TEST REPORT

Product	:	Yarbo Snow Blower
Trade mark	:	Yarbo
Model/Type reference	:	S1
Serial Number	:	N/A
Report Number	:	EED32P81644201
FCC ID	:	2A9JF-HY0919-YARBO
Date of Issue	:	Oct. 12, 2024
Test Standards	:	47 CFR Part 15 Subpart C
Test result	:	PASS

Prepared for:

Shenzhen Hanyang Technology Co., Ltd
Room 5018,Buildings 3, 4 and 5, Baoneng Science and Technology Park,Qinghu Community, Longhua Street, Longhua District, Shenzhen, China

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Compiled By:	Frazer Li	Reviewed by:	Tom Chen
Approved by:	Aaron Ma	Date:	Oct. 12, 2024

Check No.: 1449171023

1 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203	ANSI C63.10:2013	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Subpart C Section 15.207	ANSI C63.10:2013	PASS
Radiated Emissions	47 CFR Part 15 Subpart C Section 15.209	ANSI C63.10:2013	PASS

Remark:
Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

2 Contents

3 General Information

3.1 Client Information

Applicant:	Shenzhen Hanyang Technology Co., Ltd
Address of Applicant:	Room 5018,Buildings 3, 4 and 5, Baoneng Science and Technology Park,Qinghu Community, Longhua Street, Longhua District, Shenzhen, China
Manufacturer:	Shenzhen Hanyang Technology Co., Ltd
Address of Manufacturer:	Room 5018,Buildings 3, 4 and 5, Baoneng Science and Technology Park,Qinghu Community, Longhua Street, Longhua District, Shenzhen, China
Factory:	Hanyang (Zhejiang) Robotics Technology Co., Ltd.
Address of Factory:	Floors 1 and 2，No. 18, Zhenzhong East Road, Weitang Street, Jiashan County, Jiaxing City, Zhejiang , China.

3.2 General Description of EUT

Product Name:	Yarbo Snow Blower	
Model No.:	S1	
Trade Mark:	Yarbo	
Device type:	Floor Stand device	
Frequency Range:	49kHz-89kHz	
Modulation Type:	FSK	
Antenna Type:	Coil antenna	
Power Supply:	Input:	AC 100-240V~50/60Hz,5.0A
	Output:	42.0V,7.7A
	Wireless charging:	RX Coil: DC 42V15A (630W)
Test Power Grade:	Default	
Test Software of EUT:	RF test	
Sample Received Date:	Sep. 16, 2024	
Sample tested Date:	Sep. 16, 2024 to Sep. 24, 2024	

3.3 Test Environment and Mode

Operating Environment:	
Radiated Spurious Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
Conducted Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
Test mode: Transmitting mode	
Mode a:	Wireless charging mode with 0% battery
Mode b:	Wireless charging mode with 50% battery
Mode c:	Wireless charging mode with 100% battery
Mode d:	Direct exposure during device removal
Mode e:	Standby mode

3.4 Description of Support Units

The EUT has been tested with associated equipment below.

1）support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
Wireless Recharger	Yarbo	/	FCC ID and DOC	Client

3.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd
Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China
Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385
No tests were sub-contracted.
FCC Designation No.: CN1164

3.6 Deviation from Standards

None.

3.7 Abnormalities from Standard Conditions

None.

3.8 Other Information Requested by the Customer

None.

3.9 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	3.3dB (9kHz-30MHz)
		4.3dB (30MHz-1GHz)
		4.5dB (1GHz-12.75GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

4 Equipment List

Conducted Emissions Test					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
Receiver	R&S	ESCI	100435	04-18-2024	04-17-2025
LISN	R&S	ENV216	100098	09-22-2023 09-19-2024	09-21-2024 09-18-2025
Capacitive voltage probe	Schwarzbeck	CVP 9222C	00124	06-18-2024	06-17-2025
ISN	TESEQ	ISN T800	30297	12-14-2023	12-13-2024
Barometer	Changchun	DYM3	1188	---	---
Temperature/ Humidity Indicator	Defu	TH128	---	04-25-2024	04-24-2025
Test software	Fara	EZ-EMC	EMC-CON 3A1.1	---	---

3M Semi/full-anechoic Chamber(2#)					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. Date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05-22-2022	05-21-2025
Receiver	R&S	ESCI7	100938-003	09-07-2024	09-06-2025
Spectrum Analyzer	R&S	FSV40	101200	07-18-2024	07-17-2025
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04-16-2024	04-15-2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-618	05-18-2024	05-17-2025
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1869	04-16-2024	04-15-2025
Horn Antenna	A.H.SYSTEMS	SAS-574	374	07-02-2023	07-01-2026
Preamplifier	Agilent	11909A	12-1	03-22-2024	03-21-2025
Preamplifier	EMCI	EMC051845SE	980380	12-14-2023	12-13-2024
Preamplifier	CD	PAP-1840-60	6041.6042	06-19-2024	06-18-2025
Cable line	Fulai(7M)	SF106	5219/6A	---	---
Cable line	Fulai(6M)	SF106	5220/6A	---	---
Cable line	Fulai(3M)	SF106	5216/6A	---	---
Cable line	Fulai(3M)	SF106	5217/6A	---	---
Test software	Fara	EZ-EMC	EMEC-3A1-Pre	---	---

5 Test results and Measurement Data

5.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
EUT Antenna:	Please see Internal photos
The antenna is attached on the main PCB and no consideration of replacement.	

5.2 Conducted Emissions

Test Requirement: 47 CFR Part 15C Section 15.207

Test Method: ANSI C63.10: 2013

Test Frequency Range: 150kHz to 30MHz

Limit:

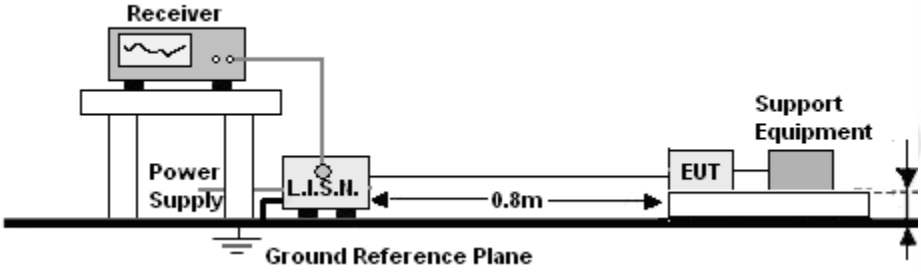
Frequency range (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

Test Procedure:

1) The mains terminal disturbance voltage test was conducted in a shielded room.
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3) The EUT was placed upon a non-metallic table 0.1m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
4) The test was performed with a vertical ground reference plane.The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.

Test Setup:

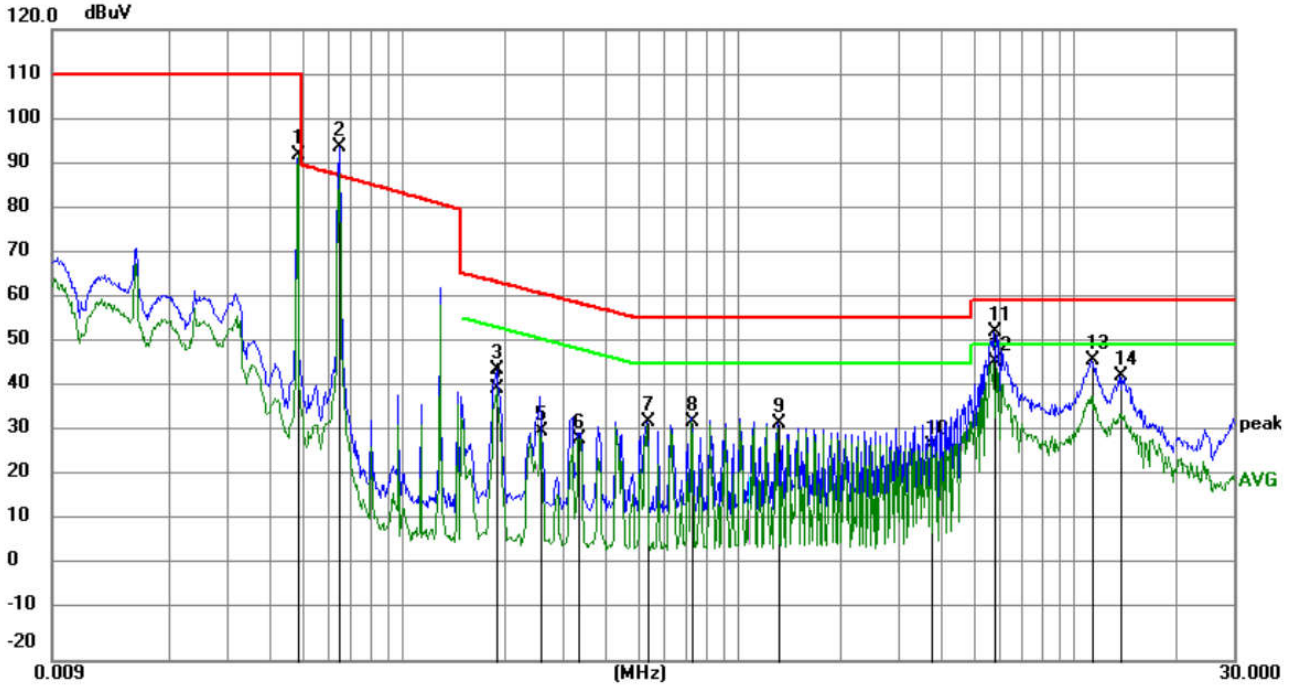


Test Mode: Transmitting mode,refer to section 4.3

Test Results: Pass

Measurement Data (Mode a):

