SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

No. 1 Workshop, M-10, Middle section, Science & Technology Park,
Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053
Fax: +86 (0) 755 2671 0594
Email: ee.shenzhen@sgs.com

TEST REPORT

Application No.:	SZEM1708009183IT
Applicant:	Zhejiang Dahua Vision Technology Co., Ltd.
Address of Applicant:	No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China
Manufacturer:	Zhejiang Dahua Vision Technology Co., Ltd.
Address of Manufacturer:	No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China
Factory:	1, ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD. 2, ZHEJIANG DAHUA ZHILIAN CO.,LTD.
Address of Factory:	1, No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China 2, No.28, Dongqiao Road, Dongzhou Street, Fuyang District, Hangzhou, P.R. China.
Equipment Under Test (EUT):	
EUT Name:	IP CAMERA
Model No.:	IPC-HFW4431TN-ASE, DH-IPC-HFW4231TP-ASE, DH-IPC-HFW4231TN-ASE, IPC-HFW4231TP-ASE, IPC-HFW4231TN-ASE, DH-IPC-HFW4431TP-ASE, DH-IPC-HFW4431TN-ASE, IPC-HFW4431TP-ASE, DH-IPC-HFW4631TP-ASE, DH-IPC-HFW4631TN-ASE, IPC-HFW4631TP-ASE, IPC-HFW4631TN-ASE, DH-IPC-HFW4831TP-ASE, DH-IPC-HFW4831TN-ASE, IPC-HFW4831TP-ASE, IPC-HFW4831TN-ASE¤
¤	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Standards:	47 CFR Part 15,Subpart B:2016
Date of Receipt:	2017-08-11
Date of Test:	2017-08-14
Date of Issue:	2017-09-04
Test Result :	**Pass***

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

Jack Zhang
EMC Laboratory 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
00	/	2017-09-04	/	Original

Authorized for issue by:				
				
		Foray Chen /Project Engineer		
				
		Eric Fu /Reviewer		

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

2 Test Summary

Emission Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15,Subpart B:2016	ANSI C63.4	Class B	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15,Subpart B:2016	ANSI C63.4	Class B	Pass
Radiated Emissions (above 1GHz)	47 CFR Part 15,Subpart B:2016	ANSI C63.4	Class B	Pass

InternalSource	UpperFrequency
Below 1.705MHz	30MHz
1.705MHz to 108MHz	1GHz
108MHz to 500MHz	2GHz
500MHz to 1GHz	5GHz
Above 1GHz	5th harmonic of the highest frequency or 40GHz, whichever is lower

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 model IPC-HFW4431TN-ASE was tested since their differences is pixels, sales area and color.

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

3 Contents

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

4 General Information

4.1 Details of E.U.T.

Power supply: DC12V/POE
Cable: Signal cable : about 0.2m
Internal source: 840MHz
Product description: IP CAMERA with a LAN port which can be connect go PC to monitoring video

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Laptop 1	LENOVO	R400	--
PoE Adapter	PowerDsine	PD-9001GR/AC	--

Software:

Description	Manufacturer	Software name	Version no.
EMC test software	Microsoft	Internet Explorer	11.0.9600.18204

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conduction emission	3.0dB (150kHz to 30MHz)
2	Radiated emission	4.5dB (30MHz-1GHz)
3	Temperature test	1℃
4	Humidity test	3%

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

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

• **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab 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.

• **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• **VCCI**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

• **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

5 Equipment List

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
1	Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2017-05-10	2018-05-10
2	LISN	Rohde & Schwarz	ENV216	SEM007-01	2016-10-09	2017-10-09
3	EMI Test Receiver(9kHz-3GHz)	Rohde & Schwarz	ESCI	SEM004-02	2017-04-14	2018-04-13
4	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017-05-10	2018-05-10
5	MXE EMI Receiver (20Hz-8.4GHz)	Agilent Technologies	N9038A	SEM004-05	2016-10-09	2017-10-09
6	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-02	2017-03-05	2020-03-05
7	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2017-04-14	2018-04-13
8	Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2017-04-14	2018-04-13
9	Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2015-06-14	2018-06-13
10	Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-14	2017-06-16	2020-06-15
11	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-10	2016-10-17	2017-10-17
12	Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2017-04-14	2018-04-13
13	Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

6 Emission Test Results

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

Test Requirement:	47 CFR Part 15,Subpart B:2016
Test Method:	ANSI C63.4
Frequency Range:	150kHz to 30MHz
Limit:	
0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(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

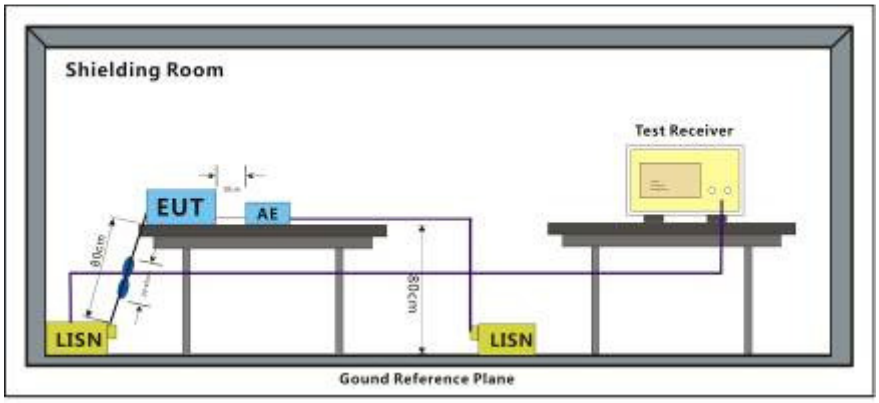
Operating Environment:

Temperature: 22 °C Humidity: 51 % RH Atmospheric Pressure: 1002 mbar

Test mode: a:DC12V monitoring : keep EUT monitoring and scanning continual with DC12V adapter .

b: PoE monitoring : keep EUT monitoring and scanning continual with PoE adapter .

