FCC 47 CFR PART 15 SUBPART C

TEST REPORT

FOR

Force GC30 GAMING Controller Dongle

Model : Force GC30 GAMING Controller

Trade Name: msi

Issued to

MICRO-STAR INT’ L CO., LTD.
No.69, Lide St., Zhonghe Dist ., New Taipei City 235, Taiwan (R.O.C.)

Issued by

WH Technology Corp.

Open Site		**No. 120, Ln. 5, Hudong St., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)**
EMC Test Site	**Xizhi Office and Lab**	**12F.-3, No.27-1, Ln. 169, Kangning St., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)**

TABLE OF CONTENTS ---------- 2

1. GENERAL INFORMATION

Applicant	:	**MICRO-STAR INT' L CO., LTD.**
Address	:	**No.69, Lide St., Zhonghe Dist ., New Taipei City 235, Taiwan (R.O.C.)**
Manufacturer	:	**MICRO-STAR INT' L CO., LTD.**
Address	:	**No.69, Lide St., Zhonghe Dist ., New Taipei City 235, Taiwan (R.O.C.)**
EUT	:	**Force GC30 GAMING Controller Dongle**
Model Name	:	**Force GC30 GAMING Controller**
Model Differences	:	**N/A**

Is here with confirmed to comply with the requirements set out in the FCC Rules and Regulations Part 15 Subpart C and the measurement procedures were according to ANSI C63.4-2014. The said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

FCC part 15 subpart C

Receipt Date : 08/23/2017 Final Test Date : 10/17/2017

Tested By: **Reviewed by:**

Oct. 17, 2017 Bell Wei/ Engineer Oct. 17, 2017 Mike Lee / Manager
Date **Date**

Designation Number: TW1083

1.1 DESCRIPTION OF THE TESTED SAMPLES

EUT Name	:	Force GC30 GAMING Controller Dongle
Model Number	::	Force GC30 GAMING Controller
FCCID Number		I4LGC30TX
Receipt Date	:	10/17/2017
Input Voltage	:	5 Vdc (From PC)
Power From		☐ Inside ☑Outside ☐Adaptor ☐BATTERY ☐AC Power Source ☐DC Power Source ☑Support Unit PC
Operate Frequency	:	Refer to the channel list as described below
Modulation Technique	:	GFSK
Number of Channels	:	63
Channel spacing	:	☐N/A ☑ 1 MHz
Operating Mode	:	☐Simplex ☑ Half Duplex
Antenna Type	:	☑integral antenna: PCB Printing ☐a dedicated antenna
Antenna gain		0 dBi

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2412	20	2432	40	2452	60	2472
01	2413	21	2433	41	2453	61	2473
02	2414	22	2434	42	2454	62	2474
03	2415	23	2435	43	2455	63	2475
04	2416	24	2436	44	2456	---	---
05	2417	25	2437	45	2457	---	---
06	2418	26	2438	46	2458	---	---
07	2419	27	2439	47	2459	---	---
08	2420	28	2440	48	2460	---	---
09	2421	29	2441	49	2461	---	---
10	2422	30	2442	50	2462	---	---
11	2423	31	2443	51	2463	---	---
12	2424	32	2444	52	2464	---	---
13	2425	33	2445	53	2465	---	---
14	2426	34	2446	54	2466	---	---
15	2427	35	2447	55	2467	---	---
16	2428	36	2448	56	2468	---	---
17	2429	37	2449	57	2469	---	---
18	2430	38	2450	58	2470	---	---
19	2431	39	2451	59	2471	---	---

2. TEST METHODOLOGY

All testing as described bellowed were performed in accordance with ANSI C63.4:2014
and FCC CFR 47 Part 15 Subpart C.

2.1 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on a wood table, which is at 0.8 m above ground plane acceding to clause 15.207 and requirements of ANSI C63.4:2014. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz are using CISPR Quasi-Peak / Average detectors.

Radiated Emissions

The EUT is a placed on a turn table, which is 0.8 m above ground plane. The turntable was rotated through 360 degrees to determine the position of maximum emission level. The EUT is placed at 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

2.2 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

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

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
10.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 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	(2)
13.36 - 13.41			

1 Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
2 Above 38.6
(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

2.3 DESCRIPTION OF TEST MODES

The EUT was tested under following modes:

Modes:

1. **Continuous transmitting**

Channels:

1. **2.412 GHz (**Lowest Channel**)**
2. **2.440 GHz (**Middle Channel**)**
3. **2.475 GHz (**Highest Channel**)**

2.4 DESCRIPTION OF THE SUPPORT EQUIPMENTS

Setup Diagram

See test photographs attached in appendix 1 for the actual connections between EUT and support equipment.

EUT

Support Equipment

Peripherals Devices:

OUTSIDE SUPPORT EQUIPMENT							
No.	Equipment	Model	Serial No.	FCC ID/ BSMI ID	Trade name	Data Cable	Power Cord
1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
INSIDE SUPPORT EQUIPMENT							
No.	Equipment	Model	Serial No.	FCC ID/ BSMI ID	Trade name	Data Cable	Power Cord
1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: All the above equipment /cable were placed in worse case position to maximize emission signals during emission test

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

3. TEST AND MEASUREMENT EQUIPMENT

3.1 CALIBRATION

The measuring equipment utilized to perform the tests documented in the report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

3.2 EQUIPMENT

The following list contains measurement equipment used for testing. The equipment conforms to the requirement of CISPR 16-1, ANSI C63.2 and. Other required standards.

Calibration of all test and measurement, including any accessories that may effect such calibration, is checked frequently to ensure the accuracy. Adjustments are made and correction factors are applied in accordance with the instructions contained in the respective.

Table 1 List of Test and Measurement Equipment

Test Site	Instrument	Manufacturer	Model No.	S/N	Next Cal. Date
Conduction	Spectrum (9K--3GHz)	R&S	FSP3	833387/010	2018/09/20
	EMI Receiver	R&S	ESHS10	830223/008	2018/06/06
	LISN	Rolf Heine Hochfrequenztechnik	NNB-2/16z	98062	2018/06/11
	ISN	Schwarzbeck	8-Wire ISN CAT5	CAT5-8158-0094	2018/09/21
	RF Cable	N/A	N/A	EMI-3	2017/10/19
Radiation	Bilog antenna(30M-1G)	ETC	MCTD2786B	BLB16M04004/JB-5-004	2018/05/18
	Double Ridged Guide Horn antenna(1G-18G)	ETC	MCTD 1209	DRH15N02009	2017/11/23
	Horn antenna (18G-26G)	com-power	AH-826	81000	2018/08/16
	LOOP Antenna (Below 30M)	com-power	AL-130	17117	2018/10/04
	Pre amplifier (30M-1G)	EMC INSTRUMENT	EMC9135	980334	2018/05/03
	Microwave Preamplifier (1G-18G)	EMC INSTRUMENT	EMC051845	980108&AT-18001	2017/10/23
	Pre amplifier	MITEQ	JS4-18002600-30-	808329	2018/08/09

	(18G~26G)		5A		
	EMI Test Receiver	R&S	ESVS30 (20M-1000MHz)	826006/002	2017/11/28
	RF Cable (open site)	EMCI	N male on end of both sides (EMI4)	30m	2017/10/19
	RF CABLE (1~26G)	HARBOUT INDUSTRIES	LL142MI(4M+4M)	NA	2018/04/17
	RF CABLE (1~26G)	HARBOUR INDUSTRIES	LL142MI(7M)	NA	2018/08/09
	Spectrum (9K--7GHz)	R&S	FSP7	830180/006	2018/04/14
	Spectrum (9K--40GHz)	AGILENT	8564EC	4046A0032	2018/03/01
Software	e3	AUDIX	N/A	N/A	N/A
SG	SINGAL GENTERATOR (100k-1GHz)	HP	8648A	3619U00426	N/A

- **CALIBRATION INTERVAL OF INSTRUMENTS LISTED ABOVE IS ONE YEAR**

4. SECTION 15.249 REQUIREMENTS (FUNDAMENTAL/ HARMONICS)

4.1 TEST SETUP

Refer to paragraph 6.1.

