

TEST REPORT

Product : 2.4GHz Remote Control
Trade mark : OVO
Model/Type reference : OVO-RC08P2, OVO-RC08,
OVO-RC07P, OVO-RC08P
Serial Number : N/A
Report Number : EED32O800665
FCC ID : 2AAUL-OVO-RC08P2
Date of Issue : Mar. 21, 2022
Test Standards : 47 CFR Part 15 Subpart C
Test result : PASS

Prepared for:

OVOMEDIA CREATIVE INC.

3F., No. 151, Ziqiang 5th Rd., Zhubei City, Hsinchu County, Taiwan

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:

mark.chen.

Reviewed by:

Aaron Ma

Mark Chen

Aaron Ma

Approved by:

David Wang

Date:

Mar. 21, 2022

David Wang

Check No.:4903140122



1 Version

Version No.	Date	Description
00	Mar. 21, 2022	Original

2 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	N/A
Field Strength of the Fundamental Signal	47 CFR Part 15 Subpart C Section 15.249 (a)	ANSI C63.10-2013	PASS
Spurious Emissions	47 CFR Part 15 Subpart C Section 15.249 (a)/15.209	ANSI C63.10-2013	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15 Subpart C Section 15.249(a)/15.205	ANSI C63.10-2013	PASS
20dB Occupied Bandwidth	47 CFR Part 15 Subpart C Section 15.215 (c)	ANSI C63.10-2013	PASS

Remark:

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

Model No.: OVO-RC08P2, OVO-RC08, OVO-RC07P, OVO-RC08P.

Only the model OVO-RC08P2 was tested, the difference between these models is listed as below: the models are different because of the sales channels and customer code numbers; but their internal structure, circuit principle, and all key components related to electromagnetic compatibility are exactly the same. The difference does not affect the safety and electromagnetic compatibility of the product.

3 Contents

	Page
1 VERSION.....	2
2 TEST SUMMARY.....	3
3 CONTENTS.....	4
4 GENERAL INFORMATION.....	5
4.1 CLIENT INFORMATION.....	5
4.2 GENERAL DESCRIPTION OF EUT.....	5
4.3 TEST ENVIRONMENT.....	7
4.4 DESCRIPTION OF SUPPORT UNITS.....	7
4.5 TEST LOCATION.....	7
4.6 DEVIATION FROM STANDARDS.....	7
4.7 ABNORMALITIES FROM STANDARD CONDITIONS.....	7
4.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	7
4.9 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2).....	8
5 EQUIPMENT LIST.....	9
6 TEST RESULTS AND MEASUREMENT DATA.....	11
6.1 ANTENNA REQUIREMENT.....	11
6.2 RADIATED SPURIOUS EMISSIONS.....	12
6.3 20dB BANDWIDTH.....	22
APPENDIX 1 PHOTOGRAPHS OF TEST SETUP.....	25
APPENDIX 2 PHOTOGRAPHS OF EUT.....	27

4 General Information

4.1 Client Information

Applicant:	OVOMEDIA CREATIVE INC.
Address of Applicant:	3F., No. 151, Ziqiang 5th Rd., Zhubei City, Hsinchu County, Taiwan
Manufacturer:	OVOMEDIA CREATIVE INC.
Address of Manufacturer:	3F., No. 151, Ziqiang 5th Rd., Zhubei City, Hsinchu County, Taiwan
Factory:	Shenzhen Tianzun Technology Co., Ltd.
Address of Factory:	6th Floor, Building 65, Baotian Industrial Zone, Chentian Community, Xixiang Street, Baoan District, Shenzhen

4.2 General Description of EUT

Product Name:	2.4GHz Remote Control
Model/Type reference:	OVO-RC08P2, OVO-RC08, OVO-RC07P, OVO-RC08P
Test Model No.:	OVO-RC08P2
Trade mark:	OVO
Product Type:	☐ Mobile ☒ Portable ☐ Fix Location
Test Software of EUT	N/A
Operation Frequency:	2402MHz~2480MHz
Modulation Type:	GFSK
Number of Channel:	5
Antenna Type:	PCB Antenna
Antenna Gain:	4.5 dBi
Power Supply:	Battery: DC 3V
Test Voltage:	DC 3V
Sample Received Date:	Jan. 14, 2022
Sample tested Date:	Jan. 14, 2022 to Mar. 18, 2022

Operation Frequency each of channel					
Channel	Frequency	Channel	Frequency	Channel	Frequency
1CH	2404 MHz	2CH	2424 MHz	3CH	2444 MHz
4CH	2476 MHz	5CH	2480 MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The Lowest channel(CH1)	2404MHz
The Middle channel(CH3)	2444MHz
The Highest channel(CH5)	2480MHz

4.3 Test Environment

Operating Environment:	
Radiated Spurious Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
RF Conducted:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar

4.4 Description of Support Units

The EUT has been tested with associated equipment below.

1) Support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
/	/	/	/	/

4.5 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

4.6 Deviation from Standards

None.

4.7 Abnormalities from Standard Conditions

None.

4.8 Other Information Requested by the Customer

None.

