Application for FCC Certificate On Behalf of Jiaxing Shufude Electric Bed Co. Ltd.

Remote Controller

Model No.: DS-DDCSY002

FCC ID: WKZDSDDCSY002

Prepared For: Jiaxing Shufude Electric Bed Co. Ltd.

East No.07 Provincial Road, Tengyun Village

Wangjiangjing Development Zone,

Jiaxing, Zhejiang, China

Prepared By: Audix Technology (Shanghai) Co., Ltd.

3F and 4F, 34Bldg 680 Guiping Rd,

Caohejing Hi-Tech Park, Shanghai 200233, China

Tel: +86-21-64955500 Fax: +86-21-64955491

Report No. : ACI-F13125
Date of Test : Jul 29 - 30, 2013
Date of Report : Jul 31, 2013

TABLE OF CONTENTS

			Page
1	SUI	MMARY OF STANDARDS AND RESULTS	4
	1.1	Description of Standards and Results	4
2		NERAL INFORMATION	
	2.1	Description of Equipment Under Test.	5
	2.2	Description of Test Facility	
	2.3	Measurement Uncertainty	6
3	RA	DIATED EMISSION TEST	7
	3.1	Test Equipment.	7
	3.2	Block Diagram of Test Setup	7
	3.3	Radiated Emission Limit [FCC Part 15 Subpart C 15.209]	8
	3.4	Test Configuration	
	3.5	Operating Condition of EUT	
	3.6	Test Procedures	
	3.7		
4		NDAMENTAL AND HARMONICS EMISSIONS TEST	
	4.1	Test Equipment	
	4.2	Block Diagram of Test Setup	
	4.3	Fundamental and Harmonics Emission Limit [FCC Part 15 Subpart C 15.249(a)]	
	4.4	Test Configuration	
	4.5	Operating Condition of EUT	
	4.6 4.7	Test Procedures Test Results	
5		ND-EDGE MEASUREMENT	
3			
	5.1 5.2	Test Equipment	
	5.3	Test Results	
6		VIATION TO TEST SPECIFICATIONS	
A	PP	ENDIX I PLOT OF DUTY CYCLE	22
A	PP	ENDIX II PHOTOGRAPHS OF TEST	24
Α	PP	ENDIX III PHOTOGRAPHS OF FUT	26

TEST REPORT FOR FCC CERTIFICATION

Applicant : Jiaxing Shufude Electric Bed Co. Ltd.

Manufacturer : Jiaxing Shufude Electric Bed Co. Ltd.

Factory : Jiaxing YINUO Electronics Technology Co., Ltd.

EUT Description : Remote Controller

(A) Model No. : DS-DDCSY002

(B) Power Supply : DC 4.5V (AAA Battery *3)

Test Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART C OCTOBER 2012 AND ANSI C63.4:2003

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits radiated emission.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report shows that the EUT (M/N: Refer to Sec2.1; S/N: Refer to Sec2.1), which was tested in 3m anechoic chamber on Jul 29 - 30, 2013 to be technically compliant with the FCC official limits also.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government by the client.

Date of Test: ______ Date of Report: _____ Jul 31, 2013

Producer: KATHY WANG / Supervisor

Review: DIO YANG / Assistant Manager

For and on behalf of Audix Technology (Shanghai) Co., Ltd.

Authorized Signature EMC SAMMY CHEN / Deputy Manager

1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Description / Test Item	Test Standard	Meets Limit	Results	
Conducted Emission at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART C OCTOBER 2011 AND ANSI C63.4:2003	15.207	N/A	
Radiated Emission	FCC RULES AND REGULATIONS PART 15 SUBPART C OCTOBER 2011 AND ANSI C63.4:2003	15.209	Pass	
Fundamental and Harmonics Emission	FCC RULES AND REGULATIONS PART 15 SUBPART C OCTOBER 2011 AND ANSI C63.4:2003	15.249	Pass	
Band-Edge Measurement	FCC RULES AND REGULATIONS			
N/A is an abbreviation fo				

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description : Remote Controller

Type of EUT : \square Production \square Pre-product \square Pro-type

Model No. : DS-DDCSY002

Applicant : Jiaxing Shufude Electric Bed Co. Ltd.

