

Radio Test Report

Report No.:STS2404310W05

Issued for

J.C. Technology Inc. dba Ace Computers

340 Howard Ave Des Plaines, IL 60018, USA

Product Name: Notebook

Brand Name: N/A

Model Name: Ace Mustang T630 V2

Series Model(s): Ace Mustang T730

FCC ID: 2BG3F-T630V2

Test Standards: FCC Part15.407

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

**TEST REPORT**

Applicant's Name: J.C. Technology Inc. dba Ace Computers
Address: 340 Howard Ave Des Plaines, IL 60018, USA
Manufacturer's Name: J.C. Technology Inc. dba Ace Computers
Address: 340 Howard Ave Des Plaines, IL 60018, USA

Product Description

Product Name: Notebook
Brand Name: N/A
Model Name: Ace Mustang T630 V2
Series Model(s): Ace Mustang T730

Test Standards: FCC Part15.407

Test Procedure ANSI C63.10-2020

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

Date of Test

Date of receipt of test item: 10 Apr. 2024
Date (s) of performance of tests: 10 Apr. 2024~ 19 Aug. 2024
Date of Issue: 19 Aug. 2024
Test Result: **Pass**

Testing Engineer :

Aaron Bu

(Aaron Bu)

Technical Manager :

Chris Chen

(Chris Chen)

Authorized Signatory :

Bovey Yang

(Bovey Yang)



Table of Contents**Page**

1 . SUMMARY OF TEST RESULTS	6
1.1 TEST FACTORY	7
1.2 MEASUREMENT UNCERTAINTY	7
2 . GENERAL INFORMATION	8
2.1 GENERAL DESCRIPTION OF THE EUT	8
2.2 DESCRIPTION OF TEST MODES	12
2.3 TEST SOFTWARE AND POWER LEVEL	13
2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS	15
2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS	16
3 . EMC EMISSION TEST	17
3.1 CONDUCTED EMISSION MEASUREMENT	17
3.2 RADIATED EMISSION AND (BANDEDGE) MEASUREMENT	21
4. POWER SPECTRAL DENSITY TEST	44
4.1 LIMIT	44
4.2 TEST PROCEDURE	44
4.3 DEVIATION FROM STANDARD	44
4.4 TEST SETUP	44
4.5 EUT OPERATION CONDITIONS	44
4.6 TEST RESULTS	44
5. BANDWIDTH MEASUREMENT	45
5.1 LIMIT	45
5.2 TEST PROCEDURE	45
5.3 DEVIATION FROM STANDARD	45
5.4 TEST SETUP	45
5.5 EUT OPERATION CONDITIONS	45
5.6 TEST RESULTS	45
6. MAXIMUM CONDUCTED OUTPUT POWER AND MAXIMUM EIRP	46
6.1 LIMIT	46
6.2 TEST PROCEDURE	46
6.3 DEVIATION FROM STANDARD	46
6.4 TEST SETUP	46
6.5 EUT OPERATION CONDITIONS	46
6.6 TEST RESULTS	46
7. IN-BAND EMISSIONS	47



Table of Contents	Page
7.1 LIMIT	47
7.2 TEST PROCEDURE	47
7.3 DEVIATION FROM STANDARD	47
7.4 TEST SETUP	47
7.5 EUT OPERATION CONDITIONS	47
7.6 TEST RESULTS	47
8. CONTENTION BASED PROTOCOL	48
8.1 LIMIT	48
8.2 TEST PROCEDURE	48
8.3 DEVIATION FROM STANDARD	48
8.4 TEST SETUP	48
8.5 TEST RESULTS	49
9. AUTOMATICALLY DISCONTINUE TRANSMISSION	50
9.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION	50
9.2 TEST RESULT OF AUTOMATICALLY DISCONTINUE TRANSMISSION	50
10. ANTENNA REQUIREMENT	51
10.1 STANDARD REQUIREMENT	51
10.2 EUT ANTENNA	51
APPENDIX - PHOTOS OF TEST SETUP	52



Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	19 Aug. 2024	STS2404310W05	ALL	Initial Issue

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

§ 15.407, KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

KDB 98794 D02 U-NII 6GHz EMC Measurement v02r01.

FCC Part 15.407		
FCC standard	Test Item	Results
15.207	AC Conducted Emission	PASS
15.407 (a)	26dB & 99% Bandwidth	PASS
15.407(a)	Maximum Conducted Output Power And Maximum EIRP	PASS
15.407(b)/15.205/15.209	Radiated Emission And (bandedge Emissions) Measurement	PASS
15.407(b)	In-Band Emission(Mask)	PASS
15.407(a)	Power Spectral Density	PASS
15.407(c)	Automatically Discontinue Transmission	PASS
15.407(d)	Contention Based Protocol	PASS
15.203/15.204	Antenna Requirement	PASS

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report.
- (2) All tests are according to ANSI C63.10-2020.

1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

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 %**.

No.	Item	Uncertainty
1	RF output power, conducted	$\pm 0.755\text{dB}$
2	Unwanted Emissions, conducted	$\pm 2.874\text{dB}$
3	All emissions, radiated 9K-30MHz	$\pm 3.80\text{dB}$
4	All emissions, radiated 30M-1GHz	$\pm 4.18\text{dB}$
5	All emissions, radiated 1G-6GHz	$\pm 4.90\text{dB}$
6	All emissions, radiated >6G	$\pm 5.24\text{dB}$
7	Conducted Emission (9KHz-150KHz)	$\pm 2.19\text{dB}$
8	Conducted Emission (150KHz-30MHz)	$\pm 2.53\text{dB}$
9	Occupied Channel Bandwidth	$\pm 3.5\%$
10	Power Spectral Density, conducted	$\pm 1.245\text{dB}$
11	Duty Cycle	$\pm 3.2\%$

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Notebook	
Brand Name	N/A	
Model Name	Ace Mustang T630 V2	
Series Model(s)	Ace Mustang T730	
Model Difference	Only different in model name	
Product Description	The EUT is a Notebook	
	Radio Technology	IEEE 802.11a (HT20)/ax(HE20) IEEE 802.11ax(HE40) IEEE 802.11ax(HE80) IEEE 802.11ax(HE160)
	Operation Frequency:	UNII-5 Band: 5925-6425MHz UNII-6 Band: 6425-6525MHz UNII-7 Band: 6525-6875MHz UNII-8 Band: 6875-7125MHz
	Modulation Type:	802.11a(OFDM): BPSK,QPSK,16-QAM,64-QAM 802.11ax(OFDM, OFDMA): BPSK,QPSK,16-QAM,64-QAM,256-QAM, 1024QAM
	Antenna Type:	FPC
	Antenna Gain (dBi):	ANT 1: 4.94 dBi ANT 2: 4.48 dBi MIMO 1+2: 7.72 dBi
	Max.Output Power(Conducted):	7.35 dBm
	More details of EUT technical specification, please refer to the User Manual.	
Test Channel	Please refer to the Note 3.	
Rating	Input: DC20V, 3.25A Output: Type C: DC5V2A USB: DC5V1A	
Adapter	Input: 100-240V~50/60Hz 1.3A Output: 20V-3.25A	
Battery	Rated Voltage:11.55V Charge Limit Voltage: 13.2V Capacity: 5200mAh	
Hardware version number	N/A	
Software version number	22H2	
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. The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.

3.

Operation Frequency of channel

802.11a /ax (20MHz)							
UNII-5		UNII-6		UNII-7		UNII-8	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5955	97	6435	117	6535	189	6895
5	5975	101	6455	121	6555	193	6915
9	5995	105	6475	125	6575	197	6935
13	6015	109	6495	129	6595	201	6955
17	6035	113	6515	133	6615	205	6975
21	6055	-	-	137	6635	209	6995
25	6075	-	-	141	6655	213	7015
29	6095	-	-	145	6675	217	7035
33	6115	-	-	149	6695	221	7055
37	6135	-	-	153	6715	225	7075
41	6155	-	-	157	6735	229	7095
45	6175	-	-	161	6755	233	7115
49	6195	-	-	165	6775	-	-
53	6215	-	-	169	6795	-	-
57	6235	-	-	173	6815	-	-
61	6255	-	-	177	6835	-	-
65	6275	-	-	181	6855	-	-
69	6295	-	-	185	6875	-	-
73	6315	-	-	-	-	-	-
77	6335	-	-	-	-	-	-
81	6355	-	-	-	-	-	-
85	6375	-	-	-	-	-	-
89	6395	-	-	-	-	-	-
93	6415	-	-	-	-	-	-

802.11ax (40MHz)							
UNII-5		UNII-6		UNII-7		UNII-8	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	5965	99	6445	115	6525	187	6885
11	6005	107	6485	123	6565	195	6925
19	6045	-	-	131	6605	203	6965
27	6085	-	-	139	6645	211	7005
35	6125	-	-	147	6685	219	7045
43	6165	-	-	155	6725	227	7085
51	6205	-	-	163	6765	-	-
59	6245	-	-	171	6805	-	-
67	6285	-	-	179	6845	-	-
75	6325	-	-	-	-	-	-
83	6365	-	-	-	-	-	-
91	6405	-	-	-	-	-	-

802.11ax (80MHz)							
UNII-5		UNII-6		UNII-7		UNII-8	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
7	5985	103	6465	119	6545	199	6945
23	6065	-	-	135	6625	215	7025
39	6145	-	-	151	6705	-	-
55	6225	-	-	167	6785	-	-
71	6305	-	-	183	6865	-	-
87	6385	-	-	-	-	-	-

802.11ax (160MHz)							
UNII-5		UNII-6		UNII-7		UNII-8	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
15	6025	111	6505	143	6665	207	6985
47	6185	-	-	175	6825	-	-
79	6345	-	-	-	-	-	-

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:

4. 6GHz: Test Frequency Channel

802.11a/ax (20MHz)							
UNII-5		UNII-6		UNII-7		UNII-8	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5955	97	6435	117	6535	189	6895
45	6175	105	6475	149	6695	209	6995
93	6415	113	6515	185	6875	233	7115

802.11ax (40MHz)							
UNII-5		UNII-6		UNII-7		UNII-8	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	5965	99	6445	115	6525	195	6925
43	6165	107	6485	147	6685	211	7005
91	6405	-	-	187	6885	227	7085

802.11ax (80MHz)							
UNII-5		UNII-6		UNII-7		UNII-8	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
7	5985	103	6465	119	6545	199	6945
39	6145	-	-	151	6705	215	7025
87	6385	-	-	183	6865	-	-

802.11ax (160MHz)							
UNII-5		UNII-6		UNII-7		UNII-8	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
15	6025	111	6505	143	6665	207	6985
47	6185	-	-	175	6825	-	-
79	6345	-	-	-	-	-	-

5. KDB 662911 D01 Multiple Transmitter Output v02r01

2) Directional Gain Calculations for In-Band Measurements

a) Basic methodology with NANT transmit antennas, each with the same directional gain GANT dBi, being driven by NANT transmitter outputs of equal power. Directional gain is to be computed as follows:

(i) If any transmit signals are correlated with each other,

Directional gain = $GANT + 10 \log(NANT)$ dBi

(ii) If all transmit signals are completely uncorrelated with each other,

Directional gain = GANT

ANT 1: 4.94 dBi

ANT 2: 4.48 dBi

MIMO 1+2: 7.72 dBi

Ant	Brand	Model Name	Ant Type	Connector	Gain (dBi)	NOTE
A	N/A	Ace Mustang T630 V2	FPC	N/A	ANT 1 : 4.94 ANT 2 : 4.48 MIMO 1+2 : 7.72	WLAN Ant

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Worst Mode	Description	Data Rate
Mode 1	TX IEEE 802.11a HT20 CH1&CH45&CH93	6 Mbps
Mode 2	TX IEEE 802.11a HT20 CH97&CH105&CH113	6 Mbps
Mode 3	TX IEEE 802.11a HT20 CH117&CH121&CH185	6 Mbps
Mode 4	TX IEEE 802.11a HT20 CH189&CH209&CH233	6 Mbps
Mode 5	TX IEEE 802.11ax HE20 CH1&CH45&CH93	NSS1 MCS0
Mode 6	TX IEEE 802.11ax HE20 CH97&CH105&CH113	NSS1 MCS0
Mode 7	TX IEEE 802.11ax HE20 CH117&CH121&CH185	NSS1 MCS0
Mode 8	TX IEEE 802.11ax HE20 CH189&CH209&CH233	NSS1 MCS0
Mode 9	TX IEEE 802.11ax HE40 CH3&CH43&CH91	NSS1 MCS0
Mode 10	TX IEEE 802.11ax HE40 CH99&CH107	NSS1 MCS0
Mode 11	TX IEEE 802.11ax HE40 CH115&CH147&CH187	NSS1 MCS0
Mode 12	TX IEEE 802.11ax HE40 CH195&CH211&CH227	NSS1 MCS0
Mode 13	TX IEEE 802.11ax HE80 CH7&CH39&CH87	NSS1 MCS0
Mode 14	TX IEEE 802.11ax HE80 CH103	NSS1 MCS0
Mode 15	TX IEEE 802.11ax HE80 CH119&CH151&CH183	NSS1 MCS0
Mode 16	TX IEEE 802.11ax HE80 CH199&CH215	NSS1 MCS0
Mode 17	TX IEEE 802.11ax HE160 CH15&CH47&CH79	NSS1 MCS0
Mode 18	TX IEEE 802.11ax HE160 CH111	NSS1 MCS0
Mode 19	TX IEEE 802.11ax HE160 CH143&CH175	NSS1 MCS0
Mode 20	TX IEEE 802.11ax HE160 CH207	NSS1 MCS0

- Note: (1) The measurements are performed at the highest, middle, lowest available channels.
(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
(3) We have been tested for all available U.S. voltage and frequencies (For 120V, 50/60Hz and 240V, 50/60Hz) for which the device is capable of operation.
(4) The battery is fully-charged during the radiated and RF conducted test.