4.2 LIMIT

Fundamental Frequency (MHz)	Field Strength of Fundamental (dBμV/m at 3-meter)	Detector
902 - 928 2400 – 2483 5725 - 5875	114	Peak
902 - 928 2400 – 2483 5725 - 5875	94	AV

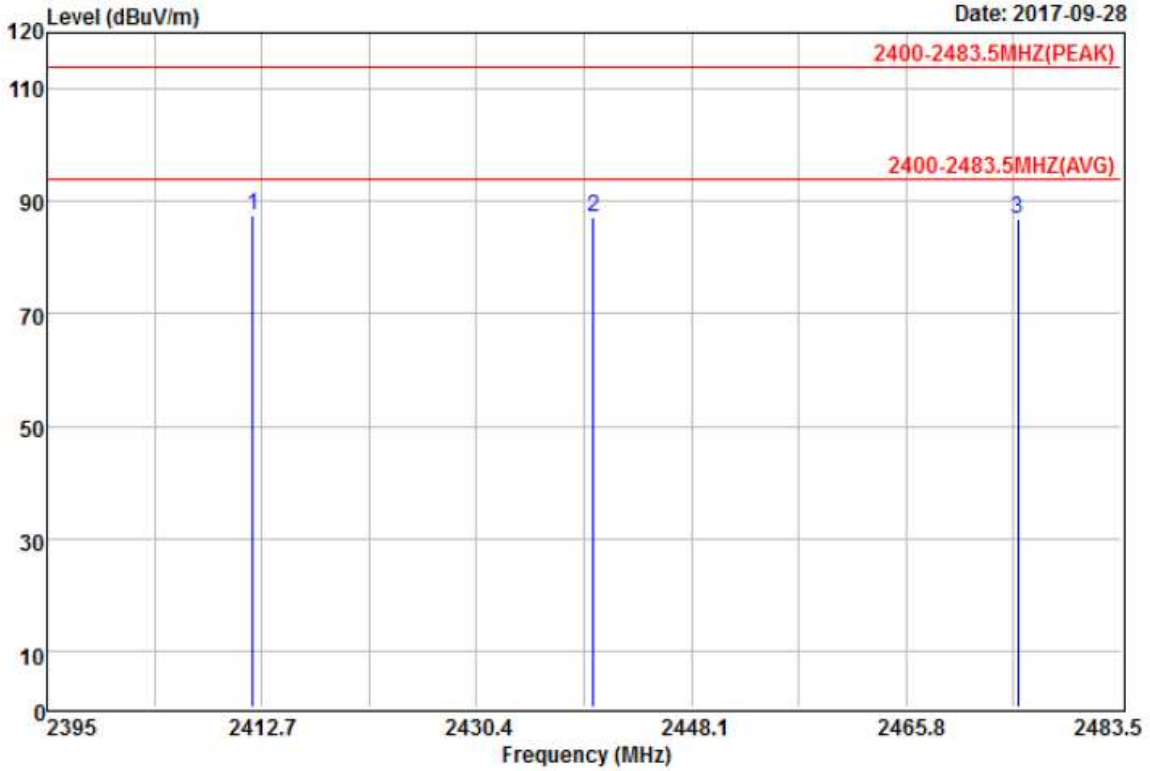
Fundamental Frequency (MHz)	Field Strength of Harmonics (dBμV/m at 3-meter)	Detector
902 - 928 2400 – 2483 5725 - 5875	74	Peak
902 - 928 2400 – 2483 5725 - 5875	54	AV

4.3 RESULT: PASSED

4.4 TEST DATA:

Fundamental

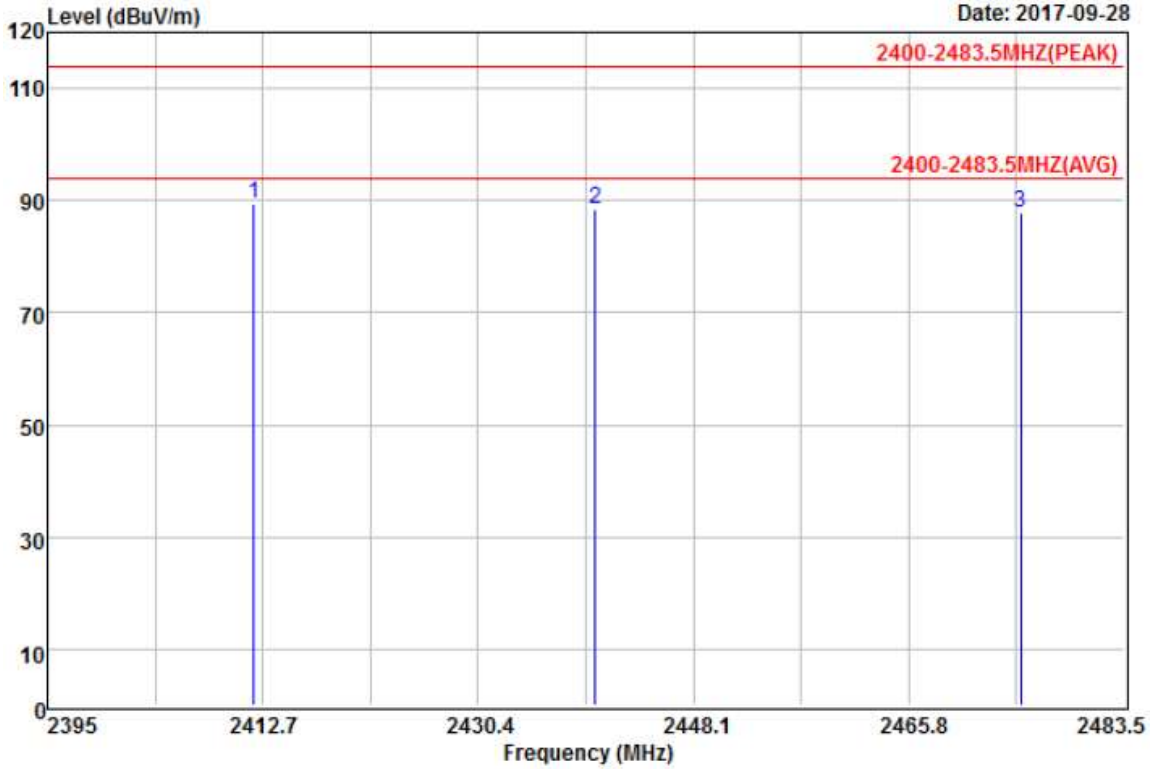
Power	:	DC 5V	Pol/Phase	:	HORIZONTAL
Test Mode 1	:	TX-LO 2412-MI 2440-HI 2475MHz	Temperature	:	33 °C
Memo	:		Humidity	:	64 %



Remarks: **: 1.Result=Read Value+Factor**
: 2.Factor=Antenna Factor+Cable loss-
: Amplifier Factor