East No.07 Provincial Road, Tengyun Village, Wangjiangjing Development Zone, Jiaxing,

Zhejiang, China

Manufacturer : Jiaxing Shufude Electric Bed Co. Ltd.

East No.07 Provincial Road, Tengyun Village, Wangjiangjing Development Zone, Jiaxing,

Zhejiang, China

Factory : Jiaxing YINUO Electronics Technology Co., Ltd.

No.733 FuRun Jiaxing (2 floor 2 house, 2 floor 1 house

in Jiaxing dexun plastic dress Co., Ltd.)

Modulation : MSK 500kbps

Frequency Channel : Total 4 Channel

2402.94MHz, 2422.94MHz, 2442.94MHz,

2462.94MHz

Tested Frequency : 2402.94MHz, 2442.49MHz, 2462.94MHz

Antenna Location : Top of the RF module

Please see Figure 7 in APPENDIX III

"Photographs of EUT".

Antenna Type : Internal permanently attached antenna

2.2 Description of Test Facility

Site Description : Sept. 17, 1998 file on (Semi-Anechoic Chamber) : Mar 16, 2012 Renewed

Federal Communications Commission

FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, USA

Name of Firm : Audix Technology (Shanghai) Co., Ltd.

Site Location : 3F 34Bldg 680 Guiping Rd.,

Caohejing Hi-Tech Park, Shanghai 200233, China

FCC registration Number : 91789

Accredited by NVLAP, Lab Code : 200371-0

2.3 Measurement Uncertainty

Radiated Emission Expanded Uncertainty (30-200MHz): U = 4.14 dB (Horizontal)

U = 4.28 dB (Vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz): U = 4.18 dB (Horizontal)

U = 4.26 dB (Vertical)

Radiated Emission Expanded Uncertainty (Above 1GHz): U = 4.50 dB (Horizontal)

U = 4.16 dB (Vertical)

3 RADIATED EMISSION TEST

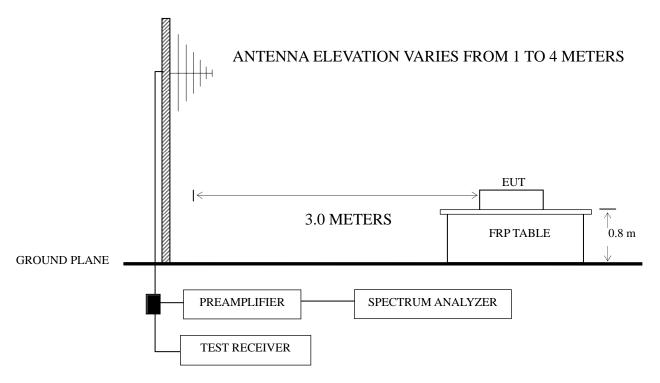
3.1 Test Equipment

The following test equipments are used during the radiated emission test in a semi-anechoic chamber:

Item	Туре	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E7405A	MY45106600	Dec 17, 2012	Dec 17, 2013
2.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 03, 2013	May 03, 2014
3.	Horn Antenna	EMCO	3115	9607-4878	May 11, 2013	May 11, 2014
4.	Horn Antenna	EMCO	3116	00062643	Jul 21, 2013	Jul 21, 2014
5.	Test Receiver	R&S	ESCI	101302	Sep 11, 2012	Sep 11, 2013
6.	Preamplifier	HP	8447D	2944A10548	Mar 18, 2013	Sep 18, 2013
7.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2013	Mar 20, 2014
8.	50Ω Coaxial Switch	Anritsu	MP59B	6200426390	Mar 18, 2013	Sep 18, 2013
9.	Software	Audix	ЕЗ	SET00200 9912M295-2		

