



FCC CERTIFICATION TEST REPORT

Applicant	:	BEIJING MADV TECHNOLOGY CO., LTD.
Address of Applicant	:	No.80, Floor 4, Building 17, Yard 30, ShiXingDaJie, Shijingshan District, Beijing, China
Manufacturer	:	BEIJING MADV TECHNOLOGY CO., LTD.
Address of Manufacturer	:	No.80, Floor 4, Building 17, Yard 30, ShiXingDaJie, Shijingshan District, Beijing, China
Equipment under Test	:	Birddy Smart Bird House Camera
Model No.	:	FJ27HWXJ
Trade Mark	:	
FCC ID	:	2AJ2LFJ27HWXJ
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart C, ANSI C63.10:2013,
Report No.	:	DDT-RE23101326-2E01
Issue Date	:	2023/10/23
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd.
Address of Laboratory	:	Unit 2,Building 1,No.17,Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

Applicant	:	BEIJING MADV TECHNOLOGY CO., LTD.
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Equipment under Test	:	Birddy Smart Bird House Camera
Model No	:	FJ27HWXJ
Trade Mark	:	
Manufacturer	:	BEIJING MADV TECHNOLOGY CO., LTD.
Address	:	No.80, Floor 4, Building 17, Yard 30, ShiXingDaJie, Shijingshan District, Beijing, China

Test Standard Used: FCC Rules and Regulations Part 15 Subpart C

Test procedure used: ANSI C63.10:2013,

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.

Report No:	DDT-RE23101326-2E01		
Date of Receipt:	Oct. 17, 2023	Date of Test:	Oct. 17, 2023 ~ Oct. 23, 2023

Prepared By:

Tiger Mo

Tiger Mo/Engineer

Approved By:

Damon Hu

Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Oct. 23, 2023	

1. Summary of Test Results

The EUT have been tested according to the applicable standards as referenced below.		
Description of Test Item	Standard	Results
6dB Bandwidth and 99% Bandwidth	FCC Part 15: 15.247(a)(2)	PASS
Conducted Output Power	FCC Part 15: 15.247(b)(3)	PASS
Power Spectral Density	FCC Part 15:15.247(e)	PASS
Band-edge and Spurious Emissions (Conducted)	FCC Part 15: 15.247(d)	PASS
Radiated Spurious Emissions	FCC Part 15: 15.205 FCC Part 15: 15.209 FCC Part 15: 15.247(d)	PASS
Radiated Band Edge Compliance	FCC Part 15: 15.205 FCC Part 15: 15.209 FCC Part 15: 15.247(d)	PASS
Power Line Conducted Emission	FCC Part 15: 15.207(a)	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

2. General Test Information

2.1. Description of EUT

EUT Name	: Birddy Smart Bird House Camera
Model Number	: FJ27HWXJ
EUT function description	: Please reference user manual of this device
Power supply	: DC 5V from External adapter or : DC 4.2V built-in battery
Radio Technology	: IEEE 802.11b/g/n
Operation frequency	: IEEE 802.11b: 2412MHz-2462MHz : IEEE 802.11g: 2412MHz-2462MHz : IEEE 802.11n HT20: 2412MHz-2462MHz : IEEE 802.11n HT40: 2422MHz-2452MHz
Modulation	: IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) : IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) : IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK, BPSK)
Transmitter rate	: IEEE 802.11b: up to 11 Mbps : IEEE 802.11g: up to 54 Mbps : IEEE 802.11n HT20: up to 72.2 Mbps : IEEE 802.11n HT40: up to 150 Mbps
Antenna Type	: Glue stick antenna, Maximum PK gain: 4.16 dBi
Sample Number	: S23101326-04 for conductive : S23101326-05 for radiation

Note 1: EUT is the abbreviation of equipment under test.

Note 2: "☒" means to be chosen or applicable; "☐" means don't to be chosen or not applicable;

This note applies to entire report.

Channel information					
CH	Frequency (MHz)	CH	Frequency (MHz)	CH	Frequency (MHz)
1	2412	5	2432	9	2452
2	2417	6	2437	10	2457
3	2422	7	2442	11	2462
4	2427	8	2447	/	/

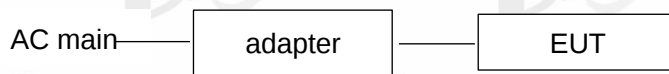
2.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Description	Remark
N/A	N/A	N/A	N/A	N/A

2.3. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	EMC Compliance	SN
NoteBook	Dell	i7-1255U MX550	N/A	038C0A5A- F922-40B9- A219- 8D44E9D1
Adapter	SOLUM VINA COMPANY LIMITED	EP-TA200	Input:100-240V 50-60Hz, 0.5A Output:9V/1.67A or 5V/2A	R37N4ER2G0 1SE3

2.4. Block diagram of EUT configuration for test



Test software: AmebaPRO mptool 1v8.3.exe

The test software was used to control EUT work in Continuous Tx mode and select test channel, wireless mode as below table.

The pathloss of external cable: 0.5dB (According to the manufacturer's claims)

Tested mode, channel, and data rate information				
Mode	Setting Tx Power	data rate (Mbps) (see Note)	Channel	Frequency (MHz)
	ANT1			
IEEE 802.11b	Default	1	LCH: CH1	2412
	Default	1	MCH: CH6	2437
	Default	1	HCH: CH11	2462
IEEE 802.11g	Default	6	LCH: CH1	2412
	Default	6	MCH: CH6	2437
	Default	6	HCH: CH11	2462
IEEE 802.11n HT20	Default	MCS 0	LCH: CH1	2412
	Default	MCS 0	MCH: CH6	2437
	Default	MCS 0	HCH: CH11	2462
IEEE 802.11n HT40	Default	MCS 0	LCH: CH3	2422
	Default	MCS 0	MCH: CH6	2437
	Default	MCS 0	HCH: CH9	2452

Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

2.5. Deviations of test standard

No Deviation

2.6. Test environment conditions

Temperature range:	+15°C to +35 °C
Humidity range:	20% to 75%
Pressure range:	86 kPa to106 kPa

2.7. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2,Building 1,No.17,Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20155, G-20118

2.8. Measurement uncertainty

Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB (10 MHz $\leq$ f < 3.6 GHz);
	1.38 dB (3.6 GHz $\leq$ f < 8 GHz)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB (10 MHz $\leq$ f < 3.6 GHz);
	1.38 dB (3.6 GHz $\leq$ f < 8 GHz)
Frequencies Stability	6.7×10^{-8} (Antenna couple method)
	5.5×10^{-8} (Conducted method)
Conducted spurious emissions	0.86 dB (10 MHz $\leq$ f < 3.6 GHz);
	1.40 dB (3.6 GHz $\leq$ f < 8 GHz)
	1.66 dB (8 GHz $\leq$ f < 26.5 GHz)
Uncertainty for radio frequency (RBW < 20 kHz)	3×10^{-8}
Temperature	0.4 °C
Humidity	2 %
Uncertainty for Radiation Emission test (9 kHz – 30 MHz)	3.44 dB
Uncertainty for Radiation Emission test (30 MHz - 1 GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1 GHz - 40 GHz)	4.10 dB (1 - 6 GHz)
	4.40 dB (6 GHz - 18 GHz)
	3.54 dB (18 GHz - 26 GHz)
	4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power line conduction emission test	3.34dB (150KHz-30MHz)
	3.72dB (9KHz-150KHz)

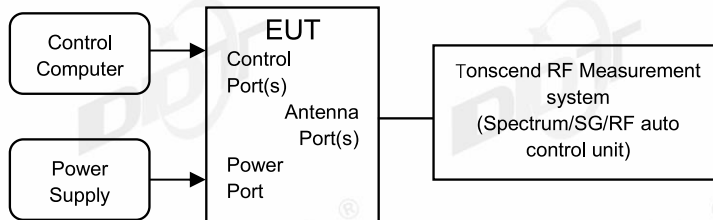
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3. Equipment Used During Test

