TEST REPORT

Application No.:	SHEM1812000177HS
Applicant:	
Address of Applicant:	
Manufacturer:	
Address of Manufacturer:	
Factory:	
Address of Factory:	
Equipment Under Test (EUT):	
EUT Name:	Zyklon Vacuum Cleaner
Model No.:	Refer to page 2¤
¤	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Standard(s) :	EN 55014-1:2017
	EN 61000-3-2:2014
	EN 61000-3-3:2013
	EN 55014-2:2015
Date of Receipt:	2016-04-19 & 2018-09-12 & 2018-12-20
Date of Test:	2016-04-19 to 2016-05-24 & 2018-09-14 to 2018-09-28 & 2018-12-27 to 2019-01-04
Date of Issue:	2019-01-14
Test Result:	**Pass***

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

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EU Declaration of Conformity and compliance with all relevant EU Directives.

Parlam Zhan
E&E Section Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

Model No.:

Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
SLX203A	SLX203B	SLX203C	SLX203D	SLX203E	SLX207B	SLX207C
SLX207D	SLX207E	SLX207F	SLX207G	SLX207H	SLX207I	SLX217B
SLX217C	SLX217D	SLX217E	SLX217F	SLX217G	SLX217H	SLX217I
SLX225B	SLX225C	SLX225D	SLX225E	SLX225F	SLX225G	SLX225H
SLX225I	SLX227A	SLX227B	SLX227C	SLX227D	SLX227E	SLX260B
SLX260C	SLX260D	SLX260E	SLX260F	SLX260G	SLX260H	SLX261B
SLX261C	SLX261D	SLX261E	SLX261F	SLX261G	SLX261H	Y8262B
Y8262C	Y8262D	Y8262E	Y8262F	Y8262G	Y8262H	Y8262I
Y8263B	Y8263C	Y8263D	Y8263E	Y8263F	Y8263G	Y8263H
Y8263I	Y8265E	Y8265G	Y8265H	Y8265I	Y8265J	Y8267B
Y8267C	Y8267D	Y8267E	Y8267F	Y8267G	Y8267H	Y8267I
Y8267ECar	Y8267HCar	SLX207EL	SLX217EL	SLX225EL	SLX260EL	SLX261EL
Y8262EL	Y8263EL	Y8265EL	Y8267EL	Y8268BL	Y8268EL	Y8291BL
Y8291BEL						

Revision Record			
Version	**Description**	**Date**	**Remark**
00	Add new test data for new model	2019-01-14	Based on SHEM160400211501

Authorized for issue by:				
				
		Leo Xu / Project Engineer		
				
		Bruce Tang / Reviewer		

2 Test Summary

Emission Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Emissions at Mains Terminals (150kHz-30MHz)	EN 55014-1:2017	CISPR 16-2-1	N/A	Pass
Radiated Emissions (30MHz-1GHz)	EN 55014-1:2017	CISPR 16-2-3	N/A	Pass
Harmonic Current Emission	EN 61000-3-2:2014	EN 61000-3-2:2014	Class A	N/A*
Voltage Fluctuations and Flicker	EN 61000-3-3:2013	EN 61000-3-3:2013	Clause 5 of EN 61000-3-3	Pass

N/A: Not applicable

N/A*: Not applicable .Please refer to Section 6.3 of this report for details.

Immunity Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Electrostatic Discharge	EN 55014-2:2015	EN 61000-4-2:2009	4kV Contact Discharge 8kV Air Discharge	Pass
Radiated Immunity (80MHz-1GHz)	EN 55014-2:2015	EN 61000-4-3:2006 +A1:2008+A2:2010	3V/m, 80%, 1kHz Amp. Mod.	Pass
Electrical Fast Transients/Burst at Power Port	EN 55014-2:2015	EN 61000-4-4:2012	1kV 5/50ns Tr/Td 5kHz Repetition Frequency	Pass
Surge at Power Port	EN 55014-2:2015	EN 61000-4-5:2014 +A1:2017	1.2/50μs Tr/Td 1kV Line to Line 2kV Line to Ground	Pass
Voltage Dips and Interruptions	EN 55014-2:2015	EN 61000-4-11:2004 +A1:2017	For 50Hz: 0 % UT for 0.5per 40 % UT for 10per 70 % UT for 25per For 60Hz: 0 % UT for 0.5per 40 % UT for 12per 70 % UT for 30per UT is Supply Voltage	Pass
Conducted Immunity at Power Port (150kHz-230MHz)	EN 55014-2:2015	EN 61000-4-6:2014	3Vrms (emf),80%,1kHz Amp. Mod.	Pass

N/A: Not applicable

Note1: Declaration of EUT Family Grouping:

There are series models mentioned in this report, and they are the similar in electrical and electronic characters. Only the models Y8265J, SLX225E, Y8291 were tested since their differences were the model number, trade name and appearance.

Note2: This report is copied from the report SHEM160400211501, add test data for model SLX225E and update the EUT name.

Note3: According to the validated standards, the models mentioned in this report are deemed to fulfil the EMC requirements without testing.

Note4: This report is copied from the report SHEM180900813101, add new test data for new model Y8291BL.And add new model Y8291EL

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply: Old:

For EUT: DC 15.6V
For Adapter:
Input: 100-240V~ 50/60Hz, 0.2A Max
Output: DC 21.5V, 250mA

New:
SLX225E: DC7.2V45W
Adaptor:TDUB-63V09
Input: 230V~,50Hz,
Output:DC9V0.25A

For model Y8291
DC15.6V
Adaptor: ZD5C215025EUE
Input: 100-240V~ 50/60Hz, 0.2A Max
Output: DC 21.5V, 250mA

Test voltage: Old:AC230V50Hz
For model Y8291:AC230V50Hz&DC15.6V

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conducted Emission at mains port using AMN	3.2dB (9kHz to 150kHz)
		3.0dB (150kHz to 30MHz)
2	Conducted Emission at mains port using VP	1.9 dB(9kHz to 30MHz)
3	Conducted Emission at telecommunication port using AAN	2.4 dB(150kHz to 30MHz)
4	Radiated Power	3.5dB
5	Radiated emission	4.4dB (30MHz-1GHz)
		4.6dB (1GHz-6GHz)

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

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

No tests were sub-contracted.

4.5 Test Facility

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

• CNAS (No. CNAS L0599)

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• NVLAP (Certificate No. 201034-0)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the National Voluntary Laboratory Accreditation Program(NVLAP). Certificate No. 201034-0.

• FCC –Designation Number: CN5033

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

Designation Number: CN5033. Test Firm Registration Number: 479755.

• Industry Canada (IC) – IC Assigned Code: 8617A

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1.

• VCCI (Member No.: 3061)

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-13868, C-14336, T-12221, G-10830 respectively.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

4.8 Monitoring of EUT for All Immunity Test

Visual: working status

5 Equipment List

Old:

CE M(150k-30M)					
Item	**Equipment**	**Manufacturer**	**Model No**	**Inventory No**	**Cal Due Date**
1	EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2017-01-12
2	Line impedance stabilization network	EMCO	3816/2	SHEM019-1	2017-01-12
3	Pulse limiter	Rohde & Schwarz	ESH3-Z2	SHEM029-1	2016-08-04

RE(30M-1G)					
Item	**Equipment**	**Manufacturer**	**Model No**	**Inventory No**	**Cal Due Date**
1	EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2016-08-04
2	Antenna	SCHWARZBECK	VUBA9117	SHEM008-1	2017-01-15
3	Ultra Antenna	Rohde & Schwarz	HL562	SHEM010-1	2017-01-15
4	Pre Amplifier	Agilent	8447D	SHEM143-1	2016-08-09
5	New Low Amplifier	CLAVIIO	BDLNA-0001-412010	SHEM164-1	2016-10-09
6	High Frequency Filter	LORCH	9BRX-875/X150-SR	SHEM156-1	N/A
7	Multi-device controller	ETS	2090	SHEM005-1	N/A

ESD					
Item	**Equipment**	**Manufacturer**	**Model No**	**Inventory No**	**Cal Due Date**
1	Electrostatic Discharge Simulator	TESEQ	NSG 437	SHEM041-1	2016-08-24

EFT(Mains)					
Item	**Equipment**	**Manufacturer**	**Model No**	**Inventory No**	**Cal Due Date**
1	Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-01-12
2	Ultra-compact simulator	EM test	UCS500M4	SHEM026-1	2017-01-12
3	Capacitive coupling clamp	EM test	HFK	SHEM026-2	2016-08-04
4	Data coupling network 4 line	EM test	CNV 504	SHEM026-3	2016-08-04
5	Matching resistors for EFT/burst generators	EM test	KW50	SHEM026-4	N/A
6	Matching resistors for EFT/burst generators	EM test	KW1000	SHEM026-5	N/A

Surge(Mains)					
Item	**Equipment**	**Manufacturer**	**Model No**	**Inventory No**	**Cal Due Date**
1	Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-01-12
2	Ultra-compact simulator	EM test	UCS500M4	SHEM026-1	2017-01-12
3	Data coupling network 4 line	EM test	CNV 504	SHEM026-3	2016-08-04
4	Matching resistors for EFT/burst generators	EM test	KW50	SHEM026-4	N/A
5	Matching resistors for EFT/burst generators	EM test	KW1000	SHEM026-5	N/A

V-Dips					
Item	**Equipment**	**Manufacturer**	**Model No**	**Inventory No**	**Cal Due Date**
1	Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-01-12
2	Ultra-compact simulator	EM test	UCS500M4	SHEM026-1	2017-01-12
3	Motorised Variac	MV2616	MV2616	SHEM026-6	2017-01-12

CI M(150K-230M)					
Item	**Equipment**	**Manufacturer**	**Model No**	**Inventory No**	**Cal Due Date**
1	signal generator	Rohde & Schwarz	SMJ100A	101394	2017-01-13
2	PAMP Conducted RF test system	HAEFFLY	PAMP250	151708	2017-01-13
3	CDN impedance and K-factor	LUTHI	L-801 M1	2116	2017-01-13
4	CDN impedance and K-factor	LUTHI	L-801 M2/M3	2117	2017-01-13
5	Coupling Clamp	LUTHI	EM 101	35724	2017-01-13

Flicker					
Item	**Equipment**	**Manufacturer**	**Model No**	**Inventory No**	**Cal Due Date**
1	AC source 6KVA	EM test	ACS500	SHEM025-1	2017-01-12

General used equipment					
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal.Due date**
1	Digital pressure meter	YONGZHI	DYM3-01	101012	2017-03-02
2	Temperature& humidity recorder	ShangHai weather meter work	ZJ 1-2B	84320600 803136, F304020153,201 01201FS100A6K ,201106117	2016-08-02
3	Digital Multimeter	FLUKE	17B	19720439	2017-01-13
4	Autoformer regulator	Guangzhou bao de	TDGC2-5KVA-	/	/
5	CLAMP METER	FLUKE	316	2503030971	2017-01-13

New:

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2017-12-20	2018-12-19
Line impedance stabilization network	SCHWARZBECK	NSLK8127	SHEM061-1	2017-12-20	2018-12-19
Line impedance stabilization network	EMCO	3816/2	SHEM019-1	2017-12-20	2018-12-19
Pulse limiter	Rohde & Schwarz	ESH3-Z2	SHEM029-1	2017-12-20	2018-12-19
Shielding Room	ZHONGYU	8*4*3M	SHEM079-2	2017-12-20	2020-12-19
CE test Cable	/	/	CE01	2017-12-26	2018-12-25

Radiated Emissions (30MHz-1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2017-12-20	2018-12-19
CONTROLLER	INNCO	CO200	SHEM047-1	N/A	N/A
ANTENNA MAST	INNCO	MA400-EP	SHEM047-2	N/A	N/A
TURN DEVICE	INNCO	DE 3600-RH	SHEM047-3	N/A	N/A
Broadband UHF-VHF ANTENNA	SCHWARZBECK	VULB9168	SHEM048-1	2017-02-28	2020-02-27
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21
Low Amplifier	CLAVIIO	BDLNA-0001-412010	SHEM164-1	2018-08-13	2019-08-12

Voltage Fluctuations and Flicker					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Harmonic&Flicker analyzer	AMETEK	PACS-1	SHEM024-2	2018-08-13	2019-08-12
AC Power Source 5KVA	AMETEK	5001iX	SHEM025-2	2018-08-13	2019-08-12

Electrostatic Discharge					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Electrostatic Discharge Simulator	TESEQ	NSG 437	SHEM041-2	2018-08-13	2019-08-12

Radiated Immunity (80MHz-1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2018-08-13	2019-08-12
Power Meter	Rohde & Schwarz	NRP	SHEM057-1	2017-12-20	2018-12-19
Power meter sensor	Rohde & Schwarz	NRP-Z91	SHEM057-2	2017-12-20	2018-12-19
Antenna	SCHWARZBECK	STLP9128D	SHEM130-1	N/A	N/A
Amplifier	MILMEGA	AS0840-55-55	SHEM133-1	N/A	N/A
Power meter sensor	Rohde & Schwarz	NRP-Z22	SHEM136-1	2017-12-19	2018-12-18
ElectroMagnetic Field Probe	ETS-Lindgren	HI-6113	SHEM134-1	2017-12-19	2018-12-18
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21

Electrical Fast Transients/Burst at Power Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19

Surge at Power Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19

Voltage Dips and Interruptions					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19

Conducted Immunity at Power Port (150kHz-230MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2018-08-13	2019-08-12
PAMP Conducted RF test system	HAEFFLY	PAMP250	SHEM023-1	2017-12-20	2018-12-19
6dB Attenuator	HUAXIANG	DTS50-6dB-1G-A	SHEM123-2	2017-12-25	2018-12-24
CDN impedance and K-factor	LUTHI	L-801 M1	SHEM023-5	2017-12-20	2018-12-19
CDN impedance and K-factor	LUTHI	L-801 M2/M3	SHEM023-6	2017-12-20	2018-12-19
Shielding Room	ZHONGYU	5*5*3M	SHEM079-6	2016-12-29	2019-12-28
Coupling and Decoupling Network	Teseq	CDN M016	SHEM168-1	2018-08-13	2019-08-12

