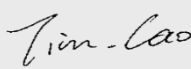
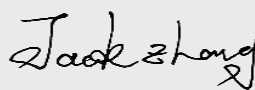




Test report No:
2390782R-RF-US-P06V03

FCC & ISED TEST REPORT

Product Name	Mobile Computer
Trademark	Elo
Model and /or type reference	EMC-M51C
FCC ID	RBWEMCM51C
IC	10757B-EMCM51C
Applicant's name / address	Elo Touch Solutions, Inc 670 N. McCarthy Blvd., Suite 100, Milpitas, CA 95035, USA.
Test method requested, standard	47 CFR FCC Part 15 (Section 15.247) ANSI C63.10: 2013 RSS-Gen Issue 5 RSS-247 Issue 3
Verdict Summary	IN COMPLIANCE
Documented by (name / position & signature)	Tim Cao / Project Manager 
Approved by (name / position & signature)	Jack Zhang / Manager 
Date of issue	2024-09-14
Report Version	V1.0
Report template No	Template_FCC Part 15C-RF-V1.0

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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

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Mar. 20, 2024
Date (start test)	Jun. 01, 2024
Date (finish test)	Jun. 30, 2024

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	: Equipment Under Test
QP	: Quasi-Peak
CAV	: CISPR Average
AV	: Average
CDN	: Coupling Decoupling Network
SAC	: Semi-Anechoic Chamber
OATS	: Open Area Test Site
BW	: Bandwidth
AM	: Amplitude Modulation
PM	: Pulse Modulation
HCP	: Horizontal Coupling Plane
VCP	: Vertical Coupling Plane
U_N	: Nominal voltage
T_x	: Transmitter
R_x	: Receiver
N/A	: Not Applicable
N/M	: Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2390782R-RF-US-P06V03	V1.0	Initial issue of report.	2024-09-14

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. This report is limited report related to installation tested module in Mobile Computer, the customer declared that the RF parameter of the module installed in the host is exactly same with the certificated module. We verified the RF Output Power and Radiated Emissions on the Host. For other test data, please refer to FCC ID: 2APJ4-SRM955, IC: 23860-SRM955. These test results on a sample of the device are for the purpose of demonstrating Compliance with 47 CFR FCC Part 15 (Section 15.247), RSS-247 Issue 3. RSS-Gen Issue 5.
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
 - Chapter 1.1 General Description of the Item(s);
 - Chapter 1.2 Antenna Informaion;
 - Chapter 1.3 Channel List.

USED EQUIPMENT

Conducted Test/ TR8

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Version	Software version
Wireless Connectivity Tester	R&S	CMW 270	102593	2024.05.15	2025.05.14	V 4.0.60	N/A
Coaxial Cable	N/A	N/A	2477	2023.10.08	2024.10.07	N/A	N/A
Coaxial Cable	N/A	N/A	2478	2023.10.08	2024.10.07	N/A	N/A
High and low temperature and fast temperature change test box	ASTUOD	ASTD-FBT-225K	N/A	2024.04.21	2025.04.20	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-032	2024.05.17	2025.05.16	N/A	N/A
Test system							
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Version	Software version
MAX Signal Analyzer	Keysight	N9010A	MY48030494	2023.11.08	2024.11.07	A.14.03	N/A
RF Control Unit	Tonscend	JS0806-2	22G8060594	2024.01.31	2025.01.30	N/A	N/A
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY61252529	2024.05.12	2025.05.11	B.01.96	N/A
Frequency extender for EXG or MXG	Keysight	N5182BX07	MY59362500	2024.05.12	2025.05.11	N/A	N/A
EXG-B MW Analog Signal Generator	Keysight	N5173B	MY61252566	2023.08.26	2024.08.25	B.01.95	N/A
Test Software	Tonscend	TS1120	JS1120-3	N/A	N/A	N/A	V3.0.22

Radiated Emission (9KHz-1GHz) / AC2

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Versiom	Software version
EMI Test Receiver	R&S	ESCI	100573	2024.02.06	2025.02.05	4.42 SP3	N/A
Loop Antenna	R&S	HFH2-Z2E	101149	2024.03.27	2025.03.26	N/A	N/A
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2024.03.20	2025.03.19	N/A	N/A
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2024.04.27	2025.04.26	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-021	2024.05.17	2025.05.16	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	3

Radiated Emission (1GHz-40GHz) / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Versiom	Software version
EXA Spectrum Analyzer	Keysight	N9020B	MY601122 18	2023.11.08	2024.11.07	A.31.05	N/A
Pre-Amplifier	SKET	EMC184045 SE	980263	2023.07.14	2024.07.13	N/A	N/A
Preamplifier	CHENGYI	EMC184045 SE	980263	2023.07.09	2024.07.08	N/A	N/A
DRG Horn Antenna	ETS-Lindgren	3117	123988	2023.11.07	2024.11.06	N/A	N/A
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2024.05.30	2025.05.29	N/A	N/A
Filter Switch Box	MVE	MSW-F196	C070001S	2024.04.20	2025.04.19	N/A	N/A
Coaxial Cable	ROSENBERGER	LA1-C011-2000/3000	AC5-40G-2	2024.05.26	2025.05.25	N/A	N/A
Cable	Rosenberger	LA1-C011-1000	0523	2024.05.26	2025.05.25	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-001	2023.08.25	2024.08.24	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-024	2024.05.17	2025.05.16	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	3

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% .

Test item	Uncertainty
Peak Power Output	± 1.27 dB
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~200MHz: 3.50 dB 300MHz~1GHz: 3.60 dB Vertical: 30MHz~200MHz: 3.60 dB 300MHz~1GHz: 3.50 dB
Radiated Emission(1GHz~26.5GHz)	Horizontal: 1GHz~18GHz: 5.00 dB Vertical: 1GHz~18GHz: 4.80 dB Horizontal: 18GHz~26.5GHz: 5.30 dB Vertical: 18GHz~26.5GHz: 4.90 dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name.....	Mobile Computer
Model No.	EMC-M51C
Trademark.	Elo
FCC ID	RBWEMCM51C
IC.....	10757B-EMCM51C
Hardware Version	V1.06
Software Version.....	MT912NoGms_EQ000_2774.F53FD5F.FD20B6E.6EAD44F_240130_100_V01_T23
Manufacturer.....	Elo Touch Solutions, Inc
Manufacturer Address.....	670 N. McCarthy Blvd., Suite 100, Milpitas, CA 95035, USA.
Factory	ShuoGe Intelligent Technology Co.,Ltd.
Factory address	Room 308-310, Building 1, No.2 8th Road, Baiyang Street, Qiantang New Area, Hangzhou City, Zhejiang Province, P.R. China(310018)
Operating temperature	-20 ~ +50℃

Wireless Card	SRM955				
Wireless specification.....	Bluetooth (LE)				
Operating frequency range(s)	2402~2480MHz				
Type of Modulation.....	GFSK				
PHYS	☒	LE 1M	☒	LE 2M	☐ LE Coded S=2/8
Data Rate	☒	1Mbit/s	☒	2Mbit/s	☐ 500/125 Kbit/s
Number of channel.....	40				

Rated power supply	Voltage and Frequency	
	☐	AC: 220 - 240 V, 50/60 Hz
	☐	AC: 100 - 240 V, 50/60 Hz
	☒	Battery: 3.8 Vdc
	☒	Adapter:
Adapter Model	UES45LCP-SPC	
	Input: 100-240 V ~ 50/60 Hz, 1.3 A	
	Output: 5.0 V / 3.0 A, 15.0 W;	
	9.0 V / 3.0 A, 27.0 W;	
	12.0 V / 3.0 A, 36.0 W;	
	15.0 V / 3.0 A, 45.0 W;	
	20.0 V / 2.25 A, 45.0 W Max;	
Mounting position.....	☐	Tabletop equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment



	☒	Hand-held/Portable equipment
	☐	Other:

1.2 Antenna Information

Antenna Delivery	☒	1TX + 1RX		
	☒	2TX + 2RX		
	☐	Others:.....		
Antenna technology	☒	SISO		
	☒	MIMO	☒	CDD
			☐	Beam-forming
Antenna Type	☐	External	☐	Dipole
			☐	Sectorized
	☒	Internal	☐	Monopole
			☒	PIFA
			☐	Others
Antenna Gain.....	-1.50 dBi			

1.3 Channel List

Bluetooth Working Frequency of Each Channel: (For LE)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz	03	2408 MHz
04	2410 MHz	05	2412 MHz	06	2414 MHz	07	2416 MHz
08	2418 MHz	09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz	15	2432 MHz
16	2434 MHz	17	2436 MHz	18	2438 MHz	19	2440 MHz
20	2442 MHz	21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz	27	2456 MHz
28	2458 MHz	29	2460 MHz	30	2462 MHz	31	2464 MHz
32	2466 MHz	33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz	39	2480 MHz

Note: The General Description of the Item , antenna information and Channel List for the EUT in clause 1 are provided and confirmed by the client.

