

TEST REPORT

Reference No...... : WTD22D04069920E V1
FCC ID..... : 2ADCSSP8096
Applicant..... : SMART Wireless Computing Inc.
Address..... : 39870 Eureka Dr, Newark, CA 94560, USA
Manufacturer 1 : SMART MODULAR TECHNOLOGIES SDN BHD
Address 1..... : PLOT 18 LORONG JELAWAT 4 KAWASAN PERINDUSTRIAN
SEBERANG JAYA PERAIPULAU PINANG 13700 MALAYSIA
Manufacturer 2 : Pegatron Corporation Taoyuan Plant
Address 2..... : No 5 Xingye st, Guishan Dist, Taoyuan City 33341, Taiwan.
Manufacturer 3 : NATIONGATE SOLUTION (M) SDN. BHD.
Address 3..... : 1413, Solok Perusahaan Satu Kawasan Perindustrian Prai, 13600
Pera, Penang, Malaysia
Product..... : Solstice Pod Gen3
Model(s)..... : SP8096
Standards : FCC PART15 SUBPART B
Date of Receipt sample : 2022-04-15
Date of Test : 2022-04-15 to 2022-04-24
Date of Issue..... : 2022-04-27
Test Result..... : **Pass**
Remarks..... : This report is for C2PC application, applicants add optional HDMI
output chip and USB Hub chip.

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.

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1 Contents

	Page
COVER PAGE	1
1 CONTENTS	2
2 REVISION HISTORY	3
3 GENERAL INFORMATION.....	4
3.1 GENERAL DESCRIPTION OF E.U.T.....	4
3.2 DETAILS OF E.U.T.....	4
3.3 SUBCONTRACTED.....	4
3.4 ABNORMALITIES FROM STANDARD CONDITIONS	4
4 TEST SUMMARY	5
5 EQUIPMENT USED DURING TEST	6
5.1 EQUIPMENT LIST.....	6
5.2 DESCRIPTION OF SUPPORT UNITS.....	7
5.3 MEASUREMENT UNCERTAINTY.....	7
5.4 TEST EQUIPMENT CALIBRATION.....	7
5.5 TEST MODE	8
6 EMISSION TEST RESULTS.....	9
6.1 RADIATION EMISSION, 30MHZ TO 1000MHZ.....	9
6.2 RADIATION EMISSION, ABOVE 1000MHZ	14
7 PHOTOGRAPHS – TEST SETUP	19
8 PHOTOGRAPHS – CONSTRUCTIONAL DETAILS	19

2 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD22D04069920E	2022-04-15	2022-04-15 to 2022-04-24	2022-04-26	Original	-	Replaced
WTD22D04069920E V1	2022-04-15	2022-04-15 to 2022-04-24	2022-04-27	Version 1	updated	Valid

3 General Information

3.1 General Description of E.U.T.

Product : Solstice Pod Gen3
Model(s) : SP8096
Model Difference : N/A
Remark : N/A

3.2 Details of E.U.T.

Ratings : DC 12V or POE

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

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	2021-04-26	1Year
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2021-10-30	1Year
3	Amplifier	ANRITSU	MH648A	M43381	2021-04-26	1Year
4	Cable	HUBER+SUHNER	CBL2	525178	2021-04-26	1Year
3m Semi-anechoic Chamber for Radiation, Above 1GHz						
1	Spectrum Analyzer	R&S	FSP30	100091	2021-04-26	1Year
2	Amplifier	Agilent	8447D	2944A10178	2021-07-26	1Year
3	EMI Test Receiver	R&S	ESPI	101528	2021-05-20	1Year
4	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	2021-08-23	1Year
5	Coaxial Cable	Top	TYPE16(13M)	-	2021-04-26	1Year
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2021-04-30	1Year
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2021-07-26	1Year
8	Coaxial Cable (above 1GHz)	ZT26-NJ-NJ-8M/FA	1GHz-18GHz	NA	2021-04-26	1Year
10m Semi-anechoic Chamber for Radiation						
1	Test Receiver (9KHz-7GHz)	R&S	ESR 7	102320	2021-12-29	1Year
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	01376	2021-12-29	1Year
3	Broadband Preamplifier (9KHz-6GHz)	SCHWARZBECK	BBV9744	00140	2021-12-29	1Year
4	Coaxial Cable (below 1GHz)	Lair Microwave	LE400-NMNM-8M	#02	2021-12-29	1Year
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	02333	2021-12-29	1Year
6	Coaxial Cable (above 1GHz)	Lair Microwave	LE400-NMNM-8M	#01	2021-12-29	1Year

5.2 Description of Support Units

Equipment	Brand	Model No.	Series No.
Laptop	Lenovo	E440	/
LED monitor	SAMSUNG	S28AG700NC	CXY6H4ZRB00675M
LED monitor	DELL	U2720Q	CN-09MRJJ-WSL00-1C7--BMRU-A11
POE adapter	CISCO	SB-PWR-INJ2	/
USB flash disk	Aigo	U356	SJOU008843
USB flash disk	Kingston	/	/
HDMI cable	Waltek	/	/
HDMI cable	Waltek	/	/
Earphone	Waltek	/	/

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(30MHz~1GHz)	$\pm 5.03\text{dB}$
Radiated Emission(1GHz~18GHz)	$\pm 5.47\text{dB}$

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 Equipment Calibration

All the test equipments used are valid and calibrated by GUANG ZHOU GRG METROLOGY & TEST CO., LTD. address is No.163, Pingyun Rd. West of Huangpu Ave, Tianhe District, Guangzhou, Guangdong, China.