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 @	2412.000	101.36	-14.00	87.36	114.00	-26.64	Peak
2	2440.000	101.05	-13.93	87.12	114.00	-26.88	Peak
3	2475.000	100.79	-13.85	86.94	114.00	-27.06	Peak

Power	:	DC 5V	Pol/Phase	:	VERTICAL
Test Mode 1	:	TX-LO 2412-MI 2440-HI 2475MHz	Temperature	:	33 °C
Memo	:		Humidity	:	64 %

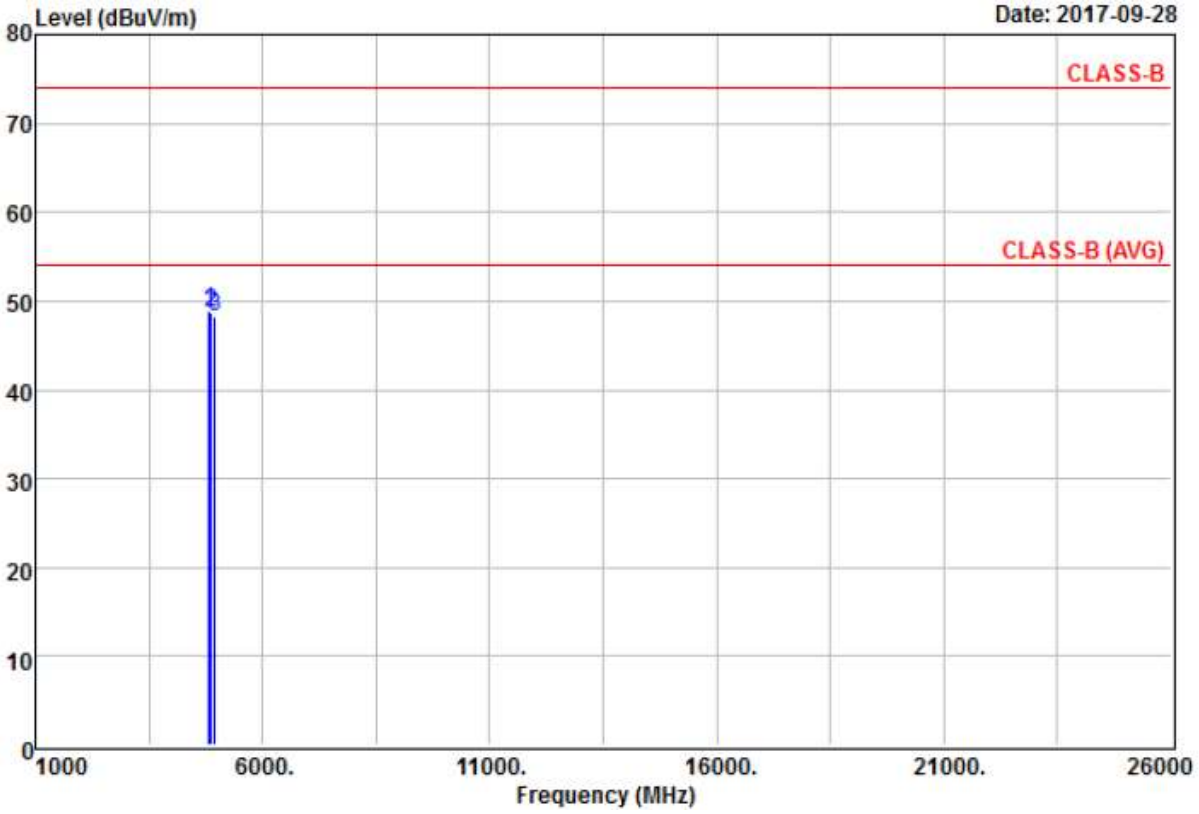


Remarks: **: 1.Result=Read Value+Factor**
: 2.Factor=Antenna Factor+Cable loss-
: Amplifier Factor

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 @	2412.000	103.54	-14.00	89.54	114.00	-24.46	Peak
2	2440.000	102.51	-13.93	88.58	114.00	-25.42	Peak
3	2475.000	101.56	-13.85	87.71	114.00	-26.29	Peak

Harmonics

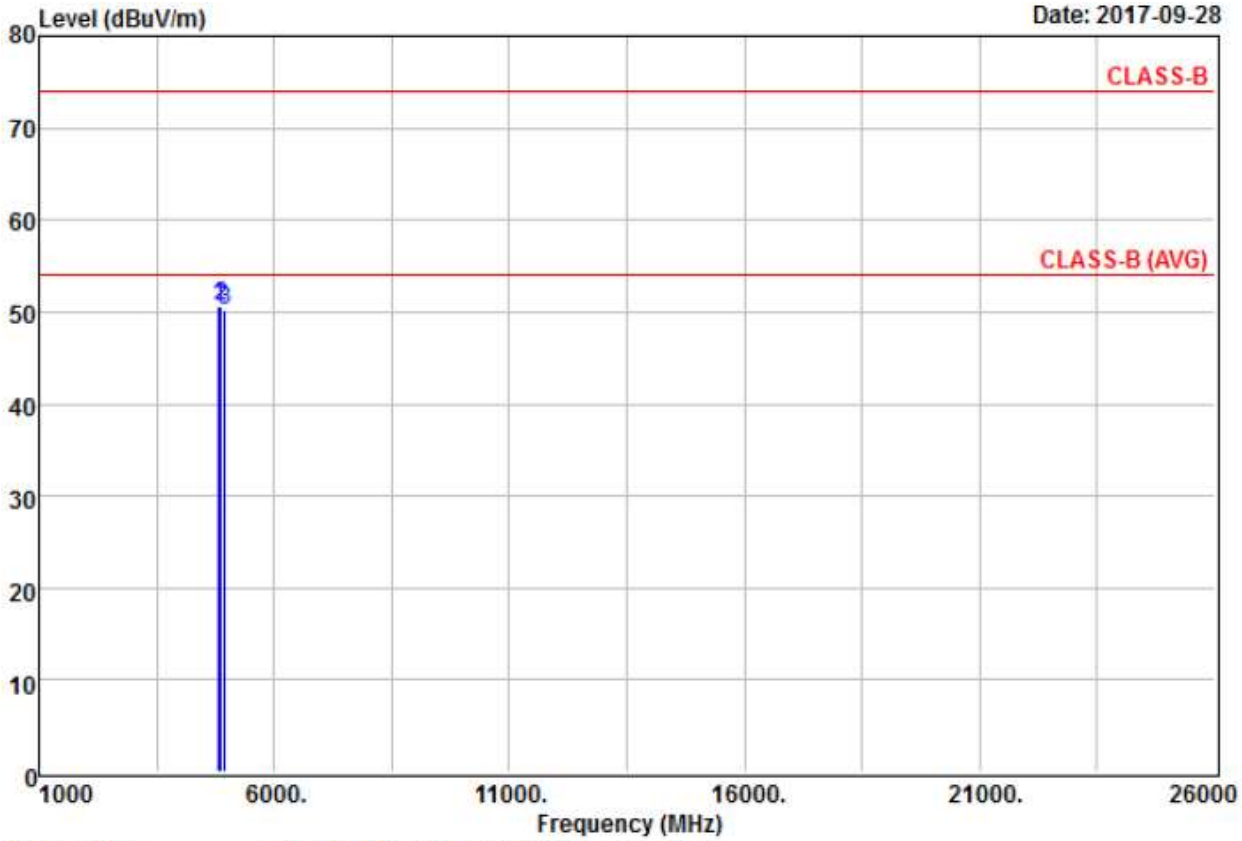
Power	:	DC 5V	Pol/Phase	:	HORIZONTAL
Test Mode 1	:	TX-LO 2412-MI 2440-HI 2475MHz	Temperature	:	33 °C
Memo	:		Humidity	:	64 %