AC Conducted Emission

Test Case	
AC Conducted Emission	Mode 21: Keeping TX + WLAN Link

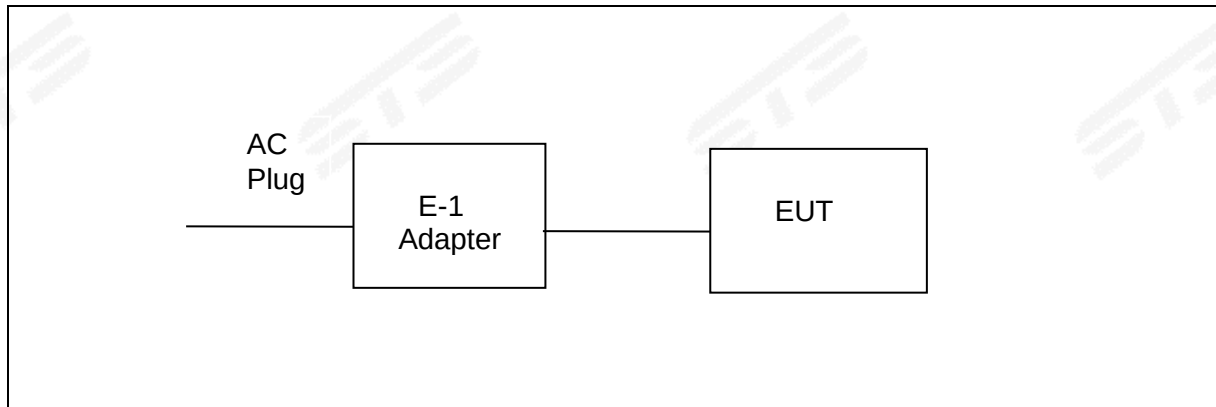
2.3 TEST SOFTWARE AND POWER LEVEL

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

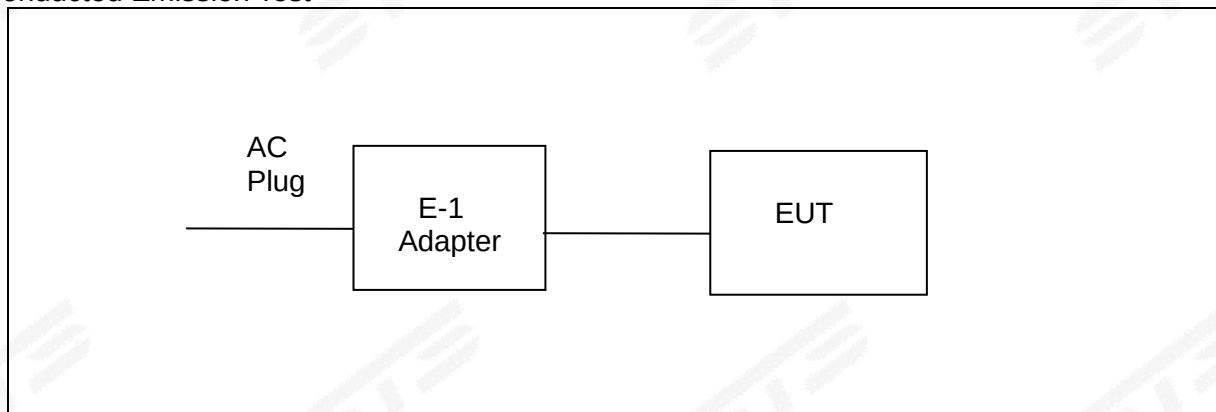
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	ANT_1 Power Class	ANT_2 Power Class
WIFI 6E	U-NII-5 (5925MHz-6425MHz)	802.11a	ANT 1 : 4.94	8	8
		802.11ax(HE20)		5	5
		802.11ax(HE40)	ANT 2 : 4.48	8	8
		802.11ax(HE80)	MIMO 1+2 : 7.72	8	8
		802.11ax(HE160)		8	8
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	ANT_1 Power Class	ANT_2 Power Class
WIFI 6E	U-NII-6 (6425MHz-6525MHz)	802.11a	ANT 1 : 4.94	8	8
		802.11ax(HE20)		5	5
		802.11ax(HE40)	ANT 2 : 4.48	8	8
		802.11ax(HE80)	MIMO 1+2 : 7.72	8	8
		802.11ax(HE160)		8	8
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	ANT_1 Power Class	ANT_2 Power Class
WIFI 6E	U-NII-7 (6525MHz-6875MHz)	802.11a	ANT 1 : 4.94	7	7
		802.11ax(HE20)		4	4
		802.11ax(HE40)	ANT 2 : 4.48	8	8
		802.11ax(HE80)	MIMO 1+2 : 7.72	8	8
		802.11ax(HE160)		8	8
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	ANT_1 Power Class	ANT_2 Power Class
WIFI 6E	U-NII-8 (6875MHz-7125MHz)	802.11a	ANT 1 : 4.94	7	7
		802.11ax(HE20)		4	4
		802.11ax(HE40)	ANT 2 : 4.48	7	7
		802.11ax(HE80)	MIMO 1+2 : 7.72	8	8
		802.11ax(HE160)		8	8

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test



Conducted Emission Test



2.5 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.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
E-1	Adapter	N/A	TYPE-C60IC	N/A	N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

RF Radiation Test Equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Temperature & Humidity	SW-108	SuWei	N/A	2024.03.15	2025.03.14
Pre-Amplifier(0.1M-3GHz)	EM	EM330	060665	2024.02.23	2025.02.22
Pre-Amplifier(1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2023.09.26	2024.09.25
Pre-Amplifier(18G-40GHz)	SKET	LNPA_1840-50	SK2018101801	2024.02.23	2025.02.22
Active loop Antenna	ZHINAN	ZN30900C	16035	2023.02.28	2025.02.27
Bilog Antenna	TESEQ	CBL6111D	34678	2022.09.30	2024.09.29
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2023.09.24	2025.09.23
Horn Antenna	A-INFOMW	LB-180400-KF	J211020657	2023.10.10	2025.10.09
Positioning Controller	MF	MF-7802	MF-780208587	N/A	N/A
Signal Analyzer	R&S	FSV 40-N	101823	2023.09.26	2024.09.25
Switch Control Box	N/A	N/A	N/A	N/A	N/A
Filter Box	BALUN Technology	SU319E	BL-SZ1530051	N/A	N/A
Antenna Mast	MF	MFA-440H	N/A	N/A	N/A
Turn Table	MF	SC100_1	60531	N/A	N/A
AC Power Source	APC	KDF-11010G	F214050035	N/A	N/A
DC power supply	HONGSHENGFENG	DPS-305AF	17064939	2023.09.26	2024.09.25
Test SW	EZ-EMC	Ver.STSLAB-03A1 RE			
Conduction Test equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2023.09.25	2024.09.24
LISN	R&S	ENV216	101242	2023.09.25	2024.09.24
LISN	EMCO	3810/2NM	23625	2023.09.25	2024.09.24
Temperature & Humidity	SW-108	SuWei	N/A	2023.09.25	2024.09.24
Test SW	EZ-EMC	Ver.STSLAB-03A1 CE			
RF Connected Test					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Signal Analyzer	Agilent	N9020A	MY51510623	2024.02.23	2025.02.22
Power Sensor	Keysight	U2021XA	MY55520005	2023.09.26	2024.09.25
Temperature & Humidity	SW-108	SuWei	N/A	2024.03.15	2025.03.14
Test SW	MW	MTS 8310 2.0.0.0			

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class B (dBuV)		Standard
	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	56.00	46.00	CISPR
5.0 -30.0	60.00	50.00	CISPR

0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

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

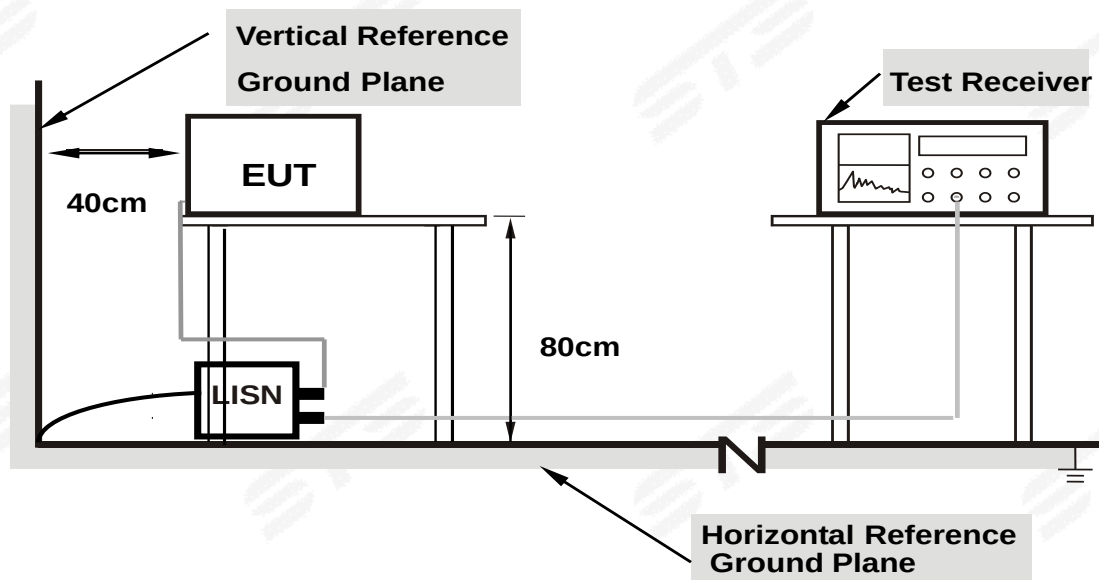
3.1.2 TEST PROCEDURE

- 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.
- 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.
- 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.
- LISN is at least 80 cm from the nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 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.

3.1.5 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.

3.1.6 TEST RESULTS

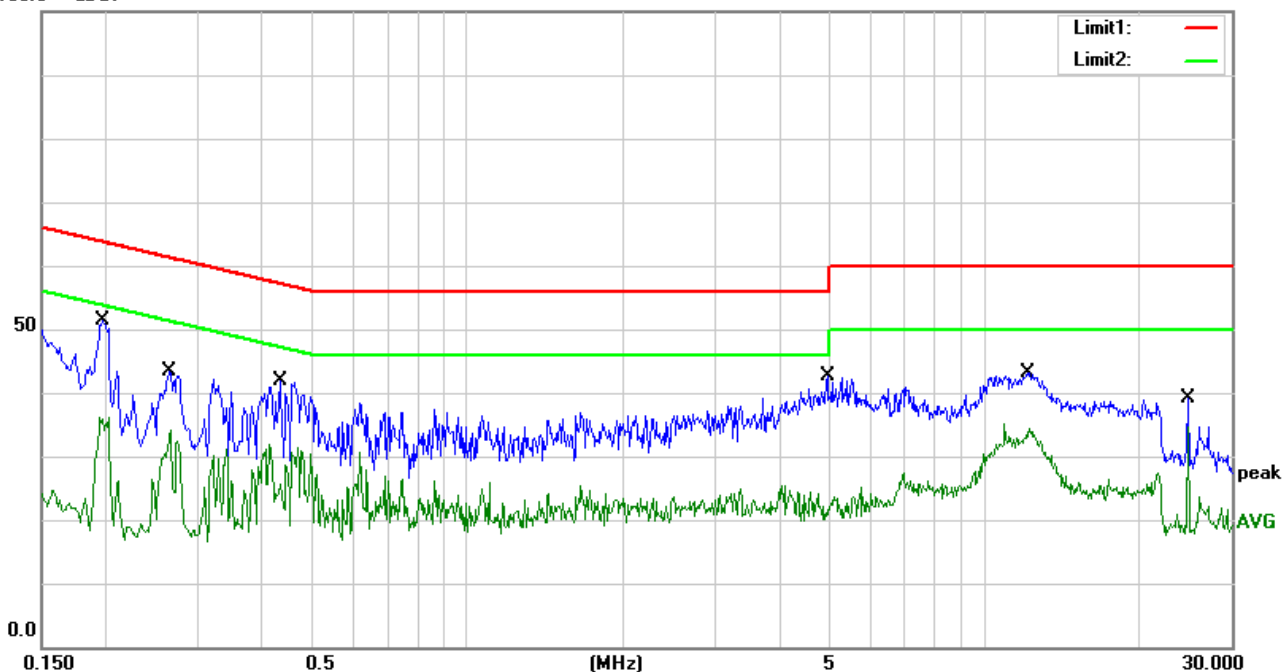
Temperature:	25.1(C)	Relative Humidity:	59%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode :	Mode 21		

No.	Frequency (MHz)	Reading (dBUV)	Correct Factor(dB)	Result (dBUV)	Limit (dBUV)	Margin (dB)	Remark
1	0.1965	31.70	19.77	51.47	63.76	-12.29	QP
2	0.1965	16.36	19.77	36.13	53.76	-17.63	AVG
3	0.2644	23.36	20.06	43.42	61.29	-17.87	QP
4	0.2644	14.00	20.06	34.06	51.29	-17.23	AVG
5	0.4340	21.88	20.01	41.89	57.18	-15.29	QP
6	0.4340	11.76	20.01	31.77	47.18	-15.41	AVG
7	4.9620	22.71	19.82	42.53	56.00	-13.47	QP
8	4.9620	5.58	19.82	25.40	46.00	-20.60	AVG
9	12.0860	22.86	20.34	43.20	60.00	-16.80	QP
10	12.0860	14.70	20.34	35.04	50.00	-14.96	AVG
11	24.6700	18.93	20.15	39.08	60.00	-20.92	QP
12	24.6700	14.53	20.15	34.68	50.00	-15.32	AVG

Remark:

1. All readings are Quasi-Peak and Average values
2. Margin = Result (Result =Reading + Factor)–Limit
3. Factor=LISN factor+Cable loss+Limiter (10dB)

100.0 dBUV



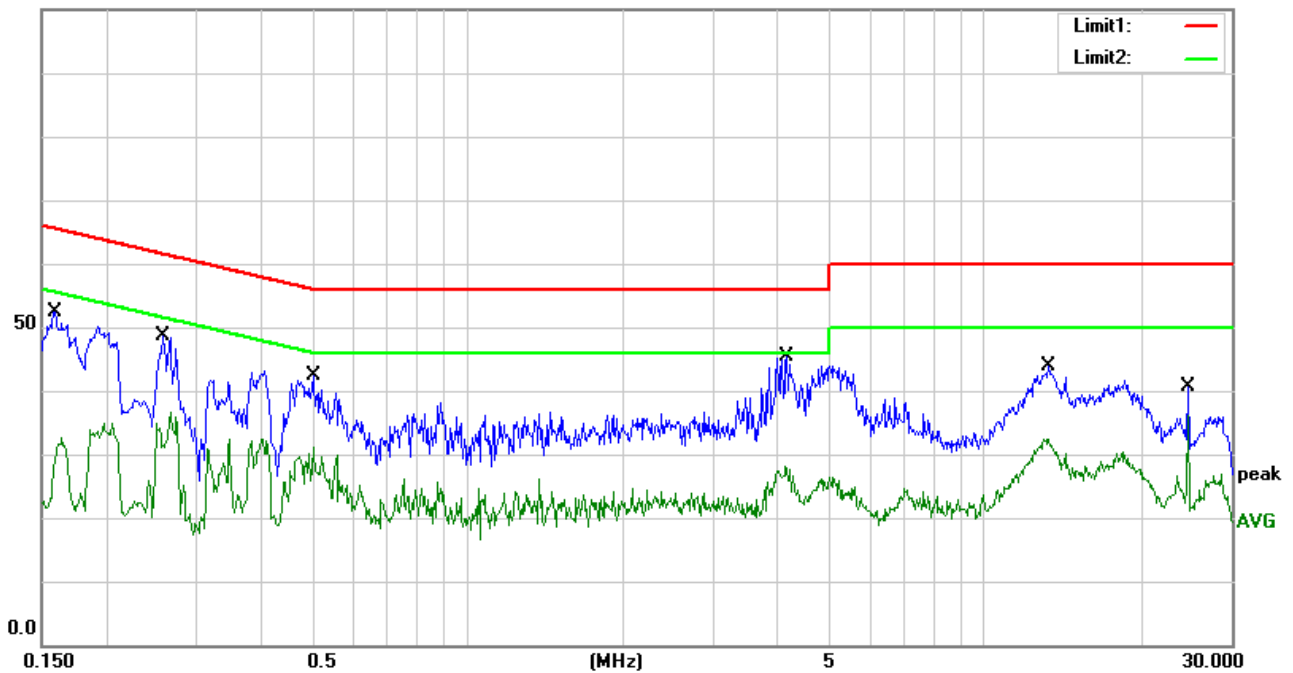
Temperature:	25.1(C)	Relative Humidity:	59%RH
Test Voltage	AC 120V/60Hz	Phase:	N
Test Mode	Mode 21		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1590	32.53	19.78	52.31	65.52	-13.21	QP
2	0.1590	15.10	19.78	34.88	55.52	-20.64	AVG
3	0.2580	28.54	20.03	48.57	61.50	-12.93	QP
4	0.2580	16.52	20.03	36.55	51.50	-14.95	AVG
5	0.5020	22.29	20.01	42.30	56.00	-13.70	QP
6	0.5020	11.14	20.01	31.15	46.00	-14.85	AVG
7	4.1500	25.50	19.84	45.34	56.00	-10.66	QP
8	4.1500	8.22	19.84	28.06	46.00	-17.94	AVG
9	13.3100	23.46	20.35	43.81	60.00	-16.19	QP
10	13.3100	12.08	20.35	32.43	50.00	-17.57	AVG
11	24.6660	20.58	20.15	40.73	60.00	-19.27	QP
12	24.6660	16.05	20.15	36.20	50.00	-13.80	AVG

Remark:

1. All readings are Quasi-Peak and Average values
2. Margin = Result (Result =Reading + Factor)–Limit
3. Factor=LISN factor+Cable loss+Limiter (10dB)

100.0 dBuV



3.2 RADIATED EMISSION AND (BANDEDGE) MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.407(b)7&15.205/209(a), then the limit in the table below has to be followed.