4.9 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-40GHz)
3	Radiated Spurious emission test	3.3dB (9kHz-30MHz)
		4.3dB (30MHz-1GHz)
		4.5dB (1GHz-18GHz)
		3.4dB (18GHz-40GHz)
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%

5 Equipment List

RF test system					
Equipment	Manufacturer	Mode No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Spectrum Analyzer	R&S	FSV40	101200	08-26-2021	08-25-2022
Signal Generator	Keysight	E8257D	MY53401106	12-24-2021	12-23-2022
Digital multimeter	FLUKE	111	90240138	05-10-2021	05-09-2022
DC Power	Keysight	E3642A	MY54426035	12-24-2021	12-23-2022

3M Semi/full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05-24-2019	05-23-2022
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-618	05-16-2021	05-15-2022
Receiver	R&S	ESC17	100938-003	10-15-2021	10-14-2022
Multi device Controller	maturio	NCD/070/10711112	---	---	---
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04-15-2021	04/14/2024
Spectrum Analyzer	R&S	FSP40	100416	04-29-2021	04-28-2022
Microwave Preamplifier	Agilent	8449B	3008A02425	06-23-2021	06-22-2022

3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
RSE Automatic test software	JS Tonscend	JS36-RSE	10166	---	---
Receiver	Keysight	N9038A	MY57290136	03-04-2021 03-01-2022	03-03-2022 02-28-2023
Spectrum Analyzer	Keysight	N9020B	MY57111112	03-04-2021 03-01-2022	03-03-2022 02-28-2023
Spectrum Analyzer	Keysight	N9030B	MY57140871	03-04-2021 03-01-2022	03-03-2022 02-28-2023
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-28-2021	04-27-2024
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-15-2021	04-14-2024
Horn Antenna	ETS-LINDGREN	3117	57407	07-04-2021	07-03-2024
Preamplifier	EMCI	EMC184055SE	980597	05-20-2021	05-19-2022
Communication test set	R&S	CMW500	102898	12-24-2021	12-23-2022
Preamplifier	EMCI	EMC001330	980563	04-15-2021	04-14-2022
Preamplifier	JS Tonscend	980380	EMC051845 SE	12-24-2021	12-23-2022
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	04-16-2021	04-15-2022
Fully Anechoic Chamber	TDK	FAC-3	---	01-09-2021	01-08-2024
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	---	---
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	---	---
Cable line	Times	EMC104-NMNM-1000	SN160710	---	---
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	---	---
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	---	---
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	---	---
Cable line	Times	HF160-KMKM-3.00M	393493-0001	---	---

6 Test results and Measurement Data

6.1 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 PCB antenna, The best case gain of the antenna is 4.5 dBi.	

6.2 Radiated Spurious Emissions

Test Requirement: 47 CFR Part 15C Section 15.249 and 15.209 and 15.205

Test Method: ANSI C63.10

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
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10kHz	Average

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
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

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.

Limit:
(Field strength of the fundamental signal)

Frequency	Limit (dBμV/m @3m)	Remark
2400MHz-2483.5MHz	94.0	Average Value
	114.0	Peak Value

Test Setup:

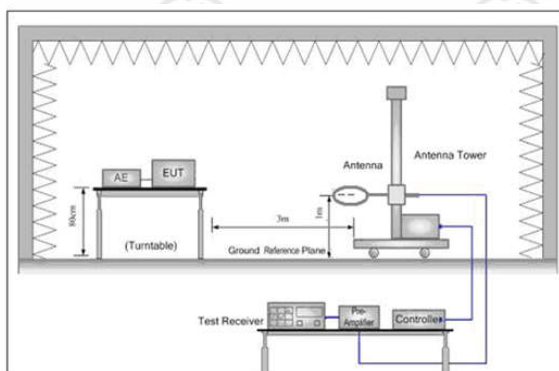


Figure 1. Below 30MHz

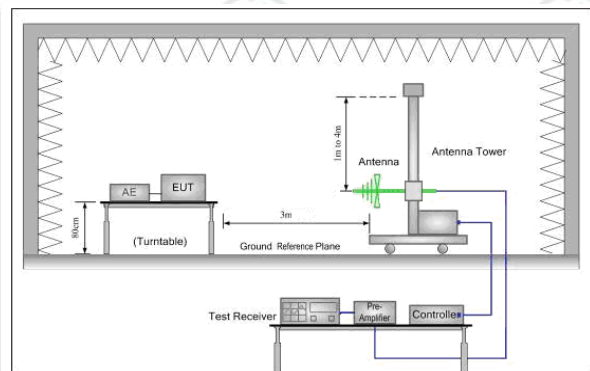


Figure 2. 30MHz to 1GHz

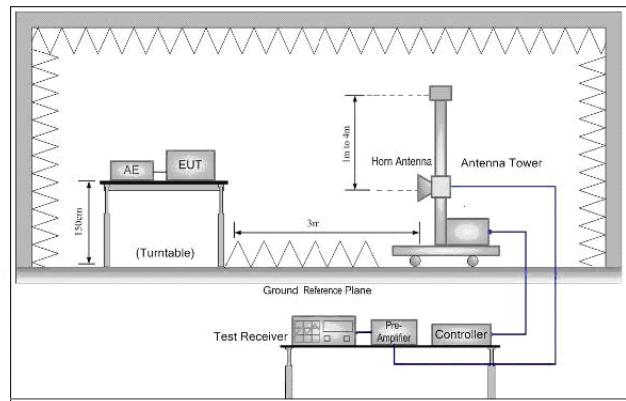


Figure 3. Above 1GHz

Test Procedure:

Below 1GHz test procedure as below:

The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

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

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.

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 rotating table was turned from 0 degrees to 360 degrees to find the maximum reading.

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

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.

Above 1GHz test procedure as below:

Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change from table 0.8 metre to 1.5 metre (Above 18GHz the distance is 1 meter and table is 1.5 metre).

Test the EUT in the lowest channel, middle channel, the Highest channel

The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.

Repeat above procedures until all frequencies measured was complete.

