TEST REPORT

of

FCC Part 15 Subpart B SDoC

☒ New Application; ☐ Class I PC; ☐ Class II PC

Product:	**Bluetooth 5.1 Module**
Brand:	**Fanstel**
Model:	**BM833F , BM833E, BM833**
Model Difference:	**Please see page 5 for detail**
FCC Rule Part:	**Part 15 B, SDoC**
Applicant:	**Fanstel Corporation, Taipei**
Address:	**10F-10, No. 79, Sec. 1, Hsin Tai Wu Rd., Hsi-Chih, New Taipei City 221 Taiwan**

Test Performed by:

International Standards Laboratory Corp.
<LT Lab.>
*Site Registration No.
BSMI: SL2-IN-E-0013; MRA TW1036; TAF: 0997; IC: IC4067B-4;
*Address:
No. 120, Lane 180, Hsin Ho Rd.,
Lung-Tan Dist., Tao Yuan City 325, Taiwan
*Tel : 886-3-407-1718; Fax: 886-3-407-1738

Report No.: **ISL-19LR247FB**

Issue Date : **2019/10/21**

Testing laboratory
0997

VERIFICATION OF COMPLIANCE

Applicant:	Fanstel Corporation, Taipei
Product Description:	Bluetooth 5.1 Module
Brand Name:	Fanstel
Model No.:	BM833F , BM833E, BM833
Model Difference:	Please see page 5 for detail
FCC Rule Part:	Part 15 B, SDoC
Date of test:	2019/8/6 ~2019/8/7
Date of EUT Received:	2019/8/5

We hereby certify that:

All the tests in this report have been performed and recorded in accordance with the standards described above and performed by an independent electromagnetic compatibility consultant, International Standards Laboratory Corp.

The test results contained in this report accurately represent the measurements of the characteristics and the energy generated by sample equipment under test at the time of the test. The sample equipment tested as described in this report is in compliance with the limits of above standards.

Test By:	Jason Chao	***Date:***	2019/10/21
	Jason Chao / Sr. Engineer		
Prepared By:	Gigi yeh	***Date:***	2019/10/21
	Gigi Yeh / Senior Engineer		
Approved By:	Jerry Liu	***Date:***	2019/10/21
	Jerry Liu / Technical Manager		

Version

Version No.	Date	Description
00	2019/10/21	Initial creation of document

Uncertainty of Measurement

Description Of Test	Uncertainty
Conducted Emission (AC power line)	2.586 dB
Field Strength of Spurious Radiation	≤30MHz: 2.96dB 30-1GHz: 4.22 dB 1-40 GHz: 4.08 dB
Conducted Power	2.412 GHz: 1.30 dB 5.805 GHz: 1.55 dB
Power Density	2.412 GHz:1.30 dB 5.805 GHz: 1.67 dB
Frequency	0.0032%
Time	0.01%
DC Voltage	1%

Table of Contents

1. General Information

1.1. Product Description

General:

Product Name	Bluetooth 5.1 Module
Brand Name	Fanstel
Model Name	BM833F , BM833E, BM833
Model Difference	Please see table below for detail.
Power Supply	5Vdc from USB (JIG)
USB port	one (JIG)

Model Summaries

module	BM833	BM833F	BM833E
SoC	nRF52833 QIAA	nRF52833 QIAA	nRF52833 QIAA
Flash/RAM	512KB/128KB	512KB/128KB	512KB/128KB
Size	10.2x15x1.9mm	15x20.6x1.9mm	10.2x15x1.9mm
GPIO	42	42	42
Antenna	PCB trace	PCB trace	u.FL
Antenna Gain	-0.56dB	0.51dBi	6dBi

1.2. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for Part15 Subpart B, is authorized under SDoC procedure.

1.3. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4: 2014.

1.4. Test Facility

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of **International Standards Laboratory Corp.** <LT Lab.> No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist., Tao Yuan City 325, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2014. FCC Registration Number is: TW1036, Canada Registration Number: 4067B-4.

1.5. Special Accessories

Not available for this EUT intended for grant.

1.6. Equipment Modifications

Not available for this EUT intended for grant.

2. System Test Configuration

2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2. EUT Exercise

The EUT was operated in the normal mode.

2.3. Limitation

(1) Conducted Emission

According to section 15.107(a), ICES-003 Section 6.1 Conducted Emission Limits is as following.

Frequency range	Class B Limits dB (uV)	
MHz	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50
Note 1.The lower limit shall apply at the transition frequencies 2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

(2) Radiated Emission

According to section 15.109(a), ICES-003 Section 6.2 or CISPR 22 Radiated Emission Class B Limits is as following:

Frequency (MHz)	Field strength μV/m	Distance (m)	Field strength at 3m dBμV/m
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
Above 960	500	3	54

CISPR 22 Limit:

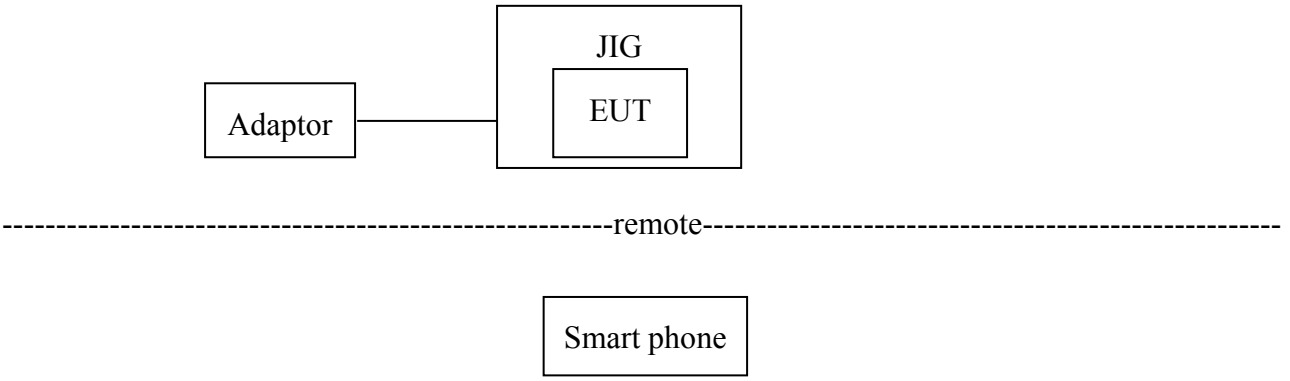
Frequency range	Limits dBuV/m (10m)
MHz	Quasi-peak
30 to 230	30
230 to 1000	37

Frequency range	Limits dBuV/m (3m)	
GHz	Average	Peak
1 to 3	50	70
3 to 6	54	74

Remark: 1. Emission level in dBuV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of 3 meters.

2.4. Configuration of Tested System

Fig. 1-1 Configuration



Support Equipment Used in Tested System

Item	Equipment	Brand	Model name	Series No	Data Cable	Power Cable
1	adaptor	Apple	A1385	N/A	N/A	Shielded /0.6m
2	Smart phone	hTC	PL99110	N/A	N/A	N/A

I/O Cable Condition of EUT and Support Units

Description	Path	Cable Length	Cable Type	Connector Type
USB power cable	Adaptor USB port to JIG micro USB port	0.6M	Non-Shielded	Metal Head

Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

Grounding: Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

3. Summary of Test Results

Rules	Description of Test	Result
§15.107 CISPR 22	Conducted Emission Class B	Compliant
§15.109 CISPR 22	Radiated Emission(Below 1GHz) Class B	Compliant
§15.109 CISPR22	Radiated Emission(above 1GHz) Class B	Compliant

4. Description of test modes

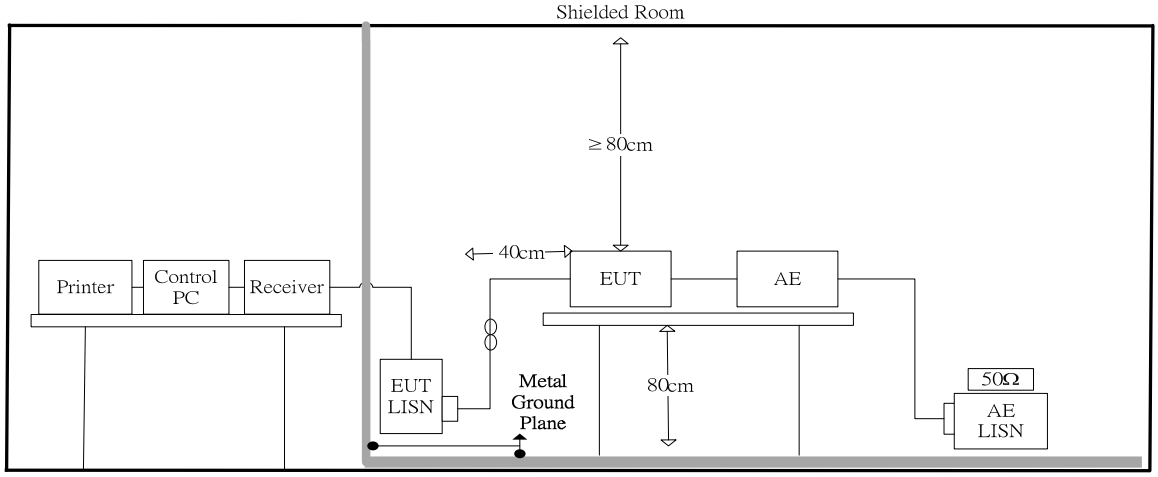
This is a modular application and the EUT was stayed in normal operation mode.

