



TEST REPORT

Reference No. : WTD23D12265582W001
Applicant : Coolr Group Inc
Address : 4451 Brookfield Corporate Dr Suite 111, Chantilly, VA 20151, US
Manufacturer 1 : Suga Electronics (Dongguan) Co.,Ltd.
Address : Suga High-tech Industrial Park, No.8 Fulong Road, Sanzhong village, Qingxi Town, Dongguan City, Guangdong Province, China
Manufacturer 2 : Suga International (Vietnam) Company Limited
Address : Lo so CN11-3, Que Vo 3 Industrial Park, Que Tan Commune, Que Vo District, Bac Ninh Province, Vietnam
Product : VistaZ
Model(s) : CVZ-0303
Standards : FCC Part 15 Subpart B
Date of Receipt sample : 2023-12-14
Date of Test : 2023-12-21 to 2024-01-09
Date of Issue : 2024-01-18
Test Result : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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2 Revision History

Test Report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD23D12265582W001	2023-12-14	2023-12-21 to 2024-01-09	2024-01-18	Original	-	Valid

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3 General Information

3.1 General Description of E.U.T.

Product : VistaZ
Model(s) : CVZ-0303
Model Description : N/A
Remark : N/A

3.2 Details of E.U.T.

Ratings : DC 3.7V by battery
Battery : DC 3.7V, 2500mAh, 9.25Wh

3.3 Subcontracted

Whether parts of tests for the product have been subcontracted to other labs:

☐ Yes ☒ No

If Yes, list the related test items and lab information:

Test Lab: N/A
Lab address: N/A
Test items: N/A

3.4 Abnormalities from Standard Conditions

None.



4 Test Summary

Test Item	Test Requirement	Test Result
AC Power Line Conducted Emission (150kHz to 30MHz)	FCC Part 15 Subpart B	N/A
Disturbance voltage at the antenna terminals (30MHz to 2150MHz)	FCC Part 15 Subpart B	N/A
Radiated Emission (30MHz to 1GHz)	FCC Part 15 Subpart B	Pass
Radiated Emission (Above 1GHz)	FCC Part 15 Subpart B	Pass

Remark:

Pass Test item meets the requirement
Fail Test item does not meet the requirement
N/A Test case does not apply to the test object

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5 Equipment Used during Test

5.1 Equipment List

3m Semi-anechoic Chamber for Radiation (TDK)						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Test Receiver	R&S	ESCI	101296	2023-04-24	2024-04-23
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2023-11-04	2024-11-03
3	Amplifier	ANRITSU	MH648A	M43381	2023-04-24	2024-04-23
4	Cable	HUBER+SUHNER	CBL2	525178	2023-04-24	2024-04-23
3m Semi-anechoic Chamber for Radiation, Above 1GHz						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Spectrum Analyzer	R&S	FSP	100091	2023-04-24	2024-04-23
2	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2023-02-02	2024-02-01
3	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2023-08-08	2024-08-07
4	Coaxial Cable (above 1GHz)	Top	1GHz-18GHz	NA	2023-02-02	2024-02-01

Test Software:

Test Item	Software name	Software version
Radiated Emission(3m)	EZ-EMC	EZ-EMC(RA-03A1-1)

5.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.
/	/	/	/



5.3 Measurement Uncertainty

Parameter	Uncertainty (Note 1)
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 3\%$
Conducted Emission (150kHz-30MHz)	$\pm 3.64\text{dB}$
Radiated Emission_3m (30MHz-1000MHz)	$\pm 4.53\text{ dB}$
Radiated Emission_10m (30MHz-1000MHz)	$\pm 5.24\text{ dB}$
Radiated Emission(1GHz~18GHz)	$\pm 5.03\text{dB}$

Note 1: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

5.4 Test Mode

Test Item	Test Mode	Test Voltage
Radiated Emissions (30MHz-1GHz)	Charging mode	DC 3.7V
	Working mode*	
Radiated Emissions (Above1GHz)	Charging mode	DC 3.7V
	Working mode*	
“*” shows the worst case mode which were recorded in this report.		