Live line:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.0487	82.41	9.83	92.24	110.00	-17.76	QP	
2	*	0.0646	84.08	9.80	93.88	87.67	6.21	QP	
3		0.1906	34.68	9.87	44.55	64.01	-19.46	QP	
4		0.1906	30.38	9.87	40.25	54.01	-13.76	AVG	
5		0.2581	21.17	9.68	30.85	51.49	-20.64	AVG	
6		0.3345	19.65	9.63	29.28	49.34	-20.06	AVG	
7		0.5326	23.46	9.72	33.18	56.00	-22.82	QP	
8		0.7261	23.03	9.94	32.97	46.00	-13.03	AVG	
9		1.3111	23.06	9.74	32.80	56.00	-23.20	QP	
10		3.7456	17.83	9.80	27.63	46.00	-18.37	AVG	
11		5.8156	43.21	9.84	53.05	60.00	-6.95	QP	
12		5.8156	36.43	9.84	46.27	50.00	-3.73	AVG	
13		11.2471	36.83	9.83	46.66	60.00	-13.34	QP	
14		13.7671	33.20	9.84	43.04	60.00	-16.96	QP	

Remark:

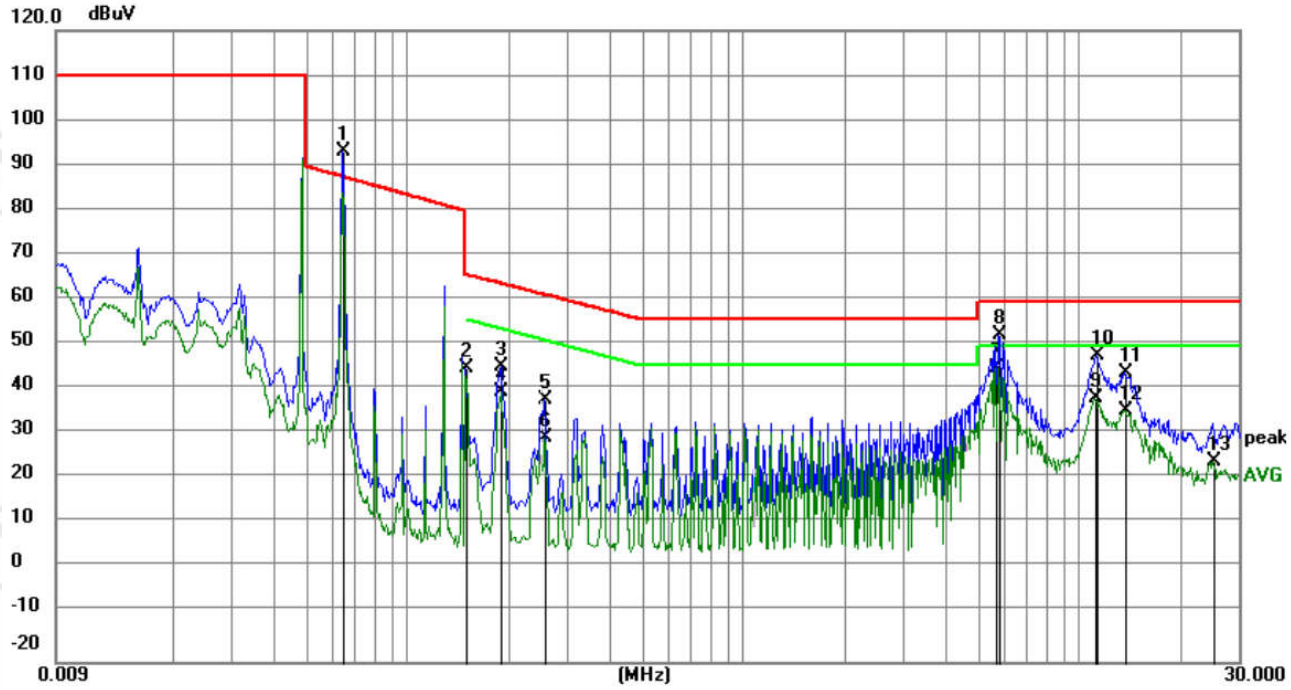
1. The following Quasi-Peak and Average measurements were performed on the EUT:

2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.

3. If the Peak value under Average limit, the Average value is not recorded in the report.

4. Point 1 and point 2 are the center frequency,therefore exempt.

Neutral line:



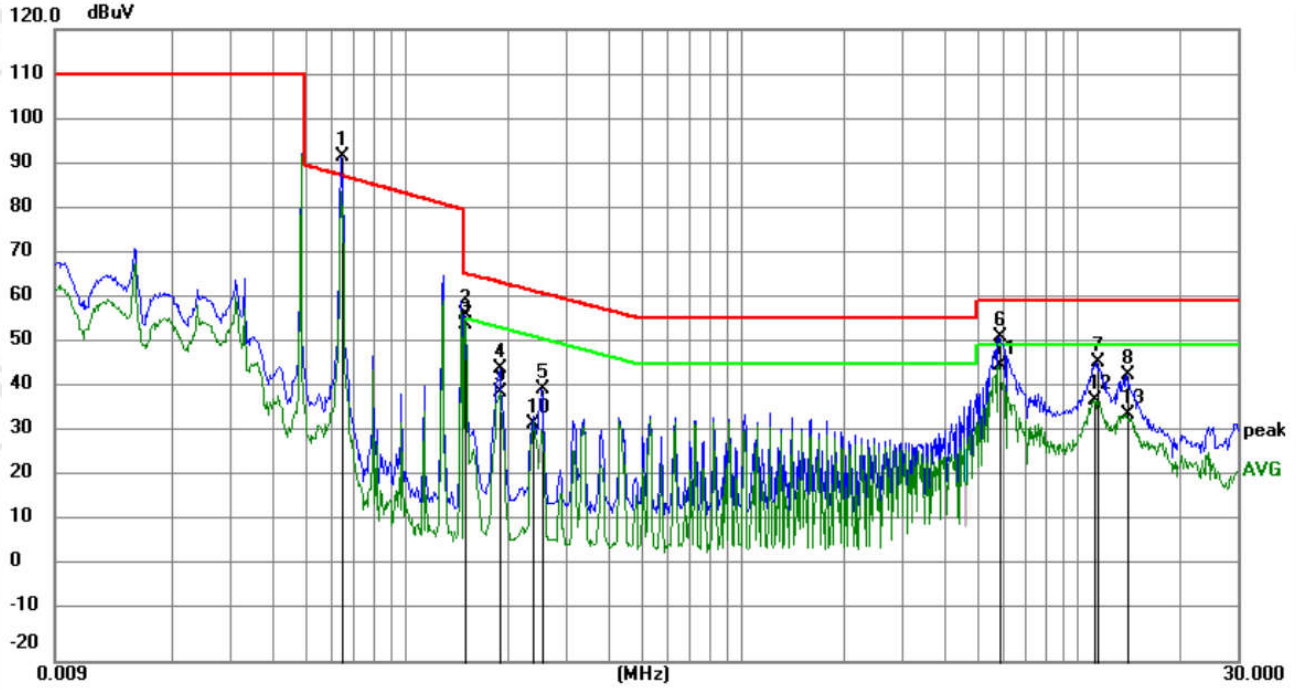
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.0646	83.49	9.80	93.29	87.67	5.62	QP	
2		0.1500	35.29	9.84	45.13	66.00	-20.87	QP	
3		0.1906	35.74	9.87	45.61	64.01	-18.40	QP	
4		0.1906	30.18	9.87	40.05	54.01	-13.96	AVG	
5		0.2581	28.45	9.68	38.13	61.49	-23.36	QP	
6		0.2581	20.34	9.68	30.02	51.49	-21.47	AVG	
7		5.6761	35.54	9.84	45.38	50.00	-4.62	AVG	
8		5.8066	42.63	9.84	52.47	60.00	-7.53	QP	
9		11.2246	28.71	9.83	38.54	50.00	-11.46	AVG	
10		11.2921	38.28	9.84	48.12	60.00	-11.88	QP	
11		13.7446	34.26	9.84	44.10	60.00	-15.90	QP	
12		13.7446	25.94	9.84	35.78	50.00	-14.22	AVG	
13		25.2871	14.64	9.91	24.55	50.00	-25.45	AVG	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.
4. Point 1 is the center frequency,therefore exempt.

