



FCC TEST REPORT

Report No.: STS2204236W02

Issued for

Chengdu Accsoon Technology Co., LTD.

Rm. 2502, Bld. A, Tianxiang Plaza, Tianfu 2nd St., High-tech Zone, Chengdu, Sichuan, China

Product Name:	Wireless Follow Focus System with Frequency-Hopping Spread Spectrum		
Brand Name:	Accsoon		
Model Name:	F-C01		
Series Model:	F-C02, F-C03		
FCC ID:	2AOH401FFC1N		
Test Standard:	FCC Part 15.249		

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APPROVAL



TEST RESULT CERTIFICATION

Applicant's Name:	Chengdu Accsoon Technology Co., LTD.
Address:	Rm. 2502, Bld. A, Tianxiang Plaza, Tianfu 2nd St., High-tech Zone, Chengdu, Sichuan, China
Manufacturer's Name:	Shenzhen Accsoon Technology Co., LTD.
Address:	Rm. 302-305, 3F, Bld. 10, Baozhi Industrial Rd., Guancheng Shequ, Guanhu St., Longhua District, Shenzhen, China
Product Description	
Product Name:	Wireless Follow Focus System with Frequency-Hopping Spread Spectrum
Brand Name:	Accsoon
Model Name:	F-C01
Series Model:	F-C02, F-C03
Test Standards:	FCC Part15.249

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

ANSI C63.10-2013

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Date of Test:

Test Procedure:

Date of receipt of test item: 29 Apr. 2022

Date of performance of tests ..: 29 Apr. 2022 ~ 25 July 2022

Date of Issue 25 July 2022

Test Result...... Pass

Testing Engineer :

(Chris Chen)

Technical Manager:

(Sean she)

Authorized Signatory:

Hound loved

(Bovey Yang)



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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	25 July 2022	STS2204236W01	ALL	Initial Issue





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part 15.249 , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	N/A	
15.203	Antenna Requirement	Pass	
15.249	Radiated Spurious Emission	Pass	
15.249 Radiated Band Edge Emission		Pass	
15.249	Field Strength of fundamental	Pass	
15.215(c)	20dB Bandwidth	Pass	

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report.
- (2) All tests are according to ANSI C63.10-2013.



1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add.: A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ,

Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569 IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	RF output power, conducted	±0.87dB
2	Unwanted Emissions, conducted	±2.895dB
3	All emissions, radiated 9K-30MHz	±3.80dB
4	All emissions, radiated 30M-1GHz	±4.09dB
5	All emissions, radiated 1G-6GHz	±4.92dB
6	All emissions, radiated>6G	±5.49dB
7	Conducted Emission (9KHz-30MHz)	±2.73dB



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Wireless Follow Focus System with Frequency-Hopping Spread Spectrum		
Trade Name	Accsoon		
Model Name	F-C01		
Series Model	F-C02, F-C03		
Model Difference	Only different in model r	name.	
Product Description	The EUT is a Wireless Follow Focus System with Frequency-Hopping Spread Spectrum. Operation Frequency: 904.17-915.17MHz Modulation Type: FSK Antenna Designation: Please refer to the Note 4. Antenna Gain(Peak): 2dBi Based on the application, features, or specification exhibited in User Manual, the EUT is considered as a ITE/Computing Device. More details of EUT technica specification, please refer to the User Manual.		
Rating	Input: 5V~8.1V 1.5A		
Connecting I/O Port(s)	Please refer to the Note 1.		
Hardware version number	V1.1		
Software version number	V1.0		

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.

2.

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	904.17	4	908.17	8	912.17
1	905.17	5	909.17	9	913.17
2	906.17	6	910.17	10	914.17
3	907.17	7	911.17	11	915.17

3.

Test channel List			
Test Channel	EUT Channel	Test Frequency (MHz)	
lowest	CH00	904.17	
middle	CH06	910.17	
highest	CH11	915.17	

4. Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	Accsoon	F-C01	Spring	N/A	2dBi	Antenna

Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.



2.2 DESCRIPTION OF THE TEST MODES

For conducted test items and radiated spurious emissions Each of these EUT operation mode(s) or test configuration mode(s) mentioned below was evaluated respectively.