6 Emission Test Results

6.1 Radiation Emission, 30MHz to 1000MHz

Test Requirement..... : FCC Part 15 Subpart B
 Test Method..... : ANSI C63.4
 Test Result : Pass
 Frequency Range : 30MHz to 1000MHz
 Class..... : Class B
 Limit..... :

Frequency (MHz)	Distance (Meter)	Limit (d μ V/m)
		Quasi-peak
30 to 88	3	40
88 to 216	3	43.5
216 to 960	3	46
960 to 1000	3	54

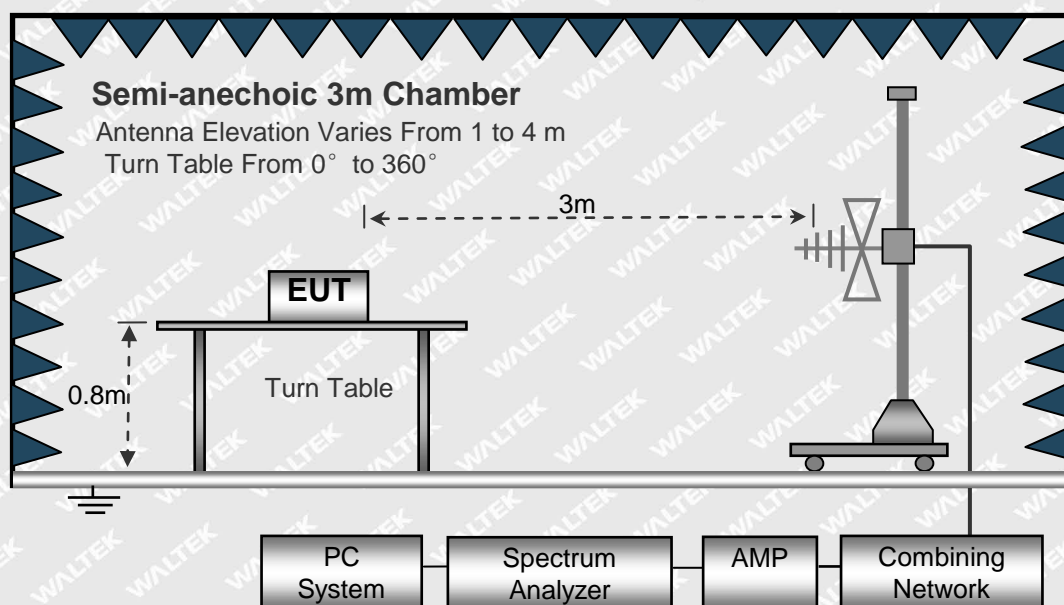
6.1.1 E.U.T. Operation

Operating Environment:

Temperature..... : 19.9°C
 Humidity..... : 38%RH
 Atmospheric Pressure..... : 101.3kPa
 EUT Operation..... : Refer to section 5.4.

6.1.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.



