FCC C2PC Test Report

FCC ID	:	**2ALXJ-WBC100**
Equipment	:	**Whiteboard Owl**
Model No.	:	**WBC100**
Brand Name	:	**OWLLabs™**
Applicant	:	**Owl Labs Inc**
Address	:	**33-1/2 Union Sq Somerville US 02143 United States Of America**
Standard	:	**47 CFR FCC Part 15.247**
Received Date	:	**Sep. 17, 2021**
Tested Date	:	**Sep. 17 ~ Oct. 07, 2021**

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by: **Approved by:**

Along Chen / Assistant Manager **Gary Chang / Manager**

Testing Laboratory
2732

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR0D1401-02AC	Rev. 01	Initial issue	Oct. 08, 2021

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.484MHz 38.05 (Margin -8.22dB) - AV	Pass
15.247(d) 15.209	Radiated Emissions	[dBuV/m at 3m]: 2390.00MHz 52.90 (Margin -1.10dB) - AV	Pass
15.247(b)(3)	Maximum Output Power	Max Power [dBm]: 25.20	Pass
15.247(a)(2)	6dB Bandwidth	Meet the requirement of limit	Pass
15.247(e)	Power Spectral Density	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

This is a Class II Permissive Change report (C2PC).
This report is issued as a supplementary report to original report no. FR0D1401AC. The modification is concerned with following item:

- Add two DC brushless fans (at the top) and the power connection to the main PCB.
- Add small holes to top enclosure for thermal dissipations.
- Reduce conducted power of partial channels by software setting

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
2400-2483.5	b	2412-2462	1-11 [11]	2	1-11 Mbps
2400-2483.5	g	2412-2462	1-11 [11]	2	6-54 Mbps
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	2	MCS 0-15
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	2	MCS 0-15
Note 1: RF output power specifies that Maximum Peak Conducted Output Power. Note 2: 802.11b uses a combination of DSSS-DBPSK, DQPSK, CCK modulation. Note 3: 802.11g/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Gain (dBi)	Remarks
1	WPANT101 40-S1 A	Metal	IPX/MHF	1.8	---

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	Adapter	Brand: APX Model: PS120I1000 Power Rating: I/P: 100-240Vac, 50/60Hz, 0.5A Max O/P: 12Vdc, 1.0A, 12W Power Line: 6.06m non-shielded without core
2	Meeting Owl Pro	Brand: OWLLabs™ Model: MTW200

1.1.5 Channel List

Frequency band (MHz)		2400~2483.5	
802.11 b / g / n HT20		802.11n HT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
1	2412	3	2422
2	2417	4	2427
3	2422	5	2432
4	2427	6	2437
5	2432	7	2442
6	2437	8	2447
7	2442	9	2452
8	2447	---	---
9	2452	---	---
10	2457	---	---
11	2462	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	Qualcomm Radio Control Tool, Version: 4.0.00134.0		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11b	100.00%	0.00
	11g	99.31%	0.03
	HT20	99.41%	0.03
	HT40	96.40%	0.16

1.1.7 Power Index of Test Tool

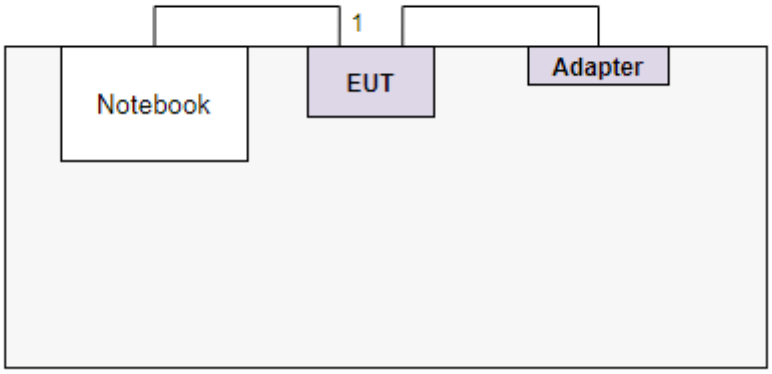
Modulation Mode	Test Frequency (MHz)	Power Index
11b	2412	12
11b	2437	12
11b	2462	12
11g	2412	17
11g	2437	17.5
11g	2462	16
HT20	2412	17
HT20	2437	17.5
HT20	2462	16
HT40	2422	12.5
HT40	2437	14
HT40	2452	13.5

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude 5400	DoC	---

1.3 Test Setup Chart

Test Setup Diagram



No.	Signal cable / Length (m)
1	Type C, 1.8m non-shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Sep. 23, 2021				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Feb. 08, 2021	Feb. 07, 2022
LISN	R&S	ENV216	101579	Mar. 17, 2021	Mar. 16, 2022
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 29, 2020	Dec. 28, 2021
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 21, 2020	Oct. 20, 2021
50 ohm terminal (Support Unit)	NA	50	04	May 25, 2021	May 24, 2022
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 1 / (03CH01-WS)				
Tested Date	Sep. 17 ~ Sep. 22, 2021				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 12, 2021	Mar. 11, 2022
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2020	Dec. 03, 2021
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 17, 2020	Nov. 16, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jun. 30, 2021	Jun. 29, 2022
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 11, 2020	Dec. 10, 2021
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170508	Dec. 31, 2020	Dec. 30, 2021
Preamplifier	EMC	EMC02325	980225	Jun. 29, 2021	Jun. 28, 2022
Preamplifier	Agilent	83017A	MY39501308	Sep. 26, 2020	Sep. 25, 2021
Preamplifier	EMC	EMC184045B	980192	Jul. 14, 2021	Jul. 13, 2022
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 06, 2020	Oct. 05, 2021
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 06, 2020	Oct. 05, 2021
LF cable 11M	EMC	EMCCFD400-NW-NW-11000	200801	Oct. 06, 2020	Oct. 05, 2021
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 06, 2020	Oct. 05, 2021
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 06, 2020	Oct. 05, 2021
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 06, 2020	Oct. 05, 2021
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Sep. 22 ~ Oct. 07, 2021				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2020	Dec. 03, 2021
Power Meter	Anritsu	ML2495A	1241002	Nov. 04, 2020	Nov. 03, 2021
Power Sensor	Anritsu	MA2411B	1207366	Nov. 04, 2020	Nov. 03, 2021
Measurement Software	Sporton	SENSE-15247_DTS	V5.10	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 15.247
ANSI C63.10-2013

1.6 Reference Guidance

FCC KDB 558074 D01 15.247 Meas Guidance v05r02
FCC KDB 662911 D01 Multiple Transmitter Output v02r01

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.41 dB
Radiated emission > 1GHz	±4.59 dB

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, 03CH01-WS, TH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	HT20	2462	MCS 0	---
Radiated Emissions ≤1GHz	HT20	2462	MCS 0	---
Radiated Emissions >1GHz 6dB bandwidth Power spectral density	11g HT20 HT40	2462 2462 2422 / 2437 / 2452	6 Mbps MCS 0 MCS 0	---
Maximum Output Power	11b 11g HT20 HT40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	---

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.

3 Transmitter Test Results

3.1 Conducted Emissions

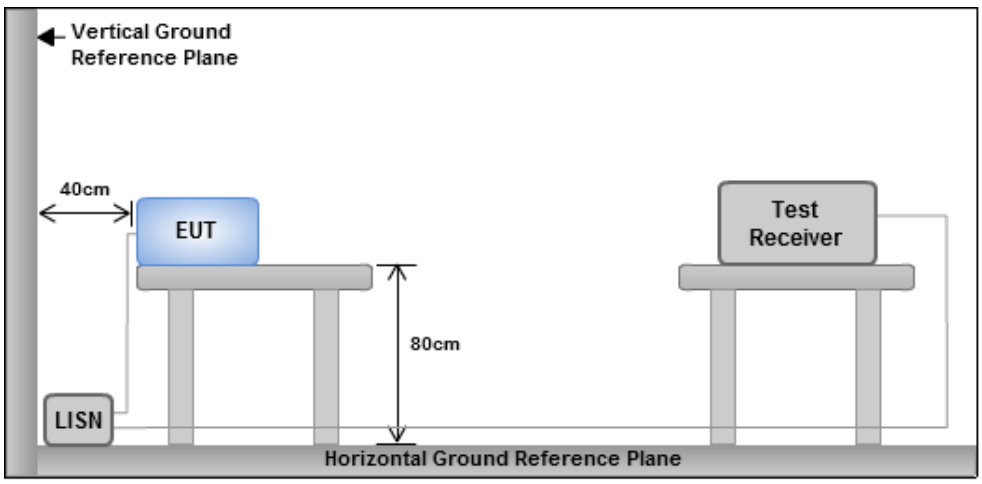
3.1.1 Limit of Conducted Emissions

Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V / 60Hz.

