

FCC TEST REPORT

REPORT NO.: 060925FIA02

MODEL NO.: 00594RA4

RECEIVED: Sept. 29, 2006

TESTED: Sept. 29 ~ Oct. 10, 2006

ISSUED: Oct. 10, 2006

APPLICANT: Chaney Instrument Co.

ADDRESS: AB 29/F HaiYing Building South Caitian
Road Futian District Shenzhen China

ISSUED BY: ADT (Shanghai) Corporation

ADDRESS: 2F, Building C, No.1618, Yishan Rd., 201103,
Shanghai, China

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ADT (Shanghai) Corporation.



V1.0

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1 CERTIFICATION

PRODUCT: wireless thermo-hygrometer
MODEL NO.: 00594RA4
APPLICANT: Chaney Instrument Co.
TESTED: Oct. 10, 2006
TEST ITEM: Engineering Sample
STANDARDS: FCC Part 15:2005,
Subpart A (Section 15.35),
Subpart C (Section 15.207, 15.209 and 15.231)
ANSI C63.4-2003

The above equipment has been tested by **ADT (Shanghai) Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

TECHNICAL
ACCEPTANCE : _____ , **DATE:** OCT. 10, 2006
(Bright Tong)
Engineering Supervisor

APPROVED BY : _____ , **DATE:** OCT. 10, 2006
(Wallace Pan)
Director of Operations

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
Standard Paragraph	Test Type	Result	Remarks
15.207	Conducted Emission Test	N/A	
15.231(c)	20dB Occupied Bandwidth Measurement (Mode 1)	PASS	Meet the requirement of limit
15.209 15.231(e)	Radiated Emission Test (Mode 1)	PASS	Minimum passing margin is -8.72 dB at 1301.76 MHz
	Radiated Emission Test (Mode 2)	PASS	Minimum passing margin is -6.56 dB at 1301.76 MHz
	Radiated Emission Test (Mode 3)	PASS	Minimum passing margin is -9.48 dB at 1301.76 MHz
	Radiated Emission Test (Mode 4)	PASS	Minimum passing margin is -7.6 dB at 1301.76 MHz

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

Measurement	Value
Conducted emissions	1.8dB
Radiated emissions	3.5dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	wireless thermo-hygrometer
MODEL NO.	00594RA4
POWER SUPPLY	3 Vdc from battery
MODULATION TYPE	ASK
CARRIER FREQUENCY OF EACH CHANNEL	433.92MHz
NUMBER OF CHANNEL	1
ANTENNA TYPE	Soldered on PCB
DATA CABLE SUPPLIED	N/A
I/O PORTS	N/A

NOTE: The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

One channel is provided to this EUT:

Channel	Frequency
1	433.92 MHz

**Test Mode Applicability AND TESTED CHANNEL DETAIL:**

EUT configure mode	Applicable to					Description
	PLC	20dB OBM	RE<1G	RE≥1G	APM	
1	--	--	√	√	--	31s time interval
2	--	--	√	√	--	37s time interval
3	--	√	√	√	--	39s time interval
4	--	--	√	√	--	41s time interval

Where PLC: Power Line Conducted Emission RE<1G RE: Radiated Emission below 1GHz
 RE≥1G: Radiated Emission above 1GHz APM: Antenna Port Measurement
 20dB OBM: 20dB Occupied Bandwidth Measurement

Radiated Emission Test (Below 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, and X.Y.Z. axis.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Available Channel	Tested Channel	Modulation Type	Axis
1	1	ASK	X

Radiated Emission Test (Above 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, and X.Y.Z. axis.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Available Channel	Tested Channel	Modulation Type	Axis
1	1	ASK	X

20dB Occupied Bandwidth Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, and X.Y.Z. axis.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Available Channel	Tested Channel	Modulation Type	Axis
1	1	ASK	X

3.3 DESCRIPTION OF SUPPORT UNITS

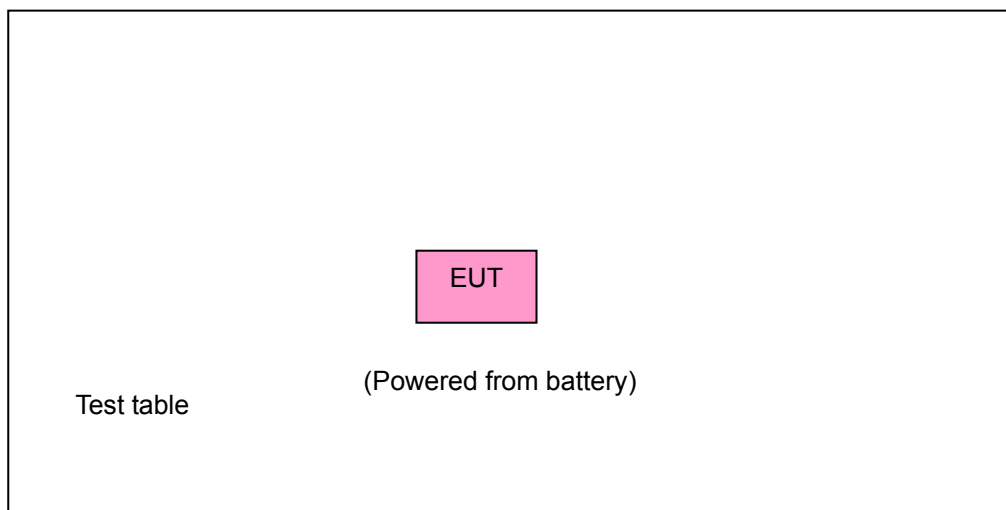
The EUT is a Temperature, Humidity and RCC Transmitter. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.231)
ANSI C63.4- 2003

All test items have been performed and recorded as per the above standards.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit.



4 EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

TEST STANDARD:

FCC Part 15: 2005, Subpart C (Section: 15.207)

FREQUENCY (MHz)	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

NOTES: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

4.1.2 TEST RESULT

Since the EUT does not have AC port, the test item is not applicable.

4.2 20dB OCCUPIED BANDWIDTH MEASUREMENT

4.2.1 LIMITS OF BAND EDGES MEASUREMENT

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for device operating above 70 MHz and below 900 MHz.

Fundamental Frequency (MHz)	Limit of 20 dB Bandwidth(kHz)
433.92	1084.8

4.2.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SIGNAL ANALYZER Rohde & Schwarz	FSP30	E1S1002	Mar. 16, 2007

NOTE: The calibration interval of the above test instruments is 12 months.

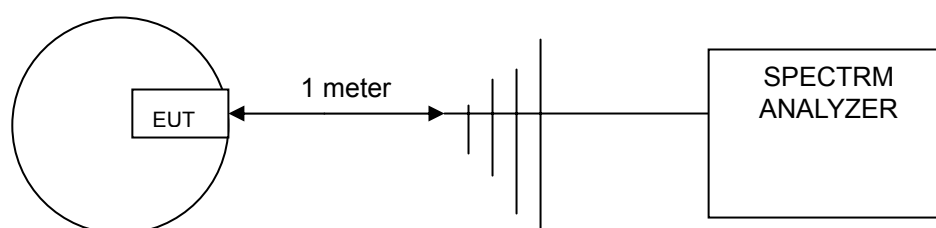
4.2.3 TEST PROCEDURES

1. The EUT was placed on the turning table.
2. The signal was coupled to the spectrum analyzer through an antenna.
3. Set the resolution bandwidth to 10 kHz and video bandwidth to 1MHz then select Peak function to scan the channel frequency.
4. The 20dB bandwidth was measured and recorded.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

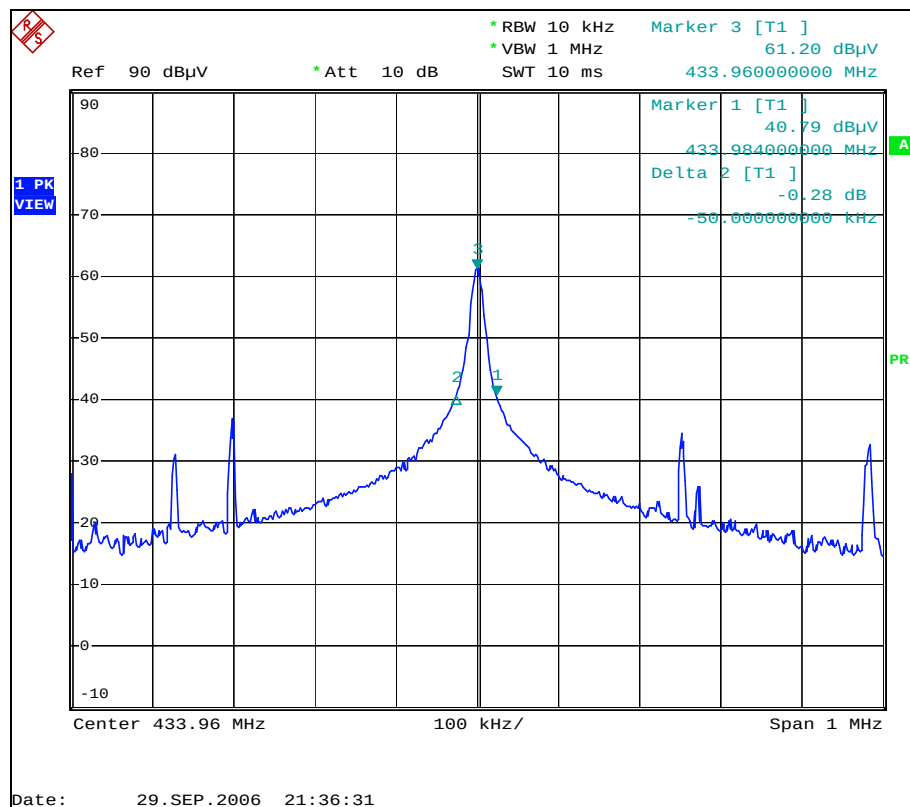
4.2.5 TEST SETUP



4.2.6 TEST RESULTS

Frequency (MHz)	20 dB bandwidth (kHz)	Maximum limit (kHz)	PASS/FAIL
433.92	50	1084.80	PASS

The plot of test result is attached as below.