Frequency (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 (Above 1000MHz)

Frequency (MHz)	Limit (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	68.2	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15E.
- (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			

Note: In case the emission radiated emission above 1000MHz fall within the restricted band the restricted frequency bands, the peak limit is 74 dBuV/m.

LIMITS OF EMISSIONS OUTSIDE OF THE FREQUENCY BANDS

For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

Note: dBuV/m(at 3M) = EIRP(dBm) + 95.2.

Peak Limit = -27dBm/MHz + 95.2 = 68.2 dBuV/m.

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

For Band edge

Spectrum Parameter	Setting
Detector	Peak
RB / VB (emission in restricted band)	1 MHz / 1 MHz, AV=1 MHz /3 MHz

Receiver Parameter	Setting
Attenuation	Auto
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

- a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. 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.
- c. 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.
- d. 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.
- e. 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.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

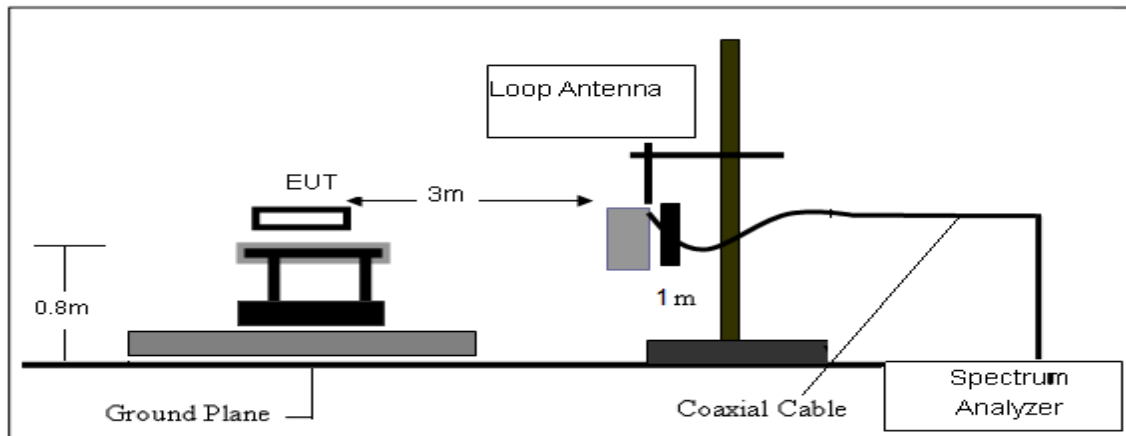
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.2 DEVIATION FROM TEST STANDARD

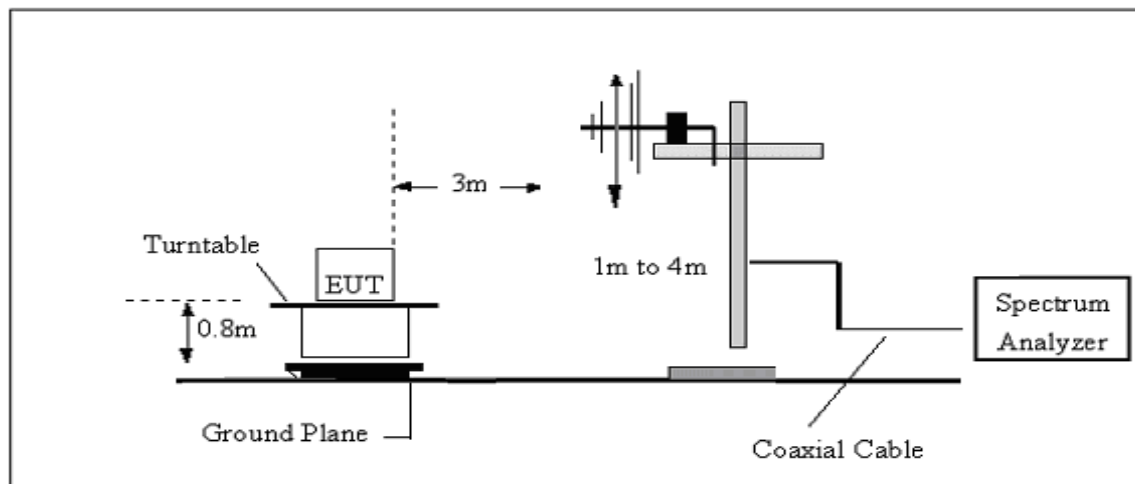
No deviation

3.2.3 TEST SETUP

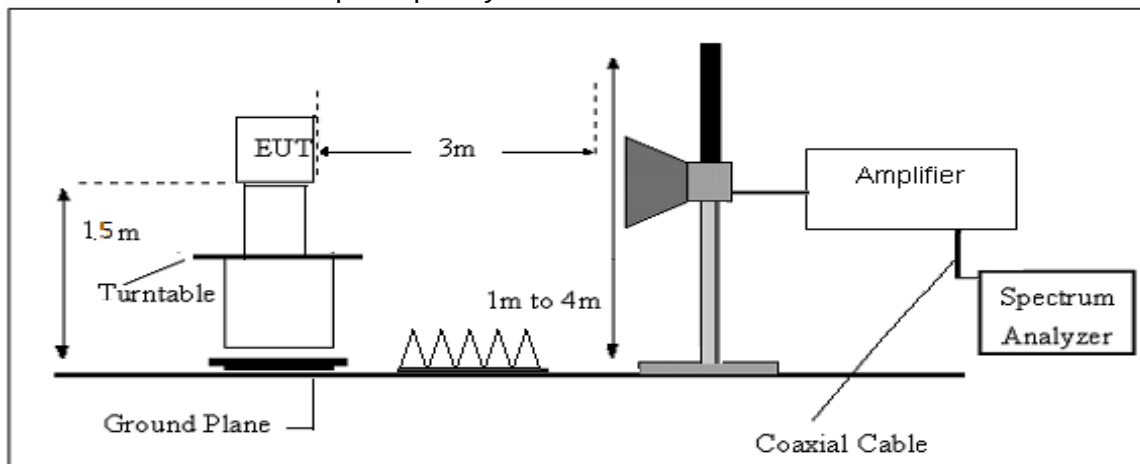
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.2.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

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

$$\text{Factor} = \text{AF} + \text{CL} - \text{AG}$$

3.2.6 TEST RESULTS (Between 9KHz – 30 MHz)

Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	AC 120V/60Hz	Polarization :	--
Test Mode:	TX Mode		

Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

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

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

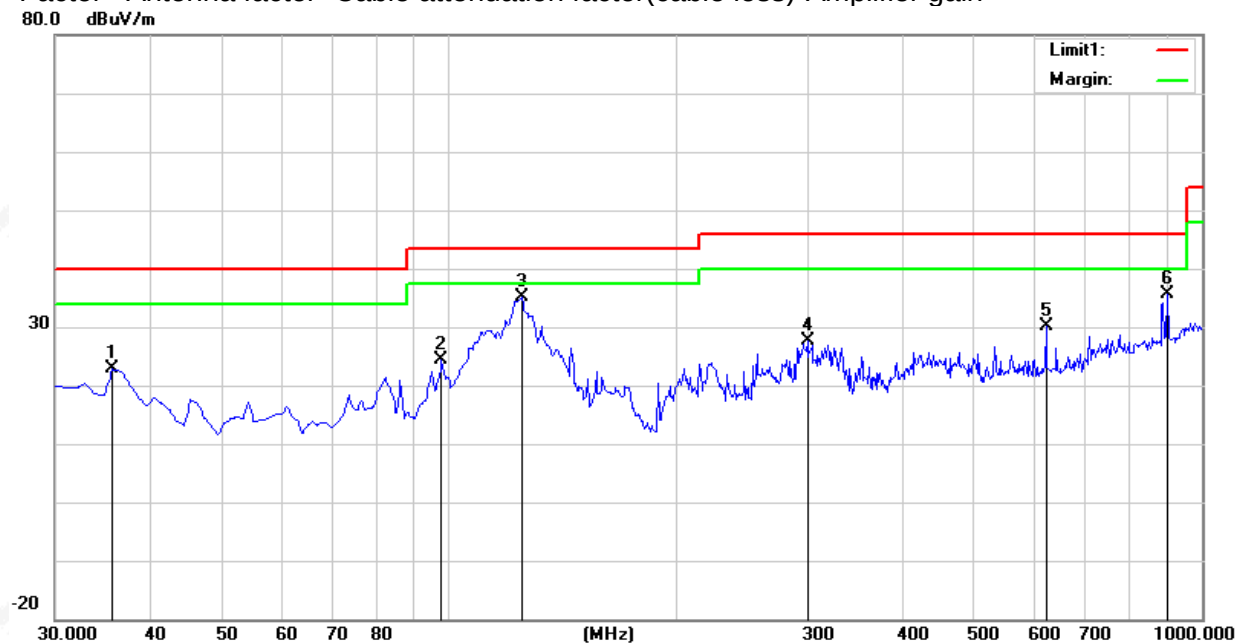
3.2.7 TEST RESULTS (Between 30MHz – 1GHz)

Temperature	23.1(C)	Relative Humidity:	60%RH
Test Voltage	AC 120V/60Hz	Polarization:	Horizontal
Test Mode	Mode 1~20 (Mode 10 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	35.8200	38.68	-15.91	22.77	40.00	-17.23	peak
2	97.9000	44.75	-20.46	24.29	43.50	-19.21	peak
3	125.0600	53.27	-18.22	35.05	43.50	-8.45	peak
4	299.6600	42.46	-14.82	27.64	46.00	-18.36	peak
5	621.7000	35.61	-5.42	30.19	46.00	-15.81	peak
6	903.0000	35.92	-0.37	35.55	46.00	-10.45	peak

Remark:

1. Margin = Result (Result =Reading + Factor)–Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



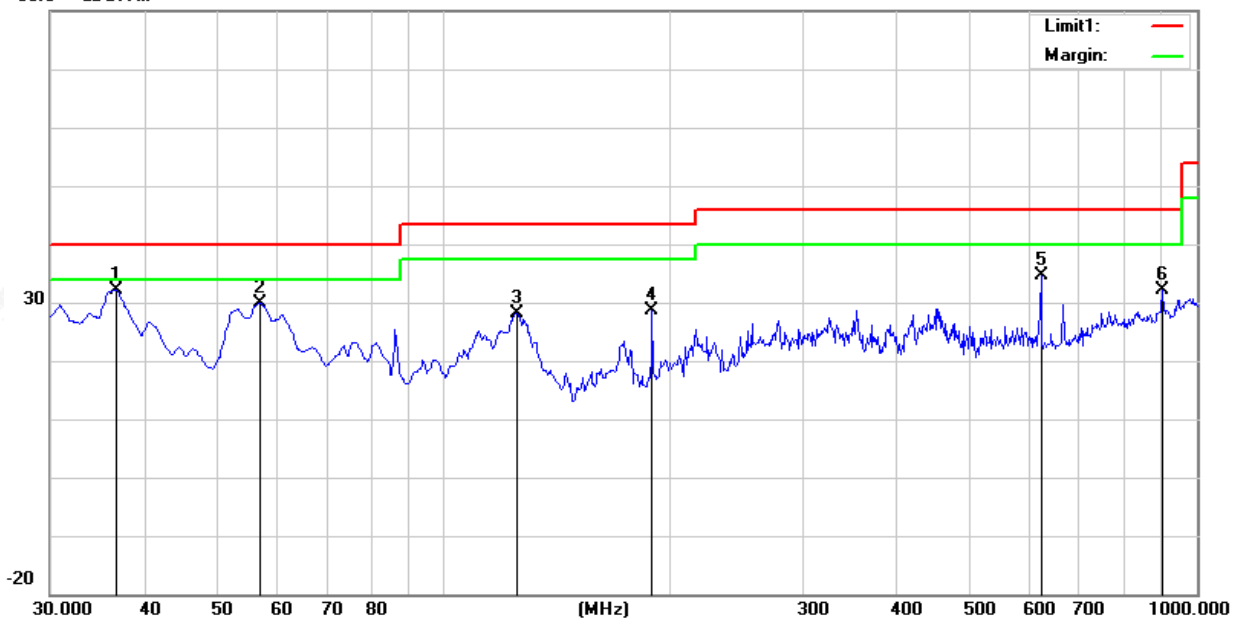
Temperature	23.1(C)	Relative Humidity:	60%RH
Test Voltage	AC 120V/60Hz	Polarization:	Vertical
Test Mode	Mode 1~20 (Mode 10 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	36.7900	48.62	-16.39	32.23	40.00	-7.77	peak
2	57.1600	55.44	-25.45	29.99	40.00	-10.01	peak
3	125.0600	46.35	-18.22	28.13	43.50	-15.37	peak
4	189.0800	49.47	-20.87	28.60	43.50	-14.90	peak
5	621.7000	40.05	-5.42	34.63	46.00	-11.37	peak
6	903.0000	32.47	-0.37	32.10	46.00	-13.90	peak

