FCC Test Report

(Class II Permissive Change)

Product Name	Intel® Wi-Fi 6 AX200
Model No.	AX200D2WL
FCC ID.	CJ6AX200D2WLWB

Applicant	Dynabook Inc.
Address	6-15, Toyosu 5-chome, Koto-ku, Tokyo, 135-8505, Japan

Date of Receipt	Jan. 01, 2022
Issued Date	May 03, 2022
Report No.	2210170R-RFUSBT2V01-B
Report Version	V1.0

Testing Laboratory
3023

Test Report

Issued Date: May 03, 2022
Report No.: 2210170R-RFUSBT2V01-B

Product Name	Intel® Wi-Fi 6 AX200
Applicant	Dynabook Inc.
Address	6-15, Toyosu 5-chome, Koto-ku, Tokyo, 135-8505, Japan
Manufacturer	Intel Mobile Communications
Model No.	AX200D2WL
FCC ID.	CJ6AX200D2WLWB
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V / 60Hz
Trade Name	Intel
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By : Jinn Chen

(Supervisor / Jinn Chen)

Tested By : Ivan Chuang

(Senior Engineer / Ivan Chuang)

Approved By : Alan Chen

(Senior Engineer / Alan Chen)

TABLE OF CONTENTS

Revision History

Report No.	Version	Description	Issued Date
2210170R-RFUSBT2V01-B	V1.0	Initial issue of report.	May 03, 2022

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Intel® Wi-Fi 6 AX200
Trade Name	Intel
Model No.	AX200D2WL
FCC ID.	CJ6AX200D2WLWB
Frequency Range	2402 – 2480MHz
Channel Number	79
Type of Modulation	FHSS: GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps)
Antenna Type	Folded Dipole Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”
Power Adapter #1	MFR: Chicony, M/N: PA5177E-1AC3 Input: AC 100-240V~1.3A 50-60Hz Output: 19V⎓2.37A Cable out: Non-Shielded, 1.8m. Power cord: Non-Shielded, 1.8m.
Power Adapter #2	MFR: Chicony, M/N: PA5177U-1ACA Input: AC 100-240V~1.3A 50-60Hz Output: 19V⎓2.37A Cable out: Non-Shielded, 1.8m. Power cord: Non-Shielded, 1.8m.
Power Adapter #3	MFR: Lite-On, M/N: PA5177E-1AC3 Input: AC 100-240V~1.3A 50-60Hz Output: 19V⎓2.37A Cable out: Non-Shielded, 1.8m. Power cord: Non-Shielded, 1.8m.
Power Adapter #4	MFR: Lite-On, M/N: PA5177U-1ACA Input: AC 100-240V~1.3A 50-60Hz Output: 19V⎓2.37A Cable out: Non-Shielded, 1.8m. Power cord: Non-Shielded, 1.8m.

Antenna List

No.	Manufacturer	Part No. (Vendor)	Antenna Type	Peak Gain
1	SLEing	SLEingB219790388 (Main)	Folded Dipole	0.84dBi in 2.4 GHz
		SLEingB219790491 (Aux)	Folded Dipole	1.64dBi in 2.4 GHz

Note: The antenna of EUT is conforming to FCC 15.203.

Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 20:	2422 MHz	Channel 40:	2442 MHz	Channel 60:	2462 MHz
Channel 01:	2403 MHz	Channel 21:	2423 MHz	Channel 41:	2443 MHz	Channel 61:	2463 MHz
Channel 02:	2404 MHz	Channel 22:	2424 MHz	Channel 42:	2444 MHz	Channel 62:	2464 MHz
Channel 03:	2405 MHz	Channel 23:	2425 MHz	Channel 43:	2445 MHz	Channel 63:	2465 MHz
Channel 04:	2406 MHz	Channel 24:	2426 MHz	Channel 44:	2446 MHz	Channel 64:	2466 MHz
Channel 05:	2407 MHz	Channel 25:	2427 MHz	Channel 45:	2447 MHz	Channel 65:	2467 MHz
Channel 06:	2408 MHz	Channel 26:	2428 MHz	Channel 46:	2448 MHz	Channel 66:	2468 MHz
Channel 07:	2409 MHz	Channel 27:	2429 MHz	Channel 47:	2449 MHz	Channel 67:	2469 MHz
Channel 08:	2410 MHz	Channel 28:	2430 MHz	Channel 48:	2450 MHz	Channel 68:	2470 MHz
Channel 09:	2411 MHz	Channel 29:	2431 MHz	Channel 49:	2451 MHz	Channel 69:	2471 MHz
Channel 10:	2412 MHz	Channel 30:	2432 MHz	Channel 50:	2452 MHz	Channel 70:	2472 MHz
Channel 11:	2413 MHz	Channel 31:	2433 MHz	Channel 51:	2453 MHz	Channel 71:	2473 MHz
Channel 12:	2414 MHz	Channel 32:	2434 MHz	Channel 52:	2454 MHz	Channel 72:	2474 MHz
Channel 13:	2415 MHz	Channel 33:	2435 MHz	Channel 53:	2455 MHz	Channel 73:	2475 MHz
Channel 14:	2416 MHz	Channel 34:	2436 MHz	Channel 54:	2456 MHz	Channel 74:	2476 MHz
Channel 15:	2417 MHz	Channel 35:	2437 MHz	Channel 55:	2457 MHz	Channel 75:	2477 MHz
Channel 16:	2418 MHz	Channel 36:	2438 MHz	Channel 56:	2458 MHz	Channel 76:	2478 MHz
Channel 17:	2419 MHz	Channel 37:	2439 MHz	Channel 57:	2459 MHz	Channel 77:	2479 MHz
Channel 18:	2420 MHz	Channel 38:	2440 MHz	Channel 58:	2460 MHz	Channel 78:	2480 MHz
Channel 19:	2421 MHz	Channel 39:	2441 MHz	Channel 59:	2461 MHz		

Note:

1. The EUT is an Intel® Wi-Fi 6 AX200 with built-in WLAN and Bluetooth transceiver, this report for Bluetooth.
2. These tests were conducted on a sample for the purpose of demonstrating compliance of Bluetooth transmitter with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. This is to request a Class II permissive change for FCC ID: CJ6AX200D2WLWB, originally granted on 03/28/2022.

   The major change filed under this application is:

   Change #1: Additional Chassis added, Product name: Notebook PC, Model number: SATELLITE C50D-B, SATELLITE PRO C50D-B

   Change #2: Reduce the Output Power through firmware, and SAR measurement were evaluated. (Only reduce Wi-Fi Output Power, Bluetooth Output Power haven't changes).

   Change #3: Addition a Folded Dipole Antenna, the antenna type is different with the original application.

Test Mode	Mode 1: Transmit - 1Mbps
	Mode 2: Transmit - 2Mbps
	Mode 3: Transmit - 3Mbps

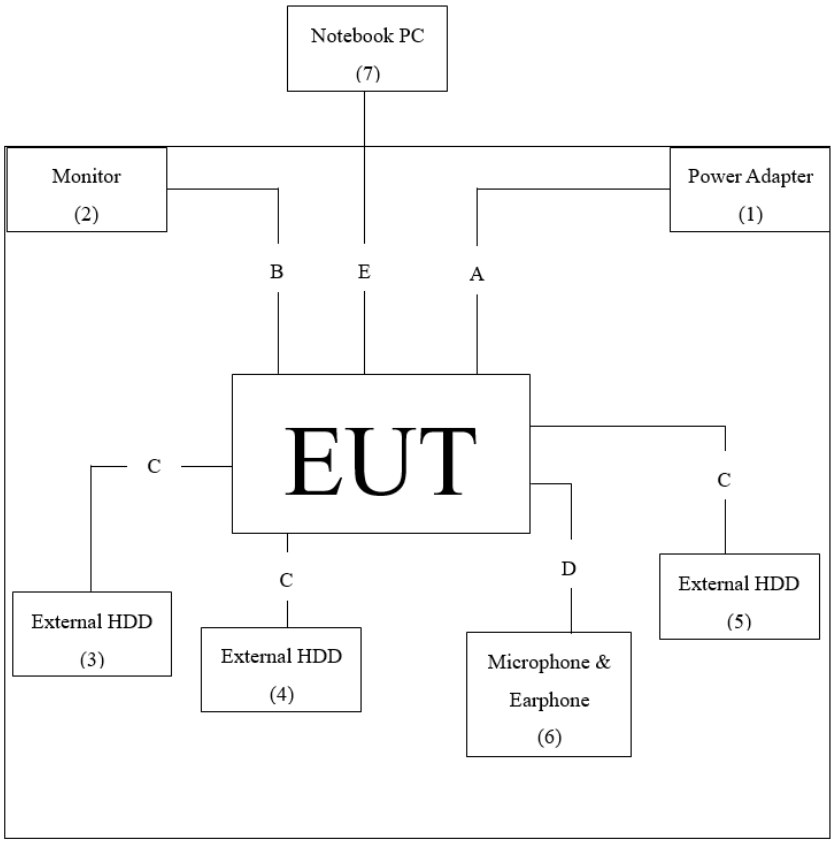
1.2. Tested System Details

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	Power Adapter	Chicony	PA-5177E-1AC3	N/A	Non-shielded, 1.8m
2	Monitor	Lenovo	A21215FS0	V5DMD987	Non-shielded, 1.8m
3	External HDD	Transcend	TS1TSJ25MC	F30467-0011	N/A
4	External HDD	Transcend	TS1TSJ25H3B	F21786-0005	N/A
5	External HDD	Transcend	TS1TSJ25H3B	F21786-0103	N/A
6	Microphone & Earphone	Verbatim	C09024VB	N/A	N/A
7	Notebook PC	DELL	Inspiron 15 3000	GT5JPJ2	N/A

Signal Cable Type		Signal cable Description
A	Power Cable	Non-shielded, 1.8m
B	HDMI Cable	Shielded, 1.8m
C	USB Cable	Shielded, 1.5m, three PCS.
D	Microphone & Earphone Cable	Non-shielded, 1.2m
E	LAN Cable	Non-shielded, 3m

1.3. Configuration of Tested System



1.4. EUT Exercise Software

1. Setup the EUT as shown in Section 1.3.
2. Execute software “DRTU V22.21050.0.0-OEM.DRTU.12004” on the EUT.
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.

1.5. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Radiated Emission	Temperature (°C)	10~40 ℃	23.8 ℃
	Humidity (%RH)	10~90 %	62.4 %
Conductive	Temperature (°C)	10~40 ℃	21.6 ℃
	Humidity (%RH)	10~90 %	58.0 %

USA : FCC Registration Number: TW0033

Canada : CAB Identifier Number: TW0323 / Company Number: 26930

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd
Address : No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan
Performed Location : No. 26, Huaya 1st Rd., Guishan Dist.,Taoyuan City 333411, Taiwan, R.O.C.
Phone number : +886-3-275-7255
Fax number : +866-3-327-8031
Email address : info.tw@dekra.com
Website : http://www.dekra.com.tw

1.6. List of Test Equipment

For Conducted measurements /SH2

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Spectrum Analyzer	R&S	FSV30	103464	2022/03/25	2023/03/24
X	Peak Power Analyzer	KEYSIGHT	8900B	MY51000539	2021/06/07	2022/06/06
X	Power Sensor	KEYSIGHT	N1923A	MY59240002	2021/05/17	2022/05/16
X	Power Sensor	KEYSIGHT	N1923A	MY59240003	2021/05/17	2022/05/16

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with “X” are used to measure the final test results.
3. Test Software version : DEKRA Conduction Test System V9.0.5.

For Radiated measurements /966-3

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
	Loop Antenna	AMETEK	HLA6121	56736	2021/04/14	2022/04/13
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-675	2021/08/11	2022/08/10
X	Horn Antenna	ETS-Lindgren	3117	00227700	2021/10/12	2022/10/11
	Horn Antenna	Com-Power	AH-840	101100	2021/10/04	2022/10/03
X	Pre-Amplifier	SGH	PRAMP118	20200202	2021/03/25	2022/03/24
X	Pre-Amplifier	EMCI	EMC001330	980302	2021/07/26	2022/07/25
	Pre-Amplifier	SGH	EM330	60736	2021.08.11	2022.08.10
X	Pre-Amplifier	EMCI	EMC051835SE	980313	2021/11/24	2022/11/23
	Pre-Amplifier	EMCI	EMC05820SE	980309	2021/09/27	2022/09/26
	Pre-Amplifier	EMCI	EMC05820SE	980310	2021/07/07	2022/07/06
X	Pre-Amplifier	EMCI	EMC184045SE	980369	2021/04/27	2022/04/26
	Coaxial Cable	EMCI	EMC102-KM-KM-600	1160314	2021/04/27	2022/04/26
	Coaxial Cable	EMCI	EMC102-KM-KM-7000	170242	2021/04/27	2022/04/26
X	Filter	MICRO TRONICS	BRM50702	G251	2021/09/16	2022/09/15
	Filter	MICRO TRONICS	BRM50716	G188	2021/09/16	2022/09/15
X	EMI Test Receiver	R&S	ESR3	102793	2021/12/15	2022/12/14
X	Spectrum Analyzer	R&S	FSV3044	101114	2022/02/11	2023/02/10
X	Coaxial Cable	SGH	HA800	GD20110222-3	2022/01/05	2023/01/04
	Coaxial Cable	SGH	SGH18	20110223-1	2022/01/05	2023/01/04
	Coaxial Cable	SGH	SGH18	2021005-3	2022/01/05	2023/01/04
	Coaxial Cable	SGH	SGH18	2021001-18	2022/01/05	2023/01/04

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with “X” are used to measure the final test results.
3. Test Software version : AUDIX e3 V9.

1.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document.

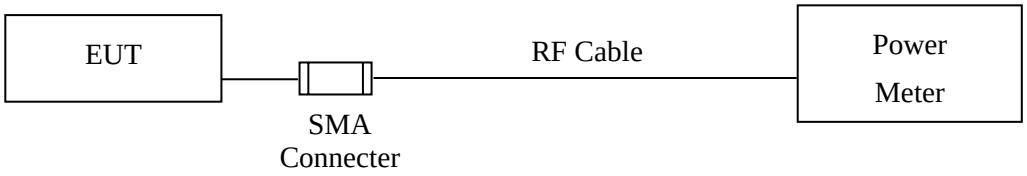
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

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	±0.91 dB	
Radiated Emission	Under 1GHz ±4.06 dB	Above 1GHz ±3.73 dB

2. Peak Power Output

2.1. Test Setup



2.2. Limit

The maximum peak power shall be less 1Watt.

2.3. Test Procedure

Tested according to FHSS test procedure of KDB 558074 section 9 (b for compliance to FCC 47CFR 15.247 requirements.

2.4. Test Result of Peak Power Output

Product : Intel® Wi-Fi 6 AX200
Test Item : Peak Power Output
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2022/03/11

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	9.25	1 Watt= 30 dBm	Pass
Channel 39	2441.00	9.75	1 Watt= 30 dBm	Pass
Channel 78	2480.00	9.81	1 Watt= 30 dBm	Pass

Product : Intel® Wi-Fi 6 AX200
Test Item : Peak Power Output
Test Mode : Mode 2: Transmit - 2Mbps
Test Date : 2022/03/11

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	9.02	1 Watt= 30 dBm	Pass
Channel 39	2441.00	9.37	1 Watt= 30 dBm	Pass
Channel 78	2480.00	9.28	1 Watt= 30 dBm	Pass

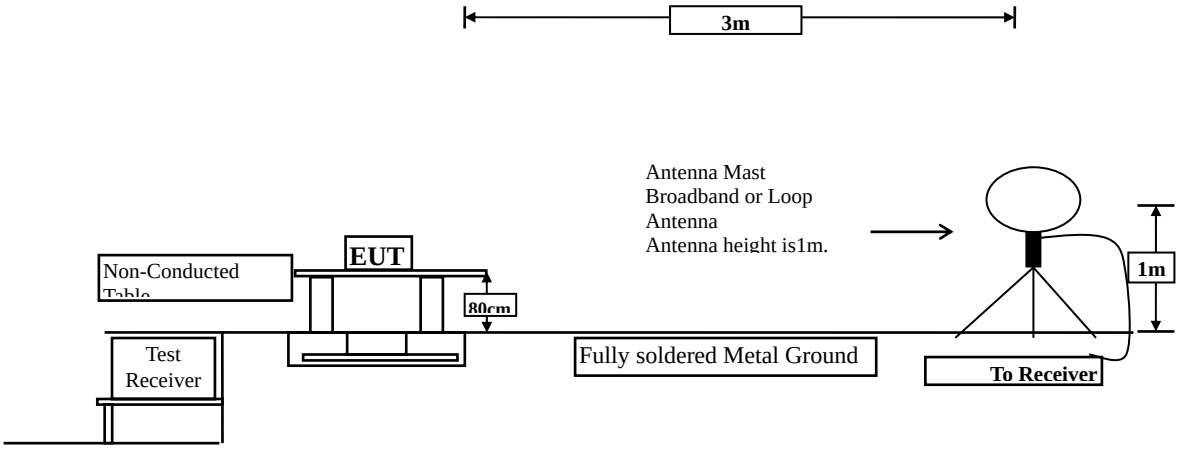
Product : Intel® Wi-Fi 6 AX200
Test Item : Peak Power Output
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2022/03/11

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	9.26	1 Watt= 30 dBm	Pass
Channel 39	2441.00	9.37	1 Watt= 30 dBm	Pass
Channel 78	2480.00	9.11	1 Watt= 30 dBm	Pass

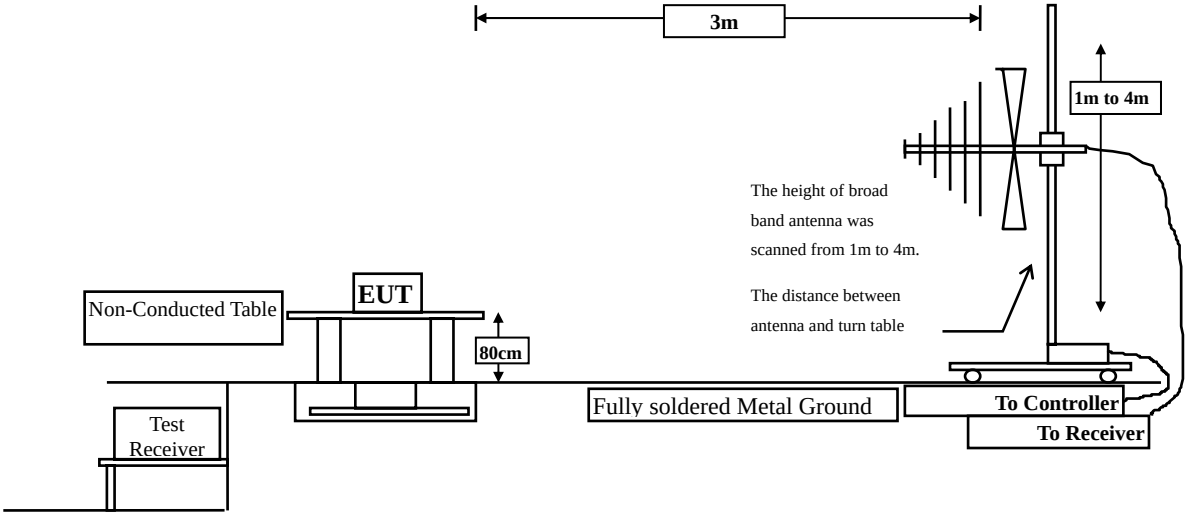
3. Radiated Emission

3.1. Test Setup

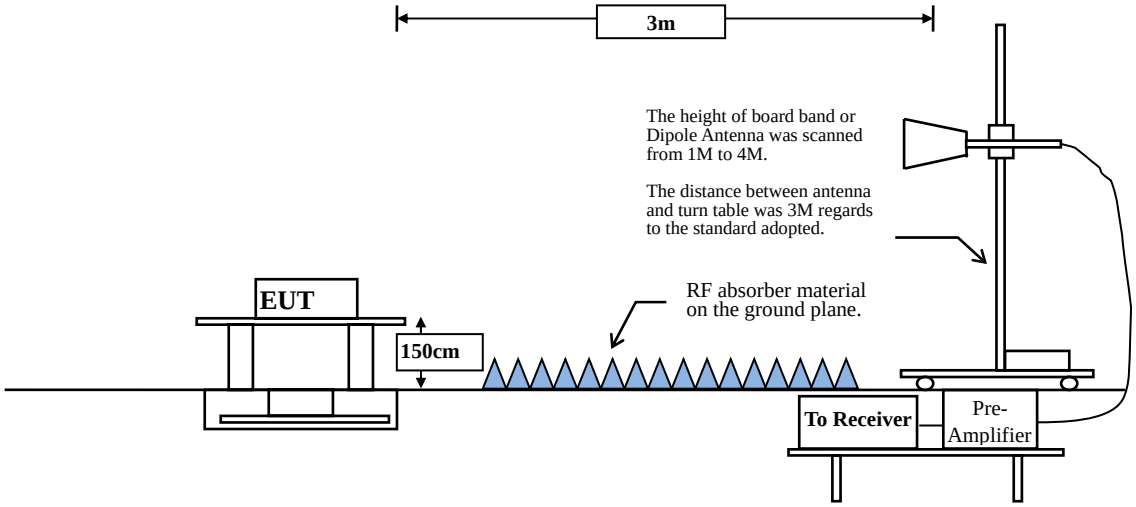
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



3.2. 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)	Measurement distance (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 (dBuV) = 20 log RF Voltage (uV)
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.

3.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested 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.

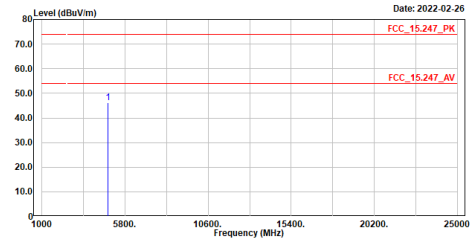
The measurement is divided into the Preliminary Measurement and the Final Measurement.

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 form 9kHz - 10th Harmonic of fundamental was investigated.

3.4. Test Result of Radiated Emission

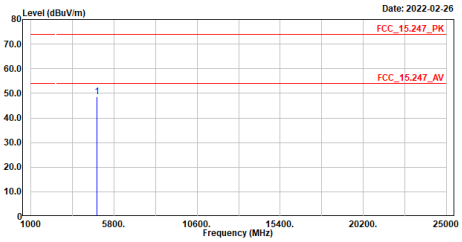
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_bt1M_2402MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4804.000	46.24	74.00	-27.76	45.34	0.90	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

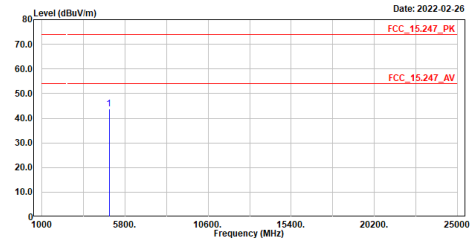
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_bt1M_2402MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4804.000	48.52	74.00	-25.48	47.62	0.90	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

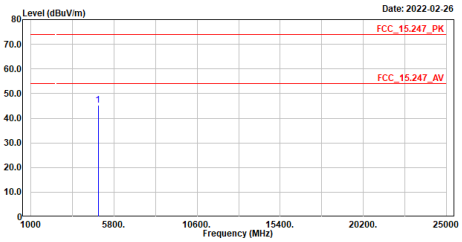
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_bt1M_2441MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4882.000	43.68	74.00	-30.32	42.84	0.84	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

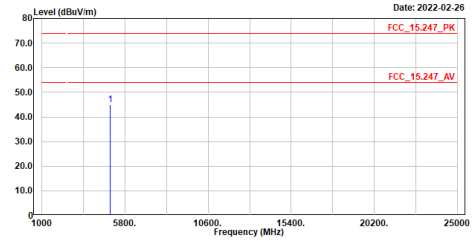
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_bt1M_2441MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4882.000	45.43	74.00	-28.57	44.58	0.85	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

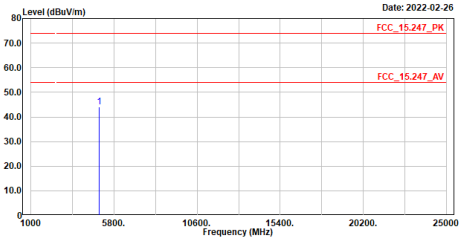
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_bt1M_2480MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4960.000	44.90	74.00	-29.10	43.86	1.04	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

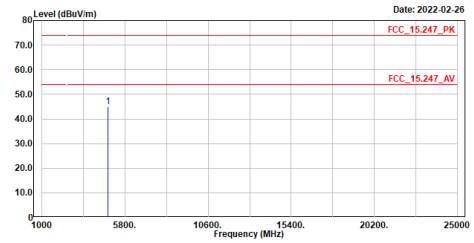
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_bt1M_2480MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4960.000	44.22	74.00	-29.78	43.18	1.04	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

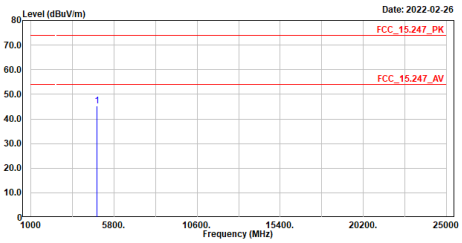
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_bt3M_2402MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4804.000	44.97	74.00	-29.03	44.05	0.92	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

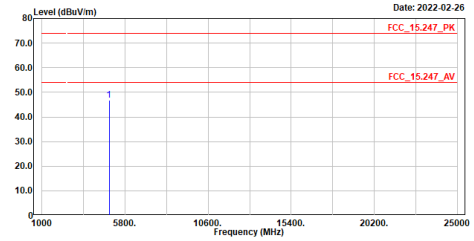
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_bt3M_2402MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4804.000	45.39	74.00	-28.61	44.49	0.90	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

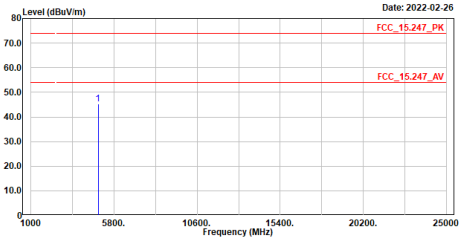
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_bt3M_2441MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4882.000	46.81	74.00	-27.19	45.91	0.90	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

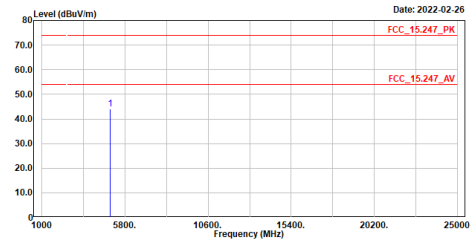
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_bt3M_2441MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4882.000	45.39	74.00	-28.61	44.40	0.99	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

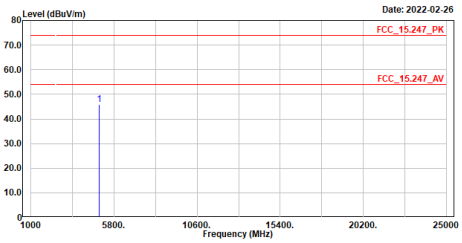
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_bt3M_2480MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4960.000	44.01	74.00	-29.99	42.97	1.04	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

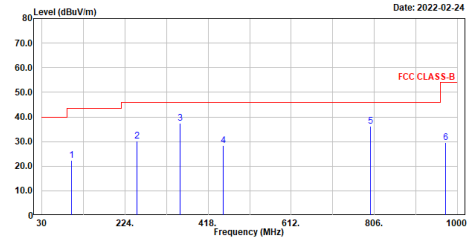
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_bt3M_2480MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4960.000	45.89	74.00	-28.11	44.85	1.04	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

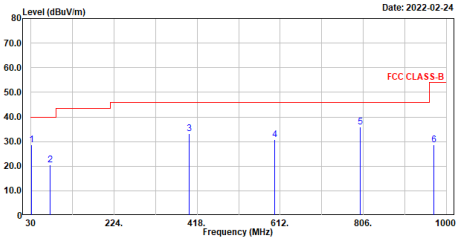
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_bt3M_2441MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	99.840	22.28	43.50	-21.22	46.64	-24.36	QP
2	251.160	30.29	46.00	-15.71	51.13	-20.84	QP
3	352.040	37.30	46.00	-8.70	55.26	-17.96	QP
4	452.920	28.40	46.00	-17.60	43.50	-15.10	QP
5	797.270	36.33	46.00	-9.67	45.55	-9.22	QP
6	971.870	29.59	54.00	-24.41	36.85	-7.26	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.

Site :966-3
Condition :3m ,VERTICAL
Mode :TX_bt3M_2441MHz
Test BY :Jing Chang



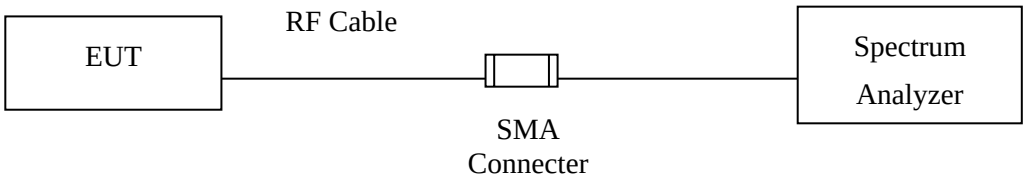
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	30.970	28.56	40.00	-11.44	49.63	-21.07	QP
2	74.620	20.53	40.00	-19.47	43.52	-22.99	QP
3	399.570	33.15	46.00	-12.85	49.86	-16.71	QP
4	598.420	30.74	46.00	-15.26	42.64	-11.90	QP
5	798.240	35.99	46.00	-10.01	45.22	-9.23	QP
6	970.900	28.72	54.00	-25.28	35.98	-7.26	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.

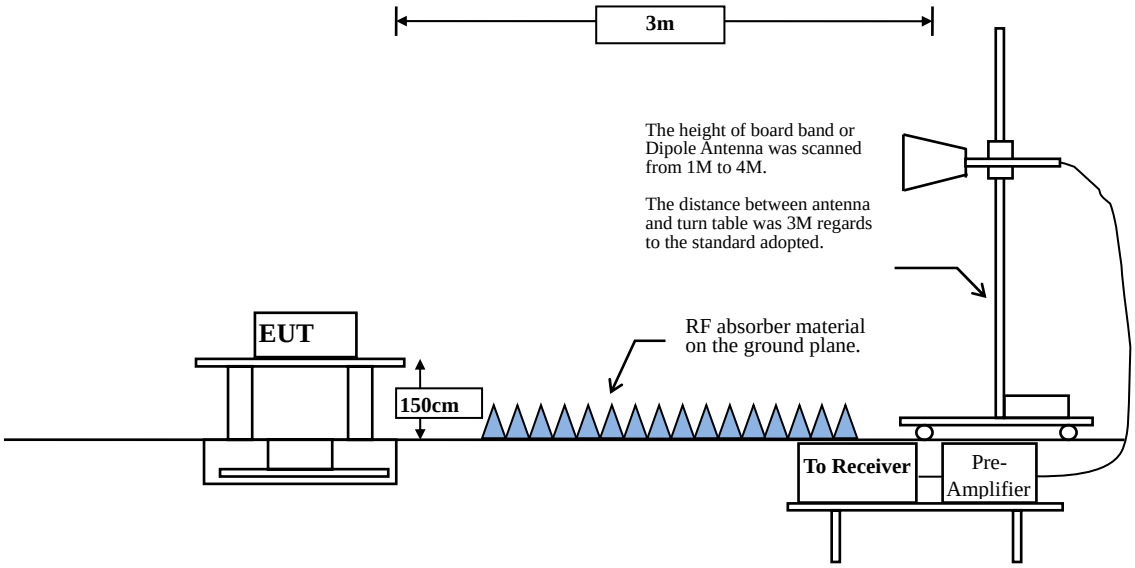
4. Band Edge

4.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



4.2. Limit

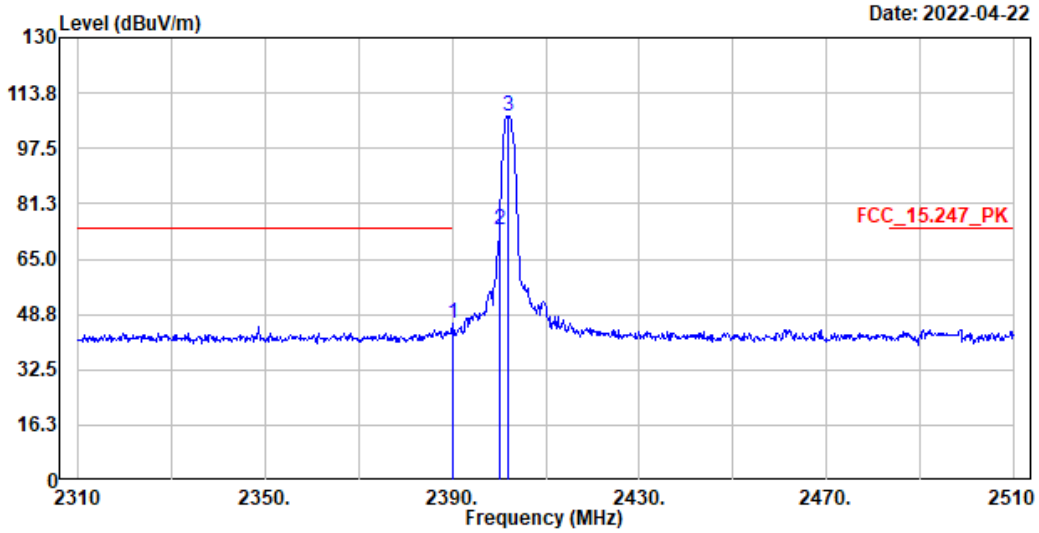
According to FCC Section 15.247(d). In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth 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)).

4.3. Test Procedure

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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.
The bandwidth setting below 1GHz and above 1GHz on the field strength meter is 120 kHz and 1MHz, respectively.

4.4. Test Result of Band Edge

```
Site      :966-3
Condition :3m    ,Horizontal
Mode      :TX_bt1M_2402MHz
Test BY   :Ashton Chiu
```



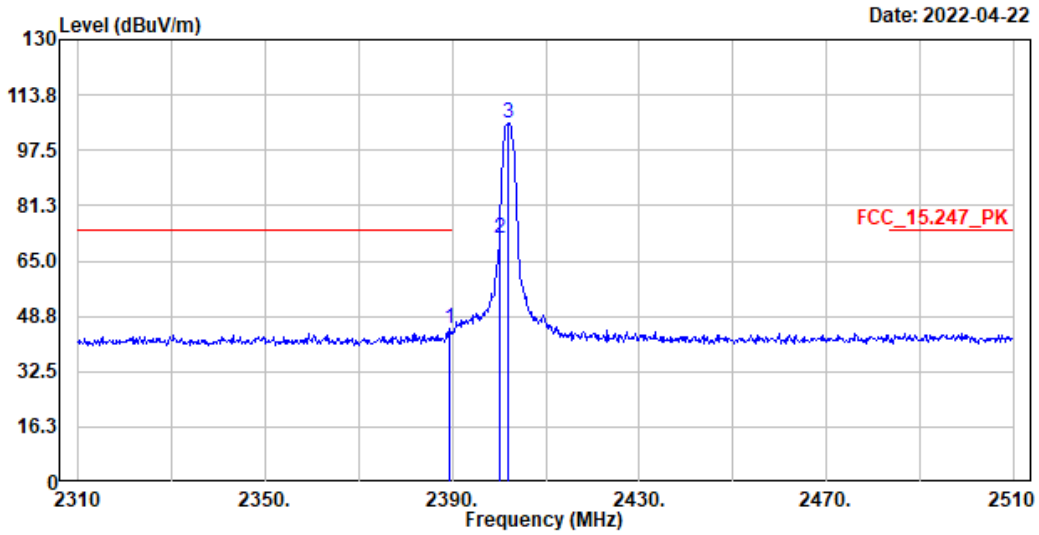
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	45.89	74.00	-28.11	32.98	12.91	Peak
2	2400.000	73.34	------	------	60.37	12.97	Peak
3	2402.000	107.09	------	------	94.12	12.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

Frequency MHz	Peak Measurement dBuV/m	Duty Cycle Factor dB	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal **Average Detector:**					
2390	45.89	-24.761	21.129	-32.871	54.000
2400	73.34	-24.761	48.579	--	--
2402	107.09	-24.761	82.329	--	--

Note:
1. Average Measurement=Peak Measurement + Duty Cycle Factor.
2. The Duty Cycle is refer to section 5.

Site :966-3
Condition :3m ,VERTICAL
Mode :TX_bt1M_2402MHz
Test BY :Ashton Chiu



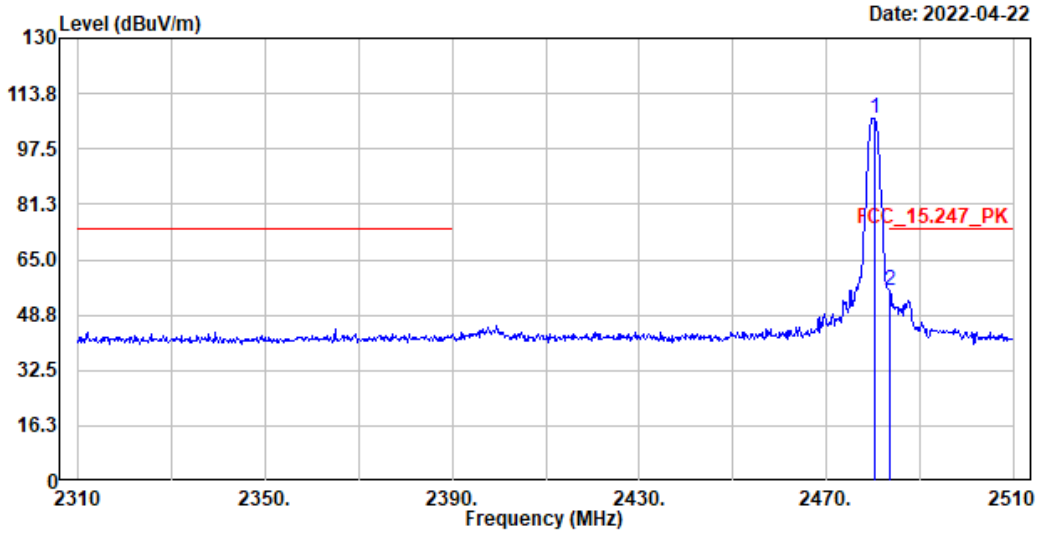
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.400	44.91	74.00	-29.09	32.00	12.91	Peak
2	2400.000	71.70	------	------	58.73	12.97	Peak
3	2402.000	105.51	------	------	92.54	12.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

Frequency MHz	Peak Measurement dBuV/m	Duty Cycle Factor dB	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Vertical **Average Detector:**					
2389.4	44.91	-24.761	20.149	-33.851	54.000
2400	71.7	-24.761	46.939	--	--
2402	105.51	-24.761	80.749	--	--

Note:
1. Average Measurement=Peak Measurement + Duty Cycle Factor.
2. The Duty Cycle is refer to section 5.

Site :966-3
Condition :3m ,Horizontal
Mode :TX_bt1M_2480MHz
Test BY :Ashton Chiu



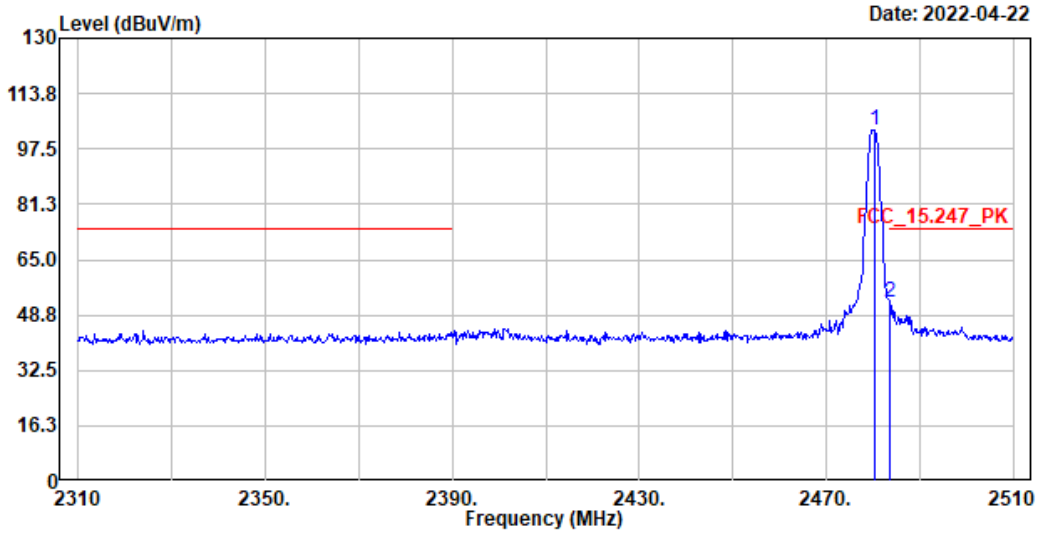
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2480.200	106.31	------	------	93.24	13.07	Peak
2	2483.600	55.88	74.00	-18.12	42.80	13.08	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

Frequency MHz	Peak Measurement dBuV/m	Duty Cycle Factor dB	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal **Average Detector:**					
2480.2	106.31	-24.761	81.549	--	--
2483.6	55.88	-24.761	31.119	-22.881	54.000

Note:
1. Average Measurement=Peak Measurement + Duty Cycle Factor.
2. The Duty Cycle is refer to section 5.

Site :966-3
Condition :3m ,Vertical
Mode :TX_bt1M_2480MHz
Test BY :Ashton Chiu



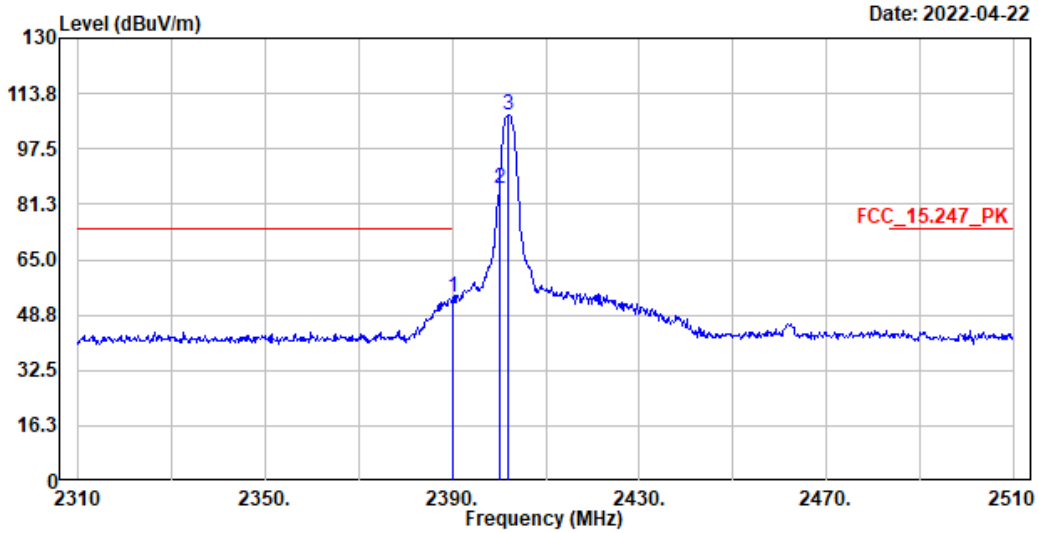
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2480.200	103.08	------	------	90.01	13.07	Peak
2	2483.600	52.58	74.00	-21.42	39.50	13.08	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

Frequency MHz	Peak Measurement dBuV/m	Duty Cycle Factor dB	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Vertical **Average Detector:**					
2480.2	103.08	-24.761	78.319	--	--
2483.6	52.58	-24.761	27.819	-26.181	54.000

Note:
1. Average Measurement=Peak Measurement + Duty Cycle Factor.
2. The Duty Cycle is refer to section 5.

```
Site       :966-3
Condition  :3m    ,Horizontal
Mode       :TX_bt3M_2402MHz
Test BY    :Ashton Chiu
```



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2390.000	53.75	74.00	-20.25	40.84	12.91	Peak
2	2400.000	85.66	------	------	72.69	12.97	Peak
3	2402.000	107.55	------	------	94.58	12.97	Peak