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Digital pressure meter	YONGZHI	DYM3-01	SHEM082-1	2018-01-25	2021-01-24
Temperature&humidity recorder	ShangHai weather meter work	ZJ 1-2B	SHEM042-1~6	2018-08-31	2019-08-30
Digital Multimeter	FLUKE	17B	SHEM043-3	2018-09-03	2019-09-02
Autoformer regulator	Guangzhou bao de	TDGC2-5KVA	SHEM150-1	N/A	N/A
Multi-purpose tong tester	FLUKE	316	SHEM001-1	2017-12-20	2018-12-19

For model Y8291

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2018-12-20	2019-12-19
Line impedance stabilization network	SCHWARZBECK	NSLK8127	SHEM061-1	2018-12-20	2019-12-19
Line impedance stabilization network	EMCO	3816/2	SHEM019-1	2018-12-20	2019-12-19
Pulse limiter	Rohde & Schwarz	ESH3-Z2	SHEM029-1	2018-12-20	2019-12-19
Shielding Room	ZHONGYU	8*4*3M	SHEM079-2	2017-12-20	2020-12-19
CE test Cable	/	/	CE01	2017-12-26	2018-12-25

Radiated Emissions (30MHz-1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2018-12-20	2019-12-19
CONTROLLER	INNCO	CO200	SHEM047-1	N/A	N/A
ANTENNA MAST	INNCO	MA400-EP	SHEM047-2	N/A	N/A
TURN DEVICE	INNCO	DE 3600-RH	SHEM047-3	N/A	N/A
Broadband UHF-VHF ANTENNA	SCHWARZBECK	VULB9168	SHEM048-1	2017-02-28	2020-02-27
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21
Low Amplifier	CLAVIIO	BDLNA-0001-412010	SHEM164-1	2018-08-13	2019-08-12

Voltage Fluctuations and Flicker					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Harmonic&Flicker analyzer	AMETEK	PACS-1	SHEM024-2	2018-08-13	2019-08-12
AC Power Source 5KVA	AMETEK	5001iX	SHEM025-2	2018-08-13	2019-08-12

Electrostatic Discharge					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Electrostatic Discharge Simulator	TESEQ	NSG 437	SHEM041-2	2018-08-13	2019-08-12

Radiated Immunity (80MHz-1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2018-08-13	2019-08-12
Power Meter	Rohde & Schwarz	NRP	SHEM057-1	2018-12-20	2019-12-19
Power meter sensor	Rohde & Schwarz	NRP-Z91	SHEM057-2	2018-12-20	2019-12-19
Antenna	SCHWARZBECK	STLP9128D	SHEM130-1	N/A	N/A
Amplifier	MILMEGA	AS0840-55-55	SHEM133-1	2018-12-20	2019-12-19
Power meter sensor	Rohde & Schwarz	NRP-Z22	SHEM136-1	2018-12-20	2019-12-19
ElectroMagnetic Field Probe	ETS-Lindgren	HI-6105	SHEM134-1	2018-12-11	2019-12-10
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21

Electrical Fast Transients/Burst at Power Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2018-12-20	2019-12-19

Surge at Power Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2018-12-20	2019-12-19

Conducted Immunity at Power Port (150kHz-230MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2018-08-13	2019-08-12
PAMP Conducted RF test system	HAEFFLY	PAMP250	SHEM023-1	2018-12-20	2019-12-19
6dB Attenuator	HUAXIANG	DTS50-6dB-1G-A	SHEM123-2	2018-12-20	2019-12-19
CDN impedance and K-factor	LUTHI	L-801 M1	SHEM023-5	2018-12-20	2019-12-19
CDN impedance and K-factor	LUTHI	L-801 M2/M3	SHEM023-6	2018-12-20	2019-12-19
Shielding Room	ZHONGYU	5*5*3M	SHEM079-6	2016-12-29	2019-12-28
Coupling and Decoupling Network	Teseq	CDN M016	SHEM168-1	2018-08-13	2019-08-12

Voltage Dips and Interruptions					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2018-12-20	2019-12-19

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Digital pressure meter	YONGZHI	DYM3-01	SHEM082-1	2018-01-25	2021-01-24
Temperature&humidity recorder	ShangHai weather meter work	ZJ 1-2B	SHEM042-1~6	2018-08-31	2019-08-30
Digital Multimeter	FLUKE	17B	SHEM043-3	2018-09-03	2019-09-02
Autoformer regulator	Guangzhou bao de	TDGC2-5KVA	SHEM150-1	N/A	N/A
Multi-purpose tong tester	FLUKE	316	SHEM001-1	2017-12-20	2018-12-19

6 Emission Test Results

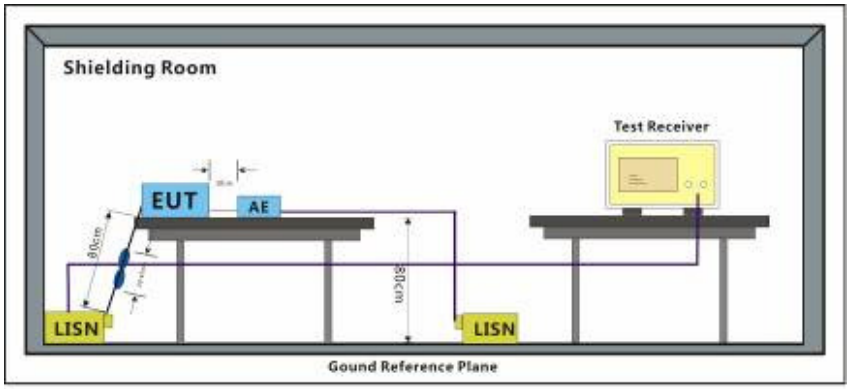
6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement: EN 55014-1:2017
Test Method: CISPR 16-2-1
Frequency Range: 150kHz to 30MHz
Limit:
0.15M-0.5MHz 66dB(μV)-56dB(μV) quasi-peak, 59dB(μV)-46dB(μV) average
0.5M-5MHz 56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz 60dB(μV) quasi-peak, 50dB(μV) average
Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

6.1.1 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar
Test mode a:Charging mode_Keep model Y8265J charging.
c:Charging mode: keep mode SLX225E charging,
e: Charging mode: keep model Y8291 charging with adaptor.

6.1.2 Test Setup Diagram

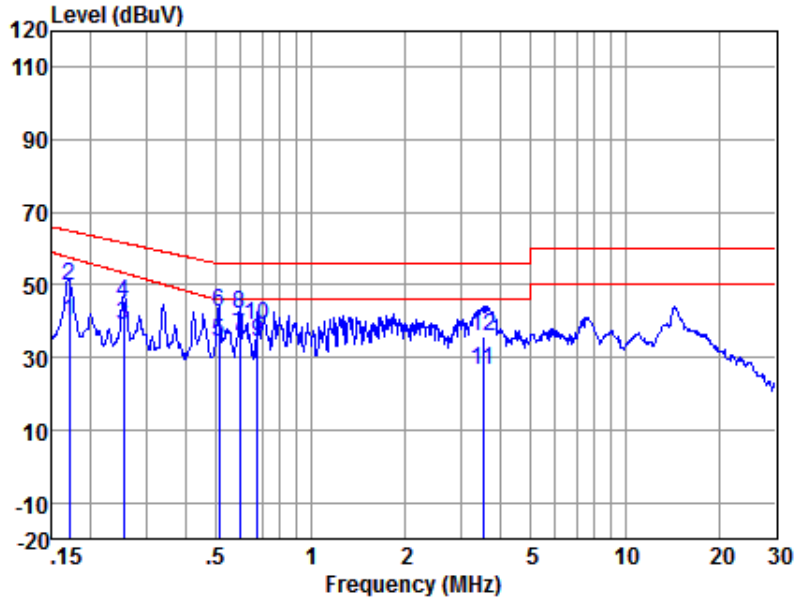


6.1.3 Measurement Data

An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

Old:

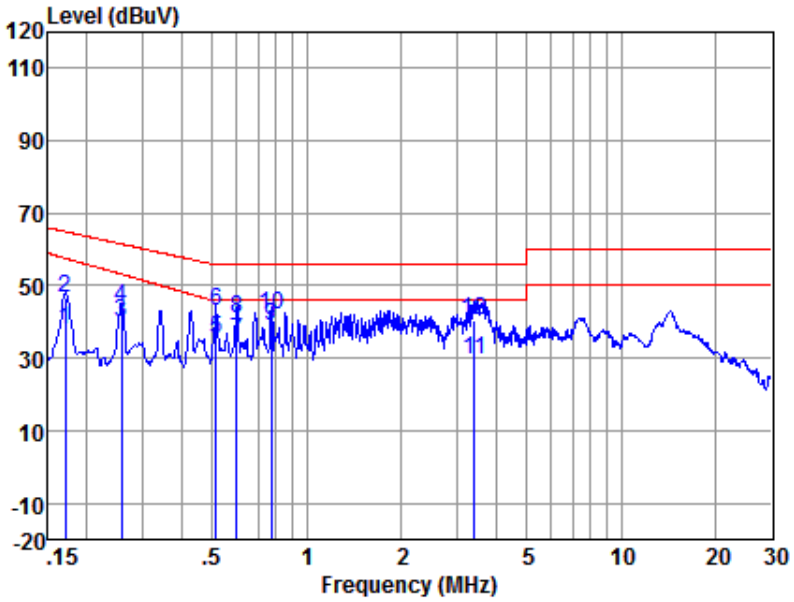
Mode:a;Line:Live Line



Site : chamber
Condition : 55014_CE-QP LISN-L-2015
EUT/Project No: 2115HS
Test mode : a

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.170	29.62	0.30	9.86	39.78	57.63	-17.85	Average
2	0.170	39.59	0.30	9.86	49.75	64.94	-15.19	QP
3	0.253	28.86	0.26	9.86	38.98	53.34	-14.36	Average
4	0.253	34.75	0.26	9.86	44.87	61.64	-16.77	QP
5	0.510	24.20	0.25	9.86	34.31	46.00	-11.69	Average
6	0.510	32.14	0.25	9.86	42.25	56.00	-13.75	QP
7	0.595	25.80	0.23	9.86	35.89	46.00	-10.11	Average
8	0.595	31.81	0.23	9.86	41.90	56.00	-14.10	QP
9	0.679	24.35	0.22	9.86	34.43	46.00	-11.57	Average
10	0.679	29.05	0.22	9.86	39.13	56.00	-16.87	QP
11	3.528	16.25	0.38	9.88	26.51	46.00	-19.49	Average
12	3.528	25.30	0.38	9.88	35.56	56.00	-20.44	QP

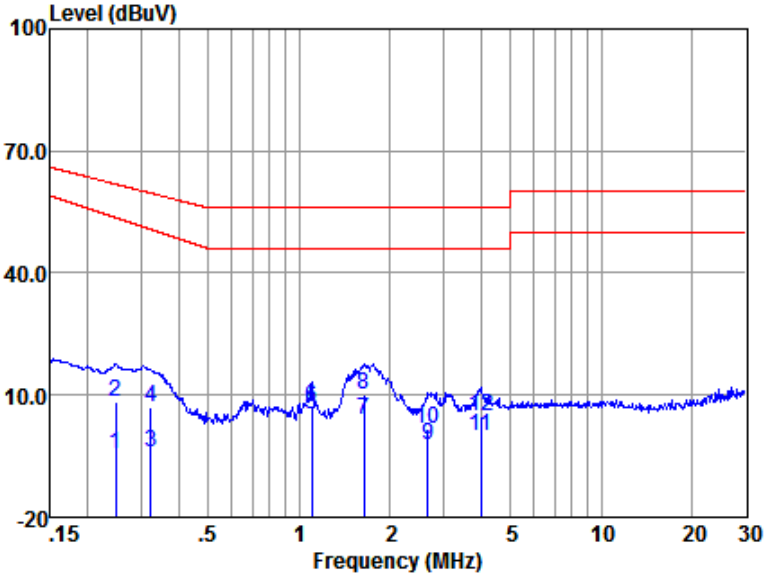
Mode:a;Line:Neutral Line



Site : chamber
Condition : 55014_CE-QP LISN-N-2015
EUT/Project No: 2115HS
Test mode : a

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.170	27.57	0.32	9.86	37.75	57.63	-19.88	Average
2	0.170	36.22	0.32	9.86	46.40	64.94	-18.54	QP
3	0.258	29.65	0.29	9.86	39.80	53.16	-13.36	Average
4	0.258	33.91	0.29	9.86	44.06	61.51	-17.45	QP
5	0.516	25.11	0.29	9.86	35.26	46.00	-10.74	Average
6	0.516	32.73	0.29	9.86	42.88	56.00	-13.12	QP
7	0.598	24.91	0.24	9.86	35.01	46.00	-10.99	Average
8	0.598	30.76	0.24	9.86	40.86	56.00	-15.14	QP
9	0.771	28.98	0.20	9.86	39.04	46.00	-6.96	Average
10	0.771	31.72	0.20	9.86	41.78	56.00	-14.22	QP
11	3.417	19.28	0.66	9.88	29.82	46.00	-16.18	Average
12	3.417	29.78	0.66	9.88	40.32	56.00	-15.68	QP