4.3 RADIATED EMISSION MEASUREMENT

4.3.1 LIMITS OF RADIATED EMISSION MEASUREMENT

TEST STANDARD:

FCC Part 15: 2005, Subpart C (Section: 15.205)

FCC Part 15: 2005, Subpart C (Section: 15.209)

FCC Part 15: 2005, Subpart C (Section: 15.231(e))

According to 15.231 the field strength of emissions from intentional radiators operated under these frequencies bands shall not exceed the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental		Field Strength of Spurious	
	uV/meter	dBuV/meter	uV/meter	dBuV/meter
40.66 – 40.70	1000	60.00	100	40.00
70 – 130	500	53.98	50	36.98
130 – 174	500 to 1500	53.98 to 63.52	50 to 150	36.98 to 43.52
174 – 260	1500	63.52	150	43.52
260 – 470	1500 to 5000	63.52 to 73.98	150 to 500	43.52 to 53.98
Above 470	5000	73.98	500	53.98

NOTE:

(1) Where F is the frequency in MHz, the formula for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, uV/m at 3 meters = $22.72727(F) - 2454.545$; for the band 260-470 MHz, uV/m at 3 meters = $16.6667(F) - 2833.3333$.

The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

(2) The above field strength limits are specified at a distance of 3meters. The tighter limits apply at the band edges.

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:



Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower



4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	E1R1001	Apr. 19, 2007
BILOG Antenna SCHWARZBECK	VULB9168	E1A1001	Sept. 26, 2007
Preamplifier Agilent	8447D	E1A2001	Jan. 27, 2007
Preamplifier Agilent	8449B	E1A2002	Jan. 27, 2007
Double Ridged Broadband Horn Antenna Schwarzbeck	BBHA 9120D	E1A1002	Feb. 15, 2007
Spectrum Analyzer Agilent	E4403B	E1S1001	Jan. 13, 2007
Signal Analyzer ROHDE & SCHWARZ	FSP30	E1S1002	May. 16, 2007
RF signal cable Woken	RG-402	E1CBH01	May. 30, 2007
RF signal cable Woken	RG-402	E1CBH05	May. 30, 2007
RF signal cable Woken	RG-402	E1CBH07	May. 30, 2007
RF signal cable Woken	RG-412	E1CBL02	May. 30, 2007
RF signal cable Woken	RG-412	E1CBL03	May. 30, 2007
RF signal cable Woken	RG-412	E1CBL04	May. 30, 2007
Software ADT	ADT_Radiated_V7.5	N/A	N/A

- NOTE:**
1. The calibration interval of the above test instruments is 12 months.
 2. “*” = These equipment are used for the final measurement.
 3. The horn antenna and Agilent preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The Spectrum Analyzer (model: FSP30) and RF signal cable (SERIAL: E1CBH05&E1CBH07) are used only for the measurement of emission frequency above 1GHz if tested.



4.3.3 TEST PROCEDURE

- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

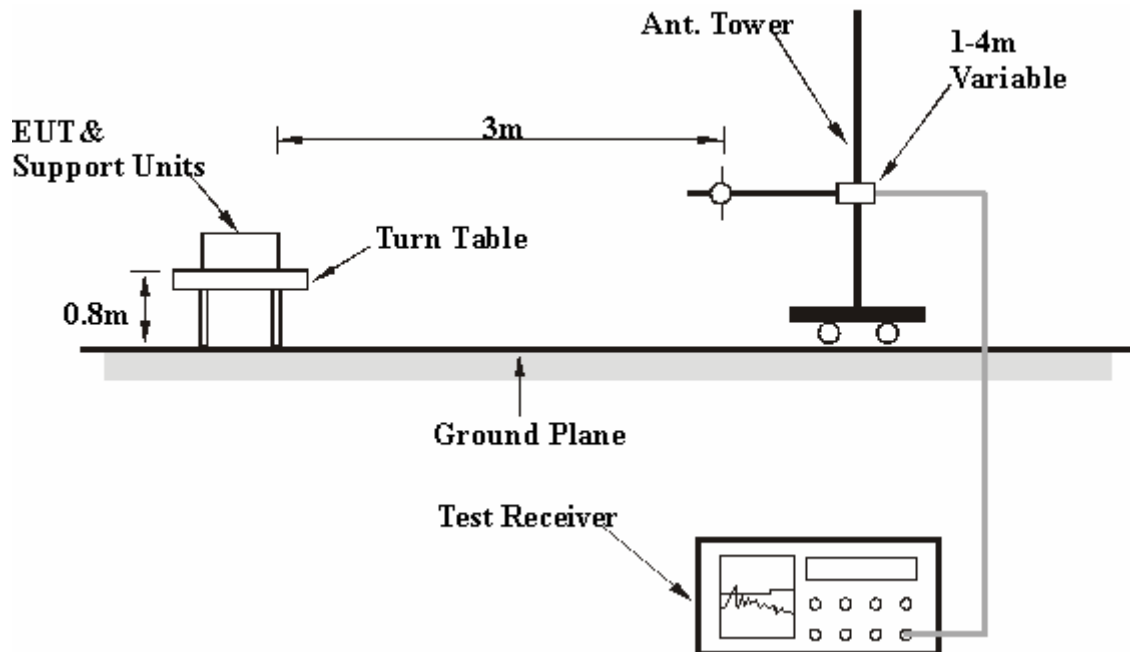
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection (PK) at frequency above 1GHz.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

4.3.6 EUT OPERATING CONDITIONS

Put the EUT at the centre of the test table and the receiver 10cm far from it, then have the test.

4.3.7 TEST RESULTS

Mode 1

Below 1GHz

EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	30 ~ 1000 MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3 Vdc from battery
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	BRIGHT		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	59.11QP	14.84	1.71	16.55	40	-23.45	100	54
2	163.37QP	16.75	-7.18	9.57	43.5	-33.93	117	81
*3	433.92PK	19.74	43.43	63.17	92.87	-29.7	100	266
*3	433.92AV	19.74	27.43	47.17	72.87	-25.7	100	266
4	459.23QP	20.26	-5.28	14.98	46	-31.02	294	19
5	512.58QP	21.14	-8.93	12.21	46	-33.79	100	325
6	643.52QP	23.81	-7.18	16.63	46	-29.37	400	19
7	837.52QP	26.24	-11.06	15.18	46	-30.82	100	182
8	867.84PK	26.45	12.48	38.93	72.87	-33.94	102	182
8	867.84AV	26.45	-3.52	22.93	52.87	-29.94	102	182

- NOTE:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
 2. Correction Factor (dB) = Antenna Factor (dB) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “*” = Fundamental frequency
 6. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (66 \times 0.24 / 100) = -16.00\text{dB}$$

Please see page 21 for plotted duty.



EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	30 ~ 1000 MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3 Vdc from battery
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	BRIGHT		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	54.25QP	15.18	-7.67	7.51	40	-32.49	100	288
2	179.9QP	14.65	1.28	15.93	43.5	-27.57	100	325
3	371.93QP	18.08	-6.92	11.16	46	-34.84	100	286
*4	433.92PK	19.74	50.84	70.58	92.87	-22.29	112	164
*4	433.92AV	19.74	34.84	54.58	72.87	-18.29	112	164
5	517.42QP	21.24	-7.83	13.41	46	-32.59	100	283
6	643.52QP	23.81	-9.93	13.88	46	-32.12	100	113
7	682.33QP	24.3	-7.9	16.4	46	-29.6	100	183
8	867.84PK	26.45	17.71	44.16	72.87	-28.71	144	278
8	867.84AV	26.45	1.71	28.16	52.87	-24.71	144	278

- NOTE:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
 2. Correction Factor (dB) = Antenna Factor (dB) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “*” = Fundamental frequency
 6. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (66 \times 0.24 / 100) = -16.00\text{dB}$$

Please see page 21 for plotted duty.

