



Test report No.: 2360570R-RFUSV01S-A

# TEST REPORT

Product Name	Wi-Fi 6/6E Sensor
Trademark	7SIGNAL, Inc.
Model and /or type reference	7S6300
FCC ID	YLF7S6300
Applicant's name / address	7signal 6155 Rockside Road, Suite 110, Independence, Ohio 44131, United States
Manufacturer's name	7SIGNAL, Inc.
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C ANSI C63.4: 2014, ANSI C63.10: 2013
Verdict Summary	IN COMPLIANCE
Documented By (Senior Project Specialist / Genie Chang)	
Tested By (Senior Engineer / Ivan Chuang)	
Tested By (Senior Engineer / Alan Chen)	
Date of Receipt	2023/06/17
Date of Issue	2023/09/05
Report Version	V1.0

---

**INDEX**


---

	Page
<b>1. Summary of Reference Test Data.....</b>	<b>5</b>
1.1. Introduction .....	5
1.2. Difference Description .....	5
1.3. Spot Check Verification Data Section .....	5
1.4. Reference Section .....	6
<b>2. General Information.....</b>	<b>7</b>
2.1. EUT Description.....	7
2.2. Tested System Details.....	9
2.3. Configuration of Tested System .....	9
2.4. EUT Exercise Software .....	9
2.5. Test Facility .....	10
2.6. List of Test Item and Equipment .....	11
2.7. Uncertainty .....	12
<b>3. Maximum Power Output .....</b>	<b>13</b>
3.1. Test Setup .....	13
3.2. Limits.....	13
3.3. Test Procedure .....	13
3.4. Test Result of Maximum Power Output .....	14
<b>4. Radiated Emission .....</b>	<b>20</b>
4.1. Test Setup .....	20
4.2. Limits.....	21
4.3. Test Procedure .....	22
4.4. Test Result of Radiated Emission .....	24
<b>5. Band Edge .....</b>	<b>25</b>
5.1. Test Setup .....	25
5.2. Limits.....	25
5.3. Test Procedure .....	26
5.4. Test Result of Band Edge .....	27

Appendix 1: EUT Test Photographs

Appendix 2: Product Photos-Please refer to the file: 2360570R-Product Photos

---

## Competences and Guarantees

---

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

**IMPORTANT:** No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

---

## General conditions

---

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

## Revision History

---

Report No.	Version	Description	Issued Date
2360570R-RFUSV01S-A	V1.0	Initial issue of report.	2023/09/05

## 1. Summary of Reference Test Data

### 1.1. Introduction

This application is intended to reuse the test data from FCC ID: A8J-ECW336, certified on 07/08/2022, due to the fact that this products is hardware-wise identical.

According to KDB 484596 D01v01, the FCC Part 15C (equipment class: DTS) reuse the original test result of FCC ID: A8J-ECW336 and perform spot-check.

DTS		
Test Item	Data Reused	Remark
Conducted Emission	Yes	N/A
Radiated Band Edge	Yes	Verify worst-case channel
Radiated Spurious Emission	Yes	Verify worst-case channel
6dB Bandwidth	Yes	N/A
Maximum Power Output	Yes	Verify all output power
RF Antenna Conducted Test	Yes	N/A
Power Spectral Density	Yes	N/A
Duty Cycle	Yes	N/A

The applicant takes full responsibility that the test data as referenced in this report represent compliance for the FCC ID: YLF7S6300.

### 1.2. Difference Description

7S6300 (FCC ID: YLF7S6300), use the same MCU chipset (IPQ8072A), share the same chipset baseline, hardware design, support same bands, the difference is only on software version change from master mode to slave mode.

### 1.3. Spot Check Verification Data Section

The radiated emission and radiated band edge tests were performed according to the worst result of FCC ID: A8J-ECW336. After evaluation and verification, this change does not affect RF characteristic.

Therefore, re-use test data which has been recorded in Test Report of FCC ID: A8J-ECW336 (DEKRA Report No.: 2230212R-RFUSWL2V01-A).

