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CNAS L5365

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TEST REPORT

Report No.: **CTC20231123E**

Applicant.....: **XonTel Technology Trd. Co. W.L.L**

Address.....: Office 21 - Justice Tower - Ali Al Salem St. - Qibla - Kuwait City - State Of Kuwait

Manufacturer.....: XonTel Technology Trd. Co. W.L.L

Address.....: Office 21 - Justice Tower - Ali Al Salem St. - Qibla - Kuwait City - State Of Kuwait

Product Name.....: **IP-Phone**

Trade Mark.....: XonTel

Model/Type reference.....: XT-09P

Listed Model(s): /

Standard.....: **EN 55032: 2015 + A11: 2020 + A1: 2020**
EN 55035: 2017 + A11: 2020
EN IEC 61000-3-2: 2019 + A1:2021
EN 61000-3-3:2013+A1:2019+A2:2021+AC:2022

Date of receipt of test sample...: May. 16, 2023

Date of testing.....: May. 18, 2023 to May. 22, 2023

Date of issue.....: May. 30, 2023

Result.....: **PASS**

Compiled by:
(Printed name+signature) Jason Chen

Jason Chen

Supervised by:
(Printed name+signature) Eric Zhang

Eric Zhang

Approved by:
(Printed name+signature) Totti Zhao



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1 TEST SUMMARY

1.1 Test standards

The tests were performed according to following standards:

[EN 55032: 2015 + A11: 2020 + A1: 2020](#)–Electromagnetic compatibility of multimedia equipment–Emission Requirements

[EN 55035: 2017 + A11: 2020](#)–Electromagnetic compatibility of multimedia equipment–Immunity requirements

[EN IEC 61000-3-2: 2019 + A1: 2021](#)–Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)

[EN 61000-3-3: 2013 + A1: 2019 + A2: 2021 + AC: 2022](#)–Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection

1.2 Report version

Revised No.	Date of issue	Description
01	May. 30, 2023	Original





1.3 Test description

Emission				
Test Item	Standard Requirement	Result	Test Engineer	Remark
Conducted emission(AC Mains)	EN 55032: 2015 + A11: 2020 + A1: 2020	Pass	Jason Chen	
Conducted emission(Signal Port)		Pass	Jason Chen	
Conducted emission(TV Port)		N/A	N/A	NOTE(1)
Radiated emission		Pass	Jason Chen	
Harmonic current emissions	EN IEC 61000-3-2: 2019 + A1: 2021	N/A	N/A	NOTE(4)
Voltage changes, voltage fluctuations and flicker	EN 61000-3-3: 2013 + A1: 2019 + A2: 2021 + AC: 2022	Pass	Jason Chen	
Immunity				
Test Item	Standard Requirement	Result	Test Engineer	Remark
	EN 55035: 2017 + A11: 2020			
Electrostatic discharge	EN 61000-4-2:2009	Pass	Jason Chen	
Radio frequency electromagnetic field	EN IEC 61000-4-3:2020	Pass	Jason Chen	
Electrical fast transient / burst	EN 61000-4-4:2012	Pass	Jason Chen	
Surge	EN 61000-4-5:2014+A1:2017	Pass	Jason Chen	
Radio frequency continuous conducted	EN 61000-4-6:2014+AC:2015	Pass	Jason Chen	
Power frequency magnetic fields	EN 61000-4-8:2010	N/A	N/A	NOTE(2)
Voltage dips, short interruptions and voltage variations	EN IEC 61000-4-11:2020	Pass	Jason Chen	

NOTE:

- (1)"N/A" denotes test is not applicable in this Test Report.
- (2) No magnetic sensitive components, so not applicable.
- (3) The measurement uncertainty is not included in the test result.
- (4) The power consumption of EUT is less than 75W and no Limits apply.

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1.4 Test facility

Address of the report laboratory

CTC Laboratories, Inc.

Address: 2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China

Laboratory accreditation

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

A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

Industry Canada (Registration No.: 9783A,CAB Identifier:CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 951311, Aug 26, 2017

1.5 Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the CTC Laboratories, Inc. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device. Below is the best measurement capability for CTC Laboratories, Inc.

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Test	Measurement Frequency Range	U (dB)	NOTE
Conducted Emission	9kHz ~ 30MHz	3.08	Main Power Port
Conducted Emission	150kHz ~ 30MHz	4.26	Telecommunication
Power disturbance	30MHz ~ 300MHz	2.38	Clamp
Conducted Emission	30MHz ~ 2150MHz	4.2	Antenna Port
Radiated Emission	30MHz ~ 1000MHz	4.51	3m chamber 2
Radiated Emission	1GHz ~ 18GHz	5.84	3m chamber 2
Radiated Emission	30MHz ~ 1000MHz	4.52	10m chamber
Radiated Emission	30MHz ~ 1000MHz	4.5	3m chamber 3
Radiated Emission	1GHz ~ 18GHz	5.7	3m chamber 3

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

1.6 Environmental conditions

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

Normal Temperature	21 °C ~ 25 °C
Lative Humidity	44 % ~ 53 %
Air Pressure	101 kPa ~ 102 kPa



2 GENERAL INFORMATION

2.1 Client Information

Applicant:	XonTel Technology Trd. Co. W.L.L
Address:	Office 21 - Justice Tower - Ali Al Salem St. - Qibla - Kuwait City - State Of Kuwait
Manufacturer:	XonTel Technology Trd. Co. W.L.L
Address:	Office 21 - Justice Tower - Ali Al Salem St. - Qibla - Kuwait City - State Of Kuwait
Factory:	/
Address:	/

2.2 General Description of EUT

Product Name	IP-Phone
Trade Mark	XonTel
Model/Type reference	XT-09P
Listed Model(s)	/
Model Difference	/
Product Description	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as both an ITE/Computing Device(Class B). More details of EUT technical specification, please refer to the User's Manual.
Power Source	Input: 5V $\overline{\text{---}}$ 600mA or POE 48V
Hardware version	/
Software version	/
Remark:	The maximum operating frequency of EUT is greater than 108MHz.
Sample ID:	CTC230512-049-1-S0001



2.3 Accessory equipment information

Equipment Information				
Name	Mfr/Brand	Model/Type No.	S/N	Note
Switching Power Adaptor	CHENZHOU FRECOM ELECTRONICS CO,LTD.	F12W8-050200SPAV	/	AE
POE power adapter	/	GQ24-480035-ACC	/	AE
Router	ZTE	E8820 V3	/	AE
Headset	Fanvil	HT202	/	AE
Laptop	Lenovo	ThinkBook 14 G4 IAP	/	AE
Cable Information				
Name	Shielded Type	Ferrite Core	Length	Note
Lan Cable	NO	NO	1.2M	/

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.

2.4 Description of test modes

As the function of the EUT, test mode selected to test as below to conform this standard.

Test mode	Description	Test Voltage
1	Ping Lan + IP Communicate	DC 5V (AC/DC Adapter)
2		DC 48V (POE Supply)

Pre-scan above all test mode and voltage, found below test mode and voltage which it was worse case mode. The test voltage is from the power supply.

Test item	Test mode
Conducted emission	1.2
Radiated emission	1.2
Voltage changes, voltage fluctuations and flicker	1
Electrostatic discharge	1.2
Radio frequency electromagnetic field	1.2
Electrical fast transient / burst	1.2
Surges	1.2
Radio frequency continuous conducted	1.2
Voltage dips, short interruptions and voltage variations	1

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2.5 Measurement instruments list

Conducted emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
<input checked="" type="checkbox"/>	LISN	R&S	ENV216	101112	Dec. 16, 2023
<input checked="" type="checkbox"/>	LISN	R&S	ENV216	101113	Dec. 16, 2023
<input checked="" type="checkbox"/>	EMI Test Receiver	R&S	ESCS30	100353	Dec. 16, 2023
	ISN CAT6	Schwarzbeck	NTFM 8158	CAT6-8158-0046	Dec. 16, 2023
<input checked="" type="checkbox"/>	ISN CAT5	Schwarzbeck	NTFM 8158	CAT5-8158-0046	Dec. 16, 2023
<input checked="" type="checkbox"/>	Test Software	R&S	EMC32	6.10.10	/

Radiated emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
<input checked="" type="checkbox"/>	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	9168-1013	Dec. 07, 2024
<input checked="" type="checkbox"/>	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-648	Dec. 07, 2024
<input checked="" type="checkbox"/>	Pre-Amplifier	SONOMA	310	186194	Dec. 16, 2023
<input checked="" type="checkbox"/>	Low Noise Pre-Amplifier	EMCI	EMC051835	980075	Dec. 16, 2023
<input checked="" type="checkbox"/>	Test Receiver	R&S	ESCI7	100967	Dec. 16, 2023
<input checked="" type="checkbox"/>	3m chamber 2	Frankonia	EE025	/	Oct. 23, 2024
<input checked="" type="checkbox"/>	Test Software	FARA	EZ-EMC	FA-03A2	/

Harmonic current emissions & Voltage fluctuations and flicker					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
<input checked="" type="checkbox"/>	Universal Power Analyzer	Voltech	PM6000	200006700723	Dec. 21, 2023
<input checked="" type="checkbox"/>	Programmable AC Power Source	Mtoni	PHF1530	MTPS001	Dec. 16, 2023
<input checked="" type="checkbox"/>	Test Software	VOLTECH	IEC/EN61000	V1.27	/

Electrostatic discharge					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
<input checked="" type="checkbox"/>	ESD Simulator	EM TEST	DITO	V1113109156	Dec. 28, 2023

Radio frequency electromagnetic field					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
<input checked="" type="checkbox"/>	High Gain Log-Periodic Antenna	R&S	HL046E	100037	Dec. 16, 2023
<input checked="" type="checkbox"/>	Stacked Log.-Per. Antenna	Schwarzbeck	STLP 9149	9149-658	Dec. 16, 2023
<input checked="" type="checkbox"/>	Power Amplifier	BONN ELEKTRONIK	BLWA0830-160/100/40D	76788	Dec. 16, 2023
<input checked="" type="checkbox"/>	Power Amplifier	Micotop	MPA-3-6G-50	MPA1706258	Dec. 16, 2023
<input checked="" type="checkbox"/>	PSG Analog Signal Generator	Agilent	E8257D	MY46521908	Dec. 16, 2023
<input checked="" type="checkbox"/>	Test Software	AUDIX	I2	V5	/

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Electrical fast transient / burst					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
<input checked="" type="checkbox"/>	Electrical fast transient generator	3ctest	EFT-4003G	EC0471140	Dec. 16, 2023
<input checked="" type="checkbox"/>	Coupling/Decoupling Clamp	3ctest	EFTC	EC0441141	Dec. 16, 2023

Surges					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
<input checked="" type="checkbox"/>	Surge generator	3ctest	SG-5006G	EC5581149	Dec. 16, 2023
<input checked="" type="checkbox"/>	Surge CDN	3ctest	SGN-20G	EC5551128	Dec. 16, 2023
<input checked="" type="checkbox"/>	Network Surge Generator	3ctest	CWS 600T	ES0311603	Dec. 16, 2023
<input checked="" type="checkbox"/>	Network Surge CDN	3ctest	CDN 405T8A1	ES2731605	Dec. 16, 2023

Radio frequency continuous conducted					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
<input checked="" type="checkbox"/>	C/S Generator	SCHLODER	CDG 6000	126A1266	Dec. 16, 2023
<input checked="" type="checkbox"/>	Coupling/Decoupling Network	SCHLODER	CDN M2+3	A2210258	Dec. 16, 2023
<input checked="" type="checkbox"/>	Coupling/Decoupling Network	TESEQ GmbH	CDN T8-10	45011	Dec. 16, 2023
<input checked="" type="checkbox"/>	6dB Attenuator	N/A	100W/6dB	N/A	Dec. 16, 2023
<input checked="" type="checkbox"/>	Test Software	HUBERT	IECVEN61000-4-6	V1.5	/

Voltage dips, short interruptions and voltage variations					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
<input checked="" type="checkbox"/>	Voltage dips and up generator	3ctest	VDG-1105G	EC0171116	Dec. 16, 2023

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3 EMC EMISSION TEST

3.1 Conducted emission measurement

LIMIT

Please refer to CENELEC EN 55032 Annex A Table A.8 to Table A.13.