Equipment	Manufacturer	Model No.	Serial Number	Due Date
☑RF Connected Test (RF Measurement System 4#)				
Signal & Spectrum Analyzer	R&S	FSV3044	101173	2024/04/22
Wideband Radio Communication Tester	R&S	CMW500	168801	2024/04/26
MXG Vector Signal Generator	Agilent	N5182A	MY48180737	2024/04/26
PSG Vector Signal Generator	Agilent	E8267D	US49060192	2024/09/05
RF Control Unit	Tonsend	JS0806-2	21I8060485	2024/04/26
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2024/05/14
Test Software	Tonscend	JS1120-3	Ver.3.2.22	N/A
☑Radiation 3#chamber				
EMI TEST RECEIVER	R&S	ESU26	100472	2024/04/22
PSA Series Spectrum Analyzer	Agilent	E4447A	MY50180031	2024/04/22
Active Loop Antenna	Schwarzbeck	FMZB-1519	1519-038	2024/09/10
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	01429	2024/07/11
Double Ridged Horn Antenna	Schwarzbeck	BBHA 9120 D	02468	2024/09/17
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	2024/04/25
Pre-amplifier	COM-POWER	PAM-118A	18040084	2024/07/14
Pre-amplifier	COM-POWER	PAM-840A	461369	2024/04/26
RE Cable	N/A	W23.02 CP1-X2 + W23.09 AP1-X8+ JCT26S-NJ-NJ-1.5M	4.5M+8M+1.5M	2024/04/20
RF Cable	Yuhu	JCTB810-NJ-NJ-9M+ ZT26S-SMAJ-SMAJ-1M	21123964	2024/04/22
Band Reject Filter(2400-2500 MHz)	REBES	BRM50702	G555	N/A
Band Reject Filter(5150-5880 MHz)	REBES	BRM50716	G392	N/A
High Pass Filter(8000-25000 MHz)	XB	XBLBQ-GTA67	210820-2-3	N/A
High Pass Filter(500-2000 MHz)	REBES	HPM50102	004	N/A
High Pass Filter(1200-18000 MHz)	REBES	HPM50108	056	N/A
Test Software	Tonscend	JS32-RE	V 5.0.0.1	N/A
☑Power Line Conducted Emissions Test 1#				
Test Receiver	R&S	ESCI	100551	2024/07/10
LISN 1	R&S	ENV216	101109	2024/07/10
LISN 2	R&S	ESH2-Z5	100309	2024/07/11
Pulse Limiter	R&S	ESH3-Z2	101242	2024/07/14
CE Cable 1	HUBSER	N/A	W10.01	2024/07/14
Test software	Audix	E3	V 6.11111b	N/A

4. 6dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

For direct sequence systems, the minimum 6 dB bandwidth shall be at least 500 kHz

4.3. Test procedure

- (1) The test according to ANSI C63.10-2013 clause 11.8.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously
- (4) Use the following spectrum analyzer settings for 6 dB Bandwidth:

RBW:	100 kHz
VBW:	$\geq [3 \times \text{RBW}]$
Detector Mode:	peak
Sweep time:	auto
Trace mode	max hold

Allow the trace to stabilize, measure the 6 dB bandwidth of signal, and record the results in the report

4.4. Test result

Test Site:	Tonscend RF Measurement System 4#	Test Date:	2023.10.18-2023.10.19
Ambient Condition:	24.5 °C, 44.6 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	Birddy Smart Bird House Camera	Model No.:	FJ27HWWXJ
Sample Number:	S23101326-04	Test Power Supply:	BATTERY

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	10.04	2406.96	2417.00	0.5	PASS
		2437	10.04	2431.96	2442.00	0.5	PASS
		2462	10.04	2456.96	2467.00	0.5	PASS
11G	Ant1	2412	16.36	2403.80	2420.16	0.5	PASS
		2437	16.36	2428.80	2445.16	0.5	PASS
		2462	16.36	2453.80	2470.16	0.5	PASS
11N20SISO	Ant1	2412	17.56	2403.20	2420.76	0.5	PASS
		2437	17.56	2428.20	2445.76	0.5	PASS
		2462	17.56	2453.20	2470.76	0.5	PASS
11N40SISO	Ant1	2422	36.08	2404.08	2440.16	0.5	PASS
		2437	36.08	2419.08	2455.16	0.5	PASS
		2452	36.08	2434.08	2470.16	0.5	PASS

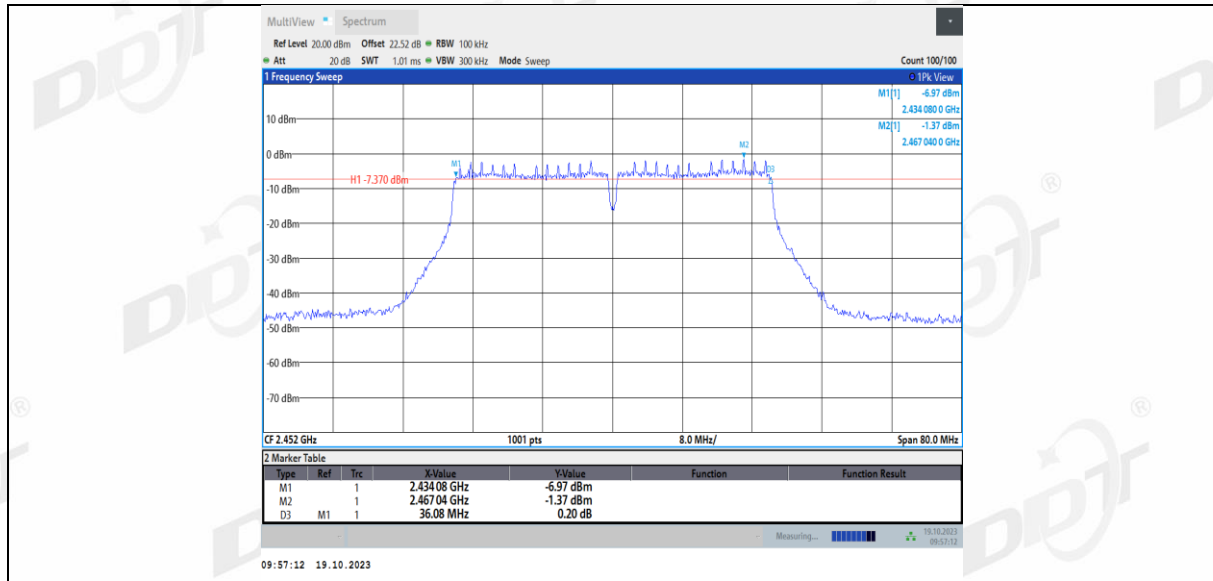
4.5. Test graphs





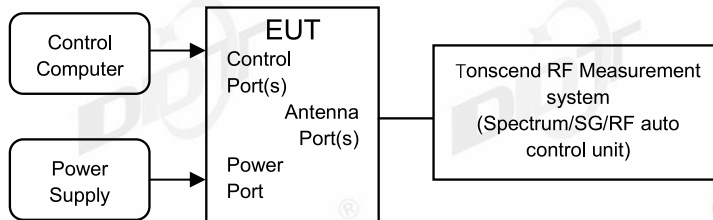






5. 99% Bandwidth

5.1. Block diagram of test setup



5.2. Limits

Just for Report.

5.3. Test procedure

- (1) The test according to ANSI C63.10-2013 clause 6.9.3.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously
- (4) Use the following spectrum analyzer settings for the 99% Bandwidth:

RBW:	1% to 5% of the OBW
VBW:	approximately three times RBW
Span:	between 1.5 times and 5.0 times the OBW
Detector Mode:	peak
Sweep time:	auto
Trace mode	max hold

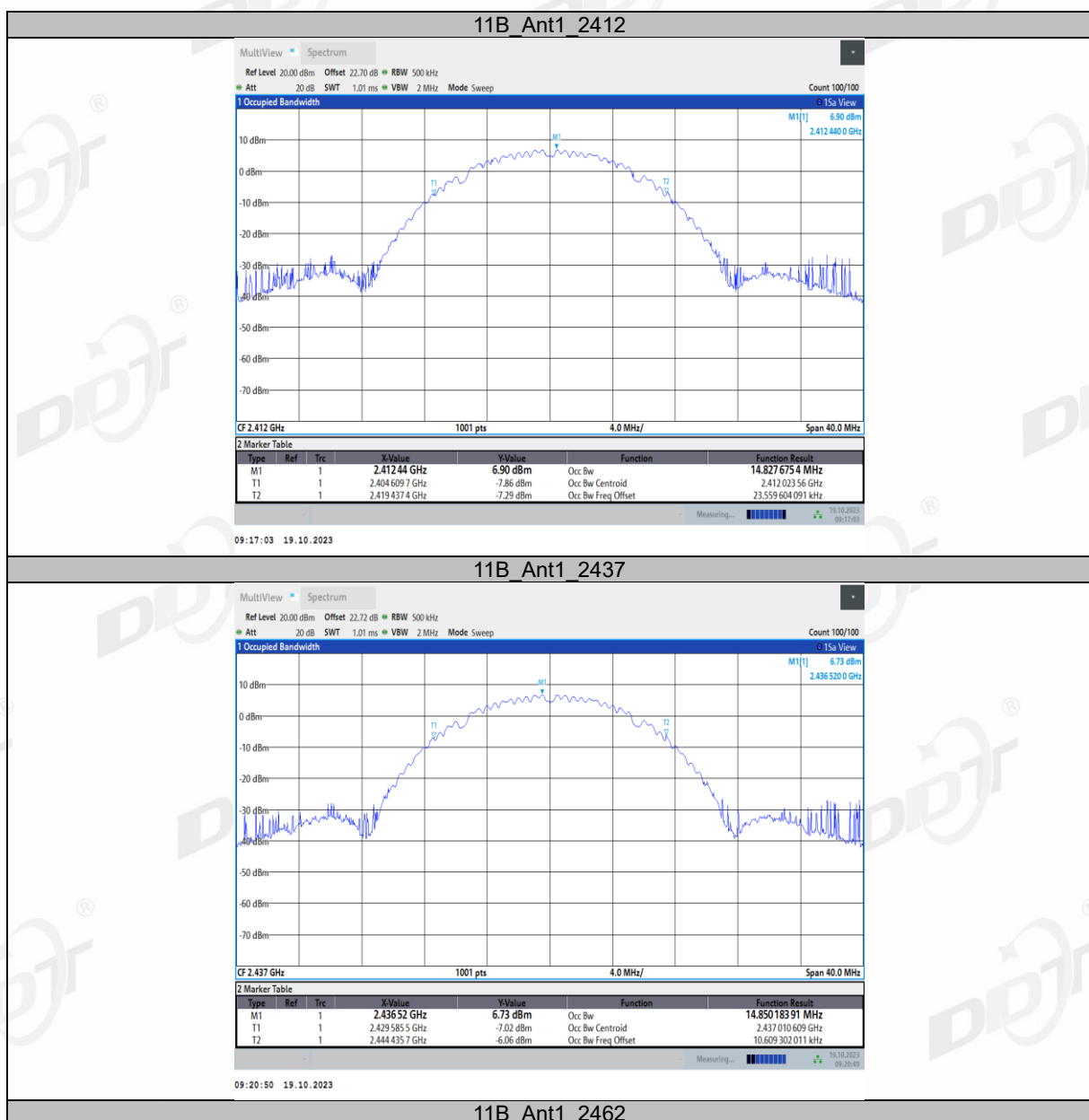
Allow the trace to stabilize, measure the 99% bandwidth of signal, and record the results in the report.

