

FCC TEST REPORT
for
Sinopine Technology Co., LTD
FPV transmitter with camera

Model Number:F2

Series Numbers:TQ153,TQ151,TQ152, TQ163, TQ163, A1,A2,A3,
A4, A5,WT01,WT02,WT03, GT01, GT02, GT03,SGT03,WT05 ,
WT07, WT08, BS2, BS3, BS4, Q1,Q2,GT05, TX862

FCC ID: 2ABQJF2

Prepared for : Sinopine Technology Co., LTD
Address : D Building, HuaFeng Industrial Zone, HangCheng Boulevard,
Gushu Village, XiXiang Town, Bao'an, Shenzhen,China.

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Report No. : 17KWE065450F
Date of Test : June.06 ~13, 2017
Date of Report : June . 15, 2017

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Guangdong Keyway Testing Technology Co., Ltd.

Applicant:	Sinopine Technology Co., LTD.		
Address:	D Building, HuaFeng Industrial Zone, HangCheng Boulevard, Gushu Village, XiXiang Town, Bao'an, Shenzhen, China.		
Manufacturer:	Sinopine Technology Co., LTD.		
Address:	D Building, HuaFeng Industrial Zone, HangCheng Boulevard, Gushu Village, XiXiang Town, Bao'an, Shenzhen, China.		
E.U.T:	FPV transmitter with camera		
Model Number:	F2		
Series Numbers:	TQ153, TQ151, TQ152, TQ163, TQ163, A1, A2, A3, A4, A5, WT01, WT02, WT03, GT01, GT02, GT03, SGT03, WT05, WT07, WT08, BS2, BS3, BS4, Q1, Q2, GT05, TX862		
Trade Name:	-----	Serial No.:	-----
Date of Receipt:	May.21, 2017	Date of Test:	June.06 ~13, 2017
Test Specification:	FCC Part 15, Subpart 15.249: 2016 ANSI C63.10-2013		
Test Result:	The equipment under test was found to be compliance with the requirements of the standards applied.		
Issue Date: June.15, 2017			
Tested by:	Reviewed by:	Approved by:	
			
_____ Keven Wu / Engineer	_____ Mark Li / Supervisor	_____ Andy Gao / Supervisor	
Other Aspects: None.			
Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested			
This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Guangdong Keyway Testing Technology Co., Ltd.			

1. TEST SUMMARY

Test Items	Test Requirement	Result
Conducted Emissions	15.207	N/A
Radiated Emissions	15.205(a)/15.209/15.249(d)	PASS
Bandwidth	15.249	PASS
Emissions from out of band	15.249	PASS
Antenna Requirement	15.203	PASS

2. GENERAL PRODUCT INFORMATION

2.1. Product Function

Refer to Technical Construction Form and User Manual.

2.2. Description of Device (EUT)

Product Name:	FPV transmitter with camera
Model No.:	F2
Series Numbers:	TQ153,TQ151,TQ152, TQ163, TQ163, A1,A2,A3, A4, A5,WT01,WT02,WT03, GT01, GT02, GT03,SGT03, WT05 ,WT07, WT08, BS2, BS3, BS4, Q1,Q2,GT05, TX862
Model difference:	All the models are the same circuit and RF module, except the model names.
Operation Frequency:	5.732GHz~5.847GHz
Channel numbers:	24 Channel
Modulation technology:	GFSK
Antenna Type:	External ANT
Antenna gain:	3.4dBi
Power supply:	DC 3.2-5V

2.3. Independent Operation Modes

The basic operation modes are:

Test mode	Frequency (MHz)
Mode 1	5732
Mode 2	5785
Mode 3	5847

2.4. Channel List

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	5732	09	5769	17	5809
02	5733	10	5771	18	5820
03	5740	11	5780	19	5825
04	5743	12	5785	20	5828
05	5745	13	5790	21	5840
06	5752	14	5800	22	5843
07	5760	15	5805	23	5845
08	5765	16	5806	24	5847

2.5. TEST SITES

Lab Qualifications : 944 Shielded Room built by ETS-Lindgren, USA
Date of completion: March 28, 2011

966 Chamber built by ETS-Lindgren, USA
Date of completion: March 28, 2011

Certificated by TUV Rheinland, Germany.
Registration No.: UA 50207153
Date of registration: July 13, 2011

Certificated by UL, USA
Registration No.: 100567-237
Date of registration: December 1, 2011

Certificated by Intertek
Registration No.: 2011-RTL-L1-31
Date of registration: October 11, 2011

Certificated by Industry Canada
Registration No.: 9868A
Date of registration: December 8, 2011

Certificated by FCC, USA
Registration No.: 370994
Date of registration: February 21, 2012

Certificated by CNAS China
Registration No.: CNAS L5783
Date of registration: August 8, 2012

Name of Firm : Guangdong Keyway Testing Technology Co., Ltd.