Test Results:

Pass

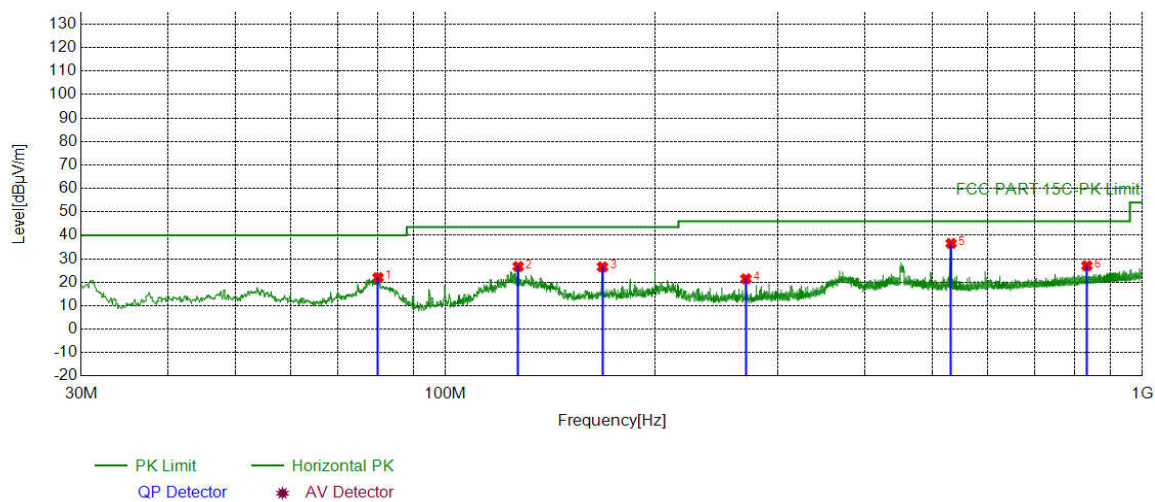
Field Strength Of The Fundamental Signal:

Peak value:

Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
2404	5.82	84.75	90.57	114	-23.43	Pass	Horizontal	PK
2404	5.83	82.14	87.97	114	-26.03	Pass	Vertical	PK
2444	6.20	87.10	93.30	114	-20.7	Pass	Horizontal	PK
2444	6.20	84.72	90.92	114	-23.08	Pass	Vertical	PK
2480	6.54	85.95	92.49	114	-21.51	Pass	Horizontal	PK
2480	6.54	85.24	91.78	114	-22.22	Pass	Vertical	PK

30MHz-1GHz:(worse)

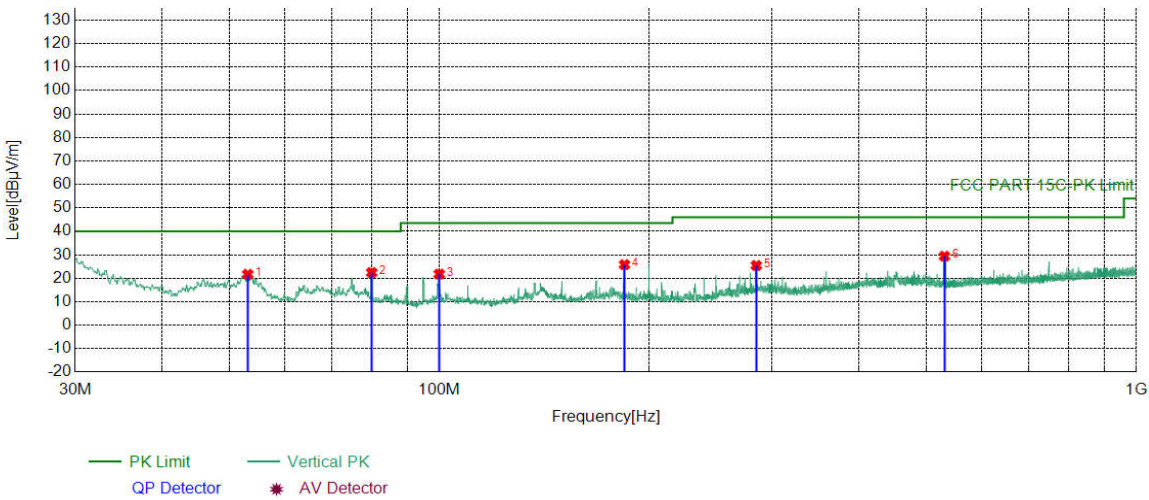
Test mode:	Transmitting (lowest channel)	Horizontal
------------	-------------------------------	------------



Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	80.0570	-22.55	44.53	21.98	40.00	18.02	PASS	Horizontal	PK
2	127.2037	-21.15	47.88	26.73	43.50	16.77	PASS	Horizontal	PK
3	168.0448	-20.59	47.15	26.56	43.50	16.94	PASS	Horizontal	PK
4	270.0020	-16.15	37.61	21.46	46.00	24.54	PASS	Horizontal	PK
5	531.8312	-10.21	46.77	36.56	46.00	9.44	PASS	Horizontal	PK
6	832.9493	-6.01	33.03	27.02	46.00	18.98	PASS	Horizontal	PK

Test mode:	Transmitting (lowest channel)	Vertical
------------	-------------------------------	----------



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	53.0883	-17.58	39.25	21.67	40.00	18.33	PASS	Vertical	PK
2	79.9600	-22.56	45.01	22.45	40.00	17.55	PASS	Vertical	PK
3	99.9440	-18.41	40.18	21.77	43.50	21.73	PASS	Vertical	PK
4	184.3424	-19.36	45.17	25.81	43.50	17.69	PASS	Vertical	PK
5	284.9415	-15.83	41.28	25.45	46.00	20.55	PASS	Vertical	PK
6	530.6671	-10.24	39.65	29.41	46.00	16.59	PASS	Vertical	PK

Above 1GHz:

Test mode:	Transmitting (lowest channel)	Horizontal
------------	-------------------------------	------------

Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1181.2181	0.81	42.42	43.23	74.00	30.77	PASS	Horizontal	PK
2	1853.2853	3.68	40.67	44.35	74.00	29.65	PASS	Horizontal	PK
3	4868.1245	-16.21	55.90	39.69	74.00	34.31	PASS	Horizontal	PK
4	7211.2808	-11.82	59.76	47.94	74.00	26.06	PASS	Horizontal	PK
5	9790.4527	-7.41	50.74	43.33	74.00	30.67	PASS	Horizontal	PK
6	13922.728	-1.84	49.43	47.59	74.00	26.41	PASS	Horizontal	PK

Test mode:	Transmitting (lowest channel)	Vertical
------------	-------------------------------	----------

Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1291.2291	1.04	41.78	42.82	74.00	31.18	PASS	Vertical	PK
2	1708.4708	2.97	41.01	43.98	74.00	30.02	PASS	Vertical	PK
3	4848.1232	-16.22	54.30	38.08	74.00	35.92	PASS	Vertical	PK
4	6965.2644	-11.82	53.22	41.40	74.00	32.60	PASS	Vertical	PK
5	11275.5517	-6.58	52.04	45.46	74.00	28.54	PASS	Vertical	PK
6	14433.7623	0.74	47.49	48.23	74.00	25.77	PASS	Vertical	PK

Test mode:	Transmitting (middle channel)	Horizontal
------------	-------------------------------	------------

Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1098.6099	0.85	42.09	42.94	74.00	31.06	PASS	Horizontal	PK
2	1763.0763	3.15	40.79	43.94	74.00	30.06	PASS	Horizontal	PK
3	4875.1250	-16.21	55.26	39.05	74.00	34.95	PASS	Horizontal	PK
4	7187.2792	-11.81	53.89	42.08	74.00	31.92	PASS	Horizontal	PK
5	10945.5297	-6.27	50.98	44.71	74.00	29.29	PASS	Horizontal	PK
6	16258.8839	1.38	48.88	50.26	74.00	23.74	PASS	Horizontal	PK

Test mode:	Transmitting (middle channel)	Vertical
------------	-------------------------------	----------

Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1356.4356	1.25	42.17	43.42	74.00	30.58	PASS	Vertical	PK
2	1783.6784	3.22	41.12	44.34	74.00	29.66	PASS	Vertical	PK
3	4889.1259	-16.20	57.94	41.74	74.00	32.26	PASS	Vertical	PK
4	6374.2249	-12.88	55.12	42.24	74.00	31.76	PASS	Vertical	PK
5	8799.3866	-9.46	51.59	42.13	74.00	31.87	PASS	Vertical	PK
6	13280.6854	-3.39	49.66	46.27	74.00	27.73	PASS	Vertical	PK

Test mode:	Transmitting (highest channel)	Horizontal
------------	--------------------------------	------------

Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1193.4193	0.80	41.74	42.54	74.00	31.46	PASS	Horizontal	PK
2	1782.6783	3.22	40.59	43.81	74.00	30.19	PASS	Horizontal	PK
3	4540.1027	-16.85	55.09	38.24	74.00	35.76	PASS	Horizontal	PK
4	6015.2010	-12.99	54.08	41.09	74.00	32.91	PASS	Horizontal	PK
5	8565.3710	-10.42	51.81	41.39	74.00	32.61	PASS	Horizontal	PK
6	12553.6369	-4.44	51.03	46.59	74.00	27.41	PASS	Horizontal	PK

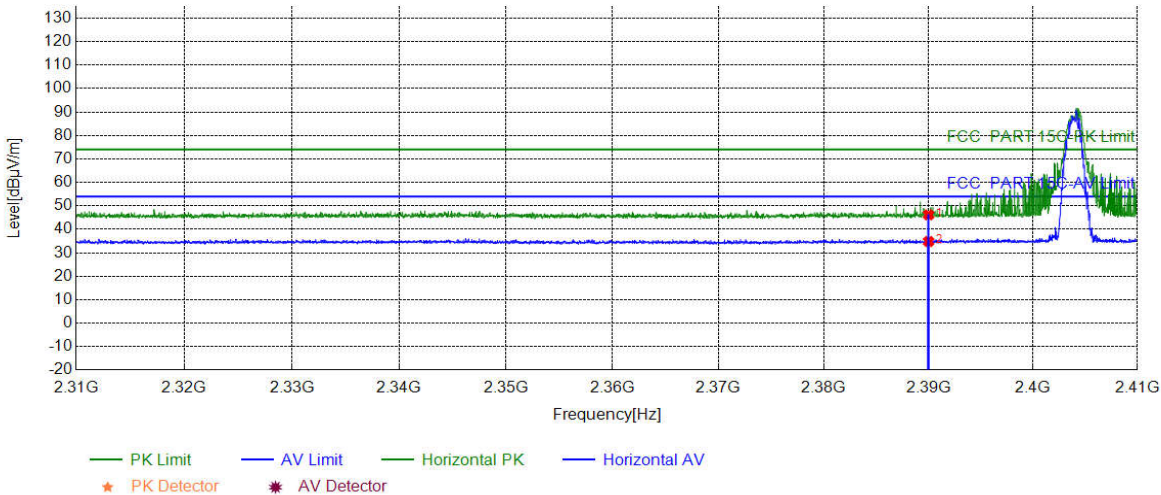
Test mode:	Transmitting (highest channel)	Vertical
------------	--------------------------------	----------

Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1120.4120	0.84	42.48	43.32	74.00	30.68	PASS	Vertical	PK
2	1679.2679	2.81	40.77	43.58	74.00	30.42	PASS	Vertical	PK
3	4373.0915	-17.10	56.40	39.30	74.00	34.70	PASS	Vertical	PK
4	6381.2254	-12.87	56.11	43.24	74.00	30.76	PASS	Vertical	PK
5	8742.3828	-9.85	53.03	43.18	74.00	30.82	PASS	Vertical	PK
6	12581.6388	-4.24	51.00	46.76	74.00	27.24	PASS	Vertical	PK