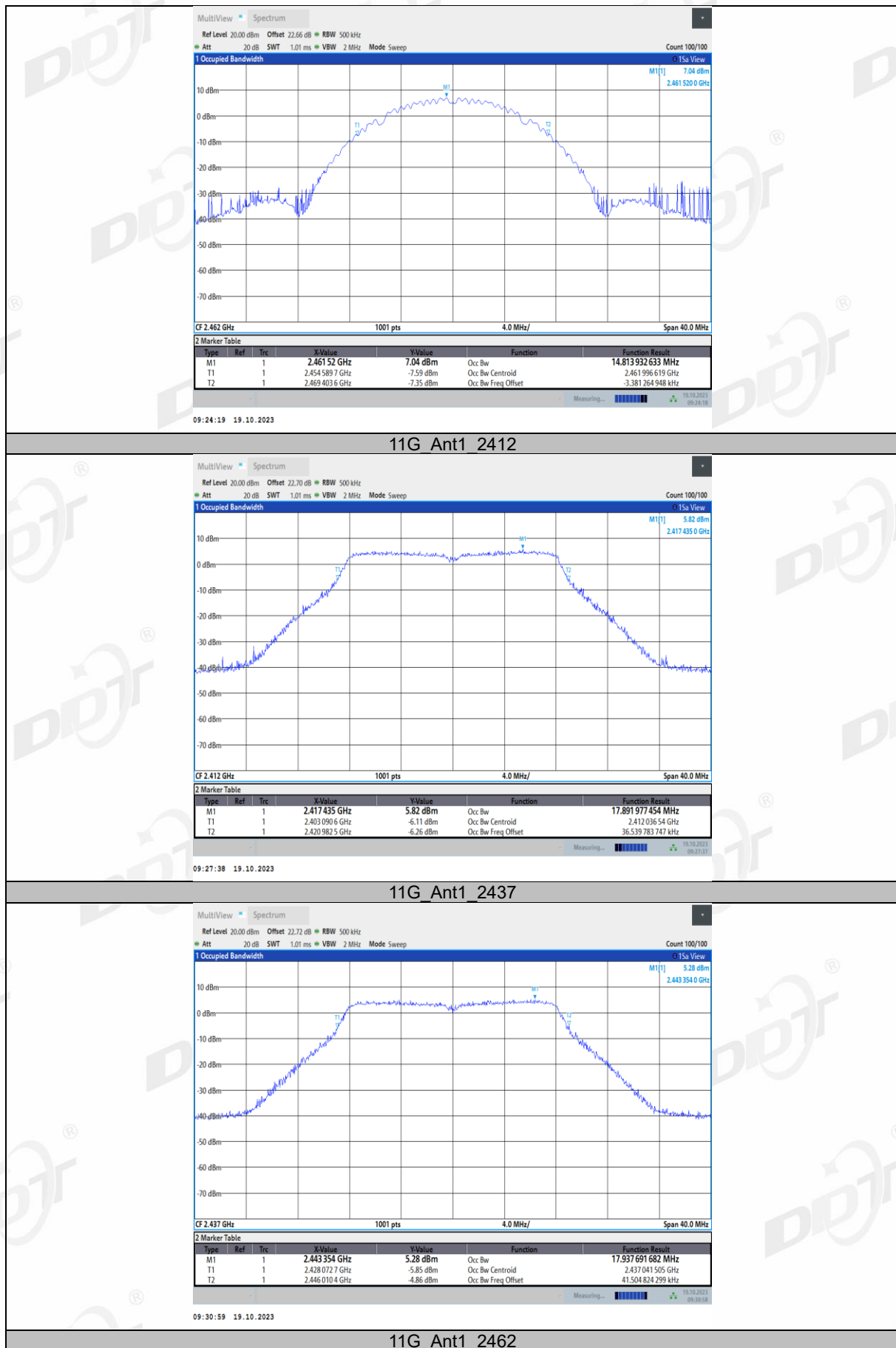
5.4. Test result

Test Site:	Tonscend RF Measurement System 4#	Test Date:	2023.10.18-2023.10.19
Ambient Condition:	24.5 °C, 44.6 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	Birdy Smart Bird House Camera	Model No.:	FJ27HWWJ
Sample Number:	S23101326-04	Test Power Supply:	BATTERY

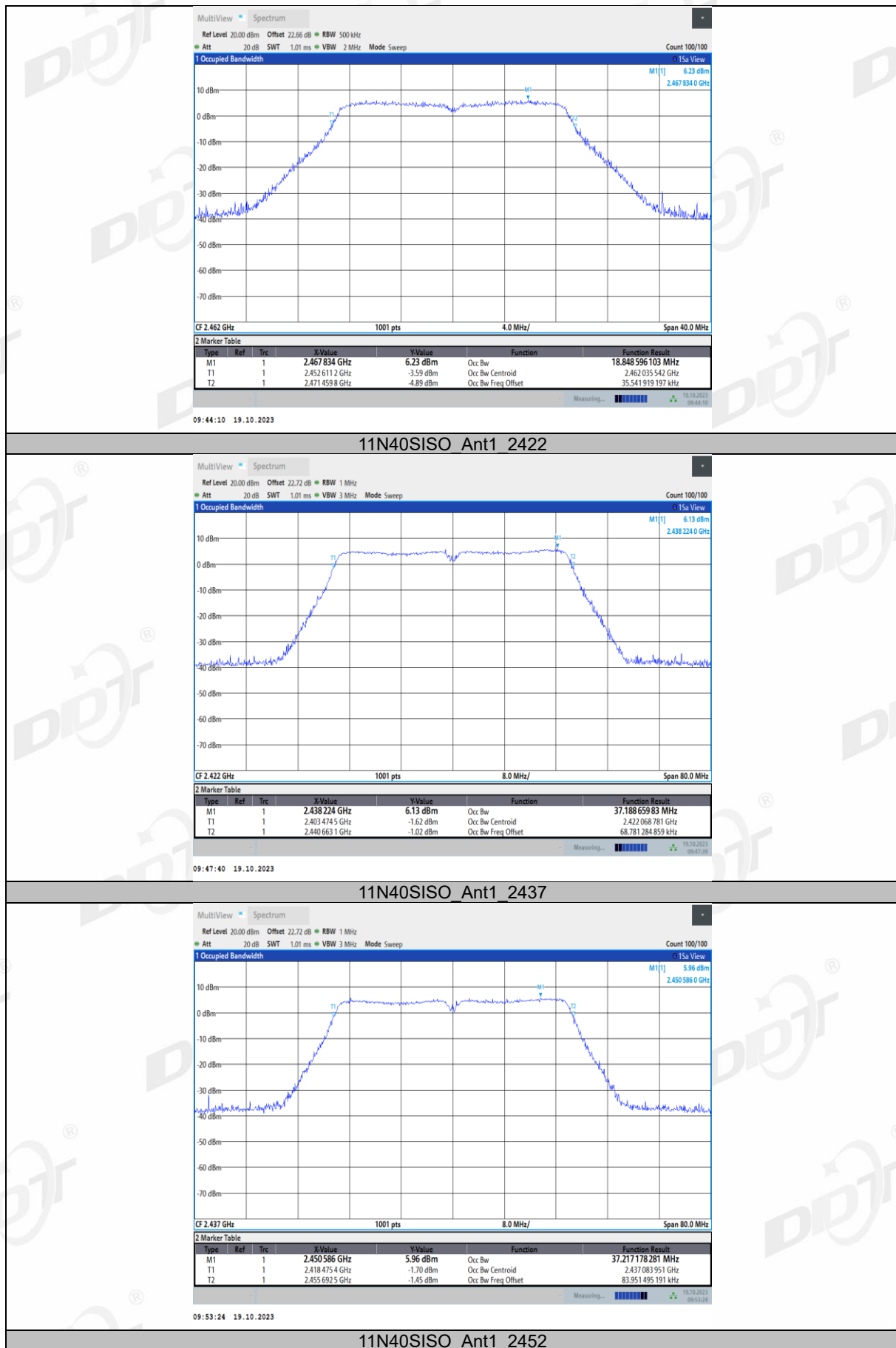
Test Mode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.828	2404.6097	2419.4374	---	---
		2437	14.850	2429.5855	2444.4357	---	---
		2462	14.814	2454.5897	2469.4036	---	---
11G	Ant1	2412	17.892	2403.0906	2420.9825	---	---
		2437	17.938	2428.0727	2446.0104	---	---
		2462	17.912	2453.0391	2470.9515	---	---
11N20SISO	Ant1	2412	18.789	2402.6459	2421.4349	---	---
		2437	18.817	2427.6405	2446.4576	---	---
		2462	18.849	2452.6112	2471.4598	---	---
11N40SISO	Ant1	2422	37.189	2403.4745	2440.6631	---	---
		2437	37.217	2418.4754	2455.6925	---	---
		2452	37.182	2433.4628	2470.6453	---	---