Measurement Data (Mode b):

Live line:

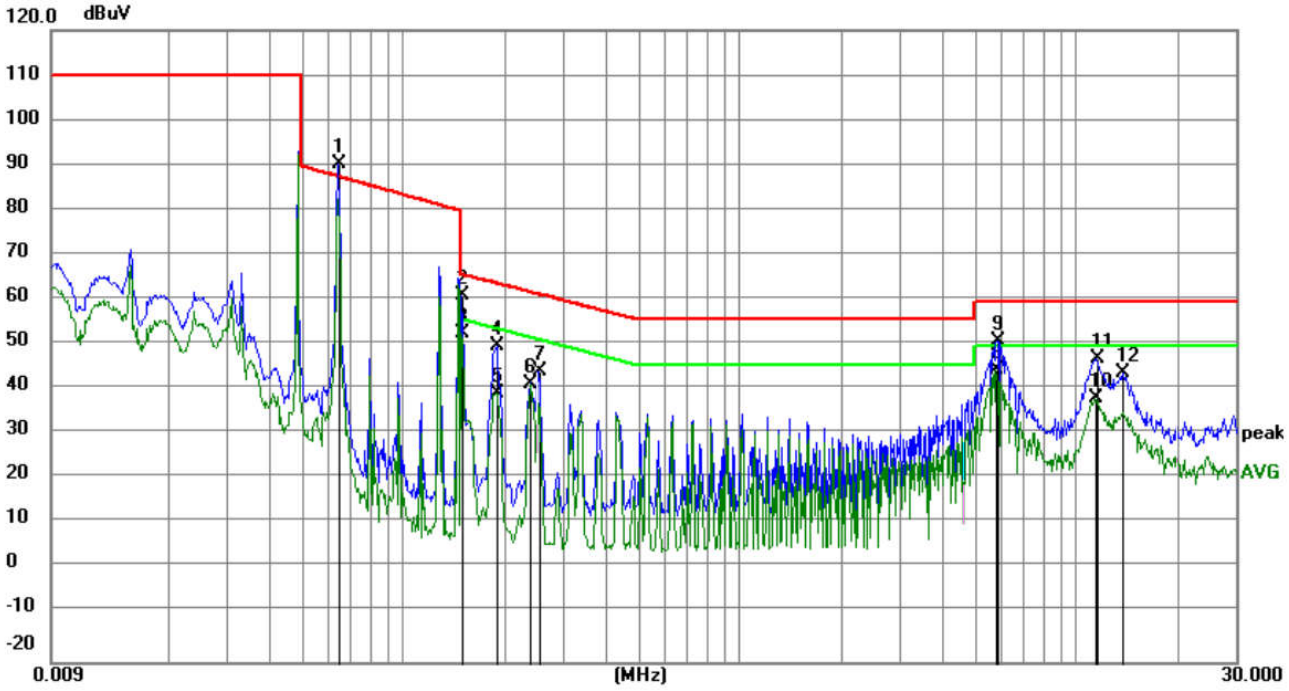


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.0644	81.89	9.79	91.68	87.70	3.98	QP	
2		0.1500	46.99	9.84	56.83	66.00	-9.17	QP	
3		0.1500	44.76	9.84	54.60	56.00	-1.40	AVG	
4		0.1906	34.95	9.87	44.82	64.01	-19.19	QP	
5		0.2536	30.84	9.69	40.53	61.64	-21.11	QP	
6		5.8561	42.25	9.84	52.09	60.00	-7.91	QP	
7		11.4586	36.63	9.84	46.47	60.00	-13.53	QP	
8		14.1001	33.82	9.85	43.67	60.00	-16.33	QP	
9		0.1906	29.75	9.87	39.62	54.01	-14.39	AVG	
10		0.2404	23.07	9.74	32.81	52.08	-19.27	AVG	
11		5.8561	35.71	9.84	45.55	50.00	-4.45	AVG	
12		11.2021	28.22	9.83	38.05	50.00	-11.95	AVG	
13		14.1001	24.92	9.85	34.77	50.00	-15.23	AVG	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.
4. Point 1 is the center frequency,therefore exempt.

Neutral line:



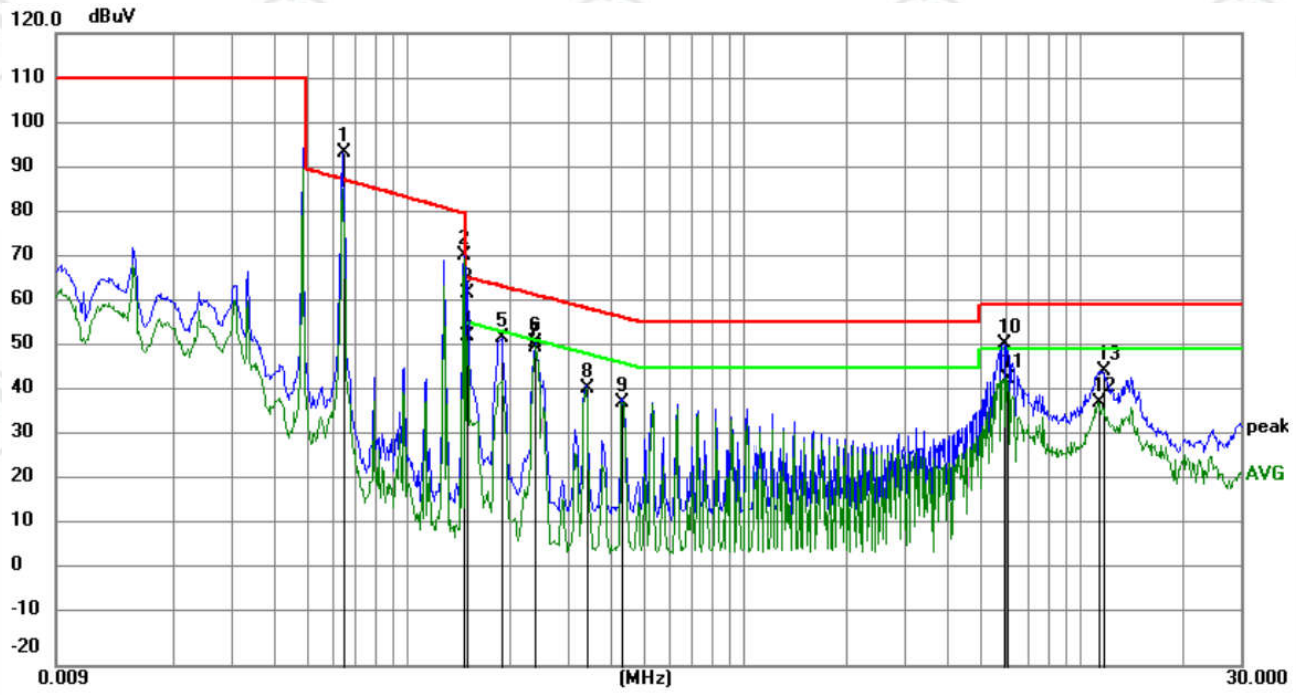
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.0644	80.80	9.79	90.59	87.70	2.89	QP	
2		0.1500	51.62	9.84	61.46	66.00	-4.54	QP	
3		0.1500	43.11	9.84	52.95	56.00	-3.05	AVG	
4		0.1906	40.41	9.87	50.28	64.01	-13.73	QP	
5		0.1906	29.91	9.87	39.78	54.01	-14.23	AVG	
6		0.2401	31.93	9.74	41.67	52.09	-10.42	AVG	
7		0.2536	34.78	9.69	44.47	61.64	-17.17	QP	
8		5.7841	35.06	9.84	44.90	50.00	-5.10	AVG	
9		5.8471	41.41	9.84	51.25	60.00	-8.75	QP	
10		11.5081	28.62	9.84	38.46	50.00	-11.54	AVG	
11		11.5756	37.56	9.84	47.40	60.00	-12.60	QP	
12		13.8211	34.36	9.85	44.21	60.00	-15.79	QP	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.
4. Point 1 is the center frequency,therefore exempt.