Pretest Mode	Description	Data/Modulation
Mode 1	TX/CH00	FSK
Mode 1	TX/CH06	FSK
Mode 1	TX/CH11	FSK

Note:

(1) All above mode have been measurement, only worst data was reported.

2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the

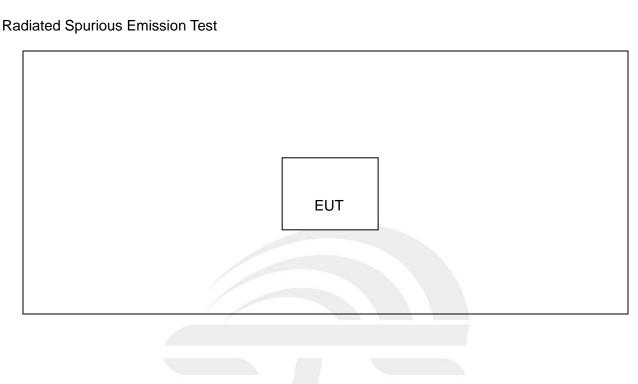
operating channel as well as the output power level.

RF Function	Туре	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
Sub-G	904-915Mhz	FSK	2	Default	The EUT has signal transmission when it is powered on



2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters.





2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A
	4				

Note:

(1) For detachable type I/O cable should be specified the length in cm in ${}^{\mathbb{F}}$ Length ${}_{\mathbb{F}}$ column.



2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Radiation rest equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29
Signal Analyzer	R&S	FSV 40-N	101823	2021.09.30	2022.09.29
Active loop Antenna	ZHINAN	ZN30900C	16035	2021.04.11	2023.04.10
Bilog Antenna	TESEQ	CBL6111D	34678	2020.10.12	2022.10.11
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2021.10.11	2023.10.10
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2020.10.12	2022.10.11
Pre-Amplifier(0.1M-3 GHz)	EM	EM330	060665	2021.10.08	2022.10.07
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2021.09.30	2022.09.29
Pre-Amplifier (18G-40GHz)	SKET	LNPA-1840-50	SK2018101801	2021.09.28	2022.09.27
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 RE)			

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29
LISN	R&S	ENV216	101242	2021.09.30	2022.09.29
LISN	EMCO	3810/2NM	23625	2021.09.30	2022.09.29
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 CE)			



RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
	Keysight	U2021XA	MY55520005	2021.09.30	2022.09.29
Power Sensor			MY55520006	2021.09.30	2022.09.29
Power Sensor			MY56120038	2021.09.30	2022.09.29
			MY56280002	2021.09.30	2022.09.29
Signal Analyzer	Agilent	N9020A	MY51110105	2022.03.01	2023.02.28
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 RE)			





3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

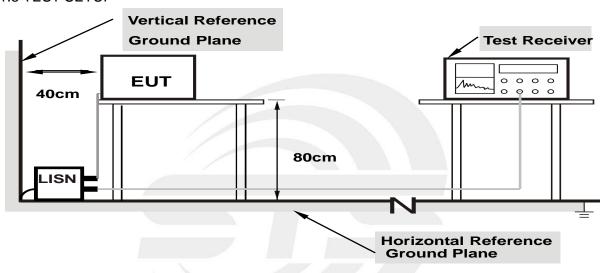
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



3.1.2 TEST PROCEDURE

- a. The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN is at least 80 cm from the nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.1.3 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support.

3.1.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



3.1.5 TEST RESULT

Temperature:	(C)	Relative Humidity:	%RH
Test Voltage:	N/A	Phase:	L/N
Test Mode:	N/A		

Note: EUT is only power by DC Power, So it is not applicable for this test.





3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on Part 15.249 and the Part 15.209(a) limit in the table below has to be followed.

Standard FCC 15.209

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(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
960~1000	500	3
Above 1000	Other:74.0 dB(µV)/m (Peak)	3
	54.0 dB(μV)/m (Average)	

Standard FCC 15.249

Frequency of Emission (MHz)	Field Strength of fundamental (millivolts /meter)	Field Strength of Harmonics (microvolts/meter)
900~928	50	500
2400~2483.5	50	500
5725~5875	50	500
24000~242500	250	2500

Notes:

(1) 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 Section 15.209, whichever is the lesser attenuation.