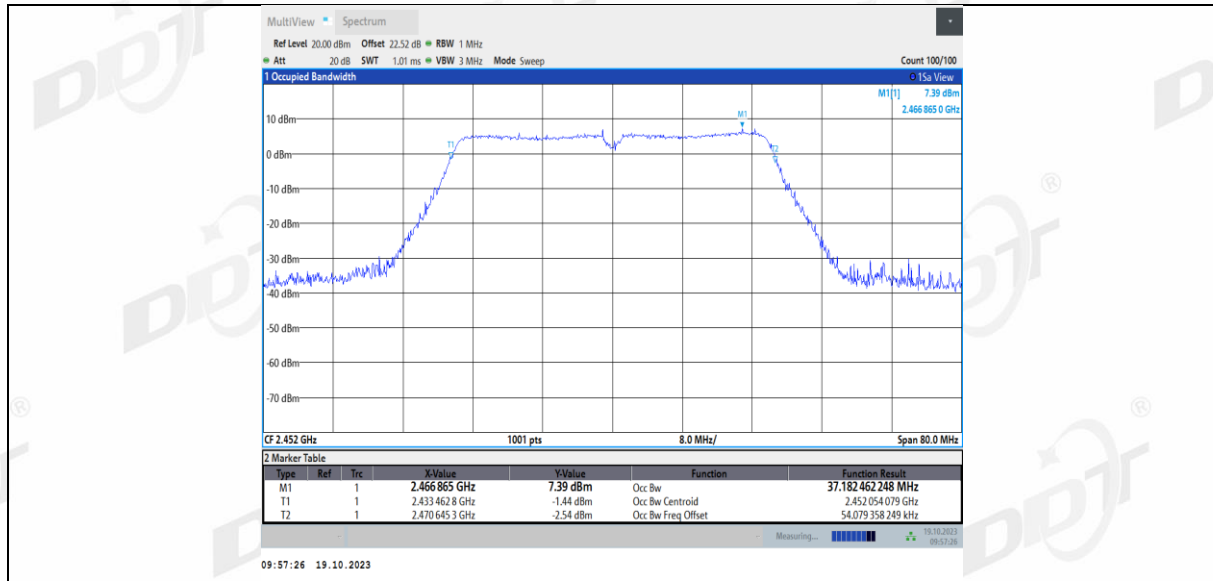
5.5. Test graphs





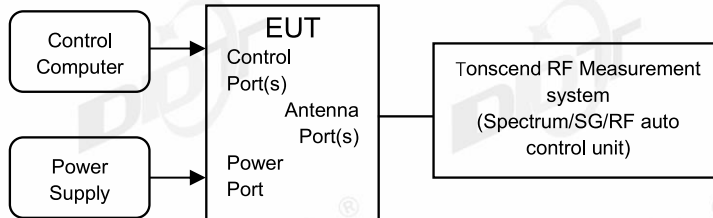






6. Conducted Output Power

6.1. Block diagram of test setup



6.2. Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.3. Test procedure

- (1) The test according to ANSI C63.10-2013 clause 11.9.2.3.
- (2) Connect EUT's antenna output to RF power meter by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously, If the transmitter does not transmit continuously, measure the duty cycle, D, of the transmitter output signal.
- (4) Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
- (5) Adjust the measurement in dBm by adding $[10 \log (1 / D)]$, where D is the duty cycle.
- (6) Record the RF average power of each antenna port.

6.4. Test result average

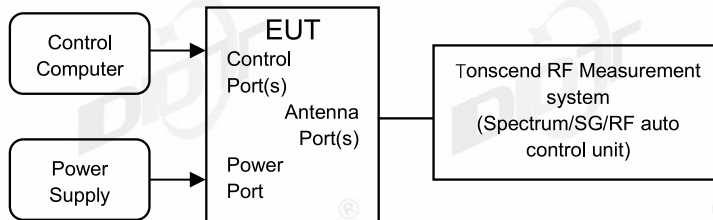
Test Site:	Tonscend RF Measurement System 4#	Test Date:	2023.10.18-2023.10.19
Ambient Condition:	24.5 °C, 44.6 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	Birdy Smart Bird House Camera	Model No.:	FJ27HWXJ
Sample Number:	S23101326-04	Test Power Supply:	BATTERY

Test Mode	Antenna	Frequency [MHz]	Average power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	16.81	98.97	0.04	16.85	≤30.00	21.01	≤36.00	PASS
		2437	16.71	98.89	0.05	16.76	≤30.00	20.92	≤36.00	PASS
		2462	16.78	98.89	0.05	16.83	≤30.00	20.99	≤36.00	PASS
11G	Ant1	2412	13.20	94.06	0.27	13.47	≤30.00	17.63	≤36.00	PASS
		2437	12.88	94.06	0.27	13.15	≤30.00	17.31	≤36.00	PASS
		2462	13.89	94.09	0.26	14.15	≤30.00	18.31	≤36.00	PASS
11N20 SISO	Ant1	2412	13.19	93.66	0.28	13.47	≤30.00	17.63	≤36.00	PASS
		2437	12.84	93.66	0.28	13.12	≤30.00	17.28	≤36.00	PASS
		2462	13.87	93.66	0.28	14.15	≤30.00	18.31	≤36.00	PASS
11N40 SISO	Ant1	2422	13.25	87.85	0.56	13.81	≤30.00	17.97	≤36.00	PASS
		2437	13.04	87.96	0.56	13.60	≤30.00	17.76	≤36.00	PASS
		2452	13.70	87.85	0.56	14.26	≤30.00	18.42	≤36.00	PASS

Note: EIRP (dBm)=Conducted Output Power (dBm)+ Antenna Gain (dBi)

7. Power Spectral Density

7.1. Block diagram of test setup



7.2. Limits

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

7.3. Test procedure

- (1) The test according to ANSI C63.10-2013 clause 11.10.5.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously.
- (4) Use the following spectrum analyzer settings for Power Spectral Density measurement:

Center frequency	DTS Channel center frequency
RBW:	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW:	$\geq 3\text{RBW}$
Span	1.5 times the DTS bandwidth
Detector Mode:	RMS
Sweep time:	auto
Trace mode	max hold
	Employ trace averaging (rms)
Trace	mode over a minimum of 100 traces.