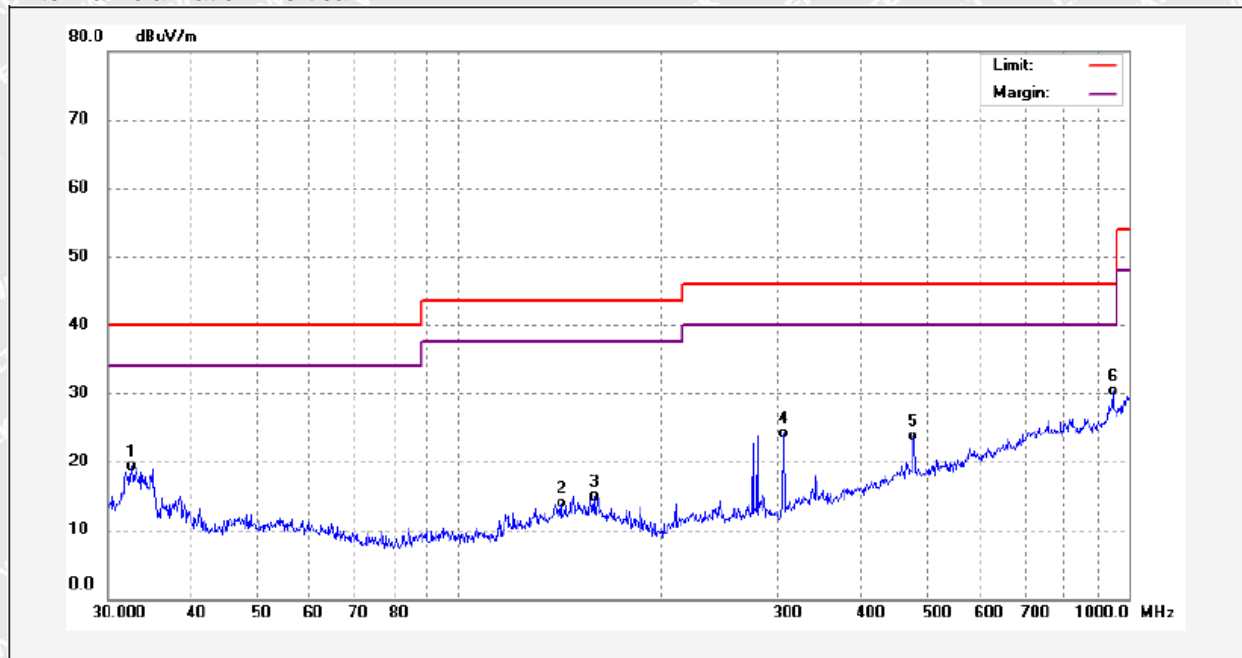


6.1.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Quasi-peak measurements were performed if peak emissions were within 6dB of the Quasi-peak limit line.

6.1.4 Radiated Emission Test Data, 30MHz to 1000MHz

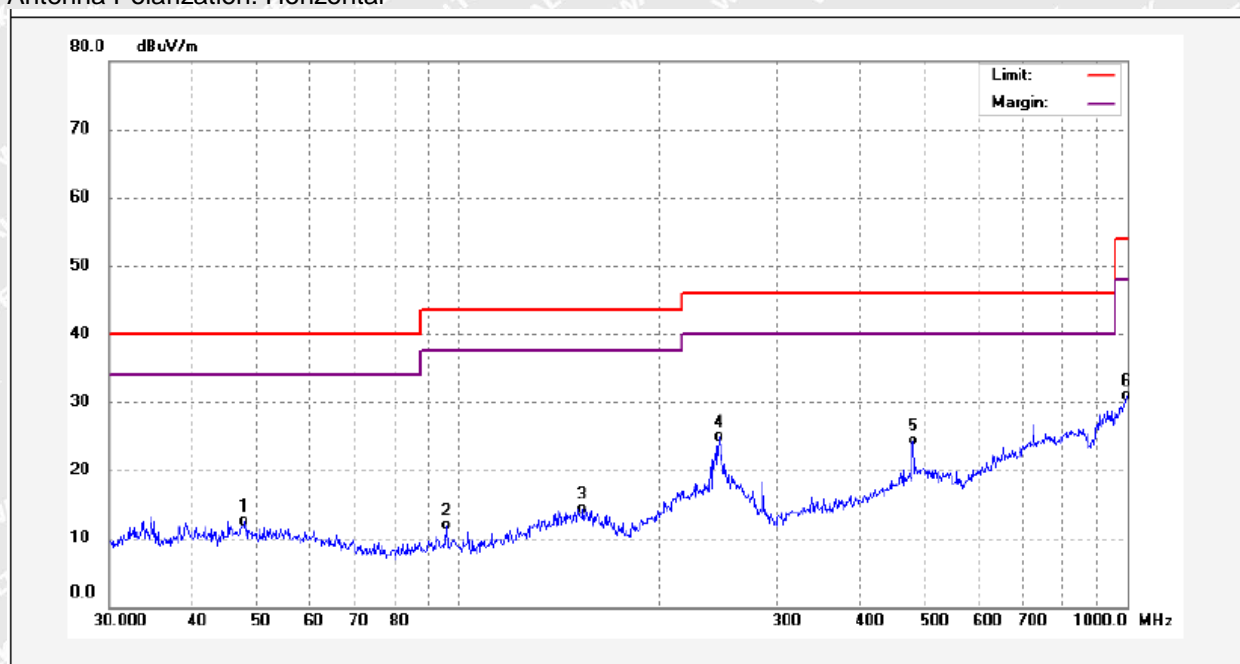
Antenna Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	32.5198	35.96	-16.75	19.21	40.00	-20.79	QP	
2	142.3243	28.12	-14.20	13.92	43.50	-29.58	QP	
3	159.2251	28.59	-13.72	14.87	43.50	-28.63	QP	
4	305.6800	38.66	-14.50	24.16	46.00	-21.84	QP	
5	477.1694	33.40	-9.75	23.65	46.00	-22.35	QP	
6	945.4399	30.39	-0.15	30.24	46.00	-15.76	QP	



Antenna Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	47.8260	28.42	-15.83	12.59	40.00	-27.41	QP	
2	95.7622	29.95	-18.12	11.83	43.50	-31.67	QP	
3	153.2004	28.26	-13.89	14.37	43.50	-29.13	QP	
4	245.0900	34.47	-9.53	24.94	46.00	-21.06	QP	
5	478.8456	33.04	-8.81	24.23	46.00	-21.77	QP	
6	996.4996	28.84	2.10	30.94	54.00	-23.06	QP	

