



RADIO TEST REPORT

Test Report No. : 10762851S-A

Applicant : Audio-Technica Corporation
Type of Equipment : UHF SYNTHESIZED WIRELESS TRANSMITTER
Model No. : ATW-T6001 S
Test regulation : FCC part 74 Subpart H: 2014
FCC ID : JFZT6001S
Test Result : Complied

1. This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the limits of the above regulation.
4. The test results in this test report are traceable to the national or international standards.
5. This test report must not be used by the customer to claim product certification, approval, or endorsement by any agency of the Federal Government.
6. The opinions and the interpretations to the result of the description in this report are outside scopes where UL Japan has been accredited.

Date of test: April 24 to May 11, 2015

Representative test engineer:

K. Adachi

Kenichi Adachi
Engineer
Consumer Technology Division

Approved by :

T. Imamura

Toyokaku Imamura
Leader
Consumer Technology Division



- The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan.
 There is no testing item of "Non-accreditation".

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN

Telephone: +81 463 50 6400

Facsimile: +81 463 50 6401

13-EM-F0429

REVISION HISTORY

Original Test Report No.: 10762851S-A

Revision	Test report No.	Date	Page revised	Contents
- (Original)	10762851S-A	May 20, 2015	-	-
1	10762851S-A	November 6, 2015	p.1, p.2 p.4, p.5	Revised page. Change RF part voltage 3.0 V to 3.3 V.
2	10762851S-A	November 11, 2015	p.1, p.2 p.1, p.4, p.8, p.16 - p.28, p.33 - p.43, p.45, p.47, p.48 p.7	Revised page. Changed "type of equipment". Corrected the remarks of table of section 4.1.

CONTENTS	PAGE
SECTION 1: Customer information	4
SECTION 2: Equipment under test (E.U.T.)	4
SECTION 3: Test specification, procedures and results.....	5
SECTION 4: Operation of E.U.T. during testing	7
SECTION 5: RF Output power	9
SECTION 6: Modulation Characteristics	9
SECTION 7: Emission Bandwidth and Field strength of spurious radiation (emission masks)	11
SECTION 8: Spurious emission at Antenna Terminals.....	11
SECTION 9: Field Strength of Spurious Emission (except emission masks).....	12
SECTION 10: Frequency Stability	14
Contents of APPENDIXES	15

SECTION 1: Customer information

Company Name : Audio-Technica Corporation
Address : 2-46-1 Nishi-naruse, Machida, Tokyo 194-8666, Japan
Telephone Number : +81-42-739-9148
Facsimile Number : +81-42-739-9160
Contact Person : Takashi Iwasa

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment : UHF SYNTHESIZED WIRELESS TRANSMITTER
Model Number : ATW-T6001 S
Serial Number : Refer to Section 4.2
Rating : DC 3 V (battery)
Country of Mass-production : Japan
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)
Receipt Date of Sample : April 20, 2015
Modification of EUT : The test lab did not make the modification to the EUT supplied from the customer to have it pass the tests.

2.2 Product Description

Model: ATW-T6001 S (referred to as the EUT in this report) is a UHF SYNTHESIZED WIRELESS TRANSMITTER.

General Specification

Clock frequency(ies) in the system : 26 MHz (VCTCXO), 24 MHz (MPU clock)

Radio Specification

Radio Type : Transmitter
Frequency of Operation : 946.125 MHz to 949.875 MHz
Modulation : Frequency modulation
Emission designator : 62K5F3E
Necessary Bandwidth : 62.5 kHz = 2M + 2D
where M: Maximum modulation frequency = 15 kHz
D: Peak deviation = 16.25 kHz
Channel spacing : 125 kHz
Power Supply (RF part input) : DC 3.3 V
Antenna name : SMA 948M YL
Antenna Gain : 2.14 dBi max
Antenna Connector Type : SMA
Operating Temperature : +5 deg.C to +45 deg.C

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN

Telephone: +81 463 50 6400

Facsimile: +81 463 50 6401

SECTION 3: Test specification, procedures and results

3.1 Test Specification

Test Specification : FCC Part 74: 2014, final revised on August 15, 2014
Title : EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES

Test Specification : FCC Part 2: 2014, final revised on December 2, 2014
Title : FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	RF Output Power	FCC section 2.1046, TIA-603-D 2.2.1	FCC section 74.861(e)(1), FCC part 2, section 2.1046	Conducted	N/A	-	Complied
2	Modulation Characteristics	FCC section 2.1047(a) and (b), TIA-603-D 2.2.3, 2.2.6	FCC section 74.861(e)(3), FCC part 2, section 2.1047	Conducted	N/A	-	Complied
3	Emission Bandwidth	FCC section 2.1049, TIA-603-D 2.2.11, 1.3.4.4	FCC section 74.861(e)(5), FCC part 2, section 2.1049	Conducted	N/A	-	Complied
4	Spurious Emission at Antenna Terminals	FCC section 2.1051, TIA-603-D 2.2.13	FCC section 74.861(e)(6), FCC part 2, section 2.1051	Conducted	N/A	-	Complied
5	Field Strength of Spurious Emission	FCC section 2.1053, TIA-603-D 2.2.12	FCC section 74.861(e)(6), FCC part 2, section 2.1053	Radiated	N/A	19.0 dB (1899.749 MHz, Horizontal, Tx 949.875 MHz, High power)	Complied
6	Frequency Stability	FCC section 2.1055, TIA-603-D 2.2.2	FCC section 74.861(e)(4), FCC part 2, section 2.1055	Conducted	N/A	-	Complied

Note: UL Japan, Inc.'s EMI Work Test Procedure 13-EM-W0420.

*1) These tests were also referred to "Land Mobile FM or PM Communications Equipment Measurement and Performance Standards" (TIA-603-D: 2010)

*2) This EUT does not have receiving part. Therefore Receiver Spurious Emission test was not performed.

Supplied Voltage Information

This EUT provides stable voltage (DC 3.3 V) constantly to RF Part regardless of input voltage.

Antenna Information

The EUT has an external antenna connector, but it is used by the professionals.

3.3 Addition to standard

No addition, exclusion nor deviation has been made from the standard.

3.4 Confirmation

UL Japan, Inc. hereby confirms that E.U.T., in the configuration tested, complies with the specifications FCC part 74.

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN

Telephone: +81 463 50 6400

Facsimile: +81 463 50 6401

3.5 Uncertainty

EMI

The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor k=2.

(EMI measurement)

Item	Frequency range	No.1 SAC* ¹ (±)	No.2 SAC(±)	No.3 SAC (±)
Radiated emission (Measurement distance: 3 m)	9 kHz - 30 MHz	3.7 dB	3.5 dB	3.5 dB
	30 MHz - 300 MHz	4.9 dB	4.9 dB	4.7 dB
	300 MHz - 1 GHz	5.0 dB	5.0 dB	4.8 dB
	1 GHz - 18 GHz	4.9 dB	4.9 dB	4.9 dB

(Substitution measurement)

Item	Frequency range	No.1 SAC* ¹ (±)	No.2 SAC(±)	No.3 SAC (±)
Radiated emission (Substitution measurement;3 m) (EUT height 0.8 m)	30 MHz - 300 MHz	4.8 dB	4.8 dB	4.8 dB
	300 MHz - 1 GHz	3.7 dB	3.7 dB	3.7 dB
	1 GHz - 13 GHz	5.1 dB	5.1 dB	5.1 dB

*1: SAC=Semi-Anechoic Chamber

Radiated Emission Test

The data listed in this test report has enough margin, more than site margin.

Power Measurement uncertainty above 1 GHz for this test was: (±) 0.71 dB

Conducted emissions Measurement (below 1 GHz) uncertainty for this test was: (±) 1.5 dB

Conducted emissions, Power Density Measurement (1 GHz - 3 GHz) uncertainty for this test was: (±) 1.7 dB

Conducted emissions Measurement (3 GHz - 18 GHz) uncertainty for this test was: (±) 2.4 dB

Frequency Measurement uncertainty for this test was: (±) 5.3×10^{-6}

Bandwidth Measurement uncertainty for this test was: (±) 0.66 %

3.6 Test Location

UL Japan, Inc. Shonan EMC Lab.

1-22-3, Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN

Telephone number : +81 463 50 6400

Facsimile number : +81 463 50 6401

JAB Accreditation No. : RTL02610

	IC Registration No.	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
<input checked="" type="checkbox"/> No.1 Semi-anechoic chamber	2973D-1	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
<input type="checkbox"/> No.2 Semi-anechoic chamber	2973D-2	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
<input checked="" type="checkbox"/> No.3 Semi-anechoic chamber	2973D-3	12.7 x 7.7 x 5.35	12.7 x 7.7	5 m
<input type="checkbox"/> No.4 Semi-anechoic chamber	-	8.1 x 5.1 x 3.55	8.1 x 5.1	-
<input type="checkbox"/> No.1 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
<input type="checkbox"/> No.2 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
<input type="checkbox"/> No.3 Shielded room	-	6.3 x 4.7 x 2.7	6.3 x 4.7	-
<input type="checkbox"/> No.4 Shielded room	-	4.4 x 4.7 x 2.7	4.4 x 4.7	-
<input checked="" type="checkbox"/> No.5 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
<input type="checkbox"/> No.6 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
<input type="checkbox"/> No.8 shielded room	-	3.45 x 5.5 x 2.4	3.45 x 5.5	-
<input type="checkbox"/> No.1 Measurement room	-	2.55 x 4.1 x 2.5	-	-

3.7 Data of EMI, Test instruments, Test set up

Refer to APPENDIX.

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN

Telephone: +81 463 50 6400

Facsimile: +81 463 50 6401

SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

Mode	Remarks
Transmitting (Tx), High power	less than 50 mW
Transmitting (Tx), Mid power	less than 10 mW
Transmitting (Tx), Low power	less than 2 mW
*Transmitting duty was 100% on all tests.	
*Power of the EUT was set by the software as follows; Power settings: High (50 mW), Mid (10 mW), Low (2 mW) Software: None *This setting of software is the worst case. Any conditions under the normal use do not exceed the condition of setting. In addition, end users cannot change the settings of the output power of the product without High or Middle or Low settings.	

*The details of Operating mode(s)

Test Item	Tested frequency	Power setting	AF input signal	Remarks
RF power output	946.125MHz (Low) 949.875MHz (High)	High power Middle power Low power	None (No modulation)	
Modulation Characteristics	946.125MHz (Low) 949.875MHz (High)	High power Low power	See data.	
Emission Bandwidth	946.125MHz (Low) 949.875MHz (High)	High power Low power	-0.2 dBV, 2500 Hz, Sine wave *1)	
Spurious emissions at antenna terminals	946.125MHz (Low) 949.875MHz (High)	High power Low power	-0.2 dBV, 2500 Hz, Sine wave *1)	
Field strength of spurious radiation	946.125MHz (Low) 949.875MHz (High)	High power Low power	None, -0.2 dBV, 2500 Hz, Sine wave *2)	
Frequency stability	946.125MHz (Low) 949.875MHz (High)	High power	None (No modulation)	
*1) When modulated by a 2500 Hz tone at an input level 16 dB greater than that necessary to produce 50 percent modulation. *2) As for near band measurements, EUT was modulated same as note *1).				

UL Japan, Inc.

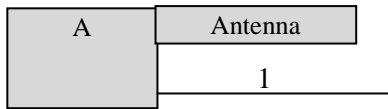
Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN

Telephone: +81 463 50 6400

Facsimile: +81 463 50 6401

4.2. Configuration and peripherals



Description of EUT and Support equipment

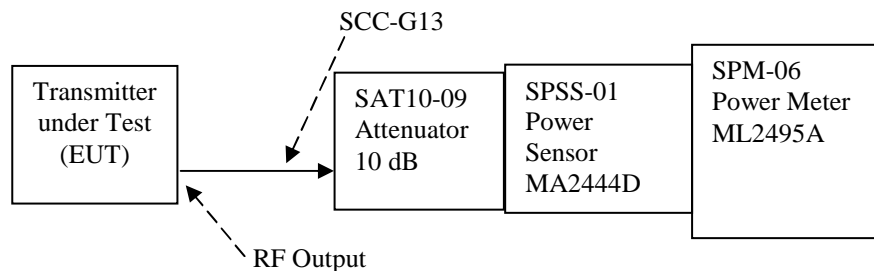
No.	Item	Model number	Serial number	Manufacturer	Remark
A	UHF SYNTHESIZED WIRELESS TRANSMITTER	ATW-T6001 S	US002	Audio-Technica Corporation	EUT

List of cables used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	Audio	0.5	Shielded	Shielded	-

SECTION 5: RF Output power

- 5.1 Test Procedure : FCC part 2 section 2.1046, TIA-603-D section 2.2.1
- 5.2 Test data : APPENDIX 1
- 5.3 Test result : Pass
- 5.4 Test instruments : SCC-G13, SAT10-09, SPSS-01, SPM-06
- 5.5 Measurement Block Diagram of RF power output



RF Power Measurement (FCC part 2 section 2.1046, TIA-603-D section 2.2.1)

SECTION 6: Modulation Characteristics

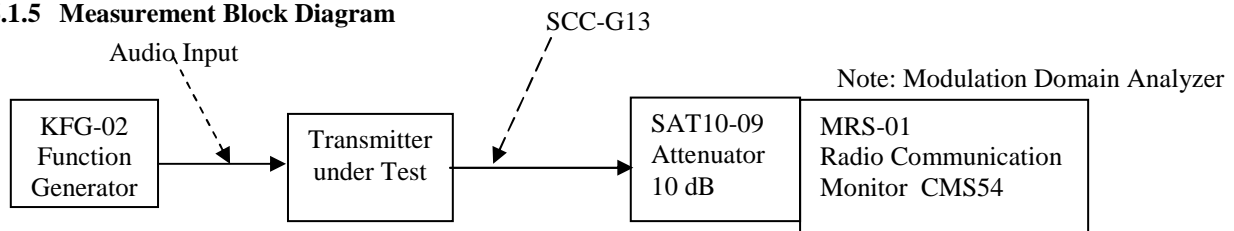
6.1 Transmitter Deviation for Input Level and Modulation frequency

- 6.1.1 Test Procedure : FCC part 2 section 2.1047, TIA-603-D section 2.2.3

- 1) The EUT was aligned for transmitter operation at full rated power.
- 2) When input Level from -63 dBV to 26 dBV is applied to audio via microphone jig input of EUT each modulation frequency 70 Hz, 100 Hz, 300 Hz, 500 Hz, 700 Hz, 1 kHz, 2.5 kHz, 5 kHz, 7 kHz, 10 kHz, 13 kHz, 15 kHz, frequency deviation is measured with MRS-01 (Model CMS54).

- 6.1.2 Test Data : APPENDIX 1
- 6.1.3 Test Result : Pass
- 6.1.4 Test Instrument : KFG-02, SCC-G13, SAT10-09, MRS-01

6.1.5 Measurement Block Diagram



Modulation Characteristics (FCC part 2 section 2.1047, TIA-603-D section 2.2.3)

6.2 Audio frequency response

6.2.1 Test Procedure : FCC part 2 section 2.1047, TIA-603-D section 2.2.6

The audio input level was measured when frequency deviation indicates 50 % modulation which measured with Radio communication Service Monitor.

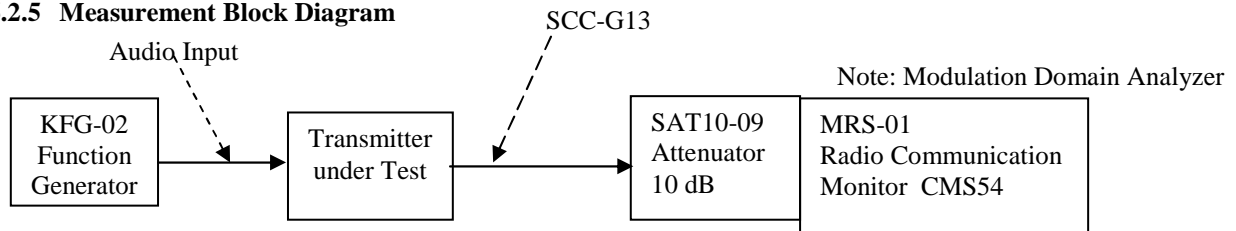
Audio frequency	70 Hz, 100 Hz, 300 Hz, 500 Hz, 700 Hz, 1 kHz, 2 kHz, 3 kHz, 5 kHz, 7 kHz, 10 kHz, 15 kHz
-----------------	------------------------------------------------------------------------------------------

6.2.2 Test Data : APPENDIX 1

6.2.3 Test Result : Pass

6.2.4 Test Instrument : KFG-02, SCC-G13, SAT10-09, MRS-01

6.2.5 Measurement Block Diagram



Modulation Characteristics (FCC part 2 section 2.1047, TIA-603-D section 2.2.6)

6.3 Transmitter Deviation for Input Frequency Response

6.3.1 Test Procedure : FCC part 2 section 2.1047, TIA-603-D section 2.2.6

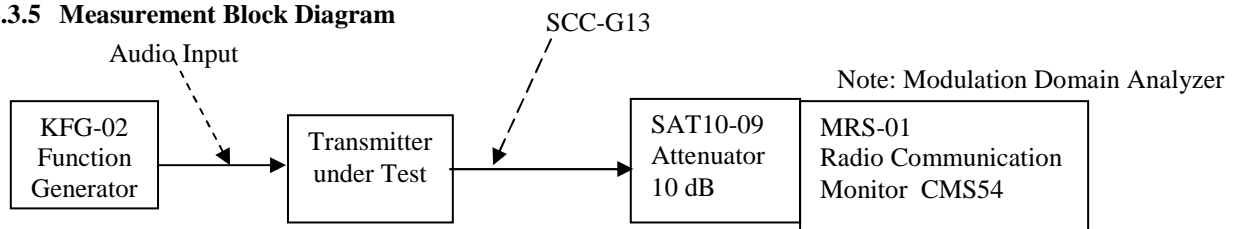
- 1) The EUT was aligned for transmitter operation at full rated power.
- 2) When frequency from 20 Hz to 18 kHz is applied to audio (microphone) input of EUT each input level -23dBV , -18dBV and -13dBV , frequency deviation is measured with MRS-01 (Model CMS54).

6.3.2 Test Data : APPENDIX 1

6.3.3 Test Result : Pass

6.3.4 Test Instrument : KFG-02, SCC-G13, SAT10-09, MRS-01

6.3.5 Measurement Block Diagram



Modulation Characteristics (FCC part 2 section 2.1047, TIA-603-D section 2.2.6)

SECTION 7: Emission Bandwidth and Field strength of spurious radiation (emission masks)

7.1 Test Procedure : FCC part 2 section 2.1049, TIA-603-D section 2.2.11

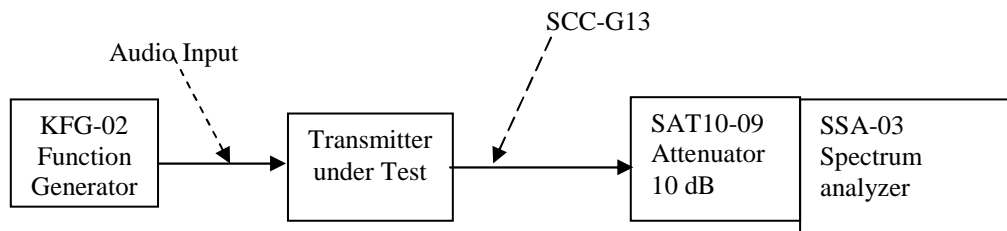
- 1) Set the reference level the spectrum analyzer to the unmodulation carrier level on the EUT
 - 2) The Carrier is modulated by a 2.5 kHz tone at an input level 16 dB greater than that necessary to produce 50 percent modulation. The input level shall be established at the frequency of maximum response of the audio modulation.
- *) The measurement was performed with Peak and Max Hold since the modulation method was frequency modulation.

7.2 Test Data : APPENDIX 1

7.3 Test Result : Pass

7.4 Test Instrument : KFG-02, SCC-G13, SAT10-09, SSA-03

7.5 Measurement Block Diagram



Emission Bandwidth (FCC part 2 section 2.1049, TIA-603-D section 2.2.11)

SECTION 8: Spurious emission at Antenna Terminals

8.1 Test Procedure : FCC part 2 section 2.1051, TIA-603-D section 2.2.13

- 1) The EUT was aligned for transmitter operation at full rated power.
- 2) Set the reference level the spectrum analyzer to the unmodulation carrier level on the EUT.
(Since spurious level was no difference between modulation mode and none-modulation mode)
- 3) Output of EUT was connected with spectrum analyzer through attenuator 10 dB.