- (5) Add $[10 \log (1 / D)]$, where D is the duty cycle measured in step a), to the measured PSD to compute the average PSD during the actual transmission time.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

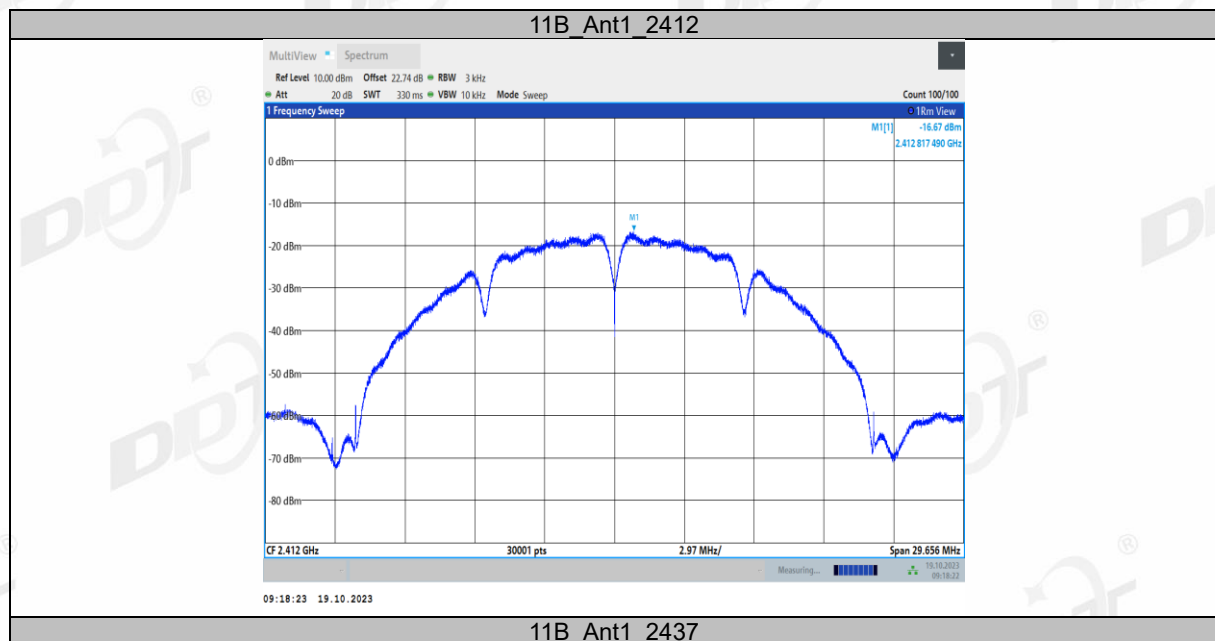
7.4. Test result

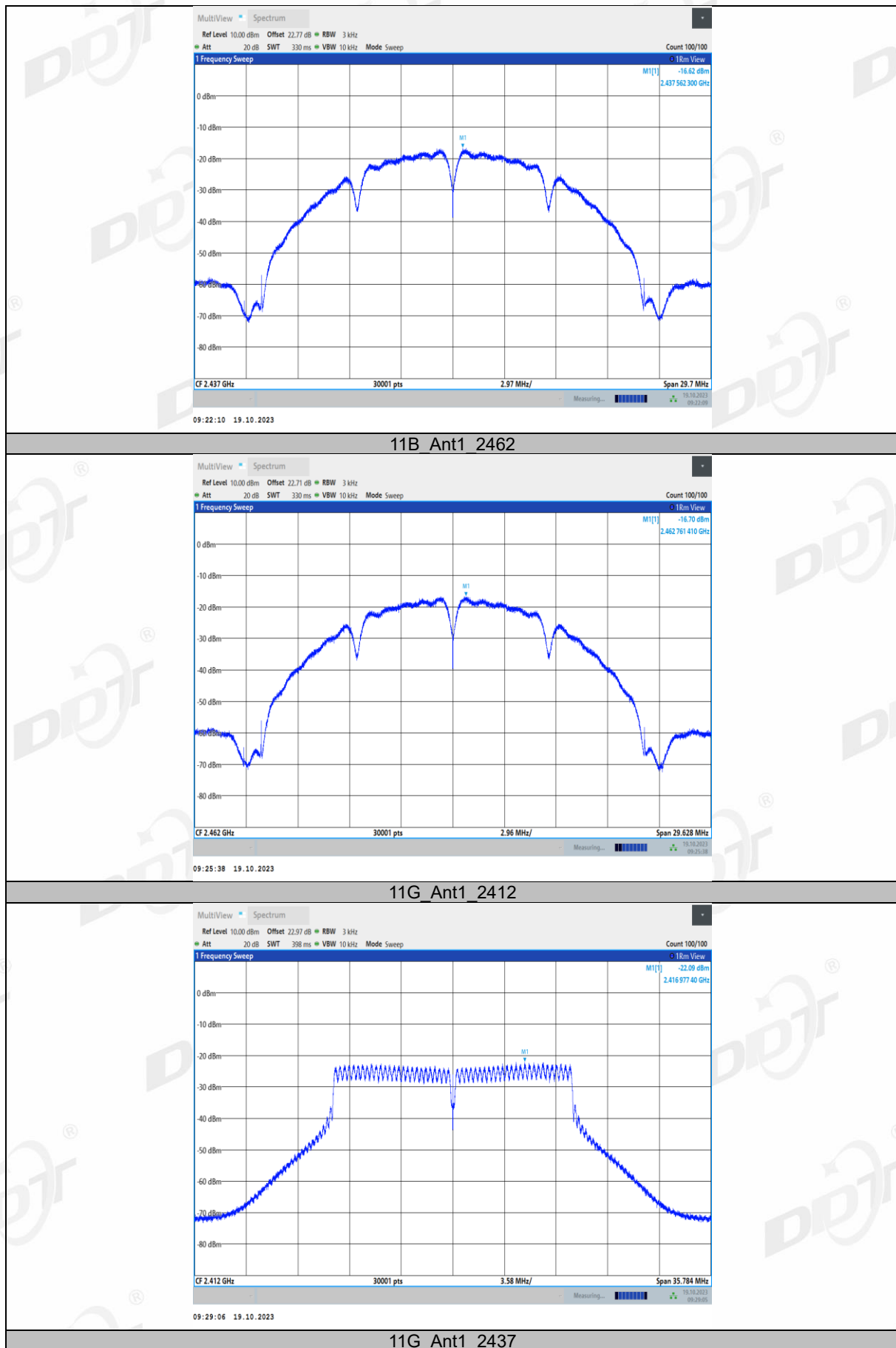
Test Site:	Tonscend RF Measurement System 4#	Test Date:	2023.10.18-2023.10.19
Ambient Condition:	24.5 °C, 44.6 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	Birdy Smart Bird House Camera	Model No.:	FJ27HWXJ
Sample Number:	S23101326-04	Test Power Supply:	BATTERY

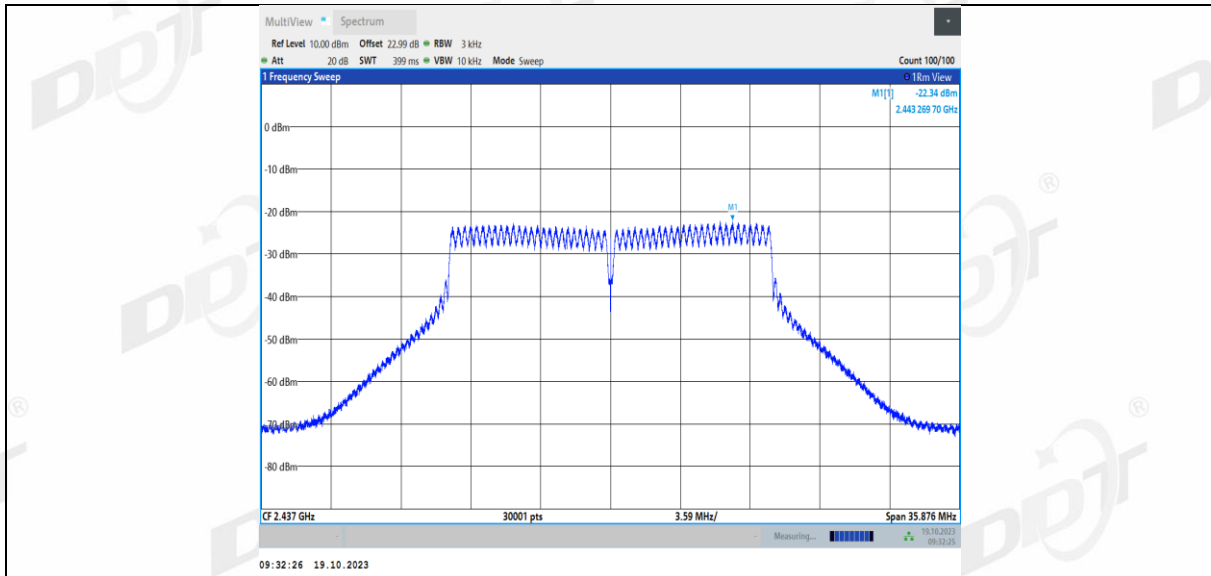
Test Mode	Antenna	Frequency [MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-16.67	≤8.00	PASS
		2437	-16.62	≤8.00	PASS
		2462	-16.70	≤8.00	PASS
11G	Ant1	2412	-22.09	≤8.00	PASS
		2437	-22.34	≤8.00	PASS
		2462	-21.43	≤8.00	PASS
11N20SISO	Ant1	2412	-22.66	≤8.00	PASS
		2437	-22.53	≤8.00	PASS
		2462	-21.16	≤8.00	PASS
11N40SISO	Ant1	2422	-24.27	≤8.00	PASS
		2437	-24.42	≤8.00	PASS
		2452	-23.71	≤8.00	PASS

Note: The Duty Cycle Factor is compensated in the graph.