Above 1GHz

EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	1GHz – 5GHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3Vdc from battery
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	DETECTOR FUNCTION	Peak / Average
TESTED BY	Bright		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	1301.76PK	30.33	21.51	51.84	74	-22.16	100	33
1	1301.76AV	30.33	5.51	35.84	54	-18.16	100	33
2	1735.68PK	30.8	19.61	50.41	74	-23.59	100	45
2	1735.68AV	30.8	3.61	34.41	54	-19.59	100	45
3	2169.60PK	34.59	16.94	51.53	74	-22.47	100	136
3	2169.60AV	34.59	0.94	35.53	54	-18.47	100	136
4	2603.52PK	35.29	16.88	52.17	74	-21.83	100	23
4	2603.52AV	35.29	0.88	36.17	54	-17.83	100	23
5	3037.44PK	36.35	17.66	54.01	74	-19.99	100	36
5	3037.44AV	36.35	1.66	38.01	54	-15.99	100	36
6	3471.36PK	36.57	15.13	51.7	74	-22.3	100	77
6	3471.36AV	36.57	-0.87	35.7	54	-18.3	100	77
7	3905.28PK	38.66	14.12	52.78	74	-21.22	100	89
7	3905.28AV	38.66	-1.88	36.78	54	-17.22	100	89
8	4339.20PK	39.81	13.21	53.02	74	-20.98	100	64
8	4339.20AV	39.81	-2.79	37.02	54	-16.98	100	64

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)

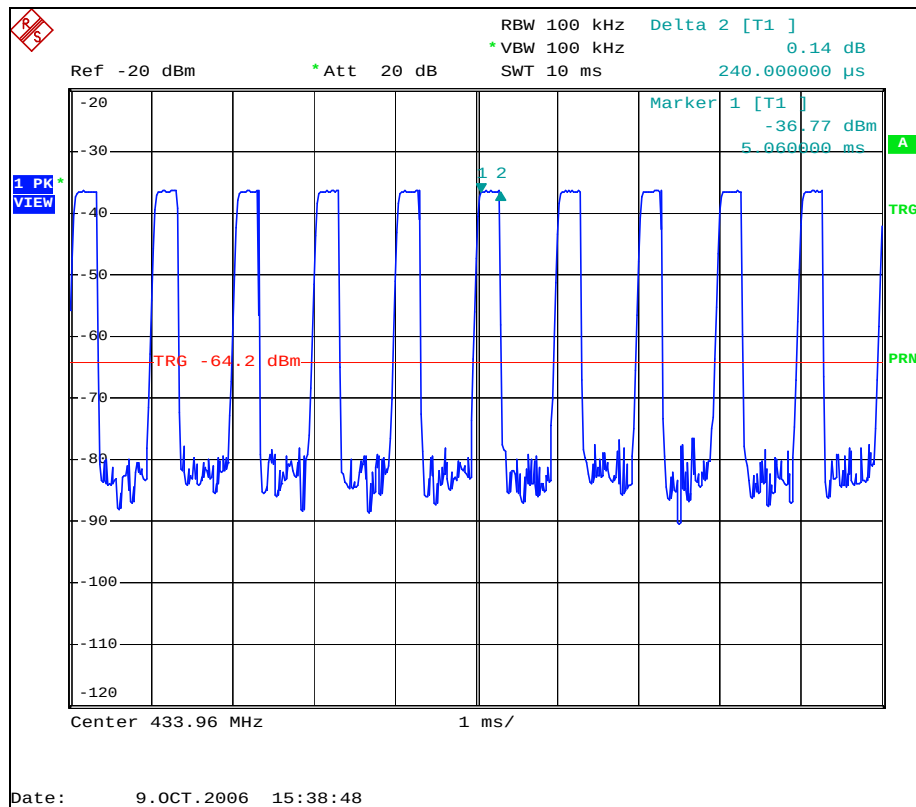
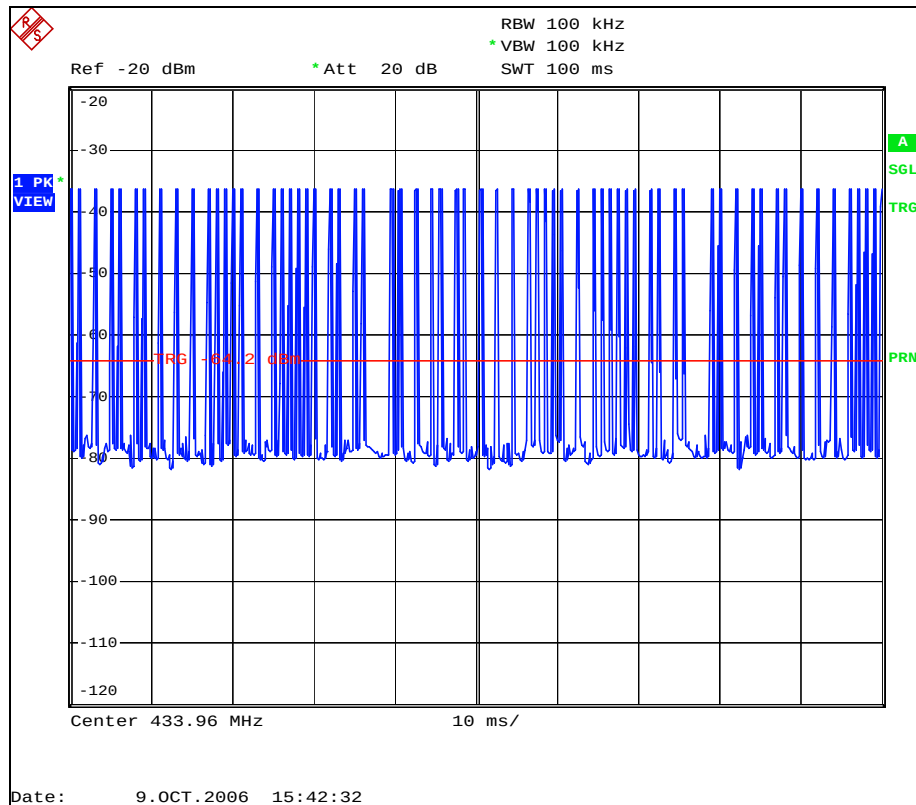
Where the duty factor is calculated from following formula:

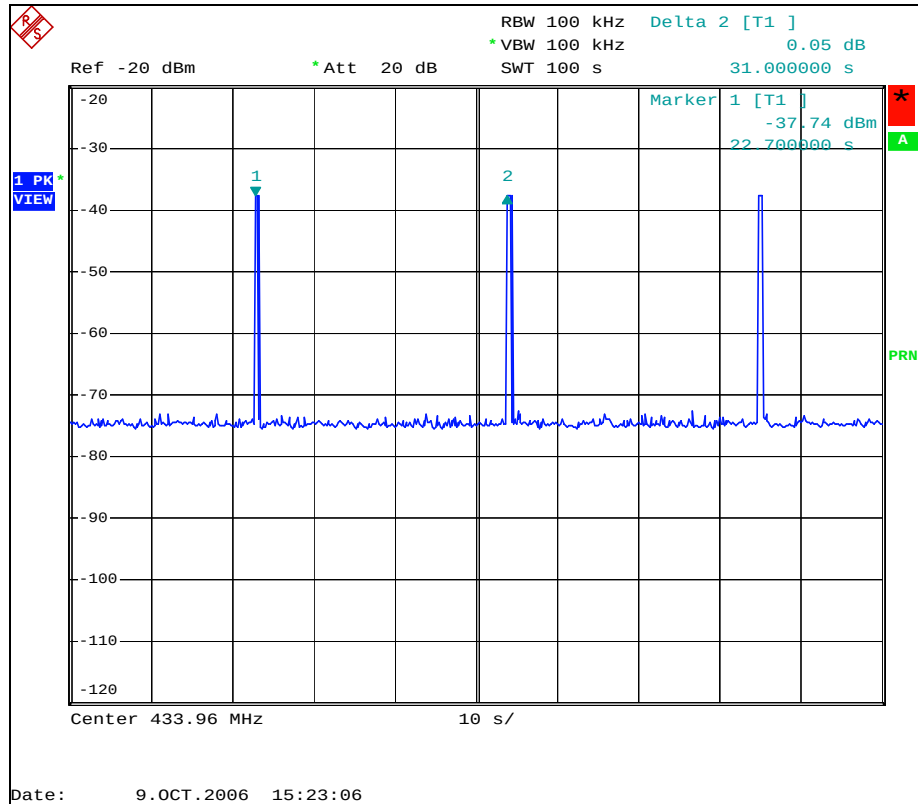
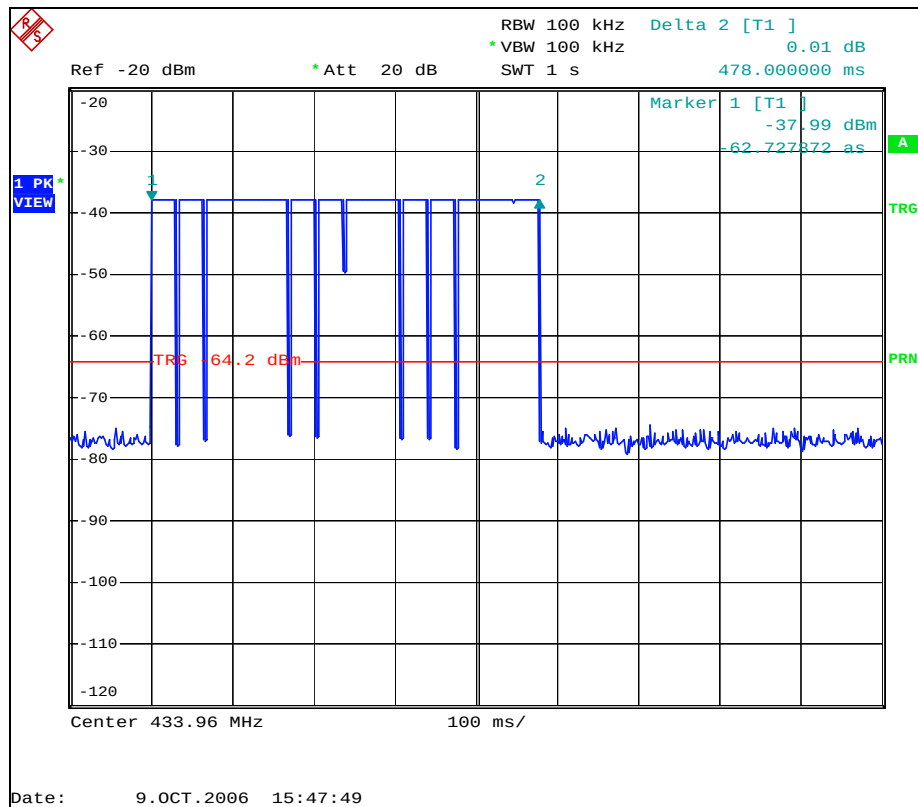
$$20\log (\text{Duty cycle}) = 20\log (66 \times 0.24/100) = -16.00\text{dB}$$

Please see page 21 for plotted duty.

