23	AVG	

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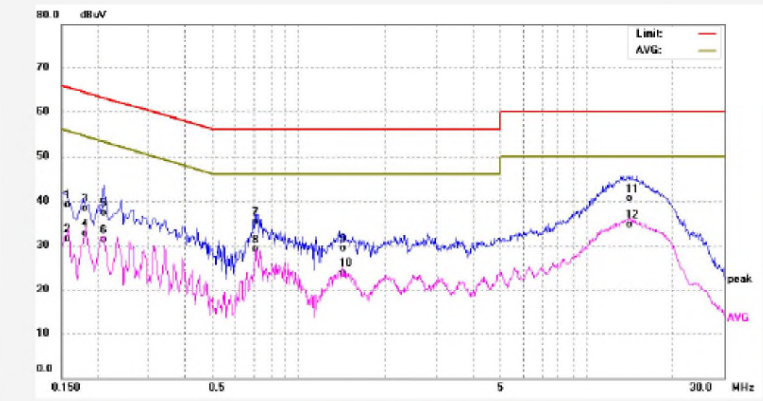
Job No.: WTD22D07151646E	Phase: N
Standard: EN55032 CE-Class B_QP	Power Source: AC 230V/50Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 15/28/26
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	
Model: MC-682N	

Note: 5V3A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1580	28.77	10.25	39.02	65.56	-26.54	QP	
2	0.1580	21.35	10.25	31.60	55.56	-23.96	AVG	
3	0.1819	28.08	10.24	38.32	64.39	-26.07	QP	
4	0.1819	22.45	10.24	32.69	54.39	-21.70	AVG	
5	0.2100	27.19	10.21	37.40	63.20	-25.80	QP	
6	0.2100	21.09	10.21	31.30	53.20	-21.90	AVG	
7	0.7100	25.00	10.30	35.30	56.00	-20.70	QP	
8	0.7100	18.74	10.30	29.04	46.00	-16.96	AVG	
9	1.4299	19.10	10.30	29.40	56.00	-26.60	QP	
10	1.4299	13.58	10.30	23.88	46.00	-22.12	AVG	
11	14.2059	29.94	10.62	40.56	60.00	-19.44	QP	
12	14.2059	24.18	10.62	34.80	50.00	-15.20	AVG	

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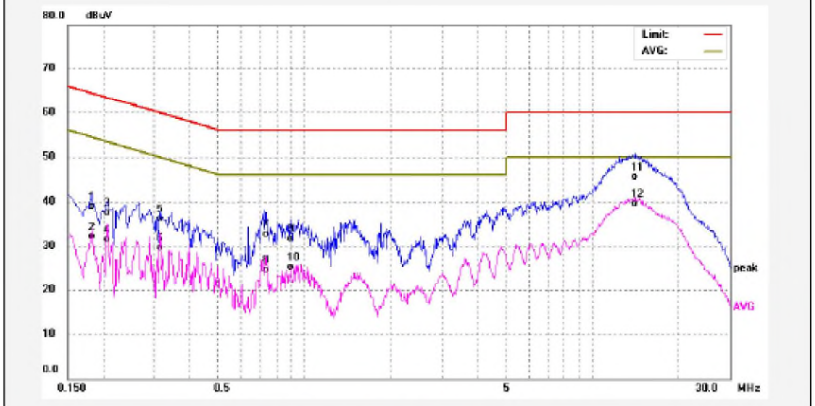
Job No.: WTD22D07151646E	Phase: L1
Standard: EN55032 CE-Class B_QP	Power Source: AC 230V/50Hz
Test item: Conduction Test	Date: 2022-8-2
Temp.(C)/Hum.(%): 26.6 (c) / 54.5 %	Time: 15/31/09
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	
Model: MC-682N	