Test Plan

		Config 1	Config 2	Config 3
	Applicable standard	FCC 15B		
	Accessories	UE + Smart mobile phone	UE + Smart mobile phone	UE + Smart mobile phone
		BT link(BM833E) Antenna:Ant060	BT link(BM833F)	BT link(BM833)
EN No.	**Description**			
8.2	Radiated emission(30M~1GHz)(above 1GHz)	Measured	Pretest	Pretest
8.3	Conducted emission (DC Power)	N/A	N/A	N/A
8.4	Conducted emission (AC Power)	Measured	N/A	N/A

5. Conducted Emissions Test

5.1. Test Setup



5.2. Measurement Procedure

The measurements are performed in a shielded room test site. The EUT was placed on non-conduction 1.0m x 1.5m table, which is 0.8 meters above an earth-grounded.

Power to the EUT was provided through the LISN which has the Impedance (50ohm/50uH) vs. Frequency Characteristic in accordance with the standard. Power to the LISNs were filtered to eliminate ambient signal interference and these filters were bonded to the ground plane. Peripheral equipment required to provide a functional system (support equipment) for EUT testing was powered from the second LISN through a ganged, metal power outlet box which is bonded to the ground plane at the LISN.

The interconnecting cables were arranged and moved to get the maximum measurement. Both the line of power cord, hot and neutral, were measured. All of the interface cables were manipulated according to ANSI C63.4 requirements.

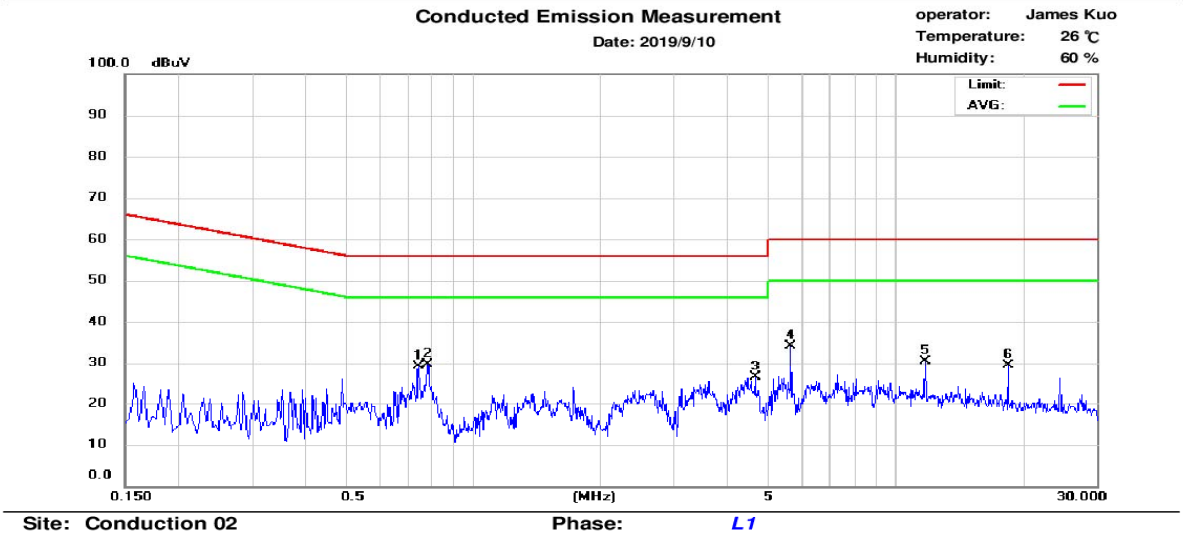
The highest emissions were analyzed in details by operating the spectrum analyzer in fixed tuned mode to determine the nature of the emissions and to provide information which could be useful in reducing their amplitude.

5.3. Measurement Equipment Used:

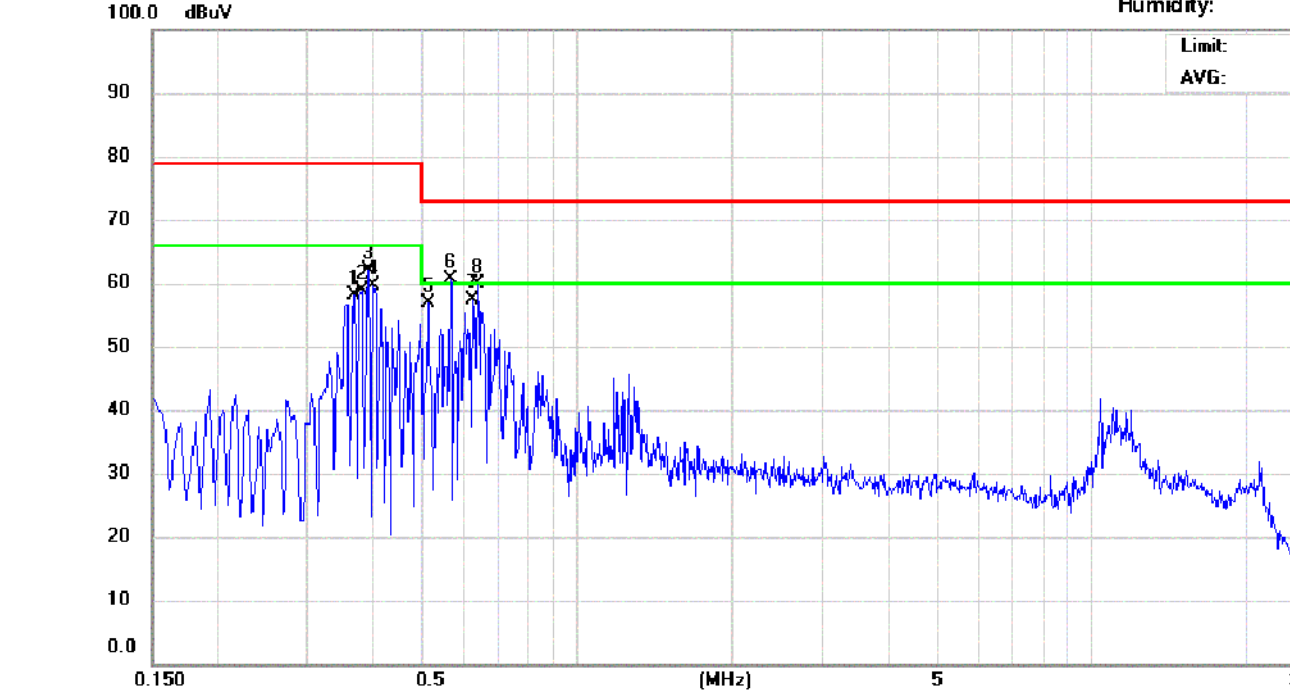
Location Con03	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Conduction 03	EMI Receiver 13	ROHDE & SCHWARZ	ESCI	101015	07/25/2019	07/25/2020
Conduction 03	ISN T4 09	Teseq GmbH	ISN T400A	49914	08/11/2019	08/11/2020
Conduction 03	ISNT8 08	Teseq GmbH	ISN T800	36155	02/19/2019	02/19/2020
Conduction 03	LISN 15	R&S	ENV216	101335	11/22/2018	11/22/2019
Conduction 03	LISN 22	R&S	ENV216	101478	08/13/2019	08/13/2020
Conduction 03	Conduction 03 -1 Cable	WOKEN	CFD 300-NL	Conduction 03 -1	08/23/2019	08/23/2020
Conduction 03	Capacitive Voltage Probe	FCC	F-CVP-1	68	02/19/2019	02/19/2020
Conduction 03	Current Probe	SCHAFFNER	SMZ 11	18030	02/19/2019	02/19/2020

5.4. Measurement Result:

Address:No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,
Tao Yuan City 325, Taiwan.
Tel:03-4071718