Power Line Conducted Emission (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.5 - 5	73.00	60.00	56.00	46.00
5 - 30	73.00	60.00	60.00	50.00

Telecommunication Port Conducted Emission (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	97 - 87*	84 - 74*	84 - 74*	74 - 64*
0.5 - 30	87	74	74	64

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

TEST PROCEDURE

Please refer to CENELEC EN 55032 Annex B and Annex C, and the EUT exercised in accordance with Annex D.

TEST MODE

Please refer to the Clause 2.4.

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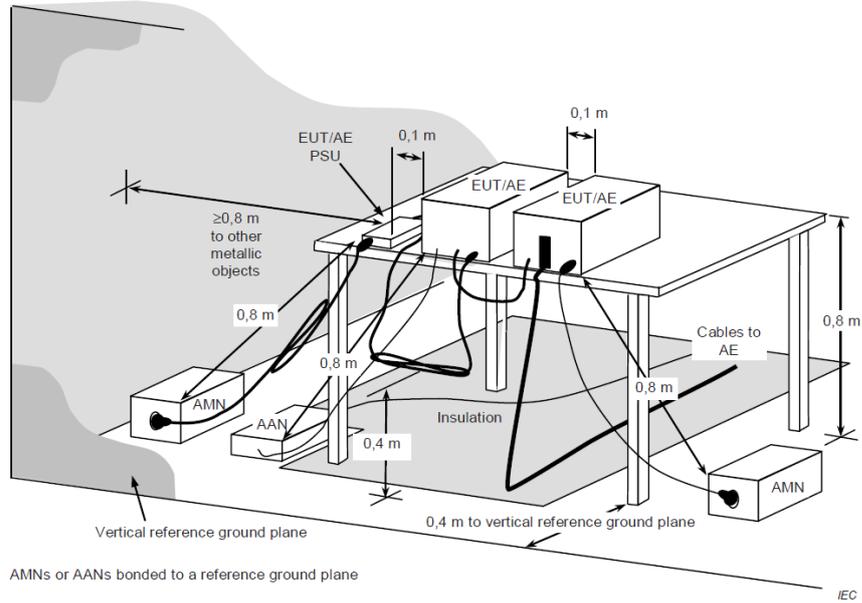


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TEST SETUP

A) For AC mains power ports and asymmetric mode conducted emissions.



The 0.8 m distance specified between EUT/AE/PSU and AMN/AAN, is applicable only to the EUT being measured. If the device is AE then it shall be ≥ 0.8 m.

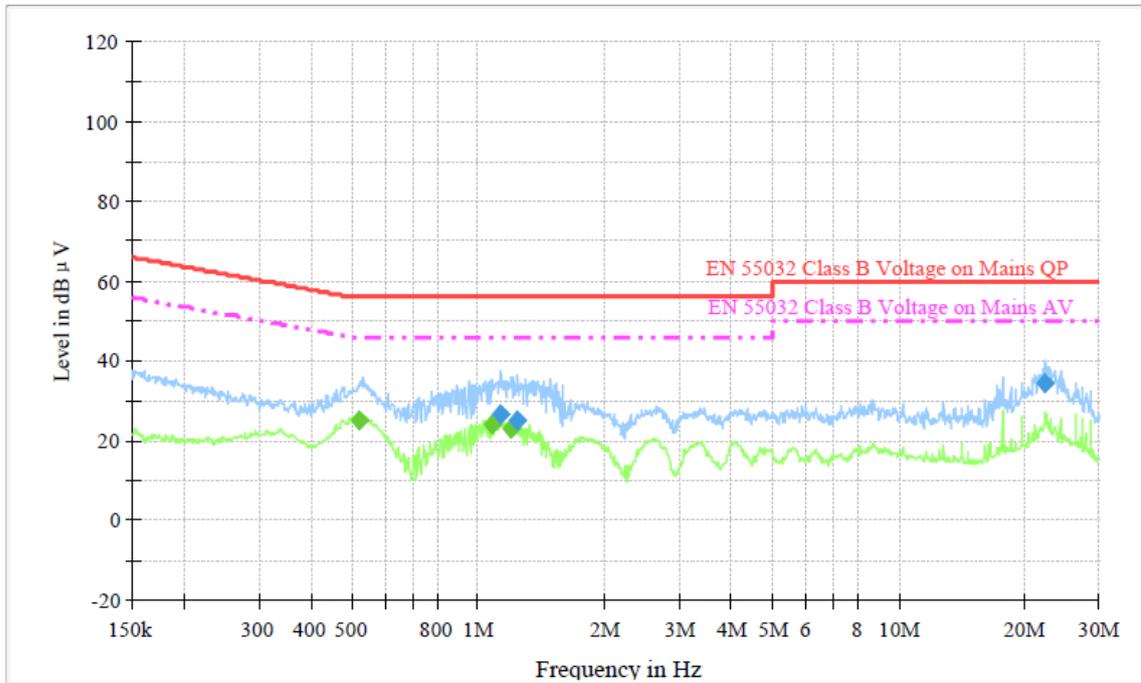
Environmental conditions

Normal Temperature:	25 °C	Latve Humidity:	52 %	Air Pressure:	101 kPa
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TEST RESULTS

Test Mode :	Mode 1
Phase :	L



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
1.130710	26.5	1000.00	9.000	On	L1	9.7	29.5	56.0	
1.239440	25.1	1000.00	9.000	On	L1	9.7	30.9	56.0	
22.395840	34.4	1000.00	9.000	On	L1	10.0	25.6	60.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
0.519130	25.1	1000.00	9.000	On	L1	9.7	20.9	46.0	
1.082130	24.0	1000.00	9.000	On	L1	9.7	22.0	46.0	
1.195700	23.3	1000.00	9.000	On	L1	9.7	22.7	46.0	

Note:

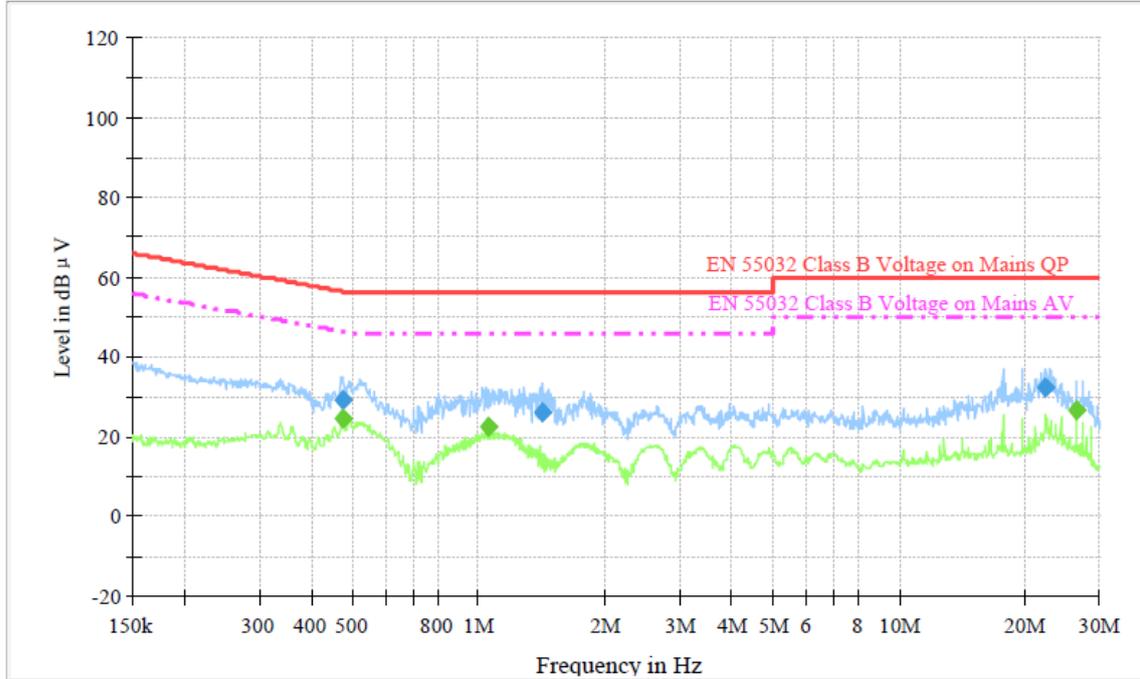
Factor = Insertion loss of LISN + Cable Loss

Limit = Limit stated in standard

Margin = Limit (dBuV) – Result (dBuV)



Test Mode :	Mode 1
Phase :	N



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
0.471700	29.2	1000.00	9.000	On	N	10.0	27.3	56.5	
1.419620	26.2	1000.00	9.000	On	N	10.0	29.8	56.0	
22.395840	32.3	1000.00	9.000	On	N	10.0	27.7	60.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
0.473590	24.7	1000.00	9.000	On	N	10.0	21.8	46.5	
1.056520	22.7	1000.00	9.000	On	N	10.0	23.3	46.0	
26.483990	26.5	1000.00	9.000	On	N	10.0	23.5	50.0	

Note:

Factor = Insertion loss of LISN + Cable Loss

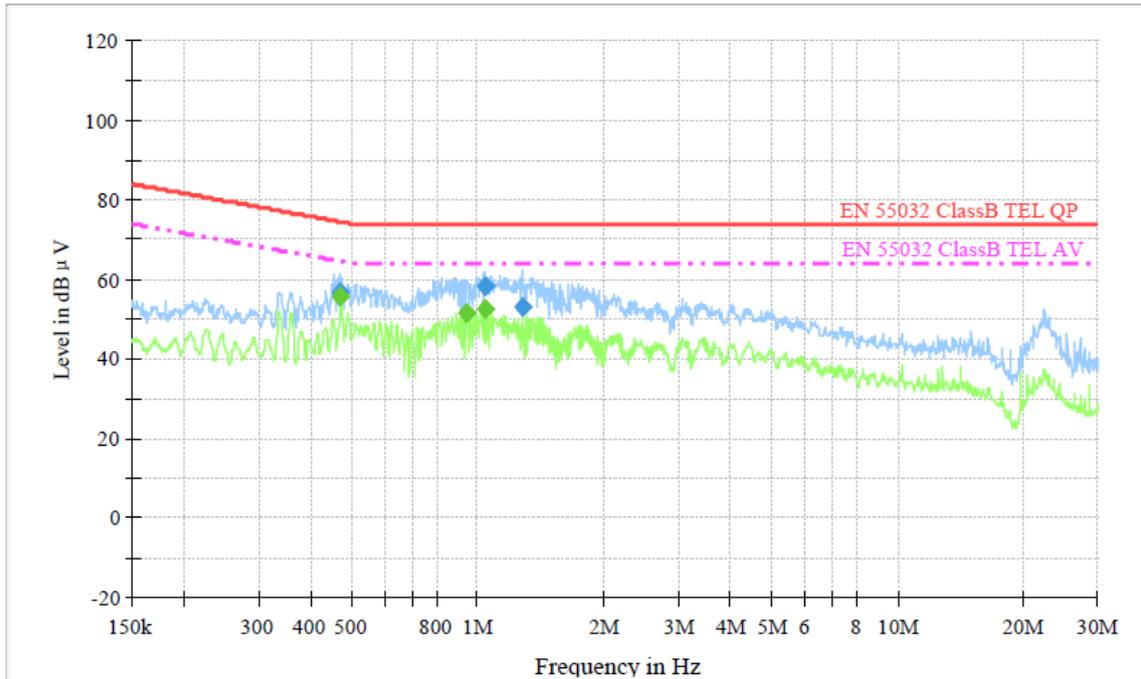
Limit = Limit stated in standard

Margin = Limit (dBuV) – Result (dBuV)





Test Mode :	Mode 1
Phase :	LAN(IP port)



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.467950	56.9	1000.00	9.000	On	LAN	10.0	17.7	74.6	
1.035640	58.2	1000.00	9.000	On	LAN	10.0	15.8	74.0	
1.274560	53.3	1000.00	9.000	On	LAN	10.0	20.8	74.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.469820	55.6	1000.00	9.000	On	LAN	10.0	8.9	64.5	
0.941020	51.5	1000.00	9.000	On	LAN	10.0	12.5	64.0	
1.035640	52.5	1000.00	9.000	On	LAN	10.0	11.5	64.0	

Note:

Factor = Insertion loss of LISN + Cable Loss

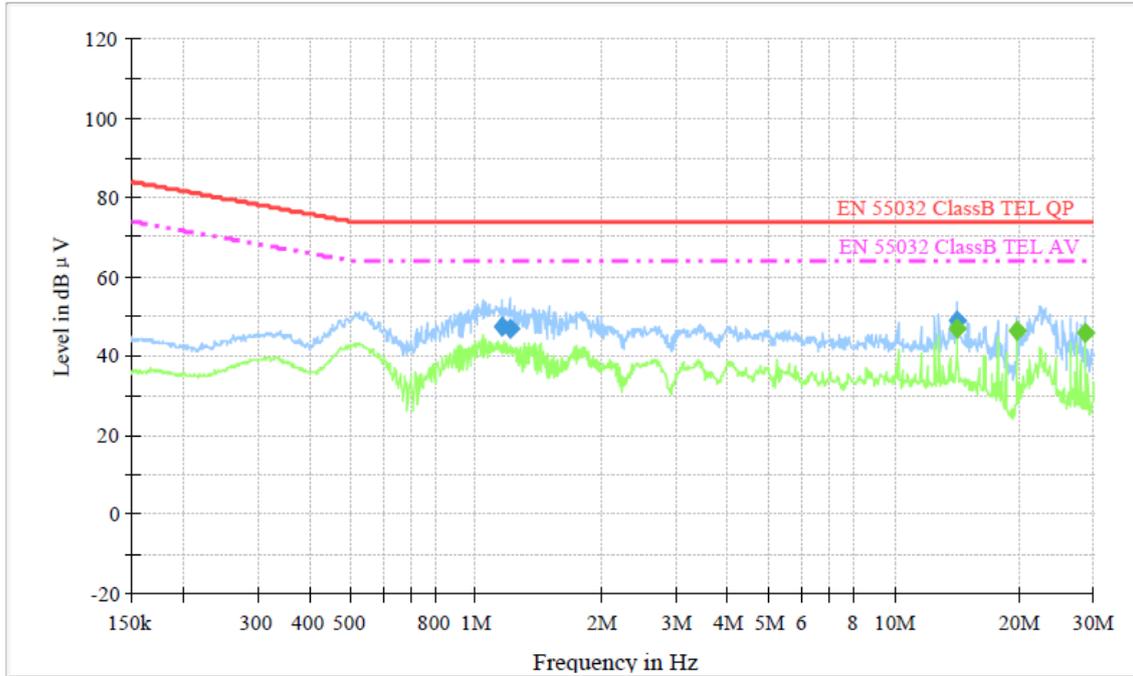
Limit = Limit stated in standard

Margin = Limit (dBuV) – Result (dBuV)





Test Mode :	Mode 1
Phase :	LAN(Laptop port)



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
1.153500	47.4	1000.00	9.000	On	LAN	10.0	26.6	74.0	
1.200480	46.7	1000.00	9.000	On	LAN	10.0	27.4	74.0	
14.151110	48.9	1000.00	9.000	On	LAN	10.0	25.1	74.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
14.151110	46.9	1000.00	9.000	On	LAN	10.0	17.1	64.0	
19.710090	46.4	1000.00	9.000	On	LAN	10.0	17.6	64.0	
28.685180	45.7	1000.00	9.000	On	LAN	10.0	18.3	64.0	

Note:

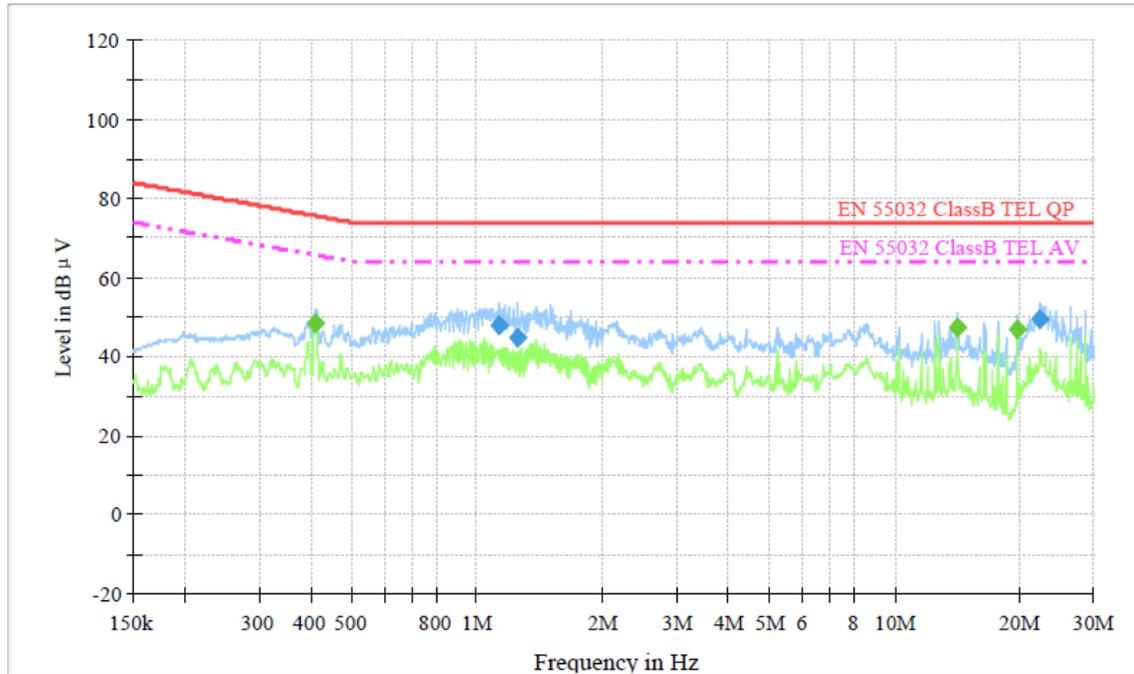
Factor = Insertion loss of LISN + Cable Loss

Limit = Limit stated in standard

Margin = Limit (dBuV) – Result (dBuV)



Test Mode :	Mode 2
Phase :	LAN(POE supply)



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
1.130710	47.7	1000.00	9.000	On	LAN	10.0	26.3	74.0	
1.249380	44.8	1000.00	9.000	On	LAN	10.0	29.2	74.0	
22.395840	49.5	1000.00	9.000	On	LAN	10.0	24.5	74.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dB μV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μV)	Comment
0.410190	48.6	1000.00	9.000	On	LAN	10.0	17.0	65.6	
14.151110	47.5	1000.00	9.000	On	LAN	10.0	16.5	64.0	
19.710090	46.8	1000.00	9.000	On	LAN	10.0	17.2	64.0	

Note:

Factor = Insertion loss of LISN + Cable Loss

Limit = Limit stated in standard

Margin = Limit (dBuV) – Result (dBuV)





3.2 Radiated emission measurement

LIMIT

Please refer to CENELEC EN 55032 Annex A Table A.2 to Table A.7.

FREQUENCY (MHz)	Class A dBuV/m		Class B dBuV/m	
	(at 10m)	(at 3m)	(at 10m)	(at 3m)
30 – 230	40	50	30	40
230 – 1000	47	57	37	47

FREQUENCY (MHz)	Class A (at 3m) dBuV/m		Class B (at 3m) dBuV/m	
	Peak	Average	Peak	Average
1000 - 6000	80	60	74	54

TEST MODE

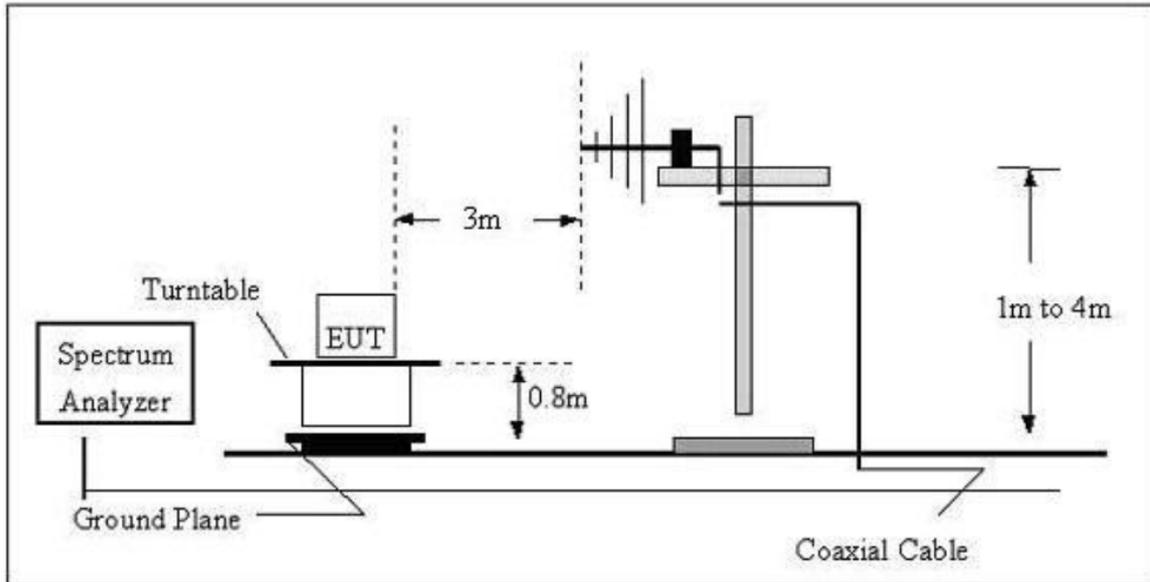
Please refer to the Clause 2.4.

Environmental conditions

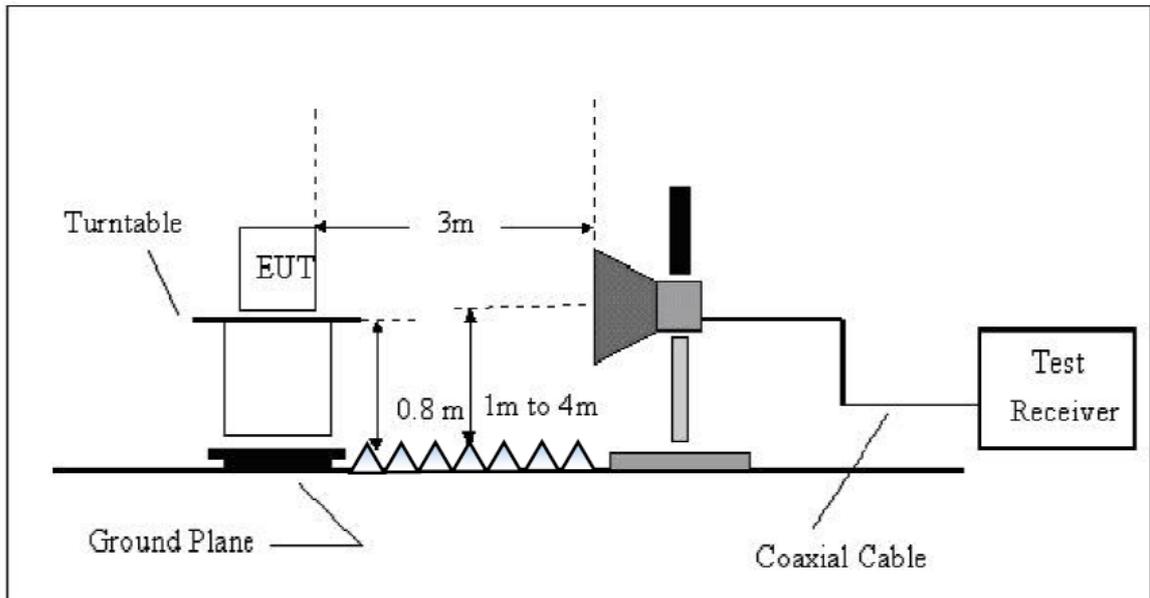
Normal Temperature:	21 °C	Relative Humidity:	47 %	Air Pressure:	101 kPa
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TEST SETUP