Note: 5V3A



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1819	28.62	10.22	38.84	64.39	-25.55	QP	
2	0.1819	21.87	10.22	32.09	54.39	-22.30	AVG	
3	0.2060	27.25	10.21	37.46	63.36	-25.90	QP	
4	0.2060	21.38	10.21	31.59	53.36	-21.77	AVG	
5	0.3140	26.02	10.18	36.20	59.86	-23.66	QP	
6	0.3140	19.46	10.18	29.64	49.86	-20.22	AVG	
7	0.7260	22.33	10.29	32.62	56.00	-23.38	QP	
8	0.7260	14.43	10.29	24.72	46.00	-21.28	AVG	
9	0.8940	21.41	10.29	31.70	56.00	-24.30	QP	
10	0.8940	15.02	10.29	25.31	46.00	-20.69	AVG	
11	14.0940	35.00	10.55	45.55	60.00	-14.45	QP	
12	14.0940	28.94	10.55	39.49	50.00	-10.51	AVG	

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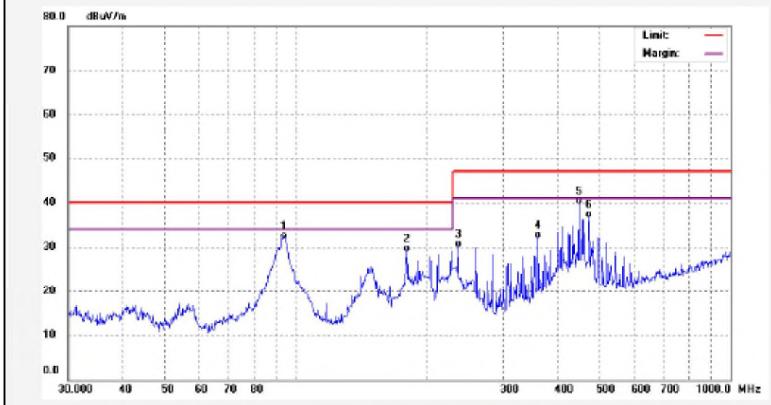
Job No.: WTD22D07151646E	Polarization: Horizontal
Standard: EN55032 RE-Class B 3M	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 9/35/12
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Half load mode	Distance: 3m
Model: MC-682N	

Note: 11V3.1A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	94.0978	53.14	-20.55	32.59	40.00	-7.41	QP	
2	180.0164	46.33	-16.66	29.67	40.00	-10.33	QP	
3	235.8163	48.13	-17.46	30.67	47.00	-16.33	QP	
4	360.4476	46.10	-13.42	32.68	47.00	-14.32	QP	
5	447.9822	51.74	-11.38	40.36	47.00	-6.64	QP	
6	472.1760	47.96	-10.73	37.23	47.00	-9.77	QP	

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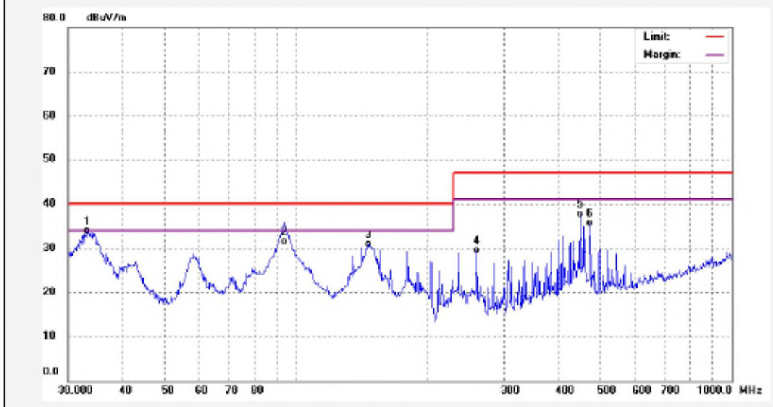
Job No.: WTD22D07151646E	Polarization: Vertical
Standard: EN55032 RE-Class B 3M	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 9/38/05
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Half load mode	Distance: 3m
Model: MC-682N	

Note: 11V3.1A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.2112	51.92	-18.03	33.89	40.00	-6.11	QP	
2	94.0979	52.15	-20.55	31.60	40.00	-8.40	QP	
3	146.8877	46.33	-15.47	30.86	40.00	-9.14	QP	
4	259.2338	45.75	-16.30	29.45	47.00	-17.55	QP	
5	447.9822	49.04	-11.38	37.66	47.00	-9.34	QP	
6	472.1760	46.45	-10.73	35.72	47.00	-11.28	QP	