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
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

A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China Tel: +88-755 3688 6288 Fax:+86-755 3688 6277 Http://www.stsapp.com E-mail: sts@stsapp.com



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	Above 38.6
13.36-13.41			

Spectrum Parameter	Setting
Detector	Peak/AV
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB (emission in restricted band)	>20BW
VB (emission in restricted band)	=3xRB

Receiver Parameter	Setting
Attenuation	Auto
	9kHz~90kHz / RB 200Hz for PK & AV
	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
	490kHz~30MHz / RB 9kHz for QP
	30MHz~1000MHz / RB 120kHz for QP



3.2.2 TEST PROCEDURE

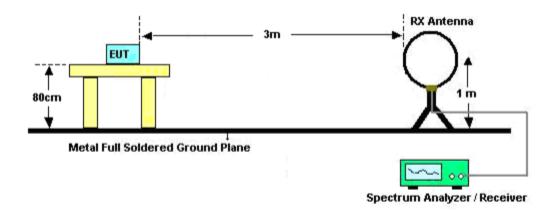
- a. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of arotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Below 1GHz)
- b. The measuring distance of 3m shall used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Above 1GHz)
- c. The height of the test antenna shall vary between 1m to 4m.Both horizontal and vertical polarization Of the antenna are set to make the measurement.
- d. The initial step in collecting radiated emission data is a receive peak detector mode.
 Pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. All readings are peak unless otherwise stated QP in column of Note. Peak denoted that the Peak reading compliance with the QP limits and then QP Mode measurement didn't perform (Below 1GHz)
- f. All readings are Peak mode value unless otherwise stated AVG in column of Note. If the Peak mode measured value compliance with the Peak limits and lower than AVG Limits, the EUT shall be deemed to meet Peak & AVG limits and then only Peak mode was measured, but AVG mode didn't perform.(Above 1GHz)
- 9. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.3 DEVIATION FROM TEST STANDARD
No deviation

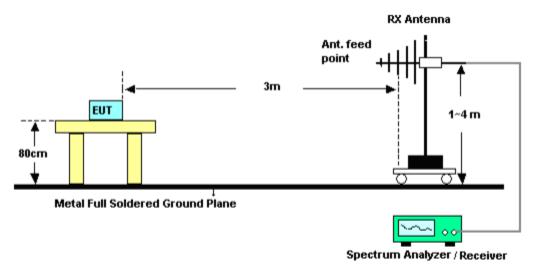


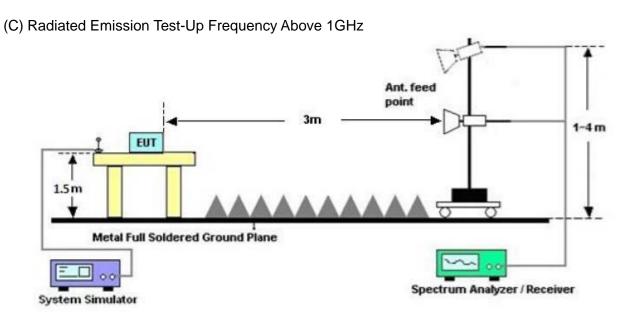
3.2.4 TEST SETUP

(A) Radiated Emission Test-Up Frequency Below 30MHz



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







3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

Margin=PL-PK L or AL- AV L; Margin only shown the worst case.

Where

PR = Peak Reading

AR = Average Reading

PL = Peak Level

AL = Average Level

AF = Antenna Factor

PK L = Peak Limit

AV L = AV Limit For example

Frequency	PR	AR	AF	PL	AL	PK L	AV L	Margin
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)
2178	40.23	30.31	9.83	50.06	40.14	74.00	54.00	-13.86



3.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

Below 30 MHz

Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 5V	Polarization:	
Test Mode:	TX Mode		

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				PASS
				PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

