

APPLICATION CERTIFICATION FCC Part 15C  
On Behalf of  
LEEDARSON LIGHTING CO., LTD.

Motion Sensor  
Model No.: 7C-SS-VA-H0

FCC ID: 2AB2Q7CSSVAH0

Prepared for : LEEDARSON LIGHTING CO., LTD.  
Address : Xingda Road, Xingtai Industrial Zone, Changtai County,  
Zhangzhou, Fujian, China

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Report Number : ATE20190569  
Date of Test : April 24-June 22, 2019  
Date of Report : June 22, 2019

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## Test Report Certification

Applicant : LEEDARSON LIGHTING CO., LTD.  
Address : Xingda Road, Xingtai Industrial Zone, Changtai County, Zhangzhou, Fujian, China  
Product : Motion Sensor  
Model No. : 7C-SS-VA-H0

Measurement Procedure Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.249  
ANSI C63.10: 2013**

The EUT was tested according to FCC 47CFR 15.249 for compliance to FCC 47CFR 15.249 requirements

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.249 limits. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test : April 24-June 22, 2019  
Date of Report : June 22, 2019

Prepared by : \_\_\_\_\_  
(Sean Yang, Engineer)

Approved & Authorized Signer : \_\_\_\_\_  
(Sean Liu, Manager)



## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

EUT	:	Motion Sensor
Model Number	:	7C-SS-VA-H0
Frequency Range	:	908.4MHz, 908.42MHz, 916MHz
Number of Channels	:	3
Modulation mode	:	GFSK (z-wave)
Antenna Gain	:	-1dBi
Antenna type	:	Integral Antenna
Power Supply	:	DC 3V

### 1.2. Special Accessory and Auxiliary Equipment

N/A

### 1.3. Description of Test Facility

- EMC Lab : Recognition of accreditation by Federal Communications Commission (FCC)  
The Designation Number is CN1189  
The Registration Number is 708358
- Listed by Innovation, Science and Economic Development Canada (ISED)  
The Registration Number is 5077A-2
- Accredited by China National Accreditation Service for Conformity Assessment (CNAS)  
The Registration Number is CNAS L3193
- Accredited by American Association for Laboratory Accreditation (A2LA)  
The Certificate Number is 4297.01
- Name of Firm : Shenzhen Accurate Technology Co., Ltd.  
Site Location : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

### 1.4. Measurement Uncertainty

- Conducted Emission Expanded Uncertainty = 2.23dB, k=2
- Radiated emission expanded uncertainty (9kHz-30MHz) = 3.08dB, k=2
- Radiated emission expanded uncertainty (30MHz-1000MHz) = 4.42dB, k=2
- Radiated emission expanded uncertainty (Above 1GHz) = 4.06dB, k=2

## 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 05, 2019	One Year
EMI Test Receiver	Rohde&Schwarz	ESR	101817	Jan. 05, 2019	One Year
Spectrum Analyzer	Rohde&Schwarz	FSV-40	101495	Jan. 05, 2019	One Year
Pre-Amplifier	Agilent	8447D	294A10619	Jan. 05, 2019	One Year
Pre-Amplifier	Compliance Direction	RSU-M2	38322	Jan. 05, 2019	One Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 05, 2019	One Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 05, 2019	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 05, 2019	One Year
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 05, 2019	One Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 05, 2019	One Year
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 05, 2019	One Year
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 05, 2019	One Year
Conducted Emission Measurement Software: ES-K1 V1.71					
Radiated Emission Measurement Software: EZ_EMV V1.1.4.2					

### 3. OPERATION OF EUT DURING TESTING

#### 3.1. Operating Mode

The mode is used: **Transmitting mode**

Low Channel: 908.4MHz

Middle Channel: 908.42MHz

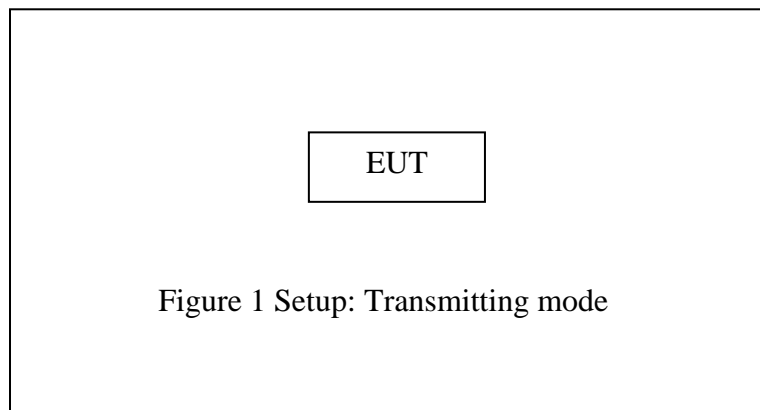
High Channel: 916.0MHz

Note: According to clause 5.6.1, table 4 of ANSI 63.10-2013, the frequency range of EUT operated is within 1MHz to 10MHz, So only the low channel and high channel were tested.

**Table 4—Number of frequencies to be tested**

Frequency range in which device operates	Number of frequencies	Location in frequency range of operation
1 MHz or less	1	Middle
1 MHz to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

#### 3.2. Configuration and peripherals



#### 4. TEST PROCEDURES AND RESULTS

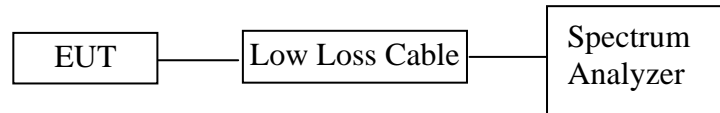
<b>FCC Rules</b>	<b>Description of Test</b>	<b>Result</b>
Section 15.215(c)	20dB Bandwidth	Compliant
Section 15.249(d)	Band Edge Compliance Test	Compliant
Section 15.205(a), Section 15.209(a), Section 15.249(d), Section 15.35	Radiated Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	N/A
Section 15.203	Antenna Requirement	Compliant

Note: The power supply mode of the EUT is DC 3V, According to the fcc standard requirements, conducted emission is not applicable.



## 5. 20DB BANDWIDTH TEST

### 5.1. Block Diagram of Test Setup



### 5.2. The Requirement For Section 15.215(c)

Must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

### 5.3. Operating Condition of EUT

5.3.1. Setup the EUT and simulator as shown as Section 5.1.

5.3.2. Turn on the power of all equipment.

5.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 908.4, 916MHz.

### 5.4. Test Procedure

5.4.1. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

5.4.2. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.

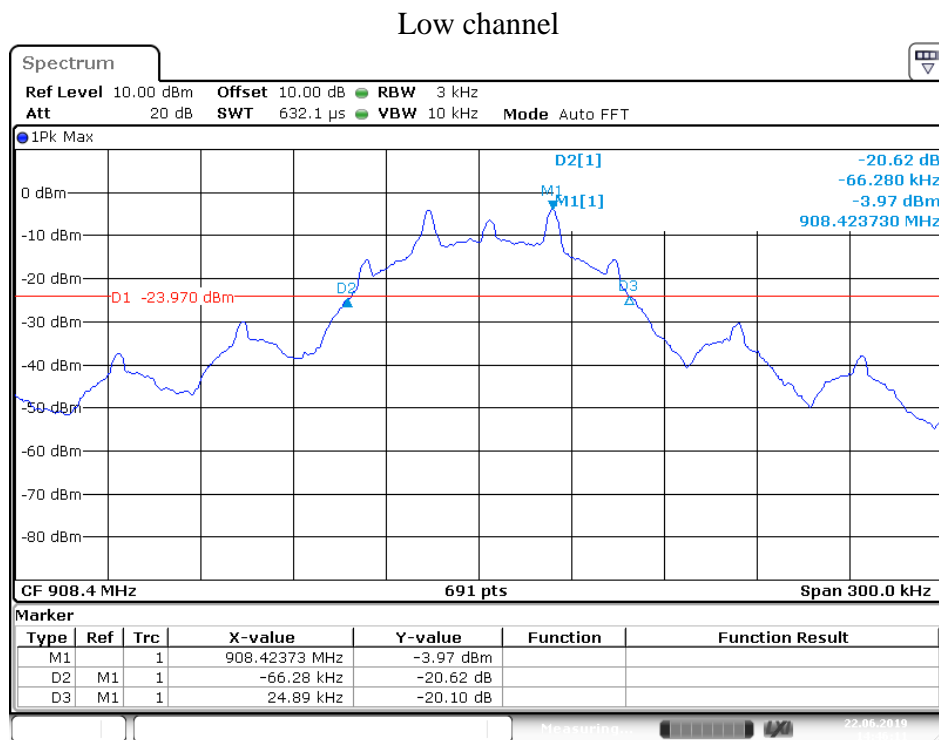
5.4.3. RBW shall be in the range of 1% to 5% of the OBW and VBW shall be approximately three times RBW.