6.1.2 Test Setup Diagram

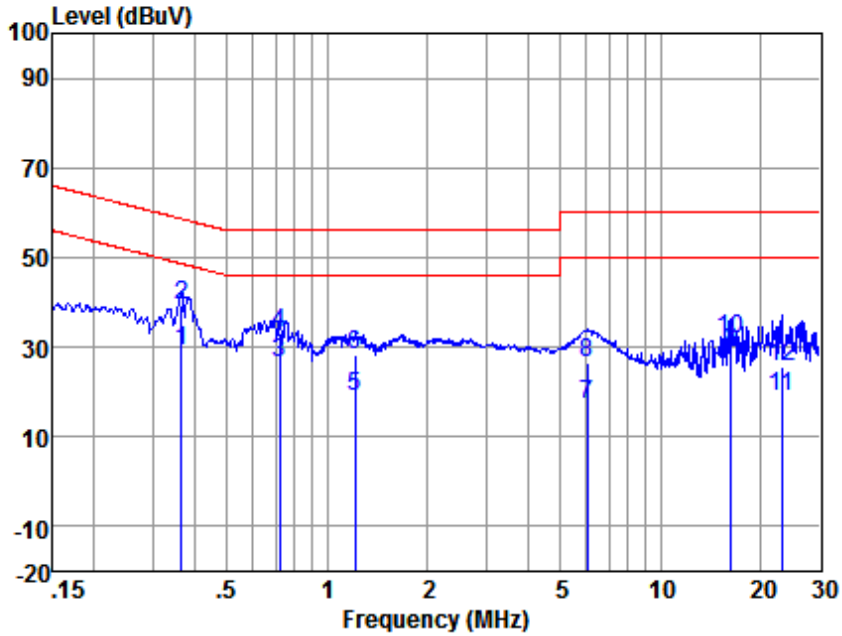


6.1.3 Measurement Data

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:a; Line:Live Line

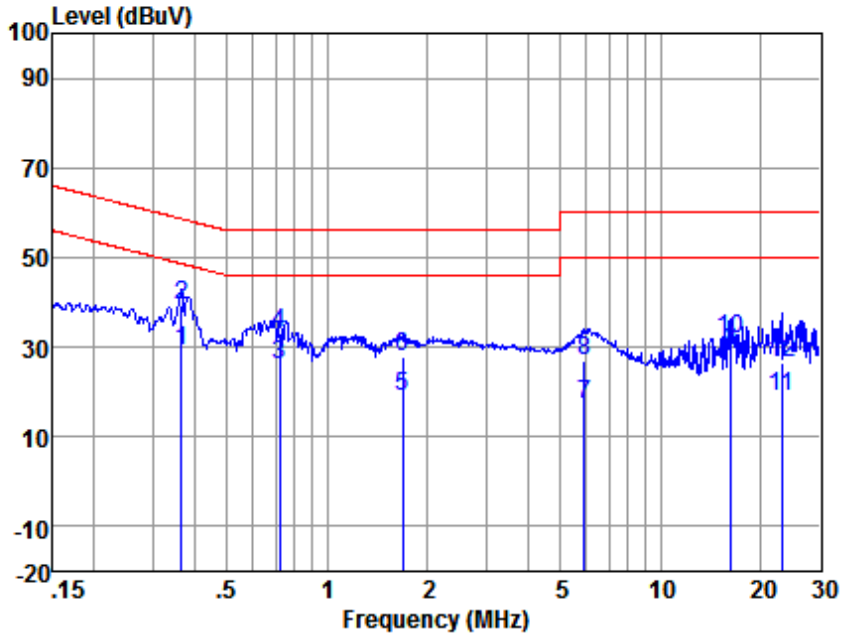


Site : chamber
Condition : LISN-L-2017
EUT/Project No: 5337IT
Test mode : a

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.365	19.17	0.11	9.81	29.09	48.61	-19.52	Average
2	0.365	29.62	0.11	9.81	39.54	58.61	-19.07	QP
3	0.720	16.37	0.11	9.83	26.31	46.00	-19.69	Average
4	0.720	23.30	0.11	9.83	33.24	56.00	-22.76	QP
5	1.216	9.13	0.11	9.84	19.08	46.00	-26.92	Average
6	1.216	18.51	0.11	9.84	28.46	56.00	-27.54	QP
7	6.056	7.26	0.11	9.86	17.23	50.00	-32.77	Average
8	6.056	16.39	0.11	9.86	26.36	60.00	-33.64	QP
9	16.226	18.64	0.16	10.02	28.82	50.00	-21.18	Average
10	16.226	21.53	0.16	10.02	31.71	60.00	-28.29	QP
11	23.140	8.67	0.20	10.04	18.91	50.00	-31.09	Average
12	23.140	15.34	0.20	10.04	25.58	60.00	-34.42	QP

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:a; Line:Neutral Line

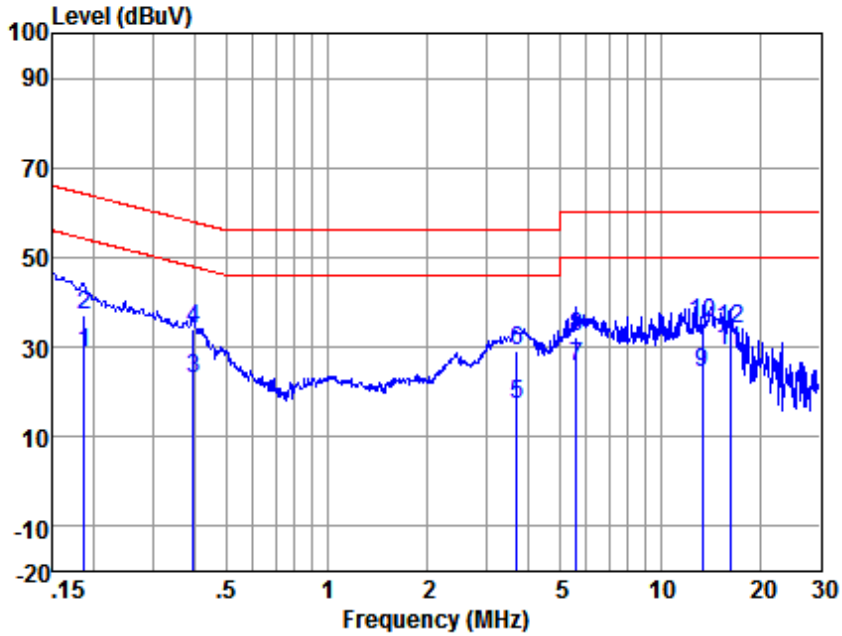


Site : chamber
Condition : LISN-N-2017
EUT/Project No: 5337IT
Test mode : a

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.365	19.06	0.11	9.81	28.98	48.61	-19.63	Average
2	0.365	29.60	0.11	9.81	39.52	58.61	-19.09	QP
3	0.720	16.18	0.11	9.83	26.12	46.00	-19.88	Average
4	0.720	23.19	0.11	9.83	33.13	56.00	-22.87	QP
5	1.689	8.94	0.12	9.84	18.90	46.00	-27.10	Average
6	1.689	17.98	0.12	9.84	27.94	56.00	-28.06	QP
7	5.898	7.00	0.13	9.86	16.99	50.00	-33.01	Average
8	5.898	16.79	0.13	9.86	26.78	60.00	-33.22	QP
9	16.226	18.64	0.18	10.02	28.84	50.00	-21.16	Average
10	16.226	21.49	0.18	10.02	31.69	60.00	-28.31	QP
11	23.140	8.76	0.21	10.04	19.01	50.00	-30.99	Average
12	23.140	16.24	0.21	10.04	26.49	60.00	-33.51	QP