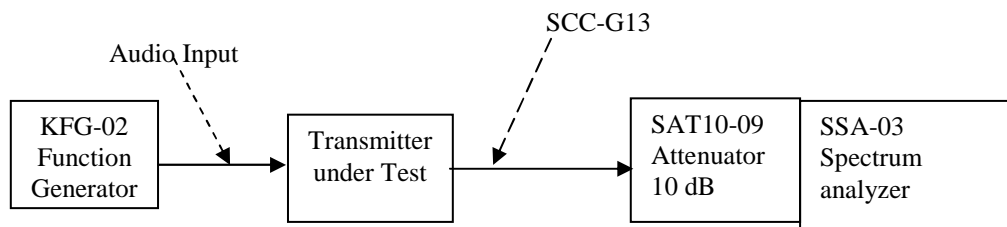
*) In the frequency range below 30 MHz, RBW was narrowed to separate the noise contents. Then, wide-band noise near the limit was checked separately. Then, wide-band noise near the limit was checked separately and the noise was detected as shown in the chart, and therefore, Radiated Emission below 30MHz was performed. But, it was not detected noise below 30 MHz.

8.2 Test Data : APPENDIX 1

8.3 Test result : Pass

8.4 Test Instrument : KFG-02, SCC-G13, SAT10-09, SSA-03

8.5 Measurement Block Diagram



Spurious Emission at Antenna Terminals (FCC part 2 section 2.1051, TIA-603-D section 2.2.13)

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN

Telephone: +81 463 50 6400

Facsimile: +81 463 50 6401

SECTION 9: Field Strength of Spurious Emission (except emission masks)

9.1 Test Procedure : FCC part 2 section 2.1053, TIA-603-D section 2.2.12

(Above 30MHz)

- 1) EUT was placed on a platform of nominal size, 1.0 m by 1.5 m, raised 0.8 m above the conducting ground plane. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The Radiated Electric Field Strength has been measured in semi anechoic chamber at a distance of 3 m. The measuring antenna height was varied between 1 m to 4 m and the turn table was rotated a full revolution in order to obtain the maximum value of the electric field strength. The measurements were performed for both vertical and horizontal antenna polarization. Spurious emissions were observed with enough time according to the test standard.
- 2) Exchanged the EUT to the Substitution Antenna, the measurement was set for the same height 0.8 m as the EUT. The frequency below 1 GHz of the Substitution Antenna was used the Half wave dipole Antenna, which was tuned the measured frequency in 1). The frequency above 1 GHz of the Substitution Antenna was used Horn Antenna. The Substitution Antenna was connected to the Signal Generator, and the polarized electromagnetic radiation of the Substitution Antenna was matched with the one of the measuring Antenna, which was set with the Signal Generator to the measured frequency in 1). Then, we set with the Output power (CW) of the Signal Generator where the measuring electromagnetic field strength is equal to the measured value in 1) by means of varying the measuring antenna height between 1 m to 4 m to obtain maximum receiving level. Its Output power of Signal Generator was recorded.
- 3) Effective radiated power was calculated by subtracting the cable loss and the attenuator loss connected between the Signal Generator and the Substitution Antenna from the Output power of the Signal Generator recorded in 2). For the usage of the Antenna (Horn Antenna) except for the Half wave dipole Antenna (2.15 dBi) for the Substitution Antenna, the Effective radiated power was calculated by compensating the finite difference in the Antenna gain of the Half wave dipole Antenna, and Substitution Antenna.

Frequency	Below 1 GHz	Above 1 GHz
Instrument used	Test Receiver	Spectrum Analyzer
IF Bandwidth	RMS Average: 120 kHz BW	RMS Average: RBW: 1 MHz/VBW: 3 MHz

(Below 30MHz)

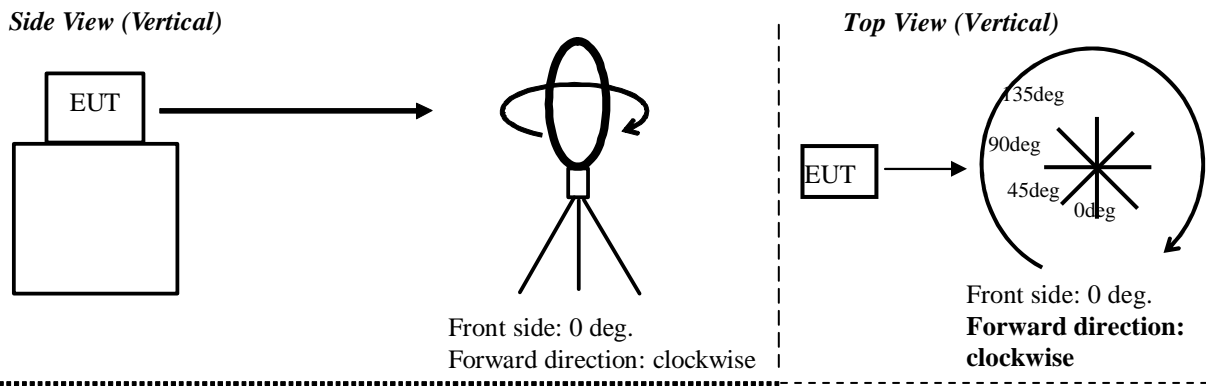
EUT was placed on a platform of nominal size, 1.0 m by 1.5 m, raised 0.8 m above the conducting ground plane. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The Radiated Electric Field Strength has been measured in semi anechoic chamber at a distance of 3 m. The EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity. The measurements were performed for vertical polarization (antenna angle: 0deg.to 360deg.) and horizontal polarization. Drawing of the antenna direction is shown in Figure 7.

Frequency	Below 150 kHz	150 kHz - 30 MHz
Instrument used	Test Receiver	Test Receiver
IF Bandwidth	RMS Average: 200 Hz BW	RMS Average: 9 kHz BW

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

Measurement range : 9 kHz - 10 GHz
Test data : APPENDIX
Test result : Pass

Figure 7: Direction of the Loop Antenna



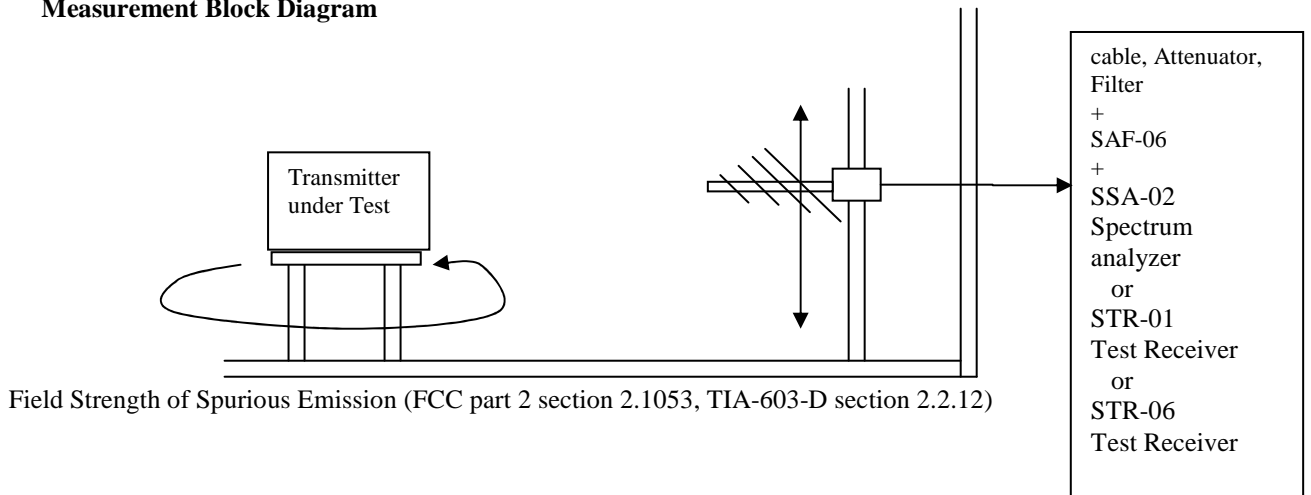
9.2 Test Data : APPENDIX 1

9.3 Test Result : Pass
 * Range of below 30MHz was no-detect signal or noise.

9.4 Test Instrument :

[9k-30MHz]: SAEC-03, SLP-02, SAT6-08, SCC-C1/C2/C3/C4/C5/C10/SRSE-03, SAF-03, STR-06
 [30M-1GHz]: SAEC-01, SBA-01, KAT6-04, SCC-A1/A3/A5/A7/A8/A13/SRSE-01, SLA-01, SAT10-01, SAT3-09,
 SCC-A2/A4/A6/A7/A8/A13/SRSE-01, SAF-01, STR-01, SDA-07, SDA-08, SCC-04, SSG-02
 [1G-5GHz]: SAEC-03, SHA-03, SCC-G04, SFL-01, SAT20-01, SAF-06, SCC-G23, SSA-02, SHA-RS01, SCC-G16, SSG-02

9.5 Measurement Block Diagram



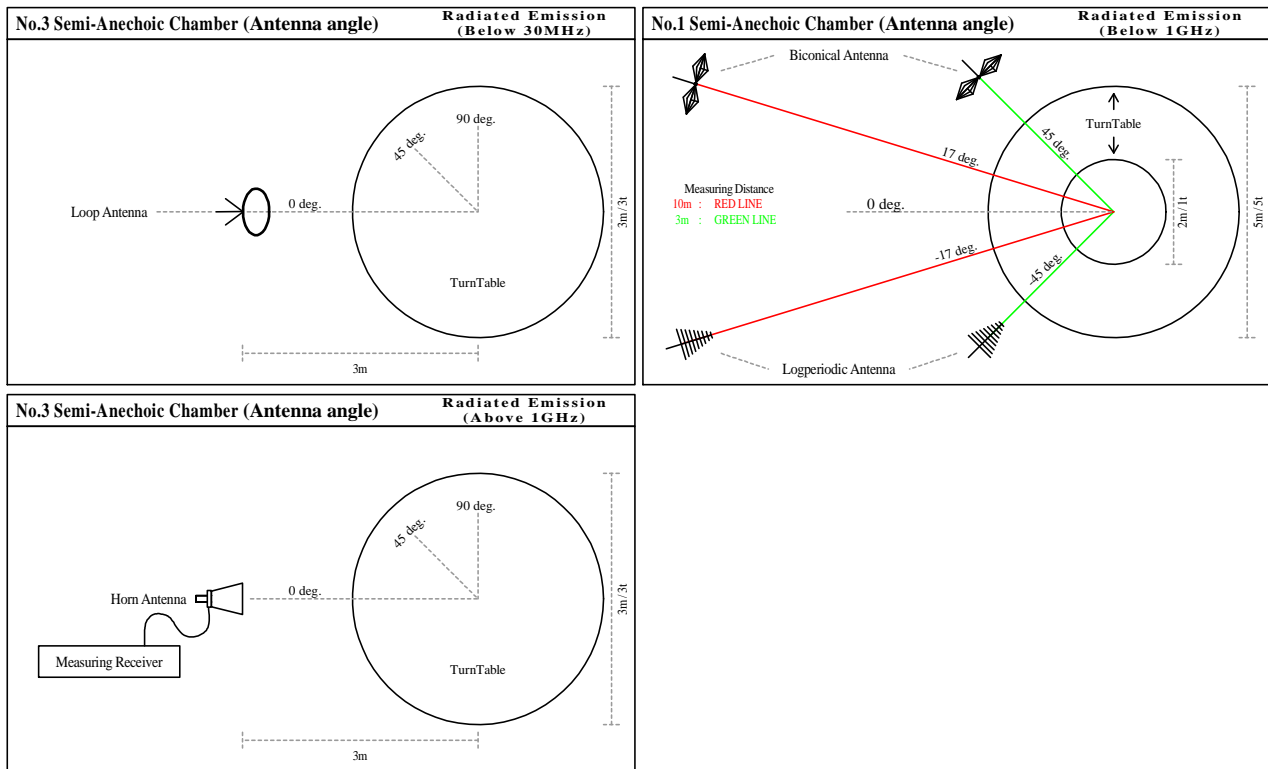
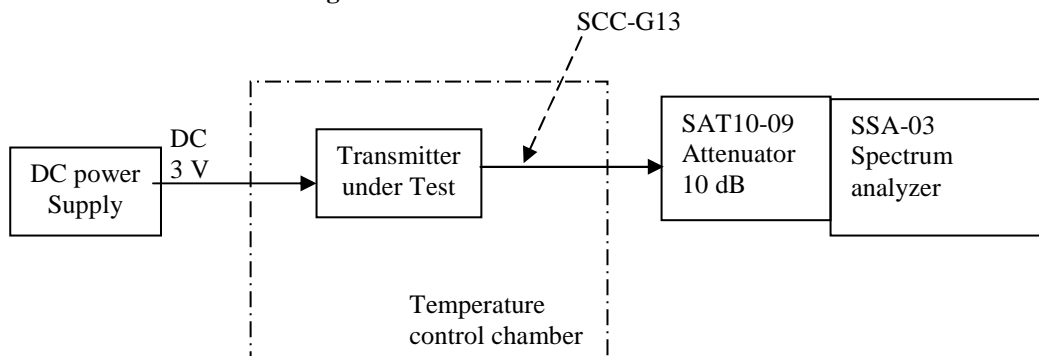


Figure 9. Antenna angle

SECTION 10: Frequency Stability

- 10.1 Test Procedure : FCC part 2 section 2.1055, TIA-603-D section 2.2.2
 * Used the spectrum analyzer, because the detecting phase was not able to be done correctly
- 10.2 Test Data : APPENDIX 1
- 10.3 Test Result : Pass
- 10.4 Test Instrument : SCH-01, SCC-G13, SAT10-09, SSA-03, STS-05

10.5 Measurement Block Diagram



Frequency Stability (FCC part 2 section 2.1055, TIA-603-D section 2.2.2)

Contents of APPENDIXES

APPENDIX 1: Data of Radio tests

RF output power

Modulation Characteristics

Emissions Bandwidth

Spurious emission at antenna terminal

Radiated Emission Test (Field Strength of Spurious Emission)

Field Strength of Spurious Emission (Emission masks)

Frequency stability

APPENDIX 2: Test instruments

Test instruments

APPENDIX 3: Photographs of test setup

Radiated emission

APPENDIX 1: Data of Radio tests

RF output power

UL Japan, Inc. Shonan EMC Lab.
No.5 Shielded Room

Company	Audio-Technica Corporation	Regulation	FCC part 74, section 74.861(d)(1)
Equipment	UHF SYNTHESIZED WIRELESS TRANSMITTER	Date	April 27, 2015
Model	ATW-T6001 S	Temperature	26 deg.C
Serial No.	US002	Humidity	46 %RH
Power	DC 3 V	ENGINEER	Kenichi Adachi
Mode	Transmitting		

(High power) (* P/M: Power Meter with power sensor, PK: Peak, AV: Average)

Freq. [MHz]	P/M (PK) Reading *1) [dBm]	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result				Limit		Margin [dB]
					(Peak) *1)		(Average)		[dBm]	[mW]	
					[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
946.125	6.23	6.19	0.83	9.59	16.65	46.24	16.61	45.81	30.00	1000.00	13.39
948.000 *1)	6.17	6.13	0.83	9.59	16.59	45.60	16.55	45.19	30.00	1000.00	13.45
949.875	6.11	6.06	0.84	9.59	16.54	45.08	16.49	44.57	30.00	1000.00	13.51

(Middle power) (* P/M: Power Meter with power sensor, PK: Peak, AV: Average)

Freq. [MHz]	P/M (PK) Reading *1) [dBm]	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result				Limit		Margin [dB]
					(Peak) *1)		(Average)		[dBm]	[mW]	
					[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
946.125	-0.68	-0.74	0.83	9.59	9.74	9.42	9.68	9.29	30.00	1000.00	20.32
948.000 *1)	-0.74	-0.82	0.83	9.59	9.68	9.29	9.60	9.12	30.00	1000.00	20.40
949.875	-0.82	-0.90	0.84	9.59	9.61	9.14	9.53	8.97	30.00	1000.00	20.47

(Low power) (* P/M: Power Meter with power sensor, PK: Peak, AV: Average)

Freq. [MHz]	P/M (PK) Reading *1) [dBm]	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result				Limit		Margin [dB]
					(Peak) *1)		(Average)		[dBm]	[mW]	
					[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
946.125	-7.36	-7.52	0.83	9.59	3.06	2.02	2.90	1.95	30.00	1000.00	27.10
948.000 *1)	-7.43	-7.60	0.83	9.59	2.99	1.99	2.82	1.91	30.00	1000.00	27.18
949.875	-7.51	-7.69	0.84	9.59	2.92	1.96	2.74	1.88	30.00	1000.00	27.26

Sample calculation:

$$\text{Result [dBm]} = \text{P/M Reading [dBm]} + \text{Cable Loss [dB]} + \text{Atten. Loss [dB]}$$

*1) Reference data.

Revised date : November 11, 2015

Data of Modulation Characteristics (Deviation versus Audio input level and Audio Frequency)

UL Japan, Inc. Shonan EMC Lab.

No.5 Shielded Room

REGULATION FCC part 74, Section 74.861(e)(3)

FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation

EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER TEST DISTANCE -

MODEL ATW-T6001 S

DATE April 24, 2015

S/ N US002

TEMPERATURE 25 deg.C

POWER DC 3 V

HUMIDITY 49 %RH

MODE Transmitting

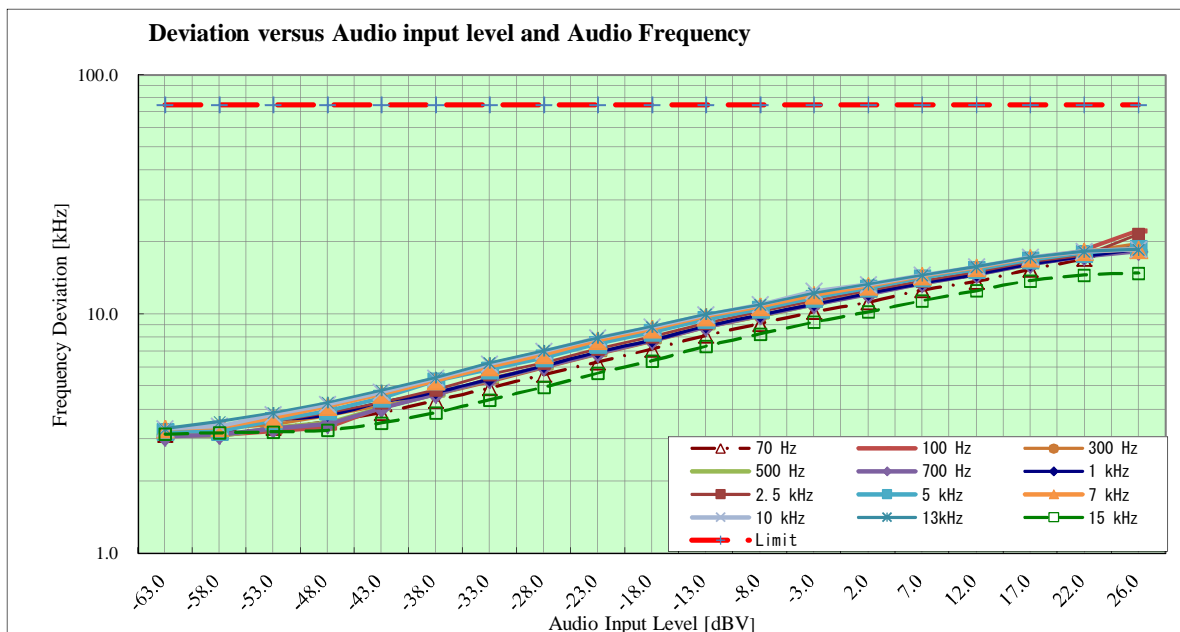
ENGINEER Kenichi Adachi

946.125 MHz High power

* CMS54 setting : filter OFF

* AF 2.5 kHz, Deviation 50 % (8.125 kHz) level: -16.2 dBV

AF Input [dBV]	Deviation [kHz] (Peak)													Limit [kHz]
	70 Hz	100 Hz	300 Hz	500 Hz	700 Hz	1 kHz	2.5 kHz	5 kHz	7 kHz	10 kHz	13kHz	15 kHz		
-63.0	3.13	3.07	3.27	3.11	3.07	3.29	3.23	3.23	3.31	3.31	3.31	3.15	75.00	
-58.0	3.19	3.11	3.31	3.07	3.11	3.39	3.31	3.23	3.35	3.39	3.55	3.19	75.00	
-53.0	3.35	3.23	3.43	3.35	3.31	3.59	3.55	3.59	3.67	3.79	3.87	3.22	75.00	
-48.0	3.55	3.35	3.75	3.51	3.47	3.79	3.87	3.95	4.11	4.19	4.27	3.27	75.00	
-43.0	3.87	4.07	4.15	4.07	4.03	4.27	4.27	4.47	4.63	4.71	4.79	3.51	75.00	
-38.0	4.35	4.63	4.63	4.63	4.63	4.71	4.83	5.27	5.27	5.39	5.43	3.87	75.00	
-33.0	4.91	5.23	5.39	5.31	5.35	5.35	5.59	5.87	6.03	6.19	6.27	4.39	75.00	
-28.0	5.59	5.99	6.07	6.03	6.03	6.07	6.27	6.59	6.79	6.99	7.03	4.95	75.00	
-23.0	6.31	6.83	6.91	6.87	6.87	6.95	7.19	7.51	7.75	7.94	7.94	5.67	75.00	
-18.0	7.15	7.71	7.75	7.75	7.75	7.78	8.06	8.42	8.66	8.82	8.86	6.39	75.00	
-13.0	8.14	8.82	8.86	8.86	8.82	8.90	9.18	9.50	9.78	9.94	9.98	7.35	75.00	
-8.0	9.14	9.82	9.82	9.82	9.90	9.90	10.22	10.50	10.78	10.94	10.98	8.26	75.00	
-3.0	10.22	11.02	10.98	10.94	10.94	11.02	11.38	11.70	12.02	12.46	12.22	9.26	75.00	
2.0	11.22	12.14	12.14	12.14	12.10	12.18	12.54	12.85	13.13	13.29	13.33	10.22	75.00	
7.0	12.62	13.49	13.49	13.41	13.41	13.49	13.77	14.17	14.45	14.57	14.57	11.38	75.00	
12.0	13.69	14.73	14.73	14.65	14.65	14.65	15.01	15.37	15.69	15.81	15.81	12.54	75.00	
17.0	15.41	16.21	16.21	16.13	16.13	16.21	16.53	16.85	17.21	17.33	17.29	13.81	75.00	
22.0	17.05	18.64	18.24	17.53	17.45	17.41	17.61	18.00	18.24	18.32	18.24	14.57	75.00	
26.0	19.84	22.44	19.72	18.36	18.32	18.64	21.64	18.84	18.60	18.64	18.64	14.85	75.00	



UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa, Japan 259-1220

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Revised date : November 11, 2015

Data of Modulation Characteristics (Deviation versus Audio input level and Audio Frequency)

UL Japan, Inc. Shonan EMC Lab.