Project No. CN2271EN 001

WALTEK TESTING GROUP CO., LTD.
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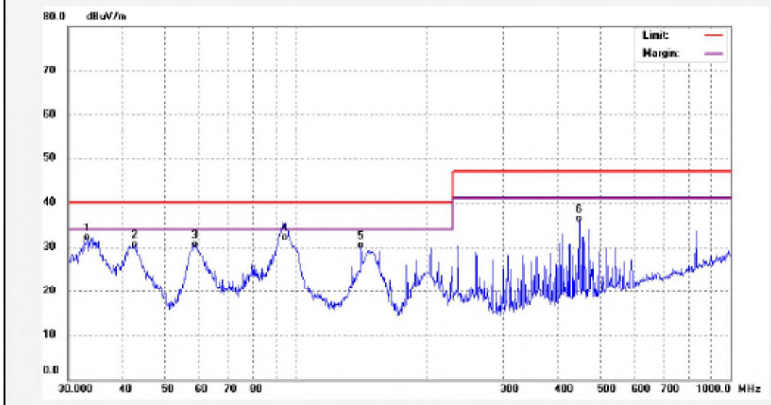
TEL: +86-769-22676998
FAX: +86-769-22676828

Job No.: WTD22D07151646E	Polarization: Vertical
Standard: EN55032 RE-Class B 3M	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 10/04/46
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Half load mode	Distance: 3m
Model: MC-682N	

Note: 5V1.5A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.2112	50.13	-18.03	32.10	40.00	-7.90	QP	
2	42.7496	48.05	-17.53	30.52	40.00	-9.48	QP	
3	58.6126	47.79	-17.22	30.57	40.00	-9.43	QP	
4	94.4284	52.59	-20.49	32.10	40.00	-7.90	QP	
5	141.3298	46.16	-15.77	30.39	40.00	-9.61	QP	
6	447.9822	47.75	-11.38	36.37	47.00	-10.63	QP	

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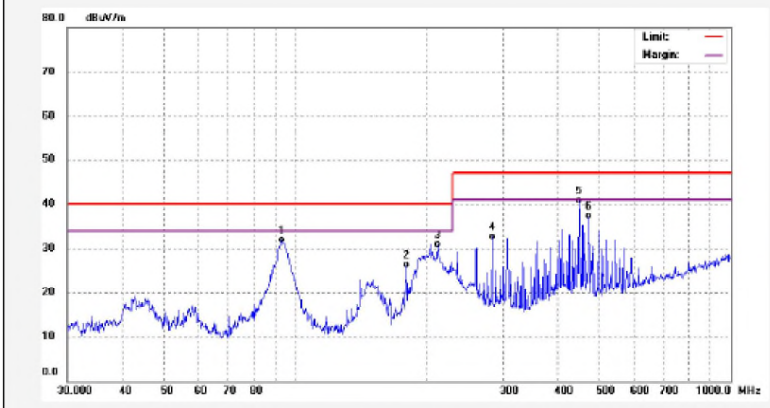
Job No.: WTD22D07151646E	Polarization: Horizontal
Standard: EN55032 RE-Class B 3M	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 10/07/28
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Half load mode	Distance: 3m
Model: MC-682N	

Note: 5V1.5A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	93.1132	52.64	-20.76	31.88	40.00	-8.12	QP	
2	180.0165	42.87	-16.66	26.21	40.00	-13.79	QP	
3	212.2695	49.00	-18.18	30.82	40.00	-9.18	QP	
4	282.9852	48.11	-15.41	32.70	47.00	-14.30	QP	
5	447.9822	52.01	-11.38	40.63	47.00	-6.37	QP	
6	472.1760	48.08	-10.73	37.35	47.00	-9.65	QP	