5.5 Test Mode

Test Item	Test Mode	Test Voltage
Radiated Emissions (30MHz-1GHz)	HDMI in and HDMI out	DC 12V from battery or POE power supply
	USB-A playing*	DC 12V from battery or POE power supply
	Wired network playing	DC 12V from battery or POE power supply
Radiated Emissions (Above 1GHz)	HDMI in and HDMI out	DC 12V from battery or POE power supply
	USB-A playing*	DC 12V from battery or POE power supply
	Wired network playing	DC 12V from battery or POE power supply
“*” 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: 2014
 Test Result : Pass
 Frequency Range..... : 30MHz to 1000MHz
 Class. : Class A
 Limit..... :

Frequency (MHz)	Distance (Meter)	Limit (dB μ V/m) Quasi-peak
30 to 88	10	39
88 to 216		43.5
216 to 960		46.4
960 to 1000		49.5

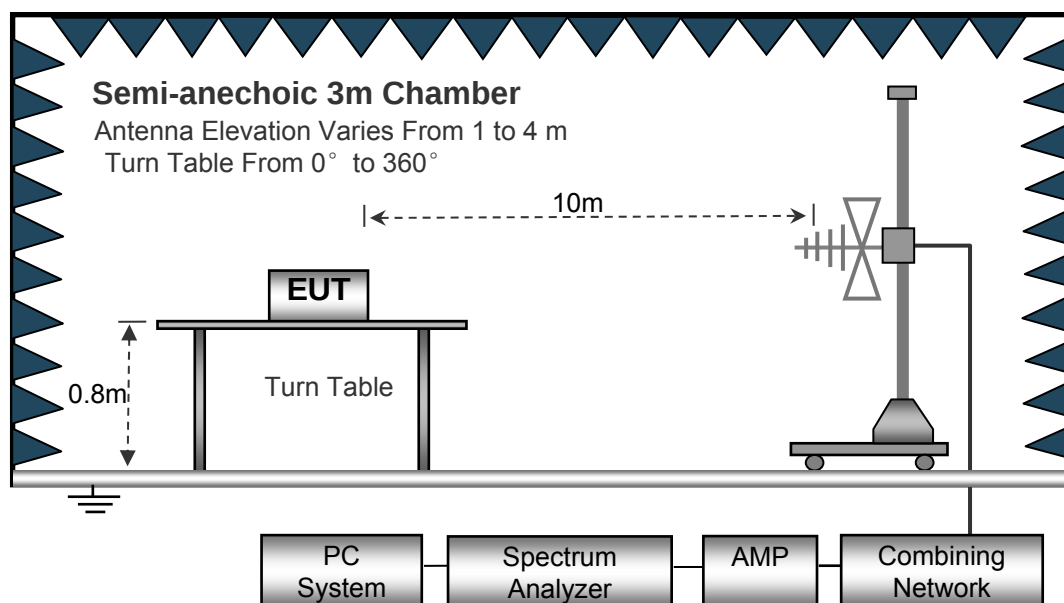
6.1.1 E.U.T. Operation

Operating Environment:

Temperature..... : 22.5°C
 Humidity..... : 52.6%RH
 Atmospheric Pressure..... : 101.8kPa
 EUT Operation : Refer to section 5.5.

6.1.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 10m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4:2014.



