



Shenzhen Huaxin Information Technology Service Co., Ltd

FCC TEST REPORT

On Behalf of

FCC ID.: UCC-M360-X

Altai Technologies Limited.

Industrial Dual-Band Wi-Fi 6 CPE/AP

Model No.: M360-X

Prepared for : Altai Technologies Limited
Address : Unit 209, 2/F, Lakeside 2, 10 Science Park West Avenue, HK Science
Park, Shatin, Hong Kong

Prepared By : Shenzhen Huaxin Information Technology Service Co., Ltd
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Date of Report : Jul 29th,2024
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TEST REPORT DECLARATION

Applicant : Altai Technologies Limited
Address : Unit 209, 2/F, Lakeside 2, 10 Science Park West Avenue, HK Science Park, Shatin, Hong Kong
Manufacturer : Altai Technologies Limited
Address : Unit 209, 2/F, Lakeside 2, 10 Science Park West Avenue, HK Science Park, Shatin, Hong Kong
EUT Description : Industrial Dual-Band Wi-Fi 6 CPE/AP
(A) Model No. : M360-X
(B) Trademark : N/A

Measurement Standard Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.247,
ANSI C63.10-2013**

The device described above is tested by Shenzhen Huaxin Information Technology Service Co., Ltd. to determine the maximum emission levels emanating from the device. The test results are contained in this test report and Shenzhen Huaxin Information Technology Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Huaxin Information Technology Service Co., Ltd.

Tested by (name +
signature).....:

Eason Tan
Project Engineer

Approved by (name +
signature).....:

Michael Wu
Project Manager

Date of issue.....: Jul 29th, 2024





Revision History

Revision	Issue Date	Revisions	Revised By
V0	Mar 27th, 2024	Initial released Issue	Eason Tan



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

KDB 558074 D01 15.247 Meas Guidance v05r02.

FCC Part 15.247, Subpart C			
Test Item	Standard Section	Result	Remark
Conducted Emission	15.207	PASS	--
Radiated Spurious Emission	15.209	PASS	--
6dB Bandwidth	15.247 (a)(2)	PASS	--
Maximum Output Power	15.247 (b)(3)	PASS	--
Conducted Spurious Emission	15.247 (d)	PASS	--
Power Spectral Density	15.247 (e)	PASS	--
Band Edge Emission (Radiated)	15.247 (d)	PASS	--
Antenna Requirement	15.203	PASS	--

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report.
- (2) The conclusion of this test report is judged by actual test data without considering measurement uncertainty.



1.1 TEST FACTORY

Company Name:	Shenzhen Huaxin Information Technology Service Co., Ltd
Address:	101, R & D Building, No.3 guansheng 4th Road, Luhua Community · Guanhu Street, Longhua District, Shenzhen, Guangdong, China
Telephone:	0775-21018313
Fax:	0775-21018313
FCC Test Firm Registration Number: 932271 Designation Number: CN1344 CAB ID : CN0147	

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95** %.

Item	MU	Remark
Conducted Emission (9K ~ 0.15MHz)	2.18dB	
Conducted Emission (0.15M ~ 30MHz)	2.17dB	
Radiation Emission ,3m (30MHz ~ 1GHz)	4.45 dB	Polarize: V
	2.76 dB	Polarize: H
Radiation Emission, 3m (1GHz ~ 6GHz)	4.02 dB	
Radiation Emission ,3m (6GHz ~ 18GHz)	4.30 dB	
RF output power (conducted)	0.41 dB	
Power Spectral Density (conducted)	0.39 dB	
Spurious emissions (conducted)	0.59 dB	
Occupied Channel Bandwidth (conducted)	4.22%	



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Industrial Dual-Band Wi-Fi 6 CPE/AP
Trade Mark	/
Model Name	M360-X
Series Model	/
Model Difference	/
Power supply	DC12V-48V or Passive PoE 48V
Radio technology	2.4G WiFi
Operation frequency	802.11b/g/n20/ax20: 2412~2462 MHz 802.11n40/ax40:2422~2452MHz
Channel No.	802.11b/g/n20/ax20: 11CH 802.11n40/ax40: 7CH
Modulation type	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n:OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (64QAM, 16QAM, QPSK, BPSK, 256QAM, 1024QAM)
Antenna Type	External antenna 1, Maximum Gain is 3.0dBi. External antenna 2, Maximum Gain is 3.0dBi.
Channel List	Please refer to the Note 2.
Hardware version number	1.0
Software version number	11.4cs2
Connecting I/O Port(s)	Please refer to the Note 1.

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.



2.

Operation Frequency of channel			
802.11b/g/n(20MHz)/ax(20MHz)		Channel List for 802.11n(40MHz)/ax(40MHz)	
Channel	Frequency	Channel	Frequency
01	2412	03	2422
02	2417	04	2427
03	2422	05	2432
04	2427	06	2437
05	2432	07	2442
06	2437	08	2447
07	2442	09	2452
08	2447		
09	2452		
10	2457		
11	2462		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Carrier Frequency Channel

2.4GHz Test Frequency:

For 802.11b/g/n (HT20)/ax (HE20)		For 802.11n (HT40)/ax (HE40)	
Channel	Freq.(MHz)	Channel	Freq.(MHz)
01	2412	03	2422
06	2437	06	2437
11	2462	09	2452

Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.



2.2 DESCRIPTION OF THE TEST MODES

Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Worst Mode	Description	Data Rate (Mbps)
Mode 1	TX IEEE 802.11b CH1	1
Mode 2	TX IEEE 802.11b CH6	1
Mode 3	TX IEEE 802.11 b CH11	1
Mode 4	TX IEEE 802.11g CH1	6
Mode 5	TX IEEE 802.11g CH6	6
Mode 6	TX IEEE 802.11g CH11	6
Mode 7	TX IEEE 802.11n HT20 CH1	6.5
Mode 8	TX IEEE 802.11n HT20 CH6	6.5
Mode 9	TX IEEE 802.11n HT20 CH11	6.5
Mode 10	TX IEEE 802.11n HT40 CH3	13.5
Mode 11	TX IEEE 802.11n HT40 CH6	13.5
Mode 12	TX IEEE 802.11n HT40 CH9	13.5
Mode 13	TX IEEE 802.11ax HE20 CH1	8
Mode 14	TX IEEE 802.11ax HE20 CH6	8
Mode 15	TX IEEE 802.11ax HE20 CH11	8
Mode 16	TX IEEE 802.11ax HE40 CH3	16
Mode 17	TX IEEE 802.11ax HE40 CH6	16
Mode 18	TX IEEE 802.11ax HE40 CH9	16

Note:

The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.