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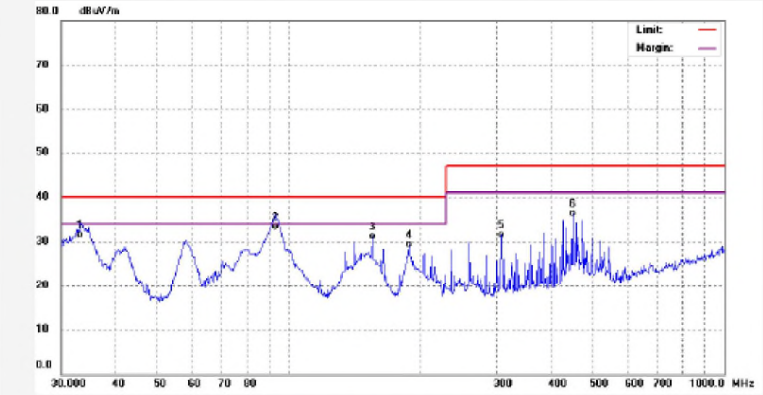
Job No.: WTD22D07151646E	Polarization: Vertical
Standard: EN55032 RE-Class B 3M	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 10/29/28
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	Distance: 3m
Model: MC-682N	

Note: 20V3.4A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.2112	49.63	-18.03	31.60	40.00	-8.40	QP	
2	93.1132	54.16	-20.76	33.40	40.00	-6.60	QP	
3	155.9101	46.53	-15.33	31.20	40.00	-8.80	QP	
4	188.4125	46.97	-17.70	29.27	40.00	-10.73	QP	
5	306.7537	46.16	-14.58	31.58	47.00	-15.42	QP	
6	447.9822	47.68	-11.38	36.30	47.00	-10.70	QP	

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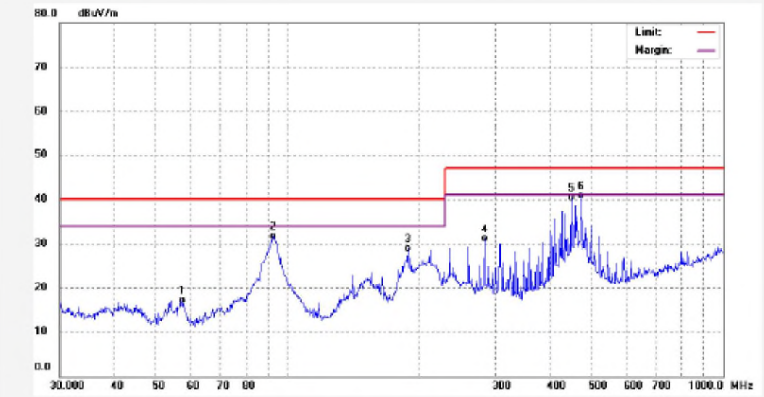
Job No.: WTD22D07151646E	Polarization: Horizontal
Standard: EN55032 RE-Class B 3M	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 10/32/05
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	Distance: 3m
Model: MC-682N	

Note: 20V3.4A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	57.3923	34.23	-17.17	17.06	40.00	-22.94	QP	
2	92.7871	52.51	-20.83	31.68	40.00	-8.32	QP	
3	188.4125	46.51	-17.70	28.81	40.00	-11.19	QP	
4	282.9852	46.61	-15.41	31.20	47.00	-15.80	QP	
5	447.9822	51.60	-11.38	40.22	47.00	-6.78	QP	
6	472.1760	51.49	-10.73	40.76	47.00	-6.24	QP	

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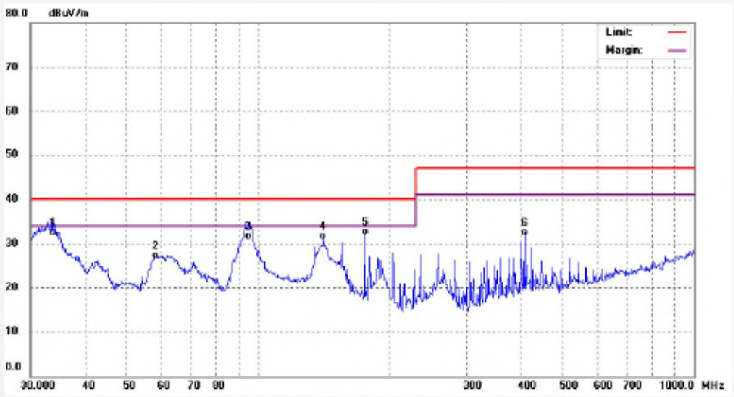
Job No.: WTD22D07151646E	Polarization: Vertical
Standard: EN55032 RE-Class B 3M	Power Source: AC 230V/50Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 9/26/51
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Half load mode	Distance: 3m
Model: MC-682N	