No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)	AVG Margin (dB)
1	0.746	11.56	6.32	9.65	21.21	56.00	-34.79	15.97	46.00	-30.03
2	0.782	16.59	7.85	9.65	26.24	56.00	-29.76	17.50	46.00	-28.50
3	4.658	10.31	4.40	9.75	20.06	56.00	-35.94	14.15	46.00	-31.85
4	5.670	9.50	4.03	9.77	19.27	60.00	-40.73	13.80	50.00	-36.20
5	11.786	6.36	0.40	9.87	16.23	60.00	-43.77	10.27	50.00	-39.73
6	18.430	6.83	1.94	9.91	16.74	60.00	-43.26	11.85	50.00	-38.15

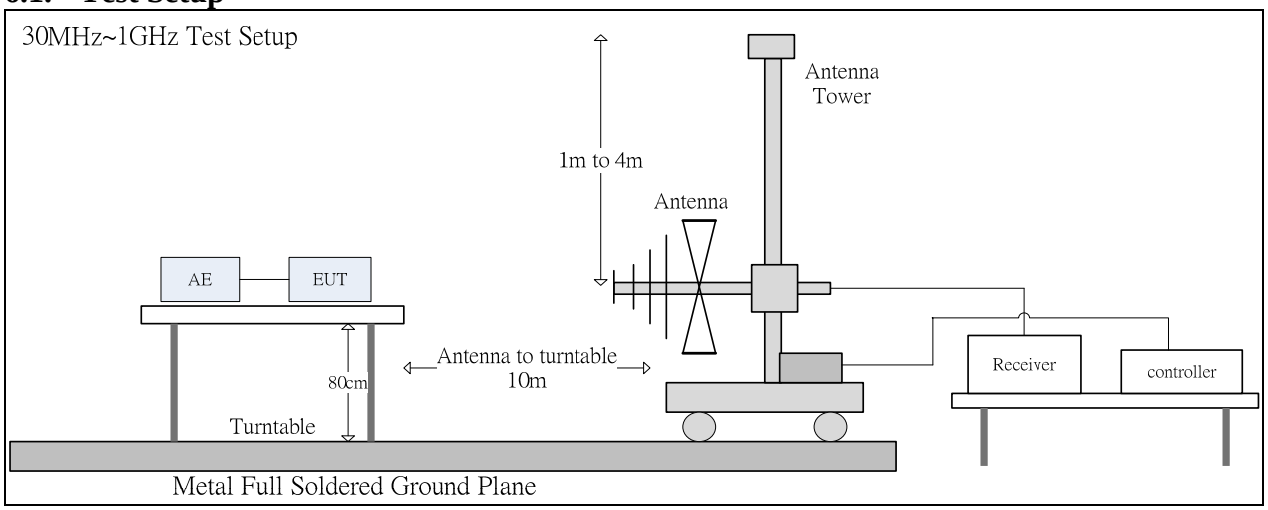


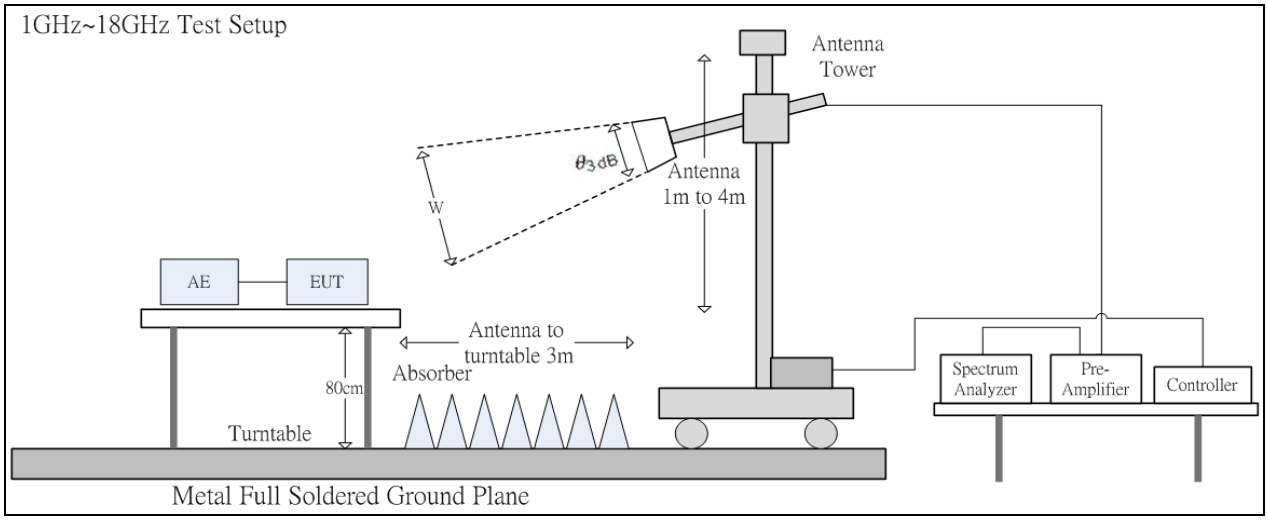
Site: Conduction 02 Phase: N

No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)
1	0.370	45.40	30.13	9.69	55.09	79.00	-23.91	39.82	66.00
2	0.382	47.81	31.13	9.69	57.50	79.00	-21.50	40.82	66.00
3	0.394	48.58	31.10	9.69	58.27	79.00	-20.73	40.79	66.00
4	0.402	48.70	30.25	9.69	58.39	79.00	-20.61	39.94	66.00
5	0.514	37.70	21.54	9.70	47.40	73.00	-25.60	31.24	60.00
6	0.570	39.82	22.10	9.71	49.53	73.00	-23.47	31.81	60.00
7	0.630	44.56	29.95	9.71	54.27	73.00	-18.73	39.66	60.00
8	0.642	42.78	27.20	9.71	52.49	73.00	-20.51	36.91	60.00

6. Radiated Emission Test

6.1. Test Setup





The 3dB beam width of the horn antenna used for the test is as shown in the table below.

1GHz~18GHz

Frequency GHz	E-plane	H-plane	$\theta_{3\,dB}$ (min)	d = 3 m
				w (m)
1	88°	147°	88°	5.79
2	68°	119°	68°	4.04
3	73°	92°	73°	4.44
4	70°	89°	70°	4.20
5	55°	60°	55°	3.12
6	63°	62°	62°	3.60
7	48°	49°	48°	2.67
8	39°	46°	39°	2.12
9	32°	42°	32°	1.72
10	30°	39	30°	1.61

Frequency GHz	E-plane	H-plane	$\theta_{3\,dB}$(min)	d = 3 m
				w (m)
11	32°	35°	32°	1.72
12	35°	32°	35°	1.89
13	34°	31°	31°	1.66
14	32°	27°	27°	1.44
15	36°	26°	26°	1.39
16	40°	28°	28°	1.50
17	43°	26°	26°	1.39
18	41°	22°	22°	1.17

18 GHz~26.5 GHz

Frequency GHz	E-plane	H-plane	$\theta_{3\,dB}$(min)	d = 1 m	d = 3 m
				w (m)	w (m)
18	11.4°	12.7°	11.4°	0.199	0.598
19	10.9°	12.4°	10.9°	0.190	0.572
20	10.8°	12.4°	10.8°	0.189	0.567
21	9.8°	12°	9.8°	0.171	0.514
22	9.7°	11°	9.7°	0.169	0.509
23	10°	11.8°	10°	0.174	0.524
24	9°	11°	9°	0.157	0.472
25	10°	12.3°	10°	0.174	0.524
26	9.9°	11.1°	9.9°	0.173	0.519
26.5	9.4°	11.3°	9.4°	0.164	0.493

26 GHz~40 GHz

Frequency GHz	E-plane	H-plane	$\theta_{3\,dB}$(min)	d = 1 m	d = 3 m
				w (m)	w (m)
26	12°	12.2°	12°	0.210	0.631
27	13°	10.5°	10.5°	0.184	0.551
28	13.2°	12.3°	12.3°	0.216	0.647
29	11.5°	12.8°	11.5°	0.201	0.604
30	12°	8°	8°	0.140	0.420
31	11.5°	10.1°	10.1°	0.177	0.530
32	11.8°	10°	10°	0.175	0.525
33	11.8°	9.5°	9.5°	0.166	0.499
34	11.6°	10°	10°	0.175	0.525
35	10.9°	9.8°	9.8°	0.171	0.514
36	11.8°	8.6°	8.6°	0.150	0.451
37	12.9°	10.5°	10.5°	0.184	0.551
38	12°	10.3°	10.3°	0.180	0.541
39	11.8°	9.8°	9.8°	0.171	0.514
40	12.5°	11.2°	11.2°	0.196	0.588

6.2. Measurement Procedure

The radiated emissions test will then be repeated on the open site or chamber to measure the amplitudes accurately and without the multiple reflections existing in the shielded room. The EUT and support equipment are set up on the turntable of one of 10 meter open field sites or 10 meter chamber. Desktop EUT are set up on a wooden stand 0.8 meter above the ground or floor-standing arrangement shall be placed on the horizontal ground reference plane. The test volume for a height of up to 30 cm may be obstructed by absorber placed on the ground plane.