A. Radiated Emission test Set-up Frequency Below 1 GHz.



B. Radiated Emission test Set-up Frequency Above 1 GHz.

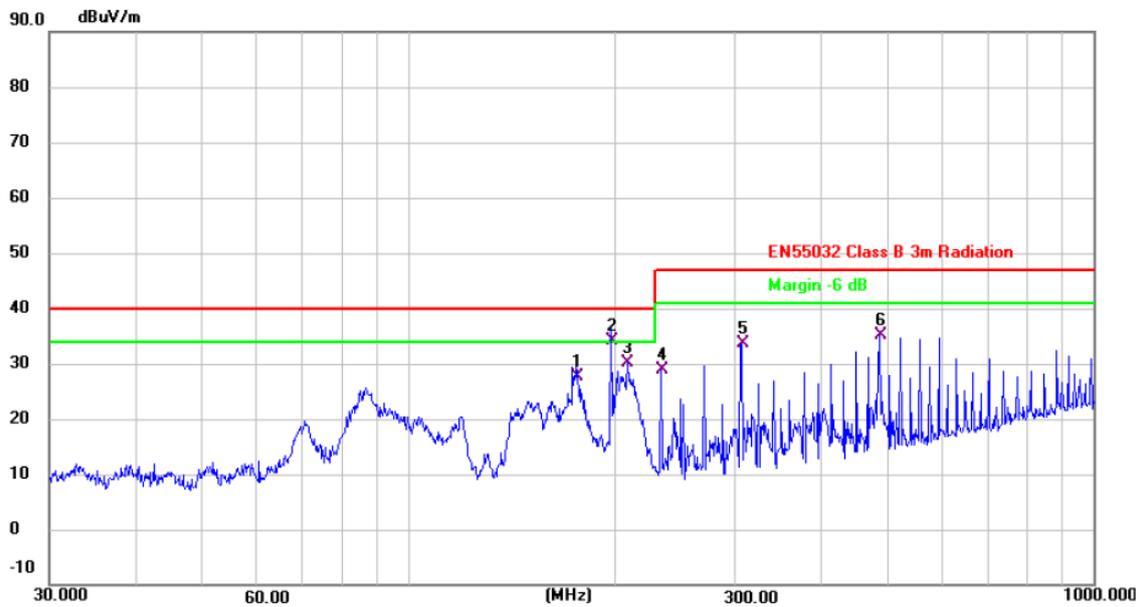


TEST RESULTS



Below 1GHz

Polarization	Horizontal
Test Mode :	Mode 1



No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	176.2686	46.00	-18.46	27.54	40.00	-12.46	QP
2 *	197.8928	54.34	-20.24	34.10	40.00	-5.90	QP
3	209.3129	50.28	-20.08	30.20	40.00	-9.80	QP
4	234.1683	48.06	-19.18	28.88	47.00	-18.12	QP
5	306.7537	50.69	-17.01	33.68	47.00	-13.32	QP
6	487.3150	47.96	-12.85	35.11	47.00	-11.89	QP

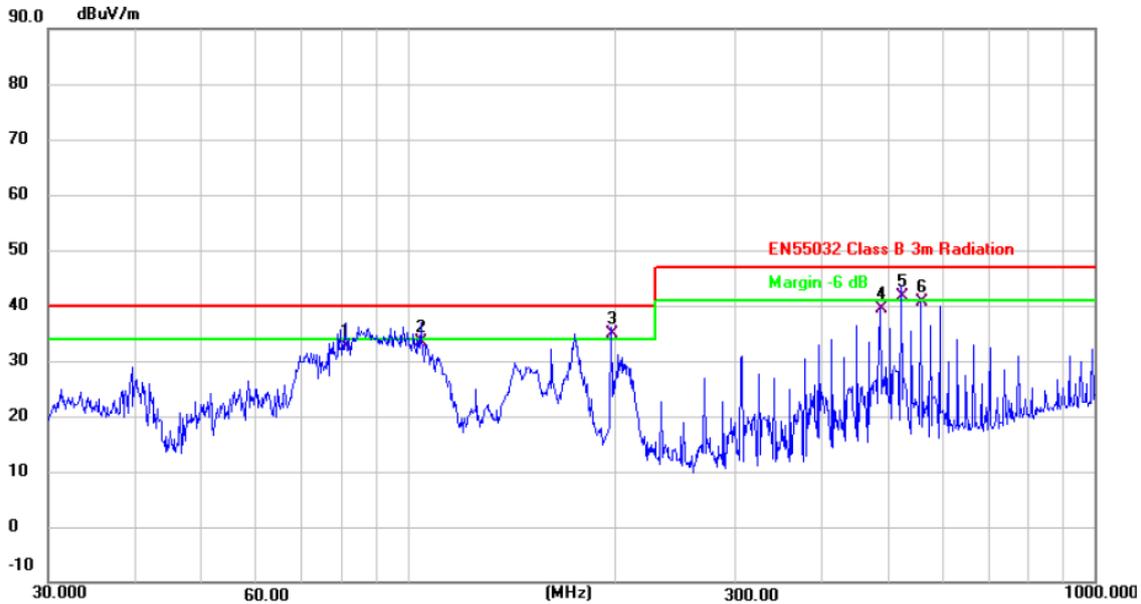
Remarks:

- Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-amplifier Factor
- Margin value = Level - Limit value





Polarization	Vertical
Test Mode :	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	81.2117	54.58	-21.98	32.60	40.00	-7.40	QP
2	104.5361	53.84	-20.54	33.30	40.00	-6.70	QP
3 *	197.8928	55.04	-20.24	34.80	40.00	-5.20	QP
4	487.3151	52.15	-12.85	39.30	47.00	-7.70	QP
5 !	522.7180	53.92	-12.22	41.70	47.00	-5.30	QP
6	558.7302	52.15	-11.55	40.60	47.00	-6.40	QP

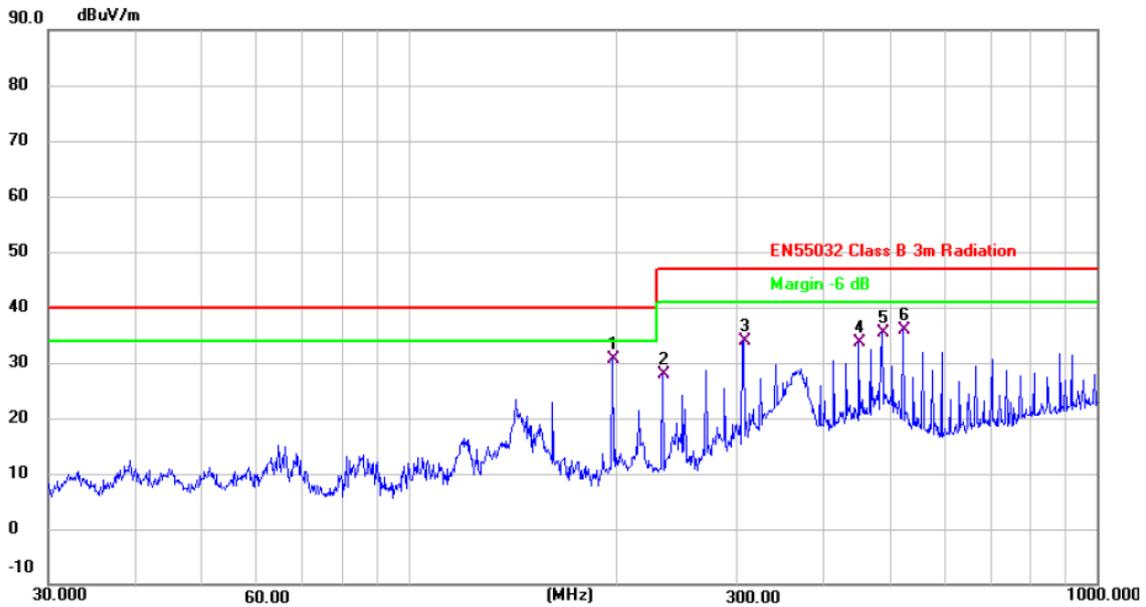
Remarks:

- Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-amplifier Factor
- Margin value = Level - Limit value





Polarization	Horizontal
Test Mode :	Mode 2



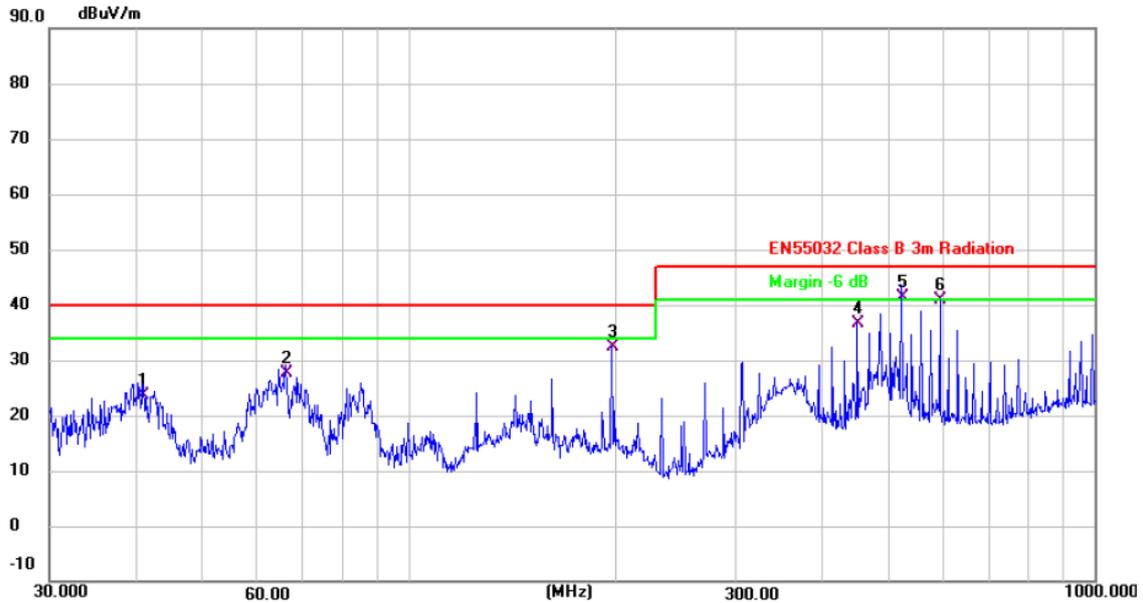
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	197.8928	50.92	-20.24	30.68	40.00	-9.32	QP
2	234.1683	47.15	-19.18	27.97	47.00	-19.03	QP
3	306.7537	50.87	-17.01	33.86	47.00	-13.14	QP
4	451.1350	46.98	-13.39	33.59	47.00	-13.41	QP
5	487.3150	48.34	-12.85	35.49	47.00	-11.51	QP
6	522.7179	48.00	-12.22	35.78	47.00	-11.22	QP

Remarks:

- Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-amplifier Factor
- Margin value = Level - Limit value



Polarization	Vertical
Test Mode :	Mode 2



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	40.9881	40.97	-17.43	23.54	40.00	-16.46	QP
2	66.2662	47.32	-19.78	27.54	40.00	-12.46	QP
3	197.8928	52.55	-20.24	32.31	40.00	-7.69	QP
4	451.1350	50.07	-13.39	36.68	47.00	-10.32	QP
5 *	522.7180	53.62	-12.22	41.40	47.00	-5.60	QP
6	595.1329	51.61	-10.80	40.81	47.00	-6.19	QP

Remarks:

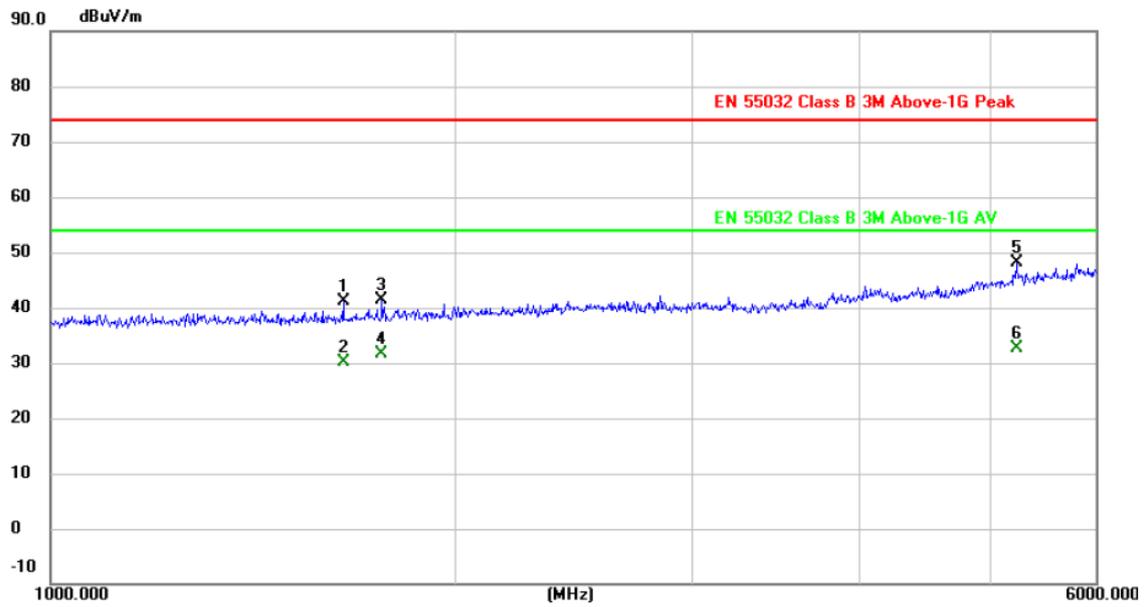
- Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-amplifier Factor
- Margin value = Level - Limit value