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Test Mode For Bluetooth	Mode 1: Transmit by LE_1Mbps
	Mode 2: Transmit by LE_2Mbps

Note 1: Regards to the frequency band operation: the lowest, middle and highest frequency channel were selected to perform the test, then shown on this report.

Note 2: For portable device, radiated tests was verified over X, Y, Z axis, and shown the worst case on this report.

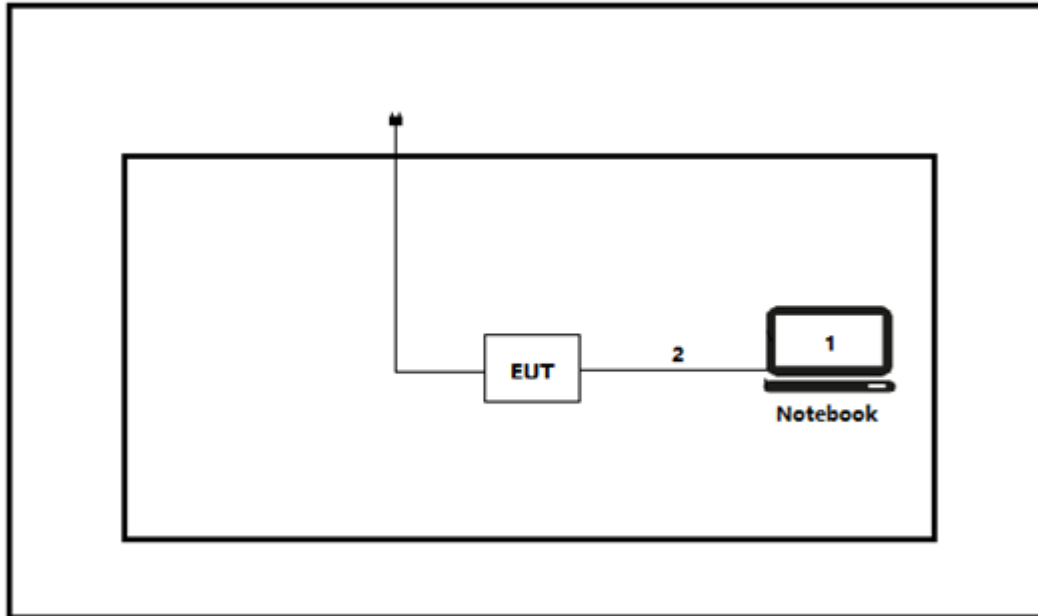
2.2 Auxiliary equipment / Test software for the EUT

Auxiliary equipment	Type / Version	Manufacturer	Supplied by
(1) Notebook	Think pad x220	Lenovo	Adapter
(2) USB Control Cable	N/A	N/A	N/A
(3) USB Control Cable	N/A	N/A	N/A
software	Type / Version	Manufacturer	Supplied by
QRCT	V4.0	N/A	N/A

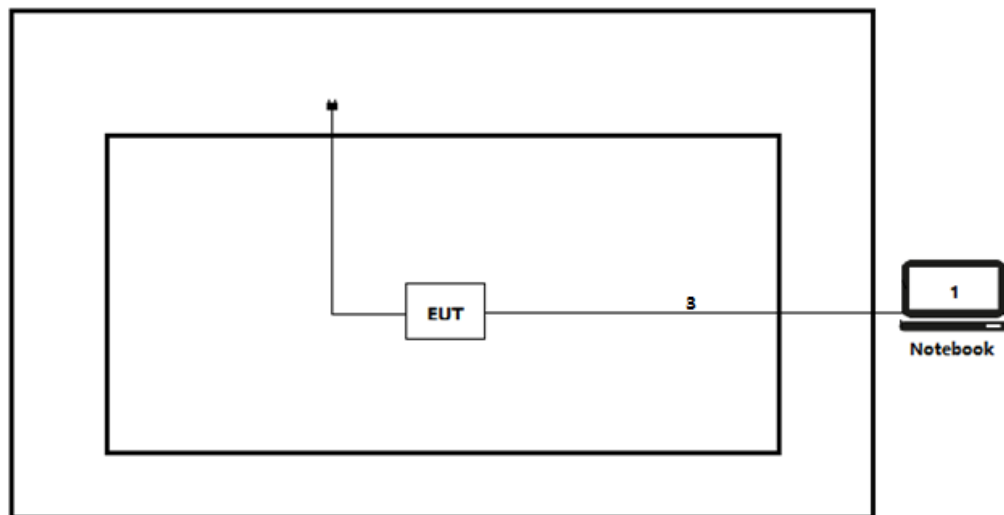
Accessories Information	Cable		
	Length used during test [m]	Attached during test	Shielded
(2)USB Control Cable	1	☒	☒
(3)USB Control Cable	8	☒	☒

2.3 Test Configuration / Block diagram used for tests

Test setup Diagram- Conducted test



Test setup Diagram- Radiated Emission



2.4 Testing process

1	Setup the EUT shown in Section 2.3.
2	Execute the [QRCT]on the notebook.
3	Configure the test mode, the test channel, and the data rate.
4	Verify that the EUT works properly.

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
CFR 47, FCC Part 15 C	2024	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
RSS-Gen Issue 5 Amendment 2	2021	General Requirements for Compliance of Radio Apparatus
RSS-247 Issue 3	2023	Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSS) and Licence-Exempt Local Area Network (LE-LAN) Devices

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

(Please define the deviations from the standard(s) if applicable)

3.3 Overview of results

Requirement – Test Item of FCC	Standard(s)	Verdict	Remark
Maximum Conducted Output Power	15.247 (b)(3)	PASS	Test data please refer to Appendix A
Emissions in Restricted Bands	FCC 15.205 FCC 15.209	PASS	Test data please refer to Appendix B

Requirement – Test case of ISCED	Standard(s)	Verdict	Remark
Maximum Conducted Output Power	RSS-247 Issue 3 Paragraph 5.4(d)	PASS	Test data please refer to Appendix A
Emissions in Restricted Bands	RSS-Gen Issue 5 Paragraph 8.9	PASS	Test data please refer to Appendix B

3.4 Power setting in test

Mode	Channel	Frequency (MHz)	Power setting
Mode1	00	2402	Default
	19	2440	Default
	39	2480	Default
Mode2	00	2402	Default
	19	2440	Default
	39	2480	Default

3.5 Test Matrix

Test item	Model: EMC-M51C	
	1(#1)	2(#2)
Maximum Conducted Output Power	☒	☐
Emissions in Restricted Bands	☐	☒
Note1: The only difference between sample #1 and sample #2 is whether to keep the original antenna, sample #1 is a conduction test product that removes the original antenna and is equipped with SMA wires, and sample #2 is a complete product that retains the original antenna.		

3.6 Test Facility

USA	:	FCC Designation Number: CN1199
CA	:	ISED CAB identifier: CN0040

4 TEST ITEMS OF LIMIT/SETUP/PROCEDURE

4.1 Maximum Conducted Output Power

VERDICT: PASS

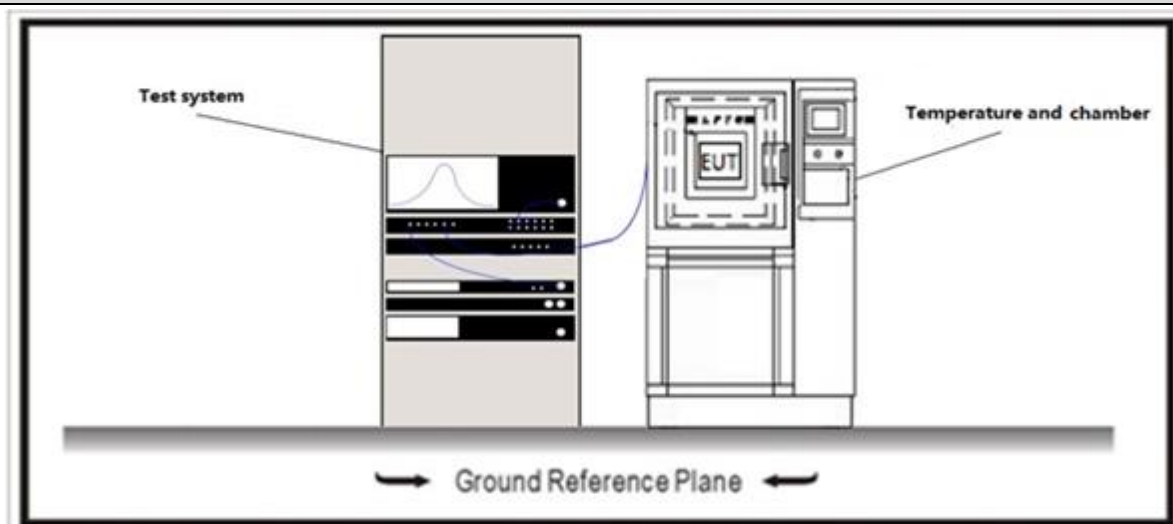
4.1.1 Limit

Standard		FCC Part 15 Subpart C Paragraph 15.247 (b)(3); RSS-247 Issue 3 Paragraph 5.4(d).
☒	GTX < 6dBi	$P_{out} \leq 30 \text{ dBm}$
☐	GTX > 6dBi	
☐	Non-Fix point-point	$P_{out} \leq 30 - (GTX - 6)$
☐	Fix point-point	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	Point-to-multipoint	$P_{out} \leq 30 - (GTX - 6)$
☐	Overlap Beams	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	Aggregate power transmitted simultaneously on all beams	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	single directional beam	$P_{out} \leq 30 - [(GTX - 6)]/3 + 8 \text{ dB}$

Note 1 : GTX directional gain of transmitting antennas.

