



2014002246H

No.	E1412WT8888-02342-Y
Total page	31

TEST REPORT

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Product Name : TRAVEL CHARGER

Type and Specification : UC11EU

Test Category : Entrusted Test

Factory : Ten Pao Electronics (Huizhou) Co., Ltd.

Client: Ten Pao Industrial Co.,Ltd.

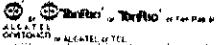


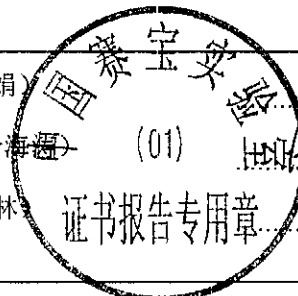
China Electronic Product Reliability And
Environmental Testing Research Institute

China CEPREI Laboratory



TEST REPORT

Report reference No .	E1412WT8888-02342-Y
Total number of pages	31 Pages
Test item description	TRAVEL CHARGER
Trademark	
Model and/or type reference	UC11EU
Factory's Name	Ten Pao Electronics (Huizhou) Co., Ltd.
Address	Dongjiang Industrial Area, Shuikou Town, Huizhou City, Guangdong Province, P.R.China
Client's Name	Ten Pao Industrial Co.,Ltd.
Address	Room10-11,6/F,Kwong Sang Hong Centre, 151-153 Hoi Bun Road, Kwun Tong, Kowloon,H.K.
Testing Laboratory Name	China CEPREI Laboratory/ China Electronic Product Reliability and Environmental Testing Research Institute
Address	No.110 Dongguanzhuang Rd., Tianhe District,Guangzhou, Guangdong, 510610, China
Testing location	China CEPREI Laboratory
Test specification	
Standard	EN301 489-34:V1.4.1 Electromagnetic compatibility and Radio spectrum Matters (ERM);Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 34: Specific conditions for External Power Supply (EPS) for mobile phones
Test category	Entrusted Test
Number of test item	1 pc
Date of receipt of test item	2014.12.11
Date(s) of performance of test	2014.12.11 – 2014.12.25
Ambient Condition	15℃~35℃ 45%RH~75% RH 86kPa~106kPa
Test Instruments and Equipment	See Equipment List of This Report.
Summary of Testing and Conclusions	
The EPS complied with the principal requirements of EN301 489-34.	
Tested by (printed name and signature)	Xie Juan (谢娟)
Reviewed by (printed name and signature)	Yu Haitao (余海滔)
Approved by (printed name and signature)	Yang Lin (杨林)
Date of issue	2014.12.25



Test case verdicts

Test case does not apply to the test object	N/A
Test item does meet the requirement(Pass)	PASS
Test item does not meet the requirement(Fail)	F
Test case does not apply caused by the testing equipment.....	ND

General remarks

1. Report without "specific stamp" of inspection organization or the authority will be regarded as invalid.
2. Duplicated report without original "specific stamp" of inspection organization or the authority will be regarded as invalid.
3. Report without the signatures of Tester, Reviewer or Approval will be regarded as invalid.
4. Test report if altered will be regarded as invalid.
5. Any dispute about the report must be submitted to inspection organization within 15 days upon report received, it will be rejected if out of the period.
6. Generally, the entrusted test only responsible for the samples.

General product information:

The client's declaration: Model UC11XX is the customer model. The "X" of UC11XX can be a letter from A to Z. The "XX" of UC11XX represent different plug for different marketing purpose.

The "XX" of UC11XX can be replaced by:

"US" represents United States plug, or

"EU" represents European plug, or

"UK" represents British plug, or

"AU" represents Australia plug, or

"CN" represents Chinese plug, or

"AR" represents Argentina plug, or

"JP" represents Japanese plug, or

"IN" represents Indian plug, or

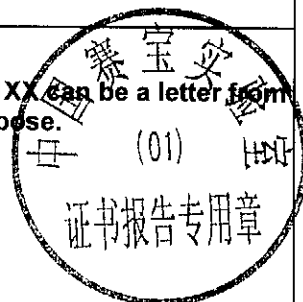
"TW" represents Taiwanese plug, or

"RU" represents Russian plug,

Model S005AYZ0500100 is same as UC11XX except model number, it is the client model.

The "Z" of S005AYZ0500100 can be replaced by: "U" "V" "B" "S" "C" "A" "T" "I" for different Plug; has the same meaning with "XX" in the model UC11XX.

All tests were carried out on UC11EU.

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EMC Standards Compliance List / Test summary

The following tests have been applied to ensure the product conforms to EMC requirements of the standard EN301 489-34. Tests related to EMC were performed and reported in this report.

Electromagnetic Emissions

Test Item	Clause	Standard	Result
Radiated Emission	8.2	EN301 489-34:V1.4.1	PASS
Conducted Emission on DC	8.3	EN301 489-34:V1.4.1	N/A (DC Cable Shorter Than 3m)
Conducted Emission on AC	8.4	EN301 489-34:V1.4.1	PASS
Harmonic current emissions	8.5	EN301 489-34:V1.4.1	PASS
Voltage fluctuations and flicker	8.6	EN301 489-34:V1.4.1	PASS
Conducted emission	8.7	EN301 489-34:V1.4.1	N/A (Not applicable)