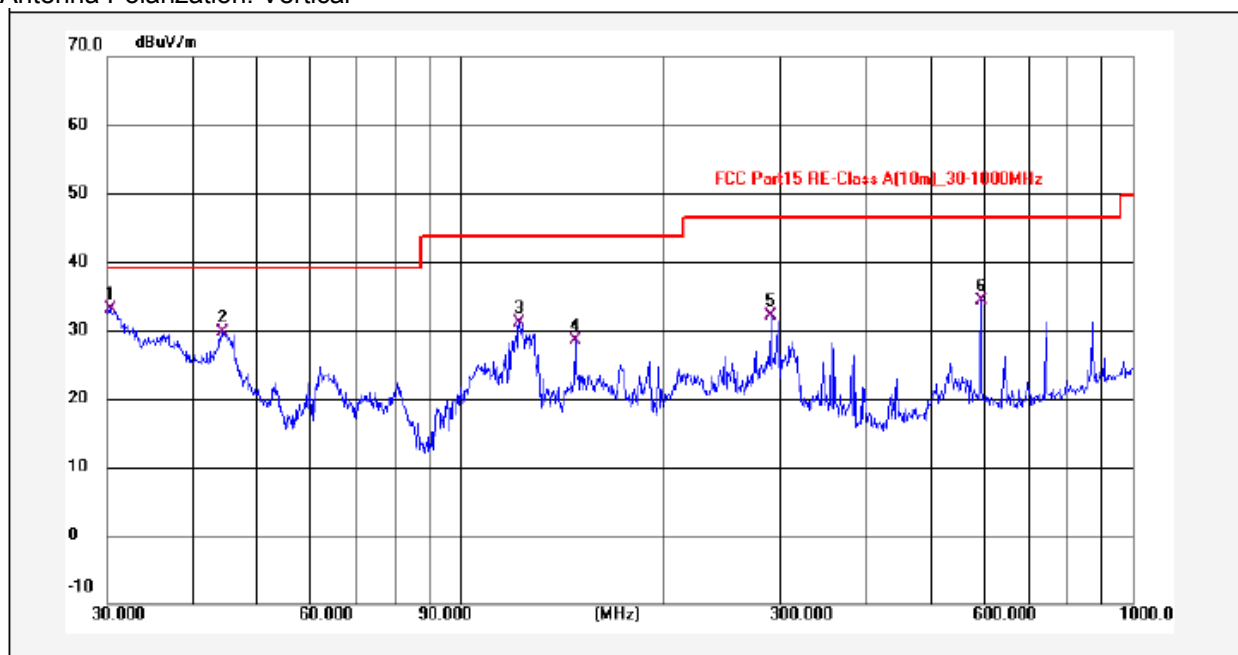
6.1.3 Measurement Data

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

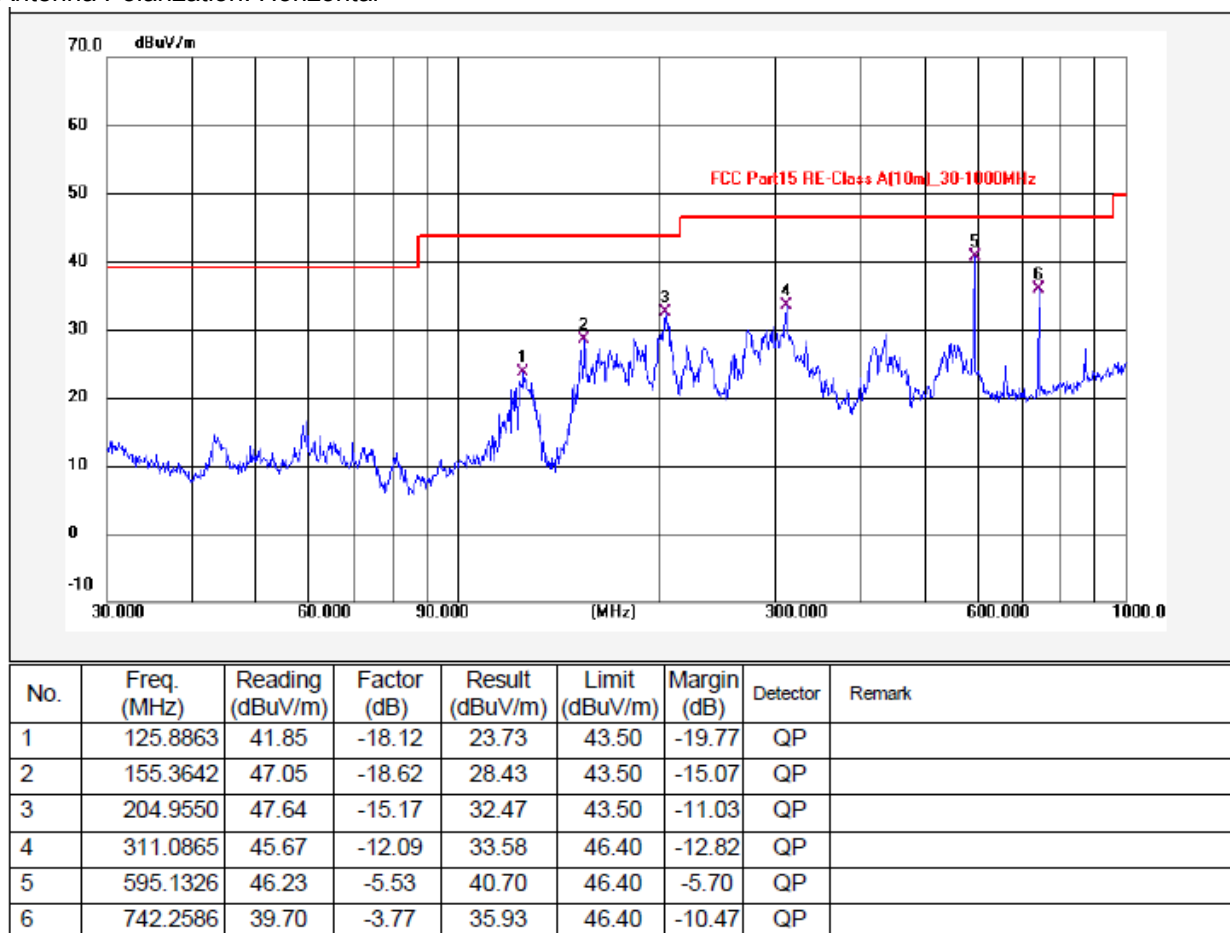
DC 12V

Antenna Polarization: Vertical



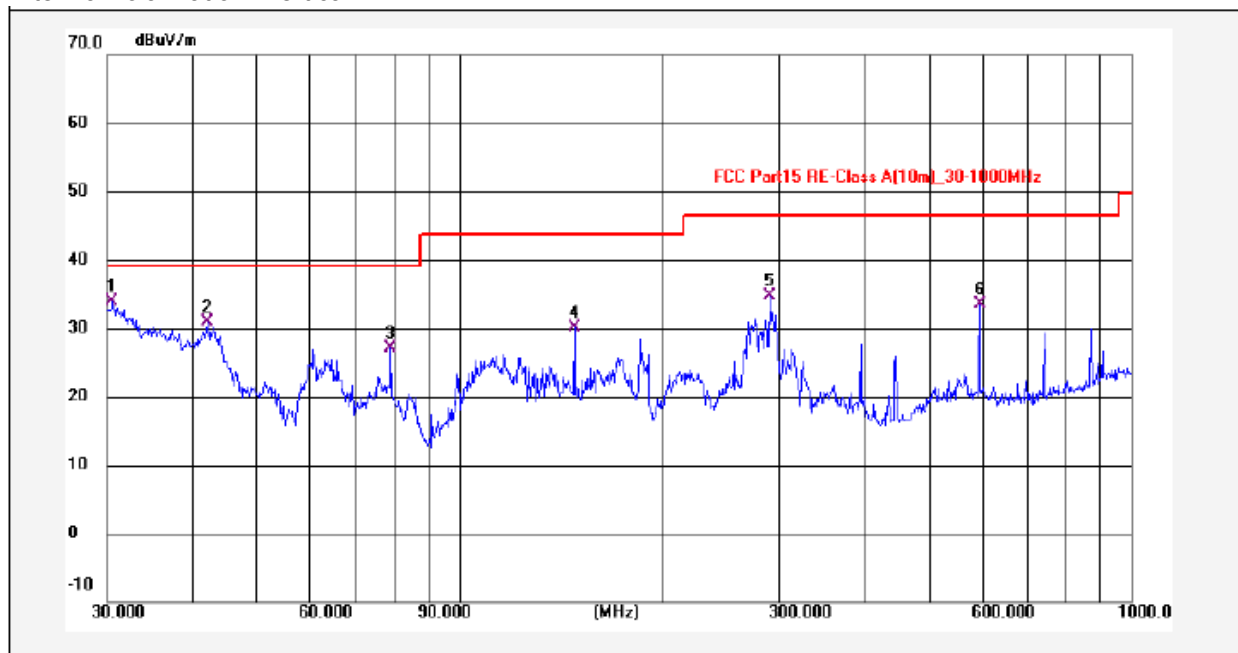
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	30.3170	50.14	-17.06	33.08	39.00	-5.92	QP	
2	44.5867	43.99	-14.19	29.80	39.00	-9.20	QP	
3	122.8336	48.75	-17.68	31.07	43.50	-12.43	QP	
4	148.4410	47.52	-18.96	28.56	43.50	-14.94	QP	
5	290.0172	44.83	-12.63	32.20	46.40	-14.20	QP	
6	595.1326	39.83	-5.53	34.30	46.40	-12.10	QP	