Note 2 : Pout is maximum peak conducted output power .

4.1.2 Test Setup



4.1.3 Test Procedure

	References Rule			Chapter	Description		
☒	ANSI C63.10			11.9	Fundamental emission output power		
	☐	ANSI C63.10			11.9.1	Maximum peak conducted output power	
		☐	ANSI C63.10	11.9.1.1	RBW ≥ DTS bandwidth		
		☐	ANSI C63.10	11.9.1.2	Integrated band power method		
		☐	ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method		
	☒	ANSI C63.10			11.9.2	Maximum conducted (average) output power	
		☐	ANSI C63.10			11.9.2.2	Measurement using a spectrum analyzer (SA)
			☐	ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle ≥98%)	
			☐	ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle ≥98%)	
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle ≤98%)	
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle ≤98%)	
			☐	ANSI C63.10	11.9.2.2.4	Method AVGSA-3	
			☐	ANSI C63.10	11.9.2.2.5	Method AVGSA-3A	
		☒	ANSI C63.10			11.9.2.3	Measurement using a power meter (PM)
			☒	ANSI C63.10	11.9.2.3.1	Method AVGPM	
			☐	ANSI C63.10	11.9.2.3.2	Method AVGPM-G	

4.2 Emissions in Restricted Bands**VERDICT: PASS****4.2.1 Limit****Standard** FCC Part 15 Subpart C Paragraph 15.205

Restricted Bands of operation

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
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
8.81425 – 8.81475	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	
13.36 – 13.41			

Standard RSS-Gen Issue 5 Paragraph 8.10

Restricted Bands of operation for IC

0.090 - 0.110	13.36 - 13.41	960 - 1427	9.0 - 9.2
0.495 - 0.505	16.42 - 16.423	1435 - 1626.5	9.3 - 9.5
2.1735 - 2.1905	16.69475 - 16.69525	1645.5 - 1646.5	10.6 - 12.7
3.020 - 3.026	16.80425 - 16.80475	1660 - 1710	13.25 - 13.4
4.125 - 4.128	25.5 - 25.67	1718.8 - 1722.2	14.47 - 14.5
4.17725 - 4.17775	37.5 - 38.25	2200 - 2300	15.35 - 16.2
4.20725 - 4.20775	73 - 74.6	2310 - 2390	17.7 - 21.4
5.677 - 5.683	74.8 - 75.2	2483.5 - 2500	22.01 - 23.12
6.215 - 6.218	108 - 138	2655 - 2900	23.6 - 24.0
6.26775 - 6.26825	149.9 - 150.05	3260 - 3267	31.2 - 31.8
6.31175 - 6.31225	156.52475 - 156.52525	3332 - 3339	36.43 - 36.5
8.291 - 8.294	156.7 - 156.9	3345.8 - 3358	Above 38.6
8.362 - 8.366	162.0125 - 167.17	3500 - 4400	
8.37625 - 8.38675	167.72 - 173.2	4500 - 5150	
8.41425 - 8.41475	240 - 285	5350 - 5460	
12.29 - 12.293	322 - 335.4	7250 - 7750	
12.51975 - 12.52025	399.9 - 410	8025 - 8500	
12.57675 - 12.57725	608 - 614	--	

Restricted Band Emissions Limit

FCC Part 15 Subpart C Paragraph 15.209

Frequency (MHz)	Field strength ($\mu\text{V/m}$)	Field strength ($\text{dB}\mu\text{V/m}$)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)
1.705 - 30	30	29.5	30 _(Note 1)
30 - 88	100	40	3 _(Note 2)
88 - 216	150	43.5	3 _(Note 2)
216 - 960	200	46	3 _(Note 2)
Above 960	500	54	3 _(Note 2)

RSS-Gen Issue 5 Paragraph 8.9.

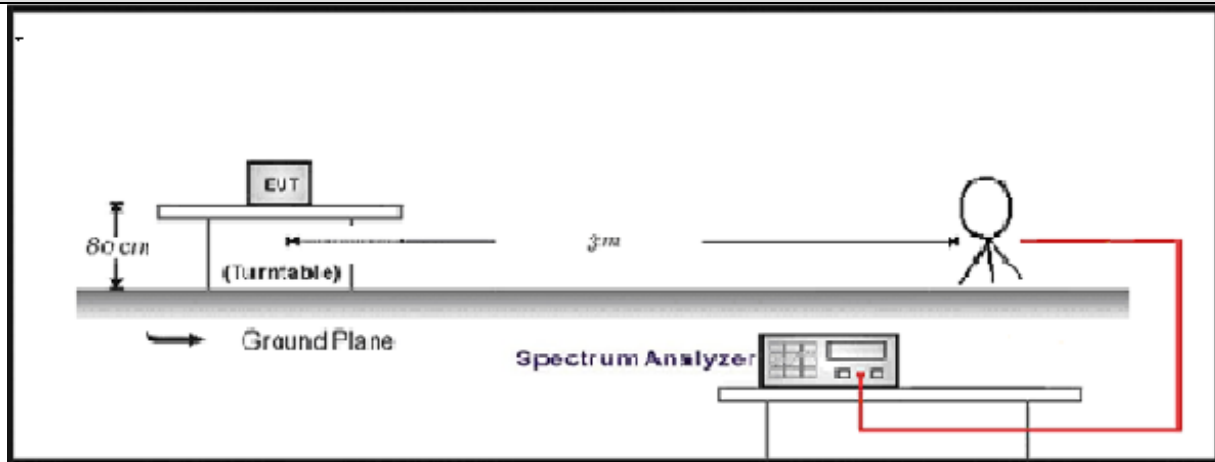
Frequency (MHz)	Field strength	Field strength ($\text{dB}\mu\text{V/m}$)	Measurement distance (m)
0.009 - 0.49	6.37/F(kHz) $\mu\text{A/m}$	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	63.7/F(kHz) $\mu\text{A/m}$	33.8 - 23	30 _(Note 1)
1.705 - 30	30 $\mu\text{V/m}$	29.5	30 _(Note 1)
30 - 88	100 $\mu\text{V/m}$	40	3 _(Note 2)
88 - 216	150 $\mu\text{V/m}$	43.5	3 _(Note 2)
216 - 960	200 $\mu\text{V/m}$	46	3 _(Note 2)
Above 960	500 $\mu\text{V/m}$	54	3 _(Note 2)

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

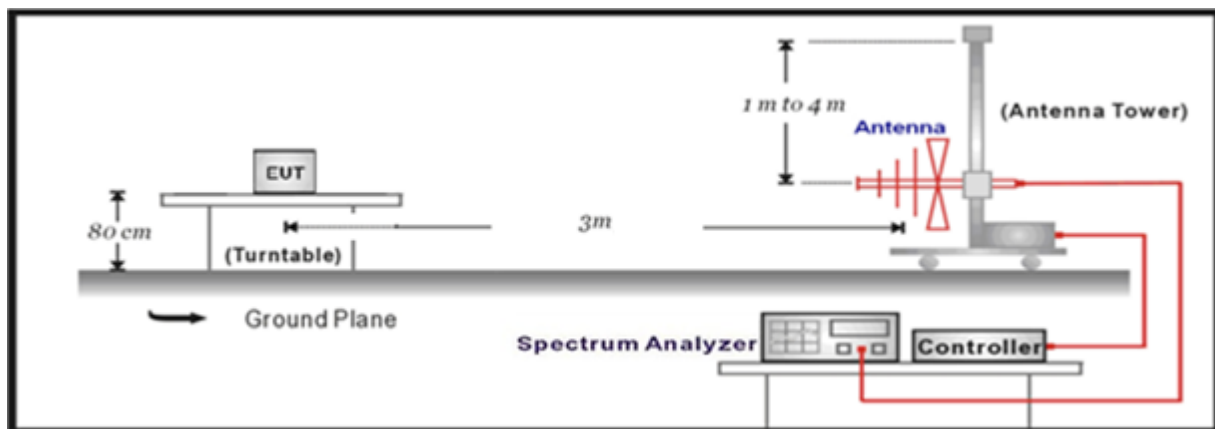
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