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:b; Line:Live Line

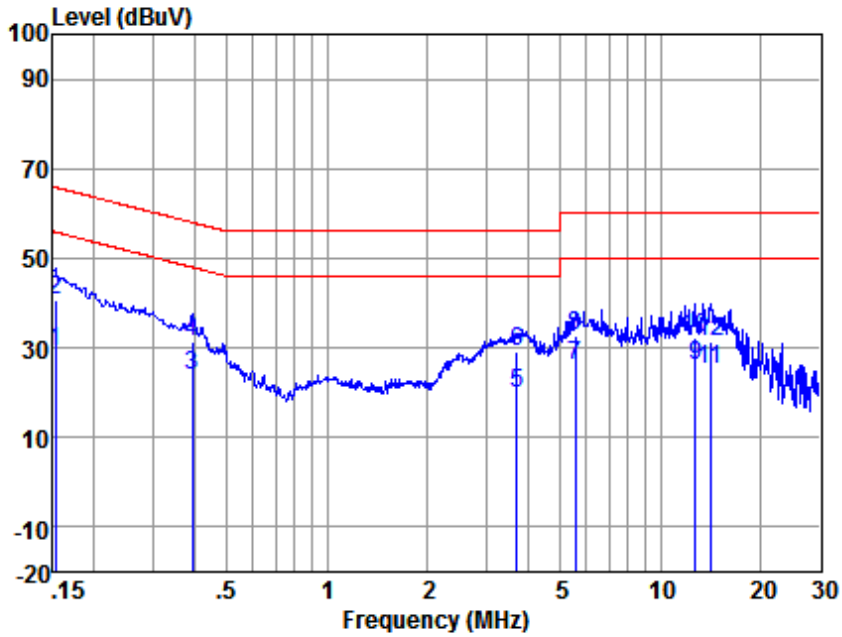


Site : chamber
Condition : LISN-L-2017
EUT/Project No: 5337IT
Test mode : b

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.186	18.91	0.11	9.81	28.83	54.20	-25.37	Average
2	0.186	27.17	0.11	9.81	37.09	64.20	-27.11	QP
3	0.396	13.21	0.11	9.81	23.13	47.95	-24.82	Average
4	0.396	24.29	0.11	9.81	34.21	57.95	-23.74	QP
5	3.720	7.06	0.12	9.85	17.03	46.00	-28.97	Average
6	3.720	18.98	0.12	9.85	28.95	56.00	-27.05	QP
7	5.594	15.55	0.11	9.86	25.52	50.00	-24.48	Average
8	5.594	22.15	0.11	9.86	32.12	60.00	-27.88	QP
9	13.337	14.02	0.13	9.96	24.11	50.00	-25.89	Average
10	13.337	25.08	0.13	9.96	35.17	60.00	-24.83	QP
11	16.226	19.08	0.16	10.02	29.26	50.00	-20.74	Average
12	16.226	23.93	0.16	10.02	34.11	60.00	-25.89	QP

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:b; Line:Neutral Line



Site : chamber
Condition : LISN-N-2017
EUT/Project No: 5337IT
Test mode : b

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.152	19.38	0.12	9.81	29.31	55.87	-26.56	Average
2	0.152	30.73	0.12	9.81	40.66	65.87	-25.21	QP
3	0.393	13.71	0.11	9.81	23.63	47.99	-24.36	Average
4	0.393	21.50	0.11	9.81	31.42	57.99	-26.57	QP
5	3.720	10.02	0.13	9.85	20.00	46.00	-26.00	Average
6	3.720	19.07	0.13	9.85	29.05	56.00	-26.95	QP
7	5.564	16.21	0.13	9.86	26.20	50.00	-23.80	Average
8	5.564	22.77	0.13	9.86	32.76	60.00	-27.24	QP
9	12.716	15.97	0.15	9.93	26.05	50.00	-23.95	Average
10	12.716	22.30	0.15	9.93	32.38	60.00	-27.62	QP
11	14.138	15.18	0.16	10.00	25.34	50.00	-24.66	Average
12	14.138	21.25	0.16	10.00	31.41	60.00	-28.59	QP

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

6.2 Radiated Emissions (30MHz-1GHz)

Test Requirement:	47 CFR Part 15,Subpart B:2016
Test Method:	ANSI C63.4
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m
Limit:	
30MHz -88MHz	40.0(dBμV/m) quasi-peak
88MHz-216MHz	43.5(dBμV/m) quasi-peak
216MHz-960MHz	46.0(dBμV/m) quasi-peak
960MHz-1000MHz	54.0(dBμV/m) quasi-peak
Detector:	Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

6.2.1 E.U.T. Operation

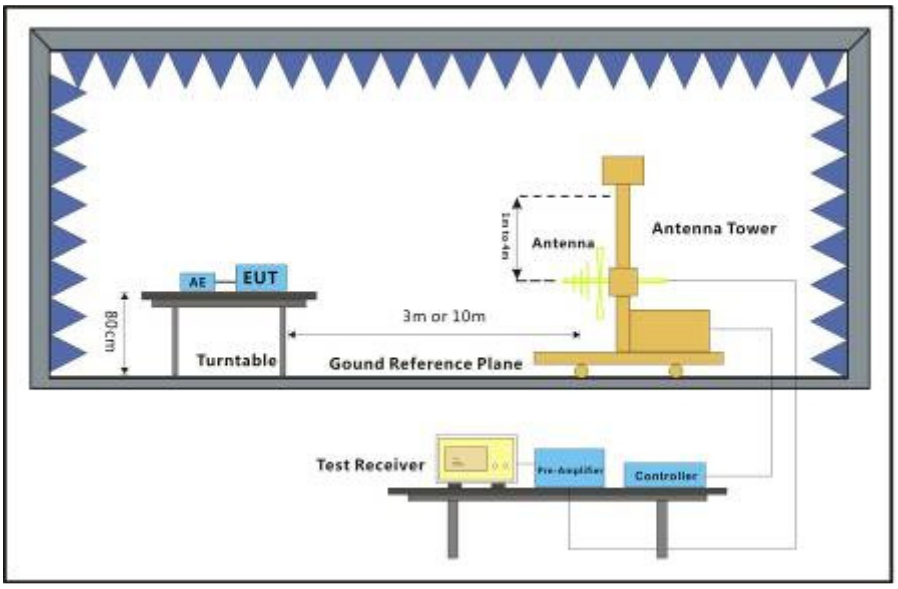
Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar

Test mode: a:DC12V monitoring : keep EUT monitoring and scanning continual with DC12V adapter .

b: PoE monitoring : keep EUT monitoring and scanning continual with PoE adapter .