5.4.4. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

### 5.5. Test Results

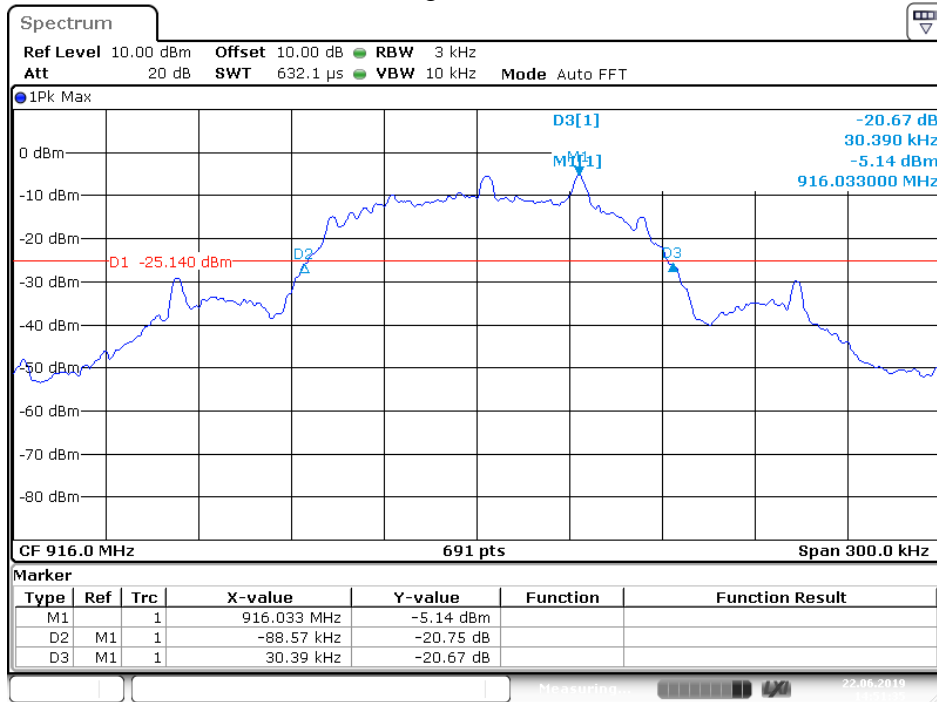
Frequency (MHz)	20 dB Bandwidth (MHz)
908.4	0.091
916.0	0.119

The spectrum analyzer plots are attached as below.



Date: 22.JUN.2019 14:46:11

### High channel

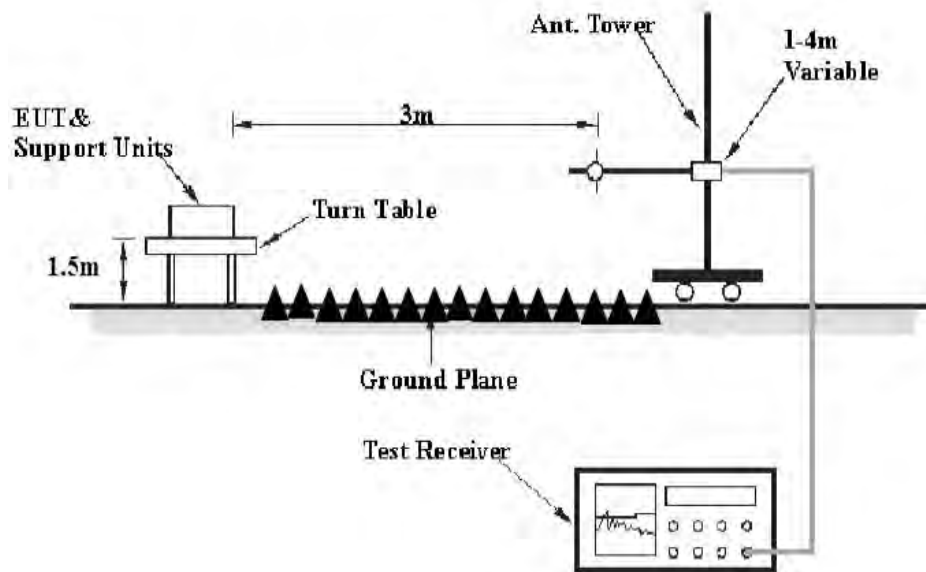


Date: 22.JUN.2019 14:51:35

## 6. BAND EDGE COMPLIANCE TEST

### 6.1. Block Diagram of Test Setup

(C) Radiated Emission Test Set-Up. Frequency above 1GHz



### 6.2. The Requirement For Section 15.249(d)

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

### 6.3. EUT Configuration on Measurement

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

## 6.4. Operating Condition of EUT

6.4.1. Setup the EUT and simulator as shown as Section 6.1.

6.4.2. Turn on the power of all equipment.

6.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 908.4, 916MHz.

## 6.5. Test Procedure

Radiate Band Edge:

6.5.1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.

6.5.2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

6.5.3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

6.5.4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

6.5.5. RBW=120kHz, VBW=300kHz

6.5.6. The band edges was measured and recorded.

## 6.6. Test Results

**Pass.**

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

3. Display the measurement of peak values.

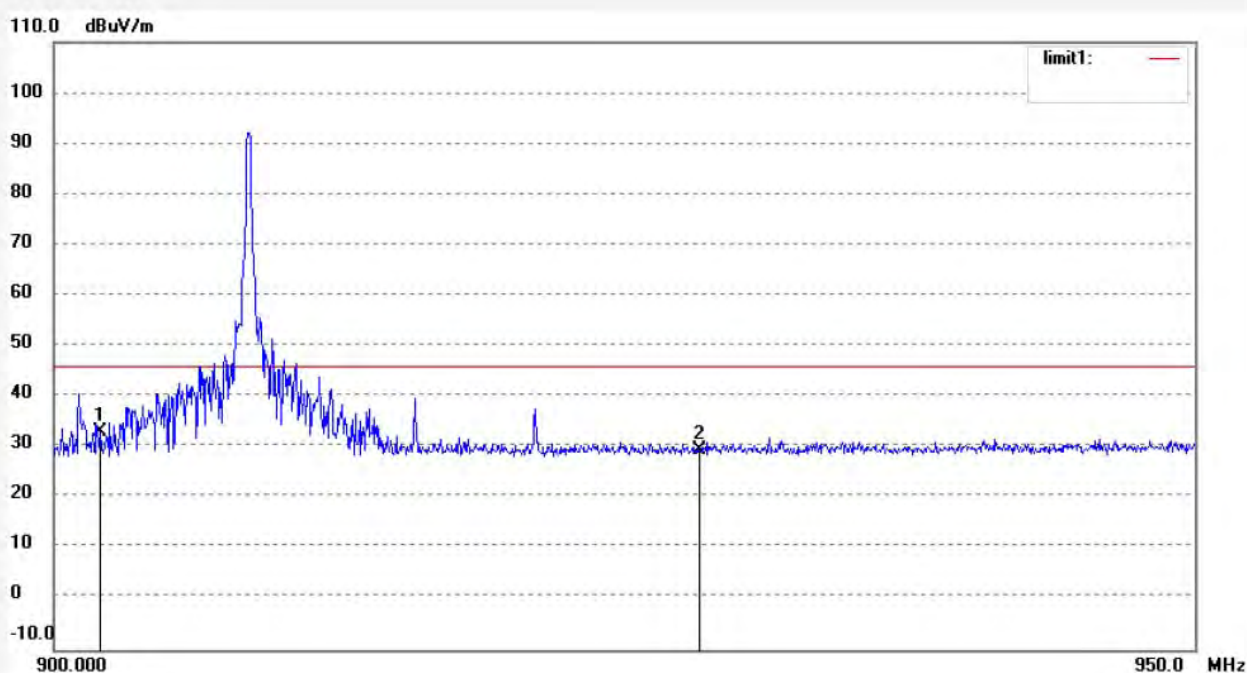
4. The average measurement was not performed when peak measured data under the limit of average detection.

The spectrum analyzer plots are attached as below.

Job No.: TUV2018 #2630  
 Standard: FCC (Band Edge)  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 908.4MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

Polarization: Horizontal  
 Power Source: DC 3V  
 Date: 19/06/10/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:

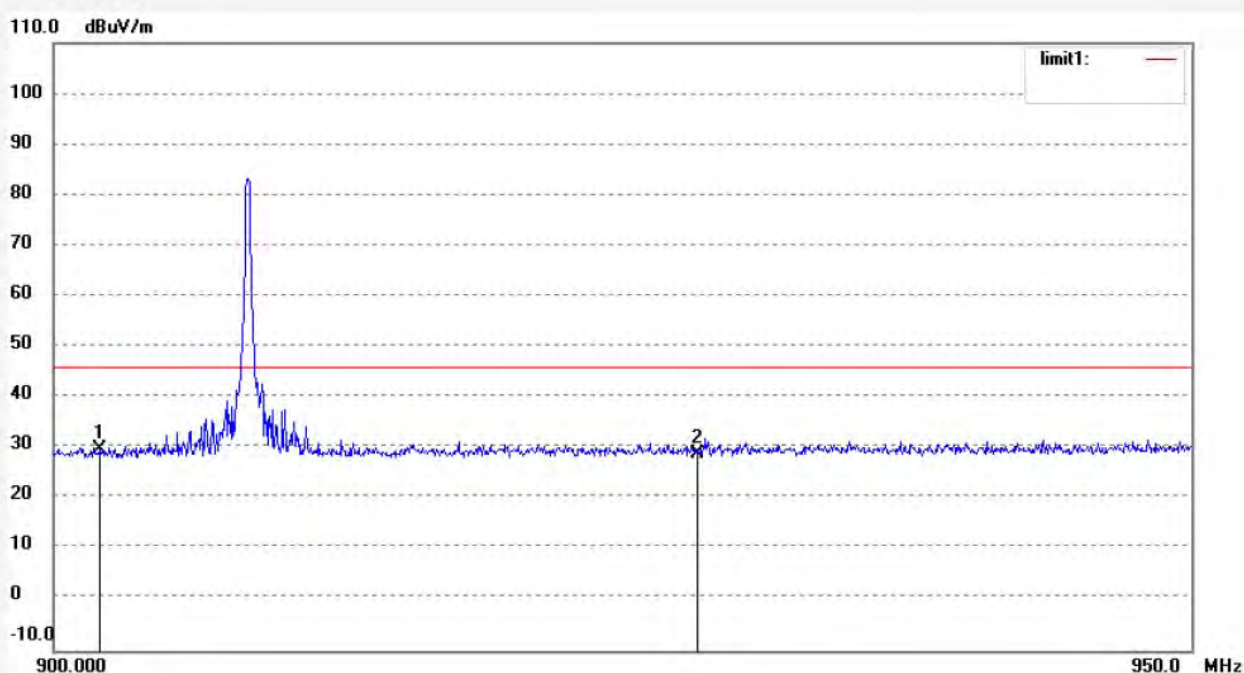


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	902.0000	30.95	2.18	33.13	46.00	-12.87	peak			
2	928.0000	26.61	2.73	29.34	46.00	-16.66	peak			