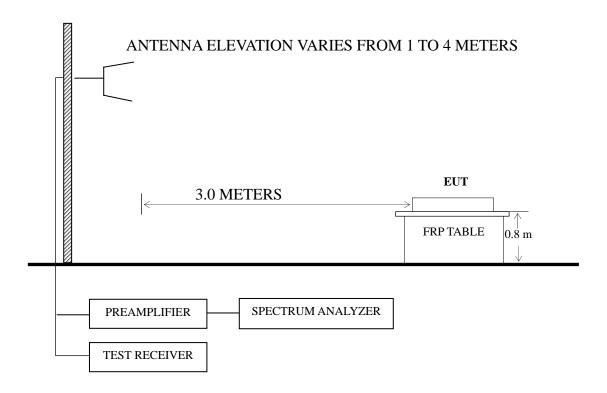
3.2 Block Diagram of Test Setup

3.2.1 Below 1GHz



■ : 50 ohm Coaxial Switch

3.2.2 Above 1GHz



3.3 Radiated Emission Limit [FCC Part 15 Subpart C 15.209]

Frequency	Distance	Field strength limits ($\mu V/m$)				
(MHz)	(m)	(µV/m)	dB (μV/m)			
30 ~ 88	3	100	40.0			
88 ~ 216	3	150	43.5			
216 ~ 960	3	200	46.0			
Above 960	3	500	54.0			

- NOTE 1 Emission Level dB (μ V/m) = 20 lg Emission Level (μ V/m)
- NOTE 2 The tighter limit applies at the band edges.
- NOTE 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.
- NOTE 4 The limits shown are based on Quasi-peak value detector below or equal to 1GHz and Average value detector above 1GHz.
- NOTE 5 Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT

3.4 Test Configuration

The EUT was installed as show on Sec. 3.2 in radiated emission test to meet FCC requirement and operating in a manner, which tend to maximize emission level in a normal application.

3.5 Operating Condition of EUT

- 3.5.1 Setup the EUT as shown in Sec. 3.2.
- 3.5.2 Turn on the power of all equipment.
- 3.5.3 Set the EUT on the test mode (Transmitting) and then test.

3.6 Test Procedures

The EUT was placed on a FRP turntable that is 0.8 meter above ground. The FRP turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. Broadband antenna (Calibrated Bilog Antenna) and horn antenna was used as receiving antenna. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C63.4:2003 requirements during radiated emission test.

The bandwidth of Test Receiver R&S ESCI was set at 120 kHz for frequency range from 30MHz to 1000MHz.

The bandwidth of the VBW was set at 1MHz and RBW was set at 1MHz for peak emission measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emission above 1GHz for Spectrum Agilent E7405A.

The frequency range from 30 MHz to 25 GHz (Up to 10th harmonics from fundamental frequency) was checked.

The test mode (Transmitting) was done on radiated emission test.

Please refer to Sec.3.7.

3.7 Test Results

<PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

- NOTE 1 Level = Read Level + Antenna Factor + Cable Loss (<1GHz)
- NOTE 2 Level = Read Level + Antenna Factor + Cable Loss
 - Preamp Factor (>1GHz)
- NOTE $3-0^{\circ}$ was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.
- NOTE 4 EUT configured in Lying, Side & Stand direction were all evaluated. The emission levels recorded below is data of EUT configured in **Lying** direction, for Lying direction was the maximum emission direction during the test.
- NOTE 5 The emission levels which not reported are too low against the official limit.
- NOTE 6 All reading are Quasi-Peak values below or equal to 1GHz and Peak values and Average values above 1GHz. For above 1GHz test, if the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.

EUT : Remote Controller Temperature : 24°C

FCC ID: WKZDSDDCSY002

Model No. : DS-DDCSY002 Humidity : 51%RH

Test Mode : Transmitting 2402.94 MHz Date of Test : Jul. 29, 2013

Polarization	Frequency (MHz)	Read Level dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level dB (µV/m)	Limits dB $(\mu V/m)$	Margin (dB)	Remark
	31.94	-2.11	17.10	0.66		15.65	40.00	24.35	
	109.54	-0.40	12.08	1.39		13.07	43.50	30.43	
	319.06	1.36	13.73	2.59		17.68	46.00	28.32	OD
	472.32	-0.80	17.32	2.87		19.39	46.00	26.61	QP
Horizontal	657.59	0.21	19.60	3.41		23.22	46.00	22.78	
	827.34	-0.31	20.60	3.90		24.19	46.00	21.81	
	1413.00	45.66	26.02	3.78	36.51	38.95	74.00	35.05	
	3996.00	39.60	33.36	5.81	35.40	43.37	74.00	30.63	PK
	7517.00	40.28	36.34	9.52	36.22	49.92	74.00	24.08	
	32.91	0.00	16.55	0.68		17.23	40.00	22.77	
	97.90	3.06	10.08	1.31		14.45	43.50	29.05	
	281.23	4.46	12.50	2.40		19.36	46.00	26.64	OD
	549.92	-0.27	19.90	3.09		22.72	46.00	23.28	QP
Vertical	659.53	1.29	19.70	3.41		24.40	46.00	21.60	
	872.93	5.07	20.23	4.19		29.49	46.00	16.51	
	1168.00	45.76	24.76	3.72	36.88	37.36	74.00	36.64	
	2722.00	44.77	28.80	5.37	35.98	42.96	74.00	31.04	PK
	6348.00	40.00	33.67	8.06	35.94	45.79	74.00	28.21	

