TEST REPORT FOR CERTIFICATION
On Behalf of

Chungear Industrial Co., Ltd.

Ceiling Fan Remote Controller (Transmitter)

Model No.: TR06B

FCC ID: KUJCE9908

Prepared for : Chungear Industrial Co., Ltd.
106 Kanho Rd., Taichung, Taiwan

Prepared By : AUDIX Technology Corporation
EMC Department
No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang,
Taipei Hsien, Taiwan, R.O.C.

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Date of Test	:	Dec. 01, 2010
Date of Report	:	Dec. 03, 2010

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TEST REPORT CERTIFICATION

Applicant	:	Chungear Industrial Co., Ltd.
Manufacturer #1	:	Chungear Industrial Co., Ltd.
Manufacturer #2	:	Satellite Electronic (Zhongshan) Ltd.
Manufacturer #3	:	Zhongshan Amity Electronic Ltd.
EUT Description	:	Ceiling Fan Remote Controller (Transmitter)
FCC ID	:	KUJCE9908
	(A) Model No.	: TR06B
	(B) Serial No.	: N/A
	(C) Power Supply	: DC 12V (Battery)
	(D) Test Voltage	: DC 12V

Measurement Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART C, October 2009
AND ANSI C63.4/2003

(FCC CFR 47 Part 15C, §15.207, §15.209 and §15.231)

The device described above was tested by AUDIX Technology Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart C limits both radiated and conducted emissions.

The measurement results are contained in this test report and AUDIX Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX Technology Corporation.

Date of Test : Dec. 01, 2010 Date of Report : Dec. 03, 2010

Producer : _____
(Kitty Ni/Administrator)

Review : _____
(Henning Chang/Supervisor)

Signatory: _____
(Ben Cheng/Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Ceiling Fan Remote Controller (Transmitter)
Model Number	:	TR06B
FCC ID	:	KUJCE9908
Applicant	:	Chungear Industrial Co., Ltd. 106 Kanho Rd., Taichung, Taiwan
Manufacturer #1	:	Chungear Industrial Co., Ltd. 106 Kanho Rd., Taichung, Taiwan
Manufacturer #2	:	Satellite Electronic (Zhongshan) Ltd. No. 15 Torch Hi-Tech Industrial Development Zone, Zhong Shan City Guangdong Province China
Manufacturer #3	:	Zhongshan Amity Electronic Ltd. No. 16 Torch Hi-Tech Industrial Development Zone, Zhong Shan City Guangdong Province China.
Fundamental Frequency	:	304MHz
Power Supply	:	DC 12V (Battery)
Date of Receipt of Sample	:	Nov. 19, 2010
Date of Test	:	Dec. 01, 2010

* Ceiling Fan Remote Controller (Transmitter) - Receiver
(1)Model No.: JY199, FCC by DoC
(2)Model No.: JY326B, FCC by DoC
(3)Model No.: JY326D, FCC by DoC
(4)Model No.: MR36T, FCC by DoC
(5)Model No.: MR36R, FCC by DoC
(6)Model No.: MR58A, FCC by DoC
(7)Model No.: MR56E, FCC by DoC

Remark:
Antenna requirement: This EUT's transmitter antenna is designed to be soldered on a printed circuit board, comply with §15.203 and inform to user that any change and modify is prohibited.

1.2.Description of Test Facility

Name of Firm	:	**AUDIX Technology Corporation** **EMC Department** No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang, Taipei Hsien, Taiwan.
Test Facility & Location	:	**Semi-Anechoic Chamber** No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang, Taipei Hsien, Taiwan. May 14, 2009 Renewal on Federal Communication Commission Registration Number: 90993
NVLAP Lab. Code	:	200077-0
TAF Accreditation No	:	1724

1.3.Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Radiation Test (Distance: 3m)	30MHz~300MHz	± 2.91dB
	300MHz~1000MHz	± 2.94dB

Remark：Uncertainty = $ku_c(y)$

2. CONDUCTED EMISSION MEASUREMENT

【The EUT only employs battery power for operation, no conductive emission limits are required according to FCC Part 15 Section §15.207】

3. RADIATED EMISSION MEASUREMENT

3.1.Test Equipment

The following test equipment was used during the radiated emission test:

3.1.1. For Frequency Range 30MHz~1000MHz (Semi-Anechoic Chamber)

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00272	Jun. 29, 10’	Jun. 28, 11’
2.	Test Receiver	R & S	ESCS30	100265	Sep. 01, 10’	Aug. 31, 11’
3.	Pre-Amplifier	HP	8447D	2944A06305	Feb. 03, 10’	Feb. 02, 11’
4.	Biconical Antenna	CHASE	VBA6106A	1264	Mar. 13, 10’	Mar. 12, 11’
5.	Log Periodic Antenna	Schwarzbeck	UHALP9108-A	0810	Mar. 13, 10’	Mar. 12, 11’
6.	Coaxial Switch	Anritsu	MP59B	6100226512	Feb. 08, 10’	Feb. 07, 11’

3.1.2. For Frequency Range Above 1GHz (Semi-Anechoic Chamber)

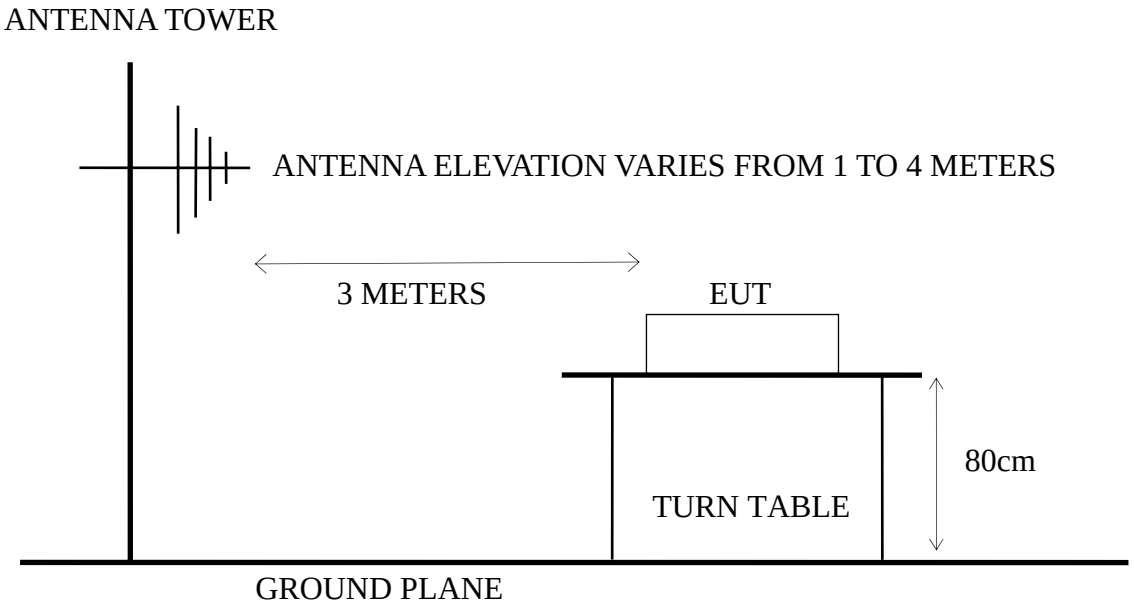
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00272	Jun. 29, 10’	Jun. 28, 11’
2.	Amplifier	HP	8449B	3008A00529	Dec. 15, 09’	Dec. 14, 10’
3.	Horn Antenna	EMCO	3115	9112-3775	May 10, 10’	May 09, 11’

3.2.Test Setup

3.2.1. Block Diagram of connection between EUT and simulators

CEILING FAN REMOTE CONTROLLER (TRANSMITTER) (EUT)

3.2.2. Semi-Anechoic Chamber (3m) Setup Diagram



3.3. Radiation Emission Limits (§15.209 & 15.231)

3.3.1. Spurious Emission Limit (§15.209)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMITS	
		μV/m	dBμV/m
30 - 88	3	100	40.00
88 - 216	3	150	43.50
216 - 960	3	200	46.00
Above 960	3	500	54.00

Remarks： (1) Emission level (dBμV/m) = 20 log Emission level (μV/m)
(2) The tighter limit applies at the edge between two frequency bands.
(3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.3.2. Fundamental Frequency Emission Limit (§15.231)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMITS	
		μV/m	dBμV/m
Fundamental Frequency	3	5595.9271	74.96 (Quasi-Peak)

Remarks： (1) Emission level (dBμV/m) = 20 log Emission level (μV/m)
(2) The tighter limit applies at the edge between two frequency bands.
(3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
(4) Where limit of Fundamental Freq. is calculated by:
41.6667x304.302-7083.3333= 5595.9271μV/m = 74.96 dBμV/m
(5) The limits in this table are based on CFR 47 Part 15.231(b).