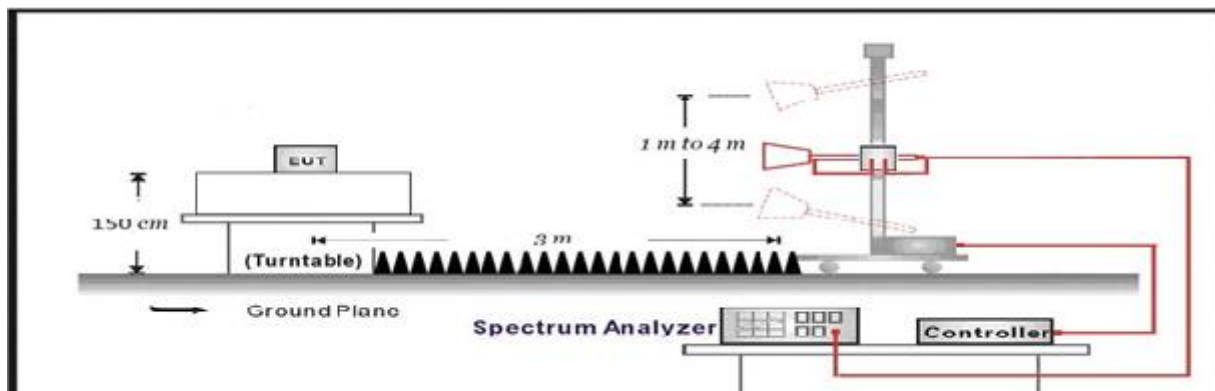
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.2.3 Test Procedure

	References Rule		Chapter	Description
☒	ANSI C63.10		11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10	11.12.1	Radiated emission measurements
	☒	ANSI C63.10	11.12.2.7	Radiated spurious emission test
	☒	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

5 TEST SETUP PHOTO AND EUT PHOTO

Remark: The test setup photo and EUT Photo please see appendix.

6 TEST RESULT

Appendix A: Maximum Conducted Output Power

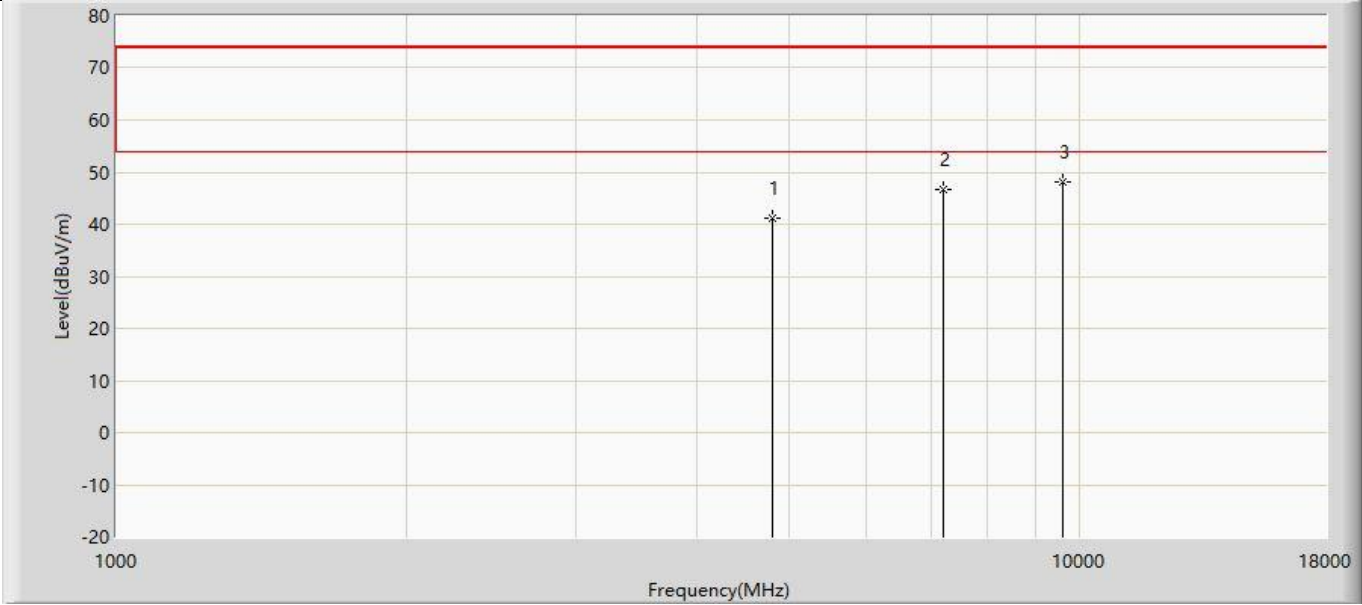
Test Mode	Frequency (MHz)	Measured Power (dBm)	EIRP (dBm)	Conducted Limit[dBm]	EIRP Limit (dBm)
Mode1	2402	4.18	2.68	≤ 30	≤ 36
	2440	3.72	2.22	≤ 30	≤ 36
	2480	2.56	1.06	≤ 30	≤ 36
Mode2	2402	4.12	2.62	≤ 30	≤ 36
	2440	3.58	2.08	≤ 30	≤ 36
	2480	2.36	0.86	≤ 30	≤ 36

Note 1: EIRP=Measured power+Antenna gain

Note 2: The antenna gain please refer to clause 1.2

Appendix B: Emissions in Restricted Bands

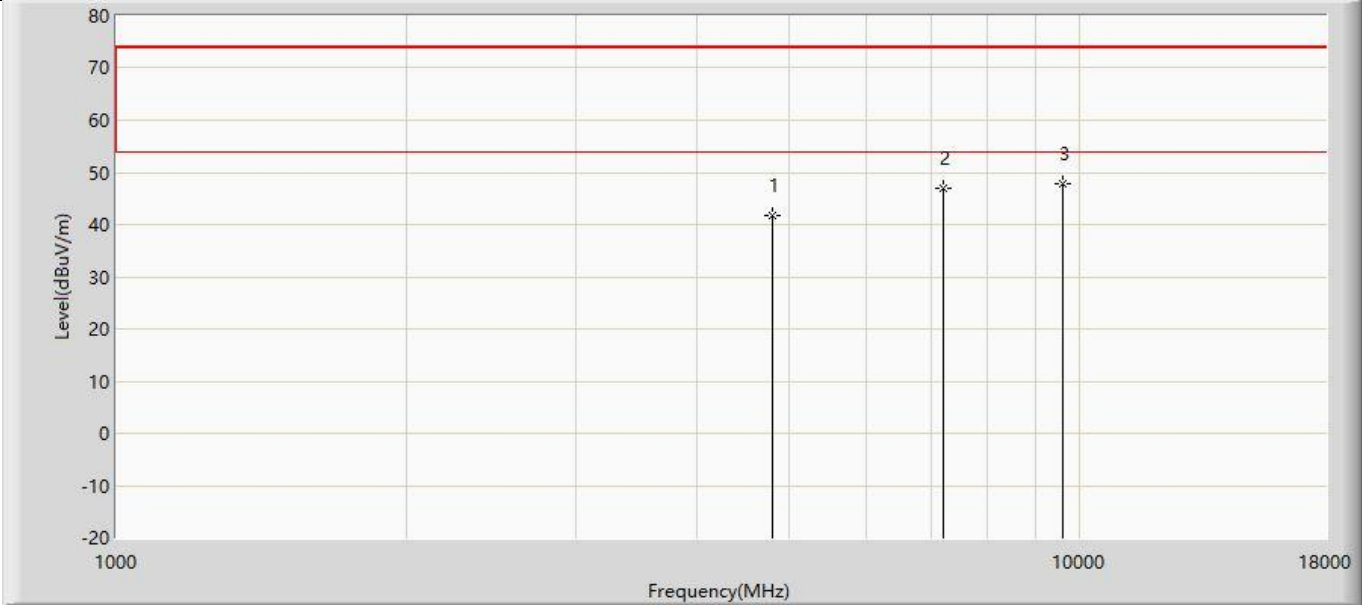
Profile: 2390782R	Page No.: 13
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 18:58
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.173	53.061	-32.827	74.000	-11.888	PK
2		7206.000	46.677	52.843	-27.323	74.000	-6.166	PK
3	*	9608.000	48.259	51.482	-25.741	74.000	-3.222	PK