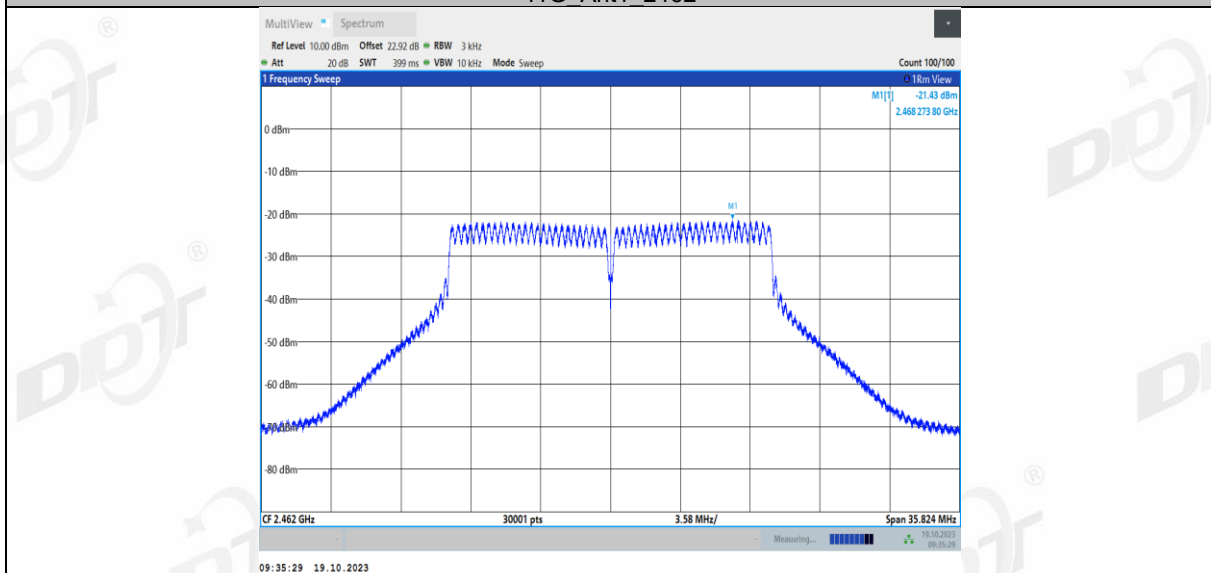
7.5. Test graphs



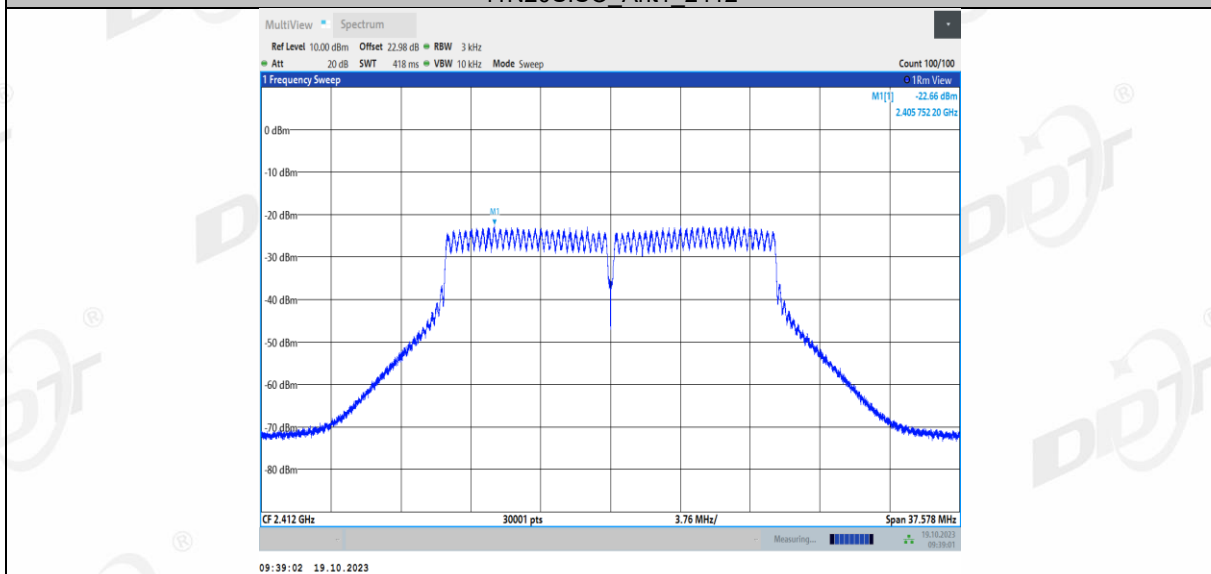




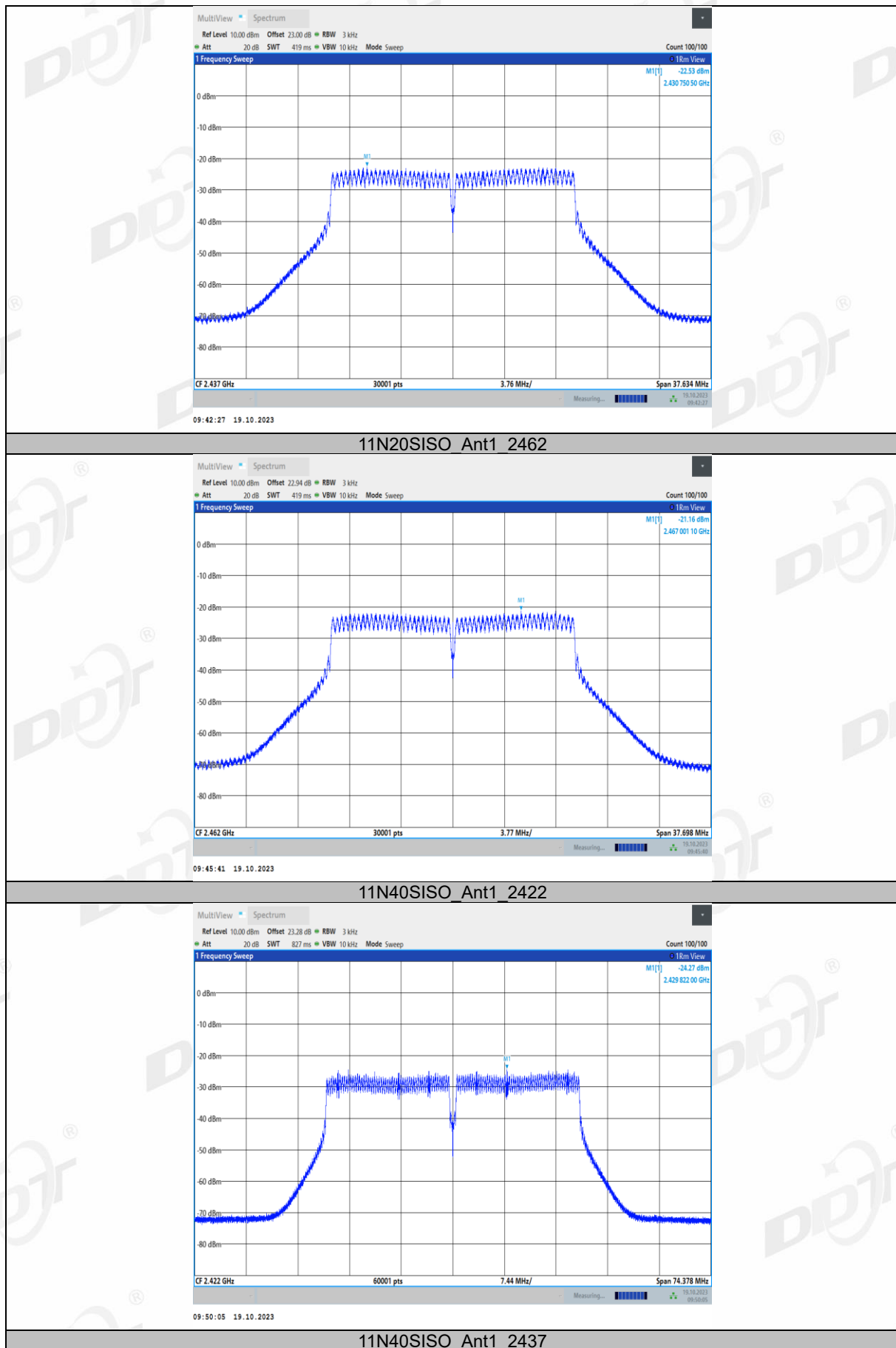
11G Ant1_2462

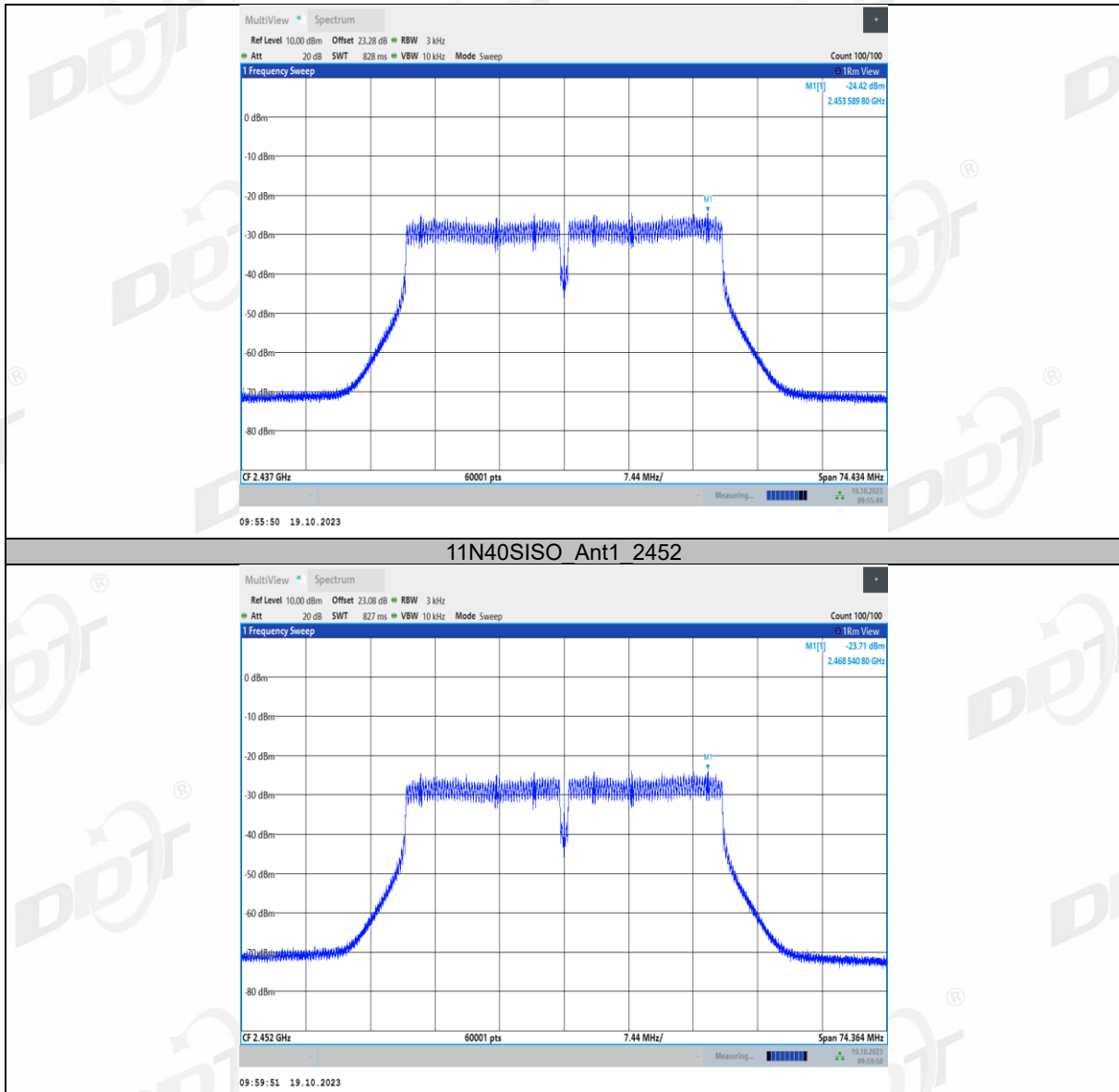


11N20SISO_Ant1_2412



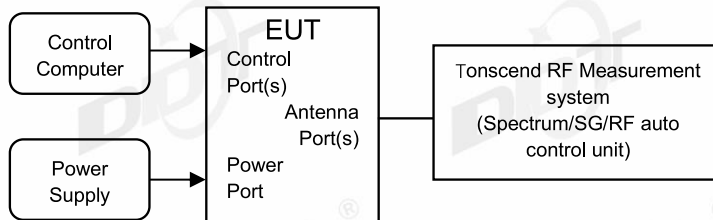
11N20SISO_Ant1_2437





8. Band Edge Compliance (Conducted Method)

8.1. Block diagram of test setup



8.2. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