Remarks: **: 1.Result=Read Value+Factor**
: 2.Factor=Antenna Factor+Cable loss-
: Amplifier Factor

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 @	4824.000	55.28	-6.32	48.96	74.00	-25.04	Peak
2	4880.000	54.91	-6.17	48.74	74.00	-25.26	Peak
3	4950.000	54.28	-5.97	48.31	74.00	-25.69	Peak

Power	:	DC 5V	Pol/Phase	:	VERTICAL
Test Mode 1	:	TX-LO 2412-MI 2440-HI 2475MHz	Temperature	:	33 °C
Memo	:		Humidity	:	64 %



Remarks: **: 1.Result=Read Value+Factor**
: 2.Factor=Antenna Factor+Cable loss-
: Amplifier Factor

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 @	4824.000	57.02	-6.32	50.70	74.00	-23.30	Peak
2	4880.000	56.69	-6.17	50.52	74.00	-23.48	Peak
3	4950.000	56.09	-5.97	50.12	74.00	-23.88	Peak

Note:

1. Emission level = Reading level + Correction factor
2. Correction factor : Antenna factor, Cable loss, Pre-Amp, etc.
3. All emissions as described above were determining by rotating the EUT through three orthogonal axes to maximizing the emissions if the EUT belongs to hand-held or body-worn devices.
4. Measurements above 1000 MHz, Peak detector setting: use a 1 MHz RBW, a 3 MHz VBW.
5. Measurements above 1000 MHz, Average detector setting: 1 MHz RBW with 10 Hz VBW
6. Peak detector measurement data will represent the worst case results.
7. “---” denotes the data which is not available.

5. SECTION 15.205 REQUIREMENTS (BAND EDGE)

5.1 TEST SETUP

Refer to paragraph 6.1.

5.2 LIMIT

Restricted Bands:

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

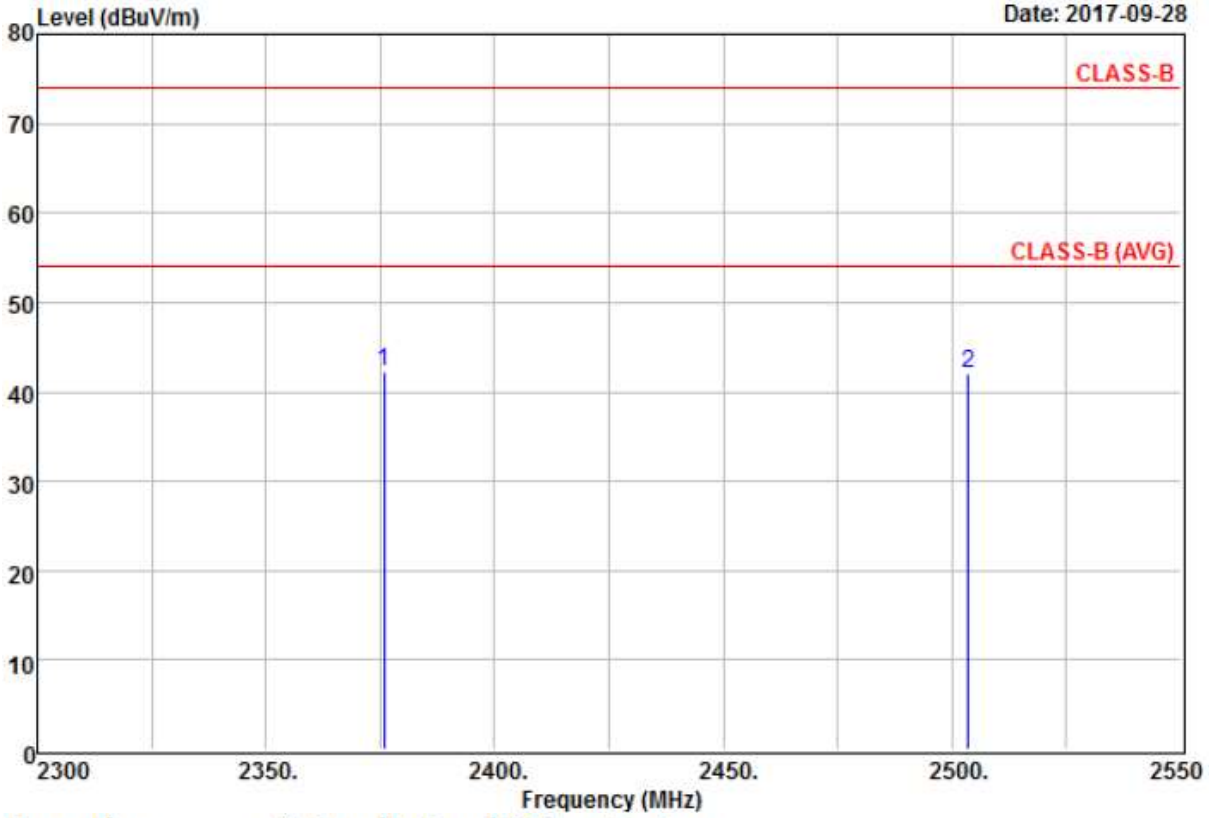
Operation within the bands:
902 - 928 MHz, 2400 - 2483.5 MHz, 5725 - 5875 MHz, and 24.0 - 24.25 GHz.

Frequency (Hz)	Field Strength (μV/m at 3-meter)	Field Strength (dBμV/m at 3-meter)
1.705-30	30 (at 30-meter)	49.5
30-88	100	40
88-216	150	43
216-960	200	46
Above 960	500	54