3.1.3 Test Setup



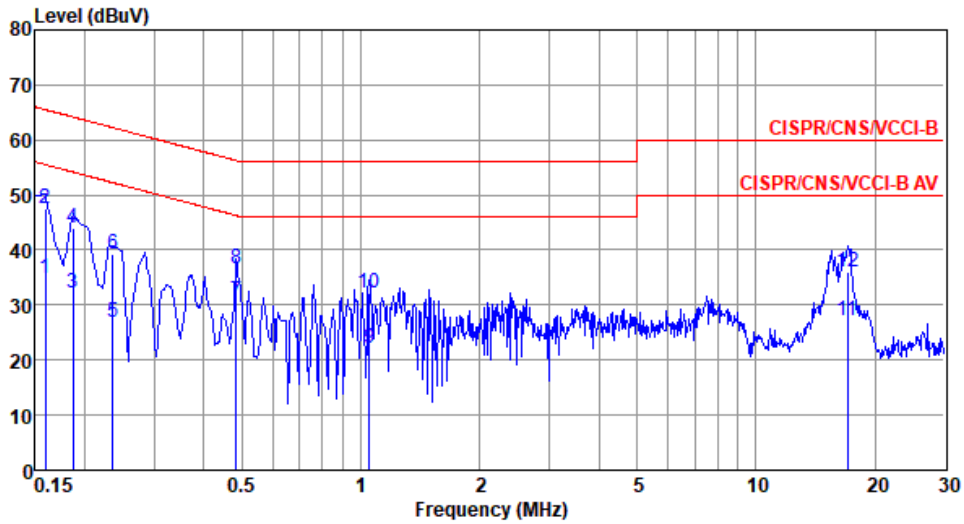
Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

Modulation	HT20	Test Freq. (MHz)	2462
Power Phase	Line		

Test by : Joe Liao Temperature: 22°C Humidity: 63%

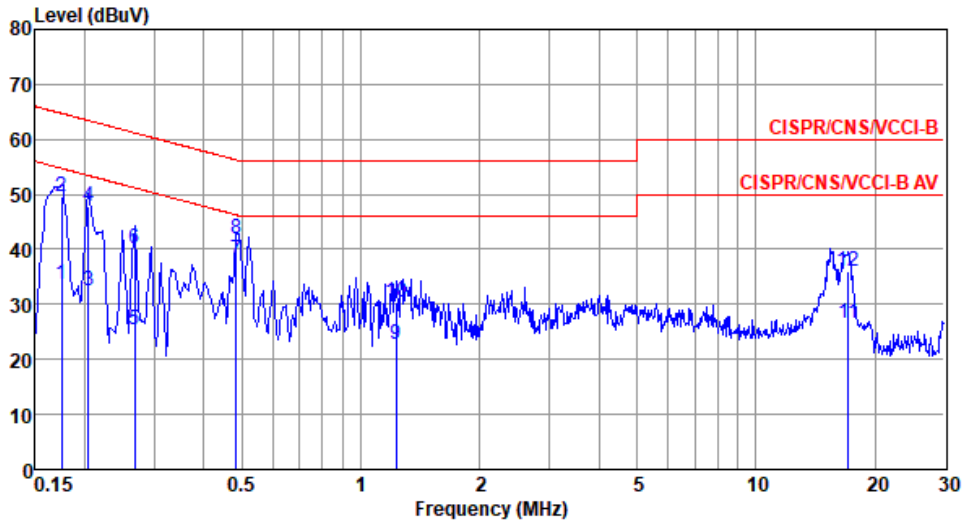


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.159	34.81	55.52	-20.71	24.93	9.83	0.05	Average
2	0.159	47.50	65.52	-18.02	37.62	9.83	0.05	QP
3	0.186	32.27	54.20	-21.93	22.37	9.84	0.06	Average
4	0.186	44.04	64.20	-20.16	34.14	9.84	0.06	QP
5	0.235	26.85	52.26	-25.41	16.94	9.85	0.06	Average
6	0.235	39.24	62.26	-23.02	29.33	9.85	0.06	QP
7*	0.484	30.73	46.27	-15.54	20.73	9.91	0.09	Average
8	0.484	36.62	56.27	-19.65	26.62	9.91	0.09	QP
9	1.049	22.16	46.00	-23.84	12.05	9.99	0.12	Average
10	1.049	32.17	56.00	-23.83	22.06	9.99	0.12	QP
11	17.018	27.02	50.00	-22.98	16.16	10.23	0.63	Average
12	17.018	36.07	60.00	-23.93	25.21	10.23	0.63	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation	HT20	Test Freq. (MHz)	2462
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 63%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.175	33.60	54.72	-21.12	23.71	9.83	0.06	Average
2	0.175	49.50	64.72	-15.22	39.61	9.83	0.06	QP
3	0.204	32.47	53.45	-20.98	22.58	9.83	0.06	Average
4	0.204	47.92	63.45	-15.53	38.03	9.83	0.06	QP
5	0.267	25.46	51.20	-25.74	15.55	9.84	0.07	Average
6	0.267	40.20	61.20	-21.00	30.29	9.84	0.07	QP
7*	0.484	38.05	46.27	-8.22	28.10	9.86	0.09	Average
8	0.484	41.80	56.27	-14.47	31.85	9.86	0.09	QP
9	1.229	22.75	46.00	-23.25	12.71	9.90	0.14	Average
10	1.229	30.44	56.00	-25.56	20.40	9.90	0.14	QP
11	17.109	26.59	50.00	-23.41	15.69	10.27	0.63	Average
12	17.109	36.00	60.00	-24.00	25.10	10.27	0.63	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

3.2 6dB and Occupied Bandwidth

3.2.1 Limit of 6dB Bandwidth

The minimum 6dB bandwidth shall be at least 500 kHz.

3.2.2 Test Procedures

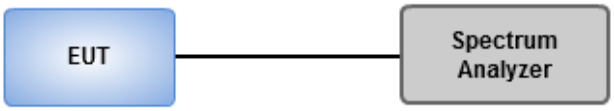
6dB Bandwidth

1. Set resolution bandwidth (RBW) = 100 kHz, Video bandwidth = 300 kHz.
2. Detector = Peak, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.

Occupied Bandwidth

1. Set resolution bandwidth (RBW) = 1% ~ 5 % of OBW, Video bandwidth = 3 x RBW
2. Detector = Sample, Trace mode = max hold.
3 Sweep = auto couple, Allow the trace to stabilize.
4. Use the OBW measurement function of spectrum analyzer to measure the occupied bandwidth.

3.2.3 Test Setup



3.2.4 Test Result of 6dB and Occupied Bandwidth

Ambient Condition	23°C / 60-67%	Tested By	Aska Huang

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11g_Nss1,(6Mbps)_2TX	15.29M	16.425M	16M4D1D	13.841M	16.353M
802.11n HT20_Nss1,(MCS0)_2TX	17.536M	17.656M	17M7D1D	13.913M	17.583M
802.11n HT40_Nss1,(MCS0)_2TX	36.377M	36.469M	36M5D1D	31.304M	36.035M

Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

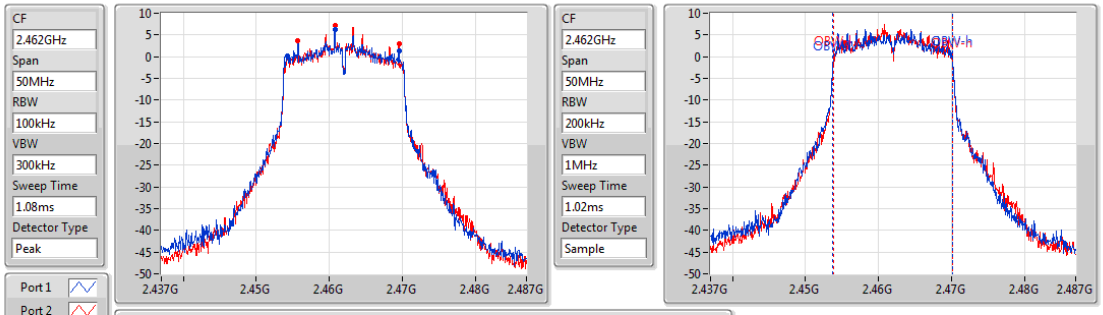
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2462MHz	Pass	500k	15.29M	16.425M	13.841M	16.353M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2462MHz	Pass	500k	17.536M	17.656M	13.913M	17.583M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.652M	36.035M	31.304M	36.035M
2437MHz	Pass	500k	36.377M	36.324M	36.377M	36.469M
2452MHz	Pass	500k	35.797M	36.179M	33.913M	36.035M

Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11g_Nss1,(6Mbps)_2TX **EBW**

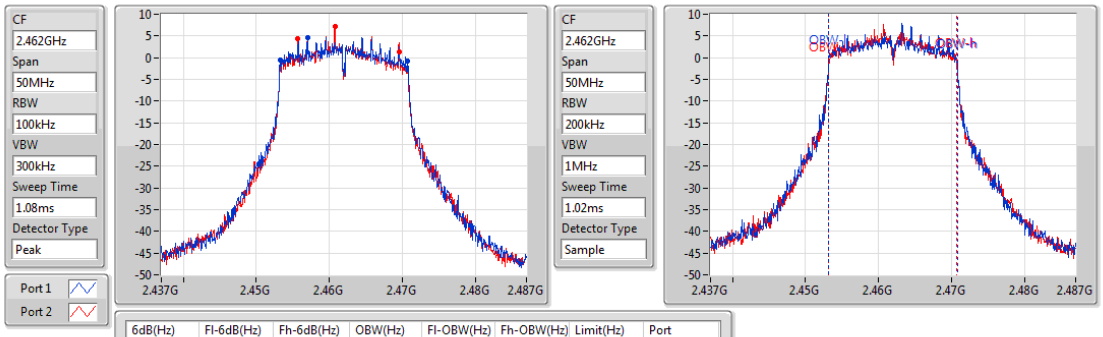
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.29M	2.454246G	2.469536G	16.425M	2.453751G	2.470177G	500k	1
13.841M	2.455696G	2.469536G	16.353M	2.453823G	2.470177G	500k	2