For the initial measurements, the receiving antenna is varied from 1-4 meter height and is changed in the vertical plane from vertical to horizontal polarization at each frequency. The highest emissions between 30 MHz to 1000 MHz were analyzed in details by operating the spectrum analyzer and/or EMI receiver in quasi-peak mode to determine the precise amplitude of the emissions. The highest emissions between 1 GHz to 40 GHz were analyzed in details by operating the spectrum analyzer in peak and average mode to determine the precise amplitude of the emissions.

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the antenna in the cone of radiation from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response. At the highest amplitudes observed, the EUT is rotated in the horizontal plane while changing the antenna polarization in the vertical plane to maximize the reading. The interconnecting cables were arranged and moved to get the maximum measurement. Once the maximum reading is obtained, the antenna elevation and polarization will be varied between specified limits to maximize the readings. All of the interface cables were manipulated according to ANSI C63.4 requirements.

The highest internal source of the EUT is defined as the highest frequency generated or used within the EUT or on which the EUT operates or tunes. If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 40 GHz, whichever is less.

6.3. Spectrum Analyzer Configuration (for the frequencies tested)

Frequency Range:	30MHz--1000MHz
Detector Function:	Quasi-Peak Mode
Resolution Bandwidth:	120kHz

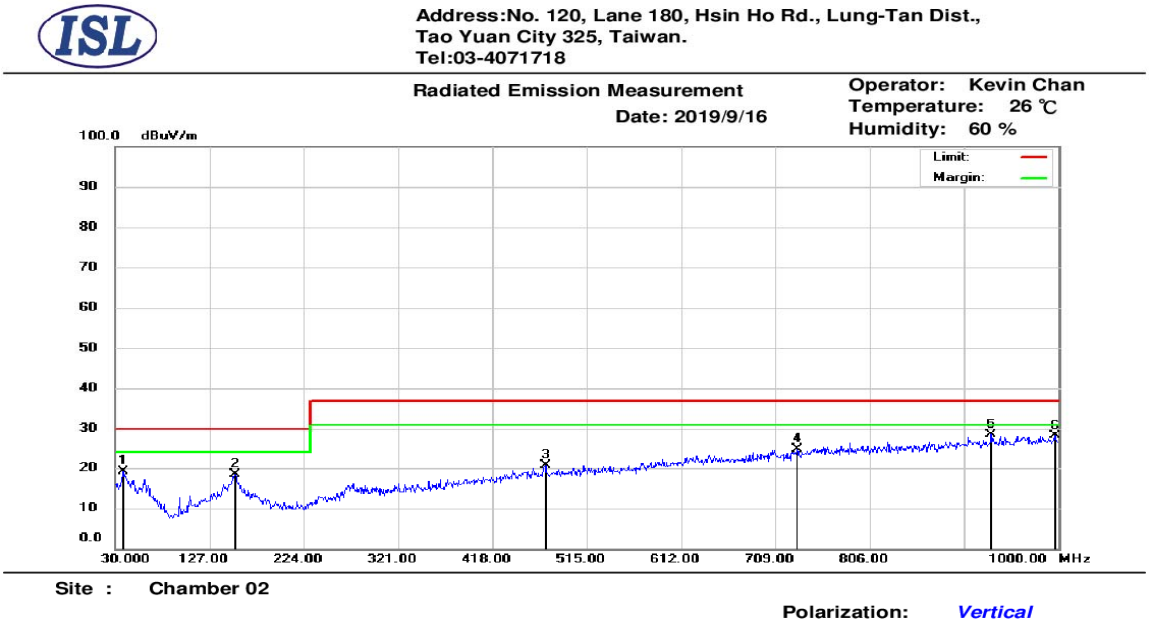
Frequency Range:	Above 1000MHz
Detector Function:	Peak/Average Mode
Resolution Bandwidth:	1MHz

6.4. Measurement Equipment Used:

Location Chmb12	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Rad. Above 1GHz(Chamber12)	Spectrum Analyzer 23	Rohde&Schwarz	FSU43	101255	03/21/2019	03/21/2020
Rad. Above 1GHz(Chamber12)	Preamplifier 24	EMC INSTRUMENT	EMC051845B	980213	09/06/2019	09/06/2020
Rad. Above 1GHz(Chamber12)	Horn Antenna 08	ETS-Lindgren	3117	00128602	09/26/2019	09/26/2020
Rad. Above 1GHz(Chamber12)	Microwave Cable 27	AGILENT	A1K50-UP0358	A1K50-80CM	05/10/2019	05/10/2020
Rad. Above 1GHz(Chamber12)	Microwave Cable 29	EMCI	EMC104-SM-NM-6000	170107	05/10/2019	05/10/2020

Chamber 19(966)					
Equipment Type	Manufacturer	Model Number	Serial Number	Last Cal.	Cal. Due.
966 Chamber	Chance Most	Chamber 19	N/A	08/13/2019	08/12/2020
Spectrum analyzer	R&S	FSP40	100116	01/10/2019	01/09/2020
EMI Receiver	R&S	ESR3	102461	08/08/2018	08/07/2020
Loop Antenna(9K-30M)	EM	EM-6879	271	05/31/2019	05/30/2020
Bilog Antenna (30M-1G)	SCHWARZBECK	VULB9168 w 5dB Att	736	01/29/2019	01/28/2020
Horn antenna (1G-18G)	SCHWARZBECK	9120D	9120D-1627	06/17/2019	06/16/2020
Horn antenna (18G-26G)	Com-power	AH-826	081001	11/21/2017	11/20/2019
Horn antenna (26G-40G)	Com-power	AH-640	100A	03/29/2019	03/28/2021
Preamplifier (9k-1000M)	HP	8447F	3113A06362	01/14/2019	01/13/2020
Preamplifier(1G-26G)	Agilent	8449B	3008A02471	10/29/2018	10/28/2019
Preamplifier (26G-40G)	MITEQ	JS4-26004000-27-5A	818471	05/06/2019	05/05/2020
RF Cable (9k-18G)	HUBER SUHNER	SUCOFLEX 104A	MY1397/4A	01/17/2019	01/16/2020
RF cable (18G~40G)	HUBER SUHNER	Sucoflex 102	27963/2&37421/2	11/12/2018	11/11/2019
Turn Table	MF	Turn Table-19	Turn Table-19	N/A	N/A
Mast Tower	MF	JSDES-15A	1308283	N/A	N/A
Controller	MF	MF-7802BS	MF780208460	N/A	N/A
AC power source	T-Power	TFC-1005	40006471	N/A	N/A
Signal Generator	Anritsu	MG3692A	20311	01/09/2019	01/08/2020
2.4G Filter	Micro-Tronics	Brm50702	76	12/25/2018	12/24/2019

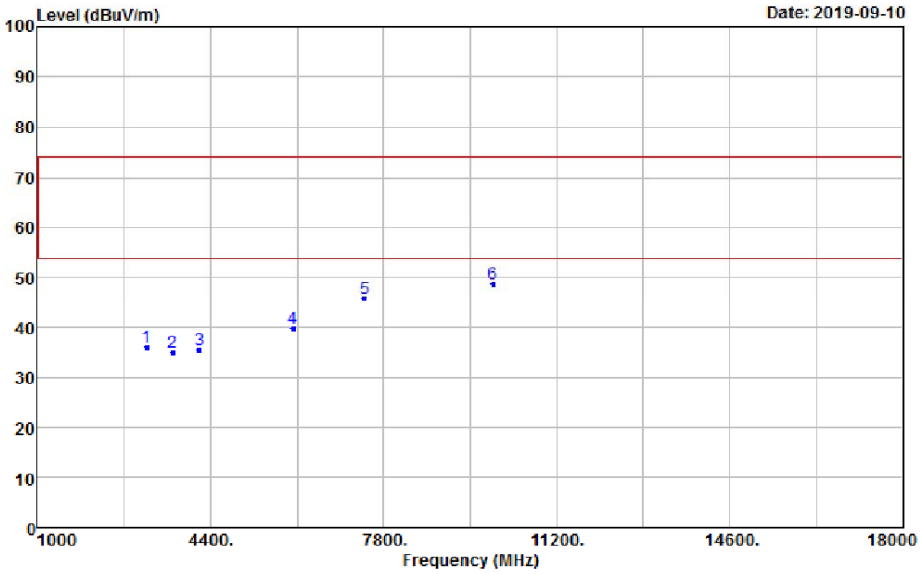
6.5. Measurement Result:



Mk.	Frequency (MHz)	RX_R (dBuV)	Correct Factor(dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	38.73	36.92	-17.85	19.07	30.00	-10.93	100	224	peak
2	153.19	34.34	-16.04	18.30	30.00	-11.70	100	282	peak
3	472.32	30.82	-10.31	20.51	37.00	-16.49	100	203	peak
4	731.31	30.26	-5.55	24.71	37.00	-12.29	100	251	peak
5	931.13	30.99	-2.68	28.31	37.00	-8.69	100	303	peak
6	996.12	30.03	-1.85	28.18	37.00	-8.82	100	91	peak

* Note:
Margin = Emission – Limit
Emission = Radiated Amplitude + Correct Factor
Correct Factor = Antenna Correction Factor + Cable Loss – Pre-Amplifier Gain
Margin = Emission – Limit
Measurement Distance: 10 meters
The CISPR 22 limits would be applied to all FCC Part 15 devices.
Below 1GHz test, if the peak measured value meets the QP limit, it is unnecessary to perform the QP measurement.

International Standard Laboratory Corp.
Company Address:No.120,Lane 180, Hsin Ho Rd.
Lung-Tan Dist., Tao Yuan City 325, Taiwan
Tel:(03)4071718 ; Fax:(03)4071738
Web:www.isl.com.tw



Condition: FCC CLASS B 3M PK 3m VERTICAL
Site : Chamber 19

Operator : jason

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	3142.00	50.54	-14.46	36.08	74.00	-37.92	Peak	VERTICAL
2	3652.00	48.24	-13.29	34.95	74.00	-39.05	Peak	VERTICAL
3	4179.00	46.97	-11.54	35.43	74.00	-38.57	Peak	VERTICAL
4	6015.00	45.63	-5.95	39.68	74.00	-34.32	Peak	VERTICAL
5	7426.00	47.51	-1.74	45.77	74.00	-28.23	Peak	VERTICAL
6	9942.00	45.85	3.07	48.92	74.00	-25.08	Peak	VERTICAL

- 1 -

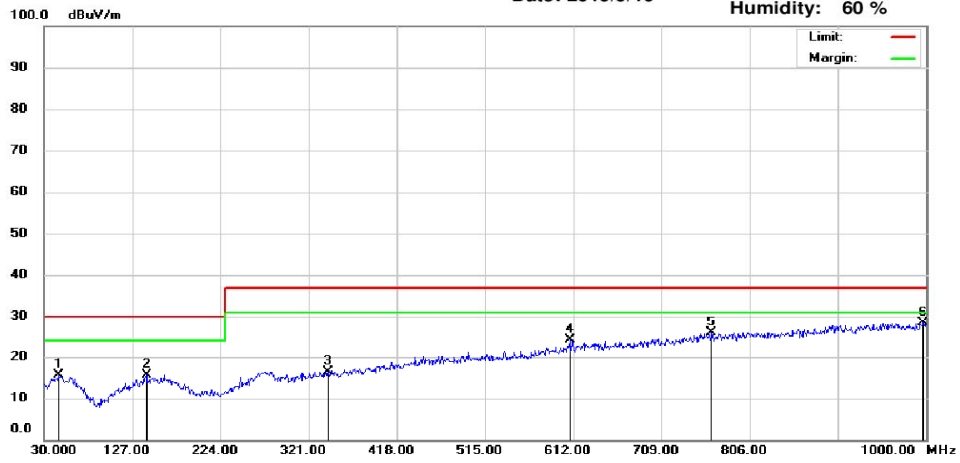
* Note:
Margin = Emission – Limit
Emission = Radiated Amplitude + Correct Factor
Correct Factor = Antenna Correction Factor + Cable Loss – Pre-Amplifier Gain
Margin = Emission – Limit
Measurement Distance: Distance: 3 meters
Above 1GHz test, if the peak measured value meets the average limit, it is unnecessary to perform the average measurement.
No signal can be detected from 18GHz to 25GHz, so the graphs are omitted above 18GHz

Address:No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,
Tao Yuan City 325, Taiwan.
Tel:03-4071718

Radiated Emission M

Operator: Kevin Chan
Temperature: 26 ℃
Humidity: 60 %

Date: 2019/9/16



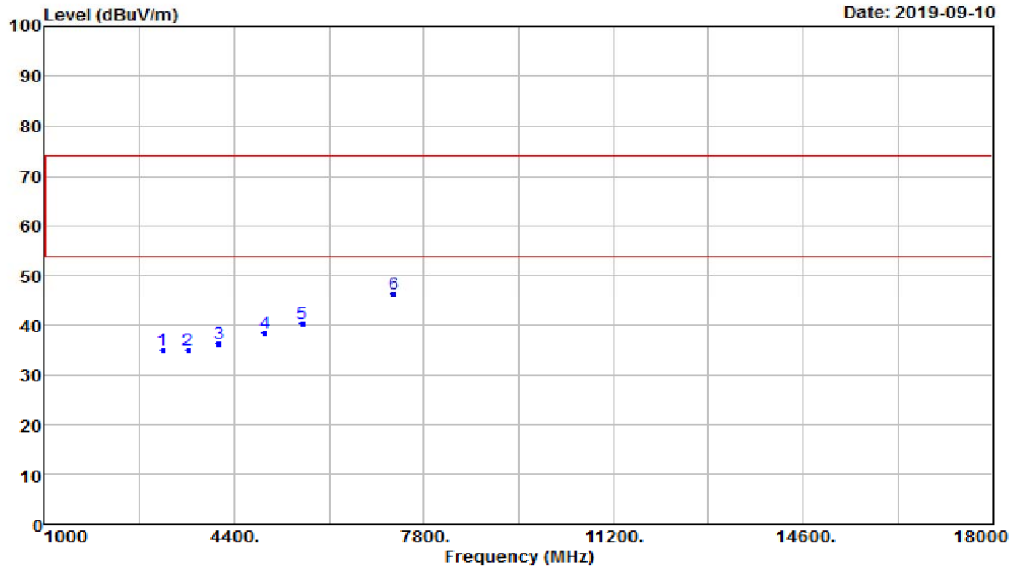
Site : Chamber 02

Polarization: *Horizontal*

Mk.	Frequency (MHz)	RX_R (dBuV)	Correct Factor(dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	45.52	32.75	-17.05	15.70	30.00	-14.30	200	84	peak
2	142.52	32.04	-16.44	15.60	30.00	-14.40	130	360	peak
3	342.34	30.18	-13.69	16.49	37.00	-20.51	396	360	peak
4	608.12	31.68	-7.55	24.13	37.00	-12.87	300	299	peak
5	764.29	30.75	-4.78	25.97	37.00	-11.03	200	51	peak
6	997.09	30.24	-1.83	28.41	37.00	-8.59	400	164	peak

* Note:
Margin = Emission – Limit
Emission = Radiated Amplitude + Correct Factor
Correct Factor = Antenna Correction Factor + Cable Loss – Pre-Amplifier Gain
Margin = Emission – Limit
Measurement Distance: 10 meters
The CISPR 22 limits would be applied to all FCC Part 15 devices.
Below 1GHz test, if the peak measured value meets the QP limit, it is unnecessary to perform the QP measurement.