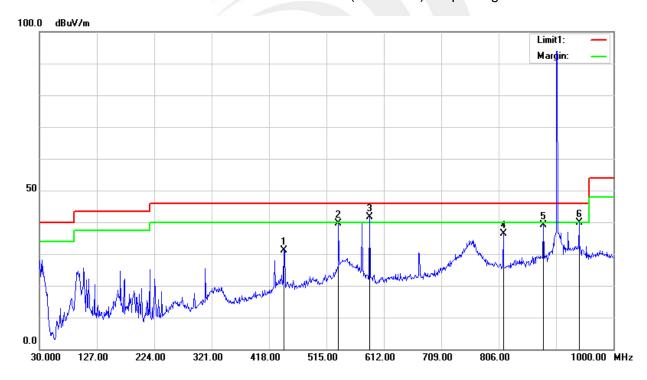


Between 30MHz - 1000 MHz Radiation Spurious

Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	Mode 1		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	443.2200	41.11	-9.95	31.16	46.00	-14.84	peak
2	535.3700	46.70	-7.13	39.57	46.00	-6.43	peak
3	587.7500	47.36	-5.81	41.55	46.00	-4.45	peak
4	813.7600	38.33	-1.98	36.35	46.00	-9.65	peak
5	881.6600	39.71	-0.66	39.05	46.00	-6.95	peak
6	941.8000	38.41	1.42	39.83	46.00	-6.17	peak

- 1. Margin = Result (Result = Reading + Factor)—Limit
- 2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

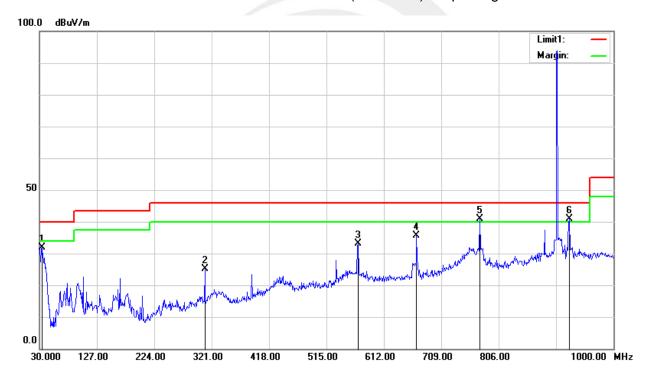




Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	Mode 1		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	33.8800	46.77	-14.80	31.97	40.00	-8.03	peak
2	309.3600	39.64	-14.48	25.16	46.00	-20.84	peak
3	568.3500	38.80	-5.58	33.22	46.00	-12.78	peak
4	667.2900	40.26	-4.64	35.62	46.00	-10.38	peak
5	773.9900	43.16	-2.29	40.87	46.00	-5.13	peak
6	925.3100	40.55	0.28	40.83	46.00	-5.17	peak

- 1. Margin = Result (Result = Reading + Factor)-Limit
- 2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

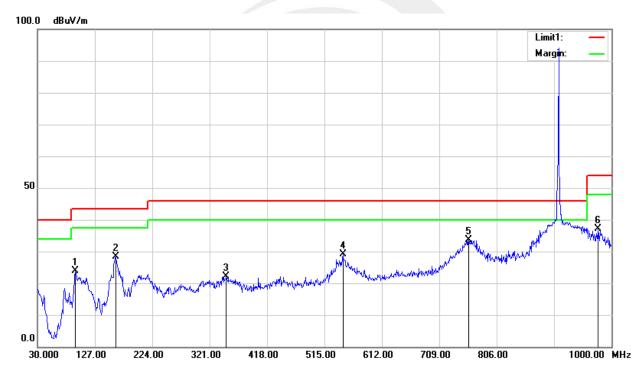




Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	Mode 2		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	94.0200	44.73	-20.89	23.84	43.50	-19.66	peak
2	161.9200	47.48	-19.01	28.47	43.50	-15.03	peak
3	349.1300	35.27	-13.09	22.18	46.00	-23.82	peak
4	546.0400	35.33	-6.20	29.13	46.00	-16.87	peak
5	758.4700	35.84	-2.17	33.67	46.00	-12.33	peak
6	977.6900	34.68	2.52	37.20	54.00	-16.80	peak

- 3. Margin = Result (Result = Reading + Factor)—Limit
- 4. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