Electromagnetic Immunity

Test Item	Clause	Standard	Test Level	Result
Electrostatic Discharge Immunity	9.3	EN301 489-34:V1.4.1	4 kV (Contact/indirect Discharge) 8 kV (Air discharge)	PASS
Fast Transients common mode Immunity	9.4	EN301 489-34:V1.4.1	0.5kV(peak)-DC output 1 kV (peak)-AC input 5/50 Tr/Th ns 5kHz Repetition frequency	PASS
RF Electromagnetic Field Immunity	9.2	EN301 489-34:V1.4.1	(80 MHz to 1 000 MHz and 1 400 MHz to 2 700 MHz) 3V/m (unmodulated, r.m.s) 80 % AM (1kHz)	PASS
RF common mode Immunity	9.5	EN301 489-34:V1.4.1	0.15-80 MHz 3V (unmodulated, r.m.s) 80% AM (1kHz)	PASS
Surge immunity	9.8	EN301 489-34:V1.4.1	1.2/50 (8/20) Tr/Th μ s 1 kV line to line 2 kV line to earth(ground)	PASS
Voltage dips and interruptions immunity	9.7	EN301 489-34:V1.4.1	voltage dip: 0 % residual voltage for 0,5 cycle; voltage dip: 0 % residual voltage for 1 cycle; voltage dip: 70 % residual voltage for 25 cycles (at 50 Hz); voltage interruption: 0 % residual voltage for 250 cycles (at 50 Hz).	PASS
Transients and surges	9.6	EN301 489-34:V1.4.1	/	N/A (Not applicable)

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Section 1 General Information

1.1 Introduction

This report documents the emission and immunity test results for the TRAVEL CHARGER.

1.2 EUT general and technical Descriptions

EUT Name:	TRAVEL CHARGER
EUT Model:	UC11EU
EUT Trademark:	/
Input Voltage:	100-240Vac
Frequency:	50/60Hz
Current:	200mA
output:	5Vdc/ 1A
Power Cable Description:	/
Other Cables Description:	/
I/O Ports:	/
Function(s) Description:	/
Accessories information:	/

1.3 Support Equipment(s) and Test Configuration

1.3.1 Details of Support Equipment(s)

Description	Manufacturer	Model No.	Connection	Working state
Resistance	Shanghai Qiujiing	10Ω/10A	Line	Normal

1.3.2 Working State of EUT

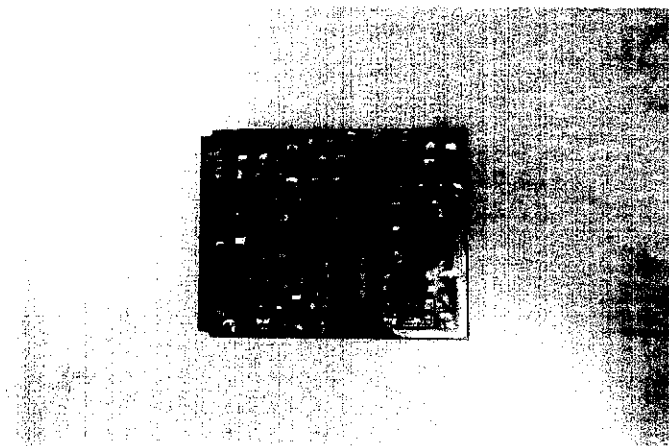
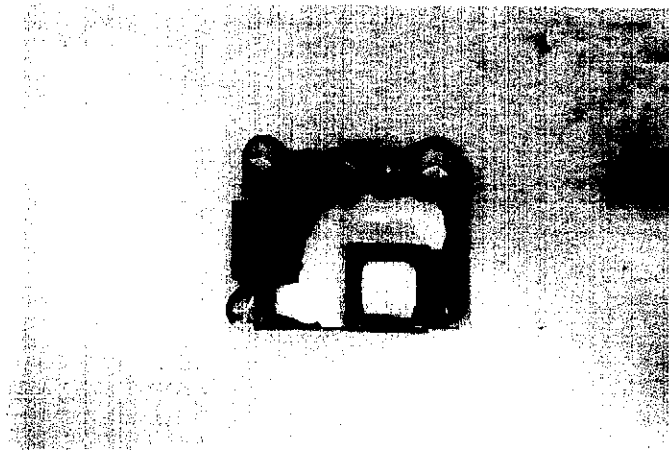
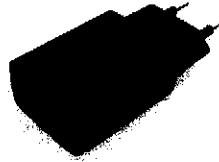
- Power Supply of EUT: 230V/50Hz

1.3.3 Block Diagram of Test Configuration

/



1.4 EUT Photographs



Section 2 Electromagnetic Emissions

2.1 Conducted Emission on AC

2.1.1 Conducted Emission Test Information

Temperature:	23° C	Humidity:	57% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz	Tested Range:	150kHz to 30MHz
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	PASS		

2.1.2 Measurement Equipments Used for Conducted Emission

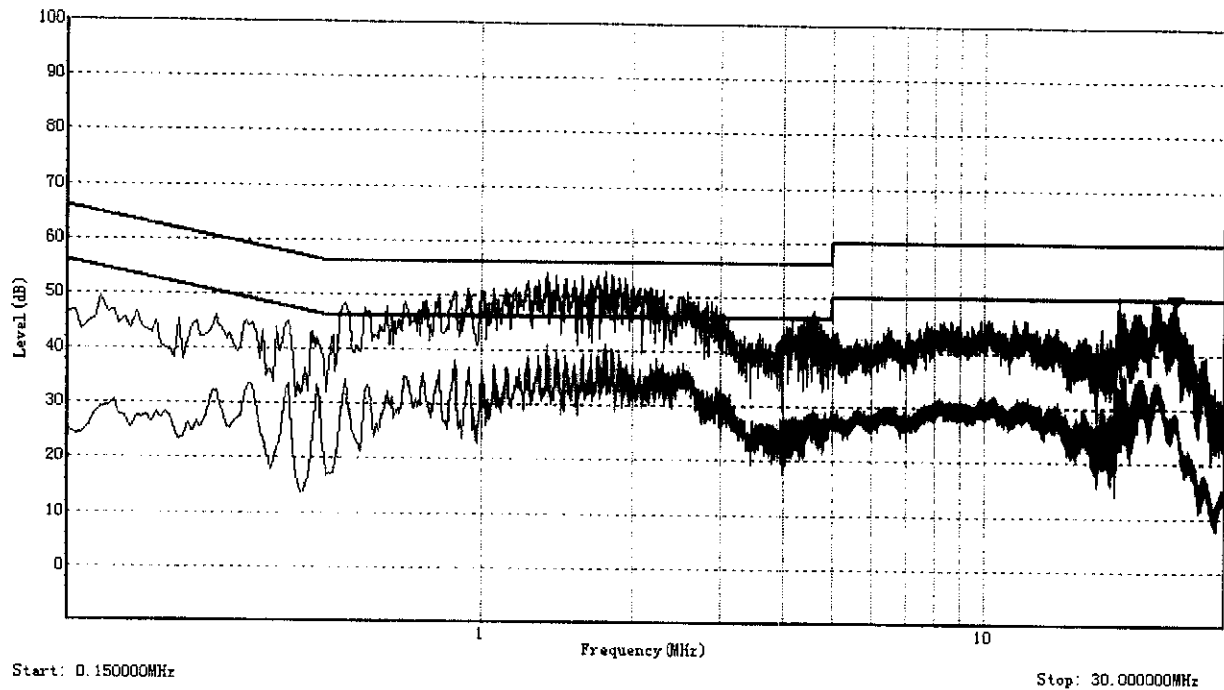
Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EMI Test Receiver	R&S	ESCS30	100317	2014-06-08	2015-06-07
LISN	R&S	ESH2-Z5	640101042-02	2014-06-08	2015-06-07