No.5 Shielded Room

REGULATION FCC part 74, Section 74.861(e)(3)

FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation

EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER TEST DISTANCE -

MODEL ATW-T6001 S

DATE April 27, 2015

S/ N US002

TEMPERATURE 26 deg.C

POWER DC 3 V

HUMIDITY 46 %RH

MODE Transmitting

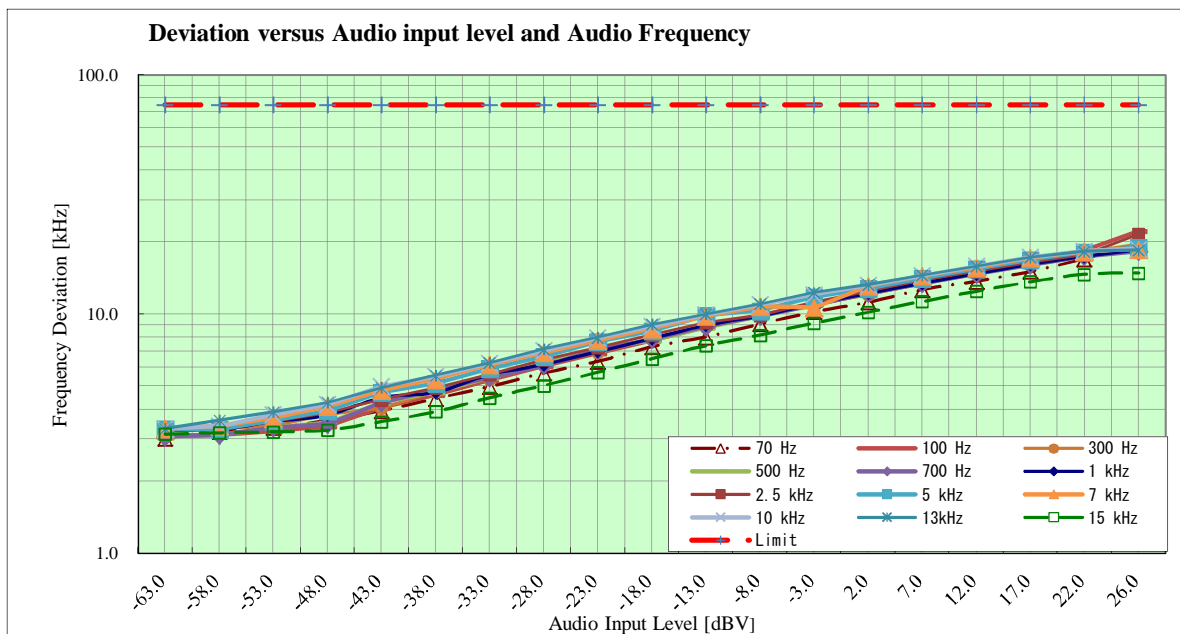
ENGINEER Kenichi Adachi

946.125 MHz Low power

* CMS54 setting : filter OFF

* AF 2.5 kHz, Deviation 50 % (8.125 kHz) level: -16.2 dBV

AF Input [dBV]	Deviation [kHz] (Peak)													Limit [kHz]
	70 Hz	100 Hz	300 Hz	500 Hz	700 Hz	1 kHz	2.5 kHz	5 kHz	7 kHz	10 kHz	13kHz	15 kHz		
-63.0	3.03	3.07	3.27	3.07	3.07	3.29	3.23	3.31	3.31	3.31	3.31	3.31	3.15	75.00
-58.0	3.23	3.11	3.31	3.11	3.11	3.31	3.29	3.29	3.39	3.39	3.39	3.59	3.19	75.00
-53.0	3.35	3.23	3.39	3.35	3.35	3.55	3.55	3.59	3.67	3.79	3.89	3.89	3.22	75.00
-48.0	3.59	3.39	3.79	3.51	3.47	3.79	3.87	3.95	4.11	4.19	4.27	4.27	3.27	75.00
-43.0	3.95	4.07	4.03	4.27	4.27	4.47	4.39	4.71	4.79	4.97	4.91	4.91	3.55	75.00
-38.0	4.43	4.59	4.75	4.71	4.83	4.71	4.91	5.15	5.35	5.51	5.55	5.55	3.91	75.00
-33.0	4.99	5.31	5.35	5.43	5.43	5.59	5.59	5.91	6.15	6.23	6.27	6.27	4.47	75.00
-28.0	5.67	6.07	6.15	6.27	6.11	6.15	6.47	6.67	6.91	7.03	7.15	7.15	5.03	75.00
-23.0	6.35	6.87	6.91	7.15	7.07	6.99	7.27	7.67	7.75	7.94	7.98	7.98	5.71	75.00
-18.0	7.31	7.78	7.86	7.78	7.86	7.90	8.18	8.50	8.70	8.90	9.06	9.06	6.51	75.00
-13.0	8.03	8.82	8.86	8.78	8.86	8.98	9.22	9.86	9.82	9.94	9.98	9.98	7.39	75.00
-8.0	9.10	9.86	9.82	9.82	9.82	9.82	9.90	10.34	10.78	10.94	11.06	11.06	8.18	75.00
-3.0	10.22	10.94	10.98	10.94	10.86	10.98	11.22	11.78	10.62	12.06	12.34	12.34	9.18	75.00
2.0	11.22	12.18	12.04	12.22	12.22	12.22	12.50	12.81	13.13	13.21	13.29	13.29	10.18	75.00
7.0	12.66	13.41	13.41	13.45	13.41	13.45	13.81	14.13	14.49	14.49	14.53	14.53	11.30	75.00
12.0	13.73	14.89	14.81	14.69	14.69	14.77	15.09	15.45	15.69	15.85	15.85	15.85	12.46	75.00
17.0	15.09	16.17	16.13	16.09	16.05	16.17	16.49	16.85	17.21	17.29	17.25	17.25	13.65	75.00
22.0	17.01	18.52	18.12	17.53	17.41	17.45	17.73	18.12	18.32	18.28	18.32	18.32	14.69	75.00
26.0	19.60	22.24	19.60	18.52	18.32	18.56	21.60	18.92	18.68	18.68	18.56	18.56	14.85	75.00



UL Japan, Inc.
Shonan EMC Lab.
 1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa, Japan 259-1220
 Telephone : +81 463 50 6400
 Facsimile : +81 463 50 6401

Revised date : November 11, 2015

Data of Modulation Characteristics (Deviation versus Audio input level and Audio Frequency)

UL Japan, Inc. Shonan EMC Lab.

No.5 Shielded Room

REGULATION FCC part 74, Section 74.861(e)(3)

FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation

EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER

TEST DISTANCE -

MODEL ATW-T6001 S

DATE April 27, 2015

S/ N US002

TEMPERATURE 26 deg.C

POWER DC 3 V

HUMIDITY 46 %RH

MODE Transmitting

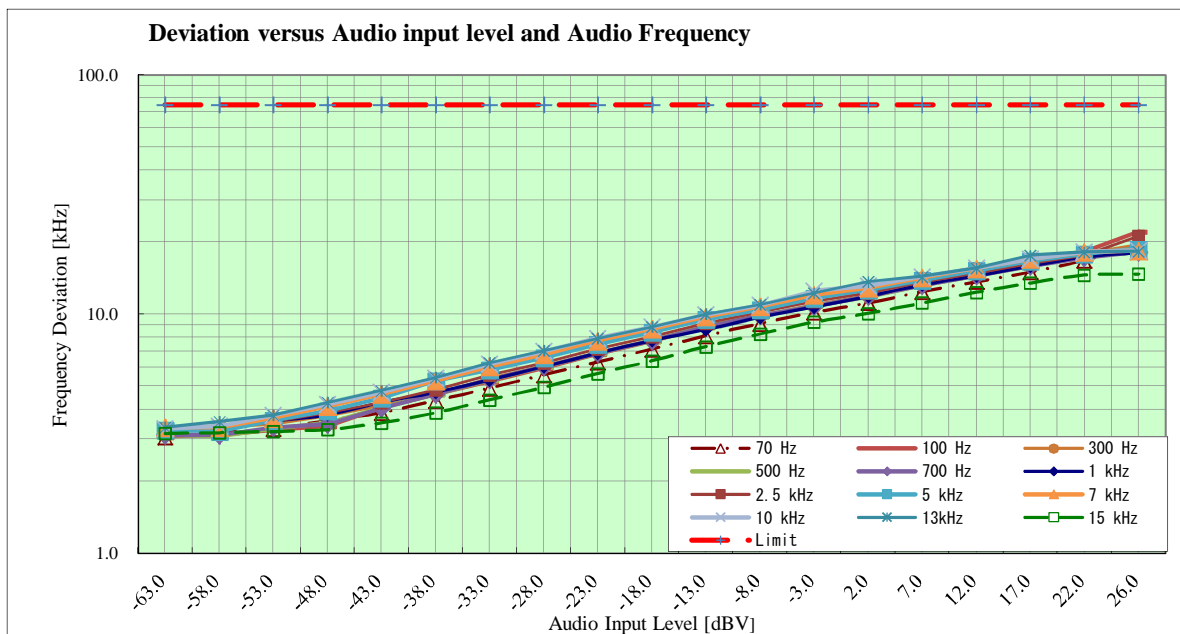
ENGINEER Kenichi Adachi

949.875 MHz High power

* CMS54 setting : filter OFF

* AF 2.5 kHz, Deviation 50 % (8.125 kHz) level: -16.2 dBV

AF Input [dBV]	Deviation [kHz] (Peak)												Limit [kHz]
	70 Hz	100 Hz	300 Hz	500 Hz	700 Hz	1 kHz	2.5 kHz	5 kHz	7 kHz	10 kHz	13kHz	15 kHz	
-63.0	3.07	3.07	3.27	3.11	3.11	3.27	3.23	3.27	3.35	3.31	3.35	3.17	75.00
-58.0	3.19	3.11	3.35	3.07	3.11	3.35	3.31	3.23	3.35	3.39	3.55	3.19	75.00
-53.0	3.31	3.27	3.47	3.31	3.35	3.57	3.55	3.59	3.67	3.78	3.78	3.23	75.00
-48.0	3.59	3.39	3.75	3.51	3.47	3.79	3.87	3.95	4.12	4.19	4.27	3.29	75.00
-43.0	3.87	4.06	4.15	4.07	4.03	4.27	4.27	4.47	4.63	4.71	4.79	3.51	75.00
-38.0	4.35	4.62	4.62	4.63	4.63	4.71	4.82	5.26	5.26	5.39	5.42	3.87	75.00
-33.0	4.91	5.22	5.39	5.31	5.35	5.31	5.58	5.85	6.02	6.18	6.26	4.39	75.00
-28.0	5.58	5.97	6.07	6.02	6.03	6.03	6.25	6.58	6.78	6.98	7.02	4.94	75.00
-23.0	6.31	6.81	6.91	6.87	6.87	6.87	7.17	7.50	7.74	7.93	7.92	5.65	75.00
-18.0	7.15	7.70	7.74	7.74	7.74	7.75	8.05	8.41	8.65	8.81	8.85	6.38	75.00
-13.0	8.12	8.82	8.86	8.86	8.82	8.62	9.18	9.49	9.78	9.93	9.98	7.32	75.00
-8.0	9.14	9.81	9.82	9.82	9.90	9.70	10.18	10.45	10.78	10.92	10.94	8.26	75.00
-3.0	10.18	10.89	10.78	10.82	10.78	10.70	11.29	11.67	12.02	12.46	12.22	9.26	75.00
2.0	11.14	11.86	11.86	11.82	11.86	11.86	12.26	12.62	12.89	13.09	13.65	10.06	75.00
7.0	12.42	13.29	13.21	13.21	13.21	13.25	13.57	13.89	14.21	14.33	14.33	11.14	75.00
12.0	13.65	14.53	14.45	14.45	14.45	14.45	14.85	15.21	15.53	15.61	15.61	12.34	75.00
17.0	15.01	16.01	15.93	15.89	15.85	15.89	16.25	16.65	16.97	17.01	17.61	13.49	75.00
22.0	16.77	18.28	17.92	17.37	17.17	17.29	17.61	17.84	18.12	18.12	18.12	14.57	75.00
26.0	19.60	22.12	19.40	18.20	18.12	18.12	21.20	18.68	18.40	18.44	18.32	14.73	75.00



UL Japan, Inc.
Shonan EMC Lab.
 1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa, Japan 259-1220
 Telephone : +81 463 50 6400
 Facsimile : +81 463 50 6401

Revised date : November 11, 2015

Data of Modulation Characteristics (Deviation versus Audio input level and Audio Frequency)

UL Japan, Inc. Shonan EMC Lab.

No.5 Shielded Room

REGULATION FCC part 74, Section 74.861(e)(3)

FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation

EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER

TEST DISTANCE -

MODEL ATW-T6001 S

DATE April 27, 2015

S/ N US002

TEMPERATURE 26 deg.C

POWER DC 3 V

HUMIDITY 46 %RH

MODE Transmitting

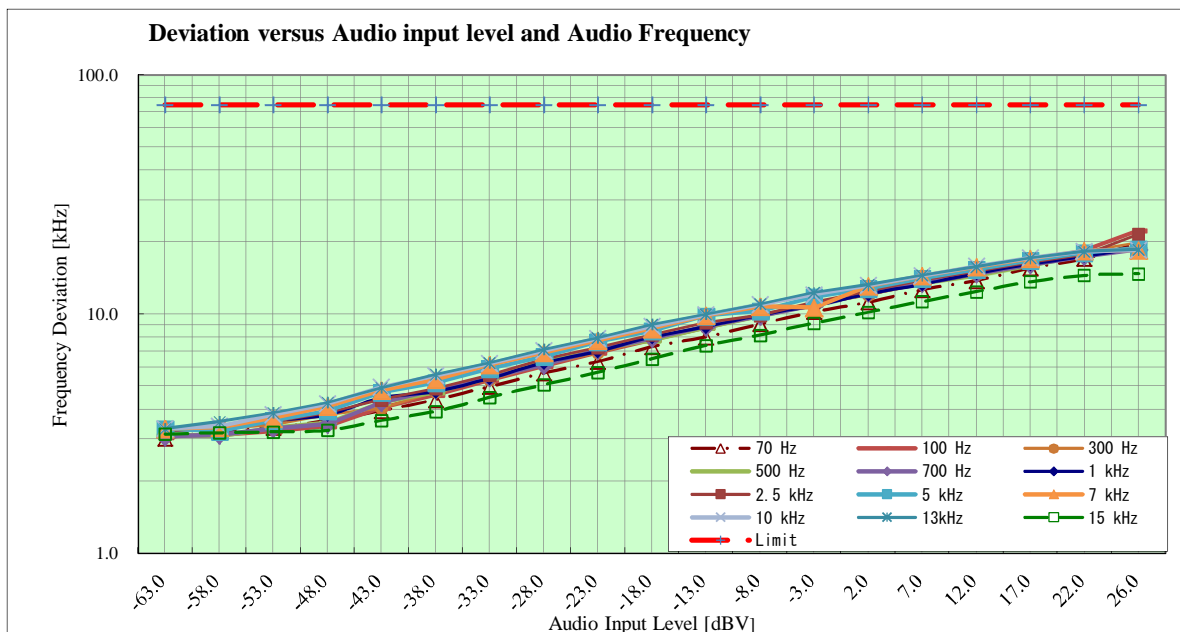
ENGINEER Kenichi Adachi

949.875 MHz Low power

* CMS54 setting : filter OFF

* AF 2.5 kHz, Deviation 50 % (8.125 kHz) level: -16.2 dBV

AF Input [dBV]	Deviation [kHz] (Peak)													Limit [kHz]
	70 Hz	100 Hz	300 Hz	500 Hz	700 Hz	1 kHz	2.5 kHz	5 kHz	7 kHz	10 kHz	13kHz	15 kHz		
-63.0	3.03	3.07	3.27	3.11	3.07	3.29	3.23	3.31	3.31	3.31	3.31	3.31	3.15	75.00
-58.0	3.23	3.11	3.31	3.07	3.11	3.39	3.31	3.23	3.35	3.39	3.55	3.19	75.00	75.00
-53.0	3.35	3.23	3.43	3.35	3.31	3.59	3.55	3.59	3.67	3.79	3.87	3.22	75.00	75.00
-48.0	3.59	3.39	3.79	3.51	3.47	3.79	3.87	3.93	4.12	4.21	4.28	3.27	75.00	75.00
-43.0	3.95	4.07	4.03	4.27	4.27	4.47	4.39	4.72	4.79	4.95	4.92	3.59	75.00	75.00
-38.0	4.39	4.59	4.75	4.71	4.83	4.75	4.89	5.18	5.33	5.52	5.59	3.92	75.00	75.00
-33.0	4.98	5.31	5.34	5.43	5.43	5.39	5.55	5.91	6.15	6.23	6.27	4.49	75.00	75.00
-28.0	5.67	6.08	6.15	6.29	6.12	6.27	6.49	6.67	6.92	7.03	7.12	5.07	75.00	75.00
-23.0	6.33	6.89	6.91	7.15	7.08	6.99	7.27	7.67	7.77	7.92	7.97	5.71	75.00	75.00
-18.0	7.31	7.79	7.86	7.78	7.89	8.02	8.19	8.51	8.70	8.90	9.07	6.51	75.00	75.00
-13.0	8.03	8.78	8.82	8.79	8.86	8.86	9.22	9.84	9.85	9.92	9.97	7.39	75.00	75.00
-8.0	9.10	9.87	9.82	9.82	9.83	9.90	9.89	10.32	10.78	10.94	11.06	8.18	75.00	75.00
-3.0	10.22	10.94	10.98	10.94	10.86	10.86	11.23	11.79	10.62	12.06	12.34	9.18	75.00	75.00
2.0	11.22	12.18	12.04	12.22	12.22	12.14	12.47	12.82	13.13	13.21	13.29	10.18	75.00	75.00
7.0	12.66	13.41	13.41	13.45	13.41	13.33	13.81	14.13	14.49	14.49	14.53	11.30	75.00	75.00
12.0	13.81	14.85	14.69	14.47	14.73	14.81	15.09	15.41	15.77	15.89	15.81	12.42	75.00	75.00
17.0	15.57	16.53	16.33	16.01	16.09	16.21	16.45	16.81	17.13	17.19	17.21	13.65	75.00	75.00
22.0	17.05	18.52	18.32	17.61	17.41	17.49	17.69	18.04	18.40	18.32	18.24	14.53	75.00	75.00
26.0	19.84	22.44	19.92	18.80	18.60	18.92	21.56	18.80	18.52	18.52	18.64	14.77	75.00	75.00



UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa, Japan 259-1220

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Data of Modulation Characteristics (Audio Frequency Response)