New:
Mode:c; Line:Live Line

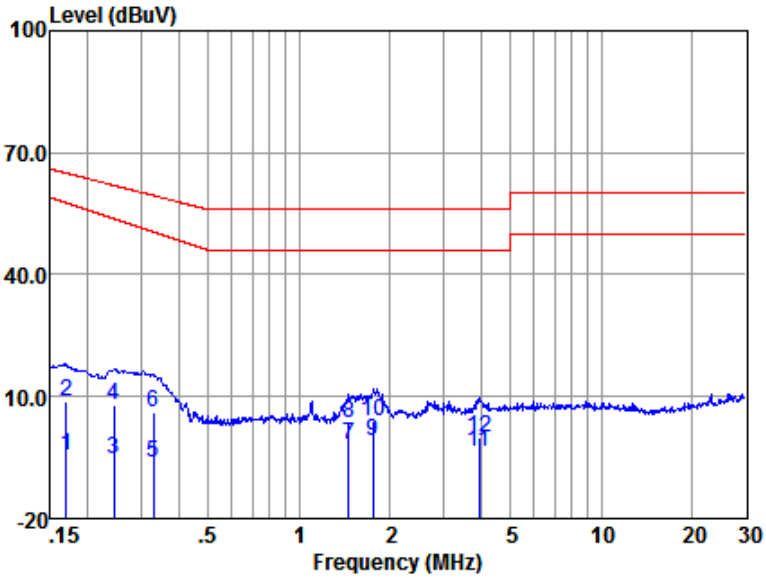


LISN : LINE
EUT/Project No : 8131HS
Test mode

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.25	-14.21	0.05	9.85	-4.31	53.62	-57.93	Average
2	0.25	-1.51	0.05	9.85	8.39	61.86	-53.47	QP
3	0.32	-13.75	0.05	9.84	-3.86	50.76	-54.62	Average
4	0.32	-2.80	0.05	9.84	7.09	59.66	-52.57	QP
5	1.10	-4.64	0.05	9.82	5.23	46.00	-40.77	Average
6	1.10	-2.74	0.05	9.82	7.13	56.00	-48.87	QP
7	1.64	-5.92	0.05	9.88	4.01	46.00	-41.99	Average
8	1.64	0.31	0.05	9.88	10.24	56.00	-45.76	QP
9	2.68	-12.37	0.06	9.88	-2.43	46.00	-48.43	Average
10	2.68	-8.36	0.06	9.88	1.58	56.00	-54.42	QP
11	4.01	-9.89	0.07	9.89	0.07	46.00	-45.93	Average
12	4.01	-5.15	0.07	9.89	4.81	56.00	-51.19	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:c; Line:Neutral Line

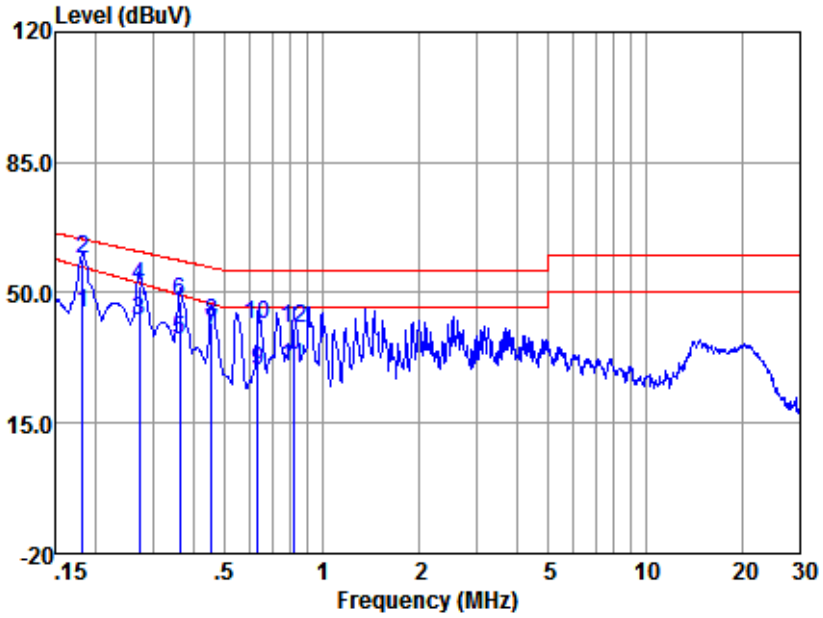


LISN : NEUTRAL
EUT/Project No : 8131HS
Test mode

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.17	-14.57	0.06	9.83	-4.68	57.68	-62.36	Average
2	0.17	-1.02	0.06	9.83	8.87	64.99	-56.12	QP
3	0.24	-15.38	0.06	9.85	-5.47	53.74	-59.21	Average
4	0.24	-1.94	0.06	9.85	7.97	61.95	-53.98	QP
5	0.33	-16.08	0.05	9.84	-6.19	50.53	-56.72	Average
6	0.33	-3.60	0.05	9.84	6.29	59.49	-53.20	QP
7	1.46	-11.93	0.06	9.86	-2.01	46.00	-48.01	Average
8	1.46	-6.56	0.06	9.86	3.36	56.00	-52.64	QP
9	1.75	-10.96	0.06	9.85	-1.05	46.00	-47.05	Average
10	1.75	-6.10	0.06	9.85	3.81	56.00	-52.19	QP
11	3.94	-13.69	0.08	9.89	-3.72	46.00	-49.72	Average
12	3.94	-9.88	0.08	9.89	0.09	56.00	-55.91	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

For model Y8291
Mode:e; Line:Live Line

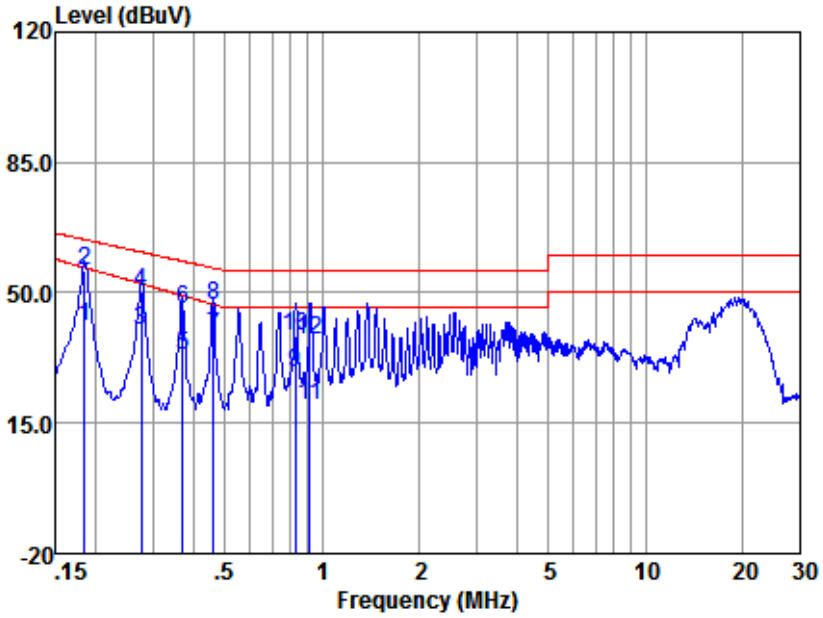


LISN : LINE
EUT/Project No : 0177HS
Test mode

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.18	34.44	0.05	9.83	44.32	56.94	-12.62	Average
2	0.18	49.14	0.05	9.83	59.02	64.42	-5.40	QP
3	0.27	32.45	0.05	9.85	42.35	52.59	-10.24	Average
4	0.27	42.04	0.05	9.85	51.94	61.07	-9.13	QP
5	0.36	27.41	0.05	9.84	37.30	49.45	-12.15	Average
6	0.36	37.77	0.05	9.84	47.66	58.65	-10.99	QP
7	0.45	29.36	0.05	9.83	39.24	47.04	-7.80	Average
8	0.45	31.90	0.05	9.83	41.78	56.80	-15.02	QP
9	0.63	19.36	0.04	9.80	29.20	46.00	-16.80	Average
10	0.63	31.73	0.04	9.80	41.57	56.00	-14.43	QP
11	0.82	19.99	0.04	9.86	29.89	46.00	-16.11	Average
12	0.82	30.49	0.04	9.86	40.39	56.00	-15.61	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:e; Line:Neutral Line



LISN : NEUTRAL
EUT/Project No : 0177HS
Test mode

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.18	31.16	0.06	9.83	41.05	56.83	-15.78	Average
2	0.18	46.06	0.06	9.83	55.95	64.33	-8.38	QP
3	0.28	29.86	0.06	9.85	39.77	52.42	-12.65	Average
4	0.28	40.20	0.06	9.85	50.11	60.94	-10.83	QP
5	0.37	23.07	0.05	9.84	32.96	49.27	-16.31	Average
6	0.37	35.94	0.05	9.84	45.83	58.52	-12.69	QP
7	0.46	28.27	0.05	9.83	38.15	46.87	-8.72	Average
8	0.46	37.00	0.05	9.83	46.88	56.67	-9.79	QP
9	0.83	18.48	0.05	9.86	28.39	46.00	-17.61	Average
10	0.83	28.62	0.05	9.86	38.53	56.00	-17.47	QP
11	0.92	10.00	0.05	9.87	19.92	46.00	-26.08	Average
12	0.92	27.17	0.05	9.87	37.09	56.00	-18.91	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

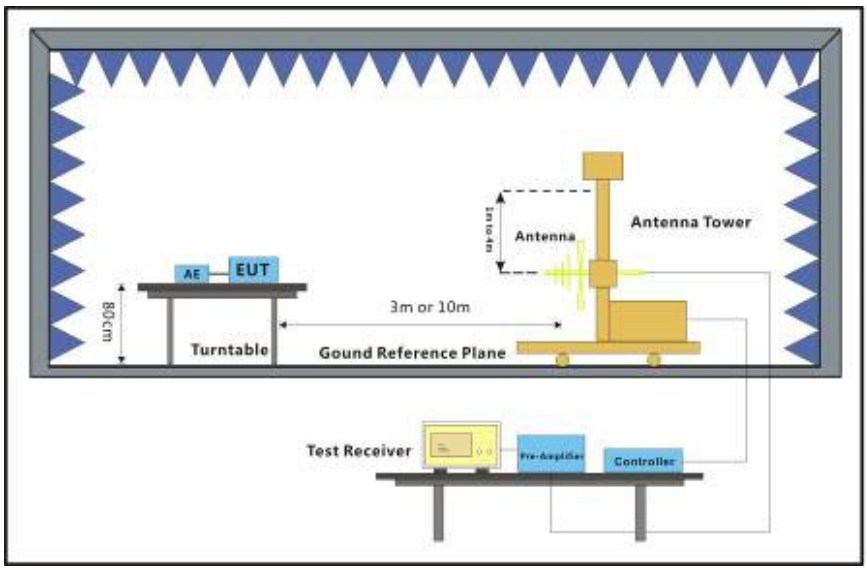
6.2 Radiated Emissions (30MHz-1GHz)

Test Requirement: EN 55014-1:2017
Test Method: CISPR 16-2-3
Frequency Range: 30MHz to 1GHz
Measurement Distance: 3m
Limit:
30MHz-230MHz 40 dB(μV/m) quasi-peak
230MHz-1GHz 47 dB(μV/m) quasi-peak
Detector: Peak for pre-scan (120kHz resolution bandwidth) 30M to 1000MHz

6.2.1 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar
Test mode: a:Charging mode_Keep model Y8265J charging.
b: Running mode_Keep the internal motor of model Y8265J running continuously.
c:Charging mode: keep mode SLX225E charging,
d:Running mode: keep mode SLX225E running.
e: Charging mode: keep model Y8291 charging with adaptor.
f: Running mode: keep model Y8291 running.

6.2.2 Test Setup Diagram

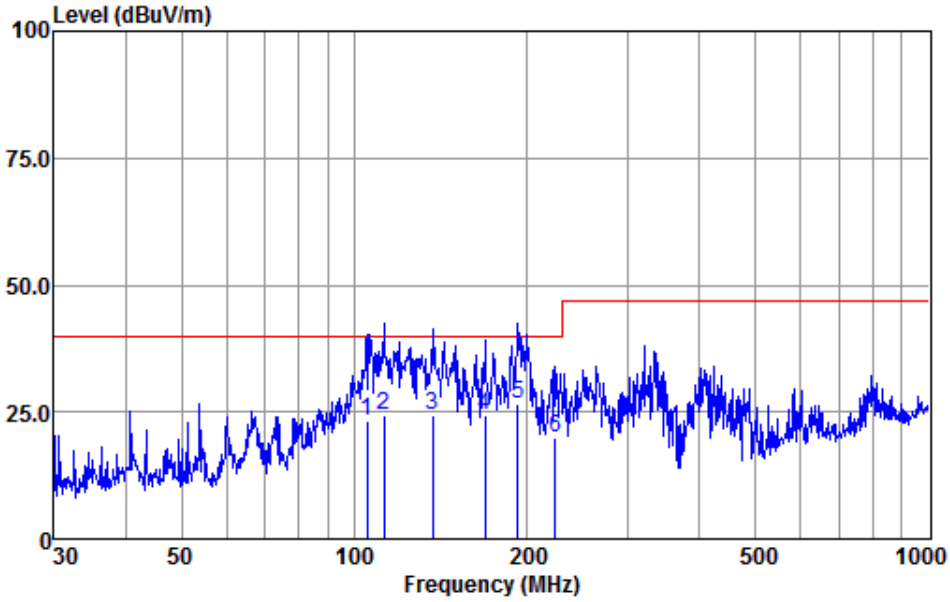


6.2.3 Measurement Data

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

Old:

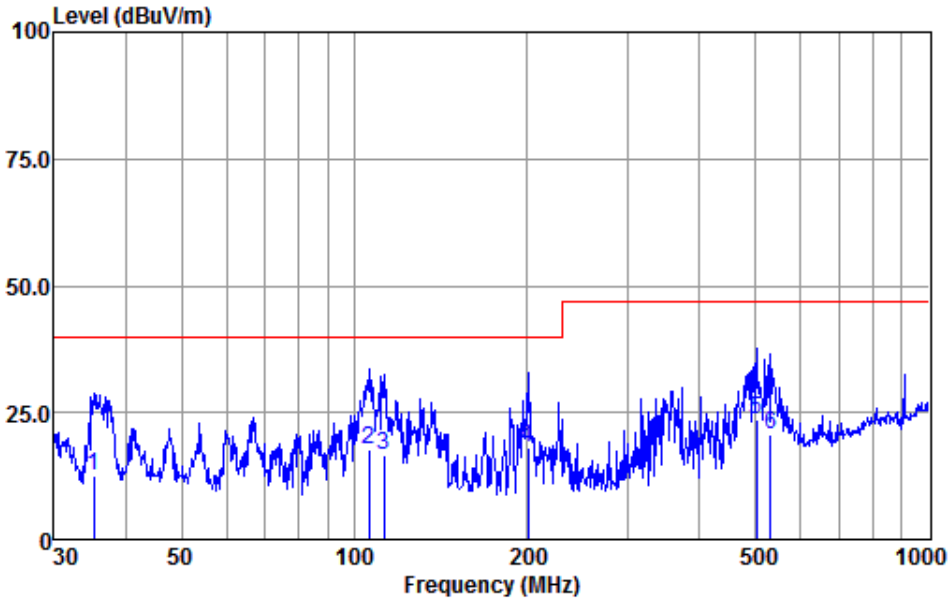
Mode:a;Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 2115HS
Test Mode : Running mode