Note: 11V3.1A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.7986	50.61	-18.01	32.60	40.00	-7.40	QP	
2	58.2030	44.58	-17.20	27.38	40.00	-12.62	QP	
3	94.7601	52.22	-20.42	31.80	40.00	-8.20	QP	
4	140.8351	47.57	-15.81	31.76	40.00	-8.24	QP	
5	175.6516	49.06	-16.32	32.74	40.00	-7.26	QP	
6	407.5145	44.79	-12.37	32.42	47.00	-14.58	QP	

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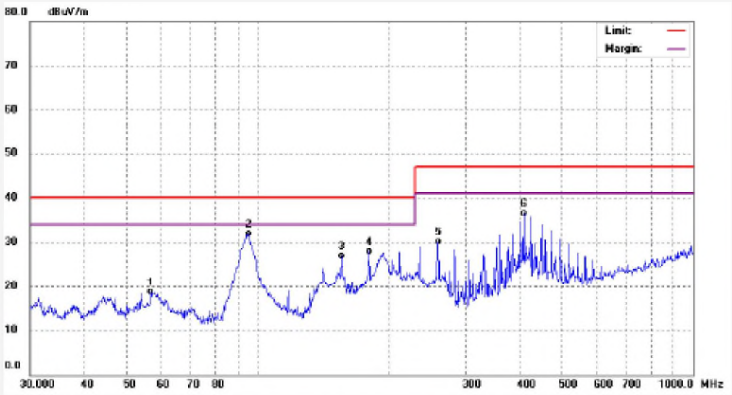
Job No.: WTD22D07151646E	Polarization: Horizontal
Standard: EN55032 RE-Class B 3M	Power Source: AC 230V/50Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 9/29/18
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Half load mode	Distance: 3m
Model: MC-682N	

Note: 11V3.1A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	56.7917	35.92	-17.14	18.78	40.00	-21.22	QP	
2	95.4270	52.18	-20.28	31.90	40.00	-8.10	QP	
3	155.9101	42.31	-15.33	26.98	40.00	-13.02	QP	
4	180.0165	44.66	-16.66	28.00	40.00	-12.00	QP	
5	259.2338	46.41	-16.30	30.11	47.00	-16.89	QP	
6	407.5145	48.86	-12.37	36.49	47.00	-10.51	QP	

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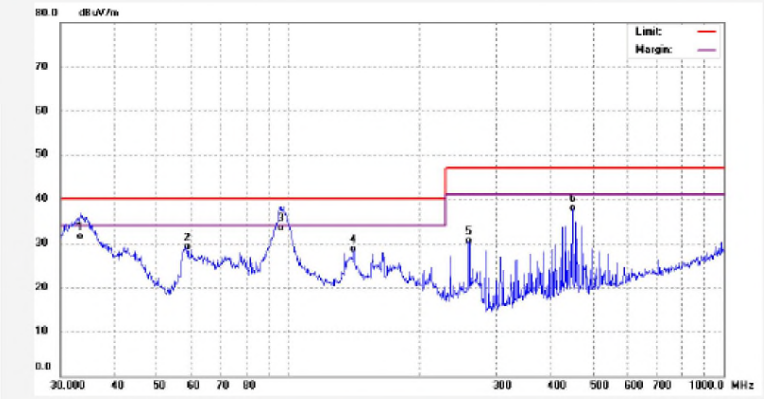
Job No.: WTD22D07151646E	Polarization: Vertical
Standard: EN55032 RE-Class B 3M	Power Source: AC 230V/50Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 10/17/16
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	Distance: 3m
Model: MC-682N	

Note: 5V3A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.3279	49.63	-18.03	31.60	40.00	-8.40	QP	
2	58.6126	46.27	-17.22	29.05	40.00	-10.95	QP	
3	96.0986	53.74	-20.14	33.60	40.00	-6.40	QP	
4	141.3298	44.54	-15.77	28.77	40.00	-11.23	QP	
5	259.2338	46.81	-16.30	30.51	47.00	-16.49	QP	
6	449.5558	49.32	-11.33	37.99	47.00	-9.01	QP	