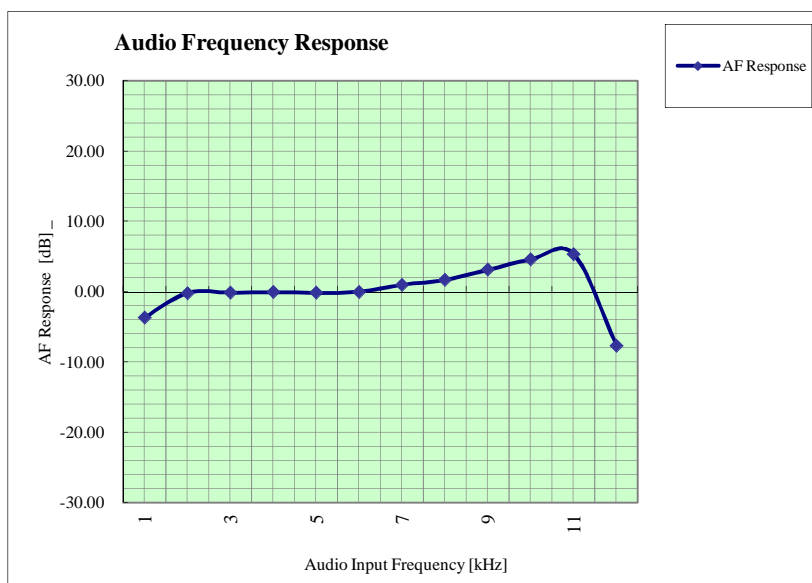
UL Japan, Inc. Shonan EMC Lab.
No.5 Shielded Room
REGULATION FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation
EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER
MODEL ATW-T6001 S
S/ N US002
POWER DC 3 V
MODE Transmitting

TEST DISTANCE -
DATE April 24, 2015
TEMPERATURE 25 deg.C
HUMIDITY 49 %RH
ENGINEER Kenichi Adachi

946.125 MHz, High power
* CMS54 setting : filter OFF

AF Freq. [Hz]	AF level [mV]	AF Response [dB]
70	240.00	-3.63
100	161.00	-0.16
300	160.00	-0.11
500	159.00	-0.05
700	160.00	-0.11
1000	158.00	0.00
2000	141.00	0.99
3000	130.00	1.69
5000	110.00	3.15
7000	93.00	4.60
10000	85.00	5.38
15000	380.00	-7.62



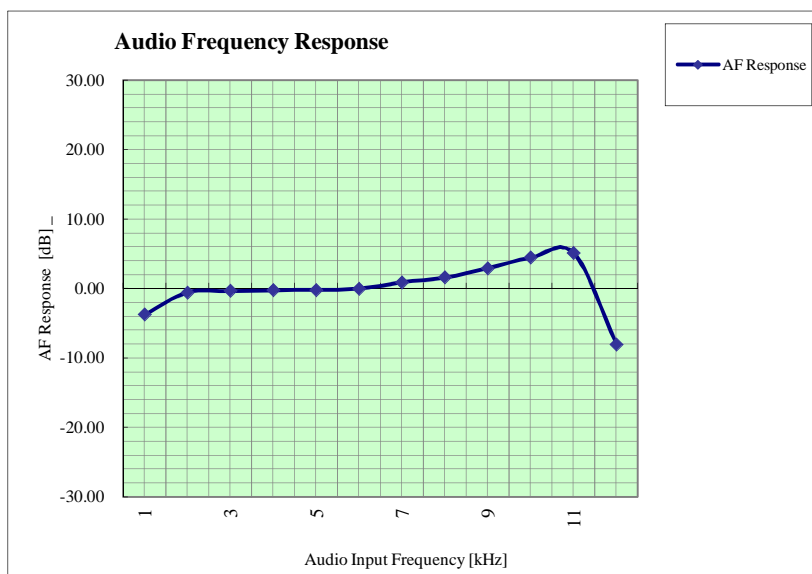
Calculation formula:

$$AF \text{ Response} = 20 \times \log (AF \text{ Level of } 1 \text{ kHz} / AF \text{ Level})$$

* The Audio input level was measured when frequency deviation indicates 50% modulation which measured with Radio communication service monitor.

946.125 MHz, Low power
* CMS54 setting : filter OFF

AF Freq. [Hz]	AF level [mV]	AF Response [dB]
70	244.00	-3.72
100	169.00	-0.53
300	165.00	-0.32
500	163.00	-0.22
700	162.00	-0.16
1000	159.00	0.00
2000	143.00	0.92
3000	132.00	1.62
5000	113.00	2.97
7000	95.00	4.47
10000	88.00	5.14
15000	399.00	-7.99



Calculation formula:

$$AF \text{ Response} = 20 \times \log (AF \text{ Level of } 1 \text{ kHz} / AF \text{ Level})$$

* The Audio input level was measured when frequency deviation indicates 50% modulation which measured with Radio communication service monitor.

Data of Modulation Characteristics (Audio Frequency Response)

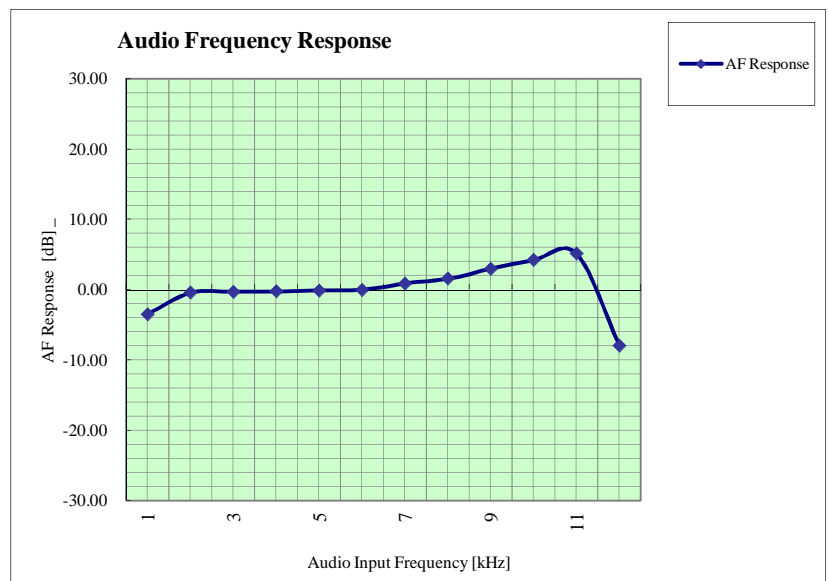
UL Japan, Inc. Shonan EMC Lab.
No.5 Shielded Room
REGULATION FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation
EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER
MODEL ATW-T6001 S
S/ N US002
POWER DC 3 V
MODE Transmitting

TEST DISTANCE -
DATE April 27, 2015
TEMPERATURE 26 deg.C
HUMIDITY 46 %RH
ENGINEER Kenichi Adachi

949.875 MHz, High power
* CMS54 setting : filter OFF

AF Freq. [Hz]	AF level [mV]	AF Response [dB]
70	250.00	-3.45
100	176.00	-0.40
300	173.00	-0.25
500	172.00	-0.20
700	170.00	-0.10
1000	168.00	0.00
2000	151.00	0.93
3000	140.00	1.58
5000	119.00	3.00
7000	103.00	4.25
10000	93.00	5.14
15000	420.00	-7.96



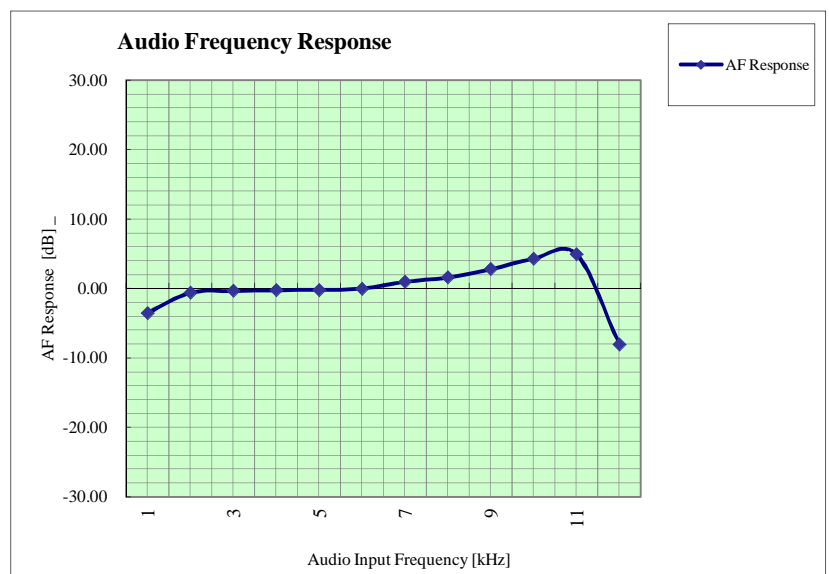
Calculation formula:

$$AF \text{ Response} = 20 \times \log (AF \text{ Level of } 1 \text{ kHz} / AF \text{ Level})$$

* The Audio input level was measured when frequency deviation indicates 50% modulation which measured with Radio communication service monitor.

949.875 MHz, Low power
* CMS54 setting : filter OFF

AF Freq. [Hz]	AF level [mV]	AF Response [dB]
70	248.00	-3.49
100	177.00	-0.56
300	172.00	-0.31
500	170.00	-0.21
700	169.00	-0.16
1000	166.00	0.00
2000	148.00	1.00
3000	138.00	1.60
5000	120.00	2.82
7000	101.00	4.32
10000	94.00	4.94
15000	418.00	-8.02



Calculation formula:

$$AF \text{ Response} = 20 \times \log (AF \text{ Level of } 1 \text{ kHz} / AF \text{ Level})$$

* The Audio input level was measured when frequency deviation indicates 50% modulation which measured with Radio communication service monitor.

Data of Modulation Characteristics (Transmitter Deviation for Input Frequency Response)

UL Japan, Inc. Shonan EMC Lab.

No.5 Shielded Room

REGULATION FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation

EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER

MODEL ATW-T6001 S

S/ N US002

POWER DC 3 V

MODE Transmitting

946.125 MHz High power

* CMS54 setting : filter OFF

TEST DISTANCE -

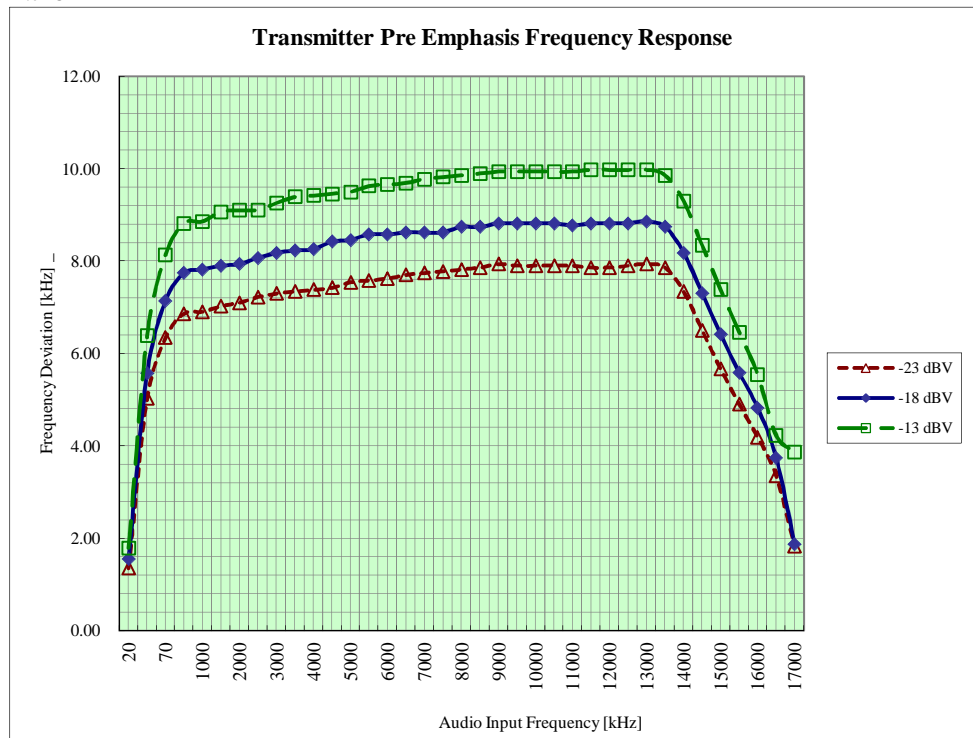
DATE April 24, 2015

TEMPERATURE 25 deg.C

HUMIDITY 49 %RH

ENGINEER Kenichi Adachi

Input Freq	Deviation [kHz] (Peak)		
	-23 dBV	-18 dBV	-13 dBV
20	1.36	1.56	1.80
50	5.03	5.57	6.39
70	6.35	7.15	8.14
500	6.87	7.75	8.82
1000	6.91	7.82	8.86
1500	7.03	7.90	9.07
2000	7.11	7.94	9.10
2500	7.23	8.07	9.11
3000	7.31	8.18	9.26
3500	7.35	8.23	9.39
4000	7.39	8.26	9.42
4500	7.43	8.43	9.46
5000	7.55	8.46	9.50
5500	7.59	8.58	9.63
6000	7.63	8.58	9.66
6500	7.71	8.62	9.69
7000	7.75	8.62	9.78
7500	7.78	8.63	9.82
8000	7.82	8.74	9.86
8500	7.86	8.74	9.90
9000	7.94	8.82	9.94
9500	7.90	8.82	9.94
10000	7.90	8.82	9.94
10500	7.90	8.82	9.94
11000	7.90	8.78	9.94
11500	7.86	8.82	9.98
12000	7.86	8.82	9.98
12500	7.90	8.82	9.98
13000	7.94	8.86	9.98
13500	7.86	8.74	9.86
14000	7.35	8.18	9.30
14500	6.51	7.31	8.34
15000	5.67	6.43	7.39
15500	4.91	5.59	6.47
16000	4.19	4.83	5.55
16500	3.35	3.75	4.23
17000	1.84	1.88	3.87



UL Japan, Inc.
Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa, Japan 259-1220

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Data of Modulation Characteristics (Transmitter Deviation for Input Frequency Response)

UL Japan, Inc. Shonan EMC Lab.

No.5 Shielded Room

REGULATION FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation

EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER

MODEL ATW-T6001 S

S/ N US002

POWER DC 3 V

MODE Transmitting

946.125 MHz Low power

* CMS54 setting : filter OFF

TEST DISTANCE -

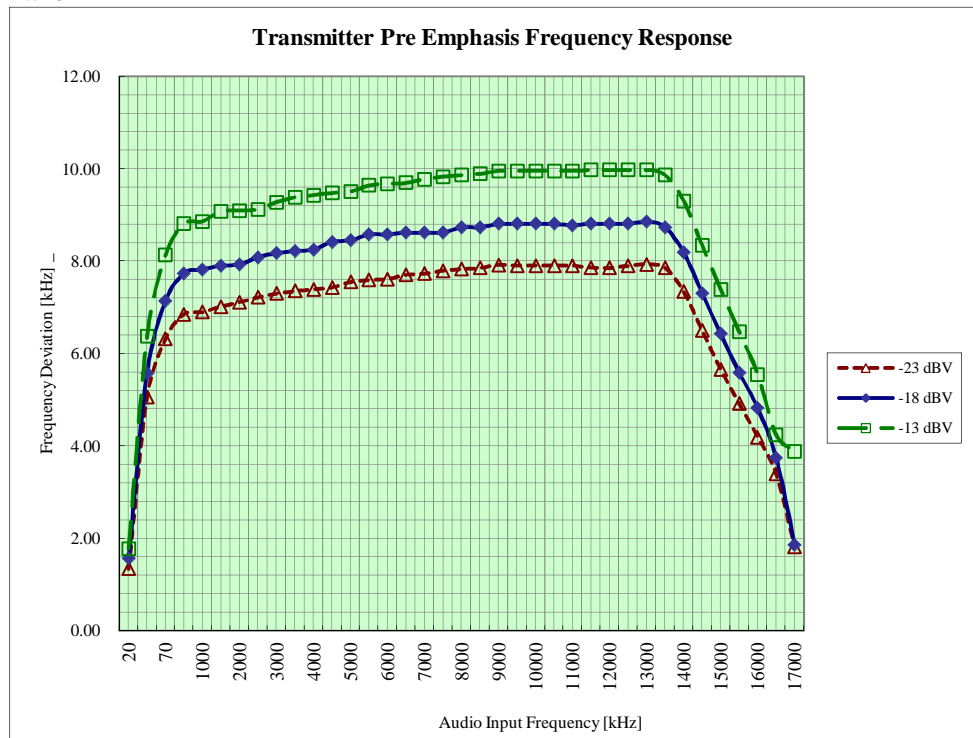
DATE April 27, 2015

TEMPERATURE 26 deg.C

HUMIDITY 46 %RH

ENGINEER Kenichi Adachi

Input Freq	Deviation [kHz] (Peak)		
	-23 dBV	-18 dBV	-13 dBV
20	1.34	1.57	1.78
50	5.06	5.58	6.38
70	6.32	7.14	8.13
500	6.86	7.74	8.81
1000	6.90	7.82	8.87
1500	7.02	7.91	9.09
2000	7.11	7.93	9.10
2500	7.22	8.09	9.12
3000	7.30	8.18	9.28
3500	7.36	8.23	9.39
4000	7.39	8.26	9.43
4500	7.43	8.42	9.48
5000	7.55	8.46	9.51
5500	7.59	8.58	9.64
6000	7.61	8.58	9.68
6500	7.71	8.62	9.70
7000	7.73	8.62	9.78
7500	7.80	8.62	9.83
8000	7.83	8.74	9.87
8500	7.86	8.74	9.89
9000	7.92	8.81	9.96
9500	7.91	8.81	9.96
10000	7.91	8.81	9.96
10500	7.91	8.81	9.96
11000	7.91	8.78	9.96
11500	7.87	8.81	9.98
12000	7.86	8.81	9.98
12500	7.90	8.81	9.98
13000	7.93	8.86	9.98
13500	7.86	8.74	9.86
14000	7.34	8.19	9.31
14500	6.50	7.31	8.35
15000	5.66	6.43	7.39
15500	4.92	5.59	6.48
16000	4.20	4.82	5.55
16500	3.39	3.75	4.24
17000	1.82	1.87	3.89



UL Japan, Inc.
Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa, Japan 259-1220
 Telephone : +81 463 50 6400
 Facsimile : +81 463 50 6401

Data of Modulation Characteristics (Transmitter Deviation for Input Frequency Response)

UL Japan, Inc. Shonan EMC Lab.

No.5 Shielded Room

REGULATION FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation

EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER

MODEL ATW-T6001 S

S/ N US002

POWER DC 3 V

MODE Transmitting

949.875 MHz High power

* CMS54 setting : filter OFF

TEST DISTANCE -

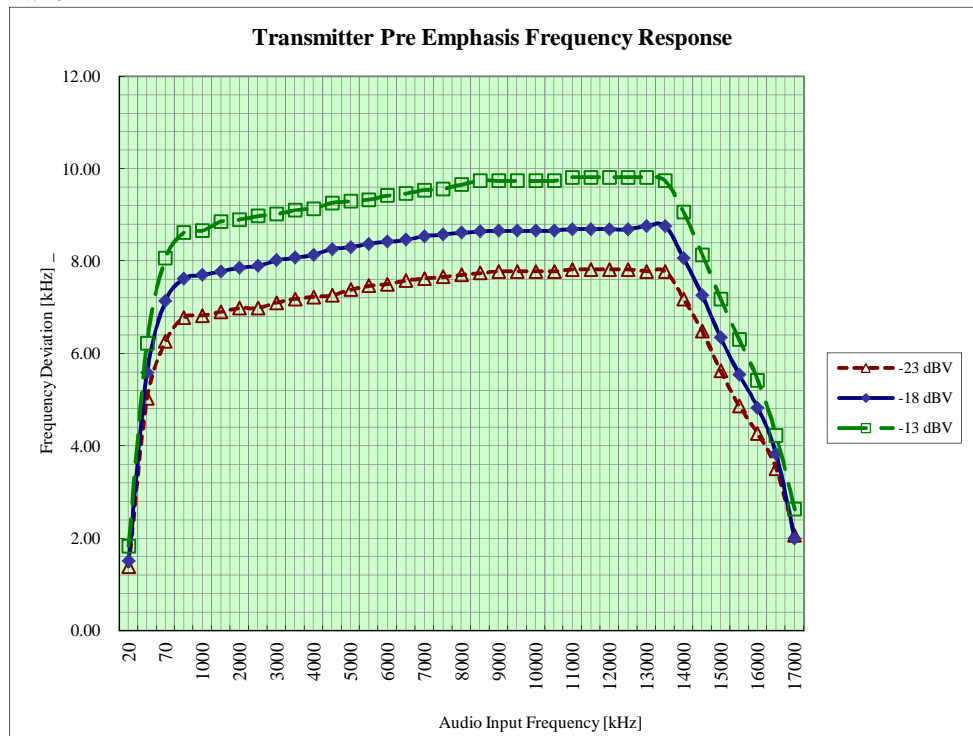
DATE April 27, 2015

TEMPERATURE 26 deg.C

HUMIDITY 46 %RH

ENGINEER Kenichi Adachi

Input Freq	Deviation [kHz] (Peak)		
	-23 dBV	-18 dBV	-13 dBV
20	1.40	1.52	1.84
50	5.03	5.59	6.23
70	6.27	7.15	8.06
500	6.79	7.63	8.62
1000	6.83	7.71	8.66
1500	6.91	7.78	8.86
2000	6.99	7.86	8.90
2500	6.99	7.90	8.98
3000	7.11	8.02	9.02
3500	7.19	8.08	9.11
4000	7.23	8.14	9.14
4500	7.27	8.27	9.27
5000	7.39	8.30	9.30
5500	7.47	8.38	9.34
6000	7.51	8.42	9.42
6500	7.59	8.47	9.47
7000	7.63	8.54	9.54
7500	7.67	8.58	9.57
8000	7.71	8.62	9.66
8500	7.75	8.65	9.74
9000	7.78	8.66	9.74
9500	7.78	8.66	9.74
10000	7.78	8.66	9.74
10500	7.78	8.66	9.74
11000	7.82	8.70	9.82
11500	7.82	8.70	9.82
12000	7.82	8.70	9.82
12500	7.82	8.70	9.82
13000	7.78	8.77	9.82
13500	7.78	8.77	9.74
14000	7.19	8.06	9.06
14500	6.49	7.27	8.14
15000	5.63	6.35	7.19
15500	4.87	5.55	6.31
16000	4.27	4.83	5.43
16500	3.51	3.83	4.23
17000	2.08	2.00	2.63



UL Japan, Inc.
Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa, Japan 259-1220
Telephone : +81 463 50 6400
Facsimile : +81 463 50 6401

Data of Modulation Characteristics (Transmitter Deviation for Input Frequency Response)

UL Japan, Inc. Shonan EMC Lab.