6.2.2 Test Setup Diagram

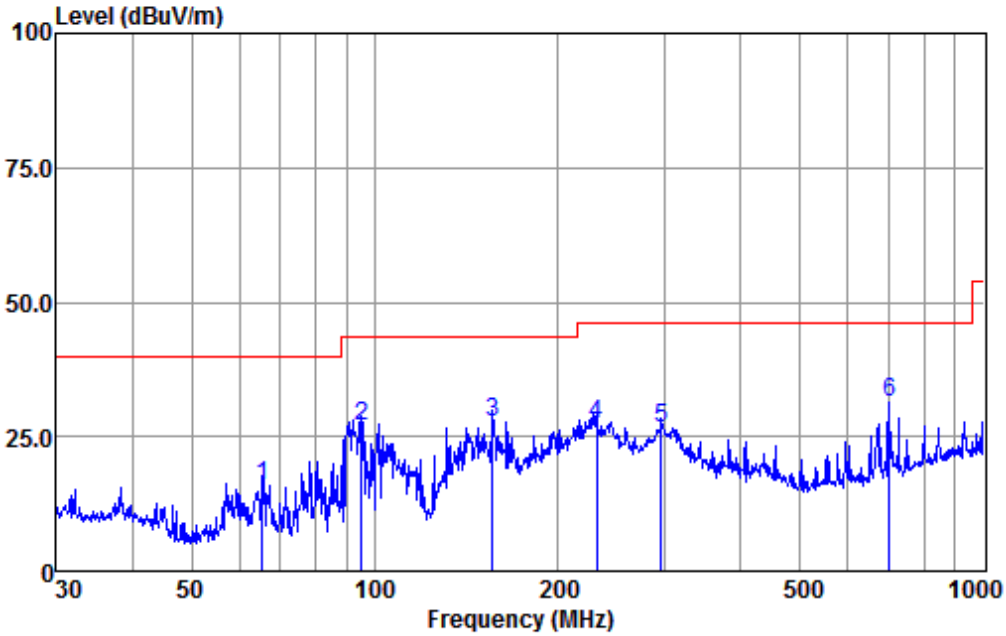


6.2.3 Measurement Data

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:a; Polarization:Horizontal

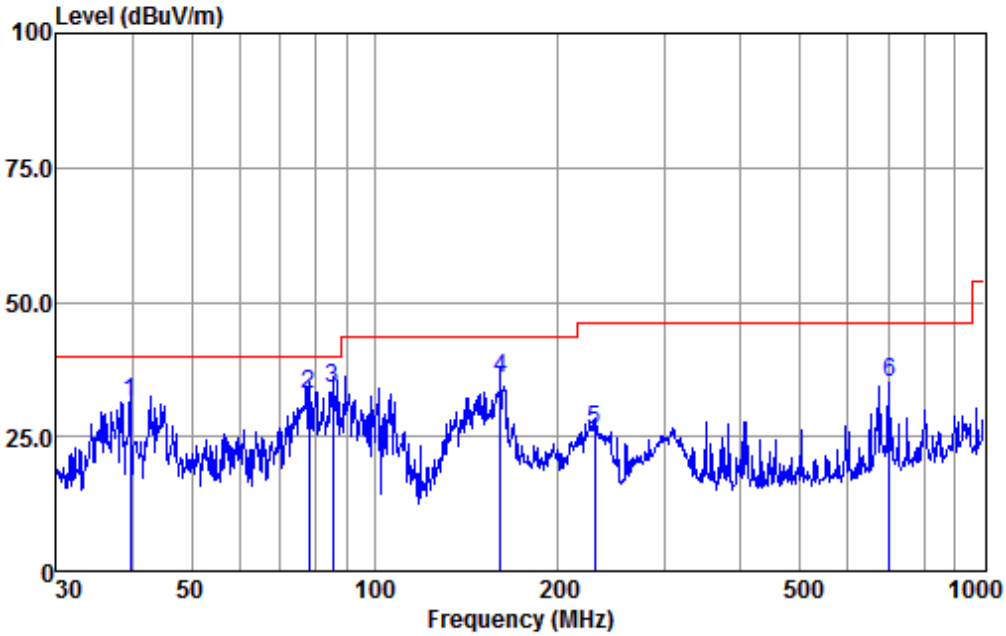


Condition : HORIZONTAL
EUT/Project: 5337IT
Test mode : a

	Freq	Read 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	65.34	46.27	11.95	0.32	42.66	15.88	40.00	-24.12	QP
2	95.09	60.25	8.85	0.44	42.69	26.85	43.50	-16.65	QP
3	156.46	57.13	12.70	0.63	42.60	27.86	43.50	-15.64	QP
4	231.72	58.33	10.78	0.74	42.48	27.37	46.00	-18.63	QP
5	296.18	54.91	13.07	0.84	42.40	26.42	46.00	-19.58	QP
6 q	701.76	51.79	20.24	1.68	42.41	31.30	46.00	-14.70	QP