3.4. Operating Condition of EUT

3.4.1. Set up the EUT and simulator as shown on 3.2.

3.4.2. To turn on the power of all equipment.

3.4.3. The EUT {Ceiling Fan Remote Controller (Transmitter)} emitted the fundamental frequency with data code at the stand, side and lying conditions. (The worst mode is lying condition)

3.4.4. The EUT was operated on maximum transmitting status during all testing (lying condition).

3.5. Test Procedure

The EUT and was placed on a turn table which was 0.8 meter above the ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set to 3 meters away from the receiving antenna which was mounted on an antenna tower. The antenna moved up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna such as calibrated biconical and log- periodical antenna or horn antenna were used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC ANSI C63.4-2003 regulation.

The bandwidth of test receiver was set at 120kHz for frequencies below 1GHz and resolution bandwidth of spectrum analyzer was set at 1MHz for frequencies above 1GHz.

The frequency range from 30MHz to 1000MHz was measured with Quasi-Peak detector.

The frequency range from 1GHz to 3.1GHz was pre-scanned with Peak detector.

EUT with worst positions (Lying) was tested during radiated measurement and all the test results are listed in section 3.6.

3.6. Radiated Emission Noise Measurement Results

3.6.1. Frequency Range 30MHz to 1GHz Measurement Results: **PASSED.**

All the emissions not reported below are too low against the FCC part 15 Subpart C limit.

Date of Test： Dec. 01, 2010 Temperature： 24℃

EUT： Ceiling Fan Remote Controller (Transmitter) Humidity： 62%

Test Mode： Operating (Lying)

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Fundamental Freq. (Quasi-Peak Value)							
	304.300	14.94	3.90	40.26	59.10		
Spurious / Harmonic Freq. (Quasi-Peak Value)							
	200.640	22.08	3.00	1.43	26.51	43.50	16.99
	207.390	21.88	3.10	-0.03	24.94	43.50	18.56
*	402.900	17.57	4.90	5.90	28.37	46.00	17.63
	486.900	18.67	6.20	5.25	30.12	46.00	15.88
*	608.600	21.45	6.20	13.13	40.79	46.00	5.21
	876.800	25.35	7.30	4.05	36.70	46.00	9.30
	911.800	24.99	7.40	11.39	43.78	46.00	2.22

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Fundamental Freq. (Quasi-Peak Value)							
	304.300	14.94	3.90	27.59	46.43		
Spurious / Harmonic Freq. (Quasi-Peak Value)							
	63.480	11.90	1.63	3.97	17.50	40.00	22.50
*	114.780	18.60	2.30	1.51	22.41	43.50	21.09
	200.640	22.08	3.00	1.31	26.39	43.50	17.11
	211.440	21.75	3.20	1.46	26.41	43.50	17.09
*	402.900	17.57	4.90	5.30	27.77	46.00	18.23
	486.900	18.67	6.20	6.45	31.32	46.00	14.68
*	608.600	21.45	6.20	8.98	36.64	46.00	9.36
	911.800	24.99	7.40	3.40	35.79	46.00	10.21

Remarks： 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.
2. Measurement was up to 10th harmonics (~3.1GHz), but the emission levels were too low against the official limit and not report.
3. "*" The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.

3.6.2. Frequency Range 1GHz to 3.1GHz Measurement Results: **PASSED.**

The frequency spectrum from 1GHz to 3.1GHz (up to 10th harmonics) was investigated. All the emissions not reported below are too low against the FCC part 15 Subpart C limit.

