


TEST REPORT

Report No. : KS2211S4824E
Applicant : Jafanda LLC
Address..... : 1309 Coffeen Avenue STE 4304 Sheridan, Wyoming 82801
Manufacturer..... : Dongguan PureMate Technology Co., Ltd.
Address..... : Building No.4, Haiyong Technology Park, Xiawei shenwo industrial zone,
Zhutang Village, Fenggang Town, Dongguan City, Guangdong Province,
China.
Product Name..... : Air Purifier
Trademark..... : 
Model/Type reference..... : JF180
Standard : 47 CFR Part 15, Subpart B
Date of Receipt..... : November 9, 2022
Date of Test Date : November 9, 2022 to November 17, 2022
Date of issue..... : November 17, 2022
Test result..... : Pass

Prepared by:
(Printed name + Signature) Chad Lin



Approved by:
(Printed name + Signature) Sky Dong



Testing Laboratory Name . : KSIGN(Guangdong) Testing Co., Ltd.
Address..... : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial
Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong,
China

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1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:
47 CFR Part 15, Subpart B: Unintentional Radiators

1.2. Report Version

Revised No.	Date of issue	Description
01	November 17, 2022	Original

1.3. Test Description

Test Item	Standard	Requirement	Result
Conducted emissions on AC mains	47 CFR Part 15, Subpart B	15.107, Class B	Pass
Radiated emissions (Below 1GHz)	47 CFR Part 15, Subpart B	15.109, Class B	Pass

1.4. Test Facility

KSIGN(Guangdong) Testing Co., Ltd.

West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

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

CNAS-Lab Code: L13261

KSIGN(Guangdong) Testing Co., Ltd. has been assessed and proved to be in Compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 5457.01

KSIGN(Guangdong) Testing Co., Ltd. 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

ISED#: 25693 CAB identifier.: CN0096

KSIGN(Guangdong) Testing Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

FCC-Registration No.: 294912 Designation Number: CN1328

KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.


1.5. Measurement Uncertainty

Test Items	Measurement Uncertainty
Conducted Emission (150k-30MHz)	± 3.34dB
RE (30-1000MHz)	± 5.7dB

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

2. GENERAL INFORMATION

2.1. General Description of EUT

Product Name:	Air Purifier
Trademark:	
Model / Type reference:	JF180
Model Difference:	N/A
Power Supply:	Input: 24V=1.0A
Power Adaptor:	Input: 100-240~50-60Hz Output: 24.0V=1.0A

2.2. Accessory Equipment Information

The EUT was tested as an independent device.

2.3. Description of Test Modes

No.	Title	Description of Mode
Test Mode1	Normal Work (Max)	N/A

2.4. Measurement Instruments List

Conducted emissions on AC mains				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
LISN	R&S	ENV432	1326.6105.02	2023-03-04
EMI Test Receiver	R&S	ESR	102524	2023-03-04
Manual RF Switch	JS TOYO	/	MSW-01/002	2023-03-04
ISN CAT6	Schwarzbeck	CAT5 8158	227	2023-03-04
Color Signal Generator	Philips	PM5418	672926	2023-03-04
Power Absorbing Clamp	R&S	MDS-21	100925	2023-03-26

Radiated emissions (Below 1GHz)				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	1230	2023-04-12
Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	2023-03-04
Color Signal Generator	Philips	PM5418	672926	2023-03-04
Broadcast Television Signal Generator	R&S	SFE100	141038	2023-03-04
Analog Signal Generator	Agilent	8648A	3847M00445	2023-03-04
EMI Test Receiver	R&S	ESR	102525	2023-03-04
Horn Antenna	Schwarzbeck	BBHA 9120 D	2023	2023-03-29
Pre-Amplifier	EMCI	EMC051835SE	980662	2023-03-04
Spectrum Analyzer	Keysight	N9020A	MY46471971	2023-03-04
Loop Antenna	Beijin ZHINAN	ZN30900C	18050	2023-03-05