2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

Accessories Equipment

Description	Manufacturer	Model	S/N	Rating
/	/	/	/	/
/	/	/	/	/

2.4 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (2) “YES” is means “with core”; “NO” is means “without core”.



2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Equipment	Manufacturer	Model No.	Firmware version	Serial No.	Last cal.	Cal. Due day
9*6*6 anechoic chamber	Mao Rui	9*6*6m	/	N/A	2022.06.15	2025.06.14
EMI receiver	R&S	ESR7	5.812	102543	2023.10.20	2024.10.19
Spectrum analyzer	R&S	FSV40-N	V7.0-4-62-2	101795	2023.09.19	2024.09.18
Pre-amplifier	HP	8447D	/	1616A02061	2023.04.15	2024.04.14
Pre-amplifier	Agilent	8449B	/	9008A00551	2023.04.15	2024.04.14
Bilog Antenna	Schwarzbeck	VULB 9168	/	/	2022.06.19	2024.06.18
Horn antenna	A.H. System, Inc	SAS-571	/	915	2023.06.17	2024.06.16
Loop Antenna	Schwarzbeck	FMZB 1519B	/	/	2023.06.17	2024.06.16
LISN	R&S	ENV216		101291	2023.06.17	2024.06.16
LISN	R&S	ESH3-Z5		894981/024	2023.06.17	2024.06.16
Analog signal Generato	Agilent	N5181A	A.01.87	MY47421151	2023.09.17	2024.09.16
Vector Signal Generator	Keysight	N5182A	A.01.87	MY50140428	2023.09.17	2024.09.16
Wideband Radio communication tester	R&S	CMW500	V3.7.22	157762	2023.09.17	2024.09.16
Spectrum analyzer	Agilent	N9020A	A.14.16	MY51280803	2023.04.15	2024.04.14
RF Cable	/	(10G)9m	/	/	2023.09.17	2024.09.16
RF Cable	/	(10G)10m	/	/	2023.09.17	2024.09.16
RF Cable	/	(18G)10m	/	/	2023.09.17	2024.09.16
attenuation pad	/	6dB	/	/	2023.09.17	2024.09.16
attenuation pad	/	10dB	/	16280012	2023.09.17	2024.09.16

Software Information			
Test Item	Software Name	Manufacturer	Version
RE	EMC-I	SKET	V1.4.0.1
CE	EMC-I	SKET	V1.4.0.1
RF-CE	RTS	TACHOY	V1.0.0



3. EMC EMISSION

3.1 AC POWER LINE CONDUCTED EMISSION

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

FREQUENCY (MHz)	Conducted Emissionlimit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 – 56 *	56 – 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of “ * ” marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

Tested Supporting System Details

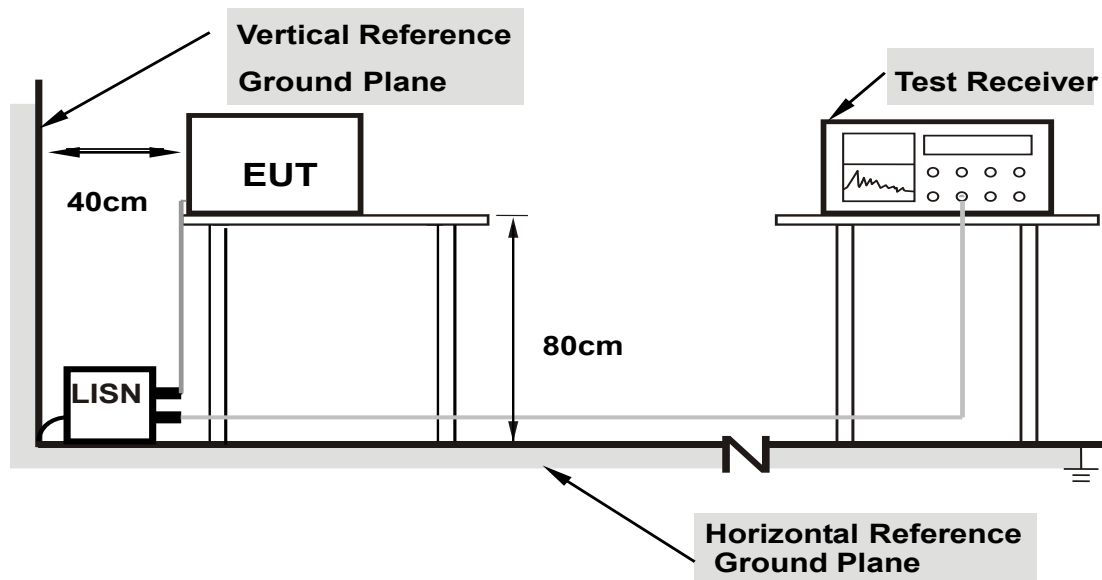
No.	Description	Manufacturer	Model	Certification	Note
1.	AC adaptor	MCP	CHD-12068	/	Input:AC 100-240V 50/60Hz Output:DC 12V/2A



3.1.2 TEST PROCEDURE

- a. The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN is at least 80 cm from the nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

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 support units.