802.11n HT20_Nss1,(MCS0)_2TX **EBW**

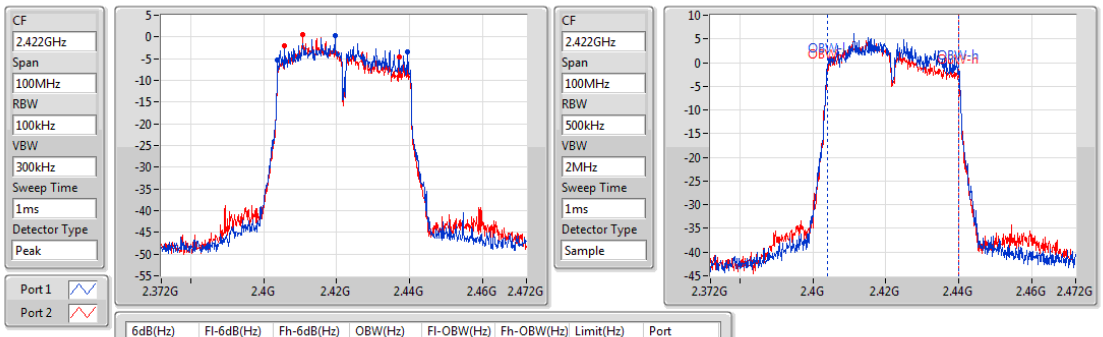
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.536M	2.453232G	2.470768G	17.656M	2.453172G	2.470828G	500k	1
13.913M	2.455696G	2.469609G	17.583M	2.453172G	2.470755G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX **EBW**

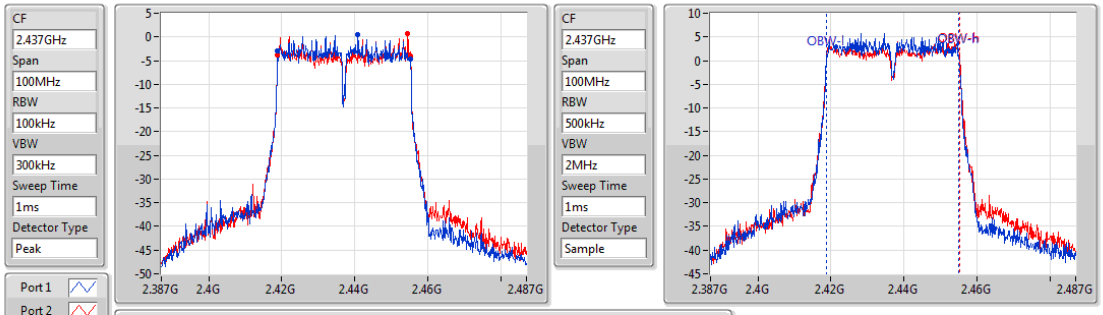
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.652M	2.403884G	2.439536G	36.035M	2.40391G	2.439945G	500k	1
31.304M	2.405768G	2.437072G	36.035M	2.40391G	2.439945G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX **EBW**

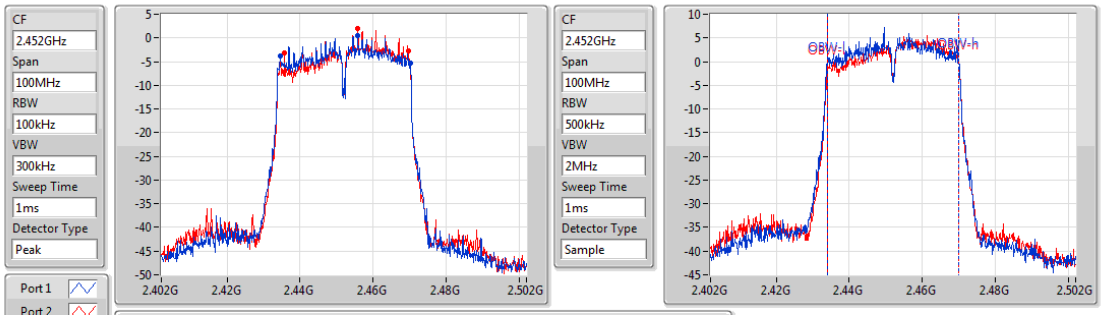
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.377M	2.418884G	2.455261G	36.324M	2.418766G	2.45509G	500k	1
36.377M	2.418884G	2.455261G	36.469M	2.418766G	2.455234G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX **EBW**

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.797M	2.434464G	2.470261G	36.179M	2.43391G	2.47009G	500k	1
33.913M	2.435768G	2.469681G	36.035M	2.434055G	2.47009G	500k	2

3.3 RF Output Power

3.3.1 Limit of RF Output Power

Conducted power shall not exceed 1Watt.

Antenna gain <= 6dBi, no any corresponding reduction is in output power limit.

3.3.2 Test Procedures

A broadband RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.

3.3.3 Test Setup

3.3.4 Test Result of Maximum Output Power

Ambient Condition	23°C / 60-67%	Tested By	Aska Huang

Summary of Peak Conducted Output Power

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	18.08	0.06427
802.11g_Nss1,(6Mbps)_2TX	25.20	0.33113
802.11n HT20_Nss1,(MCS0)_2TX	25.17	0.32885
802.11n HT40_Nss1,(MCS0)_2TX	23.63	0.23067

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.80	14.81	14.91	17.87	30.00	19.67	36.00
2437MHz	Pass	1.80	14.86	14.75	17.82	30.00	19.62	36.00
2462MHz	Pass	1.80	15.04	15.1	18.08	30.00	19.88	36.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.80	21.79	21.85	24.83	30.00	26.63	36.00
2437MHz	Pass	1.80	21.95	22.41	25.20	30.00	27.00	36.00
2462MHz	Pass	1.80	21.18	21.22	24.21	30.00	26.01	36.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.80	22.02	21.74	24.89	30.00	26.69	36.00
2437MHz	Pass	1.80	21.92	22.38	25.17	30.00	26.97	36.00
2462MHz	Pass	1.80	21.43	21.18	24.32	30.00	26.12	36.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	1.80	19.87	19.92	22.91	30.00	24.71	36.00
2437MHz	Pass	1.80	20.54	20.69	23.63	30.00	25.43	36.00
2452MHz	Pass	1.80	20.81	20.26	23.55	30.00	25.35	36.00

DG = Directional Gain; **Port X** = Port X output power

Summary of Conducted (Average) Output Power

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	15.68	0.03698
802.11g_Nss1,(6Mbps)_2TX	20.17	0.10399
802.11n HT20_Nss1,(MCS0)_2TX	20.17	0.10399
802.11n HT40_Nss1,(MCS0)_2TX	17.45	0.05559

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.80	12.42	12.55	15.50	-	17.30	-
2437MHz	Pass	1.80	12.71	12.42	15.58	-	17.38	-
2462MHz	Pass	1.80	12.58	12.75	15.68	-	17.48	-
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.80	16.71	16.98	19.86	-	21.66	-
2437MHz	Pass	1.80	17.11	17.21	20.17	-	21.97	-
2462MHz	Pass	1.80	16.25	16.42	19.35	-	21.15	-
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.80	16.74	16.87	19.82	-	21.62	-
2437MHz	Pass	1.80	16.92	17.39	20.17	-	21.97	-
2462MHz	Pass	1.80	16.14	16.25	19.21	-	21.01	-
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	1.80	13.11	13.32	16.23	-	18.03	-
2437MHz	Pass	1.80	14.26	14.62	17.45	-	19.25	-
2452MHz	Pass	1.80	14.22	14.12	17.18	-	18.98	-

DG = Directional Gain; **Port X** = Port X output power

Note : Conducted average output power is for reference only

3.4 Power Spectral Density

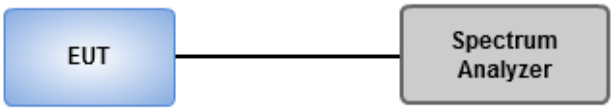
3.4.1 Limit of Power Spectral Density

Power spectral density shall not be greater than 8 dBm in any 3 kHz band.