Measurement Data (Mode c):

Live line:

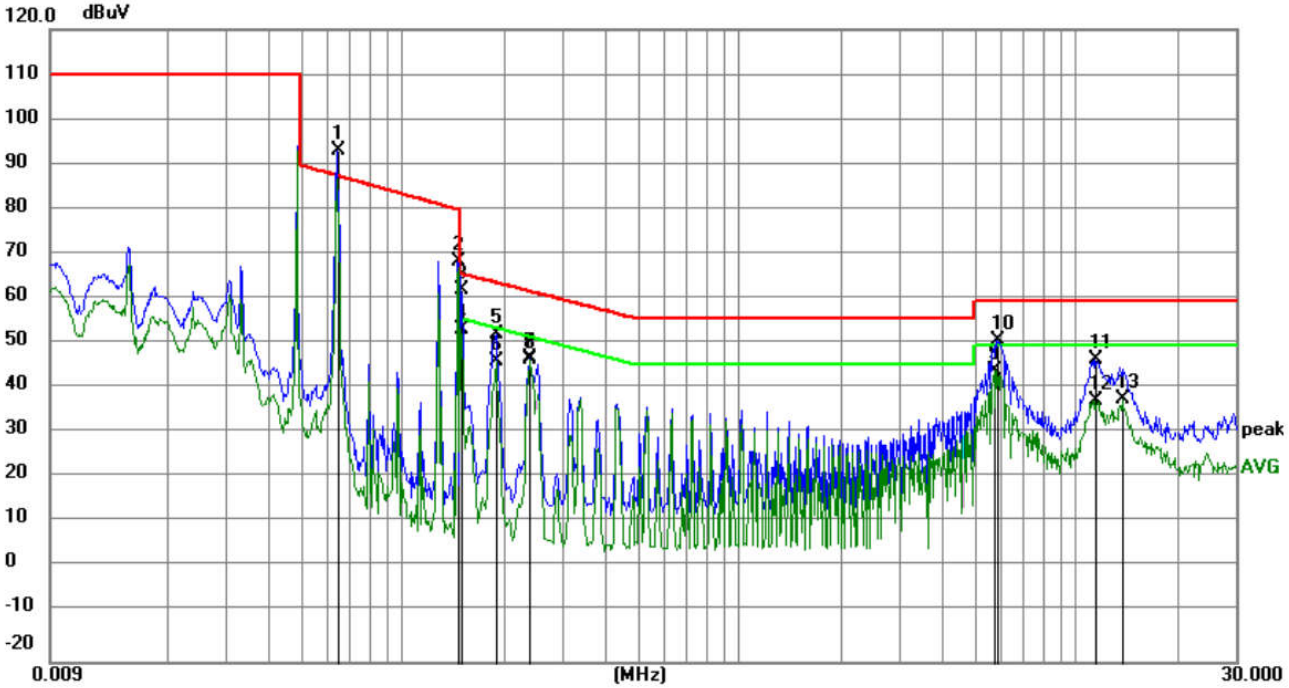


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.0642	83.67	9.79	93.46	87.72	5.74	QP	
2		0.1466	60.89	9.84	70.73	80.21	-9.48	QP	
3		0.1500	52.56	9.84	62.40	66.00	-3.60	QP	
4		0.1500	43.06	9.84	52.90	56.00	-3.10	AVG	
5		0.1906	42.90	9.87	52.77	64.01	-11.24	QP	
6		0.2401	41.68	9.74	51.42	62.09	-10.67	QP	
7		0.2401	40.76	9.74	50.50	52.09	-1.59	AVG	
8		0.3391	31.92	9.64	41.56	49.23	-7.67	AVG	
9		0.4336	28.64	9.79	38.43	47.18	-8.75	AVG	
10		5.9011	41.43	9.84	51.27	60.00	-8.73	QP	
11		6.0316	33.85	9.85	43.70	50.00	-6.30	AVG	
12		11.4226	28.50	9.84	38.34	50.00	-11.66	AVG	
13		11.6791	35.48	9.84	45.32	60.00	-14.68	QP	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.
4. Point 1 is the center frequency,therefore exempt.

Neutral line:



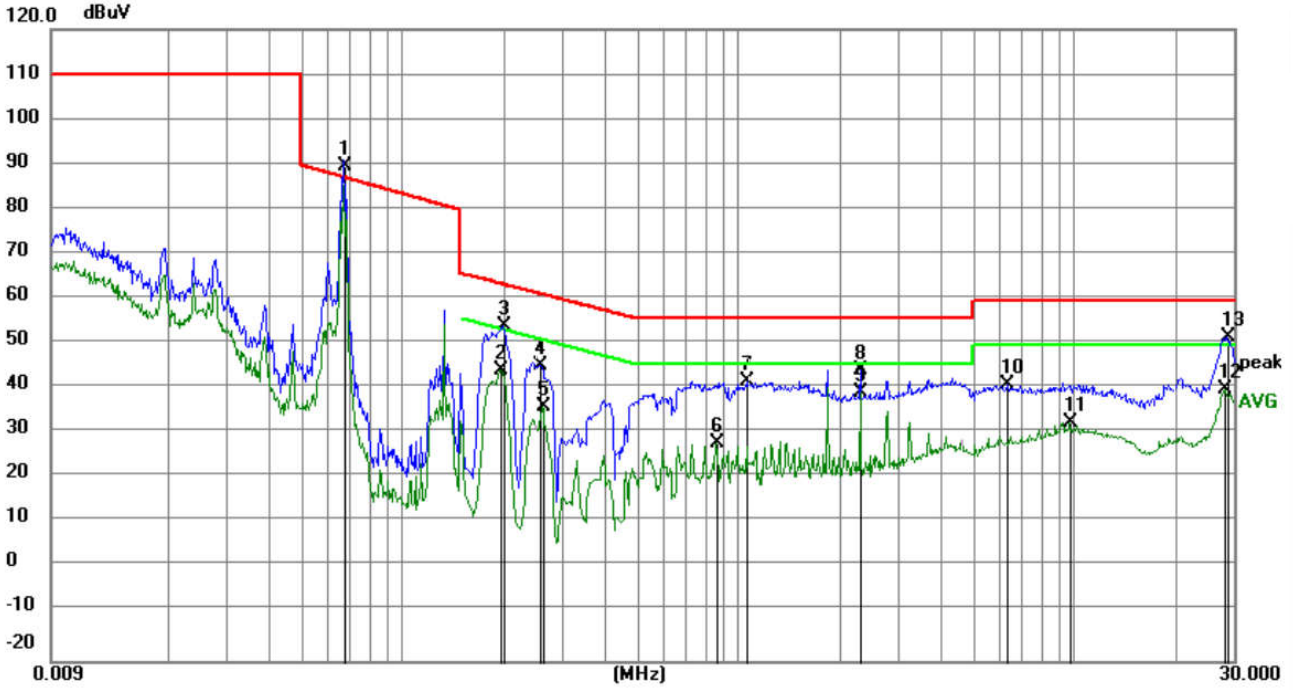
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.0643	83.45	9.79	93.24	87.71	5.53	QP	
2		0.1465	58.79	9.84	68.63	80.21	-11.58	QP	
3		0.1500	52.66	9.84	62.50	66.00	-3.50	QP	
4		0.1500	43.92	9.84	53.76	56.00	-2.24	AVG	
5		0.1906	42.78	9.87	52.65	64.01	-11.36	QP	
6		0.1906	36.64	9.87	46.51	54.01	-7.50	AVG	
7		0.2401	37.73	9.74	47.47	62.09	-14.62	QP	
8		0.2401	37.32	9.74	47.06	52.09	-5.03	AVG	
9		5.7796	34.70	9.84	44.54	50.00	-5.46	AVG	
10		5.8426	41.50	9.84	51.34	60.00	-8.66	QP	
11		11.4991	37.18	9.84	47.02	60.00	-12.98	QP	
12		11.4991	28.22	9.84	38.06	50.00	-11.94	AVG	
13		13.8076	28.48	9.85	38.33	50.00	-11.67	AVG	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.
4. Point 1 is the center frequency,therefore exempt.

Measurement Data (Mode d):

Live line:

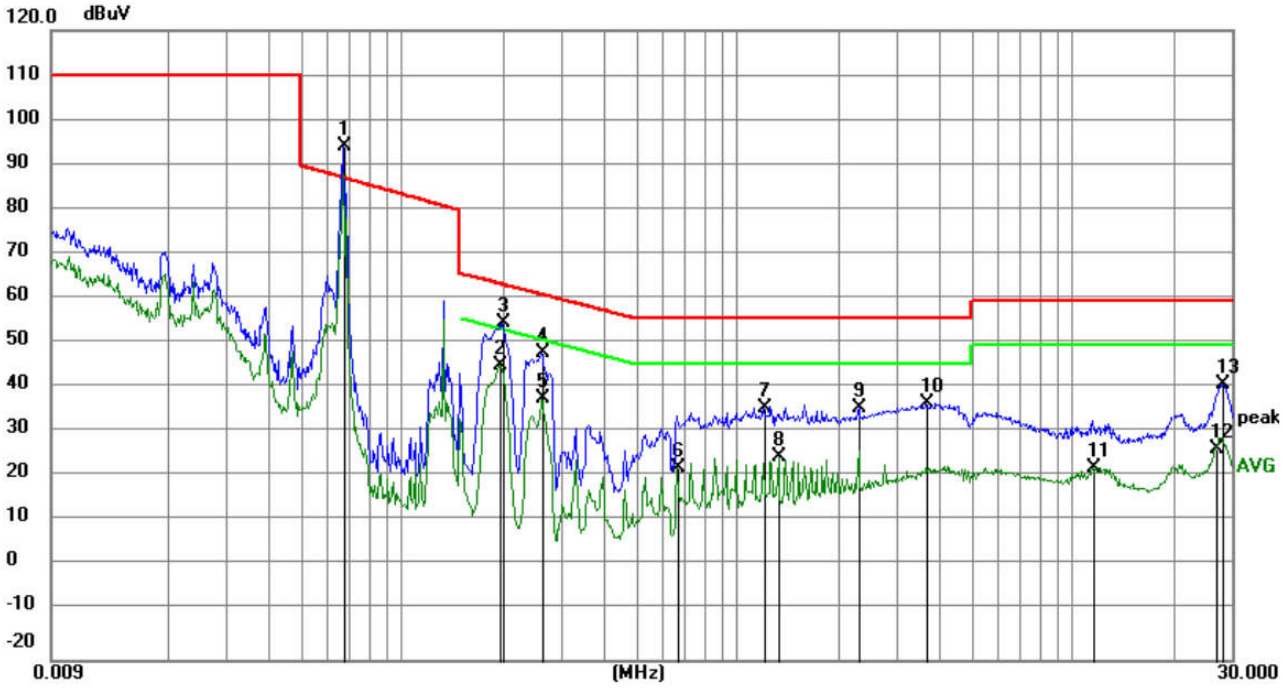


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.0669	79.78	9.82	89.60	87.35	2.25	QP	
2		0.1951	34.72	9.87	44.59	53.82	-9.23	AVG	
3		0.1996	44.67	9.87	54.54	63.63	-9.09	QP	
4		0.2581	35.97	9.68	45.65	61.49	-15.84	QP	
5		0.2626	26.76	9.66	36.42	51.35	-14.93	AVG	
6		0.8656	18.83	9.80	28.63	46.00	-17.37	AVG	
7		1.0681	32.53	9.74	42.27	56.00	-13.73	QP	
8		2.3191	34.91	9.76	44.67	56.00	-11.33	QP	
9		2.3191	29.92	9.76	39.68	46.00	-6.32	AVG	
10		6.3601	31.41	9.85	41.26	60.00	-18.74	QP	
11		9.7576	23.18	9.83	33.01	50.00	-16.99	AVG	
12		28.2616	30.38	9.83	40.21	50.00	-9.79	AVG	
13		28.8016	42.02	9.82	51.84	60.00	-8.16	QP	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.
4. Point 1 is the center frequency,therefore exempt.

Neutral line:



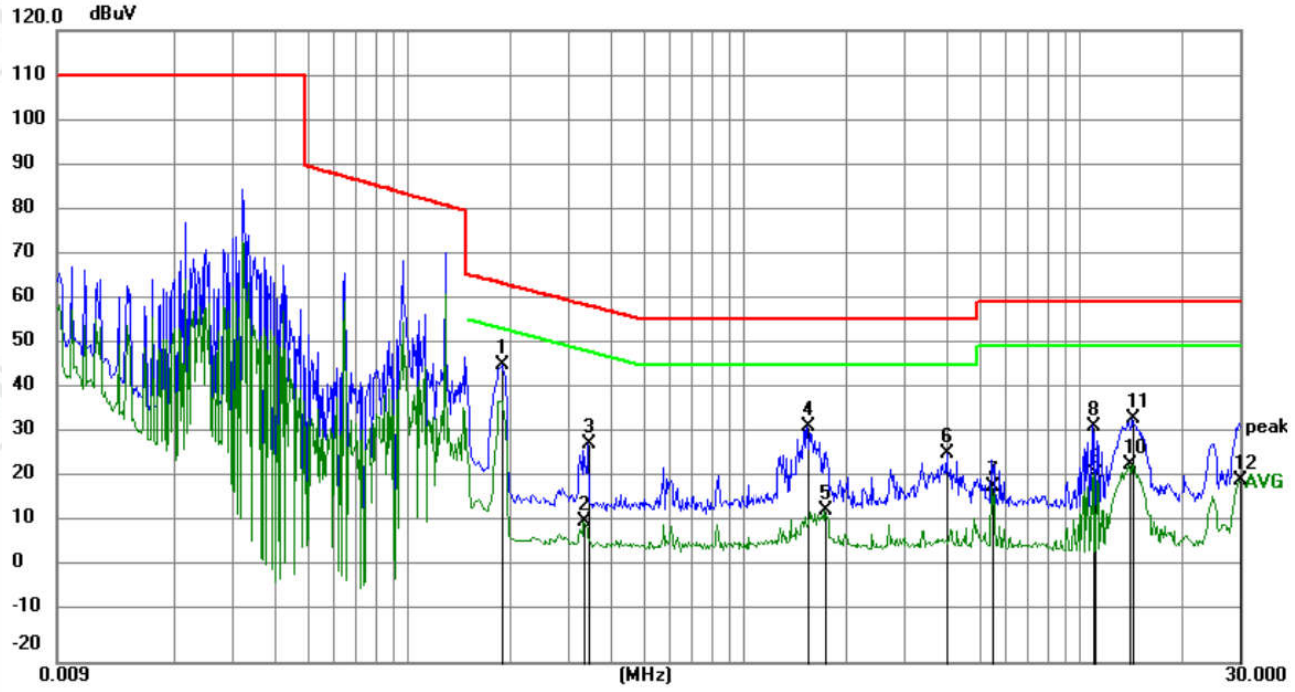
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.0669	84.46	9.82	94.28	87.35	6.93	QP	
2		0.1951	35.78	9.87	45.65	53.82	-8.17	AVG	
3		0.1996	45.30	9.87	55.17	63.63	-8.46	QP	
4		0.2626	38.68	9.66	48.34	61.35	-13.01	QP	
5		0.2626	28.46	9.66	38.12	51.35	-13.23	AVG	
6		0.6676	12.92	9.87	22.79	46.00	-23.21	AVG	
7		1.1985	26.36	9.74	36.10	56.00	-19.90	QP	
8		1.3336	15.44	9.74	25.18	46.00	-20.82	AVG	
9		2.3146	26.27	9.76	36.03	56.00	-19.97	QP	
10		3.6736	27.55	9.80	37.35	56.00	-18.65	QP	
11		11.5666	13.09	9.84	22.93	50.00	-27.07	AVG	
12		26.9161	17.20	9.87	27.07	50.00	-22.93	AVG	
13		28.1806	31.68	9.84	41.52	60.00	-18.48	QP	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.
4. Point 1 is the center frequency,therefore exempt.

Measurement Data (Mode e):

Live line:

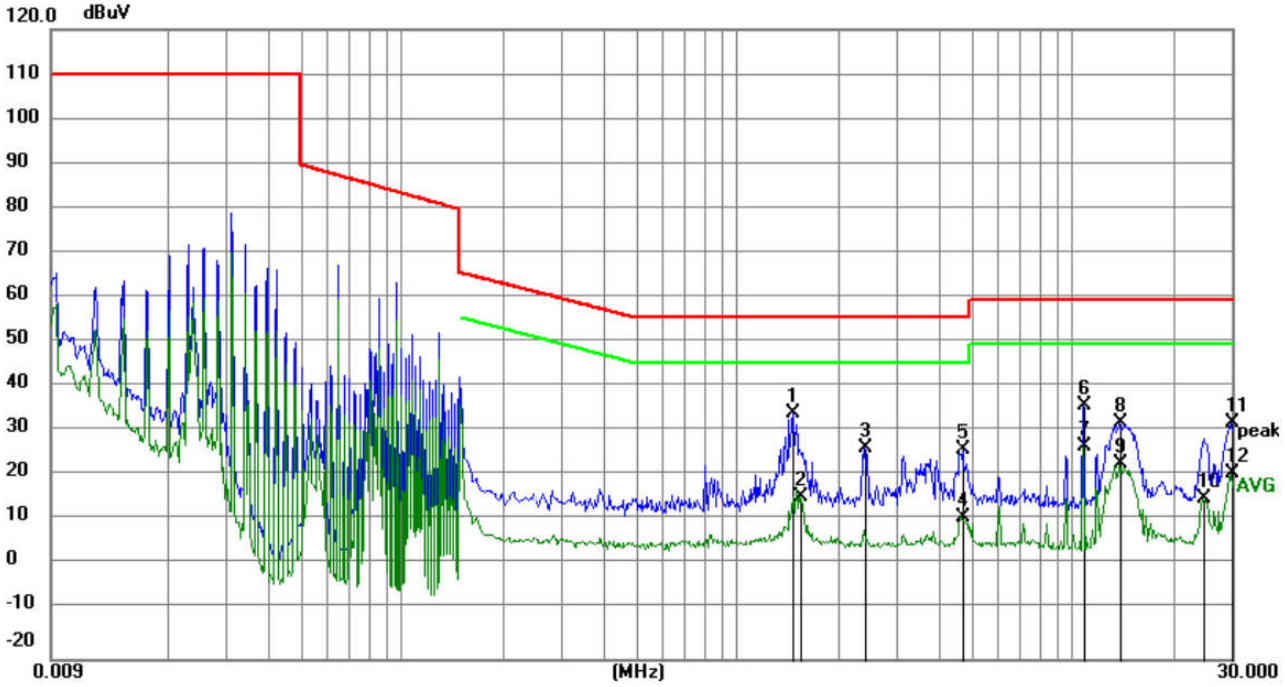


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1906	36.19	9.87	46.06	64.01	-17.95	QP	
2		0.3345	1.59	9.63	11.22	49.34	-38.12	AVG	
3		0.3436	18.71	9.65	28.36	59.12	-30.76	QP	
4		1.5496	22.47	9.75	32.22	56.00	-23.78	QP	
5		1.7431	3.91	9.75	13.66	46.00	-32.34	AVG	
6		4.0200	16.50	9.81	26.31	56.00	-29.69	QP	
7		5.4826	9.09	9.84	18.93	50.00	-31.07	AVG	
8		10.9006	22.67	9.83	32.50	60.00	-27.50	QP	
9		11.0851	12.02	9.83	21.85	50.00	-28.15	AVG	
10		14.0956	14.17	9.85	24.02	50.00	-25.98	AVG	
11		14.3881	24.09	9.85	33.94	60.00	-26.06	QP	
12		29.9851	10.67	9.79	20.46	50.00	-29.54	AVG	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

Neutral line:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	1.4776	24.95	9.74	34.69	56.00	-21.31	QP	
2		1.5496	6.56	9.75	16.31	46.00	-29.69	AVG	
3		2.4226	17.17	9.76	26.93	56.00	-29.07	QP	
4		4.6906	1.68	9.83	11.51	46.00	-34.49	AVG	
5		4.7446	16.88	9.83	26.71	56.00	-29.29	QP	
6		10.8601	26.77	9.83	36.60	60.00	-23.40	QP	
7		10.8601	17.44	9.83	27.27	50.00	-22.73	AVG	
8		13.8976	22.93	9.85	32.78	60.00	-27.22	QP	
9		13.8976	13.84	9.85	23.69	50.00	-26.31	AVG	
10		24.6616	5.90	9.92	15.82	50.00	-34.18	AVG	
11		29.9446	23.03	9.79	32.82	60.00	-27.18	QP	
12		29.9446	11.66	9.79	21.45	50.00	-28.55	AVG	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

5.3 Radiated Emissions

Test Requirement: 47 CFR Part 15C Section 15.231(b) and 15.209

Test Method: ANSI C63.10 2013

Test Site: Measurement Distance: 3m (Semi-Anechoic Chamber)

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak

Test Setup:

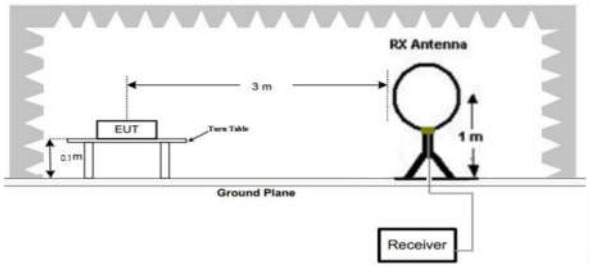


Figure 1. Below 30MHz

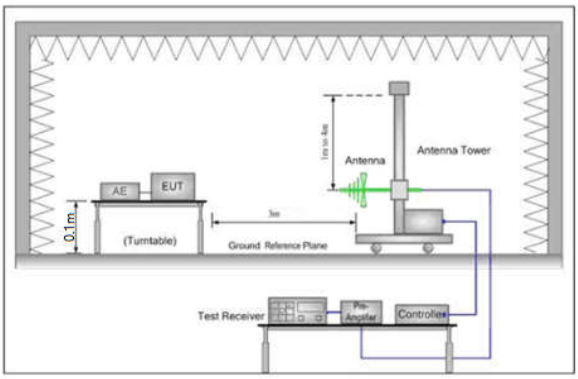


Figure 2. 30MHz-1GHz

Test Procedure:

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.1 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Limit: (Spurious Emissions)

Frequency	Field strength (microvolt/meter)	Limit (dBμV/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30

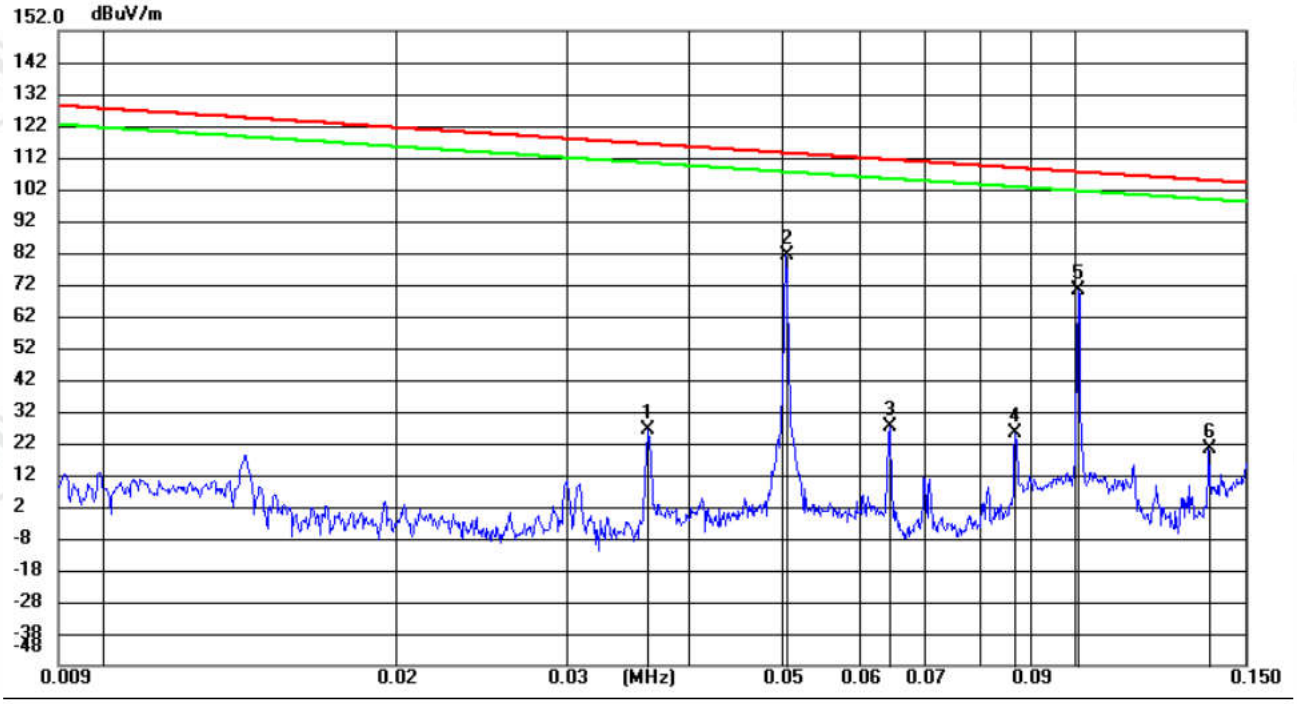
Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Test Mode: Transmitting mode,refer to section 4.3

Test Results: Pass

9kHz~150kHz:

Measurement Data (Mode a):



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0364	26.02	0.16	26.18	116.24	-90.06	QP			
2	*	0.0505	81.10	0.18	81.28	113.42	-32.14	QP			
3		0.0645	27.28	0.19	27.47	111.30	-83.83	QP			
4		0.0868	24.94	0.23	25.17	108.74	-83.57	QP			
5		0.1008	69.90	0.28	70.18	107.45	-37.27	QP			
6		0.1375	19.87	0.34	20.21	104.77	-84.56	QP			

Remark:

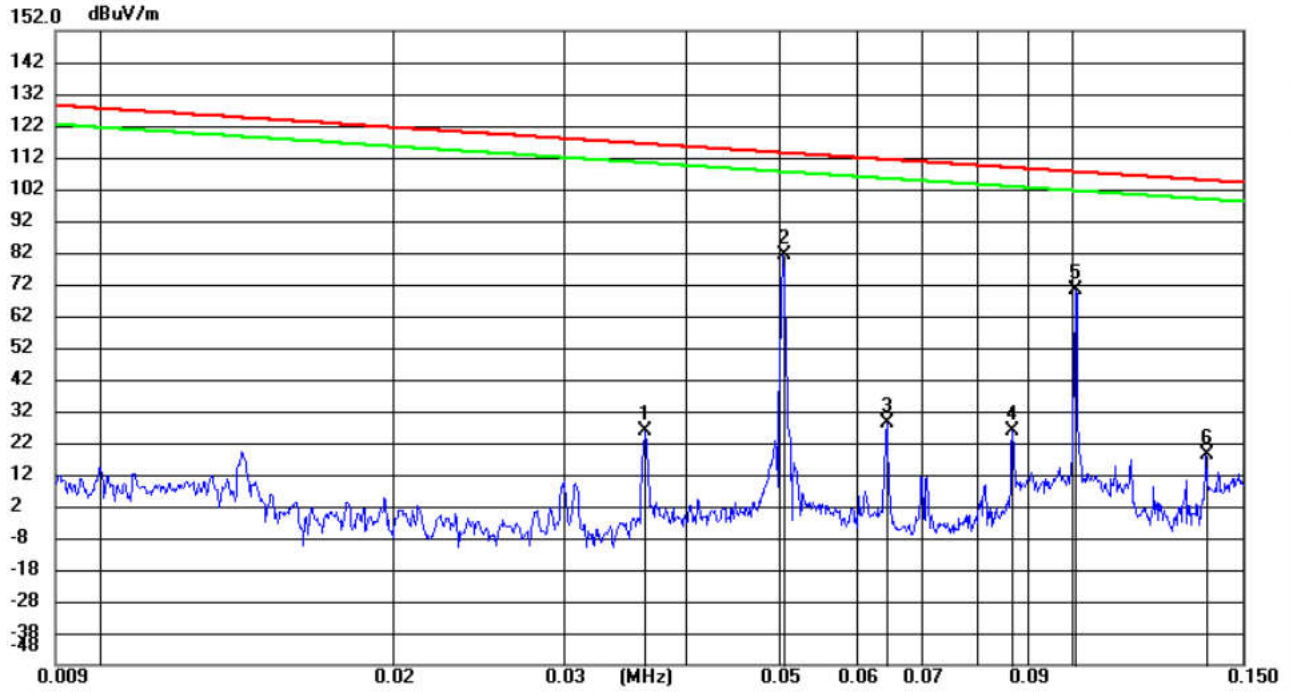
1.According ANSI C63.10-2013 chapter 6.4.6,We tested the parallel,perpendicular,and ground-parallel of loop antenna,and was recorded the worst parallel data of loop antenna in the report.

2.The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Measurement Data (Mode b):



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0363	25.53	0.16	25.69	116.27	-90.58	QP			
2	*	0.0505	81.10	0.18	81.28	113.42	-32.14	QP			
3		0.0645	27.91	0.19	28.10	111.30	-83.20	QP			
4		0.0868	25.61	0.23	25.84	108.74	-82.90	QP			
5		0.1008	69.83	0.28	70.11	107.45	-37.34	QP			
6		0.1375	18.13	0.34	18.47	104.77	-86.30	QP			

Remark:

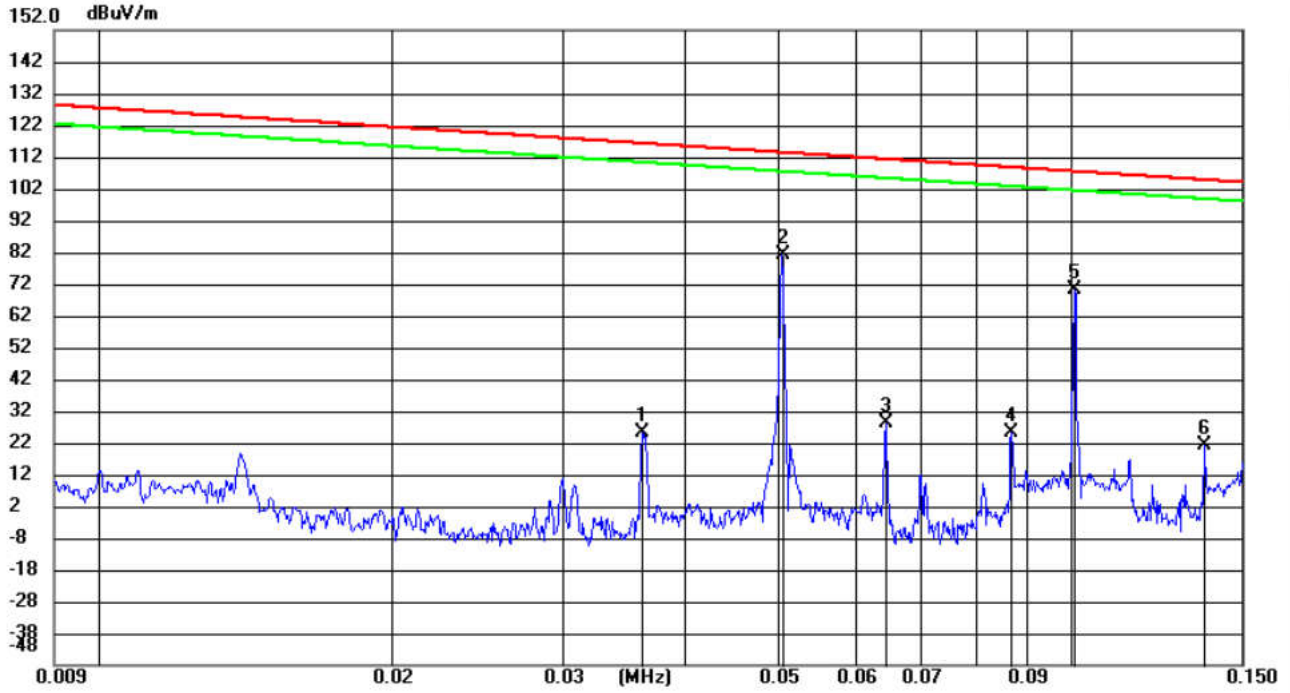
1.According ANSI C63.10-2013 chapter 6.4.6,We tested the parallel,perpendicular,and ground-parallel of loop antenna,and was recorded the worst parallel data of loop antenna in the report.

2.The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Measurement Data (Mode c):



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0362	25.16	0.16	25.32	116.29	-90.97	QP			
2	*	0.0505	81.10	0.18	81.28	113.42	-32.14	QP			
3		0.0645	27.90	0.19	28.09	111.30	-83.21	QP			
4		0.0868	25.04	0.23	25.27	108.74	-83.47	QP			
5		0.1008	69.83	0.28	70.11	107.45	-37.34	QP			
6		0.1371	20.78	0.34	21.12	104.80	-83.68	QP			

Remark:

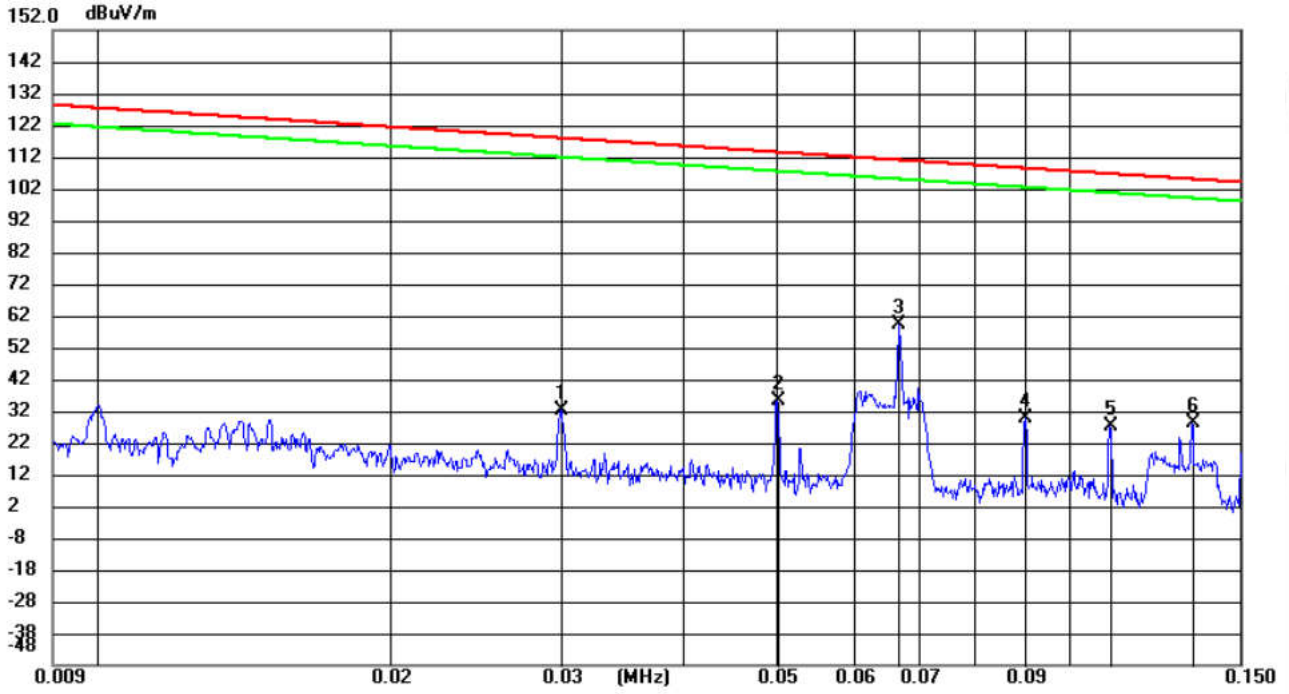
1.According ANSI C63.10-2013 chapter 6.4.6,We tested the parallel,perpendicular,and ground-parallel of loop antenna,and was recorded the worst parallel data of loop antenna in the report.