Date of Test：	Dec. 01, 2010	Temperature：	24℃
EUT：	Ceiling Fan Remote Controller (Transmitter)	Humidity：	62%
Test Mode：	Operating (Lying)		

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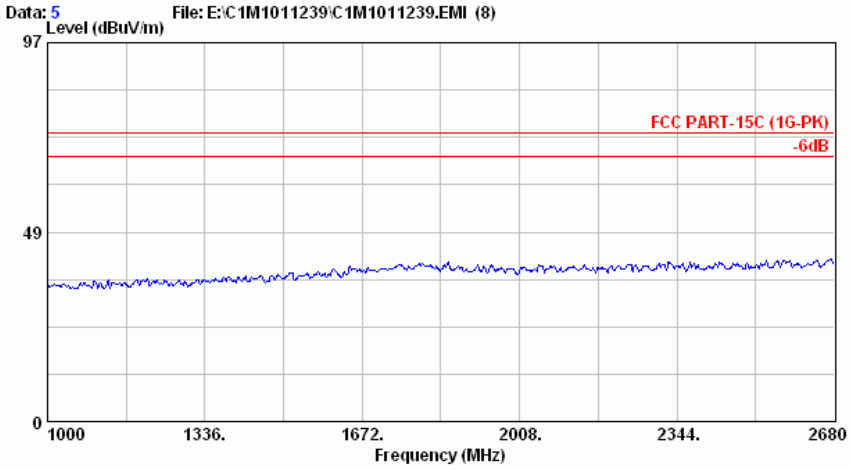
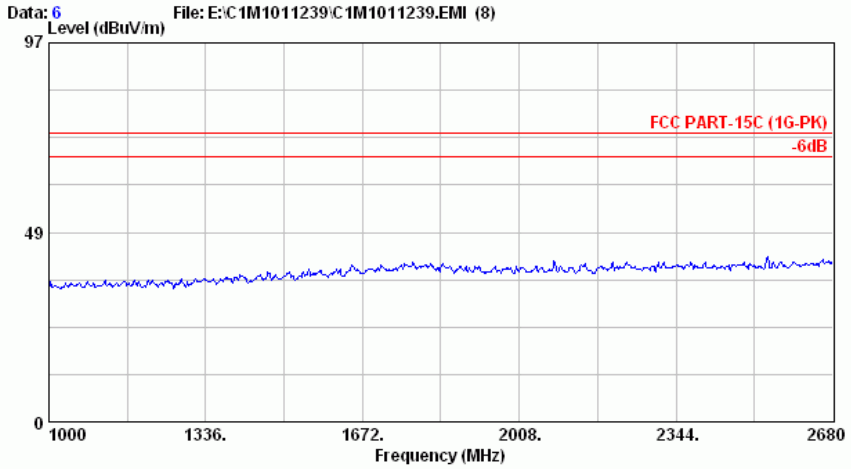



```
Site no.      : A/C Chamber                Data no.   : 5
Dis. / Ant.   : 3m   3115(3775)            Ant. pol.  : HORIZONTAL
Limit         : FCC PART-15C (1G-PK)
Env. / Ins.   : 8593EM 24*C /62%           Engineer   : Jarwei Wang
EUT           : TR06B
Power Rating  : DC 12V
Test Mode     : Operating
```