6.2 Radiation Emission, Above 1000MHz

Test Requirement..... : FCC Part 15 Subpart B
 Test Method..... : ANSI C63.4
 Test Result : Pass
 Frequency Range : Above 1GHz
 Class. : Class B
 Limit. :

Frequency Range (MHz)	Distance (Meter)	Average Limit dB(uV/m)	Peak Limit (dBuV/m)
Above 1GHz	3	54	74

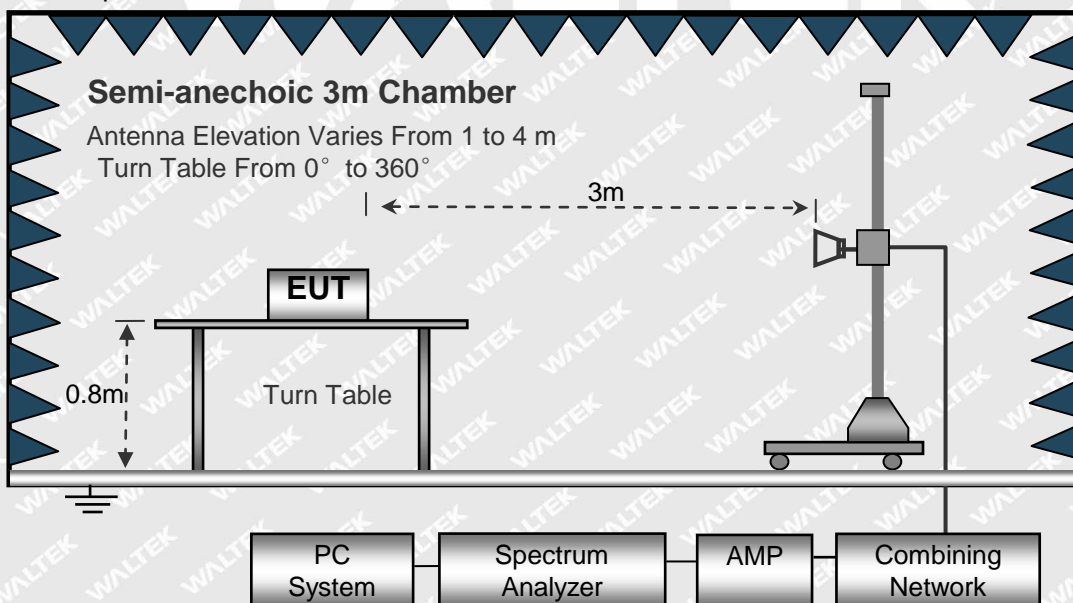
6.2.1 E.U.T. Operation

Operating Environment:

Temperature..... : 20.7°C
 Humidity..... : 38.5%RH
 Atmospheric Pressure : 101.1kPa
 EUT Operation..... : Refer to section 5.4.

6.2.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.