Site Location : Baishun Industrial Zone, Zhangmutou Town,
Dongguan, Guangdong, China

2.6. List of Test and Measurement Instruments

For radiated emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESCI	101156	Apr. 08,17	Apr. 08,18
System Simulator	Agilent	E5515C	GB43130245	Apr. 08,17	Apr. 08,18
Power Splitter	Weinschel	1506A	NW425	Apr. 08,17	Apr. 08,18
Bilog Antenna	ETS-LINDGREN	3142D	135452	Apr. 08,17	Apr. 08,18
Remark: Testable Frequency Range: 26MHz-6GHz					
Spectrum Analyzer	Agilent	E4407B	MY4511304	Apr. 08,17	Apr. 08,18
Remark: Testable Frequency Range: 100Hz-26.5GHz					
Spectrum Analyzer	R&S	FSV40	132.1.3008K39 -100967	Apr. 08,17	Apr. 08,18
Remark: Testable Frequency Range: 10Hz-40GHz					
3m Semi-anechoic Chamber	ETS-LINDGREN	966	KW01	Apr. 09,17	Apr. 09,18
Signal Amplifier	SONOMA	310	187016	Apr. 08,17	Apr. 08,18
Signal Amplifier	Agilent	8449B	3008A00251	Apr. 08,17	Apr. 08,18
RF Cable	IMRO	IMRO-400	966 Cable 1#	N/A	N/A
MULTI-DEVICE Controller	ETS-LINDGREN	2090	126913	N/A	N/A
Horn Antenna	DAZE	ZN30701	11003	Apr. 09,17	Apr. 09,18
Remark: Testable Frequency Range: 1GHz-18GHz					
Horn Antenna	SCHWARZBECK	BBHA9170	9170-068	Apr. 09,17	Apr. 09,18
Remark: Testable Frequency Range: 18GHz-40GHz					
Spectrum Analyzer	Agilent	8593E	3911A04271	Apr. 08,17	Apr. 08,18
Remark: Testable Frequency Range: 9kHz-22GHz					
Spectrum Analyzer	Agilent	E4408B	MY44211125	Apr. 08,17	Apr. 08,18
Remark: Testable Frequency Range: 9kHz-26.5GHz					
Signal Amplifier	DAZE	ZN3380C	11001	Apr. 08,17	Apr. 08,18
HighPass filter	Micro	HPM50111	324216	Apr. 08,17	Apr. 08,18
Filter	COM-MW	ZBSF-C836.5-25-X	KW032	Apr. 08,17	Apr. 08,18
Filter	COM-MW	ZBSF-C1747.5-75-X2	KW035	Apr. 08,17	Apr. 08,18
Filter	COM-MW	ZBSF-C1880-60-X2	KW037	Apr. 08,17	Apr. 08,18
Constant temperature and humidity box	GF	GTH-800-40-1P	MAA9906-005	Apr. 08,17	Apr. 08,18
Splitter	Agilent	11636B	0025164	Apr. 08,17	Apr. 08,18
Power Meter	Anritsu	ML2495A	1204003	Apr. 08,17	Apr. 08,18
Power Sensor	Anritsu	MA2411B	1126150	Apr. 08,17	Apr. 08,18
Spectrum Analyzer	Agilent	N9020A	MY56070279	Apr. 08,17	Apr. 08,18
Remark: Testable Frequency Range: 10Hz-26.5GHz					

3. TEST SET-UP AND OPERATION MODES

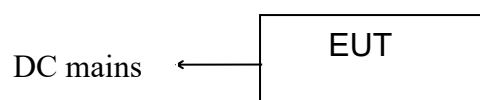
3.1. Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the Operating Instructions.

3.2. Block Diagram of Test Set-up

System Diagram of Connections between EUT and Simulators

Radiated Emission:



(EUT: FPV transmitter with camera)

3.3. Test Software

None.

3.4. Special Accessories and Auxiliary Equipment

None.

3.5. Countermeasures to Achieve EMC Compliance

None.

4. EMISSION TEST RESULTS

4.1. Conducted Emission at the Mains Terminals Test

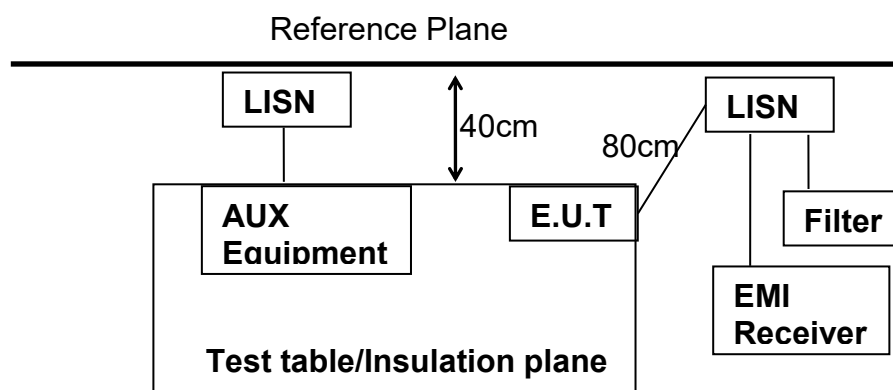
4.1.1. Limit 15.207 limits

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

NOTE: 1.The lower limit shall apply at the transition frequencies.
2.The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz.

4.1.2. Test Setup

- 1.The EUT was put on a wooden table which was 0.8 m high above the ground and connected to the AC mains through the Artificial Mains Network (AMN). Where the mains cable supplied by the manufacture was longer than 0.8 m, the excess was folded back and forth parallel to the cable at the center so as to form a bundle no longer than 0.4 m.
- 2.The EUT was kept 0.4 m from any other earthed conducting surface. Both sides of AC line were checked to find out the maximum conducted emission levels according to the test procedure during the conducted emission test.
- 3.The frequency range from 150 kHz to 30 MHz was investigated.
- 4.The bandwidth of the test receiver was set at 9 kHz.
- 5.Pretest for all mode, The test data of the worst case condition(s) was reported on the following page.



Remark: E.U.T. :Equipment Under Test
LISN: Line Impedance Stabilization Network
Test table height: 0.8m.



Note: There is no need for conduction emissions test, because the power supply of the EUT is dry battery only.