8.3. Test procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) Establish a reference level by using the following procedure:

RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

- (3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

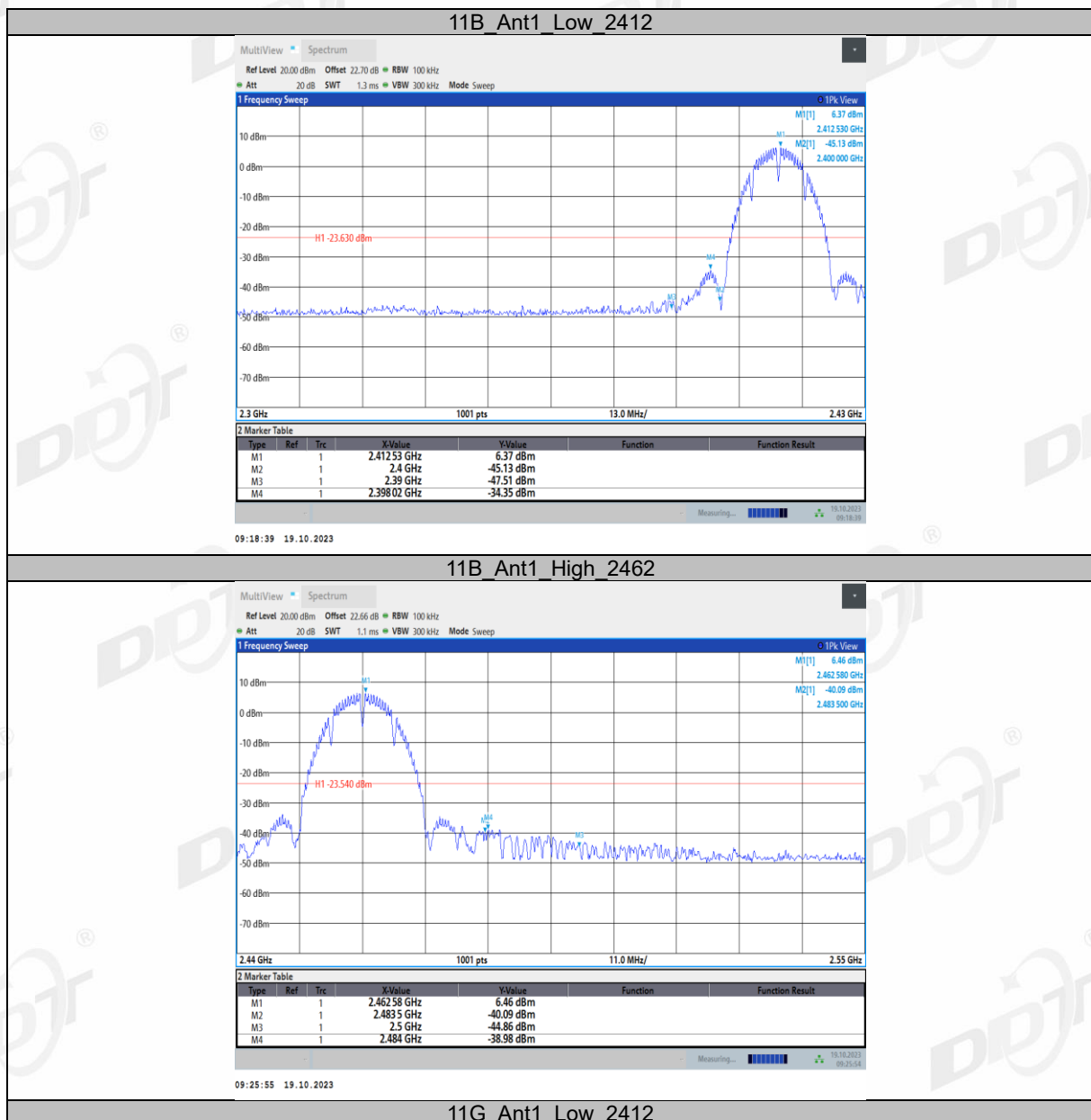
Then mark the maximum amplitude of all unwanted emissions outside of the authorized frequency band.