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	1301.76PK	30.33	30.95	61.28	74	-12.72	100	221
1	1301.76AV	30.33	14.95	45.28	54	-8.72	100	221
2	1735.68PK	30.8	23.29	54.09	74	-19.91	100	36
2	1735.68AV	30.8	7.29	38.09	54	-15.91	100	36
3	2169.60PK	34.59	16.92	51.51	74	-22.49	100	49
3	2169.60AV	34.59	0.92	35.51	54	-18.49	100	49
4	2603.52PK	35.29	14.96	50.25	74	-23.75	100	98
4	2603.52AV	35.29	-1.04	34.25	54	-19.75	100	98
5	3037.44PK	36.35	17.39	53.74	74	-20.26	100	56
5	3037.44AV	36.35	1.39	37.74	54	-16.26	100	56
6	3471.36PK	36.57	14.76	51.33	74	-22.67	100	123
6	3471.36AV	36.57	-1.24	35.33	54	-18.67	100	123
7	3905.28PK	38.66	13.12	51.78	74	-22.22	100	265
7	3905.28AV	38.66	-2.88	35.78	54	-18.22	100	265
8	4339.20PK	39.81	12.35	52.16	74	-21.84	100	49
8	4339.20AV	39.81	-3.65	36.16	54	-17.84	100	49

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:
- $$20\log (\text{Duty cycle}) = 20\log (66 \times 0.24 / 100) = -16.00\text{dB}$$
- Please see page 21 for plotted duty.





Mode 2

Below 1GHz

EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	30 ~ 1000 MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3 Vdc from battery
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	BRIGHT		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	200.53QP	12.96	4.48	17.44	43.5	-26.06	184	311
2	224.82QP	14.18	9.56	23.74	46	-22.26	120	125
3	350.33QP	17.48	6.16	23.64	46	-22.36	298	19
*4	433.92PK	19.74	41.34	61.08	92.87	-31.79	100	126
*4	433.92AV	19.74	26.79	46.53	72.87	-26.34	100	126
5	517.42QP	21.24	-7.83	13.41	46	-32.59	120	283
6	696.87QP	24.53	-6.46	18.07	46	-27.93	100	240
7	867.84PK	26.45	13.87	40.32	72.87	-32.55	102	112
7	867.84AV	26.45	-0.68	25.77	52.87	-27.1	102	112
8	905.42QP	27.33	-7.33	20	46	-26	100	60

- NOTE:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
 2. Correction Factor (dB) = Antenna Factor (dB) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “*” = Fundamental frequency
 6. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (78 \times 0.24 / 100) = -14.55\text{dB}$$

Please see page 27 for plotted duty.



EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	30 ~ 1000 MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3 Vdc from battery
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	BRIGHT		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	200.44QP	12.96	4.31	17.27	43.5	-26.23	100	317
2	228.18QP	14.41	11.42	25.83	46	-20.17	100	9
3	342.82QP	17.38	-7.02	10.36	46	-35.64	100	255
4	369.27QP	18.01	6.93	24.94	46	-21.06	100	333
*5	433.92PK	19.74	53.21	72.95	92.87	-19.92	112	134
*5	433.92AV	19.74	38.66	58.4	72.87	-14.47	112	134
6	539.25QP	21.78	-7.34	14.44	46	-31.56	100	171
7	927.25QP	27.69	-6.66	21.03	46	-24.97	100	139
8	867.84PK	26.45	18.48	44.93	72.87	-27.94	144	172
8	867.84AV	26.45	3.93	30.38	52.87	-22.49	144	172

- NOTE:** 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
 2. Correction Factor (dB) = Antenna Factor (dB) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “*” = Fundamental frequency
 6. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
 Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (78 \times 0.24 / 100) = -14.55\text{dB}$$

Please see page 27 for plotted duty.

Above 1GHz

EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	1GHz – 5GHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3Vdc from battery
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	DETECTOR FUNCTION	Peak / Average
TESTED BY	Bright		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	1301.76PK	30.33	24.5	54.83	74	-19.17	100	22
1	1301.76AV	30.33	9.95	40.28	54	-13.72	100	22
2	1735.68PK	30.8	21.2	52	74	-22	101	74
2	1735.68AV	30.8	6.65	37.45	54	-16.55	101	74
3	2169.60PK	34.59	17.28	51.87	74	-22.13	101	68
3	2169.60AV	34.59	2.73	37.32	54	-16.68	101	68
4	2603.52PK	35.29	17.79	53.08	74	-20.92	101	169
4	2603.52AV	35.29	3.24	38.53	54	-15.47	101	169
5	3037.44PK	36.35	16.69	53.04	74	-20.96	101	136
5	3037.44AV	36.35	2.14	38.49	54	-15.51	101	136
6	3471.36PK	36.57	14.58	51.15	74	-22.85	101	257
6	3471.36AV	36.57	0.03	36.6	54	-17.4	101	257
7	3905.28PK	38.66	12.81	51.47	74	-22.53	101	266
7	3905.28AV	38.66	-1.74	36.92	54	-17.08	101	266
8	4339.20PK	39.81	9.67	49.48	74	-24.52	101	312
8	4339.20AV	39.81	-4.88	34.93	54	-19.07	101	312

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)

Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (78 \times 0.24/100) = -14.55\text{dB}$$

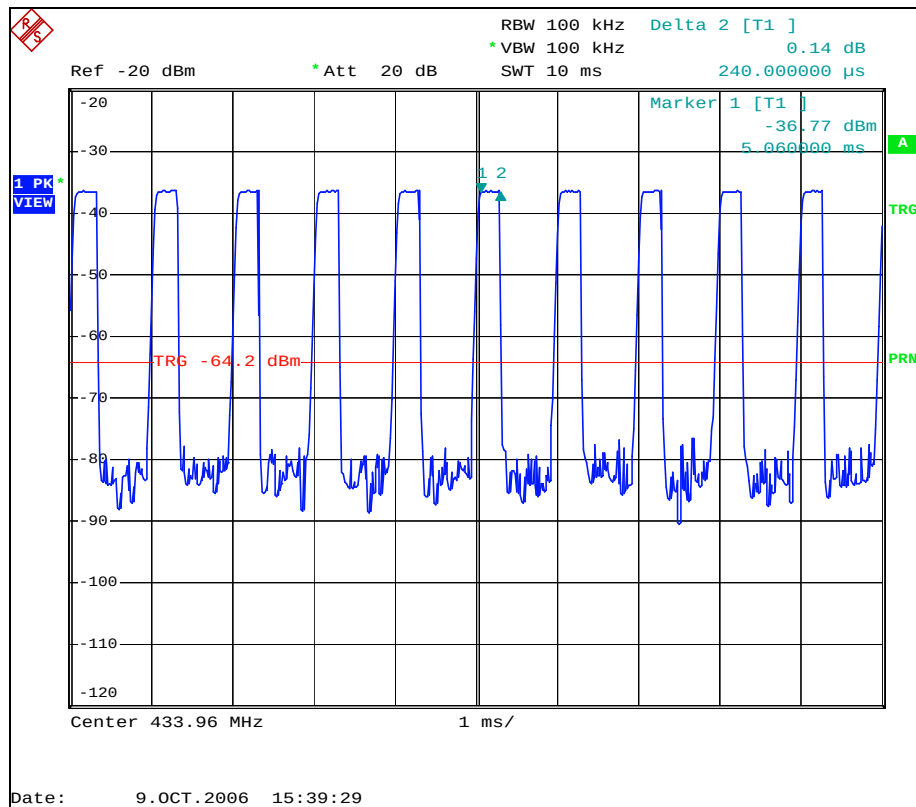
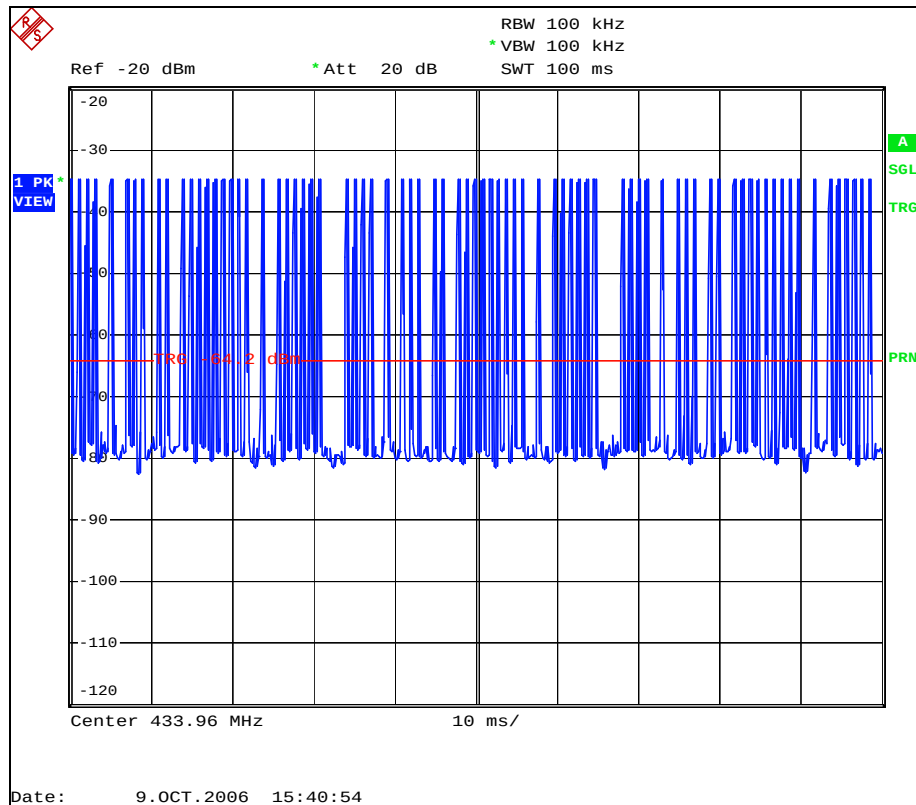
Please see page 27 for plotted duty.