#### 1.4. Reference Section

Rule Part	Operating Frequency (MHz)	Current FCC ID	Reference Original FCC ID	Reference Exhibit Type
15C (DTS)	2412~2462	YLF7S6300	A8J-ECW336	RF Test Report_2.4G (Report No.: 2230212R-RFUSWL2V01-A)

Comparison Table (The worst result)				
Test Item	Test Mode / Frequency (MHz)	Test Result		
		Original FCC ID	Current FCC ID	Margin (dB)
Radiated Emission	11b / 2462	-0.58	-0.75	
Radiated Band Edge	11g / 2437	-0.09	-1.01	

## 2. General Information

### 2.1. EUT Description

Product Name	Wi-Fi 6/6E Sensor
Trademark	7SIGNAL, Inc.
Model and /or type reference	7S6300
EUT Rated Voltage	AC 100-240V / 50-60Hz
EUT Test Voltage	AC 120V / 60Hz
Frequency Range	802.11b/g/n/ac/ax-20: 2412-2462 MHz, 802.11n/ac/ax-40: 2422-2452 MHz
Number of Channels	802.11b/g/n/ac/ax-20MHz: 11, 802.11n/ac/ax-40MHz: 7
Data Speed	802.11b: 1-11 Mbps, 802.11g: 6-54 Mbps, 802.11ax: up to 1147.1 Mbps
Type of Modulation	DSSS (DBPSK, DQPSK, CCK) OFDM, OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Channel Control	Auto

### Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Senao	7S6300	PIFA	4.07 dBi for 2400 MHz
2	Senao	7S6300	PIFA	4.26 dBi for 2400 MHz
3	Senao	7S6300	PIFA	3.89 dBi for 2400 MHz
4	Senao	7S6300	PIFA	3.15 dBi for 2400 MHz

For CDD power directional gain	For Beamforming power directional gain
4.26dBi for 2.4 GHz	10.28dBi for 2.4 GHz

#### For CDD mode:

2.4GHz: Directional gain = 4.26 dBi

(Directional gain =  $G_{ANT\ MAX} + \text{Array Gain}$ , Array Gain = 0 dB for  $N_{ANT} \leq 4$ )

#### For Beamforming mode:

2.4GHz: Directional gain = 10.28 dBi

(Directional gain =  $G_{ANT\ MAX} + \text{Array Gain}$ , Array Gain =  $10 * \log(4) = 6.02$  dB)

For PSD directional gain
9.88dBi for 2.4 GHz

2.4GHz: Directional gain = 9.88 dBi

Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$  dBi

## 802.11b/g/n/ac/ax-20 MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412	02	2417	03	2422	04	2427
05	2432	06	2437	07	2442	08	2447
09	2452	10	2457	11	2462	--	--

## 802.11n/ac/ax-40 MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422	04	2427	05	2432	06	2437
07	2442	08	2447	09	2452	--	--