5.3 RESULT: PASSED

5.4 TEST DATA:

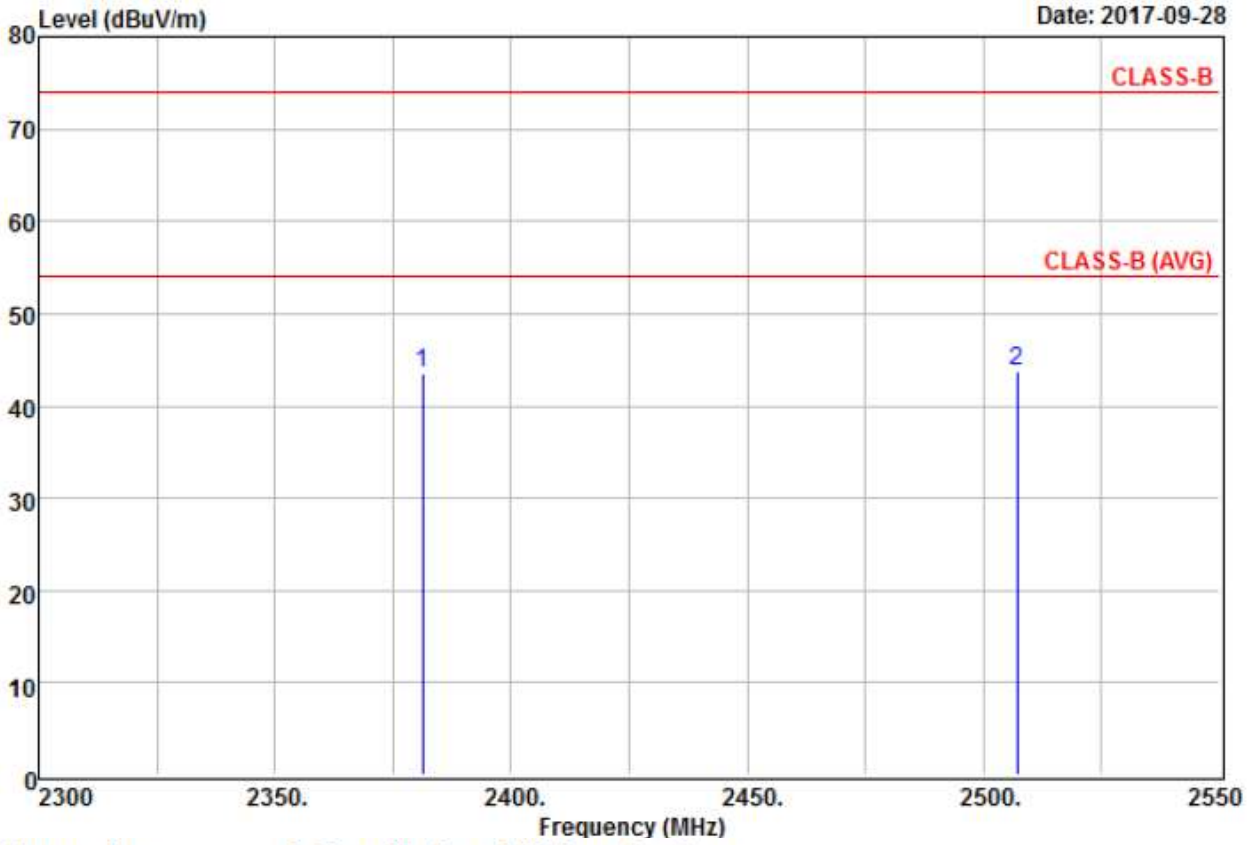
Power	:	DC 5V	Pol/Phase	:	HORIZONTAL
Test Mode 1	:	CH LO & HI –Restricted Bands	Temperature	:	33 ˚C
Memo	:		Humidity	:	64 %



Remarks: **: 1.Result=Read Value+Factor**
: 2.Factor=Antenna Factor+Cable loss-
: Amplifier Factor

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 @	2375.800	56.42	-14.08	42.34	74.00	-31.66	Peak
2	2503.500	55.90	-13.78	42.12	74.00	-31.88	Peak

Power	:	DC 5V	Pol/Phase	:	VERTICAL
Test Mode 1	:	CH LO & HI –Restricted Bands	Temperature	:	33 °C
Memo	:		Humidity	:	64 %



Remarks: **: 1.Result=Read Value+Factor**
: 2.Factor=Antenna Factor+Cable loss-
: Amplifier Factor

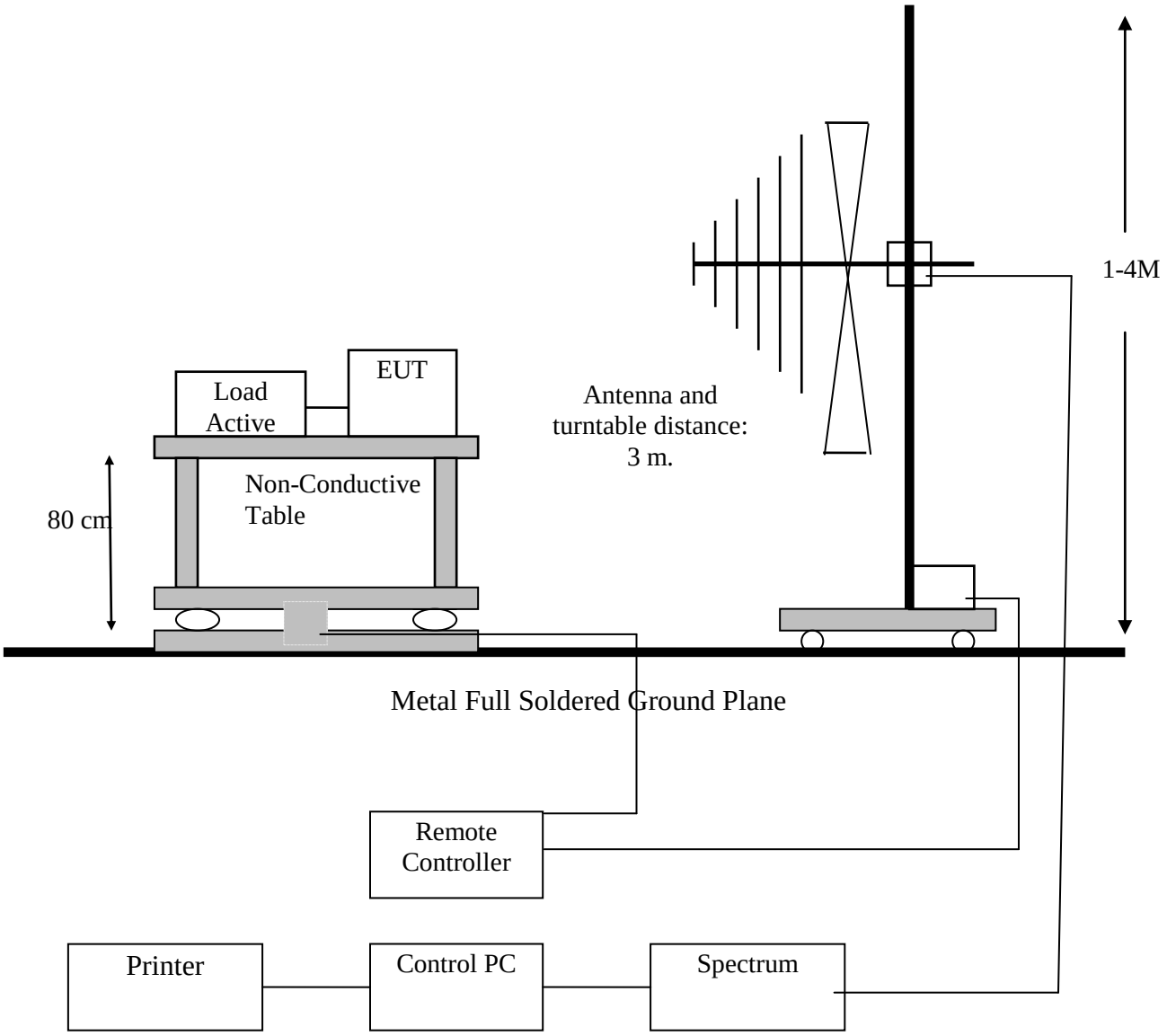
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	2381.200	57.64	-14.07	43.57	74.00	-30.43	Peak
2 @	2507.100	57.62	-13.78	43.84	74.00	-30.16	Peak

Note:

1. Emission level = Reading level + Correction factor
2. Correction factor : Antenna factor, Cable loss, Pre-Amp, etc.
3. All emissions as described above were determining by rotating the EUT through three orthogonal axes to maximizing the emissions if the EUT belongs to hand-held or body-worn devices.
4. Measurements above 1000 MHz, Peak detector setting: use a 1 MHz RBW, a 3 MHz VBW.
5. Measurements above 1000 MHz, Average detector setting: 1 MHz RBW with 10 Hz VBW.
6. Peak detector measurement data will represent the worst case results.

6. SECTION 15.209 REQUIREMENTS (GENERAL RADIATED EMISSION)

6.1 TEST SETUP



6.2 LIMIT

The field strength of any emissions which appear outside of this band shall not exceed the general radiated emission limits in section 15.209 as below.

Frequency (MHz)	Field Strength (mV/m)	Measurement Distance (m)
1.705-30	30	30
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500*	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.*

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

Frequency (Hz)	Field Strength (μV/m at 3-meter)	Field Strength (dBμV/m at 3-meter)
1.705-30	30 (at 30-meter)	49.5
30-88	100	40
88-216	150	43
216-960	200	46
Above 960	500	54

6.3 TEST PROCEDURE

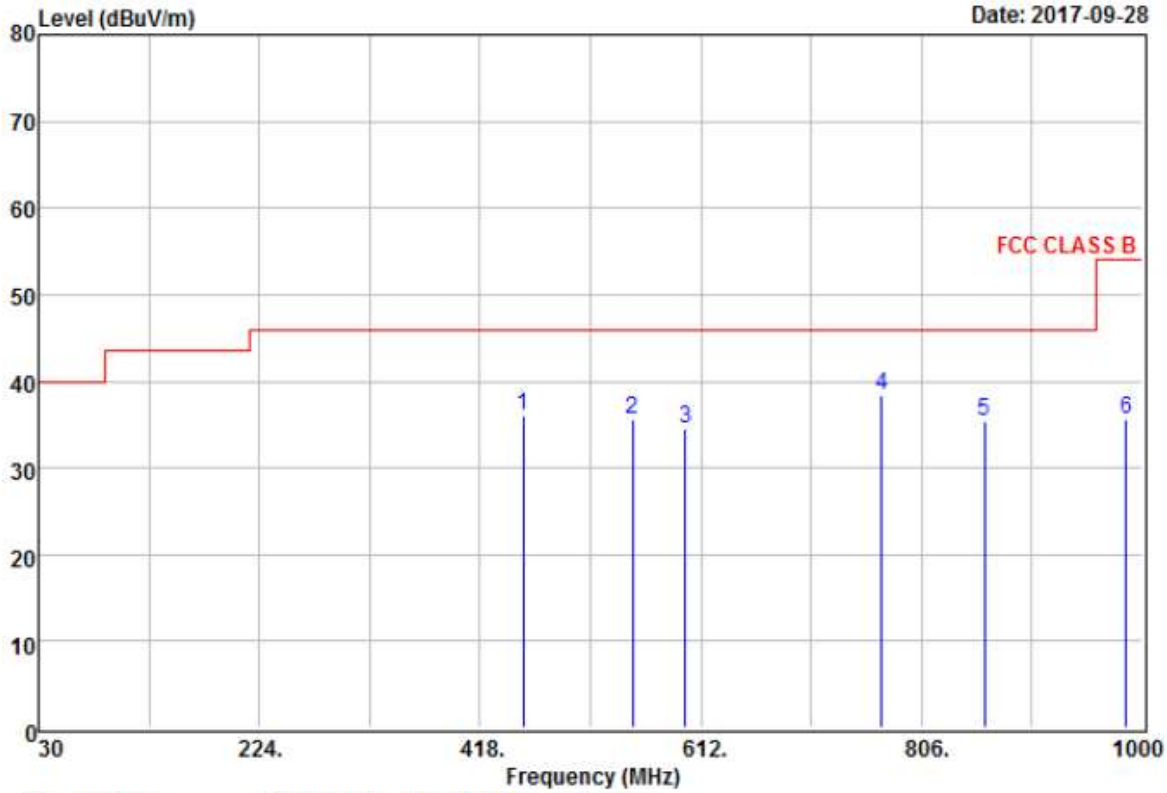
1. The EUT was placed on a turntable, which was 0.8m above ground plane.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT was set at 3m away from the receiving antenna, which was varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was maximized by changing the polarization of receiving antenna, both horizontal and vertical.
6. Repeated above procedures until the measurements for all frequencies are completed.

6.4 RESULT: PASSED

6.5 TEST DATA:

All frequencies not described in this test report and within the range of the general radiated emission limits are not detectable significantly. The table as below is representing worst emissions found.

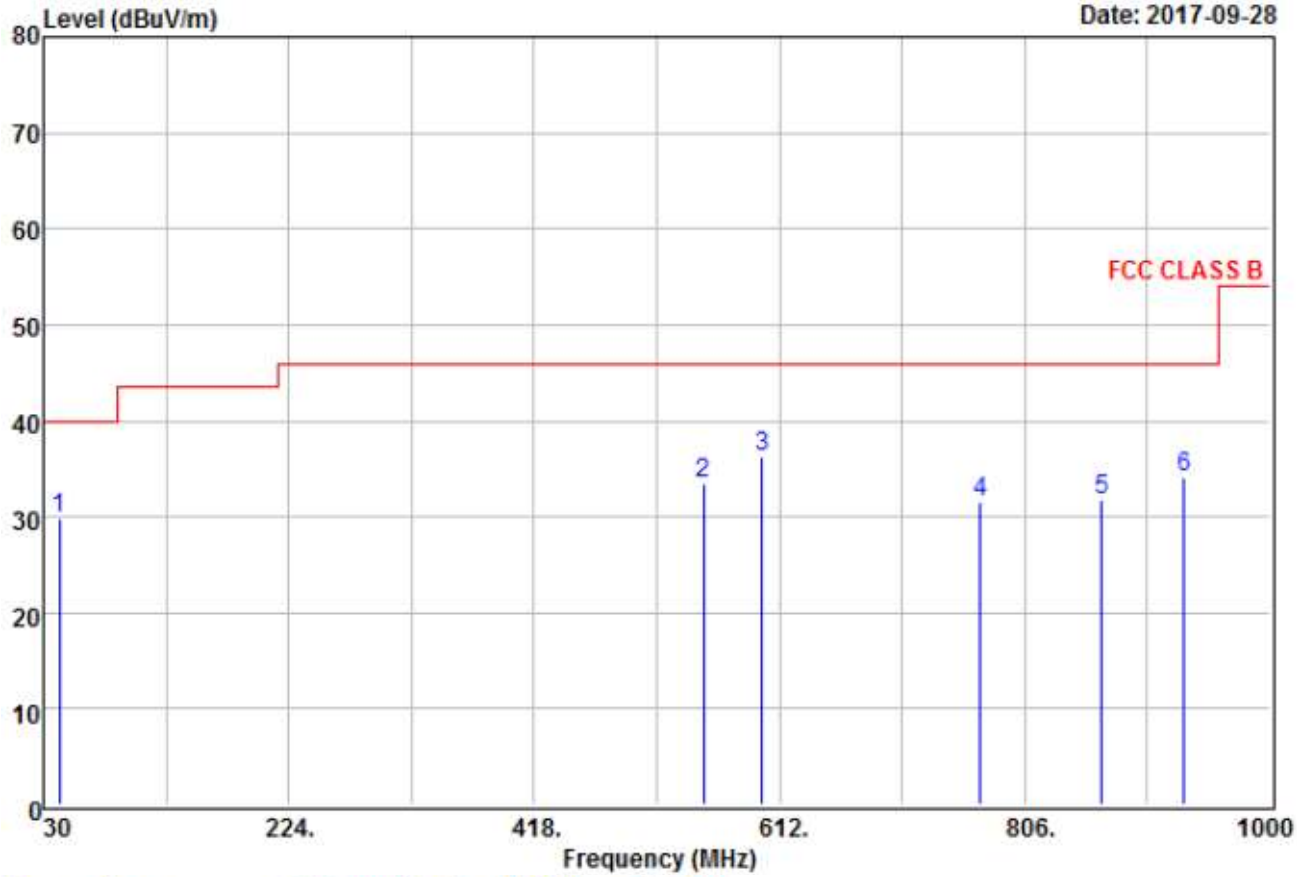
Power	:	DC 5V		Pol/Phase	:	HORIZONTAL	
Test Mode 1	:	TX 2402MHz		Temperature	:	33 ° C	
Memo	:			Humidity	:	64 %	