3.4.2 Test Procedures

1. Set the RBW = 3 kHz, VBW = 10 kHz
2. Detector = Peak, Sweep time = auto couple.
3. Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

3.4.3 Test Setup



3.4.4 Test Result of Power Spectral Density

Ambient Condition	23°C / 60-67%	Tested By	Aska Huang

Summary

Mode	PD (dBm/3kHz)
2.4-2.4835GHz	-
802.11g_Nss1,(6Mbps)_2TX	-8.30
802.11n HT20_Nss1,(MCS0)_2TX	-6.57
802.11n HT40_Nss1,(MCS0)_2TX	-11.18

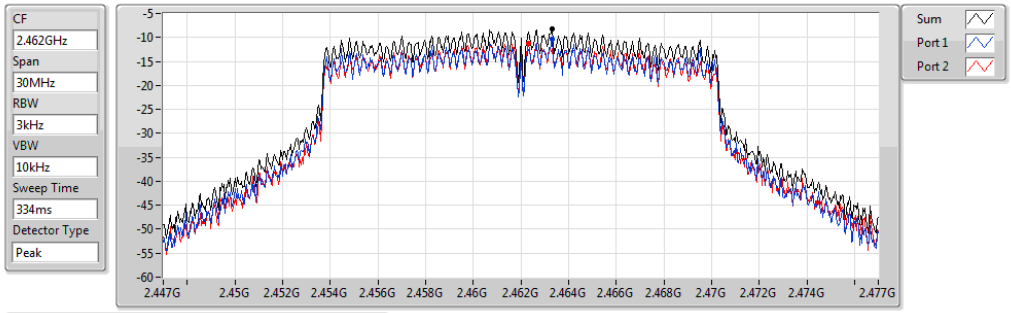
Result

Mode	Result	DG (dBi)	Port 1 (dBm/3kHz)	Port 2 (dBm/3kHz)	PD (dBm/3kHz)	PD Limit (dBm/3kHz)
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2462MHz	Pass	4.81	-10.46	-11.18	-8.30	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2462MHz	Pass	4.81	-8.98	-8.36	-6.57	8.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.81	-14.03	-14.83	-11.46	8.00
2437MHz	Pass	4.81	-14.24	-15.11	-12.53	8.00
2452MHz	Pass	4.81	-13.39	-13.43	-11.18	8.00

DG = Directional Gain = 1.8 + 10*log(2/1) = 4.81 dBi;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11g_Nss1,(6Mbps)_2TX **PSD**

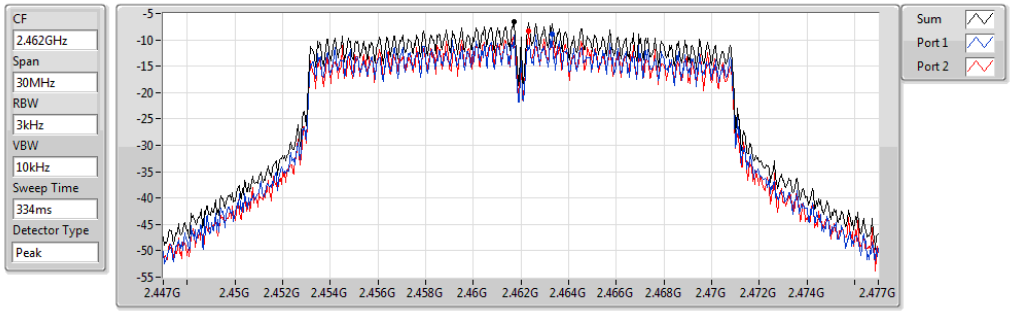
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.30	-8.30	-10.46	-11.18

802.11n HT20_Nss1,(MCS0)_2TX **PSD**

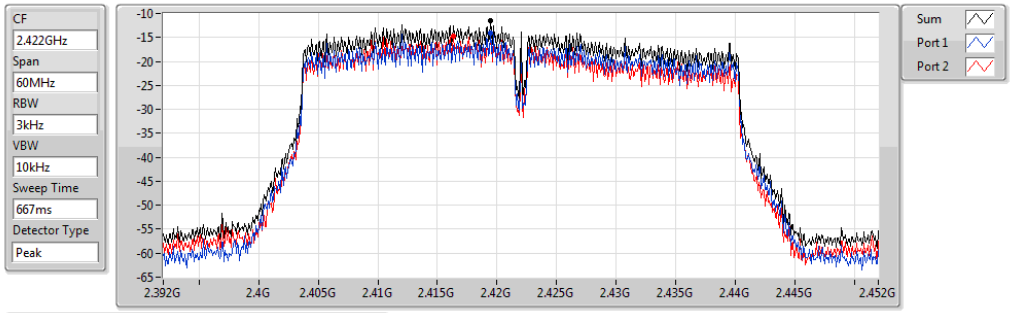
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.57	-6.57	-8.98	-8.36

802.11n HT40_Nss1,(MCS0)_2TX **PSD**

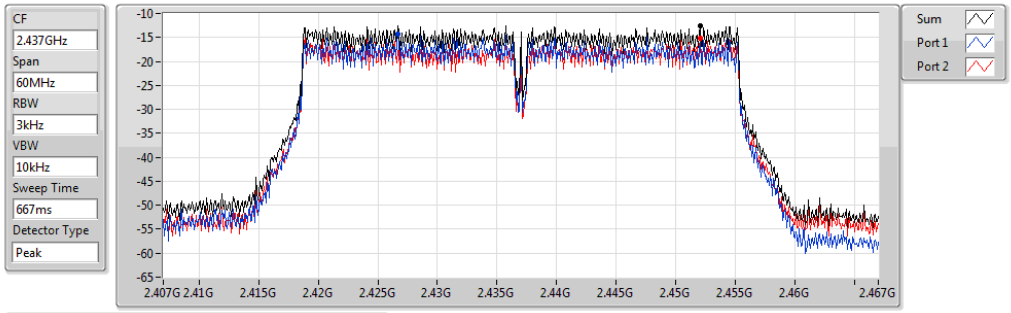
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.46	-11.46	-14.03	-14.83

802.11n HT40_Nss1,(MCS0)_2TX **PSD**

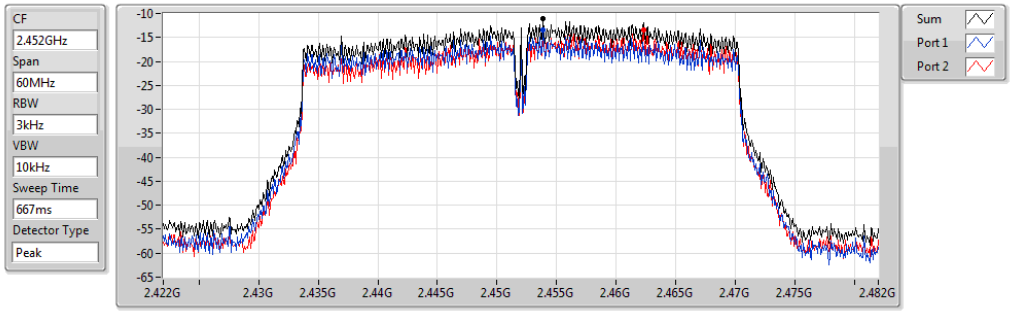
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.53	-12.53	-14.24	-15.11

802.11n HT40_Nss1,(MCS0)_2TX **PSD**

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.18	-11.18	-13.39	-13.43

3.5 Unwanted Emissions into Restricted Frequency Bands

3.5.1 Limit of Unwanted Emissions into Restricted Frequency Bands

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit
Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.5.2 Test Procedures

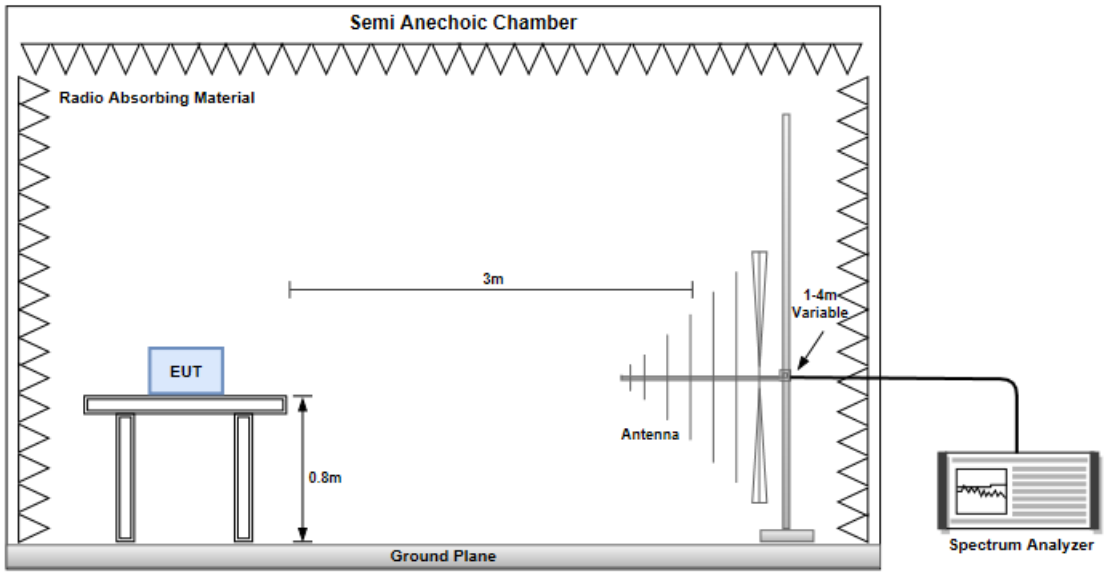
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