3.1.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

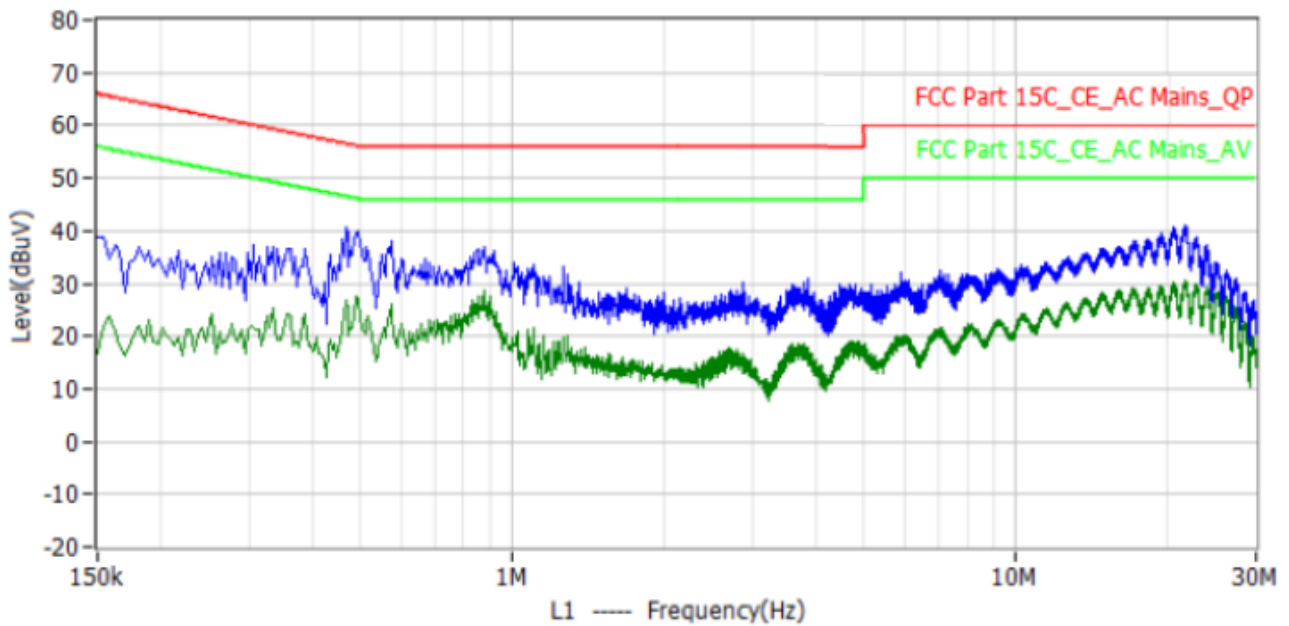
3.1.5 TEST RESULT

Note:

1. All modes were tested at Low, Middle, and High channel; only the worst result of 802.11 ax (HE40) CH3 was reported as below.
2. Both 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz power supply have been tested, only the worst result of 120 VAC, 60 Hz was reported as below.



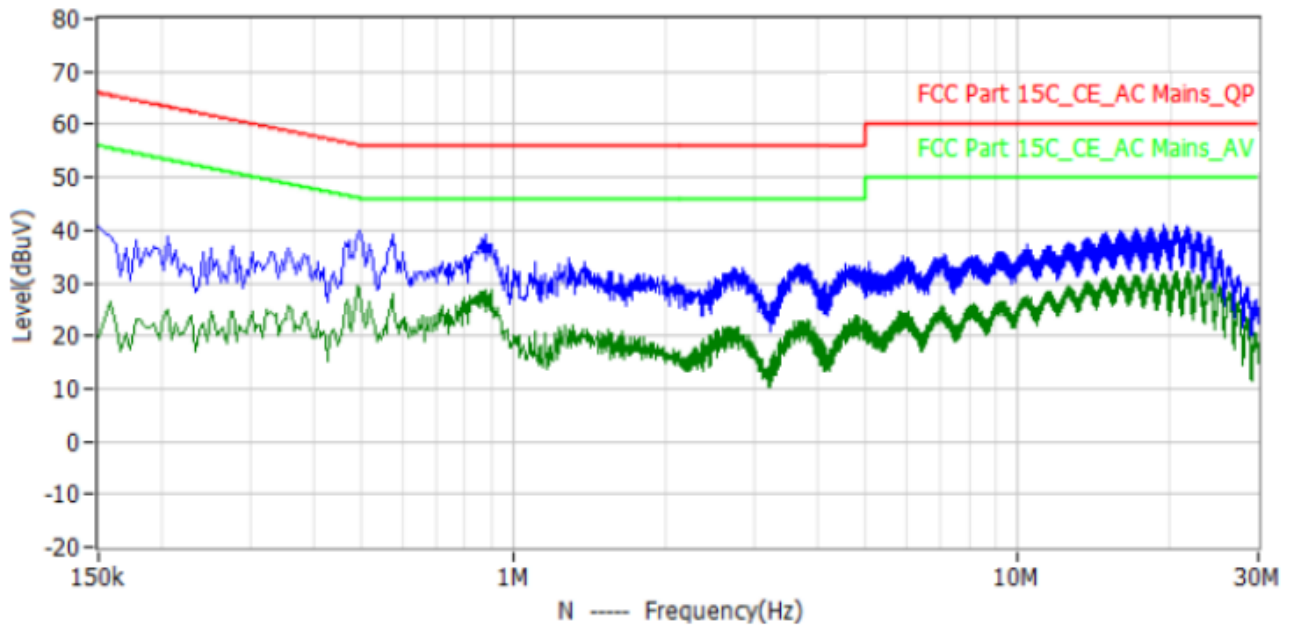
Line:



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Delta dB	Detector	Polar
1*	466.000kHz	30.8	9.7	40.5	56.6	-16.1	QP	L1
2*	21.674MHz	31.2	10.0	41.2	60.0	-18.8	QP	L1
3*	882.000kHz	27.0	9.8	36.8	56.0	-19.2	QP	L1
4*	2.858MHz	20.3	9.9	30.2	56.0	-25.8	QP	L1
5*	10.246MHz	23.7	9.9	33.6	60.0	-26.4	QP	L1
6*	154.000kHz	29.1	9.6	38.7	65.8	-27.0	QP	L1
7*	878.000kHz	18.8	9.8	28.6	46.0	-17.4	AV	L1
8*	490.000kHz	17.8	9.6	27.4	46.2	-18.7	AV	L1
9*	21.710MHz	20.6	10.0	30.6	50.0	-19.4	AV	L1
10*	10.238MHz	14.3	9.9	24.2	50.0	-25.8	AV	L1
11*	3.682MHz	8.7	9.9	18.6	46.0	-27.4	AV	L1
12*	158.000kHz	14.2	9.6	23.8	55.6	-31.8	AV	L1



Neutral:



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Delta dB	Detector	Polar
1*	494.000kHz	30.3	9.7	40.0	56.1	-16.1	QP	N
2*	878.000kHz	29.4	9.6	39.0	56.0	-17.0	QP	N
3*	20.738MHz	30.6	10.2	40.8	60.0	-19.2	QP	N
4*	10.442MHz	27.3	9.9	37.2	60.0	-22.8	QP	N
5*	206.000kHz	28.8	9.9	38.7	63.4	-24.6	QP	N
6*	5.090MHz	24.1	9.9	34.0	60.0	-26.0	QP	N
7*	490.000kHz	19.6	9.7	29.3	46.2	-16.9	AV	N
8*	878.000kHz	19.3	9.6	28.9	46.0	-17.1	AV	N
9*	21.786MHz	21.8	10.2	32.0	50.0	-18.0	AV	N
10*	12.570MHz	19.3	10.1	29.4	50.0	-20.6	AV	N
11*	3.842MHz	13.1	9.8	22.9	46.0	-23.1	AV	N
12*	158.000kHz	16.7	9.9	26.6	55.6	-29.0	AV	N