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	105.27	48.47	10.10	0.00	35.26	23.31	40.00	-16.69	QP
2	112.52	49.23	11.13	0.00	35.87	24.49	40.00	-15.51	QP
3	136.94	47.07	12.18	0.00	34.84	24.41	40.00	-15.59	QP
4	169.01	47.68	12.19	0.00	35.66	24.21	40.00	-15.79	QP
5 q	192.42	51.38	11.03	0.00	35.97	26.44	40.00	-13.56	QP
6	223.73	45.95	10.06	0.00	35.93	20.08	40.00	-19.92	QP

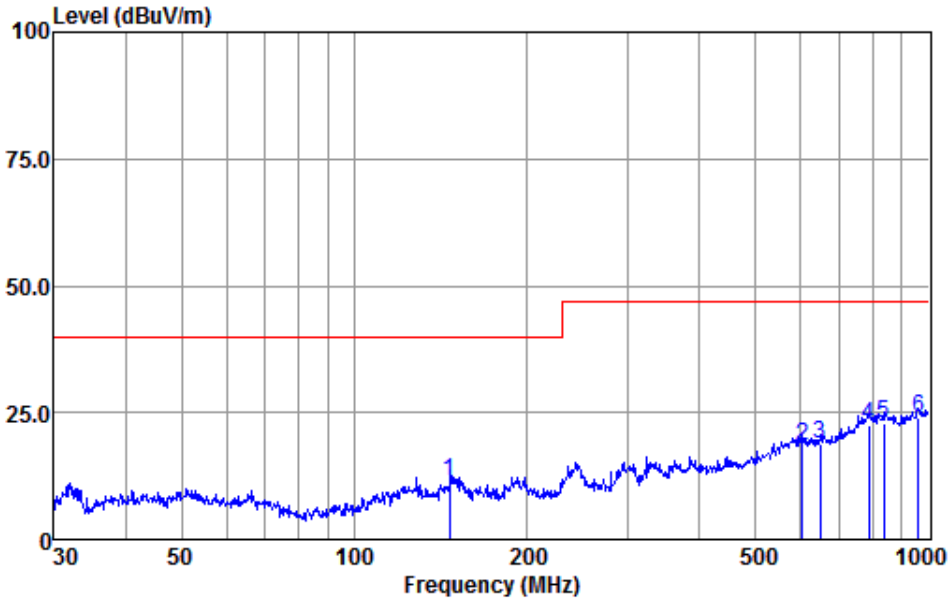
Mode:a;Polarization:Vertical



Condition : VERTICAL
EUT/Project: 2115HS
Test Mode : Running mode

	Freq	ReadLevel	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	35.24	36.11	12.55	0.00	36.00	12.66	40.00	-27.34	QP
2	106.12	42.77	10.24	0.00	35.35	17.66	40.00	-22.34	QP
3	112.62	41.27	11.14	0.00	35.87	16.54	40.00	-23.46	QP
4 q	200.63	43.11	10.76	0.00	35.96	17.91	40.00	-22.09	QP
5	501.86	42.04	17.28	0.00	35.73	23.59	47.00	-23.41	QP
6	530.77	37.49	18.53	0.00	35.46	20.56	47.00	-26.44	QP

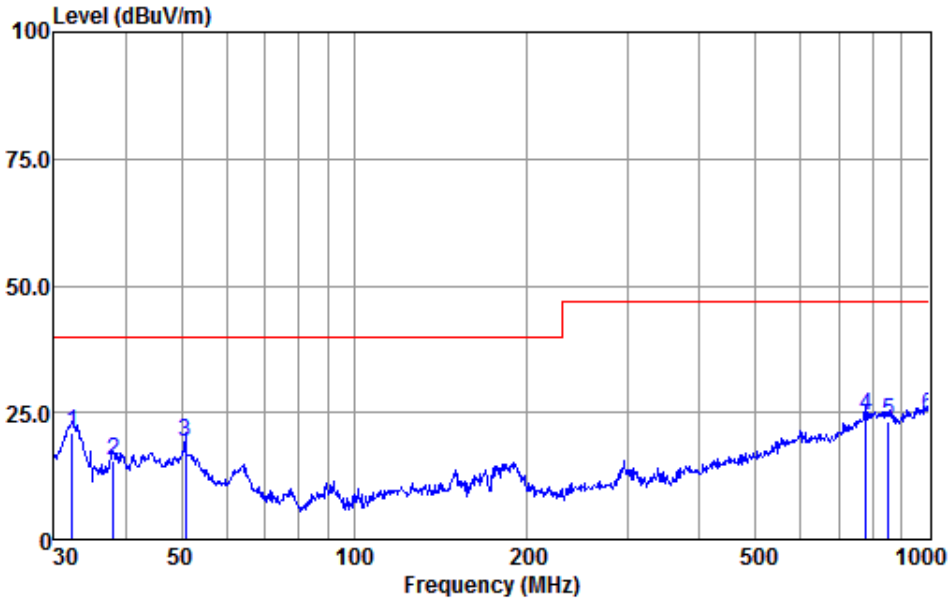
Mode:b;Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 2115HS
Test Mode : Charging mode

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	146.52	41.11	12.63	1.35	43.49	11.60	40.00	-28.40	QP
2	603.23	38.40	20.21	3.05	43.13	18.53	47.00	-28.47	QP
3	649.04	38.28	20.39	3.20	43.11	18.76	47.00	-28.24	QP
4	788.93	38.71	23.32	3.60	43.06	22.57	47.00	-24.43	QP
5	837.09	38.67	23.71	3.72	43.05	23.05	47.00	-23.95	QP
6 q	962.33	38.56	24.42	4.02	43.01	23.99	47.00	-23.01	QP

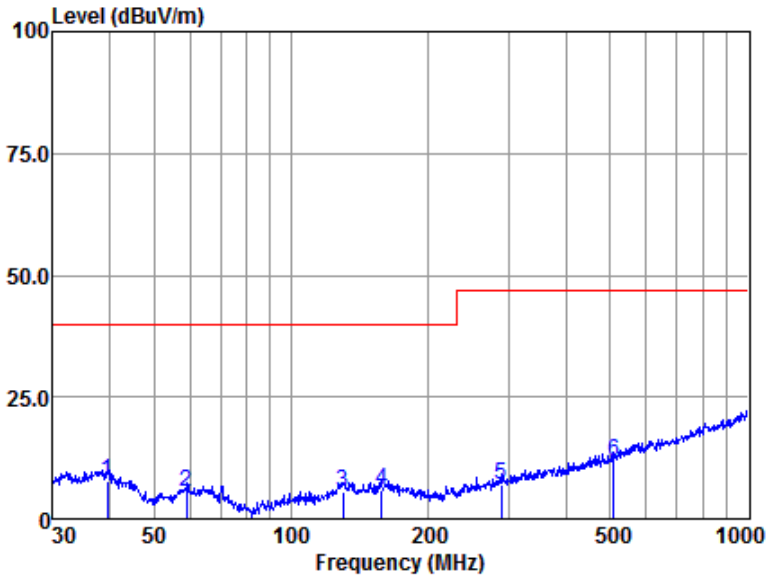
Mode:b;Polarization:Vertical



Condition : VERTICAL
EUT/Project: 2115HS
Test Mode : Charging mode

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 q	32.29	51.82	12.64	0.55	43.88	21.13	40.00	-18.87	QP
2	38.07	45.28	13.31	0.59	43.84	15.34	40.00	-24.66	QP
3	50.80	48.35	13.71	0.71	43.76	19.01	40.00	-20.99	QP
4	778.33	40.77	23.14	3.57	43.06	24.42	47.00	-22.58	QP
5	853.92	39.09	23.48	3.76	43.04	23.29	47.00	-23.71	QP
6	1000.00	38.95	24.10	4.20	43.00	24.25	47.00	-22.75	QP

New:
Mode:c; Polarization:Horizontal

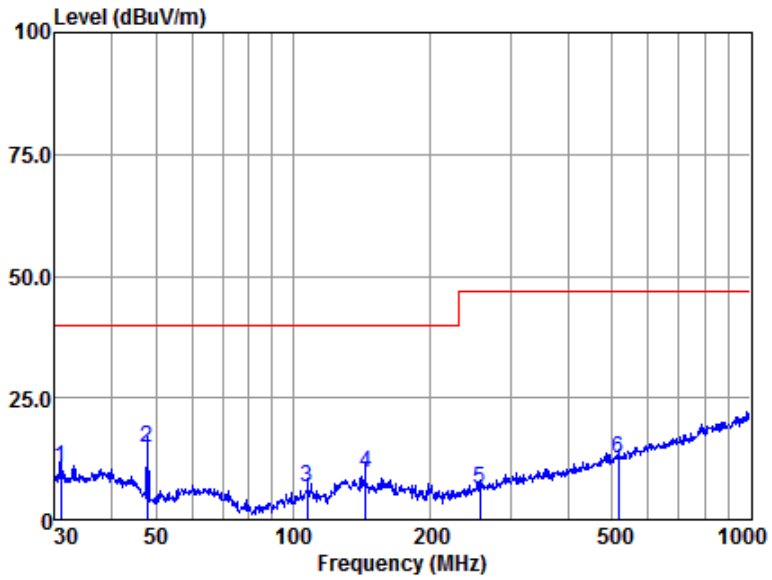


Antenna Polarity :HORIZONTAL
EUT/Project :8131HS
Test mode

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	39.44	35.04	16.25	0.22	43.70	7.81	40.00	-32.19	QP
2	59.03	36.47	12.41	0.30	43.75	5.43	40.00	-34.57	QP
3	129.92	35.76	12.80	0.58	43.74	5.40	40.00	-34.60	QP
4	157.56	36.21	12.83	0.63	43.74	5.93	40.00	-34.07	QP
5	287.99	37.16	12.81	0.83	43.70	7.10	47.00	-39.90	QP
6	510.04	36.41	17.45	1.20	43.29	11.77	47.00	-35.23	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:c; Polarization:Vertical

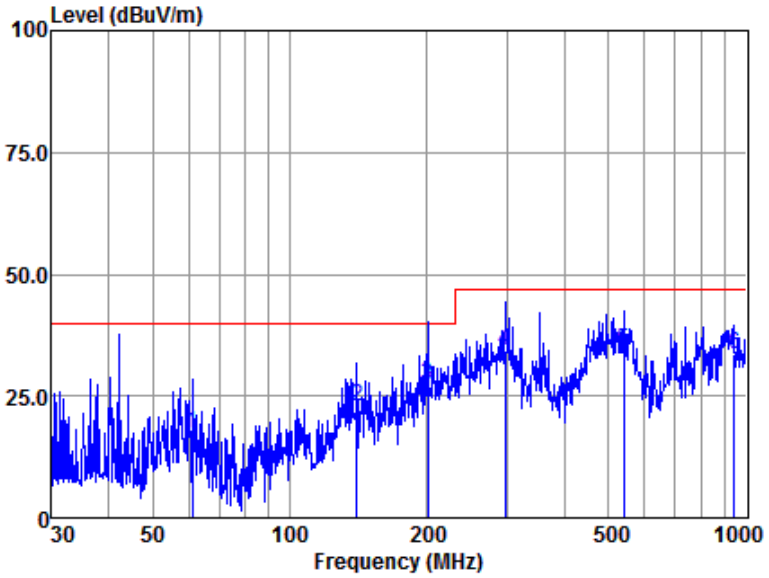


Antenna Polarity :VERTICAL
EUT/Project :8131HS
Test mode

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	30.96	38.72	15.41	0.19	43.66	10.66	40.00	-29.34	QP
2	47.83	46.61	11.76	0.25	43.72	14.90	40.00	-25.10	QP
3	107.51	40.18	9.58	0.49	43.74	6.51	40.00	-33.49	QP
4	143.83	41.01	11.54	0.61	43.73	9.43	40.00	-30.57	QP
5	256.52	37.39	11.73	0.78	43.72	6.18	47.00	-40.82	QP
6	515.44	36.89	17.58	1.21	43.27	12.41	47.00	-34.59	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:d; Polarization:Horizontal

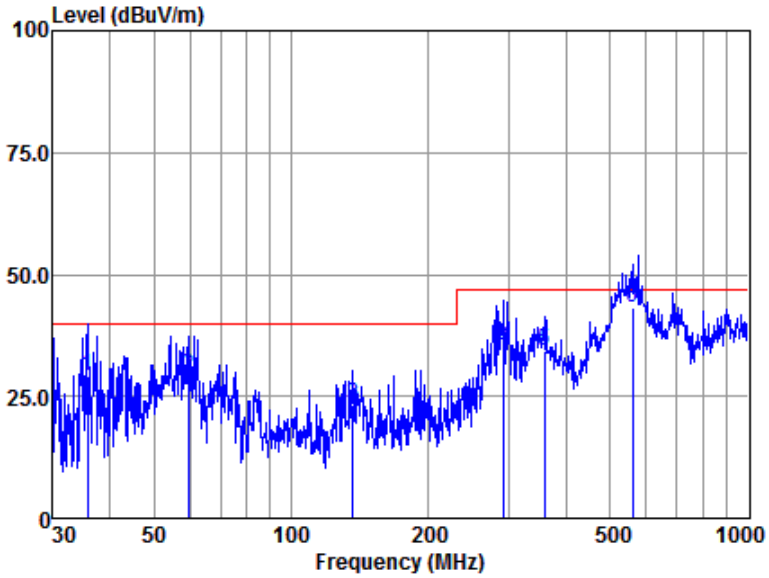


Antenna Polarity :HORIZONTAL
EUT/Project :8131HS
Test mode

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	61.13	48.42	12.46	0.30	43.75	17.43	40.00	-22.57	QP
2	140.34	54.49	11.33	0.60	43.73	22.69	40.00	-17.31	QP
3	200.69	60.85	9.43	0.69	43.70	27.27	40.00	-12.73	QP
4	296.18	63.97	13.07	0.84	43.66	34.22	47.00	-12.78	QP
5	539.48	58.08	18.13	1.25	43.19	34.27	47.00	-12.73	QP
6	942.13	50.30	23.18	2.63	42.65	33.46	47.00	-13.54	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:d; Polarization:Vertical