Above 1GHz

Polarization	Horizontal
Test Mode :	Mode 1



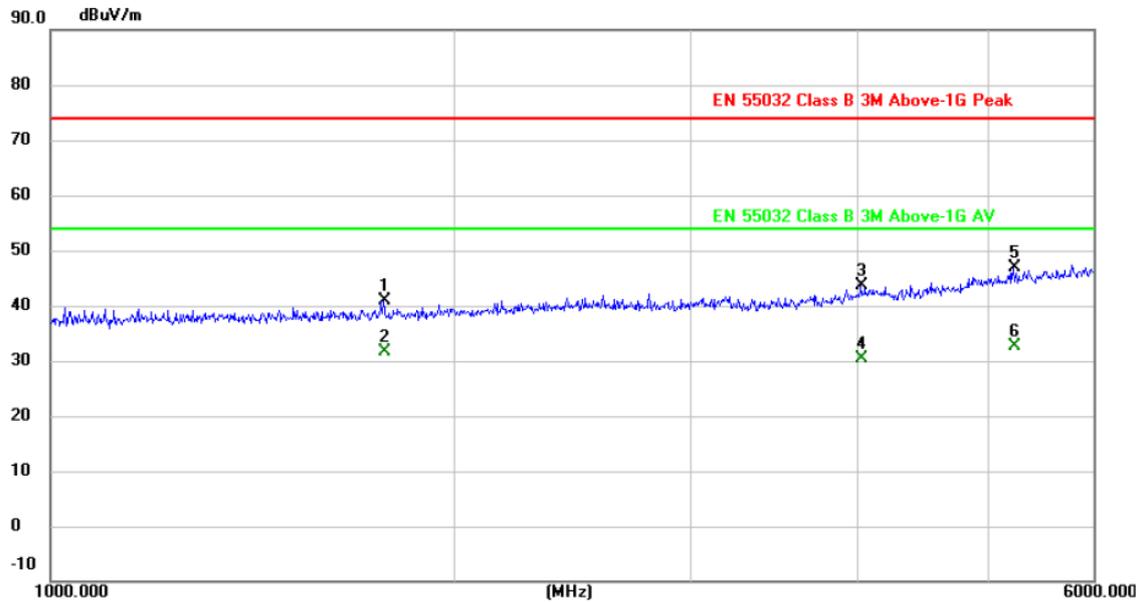
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1651.514	52.29	-11.24	41.05	74.00	-32.95	peak
2	1651.514	41.36	-11.24	30.12	54.00	-23.88	AVG
3	1764.712	52.38	-10.91	41.47	74.00	-32.53	peak
4	1764.712	42.48	-10.91	31.57	54.00	-22.43	AVG
5	5236.146	49.14	-0.94	48.20	74.00	-25.80	peak
6 *	5236.146	33.48	-0.94	32.54	54.00	-21.46	AVG

Remarks:

- Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-amplifier Factor
- Margin value = Level - Limit value



Polarization	Vertical
Test Mode :	Mode 1



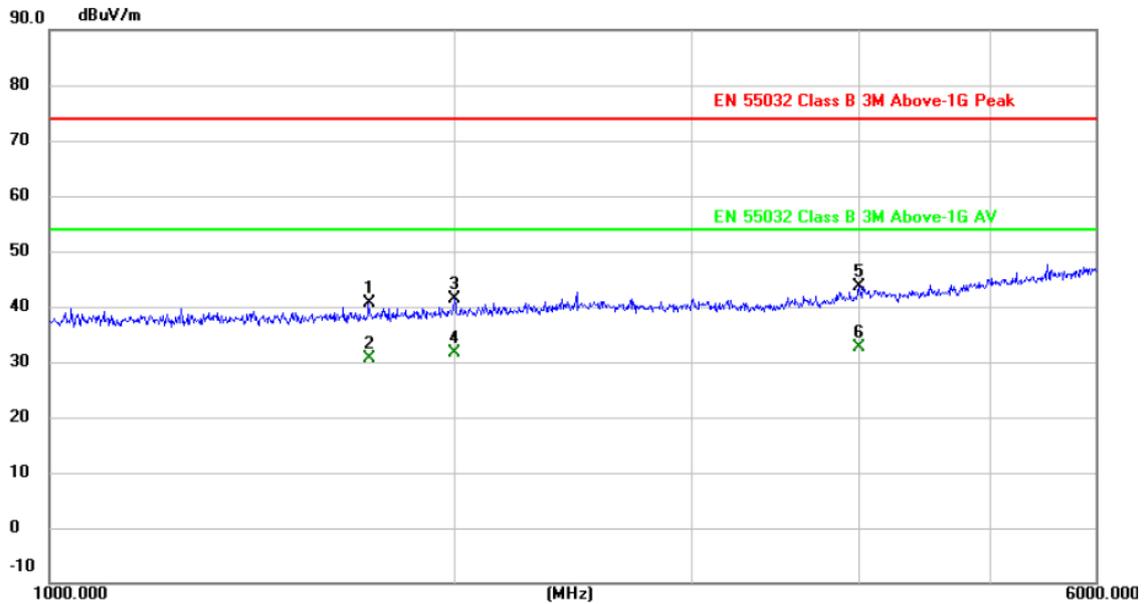
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1771.048	51.79	-10.88	40.91	74.00	-33.09	peak
2	1771.048	42.45	-10.88	31.57	54.00	-22.43	AVG
3	4023.681	48.01	-4.37	43.64	74.00	-30.36	peak
4	4023.681	34.84	-4.37	30.47	54.00	-23.53	AVG
5	5226.773	47.85	-0.97	46.88	74.00	-27.12	peak
6 *	5226.773	33.51	-0.97	32.54	54.00	-21.46	AVG

Remarks:

- Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-amplifier Factor
- Margin value = Level - Limit value



Polarization	Horizontal
Test Mode :	Mode 2



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1727.174	51.67	-11.02	40.65	74.00	-33.35	peak
2	1727.174	41.56	-11.02	30.54	54.00	-23.46	AVG
3	2000.527	50.85	-9.40	41.45	74.00	-32.55	peak
4	2000.527	40.97	-9.40	31.57	54.00	-22.43	AVG
5	4002.110	48.14	-4.40	43.74	74.00	-30.26	peak
6 *	4002.110	37.14	-4.40	32.74	54.00	-21.26	AVG

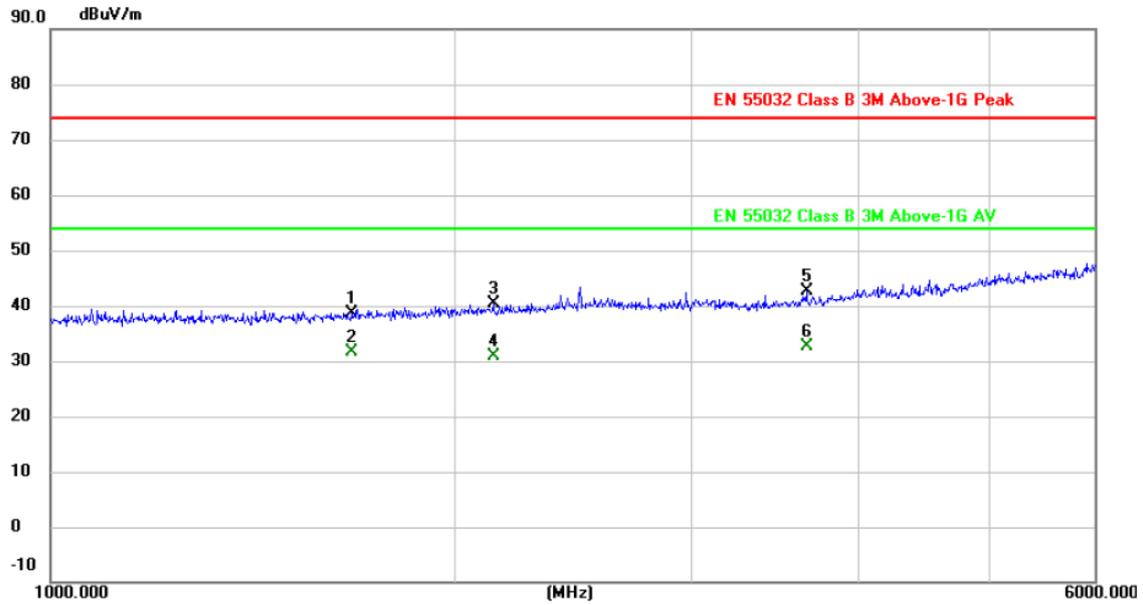
Remarks:

- Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-amplifier Factor
- Margin value = Level - Limit value





Polarization	Vertical
Test Mode :	Mode 2



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1675.358	49.89	-11.17	38.72	74.00	-35.28	peak
2	1675.358	42.91	-11.17	31.74	54.00	-22.26	AVG
3	2137.648	49.17	-8.81	40.36	74.00	-33.64	peak
4	2137.648	39.68	-8.81	30.87	54.00	-23.13	AVG
5	3659.161	48.61	-5.94	42.67	74.00	-31.33	peak
6 *	3659.161	38.51	-5.94	32.57	54.00	-21.43	AVG

Remarks:

- Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-amplifier Factor
- Margin value = Level - Limit value



3.3 Harmonic current emissions

LIMIT

Please refer to the EN IEC 61000-3-2 Clause 7.

Limits for class A equipment

Harmonic times n	Maximum permission harmonic current A
Odd number harmonic	
3	2.30
5	1.14
7	0.77
9	0.40
11	0.33
13	0.21
15 ≤ n ≤ 39	0.15 × 15/n
Even number harmonic	
2	1.08
4	0.43
6	0.30
8 ≤ n ≤ 40	0.23 × 8/n

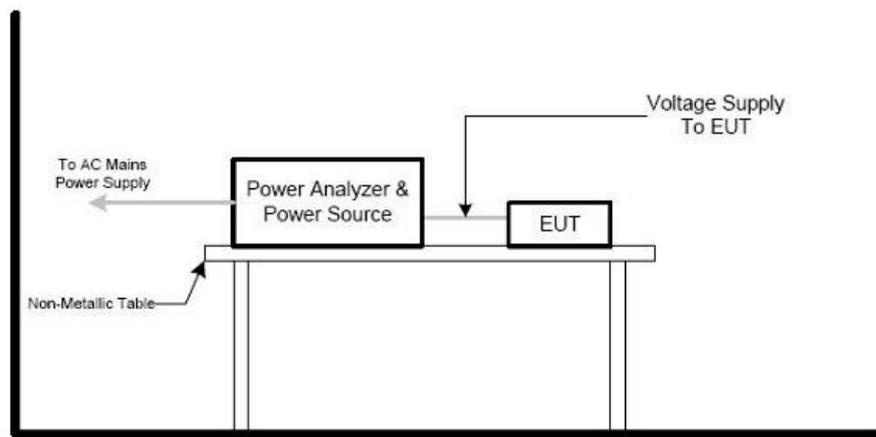
TEST PROCEDURE

Please refer to EN IEC 61000-3-2 for the measurement methods.

TEST MODE

Please refer to the Clause 2.4.

TEST SETUP





Environmental conditions

Normal Temperature:	/	Relative Humidity:	/	Air Pressure:	/
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TEST RESULTS

The power consumption of EUT is less than 75W and no Limits apply.





3.4 Voltage changes, voltage fluctuations and flicker

LIMIT

Please refer to EN 61000-3-3.

Tests	Limits
Pst	1.0
Plt	0.65
dc	3.3%
dmax	4%
d(t)	3.3%

TEST PROCEDURE

Please refer to EN61000-3-3 for the measurement methods.