Job No.: TUV2018 #2631  
 Standard: FCC (Band Edge)  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 908.4MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

Polarization: Vertical  
 Power Source: DC 3V  
 Date: 19/06/10/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



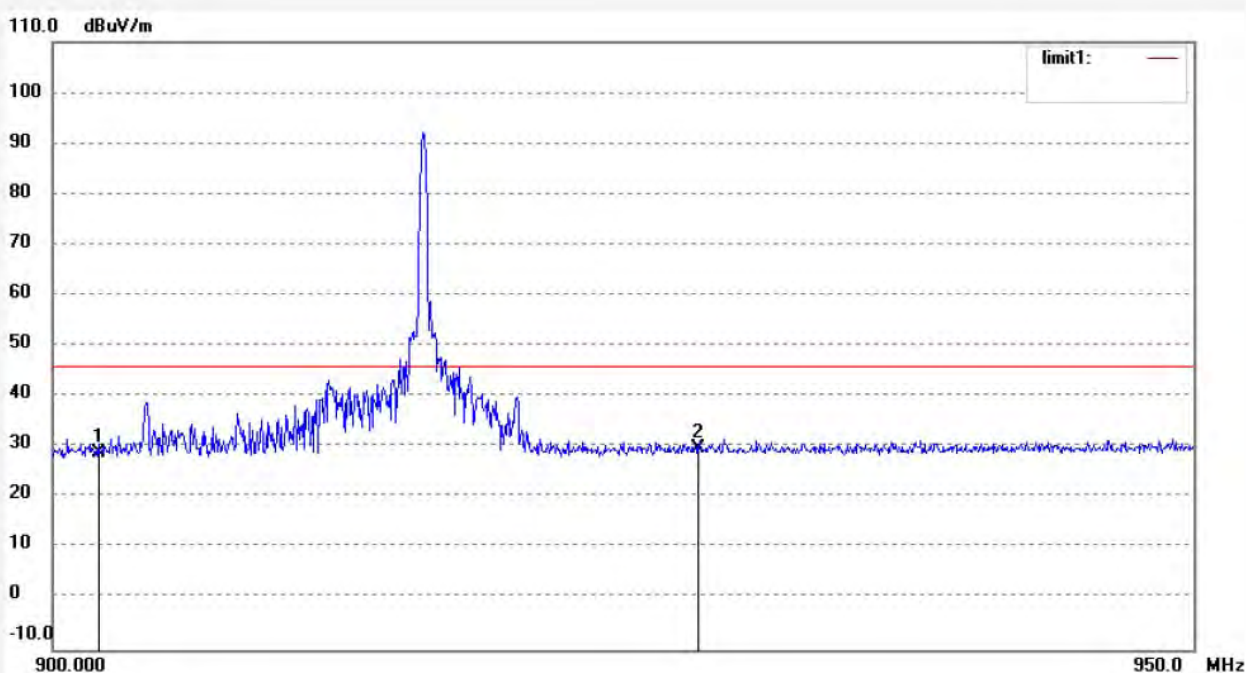
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	902.0000	27.60	2.18	29.78	46.00	-16.22	peak			
2	928.0000	26.04	2.73	28.77	46.00	-17.23	peak			



Job No.: TUV2018 #2633  
 Standard: FCC (Band Edge)  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 916MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

Polarization: Horizontal  
 Power Source: DC 3V  
 Date: 19/06/10/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



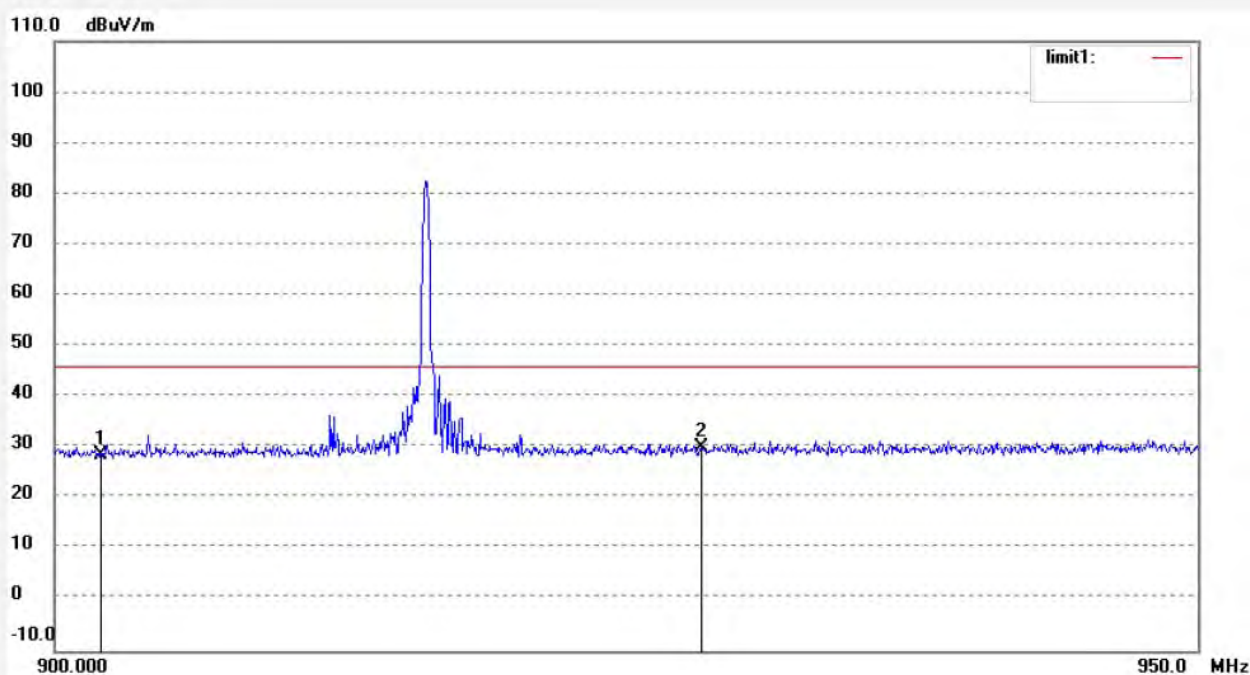
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	902.0000	26.63	2.18	28.81	46.00	-17.19	peak			
2	928.0000	27.02	2.73	29.75	46.00	-16.25	peak			



Job No.: TUV2018 #2632  
 Standard: FCC (Band Edge)  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 916MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

Polarization: Vertical  
 Power Source: DC 3V  
 Date: 19/06/10/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:

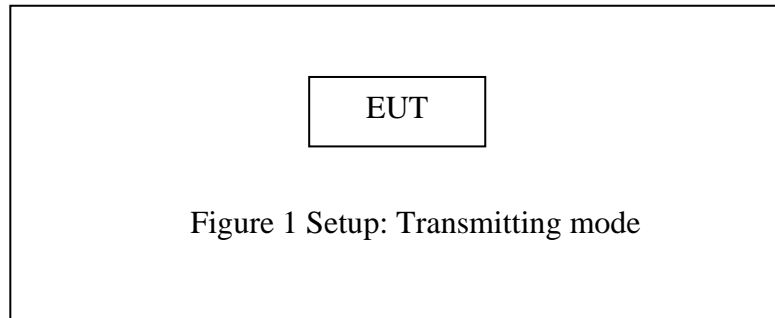


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	902.0000	26.26	2.18	28.44	46.00	-17.56	peak			
2	928.0000	27.32	2.73	30.05	46.00	-15.95	peak			