No.5 Shielded Room

REGULATION FCC part 2, section 2.1047

COMPANY Audio-Technica Corporation

EQUIPMENT UHF SYNTHESIZED WIRELESS TRANSMITTER

MODEL ATW-T6001 S

S/ N US002

POWER DC 3 V

MODE Transmitting

949.875 MHz Low power

* CMS54 setting : filter OFF

TEST DISTANCE -

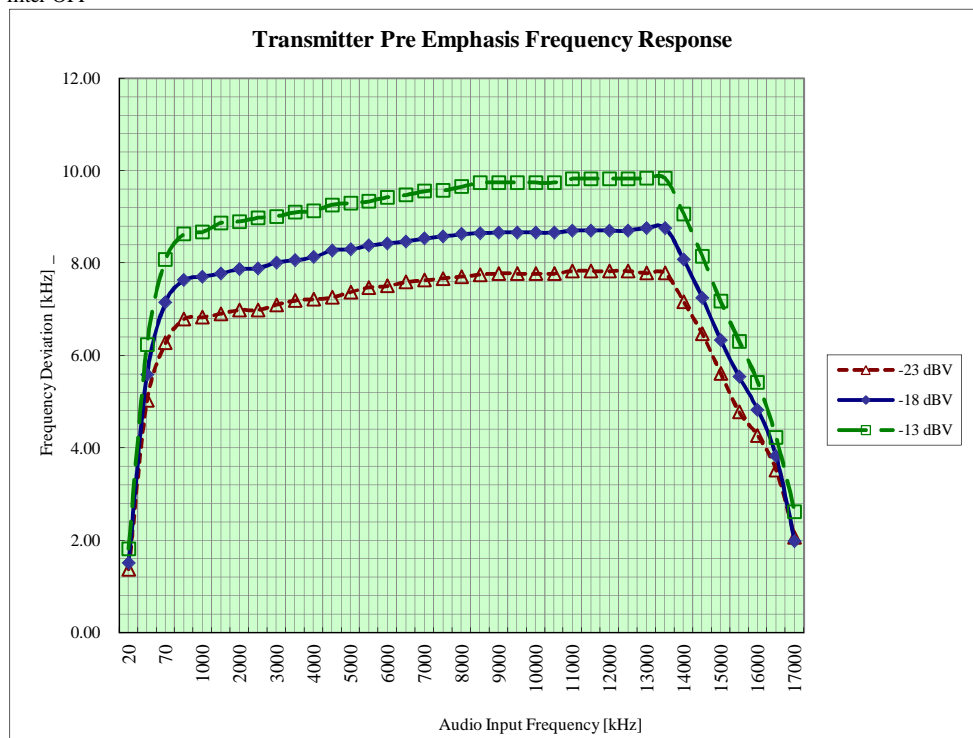
DATE April 27, 2015

TEMPERATURE 26 deg.C

HUMIDITY 46 %RH

ENGINEER Kenichi Adachi

Input Freq	Deviation [kHz] (Peak)		
	-23 dBV	-18 dBV	-13 dBV
20	1.38	1.52	1.82
50	5.03	5.59	6.23
70	6.28	7.16	8.08
500	6.79	7.63	8.63
1000	6.83	7.71	8.68
1500	6.91	7.78	8.88
2000	6.99	7.88	8.90
2500	6.99	7.89	8.99
3000	7.10	8.02	9.02
3500	7.19	8.07	9.10
4000	7.22	8.13	9.14
4500	7.26	8.28	9.27
5000	7.38	8.30	9.31
5500	7.48	8.39	9.34
6000	7.51	8.43	9.43
6500	7.59	8.48	9.48
7000	7.63	8.53	9.56
7500	7.67	8.58	9.57
8000	7.71	8.63	9.66
8500	7.75	8.65	9.74
9000	7.78	8.67	9.75
9500	7.78	8.67	9.75
10000	7.78	8.67	9.75
10500	7.78	8.67	9.75
11000	7.83	8.71	9.83
11500	7.83	8.71	9.83
12000	7.83	8.71	9.83
12500	7.83	8.71	9.83
13000	7.79	8.77	9.84
13500	7.79	8.77	9.84
14000	7.17	8.08	9.07
14500	6.48	7.26	8.16
15000	5.62	6.34	7.18
15500	4.78	5.54	6.31
16000	4.27	4.83	5.43
16500	3.52	3.83	4.23
17000	2.07	1.99	2.63



UL Japan, Inc.
Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa, Japan 259-1220

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Emission Bandwidth

UL Japan, Inc. Shonan EMC Lab.
No.5 Shielded Room

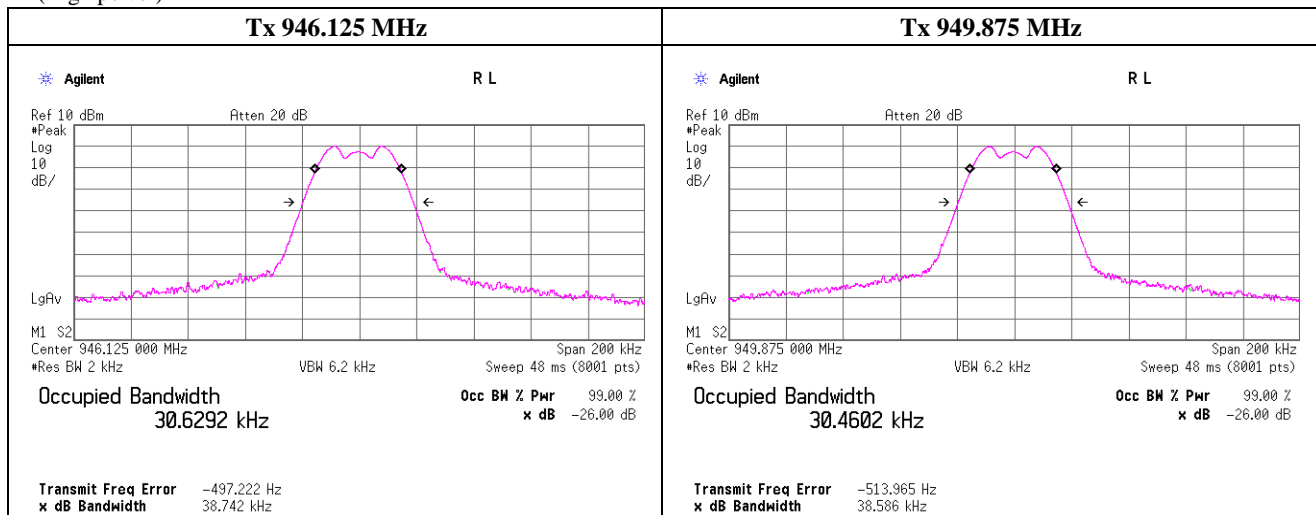
Company Audio-Technica Corporation
Equipment UHF SYNTHESIZED WIRELESS TRANSMITTER
Model ATW-T6001 S
Serial No. US002
Power DC 3 V
Mode Transmitting
modulation at 2.5kHz at 16dB over 50%

Regulation FCC part 74, section 74.861(e)(5)
Date May 1, 2015
Temperature 25 deg.C
Humidity 47 %RH
ENGINEER Kenichi Adachi

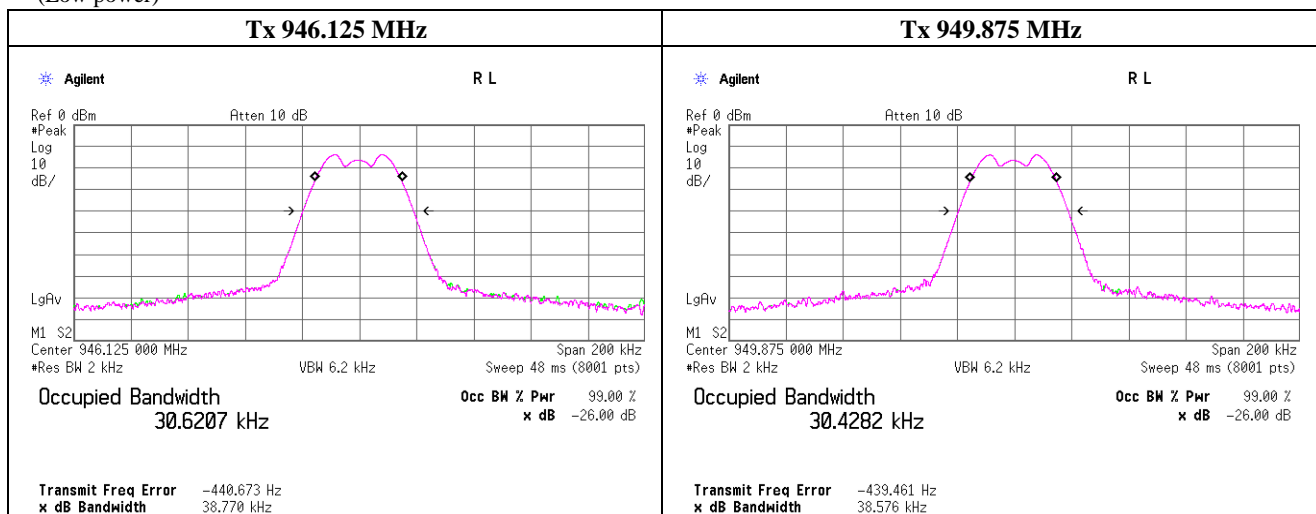
Freq. [MHz]	99% Occupied bandwidth		Limit [kHz]
	High power [kHz]	Low power [kHz]	
946.1250	30.6291	30.6207	< 200.0
949.8750	30.4602	30.4282	< 200.0

(reference)
Necessary bandwidth ($B_n = 2M + 2D$)
Bn [kHz] M [kHz] D [kHz]
62.5 15 16.25

(High power)



(Low power)



UL Japan, Inc.
Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN
Telephone : +81 463 50 6400
Facsimile : +81 463 50 6401

Revised date : November 11, 2015

Spurious emission at antenna terminalUL Japan, Inc. Shonan EMC Lab.
No.5 Shielded Room

Company	Audio-Technica Corporation	Regulation	FCC part 74, section 74.861(e)(6)
Equipment	UHF SYNTHESIZED WIRELESS TRANSMITTER	Date	May 1, 2015
Model	ATW-T6001 S	Temperature	25 deg.C
Serial No.	US002	Humidity	47 %RH
Power	DC 3 V	ENGINEER	Kenichi Adachi
Mode	Transmitting modulation at 2.5kHz at 16dB over 50%		

(Freq. = Frequency)

Power setting	Channel	Tested Freq. [MHz]	Reading Freq. [MHz]	Level [dBm]	Cable loss [dB]	Attenuator loss [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
High power	Low	946.125	0.136	-83.16	0.01	9.50	-73.65	-13.00	60.65
			0.150	-88.73	0.01	9.50	-79.22	-13.00	66.22
			295.650	-70.91	0.47	9.53	-60.90	-13.00	47.90
			650.525	-64.93	0.67	9.54	-54.72	-13.00	41.72
			1892.200	-53.78	1.10	9.57	-43.11	-13.00	30.11
			7091.875	-64.32	2.31	9.26	-52.75	-13.00	39.75
	High	949.875	0.136	-83.06	0.01	9.50	-73.55	-13.00	60.55
			0.150	-86.76	0.01	9.50	-77.25	-13.00	64.25
			296.900	-70.48	0.48	9.53	-60.47	-13.00	47.47
			653.000	-64.90	0.67	9.54	-54.69	-13.00	41.69
			1899.800	-53.99	1.11	9.57	-43.32	-13.00	30.32
			7113.125	-65.10	2.31	9.26	-53.53	-13.00	40.53
Low power	Low	946.125	0.136	-83.94	0.01	9.50	-74.43	-13.00	61.43
			0.150	-89.18	0.01	9.50	-79.67	-13.00	66.67
			295.650	-81.98	0.47	9.53	-71.97	-13.00	58.97
			3206.000	-67.60	2.06	9.54	-56.00	-13.00	43.00
			7035.625	-66.00	2.50	9.57	-53.93	-13.00	40.93
	High	949.875	0.136	-83.98	0.01	9.50	-74.47	-13.00	61.47
			0.150	-88.44	0.01	9.50	-78.93	-13.00	65.93
			296.860	-81.35	0.48	9.53	-71.34	-13.00	58.34
			3089.500	-67.31	2.00	9.54	-55.77	-13.00	42.77
			7073.125	-65.51	2.51	9.57	-53.43	-13.00	40.43

Calculation formula:

Result = Reading + Cable loss + Attenuator loss

Limit = mean output power in dBm - (43 + 10 log10 (mean output power in watts)) dB = -13 dBm

There might be some 0.01 dB difference between plots and above table due to the calculation to two decimal places.

UL Japan, Inc.**Shonan EMC Lab.**

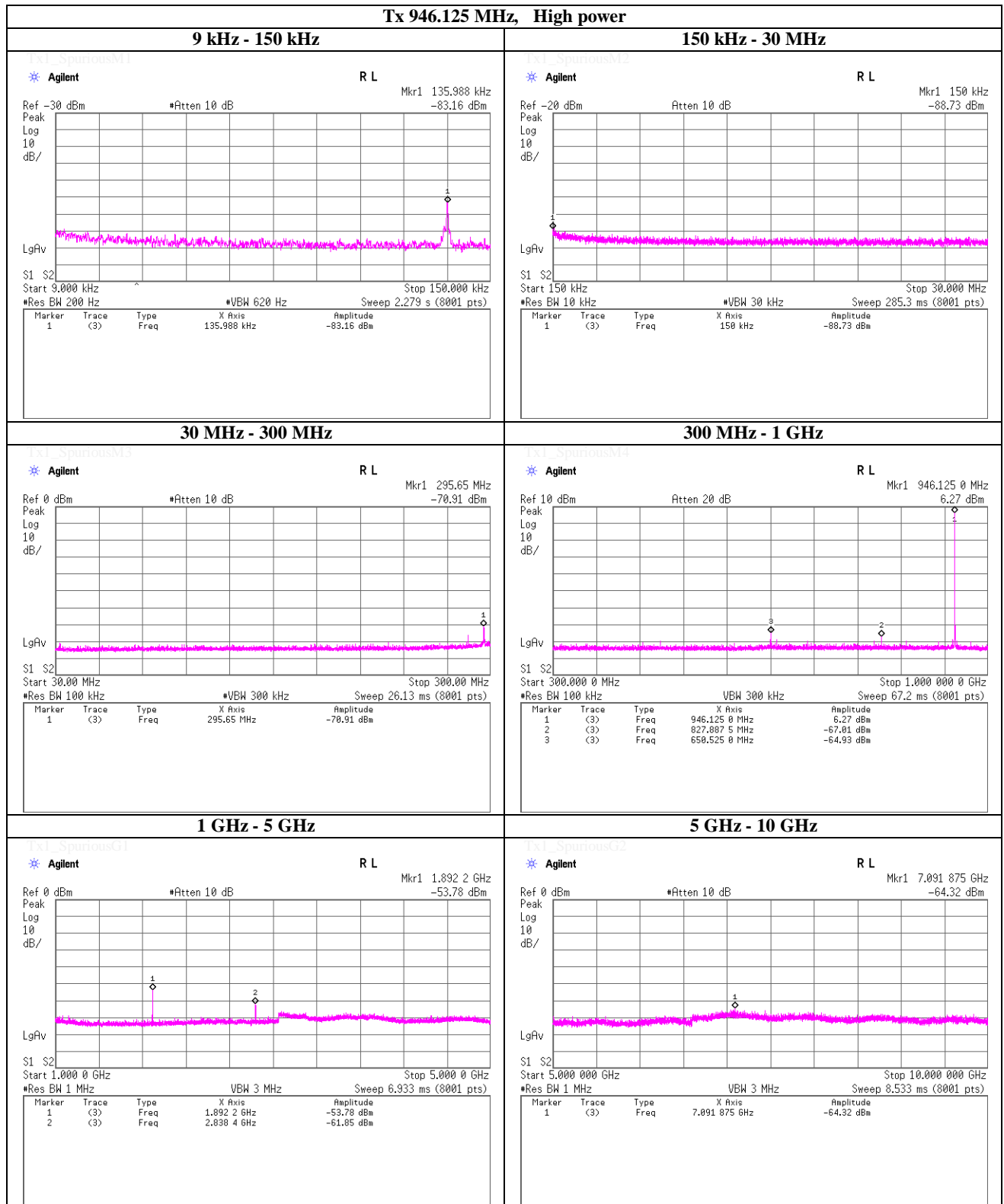
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
 Date May 1, 2015 (Serial No. US002)
 Temperature / Humidity 25 deg.C , 47 %RH
 Engineer Kenichi Adachi

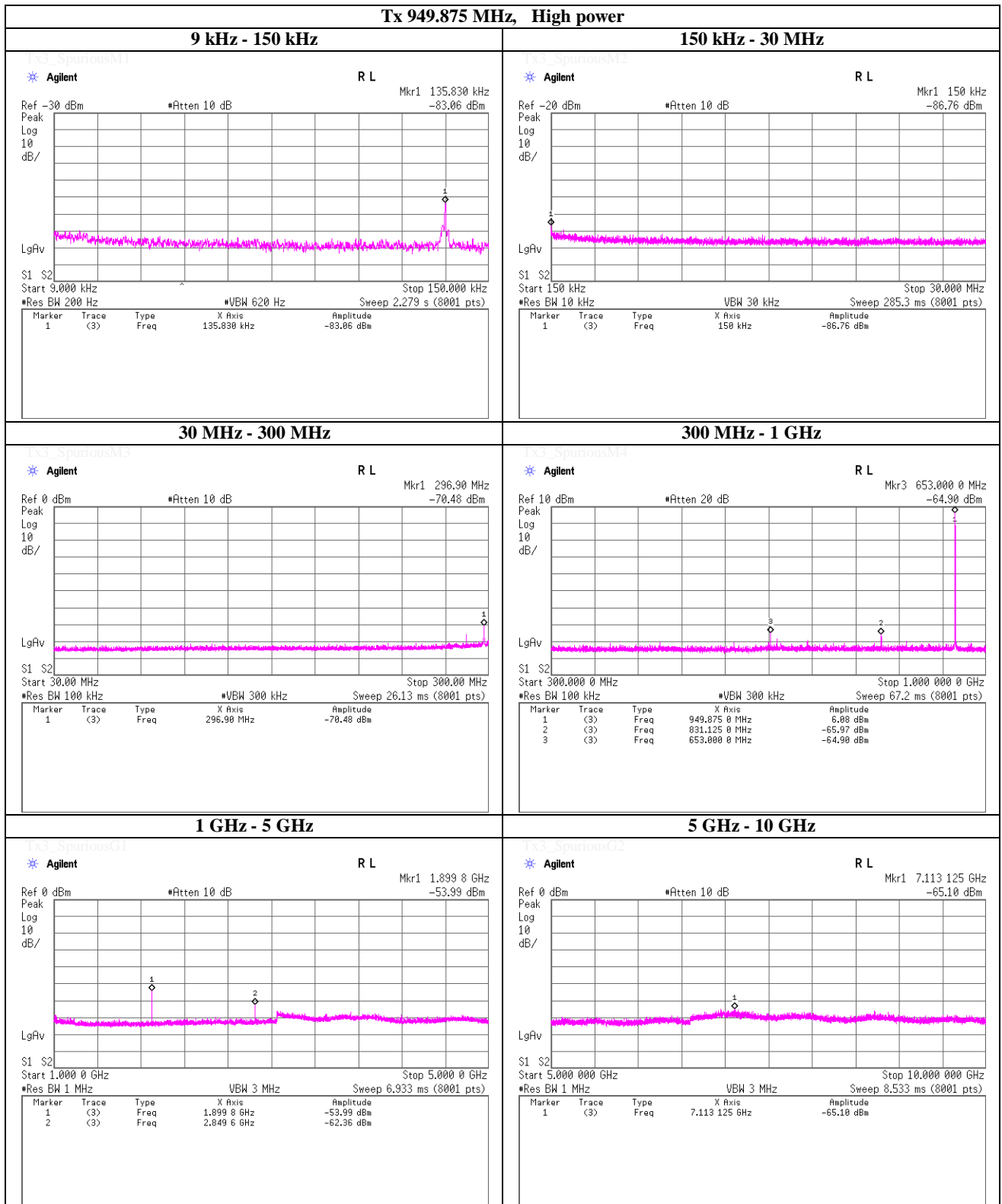
Spurious emission at antenna terminal



UL Japan, Inc.
Shonan EMC Lab.
 1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN
 Telephone : +81 463 50 6400
 Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
 Date May 1, 2015 (Serial No. US002)
 Temperature / Humidity 25 deg.C , 47 %RH
 Engineer Kenichi Adachi