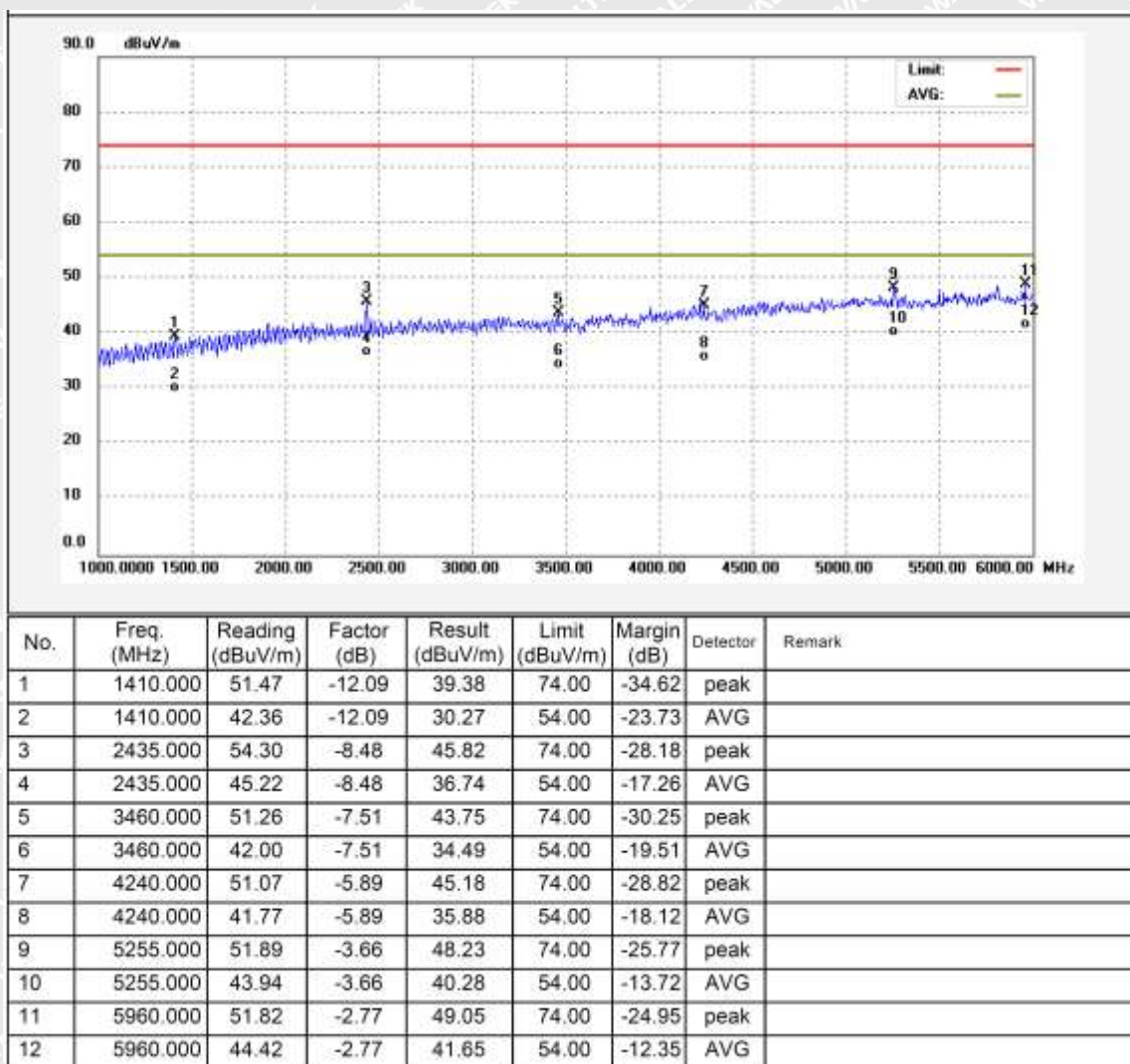
6.2.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Average measurements were performed if peak emissions were within 6dB of the average limit line