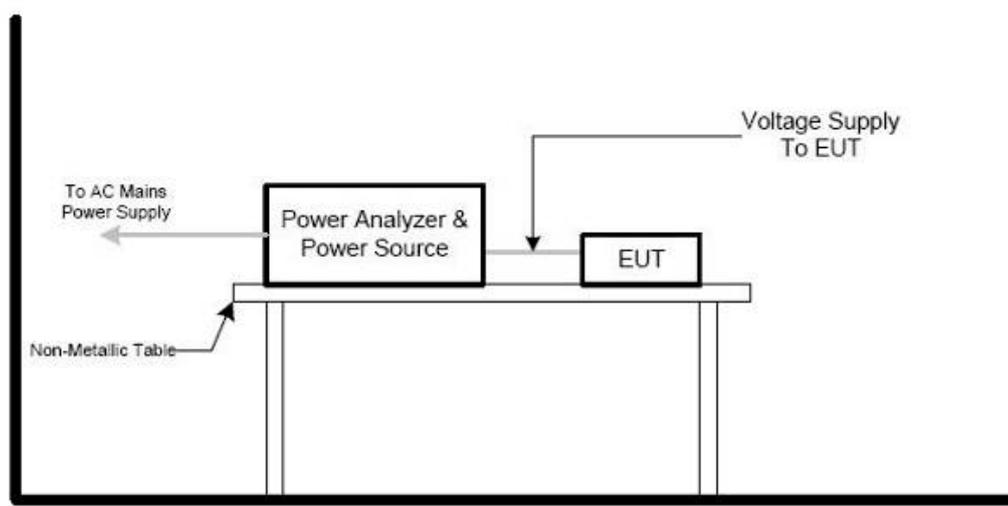
TEST MODE

Please refer to the Clause 2.4.

Environmental conditions

Normal Temperature:	23 °C	Lative Humidity:	48 %	Air Pressure:	101 kPa
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TEST SETUP





TEST RESULTS

Type of Test:	Flickermeter Test - Table
Power Analyzer:	Voltech PM6000 SN: 200006700723 Firmware Version: v1.22.07RC6
Channel(s):	1. SN: 090015502565, 28 Adjusted Date: 2 AUG 2013. 2. SN: 090015500533, 28 Adjusted Date: 19 MAR 2010. 3. SN: 090015502345, 28 Adjusted Date: 21 JUN 2012. 4. SN:None Adjusted Date:None 5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:None
Shunt(s):	1. SN: 091024303183, 4 Adjusted Date: 8 AUG 2013. 2. SN: 091024302146, 4 Adjusted Date: 22 JUN 2012. 3. SN: 091024302144, 4 Adjusted Date: 22 JUN 2012. 4. SN:None Adjusted Date:None 5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:None
AC Source:	Mains / Manual Source
Overall Result:	Notes: Measurement method - Voltage
PASS	

	Pst	dc (%)	dmax (%)	Tmax(> 3.3%)(ms)
Limit	1.000	3.300	4.000	500
Reading 1	0.344	0.131	0.331	0



4 EMC IMMUNITY TEST

4.1 Performance criteria

According to EN 55035 standard, the general performance criteria as following:

Criterion A	The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. 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 by what the user may reasonably expect from the equipment if used as intended.
Criterion B	After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test.
Criterion C	Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.





4.2 Electrostatic discharge

PERFORMANCE CRITERION

Standard	Criterion
EN 55035/EN 61000-4-2	Criteria B

TEST LEVEL

Contact Discharge at: $\pm 2\text{kV}$, $\pm 4\text{kV}$;

Air Discharge at: $\pm 2\text{kV}$, $\pm 4\text{kV}$, $\pm 8\text{kV}$

TEST PROCEDURE

Please refer to EN 61000-4-2 for the measurement methods.

TEST MODE

Please refer to the Clause 2.4.

Contact Discharge:

The ESD generator is held perpendicular to the surface to which the discharge is applied and the tip of the discharge electrode touch the surface of EUT. Then turn the discharge switch. The generator is then re-triggered for a new single discharge and repeated at least 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Air Discharge:

Air discharge is used where contact discharge can't be applied. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated at least 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Indirect discharge for horizontal coupling plane:

At least 10 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT.

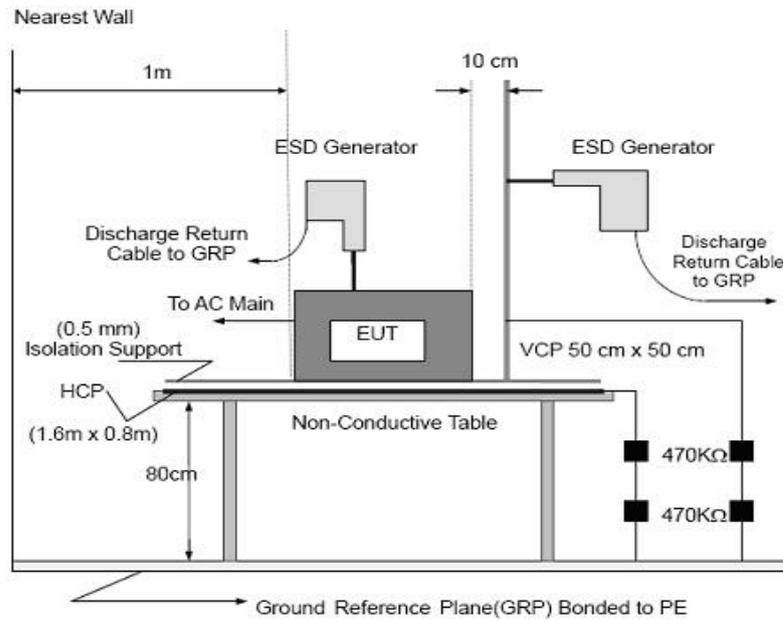
Indirect discharge for vertical coupling plane:

At least 10 single discharges shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.





TEST SETUP



Test result

Temperature	25°C	Humidity	48%	Atmospheric pressure	101KPa
Test Points	Test Voltage	Kind	Times	Results	Test Result
HCP	<input type="checkbox"/> ±2 KV ; <input checked="" type="checkbox"/> ±4 KV <input type="checkbox"/> ±6 KV ; <input type="checkbox"/> ±8 KV <input type="checkbox"/> ±10 KV; <input type="checkbox"/> ±15 KV	<input type="checkbox"/> Air <input checked="" type="checkbox"/> Contact	<input checked="" type="checkbox"/> ±10 <input type="checkbox"/> ±25 <input type="checkbox"/>	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
VCP	<input type="checkbox"/> ±2 KV ; <input checked="" type="checkbox"/> ±4 KV <input type="checkbox"/> ±6 KV ; <input type="checkbox"/> ±8 KV <input type="checkbox"/> ±10 KV; <input type="checkbox"/> ±15 KV	<input type="checkbox"/> Air <input checked="" type="checkbox"/> Contact	<input checked="" type="checkbox"/> ±10 <input type="checkbox"/> ±25 <input type="checkbox"/>	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
/	<input type="checkbox"/> ±2 KV ; <input checked="" type="checkbox"/> ±4 KV <input type="checkbox"/> ±6 KV ; <input type="checkbox"/> ±8 KV <input type="checkbox"/> ±10 KV; <input type="checkbox"/> ±15 KV	<input type="checkbox"/> Air <input checked="" type="checkbox"/> Contact	<input checked="" type="checkbox"/> ±10 <input type="checkbox"/> ±25 <input type="checkbox"/>	/	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Display module, Key, Gap, Voice tube, Lan port	<input checked="" type="checkbox"/> ±2 KV ; <input checked="" type="checkbox"/> ±4 KV <input type="checkbox"/> ±6 KV ; <input checked="" type="checkbox"/> ±8 KV <input type="checkbox"/> ±10 KV; <input type="checkbox"/> ±15 KV	<input checked="" type="checkbox"/> Air <input type="checkbox"/> Contact	<input checked="" type="checkbox"/> ±10 <input type="checkbox"/> ±25 <input type="checkbox"/>	B ¹	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

* Comment:

- No degradation was found
- Phenomenon Description

1. There is noise during the test, which can be recovered automatically after the test

Note:

The ancillary equipment's specification for an acceptable level of performance or degradation of performance during and/or after the ESD tests.

CTC Laboratories, Inc.

2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China
 Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : yz.cnca.cn

Description of Discharge Point

Contact discharge-Yellow, Air discharge-Red





4.3 Radio frequency electromagnetic field

PERFORMANCE CRITERION

Standard	Criterion
EN 55035/EN IEC 61000-4-3	Criteria A

TEST LEVEL

Condition of Test	Remark
Frequency Range	80 MHz - 1000 MHz, 1800 MHz, 2600 MHz, 3500 MHz, 5000 MHz
Field Strength	3 V/m
Modulation	1kHz Sine Wave, 80%, AM Modulation
Frequency Step	1 % of fundamental
Polarity of Antenna	Horizontal and Vertical
Test Distance	3 m
Antenna Height	1.5 m
Dwell Time	at least 3 seconds

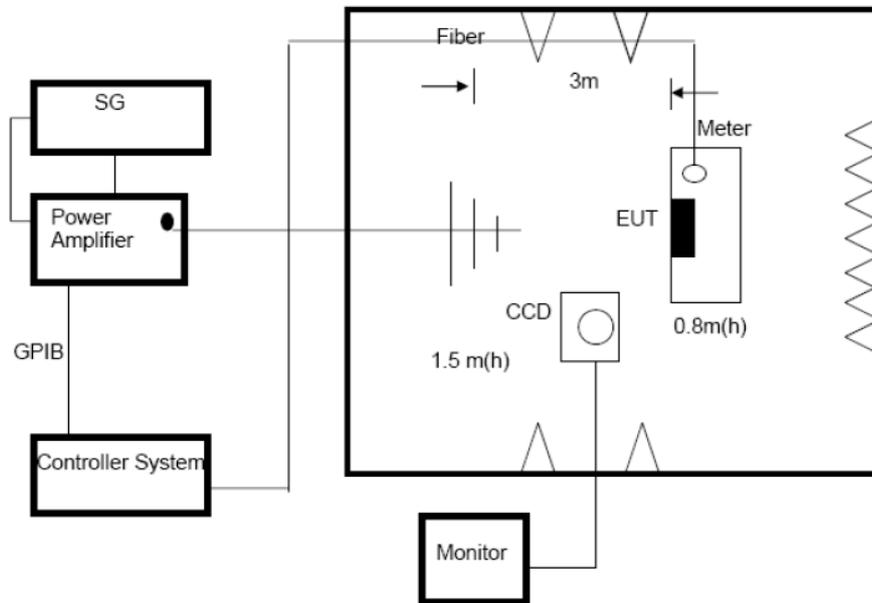
TEST PROCEDURE

Please refer to EN 61000-4-3 for the measurement methods.

TEST MODE

Please refer to the Clause 2.4.

TEST SETUP



TEST RESULTS

Temperature	24°C	Humidity	49%	Atmospheric pressure	101kPa
EUT Position	Frequency range: 80-1000 MHz 1800 MHz, 2600 MHz, 3500 MHz, 5000 MHz Level: <input checked="" type="checkbox"/> 3V/m <input type="checkbox"/> 10V/m			Test Result	
	Horizontal		Vertical		
Front	A	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		
Right	A	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		
Back	A	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		
Left	A	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		
*Comment: <input checked="" type="checkbox"/> No degradation was found <input type="checkbox"/> Phenomenon Description					



4.4 Electrical fast transient / burst

PERFORMANCE CRITERION

Standard	Criterion
EN 55035/EN 61000-4-4	Criteria B

TEST LEVEL

Test Voltage	Power Line: ± 1 kV
Polarity	Positive & Negative & Ground
Test Voltage	Signal port: ± 0.5 kV
Polarity	Positive & Negative
Impulse Frequency	5 kHz
Impulse Wave shape	5/50 ns
Burst Duration	15 ms
Burst Period	300 ms
Test Duration	Not less than 1 min

TEST PROCEDURE

Please refer to EN 61000-4-4 for the measurement methods.

TEST MODE

Please refer to the Clause 2.4.

CTC Laboratories, Inc.