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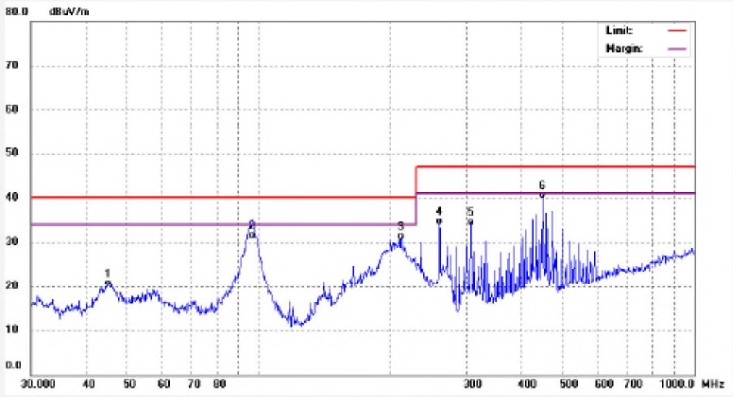
Job No.: WTD22D07151646E	Polarization: Horizontal
Standard: EN55032 RE-Class B 3M	Power Source: AC 230V/50Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 10/21/11
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	Distance: 3m
Model: MC-682N	

Note: 5V3A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	45.2166	37.94	-17.33	20.61	40.00	-19.39	QP	
2	96.7749	51.60	-20.00	31.60	40.00	-8.40	QP	
3	212.2695	49.47	-18.18	31.29	40.00	-8.71	QP	
4	259.2338	51.10	-16.30	34.80	47.00	-12.20	QP	
5	306.7537	49.01	-14.58	34.43	47.00	-12.57	QP	
6	447.9822	51.79	-11.38	40.41	47.00	-6.59	QP	

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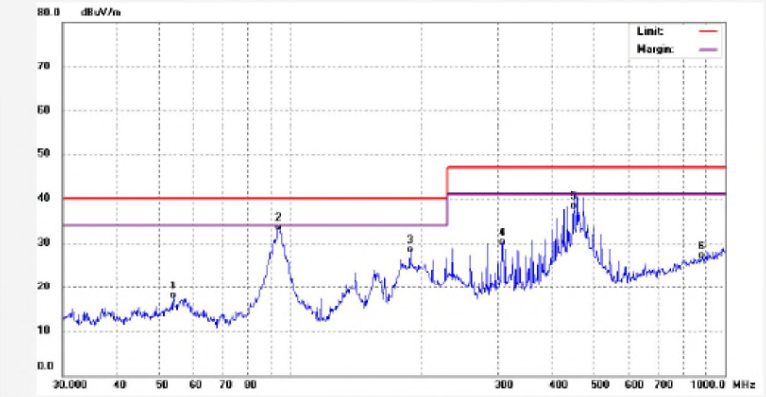
Job No.: WTD22D07151646E	Polarization: Horizontal
Standard: EN55032 RE-Class B 3M	Power Source: AC 230V/50Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 10/34/45
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	Distance: 3m
Model: MC-682N	

Note: 20V3.4A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	53.8818	35.11	-17.00	18.11	40.00	-21.89	QP	
2	94.0979	53.96	-20.55	33.41	40.00	-6.59	QP	
3	188.4125	46.24	-17.70	28.54	40.00	-11.46	QP	
4	306.7537	44.70	-14.58	30.12	47.00	-16.88	QP	
5	447.9822	49.78	-11.38	38.40	47.00	-8.60	QP	
6	884.5029	30.35	-3.34	27.01	47.00	-19.99	QP	