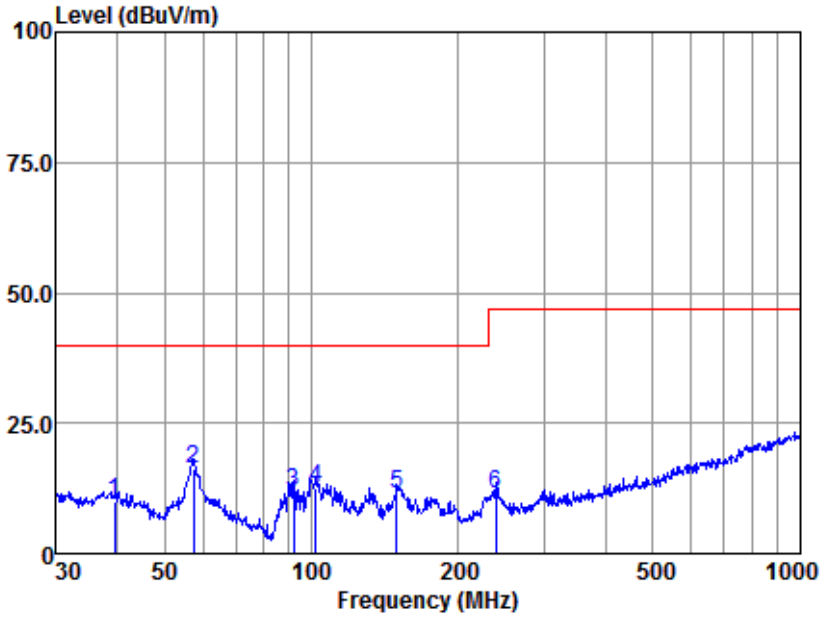


Antenna Polarity :VERTICAL
EUT/Project :8131HS
Test mode

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	35.75	56.58	15.91	0.21	43.68	29.02	40.00	-10.98	QP
2	59.44	60.26	12.48	0.30	43.75	29.29	40.00	-10.71	QP
3	136.46	54.42	11.80	0.60	43.73	23.09	40.00	-16.91	QP
4	293.08	64.38	12.97	0.83	43.67	34.51	47.00	-12.49	QP
5	359.19	62.72	14.38	0.93	43.53	34.50	47.00	-12.50	QP
6	558.73	66.51	18.55	1.30	43.21	43.15	47.00	-3.85	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

For model Y8291
Mode:e; Polarization:Horizontal

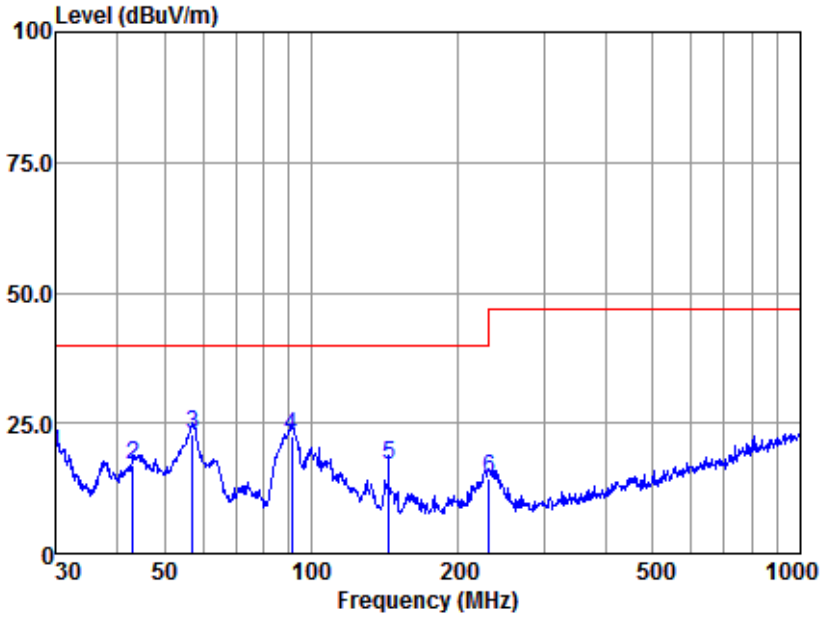


Antenna Polarity :HORIZONTAL
EUT/Project :0177HS
Test mode :a

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	39.44	35.46	16.25	0.78	42.62	9.87	40.00	-30.13	QP
2	57.39	45.73	12.10	0.89	42.65	16.07	40.00	-23.93	QP
3	92.14	45.34	8.43	0.81	42.69	11.89	40.00	-28.11	QP
4	102.00	44.76	9.52	0.78	42.69	12.37	40.00	-27.63	QP
5	149.49	41.62	11.87	0.55	42.61	11.43	40.00	-28.57	QP
6	238.31	42.49	11.04	0.51	42.47	11.57	47.00	-35.43	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:e; Polarization:Vertical

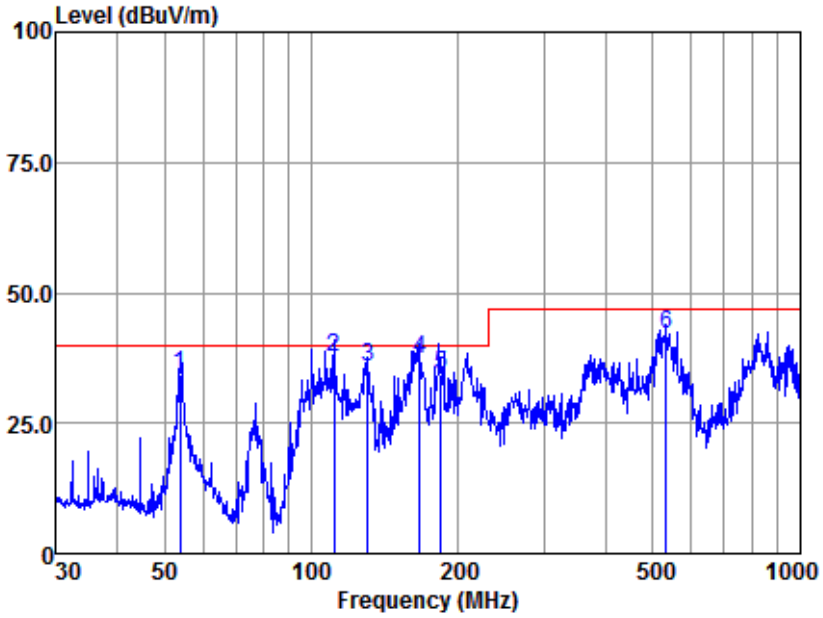


Antenna Polarity :VERTICAL
EUT/Project :0177HS
Test mode :a

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	30.00	45.97	15.30	0.60	42.60	19.27	40.00	-20.73	QP
2	43.05	44.36	14.43	0.83	42.63	16.99	40.00	-23.01	QP
3	56.99	52.77	12.02	0.90	42.65	23.04	40.00	-16.96	QP
4	91.17	56.00	8.29	0.81	42.68	22.42	40.00	-17.58	QP
5	143.83	47.46	11.54	0.57	42.62	16.95	40.00	-23.05	QP
6	230.91	45.61	10.74	0.48	42.48	14.35	47.00	-32.65	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:f; Polarization:Horizontal

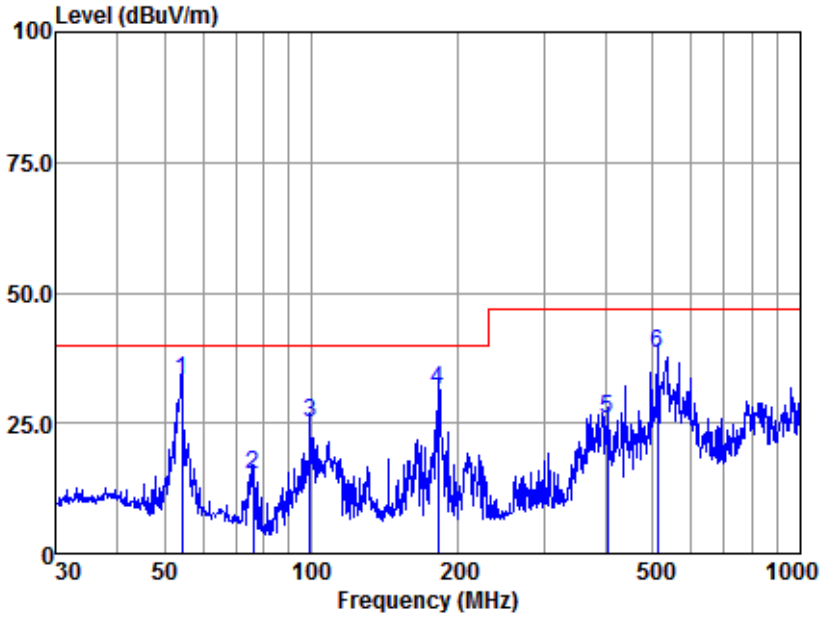


Antenna Polarity :HORIZONTAL
EUT/Project :0177HS
Test mode :b

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	53.69	64.66	11.37	0.91	42.64	34.30	40.00	-5.70	QP
2	111.35	70.09	9.65	0.73	42.70	37.77	40.00	-2.23	QP
3	130.38	64.97	12.73	0.64	42.65	35.69	40.00	-4.31	QP
4	166.65	67.27	12.10	0.49	42.58	37.28	40.00	-2.72	QP
5	184.29	65.20	11.15	0.43	42.55	34.23	40.00	-5.77	QP
6	533.83	64.99	18.00	1.23	42.16	42.06	47.00	-4.94	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:f; Polarization:Vertical



Antenna Polarity :VERTICAL
EUT/Project :0177HS
Test mode :b

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	54.26	63.35	11.48	0.90	42.65	33.08	40.00	-6.92	QP
2	75.98	47.62	9.34	0.84	42.67	15.13	40.00	-24.87	QP
3	99.53	57.54	9.45	0.79	42.69	25.09	40.00	-14.91	QP
4	181.92	62.06	11.58	0.44	42.55	31.53	40.00	-8.47	QP
5	403.25	51.92	15.17	0.87	42.10	25.86	47.00	-21.14	QP
6	511.84	61.93	17.50	1.10	42.15	38.38	47.00	-8.62	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

6.3 Harmonic Current Emission

Test Requirement: EN 61000-3-2:2014

Test Method: EN 61000-3-2:2014

Frequency Range: 100Hz to 2kHz

There is no need for Harmonics test to be performed on this product (rated power is less than 75W) in accordance with EN 61000-3-2:2014.

For further details, please refer to Clause 7 of EN 61000-3-2 which states:

"For the following categories of equipment, limits are not specified in this standard.- equipment with a rated power of 75W or less, other than lighting equipment."

6.4 Voltage Fluctuations and Flicker

Test Requirement: EN 61000-3-3:2013

Test Method: EN 61000-3-3:2013

6.4.1 E.U.T. Operation

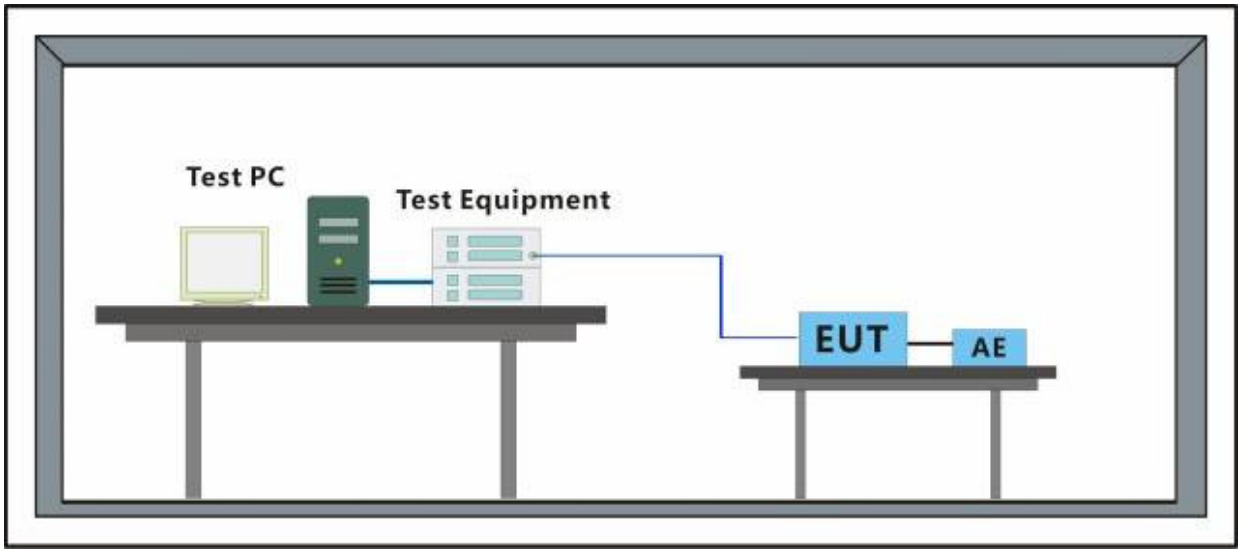
Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode

a:Charging mode_Keep model Y8265J charging.
c:Charging mode: keep mode SLX225E charging,
e: Charging mode: keep model Y8291 charging with adaptor.