Antenna Polarization: Horizontal



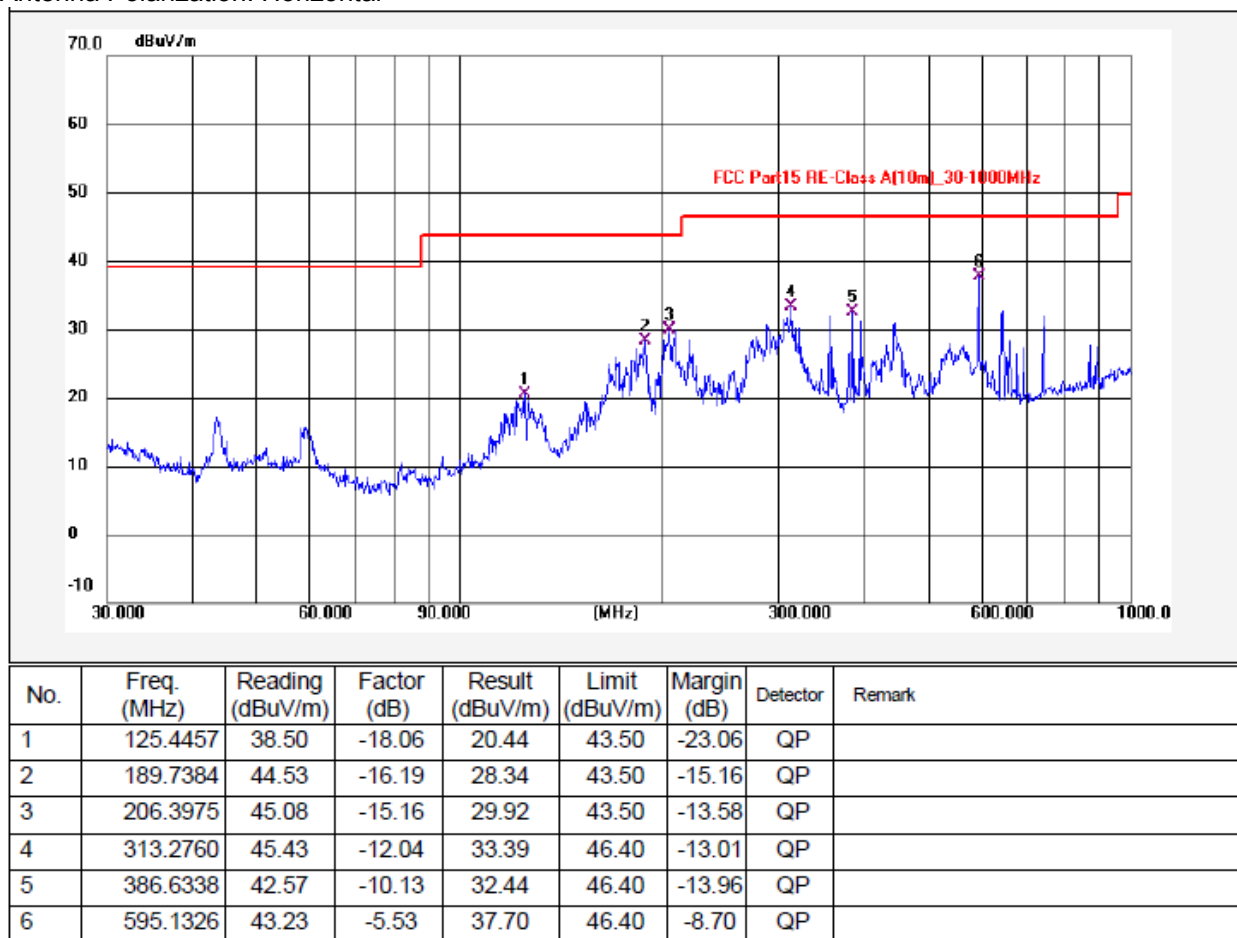
POE

Antenna Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	30.5304	50.90	-17.04	33.86	39.00	-5.14	QP	
2	42.3021	45.60	-14.65	30.95	39.00	-8.05	QP	
3	79.2425	46.78	-19.68	27.10	39.00	-11.90	QP	
4	148.4410	49.07	-18.96	30.11	43.50	-13.39	QP	
5	290.0172	47.25	-12.63	34.62	46.40	-11.78	QP	
6	595.1326	39.05	-5.53	33.52	46.40	-12.88	QP	

Antenna Polarization: Horizontal



6.2 Radiation Emission, Above 1000MHz

Test Requirement..... : FCC PART 15, SUBPART B
 Test Method..... : ANSI C63.4: 2014
 Test Result : Pass
 Frequency Range..... : Above 1GHz
 Class. : Class A
 Limit. :

Frequency Range (MHz)	Distance (Meter)	Average Limit dB(uV/m)	Peak Limit (dBuV/m)
Above 1GHz	3	60	80

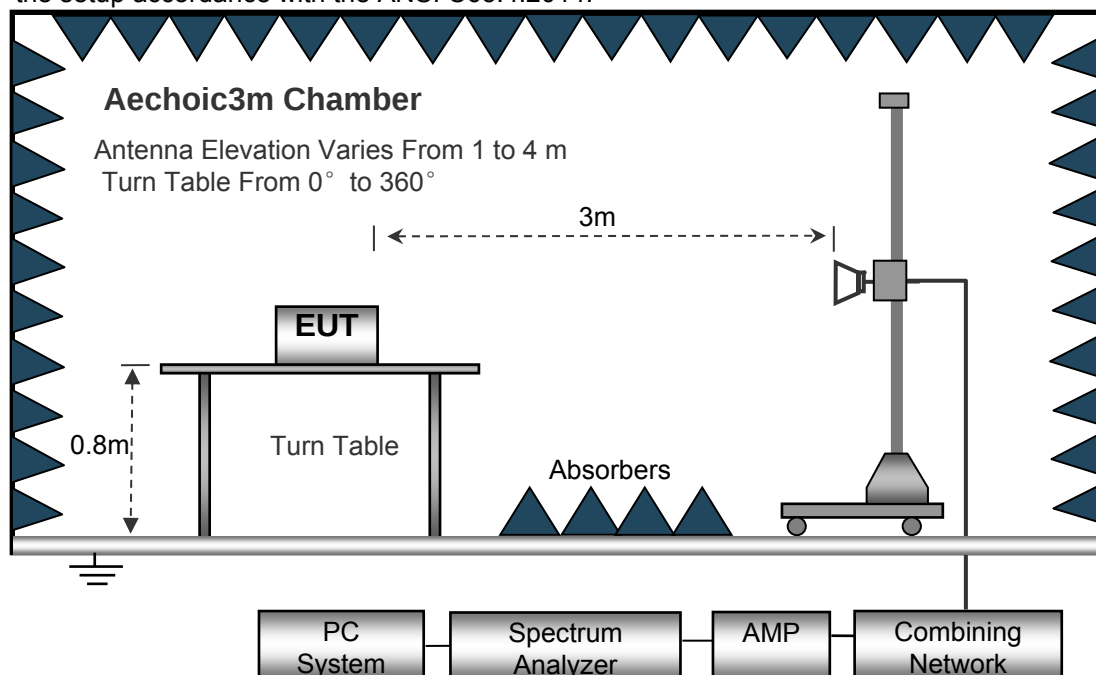
6.2.1 E.U.T. Operation

Operating Environment:

Temperature..... : 22.5°C
 Humidity..... : 52.6%RH
 Atmospheric Pressure : 101.8kPa
 EUT Operation : Refer to section 5.5.