International Standard Laboratory Corp.
Company Address:No.120,Lane 180, Hsin Ho Rd.
Lung-Tan Dist., Tao Yuan City 325, Taiwan
Tel:(03)4071718 ; Fax:(03)4071738
Web:www.isl.com.tw



Condition: FCC CLASS B 3M PK 3m HORIZONTAL
Site : Chamber 19

Operator : jason

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	3108.00	49.34	-14.43	34.91	74.00	-39.09	Peak	HORIZONTAL
2	3567.00	48.50	-13.55	34.95	74.00	-39.05	Peak	HORIZONTAL
3	4128.00	47.86	-11.69	36.17	74.00	-37.83	Peak	HORIZONTAL
4	4944.00	47.51	-9.04	38.47	74.00	-35.53	Peak	HORIZONTAL
5	5624.00	47.63	-7.30	40.33	74.00	-33.67	Peak	HORIZONTAL
6	7256.00	48.17	-1.79	46.38	74.00	-27.62	Peak	HORIZONTAL

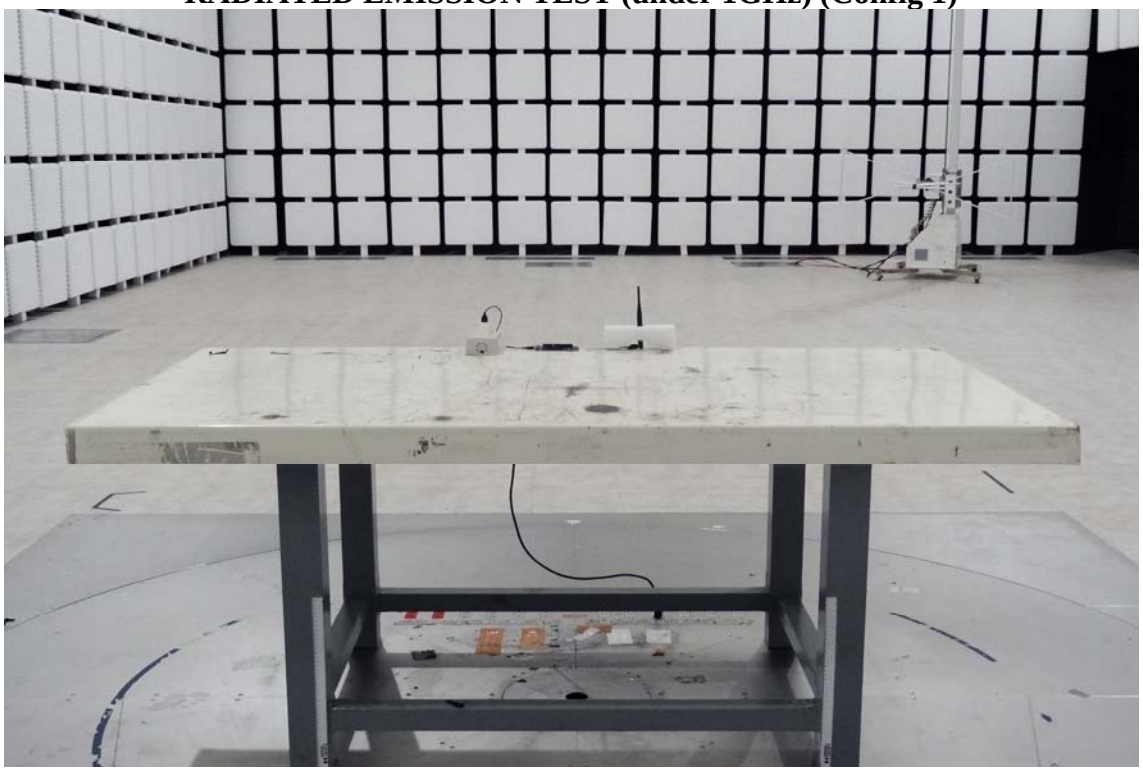
- 1 -

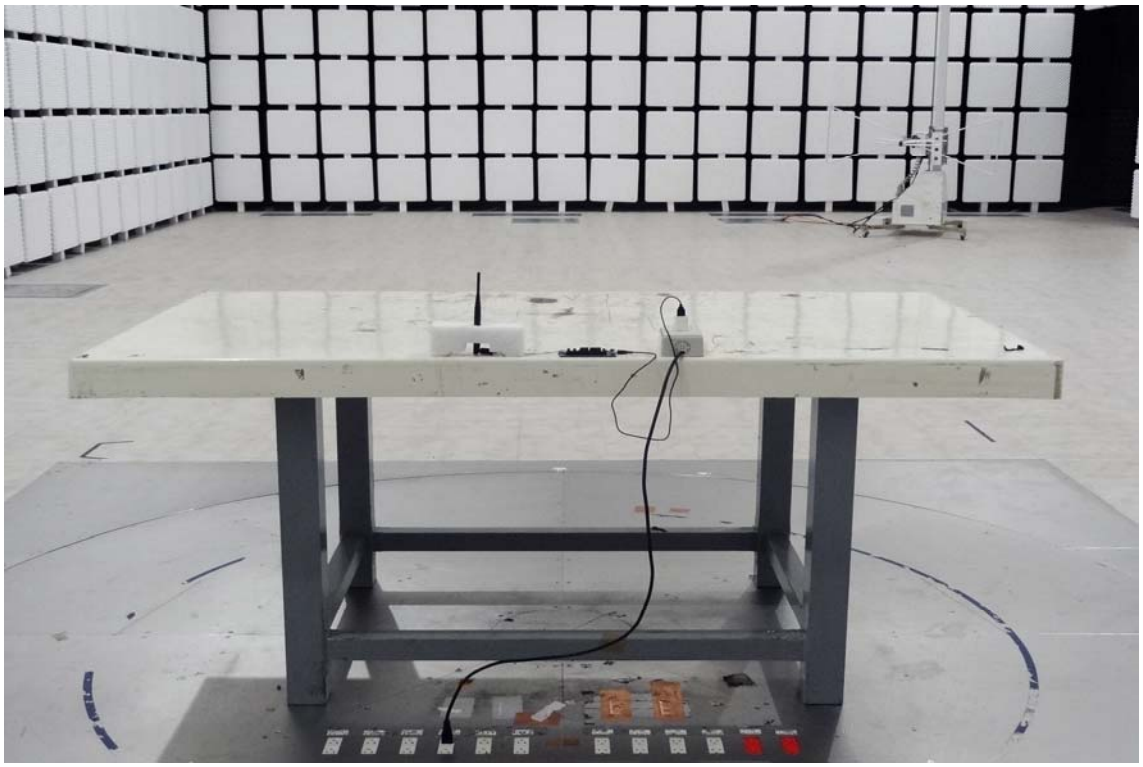
* Note:
Margin = Emission – Limit
Emission = Radiated Amplitude + Correct Factor
Correct Factor = Antenna Correction Factor + Cable Loss – Pre-Amplifier Gain
Margin = Emission – Limit
Measurement Distance: 3 meters
Above 1GHz test, if the peak measured value meets the average limit, it is unnecessary to perform the average measurement.
No signal can be detected from 18GHz to 25GHz, so the graphs are omitted above 18GHz

Appendix 1

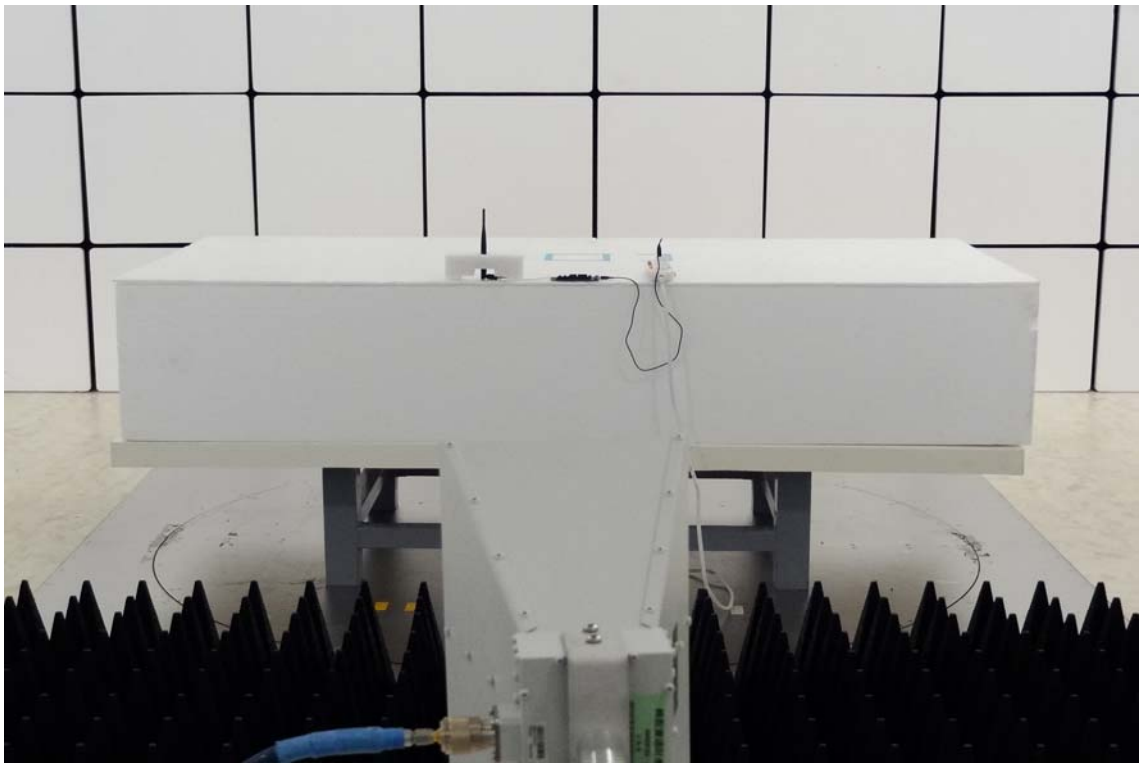
Photographs of Set Up

RADIATED EMISSION TEST (under 1GHz) (Config 1)