## 7. RADIATED SPURIOUS EMISSION TEST

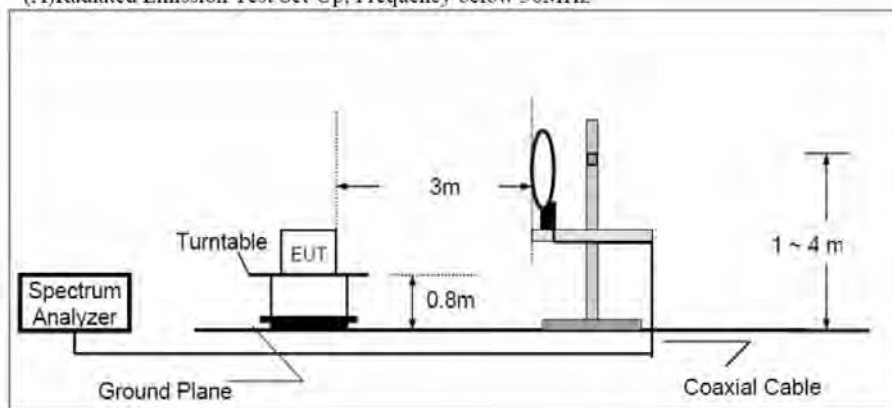
### 7.1. Block Diagram of Test Setup

#### 7.1.1. Block diagram of connection between the EUT and peripherals

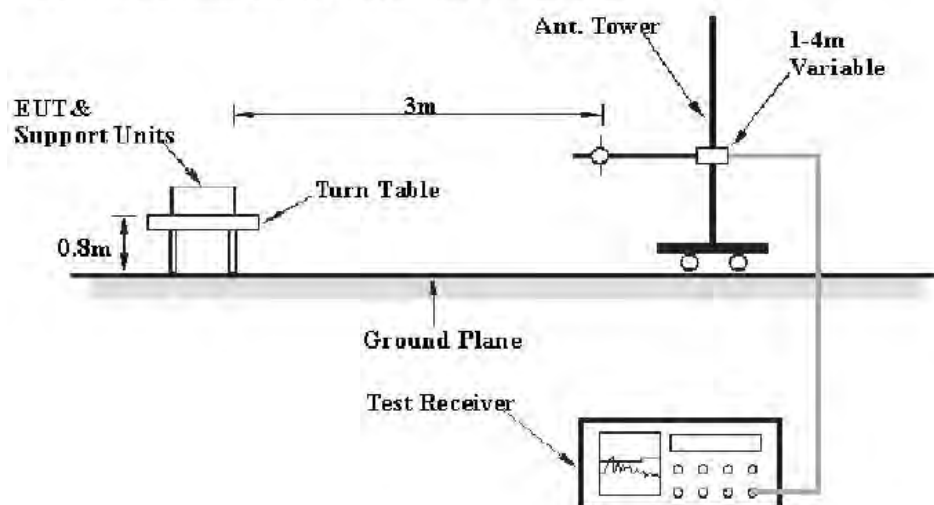


#### 7.1.2. Semi-Anechoic Chamber Test Setup Diagram

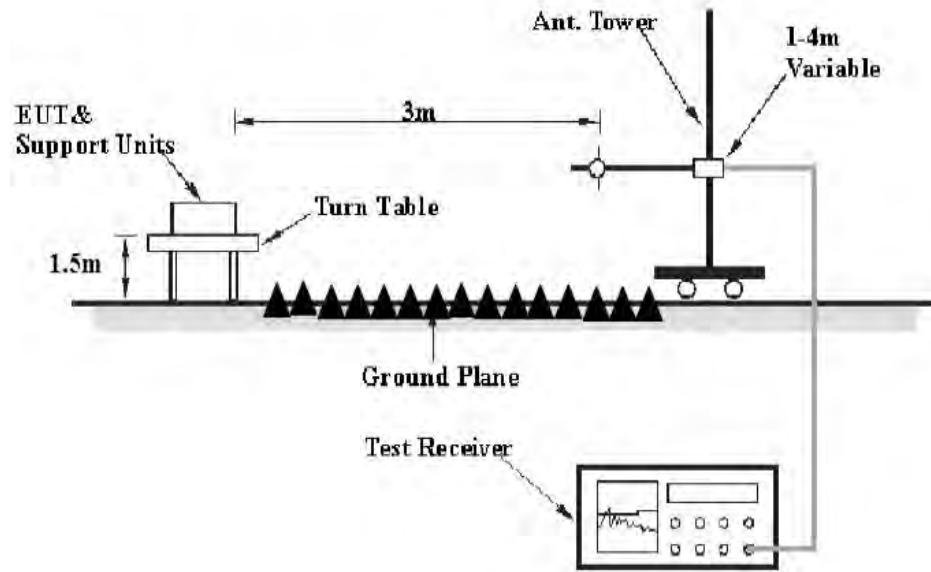
(A) Radiated Emission Test Set-Up, Frequency below 30MHz



(B) Radiated Emission Test Set-Up, Frequency 30MHz-1GHz



(C) Radiated Emission Test Set-Up. Frequency above 1GHz



## 7.2. The Limit For Section 15.249(d)

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

### 7.3. Restricted bands of operation

#### 7.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41			

<sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510

<sup>2</sup>Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

### 7.4. Configuration of EUT on Measurement

The 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.

## 7.5. Operating Condition of EUT

7.5.1. Setup the EUT and simulator as shown as Section 7.1.

7.5.2. Turn on the power of all equipment.

7.5.3. Let the EUT work in TX modes and measure it. The transmit frequency are 908.4, 916.0MHz.

## 7.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8m(Below 1GHz) and 1.5m(above 1GHz) 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 an 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 bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated emission measurement. This EUT was tested in 3 orthogonal positions and the worst case position data was reported.

The bandwidth of test receiver is set at 9 kHz in below 30MHz. and set at 120 kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9 kHz to 10GHz is checked.

The final measurement in band 9-90 kHz, 110-490 kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

RBW (120 kHz), VBW (300 kHz) for QP detector below 1GHz

Peak detector above 1GHz

RBW (1 MHz), VBW (3MHz) for Peak measurement

RBW (1 MHz), VBW (10Hz) for AV measurement

### 7.7. Data Sample

Frequency (MHz)	Reading (dB $\mu$ v)	Factor (dB/m)	Result (dB $\mu$ v/m)	Limit (dB $\mu$ v/m)	Margin (dB)	Remark
X.XX	48.69	-13.35	35.34	46	-10.66	QP

Frequency(MHz) = Emission frequency in MHz

Reading(dB $\mu$ v) = Uncorrected Analyzer/Receiver reading

Factor (dB/m) = Antenna factor + Cable Loss – Amplifier gain

Result(dB $\mu$ v/m) = Reading(dB $\mu$ v) + Factor(dB/m)

Limit (dB $\mu$ v/m) = Limit stated in standard

Margin (dB) = Result(dB $\mu$ v/m) - Limit (dB $\mu$ v/m)

QP = Quasi-peak Reading

Calculation Formula:

Margin(dB) = Result (dB $\mu$ V/m)–Limit(dB $\mu$ V/m)

Result(dB $\mu$ V/m)= Reading(dB $\mu$ V)+ Factor(dB/m)

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.

### 7.8. Test Results

**Pass.**

The frequency range from 9 kHz to 10GHz is checked.

Note: Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectrum analyzer plots are attached as below.

### 9KHz to 30MHz Test data

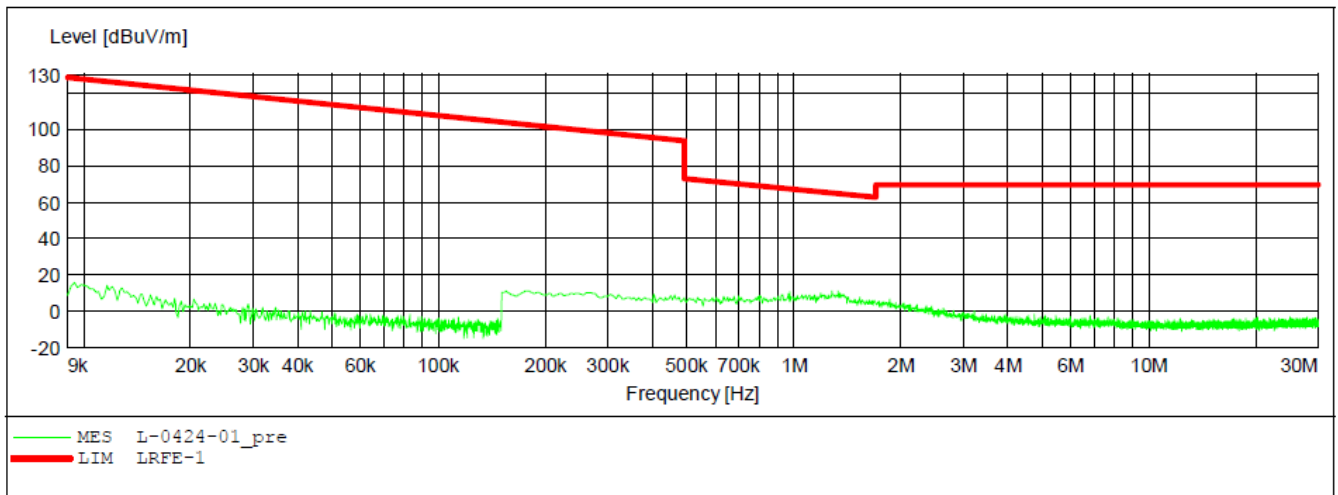
**ACCURATE TECHNOLOGY CO.,LTD**

**FCC Part 15C 3M Radiated**

EUT: Motion Sensor M/N:7C-SS-VA-H0  
 Manufacturer: Leedarson  
 Operating Condition: TX 908.4MHz  
 Test Site: 2# Chamber  
 Operator: WADE  
 Test Specification: DC 3V  
 Comment: X  
 Start of Test: 2019-4-24 /