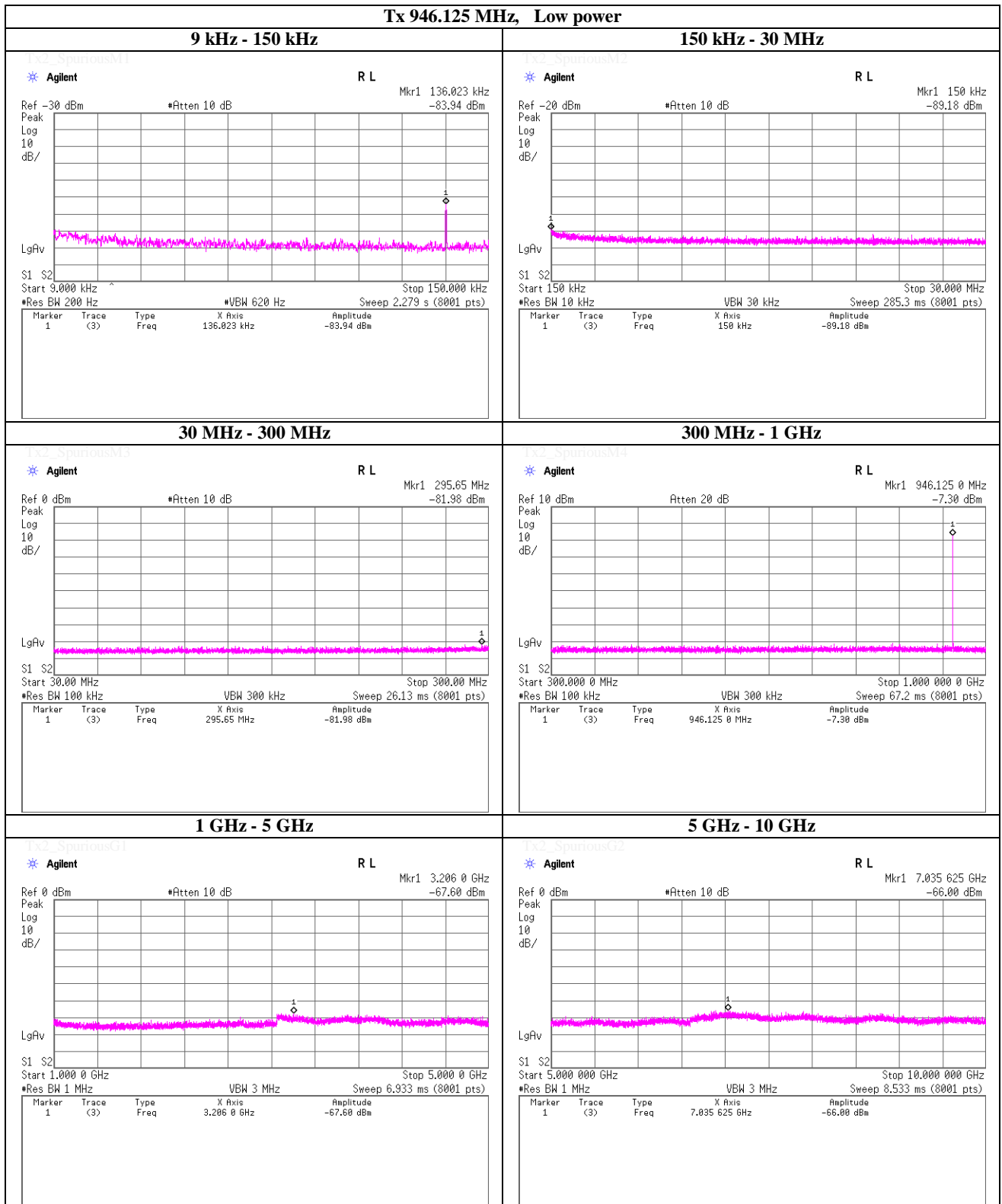
Spurious emission at antenna terminal



UL Japan, Inc.
Shonan EMC Lab.
 1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN
 Telephone : +81 463 50 6400
 Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
 Date May 1, 2015 (Serial No. US002)
 Temperature / Humidity 25 deg.C , 47 %RH
 Engineer Kenichi Adachi

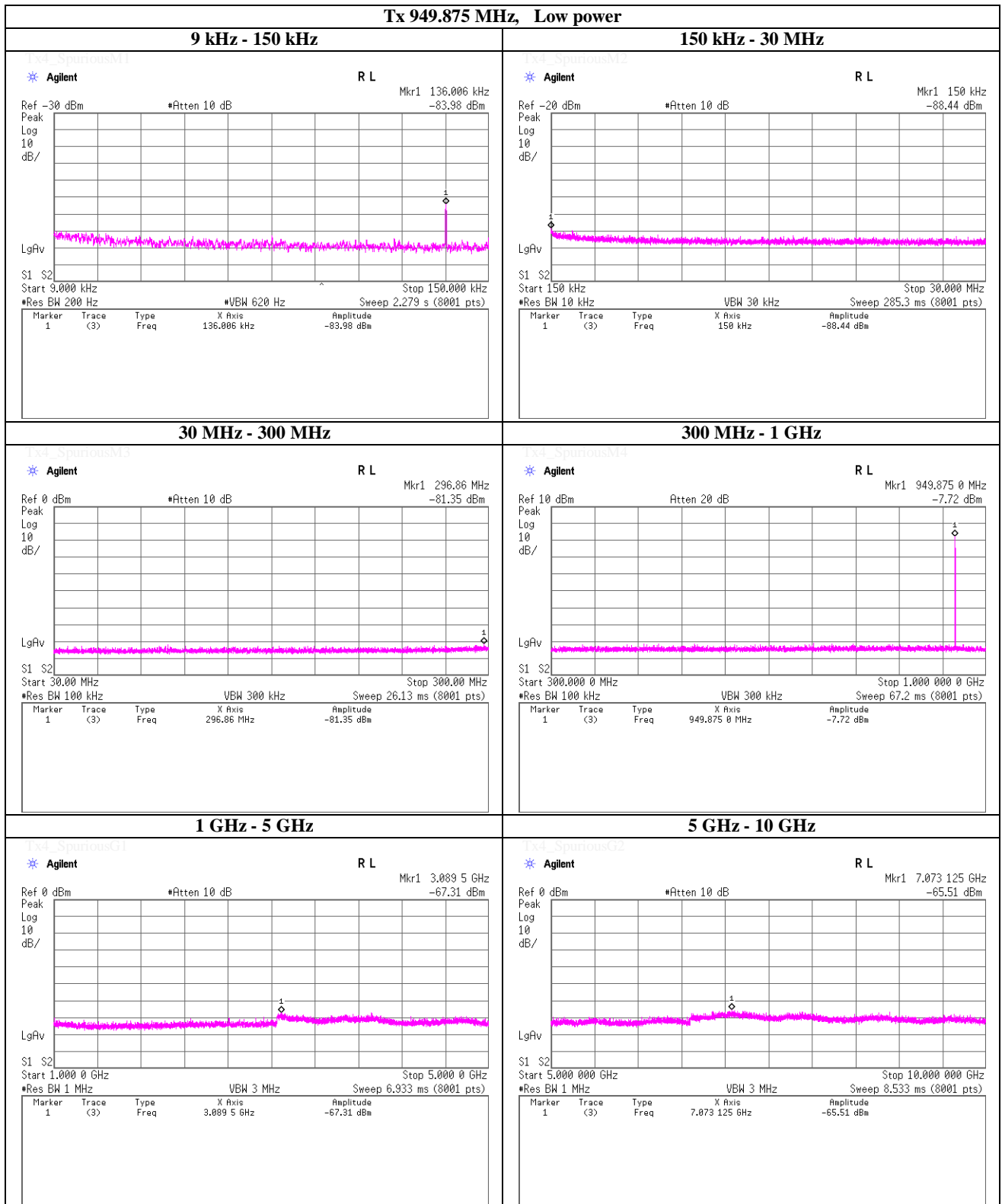
Spurious emission at antenna terminal



UL Japan, Inc.
Shonan EMC Lab.
 1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN
 Telephone : +81 463 50 6400
 Facsimile : +81 463 50 6401

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
 Date May 1, 2015 (Serial No. US002)
 Temperature / Humidity 25 deg.C , 47 %RH
 Engineer Kenichi Adachi

Spurious emission at antenna terminal



UL Japan, Inc.
Shonan EMC Lab.
 1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN
 Telephone : +81 463 50 6400
 Facsimile : +81 463 50 6401

DATA OF RADIATED EMISSION (SUBSTITUTION) TESTUL Japan, Inc. Shonan EMC Lab. No.1 Semi-Anechoic Chamber
Date : 2015/04/28

Company : Audio-Technica Corporation
 Kind of EUT : UHF SYNTHESIZED WIRELESS TRANSMITTER
 Model No. : ATW-T6001 S
 Serial No. : US002
 Remarks : EUT axis: H: X, V: Y

Mode : Tx, CW, 946.125 MHz (High power)
 Order No. : 10762851S
 Power : DC 3 V (battery)
 Temp./Humi. : 25 deg.C / 49 %RH

Limit : FCC 74.861 (e) (6) -13dBm ERP

Engineer : Kenichi Adachi

<< ERP DATA >>

No.	Freq. [MHz]	Reading <AV>	SG Level [dBm]	TX Ant. Gain [dBi]	TX Loss [dB]	ERP		Margin [dB]	Pola.	Height [cm]	Angle [deg]	TX Ant. Type	Comment
		[dBuV]				Result [dBm]	Limit [dBm]						
1	174.417	29.4	-65.2	2.2	12.9	-78.1	-13.0	65.1	Hori.	186	225	Dipol	RMS-av
2	650.500	36.0	-43.7	2.2	16.1	-59.8	-13.0	46.8	Hori.	148	231	Dipol	RMS-av
3	827.875	33.4	-42.8	2.2	17.1	-59.9	-13.0	46.9	Hori.	110	260	Dipol	RMS-av
4	942.808	21.9	-52.0	2.2	17.6	-69.6	-13.0	56.6	Hori.	100	247	Dipol	RMS-av
5	944.000	16.9	-58.7	2.2	17.6	-76.3	-13.0	63.3	Hori.	100	247	Dipol	RMS-av
6	952.000	15.4	-59.8	2.2	17.7	-77.5	-13.0	64.5	Hori.	100	247	Dipol	RMS-av
7	184.790	16.1	-86.0	2.2	13.0	-99.0	-13.0	86.0	Vert.	184	158	Dipol	RMS-av
8	650.500	33.1	-44.3	2.2	16.1	-60.4	-13.0	47.4	Vert.	100	240	Dipol	RMS-av
9	827.875	31.5	-41.9	2.2	17.1	-59.0	-13.0	46.0	Vert.	134	228	Dipol	RMS-av
10	942.808	18.5	-54.0	2.2	17.6	-71.6	-13.0	58.6	Vert.	113	206	Dipol	RMS-av
11	944.000	16.2	-58.9	2.2	17.6	-76.5	-13.0	63.5	Vert.	113	206	Dipol	RMS-av
12	952.000	15.2	-59.1	2.2	17.7	-76.8	-13.0	63.8	Vert.	113	206	Dipol	RMS-av

DATA OF RADIATED EMISSION (SUBSTITUTION) TESTUL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2015/05/07

Company : Audio-Technica Corporation
 Kind of EUT : UHF SYNTHESIZED WIRELESS TRANSMITTER
 Model No. : ATW-T6001 S
 Serial No. : US002
 Remarks : EUT axis: H: X, V: Y

Mode : Tx, CW, 946.125 MHz (High power)
 Order No. : 10762851S
 Power : DC 3 V (battery)
 Temp./Humi. : 25 deg.C / 42 %RH

Limit : FCC 74.861 (e) (6) -13dBm ERP

Engineer : Kenichi Adachi

<< ERP DATA >>

No.	Freq. [MHz]	Reading <AV>	SG Level [dBm]	TX Ant. Gain [dBi]	TX Loss [dB]	ERP		Margin [dB]	Pola.	Height [cm]	Angle [deg]	TX Ant. Type	Comment
		[dBuV]				Result [dBm]	Limit [dBm]						
1	1892.249	53.5	-38.8	9.7	5.6	-36.9	-13.0	23.9	Hori.	100	284	Horn	X, Av:RMS-av
2	2838.374	40.0	-52.3	10.8	6.9	-50.6	-13.0	37.6	Hori.	100	287	Horn	X, Av:RMS-av
3	3784.500	37.1	-55.0	12.0	8.1	-53.3	-13.0	40.3	Hori.	100	0	Horn	X, Av:RMS-av, noise floor level
4	4730.625	37.0	-53.0	12.2	9.1	-52.1	-13.0	39.1	Hori.	100	0	Horn	X, Av:RMS-av, noise floor level
5	5676.750	36.1	-50.0	12.3	10.0	-49.9	-13.0	36.9	Hori.	100	0	Horn	X, Av:RMS-av, noise floor level
6	6622.875	36.2	-47.0	11.3	10.8	-48.7	-13.0	35.7	Hori.	100	0	Horn	X, Av:RMS-av, noise floor level
7	7569.000	37.3	-45.0	10.4	11.6	-48.4	-13.0	35.4	Hori.	100	0	Horn	X, Av:RMS-av, noise floor level
8	8515.125	37.9	-41.0	11.4	12.4	-44.2	-13.0	31.2	Hori.	100	0	Horn	X, Av:RMS-av, noise floor level
9	9461.250	38.1	-39.0	11.0	13.1	-43.3	-13.0	30.3	Hori.	100	0	Horn	X, Av:RMS-av, noise floor level
10	1892.249	52.0	-42.4	9.7	5.6	-40.5	-13.0	27.5	Vert.	121	268	Horn	Y, Av:RMS-av
11	2838.374	38.1	-59.0	10.8	6.9	-57.3	-13.0	44.3	Vert.	120	264	Horn	Y, Av:RMS-av
12	3784.500	37.0	-55.0	12.0	8.1	-53.3	-13.0	40.3	Vert.	100	0	Horn	Y, Av:RMS-av, noise floor level
13	4730.625	36.9	-54.0	12.2	9.1	-53.1	-13.0	40.1	Vert.	100	0	Horn	Y, Av:RMS-av, noise floor level
14	5676.750	36.0	-50.0	12.3	10.0	-49.9	-13.0	36.9	Vert.	100	0	Horn	Y, Av:RMS-av, noise floor level
15	6622.875	36.1	-47.0	11.3	10.8	-48.7	-13.0	35.7	Vert.	100	0	Horn	Y, Av:RMS-av, noise floor level
16	7569.000	37.2	-45.0	10.4	11.6	-48.4	-13.0	35.4	Vert.	100	0	Horn	Y, Av:RMS-av, noise floor level
17	8515.125	38.0	-42.0	11.4	12.4	-45.2	-13.0	32.2	Vert.	100	0	Horn	Y, Av:RMS-av, noise floor level
18	9461.250	38.0	-40.0	11.0	13.1	-44.3	-13.0	31.3	Vert.	100	0	Horn	Y, Av:RMS-av, noise floor level

Calculation: Result [dBm] = SG level [dB] + Tx Ant Gain [dBi] - Tx Loss (Cable) [dB] - 2.15 [dB]
 Tx Antenna: Horn (1G-40G) / Rx-Antenna: Horn (1G-40G)

DATA OF RADIATED EMISSION (SUBSTITUTION) TESTUL Japan, Inc. Shonan EMC Lab. No.1 Semi-Anechoic Chamber
Date : 2015/04/29

Company : Audio-Technica Corporation
 Kind of EUT : UHF SYNTHESIZED WIRELESS TRANSMITTER
 Model No. : ATW-T6001 S
 Serial No. : US002
 Remarks : EUT axis: H: X, V: Y

Mode : Tx, CW, 949.875 MHz (High power)
 Order No. : 10762851S
 Power : DC 3 V (battery)
 Temp./Humi. : 25 deg.C / 49 %RH

Limit : FCC 74.861 (e) (6) -13dBm ERP

Engineer : Kenichi Adachi

<< ERP DATA >>

No.	Freq. [MHz]	Reading <AV>	SG Level [dBm]	TX Ant. Gain [dBi]	TX Loss [dB]	ERP		Margin [dB]	Pola.	Height [cm]	Angle [deg]	TX Ant. Type	Comment
		[dBuV]				Result [dBm]	Limit [dBm]						
1	174.726	28.6	-66.2	2.2	12.9	-79.1	-13.0	66.1	Hori.	184	223	Dipol	RMS-av
2	653.000	31.0	-48.8	2.2	16.1	-64.9	-13.0	51.9	Hori.	149	209	Dipol	RMS-av
3	831.124	27.8	-47.7	2.2	17.1	-64.8	-13.0	51.8	Hori.	108	233	Dipol	RMS-av
4	871.874	28.0	-47.6	2.2	17.3	-64.9	-13.0	51.9	Hori.	108	233	Dipol	RMS-av
5	944.000	15.5	-59.7	2.2	17.6	-77.3	-13.0	64.3	Hori.	100	245	Dipol	RMS-av
6	952.000	16.4	-57.5	2.2	17.7	-75.2	-13.0	62.2	Hori.	100	245	Dipol	RMS-av
7	975.874	21.4	-52.5	2.2	17.8	-70.3	-13.0	57.3	Hori.	100	245	Dipol	RMS-av
8	183.789	16.0	-86.3	2.2	13.0	-99.3	-13.0	86.3	Vert.	182	156	Dipol	RMS-av
9	653.000	31.1	-47.7	2.2	16.1	-63.8	-13.0	50.8	Vert.	124	224	Dipol	RMS-av
10	831.124	25.5	-46.6	2.2	17.1	-63.7	-13.0	50.7	Vert.	133	228	Dipol	RMS-av
11	871.874	25.7	-46.5	2.2	17.3	-63.8	-13.0	50.8	Vert.	133	228	Dipol	RMS-av
12	944.000	15.4	-58.9	2.2	17.6	-76.5	-13.0	63.5	Vert.	115	253	Dipol	RMS-av
13	952.000	16.2	-56.8	2.2	17.7	-74.5	-13.0	61.5	Vert.	115	253	Dipol	RMS-av
14	975.874	21.1	-51.7	2.2	17.8	-69.5	-13.0	56.5	Vert.	115	253	Dipol	RMS-av

DATA OF RADIATED EMISSION (SUBSTITUTION) TESTUL Japan,Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2015/05/07

Company : Audio-Technica Corporation
 Kind of EUT : UHF SYNTHESIZED WIRELESS TRANSMITTER
 Model No. : ATW-T6001 S
 Serial No. : US002
 Remarks : EUT axis: H: X, V: Y

Mode : Tx, CW, 949.875 MHz (High power)
 Order No. : 10762851S
 Power : DC 3 V (battery)
 Temp./Humi. : 25 deg.C / 42 %RH