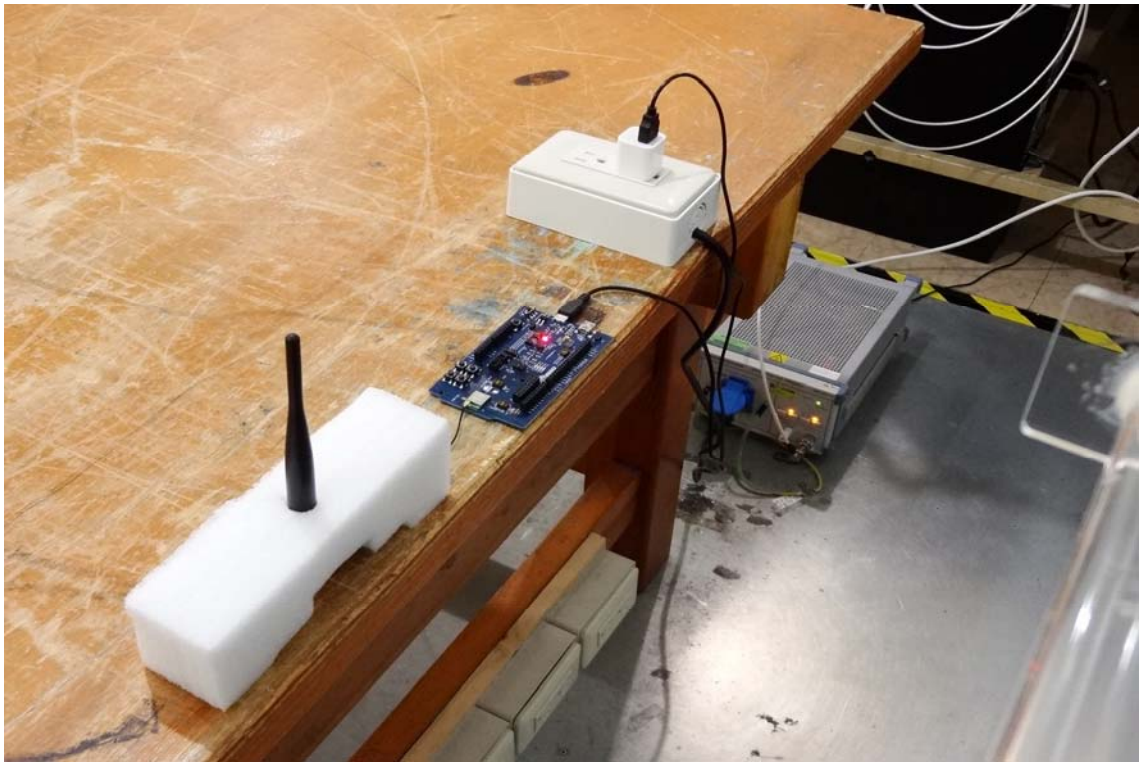


RADIATED EMISSION TEST (above 1GHz) (Config 1)