Remarks: **: 1.Result=Read Value+Factor**
: 2.Factor=Antenna Factor+Cable loss-
: Amplifier Factor

		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		455.830	46.25	-10.20	36.05	46.00	-9.95	QP
2		551.860	44.38	-8.77	35.61	46.00	-10.39	QP
3		598.420	43.38	-8.76	34.62	46.00	-11.38	QP
4	@	771.080	44.30	-5.82	38.48	46.00	-7.52	QP
5		861.290	39.41	-4.04	35.37	46.00	-10.63	QP
6		985.450	37.08	-1.38	35.70	54.00	-18.30	QP

Power	:	DC 5V	Pol/Phase	:	VERTICAL
Test Mode 1	:	TX 2402MHz	Temperature	:	33 ˚C
Memo	:		Humidity	:	64 %



Remarks: **: 1.Result=Read Value+Factor**
: 2.Factor=Antenna Factor+Cable loss-
: Amplifier Factor

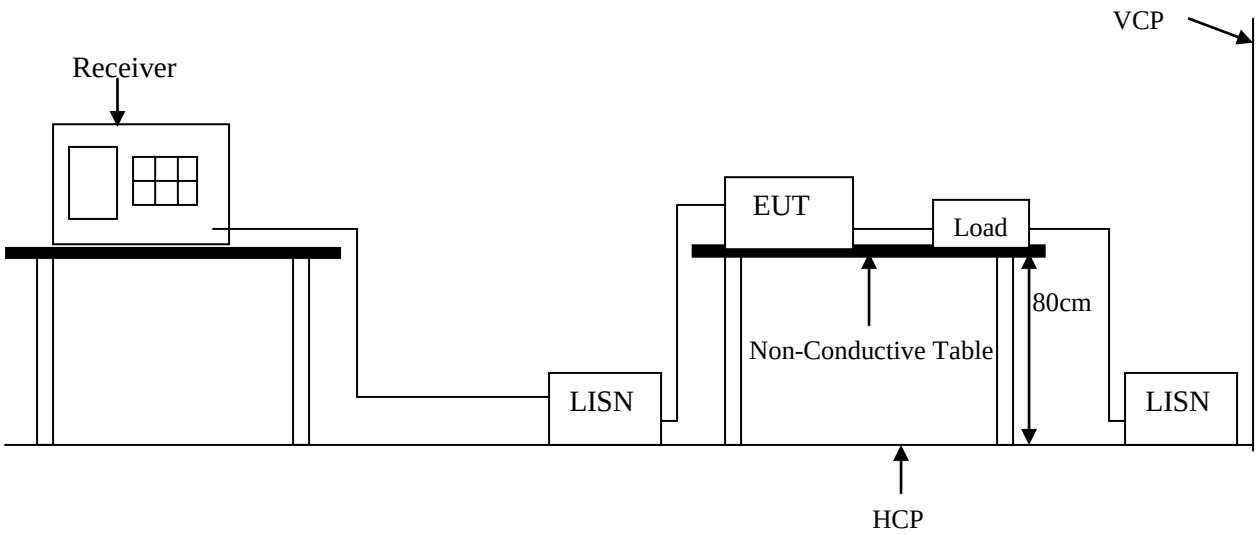
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		42.610	47.74	-17.99	29.75	40.00	-10.25	QP
2		551.860	42.27	-8.77	33.50	46.00	-12.50	QP
3	@	598.420	44.98	-8.76	36.22	46.00	-9.78	QP
4		771.080	37.40	-5.82	31.58	46.00	-14.42	QP
5		867.110	35.75	-4.04	31.71	46.00	-14.29	QP
6		932.100	36.45	-2.40	34.05	46.00	-11.95	QP

Note:

1. Emission level = Reading level + Correction factor
2. Correction factor : Antenna factor, Cable loss, Pre-Amp, etc.
3. All emissions as described above were determining by rotating the EUT through three orthogonal axes to maximizing the emissions if the EUT belongs to hand-held or body-worn devices.
4. Measurements from 9 kHz to 150 kHz, Peak detector setting: 100 Hz RBW
5. Measurements from 150 kHz to 30MHz, Peak detector setting: 10 kHz RBW
6. Measurements from 30 MHz to 1000 MHz, Peak detector setting: 100 kHz RBW
7. Measurements from 9 kHz to 150 kHz, CISPR Quasi-Peak detector: 200 Hz RBW
8. Measurements from 150 kHz to 30MHz, CISPR Quasi-Peak detector: 9 kHz RBW
9. Measurements from 30 MHz to 1000 MHz, CISPR Quasi-Peak detector: 120 kHz RBW
10. Peak detector measurement data will represent the worst case results.

7. SECTION 15.207 REQUIREMENTS (POWERLINE CONDUCTED EMISSIONS)

7.1 TEST SETUP



7.2 LIMIT

Frequency range (MHz)	CLASS B	
	QP dB(uV)	Average dB(uV)
0.15-0.5	66 - 56 dBuV	56 - 46 dBuV
0.5-5.0	56 dBuV	46 dBuV
5.0-30.0	60 dBuV	50 dBuV

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

7.3 TEST PROCEDURE

The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). It provides a 50 ohm / 50 μH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 ohm / 50 μH coupling impedance with 50 ohm termination. (Please refer to the block diagram of the test setup and photograph.)

Both sides of AC line are checked for the maximum conducted emission interference. In order to find the maximum emissions, the relating positions of equipment and all of the interference cables must be changed according to EN 55022 regulations: The measurement procedure on conducted emission interference.

The resolution bandwidth of the field strength meter is set at 9 KHz.