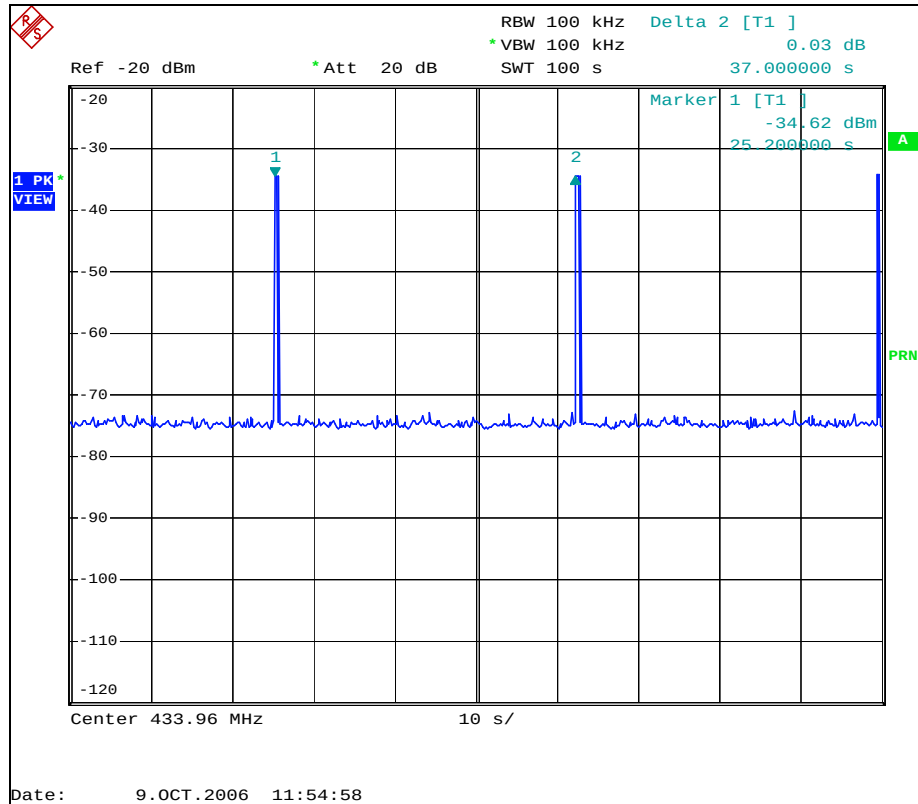
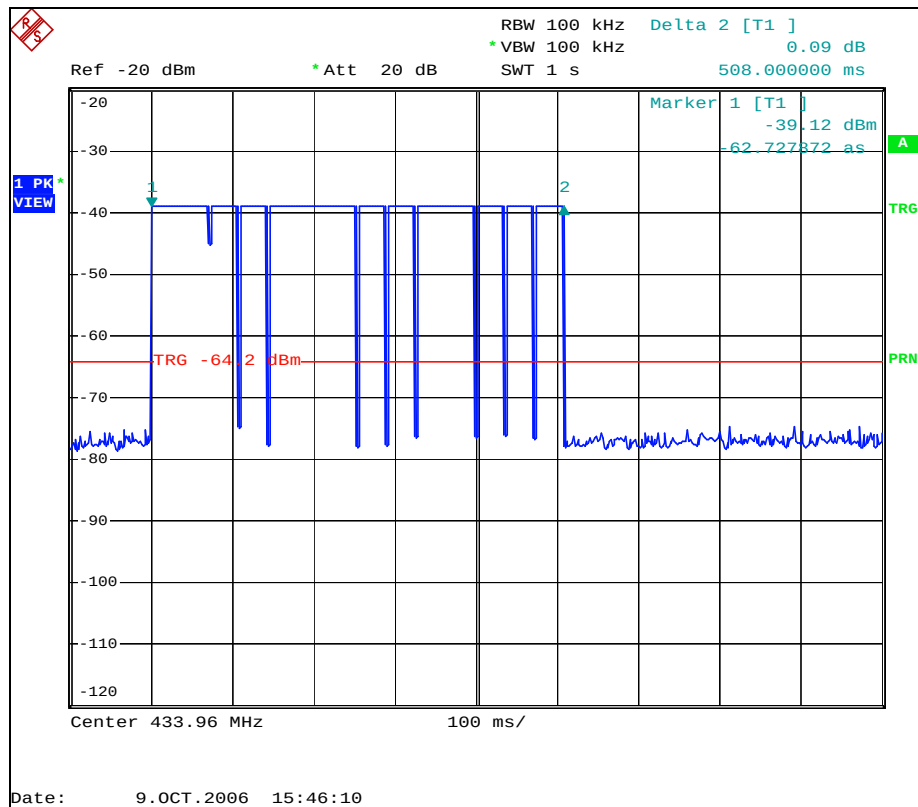
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	1301.76PK	30.33	31.66	61.99	74	-12.01	100	2
1	1301.76AV	30.33	17.11	47.44	54	-6.56	100	2
2	1735.68PK	30.8	20.2	51	74	-23	101	9
2	1735.68AV	30.8	5.65	36.45	54	-17.55	101	9
3	2169.60PK	34.59	17.63	52.22	74	-21.78	101	36
3	2169.60AV	34.59	3.08	37.67	54	-16.33	101	36
4	2603.52PK	35.29	15.68	50.97	74	-23.03	101	48
4	2603.52AV	35.29	1.13	36.42	54	-17.58	101	48
5	3037.44PK	36.35	16.24	52.59	74	-21.41	101	97
5	3037.44AV	36.35	1.69	38.04	54	-15.96	101	97
6	3471.36PK	36.57	11.27	47.84	74	-26.16	101	114
6	3471.36AV	36.57	-3.28	33.29	54	-20.71	101	114
7	3905.28PK	38.66	12.09	50.75	74	-23.25	101	66
7	3905.28AV	38.66	-2.46	36.2	54	-17.8	101	66
8	4339.20PK	39.81	13.78	53.59	74	-20.41	101	139
8	4339.20AV	39.81	-0.77	39.04	54	-14.96	101	139

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (78 \times 0.24 / 100) = -14.55\text{dB}$$

Please see page 27 for plotted duty.





Mode 3

Below 1GHz

EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	30 ~ 1000 MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3 Vdc from battery
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	BRIGHT		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	160.95QP	16.98	-4	12.98	43.5	-30.52	134	342
2	243.40QP	14.77	-6.93	7.84	46	-38.16	207	281
3	350.10QP	17.47	-7.07	10.4	46	-35.6	298	205
*4	433.92PK	19.74	43.66	63.4	92.87	-29.47	100	126
*4	433.92AV	19.74	27.29	47.03	72.87	-25.84	100	126
5	539.25QP	21.78	-7.68	14.1	46	-31.9	372	142
6	643.52QP	23.81	-7.42	16.39	46	-29.61	290	6
7	738.10QP	25.22	-7.84	17.38	46	-28.62	365	68
8	867.84PK	26.45	12.64	39.09	72.87	-33.78	102	112
8	867.84AV	26.45	-3.73	22.72	52.87	-30.15	102	112

- NOTE:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
 2. Correction Factor (dB) = Antenna Factor (dB) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “*” = Fundamental frequency
 6. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (69 \times 0.22 / 100) = -16.37\text{dB}$$

Please see page 33 for plotted duty.



EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	30 ~ 1000 MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3 Vdc from battery
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	BRIGHT		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	160.95QP	16.98	-4.81	12.17	43.5	-31.33	124	332
2	282.20QP	15.91	-7.1	8.81	46	-37.19	267	291
3	369.50QP	18.02	-7.34	10.68	46	-35.32	292	212
*4	433.92PK	19.74	50.12	69.86	92.87	-23.01	112	134
*4	433.92AV	19.74	33.75	53.49	72.87	-19.38	112	134
5	561.08QP	22.31	-7.6	14.71	46	-31.29	352	242
6	667.77QP	24.1	-7.31	16.79	46	-29.21	250	16
7	772.05QP	25.59	-7.56	18.03	46	-27.97	325	168
8	867.84PK	26.45	17.03	43.48	72.87	-29.39	144	172
8	867.84AV	26.45	0.66	27.11	52.87	-25.76	144	172

- NOTE:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
 2. Correction Factor (dB) = Antenna Factor (dB) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “*” = Fundamental frequency
 6. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (69 \times 0.22 / 100) = -16.37\text{dB}$$

Please see page 33 for plotted duty.

