



RF MEASUREMENT REPORT

Output Power & Radiated Spurious Emission & Radiated Band Edge

FCC ID: HD5-SDMAC

Applicant: Honeywell International Inc.
Honeywell Safety and Productivity Solutions

Product: SDIO Wireless Module

Model No.: SX-SDMAC

FCC Classification: Unlicensed National Information Infrastructure (NII)

FCC Rule Part(s): Part 15 Subpart E (Section 15.407)

Result: Complies

Test Date: 2022-08-16 ~ 2202-08-26

Reviewed By:

Jame Yuan

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2208RSU021-U4	Rev. 01	Initial Report	2022-08-31	Valid

Note: This is a class II permissive change project. This EUT is installed inside the portable device (Product Name: Thermal Printer, M/N: RP2D), we perform SAR testing and radiated spurious emission / band edge spot check testing.

CONTENTS

Description	Page
1. General Information.....	5
1.1. Applicant	5
1.2. Manufacturer	5
1.3. Testing Facility	5
1.4. Product Information	6
1.5. Host Information.....	6
1.6. Radio Specification	6
1.7. Antenna Details.....	7
1.8. Working Frequencies	7
2. Test Configuration	8
2.1. Test Mode	8
2.2. Test System Connection Diagram	8
2.3. Test Software	8
2.4. Applied Standards	9
2.5. Test Environment Condition	9
3. Measuring Instrument	10
4. Measurement Uncertainty.....	11
5. Test Result.....	12
5.1. Summary.....	12
5.2. Output Power Measurement.....	13
5.2.1. Test Limit.....	13
5.2.2. Test Procedure.....	13
5.2.3. Test Setting	13
5.2.4. Test Setup	13
5.2.5. Test Result	13
5.3. Radiated Spurious Emission Measurement	14
5.3.1. Test Limit.....	14
5.3.2. Test Procedure.....	14
5.3.3. Test Setting	14
5.3.4. Test Setup	16
5.3.5. Test Result	16
5.4. Radiated Restricted Band Edge Measurement	17
5.4.1. Test Limit.....	17
5.4.2. Test Procedure.....	19
5.4.3. Test Setting	19

5.4.4.	Test Setup	20
5.4.5.	Test Result	20
Appendix A – Test Result		21
A.1	Output Power Test Result	21
A.2	Radiated Spurious Emission Measurement Test Result	24
A.3	Radiated Restricted Band Edge Test Result	34
Appendix B – Test Setup Photograph		66
Appendix C – EUT Photograph		67

1. General Information

1.1. Applicant

Honeywell International Inc
Honeywell Safety and Productivity Solutions
9680 Old Bales Road, Fort Mill, SC 29707 United States

1.2. Manufacturer

Honeywell International Inc
Honeywell Safety and Productivity Solutions
9680 Old Baires Road, Fort Mill, SC 29707 United States

1.3. Testing Facility

☒	Test Site – MRT Suzhou Laboratory				
	Laboratory Location (Suzhou - Wuzhong)				
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China				
	Laboratory Location (Suzhou - SIP)				
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China				
	Laboratory Accreditations				
A2LA: 3628.01		CNAS: L10551			
FCC: CN1166		ISED: CN0001			
VCCI:	☐ R-20025	☐ G-20034	☐ C-20020	☐ T-20020	
	☐ R-20141	☐ G-20134	☐ C-20103	☐ T-20104	
☒	Test Site – MRT Shenzhen Laboratory				
	Laboratory Location (Shenzhen)				
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China				
	Laboratory Accreditations				
	A2LA: 3628.02		CNAS: L10551		
	FCC: CN1284		ISED: CN0105		
☐	Test Site – MRT Taiwan Laboratory				
	Laboratory Location (Taiwan)				
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)				
	Laboratory Accreditations				
	TAF: L3261-190725		FCC: 291082, TW3261		
	ISED: TW3261				

1.4. Product Information

Product Name	SDIO Wireless Module
Model No.	SX-SDMAC
Wi-Fi Specification	802.11a/b/g/n/ac
Bluetooth Version	v5.0 dual mode
Remark: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. Host Information

Applicant	Honeywell International Inc Honeywell Safety and Productivity Solutions
Applicant Address	9680 Old Bailes Rd, Fort Mill, SC 29707, USA
Product Name	Thermal Printer
Model No.	RP2D
Serial No.	22206B8B91 (Conducted Sample) 22206B8B84 (Radiated Sample)

1.6. Radio Specification

Frequency Range	For 802.11a/n-HT20/ac-VHT20: 5180~5240MHz, 5260~5320MHz, 5500~5700MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40: 5190~5230MHz, 5270~5310MHz, 5510~5670MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5290MHz, 5530MHz, 5610 MHz, 5775MHz
Type of Modulation	802.11a/n/ac: OFDM
Data Rate	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 150Mbps 802.11ac: up to 433.3Mbps

Note: For other features of this EUT, test report will be issued separately.

1.7. Antenna Details

Antenna No.	Antenna Type	Manufacturer	Part No.	Max. Peak Gain (dBi)
Antenna 1 (Wi-Fi/BT Antenna)	PCB Embedded Antenna	Ethertronics, Inc.	1004075	2.4GHz: 3.3, 5GHz: 5.1
Antenna 2 (Wi-Fi Antenna)			1004078	2.4GHz: 3.4, 5GHz: 4.2

Note: Only support SISO mode, both antennas can be switched automatically refer to receive signal strength.

1.8. Working Frequencies

802.11a/n-HT20/ac-VHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz	100	5500 MHz
104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz
128	5640 MHz	132	5660 MHz	136	5680 MHz
140	5700 MHz	149	5745 MHz	153	5765 MHz
157	5785 MHz	161	5805 MHz	165	5825 MHz

802.11n-HT40/ac-VHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz
62	5310 MHz	102	5510 MHz	110	5550 MHz
118	5590 MHz	126	5630 MHz	134	5670 MHz
151	5755 MHz	159	5795 MHz	--	--

802.11ac-VHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530 MHz
122	5610 MHz	155	5775 MHz	--	--

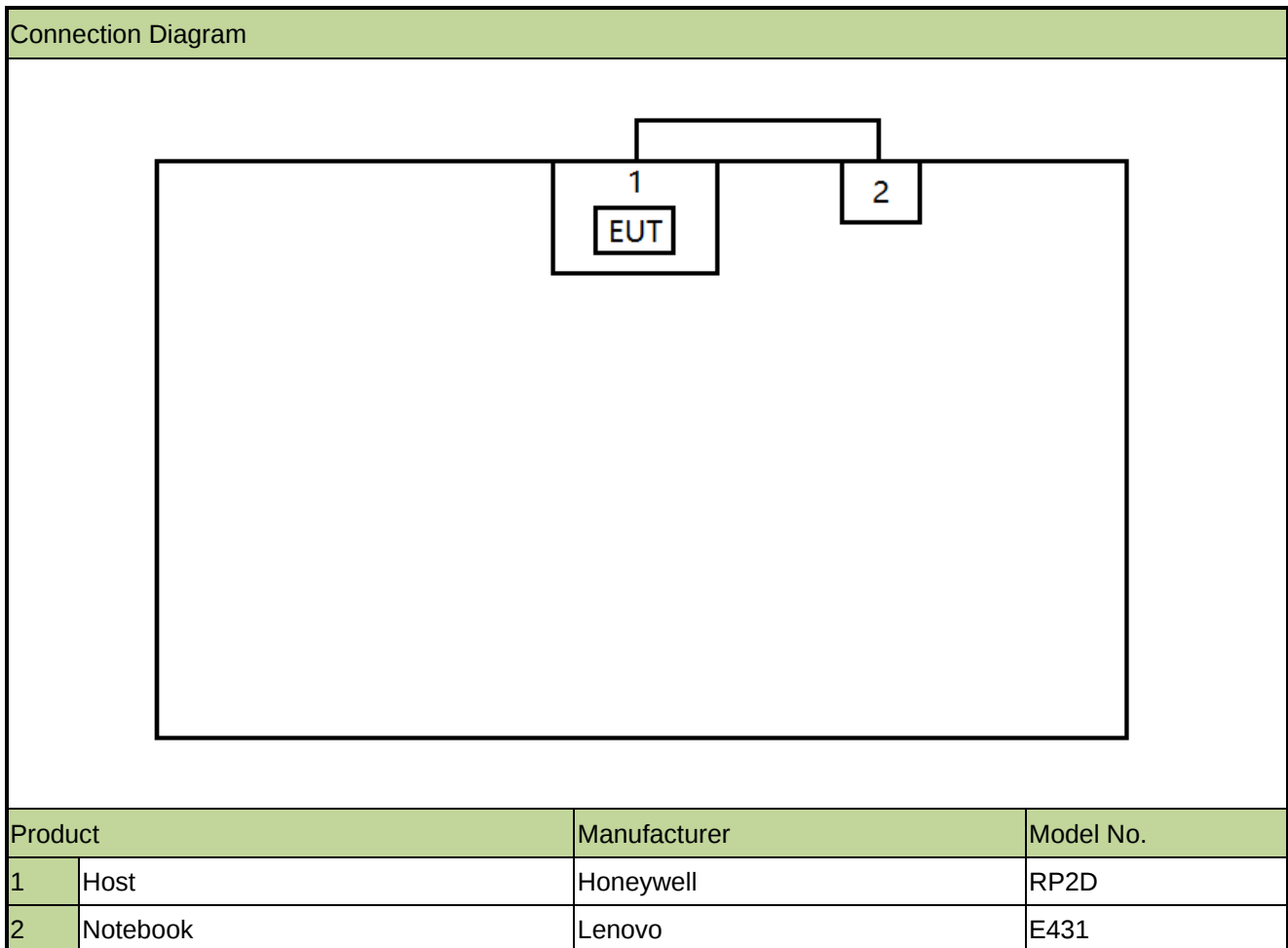
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit by 802.11a (6Mbps)
Mode 2: Transmit by 802.11n-HT20 (MCS0)
Mode 3: Transmit by 802.11n-HT40 (MCS0)
Mode 4: Transmit by 802.11ac-VHT20 (MCS0)
Mode 5: Transmit by 802.11ac-VHT40 (MCS0)
Mode 6: Transmit by 802.11ac-VHT80 (MCS0)

For radiated spurious emission and band edge measurement, some worst-case mode (Refer to module report) was selected for testing.

2.2. Test System Connection Diagram



2.3. Test Software

The test utility software used during testing was “QRCT”, and the version was 3.0.268.0.

2.4. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15.407
- KDB 789033 D02v02r01
- ANSI C63.10-2013

2.5. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20 ~ 75%RH

3. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06292	1 year	2022-10-20	NS-AC1
Anechoic Chamber	BOOMWAVE	NS-AC1	MRTSUE06496	1 year	2023-07-23	NS-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06572	1 year	2023-04-01	NS-AC1
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06573	1 year	2023-06-21	NS-AC1
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06574	1 year	2023-07-11	NS-AC1
EMI Test Receiver	R&S	ESR3	MRTSUE06575	1 year	2023-06-19	NS-AC1
Preamplifier	EMCI	EMC184045SE	MRTSUE06641	1 year	2023-01-13	NS-AC1
Thermohygrometer	testo	Testo 608-H1	MRTSUE11020	1 year	2023-05-15	NS-AC1
Thermohygrometer	testo	Testo 608-H1	MRTSUE11104	1 year	2023-05-03	NS-AC1
Signal Analyzer	Agilent	N9010A	MRTSUE06195	1 year	2023-04-13	NS-AC1
Signal Analyzer	Keysight	N9020A	MRTSUE10065	1 year	2023-01-11	NS-AC1
Signal Generator	Agilent	E4438C	MRTSUE06081	1 year	2023-02-14	WZ-SR5
Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2023-04-06	WZ-SR5
Bluetooth Test Set	Anritsu	MT8852B	MRTSUE06389	1 year	2023-06-01	WZ-SR5
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2023-06-06	WZ-SR5
Shielding Room	HUAMING	WZ-SR5	MRTSUE06442	N/A	N/A	WZ-SR5
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2023-06-04	WZ-SR5
USB Power Sensor	Keysight	U2021XA	MRTSUE06446	1 year	2023-06-04	WZ-SR5

Software	Version	Function
EMI Software	V3.0.0	EMI Test Software
Controller_T-E-TAC-2	1.02	RE Antenna & Turntable
Agilent Power Panel	V R03.09.00	Power Meter

Note: The test site with “WZ” code is in the MRT Suzhou laboratory, the test site with “NS” code is in the MRT Shenzhen Laboratory.

4. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Radiated Emission Measurement
Measurement Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): Horizontal: 30MHz~300MHz: 5.04dB 300MHz~1GHz: 4.95dB 1GHz~40GHz: 6.40dB Vertical: 30MHz~300MHz: 5.24dB 300MHz~1GHz: 6.03dB 1GHz~40GHz: 6.40dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.13dB

5. Test Result

5.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)(1)(iv), (2), (3)(i)	Maximum Conducted Output Power	Conducted	Pass
15.205, 15.209 15.407(b)(9), (10), (11)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Radiated	Pass

Remark:

1. The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
2. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

5.2. Output Power Measurement

5.2.1. Test Limit

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

5.2.2. Test Procedure

KDB 789033D02v02r01- Section II)E)3)b) Method PM-G

5.2.3. Test Setting

Average Power Measurement

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

5.2.4. Test Setup



5.2.5. Test Result

Refer to Appendix A.1.

5.3. Radiated Spurious Emission Measurement

5.3.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
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

5.3.2. Test Procedure

KDB 789033 D02v02r01- Section II)G)

5.3.3. Test Setting

Table 1 - RBW as a function of frequency

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

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

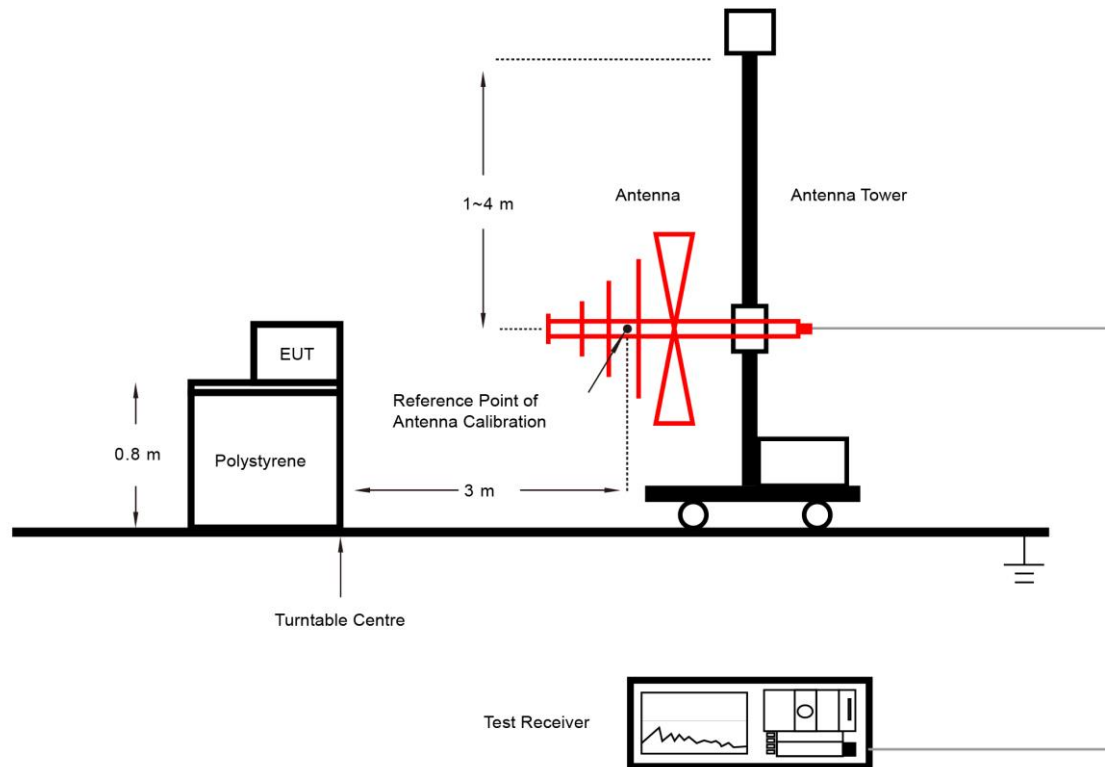
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

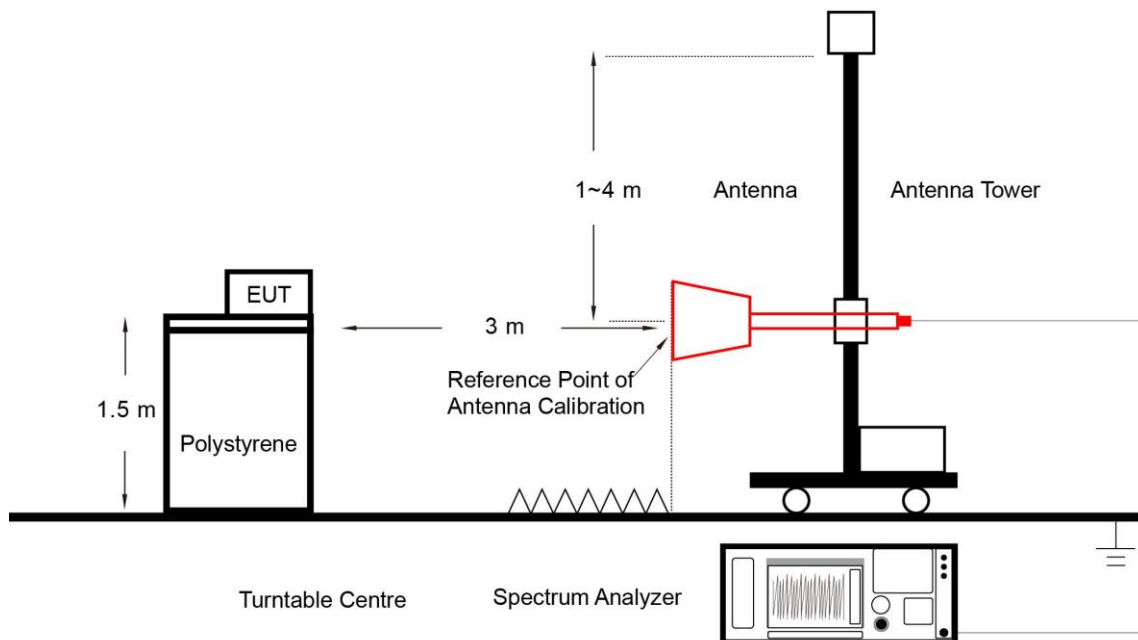
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

5.3.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.3.5. Test Result

Refer to Appendix A.2.

5.4. Radiated Restricted Band Edge Measurement

5.4.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (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	--	--	--

For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Refer to KDB 789033 D02v02r01 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
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

5.4.2. Test Procedure

KDB 789033 D02v02r01- Section II)G)

5.4.3. Test Setting

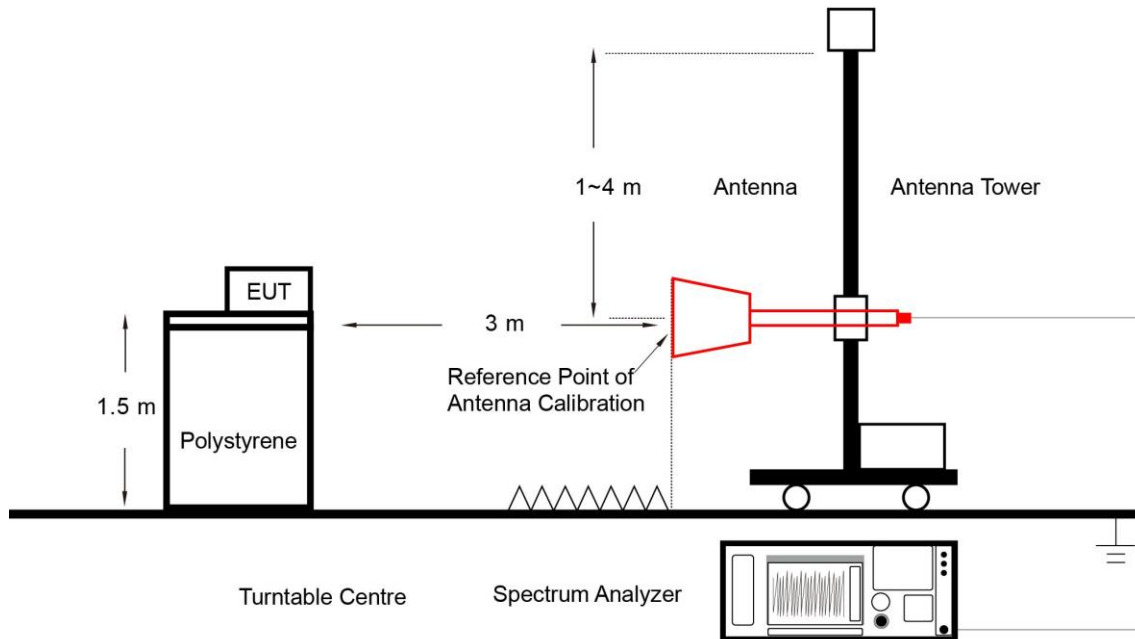
Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; if the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10Hz
4. If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

5.4.4. Test Setup



5.4.5. Test Result

Refer to Appendix A.3.

Appendix A – Test Result

A.1 Output Power Test Result

Test Site	WZ-SR5	Test Engineer	Liz Yuan
Test Date	2022-08-16	Test Mode	SISO Mode

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Average Power (dBm)		Average Power Limit (dBm)
				Antenna 1	Antenna 2	
11a	6Mbps	36	5180	10.60	10.61	≤ 30.00
11a	6Mbps	44	5220	13.68	13.66	≤ 30.00
11a	6Mbps	48	5240	13.63	13.65	≤ 30.00
11a	6Mbps	52	5260	13.47	13.48	≤ 30.00
11a	6Mbps	60	5300	13.06	13.08	≤ 30.00
11a	6Mbps	64	5320	9.13	9.02	≤ 30.00
11a	6Mbps	100	5500	9.01	8.94	≤ 30.00
11a	6Mbps	116	5580	8.98	8.81	≤ 30.00
11a	6Mbps	120	5600	8.55	8.38	≤ 30.00
11a	6Mbps	140	5700	9.46	9.33	≤ 30.00
11a	6Mbps	149	5745	10.00	10.03	≤ 30.00
11a	6Mbps	157	5785	10.35	10.36	≤ 30.00
11a	6Mbps	165	5825	7.82	9.76	≤ 30.00
11n-HT20	MCS0	36	5180	9.44	9.39	≤ 30.00
11n-HT20	MCS0	44	5220	13.06	13.07	≤ 30.00
11n-HT20	MCS0	48	5240	13.87	13.89	≤ 30.00
11n-HT20	MCS0	52	5260	13.85	13.64	≤ 30.00
11n-HT20	MCS0	60	5300	13.29	13.28	≤ 30.00
11n-HT20	MCS0	64	5320	9.06	8.73	≤ 30.00
11n-HT20	MCS0	100	5500	8.37	8.63	≤ 30.00
11n-HT20	MCS0	116	5580	8.62	8.57	≤ 30.00
11n-HT20	MCS0	120	5600	8.47	8.42	≤ 30.00
11n-HT20	MCS0	140	5700	8.45	8.20	≤ 30.00
11n-HT20	MCS0	149	5745	10.44	10.44	≤ 30.00
11n-HT20	MCS0	157	5785	9.96	10.05	≤ 30.00
11n-HT20	MCS0	165	5825	7.38	8.85	≤ 30.00

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Average Power (dBm)		Limit (dBm)
				Antenna 1	Antenna 2	
11n-HT40	MCS0	38	5190	7.96	7.92	≤ 30.00
11n-HT40	MCS0	46	5230	12.12	12.10	≤ 30.00
11n-HT40	MCS0	54	5270	12.34	12.35	≤ 30.00
11n-HT40	MCS0	62	5310	8.93	9.02	≤ 30.00
11n-HT40	MCS0	102	5510	8.77	8.79	≤ 30.00
11n-HT40	MCS0	110	5550	8.92	8.76	≤ 30.00
11n-HT40	MCS0	118	5590	9.07	9.08	≤ 30.00
11n-HT40	MCS0	134	5670	8.50	8.25	≤ 30.00
11n-HT40	MCS0	151	5755	7.08	7.22	≤ 30.00
11n-HT40	MCS0	159	5795	6.75	7.17	≤ 30.00
11ac-VHT20	MCS0	36	5180	9.49	9.49	≤ 30.00
11ac-VHT20	MCS0	44	5220	12.85	12.88	≤ 30.00
11ac-VHT20	MCS0	48	5240	13.96	13.96	≤ 30.00
11ac-VHT20	MCS0	52	5260	13.95	12.62	≤ 30.00
11ac-VHT20	MCS0	60	5300	12.85	12.84	≤ 30.00
11ac-VHT20	MCS0	64	5320	9.05	9.05	≤ 30.00
11ac-VHT20	MCS0	100	5500	8.53	8.89	≤ 30.00
11ac-VHT20	MCS0	116	5580	8.86	8.63	≤ 30.00
11ac-VHT20	MCS0	120	5600	8.34	8.36	≤ 30.00
11ac-VHT20	MCS0	140	5700	8.53	8.16	≤ 30.00
11ac-VHT20	MCS0	149	5745	9.86	9.86	≤ 30.00
11ac-VHT20	MCS0	157	5785	10.28	10.25	≤ 30.00
11ac-VHT20	MCS0	165	5825	7.21	8.90	≤ 30.00
11ac-VHT40	MCS0	38	5190	8.22	8.17	≤ 30.00
11ac-VHT40	MCS0	46	5230	12.07	12.08	≤ 30.00
11ac-VHT40	MCS0	54	5270	12.39	12.42	≤ 30.00
11ac-VHT40	MCS0	62	5310	9.02	8.86	≤ 30.00
11ac-VHT40	MCS0	102	5510	8.62	8.52	≤ 30.00
11ac-VHT40	MCS0	110	5550	9.01	8.64	≤ 30.00
11ac-VHT40	MCS0	118	5590	8.78	8.93	≤ 30.00
11ac-VHT40	MCS0	134	5670	8.58	8.03	≤ 30.00
11ac-VHT40	MCS0	151	5755	8.47	7.03	≤ 30.00
11ac-VHT40	MCS0	159	5795	6.71	7.09	≤ 30.00

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Average Power (dBm)		Limit (dBm)
				Antenna 1	Antenna 2	
11ac-VHT80	MCS0	42	5210	8.30	8.18	≤ 30.00
11ac-VHT80	MCS0	58	5290	8.92	8.84	≤ 30.00
11ac-VHT80	MCS0	106	5530	9.38	9.45	≤ 30.00
11ac-VHT80	MCS0	122	5610	11.39	11.25	≤ 30.00
11ac-VHT80	MCS0	155	5775	10.53	10.85	≤ 30.00

A.2 Radiated Spurious Emission Measurement Test Result

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2022-08-25~2022-08-26	Test Mode	802.11ac-VHT20 - Channel 36 Antenna 1
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7604.500	35.7	9.7	45.4	74.0	-28.6	Peak	Horizontal
*	8905.000	35.4	12.7	48.1	68.2	-20.1	Peak	Horizontal
	11098.000	35.6	15.3	50.9	74.0	-23.1	Peak	Horizontal
*	13129.500	34.0	15.9	49.9	68.2	-18.3	Peak	Horizontal
	7460.000	35.2	10.3	45.5	74.0	-28.5	Peak	Vertical
*	8522.500	35.9	11.2	47.1	68.2	-21.1	Peak	Vertical
	11429.500	34.1	15.5	49.6	74.0	-24.4	Peak	Vertical
*	13121.000	34.0	15.8	49.8	68.2	-18.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2022-08-25~2022-08-26	Test Mode	802.11ac-VHT20 - Channel 52 Antenna 1
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7443.000	35.1	10.1	45.2	74.0	-28.8	Peak	Horizontal
*	10520.000	46.2	14.0	60.2	68.2	-8.0	Peak	Horizontal
	11616.500	33.8	16.0	49.8	74.0	-24.2	Peak	Horizontal
*	13121.000	34.0	15.8	49.8	68.2	-18.4	Peak	Horizontal
	7426.000	35.6	10.4	46.0	74.0	-28.0	Peak	Vertical
*	10528.500	50.7	14.0	64.7	68.2	-3.5	Peak	Vertical
	11531.500	34.2	15.7	49.9	74.0	-24.1	Peak	Vertical
*	13129.500	35.1	15.9	51.0	68.2	-17.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2022-08-25~2022-08-26	Test Mode	802.11ac-VHT40 - Channel 134 Antenna 1
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7519.500	36.0	9.9	45.9	74.0	-28.1	Peak	Horizontal
*	8879.500	35.5	12.4	47.9	68.2	-20.3	Peak	Horizontal
	10962.000	35.4	15.6	51.0	74.0	-23.0	Peak	Horizontal
*	12942.500	33.7	15.9	49.6	68.2	-18.6	Peak	Horizontal
	7562.000	36.3	9.9	46.2	74.0	-27.8	Peak	Vertical
*	8692.500	33.8	12.4	46.2	68.2	-22.0	Peak	Vertical
	10919.500	35.4	15.0	50.4	74.0	-23.6	Peak	Vertical
*	13053.000	33.4	15.5	48.9	68.2	-19.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2022-08-25~2022-08-26	Test Mode	802.11ac-VHT80 - Channel 155 Antenna 1
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8454.500	36.6	10.7	47.3	74.0	-26.7	Peak	Horizontal
*	10409.500	36.4	14.2	50.6	68.2	-17.6	Peak	Horizontal
	11540.000	43.5	15.7	59.2	74.0	-14.8	Peak	Horizontal
	11549.000	33.2	15.9	49.1	54.0	-4.9	Average	Horizontal
*	12993.500	35.4	15.6	51.0	68.2	-17.2	Peak	Horizontal
	7409.000	35.6	10.3	45.9	74.0	-28.1	Peak	Vertical
*	10375.500	35.0	14.2	49.2	68.2	-19.0	Peak	Vertical
	11548.500	45.7	15.9	61.6	74.0	-12.4	Peak	Vertical
	11549.250	35.4	15.9	51.3	54.0	-2.7	Average	Vertical
*	14022.000	35.5	17.7	53.2	68.2	-15.0	Peak	Vertical
Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions. Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m) Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)								

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2022-08-25~2022-08-26	Test Mode	802.11ac-VHT20 - Channel 36 Antenna 2
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7468.500	35.1	10.2	45.3	74.0	-28.7	Peak	Horizontal
*	8735.000	34.2	12.3	46.5	68.2	-21.7	Peak	Horizontal
	9415.000	38.1	11.8	49.9	74.0	-24.1	Peak	Horizontal
*	10350.000	35.4	14.1	49.5	68.2	-18.7	Peak	Horizontal
	7409.000	35.4	10.3	45.7	74.0	-28.3	Peak	Vertical
*	8769.000	36.1	12.5	48.6	68.2	-19.6	Peak	Vertical
	9415.000	37.4	11.8	49.2	74.0	-24.8	Peak	Vertical
*	10358.500	38.9	14.1	53.0	68.2	-15.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2022-08-25~2022-08-26	Test Mode	802.11ac-VHT20 - Channel 52 Antenna 2
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8344.000	38.7	9.9	48.6	74.0	-25.4	Peak	Horizontal
*	8820.000	36.6	12.5	49.1	68.2	-19.1	Peak	Horizontal
	9483.000	38.6	11.8	50.4	74.0	-23.6	Peak	Horizontal
*	10520.000	52.7	14.0	66.7	68.2	-1.5	Peak	Horizontal
	8361.000	37.8	10.0	47.8	74.0	-26.2	Peak	Vertical
*	8675.500	35.9	12.2	48.1	68.2	-20.1	Peak	Vertical
	9483.000	38.0	11.8	49.8	74.0	-24.2	Peak	Vertical
*	10528.500	53.6	14.0	67.6	68.2	-0.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2022-08-25~2022-08-26	Test Mode	802.11ac-VHT40 - Channel 134 Antenna 2
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8429.000	36.5	10.2	46.7	74.0	-27.3	Peak	Horizontal
*	8752.000	35.4	12.4	47.8	68.2	-20.4	Peak	Horizontal
	9466.000	37.7	11.5	49.2	74.0	-24.8	Peak	Horizontal
*	10307.500	35.9	13.6	49.5	68.2	-18.7	Peak	Horizontal
	7324.000	36.7	9.5	46.2	74.0	-27.8	Peak	Vertical
*	8743.500	36.0	12.4	48.4	68.2	-19.8	Peak	Vertical
	9432.000	37.5	11.6	49.1	74.0	-24.9	Peak	Vertical
*	10146.000	36.3	13.4	49.7	68.2	-18.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

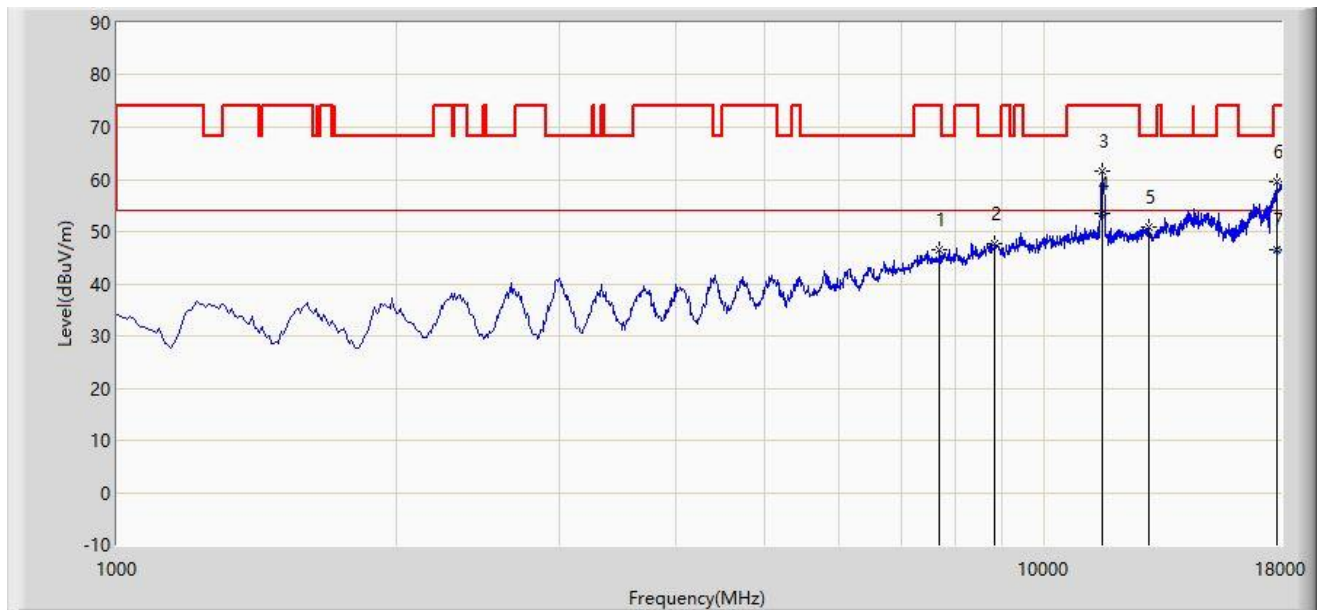
Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2022-08-25~2022-08-26	Test Mode	802.11ac-VHT80 - Channel 155 Antenna 2
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7698.000	37.5	9.1	46.6	74.0	-27.4	Peak	Horizontal
*	8828.500	35.4	12.4	47.8	68.2	-20.4	Peak	Horizontal
	11548.500	45.7	15.9	61.6	74.0	-12.4	Peak	Horizontal
	11549.250	37.6	15.9	53.5	54.0	-0.5	Average	Horizontal
*	12951.000	35.1	15.8	50.9	68.2	-17.3	Peak	Horizontal
	8412.000	37.9	10.1	48.0	74.0	-26.0	Peak	Vertical
*	10044.000	35.5	13.8	49.3	68.2	-18.9	Peak	Vertical
	11523.000	45.4	15.6	61.0	74.0	-13.0	Peak	Vertical
	11550.750	36.2	15.9	52.1	54.0	-1.9	Average	Vertical
*	13010.500	35.3	15.6	50.9	68.2	-17.3	Peak	Vertical
Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions. Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m) Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)								

The worst-case test data of radiated spurious emission above 1GHz

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part15.209_RSE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5775MHz Antenna 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor	Type
1			7698.000	46.543	37.472	-27.457	74.000	9.071	PK
2			8828.500	47.799	35.388	-20.401	68.200	12.411	PK
3			11548.500	61.606	45.724	-12.394	74.000	15.881	PK
4		*	11549.250	53.532	37.635	-0.468	54.000	15.897	AV
5			12951.000	50.918	35.091	-17.282	68.200	15.827	PK
6			17804.500	59.468	34.973	-14.532	74.000	24.494	PK
7			17804.500	46.518	22.023	-7.482	54.000	24.494	AV

Note 1: " * ", means this data is the worst emission level.

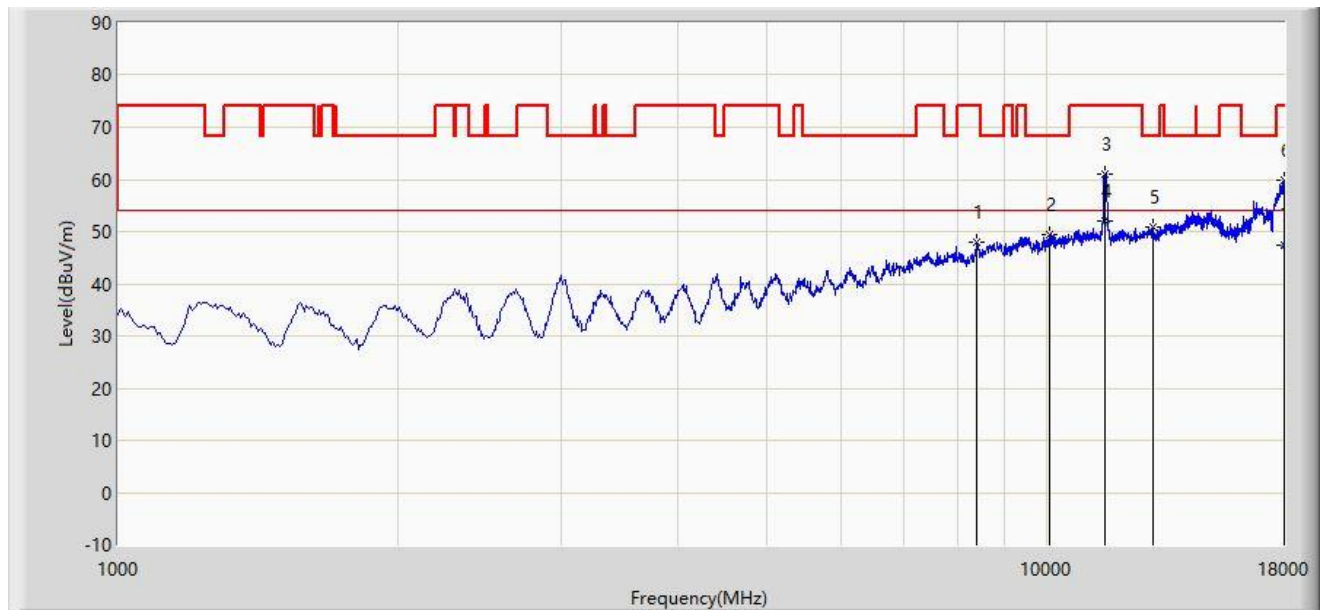
Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

Note 5: The amplitude of radiated emissions (frequency range from 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part15.209_RSE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5775MHz Antenna 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor	Type
1			8412.000	47.971	37.863	-26.029	74.000	10.108	PK
2			10044.000	49.308	35.525	-18.892	68.200	13.783	PK
3			11523.000	61.052	45.408	-12.948	74.000	15.644	PK
4		*	11550.750	52.080	36.152	-1.920	54.000	15.928	AV
5			13010.500	50.937	35.312	-17.263	68.200	15.626	PK
6			17983.000	59.744	34.235	-14.256	74.000	25.509	PK
7			17983.000	47.478	21.969	-6.522	54.000	25.509	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

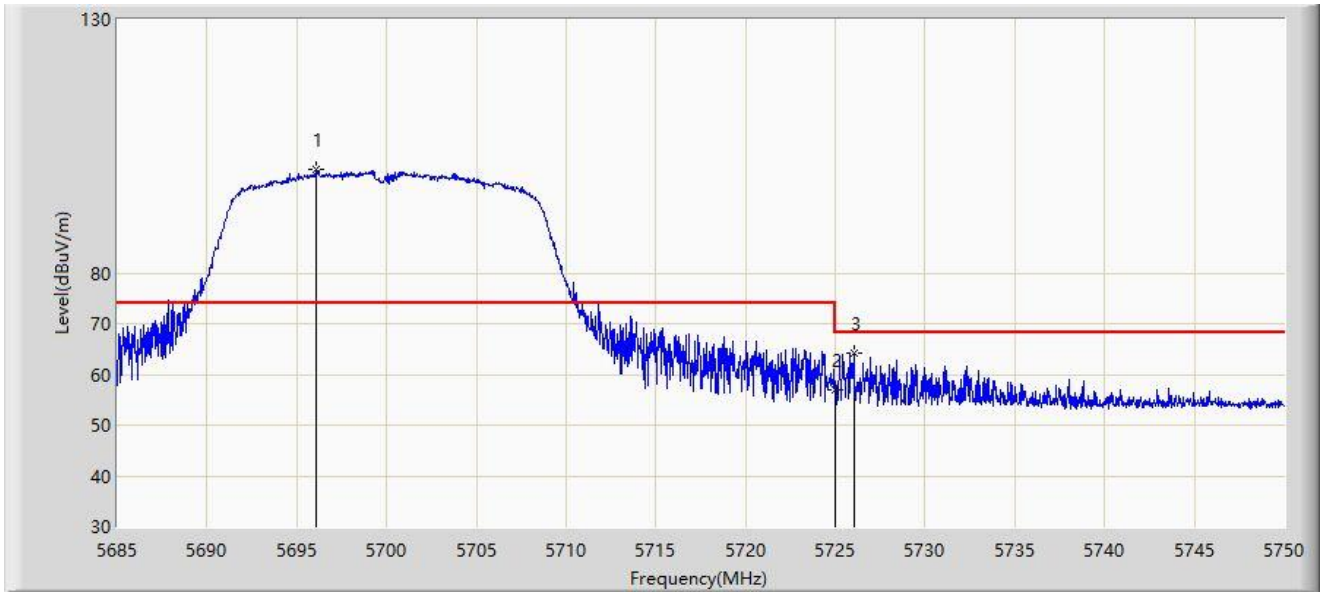
Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

Note 5: The amplitude of radiated emissions (frequency range from 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

A.3 Radiated Restricted Band Edge Test Result

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT20 at 5700MHz Antenna 1	



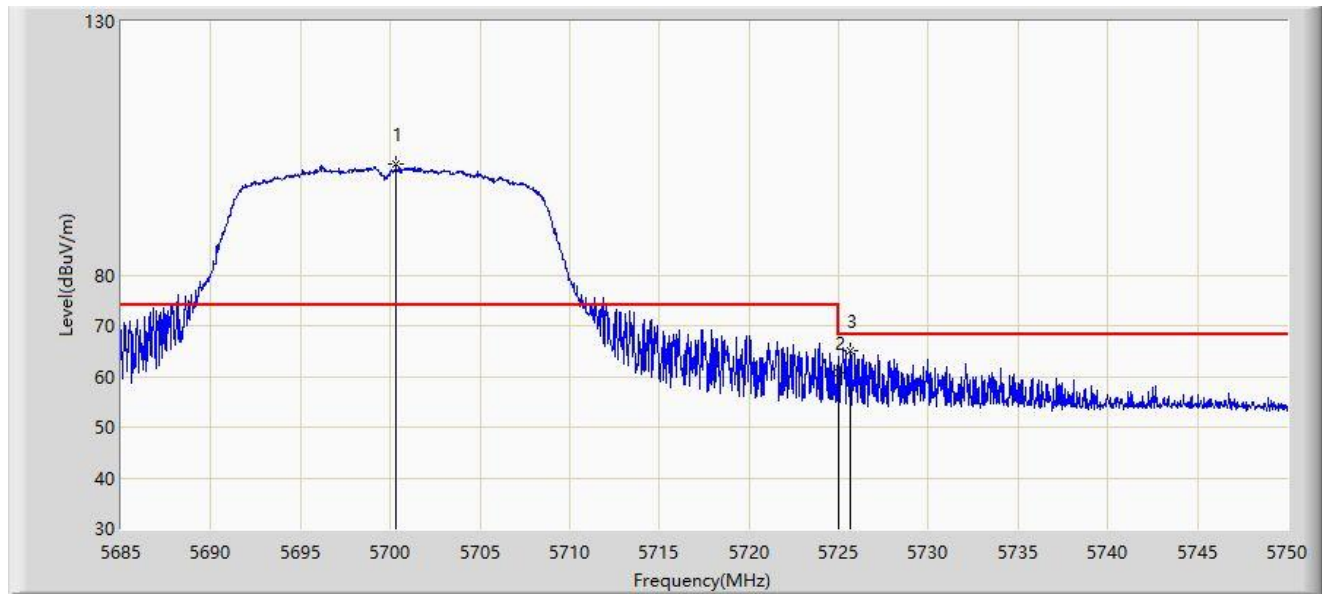
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5696.050	100.384	97.429	N/A	N/A	2.955	PK
2		5725.000	56.979	54.095	-11.221	68.200	2.884	PK
3	*	5726.015	64.329	61.438	-3.871	68.200	2.891	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT20 at 5700MHz Antenna 1	



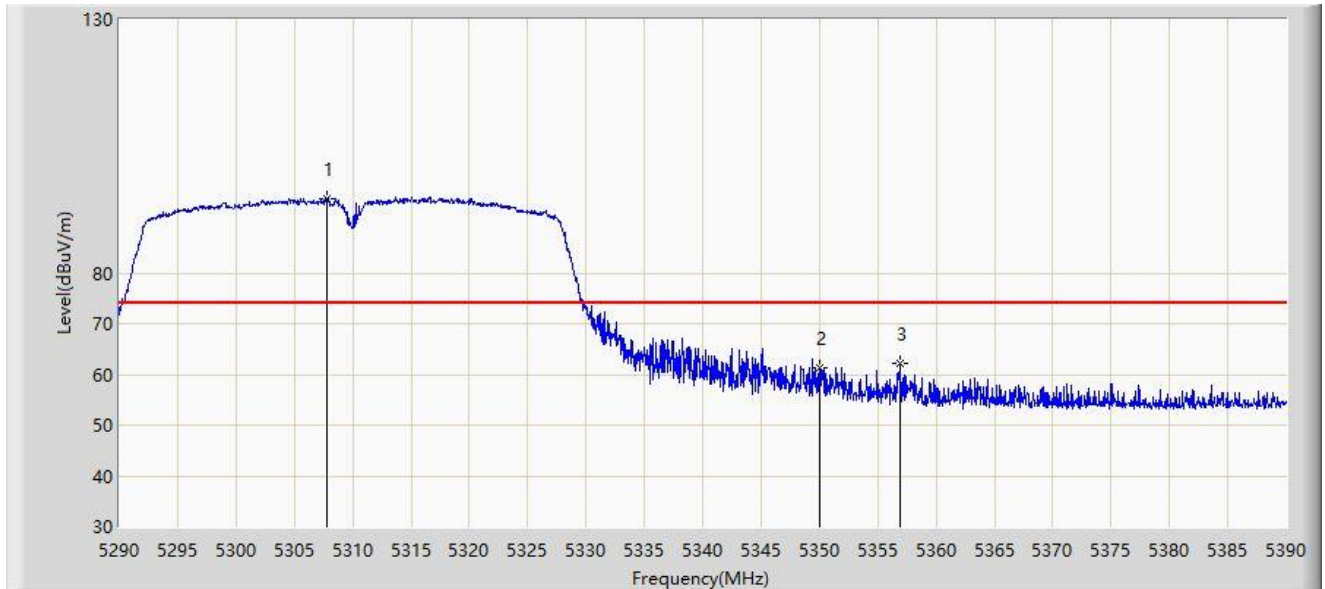
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5700.308	101.976	99.083	N/A	N/A	2.894	PK
2		5725.000	60.629	57.745	-7.571	68.200	2.884	PK
3	*	5725.625	65.030	62.142	-3.170	68.200	2.888	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5310MHz Antenna 1	



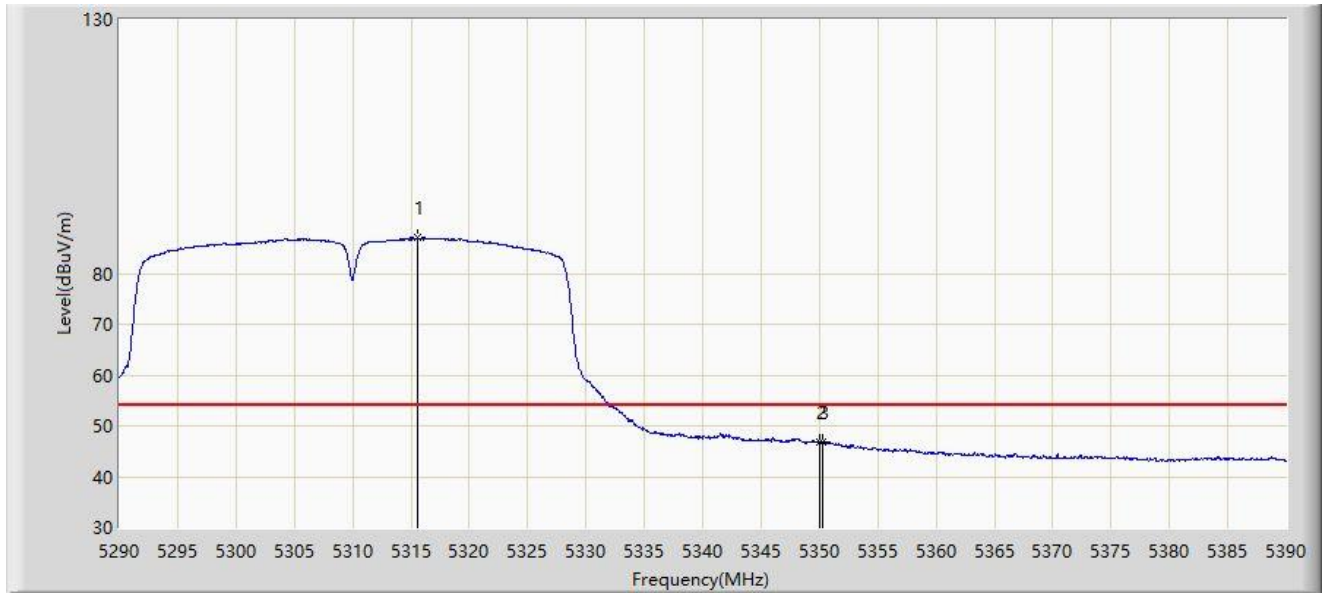
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5307.800	94.774	93.075	N/A	N/A	1.700	PK
2		5350.000	61.202	59.691	-12.798	74.000	1.511	PK
3	*	5356.900	62.237	60.659	-11.763	74.000	1.578	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5310MHz Antenna 1	



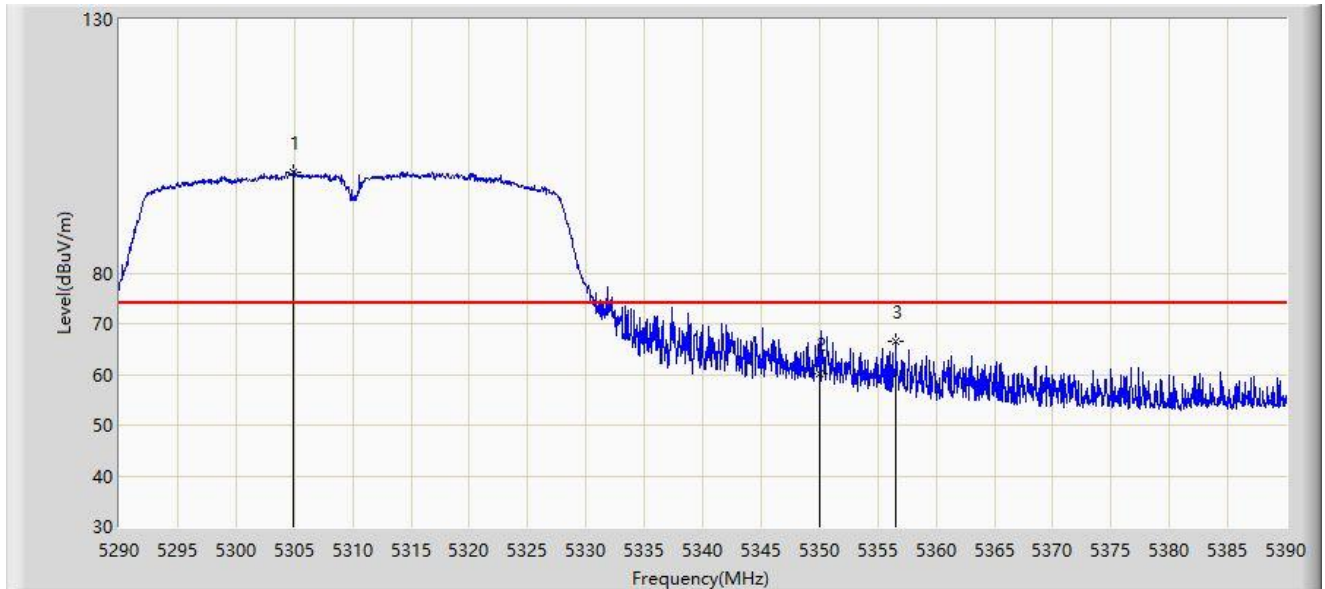
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5315.600	86.975	85.382	N/A	N/A	1.593	AV
2		5350.000	46.873	45.362	-7.127	54.000	1.511	AV
3	*	5350.300	46.886	45.376	-7.114	54.000	1.511	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5310MHz Antenna 1	



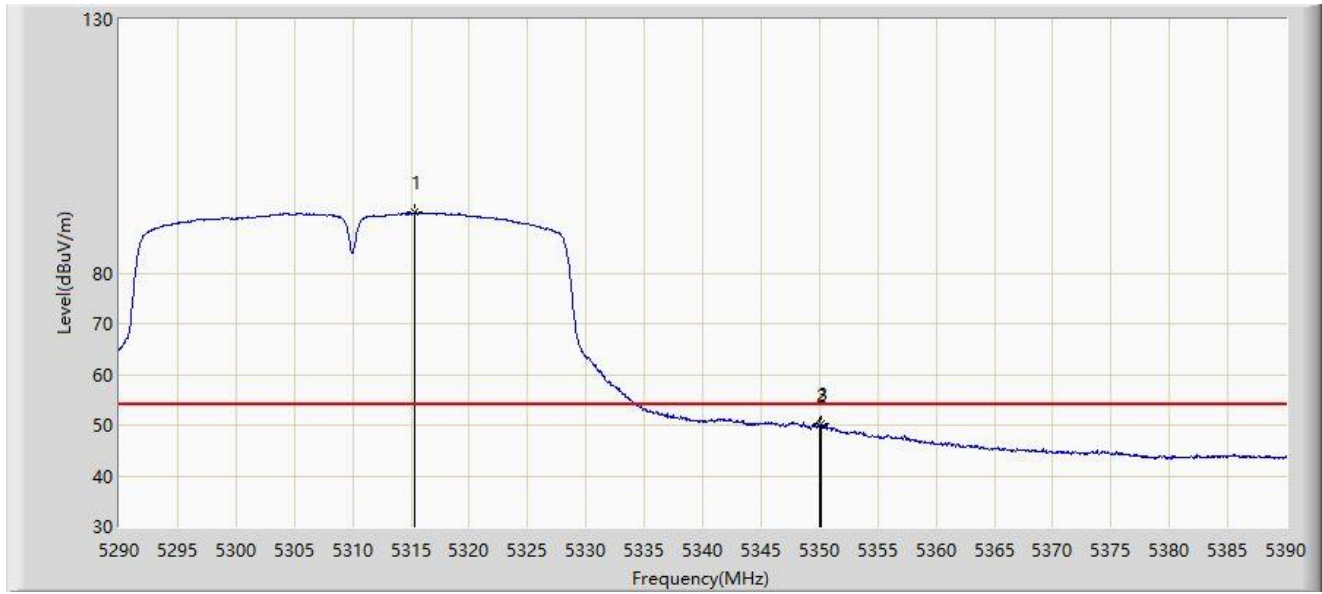
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5304.950	100.000	98.262	N/A	N/A	1.738	PK
2		5350.000	60.188	58.677	-13.812	74.000	1.511	PK
3	*	5356.550	66.429	64.856	-7.571	74.000	1.574	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5310MHz Antenna 1	



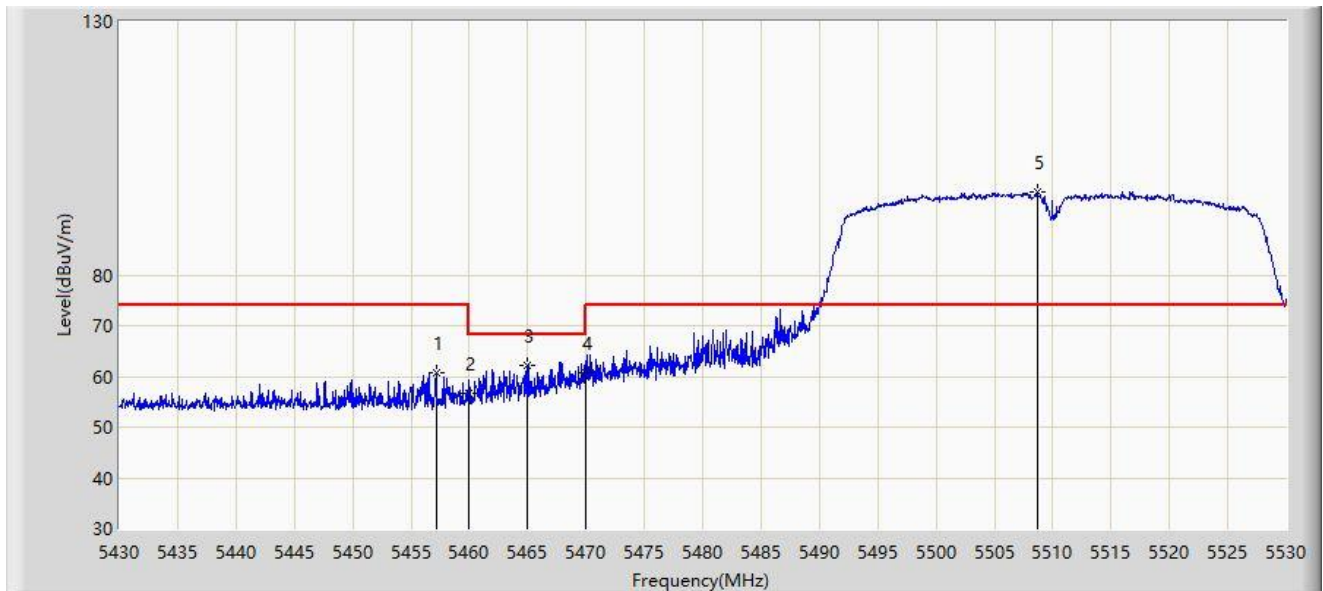
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5315.300	91.889	90.292	N/A	N/A	1.597	AV
2		5350.000	49.886	48.375	-4.114	54.000	1.511	AV
3	*	5350.150	50.372	48.861	-3.628	54.000	1.510	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5510MHz Antenna 1	



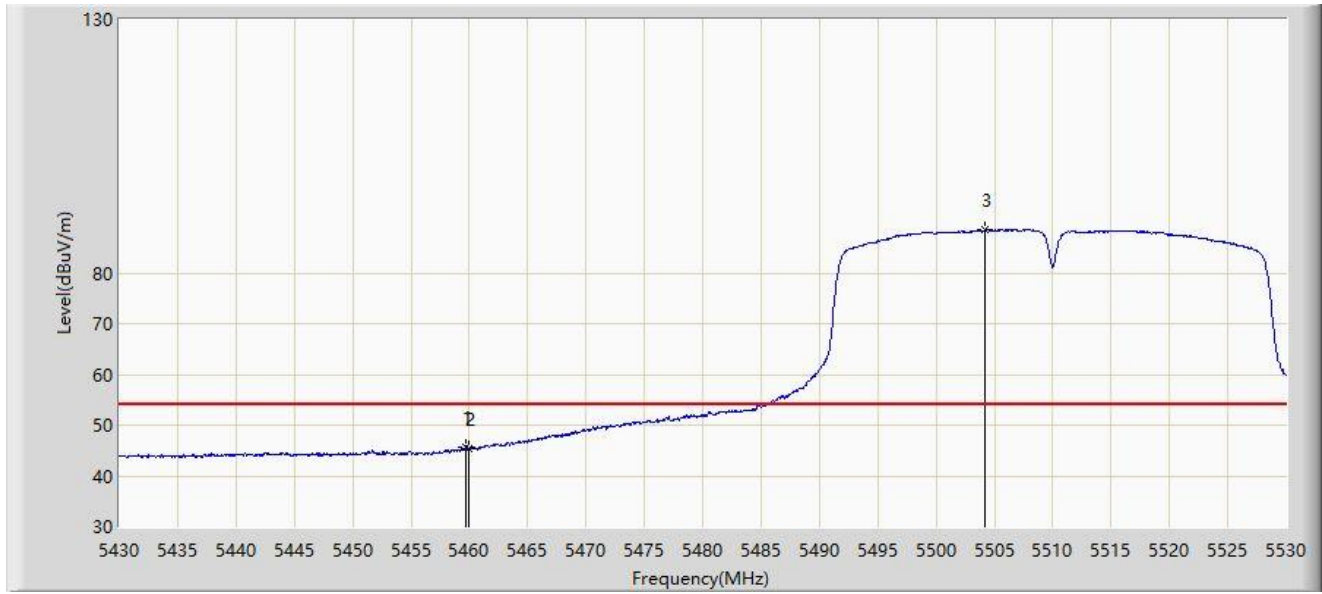
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5457.150	60.682	58.579	-13.318	74.000	2.103	PK
2		5460.000	56.704	54.570	-17.296	74.000	2.134	PK
3	*	5465.000	62.311	60.122	-5.889	68.200	2.189	PK
4		5470.000	60.798	58.554	-7.402	68.200	2.244	PK
5		5508.700	96.496	94.174	N/A	N/A	2.321	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5510MHz Antenna 1	



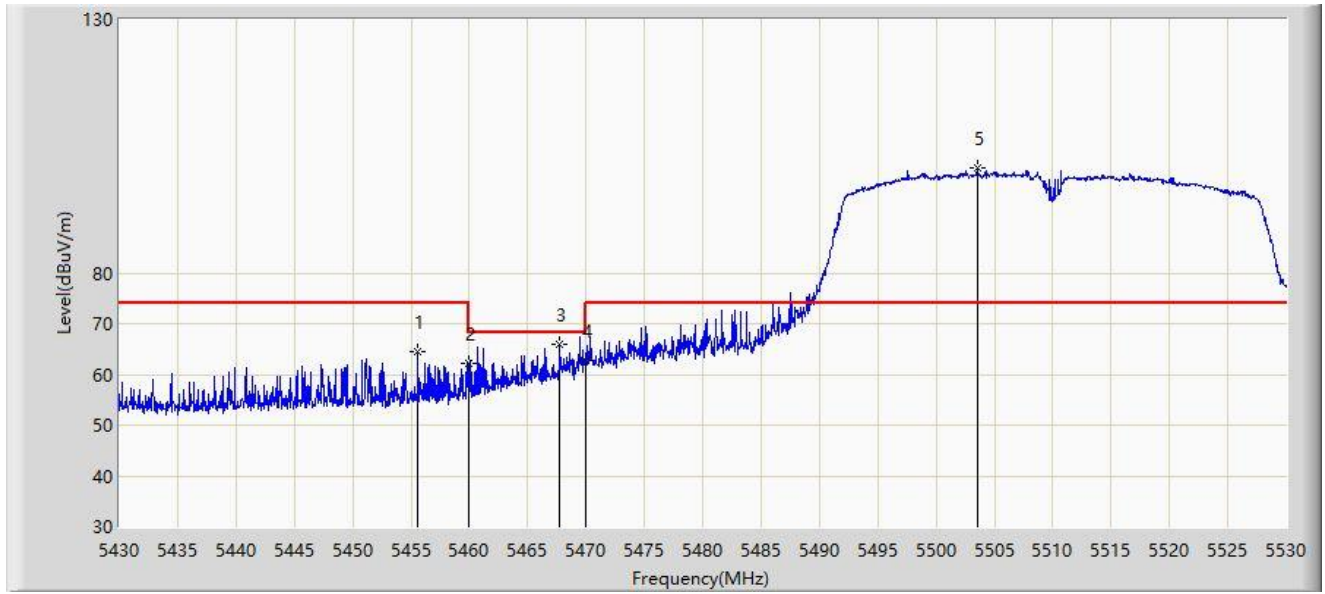
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5459.750	45.579	43.448	-8.421	54.000	2.131	AV
2		5460.000	45.373	43.239	-8.627	54.000	2.134	AV
3		5504.150	88.487	86.037	N/A	N/A	2.451	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5510MHz Antenna 1	



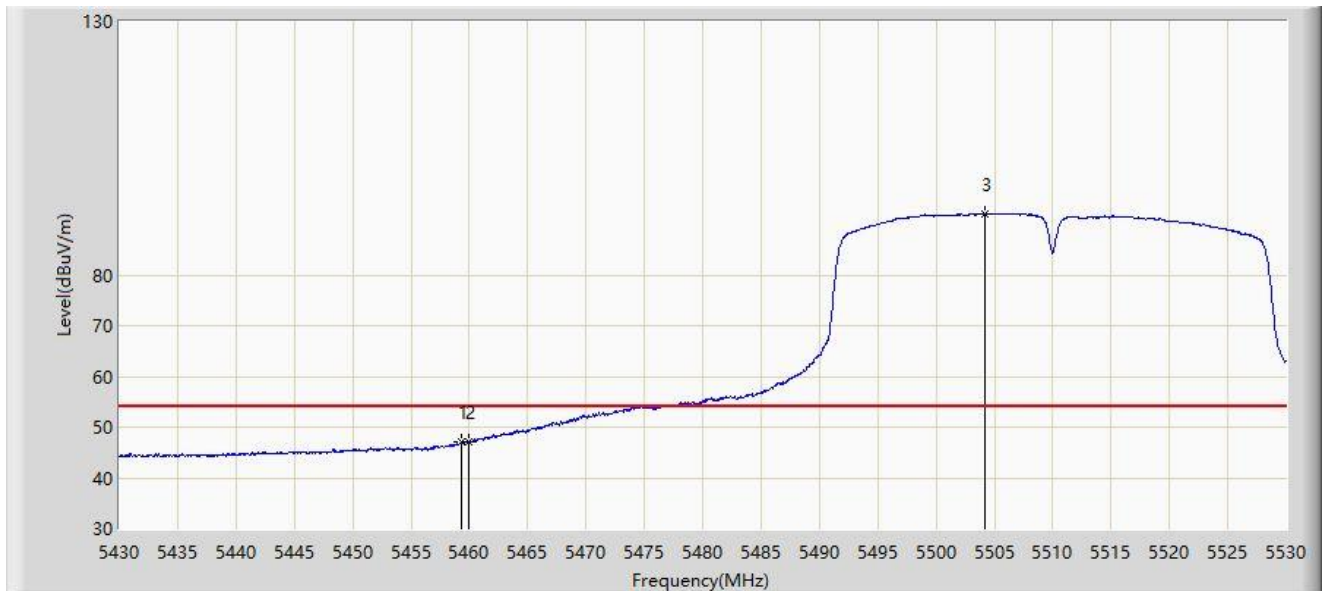
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5455.600	64.626	62.540	-9.374	74.000	2.086	PK
2		5460.000	62.196	60.062	-11.804	74.000	2.134	PK
3	*	5467.750	65.981	63.762	-2.219	68.200	2.220	PK
4		5470.000	62.664	60.420	-5.536	68.200	2.244	PK
5		5503.500	100.630	98.173	N/A	N/A	2.457	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5510MHz Antenna 1	



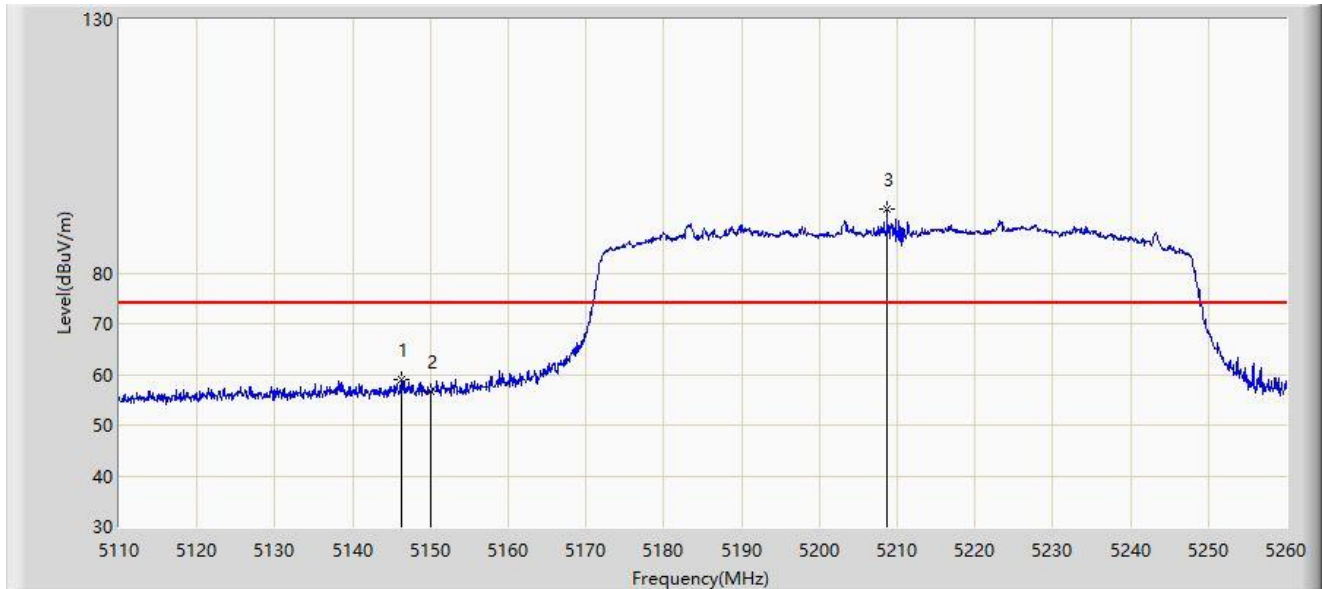
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5459.300	47.060	44.934	-6.940	54.000	2.127	AV
2		5460.000	47.020	44.886	-6.980	54.000	2.134	AV
3		5504.200	92.100	89.650	N/A	N/A	2.450	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5210MHz Antenna 1	



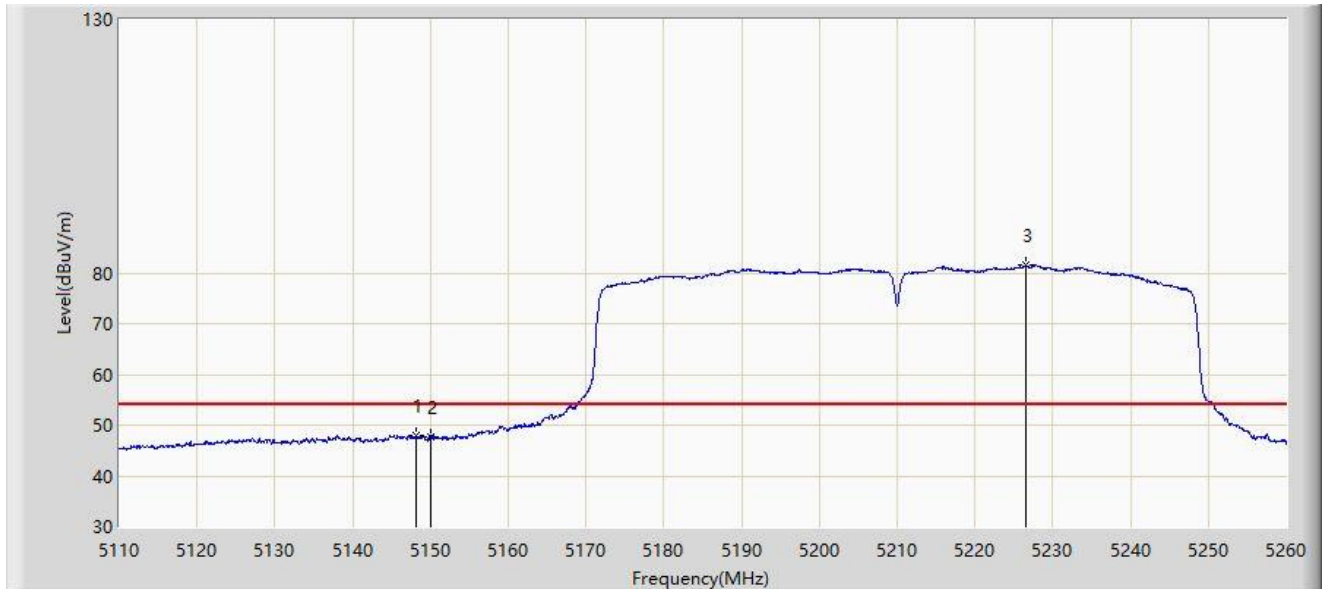
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5146.225	58.870	56.230	-15.130	74.000	2.640	PK
2		5150.000	56.601	53.935	-17.399	74.000	2.665	PK
3		5208.700	92.473	90.372	N/A	N/A	2.101	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5210MHz Antenna 1	



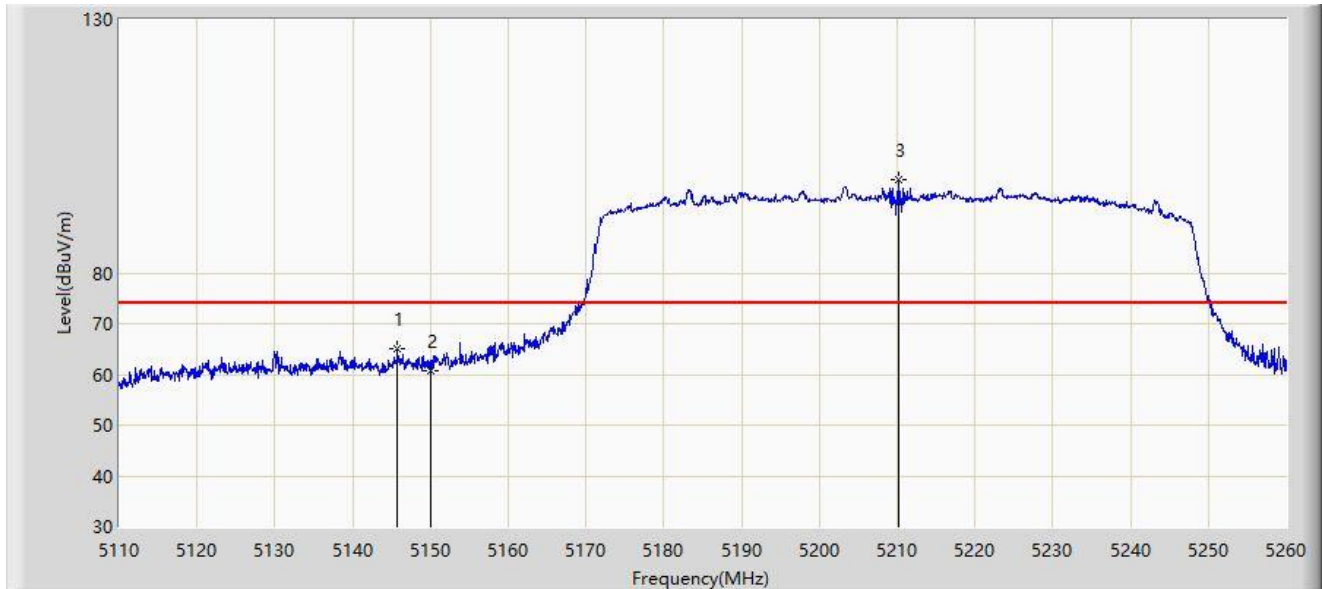
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5148.250	48.100	45.422	-5.900	54.000	2.678	AV
2		5150.000	47.778	45.112	-6.222	54.000	2.665	AV
3		5226.550	81.457	79.264	N/A	N/A	2.194	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5210MHz Antenna 1	



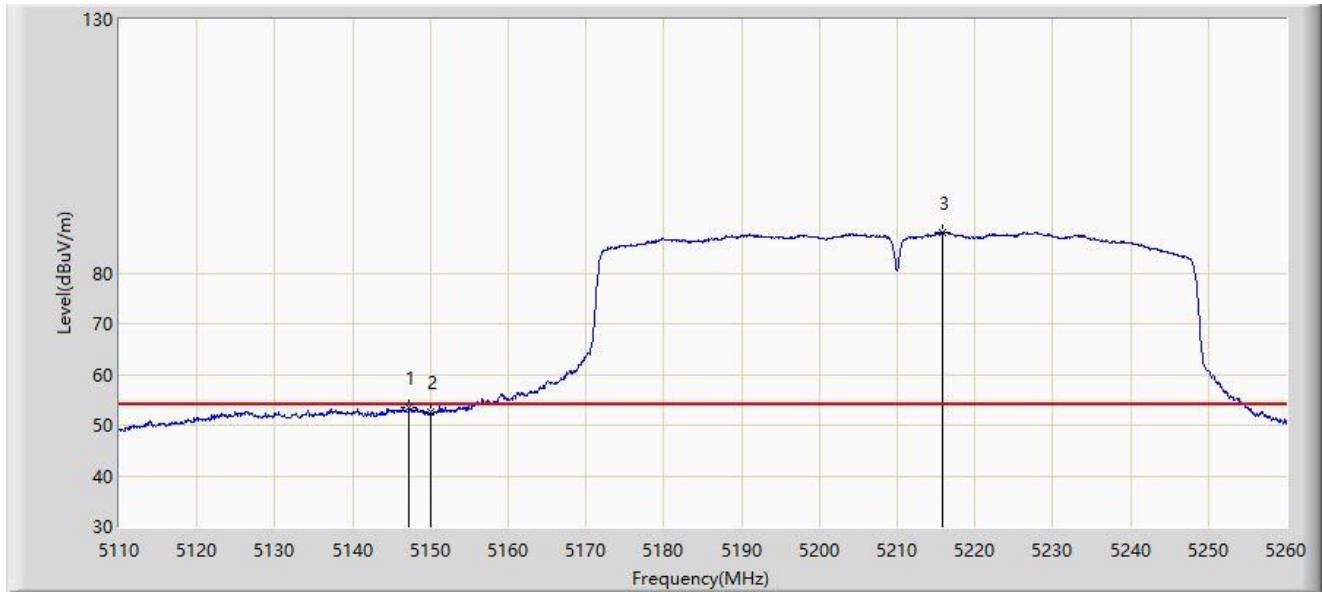
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5145.775	64.985	62.355	-9.015	74.000	2.629	PK
2		5150.000	60.808	58.142	-13.192	74.000	2.665	PK
3		5210.125	98.419	96.281	N/A	N/A	2.138	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5210MHz Antenna 1	



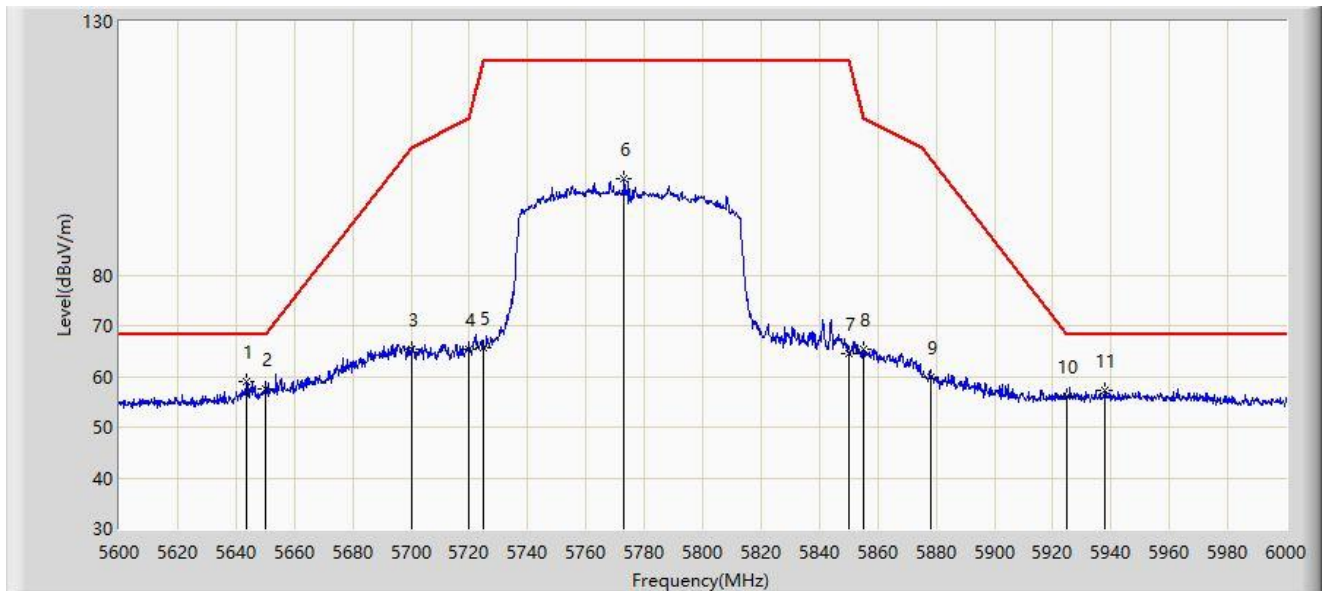
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5147.275	53.368	50.704	-0.632	54.000	2.664	AV
2		5150.000	52.552	49.886	-1.448	54.000	2.665	AV
3		5215.750	88.008	85.725	N/A	N/A	2.283	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.407_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5775MHz Antenna 1	