2.The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Measurement Data (Mode d):



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0300	32.25	0.15	32.40	117.91	-85.51	QP	100	320	
2		0.0501	34.90	0.18	35.08	113.49	-78.41	QP	100	171	
3	*	0.0667	59.01	0.19	59.20	111.02	-51.82	QP	100	352	
4		0.0901	29.58	0.24	29.82	108.42	-78.60	QP	100	171	
5		0.1101	26.97	0.30	27.27	106.69	-79.42	QP	100	288	
6		0.1337	27.75	0.33	28.08	105.01	-76.93	QP	100	228	

Remark:

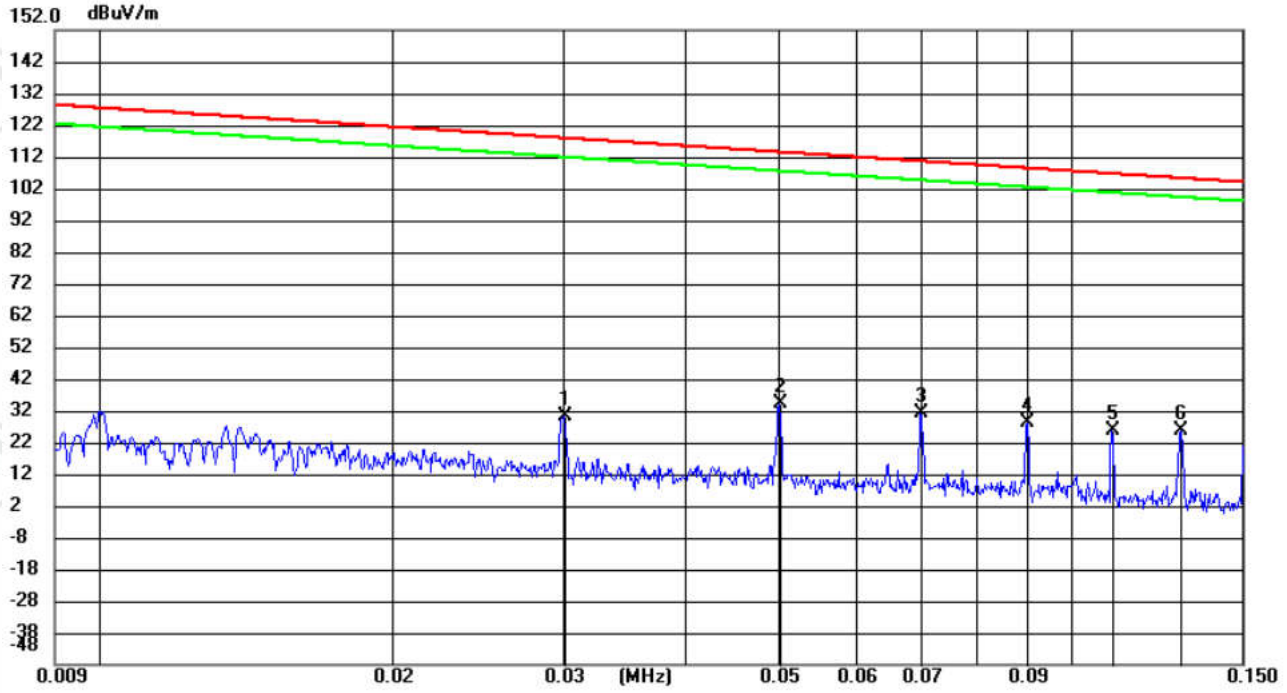
1.According ANSI C63.10-2013 chapter 6.4.6,We tested the parallel,perpendicular,and ground-parallel of loop antenna,and was recorded the worst parallel data of loop antenna in the report.

2.The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Measurement Data (Mode e):



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0301	30.06	0.15	30.21	117.88	-87.67	QP	100	90	
2		0.0501	33.84	0.18	34.02	113.49	-79.47	QP	100	342	
3	*	0.0700	31.24	0.19	31.43	110.60	-79.17	QP	100	173	
4		0.0901	27.95	0.24	28.19	108.42	-80.23	QP	200	360	
5		0.1101	25.39	0.30	25.69	106.69	-81.00	QP	200	266	
6		0.1296	25.20	0.33	25.53	105.28	-79.75	QP	100	142	

Remark:

1.According ANSI C63.10-2013 chapter 6.4.6,We tested the parallel,perpendicular,and ground-parallel of loop antenna,and was recorded the worst parallel data of loop antenna in the report.

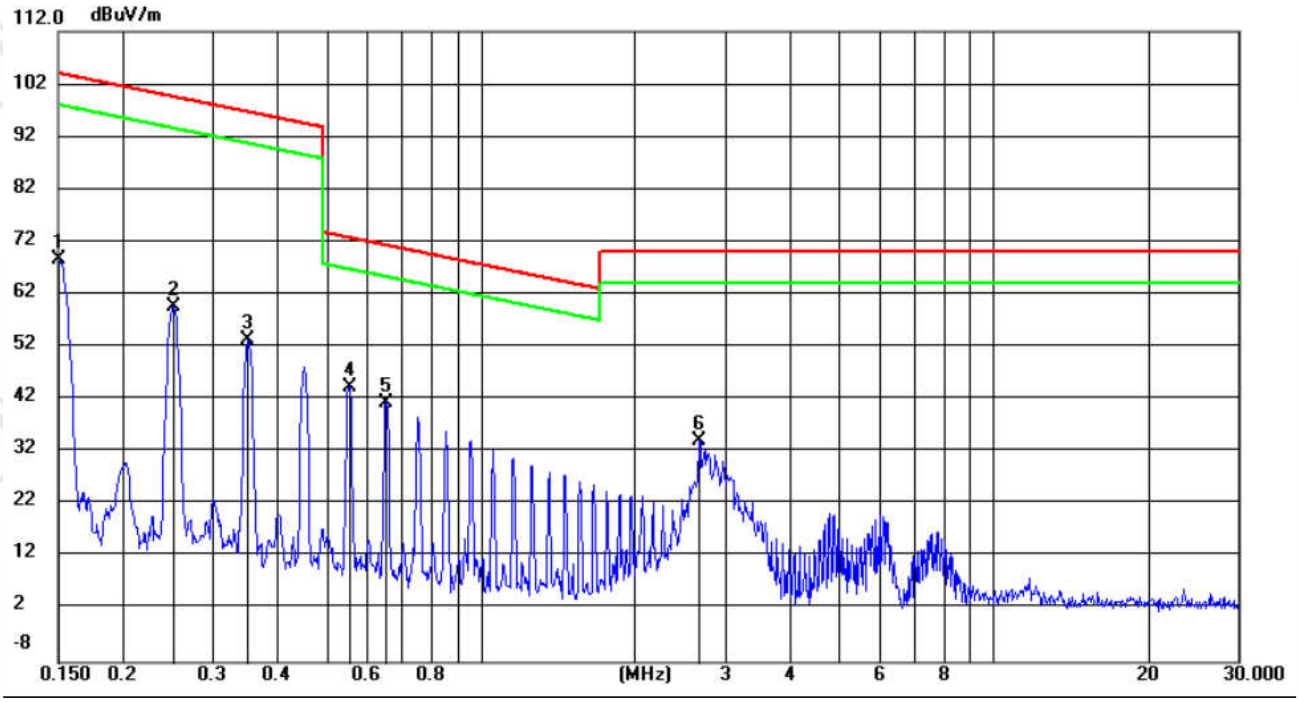
2.The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

150kHz~30MHz:

Measurement Data (Mode a):



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.1500	68.16	0.36	68.52	104.02	-35.50	QP			
2		0.2508	59.21	0.51	59.72	99.58	-39.86	QP			
3		0.3520	52.98	0.34	53.32	96.66	-43.34	QP			
4	*	0.5523	44.39	0.10	44.49	72.76	-28.27	QP			
5		0.6543	41.40	0.10	41.50	71.30	-29.80	QP			
6		2.6641	34.23	0.06	34.29	70.00	-35.71	QP			

Remark:

1.According ANSI C63.10-2013 chapter 6.4.6,We tested the parallel,perpendicular,and ground-parallel of loop antenna,and was recorded the worst parallel data of loop antenna in the report.

2.The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor