# FCC Test Report

Product Name	Screw-in On/Off Module
Model No.	AD145-1
FCC ID.	FU5AD145

Applicant	EVERSPRING INDUSTRY CO., LTD
Address	3F, No.50, Sec.1, Zhonghua Rd., Tucheng Dist.,
	New Taipei City 23666, Taiwan

Date of Receipt	Nov. 21, 2013
Issued Date	Dec. 03, 2013
Report No.	13B0411R-RFUSP15V00
Report Version	V1.0



The Test Results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation. This report must not be used to claim product endorsement by TAF or any agency of the U.S. Government

## Test Report Certification

Issued Date: Dec. 03, 2013 Report No. : 13B0411R-RFUSP15V00



Product Name	Screw-in On/Off Module	
Applicant	EVERSPRING INDUSTRY CO., LTD	
Address	3F, No.50, Sec.1, Zhonghua Rd., Tucheng Dist., New Taipei City 23666, Taiwan	
Manufacturer	Dong-Guan Li Yuan Electronics Co., Ltd	
Model No.	AD145-1	
FCC ID.	FU5AD145	
EUT Rated Voltage	AC 120V/60Hz	
EUT Test Voltage	AC 120V/60Hz	
Trade Name	EVERSPRING	
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2012	
	ANSI C63.4: 2003, ANSI C63.10: 2009	
Test Result	Complied	

The Test Results relate only to the samples tested.

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Documented By :

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Approved By

(Director / Vincent Lin)

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Attachment 1:EUT Test PhotographsAttachment 2:EUT Detailed Photographs

## 1. GENERAL INFORMATION

#### **1.1. EUT Description**

Product Name	Screw-in On/Off Module
Trade Name	EVERSPRING
FCC ID.	FU5AD145
Model No.	AD145-1
Frequency Range	908.42MHz
Type of Modulation	FSK
Number of Channels	1
Channel Control	Auto
Antenna Type	Monopole

#### Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	908.42MHz				

- 1. The EUT is a Screw-in On/Off Module with a built-in Z-Wave transceiver module.
- 2. The new batteries are used during the measurement.
- 3. These tests are conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.249.
- 4. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode	Mode 1: Transmit Mode
-----------	-----------------------

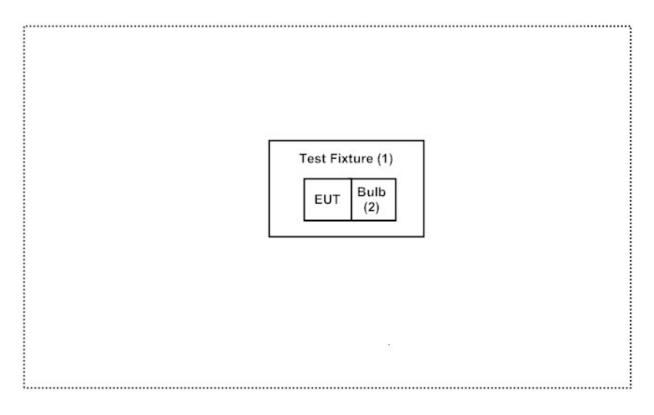
## **1.3.** Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Pro	oduct	Manufacturer	Model No.	Serial No.	Power Cord
1	Test Fixture	QuieTek	N/A	N/A	N/A
2	Bulb	CHZIVA	N/A	N/A	N/A

Signal Cable Type	Signal cable Description
	N/A

## 1.4. Configuration of Test System



## **1.5.** EUT Exercise Software

- (1) Setup the EUT as shown in section 1.4.
- (2) Provide the AC Power Source.
- (3) Starts the continuous transmit.
- (4) Verify that the EUT works correctly.

## **1.6.** Test Facility

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Ambient conditions in the laboratory:

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : <u>http://tw.quietek.com/modules/myalbum/</u> The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : <u>http://www.quietek.com/</u>

Site Description:	File on Federal Communications Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046 Registration Number: 92195
Site Name:	Quietek Corporation
Site Address:	No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, Taiwan, R.O.C. TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : <u>service@quietek.com</u>

FCC Accreditation Number: TW1014

## 2. Conducted Emission

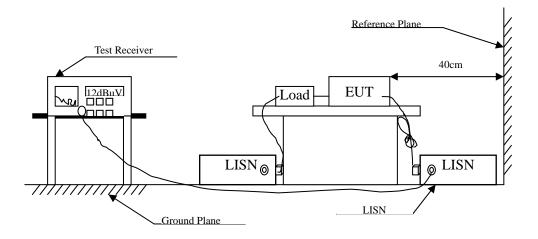
## 2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
Х	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2013	
Х	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2013	Peripherals
Х	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2013	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2013	EUT
Х	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2013	
	No.1 Shielded Room				

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked by "X" are used to measure the final test results.

## 2.2. Test Setup



## 2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit						
Frequency	Limits					
MHz	QP	AV				
0.15 - 0.50	66-56	56-46				
0.50-5.0	56	46				
5.0 - 30	60	50				

Remarks: In the above table, the tighter limit applies at the band edges.

#### 2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2009 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

## 2.5. Uncertainty

 $\pm$  2.26 dB

## 2.6. Test Result of Conducted Emission

Product	:	Screw-in On/Off Module
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Mode	:	Mode 1: Transmit Mode

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.162	9.697	49.600	59.297	-6.360	65.657
0.216	9.699	47.800	57.499	-6.615	64.114
0.283	9.702	45.160	54.862	-7.338	62.200
0.377	9.707	42.430	52.137	-7.377	59.514
0.451	9.710	37.970	47.680	-9.720	57.400
0.521	9.713	33.960	43.673	-12.327	56.000
Average					
0.162	9.697	31.880	41.577	-14.080	55.657
0.216	9.699	32.850	42.549	-11.565	54.114
0.283	9.702	30.130	39.832	-12.368	52.200
0.377	9.707	26.320	36.027	-13.487	49.514
0.451	9.710	22.910	32.620	-14.780	47.400
0.521	9.713	19.200	28.913	-17.087	46.000

#### Note:

1. All Reading Levels are Quasi-Peak and average value.

2. "means the worst emission level.

3. Measurement Level = Reading Level + Correct Factor

Product Test Item Power Line Test Mode	: Conduct : Line 2	n On/Off Module ted Emission Test Transmit Mode			
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.189	9.678	50.450	60.128	-4.758	64.886
0.252	9.681	47.820	57.501	-5.585	63.086
0.310	9.684	43.180	52.864	-8.565	61.429
0.380	9.687	41.520	51.207	-8.222	59.429
0.494	9.692	35.110	44.802	-11.369	56.171
0.912	9.721	29.270	38.991	-17.009	56.000
Average					
0.189	9.678	33.610	43.288	-11.598	54.886
0.252	9.681	30.180	39.861	-13.225	53.086
0.310	9.684	25.910	35.594	-15.835	51.429
0.380	9.687	25.780	35.467	-13.962	49.429
0.494	9.692	19.450	29.142	-17.029	46.171
0.912	9.721	21.710	31.431	-14.569	46.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

## **3.** Radiated Emission

## 3.1. Test Equipment

	The following test equipment are used	l during the radiated emission test:
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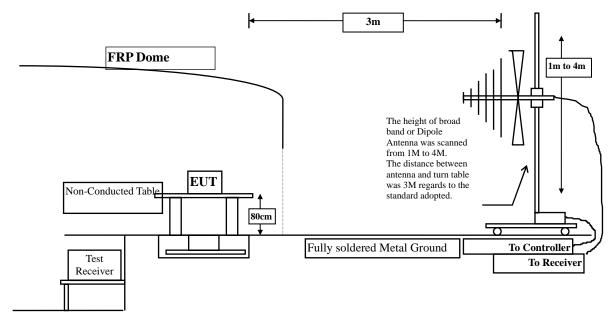
Test Site	Equipment		Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	Х	Loop Antenna	Teseq	HLA6120 / 26739	Jul., 2013
	Х	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2013
	Х	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2013
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2013
	Х	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2013
	Х	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2013
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2013
	Х	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2013
	Х	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2013
	Х	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2013
	Х	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	Х	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

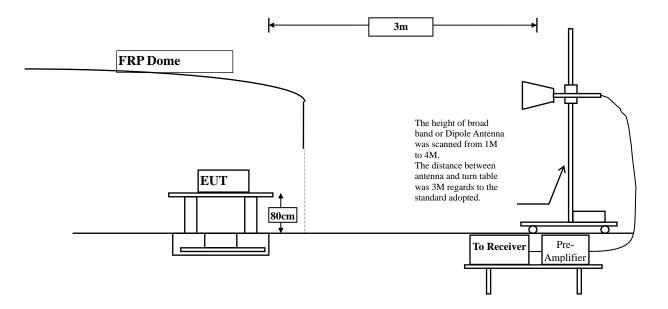
2. The test instruments marked with "X" are used to measure the final test results.

## 3.2. Test Setup

Below 1GHz



Above 1GHz



## 3.3. Limits

FCC Part 15 Subpart C Paragraph 15.249 Limits							
Frequency	Field Strength	of Fundamental	Field Strength of Harmonics				
MHz	(mV/m @3m) (dBuV/m @3m)		(uV/m @3m)	(dBuV/m @3m)			
902-928	50 94		500	54			
2400-2483.5	50	94	500	54			
5725-5875	50	94	500	54			

#### > Fundamental and Harmonics Emission Limits

Remarks : 1. RF Voltage  $(dBuV/m) = 20 \log RF$  Voltage (uV/m)

2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

#### ➤ General Radiated Emission Limits

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

FCC Part 15 Subpart C Paragraph 15.209(a) Limits							
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)					
0.009-0.490	2400/F(kHz)	300					
0.490-1.705	24000/F(kHz)	30					
1.705-30	30	30					
30-88	100	3					
88-216	150	3					
216-960	200	3					
Above 960	500	3					

Remarks : 1. RF Voltage  $(dBuV/m) = 20 \log RF$  Voltage (uV/m)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

## **3.4.** Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2009 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas. The measurement is divided into the Preliminary Measurement and the Final Measurement. The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

#### 3.5. Uncertainty

- ± 3.9 dB above 1GHz
- $\pm$  3.8 dB below 1GHz

## 3.6. Test Result of Radiated Emission

Product	: Screw-in Or	Screw-in On/Off Module							
Test Item	: Fundamenta	Fundamental Radiated Emission							
Test Site	: No.3 OATS	No.3 OATS							
Test Mode	: Mode 1: Tra	Mode 1: Transmit Mode (x-axis)							
_	_								
Frequency	Correct	Reading	Measurement	Margin	Limit				
	Factor	Level	Level						
MHz	dB	dBuV	dBuV/m	dB	dBuV/m				
Horizontal	Horizontal								
<b>Peak Detector:</b>									
908.420	27.925	59.600	87.525	-26.475	114.000				
Average Detector:									
908.420	27.925	56.100	84.025	-9.975	94.000				
Vertical									
<b>Peak Detector:</b>									
908.420	29.035	60.000	89.035	-24.965	114.000				
Average Detector:									
908.420	29.035	56.600	85.635	-8.365	94.000				

- 1. Measurement Level = Reading Level + Correct Factor.
- 2. Correct Factor = Antenna Factor + Cable Loss PreAMP.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product	:	Screw-in On/Off Module								
Test Item	:	Fundamenta	Fundamental Radiated Emission							
Test Site	:	No.3 OATS	No.3 OATS							
Test Mode	:	Mode 1: Transmit Mode (y-axis)								
Frequency		Correct Factor	Reading Level	Measurement Level	Margin	Limit				
MHz		dB	dBuV	dBuV/m	dB	dBuV/m				
Horizontal	Horizontal									
Peak Detector:										
908.420		27.925	63.500	91.425	-22.575	114.000				
Average Detector:										
908.420		27.925	60.000	87.925	-6.075	94.000				
Vertical										
<b>Peak Detector:</b>										
908.420		29.035	55.300	84.335	-29.665	114.000				
Average Detector:										
908.420		29.035	51.500	80.535	-13.465	94.000				

#### Note:

1. Measurement Level = Reading Level + Correct Factor.

2. Correct Factor = Antenna Factor + Cable Loss – PreAMP.

3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product	:	Screw-in On/Off Module								
Test Item	:	Fundament	Fundamental Radiated Emission							
Test Site	:	No.3 OATS	No.3 OATS							
Test Mode	:	Mode 1: Transmit Mode (z-axis)								
Frequency		Correct	Reading	Measurement	Margin	Limit				
		Factor	Level	Level						
MHz		dB	dBuV	dBuV/m	dB	dBuV/m				
Horizontal										
<b>Peak Detector:</b>										
908.420		27.925	59.900	87.825	-26.175	114.000				
Average Detector	:									
908.420		27.925	56.400	84.325	-9.675	94.000				
Vertical										
<b>Peak Detector:</b>										
908.420		29.035	60.900	89.935	-24.065	114.000				
Average Detector	:									
908.420		29.035	57.500	86.535	-7.465	94.000				

#### Note:

1. Measurement Level = Reading Level + Correct Factor.

2. Correct Factor = Antenna Factor + Cable Loss – PreAMP.

3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product Test Item Test Site Test Mode	<ul> <li>Screw-in On/Off Module</li> <li>Harmonic Radiated Emission Data</li> <li>No.3 OATS</li> <li>Mode 1: Transmit Mode</li> </ul>						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
1816.840	-4.390	37.964	33.574	-40.426	74.000		
2725.260	-1.075	36.320	35.244	-38.756	74.000		
3633.680	-0.395	38.430	38.035	-35.965	74.000		
4542.100	1.901	32.647	34.549	-39.451	74.000		
5450.520	4.228	31.669	35.897	-38.103	74.000		
6358.940	6.502	31.717	38.219	-35.781	74.000		
7267.360	11.106	32.232	43.338	-30.662	74.000		
8175.780	14.925	32.312	47.237	-26.763	74.000		
9084.200	13.021	31.992	45.013	-28.987	74.000		

## Average Detector:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item	<ul> <li>Screw-in On/Off Module</li> <li>Harmonic Radiated Emission Data</li> </ul>								
Test Site	: No.3 OATS								
Test Mode	: Mode 1								
_	~								
Frequency	Correct	Reading	Measurement	Margin	Limit				
	Factor	Level	Level						
MHz	dB	dBuV	dBuV/m	dB	dBuV/m				
Vertical									
<b>Peak Detector:</b>									
1816.840	-2.613	38.569	35.956	-38.044	74.000				
2725.260	-1.228	34.517	33.289	-40.711	74.000				
3633.680	0.379	37.752	38.131	-35.869	74.000				
4542.100	5.407	32.223	37.630	-36.370	74.000				
5450.520	5.976	31.647	37.622	-36.378	74.000				
6358.940	7.975	31.371	39.347	-34.653	74.000				
7267.360	11.925	32.393	44.318	-29.682	74.000				
8175.780	15.635	32.652	48.287	-25.713	74.000				
9084.200	13.142	31.900	45.042	-28.958	74.000				

#### **Average Detector:**

--

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: Screw-	: Screw-in On/Off Module							
Test Item	i : Genera	General Radiated Emission Data							
Test Site	: No.3 O	No.3 OATS							
Test Mod	le : Mode l	Aode 1: Transmit Mode							
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe				
(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB/m)				
Horizontal									
319.060	23.055	39.271	-22.945	46.000	14.520				
580.960	23.835	30.222	-22.165	46.000	23.580				
637.220	24.258	30.174	-21.742	46.000	23.810				
736.160	25.710	32.068	-20.290	46.000	23.260				
815.700	24.884	30.527	-21.116	46.000	24.050				
994.180	25.939	31.293	-28.061	54.000	24.450				
Vertical									
249.220	18.680	30.984	-27.320	46.000	18.400				
416.060	17.397	28.940	-28.603	46.000	18.810				
563.500	19.863	29.487	-26.137	46.000	20.220				
635.280	21.054	29.687	-24.946	46.000	21.070				
794.360	20.717	28.100	-25.283	46.000	22.170				
953.440	24.126	28.845	-21.874	46.000	24.920				