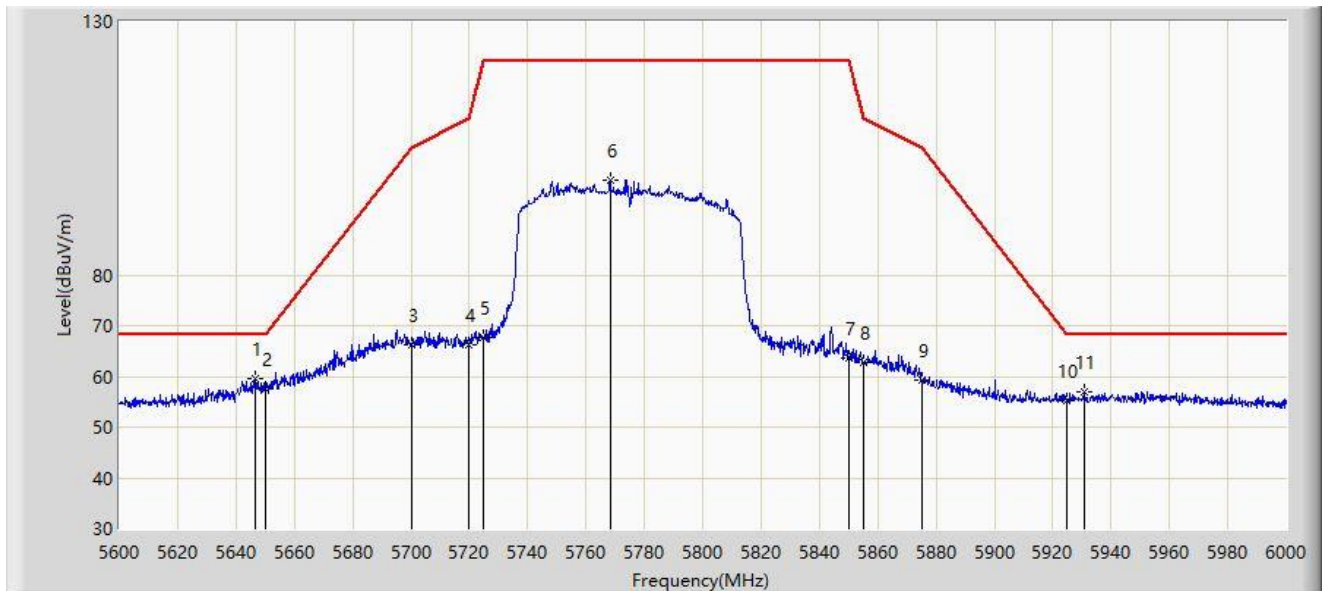
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5643.400	58.850	56.267	-9.350	68.200	2.582	PK
2		5650.000	57.494	54.896	-10.706	68.200	2.598	PK
3		5700.000	65.307	62.409	-39.893	105.200	2.897	PK
4		5720.000	65.300	62.452	-45.500	110.800	2.848	PK
5		5725.000	65.592	62.708	-56.608	122.200	2.884	PK
6		5773.000	98.958	95.840	N/A	N/A	3.118	PK
7		5850.000	64.519	61.181	-57.681	122.200	3.338	PK
8		5855.000	65.281	61.938	-45.519	110.800	3.343	PK
9		5878.000	59.956	56.548	-43.024	102.980	3.409	PK
10		5925.000	56.041	52.311	-12.159	68.200	3.731	PK
11		5937.800	57.188	53.322	-11.012	68.200	3.865	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.407_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5775MHz Antenna 1	



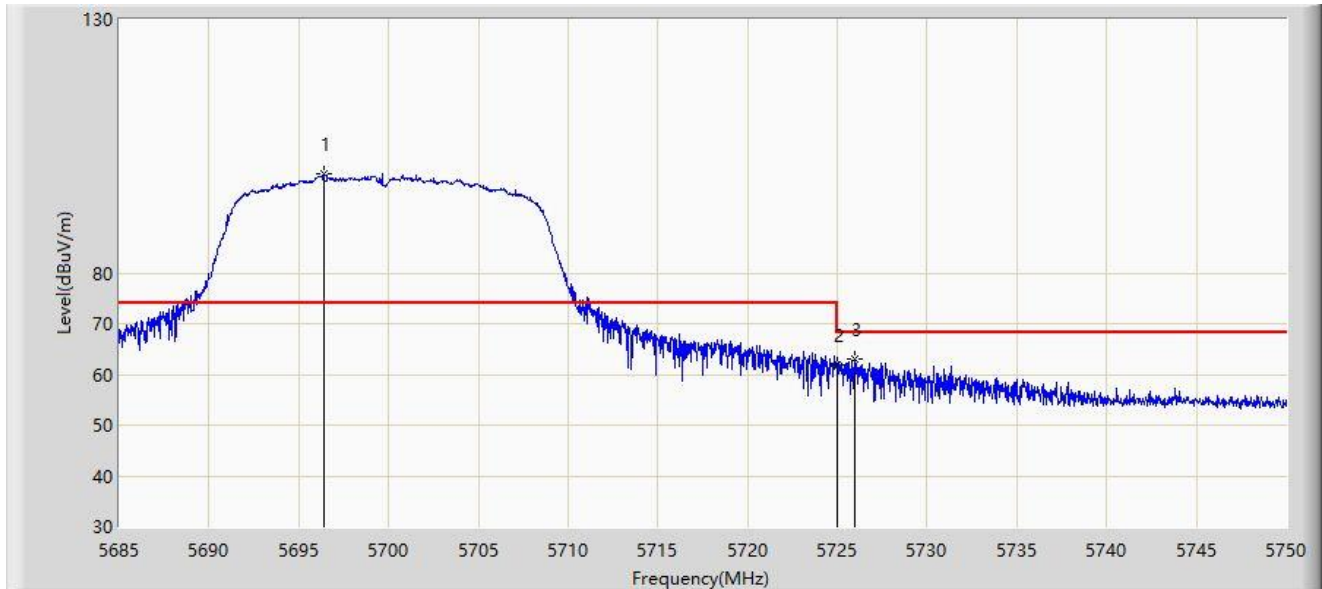
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5646.400	59.522	56.933	-8.678	68.200	2.589	PK
2		5650.000	57.645	55.047	-10.555	68.200	2.598	PK
3		5700.000	66.148	63.250	-39.052	105.200	2.897	PK
4		5720.000	66.315	63.467	-44.485	110.800	2.848	PK
5		5725.000	67.604	64.720	-54.596	122.200	2.884	PK
6		5768.200	98.627	95.471	N/A	N/A	3.157	PK
7		5850.000	63.660	60.322	-58.540	122.200	3.338	PK
8		5855.000	62.706	59.363	-48.094	110.800	3.343	PK
9		5875.000	59.132	55.735	-46.068	105.200	3.397	PK
10		5925.000	55.131	51.401	-13.069	68.200	3.731	PK
11		5930.600	56.841	53.014	-11.359	68.200	3.828	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT20 at 5700MHz Antenna 2	



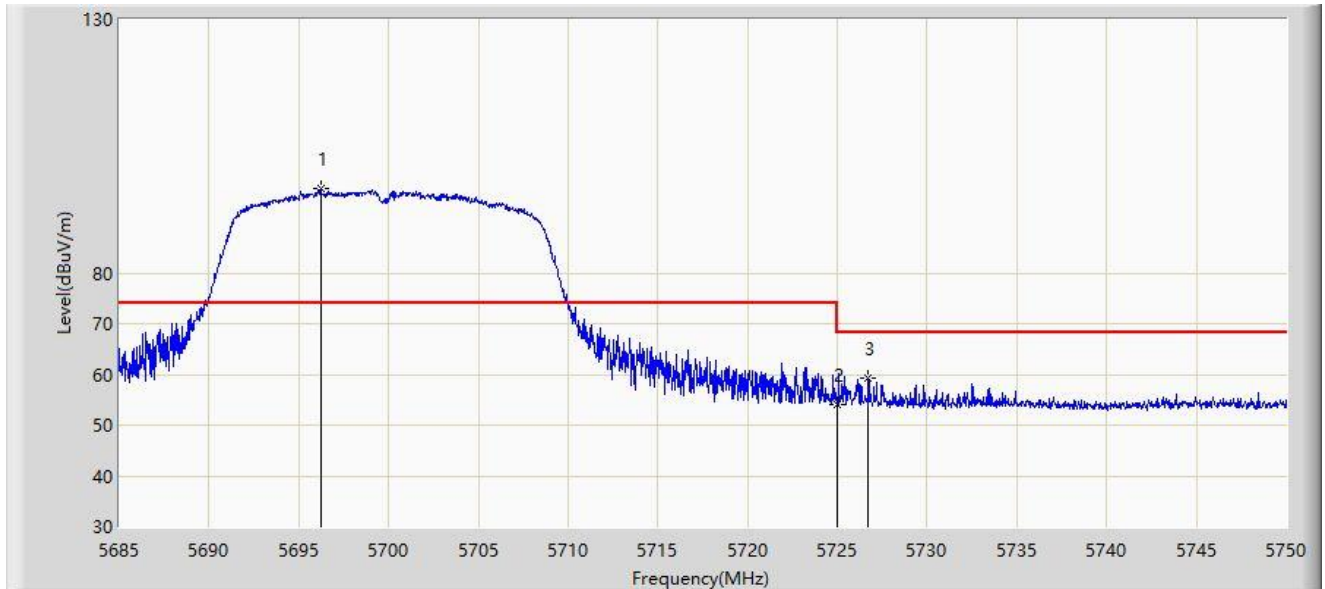
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5696.375	99.517	96.567	N/A	N/A	2.950	PK
2		5725.000	61.894	59.010	-6.306	68.200	2.884	PK
3	*	5725.950	62.936	60.045	-5.264	68.200	2.891	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT20 at 5700MHz Antenna 2	



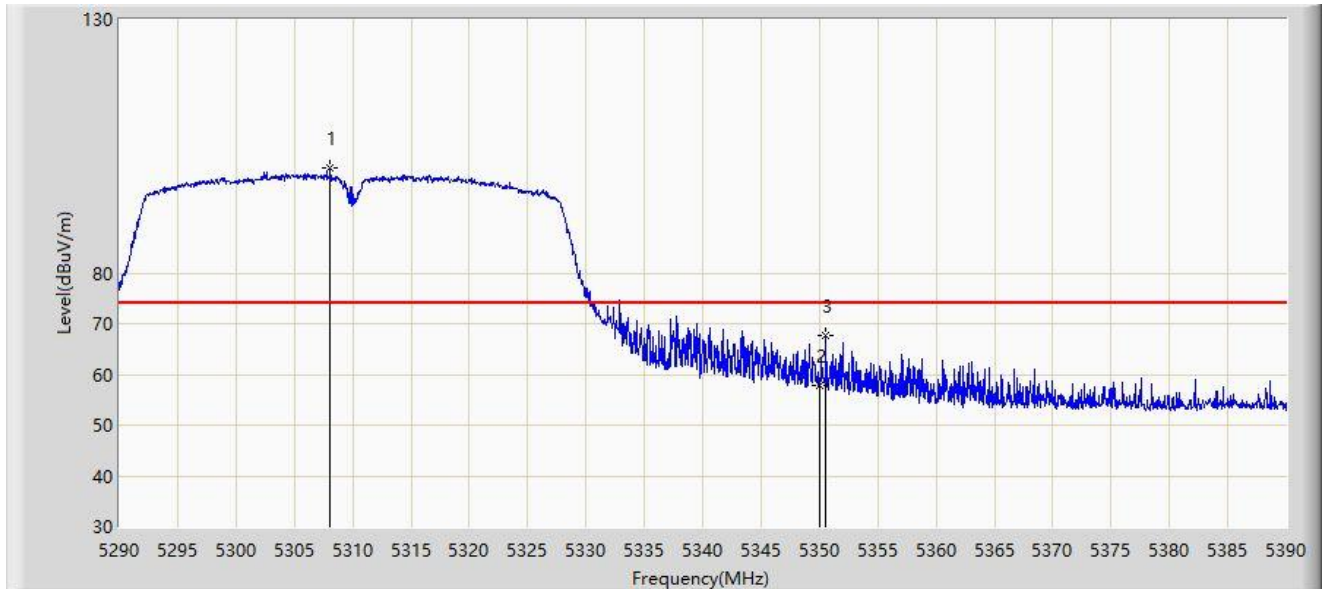
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5696.245	96.557	93.605	N/A	N/A	2.952	PK
2		5725.000	54.142	51.258	-14.058	68.200	2.884	PK
3	*	5726.730	59.152	56.253	-9.048	68.200	2.899	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5310MHz Antenna 2	



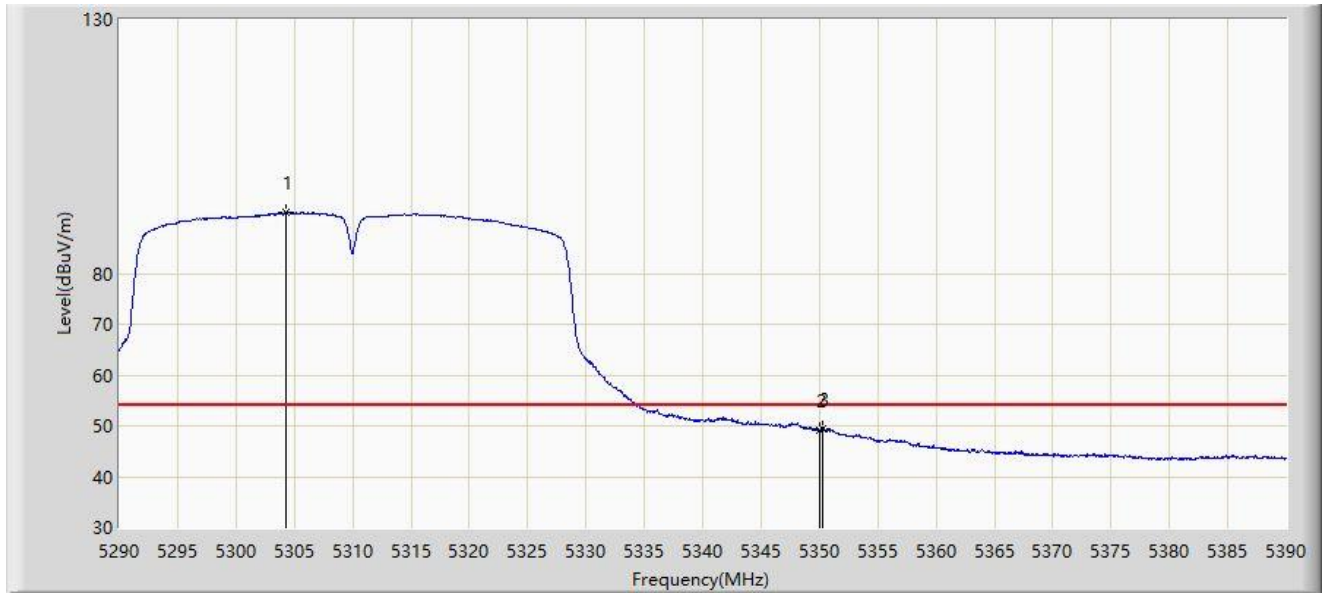
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5308.100	100.581	98.886	N/A	N/A	1.695	PK
2		5350.000	57.695	56.184	-16.305	74.000	1.511	PK
3	*	5350.550	67.656	66.146	-6.344	74.000	1.510	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5310MHz Antenna 2	



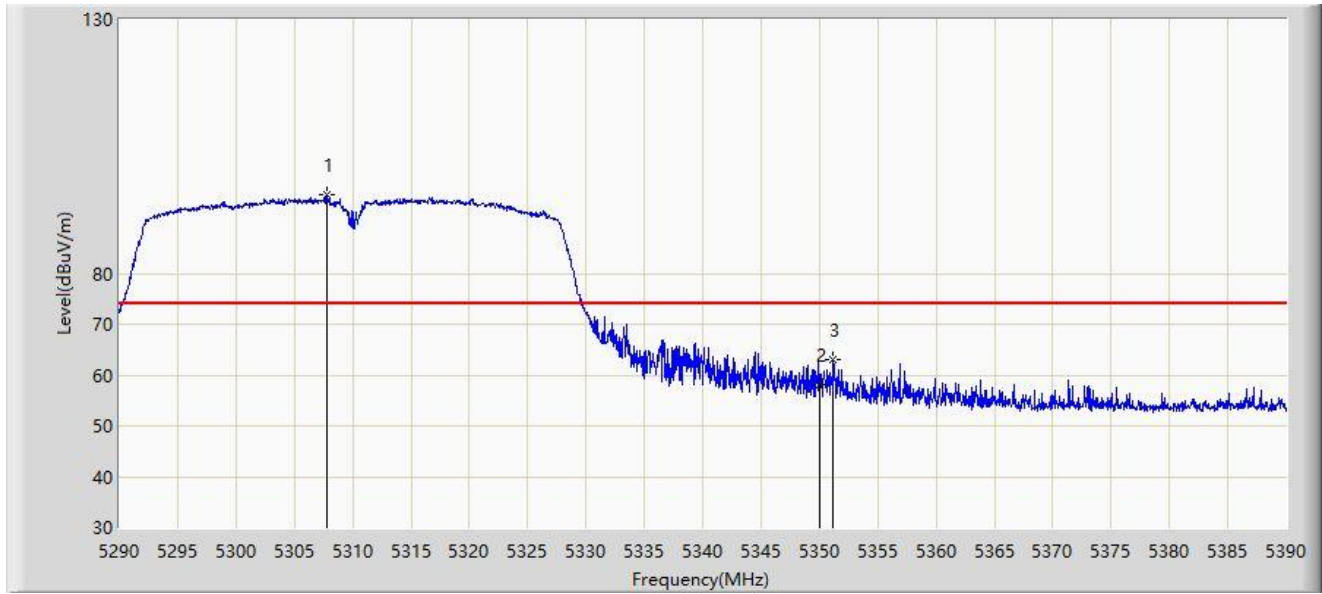
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5304.250	91.965	90.217	N/A	N/A	1.747	AV
2		5350.000	49.253	47.742	-4.747	54.000	1.511	AV
3	*	5350.300	49.363	47.853	-4.637	54.000	1.511	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5310MHz Antenna 2	