EUT : Remote Controller Temperature : 24°C

Model No. : DS-DDCSY002 Humidity : 51%RH

Test Mode : Transmitting 2442.94 MHz Date of Test : Jul. 29, 2013

Polarization	Frequency (MHz)	Read Level dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)	Remark
	121.18	-0.55	12.08	1.46		12.99	43.50	30.51	
	319.06	3.72	13.73	2.59		20.04	46.00	25.96	
	407.33	0.35	16.30	2.72		19.37	46.00	26.63	OD
	543.13	-0.62	19.70	3.07		22.15	46.00	23.85	QP
Horizontal	726.46	0.58	18.77	3.56		22.91	46.00	23.09	
	820.55	0.05	20.40	3.81		24.26	46.00	21.74	
	1616.00	46.42	27.40	4.03	36.22	41.63	74.00	32.37	
	2960.00	44.62	29.41	5.79	36.00	43.82	74.00	30.18	PK
	7034.00	41.42	34.01	9.50	36.01	48.92	74.00	25.08	
	101.78	5.31	11.06	1.34		17.71	43.50	25.79	
	131.85	4.16	11.66	1.53		17.35	43.50	26.15	
	289.96	2.53	12.90	2.46		17.89	46.00	28.11	OD
	710.94	-0.11	19.60	3.53		23.02	46.00	22.98	QP
Vertical	875.84	3.64	20.23	4.31		28.18	46.00	17.82	
	960.23	3.19	19.60	4.70		27.49	54.00	26.51	
	1413.00	46.11	26.02	3.78	36.51	39.40	74.00	34.60	
	2932.00	45.96	29.35	5.72	36.00	45.03	74.00	28.97	PK
	4409.00	39.41	32.40	6.69	35.53	42.97	74.00	31.03	

EUT : Remote Controller Temperature : 24°C

Model No. : DS-DDCSY002 Humidity : 51%RH

Test Mode : Transmitting 2462.94 MHz Date of Test : Jul. 29, 2013

Polarization	Frequency (MHz)	Read Level dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level dB (µV/m)	Limits dB ($\mu V/m$)	Margin (dB)	Remark
	30.97	-0.77	18.10	0.65		17.98	40.00	22.02	
	107.60	-0.81	12.00	1.38		12.57	43.50	30.93	
	267.65	0.40	12.40	2.31		15.11	46.00	30.89	ΩP
	432.55	-0.58	17.35	2.78		19.55	46.00	26.45	QP
Horizontal	644.98	0.88	19.23	3.38		23.49	46.00	22.51	1
	823.46	0.47	20.50	3.81		24.78	46.00	21.22	
	1077.00	47.12	24.28	4.30	37.00	38.70	74.00	35.30	
	2848.00	44.77	29.16	5.58	35.99	43.52	74.00	30.48	PK
	4143.00	39.84	33.05	6.18	35.44	43.63	74.00	30.37	
	39.70	6.33	12.16	0.75		19.24	40.00	20.76	
	122.15	4.58	12.16	1.48		18.22	43.50	25.28	
	161.92	6.43	9.23	1.69		17.35	43.50	26.15	ΩD
	430.61	5.19	17.50	2.78		25.47	46.00	20.53	QP
Vertical	526.64	4.34	17.90	3.02		25.26	46.00	20.74	
	851.59	6.33	20.37	4.08		30.78	46.00	15.22	
	1630.00	45.75	27.55	4.03	36.20	41.13	74.00	32.87	
	5592.00	39.61	34.00	7.78	35.82	45.57	74.00	28.43	PK
	6999.00	41.37	33.80	9.50	36.00	48.67	74.00	25.33	