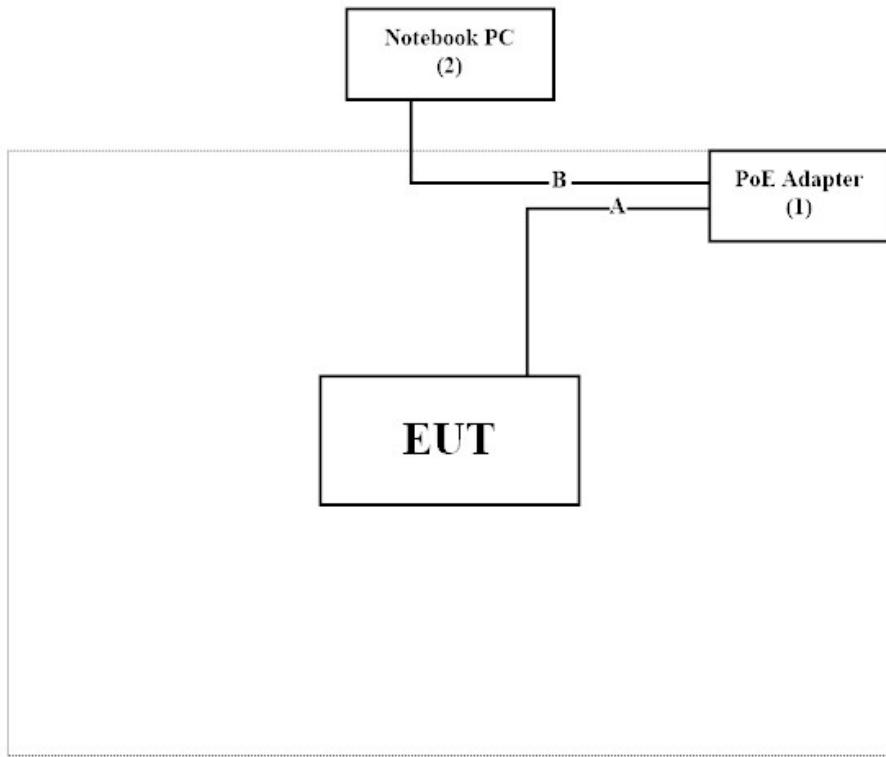
## 2.2. Tested System Details

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

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 PoE Adapter	EnGenius	EPA5006GP	N/A	N/A
2 Notebook PC	DELL	Latitude E6440	N/A	N/A

Cable Type	Cable Description
A LAN Cable	Non-shielded, 1.5m
B LAN Cable	Non-shielded, 3m

## 2.3. Configuration of Tested System



## 2.4. EUT Exercise Software

1.	Setup the EUT as shown in Section 2.3.
2.	Execute software “QSPR Version V5.0-00197” on the Notebook PC.
3.	Configure the test mode, the test channel, and the data rate.
4.	Press “OK” to start the continuous transmit.
5.	Verify that the EUT works properly.

## 2.5. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Radiated Emission	Temperature (°C)	10~40 °C	22.9 °C
	Humidity (%RH)	10~90 %	59.3 %
Conductive	Temperature (°C)	10~40 °C	22.0 °C
	Humidity (%RH)	10~90 %	55.0 %

USA	FCC Registration Number: TW0033
Canada	CAB Identifier Number: TW3023 / Company Number: 26930

Site Description	Accredited by TAF Accredited Number: 3023
------------------	--

Test Laboratory	DEKRA Testing and Certification Co., Ltd. Linkou Laboratory
Address	No.5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C.
Performed Location	No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C.
Phone Number	+886-3-275-7255
Fax Number	+886-3-327-8031

## 2.6. List of Test Item and Equipment

### For Conducted Measurements / HY-SR02

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
V	Peak Power Analyzer	KEYSIGHT	8990B	MY51000539	2023/05/15	2024/05/14
V	Power Sensor	KEYSIGHT	N1923A	MY59240002	2023/05/18	2024/05/17
V	Power Sensor	KEYSIGHT	N1923A	MY59240003	2023/05/18	2024/05/17

Note:

1. All equipment are calibrated every one year.
2. The test instruments marked with "V" are used to measure the final test results.
3. Test Software Version: RF Conducted Test Tools R3 V3.0.0.14.

### For Radiated Measurements / HY-CB03

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
V	Loop Antenna	AMETEK	HLA6121	49611	2023/02/21	2024/02/20
V	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-675	2021/08/11	2023/08/10
V	Horn Antenna	RF SPIN	DRH18-E	210507A18ES	2023/05/11	2024/05/10
V	Horn Antenna	Com-Power	AH-840	101100	2021/10/04	2023/10/03
V	Pre-Amplifier	SGH	0301	20211007-10	2023/01/10	2024/01/09
V	Pre-Amplifier	SGH	PRAMP118	20200701	2023/01/10	2024/01/09
V	Pre-Amplifier	EMCI	EMC05820SE	980310	2023/01/10	2024/01/09
V	Pre-Amplifier	EMCI	EMC184045SE	980369	2023/01/10	2024/01/09
	Coaxial Cable	EMCI	EMC102-KM-KM-600	1160314		
	Coaxial Cable	EMCI	EMC102-KM-KM-7000	170242		
V	Filter	MICRO TRONICS	BRM50702	G269	2023/01/05	2024/01/04
V	Filter	MICRO TRONICS	BRM50716	G196	2023/01/05	2024/01/04
V	EMI Test Receiver	R&S	ESR	102793	2022/12/05	2023/12/04
V	Spectrum Analyzer	R&S	FSV3044	101113	2023/02/04	2024/02/03
V	Coaxial Cable	SGH	SGH18	2021005-1	2023/01/10	2024/01/09
	Coaxial Cable	SGH	SGH18	202108-4		
	Coaxial Cable	SGH	SGH18	GD20110223-1		
	Coaxial Cable	SGH	HA800	GD20110222-3		