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Site no.      : A/C Chamber                Data no.   : 6
Dis. / Ant.   : 3m   3115(3775)            Ant. pol.  : VERTICAL
Limit         : FCC PART-15C (1G-PK)
Env. / Ins.   : 8593EM 24*C /62%           Engineer   : Jarwei Wang
EUT           : TR06B
Power Rating  : DC 12V
Test Mode     : Operating
```

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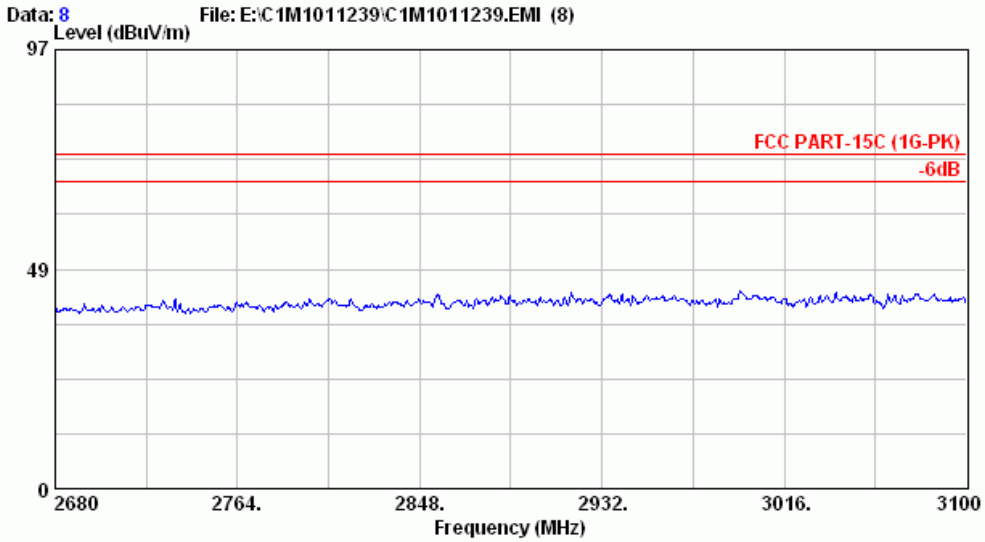


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Site no.      : A/C Chamber                Data no.   : 8
Dis. / Ant.   : 3m   3115(3775)            Ant. pol.  : HORIZONTAL
Limit         : FCC PART-15C (1G-PK)
Env. / Ins.   : 8593EM 24*C /62%           Engineer   : Jarwei Wang
EUT           : TR06B
Power Rating  : DC 12V
Test Mode     : Operating
```
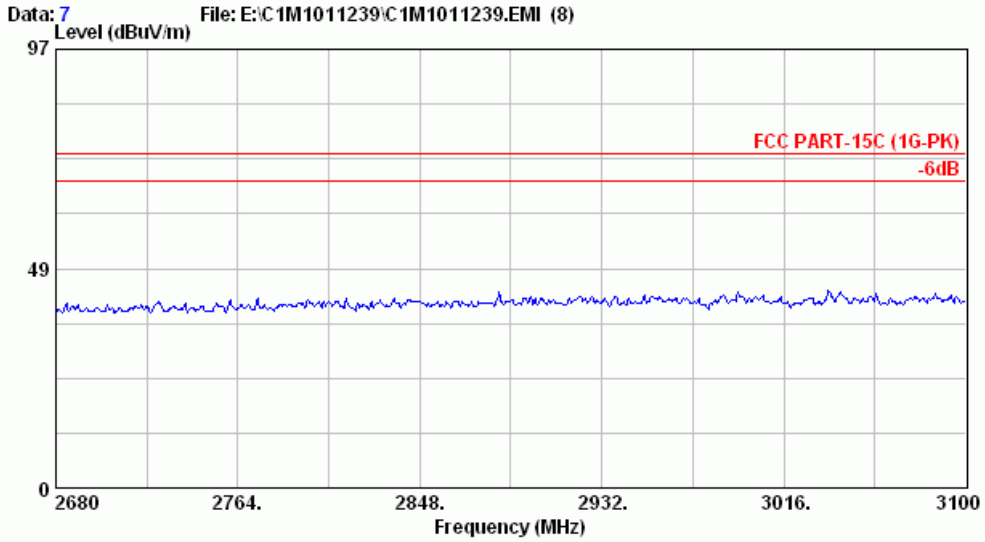




```
Site no.      : A/C Chamber                Data no.   : 7
Dis. / Ant.   : 3m   3115(3775)            Ant. pol.  : VERTICAL
Limit         : FCC PART-15C (1G-PK)
Env. / Ins.   : 8593EM 24*C /62%           Engineer   : Jarwei Wang
EUT           : TR06B
Power Rating  : DC 12V
Test Mode     : Operating
```

4. EMISSION BANDWIDTH MEASUREMENT

4.1.Test Equipment

The following test equipment was used during the Emission Bandwidth Test：

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	N9020A	MY50200226	Aug. 01, 10’	Jul. 31, 11’
2.	Wide Band Antenna	Diamond	RH799	2944A06305	N/A	N/A

4.2.Block Diagram of Test Setup

4.3.Specification Limits (§15.231-(c))

The bandwidth of emission shall be no wider than 0.25% of the center frequency for device operating above 70MHz and below 900MHz. Bandwidth is determined at the points 20dB down from the modulated carrier.

4.4.Emission Bandwidth Measurement Results

PASS.