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

80.0 dBuV/m



**3.2.8 TEST RESULTS (Above 1000 MHz)**

U-NII 5										
Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Corrected Factor (dB)	Emission Level (dBμV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Low Channel (802.11ax80/ 5985 MHz)										
3252.42	44.79	44.70	6.70	28.20	-9.80	34.99	68.20	-33.21	Pk	Vertical
3252.42	41.08	44.70	6.70	28.20	-9.80	31.28	54.00	-22.72	AV	Vertical
3245.94	44.85	44.70	6.70	28.20	-9.80	35.05	68.20	-33.15	Pk	Horizontal
3245.94	41.12	44.70	6.70	28.20	-9.80	31.32	54.00	-22.68	AV	Horizontal
3988.89	40.05	44.20	7.90	29.70	-6.60	33.45	74.00	-40.55	Pk	Vertical
3988.89	36.74	44.20	7.90	29.70	-6.60	30.14	54.00	-23.86	AV	Vertical
3993.35	38.67	44.20	7.90	29.70	-6.60	32.07	74.00	-41.93	Pk	Horizontal
3993.35	35.79	44.20	7.90	29.70	-6.60	29.19	54.00	-24.81	AV	Horizontal
7225.80	37.50	43.50	11.40	35.50	3.40	40.90	68.20	-27.30	Pk	Vertical
7225.80	34.42	43.50	11.40	35.50	3.40	37.82	54.00	-16.18	AV	Vertical
7227.61	36.53	43.50	11.40	35.50	3.40	39.93	68.20	-28.27	Pk	Horizontal
7227.61	34.56	43.50	11.40	35.50	3.40	37.96	54.00	-16.04	AV	Horizontal
11969.53	39.18	44.50	13.80	38.80	8.10	47.28	74.00	-26.72	Pk	Vertical
11969.53	36.79	44.50	13.80	38.80	8.10	44.89	54.00	-9.11	AV	Vertical
11969.92	39.47	44.50	13.80	38.80	8.10	47.57	74.00	-26.43	Pk	Horizontal
11969.92	36.08	44.50	13.80	38.80	8.10	44.18	54.00	-9.82	AV	Horizontal
14952.03	32.91	43.60	14.30	39.50	10.20	43.11	68.20	-25.09	Pk	Vertical
14952.03	30.08	43.60	14.30	39.50	10.20	40.28	54.00	-13.72	AV	Vertical
14956.32	34.12	43.60	14.30	39.50	10.20	44.32	68.20	-23.88	Pk	Horizontal
14956.32	30.77	43.60	14.30	39.50	10.20	40.97	54.00	-13.03	AV	Horizontal
17952.79	32.74	42.60	15.90	38.90	12.20	44.94	68.20	-23.26	Pk	Vertical
17952.79	28.57	42.60	15.90	38.90	12.20	40.77	54.00	-13.23	AV	Vertical
17951.72	32.39	42.60	15.90	38.90	12.20	44.59	68.20	-23.61	Pk	Horizontal
17951.72	28.63	42.60	15.90	38.90	12.20	40.83	54.00	-13.17	AV	Horizontal
Mid Channel (802.11ax80/6145 MHz)										
3254.15	43.77	44.70	6.70	28.20	-9.80	33.97	68.20	-34.23	Pk	Vertical
3254.15	40.81	44.70	6.70	28.20	-9.80	31.01	54.00	-22.99	AV	Vertical
3258.91	44.17	44.70	6.70	28.20	-9.80	34.37	68.20	-33.83	Pk	Horizontal
3258.91	41.84	44.70	6.70	28.20	-9.80	32.04	54.00	-21.96	AV	Horizontal
3996.49	39.33	44.20	7.90	29.70	-6.60	32.73	74.00	-41.27	Pk	Vertical
3996.49	36.74	44.20	7.90	29.70	-6.60	30.14	54.00	-23.86	AV	Vertical
3985.42	39.56	44.20	7.90	29.70	-6.60	32.96	74.00	-41.04	Pk	Horizontal
3985.42	35.77	44.20	7.90	29.70	-6.60	29.17	54.00	-24.83	AV	Horizontal
7226.91	36.93	43.50	11.40	35.50	3.40	40.33	68.20	-27.87	Pk	Vertical
7226.91	33.65	43.50	11.40	35.50	3.40	37.05	54.00	-16.95	AV	Vertical
7231.26	36.71	43.50	11.40	35.50	3.40	40.11	68.20	-28.09	Pk	Horizontal
7231.26	33.73	43.50	11.40	35.50	3.40	37.13	54.00	-16.87	AV	Horizontal
12289.71	39.34	44.50	13.80	38.80	8.10	47.44	74.00	-26.56	Pk	Vertical
12289.71	37.06	44.50	13.80	38.80	8.10	45.16	54.00	-8.84	AV	Vertical
12289.56	39.68	44.50	13.80	38.80	8.10	47.78	74.00	-26.22	Pk	Horizontal
12289.56	36.57	44.50	13.80	38.80	8.10	44.67	54.00	-9.33	AV	Horizontal
15355.60	34.09	43.60	14.30	39.50	10.20	44.29	68.20	-23.91	Pk	Vertical
15355.60	30.10	43.60	14.30	39.50	10.20	40.30	54.00	-13.70	AV	Vertical
15344.32	33.47	43.60	14.30	39.50	10.20	43.67	68.20	-24.53	Pk	Horizontal
15344.32	31.13	43.60	14.30	39.50	10.20	41.33	54.00	-12.67	AV	Horizontal
18420.03	31.80	42.60	15.90	38.90	12.20	44.00	68.20	-24.20	Pk	Vertical
18420.03	29.20	42.60	15.90	38.90	12.20	41.40	54.00	-12.60	AV	Vertical
18419.47	32.55	42.60	15.90	38.90	12.20	44.75	68.20	-23.45	Pk	Horizontal
18419.47	28.53	42.60	15.90	38.90	12.20	40.73	54.00	-13.27	AV	Horizontal
High Channel (802.11ax80/ 6385 MHz)										
3255.16	44.21	44.70	6.70	28.20	-9.80	34.41	68.20	-33.79	Pk	Vertical
3255.16	42.18	44.70	6.70	28.20	-9.80	32.38	54.00	-21.62	AV	Vertical
3252.94	44.44	44.70	6.70	28.20	-9.80	34.64	68.20	-33.56	Pk	Horizontal
3252.94	41.42	44.70	6.70	28.20	-9.80	31.62	54.00	-22.38	AV	Horizontal
3984.44	40.07	44.20	7.90	29.70	-6.60	33.47	74.00	-40.53	Pk	Vertical

3984.44	36.05	44.20	7.90	29.70	-6.60	29.45	54.00	-24.55	AV	Vertical
3995.88	39.04	44.20	7.90	29.70	-6.60	32.44	74.00	-41.56	Pk	Horizontal
3995.88	35.82	44.20	7.90	29.70	-6.60	29.22	54.00	-24.78	AV	Horizontal
7229.08	37.75	43.50	11.40	35.50	3.40	41.15	68.20	-27.05	Pk	Vertical
7229.08	34.74	43.50	11.40	35.50	3.40	38.14	54.00	-15.86	AV	Vertical
7223.20	36.77	43.50	11.40	35.50	3.40	40.17	68.20	-28.03	Pk	Horizontal
7223.20	34.57	43.50	11.40	35.50	3.40	37.97	54.00	-16.03	AV	Horizontal
12769.87	39.95	44.50	13.80	38.80	8.10	48.05	68.20	-20.15	Pk	Vertical
12769.87	36.59	44.50	13.80	38.80	8.10	44.69	54.00	-9.31	AV	Vertical
12769.67	39.52	44.50	13.80	38.80	8.10	47.62	68.20	-20.58	Pk	Horizontal
12769.67	36.24	44.50	13.80	38.80	8.10	44.34	54.00	-9.66	AV	Horizontal
15955.42	32.75	43.60	14.30	39.50	10.20	42.95	68.20	-25.25	Pk	Vertical
15955.42	30.13	43.60	14.30	39.50	10.20	40.33	54.00	-13.67	AV	Vertical
15944.13	34.13	43.60	14.30	39.50	10.20	44.33	68.20	-23.87	Pk	Horizontal
15944.13	29.90	43.60	14.30	39.50	10.20	40.10	54.00	-13.90	AV	Horizontal
19141.31	31.83	42.60	15.90	38.90	12.20	44.03	68.20	-24.17	Pk	Vertical
19141.31	29.08	42.60	15.90	38.90	12.20	41.28	54.00	-12.72	AV	Vertical
19136.50	31.93	42.60	15.90	38.90	12.20	44.13	68.20	-24.07	Pk	Horizontal
19136.50	29.37	42.60	15.90	38.90	12.20	41.57	54.00	-12.43	AV	Horizontal

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Scan with 802.11a (HT-20), 802.11ax (HE-20), 802.11ax (HE-40), 802.11ax (HE80) , 802.11ax (HE160) the worst case is 802.11ax (HE80).
3. The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.



U-NII 6										
Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Corrected Factor (dB)	Emission Level (dBμV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Mid Channel (802.11ax160/ 6505 MHz)										
3248.91	44.88	44.70	6.70	28.20	-9.80	35.08	68.20	-33.12	Pk	Vertical
3248.91	41.06	44.70	6.70	28.20	-9.80	31.26	54.00	-22.74	AV	Vertical
3259.42	45.01	44.70	6.70	28.20	-9.80	35.21	68.20	-32.99	Pk	Horizontal
3259.42	41.49	44.70	6.70	28.20	-9.80	31.69	54.00	-22.31	AV	Horizontal
3994.53	39.53	44.20	7.90	29.70	-6.60	32.93	74.00	-41.07	Pk	Vertical
3994.53	36.71	44.20	7.90	29.70	-6.60	30.11	54.00	-23.89	AV	Vertical
3998.20	38.68	44.20	7.90	29.70	-6.60	32.08	74.00	-41.92	Pk	Horizontal
3998.20	35.72	44.20	7.90	29.70	-6.60	29.12	54.00	-24.88	AV	Horizontal
7220.27	36.79	43.50	11.40	35.50	3.40	40.19	68.20	-28.01	Pk	Vertical
7220.27	34.85	43.50	11.40	35.50	3.40	38.25	54.00	-15.75	AV	Vertical
7228.67	37.69	43.50	11.40	35.50	3.40	41.09	68.20	-27.11	Pk	Horizontal
7228.67	33.88	43.50	11.40	35.50	3.40	37.28	54.00	-16.72	AV	Horizontal
13009.52	39.21	44.50	13.80	38.80	8.10	47.31	68.20	-20.89	Pk	Vertical
13009.52	36.60	44.50	13.80	38.80	8.10	44.70	54.00	-9.30	AV	Vertical
13010.00	39.49	44.50	13.80	38.80	8.10	47.59	68.20	-20.61	Pk	Horizontal
13010.00	37.01	44.50	13.80	38.80	8.10	45.11	54.00	-8.89	AV	Horizontal
16251.49	33.58	43.60	14.30	39.50	10.20	43.78	68.20	-24.42	Pk	Vertical
16251.49	30.64	43.60	14.30	39.50	10.20	40.84	54.00	-13.16	AV	Vertical
16254.31	32.75	43.60	14.30	39.50	10.20	42.95	68.20	-25.25	Pk	Horizontal
16254.31	29.89	43.60	14.30	39.50	10.20	40.09	54.00	-13.91	AV	Horizontal
19501.44	32.78	42.60	15.90	38.90	12.20	44.98	68.20	-23.22	Pk	Vertical
19501.44	29.32	42.60	15.90	38.90	12.20	41.52	54.00	-12.48	AV	Vertical
19511.11	31.97	42.60	15.90	38.90	12.20	44.17	68.20	-24.03	Pk	Horizontal
19511.11	29.58	42.60	15.90	38.90	12.20	41.78	54.00	-12.22	AV	Horizontal



U-NII 7										
Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Orrected Factor (dB)	Emission Level (dBμV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Low Channel (802.11ax160/ 6665MHz)										
3258.66	43.86	44.70	6.70	28.20	-9.80	34.06	68.20	-34.14	Pk	Vertical
3258.66	40.78	44.70	6.70	28.20	-9.80	30.98	54.00	-23.02	AV	Vertical
3251.15	45.19	44.70	6.70	28.20	-9.80	35.39	68.20	-32.81	Pk	Horizontal
3251.15	41.66	44.70	6.70	28.20	-9.80	31.86	54.00	-22.14	AV	Horizontal
3988.63	38.85	44.20	7.90	29.70	-6.60	32.25	74.00	-41.75	Pk	Vertical
3988.63	35.74	44.20	7.90	29.70	-6.60	29.14	54.00	-24.86	AV	Vertical
3995.54	38.68	44.20	7.90	29.70	-6.60	32.08	74.00	-41.92	Pk	Horizontal
3995.54	35.72	44.20	7.90	29.70	-6.60	29.12	54.00	-24.88	AV	Horizontal
7221.08	36.52	43.50	11.40	35.50	3.40	39.92	68.20	-28.28	Pk	Vertical
7221.08	33.91	43.50	11.40	35.50	3.40	37.31	54.00	-16.69	AV	Vertical
7226.05	37.90	43.50	11.40	35.50	3.40	41.30	68.20	-26.90	Pk	Horizontal
7226.05	34.26	43.50	11.40	35.50	3.40	37.66	54.00	-16.34	AV	Horizontal
13329.69	39.45	44.50	13.80	38.80	8.10	47.55	68.20	-20.65	Pk	Vertical
13329.69	36.74	44.50	13.80	38.80	8.10	44.84	54.00	-9.16	AV	Vertical
13329.75	40.16	44.50	13.80	38.80	8.10	48.26	68.20	-19.94	Pk	Horizontal
13329.75	36.02	44.50	13.80	38.80	8.10	44.12	54.00	-9.88	AV	Horizontal
16647.09	33.96	43.60	14.30	39.50	10.20	44.16	68.20	-24.04	Pk	Vertical
16647.09	30.34	43.60	14.30	39.50	10.20	40.54	54.00	-13.46	AV	Vertical
16654.15	34.09	43.60	14.30	39.50	10.20	44.29	68.20	-23.91	Pk	Horizontal
16654.15	31.16	43.60	14.30	39.50	10.20	41.36	54.00	-12.64	AV	Horizontal
19980.74	32.65	42.60	15.90	38.90	12.20	44.85	68.20	-23.35	Pk	Vertical
19980.74	29.96	42.60	15.90	38.90	12.20	42.16	54.00	-11.84	AV	Vertical
19975.84	32.48	42.60	15.90	38.90	12.20	44.68	68.20	-23.52	Pk	Horizontal
19975.84	29.57	42.60	15.90	38.90	12.20	41.77	54.00	-12.23	AV	Horizontal
High Channel (802.11ax160/ 6825MHz)										
3252.56	44.18	44.70	6.70	28.20	-9.80	34.38	68.20	-33.82	Pk	Vertical
3252.56	42.05	44.70	6.70	28.20	-9.80	32.25	54.00	-21.75	AV	Vertical
3250.12	43.84	44.70	6.70	28.20	-9.80	34.04	68.20	-34.16	Pk	Horizontal
3250.12	41.61	44.70	6.70	28.20	-9.80	31.81	54.00	-22.19	AV	Horizontal
3996.10	39.59	44.20	7.90	29.70	-6.60	32.99	74.00	-41.01	Pk	Vertical
3996.10	35.88	44.20	7.90	29.70	-6.60	29.28	54.00	-24.72	AV	Vertical
3986.48	39.31	44.20	7.90	29.70	-6.60	32.71	74.00	-41.29	Pk	Horizontal
3986.48	35.89	44.20	7.90	29.70	-6.60	29.29	54.00	-24.71	AV	Horizontal
7226.96	36.54	43.50	11.40	35.50	3.40	39.94	68.20	-28.26	Pk	Vertical
7226.96	33.65	43.50	11.40	35.50	3.40	37.05	54.00	-16.95	AV	Vertical
7230.30	37.68	43.50	11.40	35.50	3.40	41.08	68.20	-27.12	Pk	Horizontal
7230.30	33.96	43.50	11.40	35.50	3.40	37.36	54.00	-16.64	AV	Horizontal
13649.66	38.90	44.50	13.80	38.80	8.10	47.00	68.20	-21.20	Pk	Vertical
13649.66	35.69	44.50	13.80	38.80	8.10	43.79	54.00	-10.21	AV	Vertical
13649.95	39.47	44.50	13.80	38.80	8.10	47.57	68.20	-20.63	Pk	Horizontal
13649.95	35.88	44.50	13.80	38.80	8.10	43.98	54.00	-10.02	AV	Horizontal
17049.82	34.04	43.60	14.30	39.50	10.20	44.24	68.20	-23.96	Pk	Vertical
17049.82	30.32	43.60	14.30	39.50	10.20	40.52	54.00	-13.48	AV	Vertical
17054.02	32.80	43.60	14.30	39.50	10.20	43.00	68.20	-25.20	Pk	Horizontal
17054.02	30.93	43.60	14.30	39.50	10.20	41.13	54.00	-12.87	AV	Horizontal
20466.73	33.00	42.60	15.90	38.90	12.20	45.20	68.20	-23.00	Pk	Vertical
20466.73	28.84	42.60	15.90	38.90	12.20	41.04	54.00	-12.96	AV	Vertical
20463.76	32.07	42.60	15.90	38.90	12.20	44.27	68.20	-23.93	Pk	Horizontal
20463.76	29.25	42.60	15.90	38.90	12.20	41.45	54.00	-12.55	AV	Horizontal