Note:

1. Bi-Log Antenna and Horn Antenna (AH-840) is calibrated every two years, the other equipment are calibrated every one year.
2. The test instruments marked with "V" are used to measure the final test results.
3. Test Software Version: E3 230303 dekra V9.

## 2.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document.

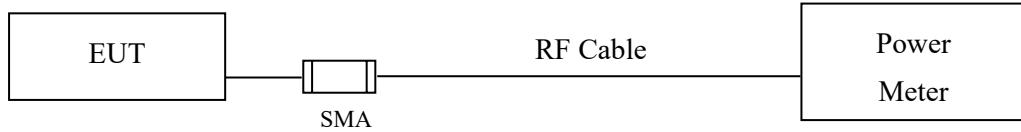
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test Item	Uncertainty
Peak Power Output	$\pm 1.05$ dB
Radiated Emission	9kHz~30MHz: $\pm 3.88$ dB 30MHz~1GHz: $\pm 4.42$ dB 1GHz~18GHz: $\pm 4.28$ dB 18GHz~40GHz: $\pm 3.90$ dB
Band Edge	$\pm 4.28$ dB

### 3. Maximum Power Output

#### 3.1. Test Setup



#### 3.2. Limits

The maximum peak power shall be less 1 Watt.

#### 3.3. Test Procedure

The EUT was tested according to C63.10:2013 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using C63.10:2013 Section 11.9.1.3 PKPM1 Peak power meter method. The maximum average conducted output power using C63.10:2013 Section 11.9.2.3 Measurement using a power meter (PM). (Measurement using a gated RF average-reading power meter). The maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### 3.4. Test Result of Maximum Power Output

Product : Wi-Fi 6/6E Sensor  
 Test Item : Maximum Power Output  
 Test Mode : Transmit (802.11b)  
 Test Date : 2023/07/11

#### Chain A+B+C+D

Frequency (MHz)	Data Rate (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Chain A+B+C+D Power (dBm)	Limit (dBm)	Result
2412	1	17.25	17.99	17.70	17.58	23.66	<30dBm	Pass
2437	1	20.11	20.13	20.23	20.17	26.18	<30dBm	Pass
2462	1	16.54	16.60	16.48	16.40	22.53	<30dBm	Pass

Note: Total Power (dBm) =  $10 \times \text{LOG}(\text{Chain A (mW)} + \text{Chain B (mW)} + \text{Chain C (mW)} + \text{Chain D (mW)})$

Product : Wi-Fi 6/6E Sensor  
Test Item : Maximum Power Output  
Test Mode : Transmit (802.11g)  
Test Date : 2023/07/11

**Chain A+B+C+D**

Frequency (MHz)	Data Rate (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Chain A+B+C+D Power (dBm)	Limit (dBm)	Result
2412	6	15.94	16.25	16.10	16.04	22.10	<30dBm	Pass
2437	6	19.82	20.05	19.84	19.88	25.92	<30dBm	Pass
2462	6	16.14	16.22	16.14	16.25	22.21	<30dBm	Pass

Note: Total Power (dBm) =  $10 \times \text{LOG} (\text{Chain A (mW)} + \text{Chain B (mW)} + \text{Chain C (mW)} + \text{Chain D (mW)})$

Product : Wi-Fi 6/6E Sensor  
Test Item : Maximum Power Output  
Test Mode : Transmit (802.11ax20)  
Test Date : 2023/07/11

**Chain A+B+C+D**

Frequency (MHz)	Data Rate (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Chain A+B+C+D Power (dBm)	Limit (dBm)	Result
2412	MCS0	16.64	16.81	16.59	16.63	22.69	<30dBm	Pass
2437	MCS0	18.15	18.67	18.25	18.44	24.40	<30dBm	Pass
2462	MCS0	14.88	14.92	14.71	14.85	20.86	<30dBm	Pass