Above 1GHz

EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	1GHz – 5GHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3Vdc from battery
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	DETECTOR FUNCTION	Peak / Average
TESTED BY	Bright		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	1301.76PK	30.33	21.4	51.73	74	-22.27	123	22
1	1301.76AV	30.33	5.03	35.36	54	-18.64	123	22
2	1735.68PK	30.8	19.38	50.18	74	-23.82	211	136
2	1735.68AV	30.8	3.01	33.81	54	-20.19	211	136
3	2169.60PK	34.59	16.49	51.08	74	-22.92	107	24
3	2169.60AV	34.59	0.12	34.71	54	-19.29	107	24
4	2603.52PK	35.29	16.2	51.49	74	-22.51	301	38
4	2603.52AV	35.29	-0.17	35.12	54	-18.88	301	38
5	3037.44PK	36.35	16.97	53.32	74	-20.68	111	67
5	3037.44AV	36.35	0.6	36.95	54	-17.05	111	67
6	3471.36PK	36.57	14.59	51.16	74	-22.84	201	36
6	3471.36AV	36.57	-1.78	34.79	54	-19.21	201	36
7	3905.28PK	38.66	13.76	52.42	74	-21.58	189	114
7	3905.28AV	38.66	-2.61	36.05	54	-17.95	189	114
8	4339.20PK	39.81	12.99	52.8	74	-21.2	241	236
8	4339.20AV	39.81	-3.38	36.43	54	-17.57	241	236

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)

Where the duty factor is calculated from following formula:

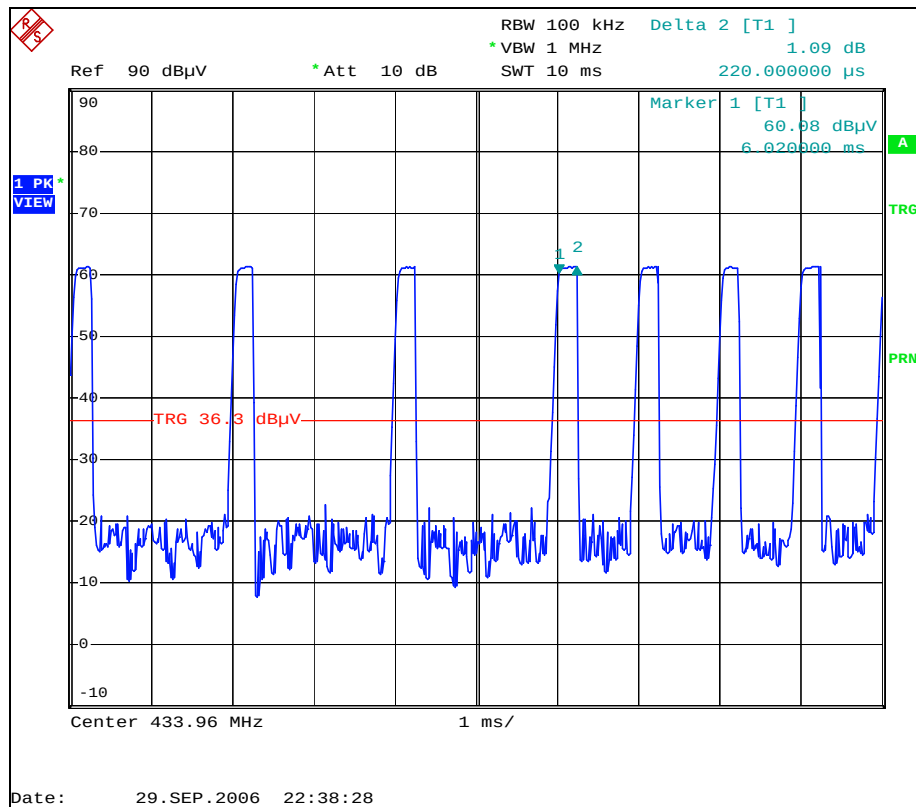
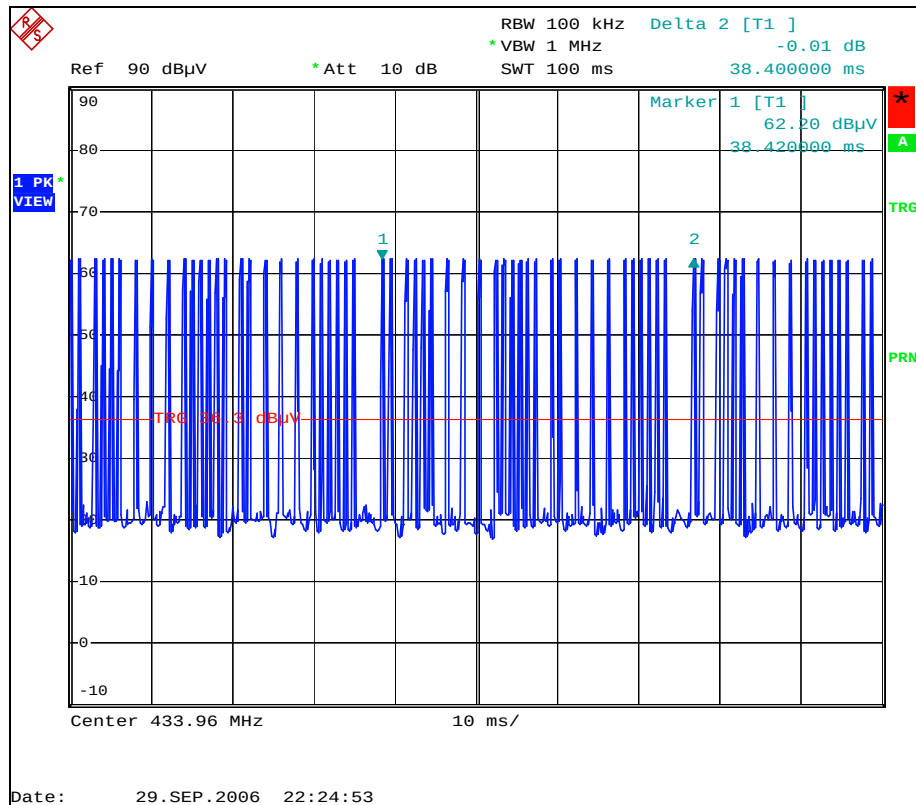
$$20\log (\text{Duty cycle}) = 20\log (69 \times 0.22 / 100) = -16.37\text{dB}$$

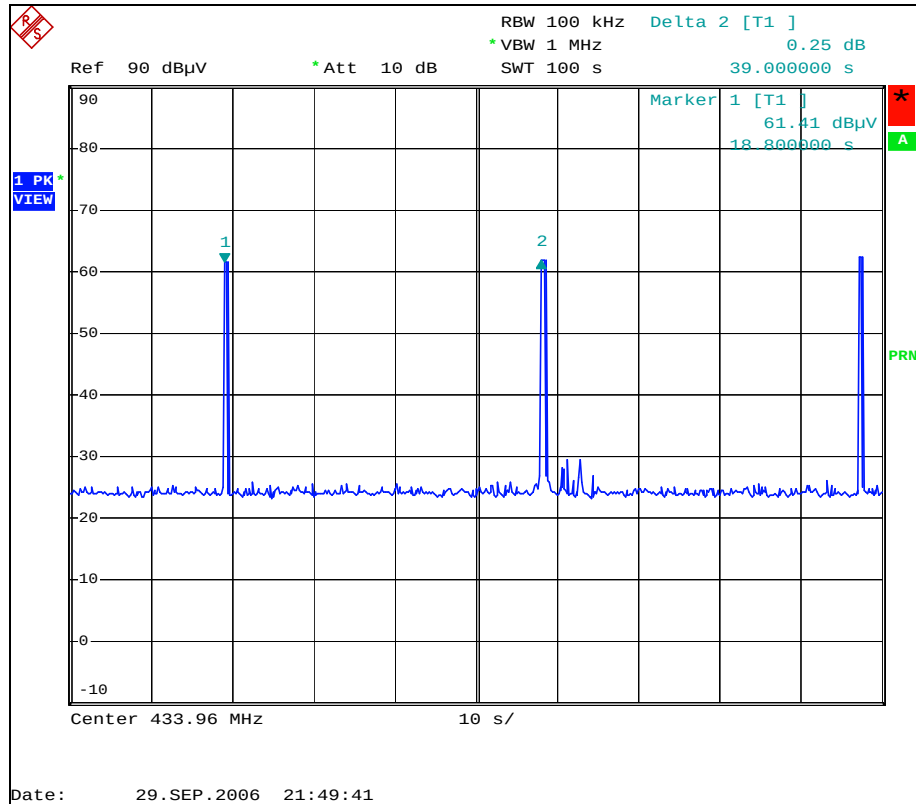
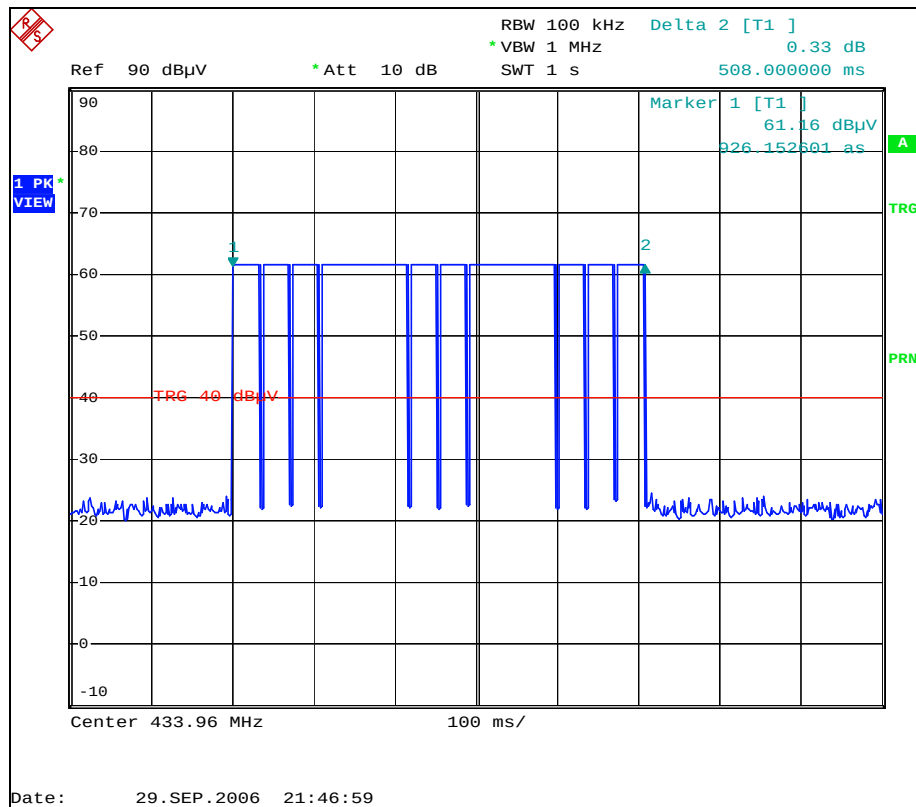
Please see page 33 for plotted duty.