6.4.2 Test Setup Diagram



6.4.3 Measurement Data

Old:
Mode:a

Maximum Flicker results

	EUT values	Limit	Result
Pst	0.045	1.00	PASS
Plt	0.045	0.65	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.230	4.00	PASS
Tmax [s]	0.000	0.50	PASS

New:
Mode:c

Vrms at the end of test (Volt):	230.05			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.224	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.100	Test limit:	0.650	Pass

For model Y8291
Mode:e
Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.93			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.20	Test limit (%):	3.30	Pass
Highest dmax (%):	0.21	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.010	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.000	Test limit:	0.650	Pass

7 Immunity Test Results

7.1 Performance Criteria Description in EN 55014-2:2015

Criterion A The apparatus shall continue to operate as intended during the test. No degradation of performance or loss of function is allowed below a performance level (or permissible loss of performance) specified by the manufacturer, when the apparatus is used as intended. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and from what the user may reasonably expect from the apparatus if used as intended.

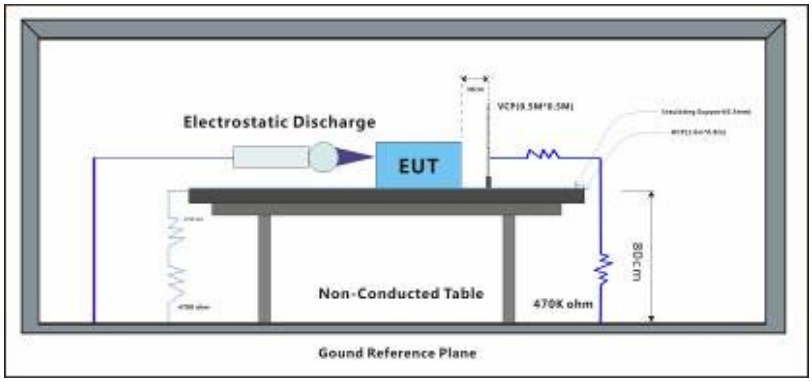
Criterion B The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level (or permissible loss of performance) specified by the manufacturer, when the apparatus is used as intended. During the test, degradation of performance is allowed, however. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation and from what the user may reasonably expect from the apparatus if used as intended.

Criterion C Temporary loss of function is allowed, provided the function is self recoverable or can be restored by the operation of the controls, or by any operation specified in the instructions for use.

7.2 Electrostatic Discharge

Test Requirement: EN 55014-2:2015
Test Method: EN 61000-4-2:2009
Performance Criterion: B
Discharge Impedance: 330Ω/150pF
Number of Discharge: Minimum 10 times at each test point
Discharge Mode: Single Discharge
Discharge Period: 1 second minimum

7.2.1 Test Setup Diagram



7.2.2 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar
Test mode:

a:Charging mode_Keep model Y8265J charging.

b: Running mode_Keep the internal motor of model Y8265J running continuously.
c:Charging mode: keep mode SLX225E charging,
d:Running mode: keep mode SLX225E running.
e: Charging mode: keep model Y8291 charging with adaptor.
f: Running mode: keep model Y8291 running.

7.2.3 Test Results:

Observations: Test Point:

1. All insulated enclosure and seams.
2. All accessible metal parts of the enclosure.
3. All side

Discharge type	Level (kV)	Polarity	Test Point	Result / Observations
Air Discharge	8	+	1	A
Air Discharge	8	-	1	A
Contact Discharge	4	+	2	A
Contact Discharge	4	-	2	A
Horizontal Coupling	4	+	3	A
Horizontal Coupling	4	-	3	A
Vertical Coupling	4	+	3	A
Vertical Coupling	4	-	3	A

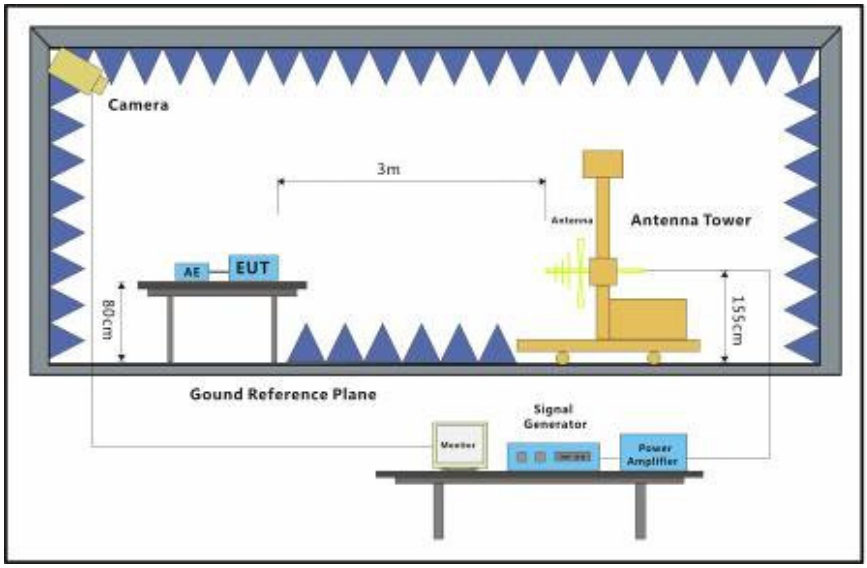
Results:

A: No degradation in the performance of the EUT was observed.

7.3 Radiated Immunity (80MHz-1GHz)

Test Requirement: EN 55014-2:2015
Test Method: EN 61000-4-3:2006 +A1:2008+A2:2010
Performance Criterion: A
Frequency Range: 80MHz to 1GHz
Antenna Polarisation: Vertical and Horizontal
Modulation 1kHz,80% Amp. Mod,1% increment

7.3.1 Test Setup Diagram



7.3.2 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar
Test mode: c:Charging mode: keep mode SLX225E charging,
d:Running mode: keep mode SLX225E running.
e: Charging mode: keep model Y8291 charging with adaptor.
f: Running mode: keep model Y8291 running.

7.3.3 Test Results:

Frequency	Level (V/m)	EUT Face	Dwell time	Result / Observations
80MHz-1GHz	3	Front	2s	A
80MHz-1GHz	3	Back	2s	A
80MHz-1GHz	3	Left	2s	A
80MHz-1GHz	3	Right	2s	A
80MHz-1GHz	3	Top	2s	A
80MHz-1GHz	3	Underside	2s	A

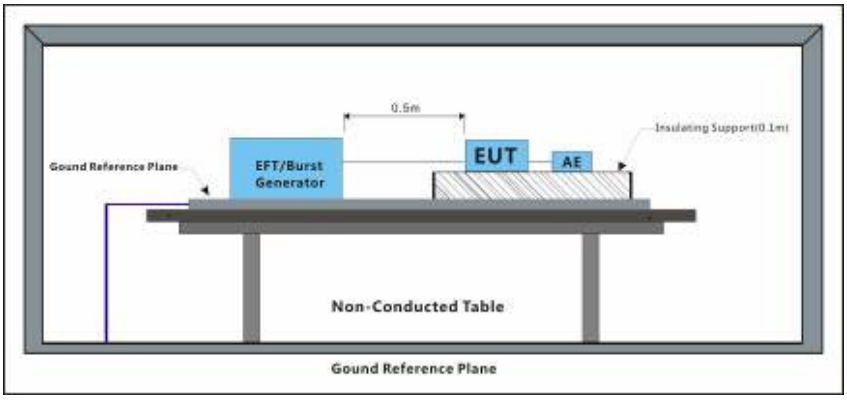
Results:

A: No degradation in the performance of the EUT was observed.

7.4 Electrical Fast Transients/Burst at Power Port

Test Requirement: EN 55014-2:2015
Test Method: EN 61000-4-4:2012
Performance Criterion: B
Repetition Frequency: 5kHz
Burst Period: 300ms
Test Duration: 2 minute per level & polarity

7.4.1 Test Setup Diagram



7.4.2 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar
Test mode:
a:Charging mode_Keep model Y8265J charging.
c:Charging mode: keep mode SLX225E charging,
e: Charging mode: keep model Y8291 charging with adaptor.

7.4.3 Test Results:

Test Line	Level (kV)	Polarity	CDN/Clamp	Result / Observations
AC power port	1	+	CDN	A
AC power port	1	-	CDN	A

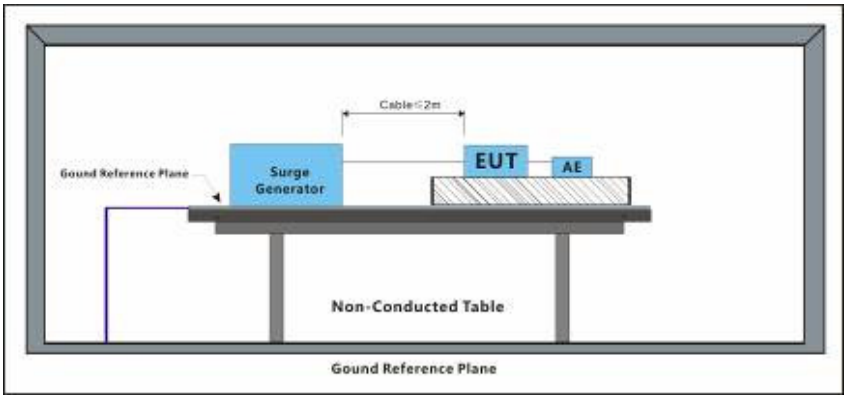
Results:

A: No degradation in the performance of the EUT was observed.

7.5 Surge at Power Port

Test Requirement: EN 55014-2:2015
Test Method: EN 61000-4-5:2014 +A1:2017
Performance Criterion: B
Interval: 60s between each surge
No. of surges: 5 positive at 90°, 5 negative at 270°.

7.5.1 Test Setup Diagram



7.5.2 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar
Test mode: a:Charging mode_Keep model Y8265J charging.
c:Charging mode: keep mode SLX225E charging,
e: Charging mode: keep model Y8291 charging with adaptor.

7.5.3 Test Results:

Test Line	Level (kV)	Polarity	Phase (deg)	Result / Observations
L-N	1	+	90°	A
L-N	1	-	270°	A

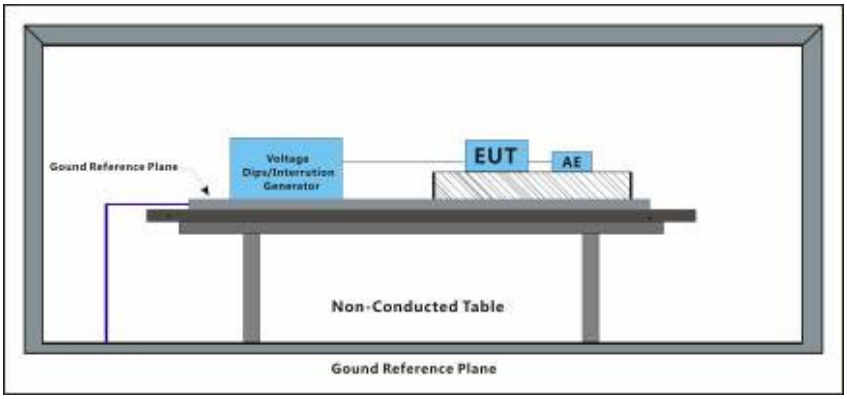
Results:

A: No degradation in the performance of the EUT was observed.

7.6 Voltage Dips and Interruptions

Test Requirement: EN 55014-2:2015
Test Method: EN 61000-4-11:2004 +A1:2017
Performance Criterion: For 50Hz:
0% of UT (Rated Voltage) for 0.5 Cycle: C;
40% of UT for 10 Cycle: C;
70% of UT for 25 Cycle: C
For 60Hz:
0% of UT (Rated Voltage) for 0.5 Cycle: C;
40% of UT for 12 Cycle: C;
70% of UT for 30 Cycle: C
No. of Dips / Interruptions: 3 per Level
Time between dropout 10s

7.6.1 Test Setup Diagram



7.6.2 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar
Test mode: a:Charging mode_Keep model Y8265J charging.
c:Charging mode: keep mode SLX225E charging,
e: Charging mode: keep model Y8291 charging with adaptor.