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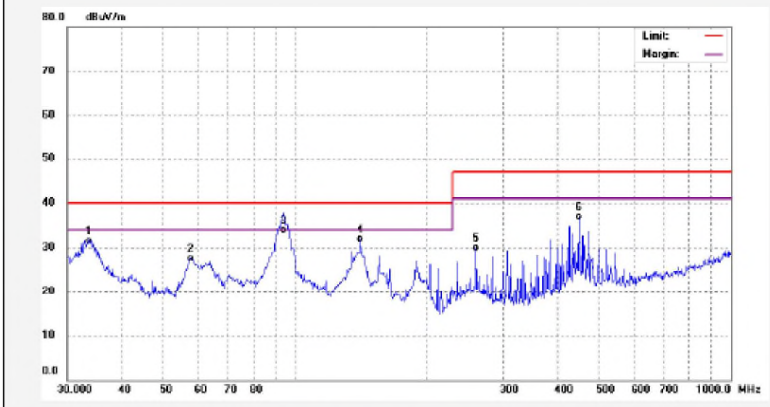
Job No.: WTD22D07151646E	Polarization: Vertical
Standard: EN55032 RE-Class B 3M	Power Source: AC 230V/50Hz
Test item: Radiation Test	Date: 2022-8-11
Temp.(C)/Hum.(%): 25.7 (c) / 56.2 %	Time: 10/37/41
EUT: AC POWER SUPPLY	Engineer Signature:
Mode: Full load mode	Distance: 3m
Model: MC-682N	

Note: 20V3.4A



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.6802	49.61	-18.01	31.60	40.00	-8.40	QP	
2	57.5939	44.63	-17.18	27.45	40.00	-12.55	QP	
3	94.0979	54.45	-20.55	33.90	40.00	-6.10	QP	
4	141.3298	47.69	-15.77	31.92	40.00	-8.08	QP	
5	259.2338	46.28	-16.30	29.98	47.00	-17.02	QP	
6	447.9822	48.35	-11.38	36.97	47.00	-10.03	QP	

Table 1: List of Test and Measurement Equipment

Waltek Testing Group Co., Ltd.

Conducted emissions from the AC mains power ports

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	EMI Test Receiver	R&S	ESCI	100947	2022-08-01	2023-07-31
2	LISN	R&S	ENV216	100115	2022-08-01	2023-07-31
3	Cable	Top	TYPE16(3.5M)	-	2022-08-01	2023-07-31

3m Semi-anechoic Chamber for Radiation (Below 1GHz) TDK

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Test Receiver	R&S	ESCI	101296	2022-04-28	2023-04-27
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2021-10-31	2022-10-30
3	Amplifier	ANRITSU	MH648A	M43381	2022-04-28	2023-04-27
4	Cable	HUBER+SUHNER	CBL2	525178	2022-04-28	2023-04-27

Harmonic and Flicker Measuring System

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Digital Power Analyzer	SCHAFFNER	CCN 1000-1	72625	2022-04-28	2023-04-27
2	Power Source	SCHAFFNER	NSG 1007	58477	2022-04-28	2023-04-27

Electrostatic Discharge

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Electrostatic Discharge Simulator	SCHLODER	SESD 216	606144	2022-04-28	2023-04-27

Radio-frequency electromagnetic fields

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Signal Generator	R&S	SMB100A	105942	2022-08-01	2023-07-31
2	RF Power Amplifier	BONN Elektronik	BLWA0830-160/100/40D	128740	2022-08-01	2023-07-31
3	GestockteBreitband (S tacked) Log.-per.Antenna	SCHWARZBECK	STLP9128D	043	2022-08-01	2023-07-31

4	Power Meter	R&S	NRP2	102031	2021-12-28	2022-12-27
5	Amplifier	NJNT	NTWPAS-2560025	2560025	2022-08-01	2023-07-31
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2022-04-30	2023-04-29

Surge, EFT, Voltage dips and Interruption

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	All Modules Generator	SCHAFFNER	6150	34579	2022-08-01	2023-07-31
2	Capacitive Coupling Clamp	SCHAFFNER	CDN 8014	25311	2022-08-01	2023-07-31
3	Signal and Data Line Coupling Network	SCHAFFNER	CDN 117	25627	2022-08-01	2023-07-31
4	AC Power Supply	HENGYUAN	DTDGC-4	-	2022-08-01	2023-07-31

Conducted Immunity

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	RF Generator	TESEQ	NSG4070	25781	2022-08-01	2023-07-31
2	CDN M-Type	TESEQ	CDN M016	25112	2021-12-27	2022-12-26
3	EM-Clamp	TESEQ	KEMZ 801	25453	2022-08-01	2023-07-31
4	Attenuator 6dB	TESEQ	ATN6050	25376	2022-08-01	2023-07-31

☐: ***Not Used***
☒: ***Used***