



# FCC RADIO TEST REPORT

**FCC ID** : HD5-CT30PL0N  
**Equipment** : Mobile computer  
**Brand Name** : Honeywell  
**Model Name** : CT30PL0N  
**Applicant** : Honeywell International Inc.  
9680 Old Bailes Road, Fort Mill, SC  
29707 USA  
**Manufacturer** : Honeywell International Inc.  
9680 Old Bailes Road, Fort Mill, SC  
29707 USA  
**Standard** : FCC Part 15 Subpart C §15.247

The product was received on Oct. 26, 2022 and testing was performed from Nov. 08, 2022 to Nov. 29, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

**Sporton International Inc. Wensan Laboratory**

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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### Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.247(a)(2)	6dB Bandwidth	Not Required	-
-	2.1049	99% Occupied Bandwidth	Not Required	-
-	15.247(b)	Power Output Measurement	Pass	-
3.1	15.247(e)	Power Spectral Density	Not Required	-
-	15.247(d)	Conducted Band Edges	Not Required	-
		Conducted Spurious Emission	Not Required	-
3.2	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	2.07 dB under the limit at 2389.800 MHz
-	15.207	AC Conducted Emission	Not Required	-
3.3	15.203	Antenna Requirement	Pass	-

**Note:**

1. Not required means after assessing, test items are not necessary to carry out.
2. This is a variant report by changing NFC antenna. All the test cases were performed on original report which can be referred to Sporton Report Number FR1N0506C. Based on the original report, only worst case was verified.

**Declaration of Conformity:**

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Uncertainty of Evaluation".

**Comments and Explanations:**

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

**Reviewed by: Wei Chen**

**Report Producer: Dewi Huang**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac, Wi-Fi 5GHz 802.11a/n/ac and NFC.

Product Feature	
Sample 1	with Scanner (S0703)
Sample 2	Non Scanner
HW Version	v1.0
SW Version	OS.11.001
Antenna Type	WLAN5GHz <Ant. 1>: PIFA Antenna WLAN2.4GHz <Ant. 2>: PIFA Antenna Bluetooth: PIFA Antenna NFC: Loop Antenna

Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	2.5

**Remark:**

1. The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.
2. Internal tracking board version is DVT2(NFC) and SW PN is 311.C0.00.1069-G-DEBUG

## 1.2 Modification of EUT

No modifications made to the EUT during the testing.



### 1.3 Testing Location

<b>Test Site</b>	Sporton International Inc. Wensan Laboratory
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sporton Site No.</b> TH05-HY, 03CH13-HY

**Note:** The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW3786

### 1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02
- ♦ ANSI C63.10-2013

**Remark:**

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.



## 2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (1 GHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and only the worst case emissions were reported in this report.

### 2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		



## 2.2 Test Mode

The final test modes include the worst data rates for each modulation shown in the table below.

### Single Antenna

Modulation	Data Rate
802.11n HT40	MCS0

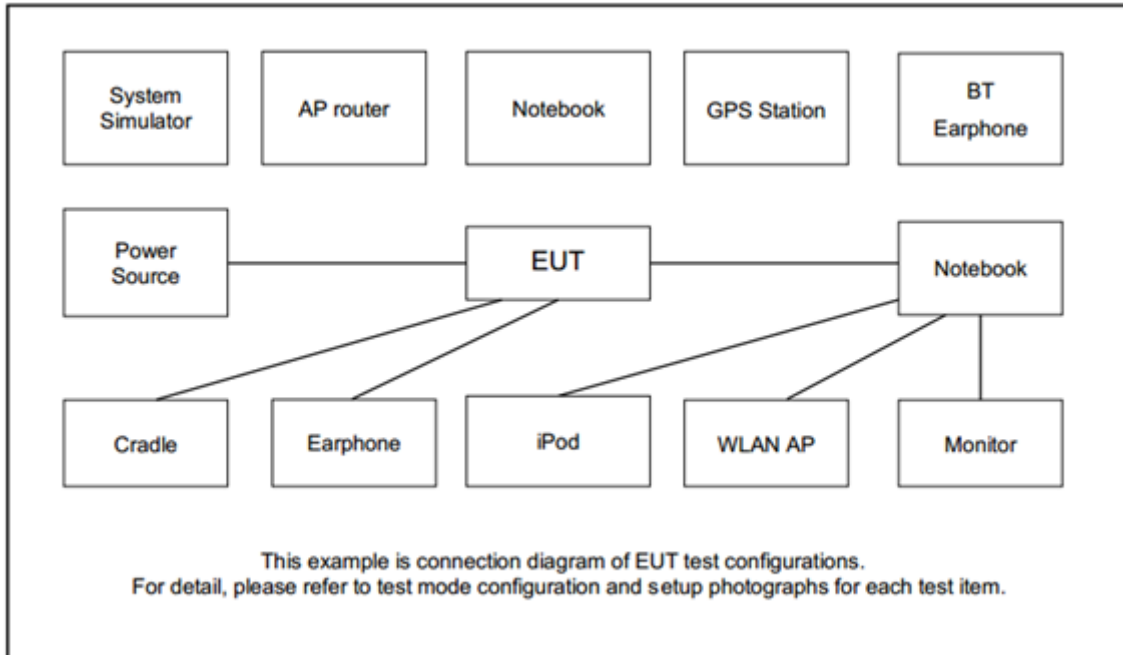
Ch. #	2400-2483.5 MHz
	802.11n HT40
Low	03
Middle	-
High	-

**Remark:**

1. For Radiated Test Cases, the tests were performed with Sample 1.
2. Only radiated measurements are used to show compliance with FCC limits for fundamental and spurious emissions.



### 2.3 Connection Diagram of Test System



### 2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	Acer	N18Q13	PD9AX201NG	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

### 2.5 EUT Operation Test Setup

The RF test items, utility “QRCT Version 4.0.00158.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

### 3 Test Result

#### 3.1 Output Power Measurement

##### 3.1.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5 MHz, the limit for output power is 30 dBm. If transmitting antenna with directional gain greater than 6 dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

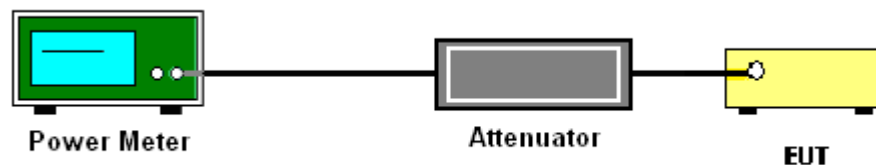
##### 3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

##### 3.1.3 Test Procedures

1. For Average Power, the testing follows ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G
2. The RF output of EUT is connected to the power meter by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Measure the conducted output power and record the results in the test report.

##### 3.1.4 Test Setup



##### 3.1.5 Test Result of Peak Output Power

Please refer to Appendix A.



### 3.2 Radiated Band Edges and Spurious Emission Measurement

#### 3.2.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device is measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

#### 3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

#### 3.2.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT is placed on a turntable with 1.5 meter for frequency above 1 GHz respectively above ground.
4. The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

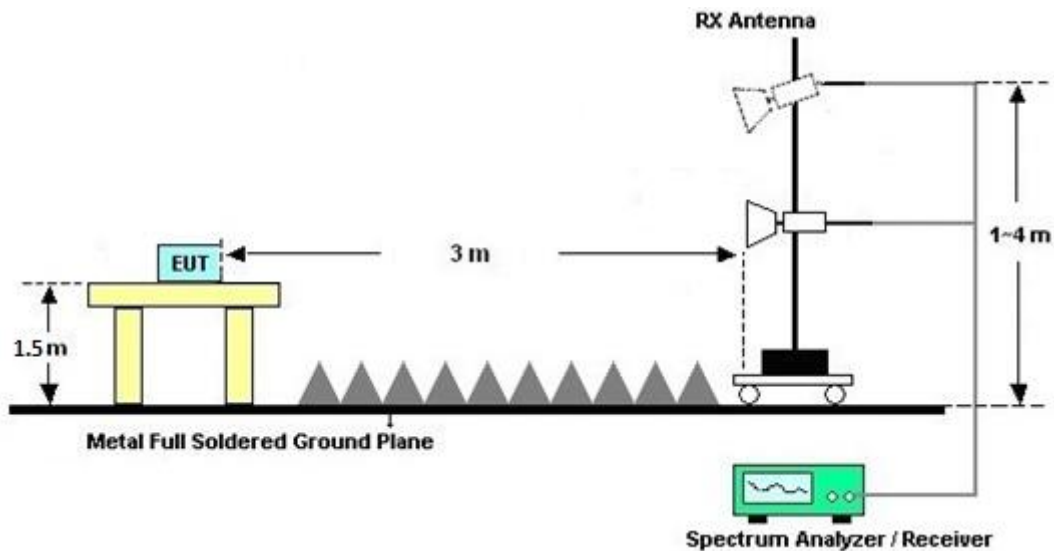
6. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-“.
7. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW = 100 kHz for  $f < 1$  GHz; VBW  $\geq$  RBW; Sweep = auto; Detector function = peak; Trace = max hold;
  - (3) Set RBW = 1 MHz, VBW= 3 MHz for  $f \geq 1$  GHz for peak measurement.

For average measurement:

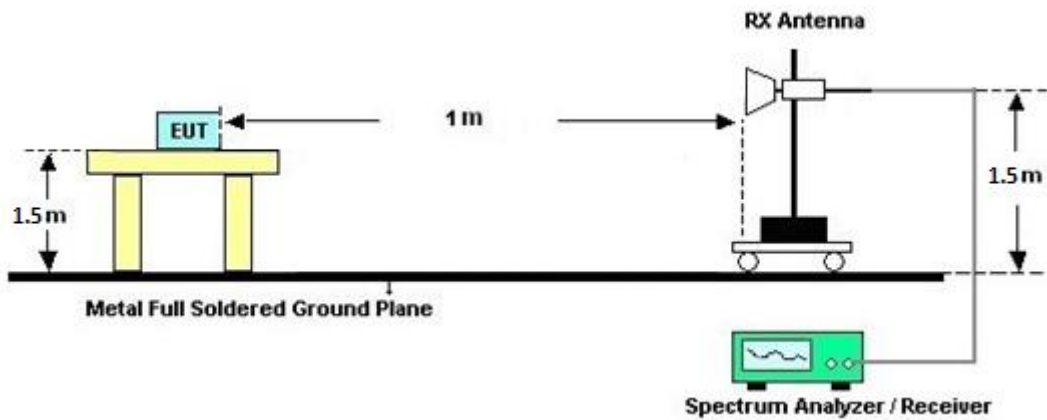
  - VBW = 10 Hz, when duty cycle is no less than 98 percent.
  - VBW  $\geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

### 3.2.4 Test Setup

For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



### 3.2.5 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

### 3.2.6 Duty Cycle

Please refer to Appendix D.

### 3.2.7 Test Result of Radiated Spurious Emission

Please refer to Appendix B and C.



### **3.3 Antenna Requirements**

#### **3.3.1 Standard Applicable**

The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

#### **3.3.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.



## 4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECEPEL	DTM-303A	TP201996	N/A	Mar. 22, 2022	Nov. 29, 2022	Mar. 21, 2023	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	15I00041SNO 10 (NO:248)	10MHz~6GHz	Dec. 29, 2021	Nov. 29, 2022	Dec. 28, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101905	10Hz - 40GHz	Aug. 03, 2022	Nov. 29, 2022	Aug. 02, 2023	Conducted (TH05-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Nov. 08, 2022~ Nov. 09, 2022	Dec. 23, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 21, 2022	Nov. 08, 2022~ Nov. 09, 2022	Feb. 20, 2023	Radiation (03CH13-HY)
Hygrometer	TECEPEL	DTM-303B	TP140325	N/A	Aug. 15, 2022	Nov. 08, 2022~ Nov. 09, 2022	Aug. 14, 2023	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz~18GHz	Jul. 25, 2022	Nov. 08, 2022~ Nov. 09, 2022	Jul. 24, 2023	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 17, 2022	Nov. 08, 2022~ Nov. 09, 2022	May 16, 2023	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Oct. 25, 2022	Nov. 08, 2022~ Nov. 09, 2022	Oct. 24, 2023	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 18, 2022	Nov. 08, 2022~ Nov. 09, 2022	Mar. 17, 2023	Radiation (03CH13-HY)
Filter	Wainwright	WLK4-1000-15 30-8000-40SS	SN12	1.53GHz Low Pass Filter	Sep. 13, 2022	Nov. 08, 2022~ Nov. 09, 2022	Sep. 12, 2023	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 0SS	SN2	3GHz High Pass Filter	Jul. 11, 2022	Nov. 08, 2022~ Nov. 09, 2022	Jul. 10, 2023	Radiation (03CH13-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000- 40ST	SN5	6.75GHz High Pass Filter	Mar. 10, 2022	Nov. 08, 2022~ Nov. 09, 2022	Mar. 09, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30MHz~18GHz	Feb. 09, 2022	Nov. 08, 2022~ Nov. 09, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30MHz~18GHz	Feb. 09, 2022	Nov. 08, 2022~ Nov. 09, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30MHz~18GHz	Feb. 09, 2022	Nov. 08, 2022~ Nov. 09, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Nov. 08, 2022~ Nov. 09, 2022	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Nov. 08, 2022~ Nov. 09, 2022	N/A	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	1223	18GHz-40GHz	Jul. 05, 2022	Nov. 08, 2022~ Nov. 09, 2022	Jul. 04, 2023	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Nov. 08, 2022~ Nov. 09, 2022	N/A	Radiation (03CH13-HY)



## 5 Uncertainty of Evaluation

### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.40 dB
-------------------------------------------------------------------------	---------

### Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.80 dB
-------------------------------------------------------------------------	---------

### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.30 dB
-------------------------------------------------------------------------	---------



## Appendix A. Test Result of Conducted Test Items

Test Engineer:	Willy Chang	Temperature:	21~25	°C
Test Date:	2022/11/29	Relative Humidity:	51~54	%

**TEST RESULTS DATA**  
**Average Output Power**

2.4GHz Band Single Antenna																
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HT40	MCS0	1	3	2422	-	13.00		-	30.00	-	2.50	-	15.50	-	36.00	Pass

**Note:** Measured power (dBm) has offset with cable loss.



## Appendix B. Radiated Spurious Emission

Test Engineer :	Jacky Hong, Rain Lee and Mancy Chou	Temperature :	20~26°C
		Relative Humidity :	40~65%

### 2.4GHz 2411~2483.5MHz

### WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT40 CH 03 2422MHz		2389.94	59.34	-14.66	74	45.22	27.84	14.16	27.78	248	48	P	H
		2389.38	49.11	-4.99	54	34.89	27.84	14.16	27.78	248	48	A	H
	*	2422	111.43	-	-	87.31	27.8	14.19	27.77	248	48	P	H
	*	2422	93.54	-	-	79.42	27.8	14.19	27.77	248	48	A	H
		2485.19	55.11	-18.99	74	41.88	27.73	14.15	27.75	248	48	P	H
		2487.96	44.4	-9.6	54	31.27	27.72	14.15	27.74	248	48	A	H
		2389.94	61.65	-12.35	74	47.53	27.84	14.16	27.78	112	116	P	V
		2389.8	51.93	-2.17	54	37.81	27.84	14.16	27.78	112	116	A	V
	*	2422	115.13	-	-	91.91	27.8	14.19	27.77	112	116	P	V
	*	2422	96.51	-	-	82.39	27.8	14.19	27.77	112	116	A	V
		2484.6	55.45	-18.55	74	41.32	27.73	14.15	27.75	112	116	P	V
		2484.14	44.53	-9.47	54	31.4	27.73	14.15	27.75	112	116	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**2.4GHz 2411~2483.5MHz  
WIFI 802.11n HT40 (Harmonic @ 3m)**