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:a; Polarization:Vertical

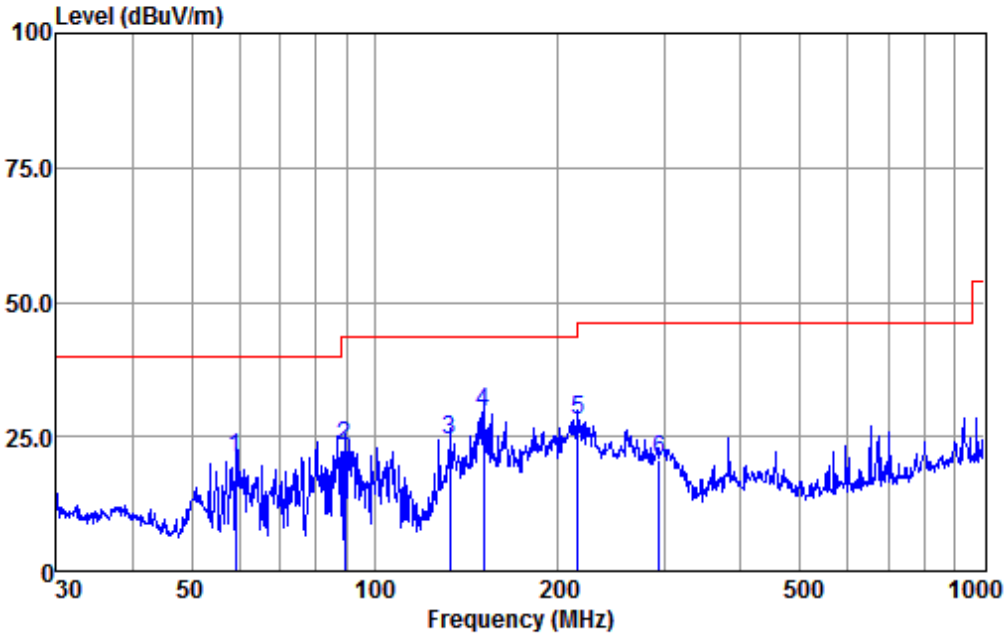


Condition : VERTICAL
EUT/Project: 5337IT
Test mode : a

	Freq	Read 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	39.71	57.54	16.28	0.22	42.62	31.42	40.00	-8.58	QP
2	78.14	66.66	8.63	0.37	42.67	32.99	40.00	-7.01	QP
3 q	85.30	68.23	8.05	0.40	42.68	34.00	40.00	-6.00	QP
4	160.91	64.84	12.93	0.64	42.59	35.82	43.50	-7.68	QP
5	230.10	57.32	10.71	0.74	42.48	26.29	46.00	-19.71	QP
6	701.76	55.52	20.24	1.68	42.41	35.03	46.00	-10.97	QP

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:b; Polarization:Horizontal

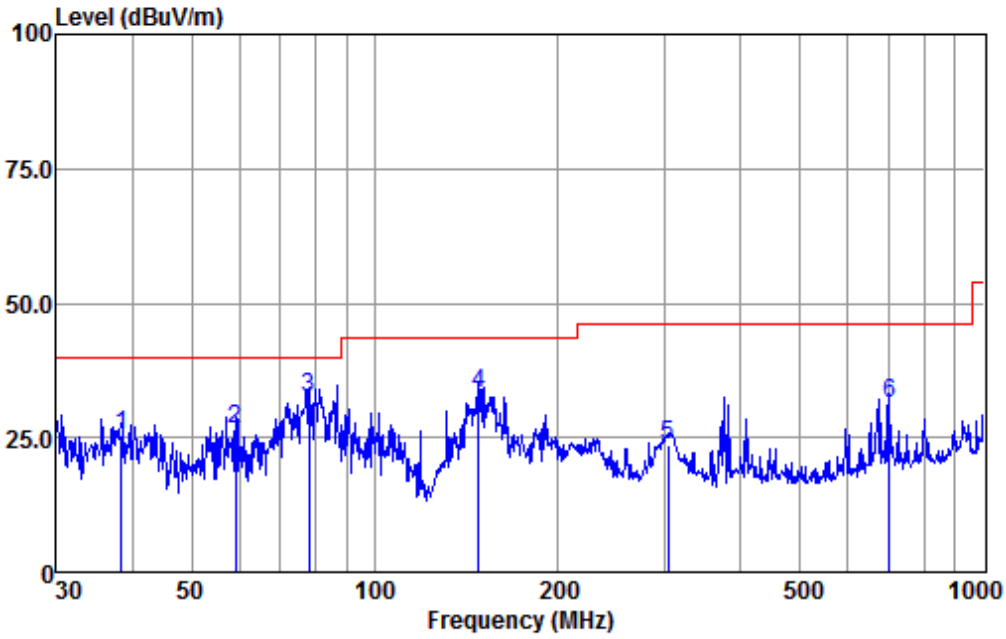


Condition : HORIZONTAL
EUT/Project: 5337IT
Test mode : b

	Freq	Read 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	59.03	50.98	12.41	0.30	42.65	21.04	40.00	-18.96	QP
2	89.28	57.50	8.09	0.41	42.68	23.32	43.50	-20.18	QP
3	133.15	54.23	12.30	0.59	42.65	24.47	43.50	-19.03	QP
4 q	151.07	59.44	12.03	0.62	42.61	29.48	43.50	-14.02	QP
5	216.02	59.57	10.12	0.72	42.50	27.91	46.00	-18.09	QP
6	293.08	49.44	12.97	0.83	42.41	20.83	46.00	-25.17	QP

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:b; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 5337IT
Test mode : b

	Freq	Read 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	38.35	51.87	16.15	0.22	42.62	25.62	40.00	-14.38	QP
2	59.03	56.58	12.41	0.30	42.65	26.64	40.00	-13.36	QP
3 q	78.14	66.03	8.63	0.37	42.67	32.36	40.00	-7.64	QP
4	148.44	63.37	11.81	0.62	42.61	33.19	43.50	-10.31	QP
5	303.54	51.96	13.27	0.85	42.39	23.69	46.00	-22.31	QP
6	701.76	51.69	20.24	1.68	42.41	31.20	46.00	-14.80	QP

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

6.3 Radiated Emissions (above 1GHz)

Test Requirement:	47 CFR Part 15,Subpart B:2016
Test Method:	ANSI C63.4
Frequency Range:	Above 1GHz
Measurement Distance:	3m
Limit:	
Above 1GHz	74(dBμV/m) peak, 54(dBμV/m) average
Detector:	Peak for pre-scan (1000kHz resolution bandwidth) 1000M to18000MHz

6.3.1 E.U.T. Operation

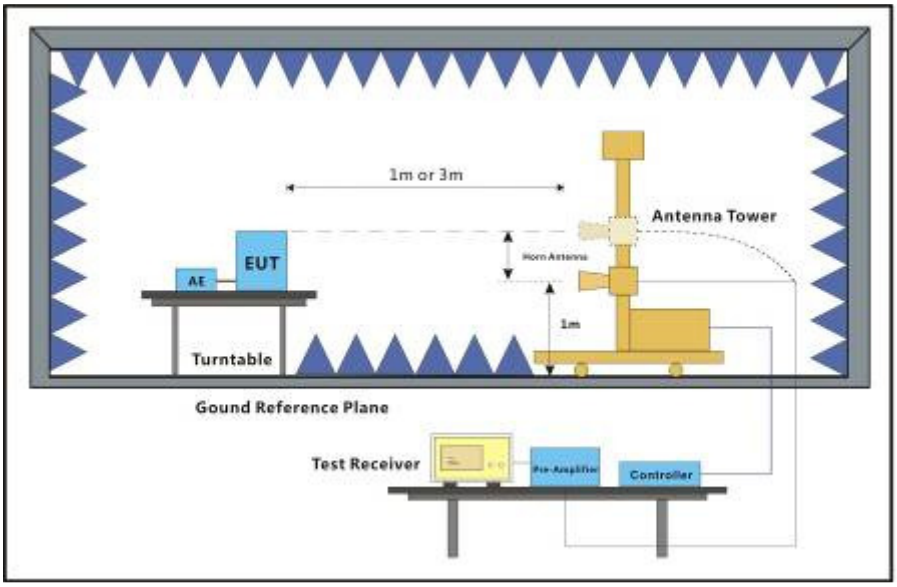
Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar

Test mode: a:DC12V monitoring : keep EUT monitoring and scanning continual with DC12V adapter .

b: PoE monitoring : keep EUT monitoring and scanning continual with PoE adapter .