Restricted bands

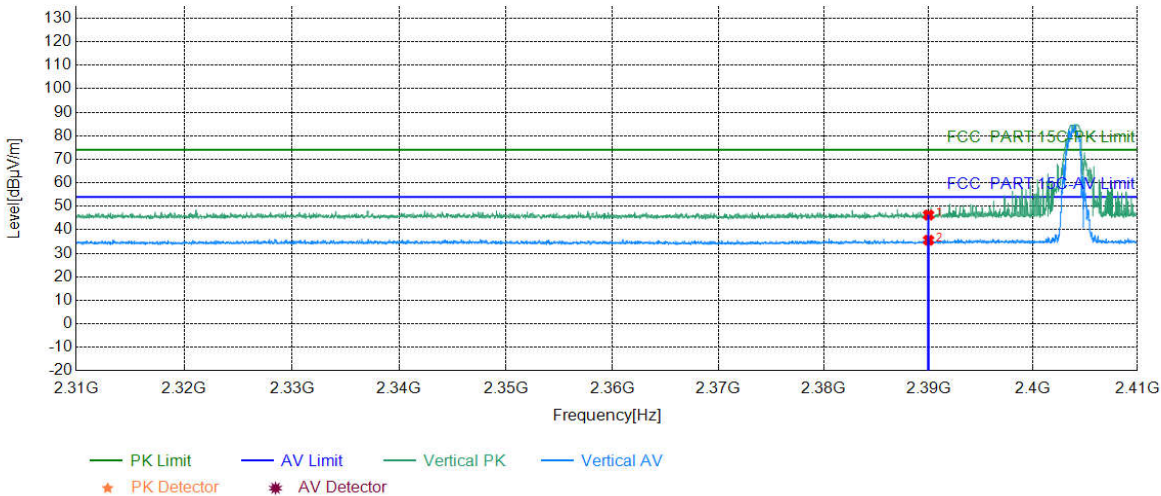
Test mode:	Transmitting (lowest channel)	Horizontal
------------	-------------------------------	------------



Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390.0000	5.77	40.41	46.18	74.00	27.82	PASS	Horizontal	PK
2	2390.0000	5.77	29.05	34.82	54.00	19.18	PASS	Horizontal	AV

Test mode:	Transmitting (lowest channel)	Vertical
------------	-------------------------------	----------

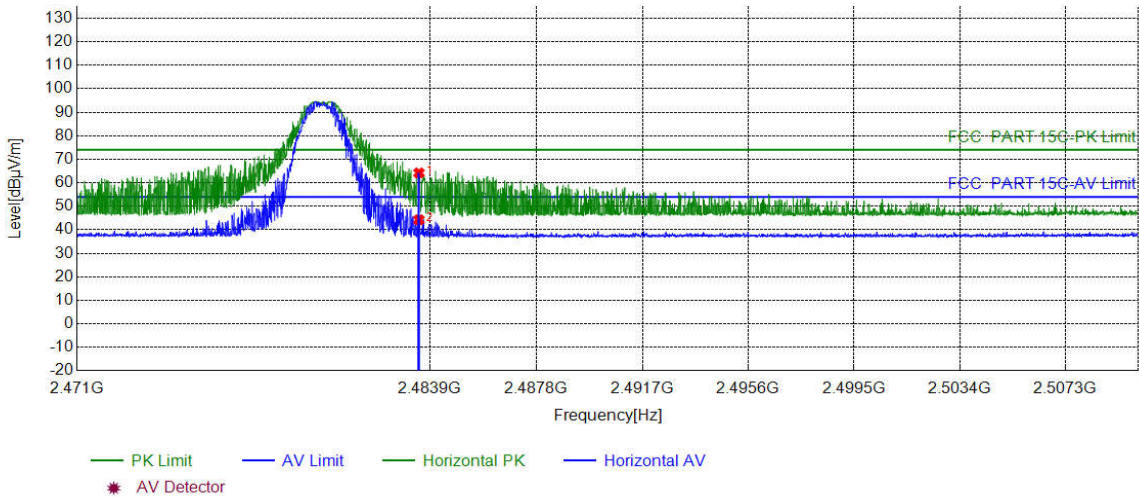


Suspected List

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390.0000	5.77	40.41	46.18	74.00	27.82	PASS	Vertical	PK
2	2390.0000	5.77	29.05	34.82	54.00	19.18	PASS	Vertical	AV

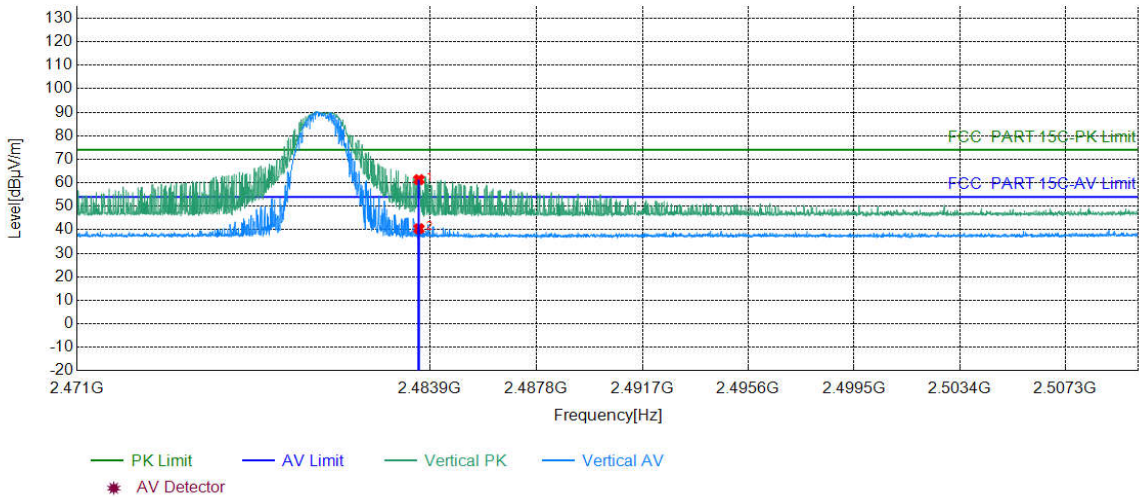
1	2390.0000	5.77	40.52	46.29	74.00	27.71	PASS	Vertical	PK
2	2390.0000	5.77	29.80	35.57	54.00	18.43	PASS	Vertical	AV