Note: Total Power (dBm) =  $10 \times \text{LOG}(\text{Chain A (mW)} + \text{Chain B (mW)} + \text{Chain C (mW)} + \text{Chain D (mW)})$

Product : Wi-Fi 6/6E Sensor  
Test Item : Maximum Power Output  
Test Mode : Transmit (802.11ax40)  
Test Date : 2023/07/11

**Chain A+B+C+D**

Frequency (MHz)	Data Rate (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Chain A+B+C+D Power (dBm)	Limit (dBm)	Result
2422	MCS0	15.42	15.48	15.26	15.22	21.37	<30dBm	Pass
2437	MCS0	14.79	14.81	14.64	14.81	20.78	<30dBm	Pass
2452	MCS0	14.42	14.45	14.34	14.49	20.45	<30dBm	Pass

Note: Total Power (dBm) =  $10 \times \text{LOG}(\text{Chain A (mW)} + \text{Chain B (mW)} + \text{Chain C (mW)} + \text{Chain D (mW)})$

Product : Wi-Fi 6/6E Sensor  
Test Item : Maximum Power Output  
Test Mode : Transmit (802.11ax20)-Beamforming  
Test Date : 2023/07/11

**Chain A+B+C+D**

Frequency (MHz)	Data Rate (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Chain A+B+C+D Power (dBm)	Limit (dBm)	Result
2412	MCS0	10.62	10.79	10.57	10.61	16.67	<30dBm	Pass
2437	MCS0	12.13	12.65	12.23	12.42	18.38	<30dBm	Pass
2462	MCS0	8.86	8.90	8.69	8.83	14.84	<30dBm	Pass

Note: Total Power (dBm) =  $10 \times \text{LOG}(\text{Chain A (mW)} + \text{Chain B (mW)} + \text{Chain C (mW)} + \text{Chain D (mW)})$

Product : Wi-Fi 6/6E Sensor  
Test Item : Maximum Power Output  
Test Mode : Transmit (802.11ax40)-Beamforming  
Test Date : 2023/07/11

**Chain A+B+C+D**

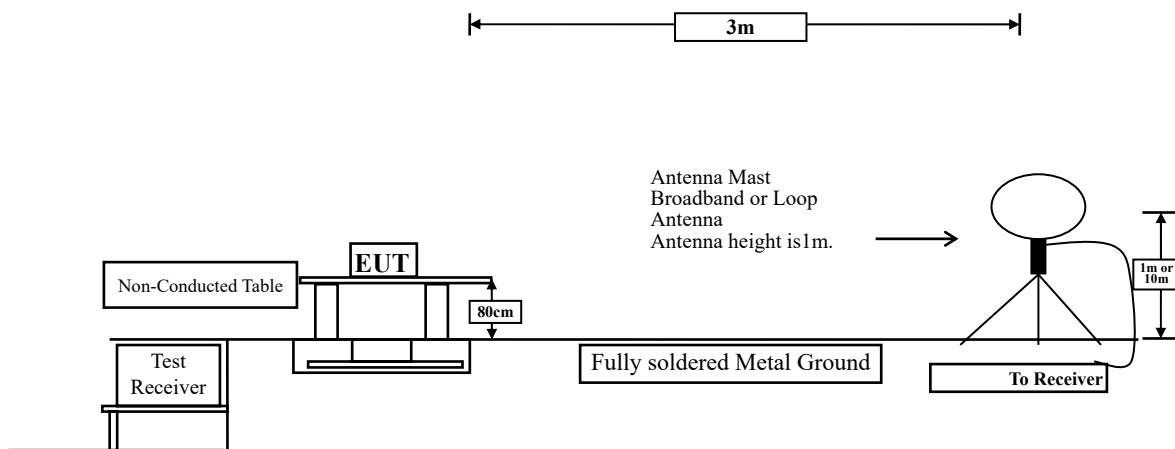
Frequency (MHz)	Data Rate (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Chain A+B+C+D Power (dBm)	Limit (dBm)	Result
2422	MCS0	9.40	9.46	9.24	9.20	15.35	<30dBm	Pass
2437	MCS0	8.77	8.79	8.62	8.79	14.76	<30dBm	Pass
2452	MCS0	8.40	8.43	8.32	8.47	14.43	<30dBm	Pass