2.1.3 Test Data

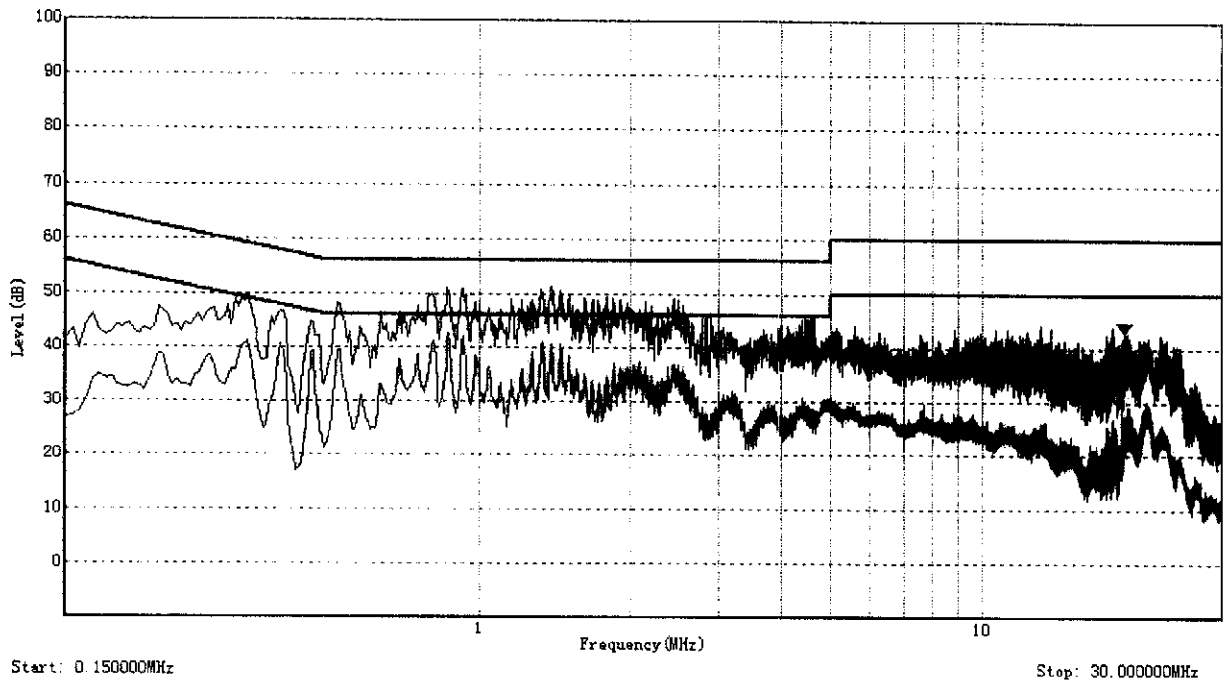
Line (Hot Lead)							
No.	Frequency (MHz)	Corrected QP Level (dBμV)	Limits QP (dBμV)	Margin QP (dB)	Corrected AVE Level (dBμV)	Limits AVE (dBμV)	Margin AVE (dB)
1	0.175	49.3	64.8	/	29.1	54.8	/
2	1.345	54.1	56.0	/	39.8	46.0	/
3	4.615	47.5	56.0	/	28.9	46.0	/
4	9.860	46.2	60.0	/	31.9	50.0	/
5	18.51	50.5	60.0	/	33.0	50.0	/
6	24.09	50.0	60.0	/	27.8	50.0	/
Neutral (Neutral Lead)							
No.	Frequency (MHz)	Corrected QP Level (dBμV)	Limits QP (dBμV)	Margin QP (dB)	Corrected AVE Level (dBμV)	Limits AVE (dBμV)	Margin AVE (dB)
1	0.345	49.1	59.2	/	41.0	49.2	/
2	0.860	51.0	56.0	/	41.3	46.0	/
3	1.385	51.2	56.0	/	40.2	46.0	/
4	2.430	49.3	56.0	/	36.9	46.0	/
5	13.08	44.1	60.0	/	25.9	50.0	/
6	19.23	43.9	60.0	/	26.6	50.0	/

Note: The Corrected QP Level and Corrected AV Level included The Cable attenuation.