7.6.3 Test Results:

Level % UT	Phase (deg)	Duration	No. of Dips / Interruptions	Result / Observations
0	0°	0.5 Cycles	3	A
0	180°	0.5 Cycles	3	A
40	0°	10 Cycles	3	A
40	180°	10 Cycles	3	A
70	0°	25 Cycles	3	A
70	180°	25 Cycles	3	A

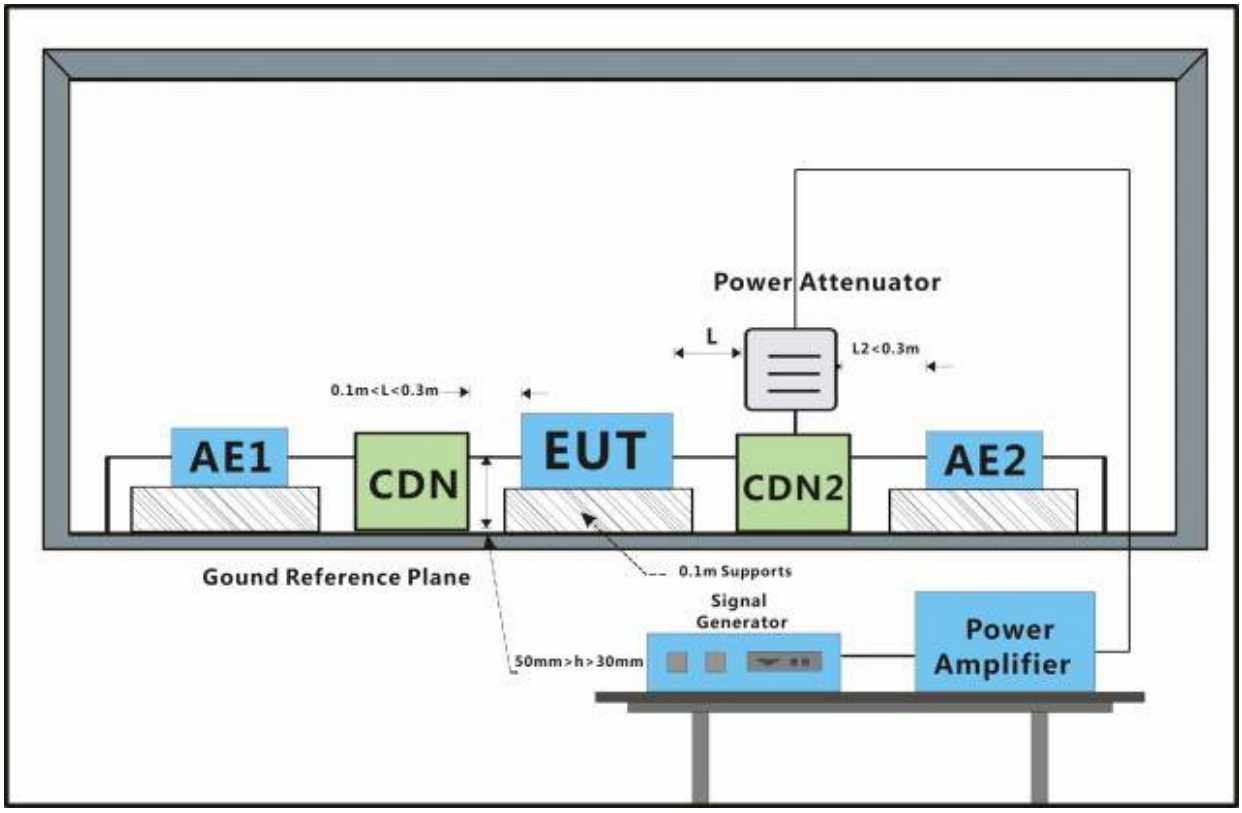
Results:

A: No degradation in the performance of the EUT was observed.

7.7 Conducted Immunity at Power Port (150kHz-230MHz)

Test Requirement: EN 55014-2:2015
Test Method: EN 61000-4-6:2014
Performance Criterion: A
Frequency Range: 0.15MHz to 230MHz
Modulation: 80%, 1kHz Amplitude Modulation
Step Size 1%

7.7.1 Test Setup Diagram



7.7.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a:Charging mode_Keep model Y8265J charging.
c:Charging mode: keep mode SLX225E charging,
e: Charging mode: keep model Y8291 charging with adaptor.

7.7.3 Test Results:

Cable port	Level (Vrms)	CDN/Clamp	Dwell time	Result / Observations
AC power port	3	CDN	2s	A

Results:

A: No degradation in the performance of the EUT was observed.

8 Photographs

8.1 Conducted Emissions at Mains Terminals (150kHz-30MHz) Test Setup

Old:

New:

For model Y8291

8.2 Radiated Emissions (30MHz-1GHz) Test Setup

Old:

New:

For model Y8291

8.3 Voltage Fluctuations and Flicker Test Setup

Old:

New:

For model Y8291

8.4 Electrostatic Discharge Test Setup

Old:

New:

For model Y8291

8.5 Radiated Immunity (80MHz-1GHz) Test Setup

For model Y8291

8.6 Electrical Fast Transients/Burst at Power Port Test Setup

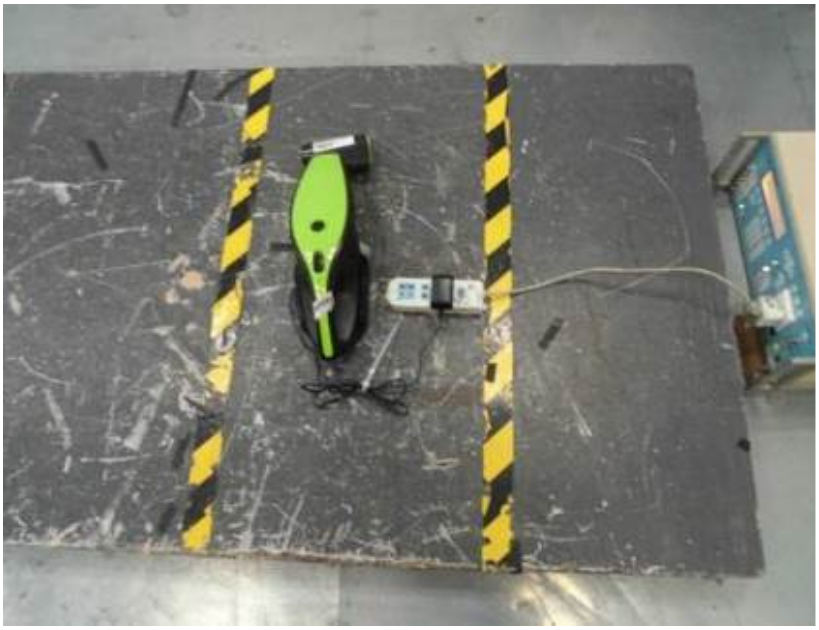
Old:

New:

For model Y8291

8.7 Surge at Power Port Test Setup

Old:



New:

For model Y8291

8.8 Voltage Dips and Interruptions Test Setup

Old:

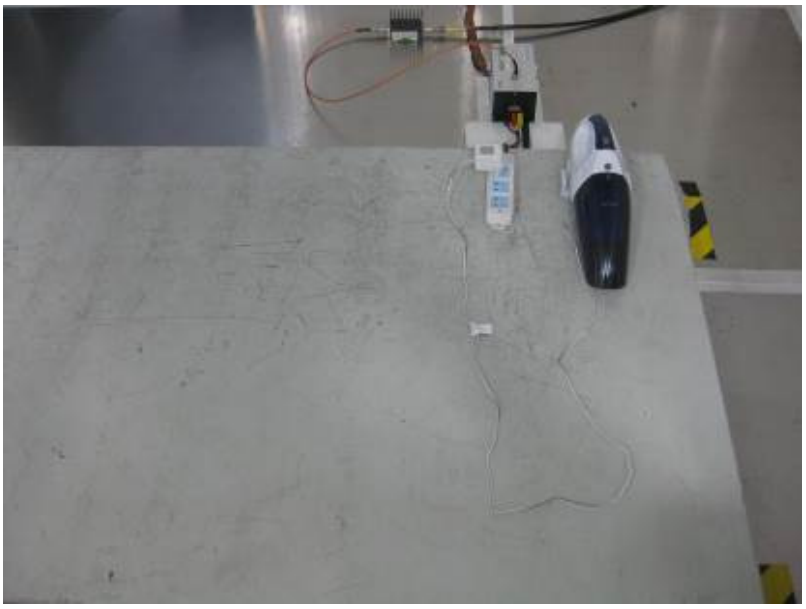
New:

For model Y8291

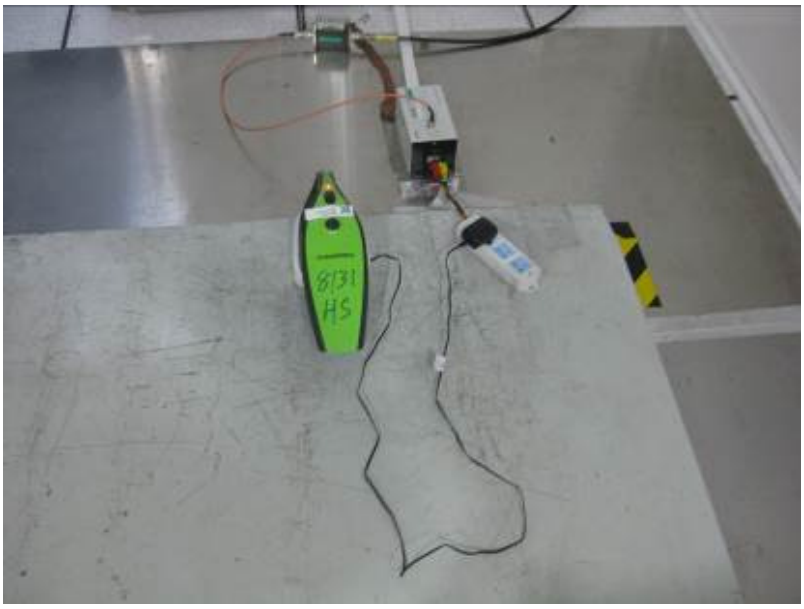
8.9 Conducted Immunity at Power Port (150kHz-230MHz) Test Setup

Old:

New:



For model Y8291

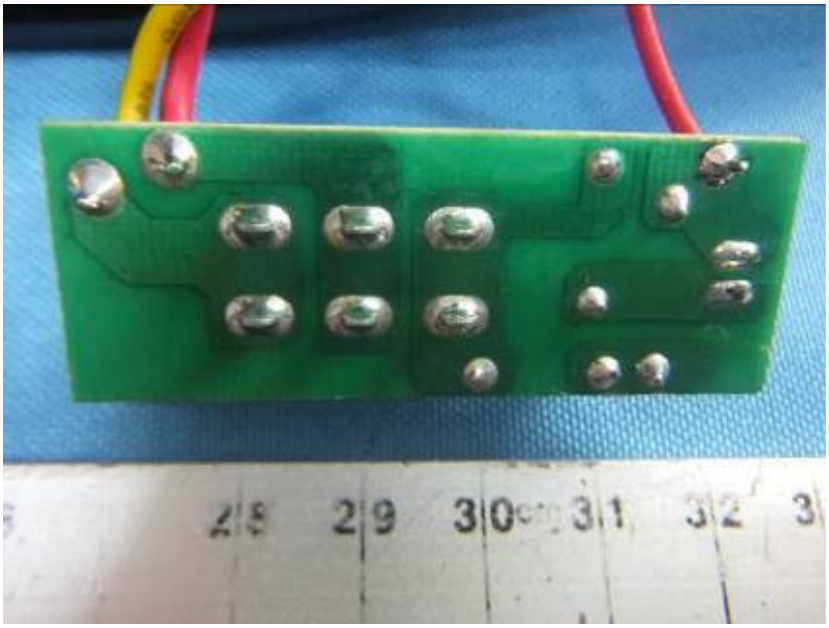


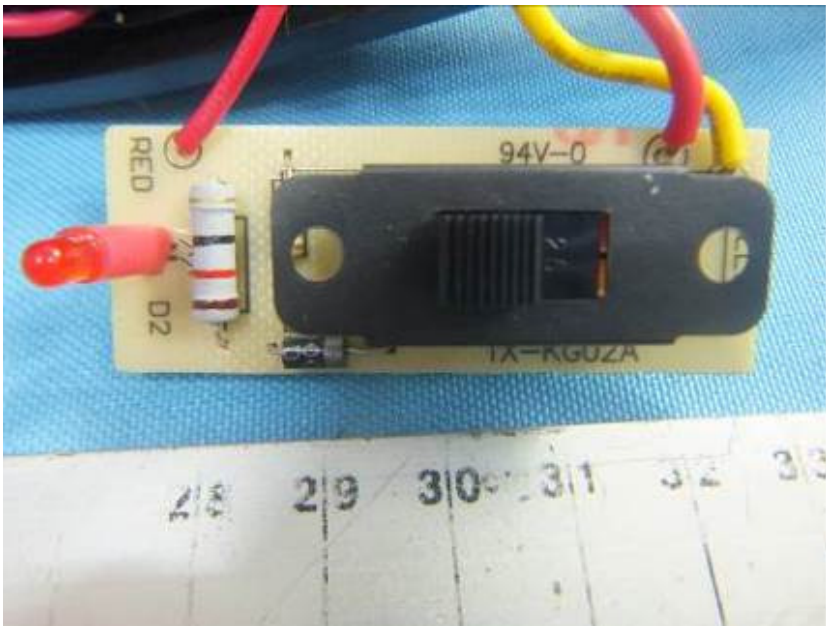
8.10 EUT Constructional Details (EUT Photos)

Old:

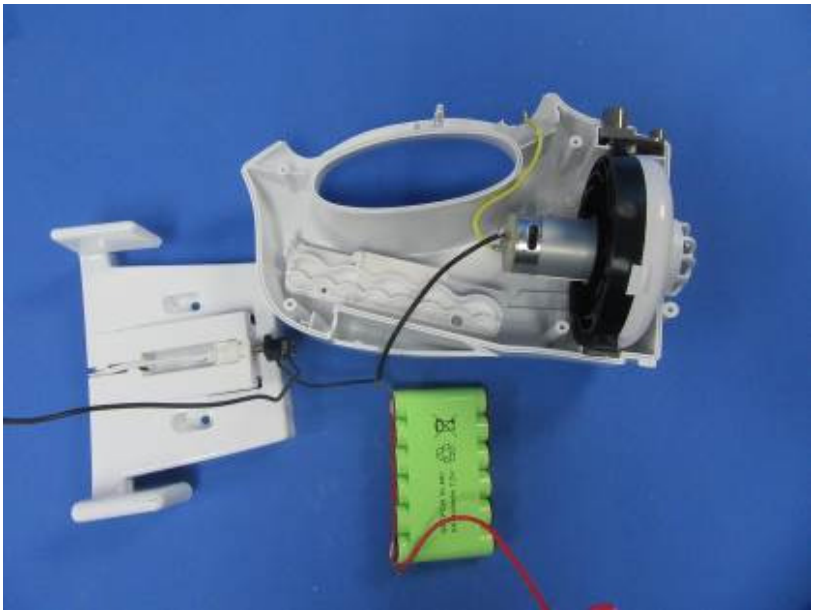

Schaltnetzteil -Switching Adaptor
E-TEK Electronics Manufactory Ltd.
Modell:ZD5C215025EUE
INPUT:100-240V~50/60Hz 0.2A
OUTPUT:21.5V ⎓250mA
IP20
Importeur:DS Produkte GmbH,Am Heisterbusch 1
19258 Gallin, DEUTSCHLAND