Note: Total Power (dBm) =  $10 \times \text{LOG}(\text{Chain A (mW)} + \text{Chain B (mW)} + \text{Chain C (mW)} + \text{Chain D (mW)})$

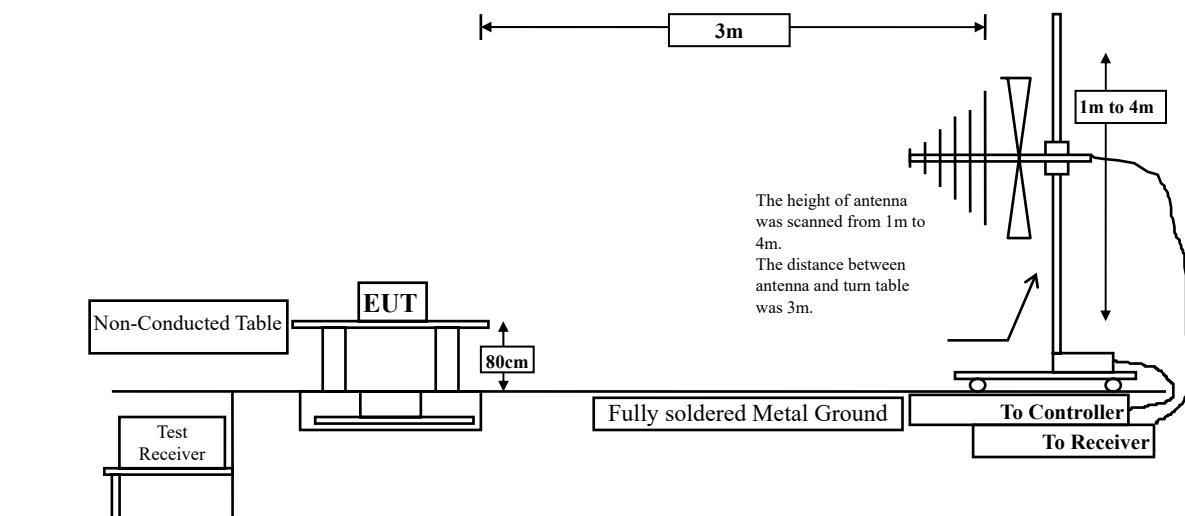
## 4. Radiated Emission

### 4.1. Test Setup

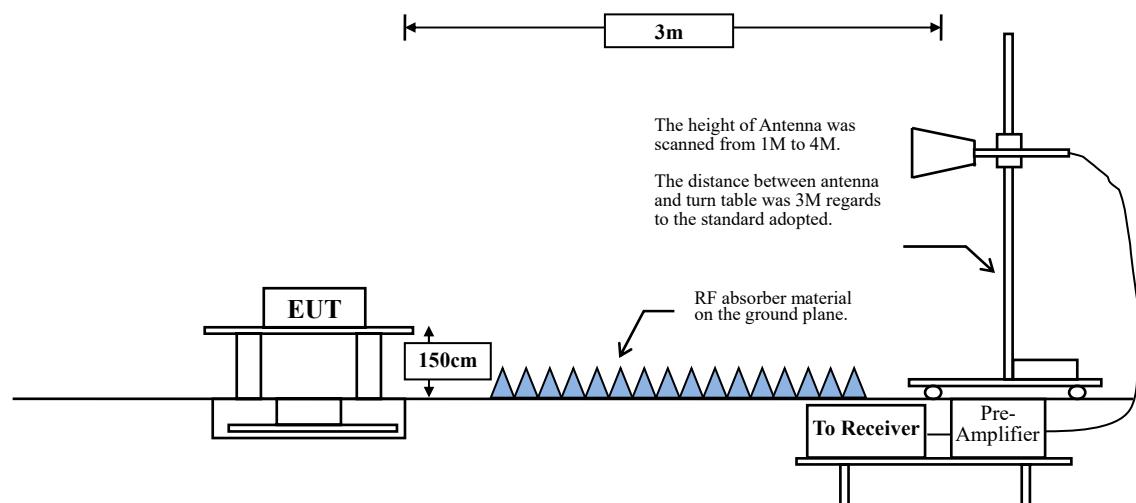
Radiated Emission Under 30 MHz



Radiated Emission Below 1 GHz



Radiated Emission Above 1 GHz



## 4.2. Limits

### ➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB 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 Limits		
Frequency MHz	Field strength (microvolts/meter)	<i>Measurement distance</i> (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 (dB $\mu$ V) = 20 log RF Voltage ( $\mu$ V)
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.