AC POWER LINE CONDUCTED EMISSION TEST

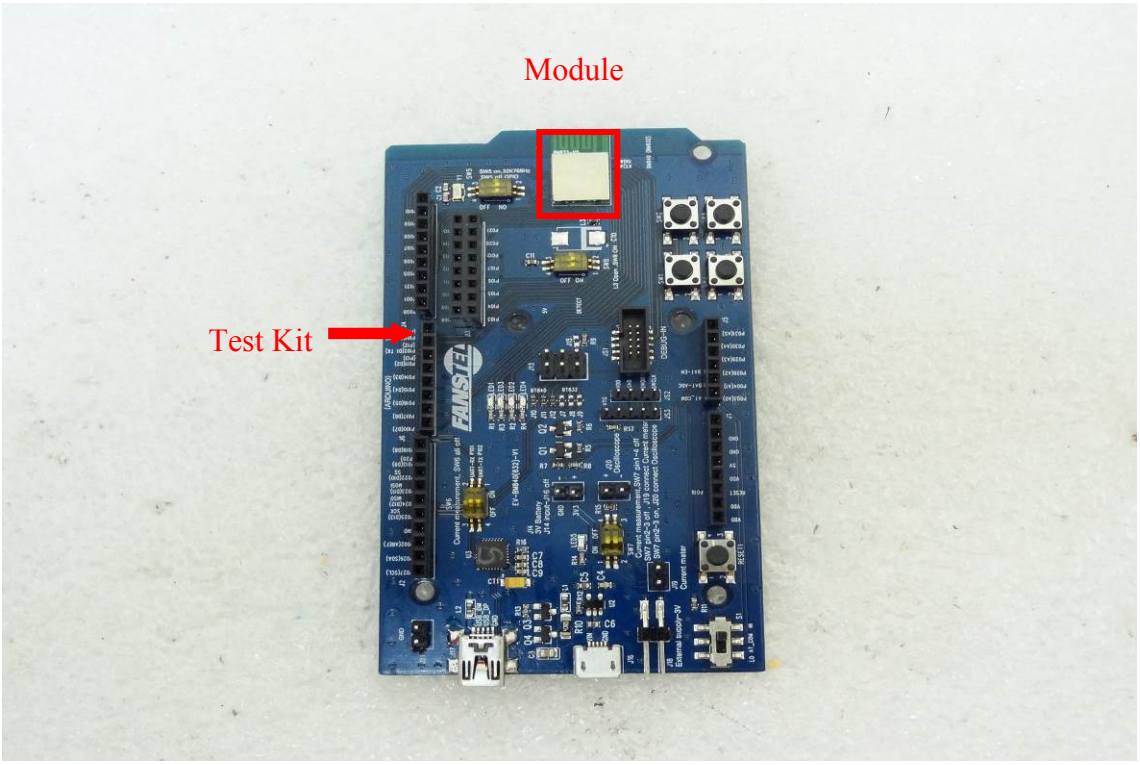
Config 1



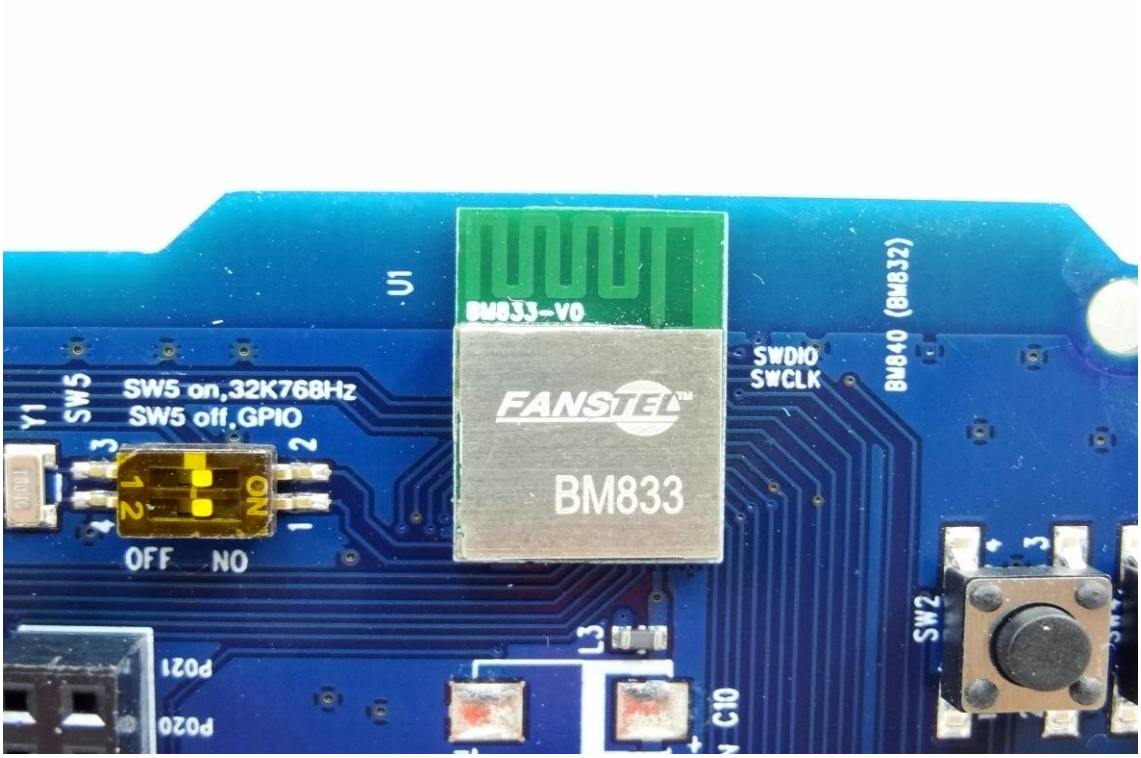
Appendix 2

Photographs of EUT

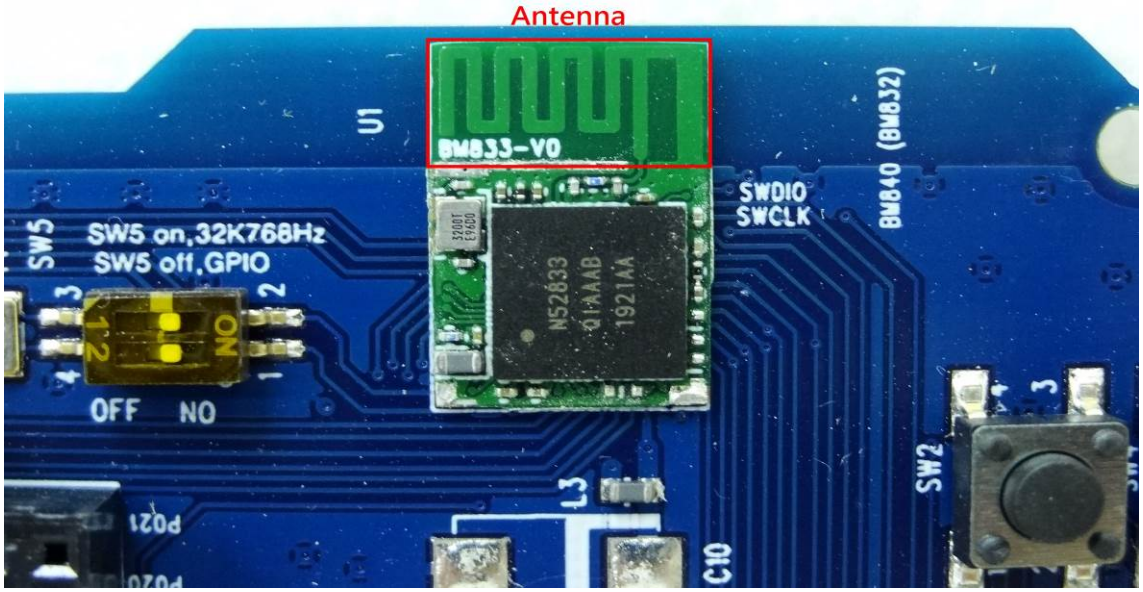
EUT 1 BM833



EUT 2 BM833



EUT 3 BM833

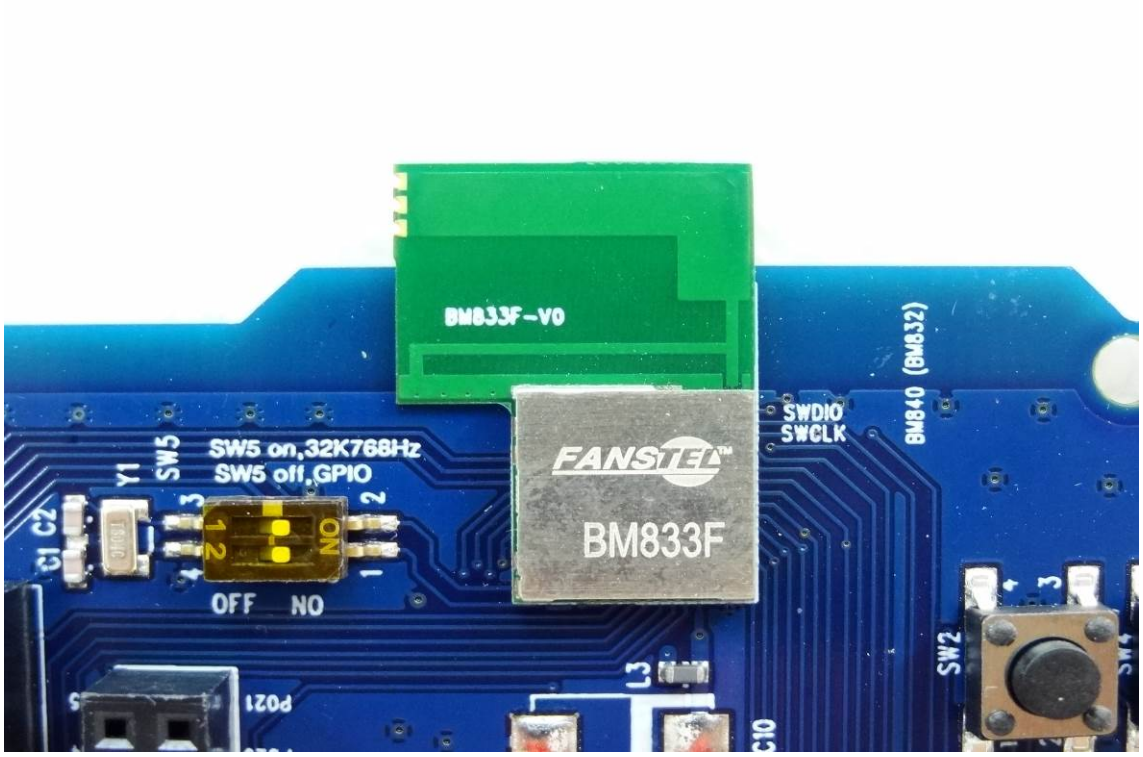


EUT 4 BM833E

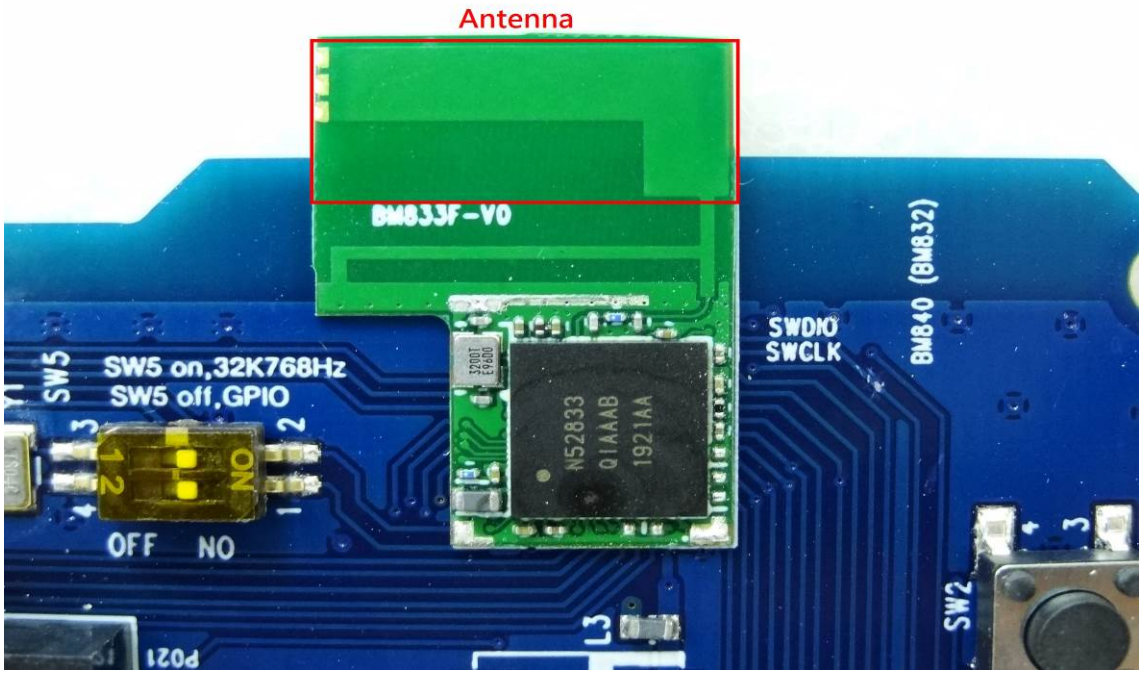
EUT 5 BM833E

EUT 6 BM833E Antenna

EUT 7 BM833F



EUT 8 BM833F Antenna



~ End of Report ~