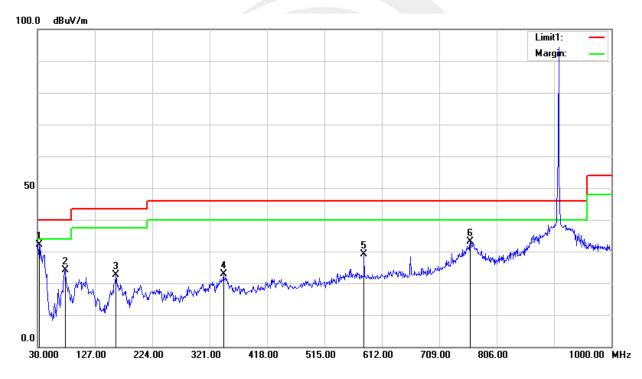




Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	Mode 2		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	32.9100	46.41	-14.33	32.08	40.00	-7.92	peak
2	76.5600	47.78	-23.61	24.17	40.00	-15.83	peak
3	162.8900	41.69	-19.12	22.57	43.50	-20.93	peak
4	344.2800	36.10	-13.26	22.84	46.00	-23.16	peak
5	581.9300	34.84	-5.78	29.06	46.00	-16.94	peak
6	761.3800	35.28	-2.19	33.09	46.00	-12.91	peak

- 3. Margin = Result (Result = Reading + Factor)-Limit
- 4. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

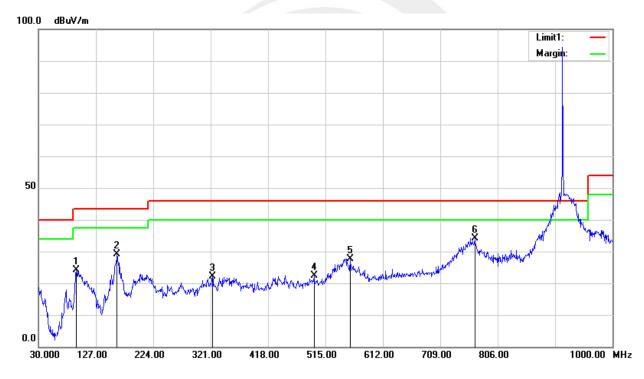




Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	Mode 3		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	94.0200	45.12	-20.89	24.23	43.50	-19.27	peak
2	162.8900	48.33	-19.12	29.21	43.50	-14.29	peak
3	323.9100	35.89	-13.88	22.01	46.00	-23.99	peak
4	495.6000	30.51	-8.10	22.41	46.00	-23.59	peak
5	556.7100	33.30	-5.58	27.72	46.00	-18.28	peak
6	767.2000	36.49	-2.29	34.20	46.00	-11.80	peak

- 5. Margin = Result (Result = Reading + Factor)—Limit
- 6. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

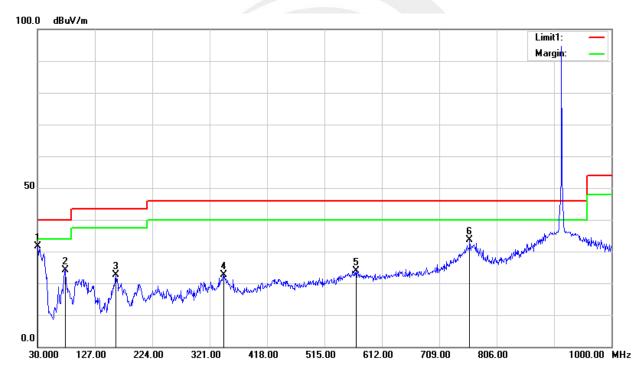




Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	Mode 3		

No.	Frequency	Reading			Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.9700	44.89	-13.35	31.54	40.00	-8.46	peak
2	76.5600	47.71	-23.61	24.10	40.00	-15.90	peak
3	161.9200	41.67	-19.01	22.66	43.50	-20.84	peak
4	345.2500	35.80	-13.23	22.57	46.00	-23.43	peak
5	568.3500	29.56	-5.58	23.98	46.00	-22.02	peak
6	760.4100	35.75	-2.18	33.57	46.00	-12.43	peak

- 5. Margin = Result (Result = Reading + Factor)—Limit
- 6. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