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	1301.76PK	30.33	30.56	60.89	74	-13.11	100	19
1	1301.76AV	30.33	14.19	44.52	54	-9.48	100	19
2	1735.68PK	30.8	23.02	53.82	74	-20.18	100	69
2	1735.68AV	30.8	6.65	37.45	54	-16.55	100	69
3	2169.60PK	34.59	16.87	51.46	74	-22.54	100	67
3	2169.60AV	34.59	0.5	35.09	54	-18.91	100	67
4	2603.52PK	35.29	15.14	50.43	74	-23.57	100	86
4	2603.52AV	35.29	-1.23	34.06	54	-19.94	100	86
5	3037.44PK	36.35	17.58	53.93	74	-20.07	100	49
5	3037.44AV	36.35	1.21	37.56	54	-16.44	100	49
6	3471.36PK	36.57	14.8	51.37	74	-22.63	100	23
6	3471.36AV	36.57	-1.57	35	54	-19	100	23
7	3905.28PK	38.66	12.98	51.64	74	-22.36	100	118
7	3905.28AV	38.66	-3.39	35.27	54	-18.73	100	118
8	4339.20PK	39.81	12.07	51.88	74	-22.12	100	54
8	4339.20AV	39.81	-4.3	35.51	54	-18.49	100	54

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:
- $$20\log (\text{Duty cycle}) = 20\log (69 \times 0.22 / 100) = -16.37\text{dB}$$
- Please see page 33 for plotted duty.





Mode 4

Below 1GHz

EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	30 ~ 1000 MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3 Vdc from battery
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	BRIGHT		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	168.22QP	16.28	-7.08	9.2	43.5	-34.3	106	176
2	238.55QP	14.72	-7.41	7.31	46	-38.69	356	66
3	427.7QP	19.55	-7.16	12.39	46	-33.61	286	127
*4	433.92PK	19.74	40.69	60.43	92.87	-32.44	100	126
*4	433.92AV	19.74	25.32	45.06	72.87	-27.81	100	126
5	558.65QP	22.25	-7.19	15.06	46	-30.94	262	48
6	706.58QP	24.71	-7.1	17.61	46	-28.39	206	195
7	801.15QP	25.84	-7.18	18.66	46	-27.34	178	117
8	867.84PK	26.45	13.69	40.14	72.87	-32.73	102	112
8	867.84AV	26.45	-1.68	24.77	52.87	-28.1	102	112

- NOTE:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
 2. Correction Factor (dB) = Antenna Factor (dB) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “*” = Fundamental frequency
 6. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (71 \times 0.24 / 100) = -15.37\text{dB}$$

Please see page 39 for plotted duty.



EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	30 ~ 1000 MHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3 Vdc from battery
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	DETECTOR FUNCTION	Quasi-Peak / Peak / Average
TESTED BY	BRIGHT		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	117.3QP	14.44	-7.68	6.76	43.5	-36.74	101	341
2	321QP	17.04	-7.44	9.6	46	-36.4	101	94
3	427.7QP	19.55	-7.28	12.27	46	-33.73	101	33
*4	433.92PK	19.74	55.01	74.75	92.87	-18.12	112	134
*4	433.92AV	19.74	39.64	59.38	72.87	-13.49	112	134
5	565.92QP	22.42	-7.6	14.82	46	-31.18	101	155
6	682.33QP	24.3	-7.69	16.61	46	-29.39	101	277
7	825.4QP	26.36	-8.44	17.92	46	-28.08	101	216
8	867.84PK	26.45	18.33	44.78	72.87	-28.09	144	172
8	867.84AV	26.45	2.96	29.41	52.87	-23.46	144	172

- NOTE:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
 2. Correction Factor (dB) = Antenna Factor (dB) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. “*” = Fundamental frequency
 6. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (71 \times 0.24 / 100) = -15.37\text{dB}$$

Please see page 39 for plotted duty.

Above 1GHz

EUT	wireless thermo-hygrometer	MODEL NO.	00594RA4
CHANNEL	Channel 1	FREQUENCY RANGE	1GHz – 5GHz
MODULATION TYPE	ASK	INPUT POWER (SYSTEM)	3Vdc from battery
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	DETECTOR FUNCTION	Peak / Average
TESTED BY	Bright		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	1301.76PK	30.33	24.73	55.06	74	-18.94	100	136
1	1301.76AV	30.33	9.36	39.69	54	-14.31	100	136
2	1735.68PK	30.8	21.56	52.36	74	-21.64	101	69
2	1735.68AV	30.8	6.19	36.99	54	-17.01	101	69
3	2169.60PK	34.59	17.53	52.12	74	-21.88	101	325
3	2169.60AV	34.59	2.16	36.75	54	-17.25	101	325
4	2603.52PK	35.29	17.93	53.22	74	-20.78	101	311
4	2603.52AV	35.29	2.56	37.85	54	-16.15	101	311
5	3037.44PK	36.35	17.17	53.52	74	-20.48	101	91
5	3037.44AV	36.35	1.8	38.15	54	-15.85	101	91
6	3471.36PK	36.57	14.94	51.51	74	-22.49	101	68
6	3471.36AV	36.57	-0.43	36.14	54	-17.86	101	68
7	3905.28PK	38.66	13.2	51.86	74	-22.14	101	64
7	3905.28AV	38.66	-2.17	36.49	54	-17.51	101	64
8	4339.20PK	39.81	10.25	50.06	74	-23.94	101	3
8	4339.20AV	39.81	-5.12	34.69	54	-19.31	101	3

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
- Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (71 \times 0.24/100) = -15.37\text{dB}$$

Please see page 39 for plotted duty.