4.2. Radiated Emission Test

4.2.1 Limit 15.209 limits

Frequency MHZ	Distance Meters	Filed Strengths Limit	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
30~88	3	100	40.0
88~216	3	150	43.5
216~960	3	200	46.0
960~1000	3	500	54.0
Above 1000	3	74.0dB(μV)/m(Peak) 54.0dB(μV)/m(Average)	

4.2.2 Restricted bands of operation

MHz	MHz	MHz	GHz
0.009-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	
All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209,all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.			

4.2.3 Test setup

The EUT was placed on a turn table which was 0.8 m (above 1GHz, the table was 1.5m) above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was set 3 m away from the receiving antenna which was mounted on an antenna tower. The measuring antenna moved up and down to find out the maximum emission level. It moved from 1 m to 4 m for both horizontal and vertical polarizations.

The EUT was tested in the Chamber Site. It was pre-scanned with a Peak detector from the spectrum, and all the final readings from the test receiver were measured with the Quasi-Peak detector.

The bandwidth of the EMI test receiver is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz.

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

Notes: 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading-Preamp Factor.

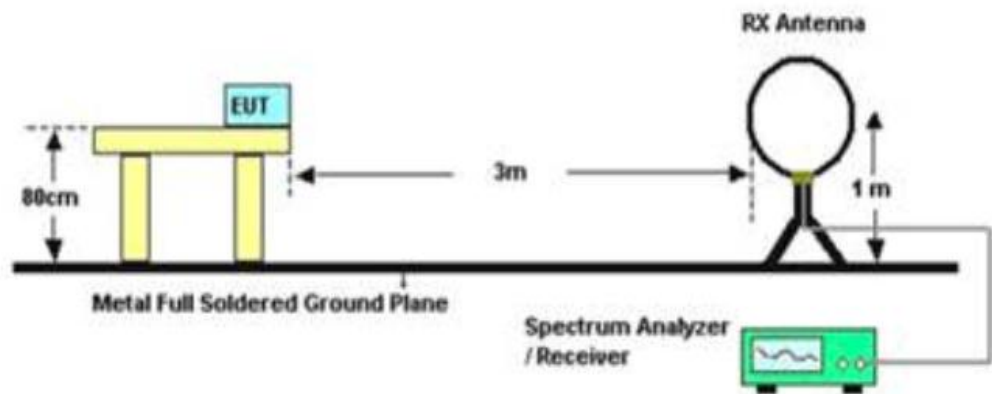
2. Measurement Uncertainty: ± 3.2 dB at a level of confidence of 95%.

3. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

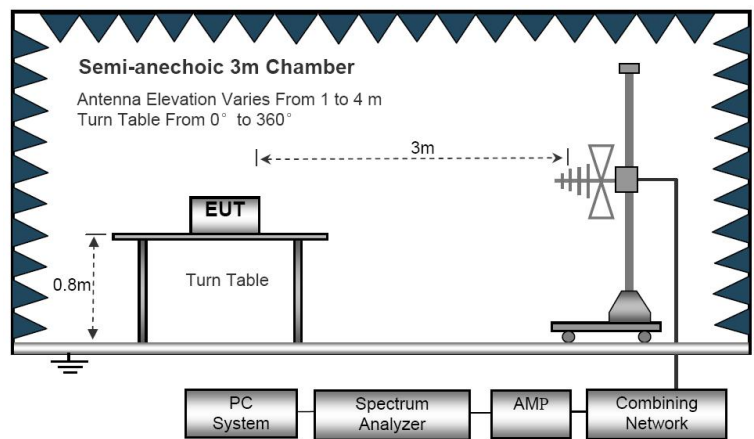
4. For emissions below 1GHz, pretest for all mode, The test data of the worst case condition(s) was reported on the following pages.

5. 5.EUT Pre-scan X/Y/Z orientation, only worst case is presented in the report (Z orientation).

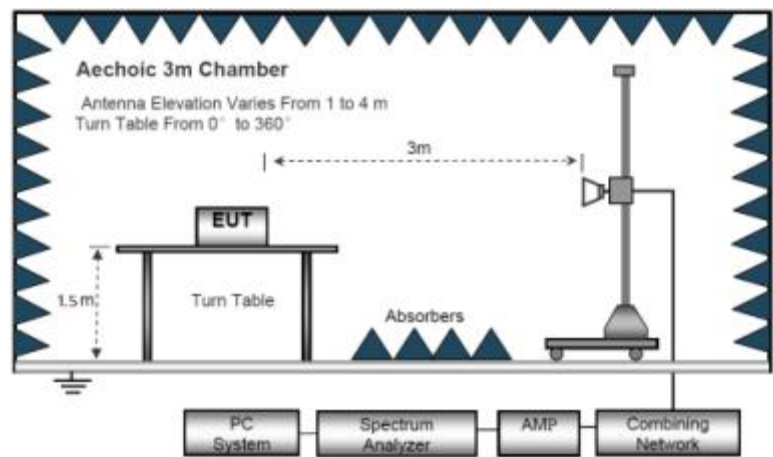
Radiated Emission Test-Up Frequency Below 30MHz



Radiated Emission Test-Up Frequency 30MHz- 1GHz



Above 1GHz



EUT :	FPV transmitter with camera	Model Name :	F2
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010hPa	Test Mode :	TX
Test Voltage :	DC 5V		

Below 30MHz

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	P
--	--	--	--	P

Note:

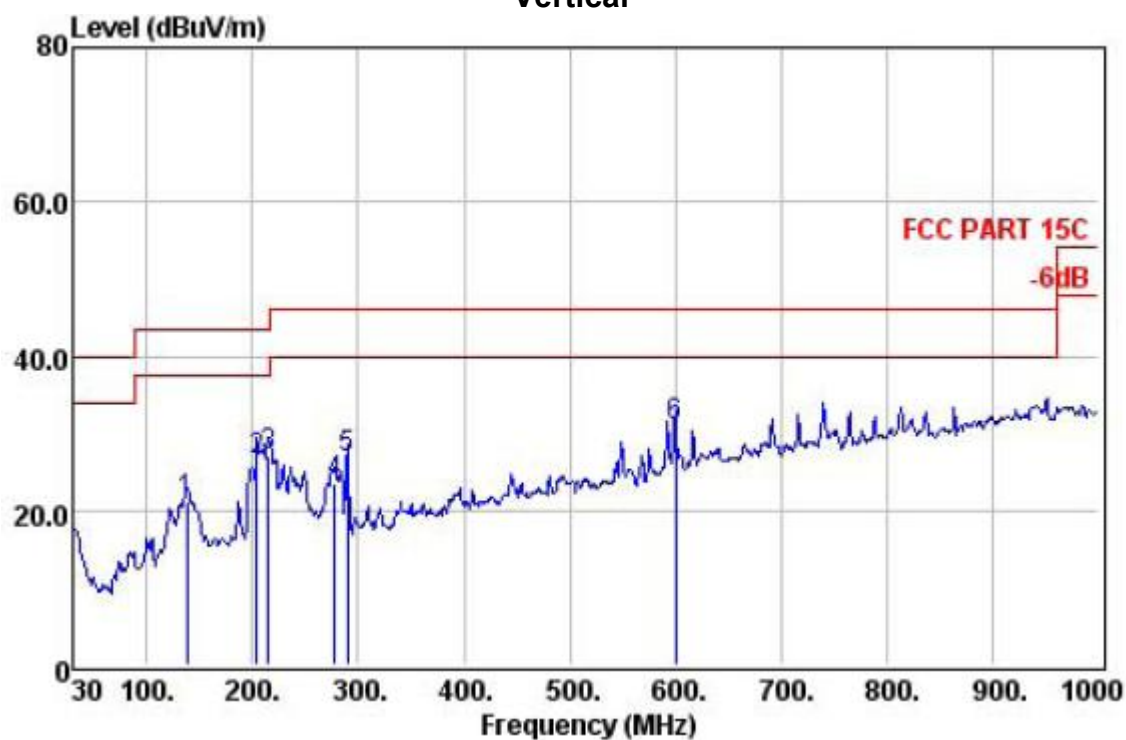
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuV) + distance extrapolation factor.

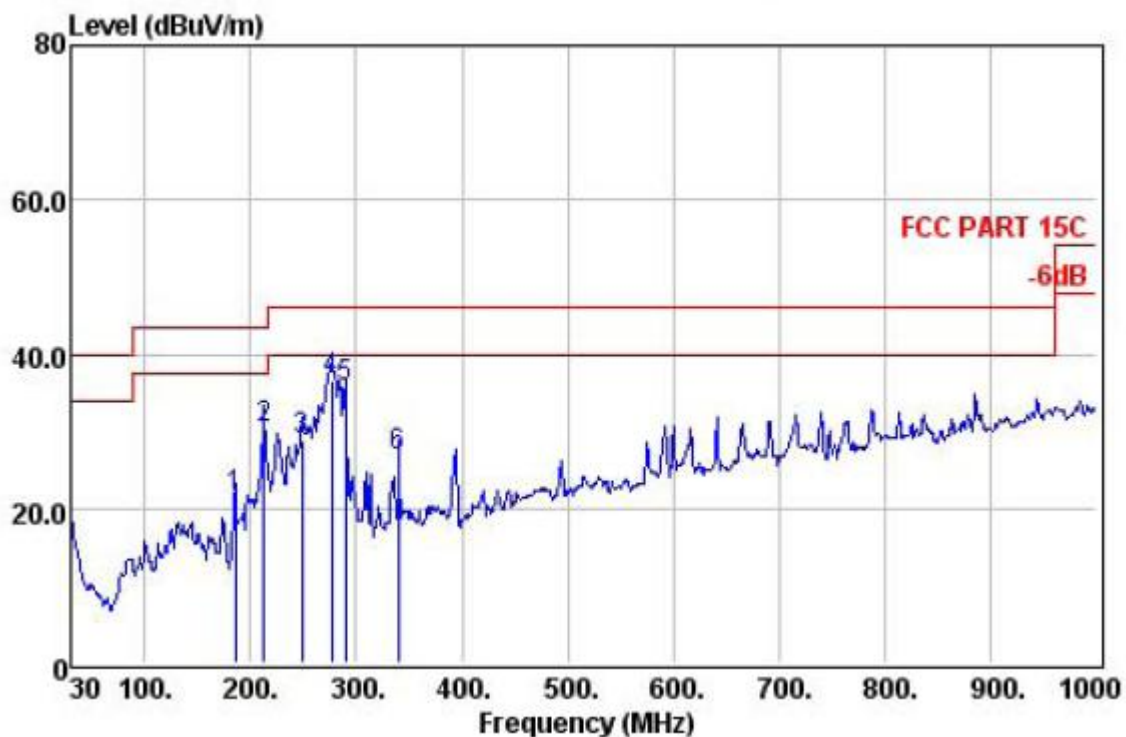
Below 1GHz			
EUT :	FPV transmitter with camera	Model Name :	F2
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010hPa	Test Mode :	TX - 5732
Test Voltage :	DC 5V		