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 C63.4:2014.



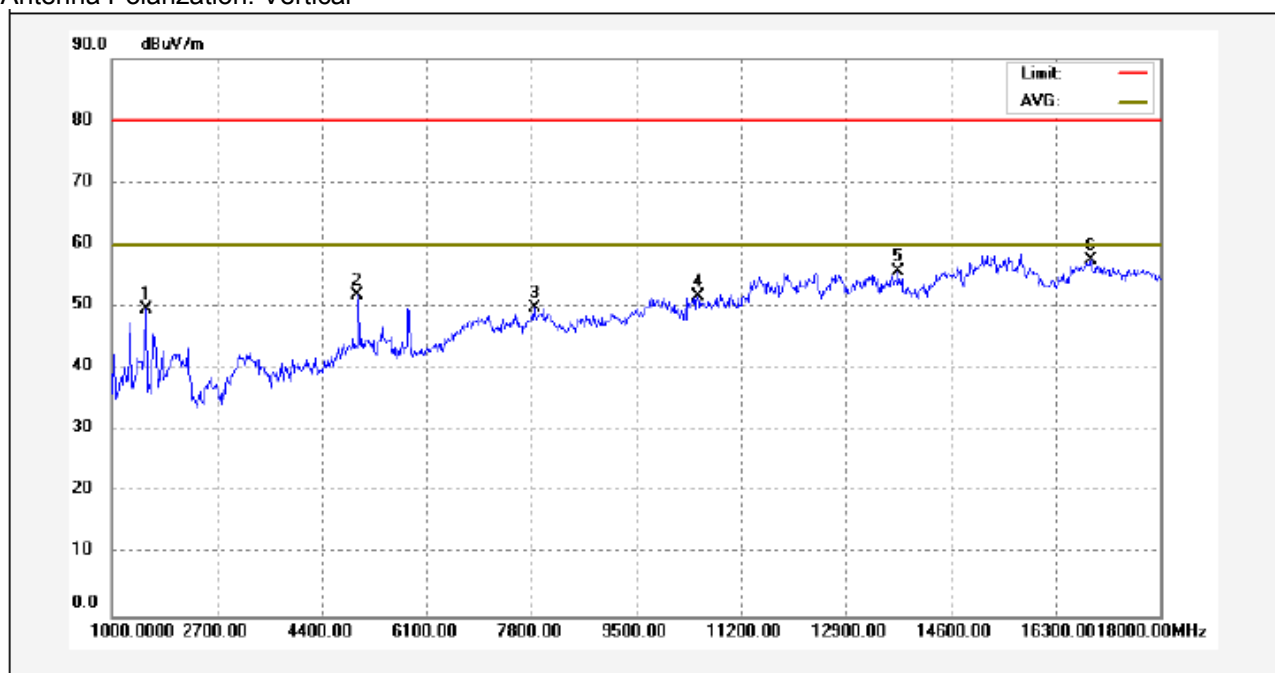
6.2.3 Measurement Data

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

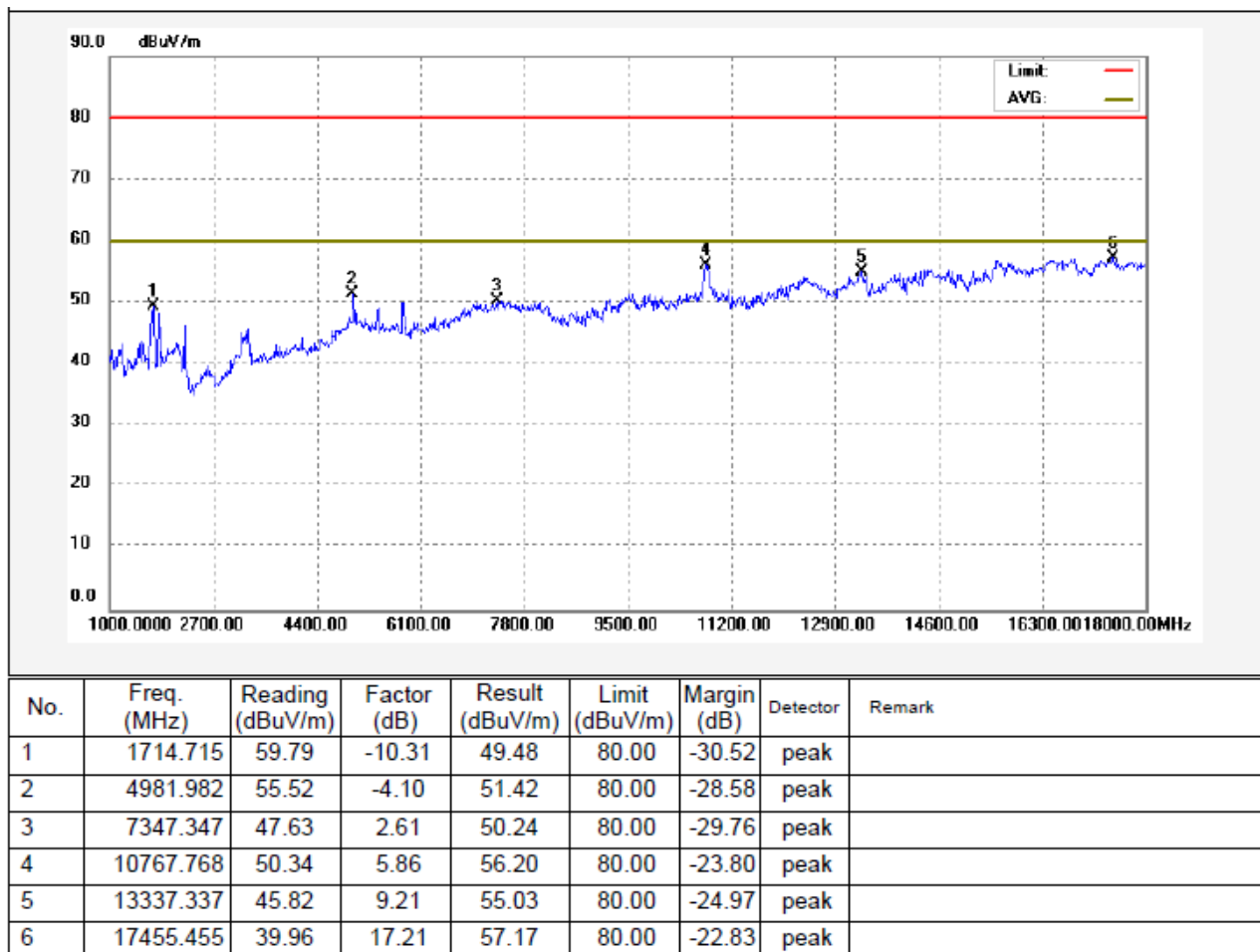
DC 12V

Antenna Polarization: Vertical



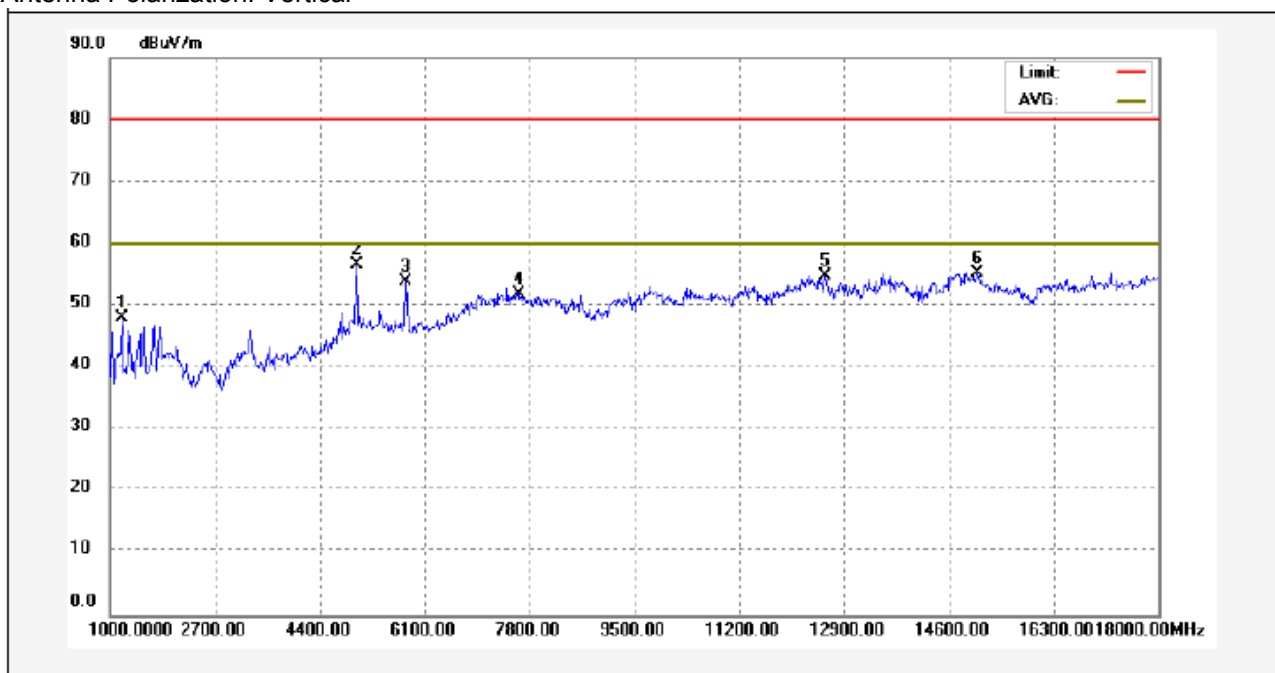
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1561.562	62.82	-13.31	49.51	80.00	-30.49	peak	
2	4981.982	53.32	-1.49	51.83	80.00	-28.17	peak	
3	7840.841	47.58	2.16	49.74	80.00	-30.26	peak	
4	10495.495	46.99	4.61	51.60	80.00	-28.40	peak	
5	13745.746	46.26	9.52	55.78	80.00	-24.22	peak	
6	16859.860	45.12	12.40	57.52	80.00	-22.48	peak	