7.4 TEST SPECIFICATION

According to PART15.207

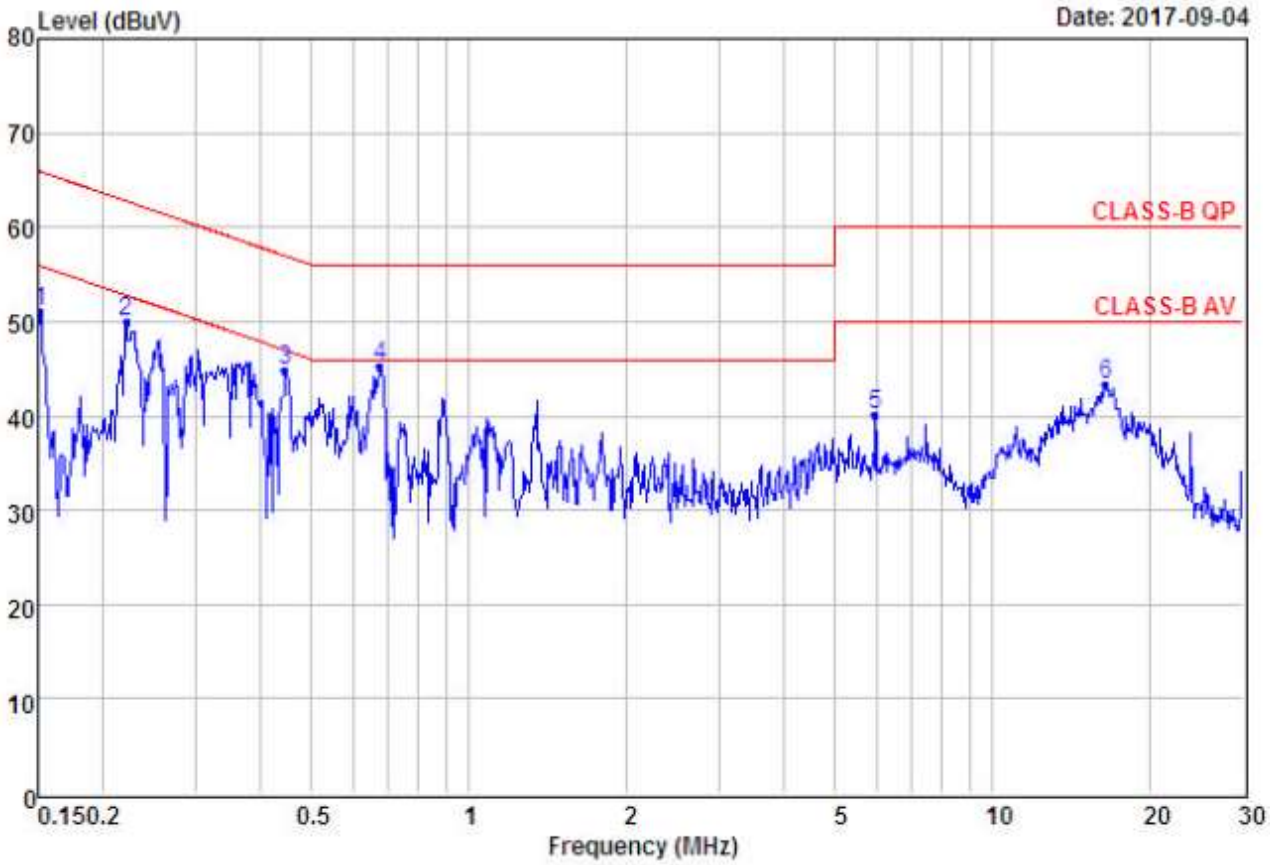
7.5 RESULT: PASSED

EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

Frequency Range:	150KHz--30MHz
Detector Function:	Quasi-Peak / Average Mode
Resolution Bandwidth:	9KHz

7.6 TEST DATA:

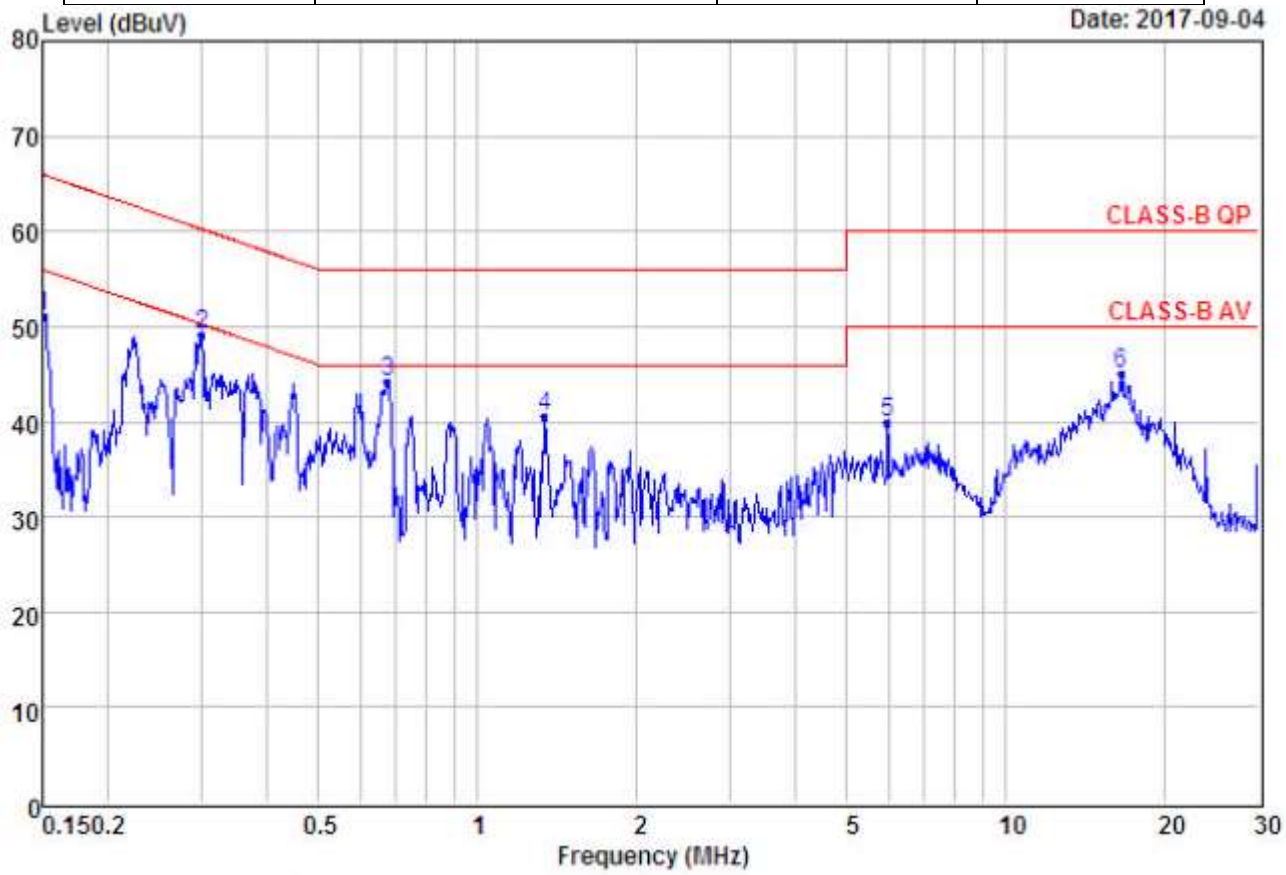
Power	:	DC 5V		Pol/Phase	:	LINE	
Test Mode 1	:	TX 2402 MHz		Temperature	:	25.1 ˚C	
Memo	:			Humidity	:	42 %	



Remarks: : Factor=Insertion loss+Cable loss

	Freq	Read Level	Level	Factor	Over Limit	Limit Line	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	
1	0.15	40.94	51.06	10.12	-14.85	65.91	Peak
2	0.22	39.83	49.94	10.11	-12.85	62.79	Peak
3	0.44	34.62	44.76	10.14	-12.22	56.98	Peak
4 @	0.68	35.03	45.18	10.15	-10.82	56.00	Peak
5	5.96	29.82	40.17	10.35	-19.83	60.00	Peak
6	16.40	32.84	43.42	10.58	-16.58	60.00	Peak

Power	:	DC 5V	Pol/Phase	:	NEUTRAL
Test Mode 1	:	TX 2402MHz	Temperature	:	25.1 °C
Memo	:		Humidity	:	42 %



Remarks: : Factor=Insertion loss+Cable loss

	Freq	Read Level	Level	Factor	Over Limit	Limit Line	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	
1	0.15	40.96	51.15	10.19	-14.81	65.96	Peak
2 @	0.30	38.85	49.06	10.21	-11.18	60.24	Peak
3	0.68	33.97	44.21	10.24	-11.79	56.00	Peak
4	1.34	30.25	40.53	10.28	-15.47	56.00	Peak
5	5.96	29.50	39.99	10.49	-20.01	60.00	Peak
6	16.49	34.35	45.07	10.72	-14.93	60.00	Peak