U-NII 8										
Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Orrected Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Mid Channel (802.11ax160/ 6985 MHz)										
3264.13	44.34	44.70	6.70	28.20	-9.80	34.54	74.00	-39.46	Pk	Vertical
3264.13	41.21	44.70	6.70	28.20	-9.80	31.41	54.00	-22.59	AV	Vertical
3259.39	43.99	44.70	6.70	28.20	-9.80	34.19	68.20	-34.01	Pk	Horizontal
3259.39	41.73	44.70	6.70	28.20	-9.80	31.93	54.00	-22.07	AV	Horizontal
3986.72	39.12	44.20	7.90	29.70	-6.60	32.52	74.00	-41.48	Pk	Vertical
3986.72	36.14	44.20	7.90	29.70	-6.60	29.54	54.00	-24.46	AV	Vertical
3988.64	39.78	44.20	7.90	29.70	-6.60	33.18	74.00	-40.82	Pk	Horizontal
3988.64	37.01	44.20	7.90	29.70	-6.60	30.41	54.00	-23.59	AV	Horizontal
7233.42	37.25	43.50	11.40	35.50	3.40	40.65	68.20	-27.55	Pk	Vertical
7233.42	34.81	43.50	11.40	35.50	3.40	38.21	54.00	-15.79	AV	Vertical
7227.26	37.40	43.50	11.40	35.50	3.40	40.80	68.20	-27.40	Pk	Horizontal
7227.26	33.67	43.50	11.40	35.50	3.40	37.07	54.00	-16.93	AV	Horizontal
13969.87	39.49	44.50	13.80	38.80	8.10	47.59	68.20	-20.61	Pk	Vertical
13969.87	35.71	44.50	13.80	38.80	8.10	43.81	54.00	-10.19	AV	Vertical
13969.99	39.11	44.50	13.80	38.80	8.10	47.21	68.20	-20.99	Pk	Horizontal
13969.99	36.32	44.50	13.80	38.80	8.10	44.42	54.00	-9.58	AV	Horizontal
17462.11	32.85	43.60	14.30	39.50	10.20	43.05	68.20	-25.15	Pk	Vertical
17462.11	29.84	43.60	14.30	39.50	10.20	40.04	54.00	-13.96	AV	Vertical
17447.03	33.13	43.60	14.30	39.50	10.20	43.33	68.20	-24.87	Pk	Horizontal
17447.03	30.57	43.60	14.30	39.50	10.20	40.77	54.00	-13.23	AV	Horizontal
20954.01	32.61	42.60	15.90	38.90	12.20	44.81	68.20	-23.39	Pk	Vertical
20954.01	29.69	42.60	15.90	38.90	12.20	41.89	54.00	-12.11	AV	Vertical
20941.65	31.58	42.60	15.90	38.90	12.20	43.78	68.20	-24.42	Pk	Horizontal
20941.65	29.38	42.60	15.90	38.90	12.20	41.58	54.00	-12.42	AV	Horizontal

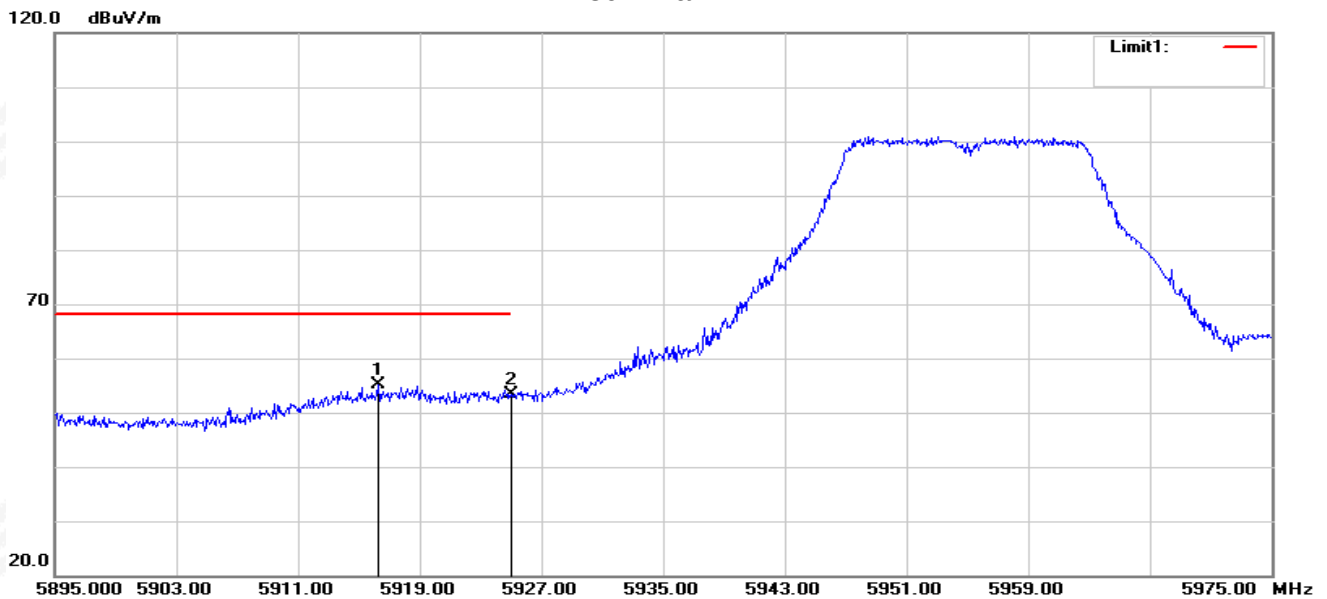
Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier.
- Scan with 802.11a (HT-20), 802.11ax (HE-20), 802.11ax (HE-40), 802.11ax (HE80) , 802.11ax (HE160) the worst case is 802.11ax (HE160).
- The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.

3.2.9 RESTRICTED FREQUENCY BANDS AND BAND EDGE

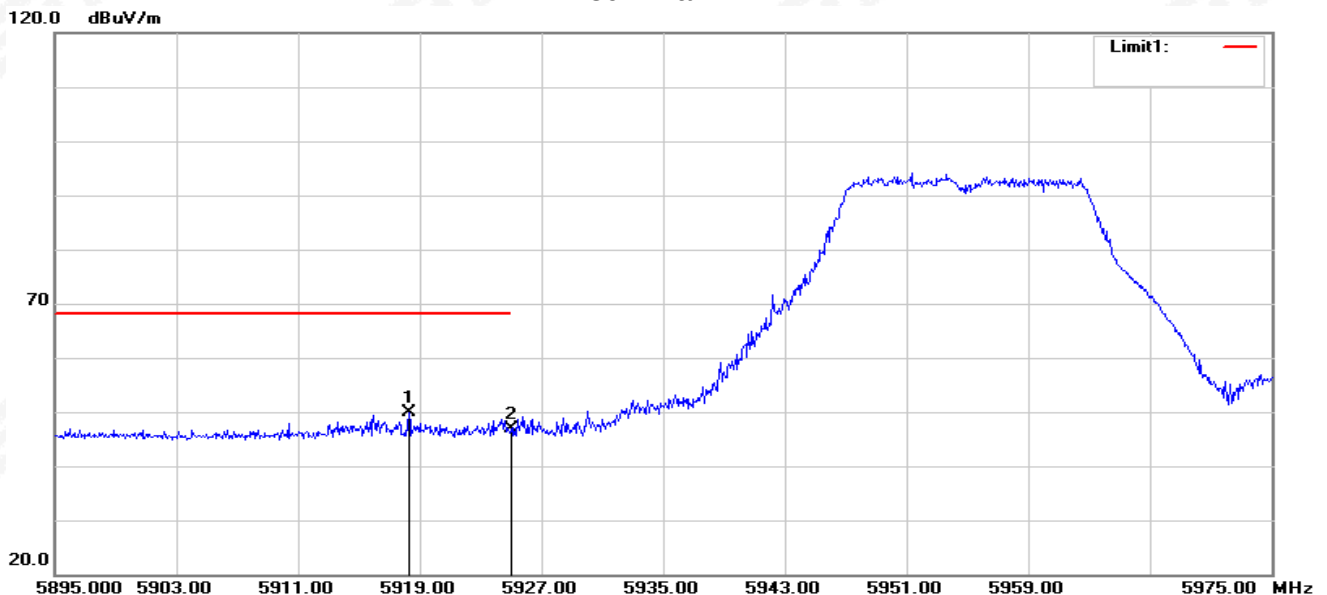
U-NII-5

802.11a-L-H



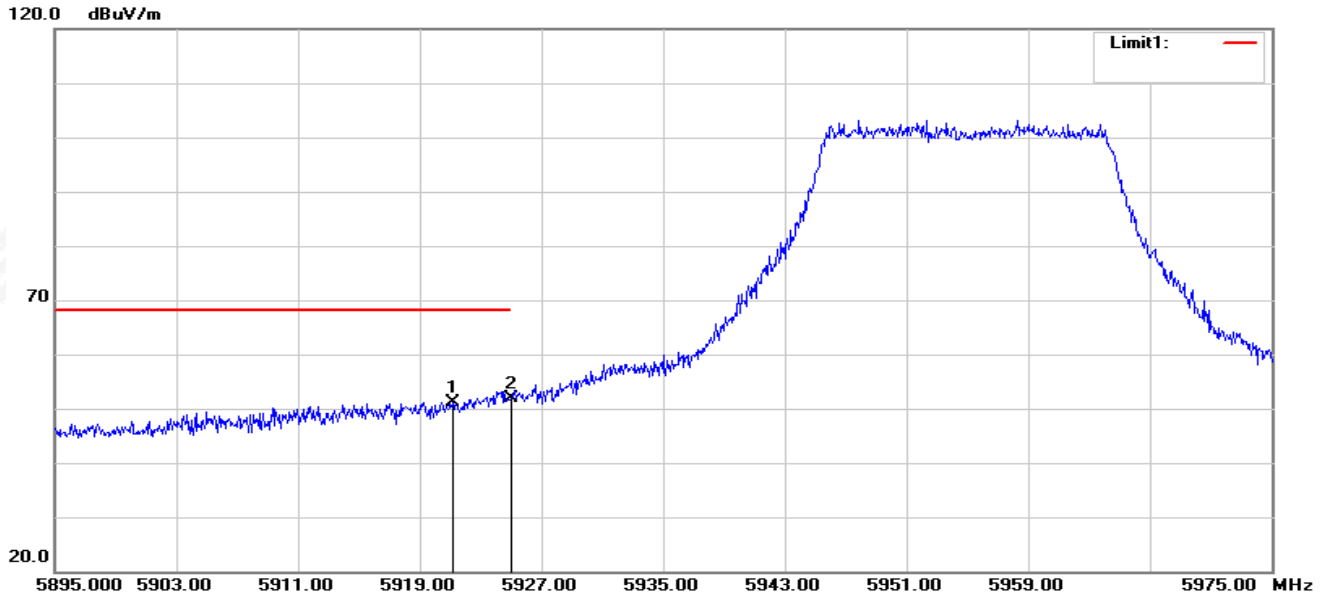
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5916.280	59.01	-3.90	55.11	68.20	-13.09	peak
2	5925.000	57.37	-3.92	53.45	68.20	-14.75	peak

802.11a-L-V



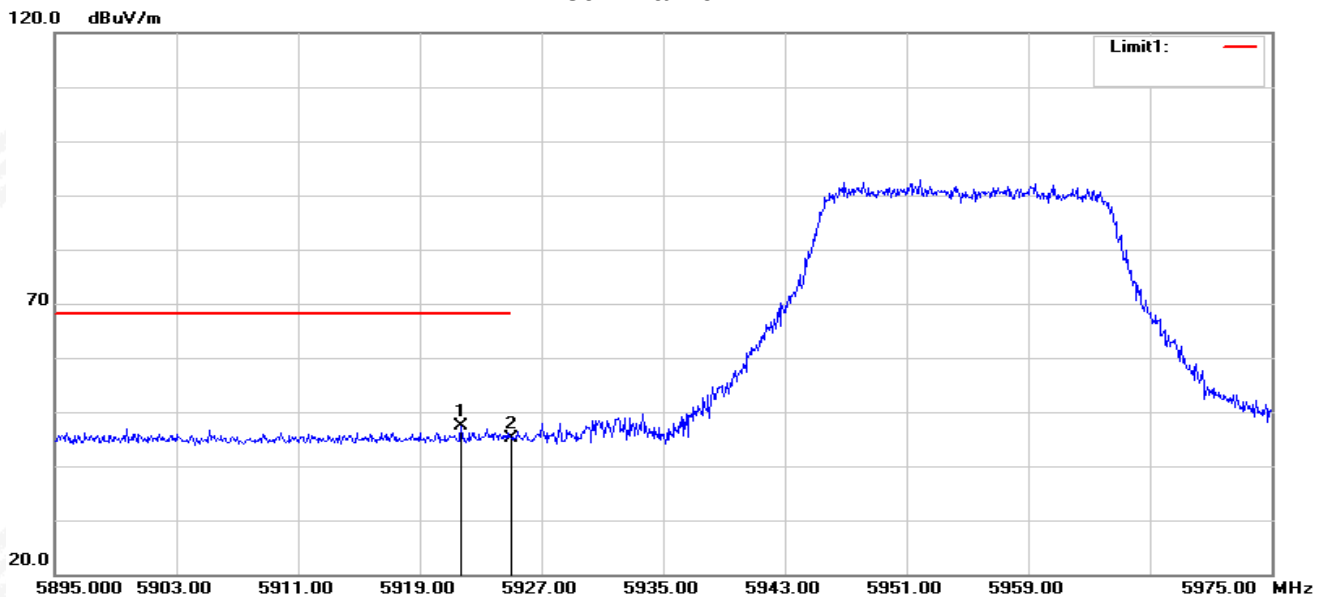
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5918.280	53.74	-3.91	49.83	68.20	-18.37	peak
2	5925.000	50.86	-3.92	46.94	68.20	-21.26	peak

802.11ax20-L-H



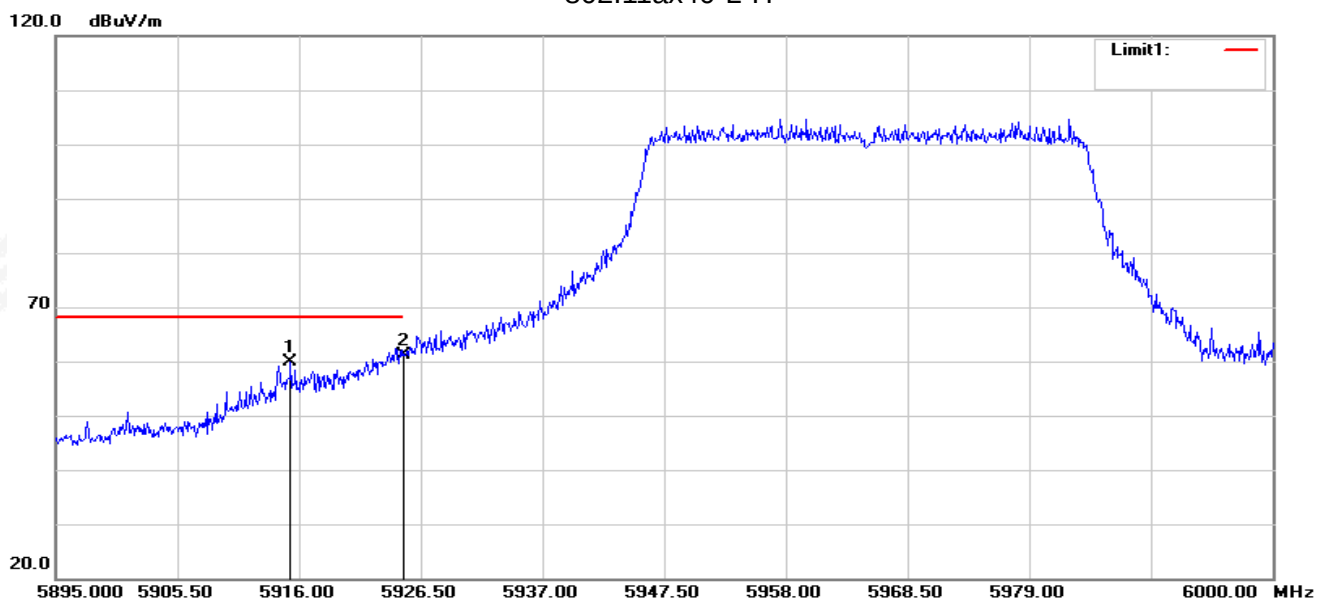
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5921.160	55.06	-3.92	51.14	68.20	-17.06	peak
2	5925.000	55.70	-3.92	51.78	68.20	-16.42	peak