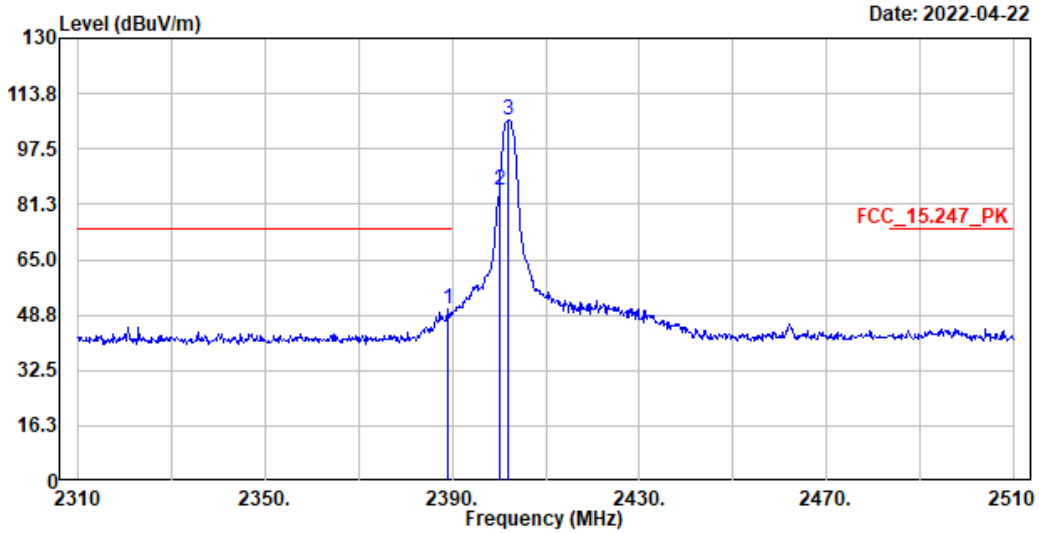
Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

Frequency MHz	Peak Measurement dBuV/m	Duty Cycle Factor dB	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal **Average Detector:**					
2390	53.75	-25.036	28.714	-25.286	54.000
2400	85.66	-25.036	60.624	--	--
2402	107.55	-25.036	82.514	--	--

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor.
2. The Duty Cycle is refer to section 5.

Site :966-3
Condition :3m ,Vertical
Mode :TX_bt3M_2402MHz
Test BY :Ashton Chiu



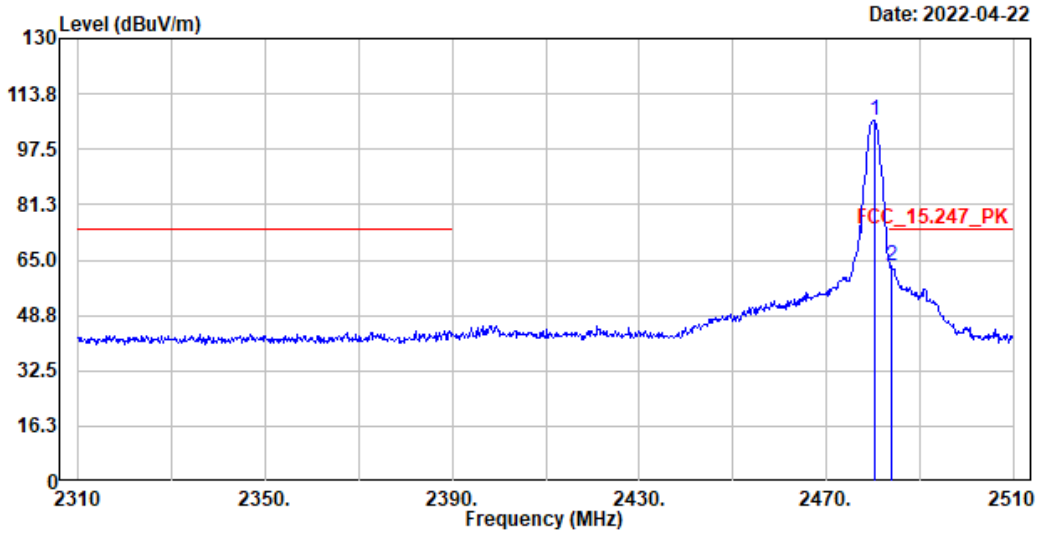
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2389.200	50.55	74.00	-23.45	37.64	12.91	Peak
2	2400.000	85.18	------	------	72.21	12.97	Peak
3	2402.000	106.15	------	------	93.18	12.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

Frequency MHz	Peak Measurement dBuV/m	Duty Cycle Factor dB	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Vertical **Average Detector:**					
2389.2	50.55	-25.036	25.514	-28.486	54.000
2400	85.18	-25.036	60.144	--	--
2402	106.15	-25.036	81.114	--	--

Note:
1. Average Measurement=Peak Measurement + Duty Cycle Factor.
2. The Duty Cycle is refer to section 5.

```
Site       :966-3
Condition  :3m    ,Horizontal
Mode       :TX_bt3M_2480MHz
Test BY    :Ashton Chiu
```



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2480.200	105.84	------	------	92.77	13.07	Peak
2	2484.000	63.19	74.00	-10.81	50.11	13.08	Peak

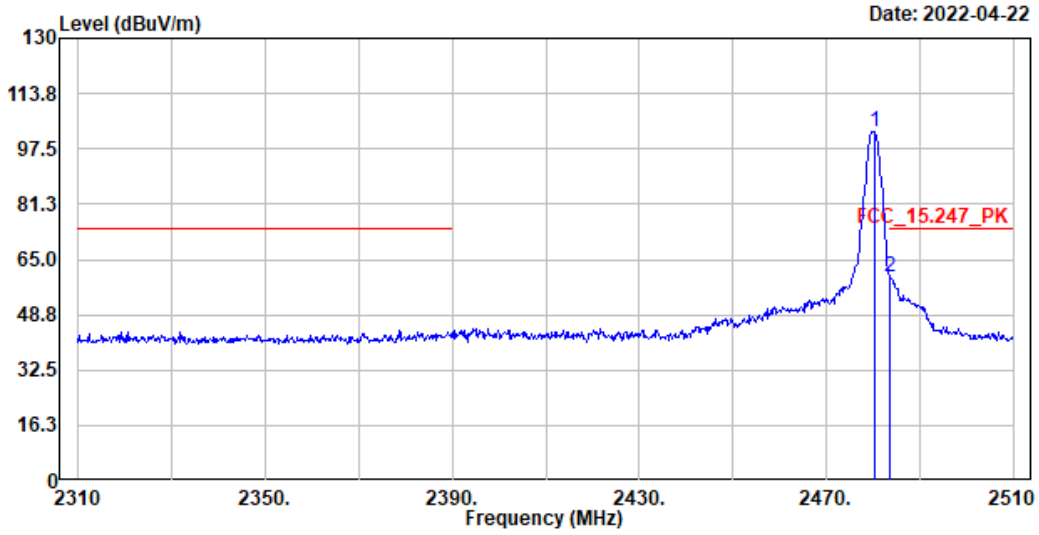
```
Note:
1. Level = Read Level + Factor
2. Factor = Antenna  Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
```

Frequency MHz	Peak Measurement dBuV/m	Duty Cycle Factor dB	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal **Average Detector:**					
2480.2	105.84	-25.036	80.804	--	--
2484	63.19	-25.036	38.154	-15.846	54.000

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor.
2. The Duty Cycle is refer to section 5.

```
Site      :966-3
Condition :3m    ,Vertical
Mode      :TX_bt3M_2480MHz
Test BY   :Ashton Chiu
```



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2480.200	102.48	------	------	89.41	13.07	Peak
2	2483.600	59.67	74.00	-14.33	46.59	13.08	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

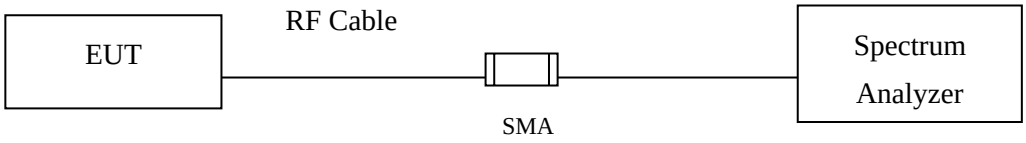
Frequency MHz	Peak Measurement dBuV/m	Duty Cycle Factor dB	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Vertical **Average Detector:**					
2480.2	102.48	-25.036	77.444	--	--
2483.6	59.67	-25.036	34.634	-19.366	54.000

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor.
2. The Duty Cycle is refer to section 5.