2.1.4 Test curves



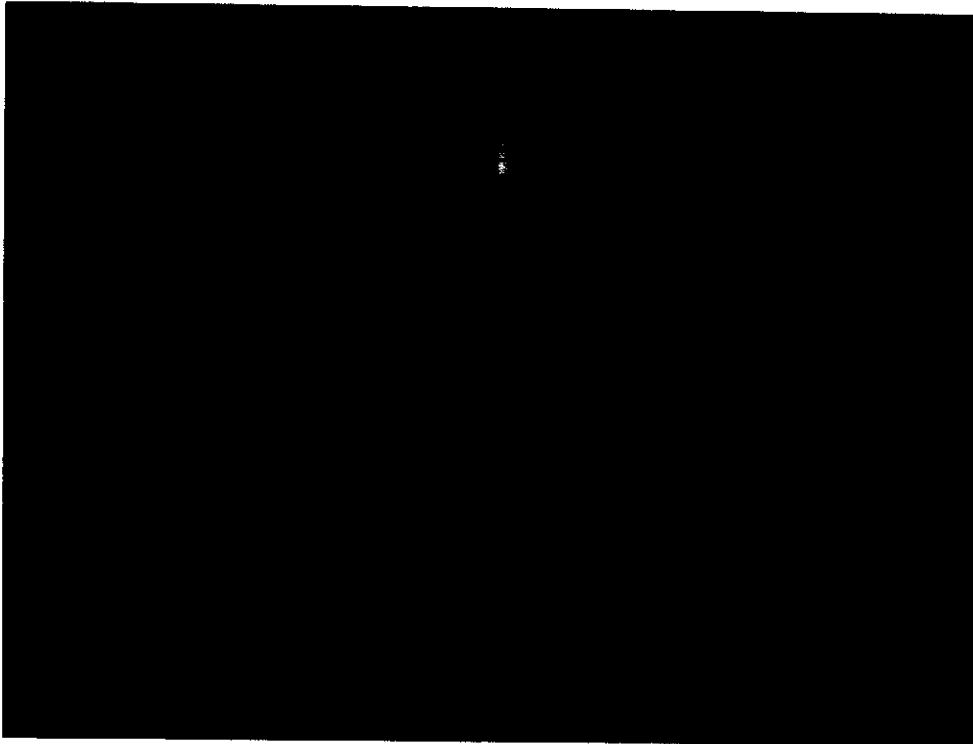
Line L Conducted Emission Graph



Line N Conducted Emission Graph

Note: The curves included The Cable attenuation.

2.1.5 Test Setup



Conducted Emission Test Set-up Front View

2.2 Radiated Emission

2.2.1 Radiated Emission Test Information

Temperature:	23° C	Humidity:	57% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz	Tested Range:	30MHz to 1000MHz
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	Pass		

2.2.2 Measurement Equipments Used for Radiated Emission

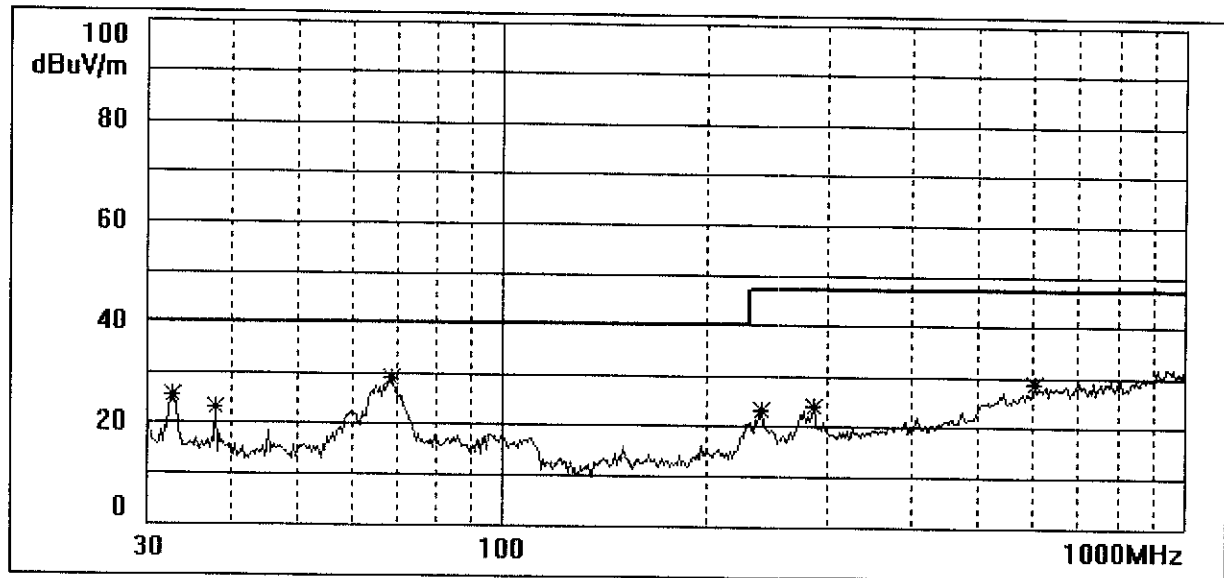
Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EMI Test Receiver	R&S	ESCS 30	7561010005	2014-06-08	2015-06-07
Bi-Log antenna	SCHAFFNER	CBL6112B	2877	2014-06-08	2015-06-07
Anechoic Chamber	Lindgren	FACT-4	640101037	2014-06-08	2015-06-07