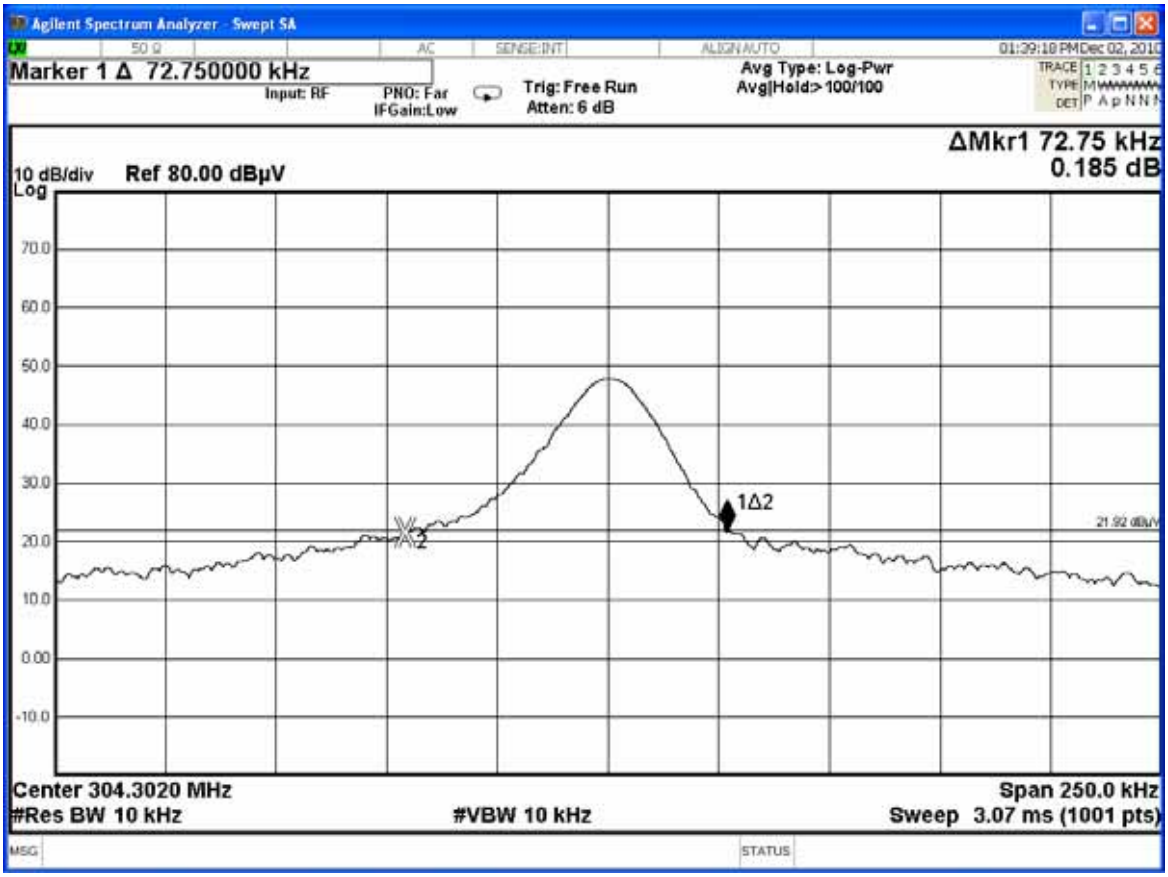
Fundamental Frequency: 304MHz

Test Date: Dec. 01, 2010 Temperature: 24℃ Humidity: 62%

No.	Center Frequency	**Bandwidth**	**Tolerance (%)**
1.	304MHz	**72.75kHz**	**0.0239%**

The bandwidth of emission was measured at the point 20dB down from the center frequency of modulated carrier.

Graph of Bandwidth Measurement



Note: "◊" The line is 20dB from the modulated carrier.

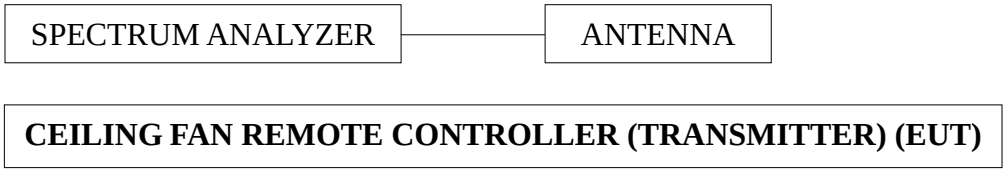
5. PERIODIC OPERATED MEASUREMENT

5.1.Test Equipment

The following test equipment was used during the periodic operated test：

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	N9020A	MY50200226	Aug. 01, 10’	Jul. 31, 11’
2.	Wide Band Antenna	Diamond	RH799	2944A06305	N/A	N/A

5.2.Block Diagram of Test Setup



5.3.Specification Limits [§15.231-(a)-(1)]

The operation of this device is manually operated transmitter that is automatically deactivated the transmitter within not more than 5 seconds of being released, Compliance with §15.231 (a)- (1).