4 FUNDAMENTAL AND HARMONICS EMISSIONS TEST

4.1 Test Equipment

The following test equipments are used during the fundamental and spurious emission test in a semi-anechoic chamber:

1		1		i		
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2013	Mar 20, 2014
2.	Spectrum Analyzer	Agilent	E7405A	MY45106600	Dec 17, 2012	Dec 17, 2013
3.	Horn Antenna	EMCO	3115	9607-4878	May 11, 2013	May 11, 2014
4.	Horn Antenna	EMCO	3116	00062643	Jul 21, 2013	Jul 21, 2014

4.2 Block Diagram of Test Setup

Same as Sec 3.2

4.3 Fundamental and Harmonics Emission Limit [FCC Part 15 Subpart C 15.249(a)]

Fundamental	Distance	Field Streng	gth of	Field Strength of		
Frequency	Distance (m)	Fundame	ntal	Harmonics		
(MHz)		(millivolts/meter)	$dB (\mu V/m)$	(microvolts/meter)	dB (μV/m)	
2400 ~ 2483.5	3	50	94	500	54	

- NOTE 1 Emission Level dB (μ V/m) = 20 lg Emission Level (μ V/m)
- NOTE 2 Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- NOTE 3 The limits shown are based on Average value detector.
- NOTE 4 The limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT

4.4 Test Configuration

The EUT was installed as show on Sec. 3.2 in fundamental and spurious emission test to meet ANSI C63.4:2003 requirements and operating in a manner that tend to maximize emission level in a normal application.

4.5 Operating Condition of EUT

- 4.5.1 Setup the EUT as shown in Sec. 3.2.
- 4.5.2 Turn on the power of all equipment.
- 4.5.3 Set the EUT on the test mode (Transmitting) and then test.

4.6 Test Procedures

The EUT was placed on a FRP turntable that is 0.8 meter above ground. The turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. Both horizontal and vertical polarization of the antenna was set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to FCC PART 15 Subpart C and ANSI C63.4:2003 requirements during fundamental and harmonics emission test.

The bandwidth of the VBW was set at 3MHz and RBW was set at 1MHz for peak emission measurement above 1GHz for Spectrum Agilent E7405A.

The frequency range from 2.4 GHz to 25 GHz (Up to 10th harmonics from fundamental frequency) was checked.

The test mode (Transmitting) was done on Fundamental and Harmonics Emission test.

4.7 Test Results

<PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

- NOTE 1 All readings are Peak values.
- NOTE 2 The harmonics emission levels which not reported are too low against the official limit.
- NOTE 3 EUT configured in Lying, Side & Stand direction were all evaluated.

 The emission levels recorded below is data of EUT configured in **Lying** direction, for Lying direction was the maximum emission direction during the test.
- NOTE 4 PK Level = Read Level + Factor AV Level = PK Level - Correction Factor.
- NOTE 5 Factor = Antenna Factor + Cable Loss Preamp Factor
- NOTE 6 Correction factor is measured as follows:

```
Duty Cycle x = Tx on / (Tx on + Tx off) = 0.805 / 2.93 = 0.2747
Correction Factor = |20\log(\text{Duty Cycle})| = 11.22 \text{ dB}
```

NOTE 7 - The duty cycle was calculated according to the plot in Appendix I

EUT : Remote Controller Temperature : 25°C

Model No. : DS-DDCSY002 Humidity : 52% RH

Test Mode Transmitting 2402.94 MHz Date of Test : Jul. 30, 2013

Polarization	Frequency (MHz)	Read Level dB (µV)	Factor (dB/m)	Correction factor (dB)	Level dB (µV/m)	Limits dB $(\mu V/m)$	Margin (dB)	Remark
	2402.94	75.71	-2.52	-	73.19	114.00	40.81	PK
Horizontal	4805.88	43.60	1.36	-	44.96	74.00	29.04	PK
Horizontai	2402.94			11.22	61.97	94.00	32.03	AV
	4805.88			11.22	33.74	54.00	20.26	AV
	2402.94	66.34	-2.49	-	63.85	114.00	50.15	DV
Vertical	4805.88	37.65	1.36	-	39.01	74.00	34.99	PK
vertical	2402.94			11.22	52.63	94.00	41.37	A37
	4805.88			11.22	27.79	54.00	26.21	AV