2.2.3 Test Data

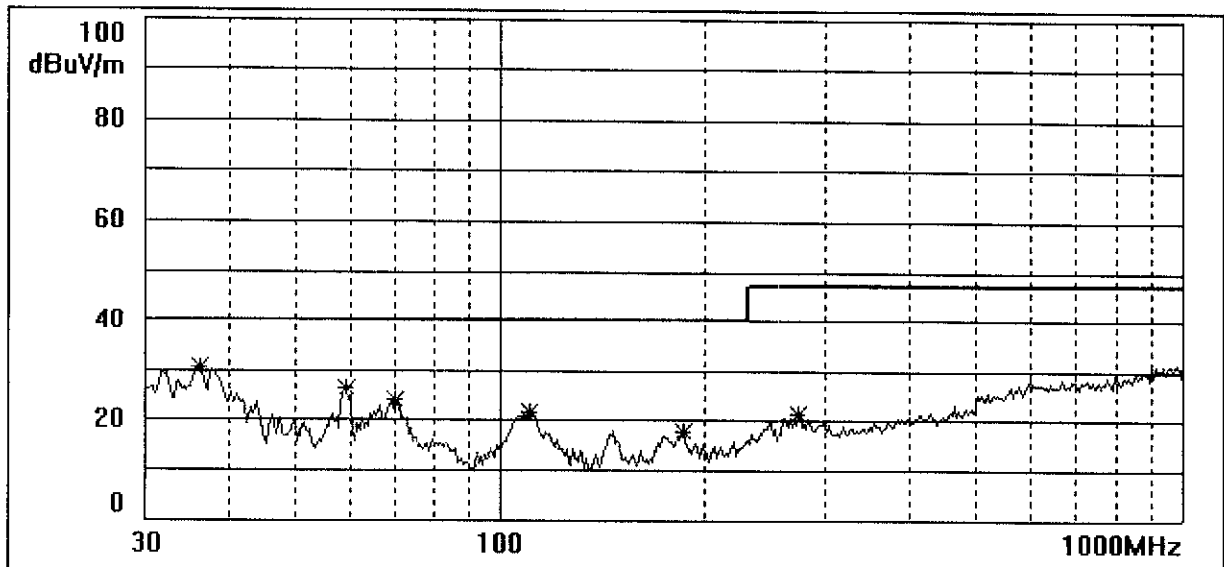
Horizontal					
No.	Frequency (MHz)	Corrected QP Level dB (μV/m)	3 Meter Limits dB (μV/m)	Angle of Turner (degree)	Height of Tower (cm)
1	32.7	25.4	40	119	120
2	37.8	23.2	40	125	114
3	68.4	29.0	40	115	312
4	239.4	23.2	47	142	122
5	286.4	23.9	47	172	123
6	602.4	28.8	47	200	124
Vertical					
No.	Frequency (MHz)	Corrected QP Level dB(μV/m)	3 Meter Limits dB (μV/m)	Angle of Turner (degree)	Height of Tower (cm)
1	36.2	30.6	40	118	126
2	59.3	26.6	40	125	125
3	69.9	23.9	40	117	130
4	110.5	21.8	40	171	103
5	185.9	17.8	40	223	123
6	274.2	21.3	47	118	104

Note: The Corrected QP Level included The Cable attenuation and The Antenna Factor.

2.2.4 Test Curves



Horizontal Radiated Emission Plot (Peak, Max Hold Mode)



Vertical Radiated Emission Plot (Peak, Max Hold Mode)

Note: The Curves included The Cable attenuation and The Antenna Factor.

2.2.5 Test Setup



Radiated Emission Test Set-Up – Front View

2.3 Harmonic current emission

2.3.1 Harmonic current emission test information

Temperature:	23° C	Humidity:	57% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz	Classification:	Class A
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	PASS For the equipment with power consumption less than 75W under required measurement, harmonic emission without relevant limits.		

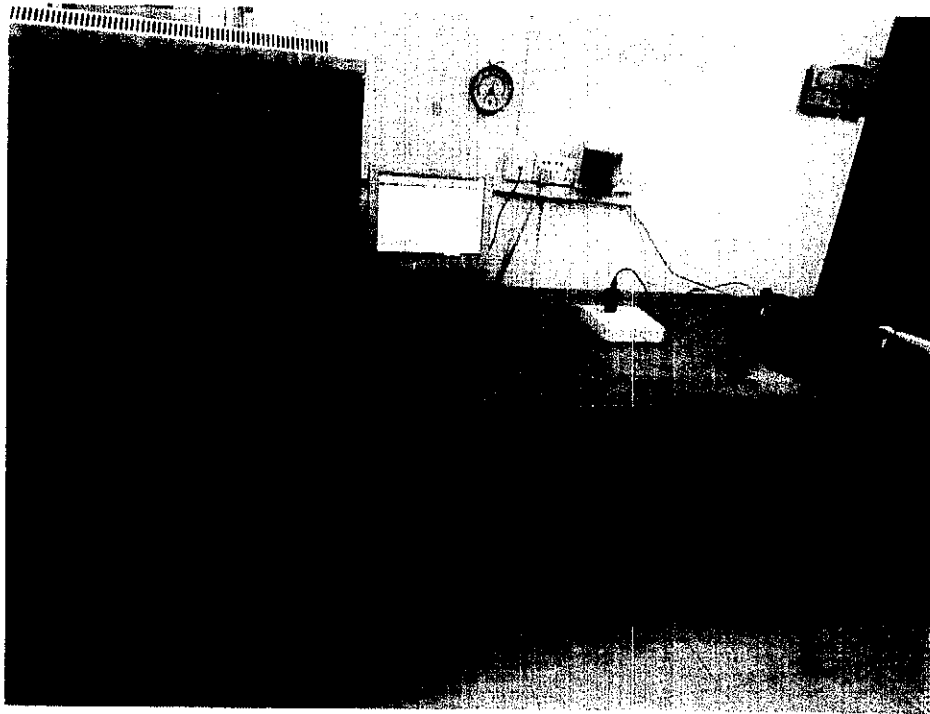
2.3.2 Measurement Equipments Used for Harmonic Current Emission

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
AC power test system	EMTEST	NetWave7	V0938105152	2014-06-08	2015-06-07
Power quality analyzer	EM TEST	DPA 503	640101055	2014-06-08	2015-06-07

2.3.3 Test Data

Average harmonic current results					Power:5.2W				
Hn	I _{eff} [A]	Low limit [A]	High limit [A]	Result	Hn	I _{eff} [A]	Low limit [A]	High limit [A]	Result
1	23.681E-3			PASS	21	4.018E-3			PASS
2	525.530E-6			PASS	22	546.805E-6			PASS
3	22.918E-3			PASS	23	3.673E-3			PASS
4	690.289E-6			PASS	24	510.432E-6			PASS
5	21.630E-3			PASS	25	3.562E-3			PASS
6	716.082E-6			PASS	26	483.970E-6			PASS
7	19.641E-3			PASS	27	3.409E-3			PASS
8	633.741E-6			PASS	28	467.383E-6			PASS
9	17.121E-3			PASS	29	3.111E-3			PASS
10	548.070E-6			PASS	30	456.027E-6			PASS
11	14.325E-3			PASS	31	2.693E-3			PASS
12	528.527E-6			PASS	32	437.039E-6			PASS
13	11.483E-3			PASS	33	2.230E-3			PASS
14	553.289E-6			PASS	34	402.998E-6			PASS
15	8.812E-3			PASS	35	1.813E-3			PASS
16	592.513E-6			PASS	36	360.219E-6			PASS
17	6.558E-3			PASS	37	1.522E-3			PASS
18	610.698E-6			PASS	38	319.161E-6			PASS
19	4.930E-3			PASS	39	1.378E-3			PASS
20	588.979E-6			PASS	40	292.323E-6			PASS