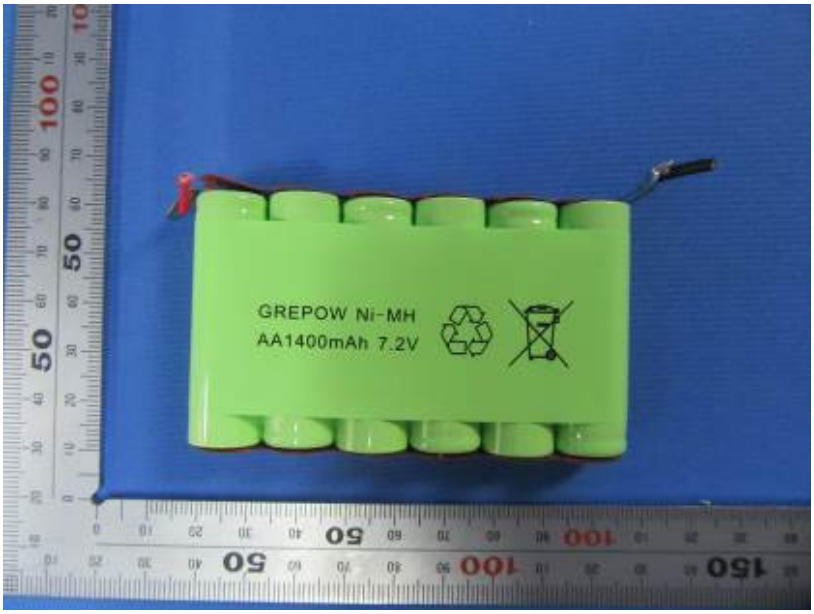

Starrett

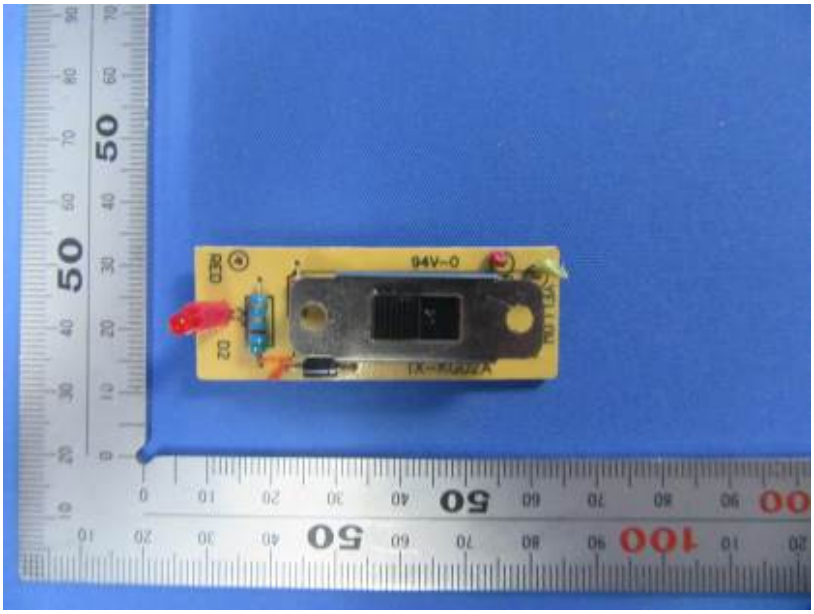


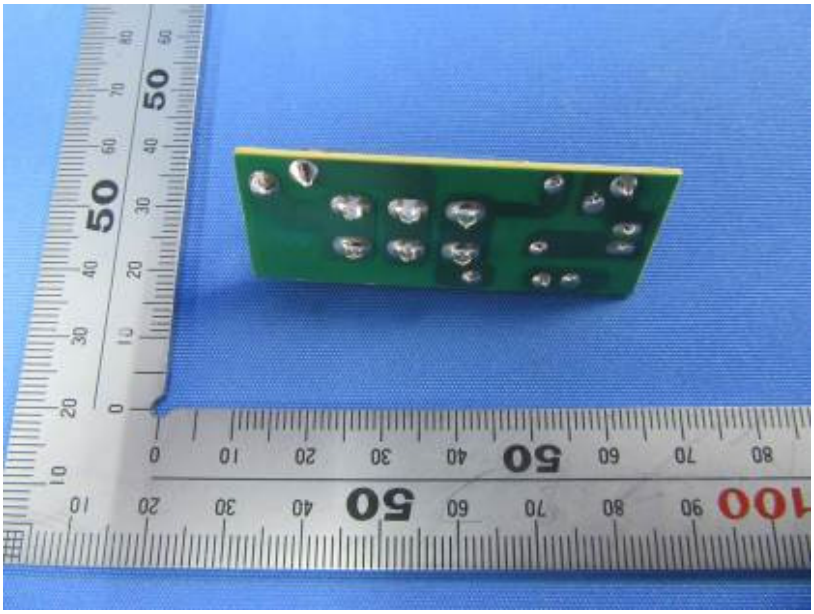

RED
94V-0
D2

New:

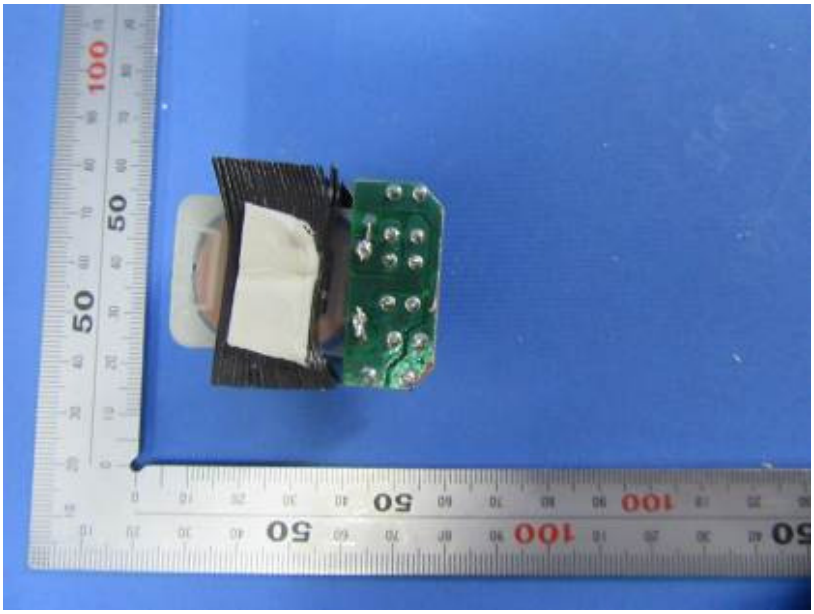



GREPOW Ni-MH
AA1400mAh 7.2V


94V-0



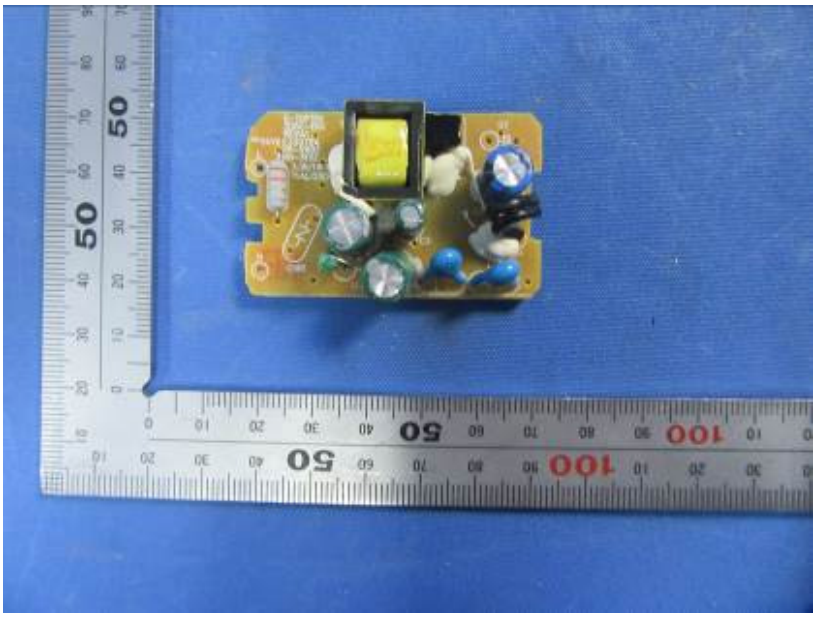

Netzgerät
MODELL: TDUB-63V09
PRI: 230V~50Hz
SEC: 9V 0.25A
LING HONG

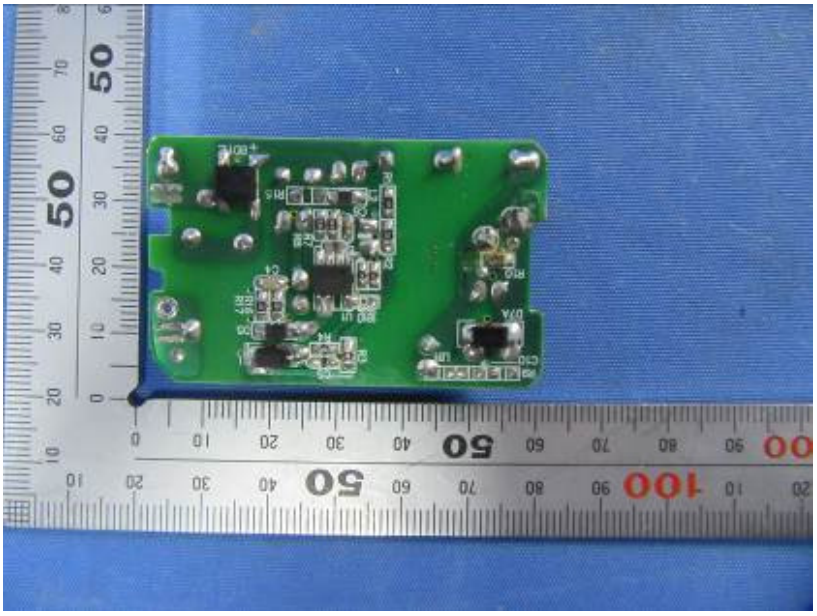


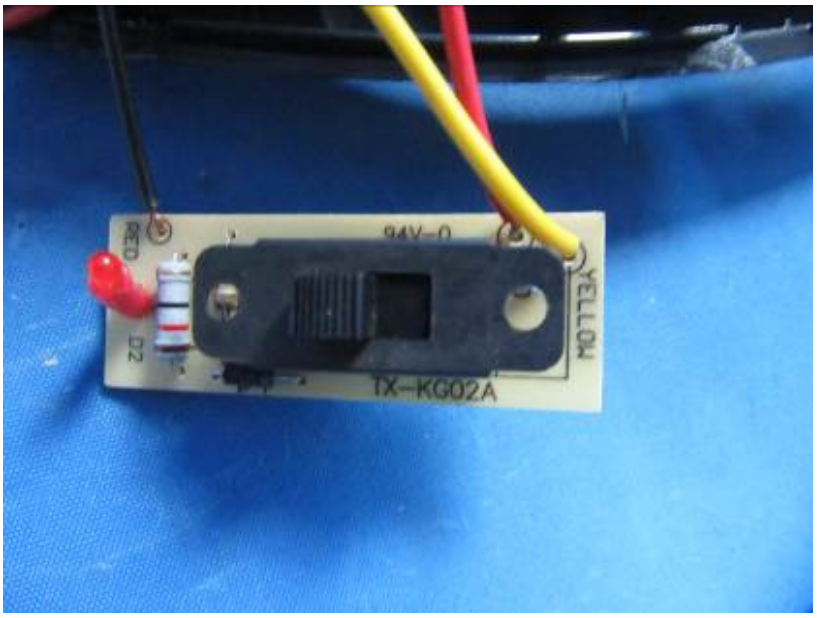
For model Y8291


8131
SH
CLEANMOXX


Schaltnetzteil -Switching Adaptor
E-TEK Electronics Manufactory Ltd.
Model:ZDSC215025EUE
INPUT:100-240V~50/60Hz 0.3A
OUTPUT:21.5V 2500mA
IP20
Importeur:DS Produkte GmbH,Am Heistersusch 1
19258 Gallin, DEUTSCHLAND



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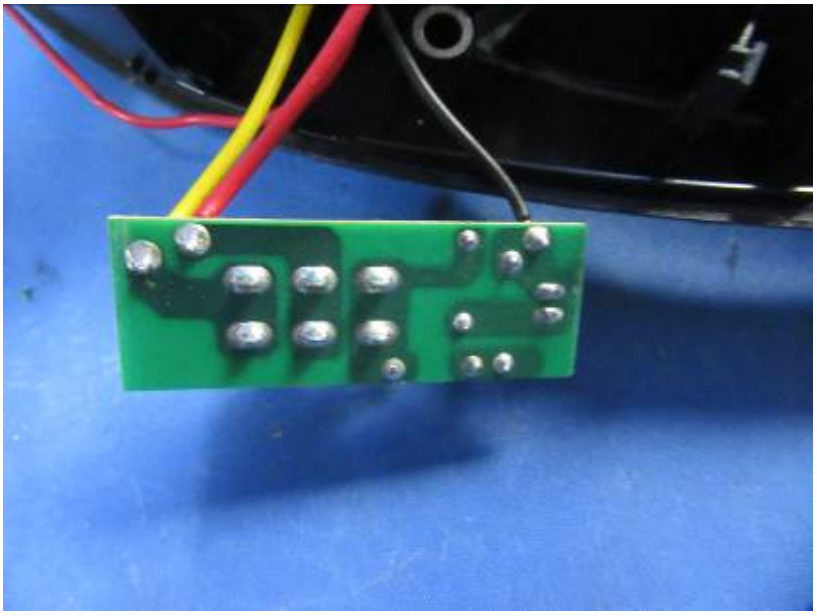
94V-0
YELLOW
D2
TX-KG02A



- End of the Report -