Antenna Polarization: Horizontal



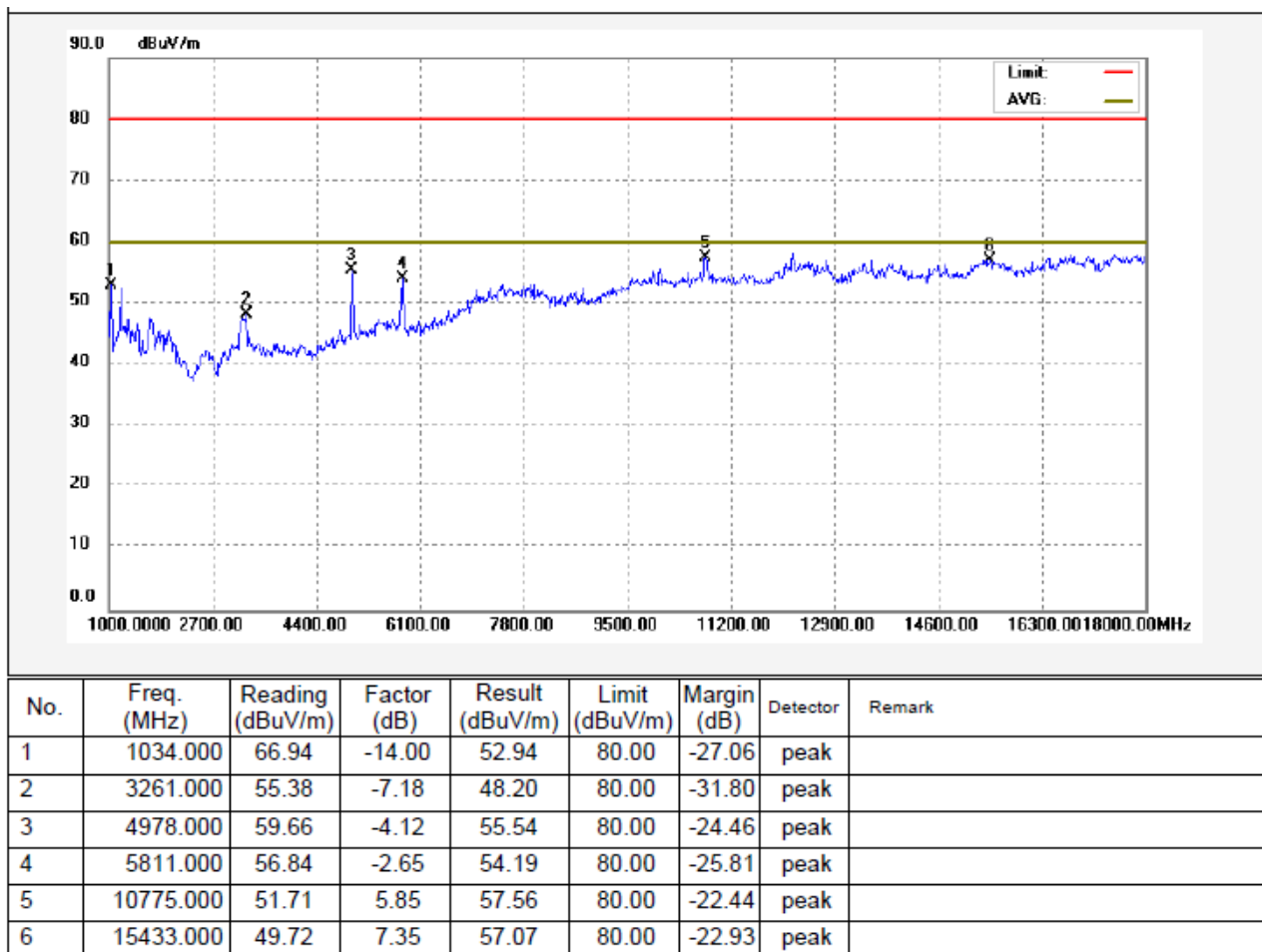
POE

Antenna Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1187.000	63.54	-15.45	48.09	80.00	-31.91	peak	
2	4995.000	58.05	-1.40	56.65	80.00	-23.35	peak	
3	5794.000	56.26	-2.45	53.81	80.00	-26.19	peak	
4	7613.000	49.89	2.01	51.90	80.00	-28.10	peak	
5	12577.000	47.45	7.30	54.75	80.00	-25.25	peak	
6	15042.000	45.41	9.84	55.25	80.00	-24.75	peak	

Antenna Polarization: Horizontal



7 Photographs – Test Setup

Note: Please refer to appendix: Appendix-SP8096-Photos.

8 Photographs – Constructional Details

Note: Please refer to appendix: Appendix-SP8096-Photos.

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