802.11ax20-L-V



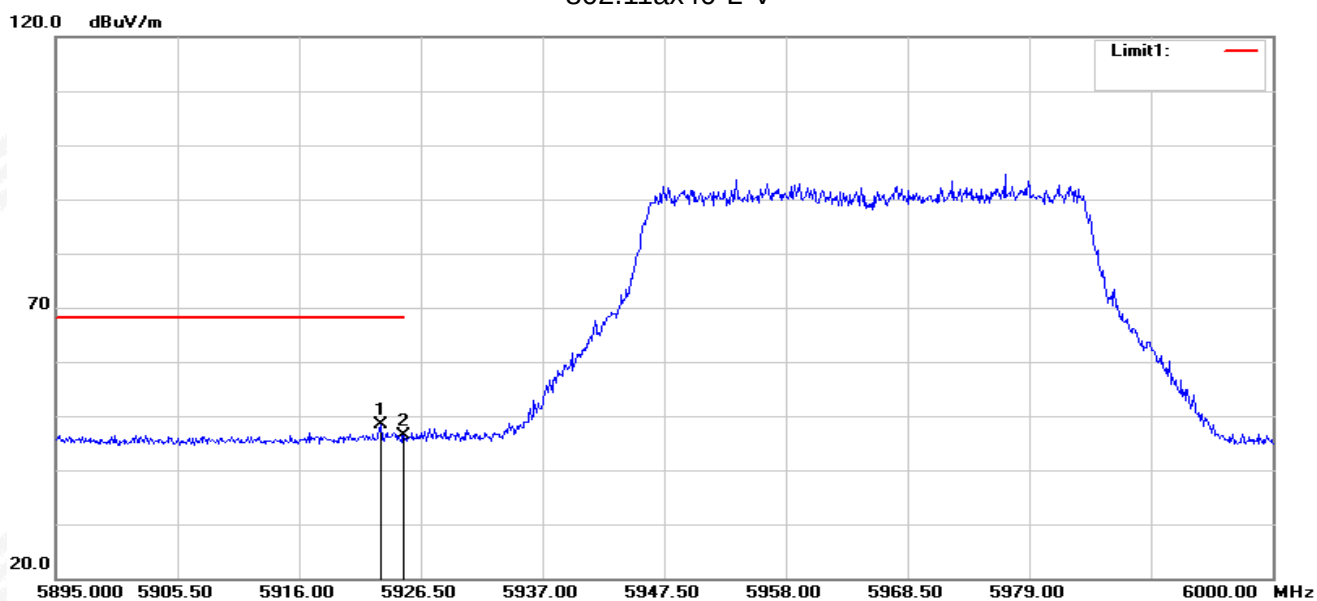
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5921.720	51.19	-3.92	47.27	68.20	-20.93	peak
2	5925.000	48.96	-3.92	45.04	68.20	-23.16	peak

802.11ax40-L-H



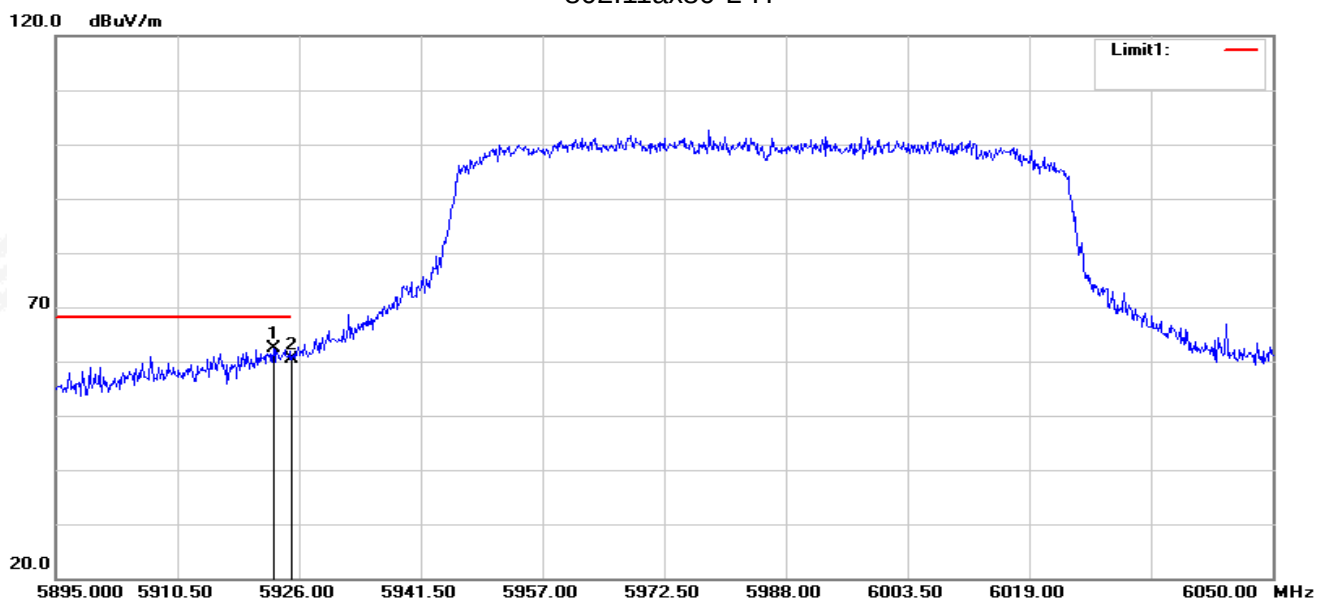
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5915.265	63.89	-3.91	59.98	68.20	-8.22	peak
2	5925.000	65.13	-3.92	61.21	68.20	-6.99	peak

802.11ax40-L-V



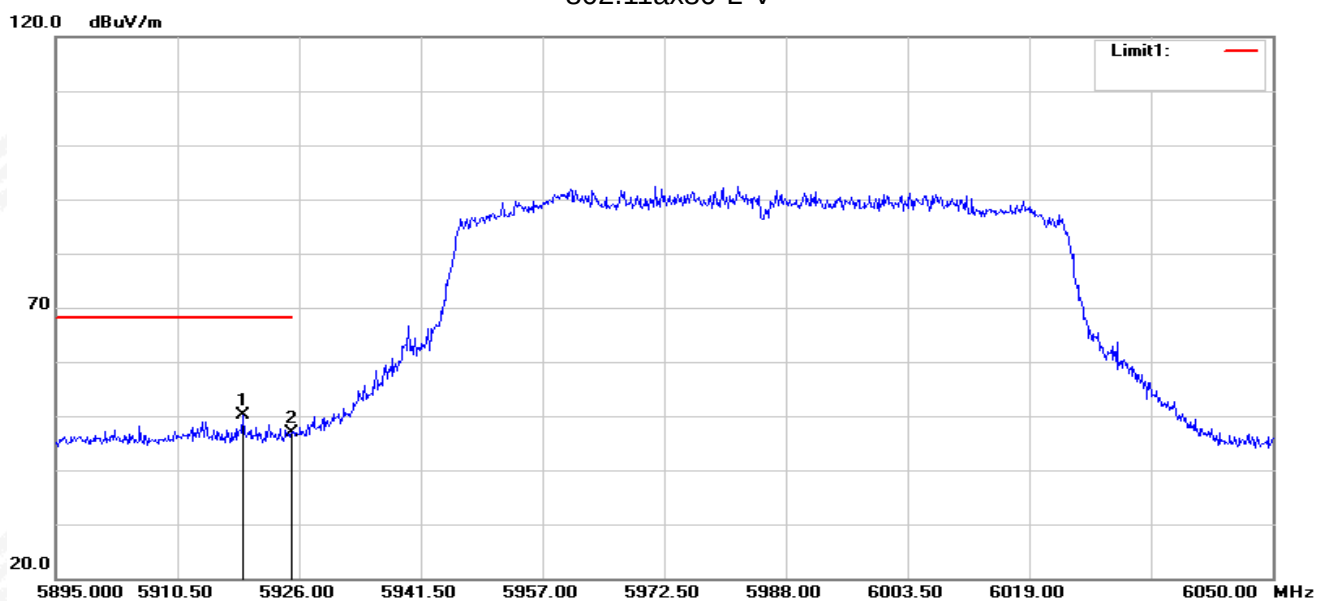
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5923.035	52.25	-3.92	48.33	68.20	-19.87	peak
2	5925.000	50.33	-3.92	46.41	68.20	-21.79	peak

802.11ax80-L-H



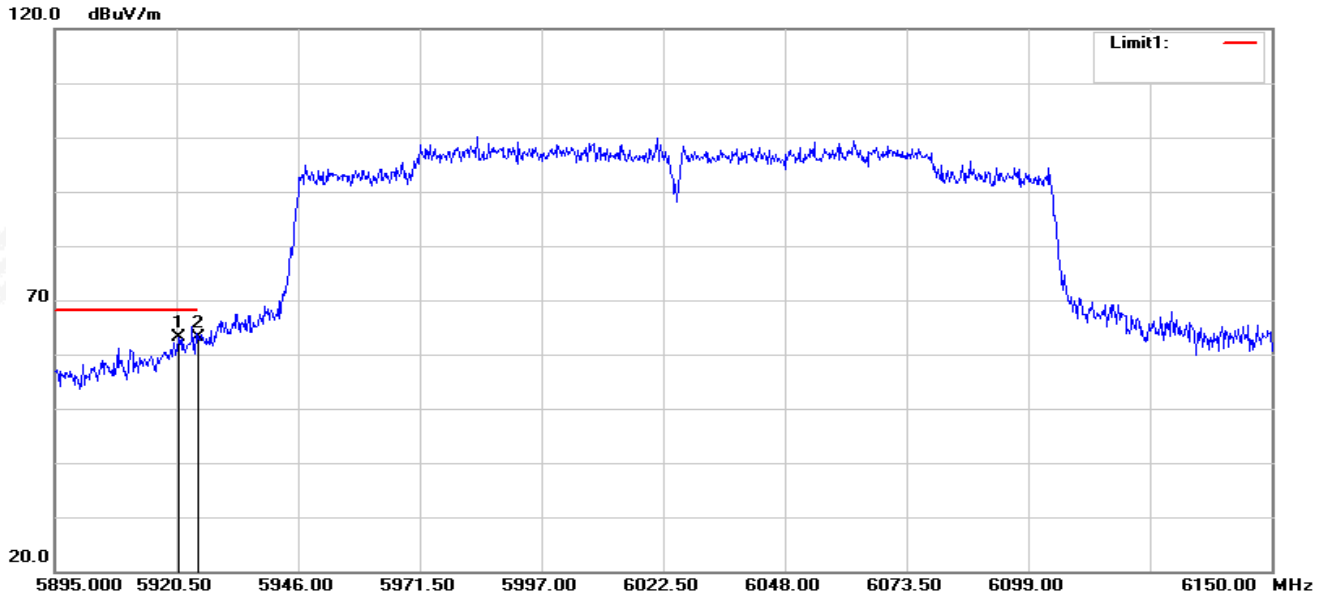
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5922.745	66.35	-3.92	62.43	68.20	-5.77	peak
2	5925.000	64.34	-3.92	60.42	68.20	-7.78	peak

802.11ax80-L-V



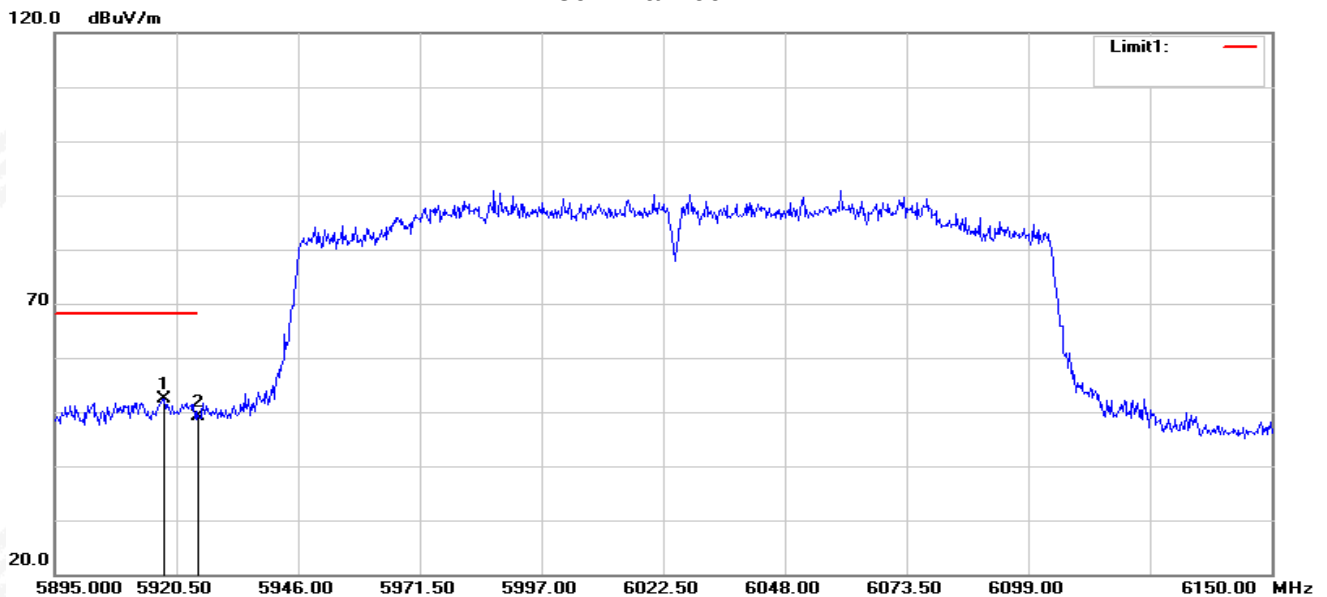
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5918.870	53.92	-3.91	50.01	68.20	-18.19	peak
2	5925.000	50.69	-3.92	46.77	68.20	-21.43	peak

802.11ax160-L-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5921.010	67.14	-3.92	63.22	68.20	-4.98	peak
2	5925.000	67.16	-3.92	63.24	68.20	-4.96	peak

802.11ax160-L-V

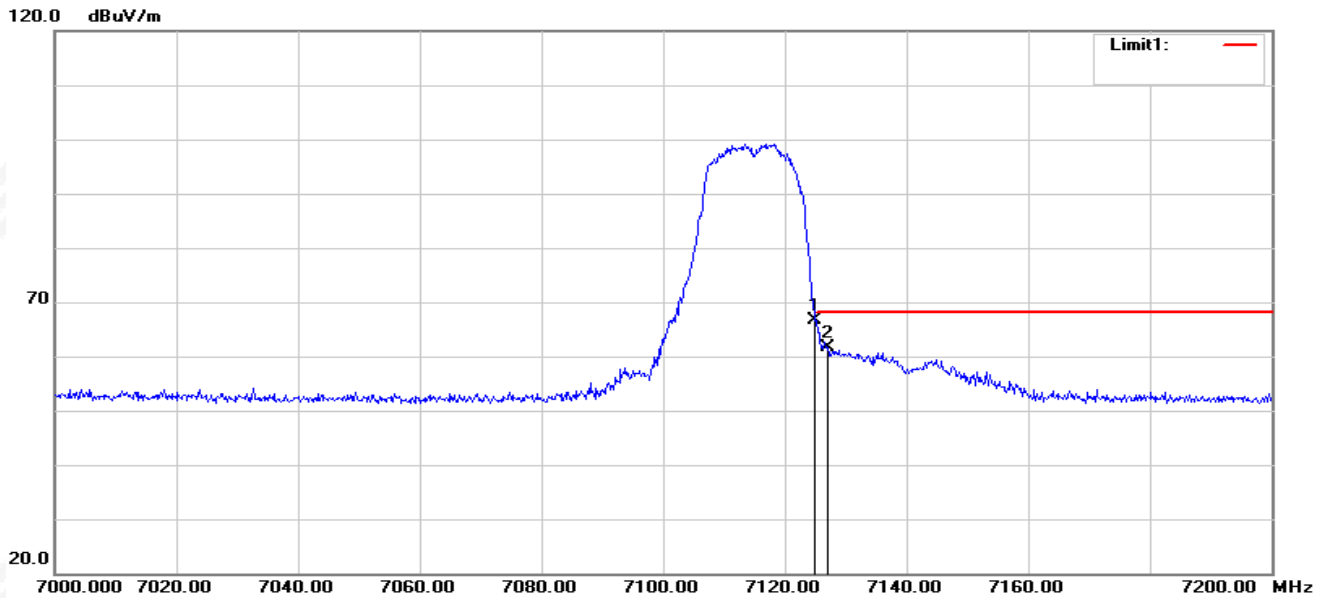


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5917.950	56.40	-3.91	52.49	68.20	-15.71	peak
2	5925.000	53.14	-3.92	49.22	68.20	-18.98	peak

Note: All modes have been tested. Only the worst mode shown in the report.