Above 1G Radiation Spurious

904.17MHz

Frequency	Meter	Detector	Amplifier	Loss	Antenna Factor	Orrected Factor	Corrected Amplitude	FCC F 15.249/15.		RX Antenna
	Reading				Factor	racioi Amplitude	Amplitude	Limit	Margin	Polar
(MHz)	(dBµV/m)	(PK/QP/AV)	(dB)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(H/V)
1808.45	67.54	PK	45.10	4.91	25.00	-15.19	52.35	74	-21.65	Н
1808.45	66.74	PK	45.10	4.91	25.00	-15.19	51.55	74	-22.45	V
2712.68	66.81	PK	44.10	5.03	25.80	-13.27	53.54	74	-20.46	Н
2712.68	66.49	PK	44.10	5.03	25.80	-13.27	53.22	74	-20.78	V
3616.69	50.59	PK	43.80	6.72	33.40	-3.68	46.91	74	-27.09	Н
3616.69	50.91	PK	43.80	6.72	33.40	-3.68	47.23	74	-26.77	V

910.17MHz

Frequency	Meter	Detector	Amplifier	Loss	Antenna	Orrected	Corrected		FCC Part 15.249/15.209/205	
, ,	Reading				Factor	Factor	Amplitude	Limit	Margin	Polar
(MHz)	(dBµV/m)	(PK/QP/AV)	(dB)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(H/V)
1820.48	67.85	PK	45.10	4.91	25.00	-15.19	52.66	74	-21.34	Н
1820.48	67.04	PK	45.10	4.91	25.00	-15.19	51.85	74	-22.15	V
2730.56	66.97	PK	44.10	5.03	25.80	-13.27	53.70	74	-20.30	Н
2730.56	66.79	PK	44.10	5.03	25.80	-13.27	53.52	74	-20.48	V
3640.77	50.89	PK	43.80	6.72	33.40	-3.68	47.21	74	-26.79	Н
3640.77	50.77	PK	43.80	6.72	33.40	-3.68	47.09	74	-26.91	V

915.17MHz

Frequency	Meter	Detector	Amplifier	Loss	Loss Antenna Orrected Corrected Amplitude		Corrected	FCC F 15.249/15.	RX Antenna	
	Reading						Factor Amplitude		Margin	Polar
(MHz)	(dBµV/m)	(PK/QP/AV)	(dB)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(H/V)
1830.61	67.87	PK	45.10	4.91	25.00	-15.19	52.68	74	-21.32	Н
1830.61	66.94	PK	45.10	4.91	25.00	-15.19	51.75	74	-22.25	V
2745.71	67.18	PK	44.10	5.03	25.80	-13.27	53.91	74	-20.09	Н
2745.71	66.52	PK	44.10	5.03	25.80	-13.27	53.25	74	-20.75	V
3660.85	50.94	PK	43.80	6.72	33.40	-3.68	47.26	74	-26.74	Н
3660.85	50.51	PK	43.80	6.72	33.40	-3.68	46.83	74	-27.17	V

Note: The peak value is less than the AV limit, so AV data does not need to be tested.



Duty cycle



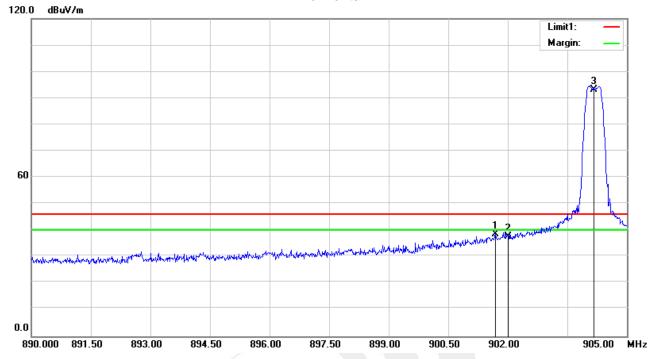
Ton (µs)	Tp (µs)	Duty Factor
4515	4995	0.88

Note: Duty Factor=20*LOG10(1/(Ton/Tp))



(Radiation Band edge)