Test mode:	Transmitting (highest channel)	Horizontal
------------	--------------------------------	------------



Suspected List										
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark	
1	2483.5000	6.57	57.63	64.20	74.00	9.80	PASS	Horizontal	PK	
2	2483.5000	6.57	37.69	44.26	54.00	9.74	PASS	Horizontal	AV	

Test mode:	Transmitting (highest channel)	Vertical
------------	--------------------------------	----------



Suspected List										
----------------	--	--	--	--	--	--	--	--	--	--

NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5000	6.57	54.78	61.35	74.00	12.65	PASS	Vertical	PK
2	2483.5000	6.57	33.91	40.48	54.00	13.52	PASS	Vertical	AV

Remark:

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

$$\text{Final Test Level} = \text{Receiver Reading} + \text{Factor}$$

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Factor} - \text{Preamplifier Factor}$$
- 2) Scan from 9kHz to 25GHz, the disturbance above 18GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

6.3 20dB Bandwidth

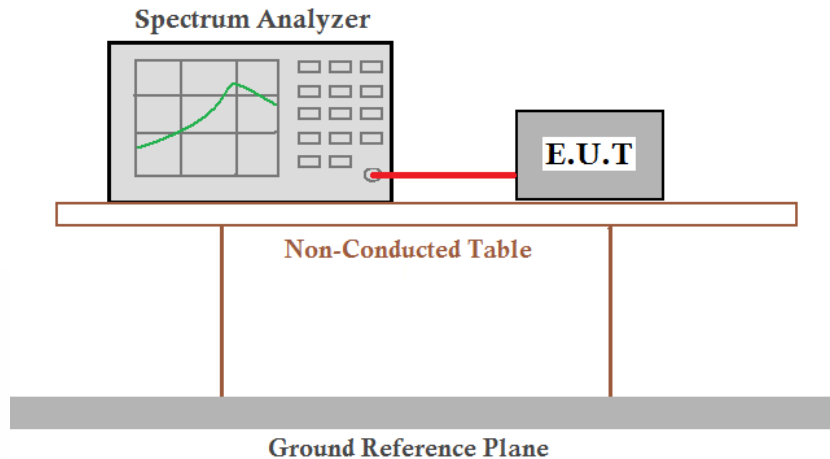
Test Requirement:

47 CFR Part 15C Section 15.215

Test Method:

ANSI C63.10: 2013

Test Setup:



Remark: Offset=Cable loss+ attenuation factor.

Test Procedure:

- 1) The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 2) Set to the maximum power setting and enable the EUT transmit continuously.
- 3) Use the following spectrum analyzer settings for 20dB Bandwidth measurement.
Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a test channel; $1\% \leq RBW \leq 5\%$ of the 20 dB bandwidth; $VBW \geq 3RBW$; Sweep = auto; Detector function = peak; Trace = max hold.
- 4) Measure and record the results in the test report.

Limit:

N/A

Test Mode:

Transmitter mode

Test Results:

Pass

Measurement Data

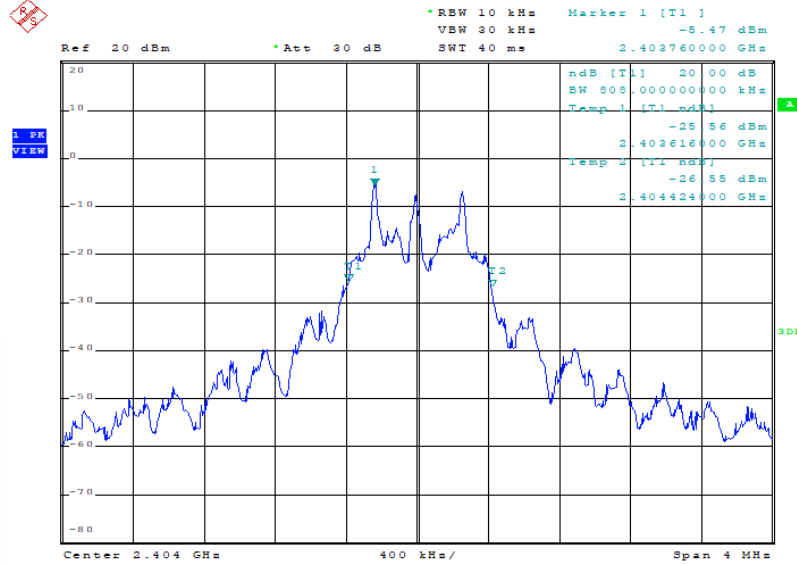
Test Channel	20dB bandwidth (MHz)	Results
Lowest	0.808	Pass
Middle	0.808	Pass
Highest	0.832	Pass