2.3.4 Test setup



Harmonic Current Emission Test Set-Up -- Front View

2.4 Voltage fluctuations and flicker

2.4.1 Voltage fluctuations and flicker test information

Temperature:	23° C	Humidity:	57% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz	Observation time:	120min
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	PASS		

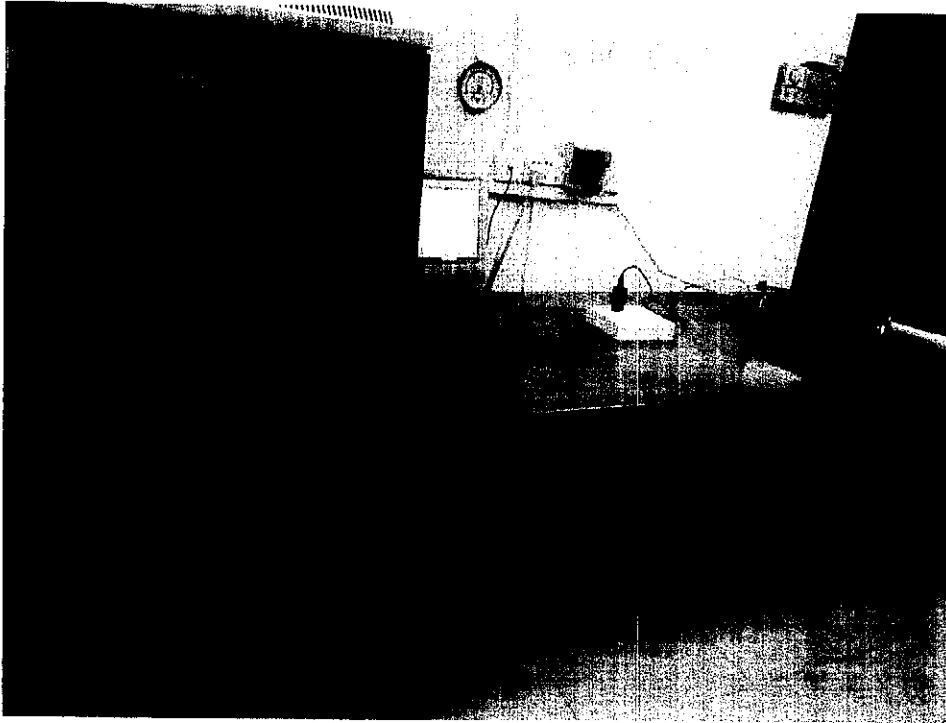
2.4.2 Measurement Equipments Used for Voltage fluctuations and flicker test

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
AC power test system	EMTEST	NetWave7	V0938105152	2014-06-08	2015-06-07
Power quality analyzer	EM TEST	DPA 503	640101055	2014-06-08	2015-06-07

2.4.3 Test Data

Maximum Flicker results			
	EUT values	Limit	Result
Pst	0.028	1.00	PASS
Plt	0.028	0.65	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.295	4.00	PASS
dt [s]	0.000	0.50	PASS

2.4.4 Test Setup



Voltage Fluctuations and Flicker Test Set-Up – Front View

Section 3 Electromagnetic Immunity

Performance Criteria (According to EN301 489-34 subclause 6)

For an EPS the performance criteria for continuous phenomena shall meet the requirements whilst tested with the representative generic test load as given below.

The EPS shall meet its specification points on voltage ranges as given below, during and after continuous phenomena and after transient phenomena:

Output Voltage 5 V \pm 0,25 V from no load to maximum output current measured at the USB Micro-B plug, while connected to the generic test load defined in EN301 489-34 clause 4.6.

While the parameters above should be monitored at the USB Micro-B plug, the reference for the output voltage is the USB Micro-B plug for an EPS with captive cable and the Standard-A plug for an EPS with detachable cable.

The above criteria shall also be met after exposure to transient phenomena.

The following criteria shall be met after exposure to all immunity phenomena tests:

Output Voltage Ripple (Under load conditions from idle to full): 80 mVp-p measured at 20 MHz bandwidth using the test method as defined in EN 62684 [16].

3.1 Electrostatic Discharge Immunity

3.1.1 Electrostatic Discharge Immunity Test Information

Temperature:	23°C	Humidity:	56% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz		
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	EUT passed with the performance criteria according to EN301 489-34 subclause 6.		

3.1.2 Measurement Equipment Used for Electrostatic Discharge Immunity

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
ESD Generator	SCHAFFNER	NSG438	640101065	2014-06-08	2015-06-07

3.1.3 Test Data

Test position	Test voltage (kV)	Test mode	Test number	Result
HCP	±2, ±4	Contact discharge	30 × 4	A
VCP	±2, ±4	Contact discharge	30 × 4	A
Aperture	±2, ±4, ±8	Air discharge	30 × 6	A
Nonmetal Enclosure	±2, ±4, ±8	Air discharge	30 × 6	A

Note:

1. Result A: No degradation in the performance of the EUT was found

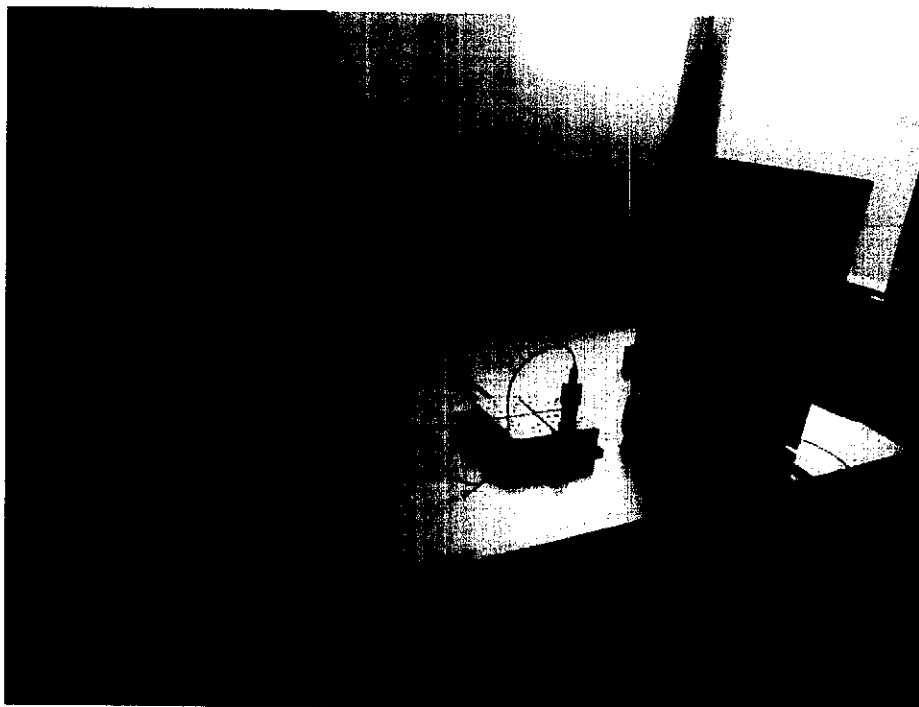
2. EUT performance observation method:

EUT was observed by verifying whether the output voltage, output current and Output Voltage Ripple are still maintained and met the requirement of subclause 6 of standard before and after the test.

3. EUT works as following conditions during and after the test:

EUT was work at 100% Rated output current

3.1.4 Test Setup



Electrostatic Discharge Immunity Test Set-Up –Front View

3.2 Electrical Fast Transient/Burst Immunity

3.2.1 Electrical Fast Transient/Burst Immunity test information

Temperature:	23°C	Humidity:	56% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz		
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	EUT passed with the performance criteria according to EN301 489-34 subclause 6.		

3.2.2 Measurement Equipment Used for Electrical Fast Transient/Burst Immunity test

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EMC immunity test system	TESEQ	NSG3060	7561990028	2014-11-26	2015-11-26
CDN	TESEQ	CDN 3063	7561990028-01	2014-11-26	2015-11-26

3.2.3 Test Data

Test position	Waveform (ns)	Voltage peak (kV)	Repetition rate (kHz)	Test time (s)	Result
L	5/50	±1	5	60+60	A
N	5/50	±1	5	60+60	A
L+N	5/50	±1	5	60+60	A

Note:

1. Result A: No degradation in the performance of the EUT was found

2. EUT performance observation method:

EUT was observed by verifying whether the output voltage, output current and Output Voltage Ripple are still maintained and met the requirement of subclause 6 of standard before and after the test.

3. EUT works as following conditions during and after the test:

EUT was work at 100% Rated output current

3.2.4 Test Setup



Electrical Fast Transient/Burst Immunity Test Set-Up –Front View

3.3 Radio-frequency Electromagnetic Fields Immunity

3.3.1 Radio-frequency Electromagnetic Fields Immunity test information

Temperature:	23°C	Humidity:	57% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC/50Hz	Tested Range:	80 MHz to 1 000 MHz, 1 400 MHz to 2 700 MHz
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	EUT passed with the performance criteria according to EN301 489-34 subclause 6.		

3.3.2 Measurement Equipment Used for Radio-frequency Electromagnetic Fields Immunity test

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
Signal Generator	R&S	SMT06	100871	2014-06-08	2015-06-07
RF power Amplifier	AR	150W1000	303845	2014-06-08	2015-06-07
Anechoic Chamber	Lindgren	RFD-F-100	2689	2014-06-08	2015-06-07
Bi-log Antenna	SCHAFFNER	CBL6143B	5111	2014-06-08	2015-06-07
Electrical Field Monitor System	EMCO	7122	640101030	2014-06-08	2015-06-07
Probe	ETS.Lindgren	HI-6153	0082913	2014-06-08	2015-06-07

3.3.3 Test Data Lindgren

Frequency Range (MHz)	Strength (V/m)	1kHz AM Mod. %	EUT Tuned degree	Result
80~1000	3	80	0°, 90°, 180°, 270°	A
1400-2700	3	80	0°, 90°, 180°, 270°	A
751.0	10	80	0°, 90°, 180°, 270°	A
897.5	10	80	0°, 90°, 180°, 270°	A
847.0	10	80	0°, 90°, 180°, 270°	A
1747.5	10	80	0°, 90°, 180°, 270°	A
1950.0	10	80	0°, 90°, 180°, 270°	A
2535.0	10	80	0°, 90°, 180°, 270°	A

Note:

1. Result A: No degradation in the performance of the EUT was found

2. EUT performance observation method:

EUT was observed by verifying whether the output voltage, output current and Output Voltage Ripple are still maintained and met the requirement of subclause 6 of standard during and after the test.

3. EUT works as following conditions during and after the test:

EUT was work at 100% Rated output current

3.3.4 Test Setup



Radio-frequency Electromagnetic Fields Immunity Test Set-Up –Front View

3.4 Radio-frequency Conducted Disturbance Immunity

3.4.1 Radio-frequency Conducted Disturbance Immunity test information

Temperature:	23°C	Humidity:	56% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz	Tested Range:	0.15MHz to 80MHz
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	EUT passed with the performance criteria according to EN301 489-34 subclause 6.		