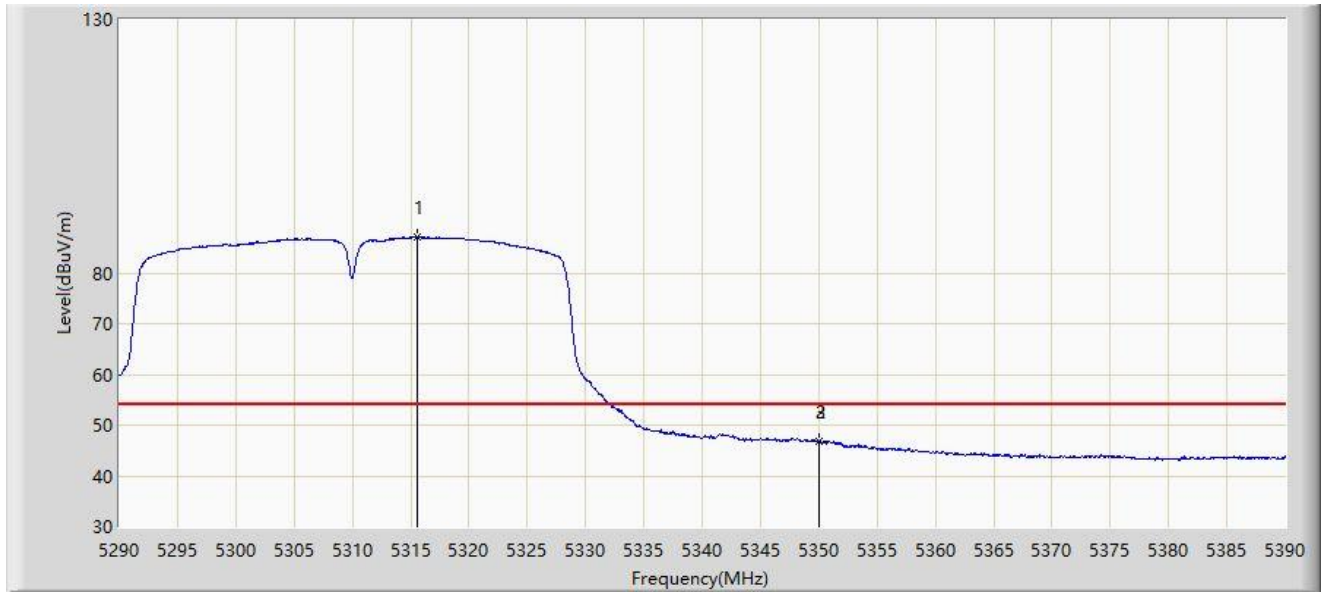
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5307.800	95.364	93.665	N/A	N/A	1.700	PK
2		5350.000	58.118	56.607	-15.882	74.000	1.511	PK
3	*	5351.150	63.163	61.654	-10.837	74.000	1.510	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5310MHz Antenna 2	



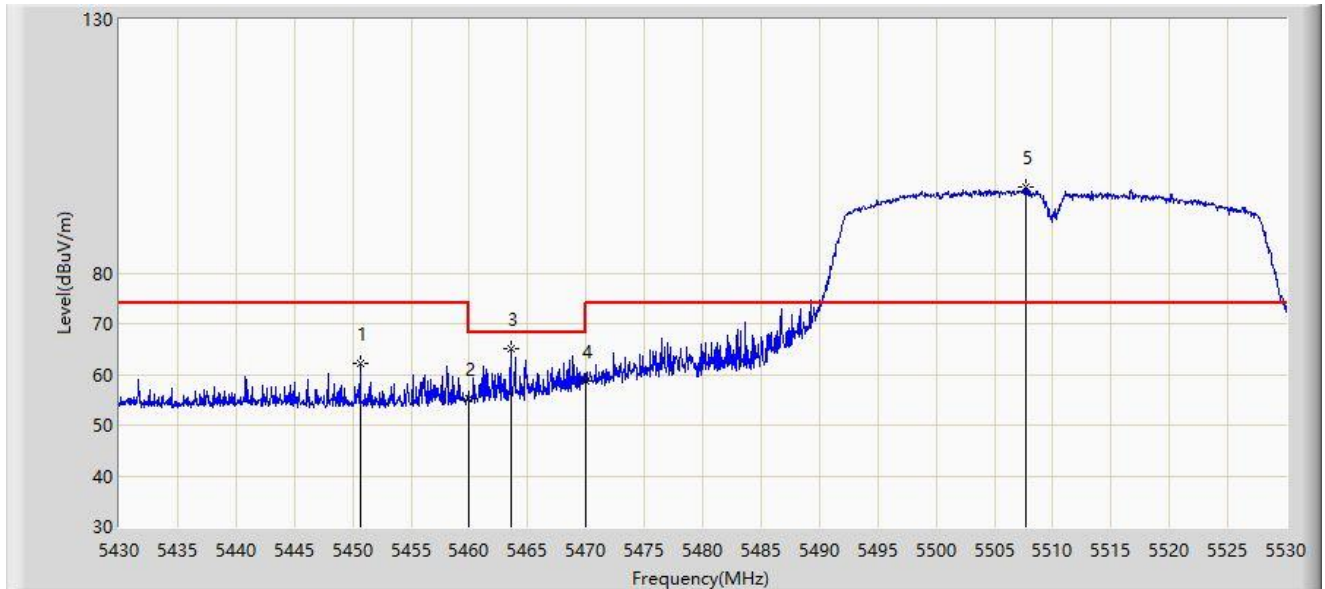
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5315.550	87.108	85.515	N/A	N/A	1.593	AV
2		5350.000	46.838	45.327	-7.162	54.000	1.511	AV
3	*	5350.050	46.901	45.390	-7.099	54.000	1.510	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5510MHz Antenna 2	



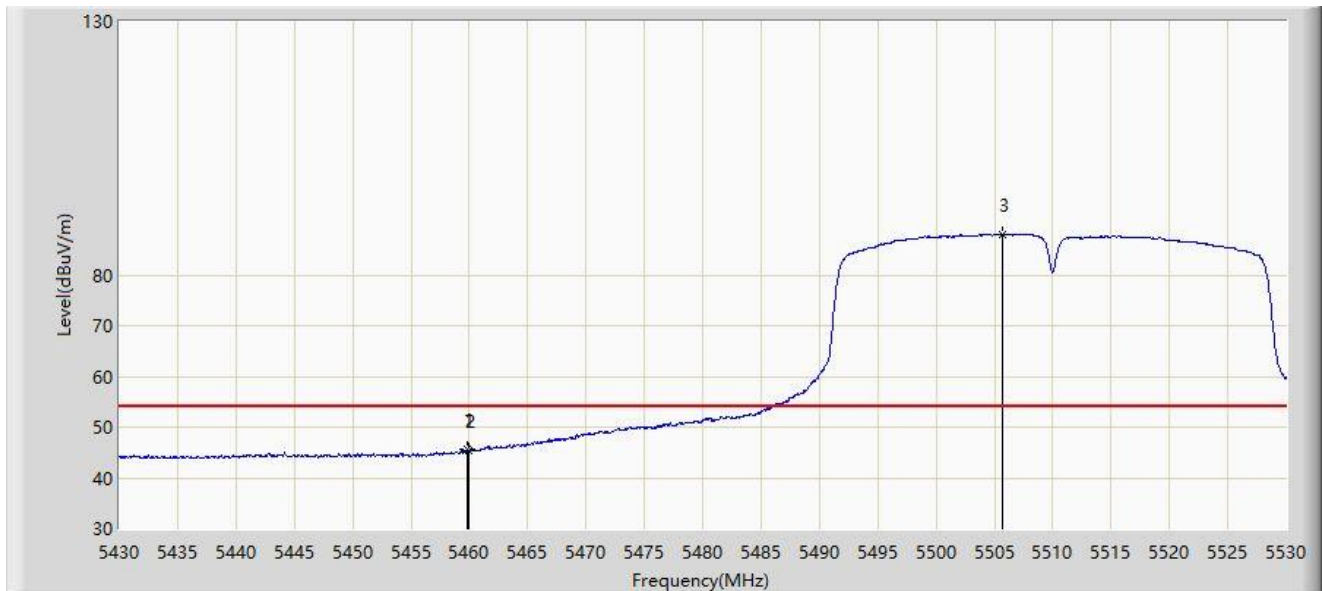
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		5450.650	62.094	59.975	-11.906	74.000	2.119	PK
2		5460.000	55.246	53.112	-18.754	74.000	2.134	PK
3	*	5463.550	64.967	62.794	-3.233	68.200	2.173	PK
4		5470.000	58.829	56.585	-9.371	68.200	2.244	PK
5		5507.750	96.913	94.561	N/A	N/A	2.351	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5510MHz Antenna 2	



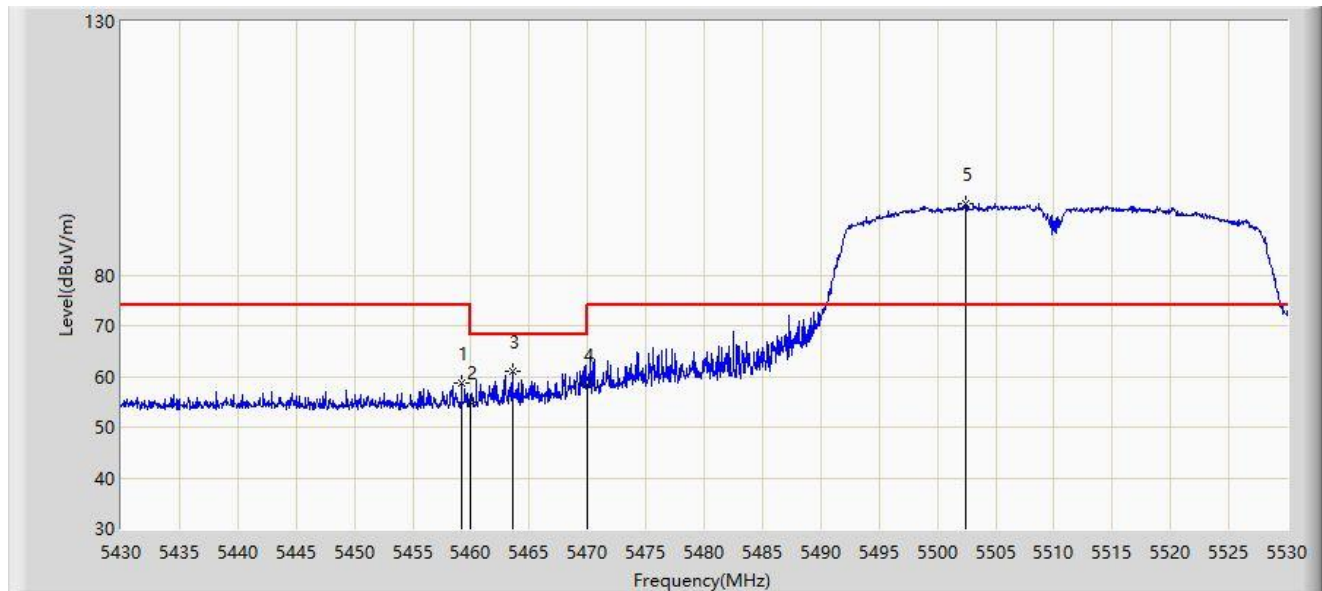
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5459.850	45.551	43.419	-8.449	54.000	2.133	AV
2		5460.000	45.268	43.134	-8.732	54.000	2.134	AV
3		5505.650	88.070	85.650	N/A	N/A	2.419	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5510MHz Antenna 2	



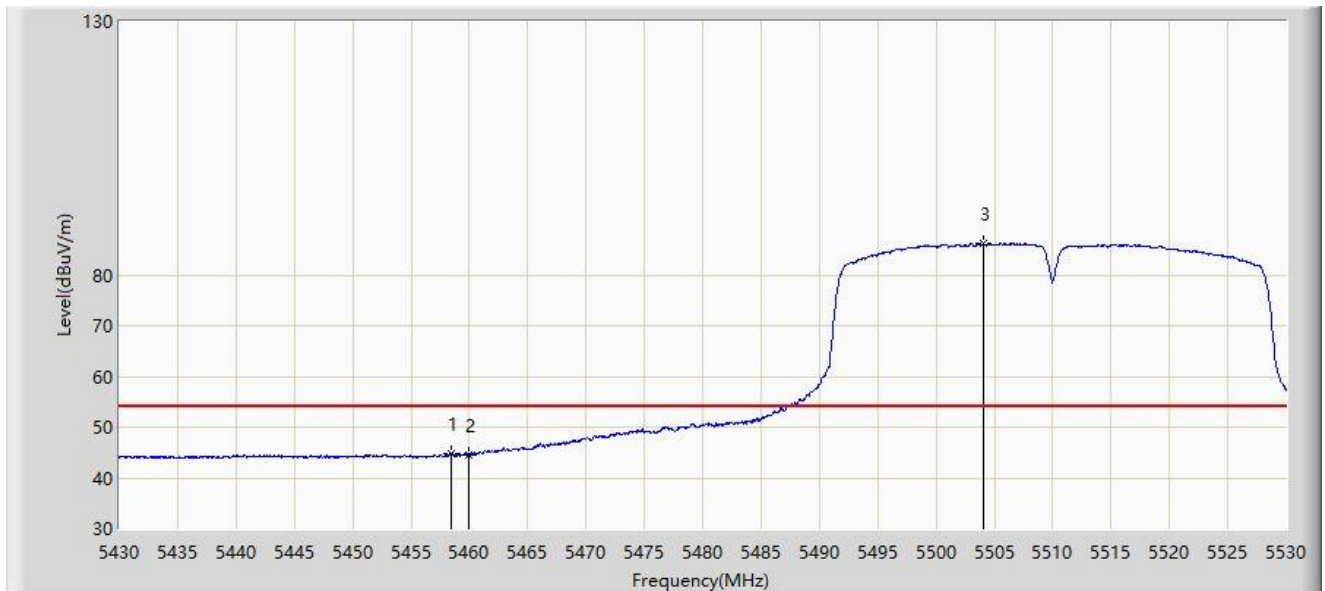
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5459.200	58.566	56.441	-15.434	74.000	2.125	PK
2		5460.000	54.783	52.649	-19.217	74.000	2.134	PK
3	*	5463.550	60.945	58.772	-7.255	68.200	2.173	PK
4		5470.000	58.510	56.266	-9.690	68.200	2.244	PK
5		5502.400	94.107	91.637	N/A	N/A	2.470	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT40 at 5510MHz Antenna 2	



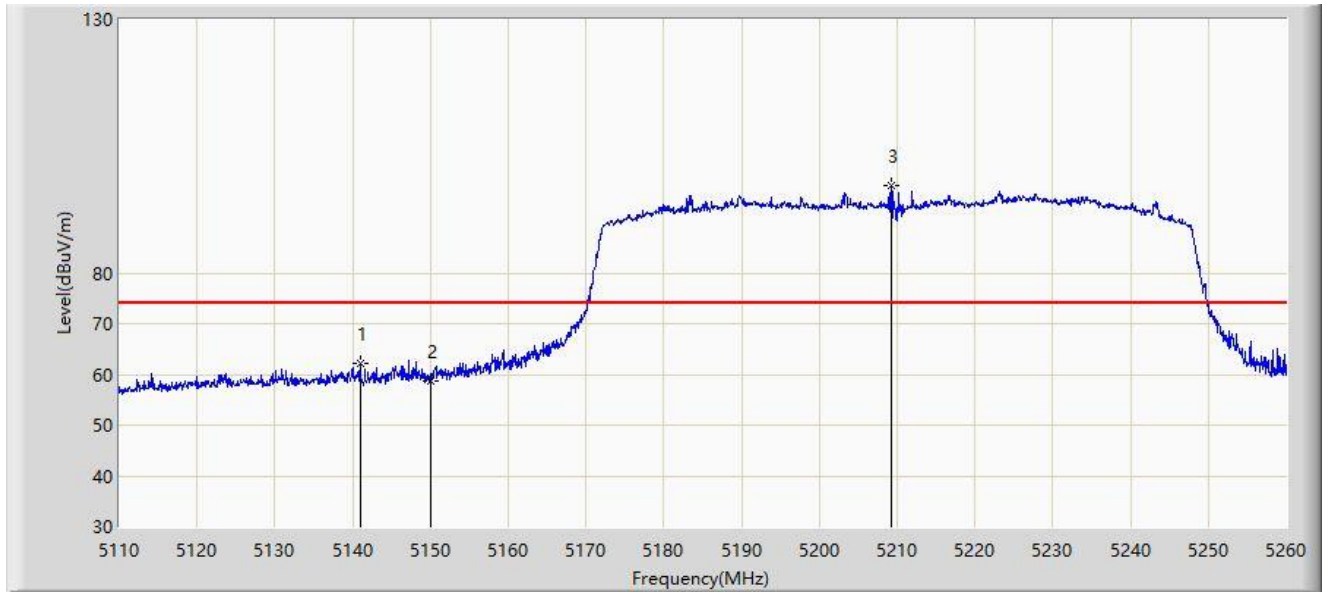
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5458.450	44.917	42.800	-9.083	54.000	2.117	AV
2		5460.000	44.545	42.411	-9.455	54.000	2.134	AV
3		5504.100	86.211	83.760	N/A	N/A	2.451	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5210MHz Antenna 2	