904.17MHz Horizontal

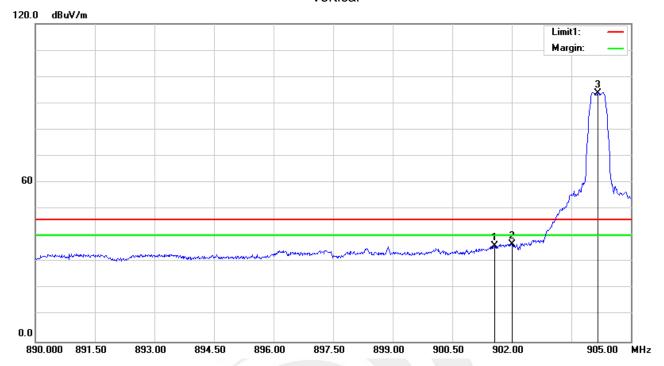


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	901.6850	38.89	-0.40	38.49	46.00	-7.51	peak
2	902.0000	38.05	-0.40	37.65	46.00	-8.35	peak

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
3	904.1700	93.45	-0.34	-	93.11	114	-20.89	peak
4	904.1700	93.45	-0.34	0.88	92.23	94	-1.77	AVG



Vertical

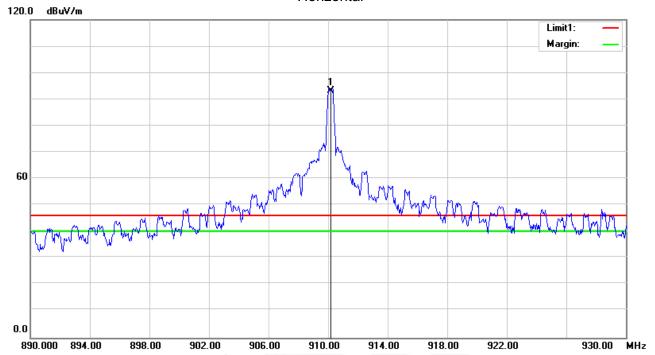


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	901.5650	36.50	-0.41	36.09	46.00	-9.91	peak
2	902.0000	37.15	-0.40	36.75	46.00	-9.25	peak

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
3	904.1700	94.15	-0.34	_	93.81	114	-20.19	peak
4	904.1700	94.15	-0.34	0.88	92.93	94	-1.07	AVG



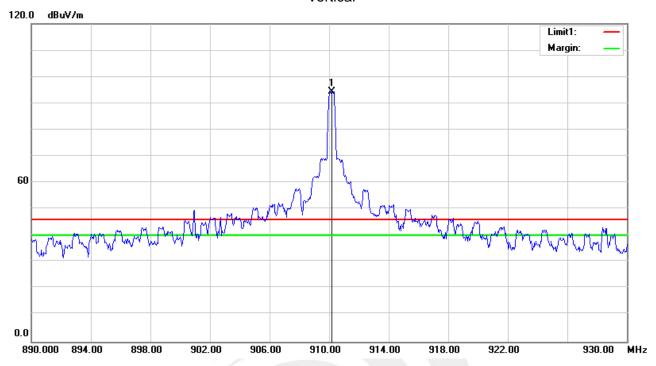
910.17MHz Horizontal



No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	910.1700	93.42	-0.18		93.24	114	-20.76	peak
2	910.1700	93.42	-0.18	0.88	92.36	94	-1.64	AVG



Vertical

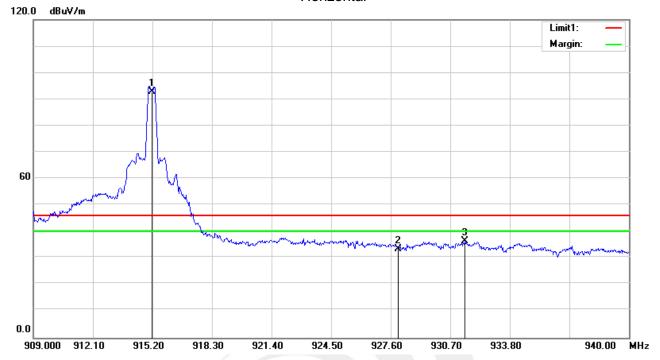


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	910.1700	94.54	-0.18	94.36	46.00	48.36	peak

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	910.1700	94.54	-0.18	-	94.36	114	-19.64	peak
2	910.1700	94.54	-0.18	0.88	93.48	94	-0.52	AVG