3. Emission Test Results (EMI)

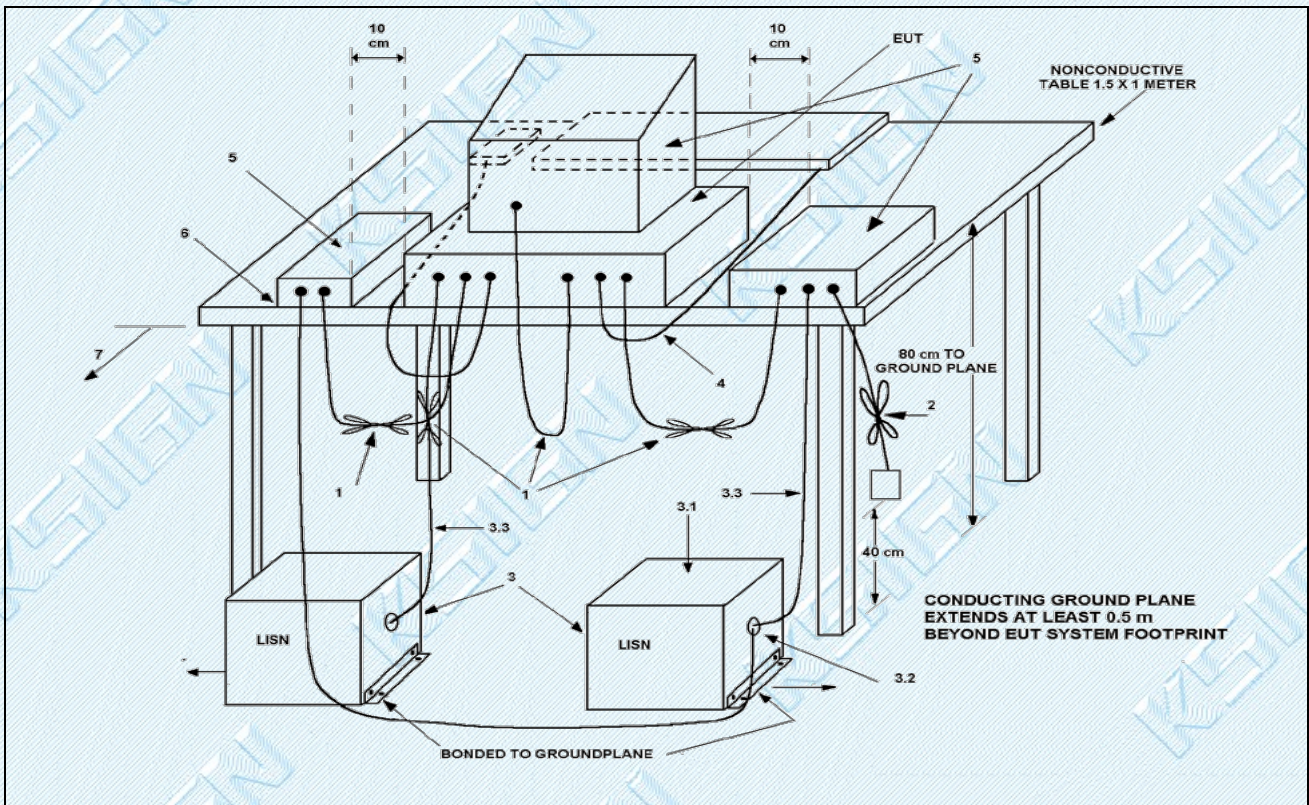
3.1. Conducted emissions on AC mains

Test Requirement:	15.107, Class B		
Test Limit:	Frequency of emission (MHz)	Conducted 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 Method:	ANSI C63.4		
Procedure:	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. Remark: Level= Read Level+ Cable Loss+ LISN Factor		