Limit : FCC 74.861 (e) (6) -13dBm ERP

Engineer : Kenichi Adachi

<< ERP DATA >>

No.	Freq. [MHz]	Reading <AV>	SG Level [dBm]	TX Ant. Gain [dBi]	TX Loss [dB]	ERP		Margin [dB]	Pola.	Height [cm]	Angle [deg]	TX Ant. Type	Comment
		[dBuV]				Result [dBm]	Limit [dBm]						
1	1899.749	58.6	-33.9	9.7	5.6	-32.0	-13.0	19.0	Hori.	100	289	Horn	X. Av:RMS-av
2	2849.624	45.3	-47.0	10.8	6.9	-45.3	-13.0	32.3	Hori.	100	292	Horn	X. Av:RMS-av
3	3799.500	37.4	-55.0	12.0	8.1	-53.3	-13.0	40.3	Hori.	100	0	Horn	X. Av:RMS-av.noise floor level
4	4749.375	36.9	-53.0	12.2	9.1	-52.1	-13.0	39.1	Hori.	100	0	Horn	X. Av:RMS-av.noise floor level
5	5699.250	35.9	-50.0	12.3	10.1	-50.0	-13.0	37.0	Hori.	100	0	Horn	X. Av:RMS-av.noise floor level
6	6649.125	35.8	-47.0	11.3	10.9	-48.8	-13.0	35.8	Hori.	100	0	Horn	X. Av:RMS-av.noise floor level
7	7599.000	37.1	-45.0	10.4	11.6	-48.4	-13.0	35.4	Hori.	100	0	Horn	X. Av:RMS-av.noise floor level
8	8548.875	38.4	-41.0	11.4	12.4	-44.2	-13.0	31.2	Hori.	100	0	Horn	X. Av:RMS-av.noise floor level
9	9498.750	38.3	-39.0	11.0	13.1	-43.3	-13.0	30.3	Hori.	100	0	Horn	X. Av:RMS-av.noise floor level
10	1899.749	57.0	-37.4	9.7	5.6	-35.5	-13.0	22.5	Vert.	121	271	Horn	Y. Av:RMS-av
11	2849.624	42.3	-54.9	10.8	6.9	-53.2	-13.0	40.2	Vert.	122	268	Horn	Y. Av:RMS-av
12	3799.500	37.3	-55.0	12.0	8.1	-53.3	-13.0	40.3	Vert.	100	0	Horn	Y. Av:RMS-av.noise floor level
13	4749.375	36.8	-54.0	12.2	9.1	-53.1	-13.0	40.1	Vert.	100	0	Horn	Y. Av:RMS-av.noise floor level
14	5699.250	35.8	-50.0	12.3	10.1	-50.0	-13.0	37.0	Vert.	100	0	Horn	Y. Av:RMS-av.noise floor level
15	6649.125	35.7	-47.0	11.3	10.9	-48.8	-13.0	35.8	Vert.	100	0	Horn	Y. Av:RMS-av.noise floor level
16	7599.000	37.0	-45.0	10.4	11.6	-48.4	-13.0	35.4	Vert.	100	0	Horn	Y. Av:RMS-av.noise floor level
17	8548.875	38.5	-42.0	11.4	12.4	-45.2	-13.0	32.2	Vert.	100	0	Horn	Y. Av:RMS-av.noise floor level
18	9498.750	38.4	-40.0	11.0	13.1	-44.3	-13.0	31.3	Vert.	100	0	Horn	Y. Av:RMS-av.noise floor level

Calculation:Result [dBm] =SG level [dB] +Tx Ant Gain [dBi] -Tx Loss (Cable) [dB] -2.15 [dB]
 Tx Antenna: Horn (1G-40G) / Rx-Antenna: Horn (1G-40G)

DATA OF RADIATED EMISSION (SUBSTITUTION) TESTUL Japan,Inc. Shonan EMC Lab. No.1 Semi-Anechoic Chamber
Date : 2015/04/29

Company : Audio-Technica Corporation
 Kind of EUT : UHF SYNTHESIZED WIRELESS TRANSMITTER
 Model No. : ATW-T6001 S
 Serial No. : US002
 Remarks : EUT axis: H: X, V: Y

Mode : Tx, CW, 946.125 MHz (Low power)
 Order No. : 10762851S
 Power : DC 3 V (battery)
 Temp./Humi. : 25 deg.C / 49 %RH

Limit : FCC 74.861 (e) (6) -13dBm ERP

Engineer : Kenichi Adachi

<< ERP DATA >>

No.	Freq. [MHz]	Reading <AV>	SG Level [dBm]	TX Ant. Gain [dBi]	TX Loss [dB]	ERP		Margin [dB]	Pola.	Height [cm]	Angle [deg]	TX Ant. Type	Comment
		[dBuV]				Result [dBm]	Limit [dBm]						
1	174.437	28.8	-65.8	2.2	12.9	-78.7	-13.0	65.7	Hori.	185	224	Dipol	RMS-av
2	650.500	20.4	-58.3	2.2	16.1	-74.4	-13.0	61.4	Hori.	149	228	Dipol	RMS-av
3	184.785	15.7	-87.2	2.2	13.0	-100.2	-13.0	87.2	Vert.	183	155	Dipol	RMS-av
4	650.500	19.4	-59.0	2.2	16.1	-75.1	-13.0	62.1	Vert.	100	237	Dipol	RMS-av

DATA OF RADIATED EMISSION (SUBSTITUTION) TESTUL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2015/05/07

Company : Audio-Technica Corporation
 Kind of EUT : UHF SYNTHESIZED WIRELESS TRANSMITTER
 Model No. : ATW-T6001 S
 Serial No. : US002
 Remarks : EUT axis: H: X, V: Y

Mode : Tx, CW, 946.125 MHz (Low power)
 Order No. : 10762851S
 Power : DC 3 V (battery)
 Temp./Humi. : 25 deg.C / 42 %RH

Limit : FCC 74.861 (e) (6) -13dBm ERP

Engineer : Kenichi Adachi

<< ERP DATA >>

No.	Freq. [MHz]	Reading <AV>	SG Level [dBm]	TX Ant. Gain [dBi]	TX Loss [dB]	ERP		Margin [dB]	Pola.	Height [cm]	Angle [deg]	TX Ant. Type	Comment
		[dBuV]				Result [dBm]	Limit [dBm]						
1	1892.249	65.9	-46.9	9.7	5.6	-45.0	-13.0	32.0	Hori.	100	291	Horn	X, Av:RMS-av
2	2838.374	54.4	-54.3	10.8	6.9	-52.6	-13.0	39.6	Hori.	100	292	Horn	X, Av:RMS-av
3	3784.500	37.3	-76.0	12.0	8.1	-74.3	-13.0	61.3	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
4	4730.625	37.2	-76.0	12.2	9.1	-75.1	-13.0	62.1	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
5	5676.750	36.2	-70.0	12.3	10.0	-69.9	-13.0	56.9	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
6	6622.875	36.4	-66.0	11.3	10.8	-67.7	-13.0	54.7	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
7	7569.000	37.4	-65.0	10.4	11.6	-68.4	-13.0	55.4	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
8	8515.125	38.0	-64.0	11.4	12.4	-67.2	-13.0	54.2	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
9	9461.250	38.2	-61.5	11.0	13.1	-65.8	-13.0	52.8	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
10	1892.249	64.4	-50.4	9.7	5.6	-48.5	-13.0	35.5	Vert.	120	269	Horn	Y, Av:RMS-av
11	2838.374	51.6	-53.5	10.8	6.9	-51.8	-13.0	38.8	Vert.	122	271	Horn	Y, Av:RMS-av
12	3784.500	37.2	-76.5	12.0	8.1	-74.8	-13.0	61.8	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
13	4730.625	37.1	-76.0	12.2	9.1	-75.1	-13.0	62.1	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
14	5676.750	36.1	-70.0	12.3	10.0	-69.9	-13.0	56.9	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
15	6622.875	36.3	-66.0	11.3	10.8	-67.7	-13.0	54.7	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
16	7569.000	37.3	-65.0	10.4	11.6	-68.4	-13.0	55.4	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
17	8515.125	37.9	-65.0	11.4	12.4	-68.2	-13.0	55.2	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
18	9461.250	38.1	-63.0	11.0	13.1	-67.3	-13.0	54.3	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level

Calculation: Result [dBm] = SG level [dB] + Tx Ant Gain [dBi] - Tx Loss (Cable) [dB] - 2.15 [dB]
 Tx Antenna: Horn (1G-40G) / Rx-Antenna: Horn (1G-40G)

DATA OF RADIATED EMISSION (SUBSTITUTION) TESTUL Japan,Inc. Shonan EMC Lab. No.1 Semi-Anechoic Chamber
Date : 2015/04/29

Company : Audio-Technica Corporation
 Kind of EUT : UHF SYNTHESIZED WIRELESS TRANSMITTER
 Model No. : ATW-T6001 S
 Serial No. : US002
 Remarks : EUT axis: H: X, V: Y

Mode : Tx, CW, 949.875 MHz (Low power)
 Order No. : 10762851S
 Power : DC 3 V (battery)
 Temp./Humi. : 25 deg.C / 49 %RH

Limit : FCC 74.861 (e) (6) -13dBm ERP

Engineer : Kenichi Adachi

<< ERP DATA >>

No.	Freq. [MHz]	Reading <AV>	SG Level [dBm]	TX Ant. Gain [dBi]	TX Loss [dB]	ERP		Margin [dB]	Pola.	Height [cm]	Angle [deg]	TX Ant. Type	Comment
		[dBuV]				Result [dBm]	Limit [dBm]						
1	174.427	28.7	-66.0	2.2	12.9	-78.9	-13.0	65.9	Hori.	184	222	Dipol	RMS-av
2	653.000	20.3	-58.6	2.2	16.1	-74.7	-13.0	61.7	Hori.	148	232	Dipol	RMS-av
3	184.449	15.9	-87.1	2.2	13.0	-100.1	-13.0	87.1	Vert.	182	157	Dipol	RMS-av
4	653.000	19.3	-58.9	2.2	16.1	-75.0	-13.0	62.0	Vert.	100	230	Dipol	RMS-av

DATA OF RADIATED EMISSION (SUBSTITUTION) TESTUL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2015/05/07

Company : Audio-Technica Corporation
 Kind of EUT : UHF SYNTHESIZED WIRELESS TRANSMITTER
 Model No. : ATW-T6001 S
 Serial No. : US002
 Remarks : EUT axis: H: X, V: Y

Mode : Tx, CW, 949.875 MHz (Low power)
 Order No. : 10762851S
 Power : DC 3 V (battery)
 Temp./Humi. : 25 deg.C / 42 %RH

Limit : FCC 74.861 (e) (6) -13dBm ERP

Engineer : Kenichi Adachi

<< ERP DATA >>

No.	Freq. [MHz]	Reading <AV>	SG Level [dBm]	TX Ant. Gain [dBi]	TX Loss [dB]	ERP		Margin [dB]	Pola.	Height [cm]	Angle [deg]	TX Ant. Type	Comment
		[dBuV]				Result [dBm]	Limit [dBm]						
1	1899.749	71.6	-40.7	9.7	5.6	-38.8	-13.0	25.8	Hori.	100	290	Horn	X, Av:RMS-av
2	2849.624	61.5	-47.2	10.8	6.9	-45.5	-13.0	32.5	Hori.	100	291	Horn	X, Av:RMS-av
3	3799.500	37.5	-76.0	12.0	8.1	-74.3	-13.0	61.3	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
4	4749.375	37.0	-76.0	12.2	9.1	-75.1	-13.0	62.1	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
5	5699.250	36.0	-70.0	12.3	10.1	-70.0	-13.0	57.0	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
6	6649.125	35.9	-66.0	11.3	10.9	-67.8	-13.0	54.8	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
7	7599.000	37.2	-65.0	10.4	11.6	-68.4	-13.0	55.4	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
8	8548.875	38.5	-64.0	11.4	12.4	-67.2	-13.0	54.2	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
9	9498.750	38.4	-61.0	11.0	13.1	-65.3	-13.0	52.3	Hori.	100	0	Horn	X, Av:RMS-av,noise floor level
10	1899.749	70.5	-41.8	9.7	5.6	-39.9	-13.0	26.9	Vert.	119	269	Horn	Y, Av:RMS-av
11	2849.624	60.6	-44.5	10.8	6.9	-42.8	-13.0	29.8	Vert.	120	271	Horn	Y, Av:RMS-av
12	3799.500	37.4	-76.5	12.0	8.1	-74.8	-13.0	61.8	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
13	4749.375	36.9	-76.0	12.2	9.1	-75.1	-13.0	62.1	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
14	5699.250	35.9	-70.0	12.3	10.1	-70.0	-13.0	57.0	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
15	6649.125	35.8	-66.0	11.3	10.9	-67.8	-13.0	54.8	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
16	7599.000	37.1	-65.0	10.4	11.6	-68.4	-13.0	55.4	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
17	8548.875	38.4	-64.5	11.4	12.4	-67.7	-13.0	54.7	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level
18	9498.750	38.3	-63.0	11.0	13.1	-67.3	-13.0	54.3	Vert.	100	0	Horn	Y, Av:RMS-av,noise floor level

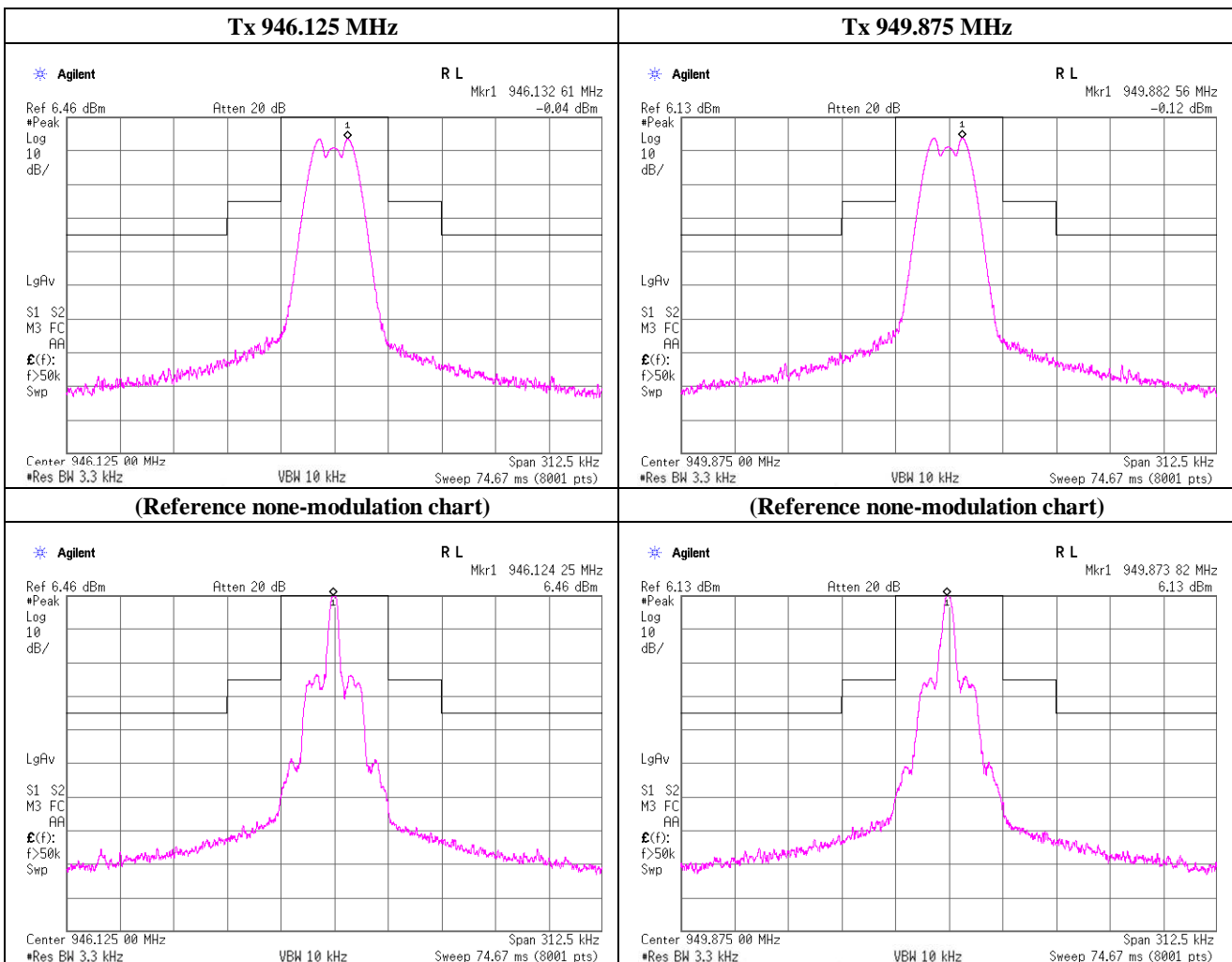
Calculation: Result [dBm] = SG level [dB] + Tx Ant Gain [dBi] - Tx Loss (Cable) [dB] - 2.15 [dB]
 Tx Antenna: Horn (1G-40G) / Rx-Antenna: Horn (1G-40G)

Field strength of spurious radiation (Emission masks)

UL Japan, Inc. Shonan EMC Lab.
No.5 Shielded Room

Company Audio-Technica Corporation
Equipment UHF SYNTHESIZED WIRELESS TRANSMITTER
Model ATW-T6001 S
Serial No. US002
Power DC 3 V
Mode Transmitting High power modulation at 2.5kHz at 16dB over 50%

Regulation FCC part 74, section 74.861(e)(6)
Date May 1, 2015
Temperature 25 deg.C
Humidity 47 %RH
ENGINEER Kenichi Adachi



UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

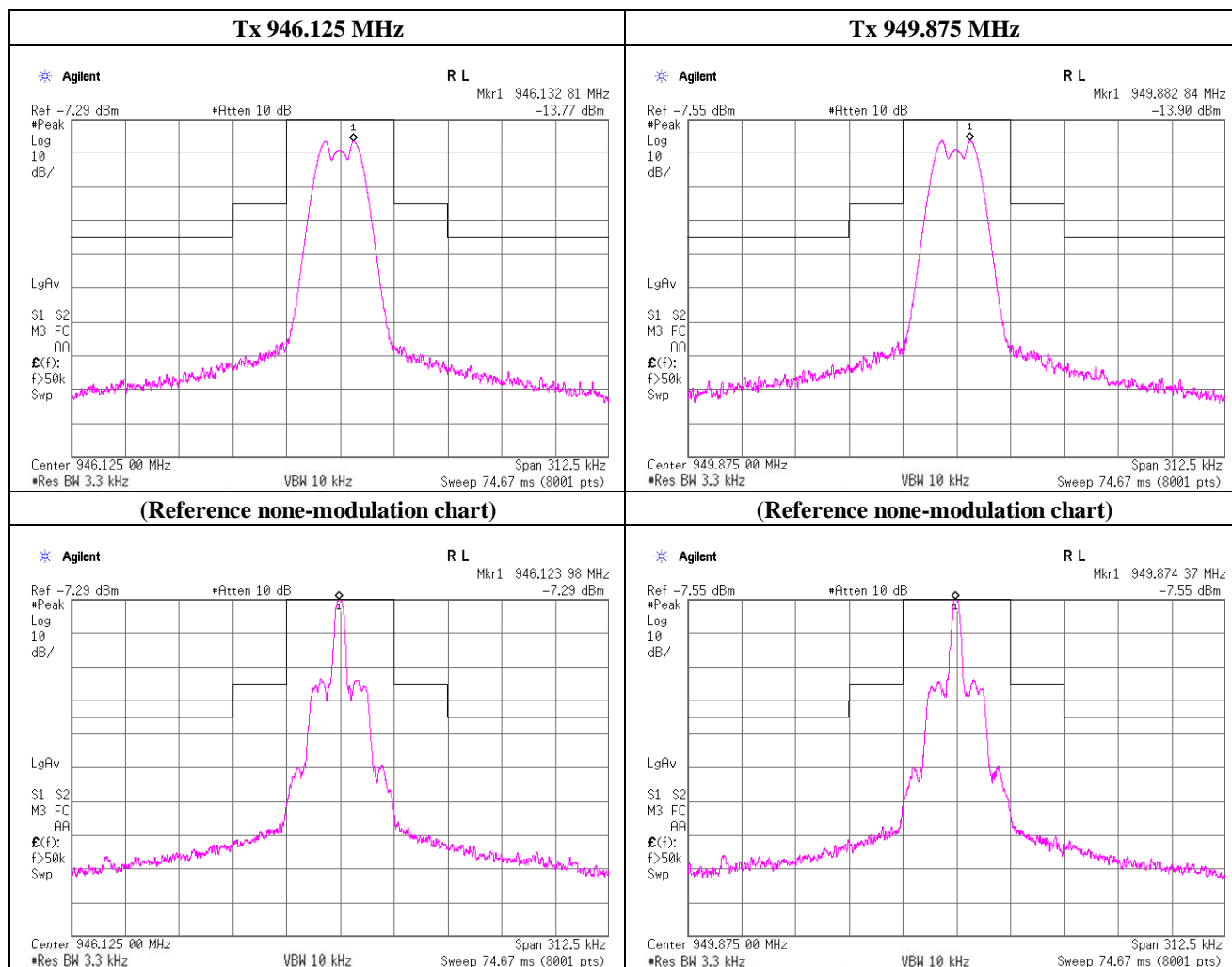
Facsimile : +81 463 50 6401

Field strength of spurious radiation (Emission masks)

UL Japan, Inc. Shonan EMC Lab.
No.5 Shielded Room

Company Audio-Technica Corporation
Equipment UHF SYNTHESIZED WIRELESS TRANSMITTER
Model ATW-T6001 S
Serial No. US002
Power DC 3 V
Mode Transmitting Low power
modulation at 2.5kHz at 16dB over 50%

Regulation FCC part 74, section 74.861(e)(6)
Date May 1, 2015
Temperature 25 deg.C
Humidity 47 %RH
ENGINEER Kenichi Adachi



UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Revised date : November 11, 2015

Frequency Stability

Company	Audio-Technica Corporation	UL Japan, Inc.
Equipment	UHF SYNTHESIZED WIRELESS TRANSMITTER	Shonan EMC Lab. No.5 Shielded room
Model	ATW-T6001 S	Regulation FCC part 74 section 74.861(e)(4)
Serial No.	US002	Date May 11, 2015
Power	DC 3 V	Temperature 25 deg.C
Mode	Transmitting 946.125 MHz	Humidity 32 %RH
	High power (*High power mode and Low power mode same tolerance)	ENGINEER Yosuke Ishikawa

Temperature Variation: -30 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	946.1250	946.124636	-0.000364	-0.00004	0.005	0.0486 ppm
after 2 minutes	946.1250	946.124562	-0.000438	-0.00005	0.005	-0.0211 ppm
after 5 minutes	946.1250	946.124728	-0.000272	-0.00003	0.005	0.1564 ppm
after 10 minutes	946.1250	946.124856	-0.000144	-0.00002	0.005	0.2928 ppm

Temperature Variation: -20 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	946.1250	946.124391	-0.000609	-0.00006	0.005	-0.2103 ppm
after 2 minutes	946.1250	946.124324	-0.000676	-0.00007	0.005	-0.2727 ppm
after 5 minutes	946.1250	946.124352	-0.000648	-0.00007	0.005	-0.2410 ppm
after 10 minutes	946.1250	946.124340	-0.000660	-0.00007	0.005	-0.2526 ppm

Temperature Variation: -10 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	946.1250	946.124240	-0.000760	-0.00008	0.005	-0.3699 ppm
after 2 minutes	946.1250	946.124234	-0.000766	-0.00008	0.005	-0.3678 ppm
after 5 minutes	946.1250	946.124234	-0.000766	-0.00008	0.005	-0.3657 ppm
after 10 minutes	946.1250	946.124234	-0.000766	-0.00008	0.005	-0.3646 ppm

Temperature Variation: 0 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	946.1250	946.124313	-0.000687	-0.00007	0.005	-0.2928 ppm
after 2 minutes	946.1250	946.124326	-0.000674	-0.00007	0.005	-0.2706 ppm
after 5 minutes	946.1250	946.124369	-0.000631	-0.00007	0.005	-0.2230 ppm
after 10 minutes	946.1250	946.124374	-0.000626	-0.00007	0.005	-0.2167 ppm

Temperature Variation: 10 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	946.1250	946.124517	-0.000483	-0.00005	0.005	-0.0772 ppm
after 2 minutes	946.1250	946.124590	-0.000410	-0.00004	0.005	0.0085 ppm
after 5 minutes	946.1250	946.124592	-0.000408	-0.00004	0.005	0.0127 ppm
after 10 minutes	946.1250	946.124596	-0.000404	-0.00004	0.005	0.0180 ppm

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Frequency Stability

Temperature Variation: 20 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	946.1250	946.124590	-0.000410	-0.00004	0.005
after 2 minutes	946.1250	946.124582	-0.000418	-0.00004	0.005
after 5 minutes	946.1250	946.124580	-0.000420	-0.00004	0.005
after 10 minutes	946.1250	946.124579	-0.000421	-0.00004	0.005

(reference)
difference by
data of normal
condition

Temperature Variation: 30 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	946.1250	946.124478	-0.000522	-0.00006	0.005
after 2 minutes	946.1250	946.124433	-0.000567	-0.00006	0.005
after 5 minutes	946.1250	946.124423	-0.000577	-0.00006	0.005
after 10 minutes	946.1250	946.124422	-0.000578	-0.00006	0.005

-0.1184 ppm
-0.1575 ppm
-0.1659 ppm
-0.1659 ppm

Temperature Variation: 40 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	946.1250	946.124218	-0.000782	-0.00008	0.005
after 2 minutes	946.1250	946.124185	-0.000815	-0.00009	0.005
after 5 minutes	946.1250	946.124186	-0.000814	-0.00009	0.005
after 10 minutes	946.1250	946.124185	-0.000815	-0.00009	0.005

-0.3932 ppm
-0.4196 ppm
-0.4164 ppm
-0.4164 ppm

Temperature Variation: 50 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	946.1250	946.124016	-0.000984	-0.00010	0.005
after 2 minutes	946.1250	946.123957	-0.001043	-0.00011	0.005
after 5 minutes	946.1250	946.123947	-0.001053	-0.00011	0.005
after 10 minutes	946.1250	946.123941	-0.001059	-0.00011	0.005

-0.6067 ppm
-0.6606 ppm
-0.6690 ppm
-0.6743 ppm

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Revised date : November 11, 2015

Frequency Stability

Company	Audio-Technica Corporation	UL Japan, Inc.
Equipment	UHF SYNTHESIZED WIRELESS TRANSMITTER	Shonan EMC Lab. No.5 Shielded room
Model	ATW-T6001 S	Regulation FCC part 74 section 74.861(e)(4)
Serial No.	US002	Date May 11, 2015
Power	DC 3 V	Temperature 25 deg.C
Mode	Transmitting 949.875 MHz	Humidity 32 %RH
		ENGINEER Yosuke Ishikawa

High power (*High power mode and Low power mode same tolerance)

Temperature Variation: -30 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	949.8750	949.874852	-0.000148	-0.00002	0.005	0.2579 ppm
after 2 minutes	949.8750	949.874873	-0.000127	-0.00001	0.005	0.2958 ppm
after 5 minutes	949.8750	949.874879	-0.000121	-0.00001	0.005	0.3085 ppm
after 10 minutes	949.8750	949.874897	-0.000103	-0.00001	0.005	0.3316 ppm

Temperature Variation: -20 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	949.8750	949.874442	-0.000558	-0.00006	0.005	-0.1737 ppm
after 2 minutes	949.8750	949.874339	-0.000661	-0.00007	0.005	-0.2664 ppm
after 5 minutes	949.8750	949.874346	-0.000654	-0.00007	0.005	-0.2527 ppm
after 10 minutes	949.8750	949.874326	-0.000674	-0.00007	0.005	-0.2695 ppm

Temperature Variation: -10 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	949.8750	949.874236	-0.000764	-0.00008	0.005	-0.3906 ppm
after 2 minutes	949.8750	949.874234	-0.000766	-0.00008	0.005	-0.3769 ppm
after 5 minutes	949.8750	949.874226	-0.000774	-0.00008	0.005	-0.3790 ppm
after 10 minutes	949.8750	949.874227	-0.000773	-0.00008	0.005	-0.3737 ppm

Temperature Variation: 0 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	949.8750	949.874332	-0.000668	-0.00007	0.005	-0.2895 ppm
after 2 minutes	949.8750	949.874346	-0.000654	-0.00007	0.005	-0.2590 ppm
after 5 minutes	949.8750	949.874325	-0.000675	-0.00007	0.005	-0.2748 ppm
after 10 minutes	949.8750	949.874316	-0.000684	-0.00007	0.005	-0.2800 ppm

Temperature Variation: 10 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	949.8750	949.874573	-0.000427	-0.00004	0.005	-0.0358 ppm
after 2 minutes	949.8750	949.874593	-0.000407	-0.00004	0.005	0.0011 ppm
after 5 minutes	949.8750	949.874594	-0.000406	-0.00004	0.005	0.0084 ppm
after 10 minutes	949.8750	949.874592	-0.000408	-0.00004	0.005	0.0105 ppm

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Frequency Stability

Temperature Variation: 20 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	949.8750	949.874607	-0.000393	-0.00004	0.005
after 2 minutes	949.8750	949.874592	-0.000408	-0.00004	0.005
after 5 minutes	949.8750	949.874586	-0.000414	-0.00004	0.005
after 10 minutes	949.8750	949.874582	-0.000418	-0.00004	0.005

(reference)
difference by
data of normal
condition

Temperature Variation: 30 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	949.8750	949.874438	-0.000562	-0.00006	0.005
after 2 minutes	949.8750	949.874423	-0.000577	-0.00006	0.005
after 5 minutes	949.8750	949.874426	-0.000574	-0.00006	0.005
after 10 minutes	949.8750	949.874426	-0.000574	-0.00006	0.005

-0.1779 ppm
-0.1779 ppm
-0.1684 ppm
-0.1642 ppm

Temperature Variation: 40 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	949.8750	949.874276	-0.000724	-0.00008	0.005
after 2 minutes	949.8750	949.874207	-0.000793	-0.00008	0.005
after 5 minutes	949.8750	949.874194	-0.000806	-0.00008	0.005
after 10 minutes	949.8750	949.874185	-0.000815	-0.00009	0.005

-0.3485 ppm
-0.4053 ppm
-0.4127 ppm
-0.4179 ppm

Temperature Variation: 50 deg.C

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	949.8750	949.873960	-0.001040	-0.00011	0.005
after 2 minutes	949.8750	949.873940	-0.001060	-0.00011	0.005
after 5 minutes	949.8750	949.873938	-0.001062	-0.00011	0.005
after 10 minutes	949.8750	949.873939	-0.001061	-0.00011	0.005

-0.6811 ppm
-0.6864 ppm
-0.6822 ppm
-0.6769 ppm

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Revised date : November 11, 2015

Frequency Stability

Company	Audio-Technica Corporation	UL Japan, Inc.
Equipment	UHF SYNTHESIZED WIRELESS TRANSMITTER	Shonan EMC Lab. No.5 Shielded room
Model	ATW-T6001 S	Regulation FCC part 74 section 74.861(e)(4)
Serial No.	US002	Date May 10, 2015
Power	DC 3 V	Temperature 25 deg.C
Mode	Transmitting 946.125 MHz	Humidity 47 %RH
	High power (*High power mode and Low power mode same tolerance)	ENGINEER Kenichi Adachi

Voltage Variation: DC 3.45 V (Reference data)**Temperature Variation: 20 deg.C**

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	946.1250	946.124457	-0.000543	-0.00006	0.005	-0.0815 ppm
after 2 minutes	946.1250	946.124452	-0.000548	-0.00006	0.005	-0.0656 ppm
after 5 minutes	946.1250	946.124451	-0.000549	-0.00006	0.005	-0.0499 ppm
after 10 minutes	946.1250	946.124449	-0.000551	-0.00006	0.005	-0.0303 ppm

Voltage Variation: DC 3 V**Temperature Variation: 20 deg.C**

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	946.1250	946.124534	-0.000466	-0.00005	0.005
after 2 minutes	946.1250	946.124515	-0.000485	-0.00005	0.005
after 5 minutes	946.1250	946.124498	-0.000502	-0.00005	0.005
after 10 minutes	946.1250	946.124478	-0.000522	-0.00006	0.005

Voltage Variation: DC 2.55 V (Reference data)**Temperature Variation: 20 deg.C**

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	946.1250	946.124472	-0.000528	-0.00006	0.005	-0.0657 ppm
after 2 minutes	946.1250	946.124463	-0.000537	-0.00006	0.005	-0.0547 ppm
after 5 minutes	946.1250	946.124461	-0.000539	-0.00006	0.005	-0.0391 ppm
after 10 minutes	946.1250	946.124460	-0.000540	-0.00006	0.005	-0.0193 ppm

Voltage Variation (end point voltage) : DC 1.8 V**Temperature Variation: 20 deg.C**

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance Limit	Limit	(reference) difference by data of normal condition
startup	946.1250	946.124464	-0.000536	-0.00006	0.005	-0.0737 ppm
after 2 minutes	946.1250	946.124451	-0.000549	-0.00006	0.005	-0.0670 ppm
after 5 minutes	946.1250	946.124457	-0.000543	-0.00006	0.005	-0.0437 ppm
after 10 minutes	946.1250	946.124457	-0.000543	-0.00006	0.005	-0.0219 ppm

UL Japan, Inc.**Shonan EMC Lab.**

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Revised date : November 11, 2015

Frequency Stability

Company	Audio-Technica Corporation	UL Japan, Inc.
Equipment	UHF SYNTHESIZED WIRELESS TRANSMITTER	Shonan EMC Lab. No.5 Shielded room
Model	ATW-T6001 S	Regulation FCC part 74 section 74.861(e)(4)
Serial No.	US002	Date May 10, 2015
Power	DC 3 V	Temperature 25 deg.C
Mode	Transmitting 949.875 MHz	Humidity 47 %RH
	High power (*High power mode and Low power mode same tolerance)	ENGINEER Kenichi Adachi

Voltage Variation: DC 3.45 V (Reference data)**Temperature Variation: 20 deg.C**

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	(reference) difference by data of normal condition
startup	949.8750	949.874473	-0.000527	-0.00006	0.005	-0.0127 ppm
after 2 minutes	949.8750	949.874465	-0.000535	-0.00006	0.005	-0.0152 ppm
after 5 minutes	949.8750	949.874460	-0.000540	-0.00006	0.005	-0.0159 ppm
after 10 minutes	949.8750	949.874456	-0.000544	-0.00006	0.005	-0.0106 ppm

Voltage Variation: DC 3 V**Temperature Variation: 20 deg.C**

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
startup	949.8750	949.874485	-0.000515	-0.00005	0.005
after 2 minutes	949.8750	949.874480	-0.000520	-0.00005	0.005
after 5 minutes	949.8750	949.874475	-0.000525	-0.00006	0.005
after 10 minutes	949.8750	949.874466	-0.000534	-0.00006	0.005

Voltage Variation: DC 2.55 V (Reference data)**Temperature Variation: 20 deg.C**

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)	
startup	949.8750	949.874460	-0.000540	-0.00006	0.005	-0.0260 ppm
after 2 minutes	949.8750	949.874456	-0.000544	-0.00006	0.005	-0.0250 ppm
after 5 minutes	949.8750	949.874455	-0.000545	-0.00006	0.005	-0.0209 ppm
after 10 minutes	949.8750	949.874456	-0.000544	-0.00006	0.005	-0.0105 ppm

Voltage Variation (end point voltage) : DC 1.8 V**Temperature Variation: 20 deg.C**

Test Conditions	Original Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance Limit	Limit	
startup	949.8750	949.874486	-0.000514	-0.00005	0.005	0.0007 ppm
after 2 minutes	949.8750	949.874470	-0.000530	-0.00006	0.005	-0.0105 ppm
after 5 minutes	949.8750	949.874466	-0.000534	-0.00006	0.005	-0.0095 ppm
after 10 minutes	949.8750	949.874462	-0.000538	-0.00006	0.005	-0.0043 ppm

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

APPENDIX 2 Test Instruments

EMI test equipment (1/2)

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MRS-01	Radiocommunication Service Monitor	Rohde & Schwarz	CMS54	840.0009.54	AT	2015/03/10 * 12
KFG-02	Programmable Function Generator	Thurlby Thandar	TG1304	156125	AT	Pre Check
SPM-06	Power Meter	Anritsu	ML2495A	0850009	AT	2015/04/07 * 12
SPSS-01	Power Sensor	Anritsu	MA2444D	0738366	AT	2015/04/07 * 12
SSA-03	Spectrum Analyzer	Agilent	E4448A	MY48250152	AT	2015/02/24 * 12
SAT10-09	Attenuator	Weinschel Corp.	54A-10	W5692	AT	2014/11/21 * 12
SCC-G13	Coaxial Cable	Suhner	SUCOFLEX 102	31599/2	AT	2015/03/11 * 12
SOS-09	Humidity Indicator	A&D	AD-5681	4061484	AT	2014/12/24 * 12
SAEC-01(NSA)	Semi-Anechoic Chamber	TDK	SAEC-01(NSA)	1	RE	2014/07/09 * 12
SBA-01	Biconical Antenna	Schwarzbeck	BBA9106	91032664	RE	2014/10/18 * 12
KAT6-04	Attenuator	INMET	18N-6dB	-	RE	2014/12/19 * 12
SCC-A1/A3/A5/A7/A8/A13/SRSE-01	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-269(RF Selector)	RE	2015/04/17 * 12
SLA-01	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP 9108-A0888	RE	2014/10/18 * 12
SAT10-01	Attenuator	JFW	50HF-010N	-	RE	2015/02/18 * 12
SAT3-09	Attenuator	JFW	50HF-003N	-	RE	2014/09/02 * 12
SCC-A2/A4/A6/A7/A8/A13/SRSE-01	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-269(RF Selector)	RE	2015/04/17 * 12
SAF-01	Pre Amplifier	SONOMA	310N	290211	RE	2015/02/18 * 12
STR-01	Test Receiver	Rohde & Schwarz	ESU40	100093	RE	2014/11/11 * 12
SOS-01	Humidity Indicator	A&D	AD-5681	4062555	RE	2014/10/30 * 12
SJM-13	Measure	ASKUL	-	-	RE	-
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV(RE,CE,RFLMF)	-	RE	-
SSG-02	Signal Generator	Agilent	E8257D-540	MY48051404	RE	2015/03/02 * 12
SCC-07	Coaxial Cable	Fujikura	5D2W	-	RE	2014/09/09 * 12
SDA-07	Dipole Antenna	Schwarzbeck	VHAP	1177	RE	2015/03/11 * 12
SDA-08	Dipole Antenna	Schwarzbeck	UHAP	1158	RE	2015/03/11 * 12
SAEC-03(NSA)	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	RE	2014/07/14 * 12
SHA-03	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-739	RE	2014/08/12 * 12
SCC-G04	Coaxial Cable	Junkosha	J12J102207-00	JUN-12-14-018	RE	2014/06/24 * 12
SAT20-01	Attenuator(above1GHz)	Agilent	8493C-020	74889	RE	2014/11/21 * 12
SFL-01	Highpass Filter	MICRO-TRONICS	HPM50115	001	RE	2014/11/21 * 12
SAF-06	Pre Amplifier	TOYO Corporation	TPA0118-36	1440491	RE	2014/05/23 * 12
SCC-G23	Coaxial Cable	Suhner	SUCOFLEX 104	297342/4	RE	2014/05/15 * 12
SSA-02	Spectrum Analyzer	Agilent	E4448A	MY48250106	RE	2015/03/26 * 12
SOS-05	Humidity Indicator	A&D	AD-5681	4062518	RE	2014/10/30 * 12
SJM-15	Measure	ASKUL	-	-	RE	-

The expiration date of the calibration is the end of the expired month .

As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

All equipment is calibrated with valid calibrations . Each measurement data is traceable to the national or international standards .

Test Item :

RE: Radiated emission tests ,

AT: Antenna terminal conducted tests

APPENDIX 2 Test Instruments

EMI test equipment (2/2)

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SCC-G16	Coaxial Cable	Suhner	SUCOFLEX 102	32704/2	RE	2015/03/11 * 12
SHA-RS01	Horn Antenna	Schwarzbeck	BBHA9120D	770	RE	2014/08/12 * 12
SLP-02	Loop Antenna	Rohde & Schwarz	HFH2-Z2	100218	RE	2014/11/30 * 12
SAT6-08	Attenuator	HIROSE ELECTRIC CO.,LTD.	AT-406(40)	-	RE	2014/08/27 * 12
SCC-C1/C2/C3/C4/C5/C10/SRSE-03	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-271(RF Selector)	RE	2015/04/17 * 12
SAF-03	Pre Amplifier	SONOMA	310N	290213	RE	2015/02/18 * 12
STR-06	Test Receiver	Rohde & Schwarz	ESCI	101259	RE	2015/03/24 * 12
STS-05	Digital Hitester	Hioki	3805-50	080997828	AT	2014/11/11 * 12
SCH-01	Temperature and Humidity Chamber	Espec	PL-1KT	14020837	AT	2015/04/22 * 12

The expiration date of the calibration is the end of the expired month .

As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

All equipment is calibrated with valid calibrations . Each measurement data is traceable to the national or international standards .

Test Item :

RE: Radiated emission tests ,

AT: Antenna terminal conducted tests