915.17MHz Horizontal

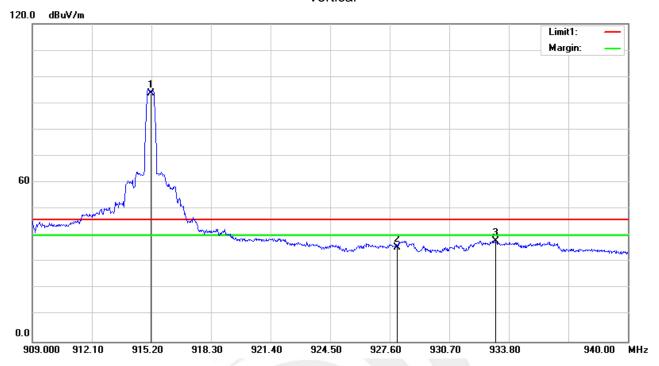


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
2	928.0000	32.96	0.43	33.39	46.00	-12.61	peak
3	931.4750	35.70	0.67	36.37	46.00	-9.63	peak

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	915.1700	92.99	-0.10	-	92.89	114	-21.11	peak
4	915.1700	92.99	-0.10	0.88	92.01	94	-1.99	AVG



Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
2	928.0000	35.05	0.43	35.48	46.00	-10.52	peak
3	933.1180	37.24	0.81	38.05	46.00	-7.95	peak

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	915.1700	93.88	-0.10	_	93.78	114	-20.22	peak
4	915.1700	93.88	-0.10	0.88	92.9	94	-1.1	AVG



4. BANDWIDTH TEST

4.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting : RBW= 1% to 5% OBW, VBW≧RBW, Sweep time = Auto.

4.2 TEST SETUP

EUT	SPECTRUM
	ANALYZER

4.3 EUT OPERATION CONDITIONS TX mode.



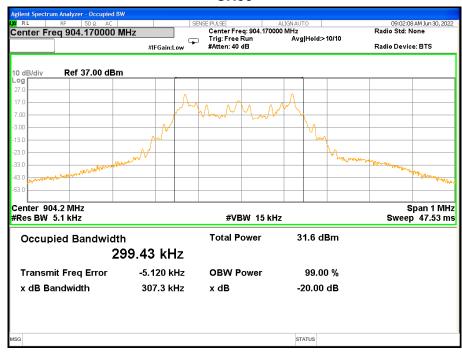


4.4 TEST RESULTS

Temperature:	25 ℃	Relative Humidity:	50%
Test Voltage:	AC 120V/60Hz		

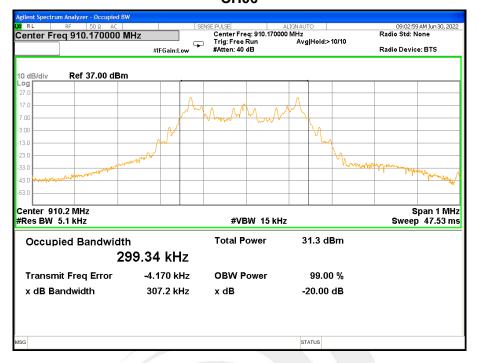
Test Channel	Frequency(MHz)	20 dB Bandwidth(KHz)	99% Bandwidth(KHz)
CH00	904.17	307.3	299.43
CH06	910.17	307.2	299.34
CH11	915.17	307.3	299.62

CH00

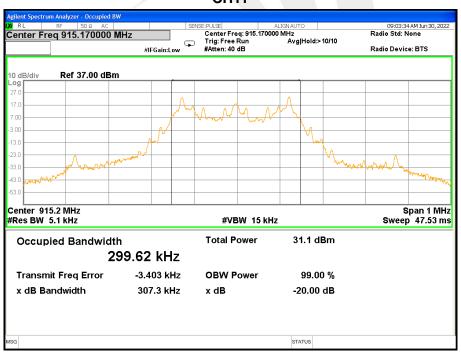




CH06



CH11





5. ANTENNA REQUIREMENT

5.1 STANDARD REQUIREMENT

According to the FCC Part 15 Paragraph 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.

5.2 EUT ANTENNA

The EUT antenna is Spring Antenna.It conforms to the standard requirements.





APPENDIX- PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

* * * * * END OF THE REPORT * * * *