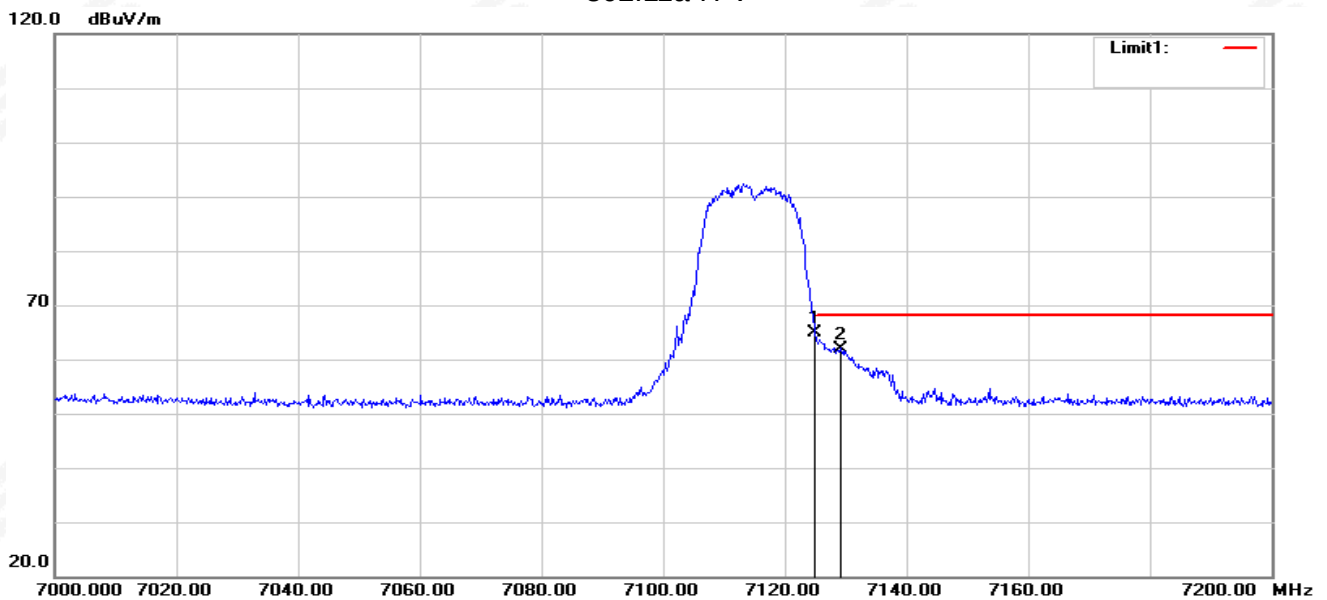
U-NII-8

802.11a-H-H



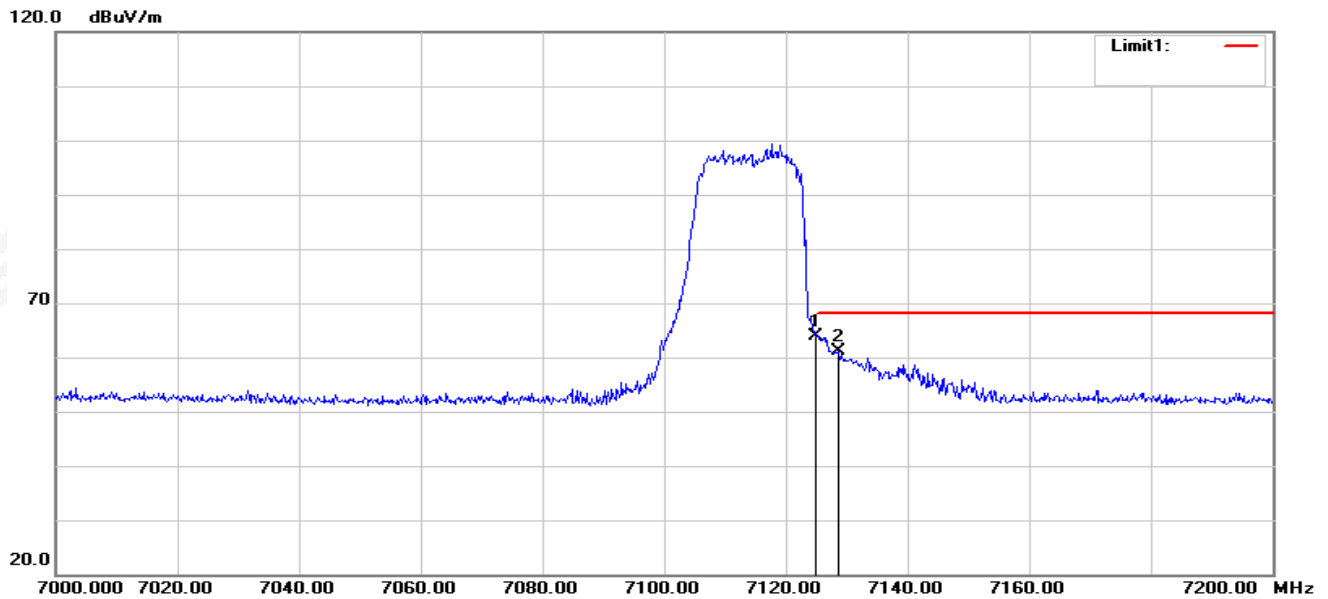
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	66.25	0.26	66.51	68.20	-1.69	peak
2	7127.000	61.41	0.26	61.67	68.20	-6.53	peak

802.11a-H-V



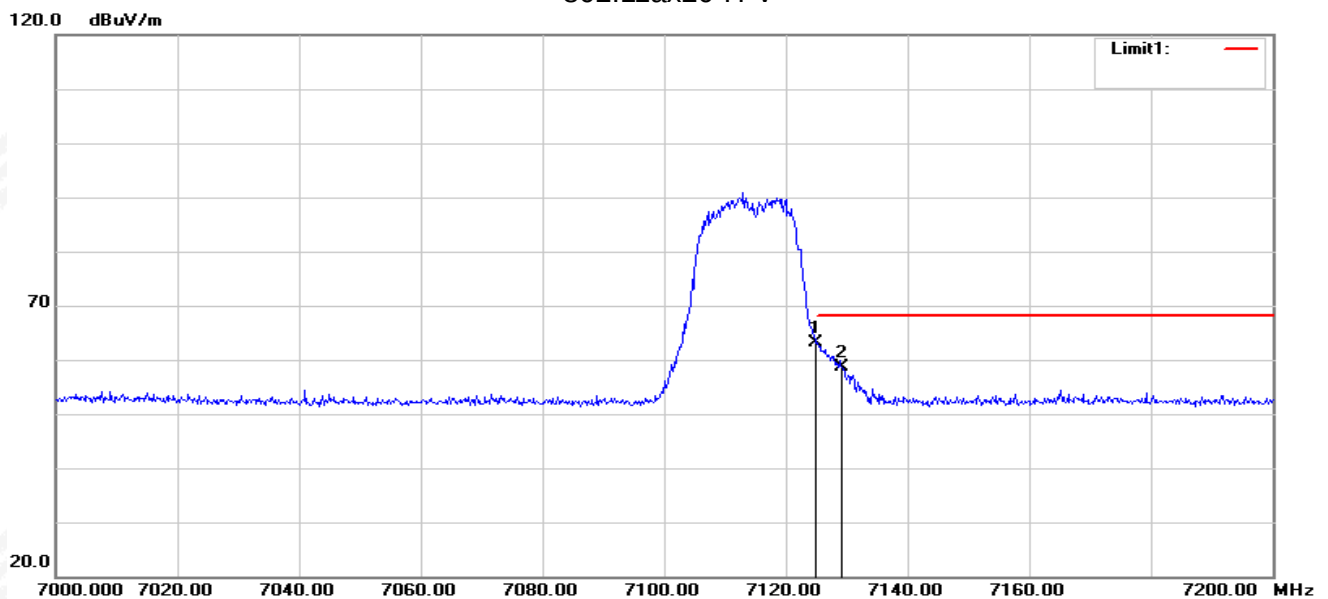
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	64.55	0.26	64.81	68.20	-3.39	peak
2	7129.200	61.73	0.27	62.00	68.20	-6.20	peak

802.11ax20-H-H



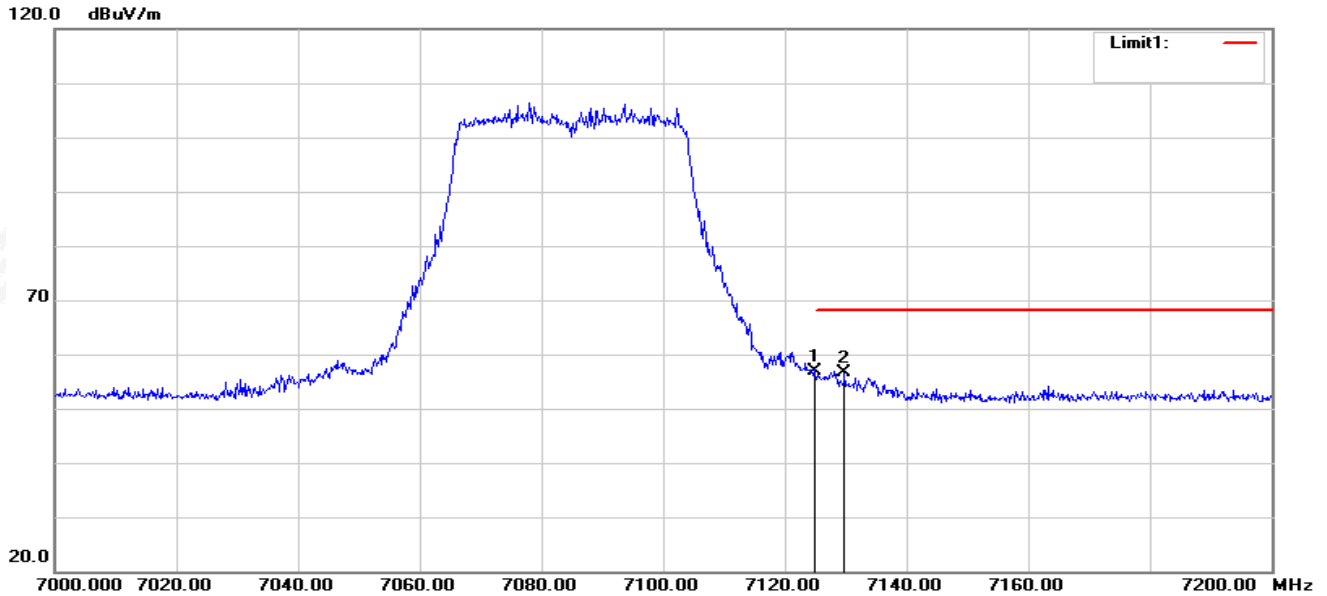
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	63.52	0.26	63.78	68.20	-4.42	peak
2	7128.600	60.90	0.27	61.17	68.20	-7.03	peak

802.11ax20-H-V



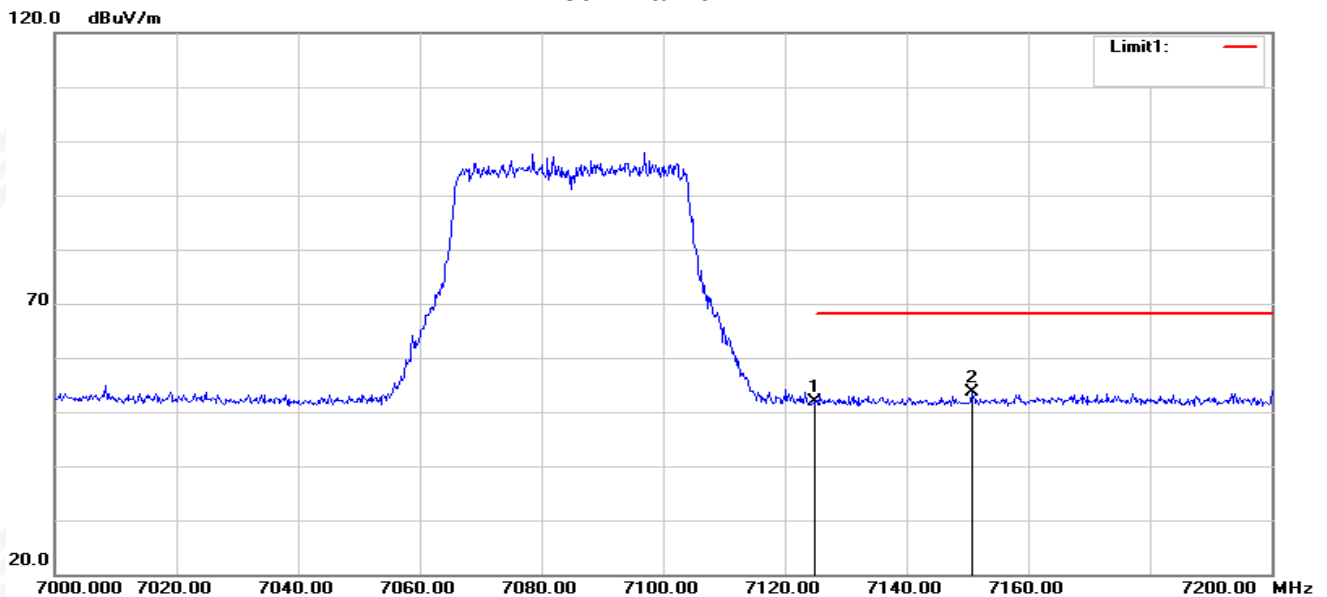
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	62.82	0.26	63.08	68.20	-5.12	peak
2	7129.200	58.25	0.27	58.52	68.20	-9.68	peak

802.11ax40-H-H



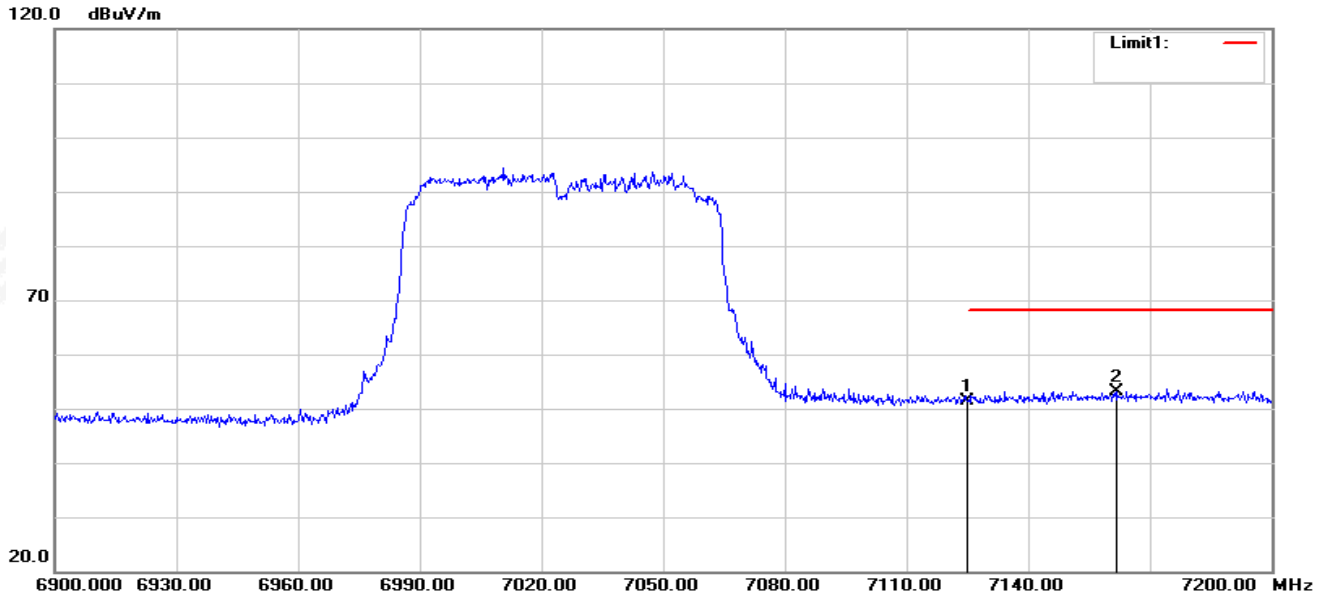
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	56.50	0.26	56.76	68.20	-11.44	peak
2	7129.800	56.35	0.27	56.62	68.20	-11.58	peak