2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

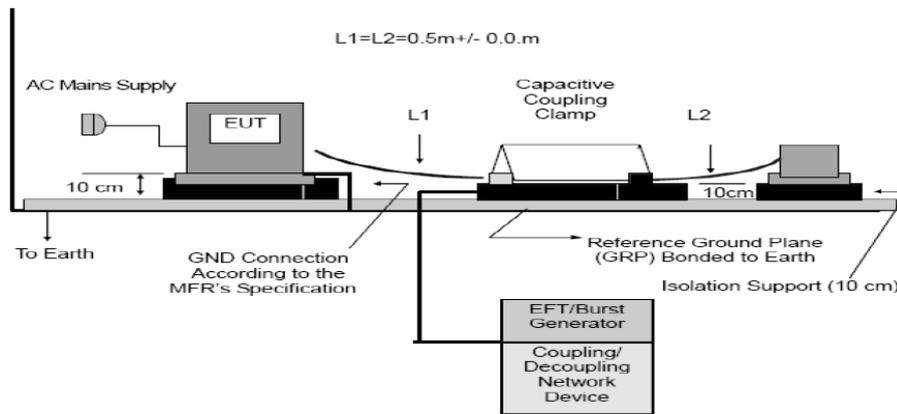
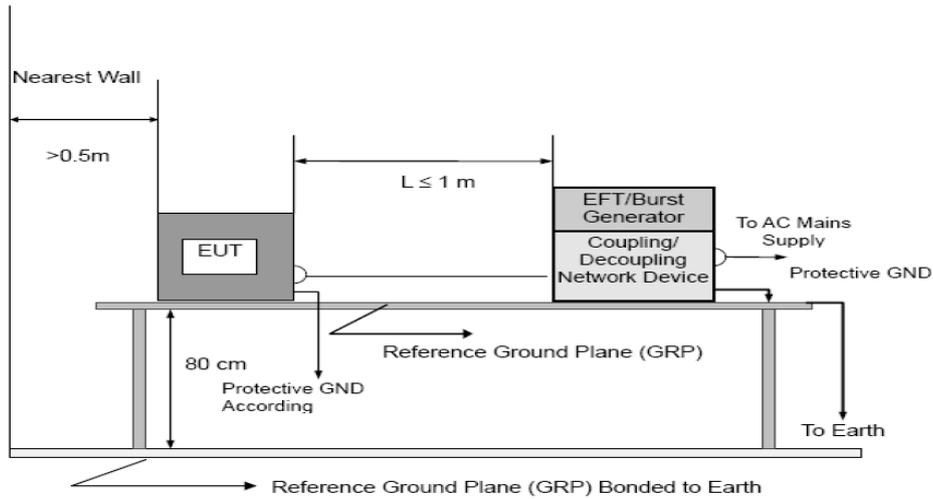


For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : yz.cnca.cn





TEST SETUP



Note:

TABLE-TOP EQUIPMENT

The configuration consisted of a wooden table (0.8m high) standing on the Ground Reference Plane. The GRP consisted of a sheet of aluminum (at least 0.25mm thick and 2.5m square) connected to the protective grounding system. A minimum distance of 0.5m was provided between the EUT and the walls of the laboratory or any other metallic structure.

FLOOR-STANDING EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC/EN 61000-4-4 and its cables, were isolated from the Ground Reference Plane by an insulating support that is 0.1-meter thick. The GRP consisted of a sheet of aluminum (at least 0.25mm thick and 2.5m square) connected to the protective grounding system.



TEST RESULTS

Temperature	24°C	Humidity	50%	Atmospheric pressure	101KPa
Test Ports		Test Voltage	Duration time	Result	Test Result
AC power port		<input type="checkbox"/> ±0.5KV <input checked="" type="checkbox"/> ±1KV <input type="checkbox"/> ±2KV <input type="checkbox"/>	<input checked="" type="checkbox"/> 120s <input type="checkbox"/>	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Signal port		<input checked="" type="checkbox"/> ±0.5KV <input type="checkbox"/> ±1KV <input type="checkbox"/> ±2KV <input type="checkbox"/>	<input checked="" type="checkbox"/> 120s <input type="checkbox"/>	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
* Comment: <input checked="" type="checkbox"/> No degradation was found <input type="checkbox"/> Phenomenon Description					





4.5 Surge

PERFORMANCE CRITERION

Standard	Criterion
EN 55035/EN 61000-4-5	Criteria B

TEST LEVEL

Wave-Shape	Combination Wave 1.2/50 us Open Circuit Voltage for input a.c. power ports
Test Voltage	Line to Line: ± 1 KV Line to Ground: ± 2 KV
Surge Input /Output	L-N; L-PE; N-PE
Generator Source	2 ohm between networks
Impedance	12 ohm between network and ground
Phase Angle	0°/90°/180°/270°
Wave-Shape	Combination Wave 10/700 us Open Circuit Voltage for signal ports
Test Voltage	Line to Ground: ± 1 KV
Telecommunication Ports	40 ohm between network and ground
Polarity	Positive/Negative
Pulse Repetition Rate	1 time / min. (maximum)
Number of Tests	5 positive and 5 negative at selected points

TEST PROCEDURE

Please refer to EN 61000-4-5 for the measurement methods.

TEST MODE

Please refer to the Clause 2.4.

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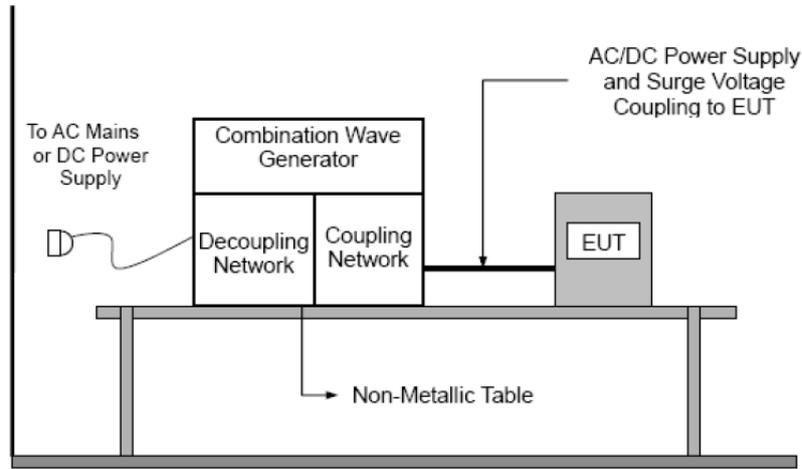


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TEST SETUP



TEST RESULTS

Temperature		24°C	Humidity		50%	Atmospheric pressure		101KPa	
Test Ports		Test Voltage	Resistor	Surge Wave	Times	Phase	Interval time	Phenomenon	Test Result
AC Power port	L-N	<input checked="" type="checkbox"/> ±1 KV <input type="checkbox"/> ±2 KV <input type="checkbox"/> ±4 KV <input type="checkbox"/> ± KV	<input checked="" type="checkbox"/> 2Ω <input type="checkbox"/> 12Ω	<input checked="" type="checkbox"/> 1.2/50us <input type="checkbox"/> 10/700us	<input checked="" type="checkbox"/> ±5	<input checked="" type="checkbox"/> 0° <input type="checkbox"/> 90° <input type="checkbox"/> 180° <input type="checkbox"/> 270°	<input checked="" type="checkbox"/> 60s	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
	L-PE	<input type="checkbox"/> ±1 KV <input type="checkbox"/> ±2 KV <input type="checkbox"/> ±4 KV	<input type="checkbox"/> 2Ω <input type="checkbox"/> 12Ω	<input type="checkbox"/> 1.2/50us <input type="checkbox"/> 10/700us	<input type="checkbox"/> ±5	<input type="checkbox"/> 0° <input type="checkbox"/> 90° <input type="checkbox"/> 180° <input type="checkbox"/> 270°	<input type="checkbox"/> 60s	/	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
	N-PE	<input type="checkbox"/> ±1 KV <input type="checkbox"/> ±2 KV <input type="checkbox"/> ±4 KV	<input type="checkbox"/> 2Ω <input type="checkbox"/> 12Ω	<input type="checkbox"/> 1.2/50us <input type="checkbox"/> 10/700us	<input type="checkbox"/> ±5	<input type="checkbox"/> 0° <input type="checkbox"/> 90° <input type="checkbox"/> 180° <input type="checkbox"/> 270°	<input type="checkbox"/> 60s	/	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Signal port	Lines-PE	<input type="checkbox"/> ±0.5 KV <input checked="" type="checkbox"/> ±1 KV <input type="checkbox"/> ±2 KV	<input checked="" type="checkbox"/> 200/8+15Ω	<input type="checkbox"/> 1.2/50us <input checked="" type="checkbox"/> 10/700us	<input checked="" type="checkbox"/> ±5	/	<input checked="" type="checkbox"/> 60s	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
	Line-Line	<input type="checkbox"/> ±0.5 KV <input type="checkbox"/> ±1 KV <input type="checkbox"/> ±2 KV	<input type="checkbox"/> 200/8+15Ω	<input type="checkbox"/> 1.2/50us <input type="checkbox"/> 10/700us	<input type="checkbox"/> ±5	/	<input type="checkbox"/> 60s	/	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

* Comment:

- No degradation was found
- Phenomenon Description

4.6 Radio frequency continuous conducted

PERFORMANCE CRITERION

Standard	Criterion
EN 55035/EN 61000-4-6	Criteria A

TEST LEVEL

Frequency Range:	0,15 to 10MHz
Field Strength:	3 V r.m.s.
Frequency Range:	10 MHz to 30MHz
Field Strength:	3 to 1 V r.m.s.
Frequency Range:	30 MHz to 80MHz
Field Strength:	1 V r.m.s.
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of fundamental
Dwell Time:	at least 3 seconds

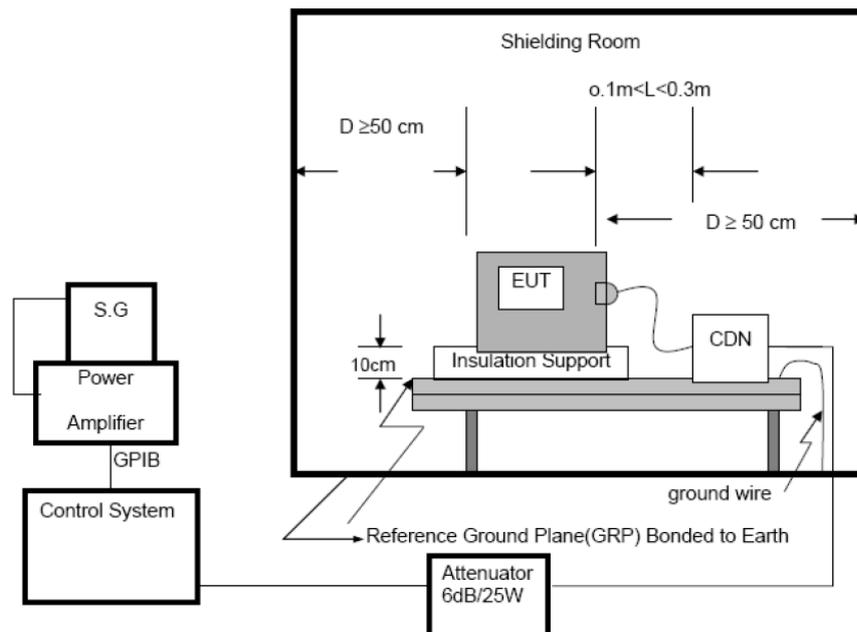
TEST PROCEDURE

Please refer to EN 61000-4-6 for the measurement methods.

TEST MODE

Please refer to the Clause 2.4.