#### 4.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to C63.10:2013 Section 11.12.1 for compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 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 is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 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 measurement frequency range from 9kHz - 10th Harmonic of fundamental was investigated.

**RBW and VBW Parameter setting:**

According to C63.10 Section 11.12.2.4 Peak measurement procedure.

RBW = as specified in Table 1.

VBW  $\geq 3 \times$  RBW.

**Table 1 - RBW as a function of frequency**

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

According to C63.10 Section 11.12.2.5 Average measurement procedure.

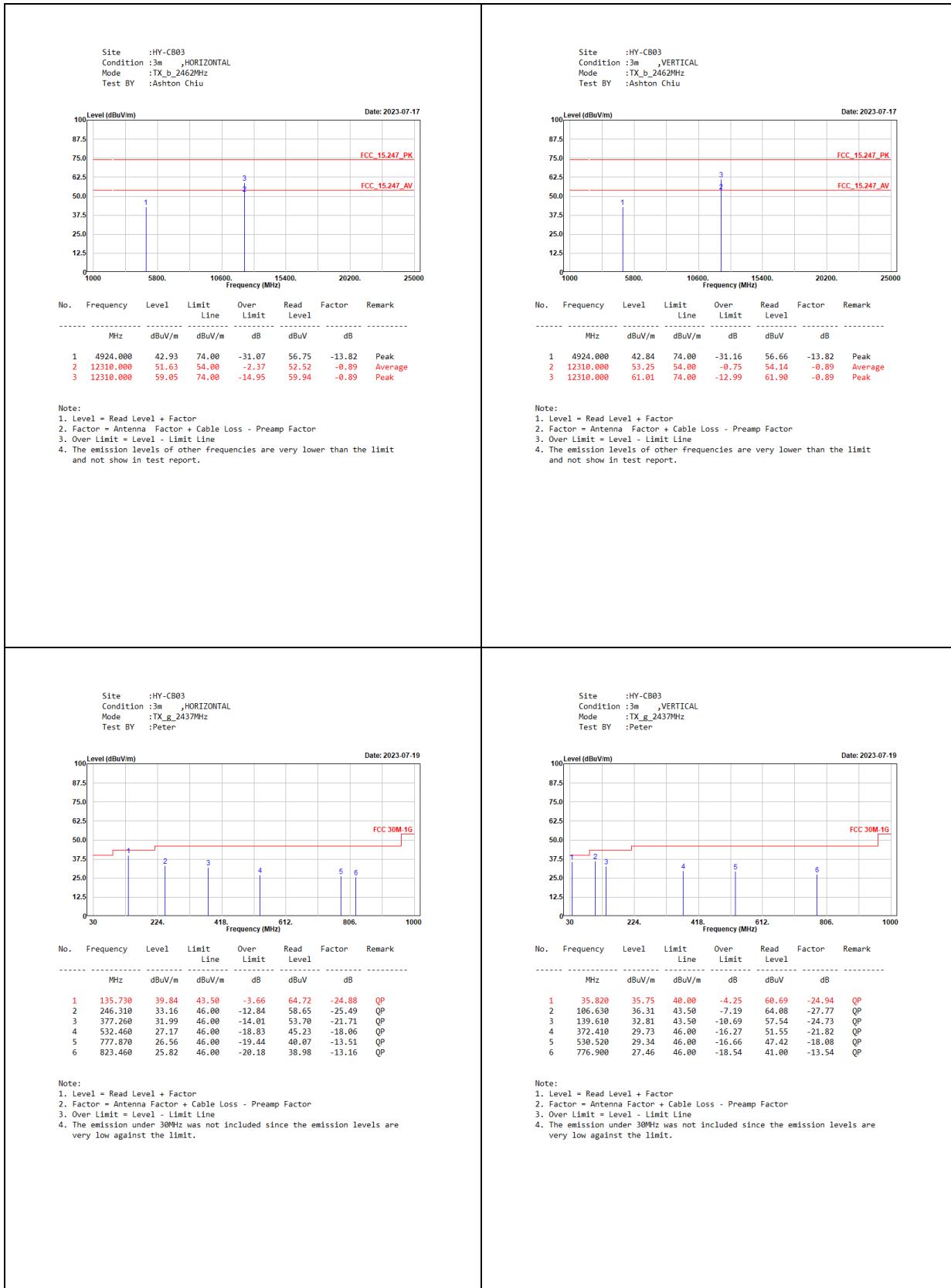
RBW = 1MHz.