6.3.2 Test Setup Diagram

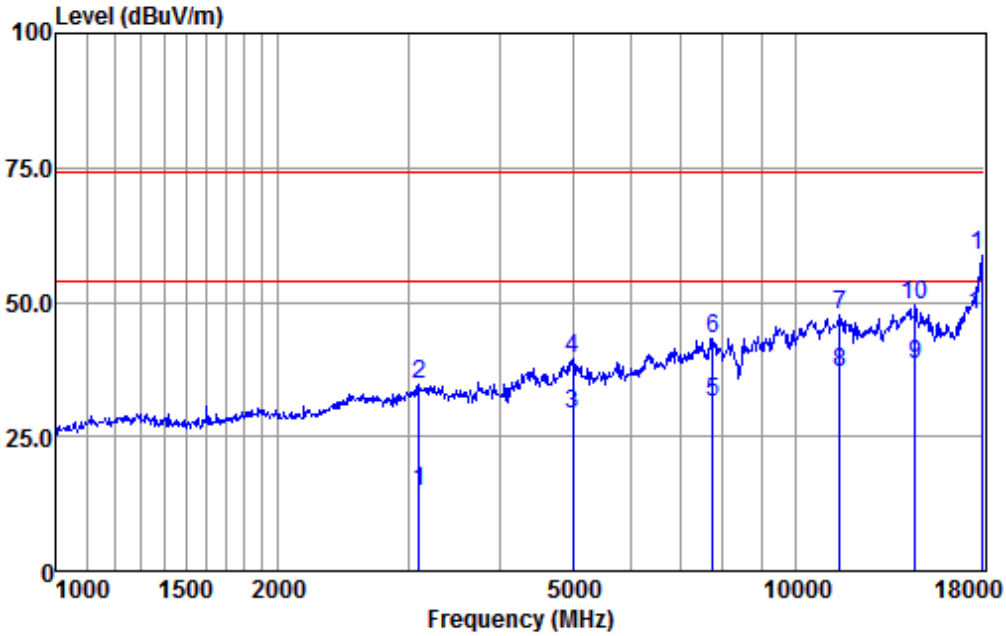


6.3.3 Measurement Data

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:a; Polarization:Horizontal

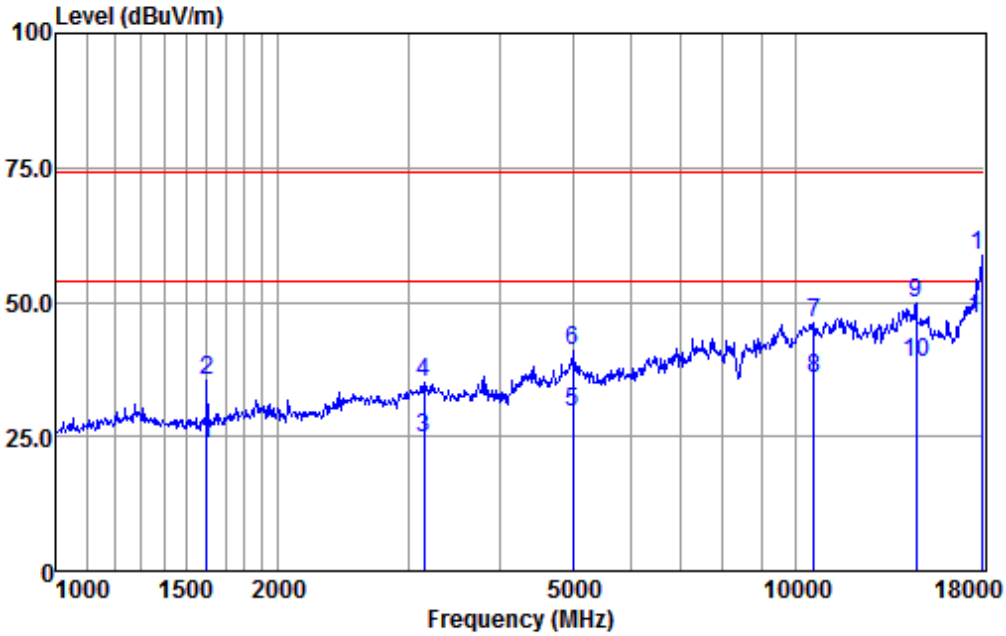


Condition : HORIZONTAL
EUT/Project: 5337IT
Test mode : a

	Freq	Read 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	3096.08	22.22	28.56	5.89	41.74	14.93	54.00	-39.07	Average
2	3096.08	42.16	28.56	5.89	41.74	34.87	74.00	-39.13	Peak
3	5002.50	30.96	31.60	8.19	41.61	29.14	54.00	-24.86	Average
4	5002.50	41.41	31.60	8.19	41.61	39.59	74.00	-34.41	Peak
5	7739.86	28.13	36.95	8.84	42.43	31.49	54.00	-22.51	Average
6	7739.86	39.77	36.95	8.84	42.43	43.13	74.00	-30.87	Peak
7	11500.20	39.25	40.20	9.76	41.78	47.43	74.00	-26.57	Peak
8	11500.20	28.54	40.20	9.76	41.78	36.72	54.00	-17.28	Average
9	14575.97	27.61	41.80	10.26	41.35	38.32	54.00	-15.68	Average
10	14575.97	38.83	41.80	10.26	41.35	49.54	74.00	-24.46	Peak
11 p	17948.05	37.69	50.11	12.83	41.80	58.83	74.00	-15.17	Peak
12	17948.05	26.47	50.11	12.83	41.80	47.61	54.00	-6.39	Average