5.4.Periodic Operated Measurement Results

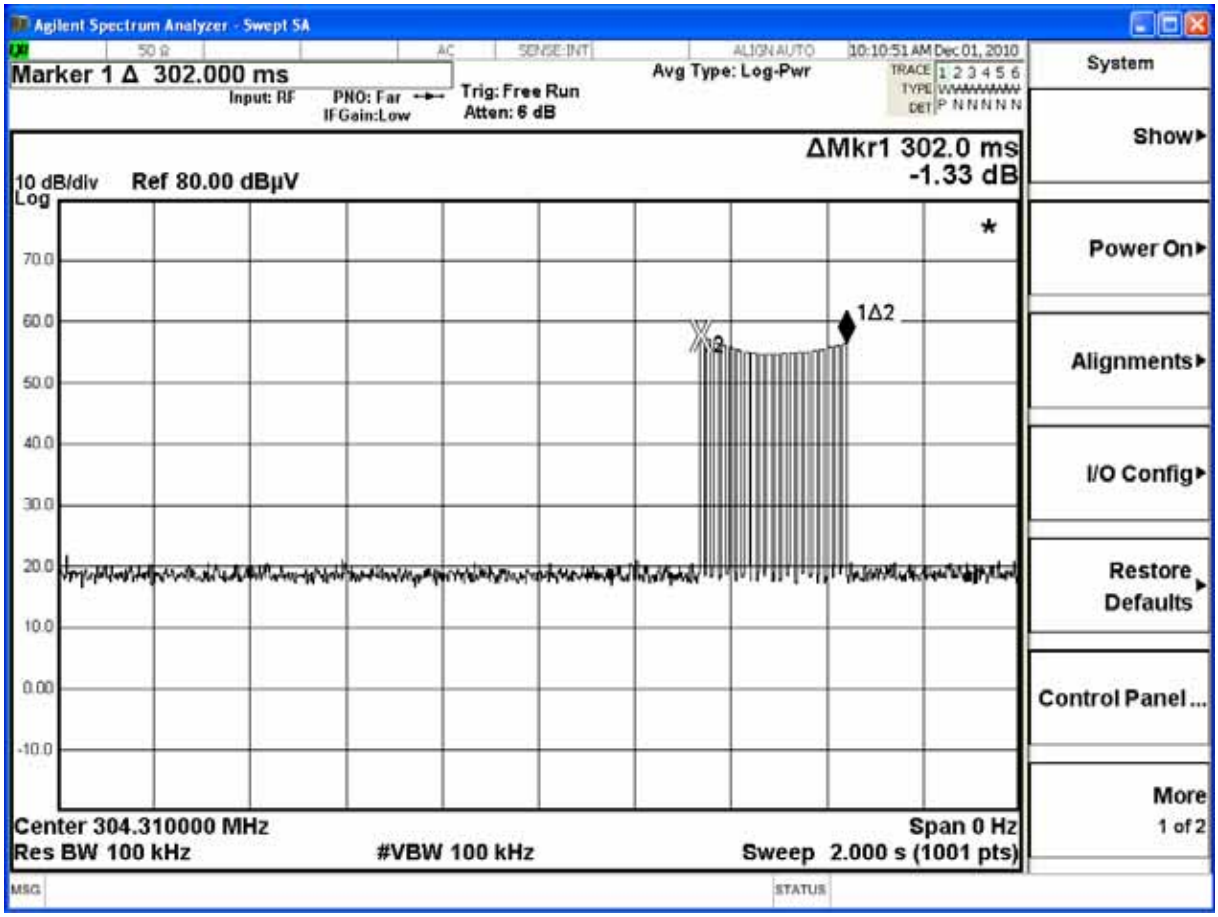
PASS. T = 0.302s. (< 5sec.)

Fundamental Frequency: 304MHz

Test Date: Dec. 01, 2010 Temperature: 24℃ Humidity: 62%

The graph of testing is attached in next page.

Graph of Periodic Operated Measurement



6. DEVIATION TO TEST SPECIFICATIONS

【NONE】