WIFI Ant. 2	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT40 CH 03 2422MHz		4844	41.62	-32.38	74	61.71	31.4	6.79	57.28	-	-	P	H	
		7266	44.43	-29.57	74	56.26	36.86	8.57	57.26	-	-	P	H	
													H	
													H	
													H	
													H	
			4844	39.98	-34.12	74	59.17	31.4	6.79	57.28	-	-	P	V
			7266	44.28	-29.72	74	56.11	36.86	8.57	57.26	-	-	P	V
														V
														V
<b>Remark</b>	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> </ol>													



*	<b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is <b>over limit</b> line.
P/A	<b>Peak</b> or <b>Average</b>
H/V	<b>Horizontal</b> or <b>Vertical</b>



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11b		2391	55.45	-18.55	74	54.51	32.22	4.58	35.86	113	318	P	H
CH 11		2391	43.54	-11.46	54	42.6	32.22	4.58	35.86	113	318	A	H
2412MHz													

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =  
Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Margin (dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

1. Level(dBμV/m)  
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)  
= 55.45 (dBμV/m)
2. Margin (dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 55.45(dBμV/m) – 74(dBμV/m)  
= -18.55(dB)

**For Average Limit @ 2390MHz:**

1. Level(dBμV/m)  
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)  
= 43.54 (dBμV/m)
2. Margin (dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 43.54(dBμV/m) – 54(dBμV/m)  
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is "PASS".



## Appendix C. Radiated Spurious Emission Plots

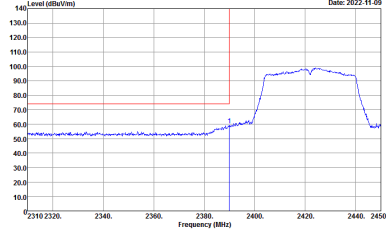
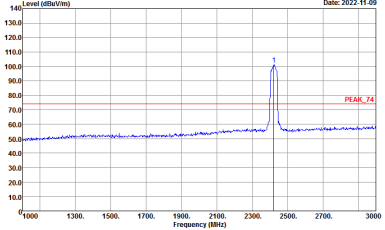
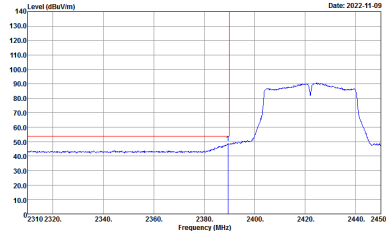
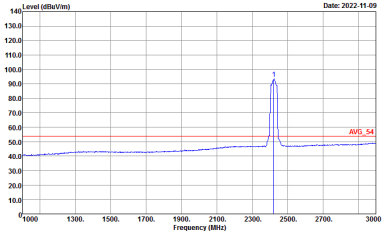
Test Engineer :	Jacky Hong, Rain Lee and Mancy Chou	Temperature :	20~26°C
		Relative Humidity :	40~65%

### Note symbol

-L	Low channel location
-R	High channel location

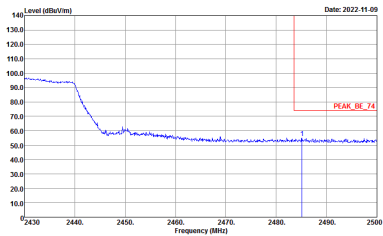
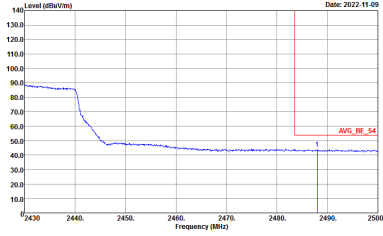