Vertical



	Freq	Preamp Factor	Read Level	Cable Loss	Antenna Factor	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	137.54	31.20	42.57	1.22	8.38	20.97	43.50	-22.53	QP
2	204.30	31.09	44.91	1.46	11.21	26.49	43.50	-17.01	QP
3	214.50	31.04	44.87	1.53	11.70	27.06	43.50	-16.44	QP
4	277.60	30.94	39.52	1.78	13.08	23.44	46.00	-22.56	QP
5	289.80	30.93	42.24	1.87	13.47	26.65	46.00	-19.35	QP
6	600.54	30.62	37.60	3.29	20.62	30.89	46.00	-15.11	QP

Horizontal



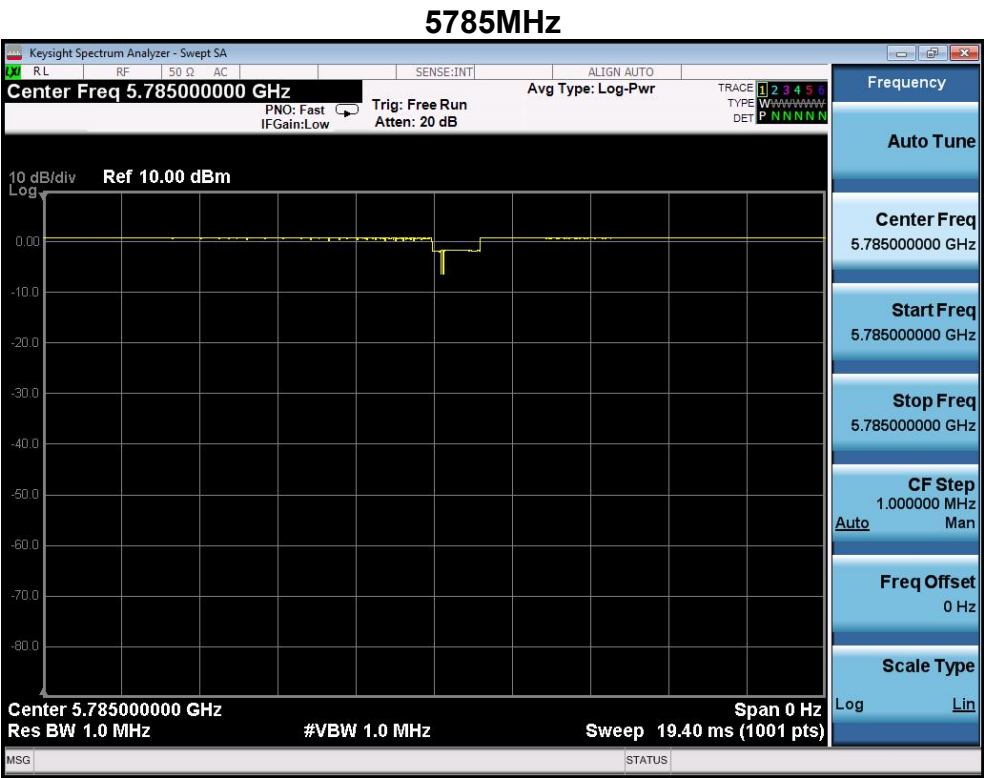
		Preamp	Read	Cable&Antenna		Limit	Over	
	Freq	Factor	Level	Loss Factor	Level	Line	Limit	Remark
	MHz	dB	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB
1	185.20	31.14	40.79	1.39	10.24	21.28	43.50	-22.22 QP
2	212.36	31.06	48.26	1.53	11.59	30.32	43.50	-13.18 QP
3	248.25	30.96	45.24	1.70	12.85	28.83	46.00	-17.17 QP
4	277.35	30.94	52.61	1.78	13.08	36.53	46.00	-9.47 QP
5	289.87	30.93	51.25	1.87	13.48	35.67	46.00	-10.33 QP
6	340.24	30.71	40.40	2.10	15.11	26.90	46.00	-19.10 QP

NOTE: 1. Absolute Level= Reading Level+antenna Factor+cable loss - Preamp factor,

2. Over Limit= Absolute Level – Limit;

3. Mode 1 is the worst mode. Only worst case is presented in the report .

Duty cycle measurement:



Frequency	Meter Reading	Antenna Factor	Cable loss	Preamplifier factor	Emission Level	Limits	Margin	Detector Type	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		
TX-5732									
5732	76.16	22.65	20.38	28.76	90.43	94	-3.57	Average	Vertical
5732	81.29	22.65	20.38	28.76	95.56	114	-18.44	peak	Vertical
11464	28.45	23.87	21.62	28.95	44.99	54	-9.01	Average	Vertical
11464	40.04	23.87	21.62	28.95	56.58	74	-17.42	peak	Vertical
17196	23.29	24.92	24.48	30.18	42.51	54	-11.49	Average	Vertical
17196	34.48	24.92	24.48	30.18	53.70	74	-20.30	peak	Vertical
5732	75.79	22.65	20.38	28.76	90.06	94	-3.94	Average	Horizontal
5732	80.46	22.65	20.38	28.76	94.73	114	-19.27	peak	Horizontal
11464	29.36	23.87	21.62	28.95	45.90	54	-8.10	Average	Horizontal
11464	41.18	23.87	21.62	28.95	57.72	74	-16.28	peak	Horizontal
17196	23.27	24.92	24.48	30.18	42.49	54	-11.51	Average	Horizontal
17196	33.36	24.92	24.48	30.18	52.58	74	-21.42	peak	Horizontal
TX-5785									
5785	75.31	22.76	20.42	28.79	89.70	94	-4.30	Average	Vertical
5785	79.64	22.76	20.42	28.79	94.03	114	-19.97	peak	Vertical
11570	28.15	23.88	21.64	28.95	44.72	54	-9.28	Average	Vertical
11570	40.64	23.88	21.64	28.95	57.21	74	-16.79	peak	Vertical
17355	24.41	25.05	24.52	30.22	43.76	54	-10.24	Average	Vertical
17355	33.39	25.05	24.52	30.22	52.74	74	-21.26	peak	Vertical
5785	75.63	22.76	20.42	28.79	90.02	94	-3.98	Average	Horizontal
5785	79.87	22.76	20.42	28.79	94.26	114	-19.74	peak	Horizontal
11570	28.26	23.88	21.64	28.95	44.83	54	-9.17	Average	Horizontal
11570	40.08	23.88	21.64	28.95	56.65	74	-17.35	peak	Horizontal
11570	25.18	25.05	24.52	30.22	44.53	54	-9.47	Average	Horizontal
11570	33.27	25.05	24.52	30.22	52.62	74	-21.38	peak	Horizontal
TX-5847									
5847	75.26	22.85	20.52	28.94	89.69	94	-4.31	Average	Vertical
5847	79.69	22.85	20.52	28.94	94.12	114	-19.88	peak	Vertical
11694	27.76	25.78	21.71	30.18	45.07	54	-8.93	Average	Vertical
11694	39.35	25.78	21.71	30.18	56.66	74	-17.34	peak	Vertical
17541	22.51	27.29	24.59	30.28	44.11	54	-9.89	Average	Vertical
17541	32.28	27.29	24.59	30.28	53.88	74	-20.12	peak	Vertical
5847	75.54	22.85	20.52	28.94	89.97	94	-4.03	Average	Horizontal
5847	79.78	22.85	20.52	28.94	94.21	114	-19.79	peak	Horizontal
11694	27.75	25.78	21.71	30.18	45.06	54	-8.94	Average	Horizontal
11694	39.38	25.78	21.71	30.18	56.69	74	-17.31	peak	Horizontal
17541	22.67	27.29	24.59	30.28	44.27	54	-9.73	Average	Horizontal
17541	32.59	27.29	24.59	30.28	54.19	74	-19.81	peak	Horizontal
NOTE:1.Absolute Level= ReadingLevel+antenna Factor+cable loss-preamplifier factor. 2.Over Limit= Absolute Level – Limit. 3.The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has not to be reported. 4.EUT Pre-scan XYZ orientation, only worst case is presented in the report (Z orientation)									

5. BANDWIDTH TEST

5.1. TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: the RBW shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement, Sweep=Auto.

5.2. Test setup

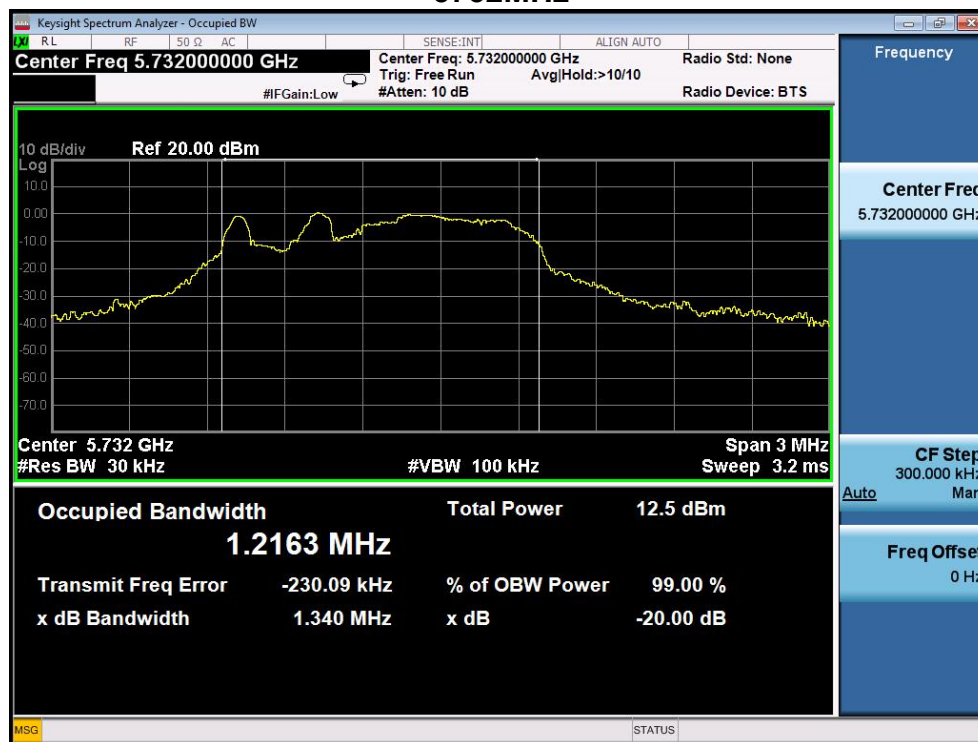


Test data:

EUT :	FPV transmitter with camera	Model Name :	F2
Temperature :	25 °C	Relative Humidity :	54%
Pressure :	1010hPa	Test Voltage :	DC 5V
Test Mode :	GFSK		