TEST SETUP



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TEST RESULTS

Temperature	24°C	Humidity	50%	Atmospheric pressure	101KPa
Test Ports	Frequency range	Test level (Vrms)	Phenomenon	Test Result	
AC power port	<input type="checkbox"/> 0.15MHz~80MHz <input type="checkbox"/> 0.15MHz~230MHz	<input type="checkbox"/> 1V <input type="checkbox"/> 3V <input type="checkbox"/>	/	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
	<input checked="" type="checkbox"/> 0.15MHz~10MHz <input type="checkbox"/> 10MHz~30MHz <input type="checkbox"/> 30MHz~80MHz	<input type="checkbox"/> 1V <input checked="" type="checkbox"/> 3V <input type="checkbox"/>	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
	<input type="checkbox"/> 0.15MHz~10MHz <input checked="" type="checkbox"/> 10MHz~30MHz <input type="checkbox"/> 30MHz~80MHz	<input type="checkbox"/> 1V <input type="checkbox"/> 3V <input checked="" type="checkbox"/> 3V-1V	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
	<input type="checkbox"/> 0.15MHz~10MHz <input type="checkbox"/> 10MHz~30MHz <input checked="" type="checkbox"/> 30MHz~80MHz	<input checked="" type="checkbox"/> 1V <input type="checkbox"/> 3V <input type="checkbox"/>	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
Signal port	<input checked="" type="checkbox"/> 0.15MHz~10MHz <input type="checkbox"/> 10MHz~30MHz <input type="checkbox"/> 30MHz~80MHz	<input type="checkbox"/> 1V <input checked="" type="checkbox"/> 3V <input type="checkbox"/>	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
	<input type="checkbox"/> 0.15MHz~10MHz <input checked="" type="checkbox"/> 10MHz~30MHz <input type="checkbox"/> 30MHz~80MHz	<input type="checkbox"/> 1V <input type="checkbox"/> 3V <input checked="" type="checkbox"/> 3V-1V	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
	<input type="checkbox"/> 0.15MHz~10MHz <input type="checkbox"/> 10MHz~30MHz <input checked="" type="checkbox"/> 30MHz~80MHz	<input checked="" type="checkbox"/> 1V <input type="checkbox"/> 3V <input type="checkbox"/>	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
*Comment: <input checked="" type="checkbox"/> No degradation was found <input type="checkbox"/> Phenomenon Description					



4.7 Voltage dips, short interruptions and voltage variations

PERFORMANCE CRITERION

Standard	Criterion
EN 55035/ EN IEC 61000-4-11	Criteria B for voltage dip Criteria C for voltage interruption

TEST LEVEL

Required Performance	B (For 0% Voltage Dips) C (For 70% Voltage Dips) C (For 0% Voltage Interruptions)
Test Duration Time	Minimum three test events in sequence
Interval between Event	Minimum ten seconds
Phase Angle	0°/45°/90°/135°/180°/225°/270°/315°
Test Cycle	3 times
Frequency	50Hz/60Hz

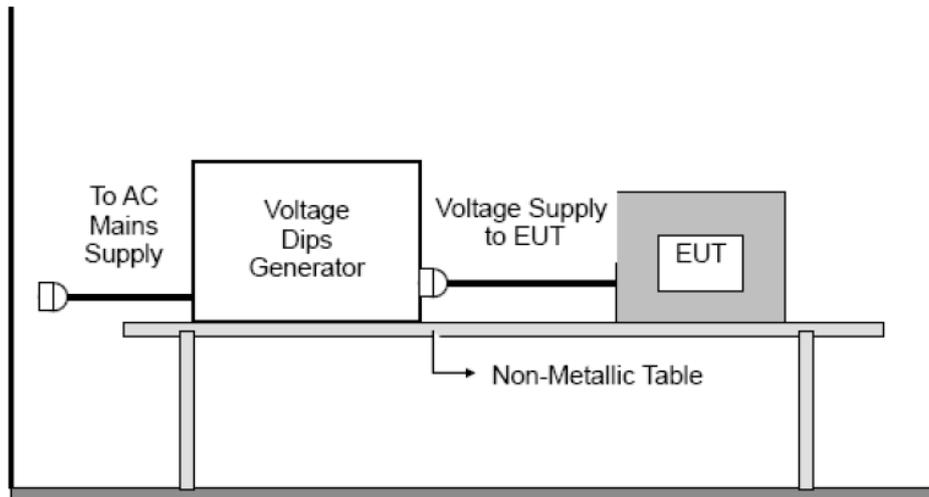
TEST PROCEDURE

Please refer to EN 61000-4-11 for the measurement methods.

TEST MODE

Please refer to the Clause 2.4.

TEST SETUP





TEST RESULTS

Temperature	24°C			Humidity	50%	Atmospheric pressure		101KPa
Voltage Reduction				Cycle		Perform Criteria	Results	Test Result
				50 (Hz)	60 (Hz)			
Voltage dips	Reduction	30 %		25	30	C	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
	Reduction	100 %		0.5	0.5	B	A	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Voltage interruption	Reduction	100 %		250	300	C	C	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
* Comment:								
<input checked="" type="checkbox"/> No degradation was found								
<input type="checkbox"/> Phenomenon Description								



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5 EUT TEST PHOTO

Conducted Emission (AC Mains)



Conducted Emission (Signal Port)



Radiated Measurement (Below 1GHz)



Radiated Measurement (Above 1GHz)



Harmonics/Flicker Test Photo



ESD Test Photo



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R/S Test Photo



Electric Fast Transients (AC port)



Electric Fast Transients (Signal port)



Surges (AC port)



Surges (Signal port)



Radio frequency continuous conducted (AC port)



Radio frequency continuous conducted (Signal port)



Volt. Interruptions/ Volt. Dips Test Photo



6 PHOTOGRAPHS OF EUT

1. Photo



2. Photo



3. Photo



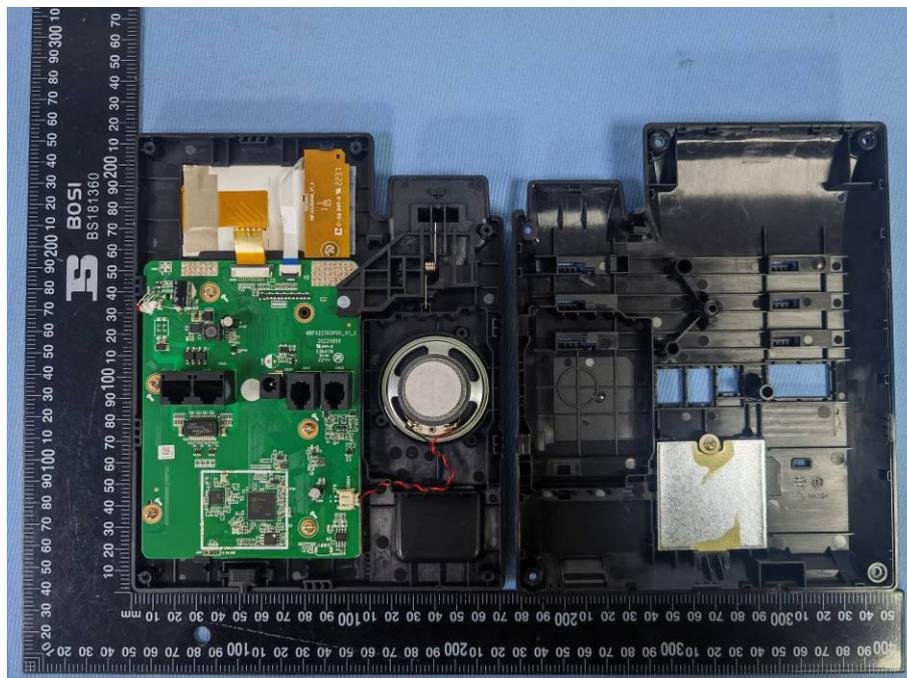
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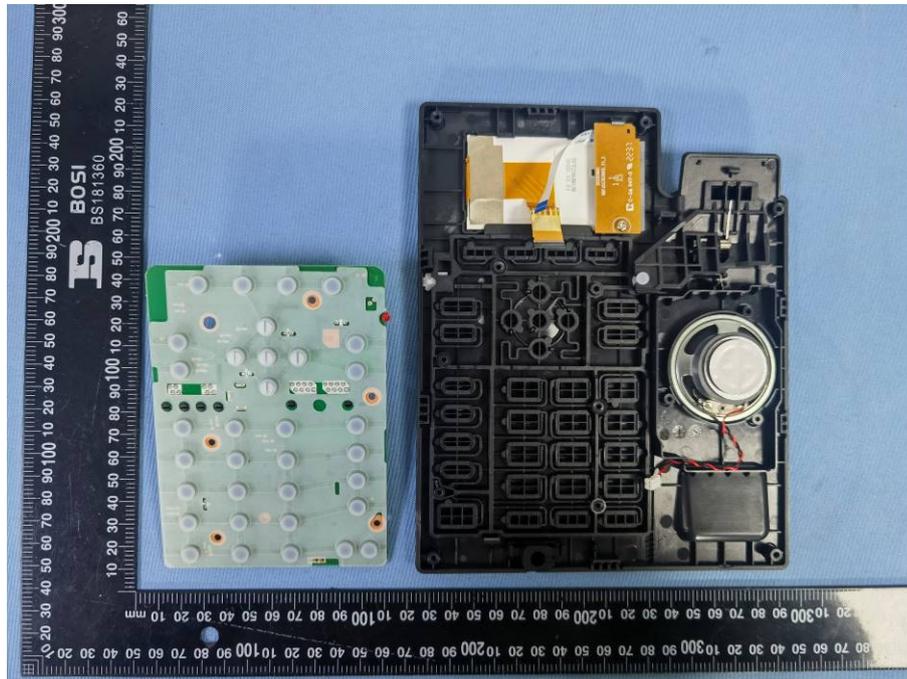
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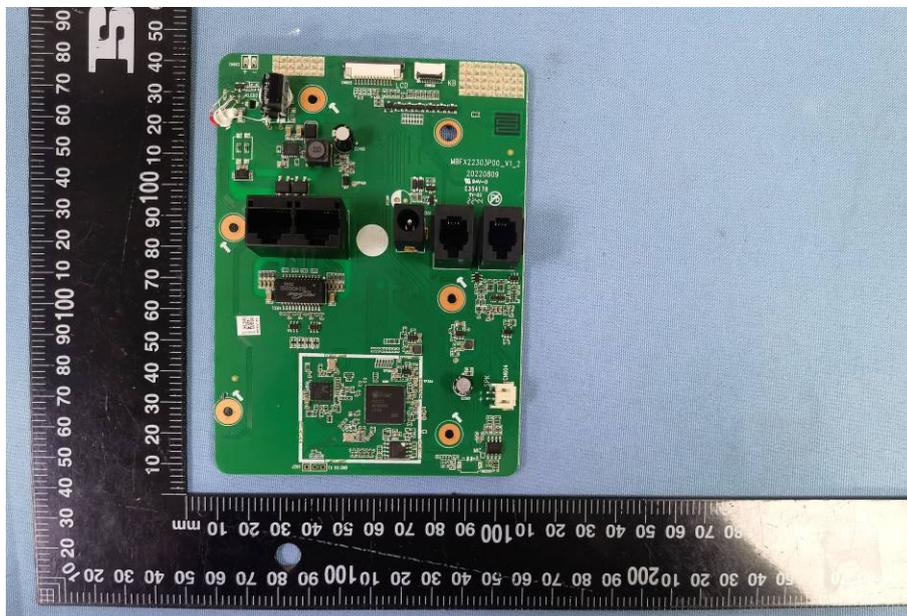
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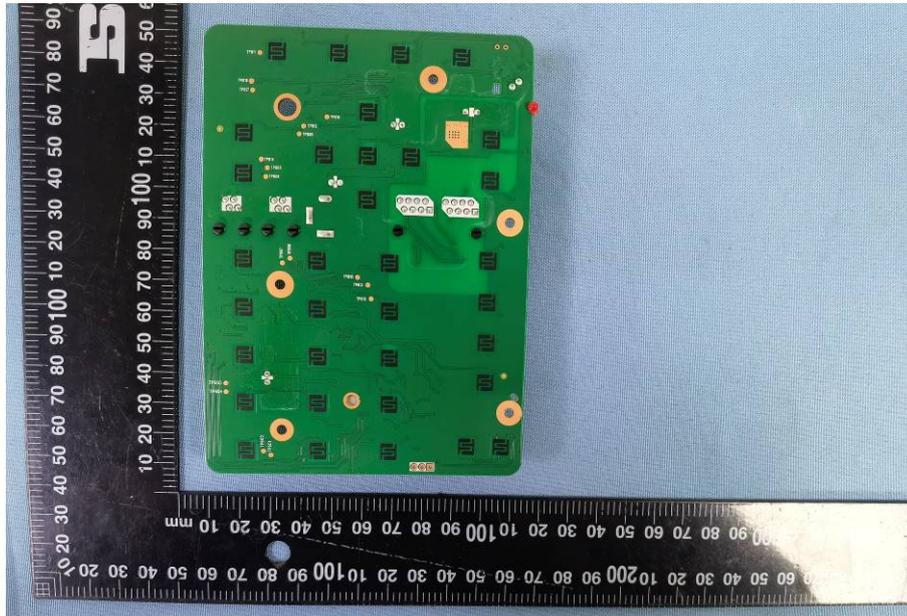
7. Photo



8. Photo



9. Photo



*****THE END*****