**SCAN TABLE: "LFRE Fin"**

Short Description:			_SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M





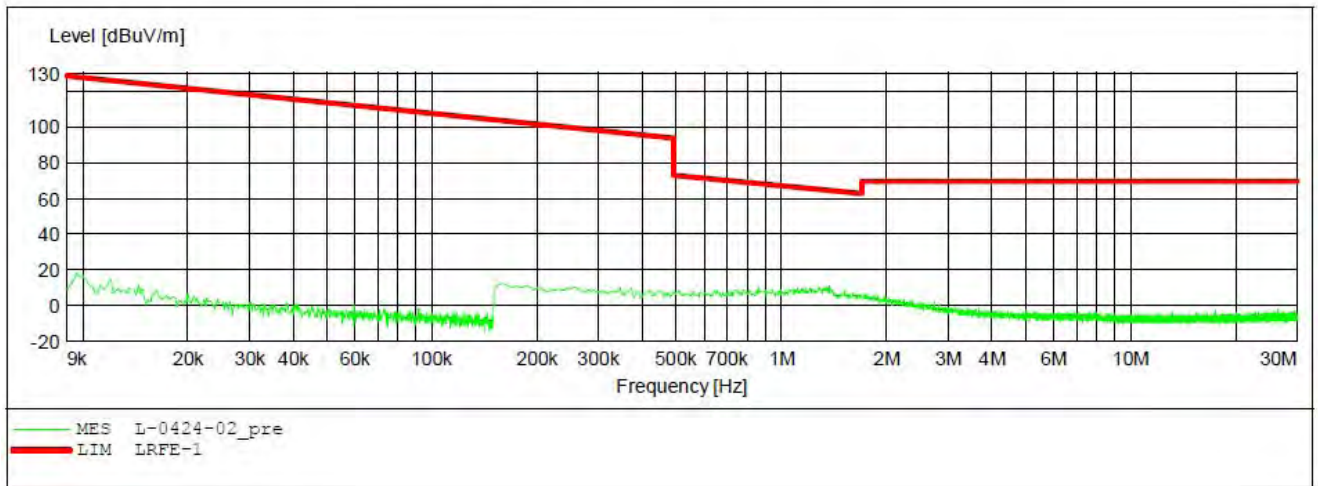
**ACCURATE TECHNOLOGY CO., LTD**

**FCC Part 15C 3M Radiated**

EUT: Motion Sensor M/N:7C-SS-VA-H0  
 Manufacturer: Leedarson  
 Operating Condition: TX 908.4MHz  
 Test Site: 2# Chamber  
 Operator: WADE  
 Test Specification: DC 3V  
 Comment: Y  
 Start of Test: 2019-4-24 /

**SCAN TABLE: "LFRE Fin"**

Short Description:			_SUB_STD_VTERM2 1.70				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer	
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M	
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M	





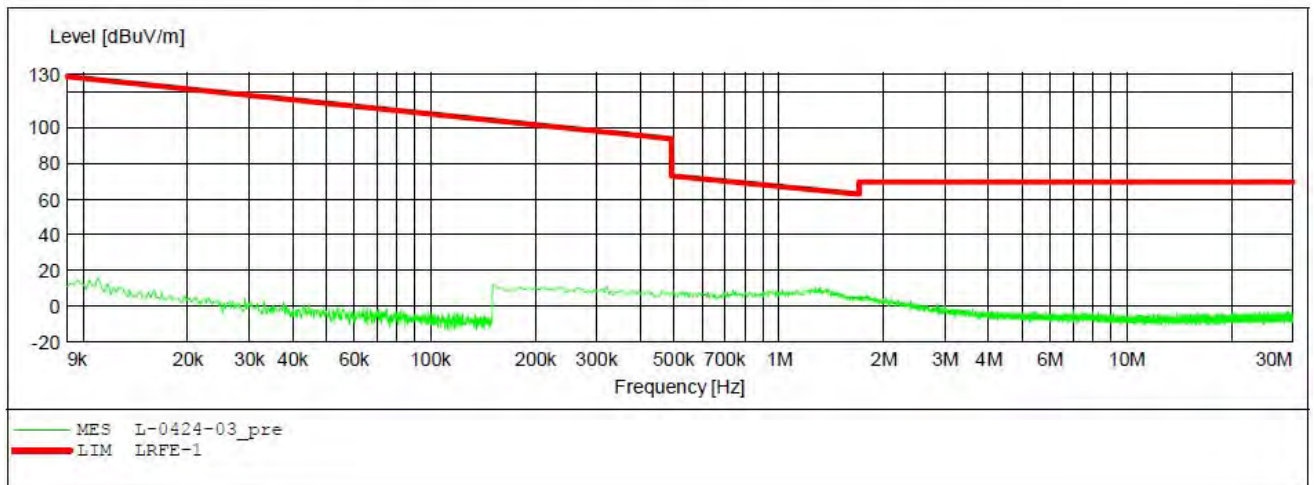
**ACCURATE TECHNOLOGY CO., LTD**

**FCC Part 15C 3M Radiated**

EUT: Motion Sensor M/N:7C-SS-VA-H0  
 Manufacturer: Leedarson  
 Operating Condition: TX 908.4MHz  
 Test Site: 2# Chamber  
 Operator: WADE  
 Test Specification: DC 3V  
 Comment: Z  
 Start of Test: 2019-4-24 /

**SCAN TABLE: "LRFE Fin"**

Short Description:			_SUB_STD_VTERM2 1.70				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer	
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M	
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M	



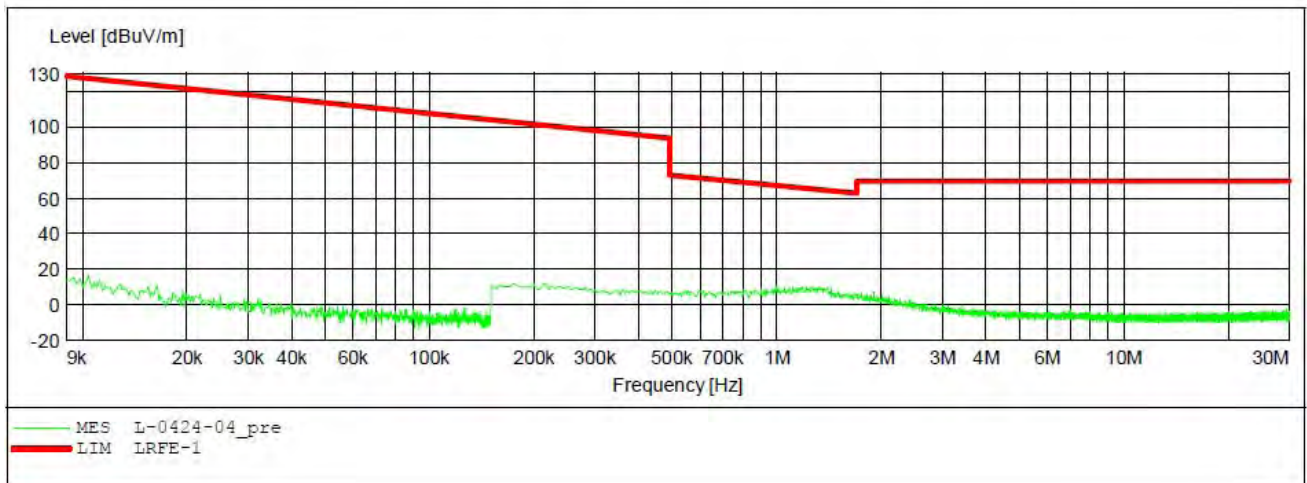
**ACCURATE TECHNOLOGY CO., LTD**

**FCC Part 15C 3M Radiated**

EUT: Motion Sensor M/N:7C-SS-VA-H0  
 Manufacturer: Leedarson  
 Operating Condition: TX 916MHz  
 Test Site: 2# Chamber  
 Operator: WADE  
 Test Specification: DC 3V  
 Comment: X  
 Start of Test: 2019-4-24 /

**SCAN TABLE: "LFRE Fin"**

Short Description:			_SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



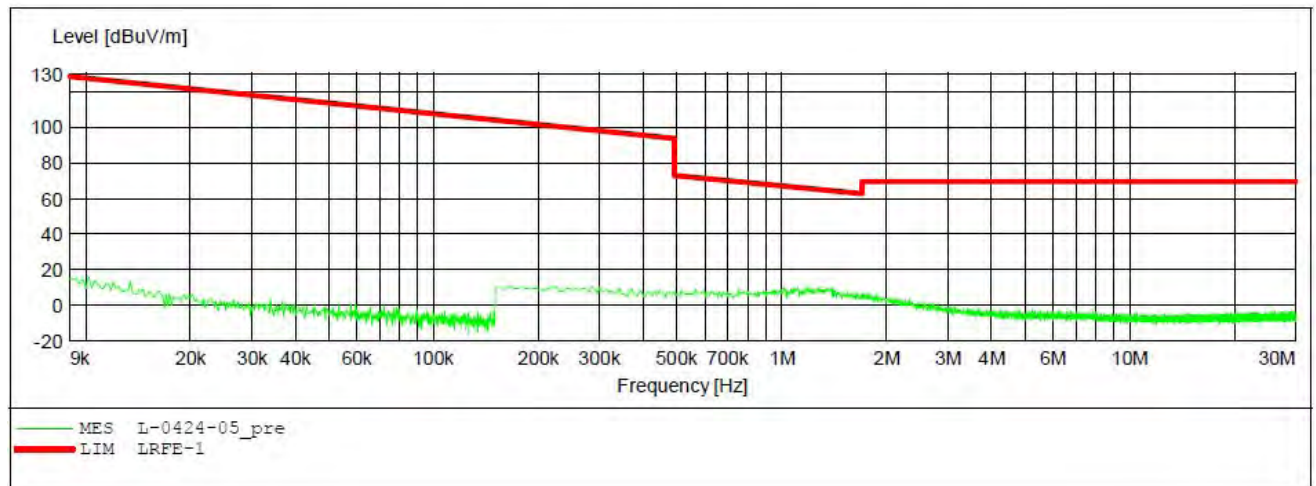
**ACCURATE TECHNOLOGY CO., LTD**

**FCC Part 15C 3M Radiated**

EUT: Motion Sensor M/N:7C-SS-VA-H0  
 Manufacturer: Leedarson  
 Operating Condition: TX 916MHz  
 Test Site: 2# Chamber  
 Operator: WADE  
 Test Specification: DC 3V  
 Comment: Y  
 Start of Test: 2019-4-24 /