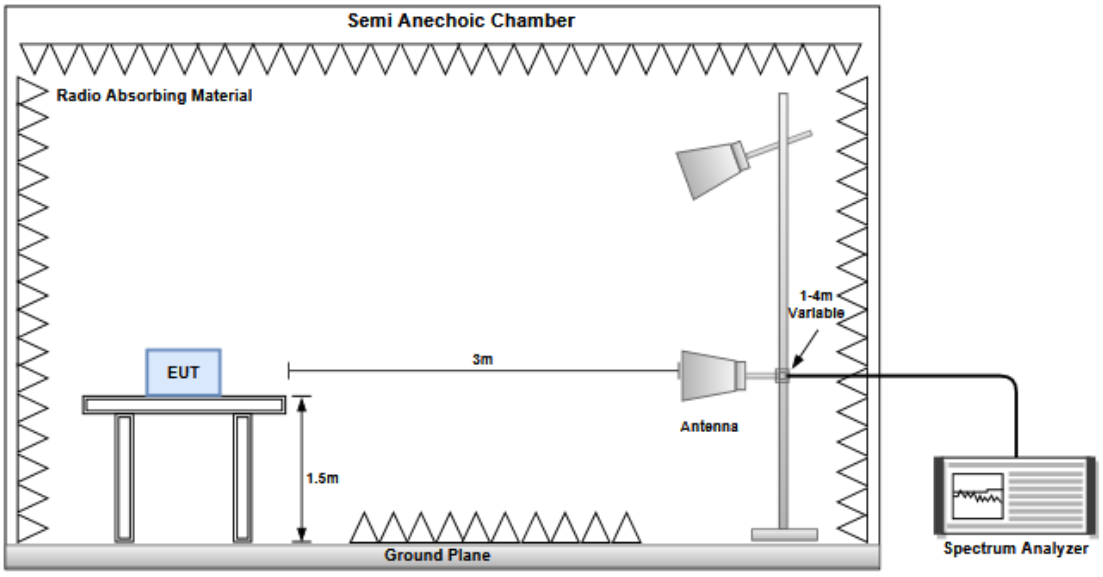
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.5.3 Test Setup

Radiated Emissions below 1 GHz



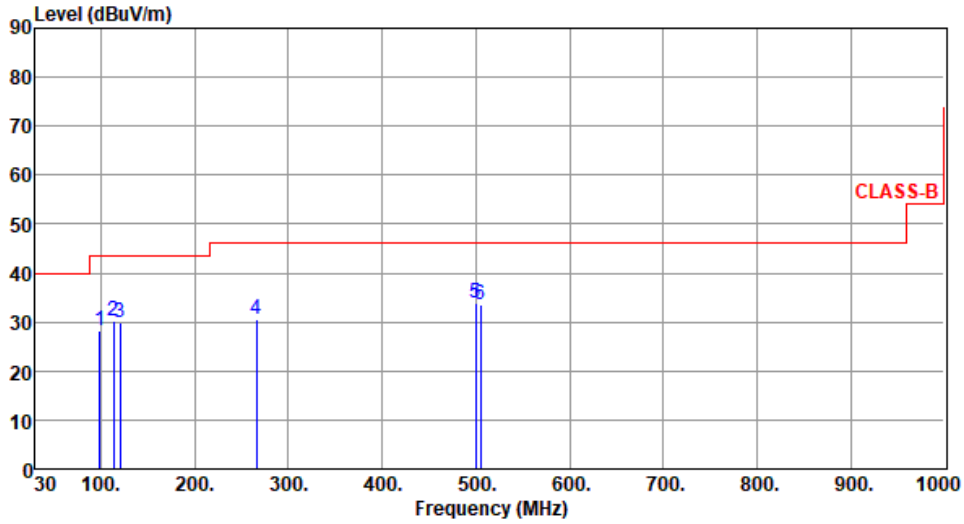
Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	HT20	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):24 Humidity(%):67

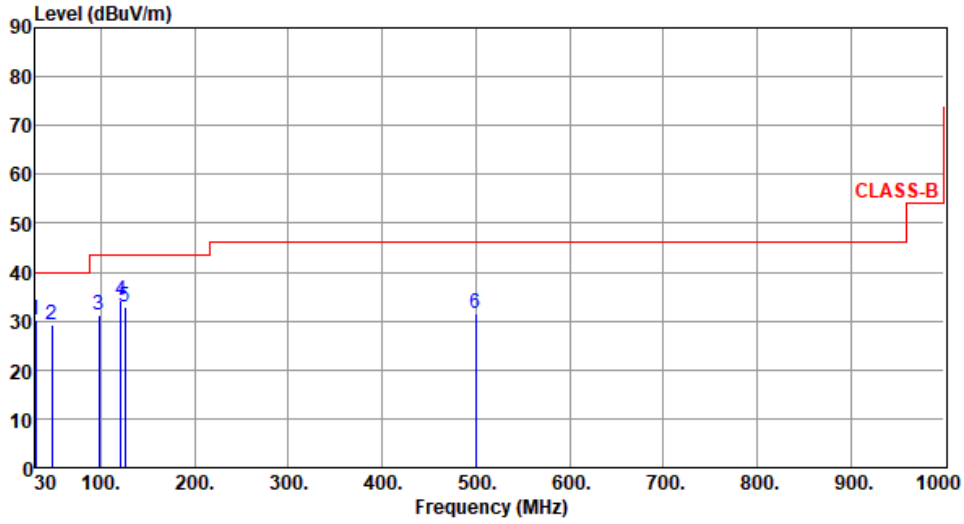


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	98.87	28.08	43.50	-15.42	41.74	-13.66	Peak	---	---
2	113.42	30.24	43.50	-13.26	41.66	-11.42	Peak	---	---
3	120.21	29.99	43.50	-13.51	40.74	-10.75	Peak	---	---
4	265.71	30.57	46.00	-15.43	40.03	-9.46	Peak	---	---
5	499.48	33.71	46.00	-12.29	37.08	-3.37	Peak	---	---
6	505.30	33.41	46.00	-12.59	36.65	-3.24	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	HT20	Test Freq. (MHz)	2462
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):24 Humidity(%):67



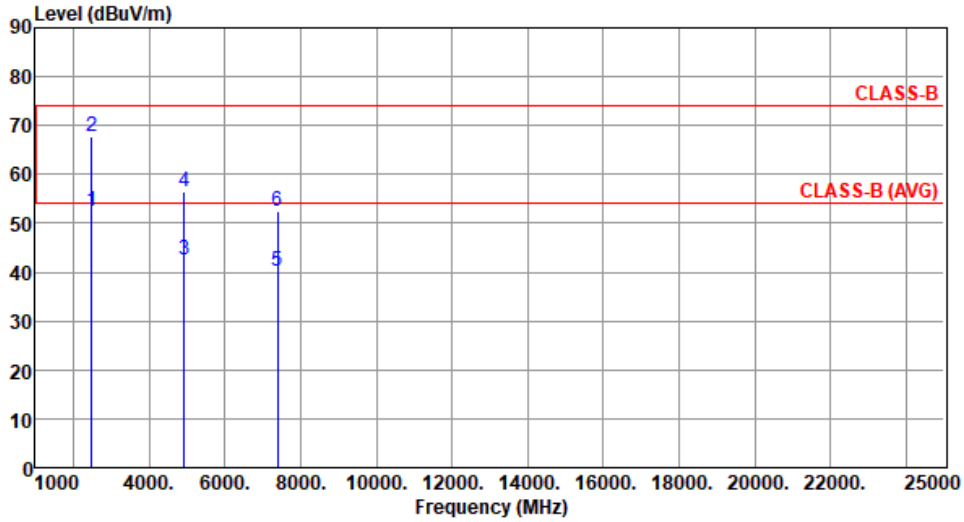
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	30.00	30.38	40.00	-9.62	40.39	-10.01	Peak	---	---
2	47.46	29.37	40.00	-10.63	37.88	-8.51	Peak	---	---
3	97.90	31.21	43.50	-12.29	44.97	-13.76	Peak	---	---
4	121.18	34.15	43.50	-9.35	44.79	-10.64	Peak	---	---
5	126.03	32.73	43.50	-10.77	42.96	-10.23	Peak	---	---
6	499.48	31.46	46.00	-14.54	34.83	-3.37	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.5.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11g

Modulation	11g	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):25 Humidity(%):68

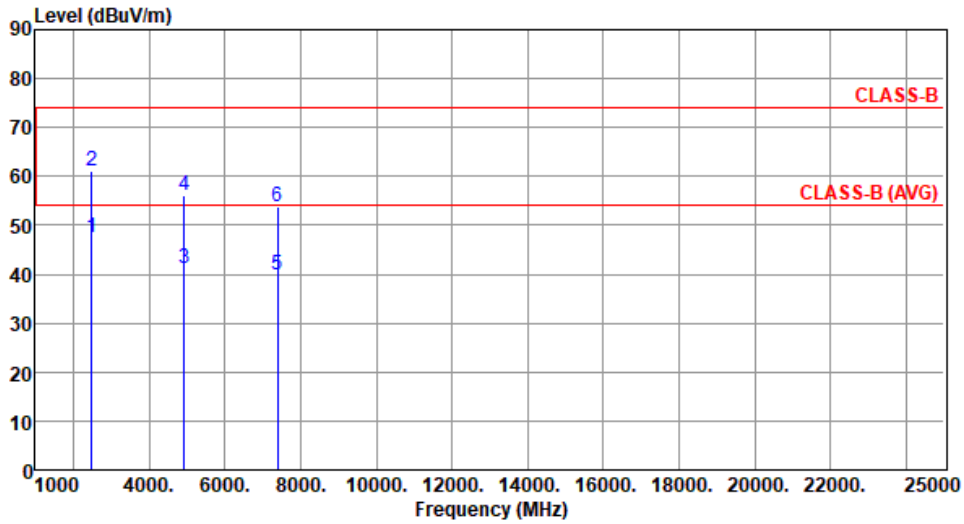


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.58	54.00	-1.42	55.32	-2.74	Average	176	90
2	2483.50	67.79	74.00	-6.21	70.53	-2.74	Peak	176	90
3	4924.00	42.42	54.00	-11.58	38.87	3.55	Average	101	152
4	4924.00	56.56	74.00	-17.44	53.01	3.55	Peak	101	152
5	7386.00	40.22	54.00	-13.78	31.25	8.97	Average	317	63
6	7386.00	52.42	74.00	-21.58	43.45	8.97	Peak	317	63