VBW = 10Hz, when duty cycle  $\geq 98\%$

VBW  $\geq 1/T$ , when duty cycle  $< 98\%$

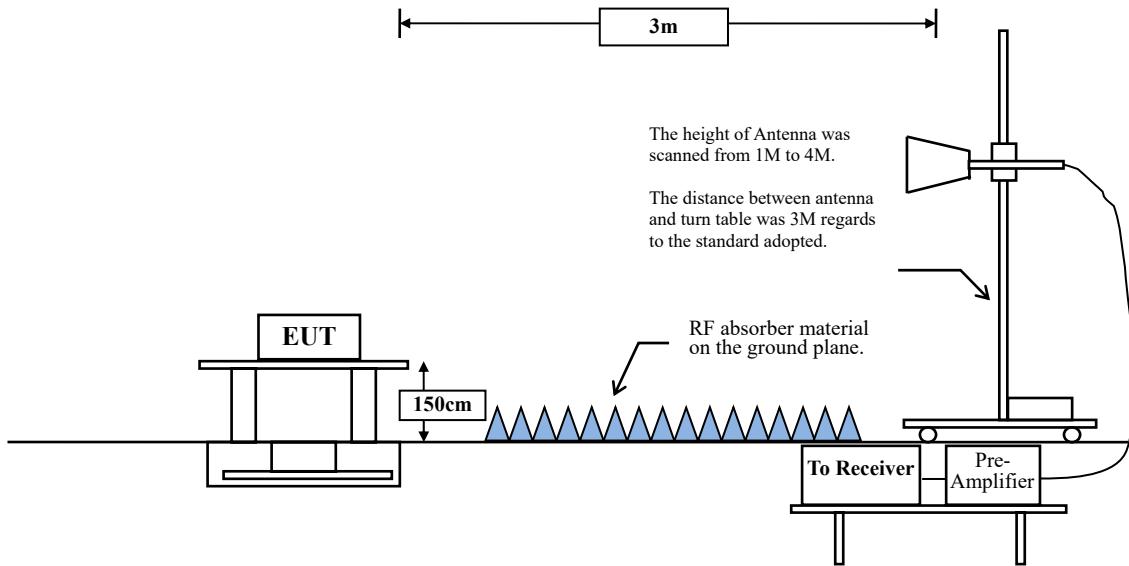
(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

#### 4.4. Test Result of Radiated Emission



## 5. Band Edge

### 5.1. Test Setup



### 5.2. Limits

According to FCC Section 15.247(d). In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. 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)).

### 5.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to C63.10:2013 Section 11.12.1 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 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 is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

#### **RBW and VBW Parameter setting:**

According to C63.10 Section 11.12.2.4 Peak measurement procedure.

RBW = as specified in Table 1.

VBW  $\geq$  3 x RBW.

**Table 1 - RBW as a function of frequency**

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

According to C63.10 Section 11.12.2.5 Average measurement procedure.

RBW = 1MHz.

VBW = 10Hz, when duty cycle  $\geq$  98 %

VBW  $\geq$  1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

## 5.4. Test Result of Band Edge