3.4.2 Measurement Equipment Used for Radio-frequency Conducted Disturbance Immunity test

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EM TEST	EM	CWS 500C	640101047	2014-06-08	2015-06-07
EM TEST CDN	EM	M2	640101047-02	2014-06-08	2015-06-07

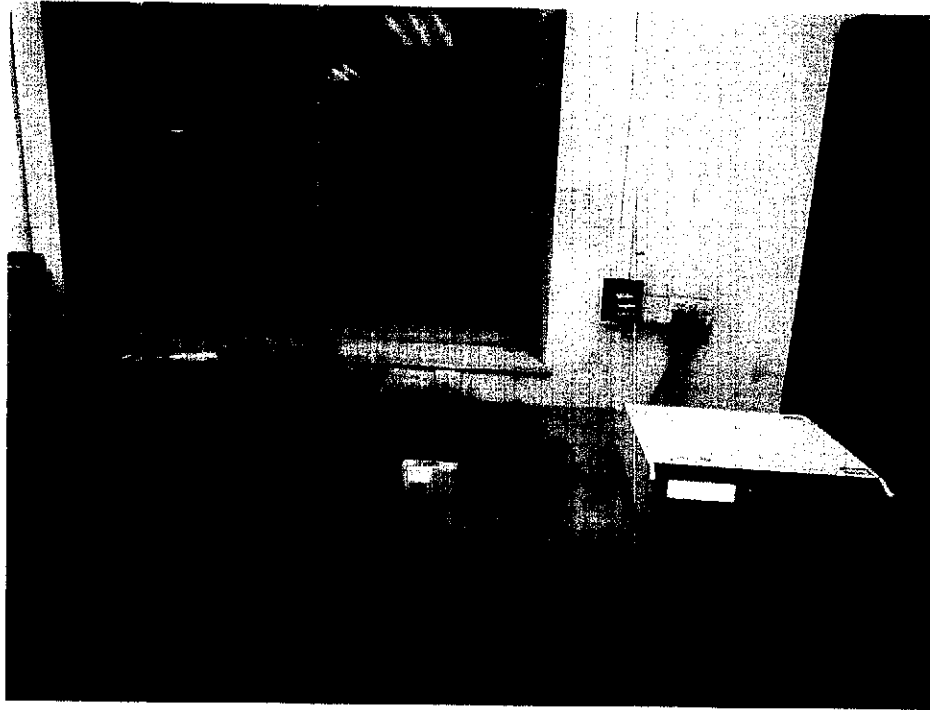
3.4.3 Test Data

Injected position	Frequency Range (MHz)	Strength (r m s) (unmodulated)	1kHz AM Mod. %	Result
AC Power Line	0.15~80	3V	80	A

Note:

- Result A: No degradation in the performance of the EUT was found
- EUT performance observation method:
EUT was observed by verifying whether the output voltage, output current and Output Voltage Ripple are still maintained and met the requirement of subclause 6 of standard during and after the test.
- EUT works as following conditions during and after the test:
EUT was work at 100% Rated output current

3.4.4 Test Setup



Radio-frequency Conducted Disturbance Immunity Test Set-Up –Front View

3.5 Surge immunity

3.5.1 Surge immunity test information

Temperature:	23°C	Humidity:	56% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz		
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	EUT passed with the performance criteria according to EN301 489-34 subclause 6.		

3.5.2 Measurement Equipment Used for Surge immunity test

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EMC immunity test system	TESEQ	NSG3060	7561990028	2014-11-26	2015-11-26
CDN	TESEQ	CDN 3063	7561990028-01	2014-11-26	2015-11-26

3.5.3 Test Data

Test position	Waveform Tr/Td μ s	Test voltage kV	Test number	Coupling phase	Result
L-N	1.2/50	$\pm 0.5, \pm 1.0$	5*4	0°	A
L-N	1.2/50	$\pm 0.5, \pm 1.0$	5*4	90°	A
L-N	1.2/50	$\pm 0.5, \pm 1.0$	5*4	180°	A
L-N	1.2/50	$\pm 0.5, \pm 1.0$	5*4	270°	A

Note:

1. Result A: No degradation in the performance of the EUT was found

2. EUT performance observation method:

EUT was observed by verifying whether the output voltage, output current and Output Voltage Ripple are still maintained and met the requirement of subclause 6 of standard before and after the test.

3. EUT works as following conditions during and after the test:

EUT was work at 100% Rated output current

3.5.4 Test Setup



Surge immunity test Set-Up –Front View

2014/08/20

3.6 Voltage dips, short interruptions immunity

3.6.1 Voltage dips, short interruptions immunity test information

Temperature:	23°C	Humidity:	57% RH
ATM Pressure:	101 k Pa	Grounding:	/
Test Voltage:	230VAC / 50Hz		
Tested by:	Xie Juan		
Test Reference:	EN301 489-34		
Results:	EUT passed with the performance criteria according to EN301 489-34 subclause 6.		

3.6.2 Measurement Equipment Used for Voltage dips, short interruptions immunity test

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EMC immunity test system	KeyTek	CEMASTER	640101039	2014-06-08	2015-06-07

3.6.3 Test Data

Test item	Test levels %UT	lasting period	Test number	Phase	Result
Voltage dips	0	0.5	3	0°	A
Voltage dips	0	0.5	3	180°	A
Voltage dips	0	1	3	0°	A
Voltage dips	70	25	3	0°	A
Interruptions	0	250	3	0°	B

Note:

1. Result A: No degradation in the performance of the EUT was found

Result B: output current cannot be maintained during the test but can be recovered by user after the test.

2. EUT performance observation method:

EUT was observed by verifying whether the output voltage, output current and Output Voltage Ripple are still maintained and met the requirement of subclause 6 of standard before and after the test.

3. EUT works as following conditions during and after the test:

EUT was work at 100% Rated output current

3.6.4 Test Setup



Voltage dips, short interruptions immunity Test Set-Up –Front View

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END OF THE TEST REPORT