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11g	Test Freq. (MHz)	2462
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):25 Humidity(%):68



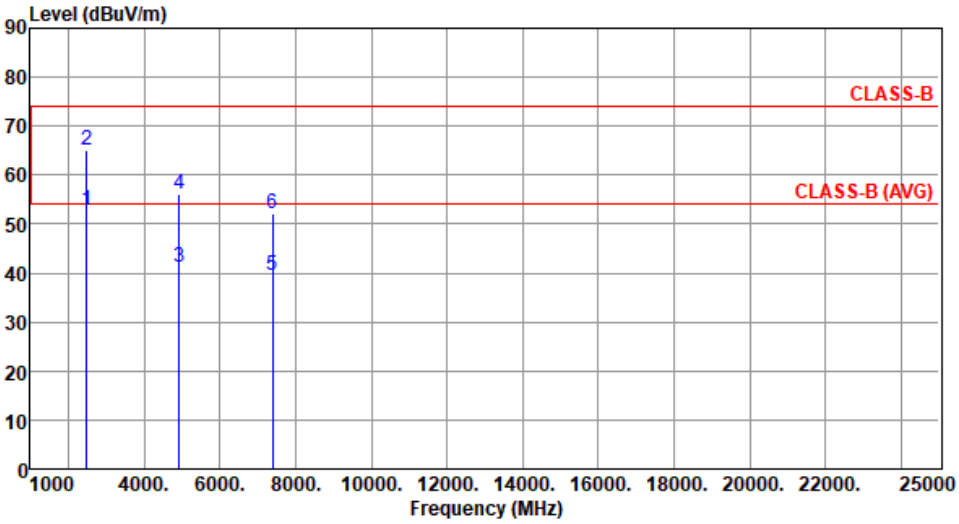
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	47.57	54.00	-6.43	50.31	-2.74	Average	138	351
2	2483.50	61.08	74.00	-12.92	63.82	-2.74	Peak	138	351
3	4924.00	41.16	54.00	-12.84	37.61	3.55	Average	175	121
4	4924.00	56.02	74.00	-17.98	52.47	3.55	Peak	175	121
5	7386.00	39.76	54.00	-14.24	30.79	8.97	Average	166	22
6	7386.00	53.68	74.00	-20.32	44.71	8.97	Peak	166	22

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

Modulation	HT20	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):25 Humidity(%):62

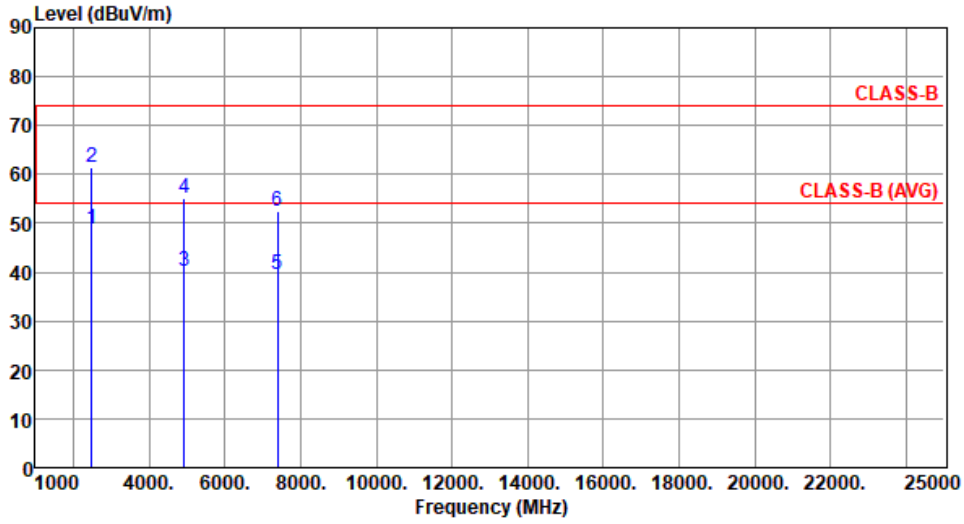


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.67	54.00	-1.33	55.41	-2.74	Average	213	84
2	2483.50	64.98	74.00	-9.02	67.72	-2.74	Peak	213	84
3	4924.00	41.12	54.00	-12.88	37.57	3.55	Average	105	149
4	4924.00	56.10	74.00	-17.90	52.55	3.55	Peak	105	149
5	7386.00	39.57	54.00	-14.43	30.60	8.97	Average	315	65
6	7386.00	52.13	74.00	-21.87	43.16	8.97	Peak	315	65

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT20	Test Freq. (MHz)	2462
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):25 Humidity(%):62



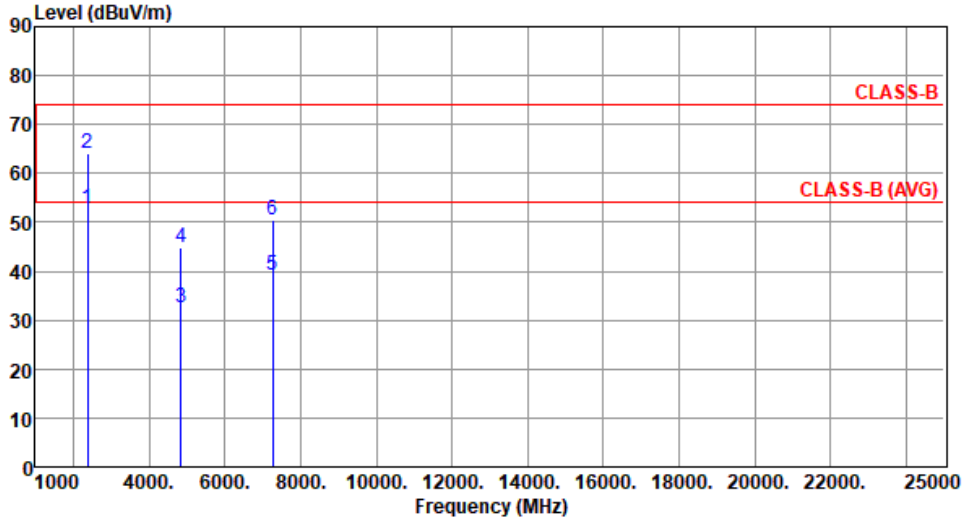
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	48.85	54.00	-5.15	51.59	-2.74	Average	205	358
2	2483.50	61.38	74.00	-12.62	64.12	-2.74	Peak	205	358
3	4924.00	40.10	54.00	-13.90	36.55	3.55	Average	178	125
4	4924.00	55.09	74.00	-18.91	51.54	3.55	Peak	178	125
5	7386.00	39.54	54.00	-14.46	30.57	8.97	Average	164	25
6	7386.00	52.53	74.00	-21.47	43.56	8.97	Peak	164	25

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT40

Modulation	HT40	Test Freq. (MHz)	2422
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):25 Humidity(%):68

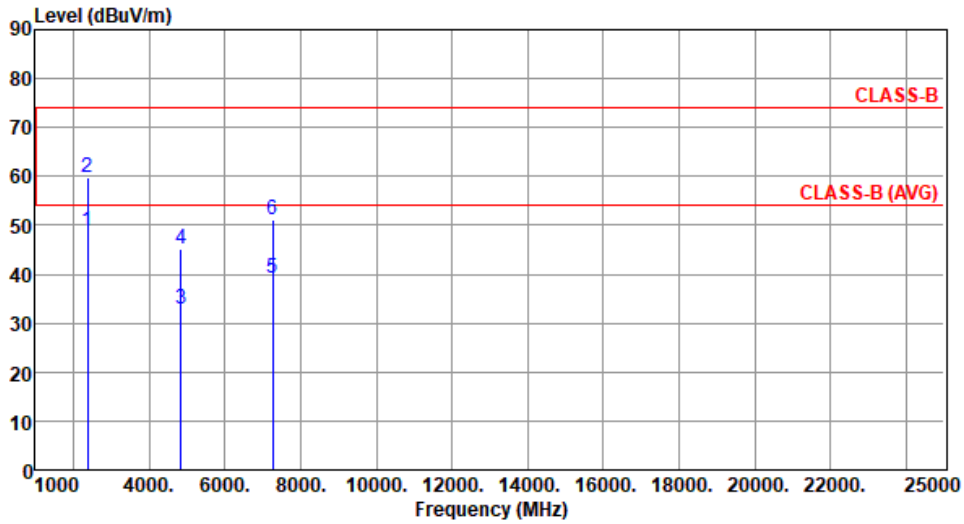


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.90	54.00	-1.10	55.69	-2.79	Average	210	277
2	2390.00	64.03	74.00	-9.97	66.82	-2.79	Peak	210	277
3	4844.00	32.71	54.00	-21.29	29.26	3.45	Average	100	30
4	4844.00	44.71	74.00	-29.29	41.26	3.45	Peak	100	30
5	7266.00	39.15	54.00	-14.85	30.15	9.00	Average	100	50
6	7266.00	50.59	74.00	-23.41	41.59	9.00	Peak	100	50

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT40	Test Freq. (MHz)	2422
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):25 Humidity(%):68