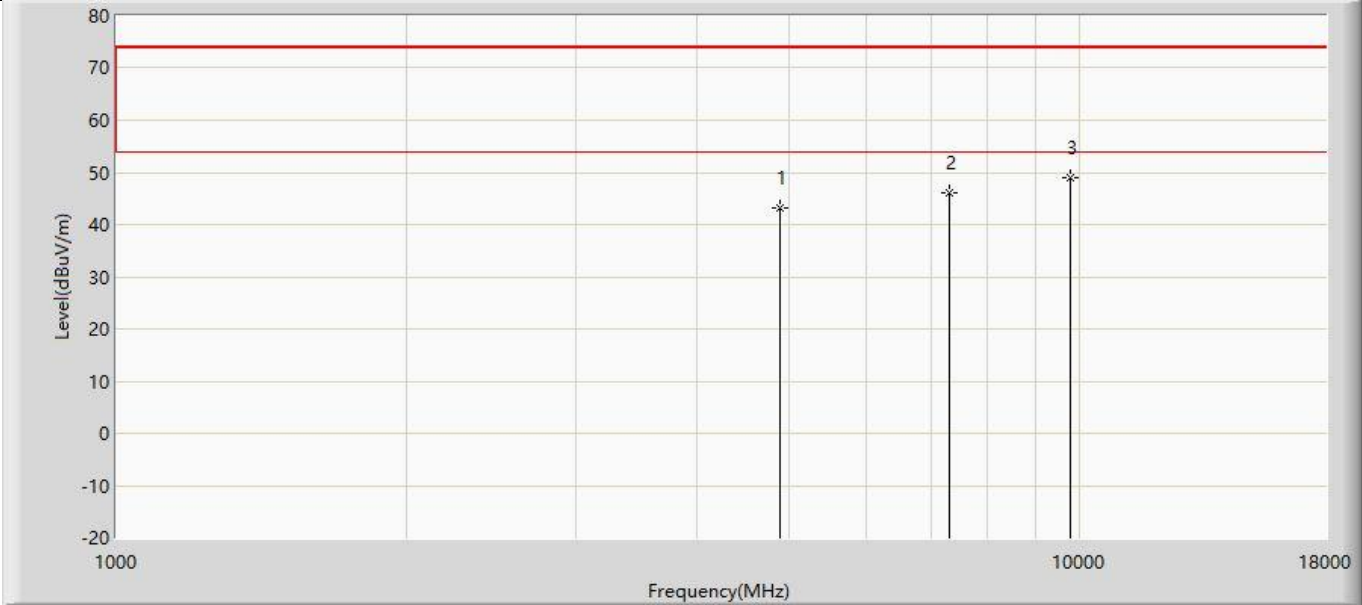
Profile: 2390782R	Page No.: 14
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 18:58
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.780	53.668	-32.220	74.000	-11.888	PK
2		7206.000	46.910	53.076	-27.090	74.000	-6.166	PK
3	*	9608.000	47.837	51.060	-26.163	74.000	-3.222	PK



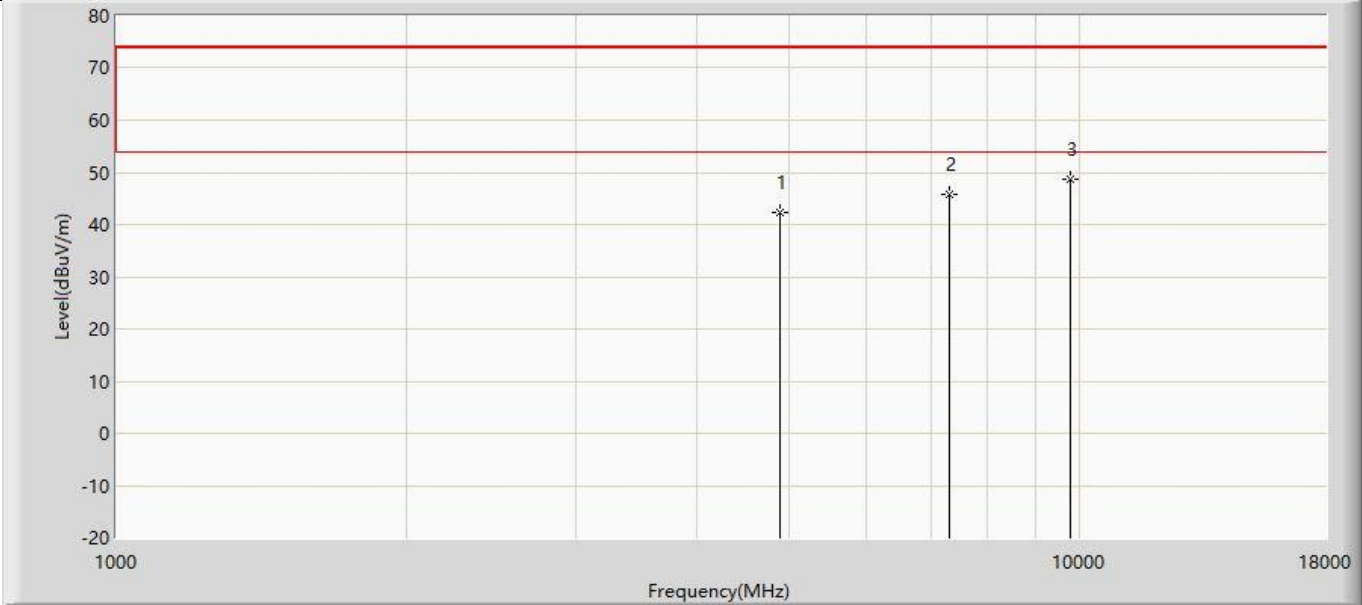
Profile: 2390782R	Page No.: 15
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 18:58
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 1: Transmit at 2440MHz by LE_1Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.295	53.899	-30.705	74.000	-10.603	PK
2		7320.000	46.150	53.077	-27.850	74.000	-6.927	PK
3	*	9760.000	48.859	51.732	-25.141	74.000	-2.874	PK

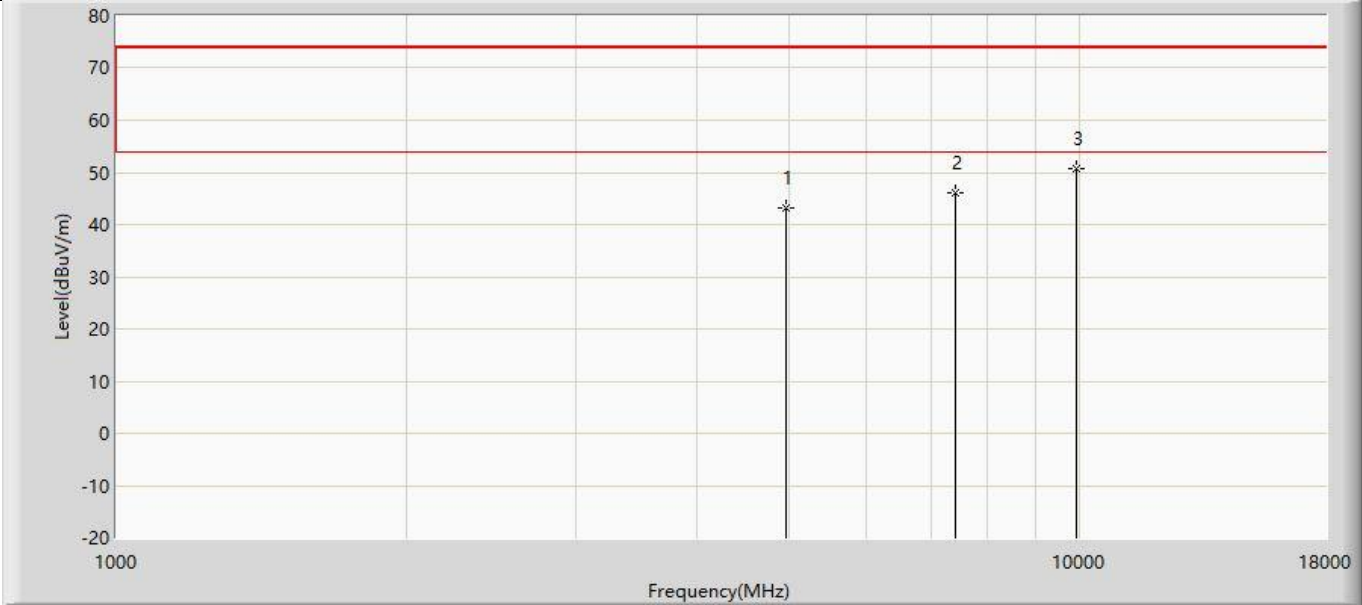


Profile: 2390782R	Page No.: 16
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 18:58
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 1: Transmit at 2440MHz by LE_1Mbps	



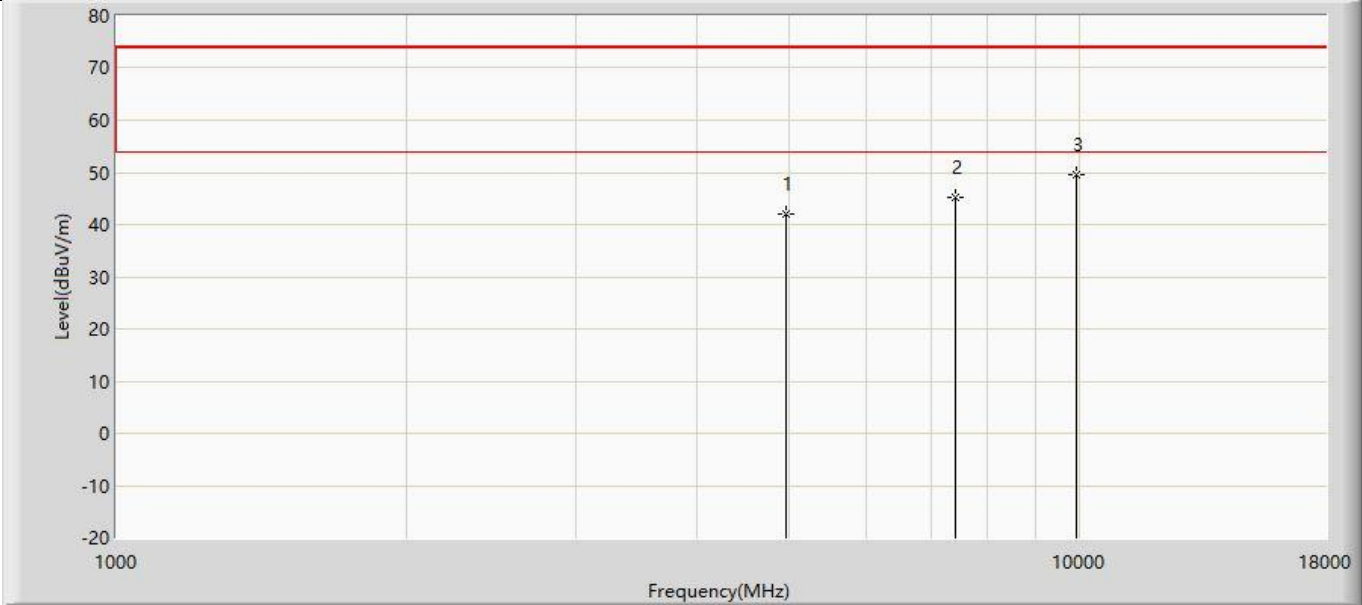
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	42.388	52.992	-31.612	74.000	-10.603	PK
2		7320.000	45.654	52.581	-28.346	74.000	-6.927	PK
3	*	9760.000	48.792	51.665	-25.208	74.000	-2.874	PK