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:a; Polarization:Vertical

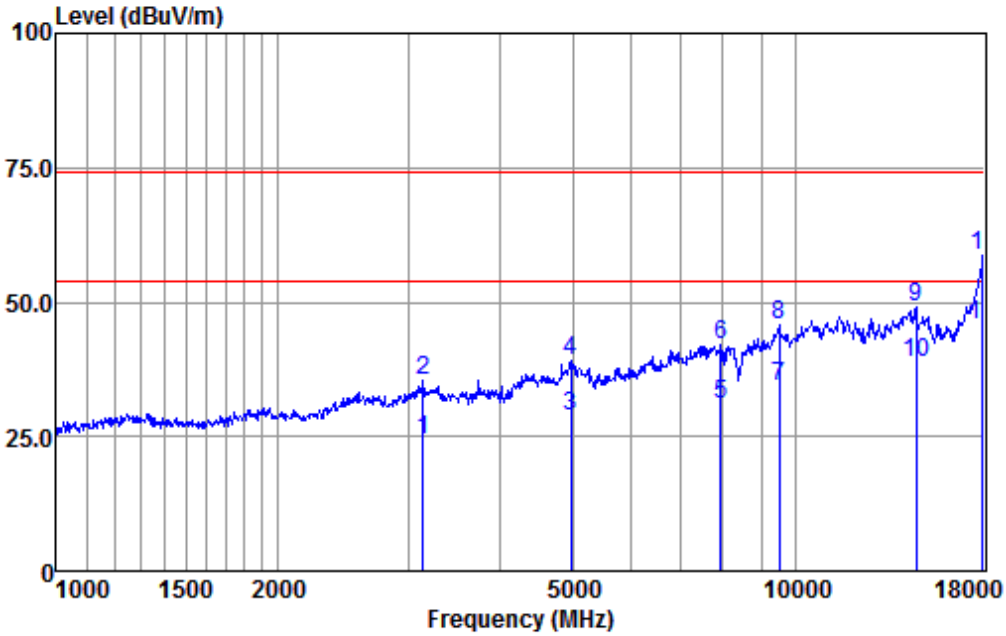


Condition : VERTICAL
EUT/Project: 5337IT
Test mode : a

	Freq	Read 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	1597.18	36.25	25.38	3.97	41.99	23.61	54.00	-30.39	Average
2	1597.18	47.97	25.38	3.97	41.99	35.33	74.00	-38.67	Peak
3	3150.24	31.99	28.60	5.92	41.76	24.75	54.00	-29.25	Average
4	3150.24	42.18	28.60	5.92	41.76	34.94	74.00	-39.06	Peak
5	5002.50	31.33	31.60	8.19	41.61	29.51	54.00	-24.49	Average
6	5002.50	42.85	31.60	8.19	41.61	41.03	74.00	-32.97	Peak
7	10606.15	38.82	39.87	9.64	42.04	46.29	74.00	-27.71	Peak
8	10606.15	28.43	39.87	9.64	42.04	35.90	54.00	-18.10	Average
9	14618.17	39.18	41.75	10.24	41.35	49.82	74.00	-24.18	Peak
10	14618.17	28.16	41.75	10.24	41.35	38.80	54.00	-15.20	Average
11 p	17948.05	37.64	50.11	12.83	41.80	58.78	74.00	-15.22	Peak
12	17948.05	25.83	50.11	12.83	41.80	46.97	54.00	-7.03	Average

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:b; Polarization:Horizontal

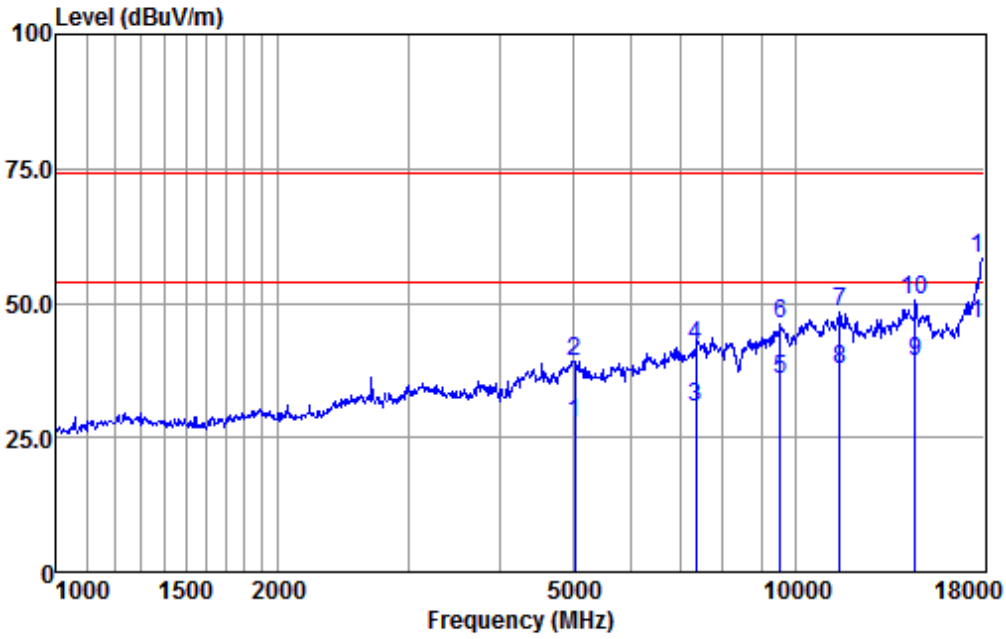


Condition : HORIZONTAL
EUT/Project: 5337IT
Test mode : b

	Freq	Read 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	3141.15	31.56	28.59	5.92	41.76	24.31	54.00	-29.69	Average
2	3141.15	42.67	28.59	5.92	41.76	35.42	74.00	-38.58	Peak
3	4973.66	30.65	31.55	8.17	41.61	28.76	54.00	-25.24	Average
4	4973.66	41.08	31.55	8.17	41.61	39.19	74.00	-34.81	Peak
5	7943.84	27.25	37.15	8.90	42.39	30.91	54.00	-23.09	Average
6	7943.84	38.41	37.15	8.90	42.39	42.07	74.00	-31.93	Peak
7	9530.43	28.59	38.52	9.62	42.32	34.41	54.00	-19.59	Average
8	9530.43	39.97	38.52	9.62	42.32	45.79	74.00	-28.21	Peak
9	14618.17	38.48	41.75	10.24	41.35	49.12	74.00	-24.88	Peak
10	14618.17	27.92	41.75	10.24	41.35	38.56	54.00	-15.44	Average
11 p	17948.05	37.38	50.11	12.83	41.80	58.52	74.00	-15.48	Peak
12	17948.05	24.58	50.11	12.83	41.80	45.72	54.00	-8.28	Average

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Mode:b; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 5337IT
Test mode : b