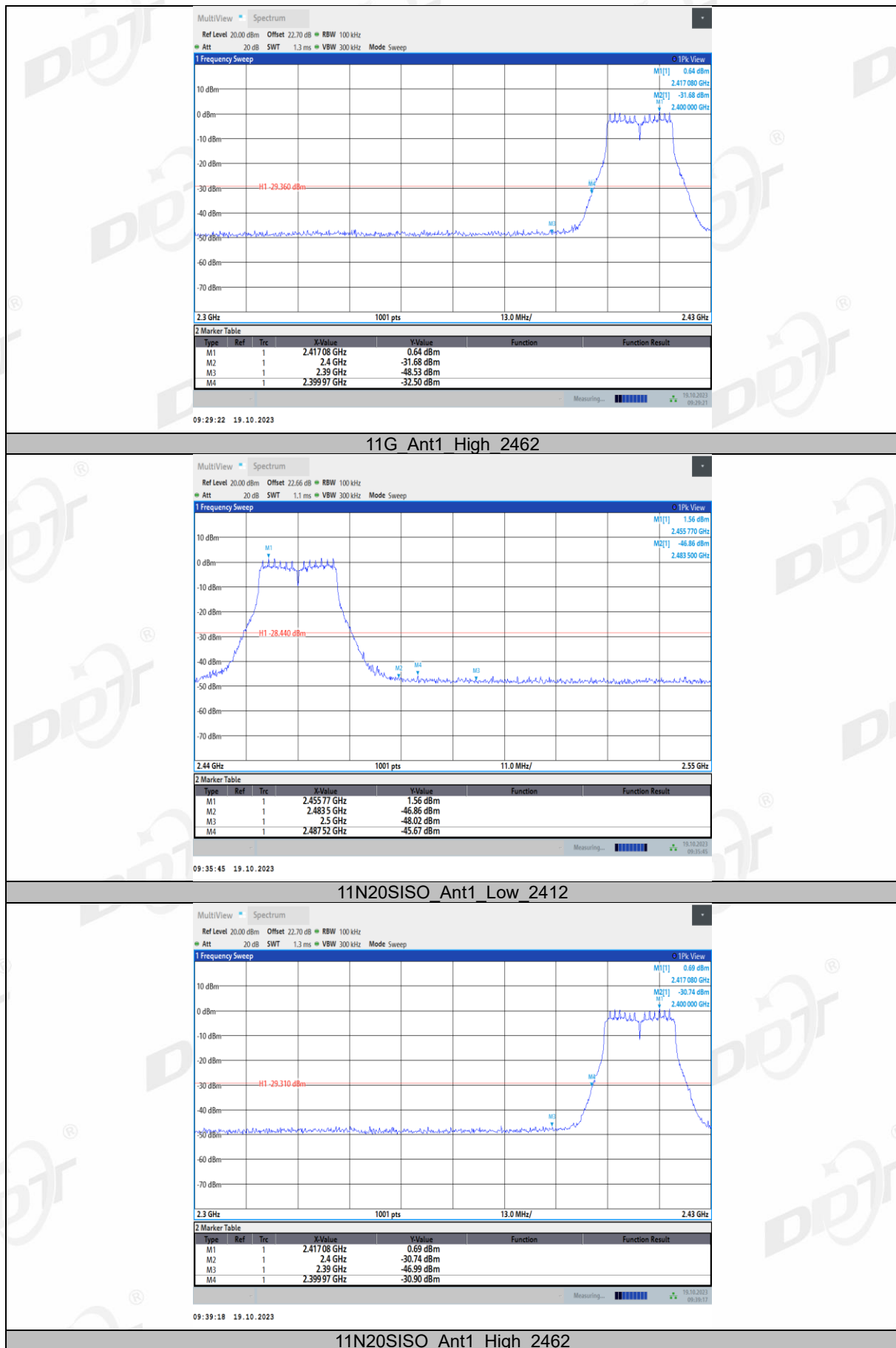
8.4. Test result

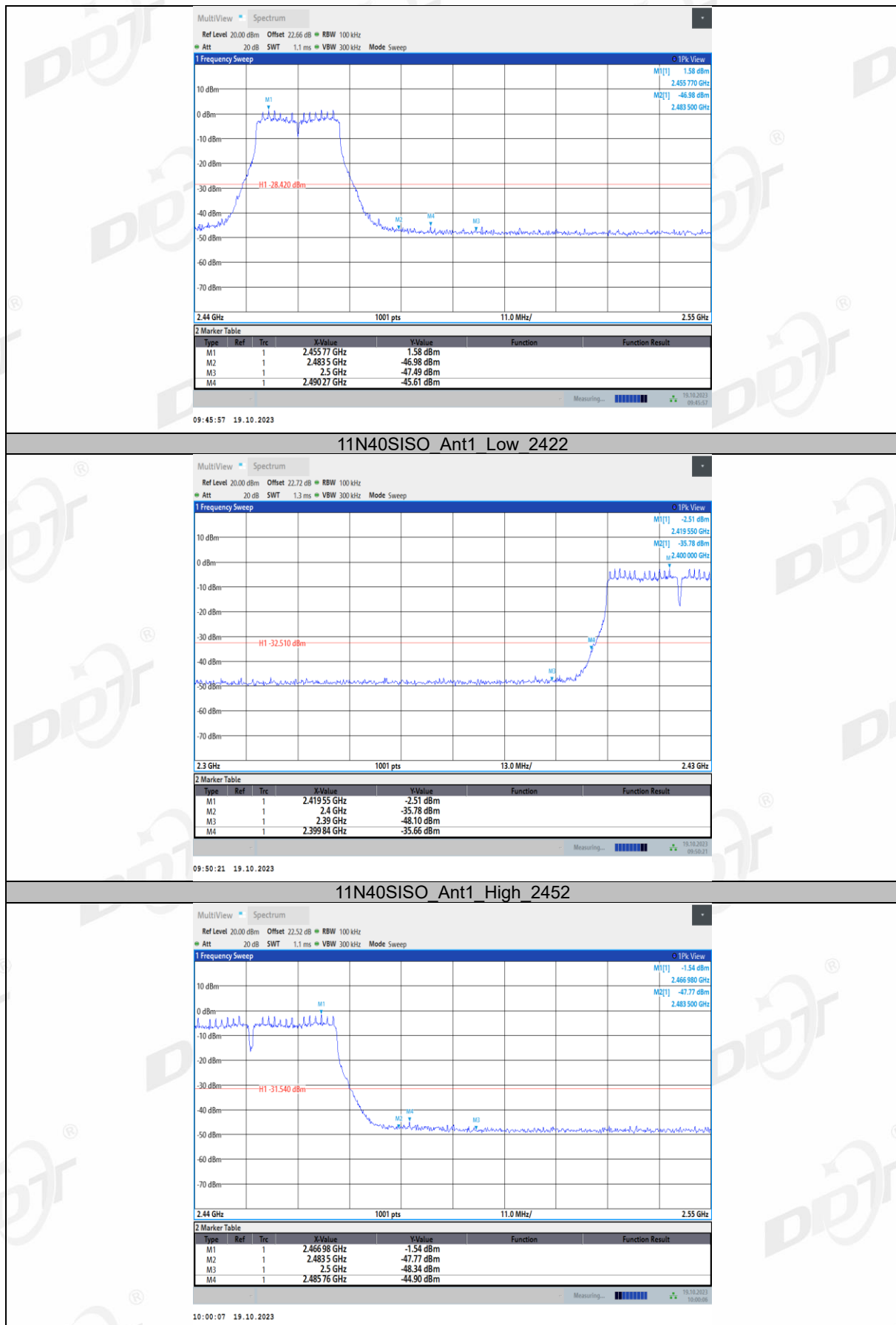
Test Site:	Tonscend RF Measurement System 4#	Test Date:	2023.10.18-2023.10.19
Ambient Condition:	24.5 °C,44.6 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	Birddy Smart Bird House Camera	Model No.:	FJ27HWXJ
Sample Number:	S23101326-04	Test Power Supply:	BATTERY

EUT Set Mode	CH or Frequency	Result(dBm)	EUT Set Mode	CH or Frequency	Result (dBm)
11b	CH1	Pass	11g	CH1	Pass
	CH11	Pass		CH11	Pass
11n HT 20	CH1	Pass	11n HT 40	CH3	Pass
	CH11	Pass		CH9	Pass

8.5. Test graphs

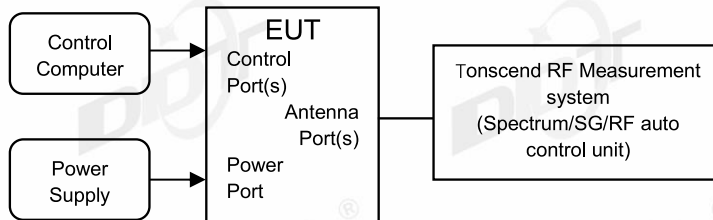






9. RF Conducted Spurious Emissions

9.1. Block diagram of test setup



9.2. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

9.3. Test procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) Establish a reference level by using the following procedure:

Center frequency	Test frequency
RBW:	100 kHz
VBW:	300 kHz
Span	Wide enough to capture the peak level of the in-band emission
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

- (3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

- (4) Set the spectrum analyzer as follows:

RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Number of measurement points	$\geq \text{Span/RBW}$
Detector Mode:	Peak

Sweep time:

auto

Trace mode

Max hold

- (5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band

9.4. Test result

Test Site:	Tonscend RF Measurement System 4#	Test Date:	2023.10.18-2023.10.19
Ambient Condition:	24.5 °C, 44.6 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	Birdy Smart Bird House Camera	Model No.:	FJ27HWXJ
Sample Number:	S23101326-04	Test Power Supply:	BATTERY

EUT Set Mode	CH or Frequency	Result(dBm)	EUT Set Mode	CH or Frequency	Result (dBm)
11b	CH1	Pass	11g	CH1	Pass
	CH11	Pass		CH11	Pass
11n HT 20	CH1	Pass	11n HT 40	CH3	Pass
	CH11	Pass		CH9	Pass

9.5. Test graphs