Profile: 2390782R	Page No.: 17
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 19:07
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



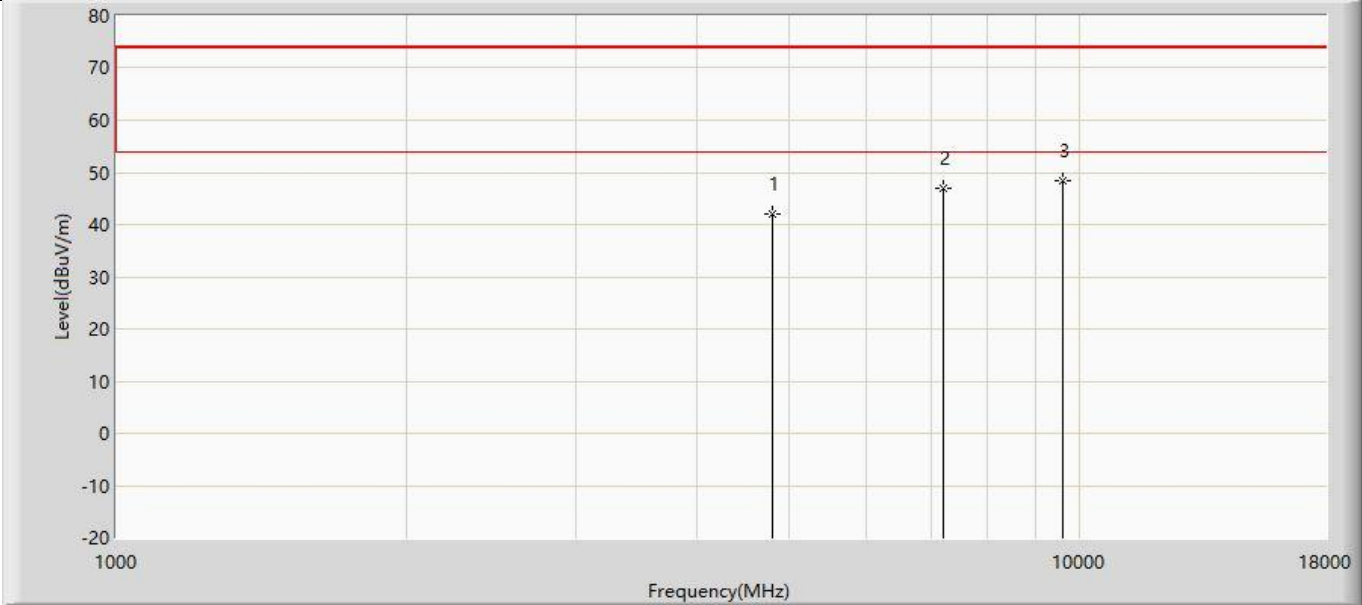
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.071	53.777	-30.929	74.000	-10.707	PK
2		7440.000	46.204	52.983	-27.796	74.000	-6.779	PK
3	*	9920.000	50.652	52.474	-23.348	74.000	-1.821	PK

Profile: 2390782R	Page No.: 18
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 19:07
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	42.143	52.849	-31.857	74.000	-10.707	PK
2		7440.000	45.272	52.051	-28.728	74.000	-6.779	PK
3	*	9920.000	49.574	51.396	-24.426	74.000	-1.821	PK

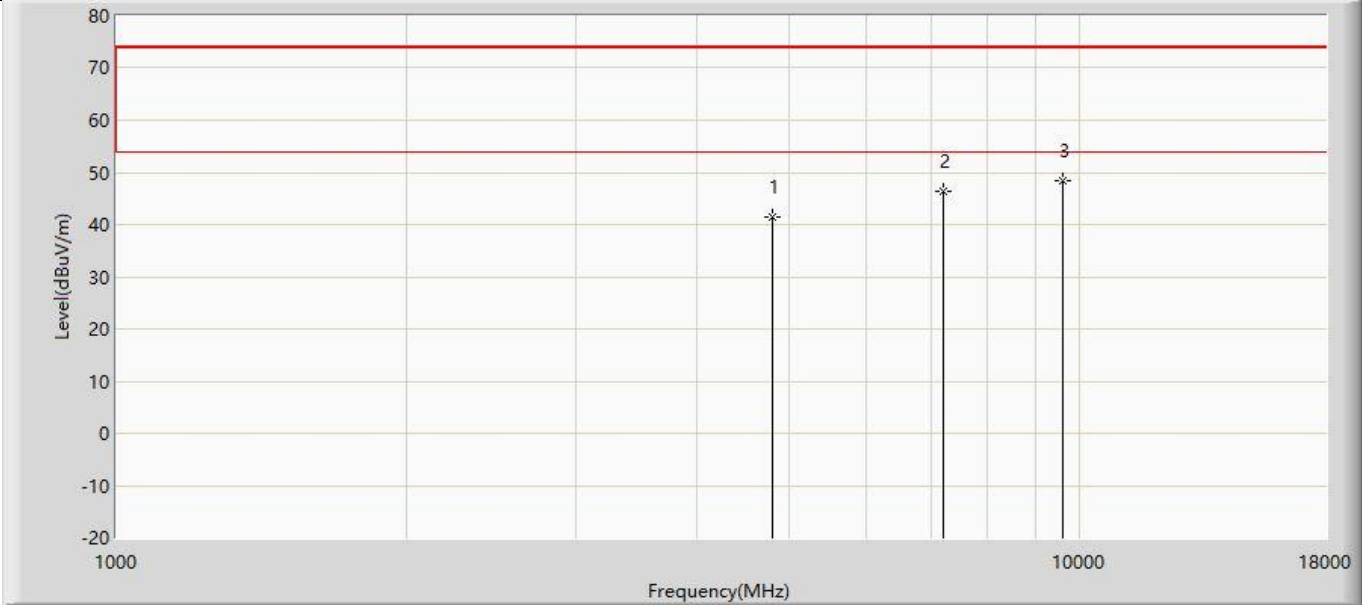
Profile: 2390782R	Page No.: 19
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 19:07
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.940	53.828	-32.060	74.000	-11.888	PK
2		7206.000	47.085	53.251	-26.915	74.000	-6.166	PK
3	*	9608.000	48.345	51.568	-25.655	74.000	-3.222	PK

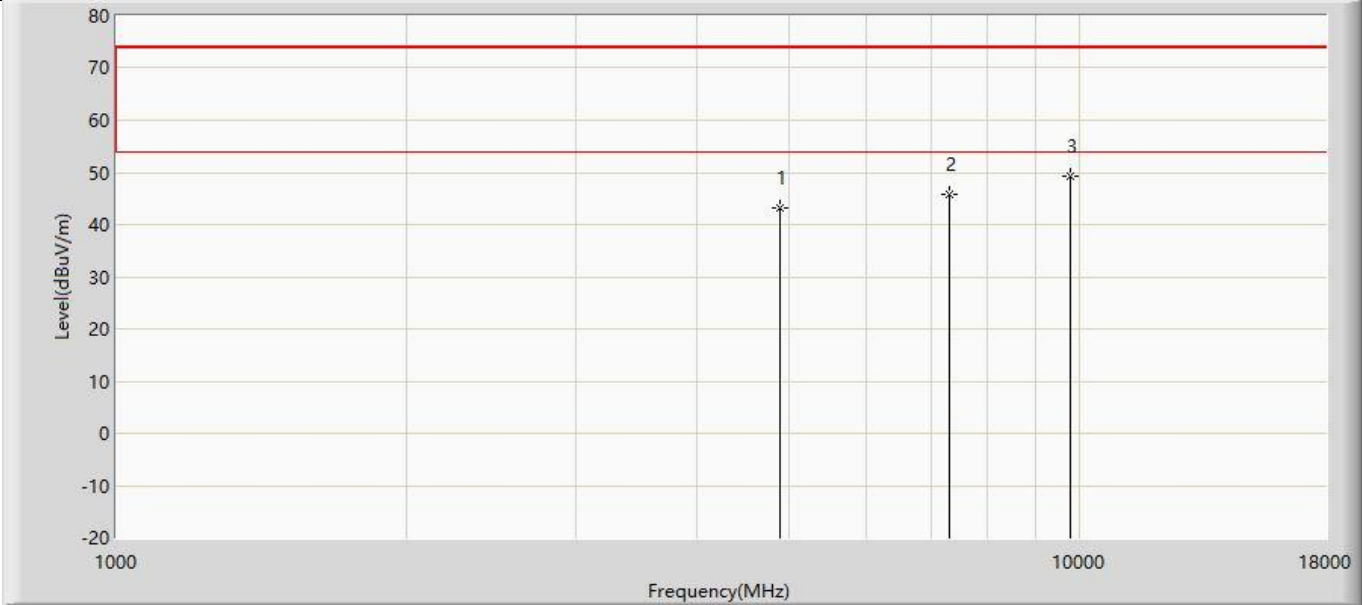


Profile: 2390782R	Page No.: 20
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 19:07
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