**SCAN TABLE: "LFRE Fin"**

Short Description:			SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



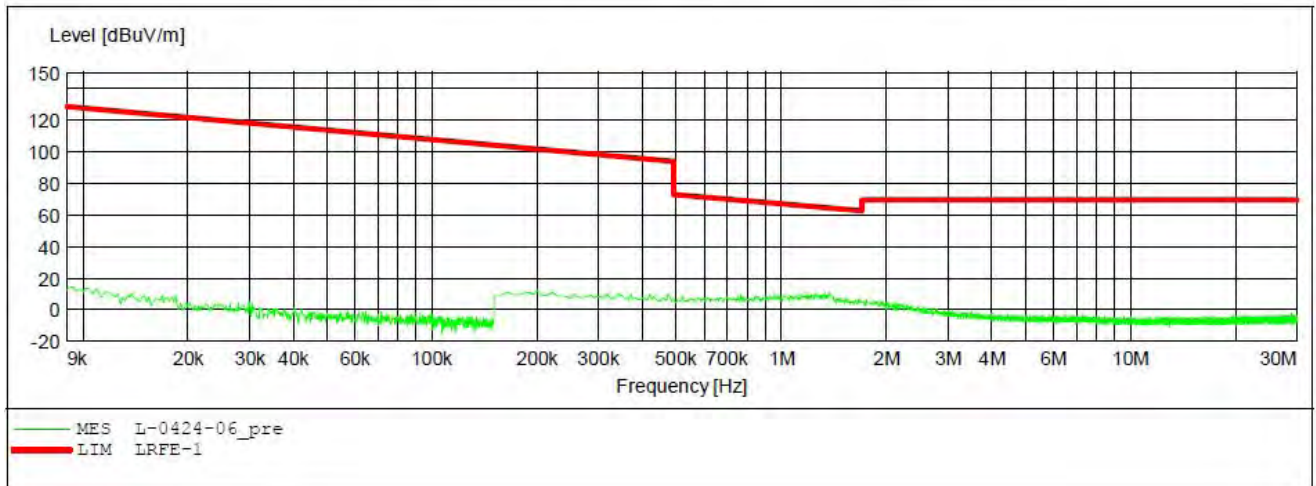
**ACCURATE TECHNOLOGY CO., LTD**

**FCC Part 15C 3M Radiated**

EUT: Motion Sensor M/N:7C-SS-VA-H0  
 Manufacturer: Leedarson  
 Operating Condition: TX 916MHz  
 Test Site: 2# Chamber  
 Operator: WADE  
 Test Specification: DC 3V  
 Comment: Z  
 Start of Test: 2019-4-24 /

**SCAN TABLE: "LFRE Fin"**

Short Description:			_SUB_STD_VTERM2 1.70				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer	
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M	
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M	





## 30MHz to 1GHz Test data


**ACCURATE TECHNOLOGY CO., LTD.**

 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

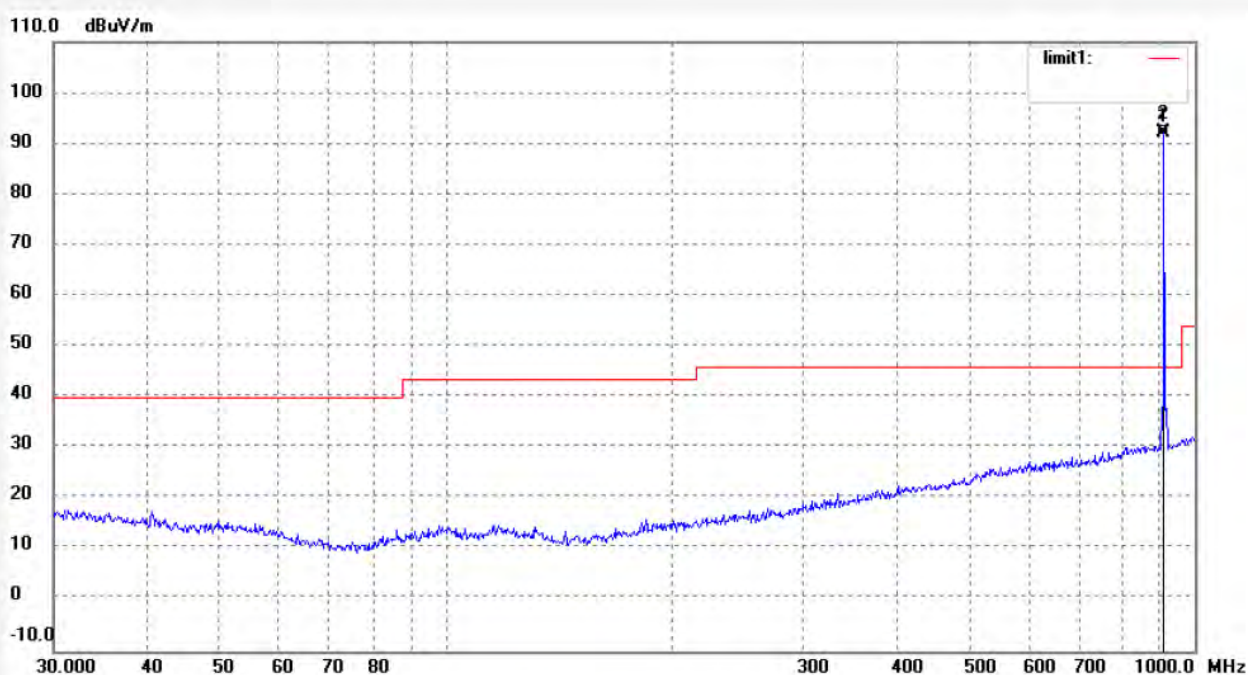
Tel:+86-0755-26503290

Fax:+86-0755-26503396

 Job No.: TUV2018 #2629  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 908.4MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

 Polarization: Horizontal  
 Power Source: DC 3V  
 Date: 19/06/10/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	908.4000	89.87	2.24	92.11	114.00	-21.89	peak			
2	908.4000	89.38	2.24	91.62	94.00	-2.38	QP			


**ACCURATE TECHNOLOGY CO., LTD.**

 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: TUV2018 #2628

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Motion Sensor

Mode: TX 908.4MHz

Model: 7C-SS-VA-H0

Manufacturer: Leedarson

Polarization: Vertical

Power Source: DC 3V

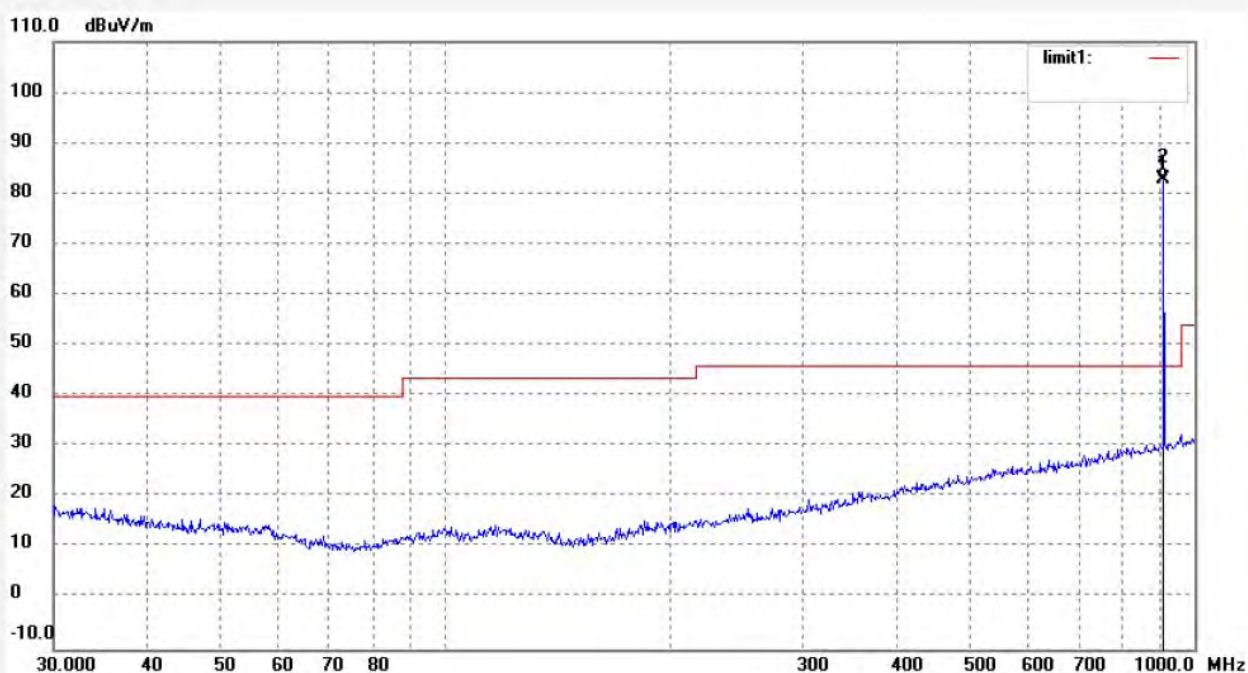
Date: 19/06/10/

Time:

Engineer Signature: WADE

Distance: 3m

Note:



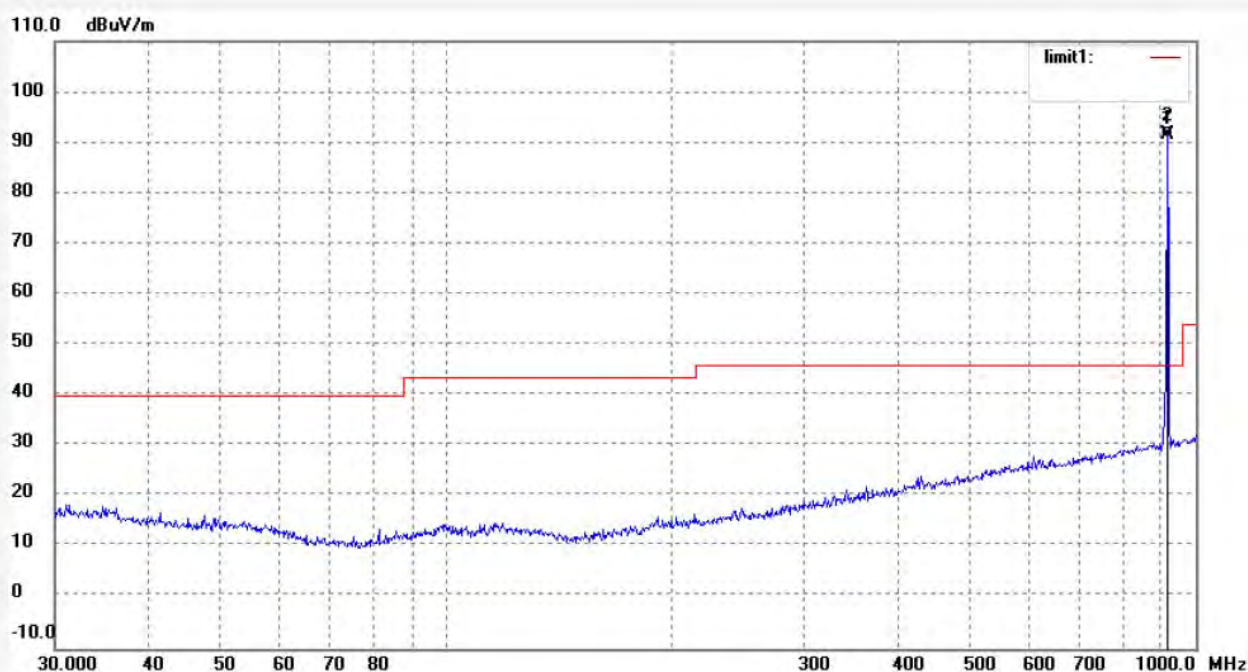
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	908.4000	80.71	2.24	82.95	114.00	-31.05	peak			
2	908.4000	80.66	2.24	82.90	94.00	-11.10	QP			



Job No.: TUV2018 #2634  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 916MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

Polarization: Horizontal  
 Power Source: DC 3V  
 Date: 19/06/10/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	916.0000	89.18	2.40	91.58	114.00	-22.42	peak			
2	916.0000	88.60	2.40	91.00	94.00	-3.00	QP			


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Site: 2# Chamber

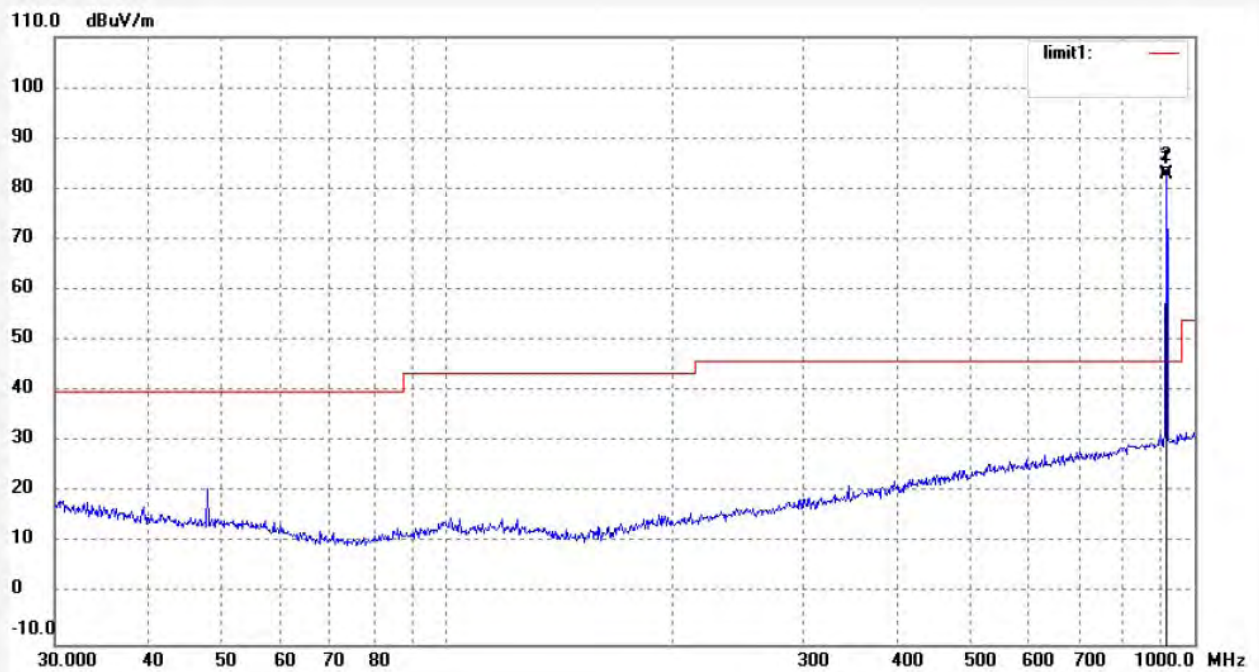
Tel:+86-0755-26503290

Fax:+86-0755-26503396

 Job No.: TUV2018 #2635  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 916MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

 Polarization: Vertical  
 Power Source: DC 3V  
 Date: 19/06/10/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	916.0000	80.37	2.40	82.77	114.00	-31.23	peak			
2	916.0000	79.80	2.40	82.21	94.00	-11.79	QP			



## 1GHz to 10GHz Test data


**ACCURATE TECHNOLOGY CO., LTD.**

 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

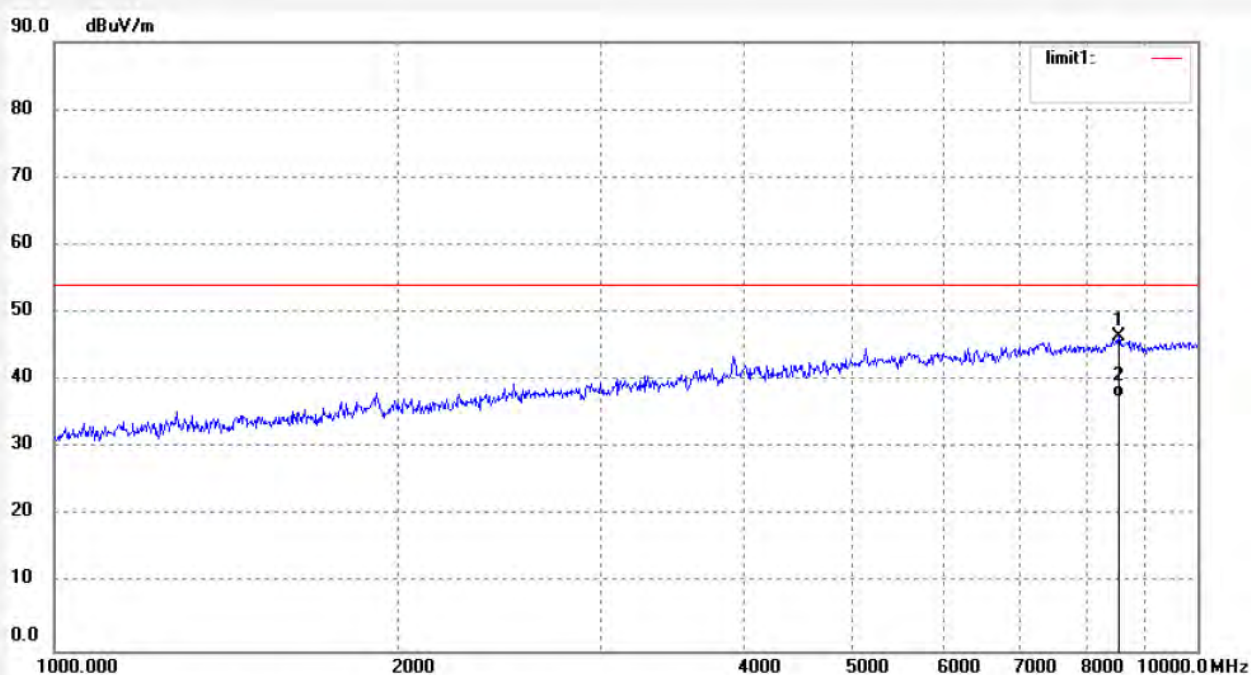
Tel:+86-0755-26503290

Fax:+86-0755-26503396

 Job No.: LGW2019 #1307  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 908.4MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

 Polarization: Horizontal  
 Power Source: DC 3V  
 Date: 19/04/25/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	8531.001	31.49	15.01	46.50	54.00	-7.50	peak			
2	8531.001	22.54	15.01	37.55	54.00	-16.45	AVG			


