FCC TEST REPORT

FOR

Enuresis Solutions, LLC

DryBuddy1 Receiver

Model No.: DB1

Prepared for	:	Enuresis Solutions, LLC
Address	:	51W, Fairmont Avenue, Savannah, GA USA, 31406
Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	:	1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, Bao'an District, Shenzhen, Guangdong, China
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Web	:	www.LCS-cert.com
Mail	:	webmaster@LCS-cert.com
Date of receipt of test sample	:	January 15, 2017
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	January 15, 2017 ~ February 20, 2017
Date of Report	:	February 20, 2017

FCC TEST REPORT

FCC CFR 47 PART 15 Subpart B: 2015

Report Reference No. ..... :	**LCS1701141812E**
Date Of Issue..... :	February 20, 2017
Testing Laboratory Name ..... :	**Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address..... :	1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, Bao'an District, Shenzhen, Guangdong, China
Testing Location/ Procedure ..... :	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name ..... :	**Enuresis Solutions, LLC**
Address..... :	51W, Fairmont Avenue, Savannah, GA USA, 31406
Test Specification	
Standard ..... :	FCC CFR 47 PART 15 Subpart B: 2017, ANSI C63.4-2014
Test Report Form No..... :	LCSEMC-1.0
TRF Originator..... :	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF..... :	Dated 2011-03

Test Item Description. ..... :	**DryBuddy1 Receiver**
Trade Mark ..... :	DryBuddy Enuresis Solutions ™
Model/Type Reference..... :	DB1
Ratings..... :	DC 3.0V
Result ..... :	**Positive**

Compiled by:	**Supervised by:**	**Approved by:**
Jacky Li/ File administrators	Glin Lu/ Technique principal	Gavin Liang/ Manager

FCC -- TEST REPORT

Test Report No. : LCS1701141812E	February 20, 2017 Date of issue

Type / Model.....	: DB1
EUT.....	: DryBuddy1 Receiver
Applicant.....	**: Enuresis Solutions, LLC**
Address.....	: 51W, Fairmont Avenue, Savannah, GA USA, 31406
Telephone.....	: 912 352 8854
Fax.....	: 912 352 8854
Manufacturer.....	**: Shenzhen Poshton Technology Co.,Ltd**
Address.....	: 3/F, BLDG9, Beifang Yongfa Technology Park, Chaoyang Rd, Yanchuan Industrial Zone, Songgang Town, Bao'an District, Shenzhen 518105, P.R.China
Telephone.....	: /
Fax.....	: /
Factory.....	: **Shenzhen Poshton Technology Co.,Ltd**
Address.....	: 3/F, BLDG9, Beifang Yongfa Technology Park, Chaoyang Rd, Yanchuan Industrial Zone, Songgang Town, Bao'an District, Shenzhen 518105, P.R.China
Telephone.....	: /
Fax.....	: /

Test Result according to the standards on page 5: **Positive**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Revision	Issue Date	Revisions	Revised By
00	2017-02-20	Initial Issue	Gavin Liang

TABLE OF CONTENTS

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

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

Emission			
Description of Test Item	**Standard**	**Limits**	**Results**
Conducted disturbance at mains terminals	FCC CFR 47 PART 15 Subpart B: 2017	Class B	N/A
Radiated disturbance	FCC CFR 47 PART 15 Subpart B: 2017	Class B	Pass
N/A is an abbreviation for Not Applicable.			

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

EUT	:	DryBuddy1 Receiver
Model Number	:	DB1
Power Supply	:	DC 3.0V
Frequency Range	:	433.90MHz
Modulation Technology	:	ASK
Antenna Type and Gain	:	Integral Antenna, 0 dBi(Max.)

2.2.Description of Test Facility

EMC Lab. : CNAS Registration Number. is L4595.
FCC Registration Number. is 899208.
Industry Canada Registration Number. is 9642A-1.
ESMD Registration Number. is ARCB0108.
UL Registration Number. is 100571-492.
TUV SUD Registration Number. is SCN1081.
TUV RH Registration Number. is UA 50296516-001

2.3.Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

2.4.Measurement Uncertainty

Test Item	Frequency Range	Expanded uncertainty (Ulab)	Expanded uncertainty (Ucispr)
Conducted Emission	(9kHz to 150kHz)	+/-2.63 dB	+/-4.0 dB
	(150kHz to 30MHz)	+/-2.35 dB	+/-3.6 dB
Radiated Emission	(9kHz to 30MHz)	+/-3.68 dB	N/A
Radiated Emission	(30MHz to 1000MHz)	+/-3.48 dB	+/-5.2 dB
Radiated Emission	(above 1000MHz)	+/-3.90 dB	N/A

(1) Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.
(2) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