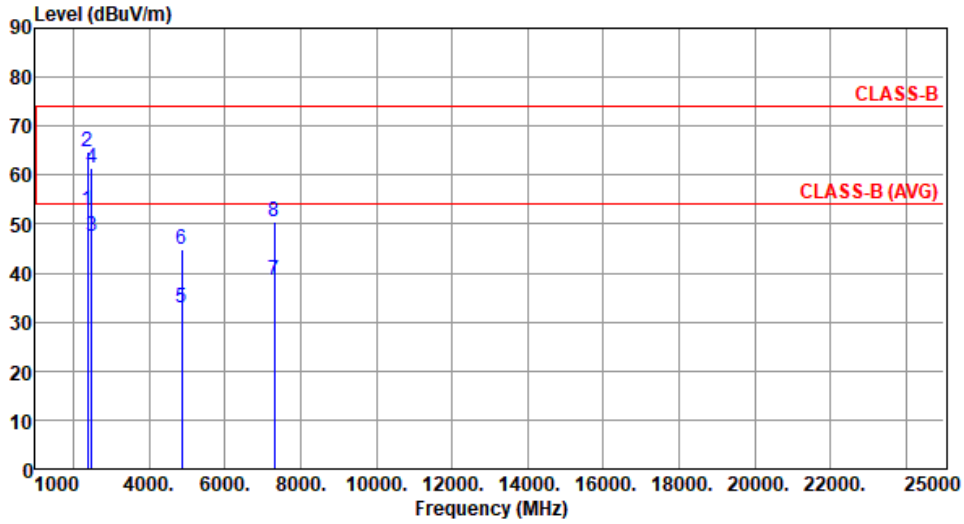


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.66	54.00	-5.34	51.45	-2.79	Average	209	348
2	2390.00	59.76	74.00	-14.24	62.55	-2.79	Peak	209	348
3	4844.00	32.76	54.00	-21.24	29.31	3.45	Average	100	20
4	4844.00	45.09	74.00	-28.91	41.64	3.45	Peak	100	20
5	7266.00	39.31	54.00	-14.69	30.31	9.00	Average	100	60
6	7266.00	51.15	74.00	-22.85	42.15	9.00	Peak	100	60

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT40	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):25 Humidity(%):62

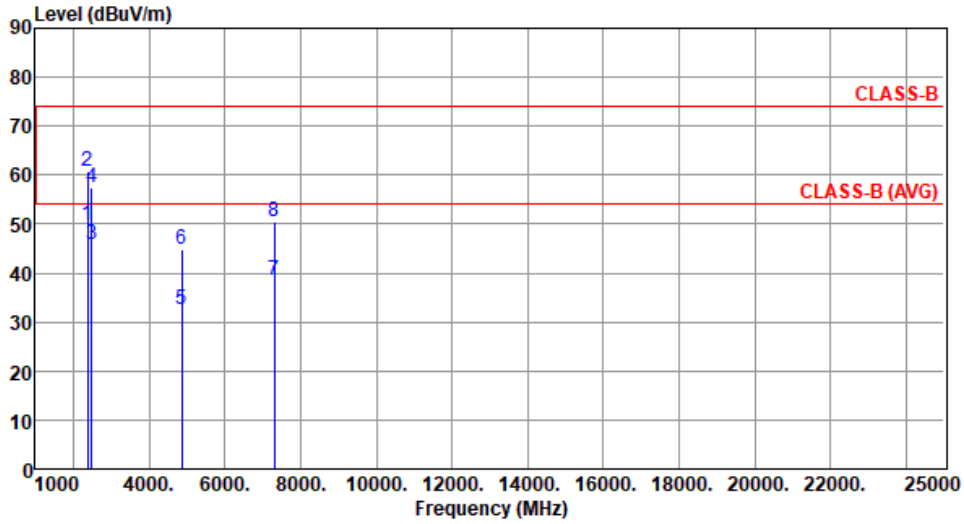


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.76	54.00	-1.24	55.55	-2.79	Average	234	87
2	2390.00	64.90	74.00	-9.10	67.69	-2.79	Peak	234	87
3	2483.50	47.44	54.00	-6.56	50.18	-2.74	Average	252	87
4	2483.50	61.28	74.00	-12.72	64.02	-2.74	Peak	252	87
5	4874.00	32.79	54.00	-21.21	29.34	3.45	Average	100	60
6	4874.00	44.80	74.00	-29.20	41.35	3.45	Peak	100	60
7	7311.00	38.58	54.00	-15.42	29.59	8.99	Average	100	40
8	7311.00	50.55	74.00	-23.45	41.56	8.99	Peak	100	40

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT40	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):25 Humidity(%):62

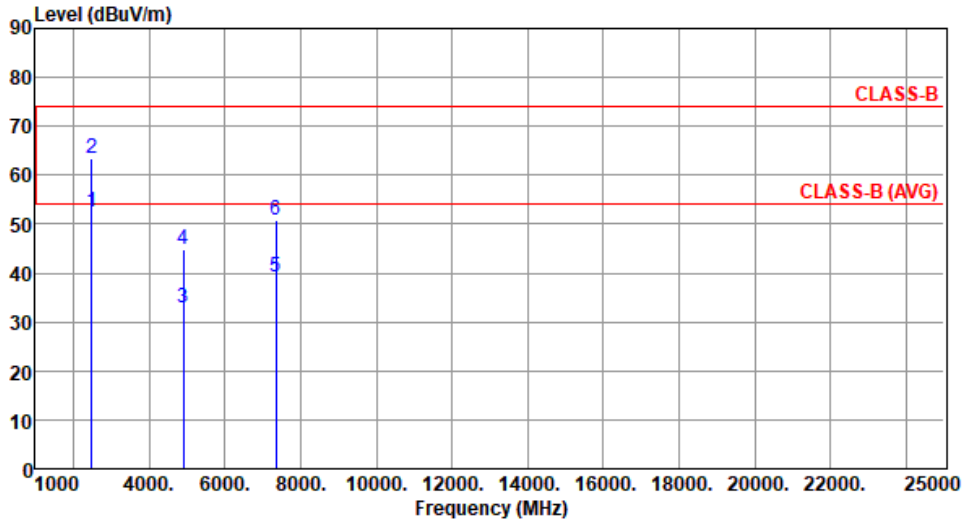


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.66	54.00	-4.34	52.45	-2.79	Average	365	352
2	2390.00	60.79	74.00	-13.21	63.58	-2.79	Peak	365	352
3	2483.50	45.81	54.00	-8.19	48.55	-2.74	Average	365	352
4	2483.50	57.31	74.00	-16.69	60.05	-2.74	Peak	365	352
5	4874.00	32.71	54.00	-21.29	29.26	3.45	Average	100	30
6	4874.00	44.68	74.00	-29.32	41.23	3.45	Peak	100	30
7	7311.00	38.61	54.00	-15.39	29.62	8.99	Average	100	80
8	7311.00	50.49	74.00	-23.51	41.50	8.99	Peak	100	80

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT40	Test Freq. (MHz)	2452
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):25 Humidity(%):68

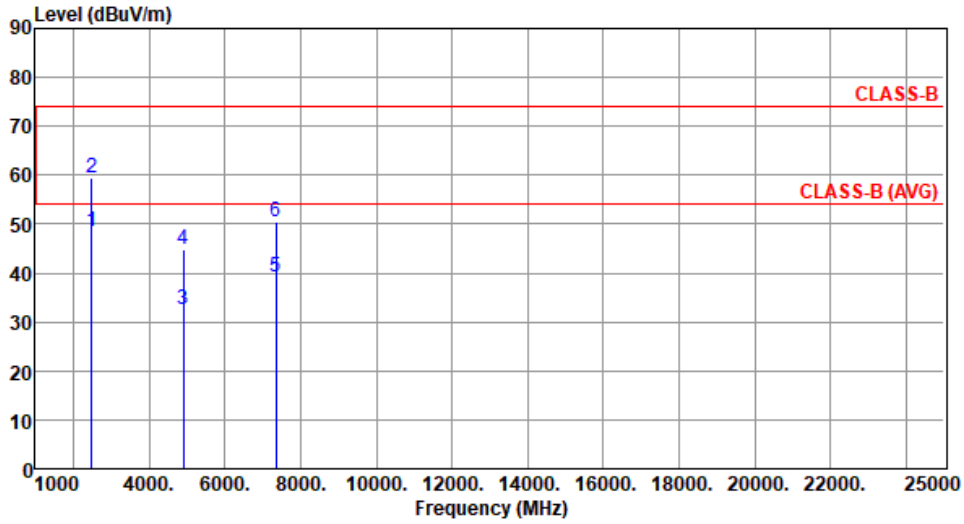


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.34	54.00	-1.66	55.08	-2.74	Average	167	286
2	2483.50	63.30	74.00	-10.70	66.04	-2.74	Peak	167	286
3	4904.00	32.75	54.00	-21.25	29.26	3.49	Average	100	20
4	4904.00	44.80	74.00	-29.20	41.31	3.49	Peak	100	20
5	7356.00	39.30	54.00	-14.70	30.25	9.05	Average	100	90
6	7356.00	50.73	74.00	-23.27	41.68	9.05	Peak	100	90

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT40	Test Freq. (MHz)	2452
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):25 Humidity(%):68



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	48.55	54.00	-5.45	51.29	-2.74	Average	209	355
2	2483.50	59.54	74.00	-14.46	62.28	-2.74	Peak	209	355
3	4904.00	32.64	54.00	-21.36	29.15	3.49	Average	100	30
4	4904.00	44.74	74.00	-29.26	41.25	3.49	Peak	100	30
5	7356.00	39.06	54.00	-14.94	30.01	9.05	Average	100	50
6	7356.00	50.51	74.00	-23.49	41.46	9.05	Peak	100	50

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.6 Emissions in Non-Restricted Frequency Bands

3.6.1 Emissions in Non-Restricted Frequency Bands Limit

Peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz.