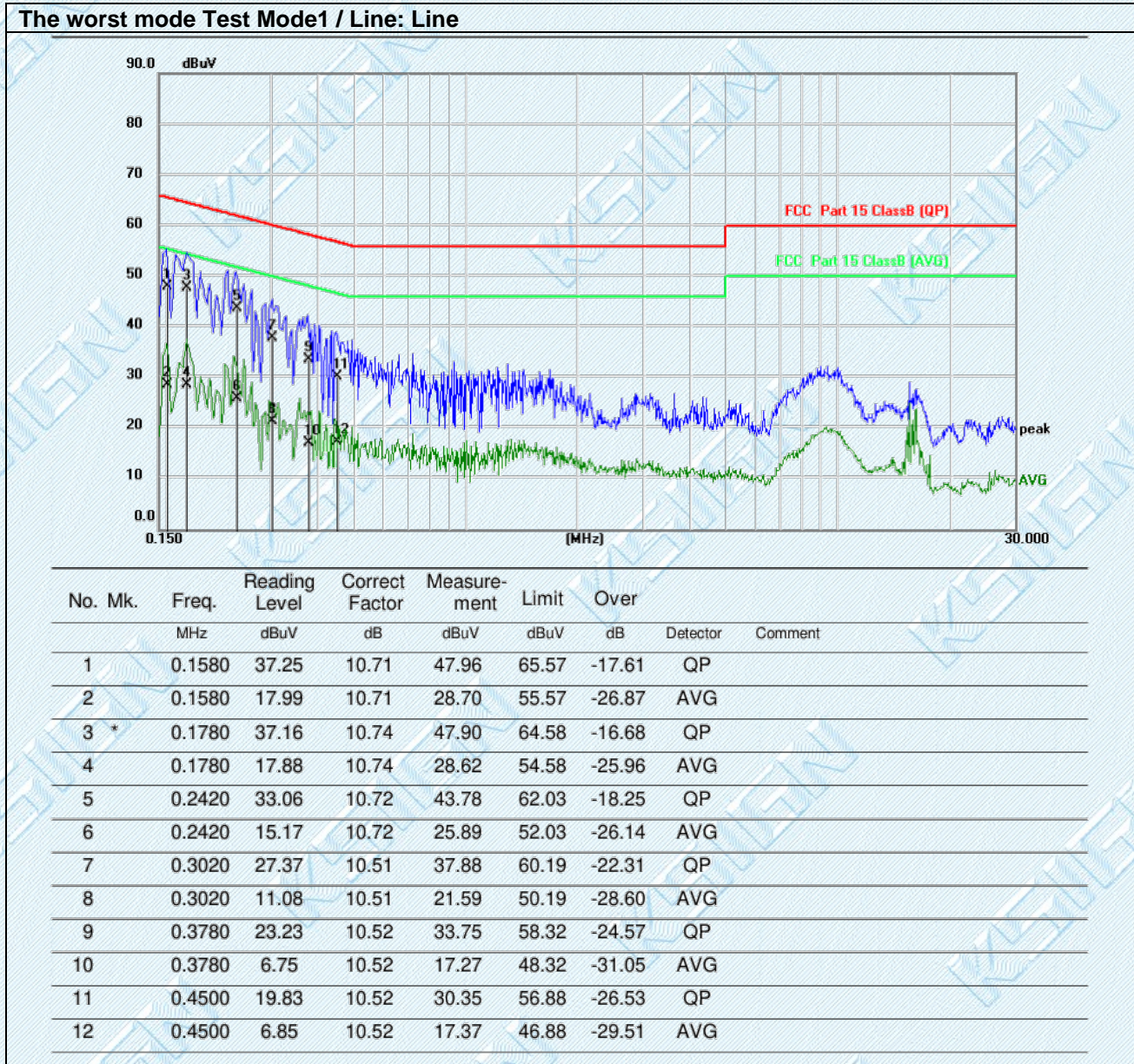
3.1.1. E.U.T. Operation:

Operating Environment:	
Temperature:	24.4 °C
Humidity:	51.3 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1

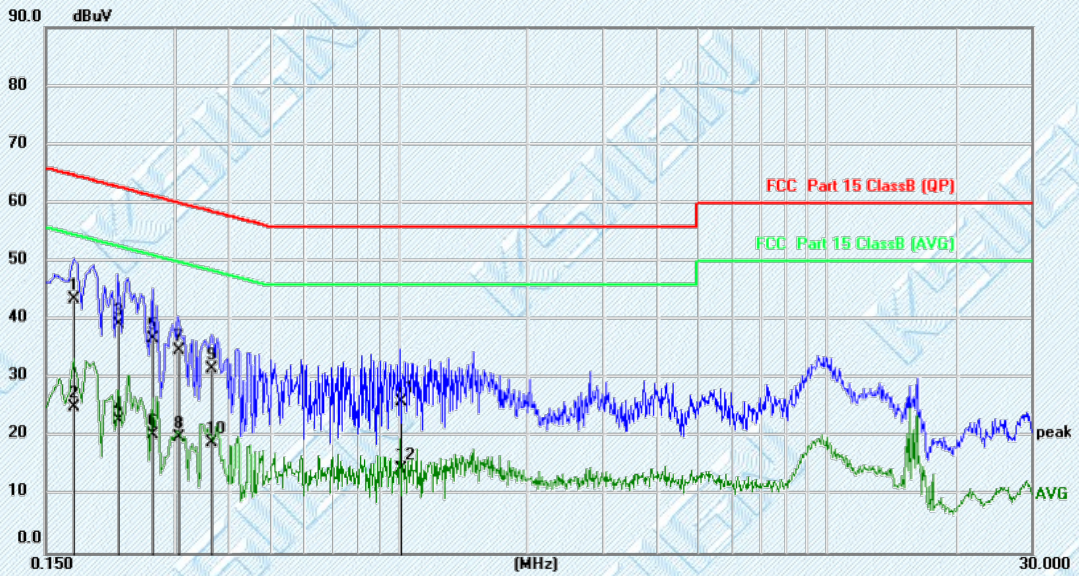
3.1.2. Test Setup Diagram:



3.1.3. Test Data:



The worst mode Test Mode1 / Line: Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1740	32.88	10.73	43.61	64.77	-21.16	QP	
2		0.1740	14.39	10.73	25.12	54.77	-29.65	AVG	
3		0.2220	28.49	10.75	39.24	62.74	-23.50	QP	
4		0.2220	12.18	10.75	22.93	52.74	-29.81	AVG	
5		0.2660	26.04	10.66	36.70	61.24	-24.54	QP	
6		0.2660	9.81	10.66	20.47	51.24	-30.77	AVG	
7		0.3060	24.30	10.53	34.83	60.08	-25.25	QP	
8		0.3060	9.36	10.53	19.89	50.08	-30.19	AVG	
9		0.3660	21.01	10.55	31.56	58.59	-27.03	QP	
10		0.3660	8.36	10.55	18.91	48.59	-29.68	AVG	
11		1.0100	15.44	10.50	25.94	56.00	-30.06	QP	
12		1.0100	4.10	10.50	14.60	46.00	-31.40	AVG	

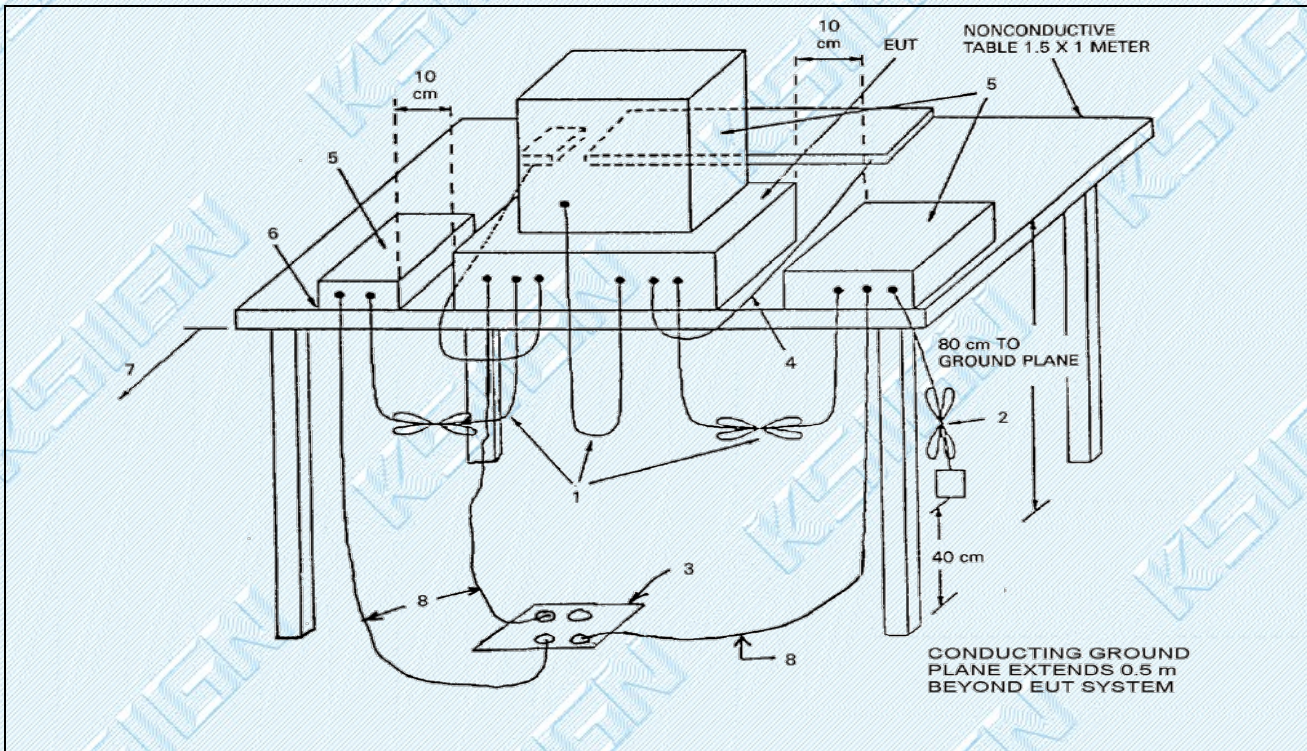
3.2. Radiated emissions (Below 1GHz)