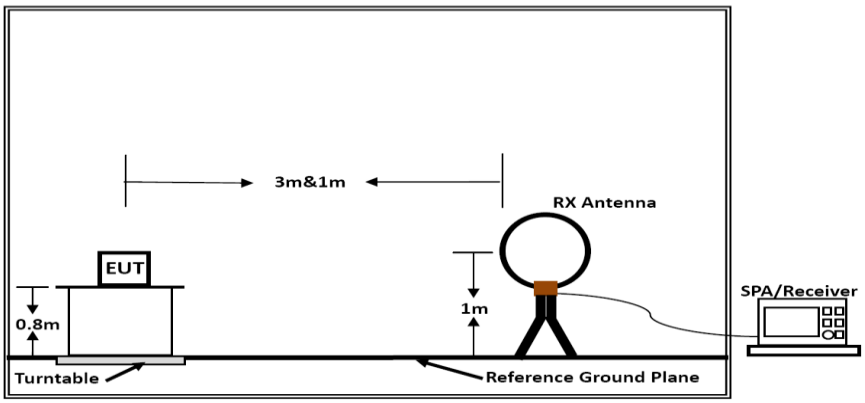
3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

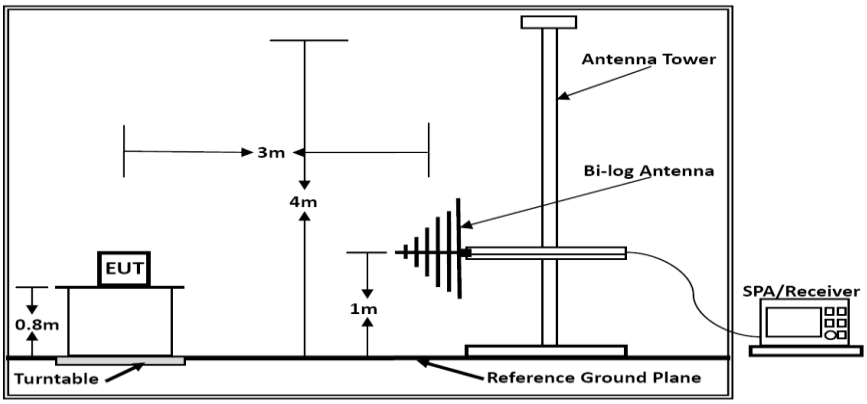
The following test equipments are used during the radiated emission measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2016/06/18
2	Spectrum Analyzer	Agilent	N9020A	MY50510140	2016/10/28
3	Log per Antenna	SCHWARZBECK	VULB9163	9163-470	2016/06/18
4	EMI Test Software	AUDIX	E3	N/A	2016/06/18
5	Positioning Controller	MF	MF-7082	/	2016/06/18

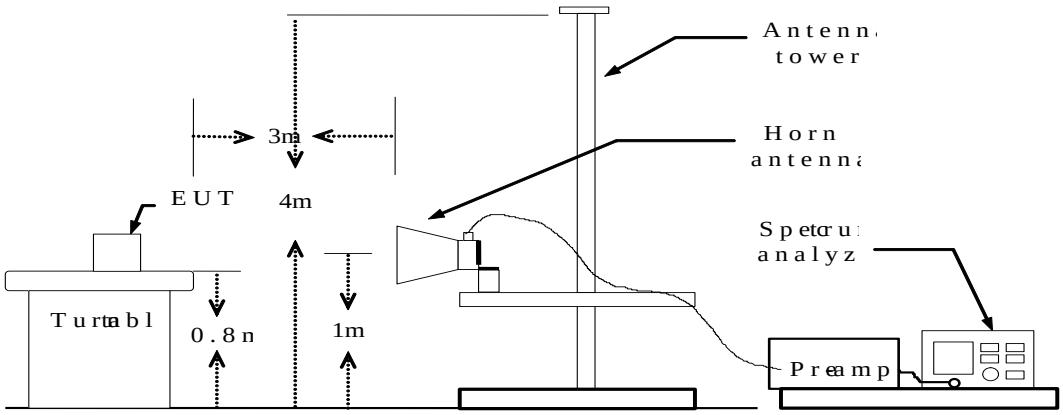
3.2. Block Diagram of Test Setup



Below 30MHz



Below 1GHz



Above 10 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distanc [3m] / test distance [1.5m]) (dB);
Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

1) Sequence of testing 9 kHz to 30 MHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions.

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Premeasurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna height is 0.8 meter.

--- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

--- Identified emissions during the premeasurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).

--- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

2) Sequence of testing 30 MHz to 1 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Premeasurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 3 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

3) Sequence of testing 1 GHz to 18 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Premeasurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height scan range is 1 meter to 2.5 meter.

--- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.

--- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

4) Sequence of testing above 18 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 1 meter.

--- The EUT was set into operation.