5. Duty Cycle

5.1. Test Setup

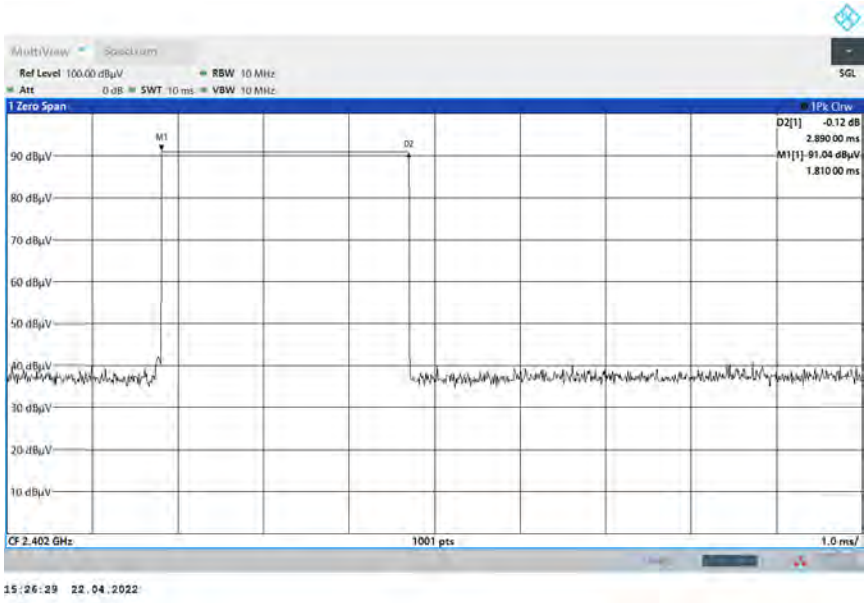


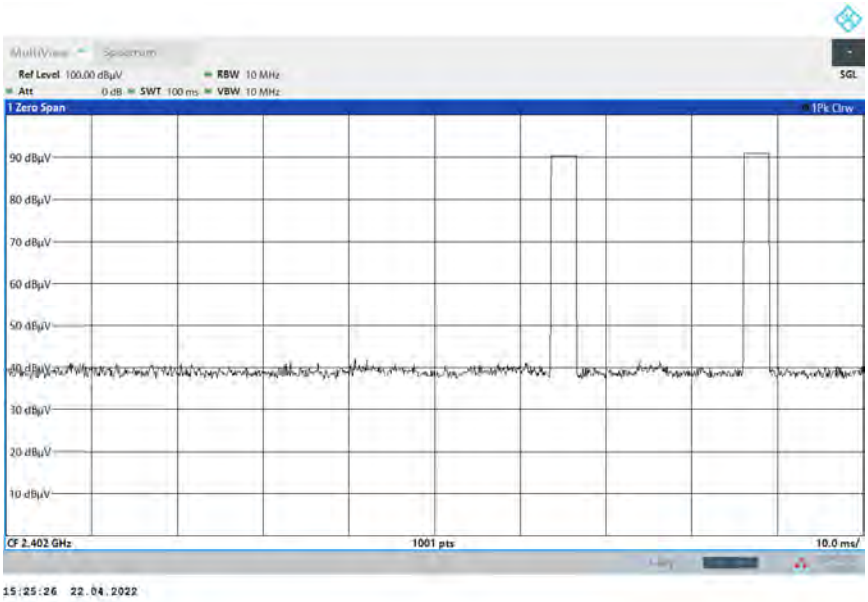
5.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to ANSI C63.10 2013 for compliance to FCC 47CFR 15.247 requirements.

5.3. Test Result of Duty Cycle

Product : Intel® Wi-Fi 6 AX200
Test Item : Duty Cycle
Test Mode : Mode 1: Transmit - 1Mbps





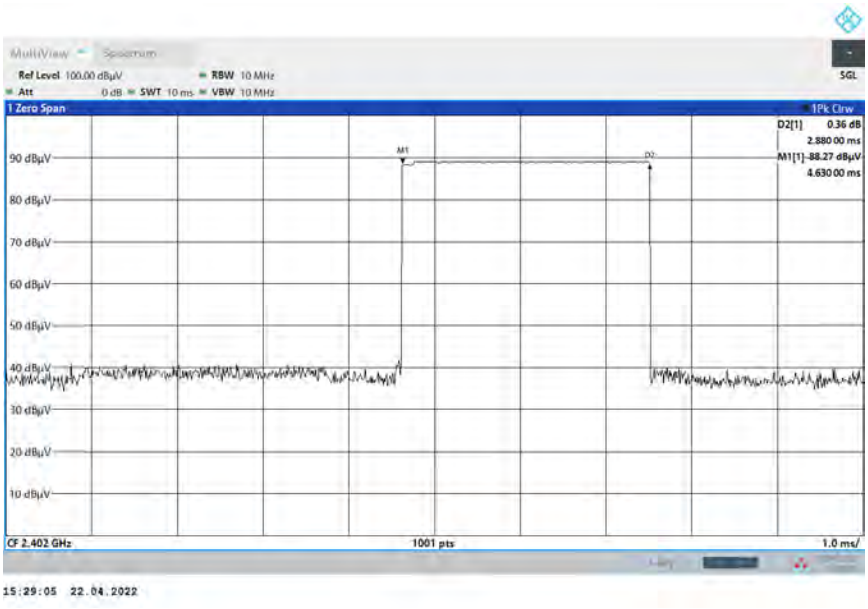
Time on of 100ms= 5.78ms

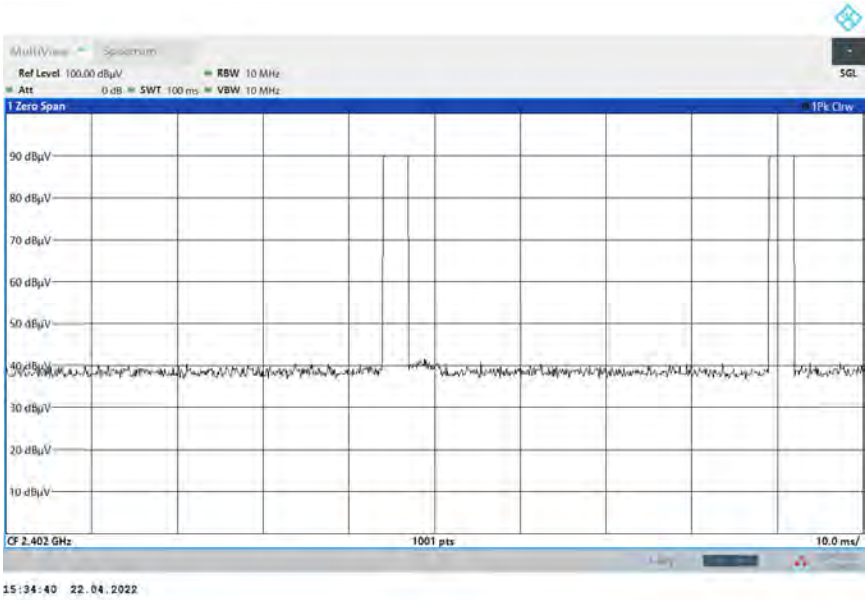
Duty Cycle= 5.78ms / 100ms= 0.0578

Duty Cycle correction factor= 20 LOG 0.0578= -24.761dB

Duty Cycle correction factor	**-24.761**	**dB**

Product : Intel® Wi-Fi 6 AX200
Test Item : Duty Cycle
Test Mode : Mode 3: Transmit - 3Mbps





Time on of 100ms= 5.6ms

Duty Cycle= 5.6ms / 100ms= 0.056

Duty Cycle correction factor= 20 LOG 0.056= -25.036dB

Duty Cycle correction factor	**-25.036**	**dB**

6. EMI Reduction Method During Compliance Testing

No modification was made during testing.