Channel Frequency (MHz)	20dB Bandwidth (MHz)	99% Bandwidth (MHz)	Result
5732	1.340	1.2163	Pass
5785	1.344	1.2032	Pass
5847	1.373	1.2440	Pass

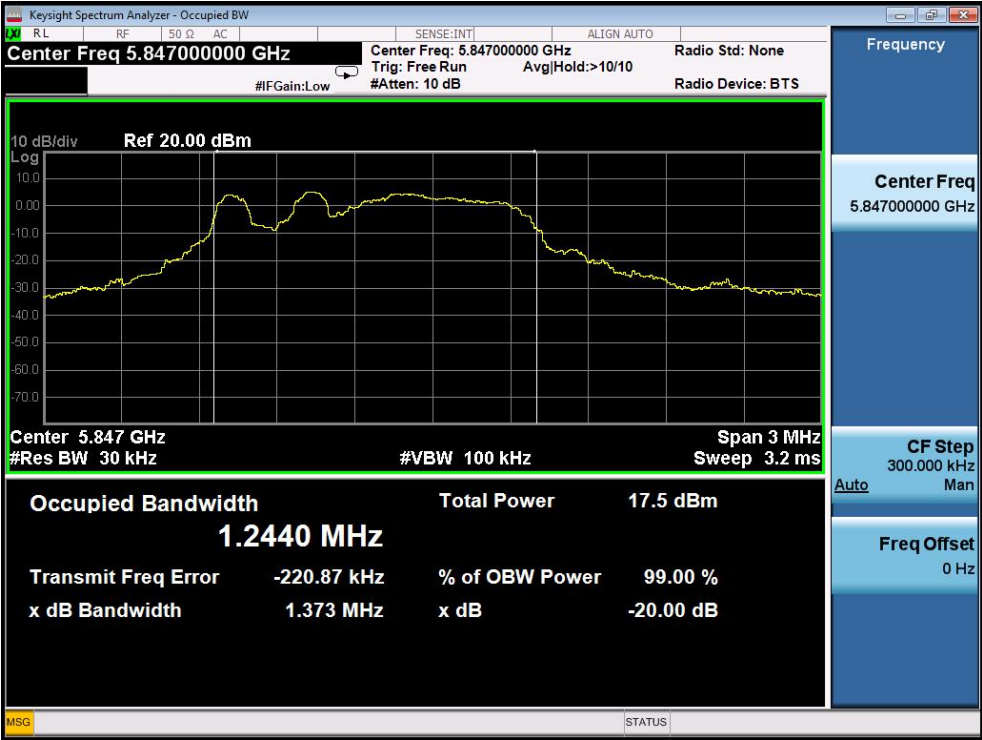
Test plot as follows:

5732MHz

5785MHz



5847MHz



6. BAND EDGE COMPLIANCE TEST

Test Requirement: FCC Part15 C section 15.249

(a) Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental (dB μ V/m @ 3m)	Field Strength of Harmonics (dB μ V/m @ 3m)
902 to 928	94.0	54.0
2400 to 2483.5	94.0	54.0
5725 to 5875	94.0	54.0
24000 to 24250	108.0	68.0

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Limits: The fundamental frequency rang is in the frequency band of the EUT is 5725 MHz ~ 5875 MHz

The limit for AVG field strength dB μ V/m for the fundamental frequency = 94.0 dB μ V/m.

The limit for Peak field strength dB μ V/m for the fundamental frequency = 114.0 dB μ V/m.

No fundamental is allowed in the restricted bands.

The limit for AVG field strength dB μ V/m for the harmonics and other above 1G frequencies = 54.0 dB μ V/m.

The limit for Peak field strength dB μ V/m for the harmonics and other above 1G frequencies = 74.0 dB μ V/m.

Test Method: ANSI C63.10: Clause 6.4, 6.6 and 6.7 for Field Strength of Fundamental& Field Strength of Unwanted Emissions

ANSI C63.10: Clause 6.9.2 for Band Edge

Status Pre-test the EUT in continuous transmitting mode with setup as stand-alone in only antnna A transmits,only antenna B transmits and both antenna A & antenna B transmit, found the worst case is both antenna A & antenna B transmit and report the data.

Measurement Distance: 3m (Semi-Anechoic Chamber)

Frequency range 9 kHz - 40 GHz for transmitting mode.

Test instrumentation resolution bandwidth

9 kHz (9 kHz - 30 MHz), 120 kHz (30 MHz - 1000 MHz), 1 MHz (1000 MHz - 40 GHz)

Detector:

For PK and QP value:

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

For AV value:

RBW = 1 MHz for $f \geq 1$ GHz,

VBW = 10 Hz

Sweep = auto

Detector function = peak

Trace = max hold

For radiated test as follows:

EUT :	FPV transmitter with camera	Model Name :	F2
Temperature :	25 °C	Relative Humidity :	54%
Pressure :	1010hPa	Test Voltage :	DC 5V
Test Mode :	GFSK		

Peak Measurement:						
Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Antenna polarization
5725.00	43.29	3.95	47.24	74.00	-26.76	V
5875.00	43.76	3.97	47.73	74.00	-26.27	V
5725.00	44.28	3.95	48.23	74.00	-25.77	H
5875.00	44.66	3.97	48.63	74.00	-25.37	H
Average Measurement:						
Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Antenna polarization
5725.00	33.16	3.95	37.11	54.00	-16.89	V
5875.00	31.48	3.97	35.45	54.00	-18.55	V
5725.00	33.29	3.95	37.24	54.00	-16.76	H
5875.00	32.73	3.97	36.70	54.00	-17.30	H