Note:

1. Level = Reading + Factor

2. Factor = LISN Factor + Cable Loss

3. Delta = Level - Limit



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205(a)&209(a) limit in the table and according to ANSI C63.10-2013 below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

Frequencies (MHz)	Field Strength (micorvolts/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

LIMITS OF RADIATED EMISSION MEASUREMENT (1000MHz-25GHz)

FREQUENCY (MHz)	(dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	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	Above 38.6
13.36-13.41			



For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP/AV
Start Frequency	9 KHz/150KHz(Peak/QP/AV)
Stop Frequency	150KHz/30MHz(Peak/QP/AV)
RB / VB (emission in restricted band)	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz); 200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP
Start Frequency	30 MHz(Peak/QP)
Stop Frequency	1000 MHz (Peak/QP)
RB / VB (emission in restricted band)	120 KHz / 300 KHz

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/AV
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier hamonic(Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

For Restricted band

Spectrum Parameter	Setting
Detector	Peak/AV
Start/Stop Frequency	Lower Band Edge: 2310 to 2430 MHz Upper Band Edge: 2445 to 2500 MHz
RB / VB	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)



Receiver Parameter	Setting
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

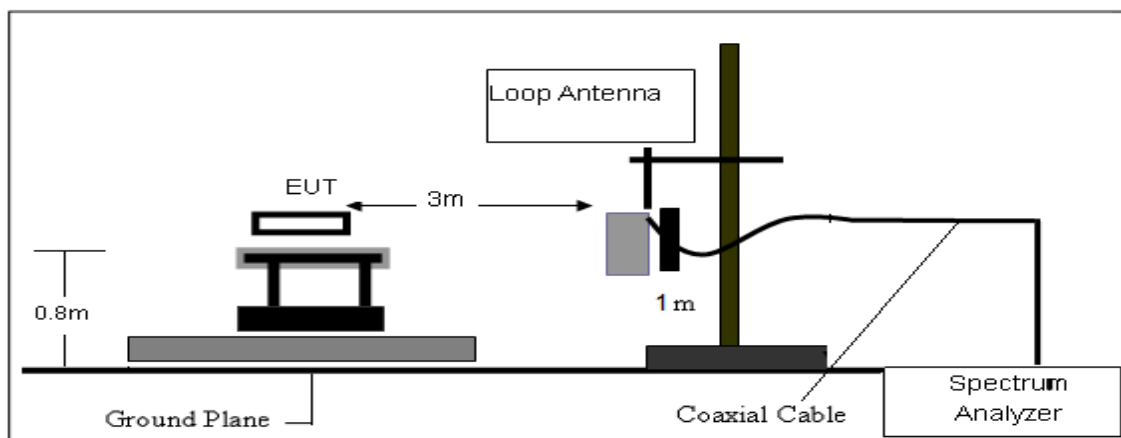
- The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and QuasiPeak detector mode will be re-measured.
- If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

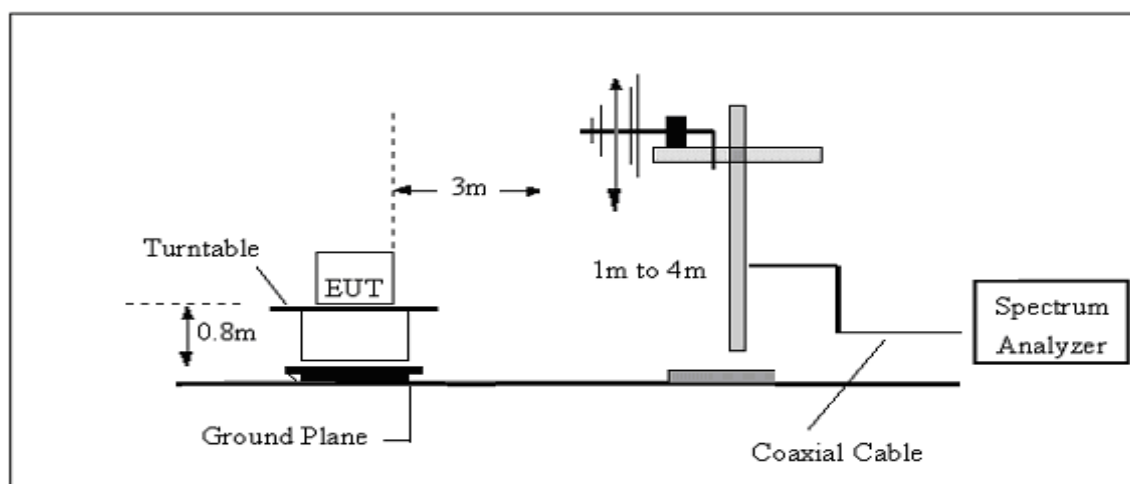
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.3 TEST SETUP

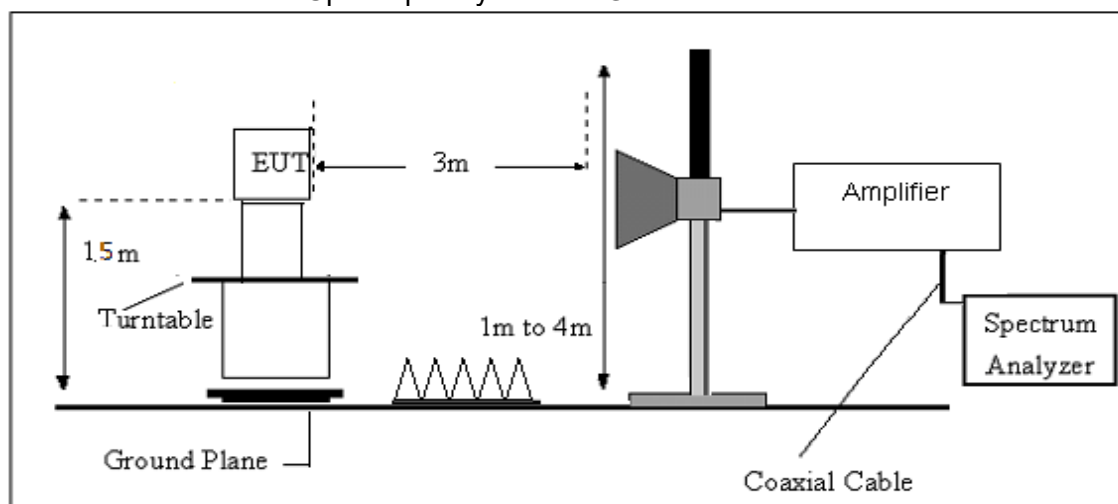
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.4 EUT OPERATING CONDITIONS

Please refer to section 3.1.4 of this report.



3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

3.2.6 TEST RESULT

We have scanned the 10th harmonic from 9KHz to the EUT' s highest frequency.

Detailed information please see the following page.

From 9KHz to 30MHz Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

30M-1GHz : PASS

Noet:1.The test results are listed in next pages.

2.All modes have been tested, and only worst data of 802.11 ax mode, Channel 2422MHz was listed in this report.

1G-25GHz Remark:PASS

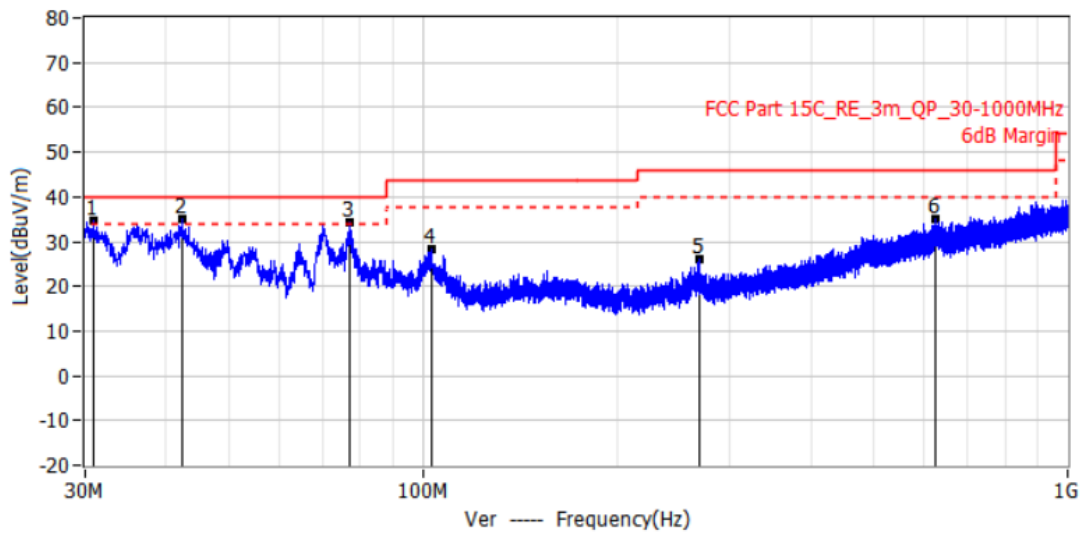
Note:

1. The test results are listed in next pages.
 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out.
 3. If the limits for the measurement with the average detector are met when using a receiver with a quasi-peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.
 4. Except for mode b/g, other modes test the MIMO status.
- The test result of SISO mode reflects the worst data between antenna 1 and antenna 2.



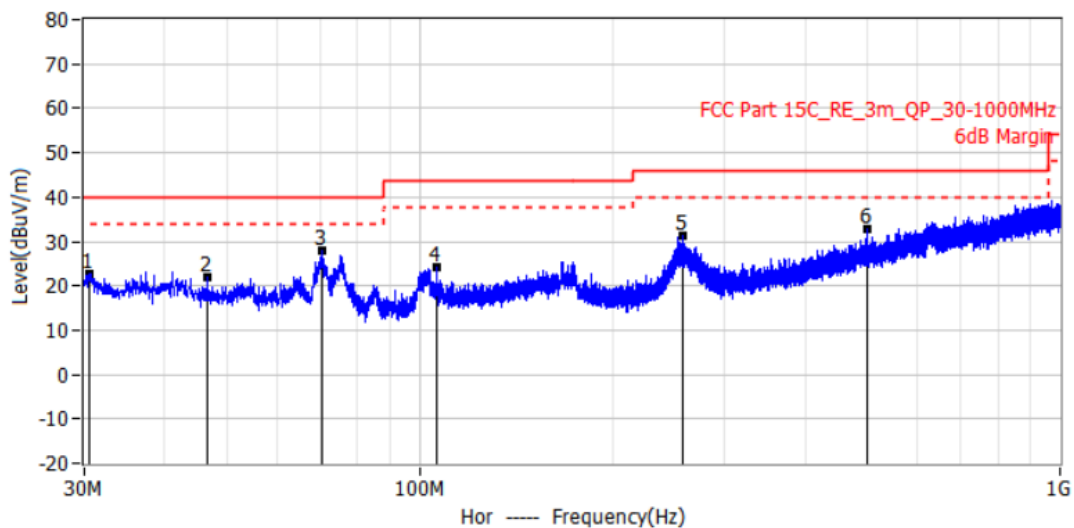
Test Mode: Mode16

Ver



No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Delta dB	Detector	Polar	Height cm	Angle deg
1*	30.840MHz	21.6	13.0	34.6	40.0	-5.4	QP	Ver	100.0	63.0
2*	42.300MHz	20.8	14.2	35.0	40.0	-5.0	QP	Ver	100.0	0.0
3*	77.220MHz	23.9	10.3	34.2	40.0	-5.8	QP	Ver	100.0	224.0
4*	103.080MHz	17.5	10.7	28.2	43.5	-15.3	QP	Ver	100.0	305.0
5*	268.080MHz	11.4	14.5	25.9	46.0	-20.1	QP	Ver	100.0	82.0
6*	624.960MHz	11.5	23.4	34.9	46.0	-11.1	QP	Ver	100.0	31.0

Hor



No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Delta dB	Detector	Polar	Height cm	Angle deg
1*	30.600MHz	9.7	13.0	22.7	40.0	-17.3	QP	Hor	100.0	303.0
2*	46.800MHz	7.8	14.1	21.9	40.0	-18.1	QP	Hor	100.0	0.0
3*	70.620MHz	15.8	12.0	27.8	40.0	-12.2	QP	Hor	100.0	0.0
4*	106.500MHz	12.9	11.3	24.2	43.5	-19.3	QP	Hor	100.0	0.0
5*	258.300MHz	17.2	14.0	31.2	46.0	-14.8	QP	Hor	100.0	128.0
6*	499.980MHz	12.1	20.7	32.8	46.0	-13.2	QP	Hor	100.0	346.0



From 1GHz to 25GHz:

Test Mode : IEEE 802.11b TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4824	V	82.67	-27.27	55.40	74.00	-18.60	Peak
2	4824	V	66.10	-27.27	38.83	54.00	-15.17	Avg
3	7236	--	--	--	--	--	--	--
4	9648	--	--	--	--	--	--	--
5	4824	H	83.56	-27.27	56.29	74.00	-17.71	Peak
6	4824	H	71.96	-27.27	44.69	54.00	-9.31	Avg
7	7236	--	--	--	--	--	--	--
8	9648	--	--	--	--	--	--	--
Test Mode : IEEE 802.11b TX Mid								
1	4874	V	85.30	-27.79	57.51	74.00	-16.49	Peak
2	4874	V	64.26	-27.79	36.47	54.00	-17.53	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	84.00	-27.79	56.21	74.00	-17.79	Peak
6	4874	H	72.24	-27.79	44.45	54.00	-9.55	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11b TX High								
1	4924	V	85.67	-28.30	57.37	74.00	-16.63	Peak
2	4924	V	68.45	-28.30	40.15	54.00	-13.85	Avg
3	7386	--	--	--	--	--	--	--
4	9848	--	--	--	--	--	--	--
5	4924	H	83.29	-28.30	54.99	74.00	-19.01	Peak
6	4924	H	71.92	-28.30	43.62	54.00	-10.38	Avg
7	7386	--	--	--	--	--	--	--
8	9848	--	--	--	--	--	--	--
Note:	1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit.							



Test Mode : IEEE 802.11g TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4824	V	83.08	-27.27	55.81	74.00	-18.19	Peak
2	4824	V	66.48	-27.27	39.21	54.00	-14.79	Avg
3	7236	--	--	--	--	--	--	--
4	9648	--	--	--	--	--	--	--
5	4824	H	81.51	-27.27	54.24	74.00	-19.76	Peak
6	4824	H	73.84	-27.27	46.57	54.00	-7.43	Avg
7	7236	--	--	--	--	--	--	--
8	9648	--	--	--	--	--	--	--
Test Mode : IEEE 802.11g TX Mid								
1	4874	V	86.73	-27.79	58.94	74.00	-15.06	Peak
2	4874	V	63.74	-27.79	35.95	54.00	-18.05	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	81.91	-27.79	54.12	74.00	-19.88	Peak
6	4874	H	73.23	-27.79	45.44	54.00	-8.56	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11g TX High								
1	4924	V	83.33	-28.30	55.03	74.00	-18.97	Peak
2	4924	V	70.35	-28.30	42.05	54.00	-11.95	Avg
3	7386	--	--	--	--	--	--	--
4	9848	--	--	--	--	--	--	--
5	4924	H	80.43	-28.30	52.13	74.00	-21.87	Peak
6	4924	H	73.43	-28.30	45.13	54.00	-8.87	Avg
7	7386	--	--	--	--	--	--	--
8	9848	--	--	--	--	--	--	--
Note:	1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit.							



Test Mode : IEEE 802.11n/HT20 TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4824	V	85.95	-27.27	58.68	74.00	-15.32	Peak
2	4824	V	65.07	-27.27	37.80	54.00	-16.20	Avg
3	7236	--	--	--	--	--	--	--
4	9648	--	--	--	--	--	--	--
5	4824	H	82.68	-27.27	55.41	74.00	-18.59	Peak
6	4824	H	74.94	-27.27	47.67	54.00	-6.33	Avg
7	7236	--	--	--	--	--	--	--
8	9648	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HT20 TX Mid								
1	4874	V	87.56	-27.79	59.77	74.00	-14.23	Peak
2	4874	V	63.51	-27.79	35.72	54.00	-18.28	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	82.05	-27.79	54.26	74.00	-19.74	Peak
6	4874	H	70.57	-27.79	42.78	54.00	-11.22	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HT20 TX High								
1	4924	V	86.42	-28.30	58.12	74.00	-15.88	Peak
2	4924	V	68.00	-28.30	39.70	54.00	-14.30	Avg
3	7386	--	--	--	--	--	--	--
4	9848	--	--	--	--	--	--	--
5	4924	H	80.11	-28.30	51.81	74.00	-22.19	Peak
6	4924	H	72.91	-28.30	44.61	54.00	-9.39	Avg
7	7386	--	--	--	--	--	--	--
8	9848	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit.								



Test Mode : IEEE 802.11n/HT40 TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4844	V	83.71	-27.27	56.44	74.00	-17.56	Peak
2	4844	V	66.09	-27.27	38.82	54.00	-15.18	Avg
3	7266	--	--	--	--	--	--	--
4	9688	--	--	--	--	--	--	--
5	4844	H	82.72	-27.27	55.45	74.00	-18.55	Peak
6	4844	H	72.69	-27.27	45.42	54.00	-8.58	Avg
7	7266	--	--	--	--	--	--	--
8	9688	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HT40 TX Mid								
1	4874	V	85.51	-27.79	57.72	74.00	-16.28	Peak
2	4874	V	63.81	-27.79	36.02	54.00	-17.98	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	82.58	-27.79	54.79	74.00	-19.21	Peak
6	4874	H	70.64	-27.79	42.85	54.00	-11.15	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HT40 TX High								
1	4904	V	85.34	-28.30	57.04	74.00	-16.96	Peak
2	4904	V	67.15	-28.30	38.85	54.00	-15.15	Avg
3	7356	--	--	--	--	--	--	--
4	9808	--	--	--	--	--	--	--
5	4904	H	81.04	-28.30	52.74	74.00	-21.26	Peak
6	4904	H	73.47	-28.30	45.17	54.00	-8.83	Avg
7	7356	--	--	--	--	--	--	--
8	9808	--	--	--	--	--	--	--
Note:	1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit.							



Test Mode : IEEE 802.11ax20 TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4824	V	86.09	-27.27	58.82	74.00	-15.18	Peak
2	4824	V	66.38	-27.27	39.11	54.00	-14.89	Avg
3	7236	--	--	--	--	--	--	--
4	9648	--	--	--	--	--	--	--
5	4824	H	81.58	-27.27	54.31	74.00	-19.69	Peak
6	4824	H	73.76	-27.27	46.49	54.00	-7.51	Avg
7	7236	--	--	--	--	--	--	--
8	9648	--	--	--	--	--	--	--
Test Mode : IEEE 802.11n/HTax20 TX Mid								
1	4874	V	86.57	-27.79	58.78	74.00	-15.22	Peak
2	4874	V	66.46	-27.79	38.67	54.00	-15.33	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	83.11	-27.79	55.32	74.00	-18.68	Peak
6	4874	H	71.30	-27.79	43.51	54.00	-10.49	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11ax20 TX High								
1	4924	V	85.00	-28.30	56.70	74.00	-17.30	Peak
2	4924	V	67.87	-28.30	39.57	54.00	-14.43	Avg
3	7386	--	--	--	--	--	--	--
4	9848	--	--	--	--	--	--	--
5	4924	H	83.18	-28.30	54.88	74.00	-19.12	Peak
6	4924	H	71.73	-28.30	43.43	54.00	-10.57	Avg
7	7386	--	--	--	--	--	--	--
8	9848	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit.								



Test Mode : IEEE 802.11ax40 TX Low								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	4844	V	84.59	-27.27	57.32	74.00	-16.68	Peak
2	4844	V	65.55	-27.27	38.28	54.00	-15.72	Avg
3	7266	--	--	--	--	--	--	--
4	9688	--	--	--	--	--	--	--
5	4844	H	80.74	-27.27	53.47	74.00	-20.53	Peak
6	4844	H	73.87	-27.27	46.60	54.00	-7.40	Avg
7	7266	--	--	--	--	--	--	--
8	9688	--	--	--	--	--	--	--
Test Mode : IEEE 802.11ax40 TX Mid								
1	4874	V	84.48	-27.79	56.69	74.00	-17.31	Peak
2	4874	V	63.95	-27.79	36.16	54.00	-17.84	Avg
3	7311	--	--	--	--	--	--	--
4	9748	--	--	--	--	--	--	--
5	4874	H	84.20	-27.79	56.41	74.00	-17.59	Peak
6	4874	H	72.41	-27.79	44.62	54.00	-9.38	Avg
7	7311	--	--	--	--	--	--	--
8	9748	--	--	--	--	--	--	--
Test Mode : IEEE 802.11ax40 TX High								
1	4904	V	85.96	-28.30	57.66	74.00	-16.34	Peak
2	4904	V	68.42	-28.30	40.12	54.00	-13.88	Avg
3	7356	--	--	--	--	--	--	--
4	9808	--	--	--	--	--	--	--
5	4904	H	83.98	-28.30	55.68	74.00	-18.32	Peak
6	4904	H	71.22	-28.30	42.92	54.00	-11.08	Avg
7	7356	--	--	--	--	--	--	--
8	9808	--	--	--	--	--	--	--
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit.								



4. CONDUCTED SPURIOUS EMISSION

4.1 LIMIT

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

4.2 TEST PROCEDURE

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	30 MHz to 10th carrier harmonic
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

For Band edge

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 2300 to 2432 MHz Upper Band Edge: 2442 to 2500 MHz
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



The EUT which is powered by the AC adaptor, is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

4.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

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4.6 TEST RESULTS

For the measurement records · refer to the appendix I.

Note: Both antennas have been tested and only the worst data of antenna 1 is shown.



5. POWER SPECTRAL DENSITY

5.1 LIMIT

FCC Part15.247 , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	≤ 8 dBm (RBW ≥ 3 KHz)	2400-2483.5	PASS

5.2 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the $100 \text{ kHz} \geq \text{RBW} \geq 3 \text{ kHz}$.
4. Set the $\text{VBW} \geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.



5.6 TEST RESULTS

For the measurement records , refer to the appendix I.



6.6DB BANDWIDTH

6.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

6.2 TEST PROCEDURE

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW $\geq$ 3RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.



6.6 TEST RESULTS

For the measurement records , refer to the appendix I.

Note: Both antennas have been tested and only the worst data of antenna 1 is shown.



7. MAXIMUM OUTPUT POWER

7.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

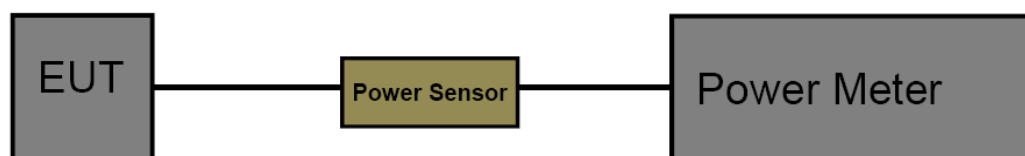
7.2 TEST PROCEDURE

1. The maximum conducted output power may be measured using a broadband RF power meter.
2. 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.
3. 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.
4. Record the measurement data.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

7.6 TEST RESULTS

For the measurement records , refer to the appendix I.



8.BAND EDGE EMISSION (RADIATED)

8.1 TEST LIMITS

Please refer RSS-GEN & FCC PART 15: 15.247

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits and RSS-GEN limits.

8.2 TEST PROCEDURE

Details see the KDB558074 D01 Meas Guidance v05r02

8.2.1 Put the EUT on a 1.5m high table, power on the EUT. Emissions were scanned and measured rotating the EUT to 360 degrees, Find the maximum Emission

8.2.2 Check the spurious emissions out of band.

8.2.3 RBW 1MHz, VBW 3MHz, peak detector for peak value, RBW 1MHz, VBW 10Hz, RMS detector for AV value.

8.3 TEST SETUP

Same as 3.2.3.

8.4 TEST RESULTS

PASS.

Detailed information please see the following page.



Frequency Range : 2310MHz~2410MHz								
Test Mode : IEEE 802.11b TX 2412MHz								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	71.90	-21.62	50.28	74.00	-23.72	Peak
2	2390	H	--	-21.62	--	54.00	--	Avg
3	2400	H	78.87	-26.08	52.79	74.00	-21.21	Peak
4	2400	H	--	-26.08	--	54.00	--	Avg
1	2390	V	70.26	-21.62	48.64	74.00	-25.36	Peak
2	2390	V	--	-21.62	--	54.00	--	Avg
3	2400	V	78.03	-26.08	51.95	74.00	-22.05	Peak
4	2400	V	--	-26.08	--	54.00	--	Avg
Frequency Range : 2450MHz~2550MHz								
Test Mode : IEEE 802.11b TX 2462MHz								
1	2483.5	H	77.11	-25.84	51.27	74.00	-22.73	Peak
2	2483.5	H	--	-25.84	--	54.00	--	Avg
1	2483.5	V	72.37	-25.84	46.53	74.00	-27.47	Peak
2	2483.5	V	--	-25.84	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								