	Freq	Read 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	5031.50	29.48	31.62	8.19	41.63	27.66	54.00	-26.34	Average
2	5031.50	40.94	31.62	8.19	41.63	39.12	74.00	-34.88	Peak
3	7347.47	28.06	36.32	8.74	42.41	30.71	54.00	-23.29	Average
4	7347.47	39.28	36.32	8.74	42.41	41.93	74.00	-32.07	Peak
5	9558.02	29.97	38.54	9.62	42.31	35.82	54.00	-18.18	Average
6	9558.02	40.29	38.54	9.62	42.31	46.14	74.00	-27.86	Peak
7	11500.20	40.11	40.20	9.76	41.78	48.29	74.00	-25.71	Peak
8	11500.20	29.43	40.20	9.76	41.78	37.61	54.00	-16.39	Average
9	14575.97	28.32	41.80	10.26	41.35	39.03	54.00	-14.97	Average
10	14575.97	39.71	41.80	10.26	41.35	50.42	74.00	-23.58	Peak
11	18000.00	24.42	50.90	12.83	41.86	46.29	54.00	-7.71	Average
12 p	18000.00	36.56	50.90	12.83	41.86	58.43	74.00	-15.57	Peak

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

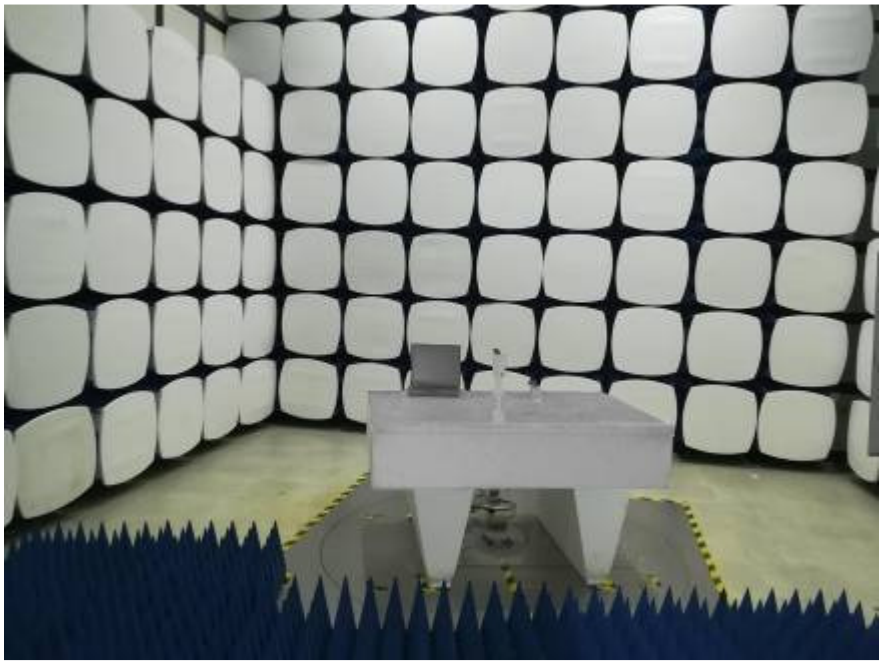
7 Photographs

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

7.3 Radiated Emissions (above 1GHz) Test Setup



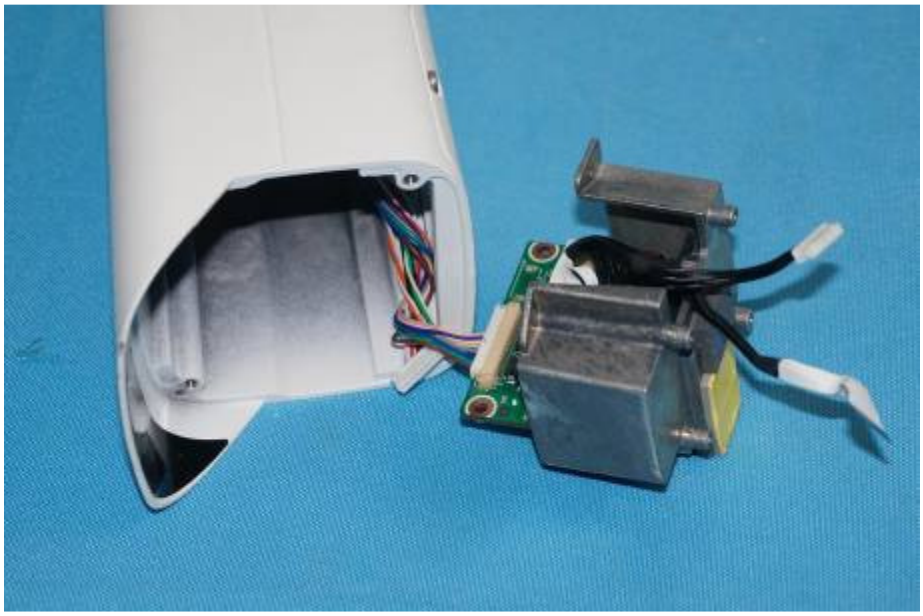
This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

7.4 EUT Constructional Details

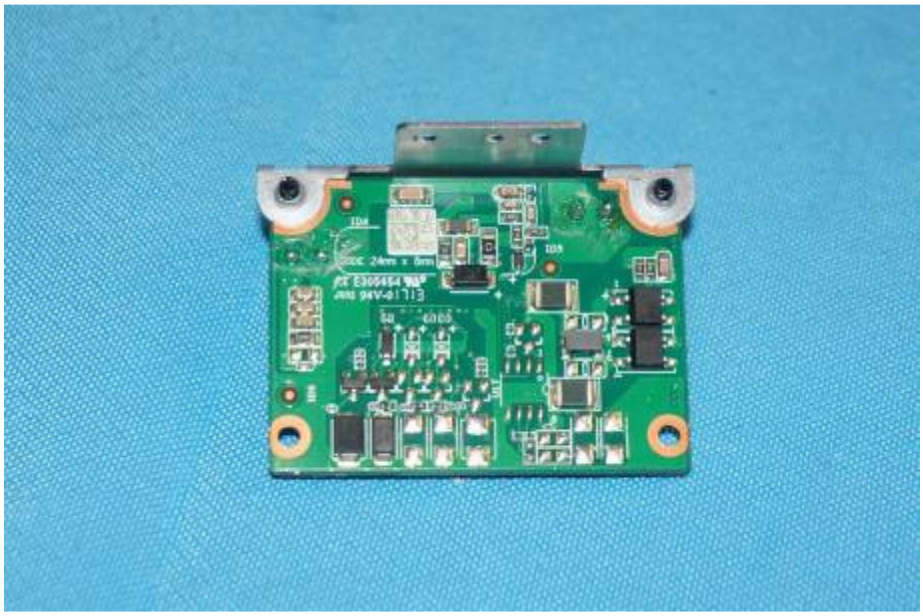
This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



--End of the Report--

This document is issued by the Company subject to its General Conditions of Service printed overleaf,-available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.