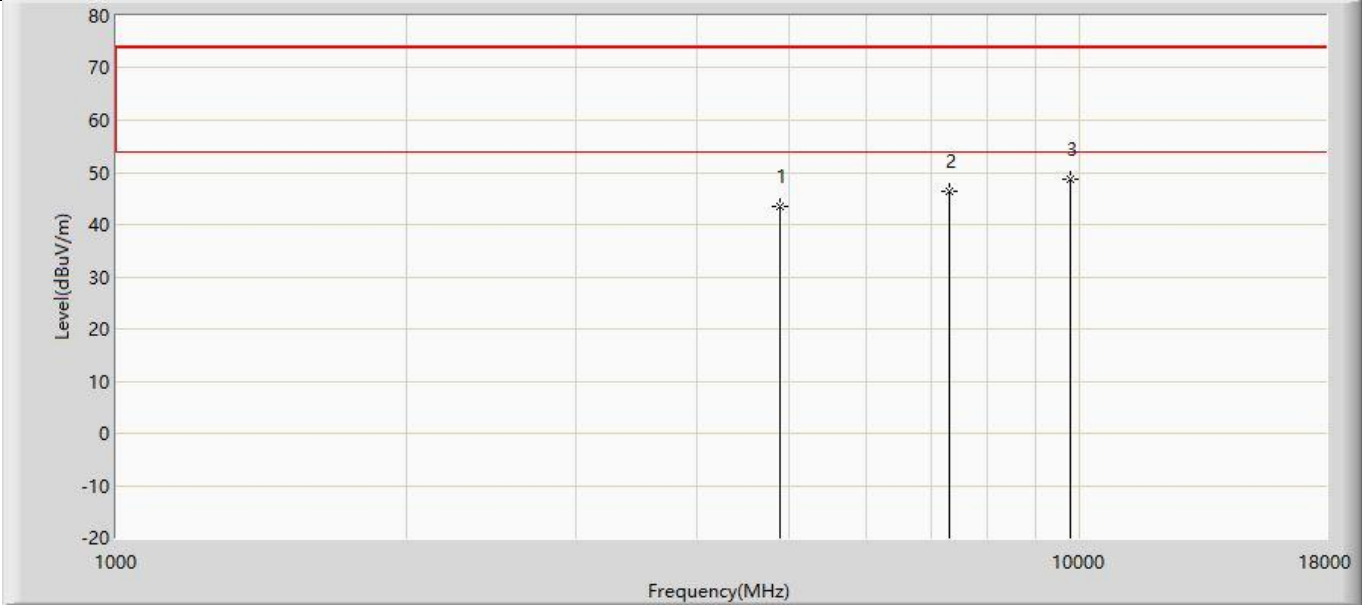
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	41.418	53.306	-32.582	74.000	-11.888	PK
2		7206.000	46.417	52.583	-27.583	74.000	-6.166	PK
3	*	9608.000	48.533	51.756	-25.467	74.000	-3.222	PK

Profile: 2390782R	Page No.: 21
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 19:07
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 2: Transmit at 2440MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.287	53.891	-30.713	74.000	-10.603	PK
2		7320.000	45.734	52.661	-28.266	74.000	-6.927	PK
3	*	9760.000	49.144	52.017	-24.856	74.000	-2.874	PK

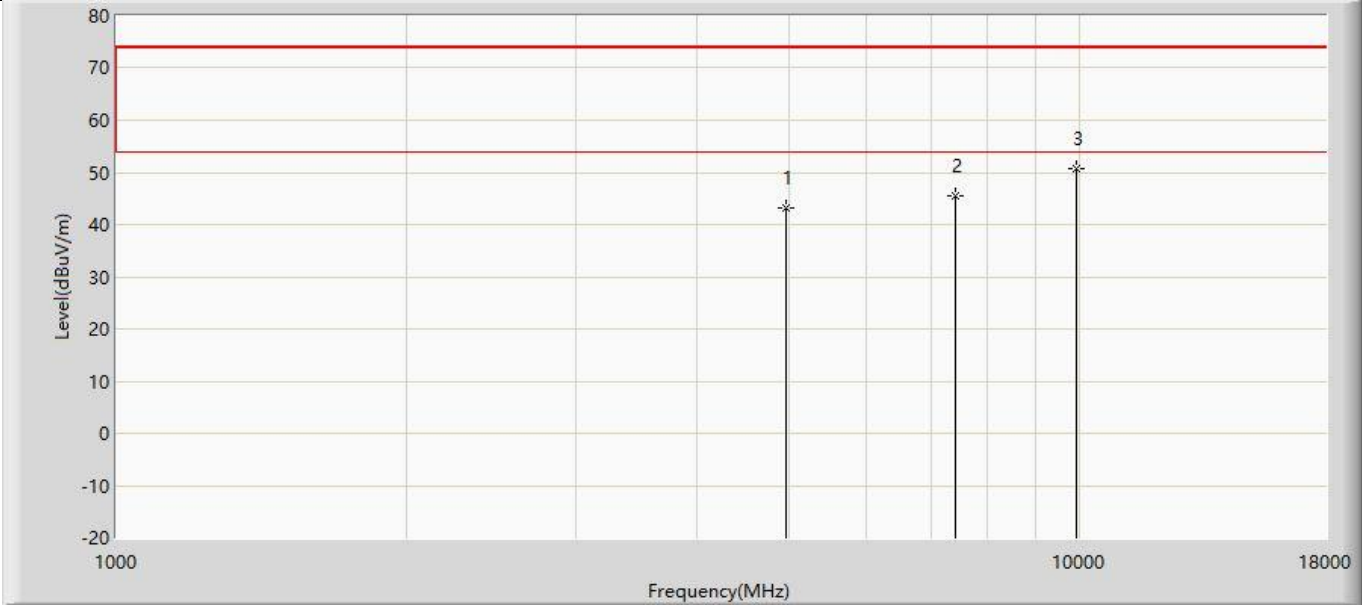
Profile: 2390782R	Page No.: 22
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 19:07
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 2: Transmit at 2440MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4880.000	43.577	54.181	-30.423	74.000	-10.603	PK
2		7320.000	46.307	53.234	-27.693	74.000	-6.927	PK
3	*	9760.000	48.747	51.620	-25.253	74.000	-2.874	PK