2.4GHz 2400~2483.5MHz  
 WIFI 802.11n HT40 (Band Edge @ 3m)

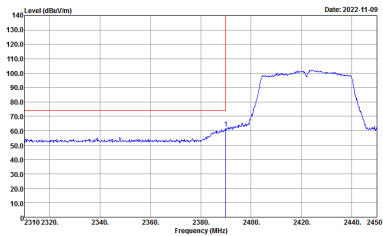
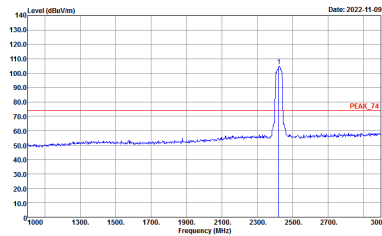
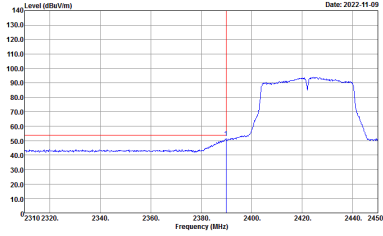
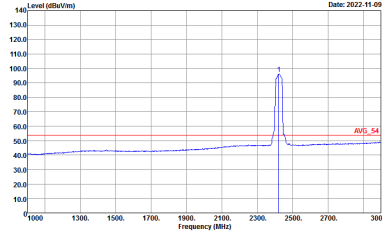
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
2	Horizontal	Fundamental
Peak	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a signal level around 50 dBuV/m from 2310 to 2390 MHz, rising to a peak of approximately 100 dBuV/m between 2400 and 2440 MHz, and then falling back to 50 dBuV/m by 2450 MHz. A red vertical line is at 2422 MHz.</p> <p>Site : 03CH13-4Y          Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL          : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Fundamental orientation. The plot shows a signal level around 50 dBuV/m from 1000 to 2300 MHz, with a sharp peak at 2422 MHz reaching approximately 100 dBuV/m, and then falling back to 50 dBuV/m by 2500 MHz. A red horizontal line is at 80 dBuV/m.</p> <p>Site : 03CH13-4Y          Condition : PEAK_74 3m HORN_91200_1241 HORIZONTAL          : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a signal level around 50 dBuV/m from 2310 to 2390 MHz, rising to a peak of approximately 100 dBuV/m between 2400 and 2440 MHz, and then falling back to 50 dBuV/m by 2450 MHz. A red vertical line is at 2422 MHz.</p> <p>Site : 03CH13-4Y          Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL          : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Fundamental orientation. The plot shows a signal level around 50 dBuV/m from 1000 to 2300 MHz, with a sharp peak at 2422 MHz reaching approximately 100 dBuV/m, and then falling back to 50 dBuV/m by 2500 MHz. A red horizontal line is at 60 dBuV/m.</p> <p>Site : 03CH13-4Y          Condition : AVG_54 3m HORN_91200_1241 HORIZONTAL          : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>





WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
2	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH13-HY            Condition : PEAK_BE_74 3m HORN_91200_1241 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Left Blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH13-HY            Condition : AVG_BE_54 3m HORN_91200_1241 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Left Blank</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
2	Vertical	Fundamental
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH13-HY Condition : PEAK_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH13-HY Condition : AVG_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
2	Vertical	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE_74 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank
Avg.	<p>Site : 03CH13-HY Condition : AVG_BE_54 3m HORN_91200_1241 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

Table with 3 columns: WIFI (2.4GHz 2400~2483.5MHz Harmonic @ 3m), ANT (802.11n HT40 CH03 2422MHz), and 2 (Horizontal/Vertical). It contains two graphs showing Level (dBuV/m) vs Frequency (MHz) for Peak and Avg. measurements.



### Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
2	2.4GHz 802.11n HT40	90.82	890	1.12	3kHz

<Ant. 2>