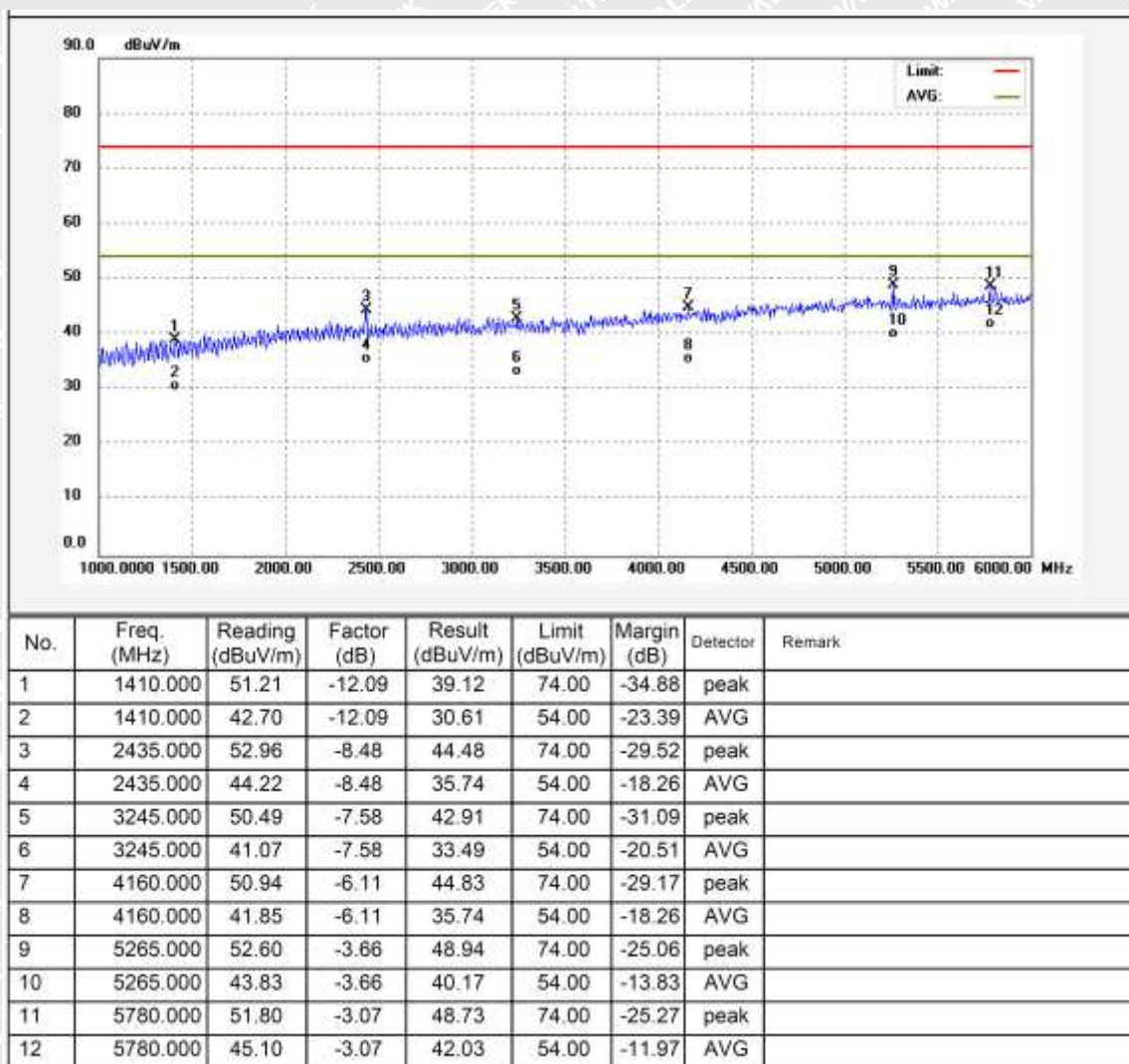
6.2.4 Radiated Emission test data, Above 1000MHz

Antenna Polarization: Vertical





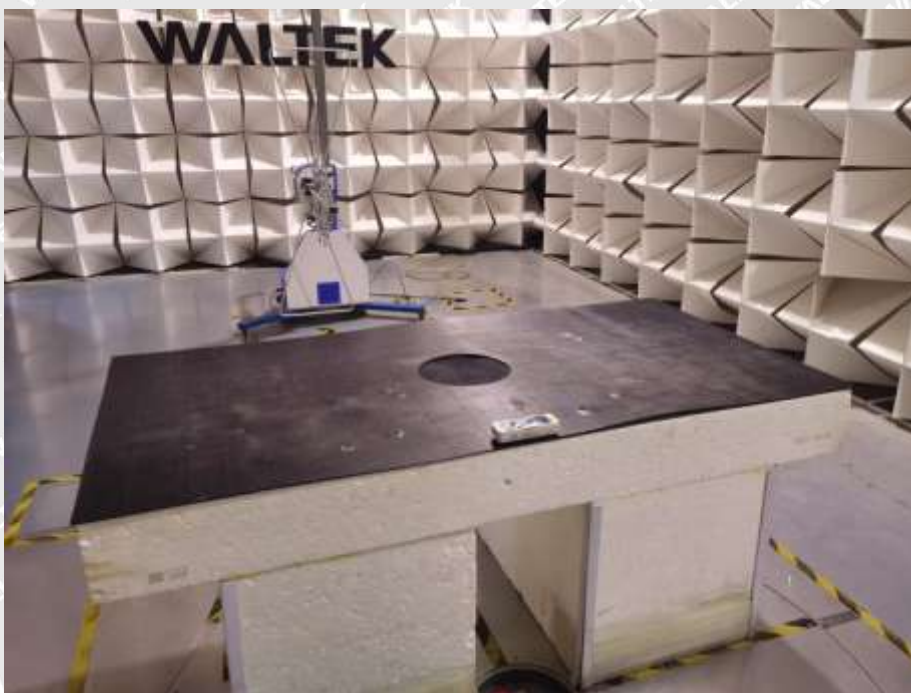
Antenna Polarization: Horizontal





7 Photographs – Test Setup

7.1 Photograph – Radiated Emission Test Setup For 30MHz-1000MHz



7.2 Photograph –Radiated Emissions Test Setup For Above 1GHz





8 Photographs – Constructional Details

Note: Please refer to appendix: Appendix-CVZ-0303-Photos.

=====End of Report=====

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