3.6.2 Test Procedures

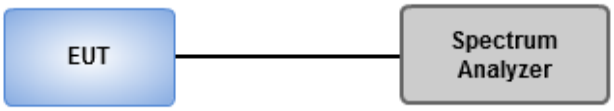
Reference level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Use the peak marker function to determine the maximum PSD level

Emission level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Scan Frequency range is up to 25GHz
4. Use the peak marker function to determine the maximum amplitude level

3.6.3 Test Setup

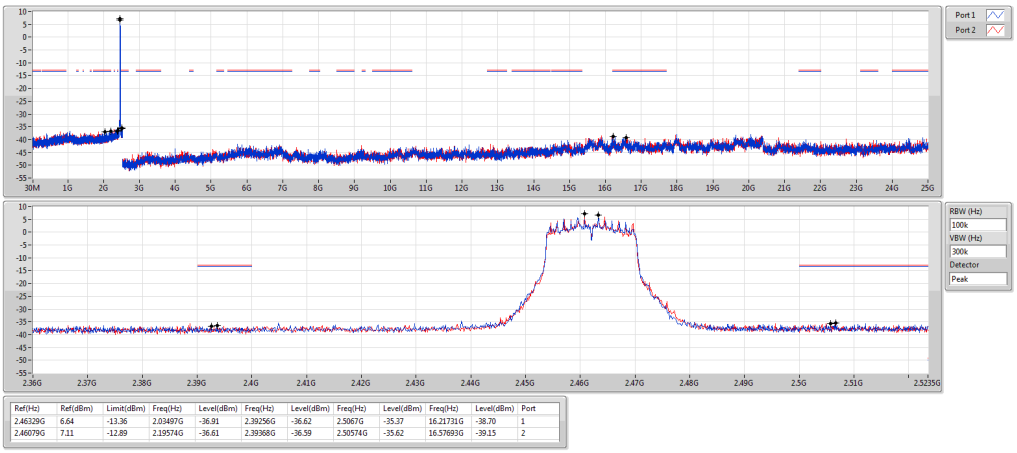


3.6.4 Unwanted Emissions into Non-Restricted Frequency Bands

Ambient Condition	23°C / 60-67%	Tested By	Aska Huang

802.11g_Nss1,(6Mbps)_2TX **CSE NdB**

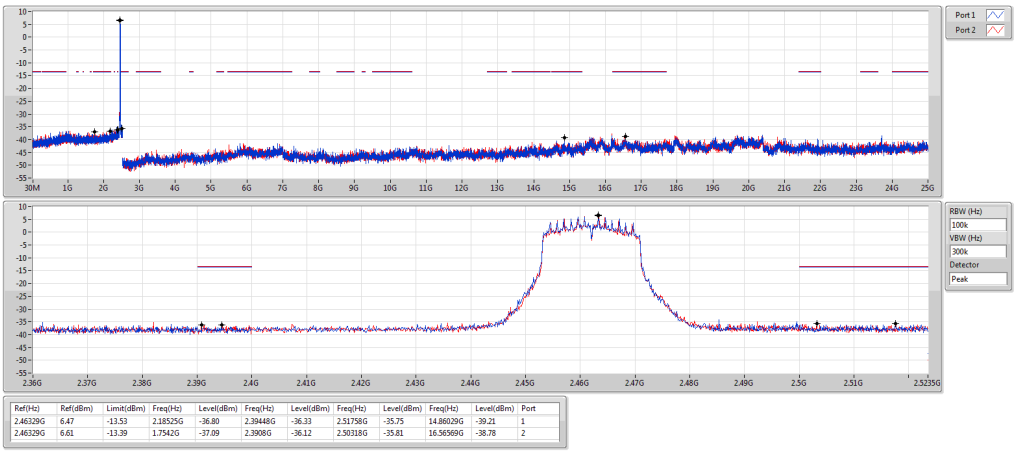
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46329G	6.64	-13.36	2.03497G	-36.91	2.39256G	-36.62	2.5067G	-35.37	16.21731G	-38.70	1
2.46079G	7.11	-12.89	2.19574G	-36.61	2.39368G	-36.59	2.50574G	-35.62	16.57693G	-39.15	2

802.11n HT20_Nss1,(MCS0)_2TX **CSE NdB**

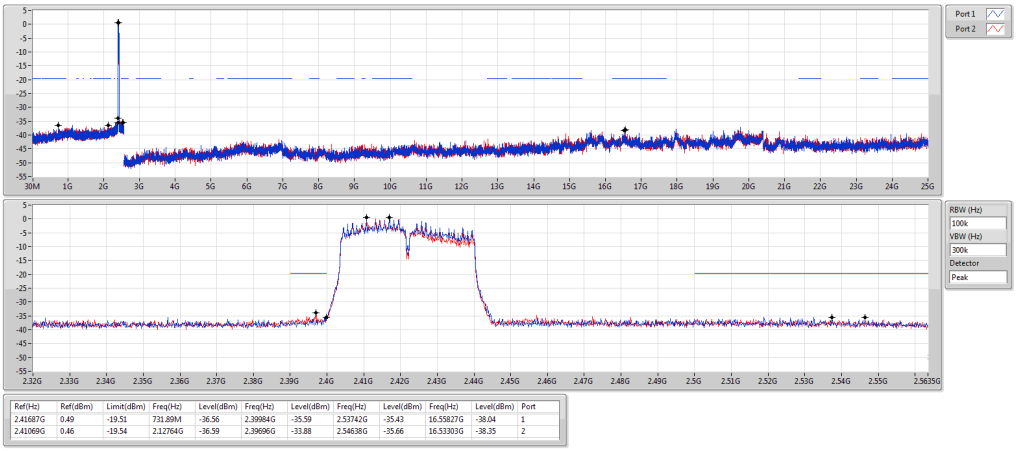
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46329G	6.47	-13.53	2.18525G	-36.80	2.39448G	-36.33	2.51758G	-35.75	14.86029G	-39.21	1
2.46329G	6.61	-13.39	1.7542G	-37.09	2.3908G	-36.12	2.50318G	-35.81	16.56569G	-38.78	2

802.11n HT40_Nss1,(MCS0)_2TX **CSE NdB**

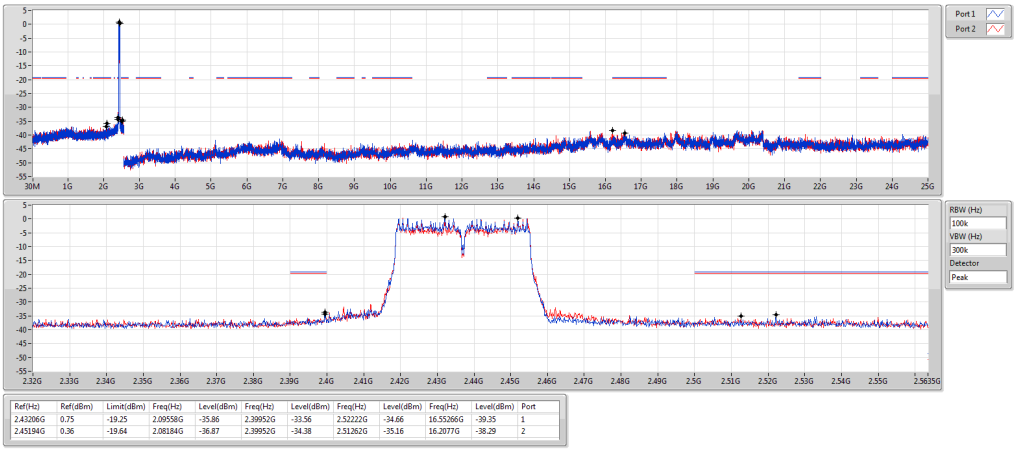
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41687G	0.49	-19.51	731.89M	-36.56	2.39084G	-35.59	2.53742G	-35.43	16.55827G	-38.04	1
2.41069G	0.46	-19.54	2.12764G	-36.59	2.39696G	-33.88	2.54638G	-35.66	16.53303G	-38.35	2

802.11n HT40_Nss1,(MCS0)_2TX **CSE NdB**

2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43206G	0.75	-19.25	2.09558G	-35.86	2.39952G	-33.56	2.52222G	-34.66	16.55266G	-39.35	1
2.45194G	0.36	-19.64	2.08184G	-36.87	2.39952G	-34.38	2.51262G	-35.16	16.2077G	-38.29	2

802.11n HT40_Nss1,(MCS0)_2TX **CSE NdB**

2452MHz

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.45578G	0.74	-19.26	2.30855G	-36.60	2.39824G	-35.39	2.50334G	-35.80	24.95793G	-38.86	1
2.45578G	1.90	-18.10	1.99139G	-36.98	2.39264G	-36.36	2.50574G	-35.58	16.27501G	-39.10	2

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

No.2-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 333, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666
Fax: 886-3-318-0345
Email: ICC_Service@icertifi.com.tw

==END==