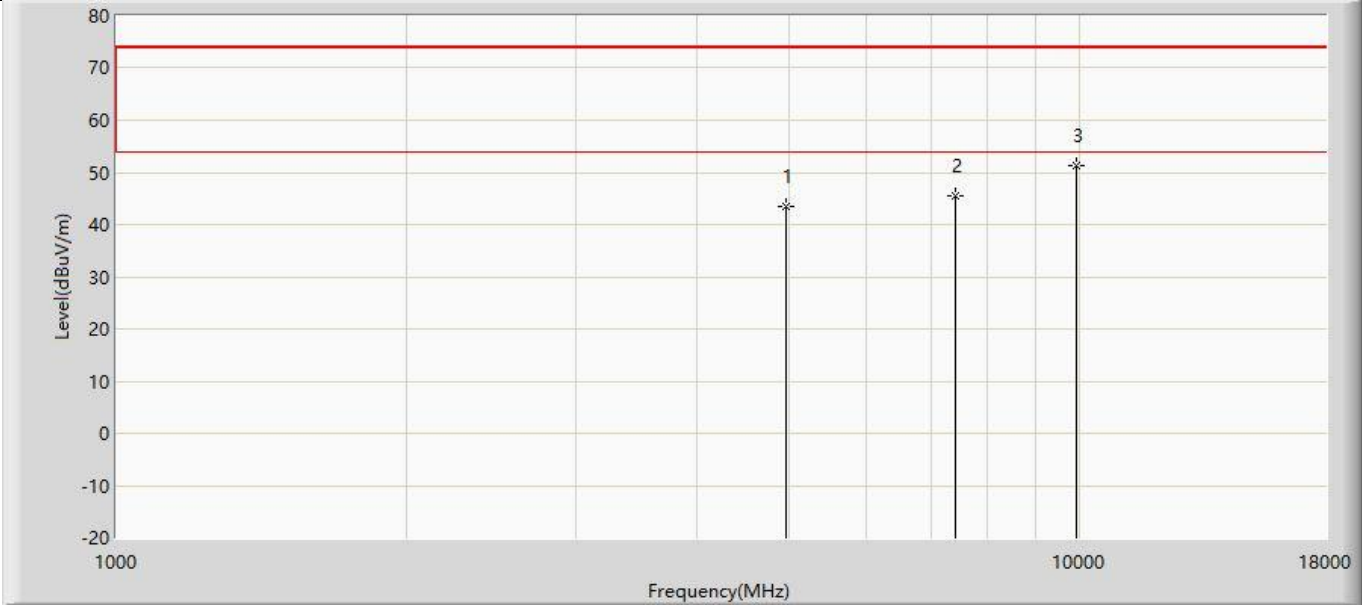


Profile: 2390782R	Page No.: 23
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 19:07
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.178	53.884	-30.822	74.000	-10.707	PK
2		7440.000	45.540	52.319	-28.460	74.000	-6.779	PK
3	*	9920.000	50.743	52.565	-23.257	74.000	-1.821	PK

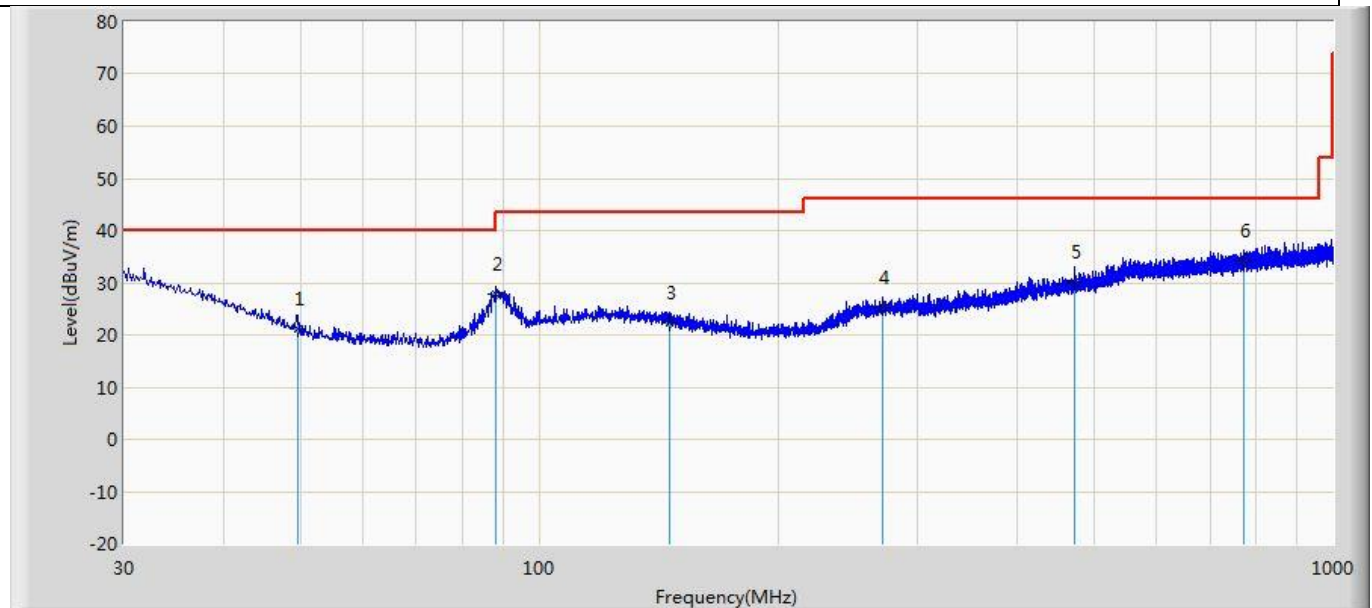
Profile: 2390782R	Page No.: 24
Engineer: Yuliu	
Site: AC5	Time: 2024/06/28 - 19:07
Limit: FCC_Part15.209_RE	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	43.485	54.191	-30.515	74.000	-10.707	PK
2		7440.000	45.527	52.306	-28.473	74.000	-6.779	PK
3	*	9920.000	51.382	53.204	-22.618	74.000	-1.821	PK

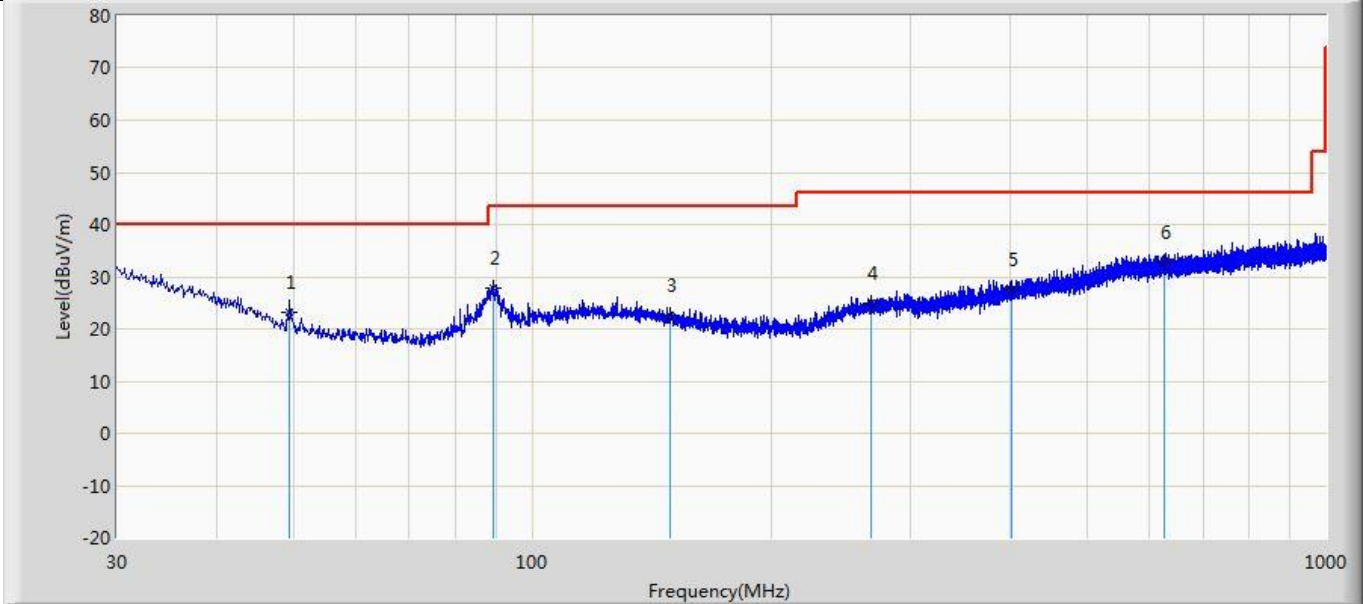
The worst case of Radiated Emission below 1GHz :

Profile: 2390782R	Page No.: 25
Engineer: Yuliu	
Site: AC2	Time: 2024/06/29 - 23:23
Limit: FCC_Part 15.209_RE	Margin: 0
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Horizontal
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 1 : Transmit at 2402MHz by LE_1Mbps	



N o	Mar k	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		49.643	21.179	5.807	-18.821	40.000	15.372	QP
2		88.321	27.840	12.211	-15.660	43.500	15.629	QP
3		146.279	22.284	4.578	-21.216	43.500	17.706	QP
4		270.560	25.210	4.811	-20.790	46.000	20.399	QP
5		472.078	30.289	5.257	-15.711	46.000	25.032	QP
6	*	773.263	34.320	5.534	-11.680	46.000	28.787	QP

Profile: 2390782R	Page No.: 26
Engineer: Yuliu	
Site: AC2	Time: 2024/06/29 - 23:24
Limit: FCC_Part 15.209_RE	Margin: 0
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Vertical
EUT: Mobile Computer	Power: Battery Powered
Note: Mode 1 : Transmit at 2402MHz by LE_1Mbps	



N o	Mar k	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		49.521	23.245	7.821	-16.755	40.000	15.424	QP
2		89.291	27.920	12.106	-15.580	43.500	15.814	QP
3		149.189	22.500	5.014	-21.000	43.500	17.487	QP
4		267.286	24.840	4.517	-21.160	46.000	20.323	QP
5		401.267	27.533	3.787	-18.467	46.000	23.746	QP
6	*	625.216	32.840	5.335	-13.160	46.000	27.505	QP

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp)
3. The test frequency range, 9kHz~30MHz, worst case are at least 20dB below the limits, therefore no data appear in the report.
4. The test frequency range, 18GHz~26GHz test result on peak is lower than average limit, all is the noise base, therefore no data appear in the report.
5. If the test result on peak is lower than average limit, then average measurement needn't be performed.

The End