802.11ax40-H-V



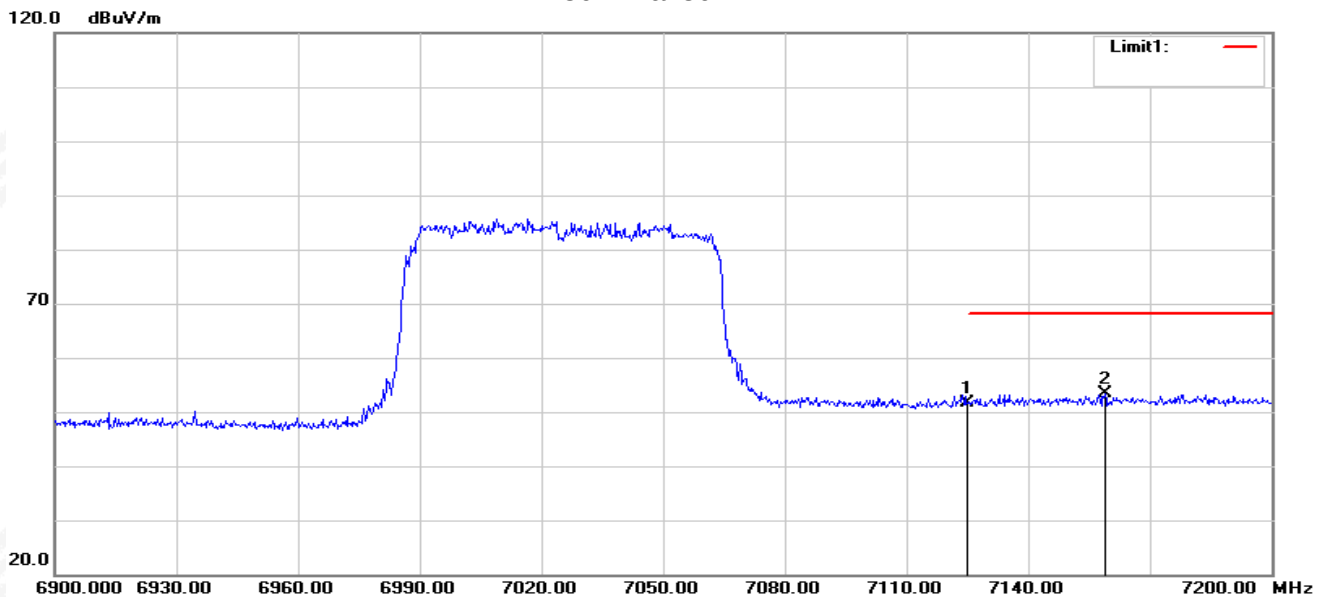
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	51.55	0.26	51.81	68.20	-16.39	peak
2	7150.800	53.15	0.36	53.51	68.20	-14.69	peak

802.11ax80-H-H



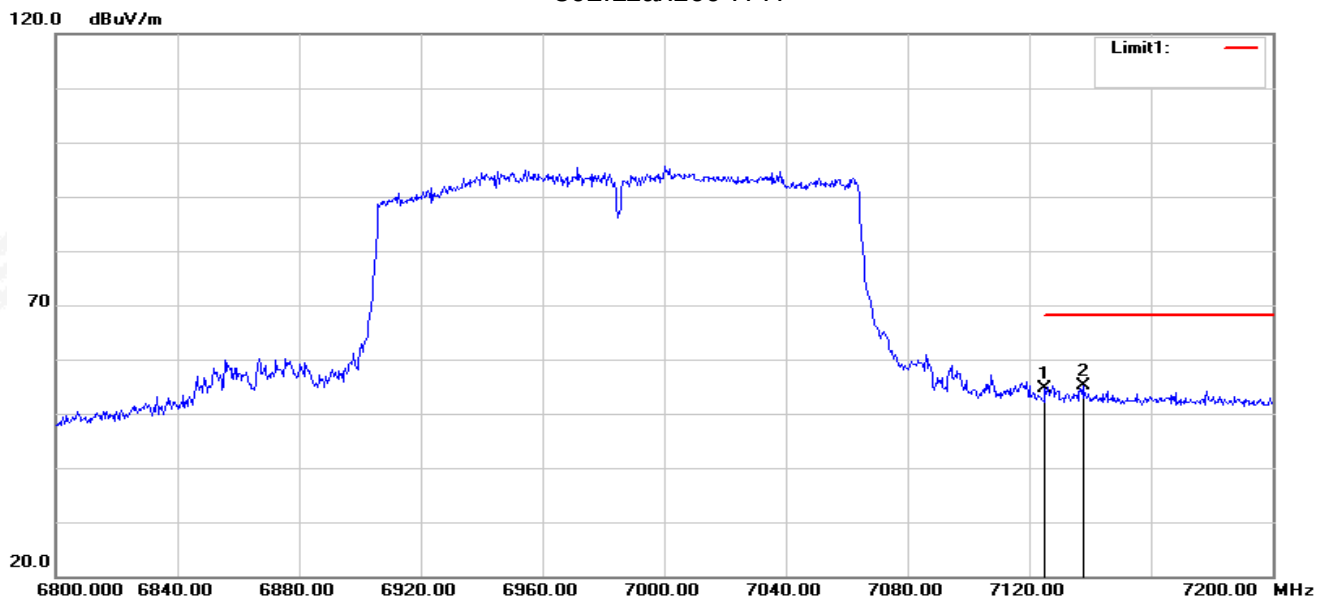
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	51.21	0.26	51.47	68.20	-16.73	peak
2	7161.900	52.83	0.39	53.22	68.20	-14.98	peak

802.11ax80-H-V



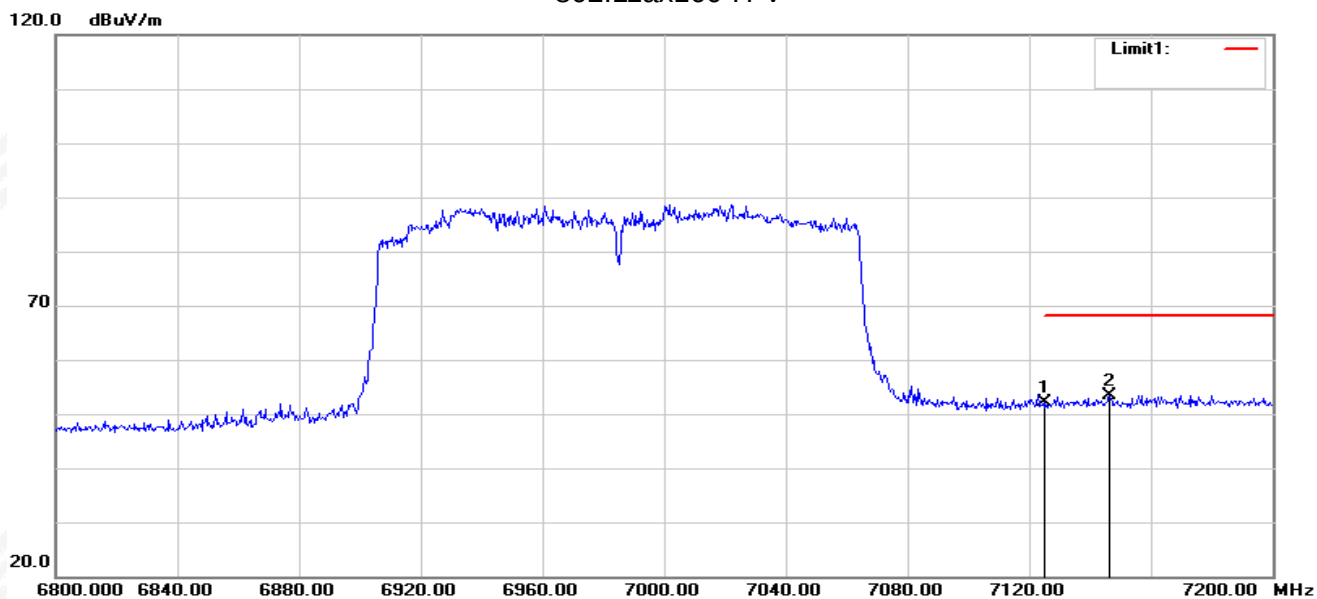
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	51.44	0.26	51.70	68.20	-16.50	peak
2	7158.900	52.97	0.38	53.35	68.20	-14.85	peak

802.11ax160-H-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	54.40	0.26	54.66	68.20	-13.54	peak
2	7137.600	54.82	0.31	55.13	68.20	-13.07	peak

802.11ax160-H-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	51.79	0.26	52.05	68.20	-16.15	peak
2	7146.400	53.15	0.34	53.49	68.20	-14.71	peak

Note: All modes have been tested. Only the worst mode shown in the report.

4. POWER SPECTRAL DENSITY TEST

4.1 LIMIT

For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

4.2 TEST PROCEDURE

Duty cycle $\geq 98\%$

1. Set RBW=1MHz/VBW=3MHz, Sweptime=auto Detector=RMS
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level
4. EIRPPSD=Measured conducted power density+Antenna gain

Duty cycle $< 98\%$

1. Set RBW=1MHz/VBW=3MHz Detector=RMS
2. Set sweep time $\geq 10 \times (\text{number of points in sweep}) \times (\text{total on/off period of the transmitted signal})$
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level
5. Add $10\log(1/x)$ where x is the duty cycle.
6. EIRP PSD=Measured conducted power density+Antenna gain.

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.6 TEST RESULTS

Note: The test data please reference to attachment "STS2404310W05_Appendix 6G WIFI".

5. BANDWIDTH MEASUREMENT

5.1 LIMIT

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320MHz.

5.2 TEST PROCEDURE

26dB Bandwidth

1. Set RBW=approximately 1% of the emission bandwidth.
2. Set the VBW $\geq$ RBW.
3. Trace mode = max hold.
4. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

Occupied Bandwidth

- 1.Set RBW=1% to 5% of the OBW.
- 2 Set VBW $\geq$ 3RBW
- 3.Sample detection and single sweep modes shall be used
- 4.Use the 99% power bandwidth function of the instrument.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULTS

The test data please reference to attachment "STS2404310W05_Appendix 6G WIFI".

6. MAXIMUM CONDUCTED OUTPUT POWER AND MAXIMUM EIRP

6.1 LIMIT

For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

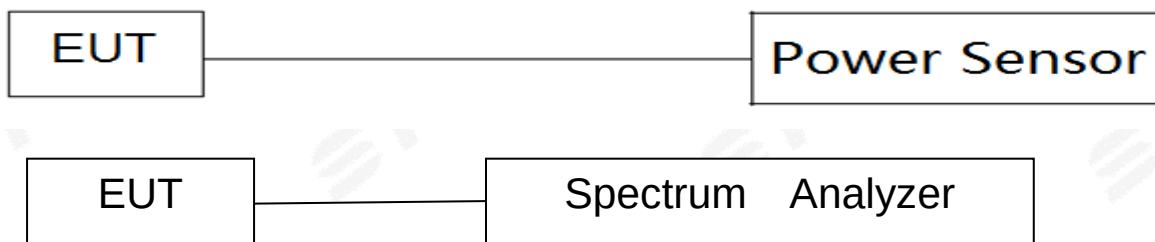
6.2 TEST PROCEDURE

The EUT was directly connected to the Power Sensor&PC .

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 5 Unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULTS

Note: The test data please reference to attachment "STS2404310W05_Appendix 6G WIFI".

7. IN-BAND EMISSIONS

7.1 LIMIT

For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

7.2 TEST PROCEDURE

1. Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth
2. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 5 Unless otherwise a special operating condition is specified in the follows during the testing.

7.6 TEST RESULTS

Note: The test data please reference to attachment "STS2404310W05_Appendix 6G WIFI".

8. CONTENTION BASED PROTOCOL

8.1 LIMIT

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

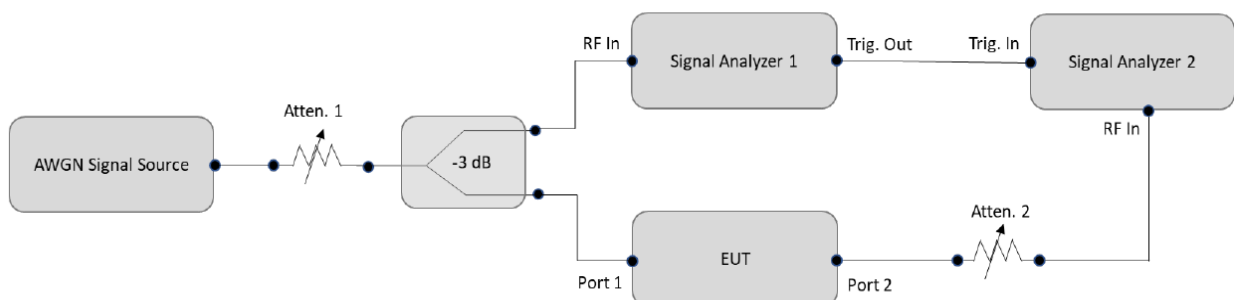
8.2 TEST PROCEDURE

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
3. Set the signal analyzer center frequency to the nominal EEUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
4. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
5. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
9. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
10. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 TEST RESULTS

<Normal mode – WLAN Ant.1+2>

Bnad	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent Freq. (MHz)	Measured Detection level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Margin (dB)
UNII Band 5	6175	20	6175	-64.86	100	-57.52	-7.34
	6185	160	6110	-64.86	100	-57.52	-7.34
			6185	-65.02	100	-57.52	-7.5
			6260	-65.2	100	-57.52	-7.68
UNII Band 6	6475	20	6475	-65.03	100	-57.52	-7.51
	6505	160	6430	-65.2	100	-57.52	-7.68
			6505	-65.28	100	-57.52	-7.76
			6580	-65.17	100	-57.52	-7.65
UNII Band 7	6695	20	6695	-65.04	100	-57.52	-7.52
	6825	160	6750	-64.91	100	-57.52	-7.39
			6825	-65.23	100	-57.52	-7.71
			6900	-64.94	100	-57.52	-7.42
UNII Band 8	6995	20	6995	-64.97	100	-57.52	-7.45
	6985	160	6910	-64.97	100	-57.52	-7.45
			6985	-65.25	100	-57.52	-7.73
			7060	-65.09	100	-57.52	-7.57

Note: Threshold Level (TL) = -62dBm + minimum antenna gain

9. AUTOMATICALLY DISCONTINUE TRANSMISSION

9.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

9.2 TEST RESULT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

10. ANTENNA REQUIREMENT

10.1 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.

10.2 EUT ANTENNA

The EUT antenna is FPC Antenna. It comply with the standard requirement.



APPENDIX - PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

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