7. ANTENNA REQUIREMENTS

7.1. Limits

For intentional device, according to FCC 47 CFR Section 15.203, 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. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

7.2. Result

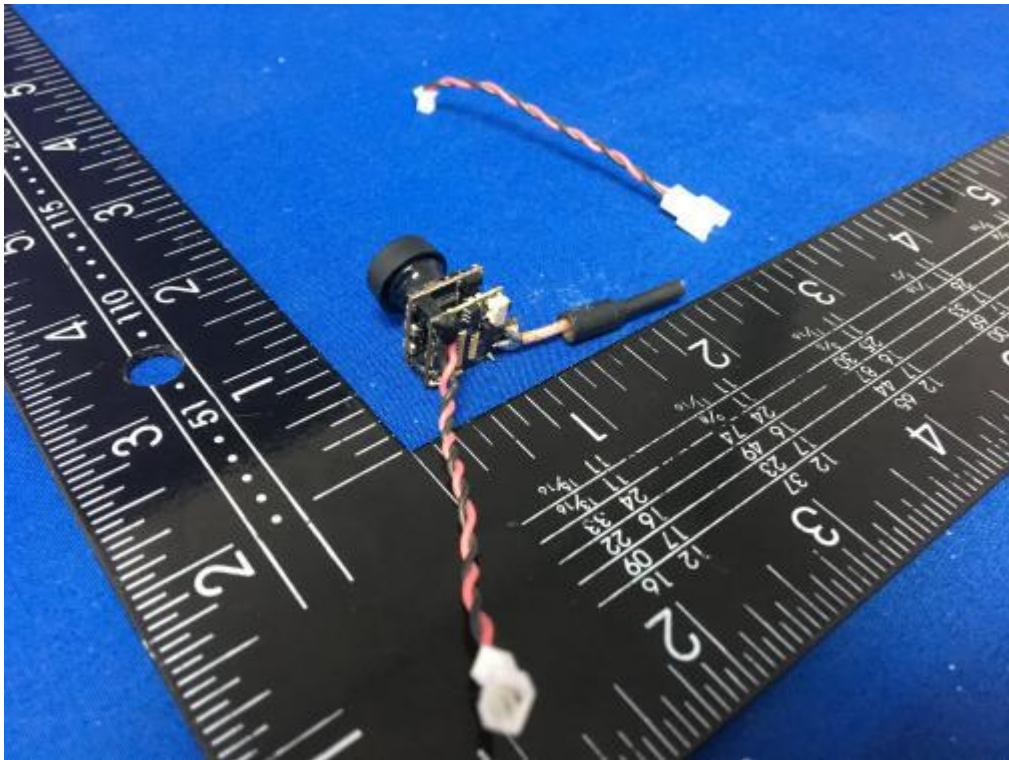
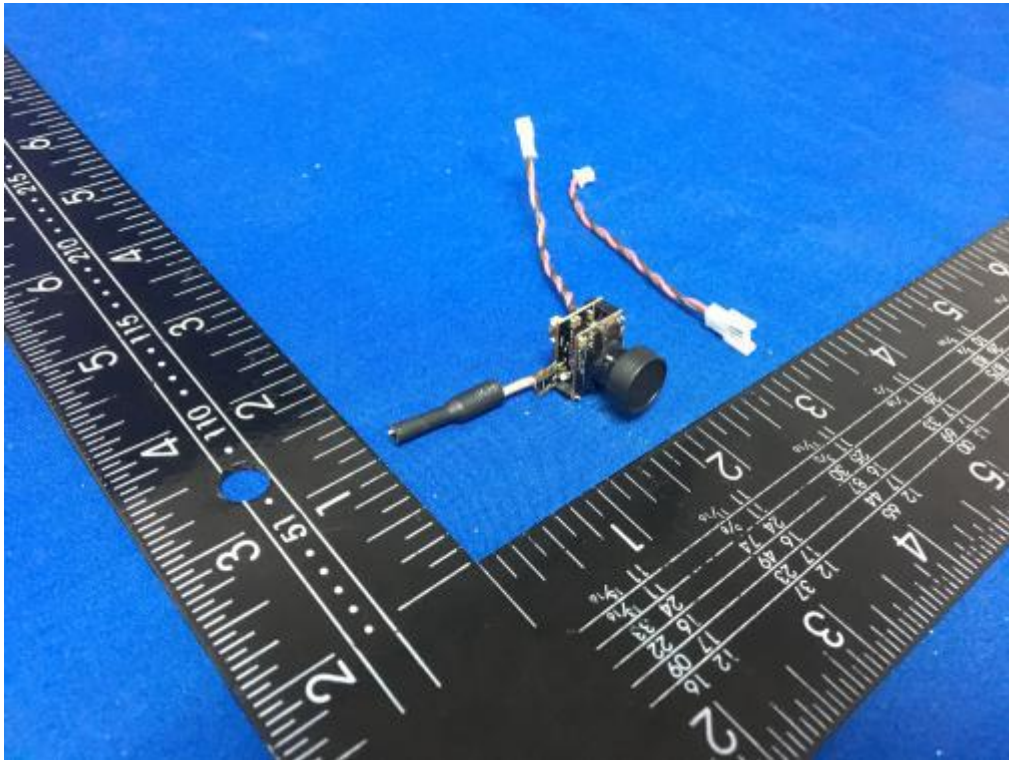
The antenna used for this product is external antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 3.4dBi.

8. PHOTOGRAPHS OF TEST SET-UP

Radiated Emission Test



9. PHOTOGRAPHS OF THE EUT



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