Report No. : EED32O800665

Page 23 of 31

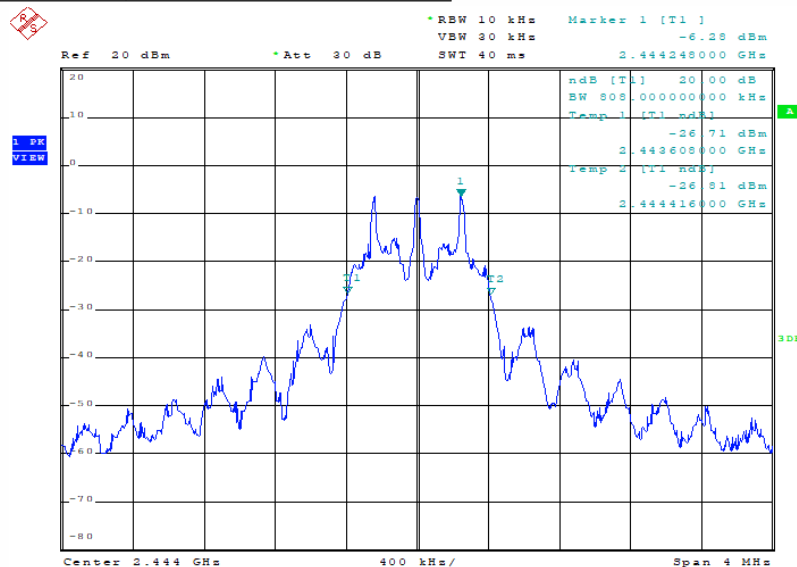
Test plot as follows:

Test channel:	Lowest
---------------	--------



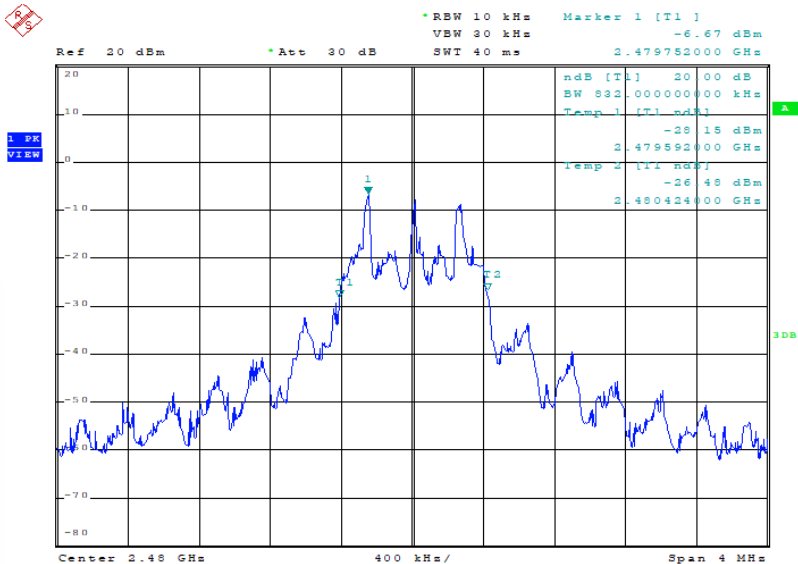
Date: 17.MAR.2022 16:27:05

Test channel:	Middle
---------------	--------



Date: 17.MAR.2022 16:29:35

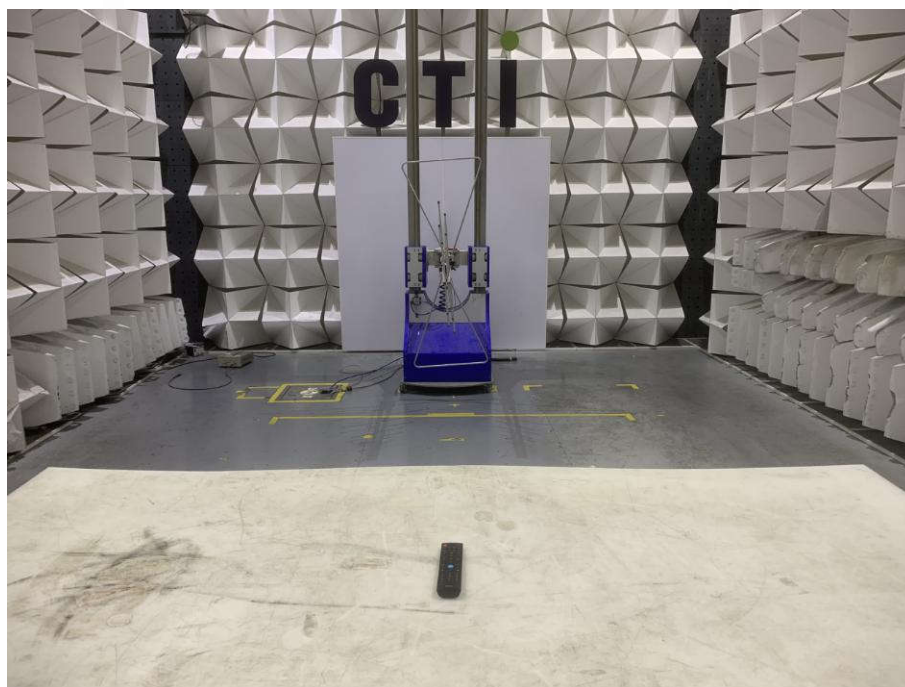
Test channel:	Highest
---------------	---------