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

## 4. Band Edge

## 4.1. Test Equipment

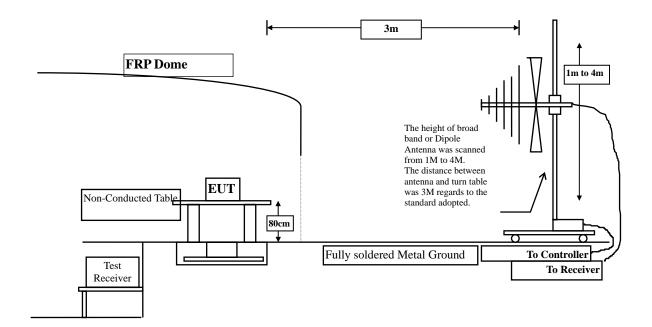
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	Х	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2013
		Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2013
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2013
	Х	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2013
		Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2013
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2013
		Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2013
	Х	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2013
	Х	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2013
	Х	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	Х	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated every one year.

2. The test equipments marked by "X" are used to measure the final test results.

## 4.2. Test Setup



#### **4.3.** Limit

Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

## 4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2009 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCS 30 )is 120 kHz, above 1GHz are 1 MHz.

#### 4.5. Uncertainty

Radiated is  $\pm$  3.9 dB.

#### 4.6. Test Result of Band Edge

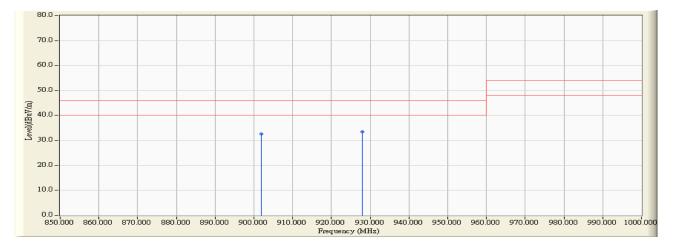
Product	:	Screw-in On/Off Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit Mode

#### **RF Radiated Measurement (Horizontal):**

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
01(Quasi-Peak)	902.000	5.628	26.880	32.508	-13.492	Pass
02(Quasi-Peak)	928.000	6.848	26.540	33.387	-12.613	Pass

#### Figure Channel 01:

#### Horizontal (Quasi-Peak)



- 1. Quasi-Peak measurements: RBW=100kHz,VBW=1MHz,Sweep: Auto.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.

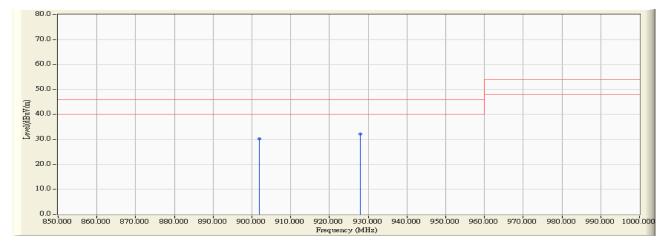
Product	:	Screw-in On/Off Module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit Mode

#### **RF** Radiated Measurement (Vertical):

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
01(Quasi-Peak)	902.000	3.155	27.050	30.204	-15.796	Pass
02(Quasi-Peak)	928.000	6.160	25.930	32.090	-13.910	Pass

#### Figure Channel 01:

#### Vertical (Quasi-Peak)



- 1. Quasi-Peak measurements: RBW=100kHz,VBW=1MHz,Sweep: Auto.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.

## 5. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1 : EUT Test Photographs

Attachment 2 : EUT Detailed Photographs