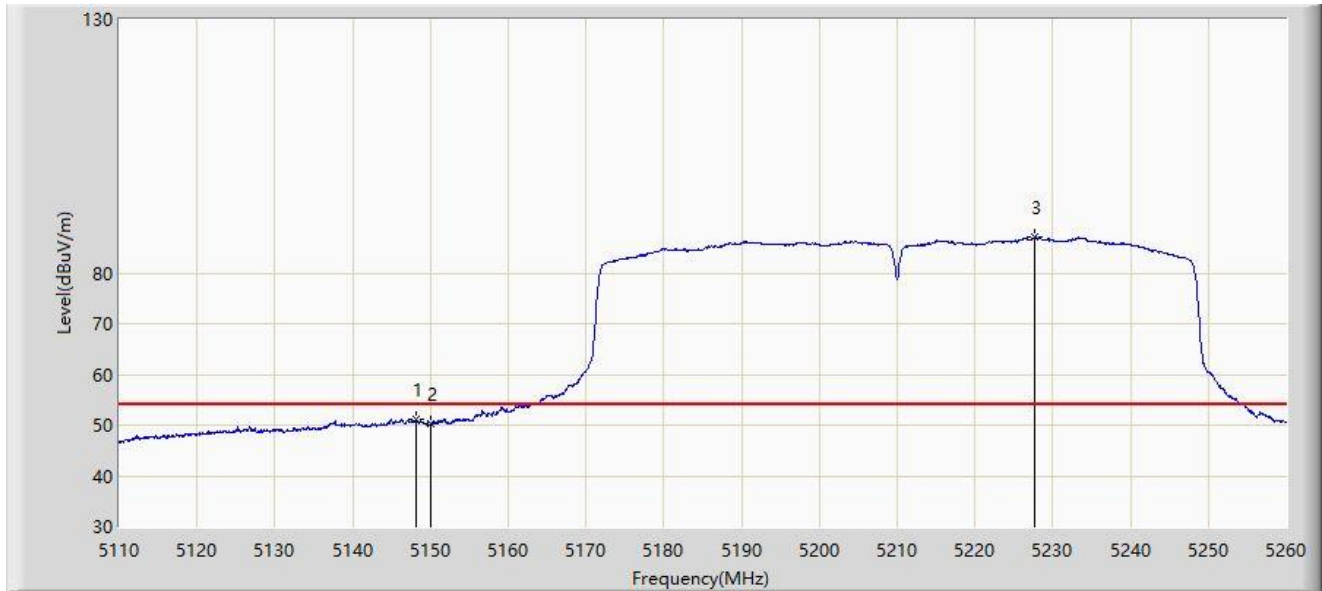
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5140.975	62.217	59.696	-11.783	74.000	2.521	PK
2		5150.000	58.661	55.995	-15.339	74.000	2.665	PK
3		5209.300	97.104	94.988	N/A	N/A	2.117	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5210MHz Antenna 2	



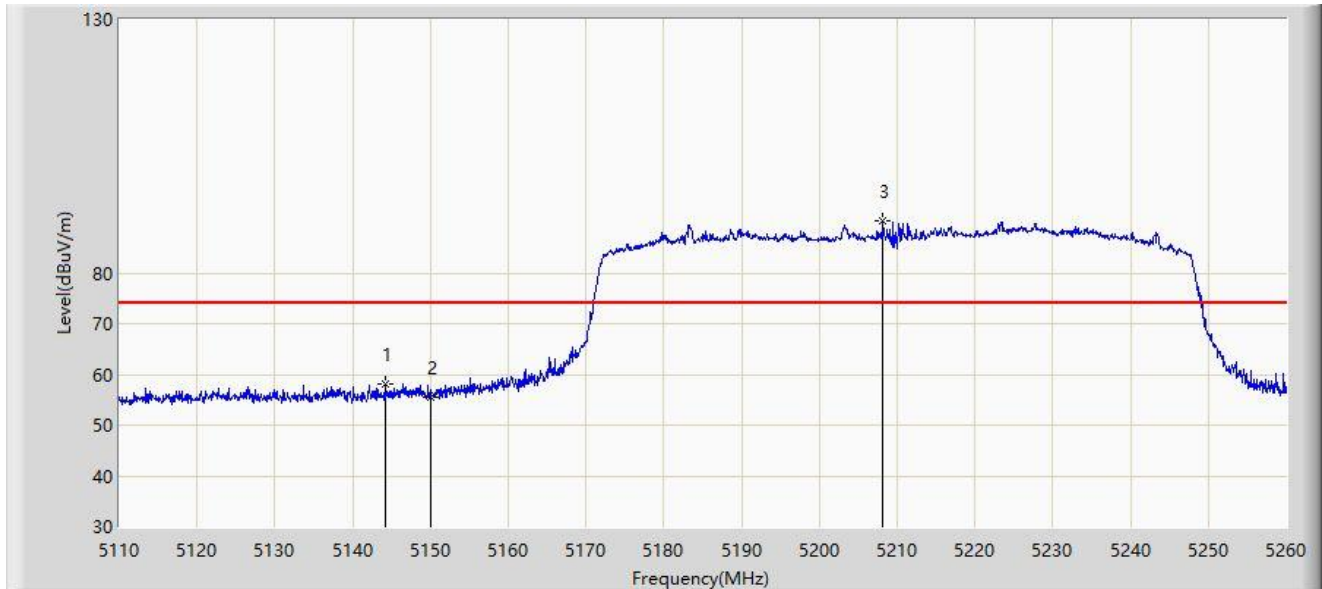
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5148.100	51.297	48.618	-2.703	54.000	2.680	AV
2		5150.000	50.253	47.587	-3.747	54.000	2.665	AV
3		5227.675	87.043	84.860	N/A	N/A	2.183	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5210MHz Antenna 2	



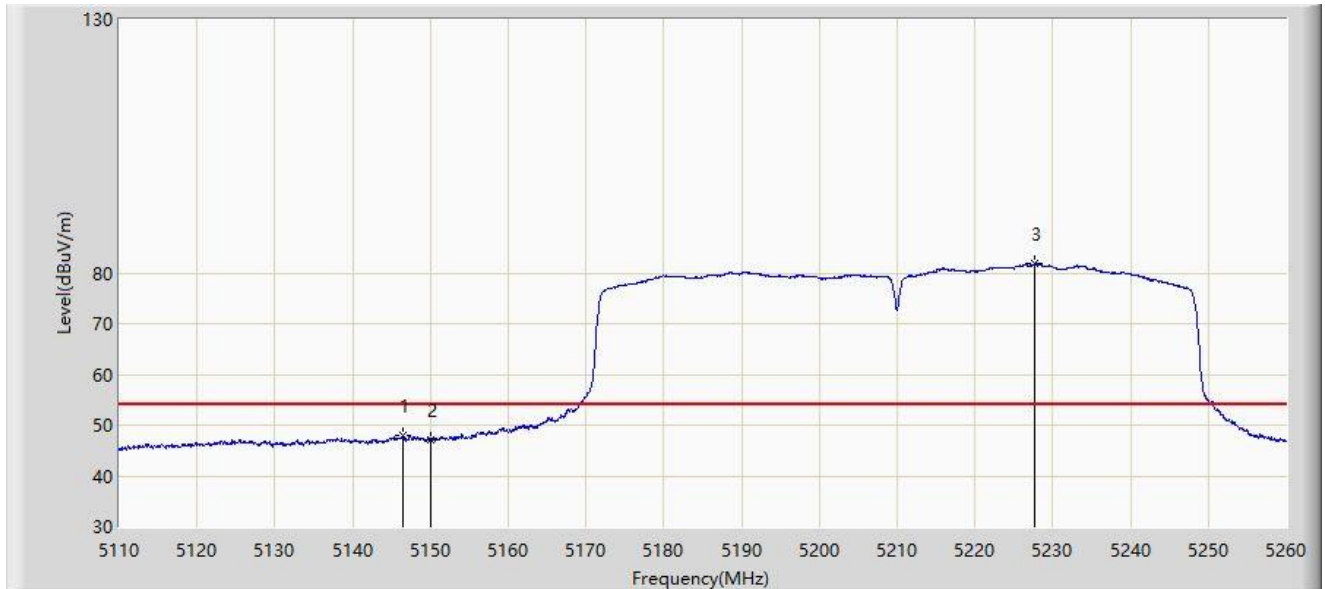
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5144.125	57.987	55.395	-16.013	74.000	2.592	PK
2		5150.000	55.518	52.852	-18.482	74.000	2.665	PK
3		5208.175	90.210	88.123	N/A	N/A	2.088	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.209_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5210MHz Antenna 2	



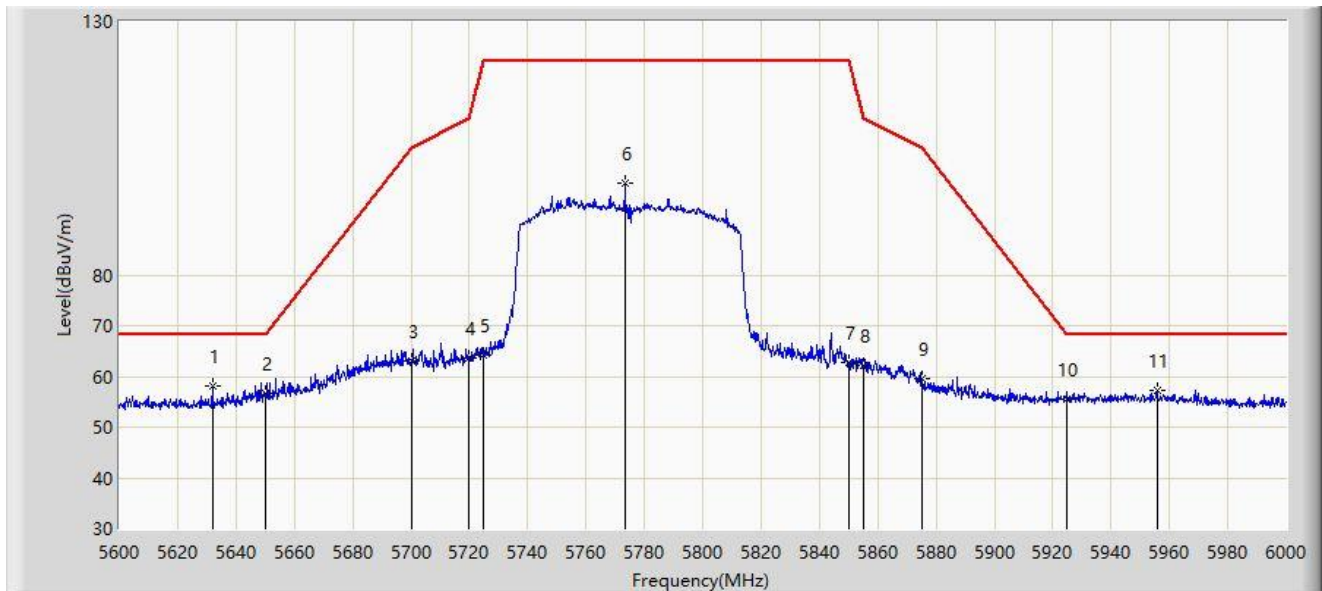
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5146.525	47.867	45.220	-6.133	54.000	2.647	AV
2		5150.000	47.205	44.539	-6.795	54.000	2.665	AV
3		5227.600	81.777	79.593	N/A	N/A	2.183	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.407_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5775MHz Antenna 2	



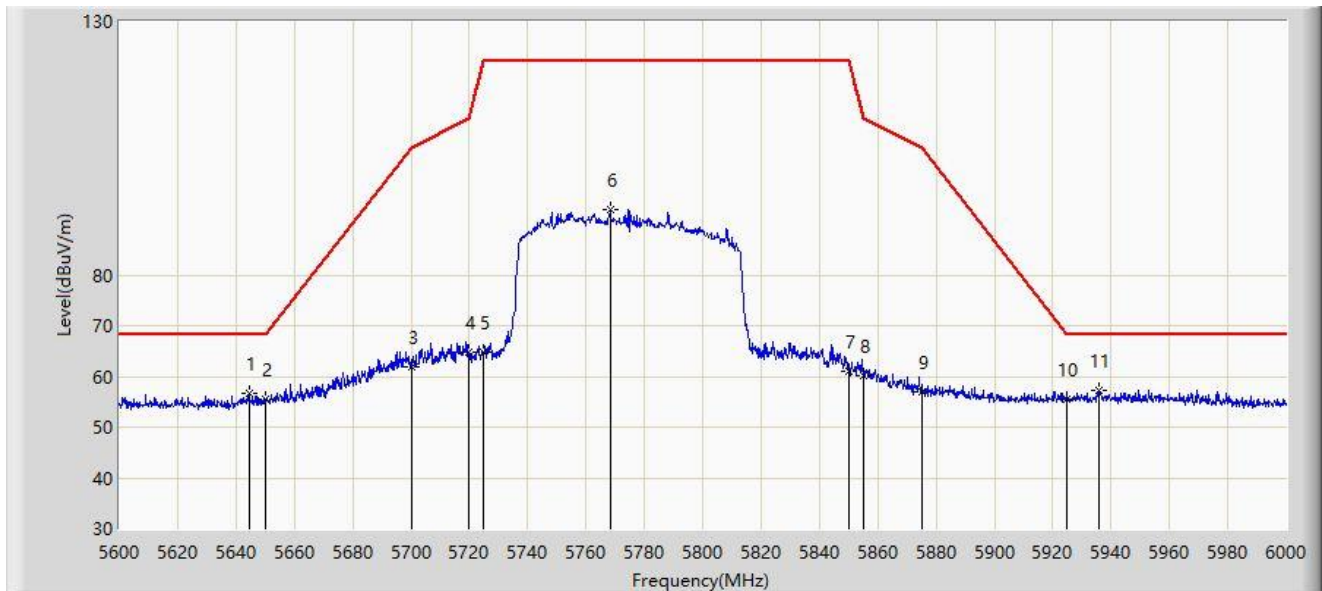
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5632.000	57.985	55.490	-10.215	68.200	2.494	PK
2		5650.000	56.707	54.109	-11.493	68.200	2.598	PK
3		5700.000	62.994	60.096	-42.206	105.200	2.897	PK
4		5720.000	63.699	60.851	-47.101	110.800	2.848	PK
5		5725.000	64.257	61.373	-57.943	122.200	2.884	PK
6		5773.400	98.018	94.903	N/A	N/A	3.114	PK
7		5850.000	62.691	59.353	-59.509	122.200	3.338	PK
8		5855.000	62.289	58.946	-48.511	110.800	3.343	PK
9		5875.000	59.629	56.232	-45.571	105.200	3.397	PK
10		5925.000	55.613	51.883	-12.587	68.200	3.731	PK
11		5955.800	57.269	53.433	-10.931	68.200	3.836	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: NS-AC1	Test Date: 2022/08/26
Limit: FCC_Part 15.407_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Thermal Printer	Power: By Battery
Test Mode: Transmit by 802.11ac-VHT80 at 5775MHz Antenna 2	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5644.400	56.656	54.071	-11.544	68.200	2.585	PK
2		5650.000	55.600	53.002	-12.600	68.200	2.598	PK
3		5700.000	61.988	59.090	-43.212	105.200	2.897	PK
4		5720.000	64.852	62.004	-45.948	110.800	2.848	PK
5		5725.000	64.857	61.973	-57.343	122.200	2.884	PK
6		5768.200	92.984	89.828	N/A	N/A	3.157	PK
7		5850.000	61.036	57.698	-61.164	122.200	3.338	PK
8		5855.000	60.039	56.696	-50.761	110.800	3.343	PK
9		5875.000	56.911	53.514	-48.289	105.200	3.397	PK
10		5925.000	55.591	51.861	-12.609	68.200	3.731	PK
11	*	5935.600	57.234	53.380	-10.966	68.200	3.853	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Appendix B – Test Setup Photograph

Refer to “2208RSU021-UT” file.

Appendix C – EUT Photograph

Refer to “2208RSU021-UE” file.

The End