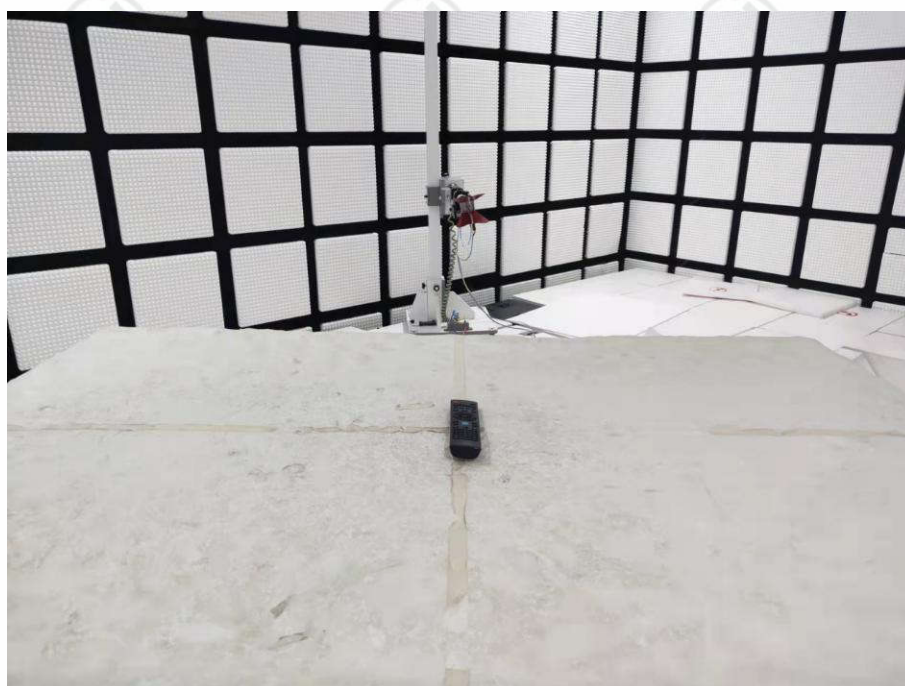
Date: 17.MAR.2022 16:42:23

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

Test Model No.:OVO-RC08P2



Radiated emission Test Setup-1 (30MHz~1GHz)



Radiated spurious emission Test Setup-2(Above 1GHz)

APPENDIX 2 PHOTOGRAPHS OF EUT

Test model No.:OVO-RC08P2



View of Product-1



View of Product-2



View of Product-3



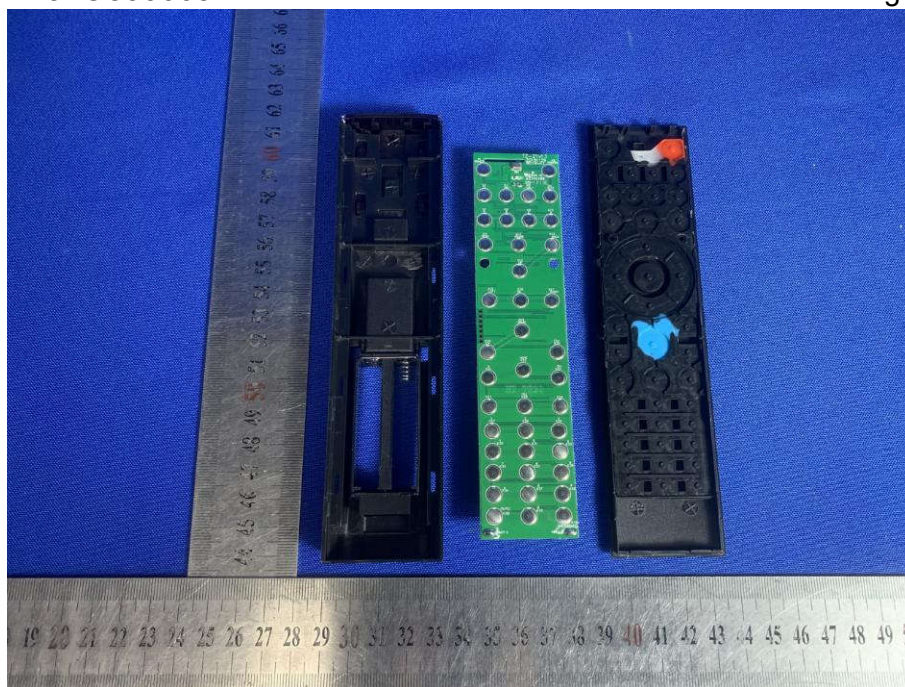
View of Product-4



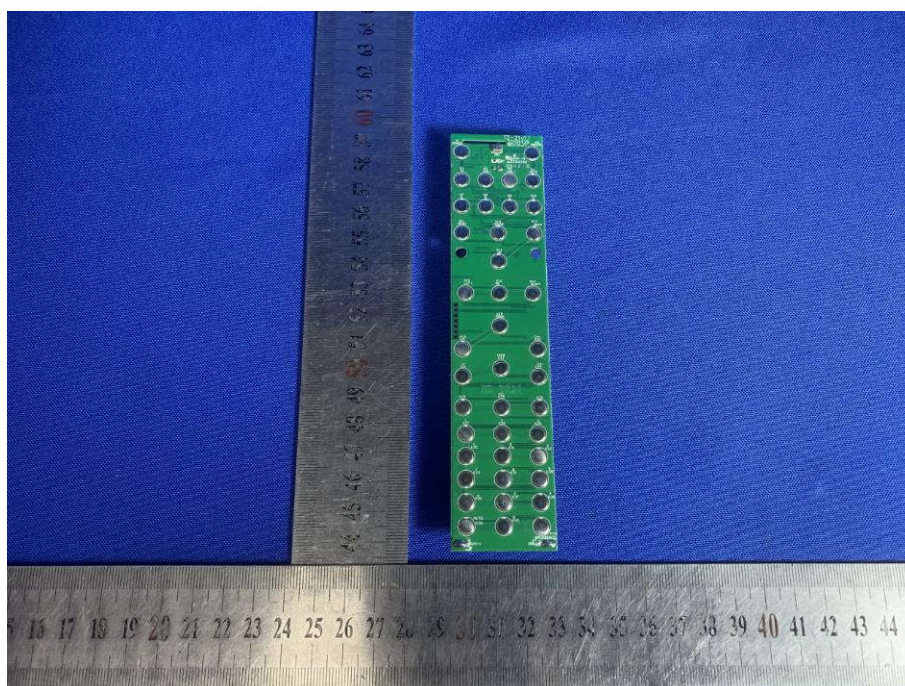
View of Product-5



View of Product-6



View of Product-7



View of Product-8



*** End of Report ***