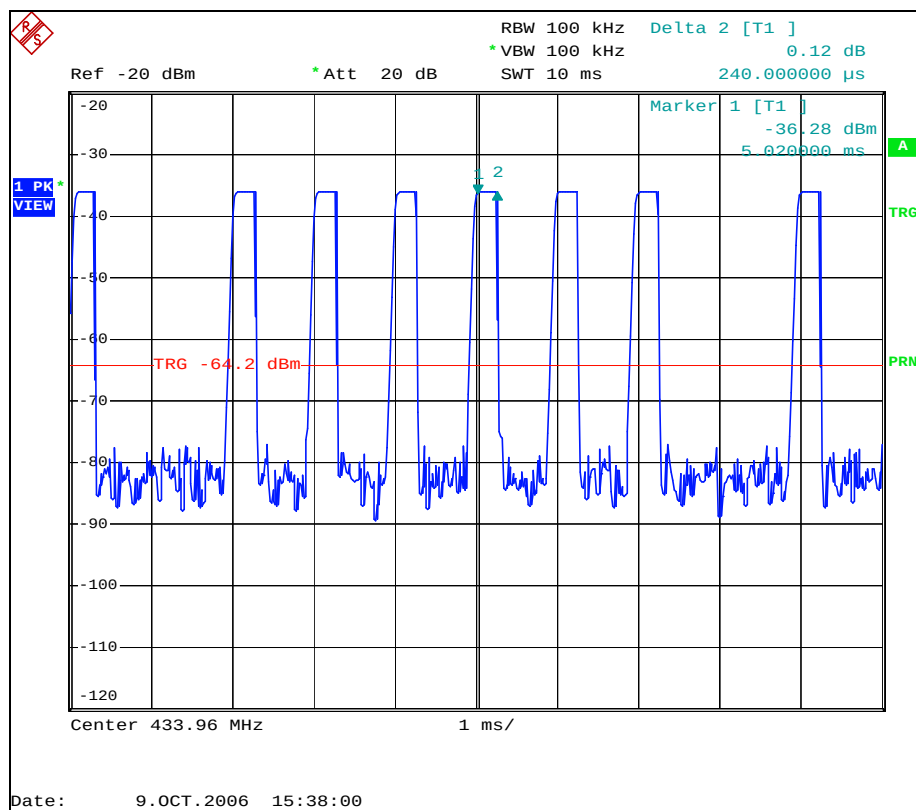
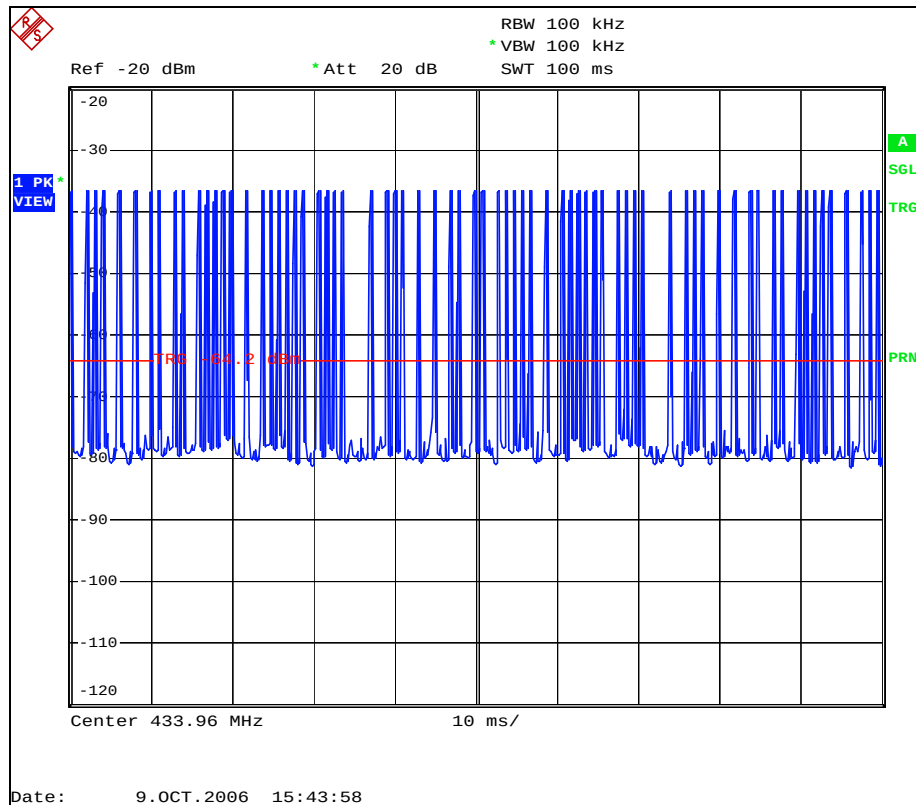


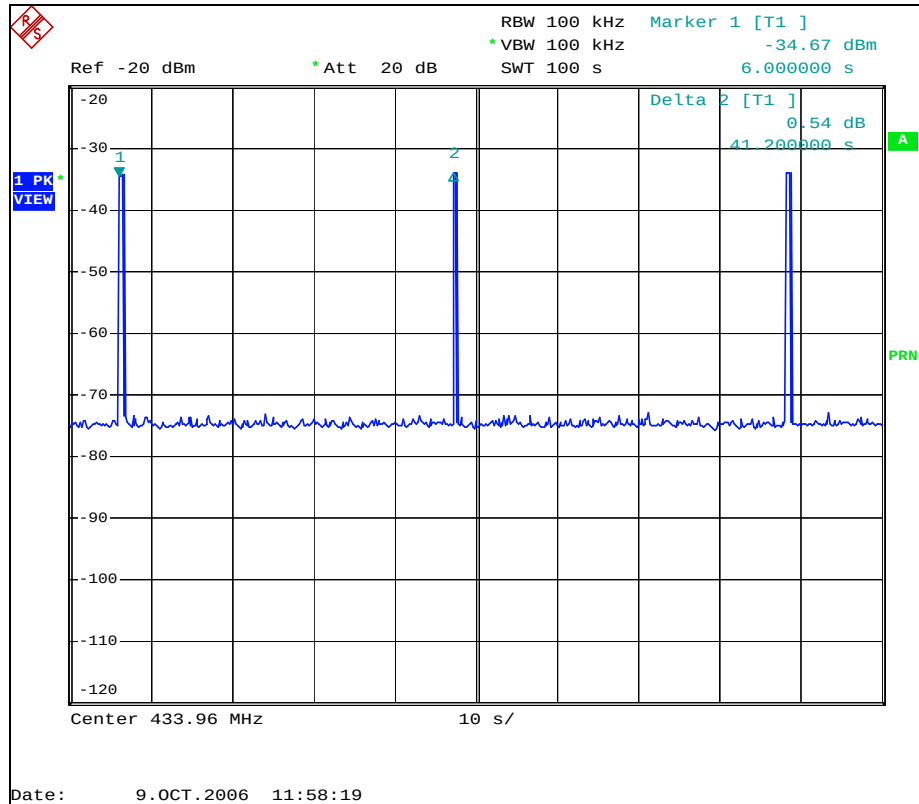
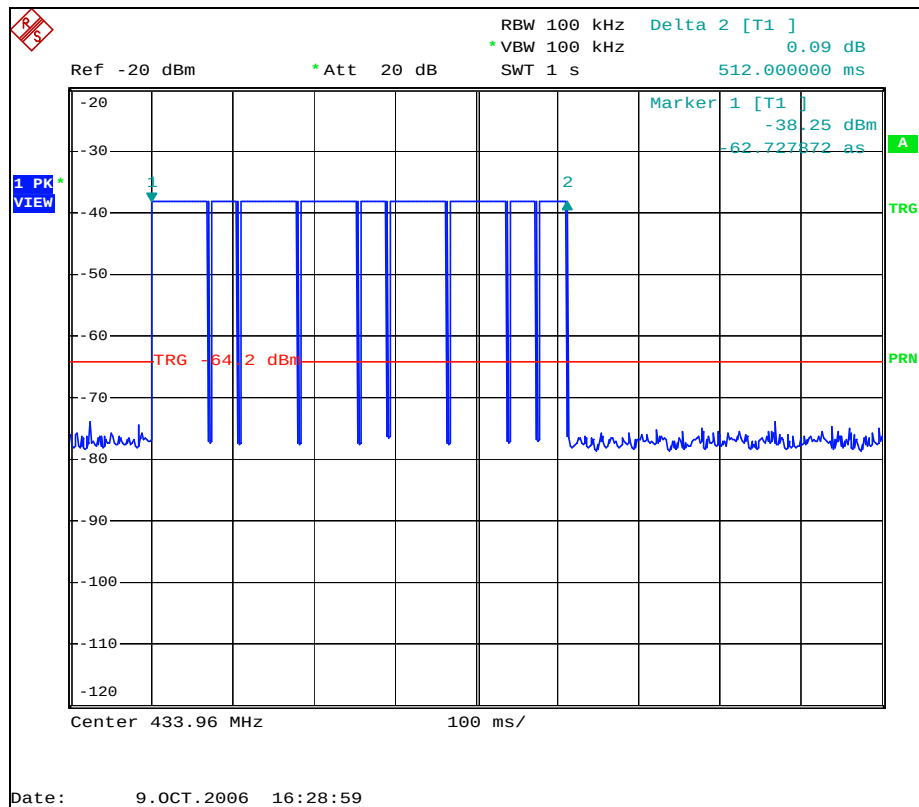
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Factor (dB/M)	Reading (dBuV/M)	Emission (dBuV/M)	Limit (dBuV/M)	Margin (dB)	Ant. Height (cm)	Table Angle (Deg.)
1	1301.76PK	30.33	31.44	61.77	74	-12.23	100	97
1	1301.76AV	30.33	16.07	46.4	54	-7.6	100	97
2	1735.68PK	30.8	20.11	50.91	74	-23.09	101	46
2	1735.68AV	30.8	4.74	35.54	54	-18.46	101	46
3	2169.60PK	34.59	17.43	52.02	74	-21.98	101	234
3	2169.60AV	34.59	2.06	36.65	54	-17.35	101	234
4	2603.52PK	35.29	15.37	50.66	74	-23.34	101	348
4	2603.52AV	35.29	5E-16	35.29	54	-18.71	101	348
5	3037.44PK	36.35	16.27	52.62	74	-21.38	101	110
5	3037.44AV	36.35	0.9	37.25	54	-16.75	101	110
6	3471.36PK	36.57	11.18	47.75	74	-26.25	101	269
6	3471.36AV	36.57	-4.19	32.38	54	-21.62	101	269
7	3905.28PK	38.66	12.03	50.69	74	-23.31	101	78
7	3905.28AV	38.66	-3.34	35.32	54	-18.68	101	78
8	4339.20PK	39.81	13.91	53.72	74	-20.28	101	19
8	4339.20AV	39.81	-1.46	38.35	54	-15.65	101	19

- REMARKS:**
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m)
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The average value of fundamental frequency is: Average = Peak value + 20log (Duty cycle)
Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log (71 \times 0.24/100) = -15.37\text{dB}$$

Please see page 39 for plotted duty.





5 APPENDIX - INFORMATION ON THE TESTING LABORATORY

We, ADT (Shanghai) Corp., was founded in 2003 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratory is accredited and approved by the following approval agencies according to ISO/IEC 17025.

JAPAN	VCCI
USA	FCC, A2LA
Norway	DNV



Copies of accreditation certificates of our laboratory obtained from approval agencies can be downloaded from our web site: www.cnadt.com

If you have any comments, please feel free to contact us at the following:

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