Frequency Range : 2310MHz~2410MHz								
Test Mode : IEEE 802.11g TX 2412MHz								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	71.90	-21.62	50.28	74.00	-23.72	Peak
2	2390	H	--	-21.62	--	54.00	--	Avg
3	2400	H	76.29	-26.08	50.21	74.00	-23.79	Peak
4	2400	H	--	-26.08	--	54.00	--	Avg
1	2390	V	69.95	-21.62	48.33	74.00	-25.67	Peak
2	2390	V	--	-21.62	--	54.00	--	Avg
3	2400	V	79.53	-26.08	53.45	74.00	-20.55	Peak
4	2400	V	--	-26.08	--	54.00	--	Avg
Frequency Range : 2450MHz~2550MHz								
Test Mode : IEEE 802.11g TX 2462MHz								
1	2483.5	H	74.84	-25.84	49.00	74.00	-25.00	Peak
2	2483.5	H	--	-25.84	--	54.00	--	Avg
1	2483.5	V	75.13	-25.84	49.29	74.00	-24.71	Peak
2	2483.5	V	--	-25.84	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								



Frequency Range : 2310MHz~2410MHz								
Test Mode : IEEE 802.11n/HT20 TX 2412MHz								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	71.90	-21.62	50.28	74.00	-23.72	Peak
2	2390	H	--	-21.62	--	54.00	--	Avg
3	2400	H	78.39	-26.08	52.31	74.00	-21.69	Peak
4	2400	H	--	-26.08	--	54.00	--	Avg
1	2390	V	67.77	-21.62	46.15	74.00	-27.85	Peak
2	2390	V	--	-21.62	--	54.00	--	Avg
3	2400	V	77.76	-26.08	51.68	74.00	-22.32	Peak
4	2400	V	--	-26.08	--	54.00	--	Avg
Frequency Range : 2450MHz~2550MHz								
Test Mode : IEEE 802.11n/HT20 TX 2462MHz								
1	2483.5	H	73.78	-25.84	47.94	74.00	-26.06	Peak
2	2483.5	H	--	-25.84	--	54.00	--	Avg
1	2483.5	V	71.73	-25.84	45.89	74.00	-28.11	Peak
2	2483.5	V	--	-25.84	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								



Frequency Range : 2310MHz~2410MHz								
Test Mode : IEEE 802.11n/HT40 TX 2422MHz								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	71.74	-21.62	50.12	74.00	-23.88	Peak
2	2390	H	--	-21.62	--	54.00	--	Avg
3	2400	H	77.01	-26.08	50.93	74.00	-23.07	Peak
4	2400	H	--	-26.08	--	54.00	--	Avg
1	2390	V	69.97	-21.62	48.35	74.00	-25.65	Peak
2	2390	V	--	-21.62	--	54.00	--	Avg
3	2400	V	77.72	-26.08	51.64	74.00	-22.36	Peak
4	2400	V	--	-26.08	--	54.00	--	Avg
Frequency Range : 2450MHz~2550MHz								
Test Mode : IEEE 802.11n/HT40 TX 2452MHz								
1	2483.5	H	74.12	-25.84	48.28	74.00	-25.72	Peak
2	2483.5	H	--	-25.84	--	54.00	--	Avg
1	2483.5	V	72.94	-25.84	47.10	74.00	-26.90	Peak
2	2483.5	V	--	-25.84	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								



Frequency Range : 2310MHz~2410MHz								
Test Mode : IEEE 802.11ax20 TX 2412MHz								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	73.08	-21.62	51.46	74.00	-22.54	Peak
2	2390	H	--	-21.62	--	54.00	--	Avg
3	2400	H	78.50	-26.08	52.42	74.00	-21.58	Peak
4	2400	H	--	-26.08	--	54.00	--	Avg
1	2390	V	70.47	-21.62	48.85	74.00	-25.15	Peak
2	2390	V	--	-21.62	--	54.00	--	Avg
3	2400	V	76.78	-26.08	50.70	74.00	-23.30	Peak
4	2400	V	--	-26.08	--	54.00	--	Avg
Frequency Range : 2450MHz~2550MHz								
Test Mode : IEEE 802.11ax20 TX 2462MHz								
1	2483.5	H	76.97	-25.84	51.13	74.00	-22.87	Peak
2	2483.5	H	--	-25.84	--	54.00	--	Avg
1	2483.5	V	74.66	-25.84	48.82	74.00	-25.18	Peak
2	2483.5	V	--	-25.84	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								



Frequency Range : 2310MHz~2410MHz								
Test Mode : IEEE 802.11ax40 TX 2422MHz								
No.	Freq MHz	Polarity	Reading (dBuV/m)	Correct Factor	Result (dBuV/m)	Limit (dBuV/m)	Margin	Remark
1	2390	H	70.72	-21.62	49.10	74.00	-24.90	Peak
2	2390	H	--	-21.62	--	54.00	--	Avg
3	2400	H	76.56	-26.08	50.48	74.00	-23.52	Peak
4	2400	H	--	-26.08	--	54.00	--	Avg
1	2390	V	67.13	-21.62	45.51	74.00	-28.49	Peak
2	2390	V	--	-21.62	--	54.00	--	Avg
3	2400	V	79.51	-26.08	53.43	74.00	-20.57	Peak
4	2400	V	--	-26.08	--	54.00	--	Avg
Frequency Range : 2450MHz~2550MHz								
Test Mode : IEEE 802.11ax40 TX 2452MHz								
1	2483.5	H	73.61	-25.84	47.77	74.00	-26.23	Peak
2	2483.5	H	--	-25.84	--	54.00	--	Avg
1	2483.5	V	75.20	-25.84	49.36	74.00	-24.64	Peak
2	2483.5	V	--	-25.84	--	54.00	--	Avg
Note: 1. Means other frequency and mode comply with standard requirements and at least have 20dB margin. 2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain. Result=Reading + Correct Factor. Margin= Result-Limit. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.								



9. ANTENNA REQUIREMENT

9.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

9.2 EUT ANTENNA

The EUT antennas are External Antenna and the best case gain of the antenna is 3dBi. It comply with the standard requirement.



APPENDIX I:TEST RESULTS

Please refer to separated files for APPENDIX I .



APPENDIX II: External Photos

Please refer to separated files for APPENDIX II.



APPENDIX III: Internal Photos

Please refer to separated files for APPENDIX III .



APPENDIX IV :Test Setup Photos

Please refer to separated files for APPENDIX IV .

*****END OF THE REPORT*****