EUT : Remote Controller Temperature : 25°C

Model No. : DS-DDCSY002 Humidity : 52% RH

Test Mode Transmitting 2442.94 MHz Date of Test : Jul. 30, 2013

Polarization	Frequency (MHz)	Read Level dB (µV)	Factor (dB/m)	Correction factor (dB)	$\begin{array}{c} Level \\ dB \\ (\mu V/m) \end{array}$	Limits dB $(\mu V/m)$	Margin (dB)	Remark
	2442.94	76.09	-2.67	-	73.42	114.00	40.58	PK
Horizontal	4885.88	44.51	0.86	-	45.37	74.00	28.63	PK
Horizontai	2442.94			11.22	62.20	94.00	31.80	AV
	4885.88			11.22	34.15	54.00	19.85	AV
	2442.94	65.89	-2.64	-	63.25	114.00	50.75	PK
Vertical	4885.88	38.37	0.86	-	39.23	74.00	34.77	PK
vertical	2442.94			11.22	52.03	94.00	41.97	AV
	4885.88			11.22	28.01	28.01	54.00	AV

EUT : Remote Controller Temperature : 25°C

Model No. : DS-DDCSY002 Humidity : 52% RH

Test Mode Transmitting 2462.94 MHz Date of Test : Jul. 30, 2013

Polarization	Frequency (MHz)	Read Level dB (µV)	Factor (dB/m)	Correction factor (dB)	Level dB (µV/m)	Limits dB $(\mu V/m)$	Margin (dB)	Remark
	2462.94	76.17	-2.74	-	73.43	114.00	40.57	PK
Horizontal	4925.88	43.55	0.58	-	44.13	74.00	29.87	PK
Horizontai	2462.94			11.22	62.21	94.00	31.79	A37
	4925.88			11.22	32.91	54.00	21.09	AV
	2462.94	65.74	-2.74	-	63.00	114.00	51.00	DV
Vertical	4925.88	38.39	0.58	-	38.97	74.00	35.03	PK
vertical	2462.94			11.22	51.78	94.00	42.22	A37
	4925.88			11.22	27.75	54.00	26.25	AV

5 BAND-EDGE MEASUREMENT

5.1 Test Equipment

Item	Туре	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E7405A	MY45106600	Dec 17, 2012	Dec 17, 2013
2.	Horn Antenna	EMCO	3115	9607-4878	May 11, 2013	May 11, 2014
3.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2013	Mar 20, 2014
4.	Software	Audix	E3	SET00200 9912M295-2		

5.2 Band-Edge Limit [FCC Part 15 Subpart C 15.249(d)]

Emissions radiated outside of the specified frequency bands, except for harmonic, 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.

For peak value, The RBW of Spectrum Analyzer Agilent E7405A was set at 1MHz and the VBW was set at 3MHz.

5.3 Test Results

<PASS>

EUT : Remote Controller Temperature : 25° C

Model No. : DS-DDCSY002 Humidity : 52% RH

Test Mode : Transmitting 2402.94 MHz Date of Test : Jul. 30, 2013

Peak limit = 74.00 dBuV/m Average limit = 54.00 dBuV/m

HORIZONTAL

Peak value @ **2400MHz** = 42.14 dBuV/m

Average value @ **2400MHz** = Peak value - Correction Factor

= 42.14 dBuV/m - 11.22 dB

= 30.92 dBuV/m

Peak value @ **2483.5MHz** = 40.96 dBuV/m

Average value @ 2483.5MHz = Peak value - Correction Factor

= 40.96 dBuV/m - 11.22 dB

 $= 29.74 \, dBuV/m$

VERTICAL

Peak value @ **2400MHz** = 41.85 dBuV/m

Average value @ 2400MHz = Peak value - Correction Factor

= 41.85 dBuV/m - 11.22 dB

=30.63 dBuV/m

Peak value @ **2483.5MHz** = 40.66 dBuV/m

Average value @ 2483.5MHz = Peak value - Correction Factor

= 40.66 dBuV/m - 11.22 dB

 $= 29.44 \, dBuV/m$

6 DEVIATION TO TEST SPECIFICATIONS

None.

APPENDIX I

PLOT OF DUTY CYCLE



DUTY CYCLE