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Site: 2# Chamber

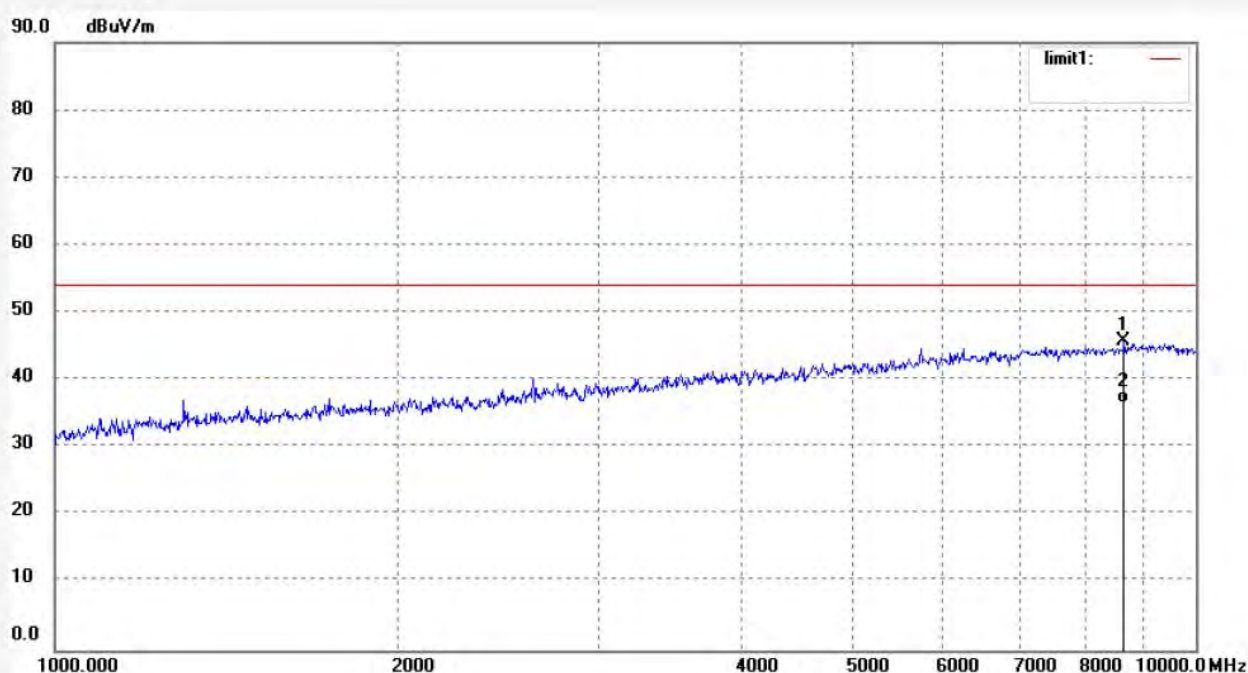
Tel:+86-0755-26503290

Fax:+86-0755-26503396

 Job No.: LGW2019 #1308  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 908.4MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

 Polarization: Vertical  
 Power Source: DC 3V  
 Date: 19/04/25/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	8649.679	31.19	14.65	45.84	54.00	-8.16	peak			
2	8649.679	21.81	14.65	36.46	54.00	-17.54	AVG			


**ACCURATE TECHNOLOGY CO., LTD.**

 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

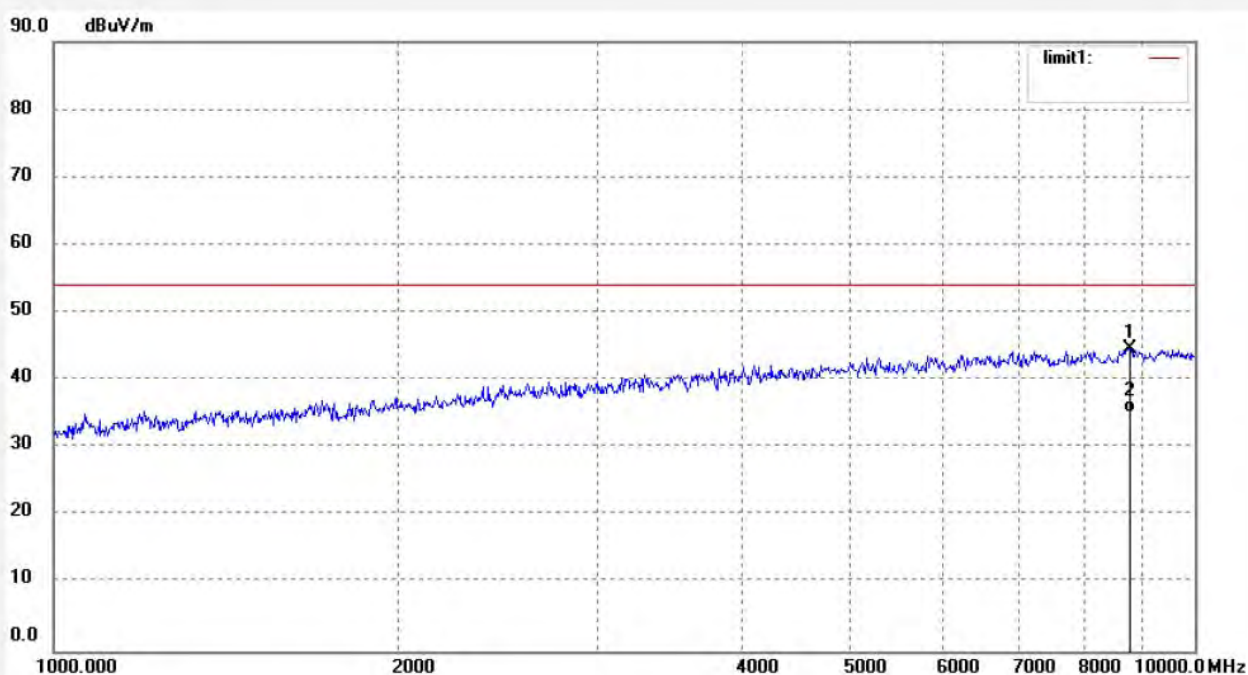
Tel:+86-0755-26503290

Fax:+86-0755-26503396

 Job No.: LGW2019 #1314  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 916MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

 Polarization: Horizontal  
 Power Source: DC 3V  
 Date: 19/04/25/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



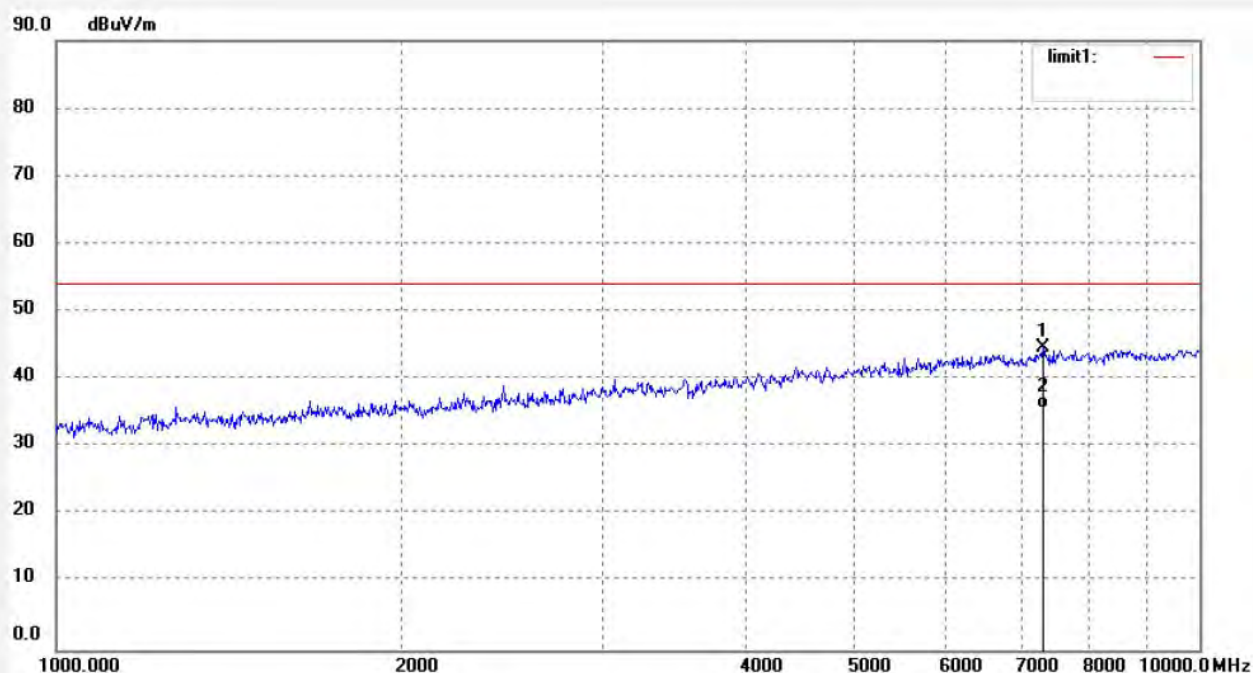
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	8770.008	30.29	14.45	44.74	54.00	-9.26	peak			
2	8770.008	20.79	14.45	35.24	54.00	-18.76	AVG			



Job No.: LGW2019 #1313  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 23 C / 48 %  
 EUT: Motion Sensor  
 Mode: TX 916MHz  
 Model: 7C-SS-VA-H0  
 Manufacturer: Leedarson

Polarization: Vertical  
 Power Source: DC 3V  
 Date: 19/04/25/  
 Time:  
 Engineer Signature: WADE  
 Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7294.575	33.36	11.22	44.58	54.00	-9.42	peak			
2	7294.575	24.35	11.22	35.57	54.00	-18.43	AVG			

## 8. ANTENNA REQUIREMENT

### 8.1. The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

### 8.2. Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Antenna gain of EUT is -1dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.

**\*\*\*\*\* End of Test Report \*\*\*\*\***