Premeasurement:

--- The antenna is moved spherical over the EUT in different polarisations of the antenna.

Final measurement:

--- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.

--- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

3.3. Radiated Emission Limit (Class B)

Limits for radiated disturbance Blow 1GHz

Frequency MHz	Distance Meters	Field Strengths Limit	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46
960 ~ 1000	3	500	54

Remark：
(1) Emission level (dB)μV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

3.4. EUT Configuration on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

3.5. Operating Condition of EUT

3.5.1.Setup the EUT as shown in Section 4.2.
3.5.2.Let the EUT work in test mode (on) and measure it.

3.6. Test Procedure

EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated by-log antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2014 on radiated emission measurement. If the emission level of the EUT in peak mode was 10dB 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 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Below 1G:

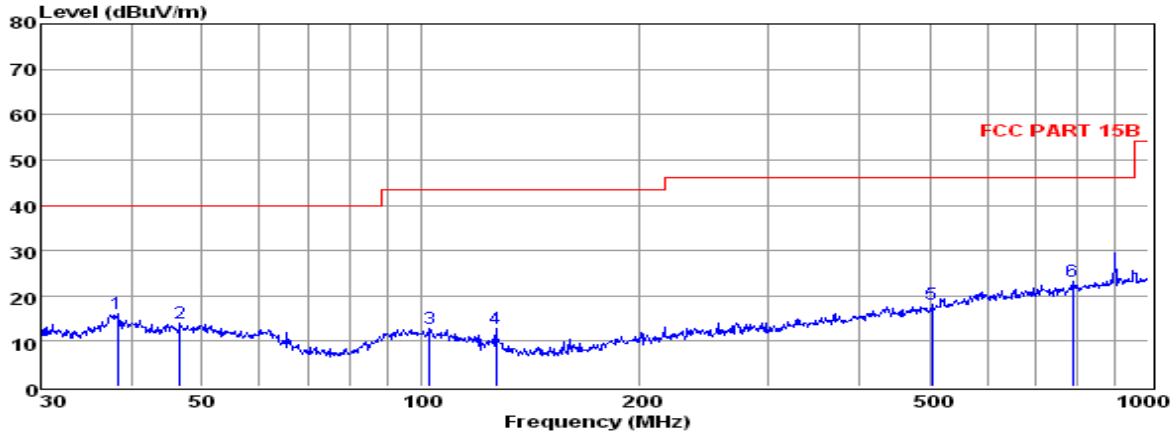
The bandwidth of the EMI test receiver is set at 120kHz, 1000kHz.
The frequency range from 30MHz to 1000MHz is checked.

Above 1G:

The bandwidth of the EMI test receiver is set at 1MHz, 3MHz for Peak detector.
The bandwidth of the EMI test receiver is set at 1MHz, 10Hz for Average detector
The frequency range from 1GHz to 6 GHz is checked.

3.7. Radiated Emission Noise Measurement Result

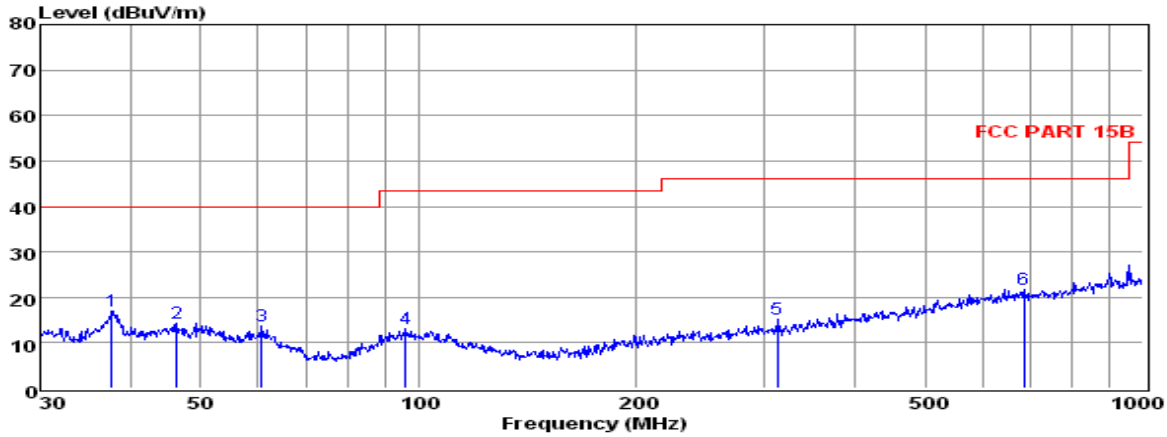
PASS.