Test Requirement:	15.109, Class B				
Test Limit:	Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:				
	Frequency of emission (MHz)	Field strength @3m		Field strength @10m	
		(uV/m)	(dBuV/m)	(uV/m)	(dBuV/m)
	30 – 88	100	40	30	29.5
	88 – 216	150	43.5	45	33.1
216 – 960	200	46	60	35.6	
Above 960	500	54	150	43.5	
Test Method:	ANSI C63.4				
Procedure:	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. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor				

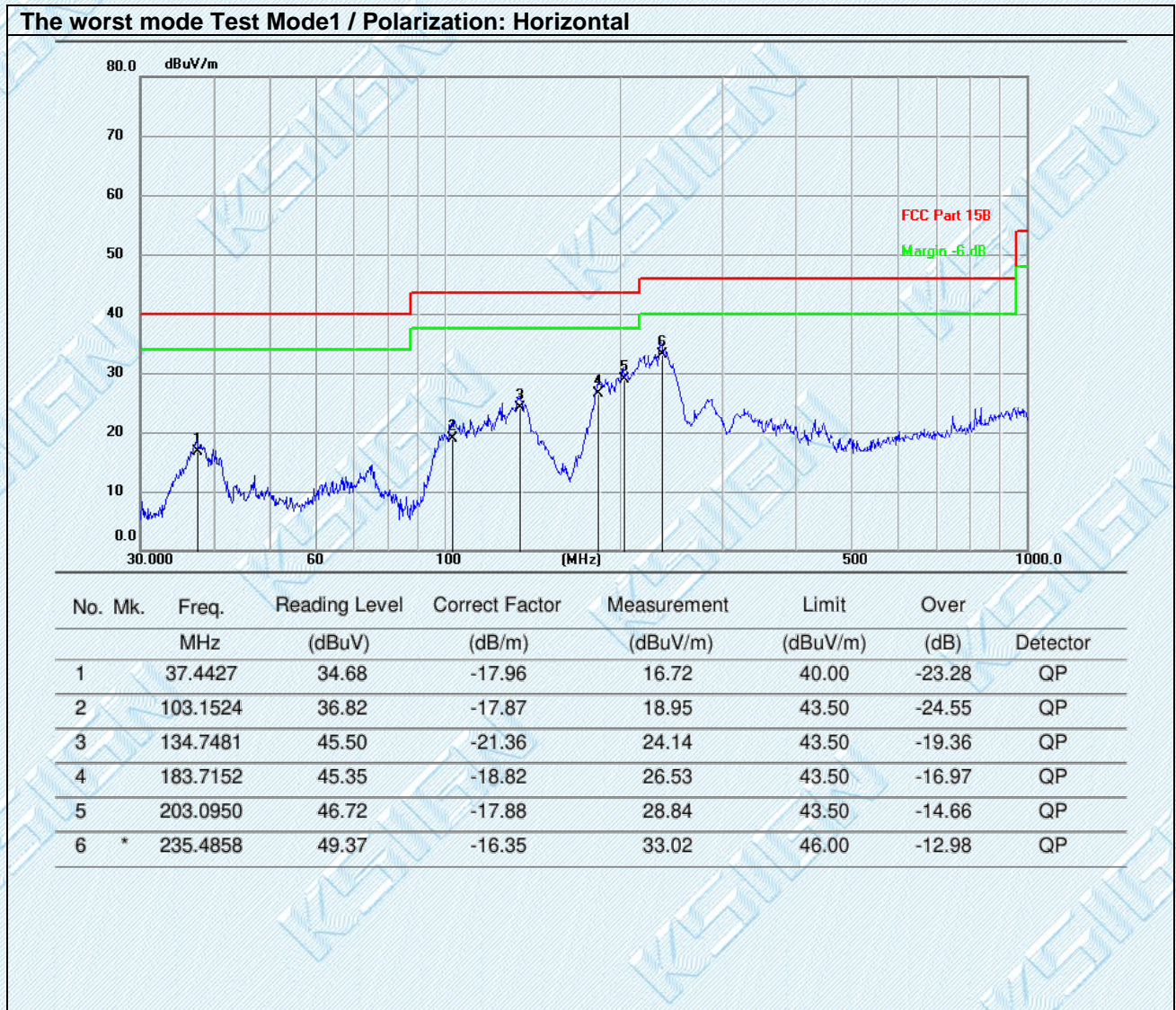
3.2.1. E.U.T. Operation:

Operating Environment:	
Temperature:	25.7 °C
Humidity:	44.8 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1

3.2.2. Test Setup Diagram:



3.2.3. Test Data:

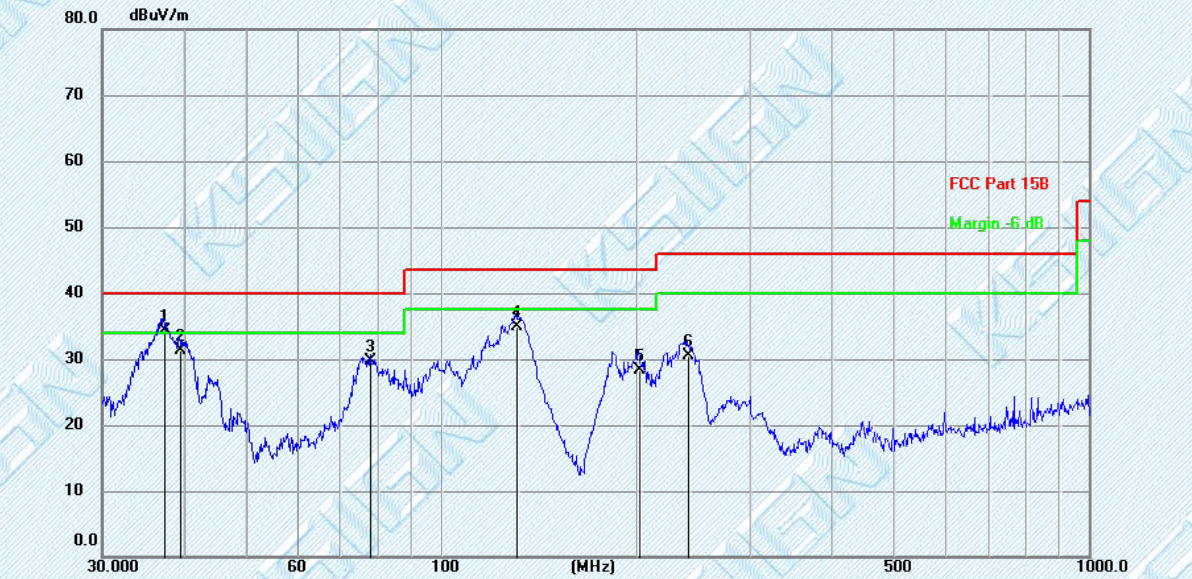


TRF EMC_R1

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The worst mode Test Mode1 / Polarization: Vertical



No. Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1 *	37.3247	52.22	-18.00	34.22	40.00	-5.78	QP
2	39.5064	48.68	-17.28	31.40	40.00	-8.60	QP
3	77.8927	50.62	-20.94	29.68	40.00	-10.32	QP
4	130.6077	56.02	-21.04	34.98	43.50	-8.52	QP
5	201.4637	46.31	-17.94	28.37	43.50	-15.13	QP
6	240.4928	46.65	-16.11	30.54	46.00	-15.46	QP

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4. EUT TEST PHOTOS

Conducted emissions on AC mains



Radiated emissions (Below 1GHz)



5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

External



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--THE END--