Env./Ins: 24℃/56%
pol: HORIZONTAL

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	38.21	2.57	0.38	13.12	16.07	40.00	-23.93	QP
2	46.67	0.31	0.35	13.45	14.11	40.00	-25.89	QP
3	102.72	-0.78	0.60	12.91	12.73	43.50	-30.77	QP
4	126.77	2.70	0.67	9.43	12.80	43.50	-30.70	QP
5	504.71	0.26	1.29	16.67	18.22	46.00	-27.78	QP
6	787.85	1.49	1.72	19.91	23.12	46.00	-22.88	QP

Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that ate 20db blow the offficial limit are not reported



Env./Ins: 24℃/56%
pol: VERTICAL

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	37.68	3.53	0.38	12.99	16.90	40.00	-23.10	QP
2	46.34	0.55	0.35	13.47	14.37	40.00	-25.63	QP
3	60.70	0.64	0.49	12.41	13.54	40.00	-26.46	QP
4	95.76	-0.53	0.58	12.89	12.94	43.50	-30.56	QP
5	313.28	0.73	1.09	13.24	15.06	46.00	-30.94	QP
6	684.75	1.46	1.60	18.76	21.82	46.00	-24.18	QP

Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that ate 20db blow the offficial limit are not reported

Test Mode: Receive	**Tested by:** Jacky
Test voltage: DC 12.0V	**Test Distance:** 3m
Detector Function: Peak+AV	**Test Results:** Passed

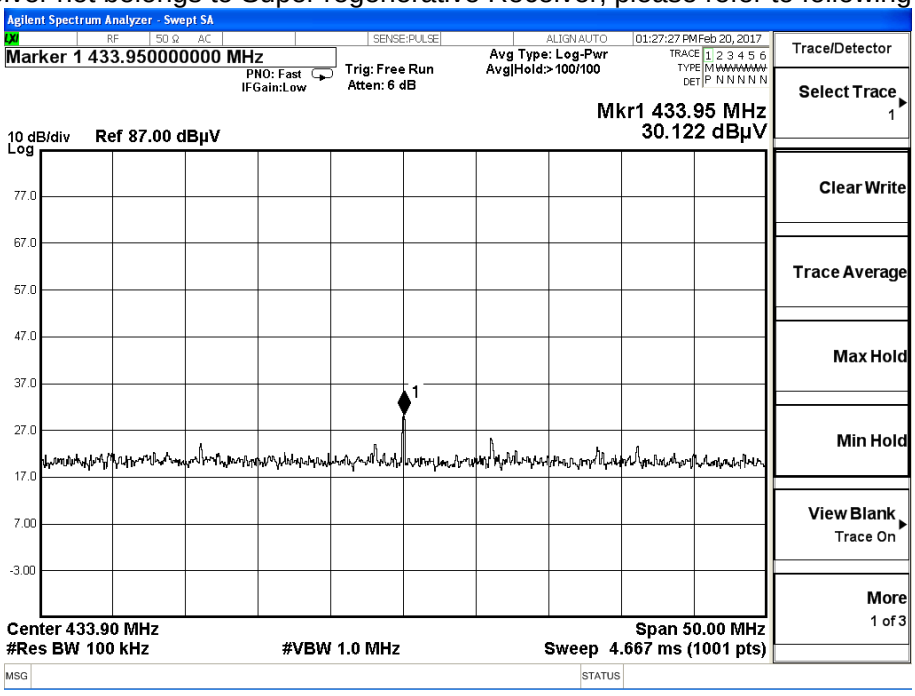
Polarization	Frequency MHz	Emission Level dBμV/m		Limits dBμV/m		Margin dBμV/m	
		Peak	AVG	Peak	AVG	Peak	AVG
Horizontal	1301.54	52.14	41.56	74.00	54.00	-21.86	-12.44
	1735.87	51.56	40.41	74.00	54.00	-22.44	-13.59
	2169.71	55.62	43.38	74.00	54.00	-18.38	-10.62
	3995.17	50.26	39.10	74.00	54.00	-23.74	-14.90
Vertical	1301.54	50.11	39.20	74.00	54.00	-23.89	-14.80
	1735.87	50.24	39.41	74.00	54.00	-23.76	-14.59
	2169.71	54.78	42.78	74.00	54.00	-19.22	-11.22
	3995.17	50.36	39.41	74.00	54.00	-23.64	-14.59

Notes:

1. *Measuring frequencies from 9k~6 GHz , No emission found between lowest internal used/generated frequency to 30MHz.*
2. *Radiated emissions measured in frequency range from 9k~6 GHz were made with an instrument using Peak detector mode.*
3. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measure*

Receiver Type:

The receiver not belongs to Super regenerative Receiver; please refer to following confirm plots.



4. TEST SETUP PHOTOGRAPHS

Please refer to test setup photographs files.

5. Exterior Photographs OF EUT

Please refer to exterior photographs files.

6. INTERIOR Photographs OF EUT

Please refer to interior photographs files.

----------THE END OF REPORT----------