Product Name:	FusionLink
Brand Name:	ASYS
Model No.:	N280
Applicant:	ASYS Corporation 20F.-1, No. 8, Ziqiang S. Rd., Zhubei City, Hsinchu County 302044, Taiwan (R.O.C.)
Date of Receipt:	Jun. 29, 2023
Finished date of Test:	Aug. 15, 2023
Applicable Standards:	47 CFR Part 15, Subpart C, 15.247 ANSI C63.10: 2013 FCC publication KDB 558074 D01 15.247 Meas Guidance v05r02 Apr 02, 2019

We, **Spectrum Research & Testing Laboratory Inc.**, hereby certify that one sample of the above was tested in our laboratory with positive results according to the above-mentioned standards. The records in the report are an accurate account of the results. Details of the results are given in the subsequent pages of this report.

Tested By : Richard Lin , Date: 8/23/2023

(Richard Lin)

Approved By : , Date: 8/23/2023

(Johnson Ho, Director)

Testing Laboratory 1016

Revisions History

Report No.	Issue Date	Revisions
FCCA23062901	Aug. 23, 2023	Initial issue

Table of Contents

1. DOCUMENT POLICY AND TEST STATEMENT 5
   1.1 DOCUMENT POLICY 5
   1.2 TEST STATEMENT 5
   1.3 EUT MODIFICATION 5
   1.4 DECISION RULE 5
   1.5 REPORTING STATEMENTS OF CONFORMITY 5
2. DESCRIPTION OF EUT AND TEST MODE 6
   2.1 GENERAL DESCRIPTION OF EUT 6
   2.2 DESCRIPTION OF EUT INTERNAL DEVICE 7
   2.3 DESCRIPTION OF TEST MODE 7
   2.4 EUT OPERATING CONDITION 7
   2.5 DESCRIPTION OF SUPPORT UNIT 8
   2.6 CHANNEL AND FREQUENCY TABLE 8
3. DESCRIPTION OF APPLIED STANDARDS 9
   3.1 SUMMARY OF TEST RESULTS 9
4. CONDUCTED EMISSION TEST 10
   4.1 LIMIT 10
   4.2 TEST EQUIPMENT 10
   4.3 TEST SETUP 11
   4.4 TEST PROCEDURE 11
   4.5 TEST RESULT 12
5. RADIATED EMISSION TEST 30
   5.1 LIMIT 30
   5.2 TEST EQUIPMENT 31
   5.3 TEST SET-UP 33
   5.4 TEST PROCEDURE 34
   5.5 TEST RESULT 35
6. BANDWIDTH TEST 62
   6.1 LIMIT 62
   6.2 TEST EQUIPMENT 62
   6.3 TEST SET-UP 62
   6.4 TEST PROCEDURE 62
   6.5 EUT OPERATING CONDITION 62
   6.6 TEST RESULT 63
7. PEAK CONDUCTED OUTPUT POWER TEST 75

7.1 LIMIT 75
7.2 TEST EQUIPMENT 75
7.3 TEST SET-UP 75
7.4 TEST PROCEDURE 75
7.5 EUT OPERATING CONDITION 75
7.6 TEST RESULT 76
8. BAND EDGE TEST 82
8.1 LIMIT 82
8.2 TEST EQUIPMENT 83
8.3 TEST SETUP 84
8.4 TEST PROCEDURE 84
8.5 EUT OPERATING CONDITION 84
8.6 TEST RESULT 85
9. POWER SPECTRAL DENSITY TEST 94
9.1 LIMIT 94
9.2 TEST EQUIPMENT 94
9.3 TEST SET-UP 94
9.4 TEST PROCEDURE 94
9.5 EUT OPERATING CONDITION 94
9.6 TEST RESULT 95
10. §15.203 ANTENNA REQUIREMENT 101
10.1 APPLICABLE STANDARD 101
10.2 RESULT 101
11. TERMS OF ABBREVIATION 102

1. DOCUMENT POLICY AND TEST STATEMENT

1.1 DOCUMENT POLICY

- The report shall not be reproduced except in full, without the written approval of SRT Lab, Inc.
- FCC Registered Test Site Number：TW1016

1.2 TEST STATEMENT

- The test results in the report apply only to the unit tested by SRT Lab.
- There was no deviation from the requirements of test standards during the test.
- DC power source from Adapter 9V~24V.

1.3 EUT MODIFICATION

- No modification in SRT Lab.

1.4 DECISION RULE

- To make sure the testing report(s) meet the requirement of ISO/IEC 17025:2017 standard and meet chapter 7.1 (Review of Requests, Tenders and Contracts), chapter 7.4 (Handling of Test or Calibration Items), chapter 7.8.2 (Reporting of Results – Common Requirement for Reports (Test, Calibration or Sampling)), This decision rule will be the base of adjustment (include the disclaimer scope) from SRT LAB.
- After communicate between SRT LAB. and clients /applicants and get the agreement, SRT LAB. will do the adjustment. According to this decision rule, SRT LAB. Manager(s) will do the Pass or Fail adjustment. (But one thing need to be concerned is, not every assessing rule suits all declaration of conformity assessing actions, it should be ruled depends on product's feature, test standard, technical regulation, test results, and also acceptance of risk of both sides.)
- This report according to the "description of applied standards and statements of conformity" on the report, as the decision rule.

1.5 REPORTING STATEMENTS OF CONFORMITY

- Base on ISO/IEC 17025, the statements of conformity requirement of testing results.
- □ It does not need to provide the statements of conformity.
- ■ It need to provide the statements of conformity and
  - ■ Use CISPR 16-4,ISO/IEC Guide 98-3, IEC Guide 115,etsi ETR 028 speciation and it does not need to provide additional uncertainty of the testing results or data on the report(s).
  - □ It need to provide additional uncertainty of the testing results or data on the report(s).

2. DESCRIPTION OF EUT AND TEST MODE

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	FusionLink
MODEL NO.	N280
POWER SUPPLY	DC 9 ~ 24V from DC power Source
CABLE	N/A
FREQUENCY BAND	2.4 GHz ~ 2.4835 GHz
CARRIER FREQUENCY	2.412 GHz ~ 2.462 GHz
NUMBER OF CHANNEL	2.4 G band_802.11b/g/n - HT20：11 ch
RATED RF OUTPUT POWER	802.11b: 6.64 dBm (4.61 mW) 802.11g: 1.74 dBm (1.49 mW) 802.11n - HT20: 1.05 dBm (1.27 mW)
MODULATION TYPE	IEEE802.11b: DSSS (BPSK / QPSK / CCK) IEEE802.11g: OFDM (BPSK / 16-QAM / 64-QAM) IEEE802.11n: SISO-OFDM (BPSK / QPSK / 16-QAM / 64-QAM)
MODE OF OPERATION	Duplex
BIT RATE OF TRANSMISSION	802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n - HT20: MCS0 ~ MCS7 (Max. 72.2 Mbps)
ANTENNA TYPE	Dipole Antenna
ANTENNA GAIN	2.0 dBi
OPERATING TEMPERATURE RANGE	0 ~ 60°C

NOTE: For more detailed information, please refer to the EUT's specification or user's manual provided by manufacturer.

2.2 DESCRIPTION OF EUT INTERNAL DEVICE

DEVICE	BRAND / MAKER	MODEL #	FCC ID / DOC	REMARK
RF Module	EDOM	AP6212	N/A	WiFi+Bluetooth 4.0+FM RX SIP Module, only use WiFi 2.4G function.
Antenna	KINSUN INDUSTRIES INC.	6602813031-100	N/A	Dipole Antenna, 2.0 dBi

2.3 DESCRIPTION OF TEST MODE

There are test modes for each test configuration as below:

#1_MLWG3：

Mode		Channel	Frequency (MHz)
01	802.11b	CH01	2412
02		CH06	2437
03		CH11	2462
04	802.11g	CH01	2412
05		CH06	2437
06		CH11	2462
07	802.11n - HT20	CH01	2412
08		CH06	2437
09		CH11	2462

NOTE:

1. Below 1 GHz were pre-tested in chamber and chosen the worst case for conducted and radiated emission test.
2. Above 1 GHz were tested individually.
3. The axis X, Y and Z we evaluate in chamber, the X axis is worst case.

2.4 EUT OPERATING CONDITION

1. Setup the EUT and all peripheral devices.
2. Turn on the power of all equipment and EUT.
3. Based on customer provided continuous program & Program instructions.
4. Set the EUT under continuous transmission mode

2.5 DESCRIPTION OF SUPPORT UNIT

The EUT was configured by the requirement of ANSI C63.10:2013. All interface ports were connected to the appropriate support units via specific cables. The support units and cables are listed below.

NO	DEVICE	BRAND	MODEL #	FCC ID/DOC	CABLE
1	Adapter	ASUS	M32AA1	R31018	1.5m unshielded power cable.
2	USB	Kingston	DTSE9 G2	D43254	16GB
3	USB	Sandisk	Cruzer Switch 8 G	D33724	8G
4	TF card	Sandisk	8G	D33135	8G

NOTE: For the actual test configuration, please refer to the photos of testing.

2.6 CHANNEL AND FREQUENCY TABLE

2.4G_802.11b/g/n - HT20			
Channel	**Frequency**	**Channel**	**Frequency**
CH01	2412 MHz	CH07	2442 MHz
CH02	2417 MHz	CH08	2447 MHz
CH03	2422 MHz	CH09	2452 MHz
CH04	2427 MHz	CH10	2457 MHz
CH05	2432 MHz	CH11	2462 MHz
CH06	2437 MHz	--	--

3. DESCRIPTION OF APPLIED STANDARDS

The EUT is a wireless product. According to the specifications provided by the applicant, it must comply with the requirements of the following standards:

47 CFR Part 15, Subpart C, 15.247

ANSI C63.10: 2013

FCC publication KDB 558074 D01 15.247 Meas Guidance v05r02 Apr 02, 2019

All tests have been performed and recorded as the above standards.

3.1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

STANDARD SECTION	TEST TYPE AND LIMIT RESULTS	RESULTS
15.207	AC Power Line Conducted Emission	PASS
15.247(d) 15.205(a) 15.209(a)	Transmitter Radiated Emissions Limit: Table 15.209	PASS
15.247(a)(2)	6 dB Bandwidth	PASS
15.247(b)	Maximum Peak Conducted Output Power	PASS
15.247(d)	Band Edge Measurement:	PASS
15.247(e)	Power Density	PASS

4. CONDUCTED EMISSION TEST

4.1 LIMIT

Frequency (MHz)	Class A (dBμV)		Class B (dBμV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTE:
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

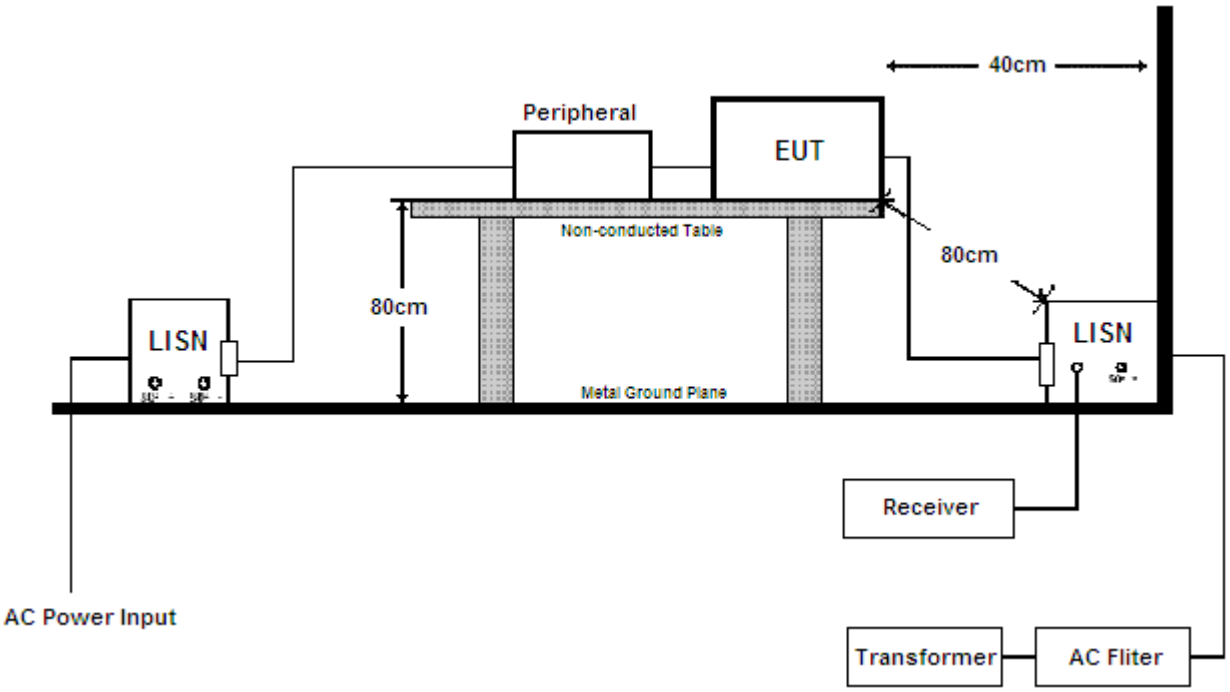
4.2 TEST EQUIPMENT

The following test equipment was used for the test:

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER	FINAL TEST BE USED
EMI TEST RECEIVER	9 kHz ~ 2.75 GHz	ROHDE & SCHWARZ	ESCS30 / 100376	APR. 26, 2024 ETC	■
LISN	50 μH, 50 ohm	SOLAR	9252-50-R-24-BNC / 951315	FEB. 22, 2024 ETC	■
LISN	50 μH, 50 ohm	SCHWARZBECK	NSLK 8127 / 8127-808	MAR. 08, 2024 ETC	■
50Ω BNC TYPE TERMINATOR	50 ohm	N/A	11593A / L1TEQU005	FEB. 14, 2024 ETC	■
50Ω BNC TYPE TERMINATOR	50 ohm	N/A	B00-CD-357 / L1TEQU009	2023.10.12 ETC	■
COAXIAL CABLE	5 m	HUBER+SUHNER	RG214/U(5m) / L1TCAB013	JUL. 05, 2024 ETC	■
FILTER	2 LINE, 30 A	FIL.COIL	FC-943 / 771	NCR	■
GROUND PLANE	2 m (H) x 3 m (W)	SRT	N/A	NCR	■
GROUND PLANE	2.5 m (H) x 3 m (W)	SRT	N/A	NCR	■
PULSE LIMITER	9 kHz ~ 30 MHz Insertion Loss= 10dB±0.3dB	ROHDE & SCHWARZ	ESH3-Z2 / L1TTES010	FEB. 16, 2024 ETC	■
THERMO-HYGRO	15 – 40 °C,	TOP	20-A / 6644	MAR. 01, 2024 ETC	■
MEASUREMENT SOFTEARE	N/A	EZ-EMC	SRT-03A1	NCR	■

NOTE: The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

4.3 TEST SETUP



NOTE:
1. The EUT was put on a wooden table with 0.8m heights above ground plane, and 0.4m away from reference ground plane (> 2mx2m).
2. For the actual test configuration, please refer to the photos of testing.

4.4 TEST PROCEDURE

The EUT was tested according to the requirement of ANSI C63.10:2013 and EN 55022. The frequency spectrum from 0.15 MHz to 30 MHz was investigated. The LISN used was 50 ohm/50μH as specified. All readings were quasi-peak and average values with 10 kHz resolution bandwidth of the test receiver. The EUT system was operated in all typical methods by users. Both lines of the power mains of EUT were measured and the cables connected to EUT and support units were moved to find the maximum emission levels for each frequency. First, find the margin or higher points at least 6 points by software, then use manual to find the maximum data. The procedure is referred on the test procedure of SRT LAB.

4.5 TEST RESULT

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11b_CH01
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line

Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1773	47.89	-0.04	47.85	64.61	-16.76	QP	
	2	0.1773	39.29	-0.04	39.25	54.61	-15.36	AVG	
	3	0.2008	42.96	-0.04	42.92	63.58	-20.66	QP	
	4	0.2008	33.07	-0.04	33.03	53.58	-20.55	AVG	
	5	0.4234	36.09	-0.05	36.04	57.38	-21.34	QP	
	6	0.4234	24.08	-0.05	24.03	47.38	-23.35	AVG	
	7	3.1797	38.87	0.06	38.93	56.00	-17.07	QP	
*	8	3.1797	34.46	0.06	34.52	46.00	-11.48	AVG	
	9	3.6992	37.63	0.08	37.71	56.00	-18.29	QP	
	10	3.6992	33.37	0.08	33.45	46.00	-12.55	AVG	
	11	3.9336	36.65	0.08	36.73	56.00	-19.27	QP	
	12	3.9336	32.03	0.08	32.11	46.00	-13.89	AVG	
	13	4.8945	32.88	0.11	32.99	56.00	-23.01	QP	
	14	4.8945	25.50	0.11	25.61	46.00	-20.39	AVG	
	15	10.0000	23.35	0.28	23.63	60.00	-36.37	QP	
	16	10.0000	18.10	0.28	18.38	50.00	-31.62	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11b_CH01
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

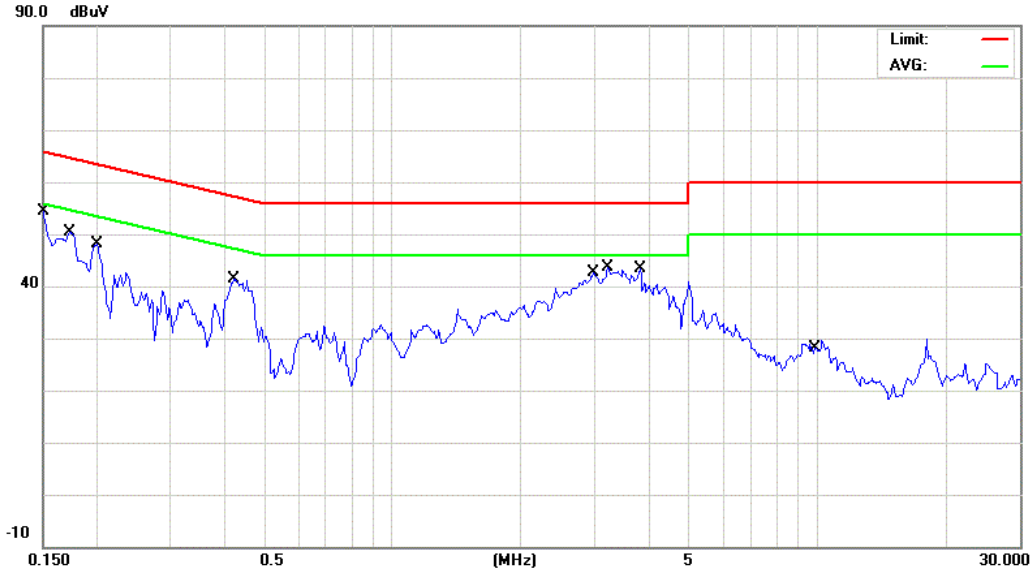
Power Line Measured：Neutral

Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1734	48.35	-0.08	48.27	64.80	-16.53	QP	
	2	0.1734	40.04	-0.08	39.96	54.80	-14.84	AVG	
	3	0.2047	42.56	-0.08	42.48	63.42	-20.94	QP	
	4	0.2047	33.88	-0.08	33.80	53.42	-19.62	AVG	
	5	0.4234	37.22	-0.08	37.14	57.38	-20.24	QP	
	6	0.4234	27.11	-0.08	27.03	47.38	-20.35	AVG	
	7	0.4625	37.43	-0.08	37.35	56.65	-19.30	QP	
	8	0.4625	34.44	-0.08	34.36	46.65	-12.29	AVG	
	9	3.3281	38.91	0.03	38.94	56.00	-17.06	QP	
*	10	3.3281	34.71	0.03	34.74	46.00	-11.26	AVG	
	11	3.6367	37.66	0.04	37.70	56.00	-18.30	QP	
	12	3.6367	32.96	0.04	33.00	46.00	-13.00	AVG	
	13	3.8320	36.02	0.05	36.07	56.00	-19.93	QP	
	14	3.8320	30.53	0.05	30.58	46.00	-15.42	AVG	
	15	10.0000	23.12	0.25	23.37	60.00	-36.63	QP	
	16	10.0000	17.76	0.25	18.01	50.00	-31.99	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11b_CH06
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line

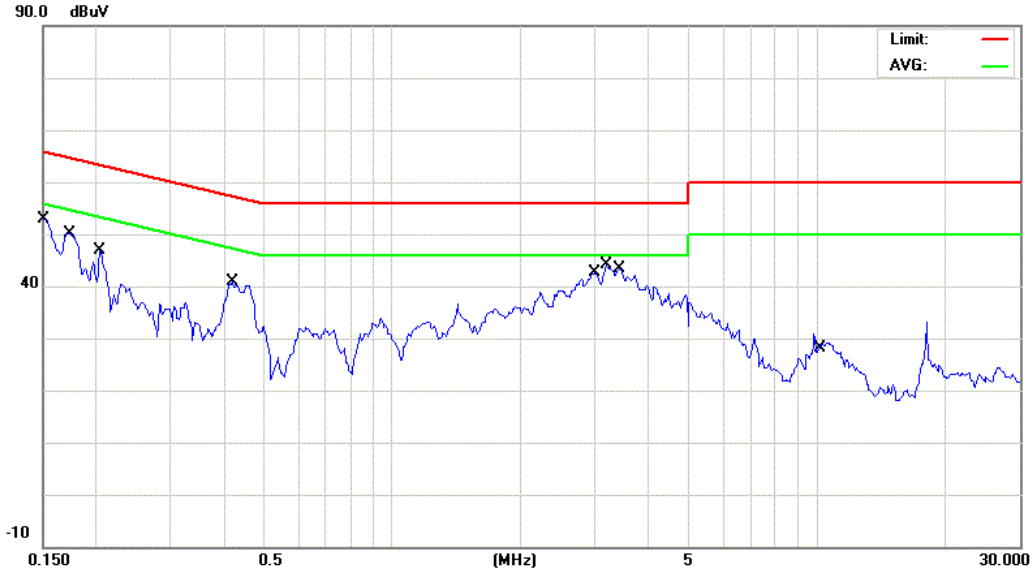


Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1500	48.67	-0.05	48.62	66.00	-17.38	QP	
	2	0.1500	39.40	-0.05	39.35	56.00	-16.65	AVG	
	3	0.1734	47.83	-0.04	47.79	64.80	-17.01	QP	
	4	0.1734	38.41	-0.04	38.37	54.80	-16.43	AVG	
	5	0.2008	41.80	-0.04	41.76	63.58	-21.82	QP	
	6	0.2008	33.79	-0.04	33.75	53.58	-19.83	AVG	
	7	0.4234	36.70	-0.05	36.65	57.38	-20.73	QP	
	8	0.4234	25.72	-0.05	25.67	47.38	-21.71	AVG	
	9	2.9664	37.78	0.05	37.83	56.00	-18.17	QP	
	10	2.9664	33.43	0.05	33.48	46.00	-12.52	AVG	
	11	3.2148	39.40	0.06	39.46	56.00	-16.54	QP	
*	12	3.2148	35.16	0.06	35.22	46.00	-10.78	AVG	
	13	3.8281	36.06	0.08	36.14	56.00	-19.86	QP	
	14	3.8281	31.34	0.08	31.42	46.00	-14.58	AVG	
	15	10.0000	23.43	0.28	23.71	60.00	-36.29	QP	
	16	10.0000	17.69	0.28	17.97	50.00	-32.03	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11b_CH06
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Neutral

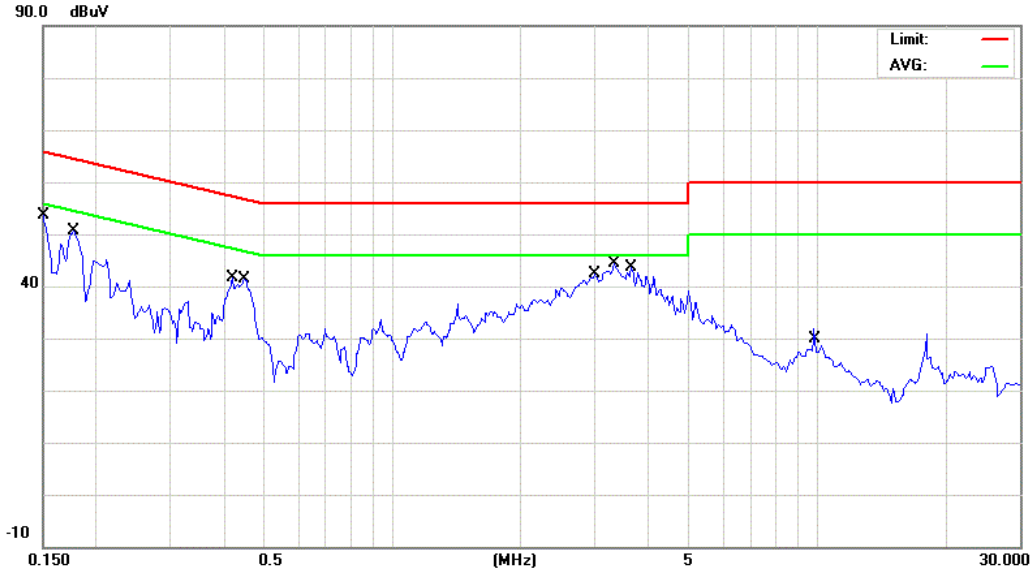


Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1500	49.87	-0.09	49.78	66.00	-16.22	QP	
	2	0.1500	37.69	-0.09	37.60	56.00	-18.40	AVG	
	3	0.1734	47.89	-0.08	47.81	64.80	-16.99	QP	
	4	0.1734	39.95	-0.08	39.87	54.80	-14.93	AVG	
	5	0.2047	42.22	-0.08	42.14	63.42	-21.28	QP	
	6	0.2047	33.36	-0.08	33.28	53.42	-20.14	AVG	
	7	0.4195	36.38	-0.08	36.30	57.46	-21.16	QP	
	8	0.4195	24.08	-0.08	24.00	47.46	-23.46	AVG	
	9	2.9820	38.26	0.02	38.28	56.00	-17.72	QP	
	10	2.9820	34.09	0.02	34.11	46.00	-11.89	AVG	
	11	3.1758	39.37	0.03	39.40	56.00	-16.60	QP	
	12	3.1758	35.20	0.03	35.23	46.00	-10.77	AVG	
	13	3.4336	39.46	0.03	39.49	56.00	-16.51	QP	
*	14	3.4336	35.26	0.03	35.29	46.00	-10.71	AVG	
	15	10.0000	23.04	0.25	23.29	60.00	-36.71	QP	
	16	10.0000	17.76	0.25	18.01	50.00	-31.99	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11b_CH11
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line



Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1500	50.90	-0.05	50.85	66.00	-15.15	QP	
	2	0.1500	41.93	-0.05	41.88	56.00	-14.12	AVG	
	3	0.1773	47.15	-0.04	47.11	64.61	-17.50	QP	
	4	0.1773	38.62	-0.04	38.58	54.61	-16.03	AVG	
	5	0.4195	38.86	-0.05	38.81	57.46	-18.65	QP	
	6	0.4195	32.74	-0.05	32.69	47.46	-14.77	AVG	
	7	0.4469	38.26	-0.05	38.21	56.93	-18.72	QP	
	8	0.4469	32.67	-0.05	32.62	46.93	-14.31	AVG	
	9	2.9937	37.97	0.05	38.02	56.00	-17.98	QP	
	10	2.9937	33.63	0.05	33.68	46.00	-12.32	AVG	
	11	3.3125	38.98	0.06	39.04	56.00	-16.96	QP	
*	12	3.3125	34.53	0.06	34.59	46.00	-11.41	AVG	
	13	3.6523	37.84	0.07	37.91	56.00	-18.09	QP	
	14	3.6523	33.35	0.07	33.42	46.00	-12.58	AVG	
	15	10.0000	22.82	0.28	23.10	60.00	-36.90	QP	
	16	10.0000	17.41	0.28	17.69	50.00	-32.31	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11b_CH11
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

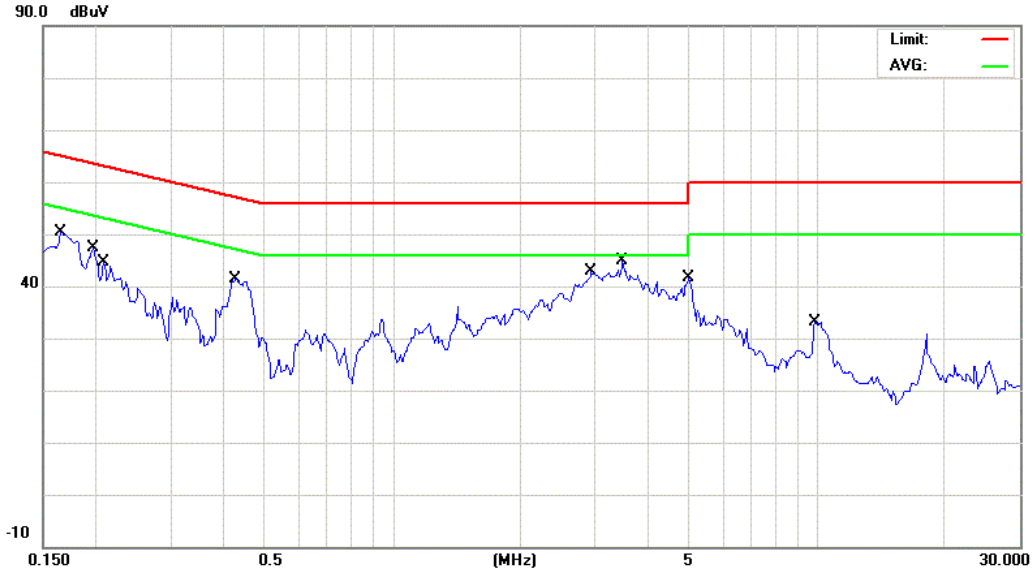
Power Line Measured：Neutral

Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1500	51.00	-0.09	50.91	66.00	-15.09	QP	
	2	0.1500	40.56	-0.09	40.47	56.00	-15.53	AVG	
	3	0.1773	47.19	-0.08	47.11	64.61	-17.50	QP	
	4	0.1773	39.04	-0.08	38.96	54.61	-15.65	AVG	
	5	0.2008	41.15	-0.08	41.07	63.58	-22.51	QP	
	6	0.2008	30.33	-0.08	30.25	53.58	-23.33	AVG	
	7	0.4234	37.24	-0.08	37.16	57.38	-20.22	QP	
	8	0.4234	26.03	-0.08	25.95	47.38	-21.43	AVG	
	9	0.4508	36.59	-0.08	36.51	56.86	-20.35	QP	
	10	0.4508	26.07	-0.08	25.99	46.86	-20.87	AVG	
	11	3.2500	39.89	0.03	39.92	56.00	-16.08	QP	
*	12	3.2500	35.56	0.03	35.59	46.00	-10.41	AVG	
	13	3.4414	39.74	0.03	39.77	56.00	-16.23	QP	
	14	3.4414	35.34	0.03	35.37	46.00	-10.63	AVG	
	15	10.0000	23.02	0.25	23.27	60.00	-36.73	QP	
	16	10.0000	17.69	0.25	17.94	50.00	-32.06	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11g_CH01
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line



Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1656	47.08	-0.04	47.04	65.18	-18.14	QP	
	2	0.1656	38.04	-0.04	38.00	55.18	-17.18	AVG	
	3	0.1969	43.14	-0.04	43.10	63.74	-20.64	QP	
	4	0.1969	35.32	-0.04	35.28	53.74	-18.46	AVG	
	5	0.2086	33.30	-0.04	33.26	63.26	-30.00	QP	
	6	0.2086	21.00	-0.04	20.96	53.26	-32.30	AVG	
	7	0.4273	37.95	-0.05	37.90	57.31	-19.41	QP	
	8	0.4273	34.23	-0.05	34.18	47.31	-13.13	AVG	
	9	2.9430	37.53	0.05	37.58	56.00	-18.42	QP	
	10	2.9430	33.18	0.05	33.23	46.00	-12.77	AVG	
	11	3.4727	38.71	0.06	38.77	56.00	-17.23	QP	
*	12	3.4727	34.45	0.06	34.51	46.00	-11.49	AVG	
	13	4.9805	35.28	0.12	35.40	56.00	-20.60	QP	
	14	4.9805	24.00	0.12	24.12	46.00	-21.88	AVG	
	15	10.0000	22.80	0.28	23.08	60.00	-36.92	QP	
	16	10.0000	17.62	0.28	17.90	50.00	-32.10	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11g_CH01
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

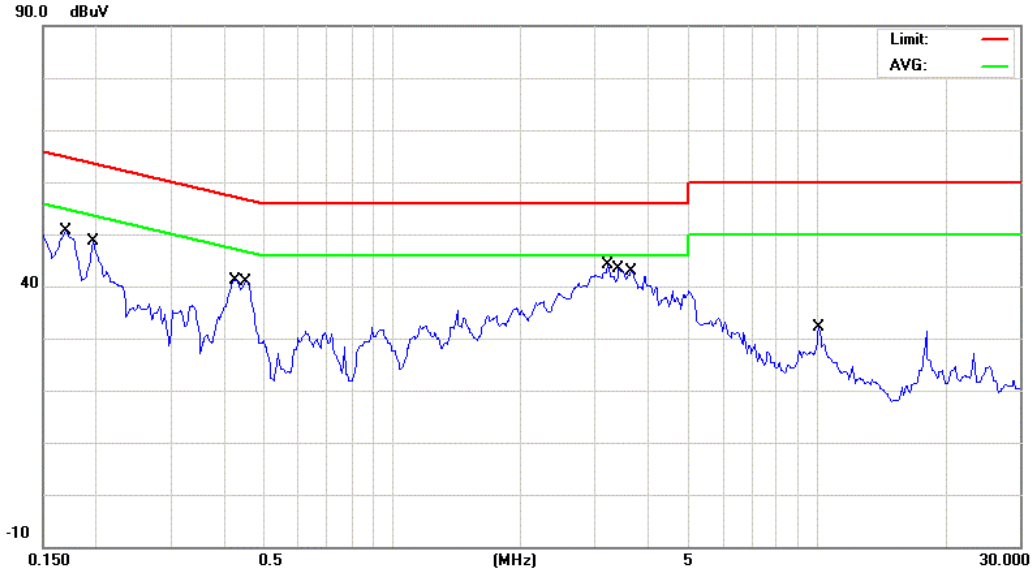
Power Line Measured：Neutral

Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1695	47.76	-0.08	47.68	64.98	-17.30	QP	
	2	0.1695	39.30	-0.08	39.22	54.98	-15.76	AVG	
	3	0.1891	39.11	-0.08	39.03	64.08	-25.05	QP	
	4	0.1891	26.05	-0.08	25.97	54.08	-28.11	AVG	
	5	0.2086	36.57	-0.08	36.49	63.26	-26.77	QP	
	6	0.2086	21.59	-0.08	21.51	53.26	-31.75	AVG	
	7	0.4234	38.25	-0.08	38.17	57.38	-19.21	QP	
	8	0.4234	35.19	-0.08	35.11	47.38	-12.27	AVG	
	9	2.9039	37.01	0.02	37.03	56.00	-18.97	QP	
	10	2.9039	32.60	0.02	32.62	46.00	-13.38	AVG	
	11	3.4258	39.31	0.03	39.34	56.00	-16.66	QP	
*	12	3.4258	35.18	0.03	35.21	46.00	-10.79	AVG	
	13	3.7695	36.25	0.05	36.30	56.00	-19.70	QP	
	14	3.7695	31.50	0.05	31.55	46.00	-14.45	AVG	
	15	10.0000	22.84	0.25	23.09	60.00	-36.91	QP	
	16	10.0000	17.55	0.25	17.80	50.00	-32.20	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11g_CH06
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line



Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1695	47.66	-0.04	47.62	64.98	-17.36	QP	
	2	0.1695	40.05	-0.04	40.01	54.98	-14.97	AVG	
	3	0.1969	43.20	-0.04	43.16	63.74	-20.58	QP	
	4	0.1969	35.16	-0.04	35.12	53.74	-18.62	AVG	
	5	0.4273	37.89	-0.05	37.84	57.31	-19.47	QP	
	6	0.4273	33.77	-0.05	33.72	47.31	-13.59	AVG	
	7	0.4508	37.66	-0.05	37.61	56.86	-19.25	QP	
	8	0.4508	34.09	-0.05	34.04	46.86	-12.82	AVG	
	9	3.2148	39.11	0.06	39.17	56.00	-16.83	QP	
*	10	3.2148	35.16	0.06	35.22	46.00	-10.78	AVG	
	11	3.4141	39.04	0.06	39.10	56.00	-16.90	QP	
	12	3.4141	34.93	0.06	34.99	46.00	-11.01	AVG	
	13	3.6523	37.96	0.07	38.03	56.00	-17.97	QP	
	14	3.6523	33.25	0.07	33.32	46.00	-12.68	AVG	
	15	10.0000	22.68	0.28	22.96	60.00	-37.04	QP	
	16	10.0000	17.48	0.28	17.76	50.00	-32.24	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11g_CH06
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

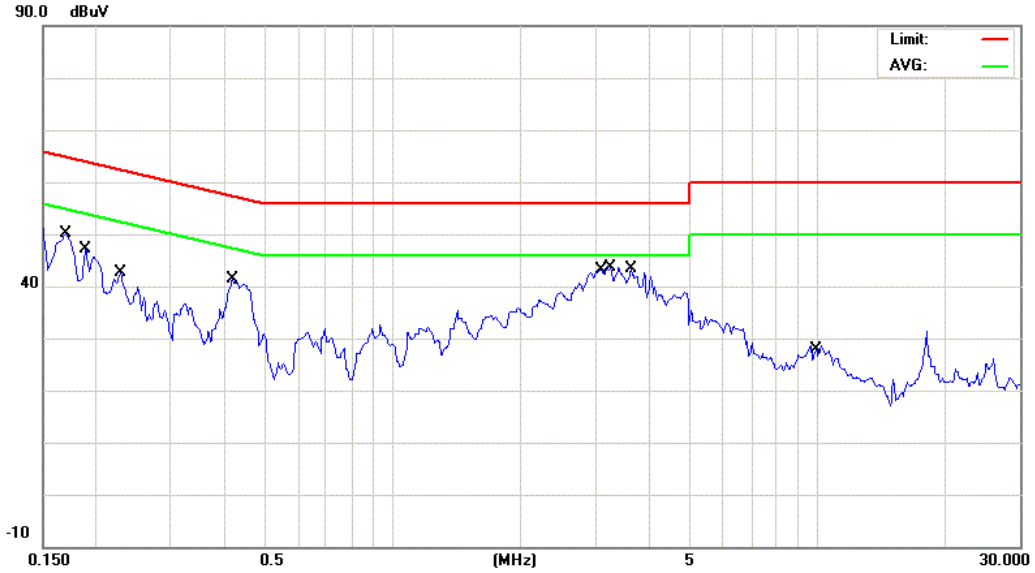
Power Line Measured：Neutral

Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1695	47.66	-0.08	47.58	64.98	-17.40	QP	
	2	0.1695	39.45	-0.08	39.37	54.98	-15.61	AVG	
	3	0.1969	43.12	-0.08	43.04	63.74	-20.70	QP	
	4	0.1969	35.24	-0.08	35.16	53.74	-18.58	AVG	
	5	0.2203	37.49	-0.08	37.41	62.81	-25.40	QP	
	6	0.2203	29.72	-0.08	29.64	52.81	-23.17	AVG	
	7	0.4469	36.51	-0.08	36.43	56.93	-20.50	QP	
	8	0.4469	31.36	-0.08	31.28	46.93	-15.65	AVG	
	9	3.2031	39.64	0.03	39.67	56.00	-16.33	QP	
*	10	3.2031	35.62	0.03	35.65	46.00	-10.35	AVG	
	11	3.6836	37.82	0.05	37.87	56.00	-18.13	QP	
	12	3.6836	33.26	0.05	33.31	46.00	-12.69	AVG	
	13	4.8906	32.31	0.08	32.39	56.00	-23.61	QP	
	14	4.8906	25.38	0.08	25.46	46.00	-20.54	AVG	
	15	10.0000	22.72	0.25	22.97	60.00	-37.03	QP	
	16	10.0000	17.55	0.25	17.80	50.00	-32.20	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11g_CH11
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line

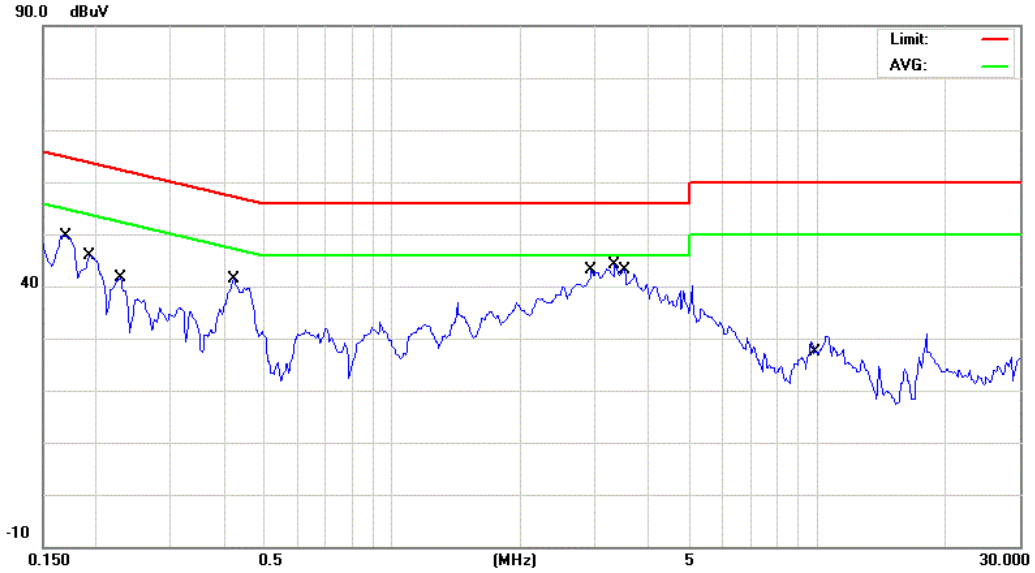


Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1695	46.86	-0.04	46.82	64.98	-18.16	QP	
	2	0.1695	39.45	-0.04	39.41	54.98	-15.57	AVG	
	3	0.1891	38.38	-0.04	38.34	64.08	-25.74	QP	
	4	0.1891	23.52	-0.04	23.48	54.08	-30.60	AVG	
	5	0.2281	36.71	-0.04	36.67	62.52	-25.85	QP	
	6	0.2281	27.87	-0.04	27.83	52.52	-24.69	AVG	
	7	0.4195	37.53	-0.05	37.48	57.46	-19.98	QP	
	8	0.4195	32.95	-0.05	32.90	47.46	-14.56	AVG	
	9	3.0576	37.47	0.06	37.53	56.00	-18.47	QP	
	10	3.0576	33.21	0.06	33.27	46.00	-12.73	AVG	
	11	3.2695	38.95	0.06	39.01	56.00	-16.99	QP	
*	12	3.2695	34.69	0.06	34.75	46.00	-11.25	AVG	
	13	3.6445	37.72	0.07	37.79	56.00	-18.21	QP	
	14	3.6445	33.40	0.07	33.47	46.00	-12.53	AVG	
	15	10.0000	22.80	0.28	23.08	60.00	-36.92	QP	
	16	10.0000	17.76	0.28	18.04	50.00	-31.96	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11g_CH11
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Neutral



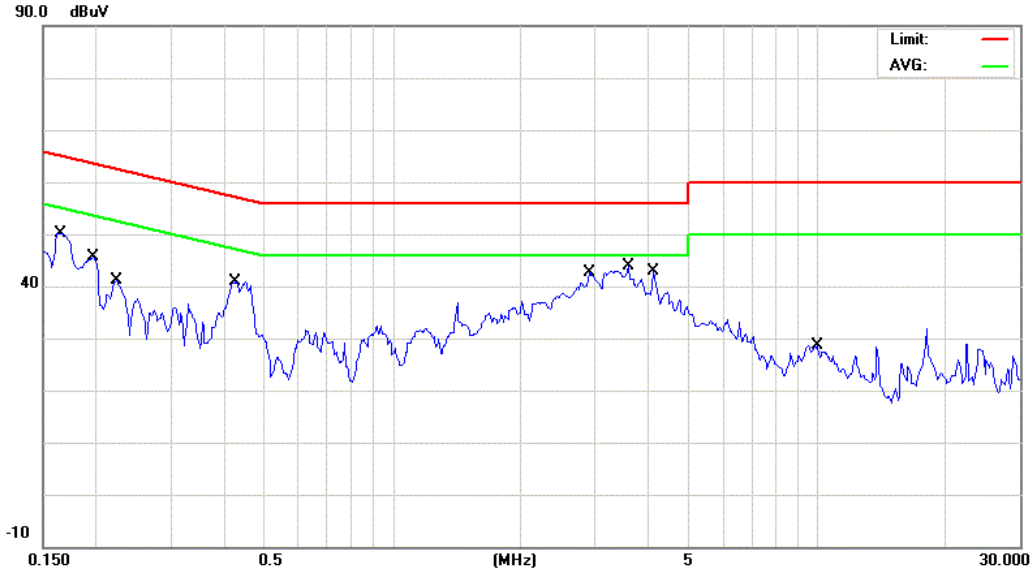
Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1695	47.50	-0.08	47.42	64.98	-17.56	QP	
	2	0.1695	39.45	-0.08	39.37	54.98	-15.61	AVG	
	3	0.1930	40.93	-0.08	40.85	63.91	-23.06	QP	
	4	0.1930	30.47	-0.08	30.39	53.91	-23.52	AVG	
	5	0.2281	36.91	-0.08	36.83	62.52	-25.69	QP	
	6	0.2281	28.21	-0.08	28.13	52.52	-24.39	AVG	
	7	0.4234	38.05	-0.08	37.97	57.38	-19.41	QP	
	8	0.4234	34.32	-0.08	34.24	47.38	-13.14	AVG	
	9	2.9430	37.77	0.02	37.79	56.00	-18.21	QP	
	10	2.9430	33.71	0.02	33.73	46.00	-12.27	AVG	
	11	3.3438	38.89	0.03	38.92	56.00	-17.08	QP	
*	12	3.3438	34.71	0.03	34.74	46.00	-11.26	AVG	
	13	3.5117	38.60	0.04	38.64	56.00	-17.36	QP	
	14	3.5117	34.16	0.04	34.20	46.00	-11.80	AVG	
	15	10.0000	23.04	0.25	23.29	60.00	-36.71	QP	
	16	10.0000	17.69	0.25	17.94	50.00	-32.06	AVG	

NOTE :

1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11n - HT20_CH01
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line



Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1656	46.98	-0.04	46.94	65.18	-18.24	QP	
	2	0.1656	38.79	-0.04	38.75	55.18	-16.43	AVG	
	3	0.1969	43.18	-0.04	43.14	63.74	-20.60	QP	
	4	0.1969	35.24	-0.04	35.20	53.74	-18.54	AVG	
	5	0.2242	37.80	-0.04	37.76	62.66	-24.90	QP	
	6	0.2242	29.42	-0.04	29.38	52.66	-23.28	AVG	
	7	0.4273	38.07	-0.05	38.02	57.31	-19.29	QP	
	8	0.4273	32.47	-0.05	32.42	47.31	-14.89	AVG	
	9	2.9039	36.69	0.05	36.74	56.00	-19.26	QP	
	10	2.9039	32.22	0.05	32.27	46.00	-13.73	AVG	
	11	3.5898	37.47	0.07	37.54	56.00	-18.46	QP	
*	12	3.5898	33.04	0.07	33.11	46.00	-12.89	AVG	
	13	4.1055	35.54	0.08	35.62	56.00	-20.38	QP	
	14	4.1055	30.70	0.08	30.78	46.00	-15.22	AVG	
	15	10.0000	22.90	0.28	23.18	60.00	-36.82	QP	
	16	10.0000	17.26	0.28	17.54	50.00	-32.46	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11n - HT20_CH01
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

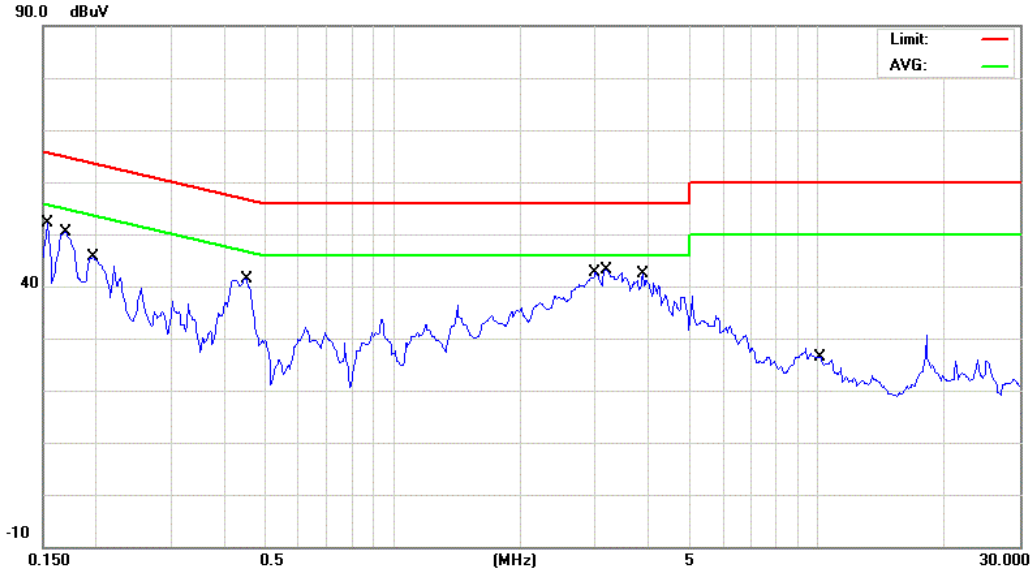
Power Line Measured：Neutral

Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1617	45.02	-0.08	44.94	65.38	-20.44	QP	
	2	0.1617	31.54	-0.08	31.46	55.38	-23.92	AVG	
	3	0.1695	47.54	-0.08	47.46	64.98	-17.52	QP	
	4	0.1695	38.79	-0.08	38.71	54.98	-16.27	AVG	
	5	0.1930	42.82	-0.08	42.74	63.91	-21.17	QP	
	6	0.1930	33.98	-0.08	33.90	53.91	-20.01	AVG	
	7	0.4234	38.55	-0.08	38.47	57.38	-18.91	QP	
	8	0.4234	35.27	-0.08	35.19	47.38	-12.19	AVG	
	9	2.9859	37.84	0.02	37.86	56.00	-18.14	QP	
	10	2.9859	33.81	0.02	33.83	46.00	-12.17	AVG	
	11	3.2539	39.18	0.03	39.21	56.00	-16.79	QP	
*	12	3.2539	35.09	0.03	35.12	46.00	-10.88	AVG	
	13	5.0313	31.67	0.09	31.76	60.00	-28.24	QP	
	14	5.0313	25.73	0.09	25.82	50.00	-24.18	AVG	
	15	10.0000	21.91	0.25	22.16	60.00	-37.84	QP	
	16	10.0000	16.90	0.25	17.15	50.00	-32.85	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11n - HT20_CH06
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line



Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1539	43.29	-0.04	43.25	65.79	-22.54	QP	
	2	0.1539	24.40	-0.04	24.36	55.79	-31.43	AVG	
	3	0.1695	47.64	-0.04	47.60	64.98	-17.38	QP	
	4	0.1695	40.14	-0.04	40.10	54.98	-14.88	AVG	
	5	0.1969	43.18	-0.04	43.14	63.74	-20.60	QP	
	6	0.1969	35.32	-0.04	35.28	53.74	-18.46	AVG	
	7	0.4547	37.51	-0.05	37.46	56.79	-19.33	QP	
	8	0.4547	33.33	-0.05	33.28	46.79	-13.51	AVG	
	9	3.0078	37.53	0.06	37.59	56.00	-18.41	QP	
	10	3.0078	33.39	0.06	33.45	46.00	-12.55	AVG	
	11	3.1758	39.03	0.06	39.09	56.00	-16.91	QP	
*	12	3.1758	34.87	0.06	34.93	46.00	-11.07	AVG	
	13	3.8867	36.71	0.08	36.79	56.00	-19.21	QP	
	14	3.8867	31.95	0.08	32.03	46.00	-13.97	AVG	
	15	10.0000	22.09	0.28	22.37	60.00	-37.63	QP	
	16	10.0000	16.67	0.28	16.95	50.00	-33.05	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11n - HT20_CH06
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

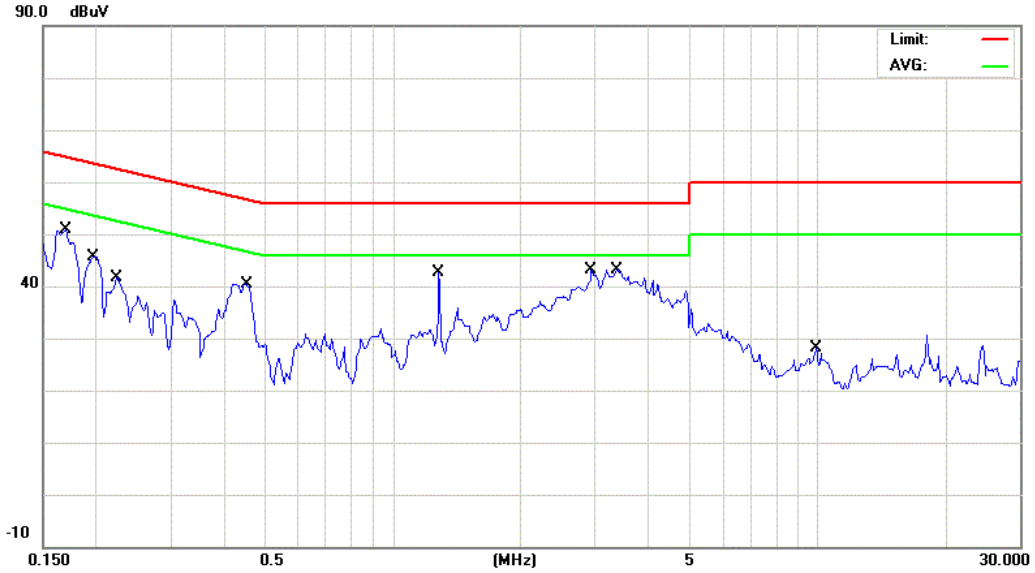
Power Line Measured：Neutral

Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1656	47.40	-0.08	47.32	65.18	-17.86	QP	
	2	0.1656	36.35	-0.08	36.27	55.18	-18.91	AVG	
	3	0.1930	41.96	-0.08	41.88	63.91	-22.03	QP	
	4	0.1930	30.40	-0.08	30.32	53.91	-23.59	AVG	
	5	0.2242	37.78	-0.08	37.70	62.66	-24.96	QP	
	6	0.2242	29.08	-0.08	29.00	52.66	-23.66	AVG	
	7	0.4234	38.49	-0.08	38.41	57.38	-18.97	QP	
	8	0.4234	35.35	-0.08	35.27	47.38	-12.11	AVG	
	9	2.9469	37.75	0.02	37.77	56.00	-18.23	QP	
	10	2.9469	33.66	0.02	33.68	46.00	-12.32	AVG	
	11	3.2656	39.15	0.03	39.18	56.00	-16.82	QP	
*	12	3.2656	34.85	0.03	34.88	46.00	-11.12	AVG	
	13	3.7344	36.99	0.05	37.04	56.00	-18.96	QP	
	14	3.7344	32.24	0.05	32.29	46.00	-13.71	AVG	
	15	10.0000	22.25	0.25	22.50	60.00	-37.50	QP	
	16	10.0000	17.19	0.25	17.44	50.00	-32.56	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11n - HT20_CH11
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Line



Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1695	47.60	-0.04	47.56	64.98	-17.42	QP	
	2	0.1695	39.96	-0.04	39.92	54.98	-15.06	AVG	
	3	0.1969	43.02	-0.04	42.98	63.74	-20.76	QP	
	4	0.1969	34.92	-0.04	34.88	53.74	-18.86	AVG	
	5	0.2242	37.60	-0.04	37.56	62.66	-25.10	QP	
	6	0.2242	28.75	-0.04	28.71	52.66	-23.95	AVG	
	7	0.4547	37.43	-0.05	37.38	56.79	-19.41	QP	
	8	0.4547	33.81	-0.05	33.76	46.79	-13.03	AVG	
	9	1.2867	23.73	0.00	23.73	56.00	-32.27	QP	
	10	1.2867	18.89	0.00	18.89	46.00	-27.11	AVG	
	11	2.9352	36.68	0.05	36.73	56.00	-19.27	QP	
	12	2.9352	32.50	0.05	32.55	46.00	-13.45	AVG	
	13	3.3789	38.34	0.06	38.40	56.00	-17.60	QP	
*	14	3.3789	34.16	0.06	34.22	46.00	-11.78	AVG	
	15	10.0000	21.80	0.28	22.08	60.00	-37.92	QP	
	16	10.0000	16.59	0.28	16.87	50.00	-33.13	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

Temperature:	29 °C	Humidity:	69 %RH
Frequency Range:	0.15 – 30 MHz	Tested Mode:	802.11n - HT20_CH11
Receiver Detector:	Q.P. and AV.	Tested Date:	Jul. 18, 2023

Power Line Measured：Neutral

Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1695	47.62	-0.08	47.54	64.98	-17.44	QP	
	2	0.1695	39.77	-0.08	39.69	54.98	-15.29	AVG	
	3	0.1969	42.90	-0.08	42.82	63.74	-20.92	QP	
	4	0.1969	34.29	-0.08	34.21	53.74	-19.53	AVG	
	5	0.2242	37.49	-0.08	37.41	62.66	-25.25	QP	
	6	0.2242	28.67	-0.08	28.59	52.66	-24.07	AVG	
	7	0.4313	37.32	-0.08	37.24	57.23	-19.99	QP	
	8	0.4313	32.58	-0.08	32.50	47.23	-14.73	AVG	
	9	1.4234	33.83	-0.03	33.80	56.00	-22.20	QP	
	10	1.4234	29.52	-0.03	29.49	46.00	-16.51	AVG	
	11	3.1992	39.58	0.03	39.61	56.00	-16.39	QP	
*	12	3.1992	35.43	0.03	35.46	46.00	-10.54	AVG	
	13	3.4844	38.72	0.03	38.75	56.00	-17.25	QP	
	14	3.4844	34.46	0.03	34.49	46.00	-11.51	AVG	
	15	10.0000	21.40	0.25	21.65	60.00	-38.35	QP	
	16	10.0000	16.59	0.25	16.84	50.00	-33.16	AVG	

NOTE :
1. Measurement uncertainty is 2.92 dB.
2. Result = Reading + Correction factor.
3. Corrected Factor = Cable loss + Insertion loss of LISN
   Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
4. Margin = Result – Limit.

5. RADIATED EMISSION TEST

5.1 LIMIT

FCC Part15, Subpart C Section 15.209 limit of radiated emission for frequency below1000MHz. The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

FREQUENCY (MHz)	FIELD STRENGTH (microvolts/meter)	DISTANCE (m)	FIELD STRENGTH (dBμV/m)
0.009 - 0.490	2400/F(kHz)	300	67.6-20log(kHz)
0.490 - 1.705	24000/F(kHz)	30	87.6-20log(kHz)
1.705 - 30	30	30	30
30 - 88	100	3	40.0
88 - 216	150	3	43.5
216 - 960	200	3	46.0
Above 960	500	3	54.0

NOTE:
1. 30 dBuV (in 30m) = 70 dBuV (in 3m).
2. In the emission tables above , the tighter limit applies at the band edges.
3. Distance refers to the distance between measuring instrument, antemma, and the closest point of any part of the device or system.

FCC Part 15, Section15.35(b) limit of radiated emission for frequency above 1000 MHz

FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80.0	60.0	74.0	54.0

5.2 TEST EQUIPMENT

Below 1 GHz The following test equipment was used during the radiated emission test:

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER	FINAL TEST BE USED
EMI TEST RECEIVER	9 kHz ~ 2.75 GHz	ROHDE & SCHWARZ	ESCS30 / 100376	APR. 26, 2024 ETC	■
BI-LOG ANTENNA & 6 dB ATTENUATOR	30 MHz ~ 2 GHz	SCHAFFNER	CBL6141A & 4173 / 4181 & AT-N0627	2023/10/10 ETC	■
BICONICAL ANTENNA	30 MHz ~ 200 MHz	EMCO	3108 / 2380	MAY 01, 2024 ETC	■
LOG PERIODIC ANTENNA	200 MHz ~ 1 GHz	EMCO	3146 / 9002-2686	MAY 01, 2024 ETC	■
OPEN AREA TEST SITE	3 – 10 M MEASUREMENT	SRT	A02 / SRT002	MAR. 07, 2024 SRT	■
COAXIAL CABLE	9k~1GHz	TIMES	LMR-400(30m) / L1TCAB014	JUL. 05, 2024 ETC	■
COAXIAL CABLE	9k~1.5GHz	Suncity	J400-2M-2NHP (#1.5m) / EQM-0165		■
FILTER	2 LINE, 30 A	FIL.COIL	FC-943 / 869	NCR	■
CDN	0.15 MHz ~ 300 MHz	LUTHI	CDN L-801 M2/M3 / 2790	JUN. 10, 2024 ETC	□
PRE-AMPLIFIER	0.1 MHz ~ 1.3 GHz	HP	8447D / 2944A06746	APR. 19, 2024 ETC	■
THERMO-HYGRO	15 – 40°C, 0- 100% RH	TOP	20-A / 9326	MAR. 26, 2024 ETC	■

NOTE: The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

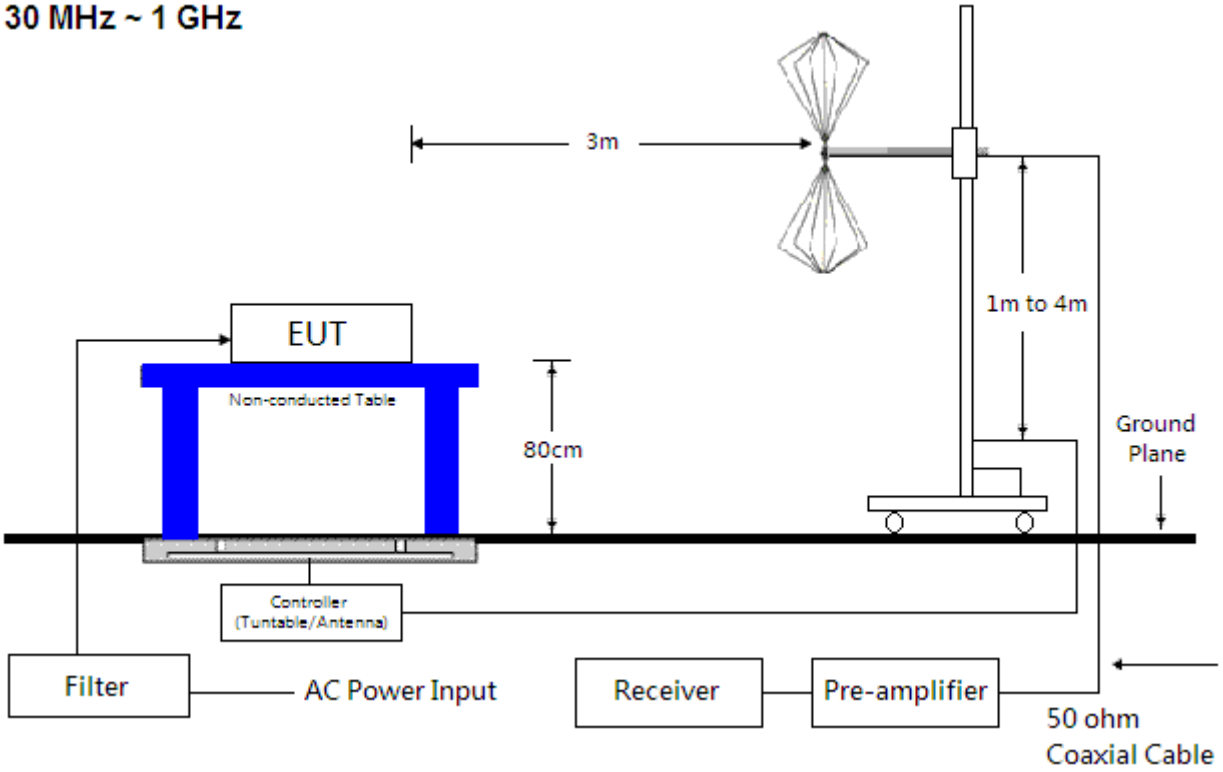
Above 1 GHz The following test equipment was used during the radiated emission test:

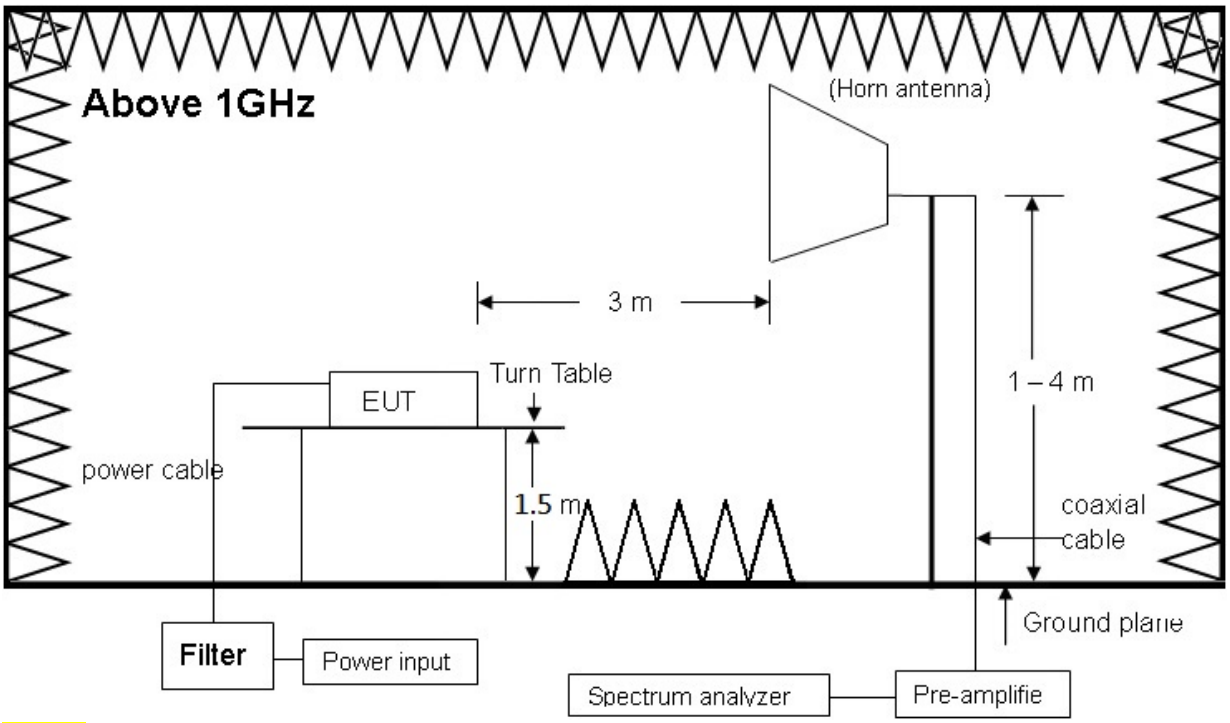
EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER	FINAL TEST BE USED
SPECTRUM ANALYZER	9 kHz ~ 40GHz	Advantest	R3182 / 131001635	2023/10/04 ETC	■
HORN ANTENNA	1 GHz ~ 18 GHz	EMCO	3115 / 9602-4681	FEB. 23, 2024 ETC	■
PRE-AMPLIFIER	1 GHz ~ 26.5 GHz	AGILENT	8449B / 3008A01995	MAR. 06, 2024 ETC	■
HORN ANTENNA	18 GHz ~ 40 GHz	ETS	3116 / 00032255	MAY.14, 2024 ETC	■
ANECHOIC CHAMBER	3 M MEASUREMENT	SRT	A01 / SRT001	JUN. 05, 2024 ETC	■
RF CABLE	UP TO 18 GHz 1.5 m	JYEBAO	A30A30-L 142 / EQF-0035(001)	FEB. 16, 2024 ETC	■
RF CABLE	UP TO 26.5 GHz 3.5 m	EMCI	EMC104-SM-SM-3500 / 150601	SEP. 13, 2023 ETC	■
K-TYPE CABLE	UP TO 40 GHz 3 m	HUBER+ SUHNER	SF102-46/2* 11SK252 / MY2611/2	APR. 24, 2024 ETC	■
K-TYPE CABLE	UP TO 40 GHz, 1 m	HUBER+ SUHNER	SF102/2* 11SK252 / MY3331/2	FEB. 13, 2024 ETC	■
FILTER	2 LINE, 30 A	FIL.COIL	FC-943 / 869	NCR	■
THERMO-HYGRO	15 – 40 ℃, 0- 100% RH	TOP	20-A / 9326	MAR. 26, 2024 ETC	■
MEASUREMENT SOFTEARE	N/A	EZ-EMC	SRT-03A1	NCR	■

NOTE: The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

5.3 TEST SET-UP

30 MHz ~ 1 GHz





NOTE: The EUT system was put on a wooden table with 1.5m heights above a ground plane. For the actual test configuration, please refer to the photos of testing.

5.4 TEST PROCEDURE

The EUT was tested according to the requirement of ANSI C63.10:2013 and EN 55022. When the frequency spectrum measured started from 9 kHz to 30 MHz, then use antenna is a loop antenna. The measurements were made at an open area test site with 3 meter measurement distance under 1 GHz and with 3m distance above 1GHz. The frequency spectrum measured started from 9kHz to 30MHz and 30 MHz to 1 GHz, all readings were quasi-peak values with 120 kHz resolution bandwidth of the test receiver. Above 1 GHz, the measurements were made at an open area test site with 3 meter measurement distance and all readings were peak or average values with 1 MHz resolution bandwidth of the test receiver. The EUT system was operated in all typical methods by users. The cables connected to EUT and support units were moved to find the maximum emission levels for each frequency. First, find the margin or higher points at least 6 points by software, then use manual to find the maximum data. The procedure is referred on the test procedure of SRT LAB.

5.5 TEST RESULT

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11b_CH01
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.21	3.60	14.30	27.59	39.81	30.12	43.5	-13.38	139	3.46
298.98	4.74	15.46	27.30	43.84	36.75	46.0	-9.25	149	3.15
349.35	5.23	15.40	27.62	48.82	41.83	46.0	-4.17	137	2.81
374.67	5.45	15.98	27.79	45.44	39.09	46.0	-6.91	207	2.41
398.55	5.66	16.26	27.95	44.84	38.82	46.0	-7.18	50	1.65
749.40	8.86	21.72	28.30	37.35	39.63	46.0	-6.37	153	1.33

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
51.62	2.09	11.50	28.23	44.52	29.88	40.0	-10.12	56	1.26
78.49	2.36	8.30	28.14	48.83	31.35	40.0	-8.65	69	1.57
110.05	2.81	10.60	28.02	44.42	29.81	43.5	-13.69	354	1.98
349.73	5.23	15.40	27.62	41.36	34.37	46.0	-11.63	37	2.35
398.84	5.66	16.26	27.95	39.75	33.73	46.0	-12.27	187	2.97
749.15	8.86	21.72	28.30	34.38	36.66	46.0	-9.34	135	3.41

NOTE :
1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11b_CH06
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.56	3.60	14.30	27.59	38.86	29.17	43.5	-14.33	175	3.42
298.81	4.74	15.46	27.30	43.68	36.59	46.0	-9.41	79	3.11
349.04	5.23	15.40	27.62	49.20	42.21	46.0	-3.79	334	2.78
374.37	5.45	15.98	27.79	45.30	38.95	46.0	-7.05	256	2.54
398.92	5.66	16.26	27.95	45.34	39.32	46.0	-6.68	347	2.13
749.66	8.86	21.72	28.30	36.62	38.90	46.0	-7.10	13	1.54

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
50.45	2.08	11.50	28.23	45.93	31.28	40.0	-8.72	150	1.13
78.71	2.36	8.30	28.14	47.63	30.15	40.0	-9.85	153	1.39
89.94	2.54	8.10	28.11	47.64	30.17	43.5	-13.33	301	1.86
349.02	5.23	15.40	27.62	42.49	35.50	46.0	-10.50	39	2.03
398.89	5.66	16.26	27.95	40.86	34.84	46.0	-11.16	166	2.47
749.37	8.86	21.72	28.30	33.25	35.53	46.0	-10.47	309	3.29

NOTE :
1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11b_CH11
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.62	3.60	14.30	27.59	38.94	29.25	43.5	-14.25	61	3.41
298.08	4.74	15.46	27.30	43.21	36.12	46.0	-9.88	276	3.19
349.93	5.23	15.40	27.62	48.62	41.63	46.0	-4.37	57	2.94
374.22	5.45	15.98	27.79	45.02	38.67	46.0	-7.33	258	2.51
398.55	5.66	16.26	27.95	46.12	40.10	46.0	-5.90	10	1.93
749.73	8.86	21.72	28.30	36.90	39.18	46.0	-6.82	188	1.34

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
39.82	1.97	13.00	28.28	41.75	28.44	40.0	-11.56	160	1.26
50.01	2.08	11.50	28.23	45.01	30.36	40.0	-9.64	192	1.39
83.77	2.44	7.90	28.12	49.11	31.33	40.0	-8.67	345	1.95
349.98	5.23	15.40	27.62	41.33	34.34	46.0	-11.66	253	2.24
398.35	5.66	16.26	27.95	39.49	33.47	46.0	-12.53	308	2.78
749.64	8.86	21.72	28.30	33.27	35.55	46.0	-10.45	330	3.26

NOTE :
1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11g_CH01
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.32	3.60	14.30	27.59	39.45	29.76	43.5	-13.74	229	3.36
298.65	4.74	15.46	27.30	43.68	36.59	46.0	-9.41	118	3.12
349.03	5.23	15.40	27.62	48.77	41.78	46.0	-4.22	189	2.84
374.87	5.45	15.98	27.79	45.77	39.42	46.0	-6.58	246	2.25
398.56	5.66	16.26	27.95	44.53	38.51	46.0	-7.49	207	1.79
749.16	8.86	21.72	28.30	37.18	39.46	46.0	-6.54	124	1.34

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
49.64	2.07	11.70	28.24	46.24	31.78	40.0	-8.22	24	1.09
77.88	2.35	8.60	28.14	46.35	29.15	40.0	-10.85	167	1.38
90.18	2.55	8.10	28.10	46.79	29.34	43.5	-14.16	289	1.96
349.36	5.23	15.40	27.62	41.41	34.42	46.0	-11.58	262	2.15
398.91	5.66	16.26	27.95	39.53	33.51	46.0	-12.49	260	2.79
749.25	8.86	21.72	28.30	33.41	35.69	46.0	-10.31	162	3.33

NOTE :
1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11g_CH06
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.66	3.60	14.30	27.59	38.97	29.28	43.5	-14.22	299	3.41
298.19	4.74	15.46	27.30	43.28	36.19	46.0	-9.81	2	3.09
349.32	5.23	15.40	27.62	48.93	41.94	46.0	-4.06	112	2.81
374.57	5.45	15.98	27.79	45.77	39.42	46.0	-6.58	303	2.17
398.48	5.66	16.26	27.95	44.12	38.10	46.0	-7.90	175	1.95
749.91	8.86	21.72	28.30	36.51	38.79	46.0	-7.21	104	1.24

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
48.12	2.06	11.90	28.24	45.88	31.60	40.0	-8.40	116	1.33
77.06	2.35	8.60	28.14	46.97	29.77	40.0	-10.23	59	1.58
349.94	5.23	15.40	27.62	41.24	34.25	46.0	-11.75	319	1.98
374.55	5.45	15.98	27.79	39.48	33.13	46.0	-12.87	314	2.14
398.28	5.66	16.26	27.95	40.22	34.20	46.0	-11.80	353	2.39
749.67	8.86	21.72	28.30	33.51	35.79	46.0	-10.21	150	3.02

NOTE :

1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11g_CH11
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.66	3.60	14.30	27.59	38.86	29.17	43.5	-14.33	273	3.39
298.25	4.74	15.46	27.30	43.72	36.63	46.0	-9.37	263	3.02
349.03	5.23	15.40	27.62	48.74	41.75	46.0	-4.25	339	2.86
374.81	5.45	15.98	27.79	45.66	39.31	46.0	-6.69	67	2.15
398.46	5.66	16.26	27.95	45.41	39.39	46.0	-6.61	284	1.96
749.34	8.86	21.72	28.30	37.44	39.72	46.0	-6.28	271	1.34

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
49.30	2.07	11.70	28.24	46.00	31.54	40.0	-8.46	306	1.22
82.75	2.43	8.10	28.13	47.95	30.35	40.0	-9.65	87	1.87
92.18	2.59	8.40	28.10	48.27	31.16	43.5	-12.34	310	2.34
349.66	5.23	15.40	27.62	41.79	34.80	46.0	-11.20	22	2.76
398.92	5.66	16.26	27.95	40.54	34.52	46.0	-11.48	278	3.02
749.85	8.86	21.72	28.30	33.59	35.87	46.0	-10.13	319	3.35

NOTE :
1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11n - HT20_CH01
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.79	3.60	14.30	27.59	38.85	29.16	43.5	-14.34	73	3.45
298.12	4.74	15.46	27.30	43.18	36.09	46.0	-9.91	341	3.09
349.64	5.23	15.40	27.62	48.93	41.94	46.0	-4.06	100	2.86
374.50	5.45	15.98	27.79	45.43	39.08	46.0	-6.92	75	2.13
398.37	5.66	16.26	27.95	45.24	39.22	46.0	-6.78	139	1.74
749.09	8.86	21.72	28.30	37.17	39.45	46.0	-6.55	190	1.35

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
50.48	2.08	11.50	28.23	46.85	32.20	40.0	-7.80	230	1.19
78.12	2.36	8.30	28.14	46.84	29.36	40.0	-10.64	144	1.48
91.93	2.57	8.20	28.10	48.50	31.17	43.5	-12.33	212	1.97
349.51	5.23	15.40	27.62	41.52	34.53	46.0	-11.47	101	2.25
398.06	5.66	16.26	27.95	41.32	35.30	46.0	-10.70	91	2.78
749.74	8.86	21.72	28.30	34.10	36.38	46.0	-9.62	192	3.02

NOTE :

1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11n - HT20_CH06
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.13	3.60	14.30	27.59	38.64	28.95	43.5	-14.55	24	3.49
298.62	4.74	15.46	27.30	43.05	35.96	46.0	-10.04	72	3.12
349.70	5.23	15.40	27.62	48.31	41.32	46.0	-4.68	71	2.88
374.91	5.45	15.98	27.79	45.58	39.23	46.0	-6.77	190	2.41
398.35	5.66	16.26	27.95	43.81	37.79	46.0	-8.21	80	1.76
749.46	8.86	21.72	28.30	36.46	38.74	46.0	-7.26	357	1.32

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
52.22	2.09	11.20	28.22	42.46	27.53	40.0	-12.47	348	1.08
78.68	2.36	8.30	28.14	45.19	27.71	40.0	-12.29	15	1.56
349.01	5.23	15.40	27.62	41.23	34.24	46.0	-11.76	134	1.97
374.94	5.45	15.98	27.79	38.96	32.61	46.0	-13.39	251	2.34
398.53	5.66	16.26	27.95	39.62	33.60	46.0	-12.40	166	2.99
749.50	8.86	21.72	28.30	33.31	35.59	46.0	-10.41	48	3.27

NOTE :

1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	25 °C	Humidity:	73 %RH
Frequency Range:	30 M – 1 GHz	Tested Mode:	802.11n - HT20_CH11
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 09, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
198.36	3.60	14.30	27.59	39.63	29.94	43.5	-13.56	209	3.22
298.08	4.74	15.46	27.30	43.58	36.49	46.0	-9.51	161	2.85
349.96	5.23	15.40	27.62	48.88	41.89	46.0	-4.11	170	2.31
374.14	5.45	15.98	27.79	46.01	39.66	46.0	-6.34	78	1.84
398.58	5.66	16.26	27.95	44.52	38.50	46.0	-7.50	227	1.30
749.24	8.86	21.72	28.30	37.14	39.42	46.0	-6.58	138	1.11

Antenna Polarization：Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
50.11	2.08	11.50	28.23	46.54	31.89	40.0	-8.11	195	1.25
77.65	2.35	8.60	28.14	46.63	29.43	40.0	-10.57	99	1.49
349.74	5.23	15.40	27.62	42.01	35.02	46.0	-10.98	192	1.97
374.03	5.45	15.98	27.79	38.92	32.57	46.0	-13.43	199	2.18
398.89	5.66	16.26	27.95	38.98	32.96	46.0	-13.04	254	2.78
749.94	8.86	21.72	28.30	34.57	36.85	46.0	-9.15	56	3.34

NOTE :

1. Measurement uncertainty is 4.20 dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11b_CH01
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1448.34	-32.21	26.79	44.82	34.31	39.39	28.88	74	54	-34.61	-25.12	273	1.98
1621.91	-31.85	27.00	44.91	34.46	40.06	29.61	74	54	-33.94	-24.39	78	1.83
2629.07	-30.67	28.86	44.86	34.35	43.05	32.54	74	54	-30.95	-21.46	42	1.66
3338.25	-30.00	31.08	43.65	33.12	44.72	34.19	74	54	-29.28	-19.81	314	1.43
4227.82	-29.05	32.15	43.51	33.09	46.60	36.18	74	54	-27.40	-17.82	26	1.32
5218.96	-28.05	33.74	45.20	34.75	50.88	40.43	74	54	-23.12	-13.57	297	1.19

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1597.75	-31.89	26.98	44.55	34.06	39.64	29.15	74	54	-34.36	-24.85	305	1.15
2271.51	-30.95	27.78	43.80	33.37	40.63	30.20	74	54	-33.37	-23.80	309	1.31
3138.37	-30.29	30.63	43.95	33.40	44.29	33.74	74	54	-29.71	-20.26	142	1.52
4045.06	-29.23	32.31	43.95	33.42	47.02	36.49	74	54	-26.98	-17.51	185	1.68
4269.95	-29.01	32.10	45.08	34.57	48.17	37.66	74	54	-25.83	-16.34	227	1.79
5372.13	-28.05	33.84	44.54	34.01	50.34	39.81	74	54	-23.66	-14.19	32	1.88

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency			802.11b_CH01
Range:	1 GHz – 25 GHz	Tested Mode:	(Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2412.00 (F)	-30.82	28.05	91.52	79.13	88.75	76.36	--	--	--	--	71	1.53
4824.00	-28.31	32.84	41.84	31.26	46.37	35.79	74	54	-27.63	-18.21	184	1.53
7236.00	-27.40	36.32	41.20	30.75	50.12	39.67	74	54	-23.88	-14.33	67	1.47
9648.00	-27.15	37.50	40.18	29.61	50.53	39.96	74	54	-23.47	-14.04	342	1.49
12060.00	-25.42	39.16	39.64	29.17	53.38	42.91	74	54	-20.62	-11.09	83	1.40
14472.00	-22.83	42.20	31.17	20.66	50.54	40.03	74	54	-23.46	-13.97	29	1.58

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2412.00 (F)	-30.82	28.05	95.89	83.35	93.12	80.58	--	--	--	--	109	1.57
4824.00	-28.31	32.84	44.78	34.22	49.31	38.75	74	54	-24.69	-15.25	245	1.59
7236.00	-27.40	36.32	41.15	30.66	50.07	39.58	74	54	-23.93	-14.42	179	1.53
9648.00	-27.15	37.50	40.73	30.27	51.08	40.62	74	54	-22.92	-13.38	75	1.58
12060.00	-25.42	39.16	39.37	28.73	53.11	42.47	74	54	-20.89	-11.53	299	1.70
14472.00	-22.83	42.20	31.16	20.64	50.53	40.01	74	54	-23.47	-13.99	117	1.49

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11b_CH06
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1636.07	-31.82	27.00	45.33	34.82	40.51	30.00	74	54	-33.49	-24.00	247	1.98
2264.85	-30.96	27.76	44.51	34.06	41.30	30.85	74	54	-32.70	-23.15	235	1.77
3261.10	-30.11	30.92	44.23	33.78	45.04	34.59	74	54	-28.96	-19.41	30	1.65
3482.36	-29.80	31.10	43.97	33.45	45.27	34.75	74	54	-28.73	-19.25	325	1.51
4194.78	-29.09	32.20	43.94	33.57	47.05	36.68	74	54	-26.95	-17.32	221	1.37
5219.41	-28.05	33.74	44.90	34.41	50.59	40.10	74	54	-23.41	-13.90	285	1.13

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1407.68	-32.34	26.54	45.78	35.29	39.98	29.49	74	54	-34.02	-24.51	56	1.19
1639.41	-31.82	27.00	45.42	34.96	40.60	30.14	74	54	-33.40	-23.86	303	1.35
3144.65	-30.28	30.66	43.75	33.28	44.13	33.66	74	54	-29.87	-20.34	18	1.47
3749.93	-29.53	31.90	42.91	32.40	45.28	34.77	74	54	-28.72	-19.23	21	1.63
4216.22	-29.06	32.17	44.74	34.35	47.84	37.45	74	54	-26.16	-16.55	287	1.78
5302.16	-28.05	33.90	44.48	34.91	50.33	40.76	74	54	-23.67	-13.24	121	1.95

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency			802.11b_CH06
Range:	1 GHz – 25 GHz	Tested Mode:	(Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2437.00 (F)	-30.79	28.15	89.41	77.63	86.77	74.99	--	--	--	--	193	1.59
4874.00	-28.24	33.05	42.37	31.86	47.18	36.67	74	54	-26.82	-17.33	18	1.44
7311.00	-27.36	36.42	41.12	30.67	50.19	39.74	74	54	-23.81	-14.26	256	1.49
9748.00	-27.11	37.79	40.45	29.92	51.14	40.61	74	54	-22.86	-13.39	57	1.58
12185.00	-25.11	39.10	39.57	29.04	53.56	43.03	74	54	-20.44	-10.97	354	1.47
14622.00	-22.92	42.01	30.21	19.75	49.30	38.84	74	54	-24.70	-15.16	194	1.66

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2437.00 (F)	-30.79	28.15	97.19	84.96	94.55	82.32	--	--	--	--	263	1.64
4874.00	-28.24	33.05	44.08	33.52	48.89	38.33	74	54	-25.11	-15.67	248	1.67
7311.00	-27.36	36.42	41.39	30.83	50.46	39.90	74	54	-23.54	-14.10	166	1.53
9748.00	-27.11	37.79	40.91	30.46	51.60	41.15	74	54	-22.40	-12.85	262	1.69
12185.00	-25.11	39.10	39.46	28.91	53.45	42.90	74	54	-20.55	-11.10	217	1.62
14622.00	-22.92	42.01	30.30	19.88	49.39	38.97	74	54	-24.61	-15.03	29	1.57

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11b_CH11
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1478.02	-32.12	26.63	45.85	35.31	40.36	29.82	74	54	-33.64	-24.18	330	1.99
2272.98	-30.95	27.79	44.48	33.97	41.31	30.80	74	54	-32.69	-23.20	28	1.84
2629.66	-30.67	28.86	44.69	34.15	42.88	32.34	74	54	-31.12	-21.66	205	1.72
3748.53	-29.53	31.90	42.98	32.46	45.35	34.83	74	54	-28.65	-19.17	229	1.51
4241.28	-29.04	32.12	44.15	33.60	47.23	36.68	74	54	-26.77	-17.32	83	1.31
5163.70	-28.05	33.55	45.20	34.76	50.70	40.26	74	54	-23.30	-13.74	346	1.11

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1998.15	-31.22	27.69	43.18	32.69	39.64	29.15	74	54	-34.36	-24.85	269	1.24
2234.93	-30.99	27.64	44.27	33.78	40.92	30.43	74	54	-33.08	-23.57	207	1.37
3307.29	-30.05	31.01	44.63	34.12	45.60	35.09	74	54	-28.40	-18.91	314	1.54
3955.18	-29.32	32.49	43.42	32.95	46.59	36.12	74	54	-27.41	-17.88	56	1.72
4368.14	-28.91	32.10	43.83	33.32	47.02	36.51	74	54	-26.98	-17.49	113	1.79
5367.07	-28.05	33.83	45.36	34.83	51.15	40.62	74	54	-22.85	-13.38	152	1.94

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency			802.11b_CH11
Range:	1 GHz – 25 GHz	Tested Mode:	(Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2462.00 (F)	-30.77	28.25	89.05	76.84	86.53	74.32	--	--	--	--	89	1.63
4924.00	-28.17	33.15	42.78	32.21	47.76	37.19	74	54	-26.24	-16.81	280	1.56
7386.00	-27.31	36.43	41.06	30.52	50.17	39.63	74	54	-23.83	-14.37	332	1.68
9848.00	-27.06	37.90	40.78	30.29	51.62	41.13	74	54	-22.38	-12.87	127	1.55
12310.00	-24.80	39.00	39.41	28.97	53.62	43.18	74	54	-20.39	-10.83	35	1.43
14772.00	-23.02	41.21	31.35	20.81	49.54	39.00	74	54	-24.46	-15.00	236	1.64

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2462.00 (F)	-30.77	28.25	96.37	83.17	93.85	80.65	--	--	--	--	328	1.40
4924.00	-28.17	33.15	43.45	32.92	48.43	37.90	74	54	-25.57	-16.10	198	1.61
7386.00	-27.31	36.43	41.10	30.67	50.21	39.78	74	54	-23.79	-14.22	254	1.49
9848.00	-27.06	37.90	40.87	30.36	51.71	41.20	74	54	-22.29	-12.80	293	1.44
12310.00	-24.80	39.00	39.24	28.70	53.45	42.91	74	54	-20.56	-11.10	12	1.70
14772.00	-23.02	41.21	31.15	20.65	49.34	38.84	74	54	-24.66	-15.16	136	1.67

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11g_CH01
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1374.42	-32.45	26.34	45.94	35.41	39.84	29.31	74	54	-34.16	-24.69	71	1.93
3071.68	-30.39	30.34	43.57	33.06	43.52	33.01	74	54	-30.48	-20.99	303	1.75
3263.15	-30.11	30.93	44.49	33.98	45.30	34.79	74	54	-28.70	-19.21	168	1.66
4032.08	-29.25	32.34	43.00	32.53	46.09	35.62	74	54	-27.91	-18.38	163	1.48
4278.33	-29.00	32.10	44.05	33.57	47.15	36.67	74	54	-26.85	-17.33	334	1.35
5196.95	-28.05	33.68	45.89	35.39	51.52	41.02	74	54	-22.48	-12.98	38	1.21

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1631.04	-31.83	27.00	44.81	34.21	39.98	29.38	74	54	-34.02	-24.62	79	1.13
2285.17	-30.94	27.84	44.16	33.68	41.06	30.58	74	54	-32.94	-23.42	167	1.33
3307.81	-30.05	31.01	43.96	33.40	44.93	34.37	74	54	-29.07	-19.63	252	1.46
4049.35	-29.23	32.30	44.44	33.93	47.51	37.00	74	54	-26.49	-17.00	9	1.69
4212.26	-29.07	32.18	44.49	33.96	47.60	37.07	74	54	-26.40	-16.93	131	1.78
5383.92	-28.04	33.87	44.83	34.25	50.65	40.07	74	54	-23.35	-13.93	98	1.91

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11g_CH01 (Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2412.00 (F)	-30.82	28.05	89.76	77.52	86.99	74.75	--	--	--	--	10	1.51
4824.00	-28.31	32.84	41.87	31.39	46.40	35.92	74	54	-27.60	-18.08	223	1.60
7236.00	-27.40	36.32	41.22	30.71	50.14	39.63	74	54	-23.86	-14.37	21	1.41
9648.00	-27.15	37.50	40.83	30.36	51.18	40.71	74	54	-22.82	-13.29	123	1.52
12060.00	-25.42	39.16	39.37	28.81	53.11	42.55	74	54	-20.89	-11.45	154	1.58
14472.00	-22.83	42.20	31.16	20.67	50.53	40.04	74	54	-23.47	-13.96	177	1.57

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2412.00 (F)	-30.82	28.05	94.01	81.54	91.24	78.77	--	--	--	--	77	1.55
4824.00	-28.31	32.84	44.06	33.51	48.59	38.04	74	54	-25.41	-15.96	271	1.47
7236.00	-27.40	36.32	41.08	30.55	50.00	39.47	74	54	-24.00	-14.53	217	1.54
9648.00	-27.15	37.50	40.97	30.43	51.32	40.78	74	54	-22.68	-13.22	79	1.68
12060.00	-25.42	39.16	39.35	28.81	53.09	42.55	74	54	-20.91	-11.45	113	1.52
14472.00	-22.83	42.20	30.94	20.43	50.31	39.80	74	54	-23.69	-14.20	64	1.65

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11g_CH06
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1997.06	-31.22	27.68	43.94	33.42	40.40	29.88	74	54	-33.60	-24.12	252	1.97
2328.73	-30.90	27.96	44.48	33.96	41.54	31.02	74	54	-32.46	-22.98	336	1.88
3164.85	-30.25	30.70	43.30	32.81	43.75	33.26	74	54	-30.25	-20.74	132	1.63
4049.26	-29.23	32.30	43.69	33.17	46.76	36.24	74	54	-27.24	-17.76	236	1.51
4432.15	-28.85	32.10	44.26	33.78	47.51	37.03	74	54	-26.49	-16.97	295	1.37
5219.92	-28.05	33.74	44.80	34.35	50.49	40.04	74	54	-23.51	-13.96	3	1.12

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1458.06	-32.18	26.75	46.06	35.59	40.63	30.16	74	54	-33.37	-23.84	138	1.25
1712.98	-31.70	26.65	44.55	34.01	39.50	28.96	74	54	-34.50	-25.04	208	1.36
3274.35	-30.10	30.95	43.99	33.47	44.84	34.32	74	54	-29.16	-19.68	347	1.51
3411.11	-29.90	31.10	43.79	33.29	44.99	34.49	74	54	-29.01	-19.51	121	1.75
4323.78	-28.96	32.10	44.72	34.22	47.86	37.36	74	54	-26.14	-16.64	99	1.84
5251.68	-28.05	33.80	44.98	34.46	50.73	40.21	74	54	-23.27	-13.79	230	1.96

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency			802.11g_CH06
Range:	1 GHz – 25 GHz	Tested Mode:	(Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2437.00 (F)	-30.79	28.15	87.54	75.36	84.90	72.72	--	--	--	--	155	1.51
4874.00	-28.24	33.05	41.81	31.32	46.62	36.13	74	54	-27.38	-17.87	357	1.41
7311.00	-27.36	36.42	40.98	30.42	50.05	39.49	74	54	-23.95	-14.51	354	1.46
9748.00	-27.11	37.79	40.77	30.27	51.46	40.96	74	54	-22.54	-13.04	305	1.60
12185.00	-25.11	39.10	39.41	28.95	53.40	42.94	74	54	-20.60	-11.06	117	1.64
14622.00	-22.92	42.01	30.75	20.24	49.84	39.33	74	54	-24.16	-14.67	224	1.41

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2437.00 (F)	-30.79	28.15	94.37	81.96	91.73	79.32	--	--	--	--	176	1.66
4874.00	-28.24	33.05	44.08	33.57	48.89	38.38	74	54	-25.11	-15.62	340	1.63
7311.00	-27.36	36.42	40.89	30.36	49.96	39.43	74	54	-24.04	-14.57	31	1.46
9748.00	-27.11	37.79	40.71	30.29	51.40	40.98	74	54	-22.60	-13.02	16	1.66
12185.00	-25.11	39.10	39.04	28.55	53.03	42.54	74	54	-20.97	-11.46	272	1.67
14622.00	-22.92	42.01	30.92	20.41	50.01	39.50	74	54	-23.99	-14.50	42	1.44

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11g_CH11
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1998.06	-31.22	27.69	44.12	33.67	40.58	30.13	74	54	-33.42	-23.87	261	1.92
2213.98	-31.01	27.55	44.40	33.98	40.94	30.52	74	54	-33.06	-23.48	53	1.83
3020.14	-30.46	30.24	43.97	33.41	43.75	33.19	74	54	-30.25	-20.81	241	1.77
3332.35	-30.01	31.06	44.26	33.75	45.31	34.80	74	54	-28.69	-19.20	190	1.53
4271.74	-29.01	32.10	44.20	33.73	47.29	36.82	74	54	-26.71	-17.18	175	1.39
4743.95	-28.43	32.60	44.25	33.70	48.42	37.87	74	54	-25.58	-16.13	253	1.14

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1638.03	-31.82	27.00	44.65	34.16	39.83	29.34	74	54	-34.17	-24.66	339	1.20
2281.64	-30.94	27.82	43.90	33.42	40.78	30.30	74	54	-33.22	-23.70	64	1.34
3217.25	-30.18	30.77	44.26	33.78	44.85	34.37	74	54	-29.15	-19.63	177	1.49
3479.97	-29.80	31.10	43.79	33.20	45.09	34.50	74	54	-28.91	-19.50	307	1.62
4052.58	-29.23	32.30	43.30	32.86	46.37	35.93	74	54	-27.63	-18.07	287	1.78
5268.16	-28.05	33.84	45.02	34.53	50.81	40.32	74	54	-23.19	-13.68	114	1.90

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11g_CH11 (Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2462.00 (F)	-30.77	28.25	87.28	75.34	84.76	72.82	--	--	--	--	44	1.69
4924.00	-28.17	33.15	42.72	32.29	47.70	37.27	74	54	-26.30	-16.73	268	1.62
7386.00	-27.31	36.43	41.03	30.56	50.14	39.67	74	54	-23.86	-14.33	56	1.41
9848.00	-27.06	37.90	40.98	30.47	51.82	41.31	74	54	-22.18	-12.69	158	1.45
12310.00	-24.80	39.00	39.52	29.01	53.73	43.22	74	54	-20.28	-10.79	217	1.42
14772.00	-23.02	41.21	31.16	20.68	49.35	38.87	74	54	-24.65	-15.13	198	1.49

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2462.00 (F)	-30.77	28.25	94.01	81.39	91.49	78.87	--	--	--	--	71	1.60
4924.00	-28.17	33.15	45.07	34.56	50.05	39.54	74	54	-23.95	-14.46	344	1.52
7386.00	-27.31	36.43	41.19	30.66	50.30	39.77	74	54	-23.70	-14.23	123	1.57
9848.00	-27.06	37.90	40.83	30.39	51.67	41.23	74	54	-22.33	-12.77	131	1.61
12310.00	-24.80	39.00	39.40	28.91	53.61	43.12	74	54	-20.40	-10.89	249	1.64
14772.00	-23.02	41.21	31.06	20.55	49.25	38.74	74	54	-24.75	-15.26	349	1.52

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11n - HT20_CH01
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1514.09	-32.03	26.53	45.42	34.96	39.92	29.46	74	54	-34.08	-24.54	76	1.88
1661.37	-31.78	26.93	44.84	34.31	39.99	29.46	74	54	-34.01	-24.54	271	1.81
3268.18	-30.10	30.94	44.20	33.76	45.03	34.59	74	54	-28.97	-19.41	182	1.63
3472.29	-29.81	31.10	43.59	33.02	44.88	34.31	74	54	-29.12	-19.69	70	1.54
4279.64	-29.00	32.10	43.65	33.17	46.75	36.27	74	54	-27.25	-17.73	319	1.37
5222.77	-28.05	33.74	44.90	34.45	50.59	40.14	74	54	-23.41	-13.86	69	1.11

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1622.02	-31.85	27.00	44.29	33.73	39.44	28.88	74	54	-34.56	-25.12	280	1.23
3097.98	-30.35	30.39	43.65	33.10	43.69	33.14	74	54	-30.31	-20.86	136	1.42
3369.43	-29.96	31.10	44.37	33.89	45.51	35.03	74	54	-28.49	-18.97	11	1.49
4048.75	-29.23	32.30	43.75	33.27	46.82	36.34	74	54	-27.18	-17.66	12	1.58
4226.58	-29.05	32.15	44.34	33.85	47.43	36.94	74	54	-26.57	-17.06	256	1.77
5157.12	-28.05	33.53	45.13	34.64	50.60	40.11	74	54	-23.40	-13.89	108	1.91

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11n - HT20_CH01 (Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2412.00 (F)	-30.82	28.05	87.93	75.62	85.16	72.85	--	--	--	--	319	1.45
4824.00	-28.31	32.84	42.76	32.19	47.29	36.72	74	54	-26.71	-17.28	129	1.50
7236.00	-27.40	36.32	41.20	30.73	50.12	39.65	74	54	-23.88	-14.35	67	1.70
9648.00	-27.15	37.50	40.99	30.46	51.34	40.81	74	54	-22.66	-13.19	334	1.59
12060.00	-25.42	39.16	39.35	28.81	53.09	42.55	74	54	-20.91	-11.45	184	1.70
14472.00	-22.83	42.20	31.26	20.79	50.63	40.16	74	54	-23.37	-13.84	98	1.52

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2412.00 (F)	-30.82	28.05	92.35	80.07	89.58	77.30	--	--	--	--	356	1.53
4824.00	-28.31	32.84	43.24	32.76	47.77	37.29	74	54	-26.23	-16.71	312	1.67
7236.00	-27.40	36.32	40.96	30.43	49.88	39.35	74	54	-24.12	-14.65	244	1.56
9648.00	-27.15	37.50	40.23	29.71	50.58	40.06	74	54	-23.42	-13.94	162	1.50
12060.00	-25.42	39.16	38.97	28.43	52.71	42.17	74	54	-21.29	-11.83	53	1.67
14472.00	-22.83	42.20	30.74	20.29	50.11	39.66	74	54	-23.89	-14.34	220	1.55

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH

Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11n - HT20_CH06
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1528.64	-32.00	26.56	45.88	35.31	40.43	29.86	74	54	-33.57	-24.14	121	1.95
2231.93	-30.99	27.62	44.88	34.39	41.51	31.02	74	54	-32.49	-22.98	346	1.83
3094.15	-30.35	30.39	43.96	33.42	43.99	33.45	74	54	-30.01	-20.55	229	1.67
3862.84	-29.42	32.32	42.87	32.37	45.78	35.28	74	54	-28.22	-18.72	346	1.51
4203.23	-29.08	32.19	43.94	33.45	47.06	36.57	74	54	-26.94	-17.43	32	1.34
5276.48	-28.05	33.85	44.45	34.96	50.25	40.76	74	54	-23.75	-13.24	122	1.28

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1462.67	-32.17	26.73	44.73	34.23	39.29	28.79	74	54	-34.71	-25.21	357	1.19
1998.05	-31.22	27.69	43.19	32.67	39.65	29.13	74	54	-34.35	-24.87	77	1.33
3185.84	-30.22	30.70	43.92	33.44	44.40	33.92	74	54	-29.60	-20.08	165	1.51
3942.29	-29.34	32.48	42.42	31.98	45.57	35.13	74	54	-28.43	-18.87	318	1.64
4443.36	-28.84	32.10	43.72	33.28	46.98	36.54	74	54	-27.02	-17.46	66	1.78
5318.17	-28.05	33.86	44.34	34.80	50.16	40.62	74	54	-23.84	-13.38	102	1.93

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11n - HT20_CH06 (Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2437.00 (F)	-30.79	28.15	86.91	74.39	84.27	71.75	--	--	--	--	283	1.54
4874.00	-28.24	33.05	41.96	31.47	46.77	36.28	74	54	-27.23	-17.72	34	1.46
7311.00	-27.36	36.42	41.40	30.92	50.47	39.99	74	54	-23.53	-14.01	141	1.48
9748.00	-27.11	37.79	40.86	30.34	51.55	41.03	74	54	-22.45	-12.97	272	1.45
12185.00	-25.11	39.10	39.31	28.87	53.30	42.86	74	54	-20.70	-11.14	180	1.41
14622.00	-22.92	42.01	30.87	20.35	49.96	39.44	74	54	-24.04	-14.56	10	1.44

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2437.00 (F)	-30.79	28.15	94.72	82.25	92.08	79.61	--	--	--	--	70	1.45
4874.00	-28.24	33.05	44.21	33.79	49.02	38.60	74	54	-24.98	-15.40	345	1.69
7311.00	-27.36	36.42	41.13	30.62	50.20	39.69	74	54	-23.80	-14.31	275	1.60
9748.00	-27.11	37.79	40.95	30.44	51.64	41.13	74	54	-22.36	-12.87	156	1.45
12185.00	-25.11	39.10	39.52	29.07	53.51	43.06	74	54	-20.49	-10.94	243	1.49
14622.00	-22.92	42.01	31.10	20.65	50.19	39.74	74	54	-23.81	-14.26	122	1.51

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH

Frequency Range:	1 GHz – 25 GHz	Tested Mode:	802.11n - HT20_CH11
Detector Type:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1451.37	-32.20	26.79	44.79	34.28	39.38	28.87	74	54	-34.62	-25.13	20	1.94
2232.66	-30.99	27.63	43.88	33.30	40.52	29.94	74	54	-33.48	-24.06	202	1.88
3473.08	-29.81	31.10	43.36	32.81	44.65	34.10	74	54	-29.35	-19.90	210	1.68
4204.92	-29.08	32.19	44.71	34.29	47.83	37.41	74	54	-26.17	-16.59	356	1.53
4307.57	-28.97	32.10	44.53	34.03	47.66	37.16	74	54	-26.34	-16.84	20	1.32
5261.25	-28.05	33.82	44.83	34.35	50.60	40.12	74	54	-23.40	-13.88	217	1.19

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
1428.63	-32.28	26.67	45.20	34.72	39.59	29.11	74	54	-34.41	-24.89	349	1.13
1629.29	-31.84	27.00	44.46	33.96	39.62	29.12	74	54	-34.38	-24.88	297	1.34
3144.15	-30.28	30.66	44.52	34.14	44.90	34.52	74	54	-29.10	-19.48	171	1.48
4083.73	-29.20	32.23	43.98	33.47	47.02	36.51	74	54	-26.98	-17.49	179	1.69
4271.34	-29.01	32.10	44.75	34.20	47.84	37.29	74	54	-26.16	-16.71	49	1.82
5462.08	-28.04	33.82	44.57	34.01	50.35	39.79	74	54	-23.65	-14.21	200	1.97

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

Temperature:	27 °C	Humidity:	79 %RH
Frequency			802.11n - HT20_CH11
Range:	1 GHz ~ 25 GHz	Tested Mode:	(Fundamental and Harmonics)
Detector:	PK. and AV.	IF Bandwidth:	1 MHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Antenna Polarization：Horizontal

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2462.00 (F)	-30.77	28.25	87.03	74.81	84.51	72.29	--	--	--	--	119	1.52
4924.00	-28.17	33.15	42.35	31.86	47.33	36.84	74	54	-26.67	-17.16	309	1.61
7386.00	-27.31	36.43	41.25	30.71	50.36	39.82	74	54	-23.64	-14.18	209	1.63
9848.00	-27.06	37.90	41.07	30.56	51.91	41.40	74	54	-22.09	-12.60	85	1.66
12310.00	-24.80	39.00	39.55	29.01	53.76	43.22	74	54	-20.25	-10.79	352	1.48
14772.00	-23.02	41.21	30.82	20.37	49.01	38.56	74	54	-24.99	-15.44	161	1.53

Antenna Polarization：Vertical

Frequency (MHz)	Correct Factor (dB)	Ant. Factor (dB/m)	Reading Data (dBμV)		Emission Level (dBμV/m)		Limit (dBμV/m)		Margin (dB)		AZ (°)	EL (m)
			PK.	AV.	PK.	AV.	PK.	AV.	PK.	AV.		
2462.00 (F)	-30.77	28.25	93.06	80.96	90.54	78.44	--	--	--	--	203	1.65
4924.00	-28.17	33.15	44.80	34.35	49.78	39.33	74	54	-24.22	-14.67	359	1.42
7386.00	-27.31	36.43	41.13	30.69	50.24	39.80	74	54	-23.76	-14.20	183	1.57
9848.00	-27.06	37.90	40.95	30.44	51.79	41.28	74	54	-22.21	-12.72	240	1.55
12310.00	-24.80	39.00	39.38	28.89	53.59	43.10	74	54	-20.42	-10.91	116	1.50
14772.00	-23.02	41.21	30.42	19.96	48.61	38.15	74	54	-25.39	-15.85	289	1.41

NOTE:
1. Measurement uncertainty is 4.04 dB.
2. Emissiom Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field stregth of fundamental frequency.

6. BANDWIDTH TEST

6.1 LIMIT

FCC Part15, Subpart C Section 15.247(a)(2).

Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

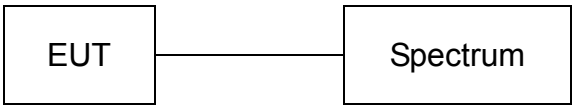
6.2 TEST EQUIPMENT

The following test equipment was used during the test：

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER
EMI TEST RECEIVER (INCLUDE SPECTRUM ANALYZER)	9 KHz ~ 6 GHz	ROHDE & SCHWARZ	ESL6 / 100176	SEP. 06, 2023 ETC

NOTE： The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

6.3 TEST SET-UP



The EUT was connected to a spectrum through a 50Ω RF cable.

6.4 TEST PROCEDURE

The EUT was operating in continuous transmission mode or could control its channel. Printed out the test result from the spectrum by hard copy function.

6.5 EUT OPERATING CONDITION

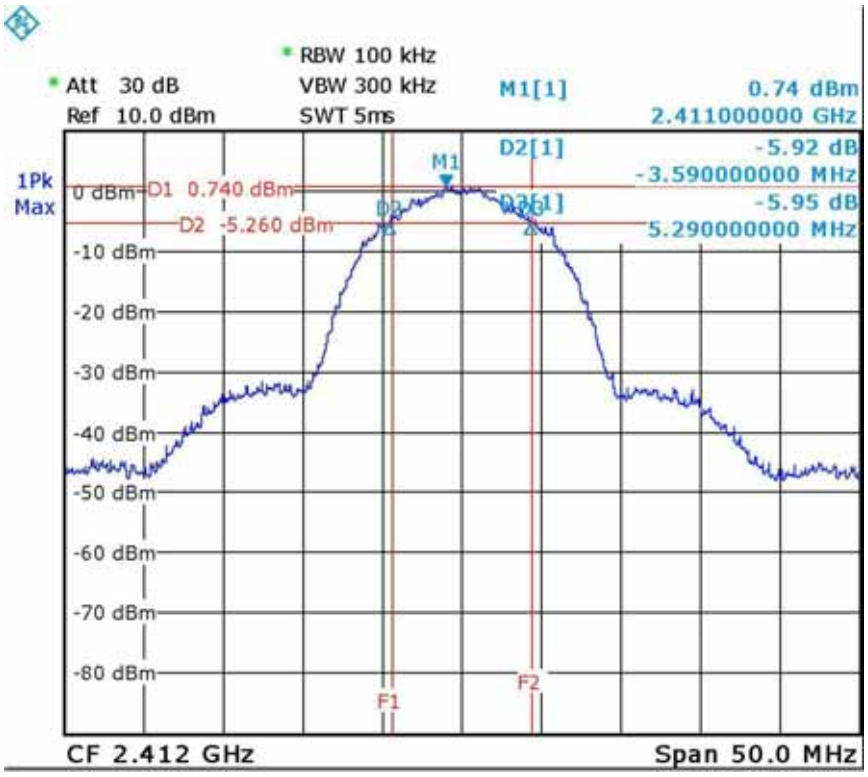
1. Set the EUT under continuous transmission condition.
2. The EUT was set to the highest available power level.

6.6 TEST RESULT

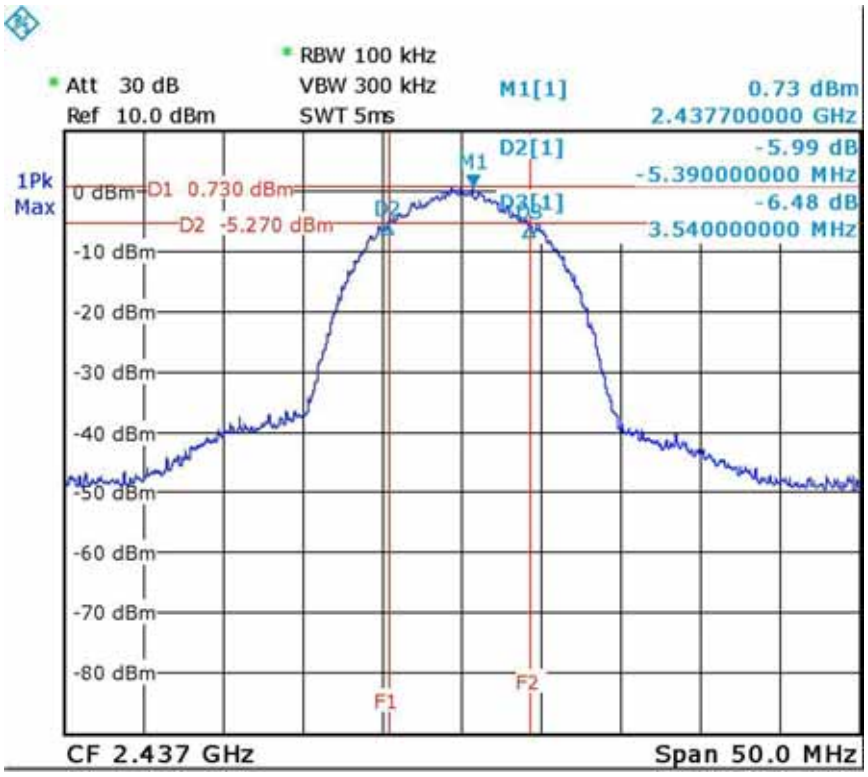
Temperature:	25 °C	Humidity:	64 %RH
Detector:	Peak	Test Mode:	802.11b
RBW:	100 kHz	VBW:	300 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 18, 2023

Channel Number	Channel Frequency (MHz)	6dB Bandwidth (kHz)	Minimum Limit (kHz)
B_CH01	2412	8880	500
B_CH06	2437	8930	500
B_CH11	2462	8880	500

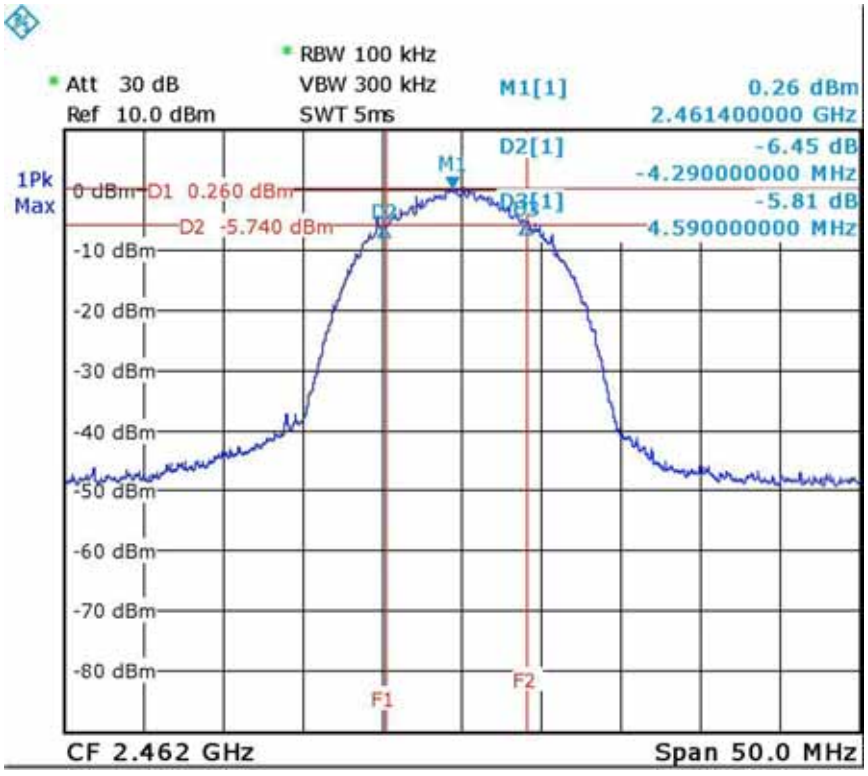
B_CH01：5.29-(-3.59) = 8.88 MHz



B_CH06：3.54-(-5.39) = 8.93 MHz



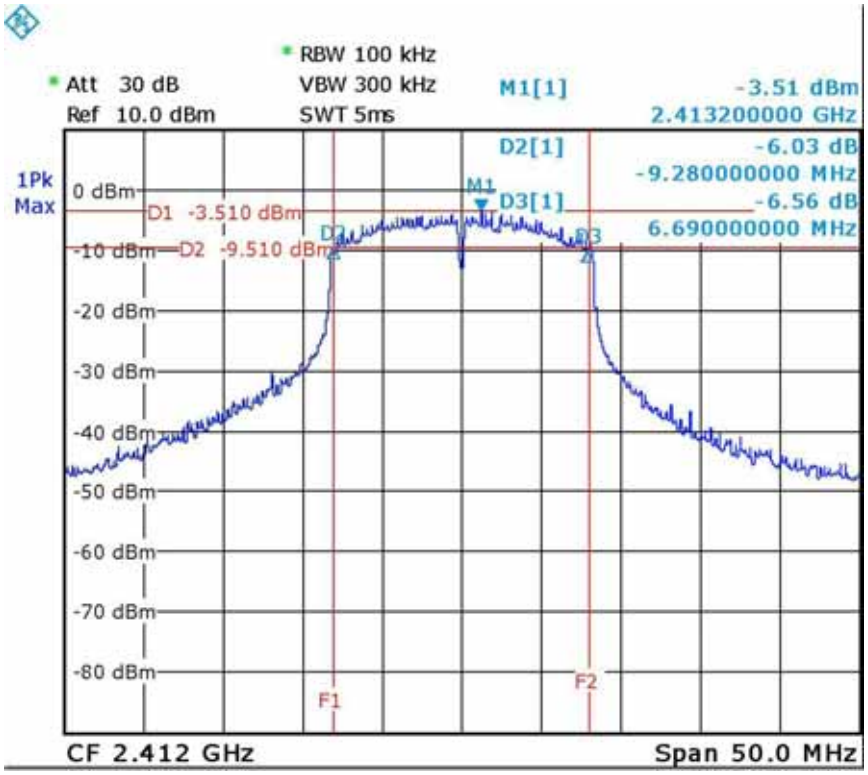
B_CH11：4.59-(-4.29) = 8.88 MHz



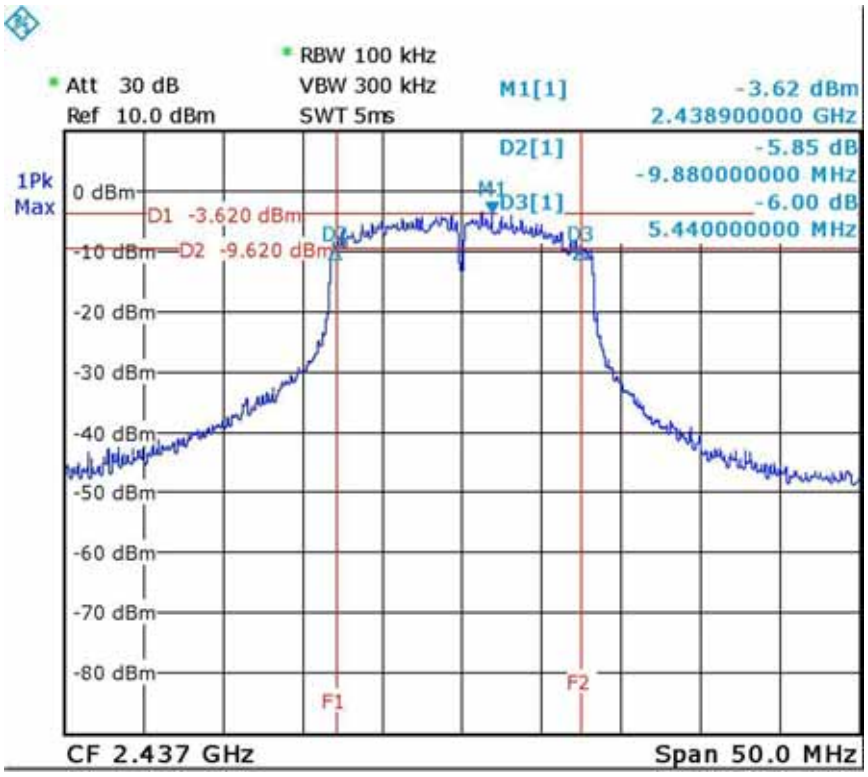
Temperature:	25 °C	Humidity:	64 %RH
Detector:	Peak	Test Mode:	802.11g
RBW:	100 kHz	VBW:	300 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 18, 2023

Channel Number	Channel Frequency (MHz)	6dB Bandwidth (kHz)	Minimum Limit (kHz)
G_CH01	2412	15970	500
G_CH06	2437	15320	500
G_CH11	2462	15870	500

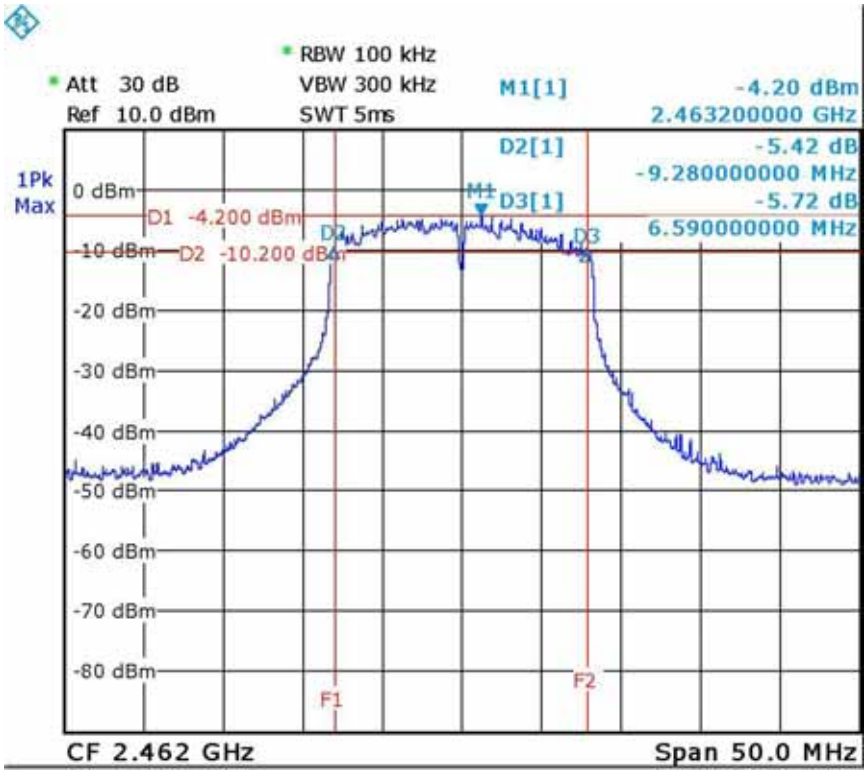
G_CH01：6.69-(-9.28) = 15.97 MHz



G_CH06：5.44-(-9.88) = 15.32 MHz



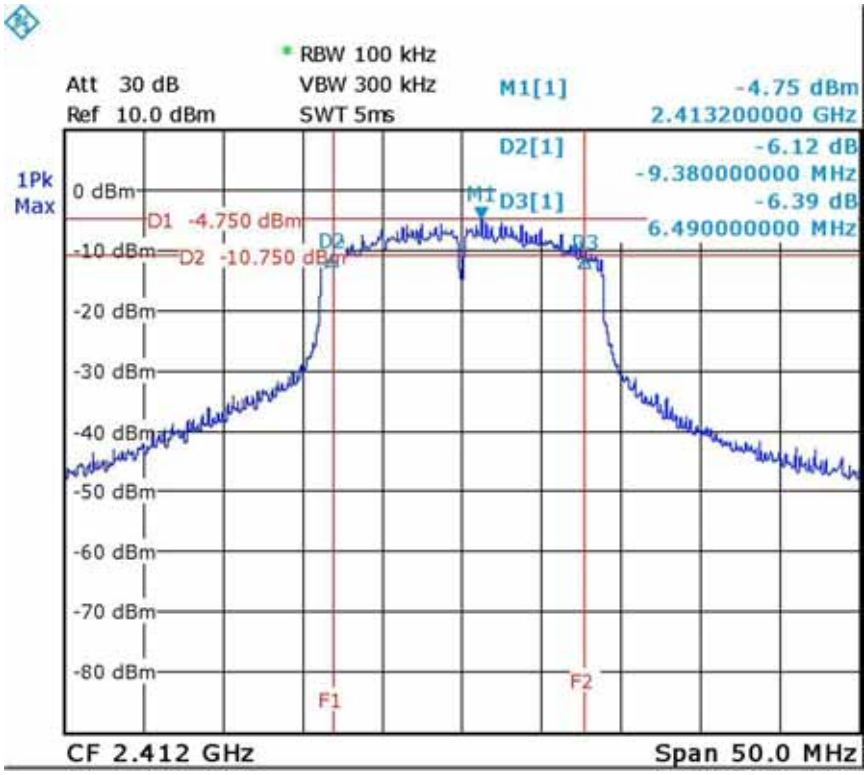
G_CH11：6.59-(-9.28) = 15.87 MHz



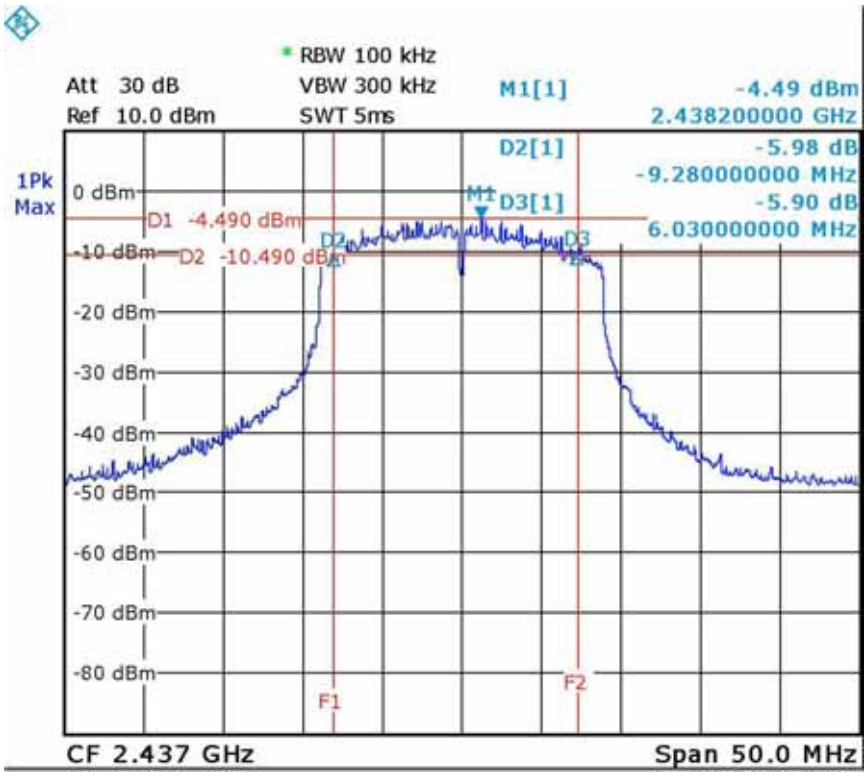
Temperature:	25 °C	Humidity:	64 %RH
Detector:	Peak	Test Mode:	802.11n - HT20
RBW:	100 kHz	VBW:	300 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 18, 2023

Channel Number	Channel Frequency (MHz)	6dB Bandwidth (kHz)	Minimum Limit (kHz)
N_CH01	2412	15870	500
N_CH06	2437	15310	500
N_CH11	2462	15770	500

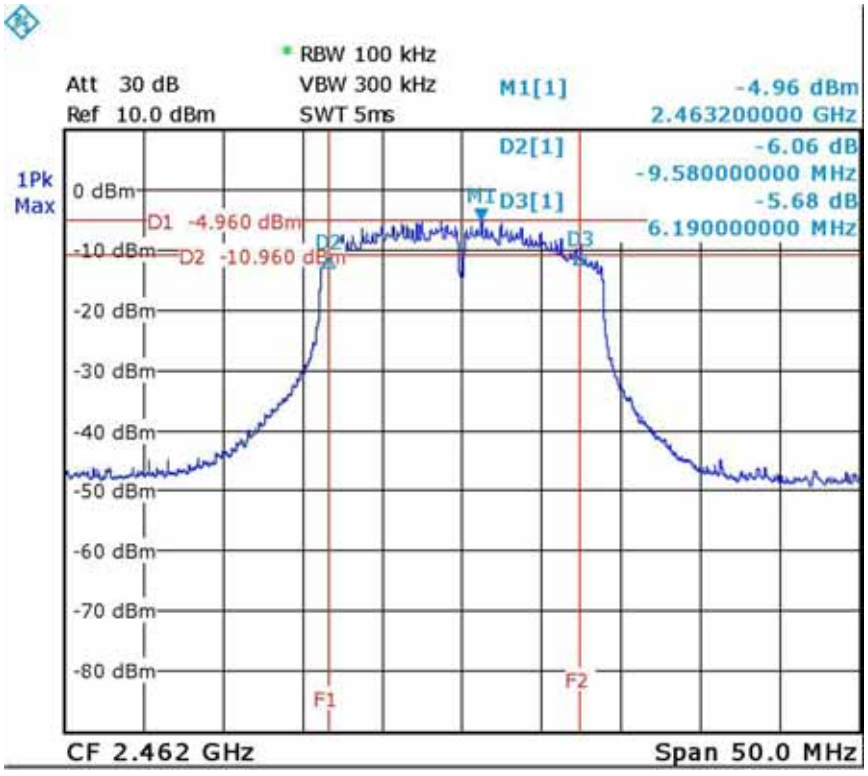
N_CH01：6.49-(-9.38) = 15.87 MHz



N_CH06：6.03-(-9.28) = 15.31 MHz



N_CH11：6.19-(-9.58) = 15.77 MHz

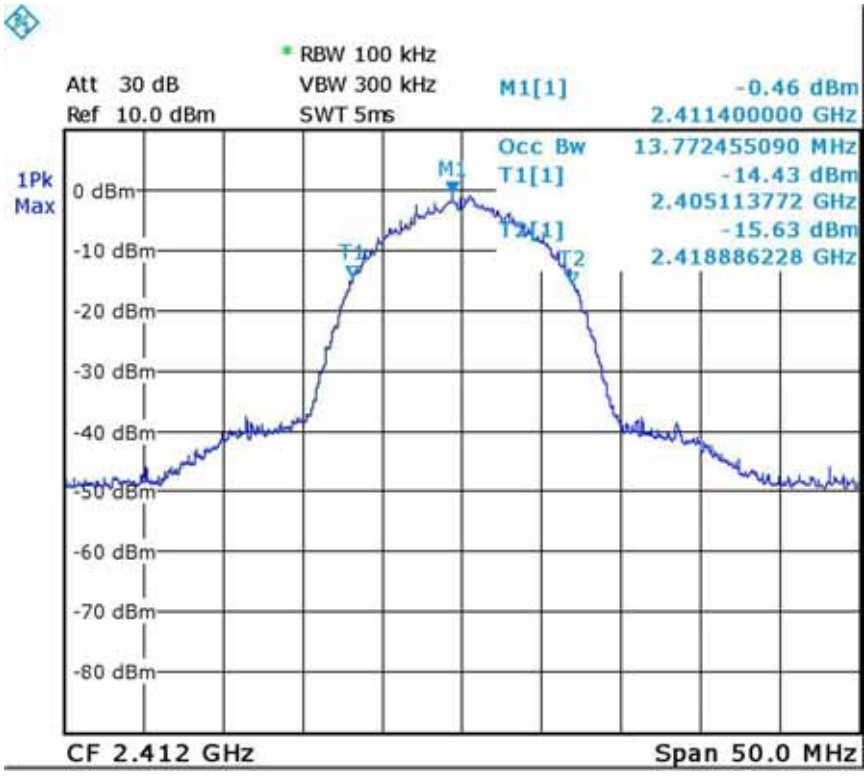


99% Bandwidth：

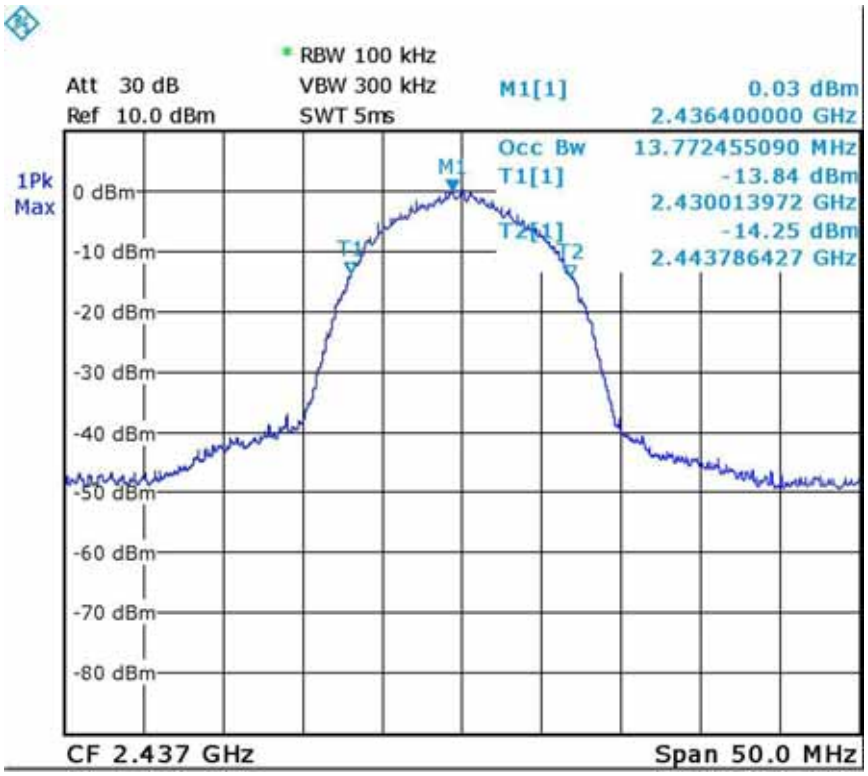
Temperature:	25 °C	Humidity:	64 %RH
Detector:	Peak	Test Mode:	802.11b
RBW:	100 kHz	VBW:	300 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	99% Bandwidth (MHz)
B_CH01	2412	13.77
B_CH06	2437	13.77
B_CH11	2462	13.87

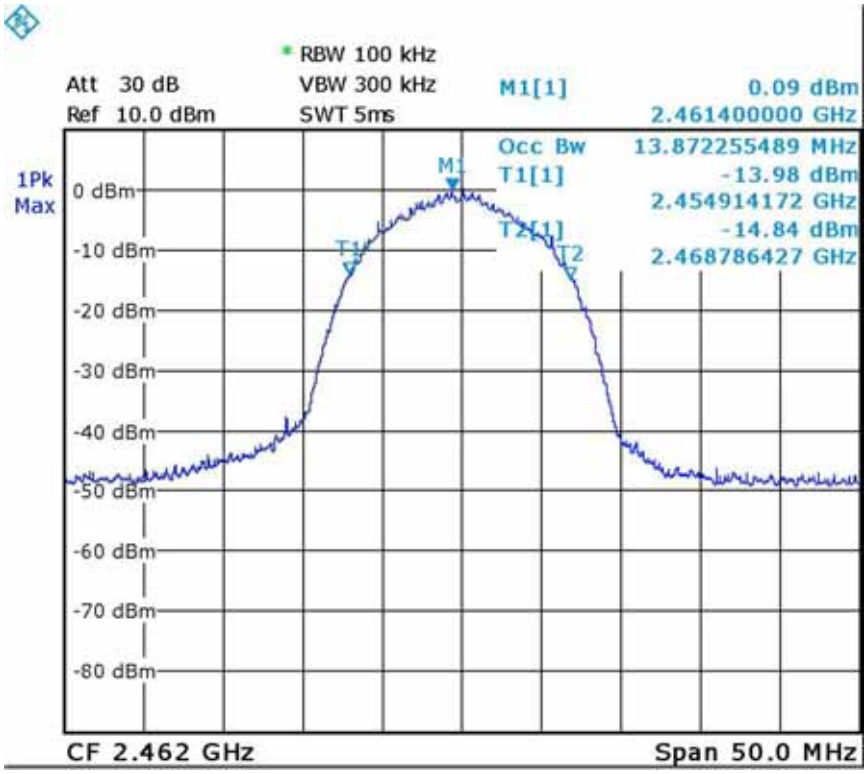
B_CH01：



B_CH06：


RBW 100 kHz
Att 30 dB
VBW 300 kHz
Ref 10.0 dBm
SWT 5ms
M1[1]
0.03 dBm
2.436400000 GHz
Occ Bw
13.772455090 MHz
T1[1]
-13.84 dBm
2.430013972 GHz
T2[1]
-14.25 dBm
2.443786427 GHz
1Pk
Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.437 GHz
Span 50.0 MHz

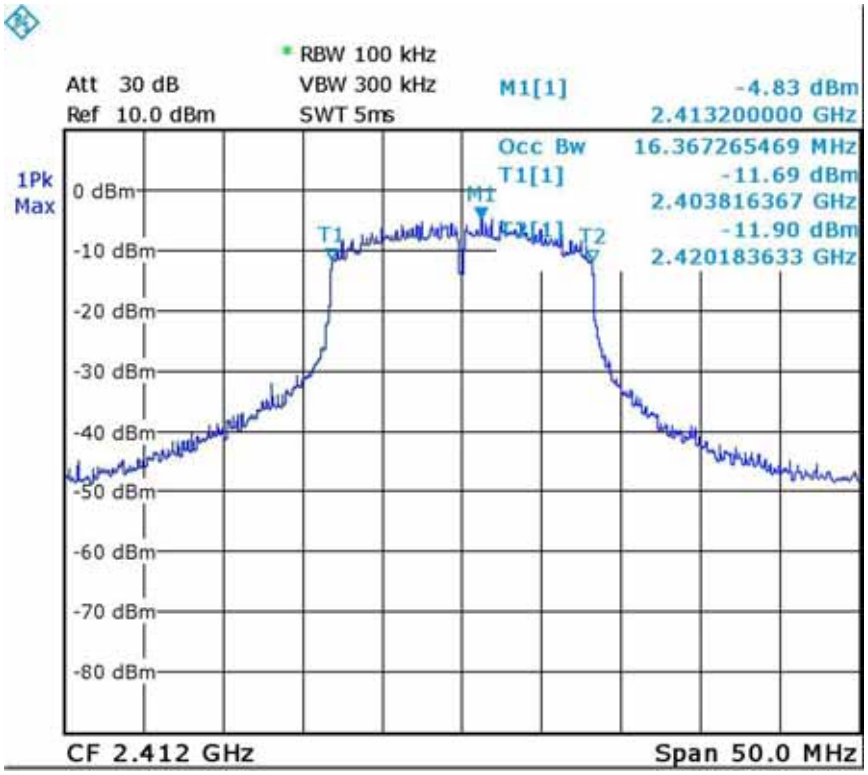
B_CH11：


RBW 100 kHz
Att 30 dB
VBW 300 kHz
Ref 10.0 dBm
SWT 5ms
M1[1]
0.09 dBm
2.461400000 GHz
Occ Bw
13.872255489 MHz
T1[1]
-13.98 dBm
2.454914172 GHz
T2[1]
-14.84 dBm
2.468786427 GHz
1Pk
Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.462 GHz
Span 50.0 MHz

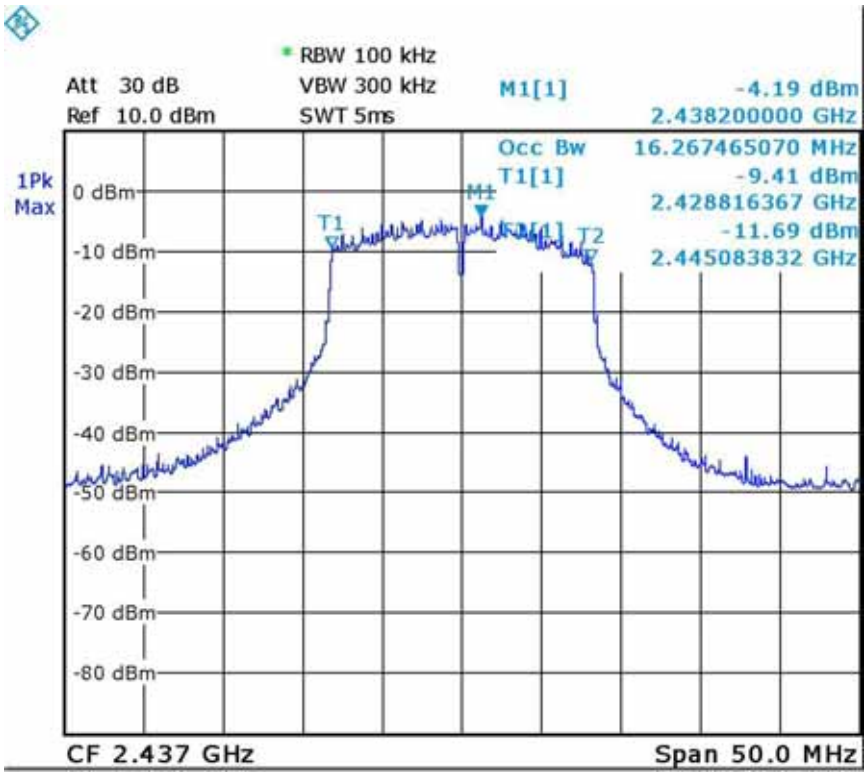
Temperature:	25 °C	Humidity:	64 %RH
Detector:	Peak	Test Mode:	802.11g
RBW:	100 kHz	VBW:	300 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	99% Bandwidth (MHz)
G_CH01	2412	16.37
G_CH06	2437	16.27
G_CH11	2462	16.37

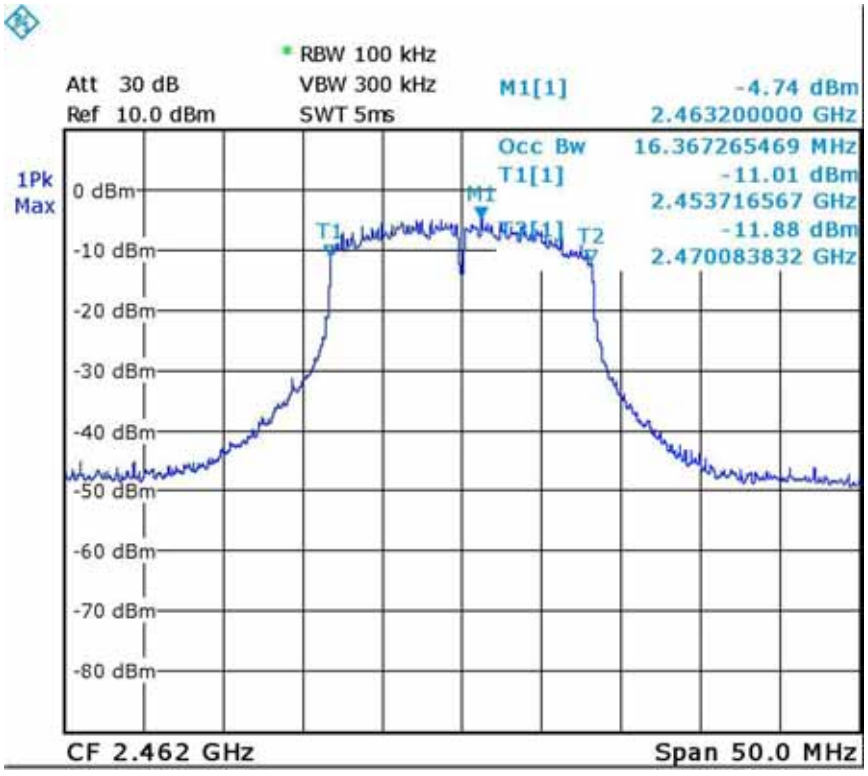
G_CH01：



G_CH06：


RBW 100 kHz
Att 30 dB
VBW 300 kHz
Ref 10.0 dBm
SWT 5ms
M1[1]
-4.19 dBm
2.438200000 GHz
Occ Bw
16.267465070 MHz
T1[1]
-9.41 dBm
2.428816367 GHz
-11.69 dBm
2.445083832 GHz
1Pk
Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.437 GHz
Span 50.0 MHz

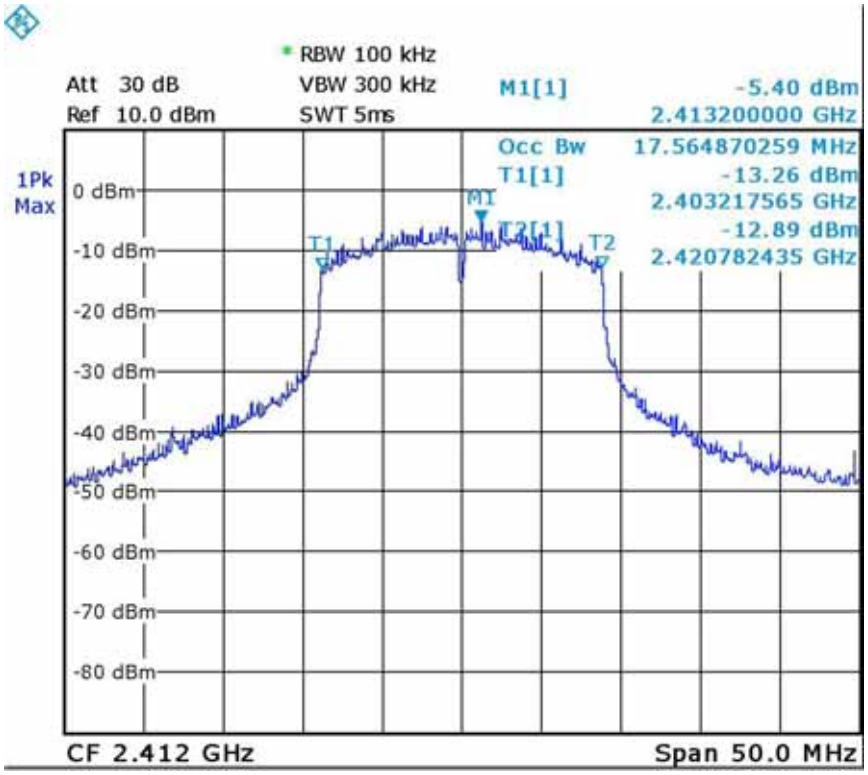
G_CH11：


RBW 100 kHz
Att 30 dB
VBW 300 kHz
Ref 10.0 dBm
SWT 5ms
M1[1]
-4.74 dBm
2.463200000 GHz
Occ Bw
16.367265469 MHz
T1[1]
-11.01 dBm
2.453716567 GHz
-11.88 dBm
2.470083832 GHz
1Pk
Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.462 GHz
Span 50.0 MHz

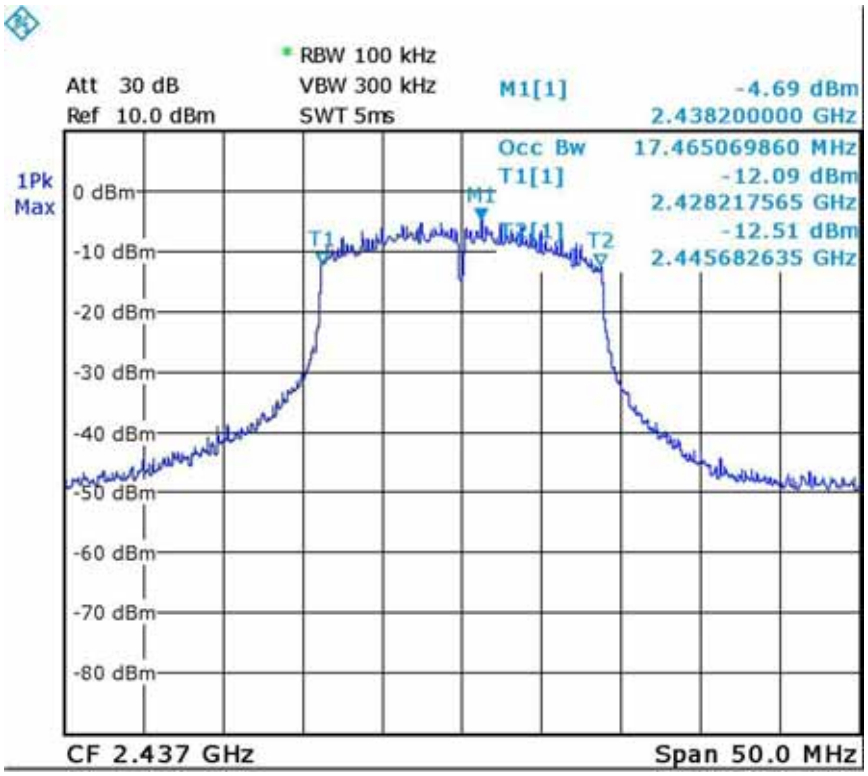
Temperature:	25 °C	Humidity:	64 %RH
Detector:	Peak	Test Mode:	802.11n - HT20
RBW:	100 kHz	VBW:	300 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	99% Bandwidth (MHz)
N_CH01	2412	17.56
N_CH06	2437	17.47
N_CH11	2462	17.47

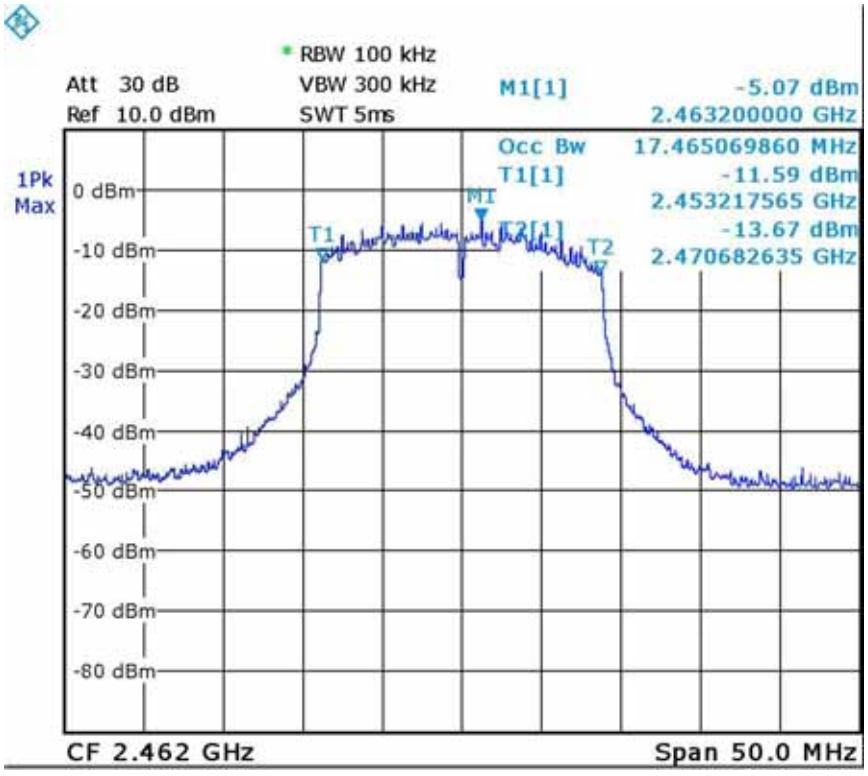
N_CH01：



N_CH06：


RBW 100 kHz
Att 30 dB
VBW 300 kHz
Ref 10.0 dBm
SWT 5ms
M1[1]
-4.69 dBm
2.438200000 GHz
Occ Bw
17.465069860 MHz
T1[1]
-12.09 dBm
2.428217565 GHz
T2[1]
-12.51 dBm
2.445682635 GHz
1Pk
Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.437 GHz
Span 50.0 MHz

N_CH11：


RBW 100 kHz
Att 30 dB
VBW 300 kHz
Ref 10.0 dBm
SWT 5ms
M1[1]
-5.07 dBm
2.463200000 GHz
Occ Bw
17.465069860 MHz
T1[1]
-11.59 dBm
2.453217565 GHz
T2[1]
-13.67 dBm
2.470682635 GHz
1Pk
Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.462 GHz
Span 50.0 MHz

7. PEAK CONDUCTED OUTPUT POWER TEST

7.1 LIMIT

FCC Part15, Subpart C Section 15.247(b).

The maximum peak conducted output power of the intentional radiator shall not exceed the following:

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

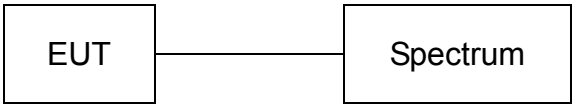
7.2 TEST EQUIPMENT

The following test equipment was used during the test：

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER
EMI TEST RECEIVER (INCLUDE SPECTRUM ANALYZER)	9 KHz ~ 6 GHz	ROHDE & SCHWARZ	ESL6 / 100176	SEP. 06, 2023 ETC

NOTE: The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

7.3 TEST SET-UP



The EUT was connected to a spectrum through a 50Ω RF cable.

7.4 TEST PROCEDURE

The EUT was operating in continuous transmission mode or could control its channel. Printed out the test result from the spectrum by hard copy function.

7.5 EUT OPERATING CONDITION

1. Set the EUT under continuous transmission condition.
2. The EUT was set to the highest available power level.

7.6 TEST RESULT

Temperature:	25 °C	Humidity:	64 %RH
Detector:	RMS	Test Mode:	802.11b
RBW:	300 kHz	VBW:	1 MHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	99% Bandwidth (MHz)	Peak Conducted Output Power		Limit (dBm)
			(dBm)	(mW)	
B_CH01	2412	13.77	6.28	4.25	30
B_CH06	2437	13.77	6.64	4.61	30
B_CH11	2462	13.87	6.34	4.31	30

B_CH01：

B_CH06：

RBW 300 kHz
Att 30 dB
VBW 1 MHz
M1[1]
-6.52 dBm
Ref 10.0 dBm
SWT 2.5ms
2.436400000 GHz
1Rm
Avg
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
Count 500
CF 2.437 GHz
Span 50.0 MHz
Tx Channel
Standard: NONE
Bandwidth
13.770 MHz
Power
6.64 dBm

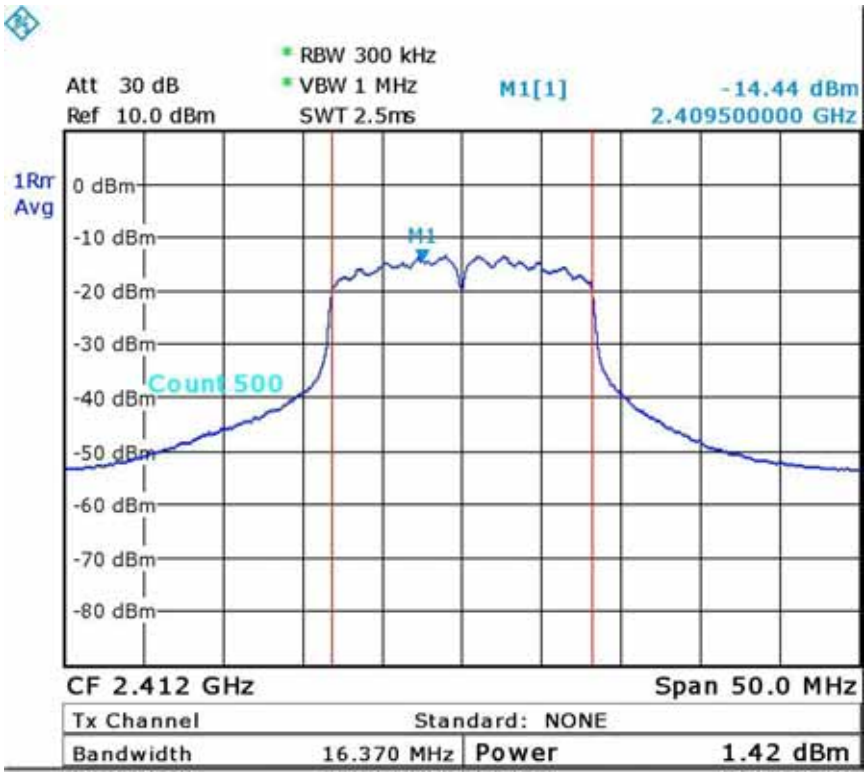
B_CH11：

RBW 300 kHz
Att 30 dB
VBW 1 MHz
M1[1]
-6.28 dBm
Ref 10.0 dBm
SWT 2.5ms
2.461000000 GHz
1Rm
Avg
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
Count 500
CF 2.462 GHz
Span 50.0 MHz
Tx Channel
Standard: NONE
Bandwidth
13.870 MHz
Power
6.34 dBm

Temperature:	25 °C	Humidity:	64 %RH
Detector:	RMS	Test Mode:	802.11g
RBW:	300 kHz	VBW:	1 MHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	99% Bandwidth (MHz)	Peak Conducted Output Power		Limit (dBm)
			(dBm)	(mW)	
G_CH01	2412	16.37	1.42	1.39	30
G_CH06	2437	16.27	1.74	1.49	30
G_CH11	2462	16.37	1.44	1.39	30

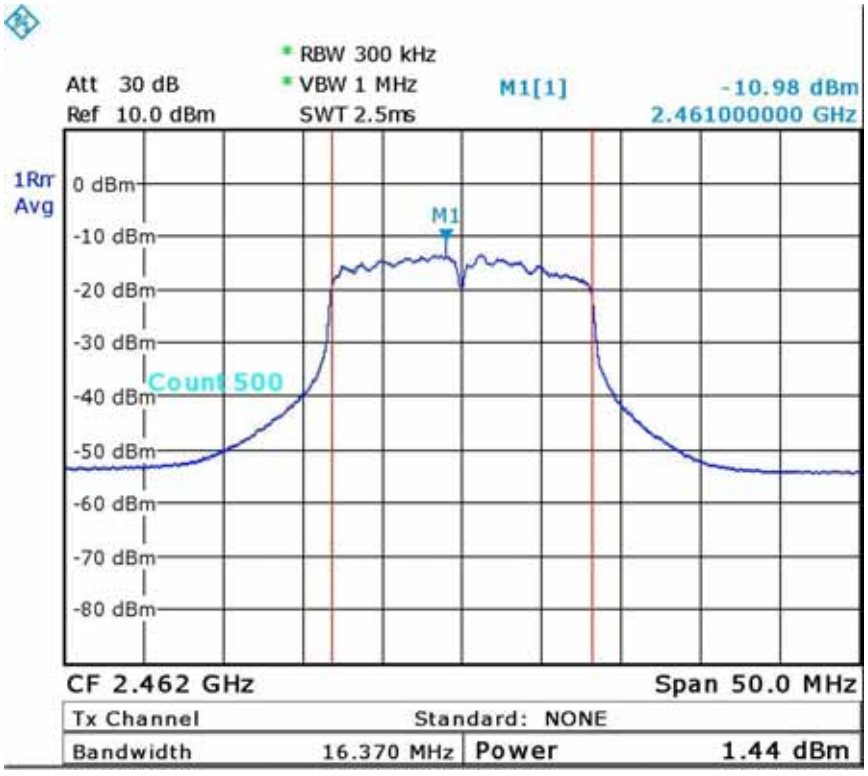
G_CH01：



G_CH06：

RBW 300 kHz
Att 30 dB
VBW 1 MHz
M1[1]
-13.96 dBm
Ref 10.0 dBm
SWT 2.5ms
2.436000000 GHz
1Rm
Avg
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
Count 500
CF 2.437 GHz
Span 50.0 MHz
Tx Channel
Standard: NONE
Bandwidth
16.270 MHz
Power
1.74 dBm

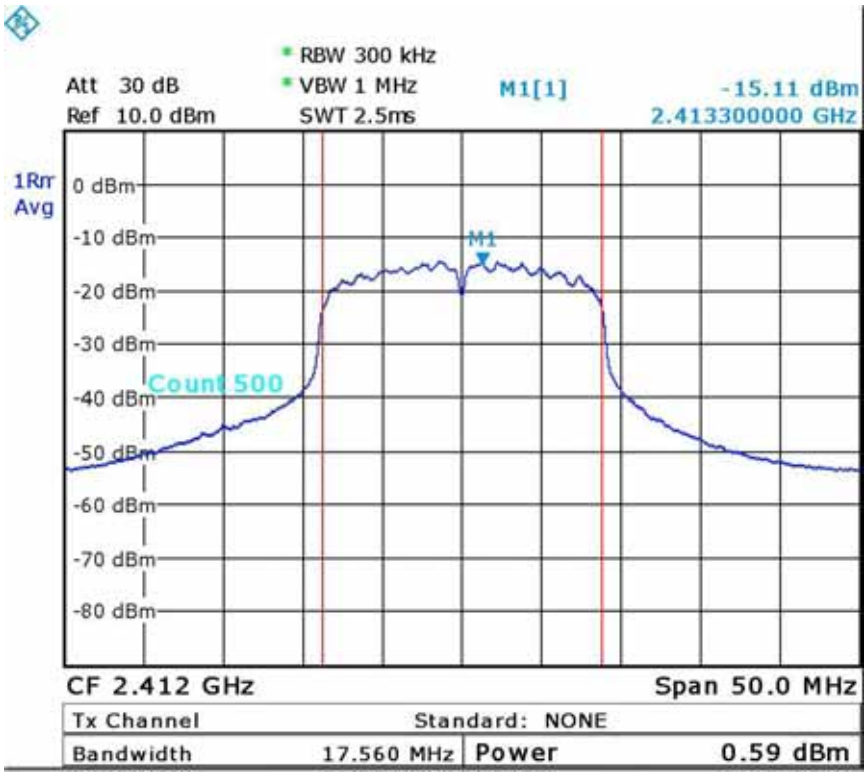
G_CH11：


RBW 300 kHz
Att 30 dB
VBW 1 MHz
M1[1]
-10.98 dBm
Ref 10.0 dBm
SWT 2.5ms
2.461000000 GHz
1Rm
Avg
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
Count 500
CF 2.462 GHz
Span 50.0 MHz
Tx Channel
Standard: NONE
Bandwidth
16.370 MHz
Power
1.44 dBm

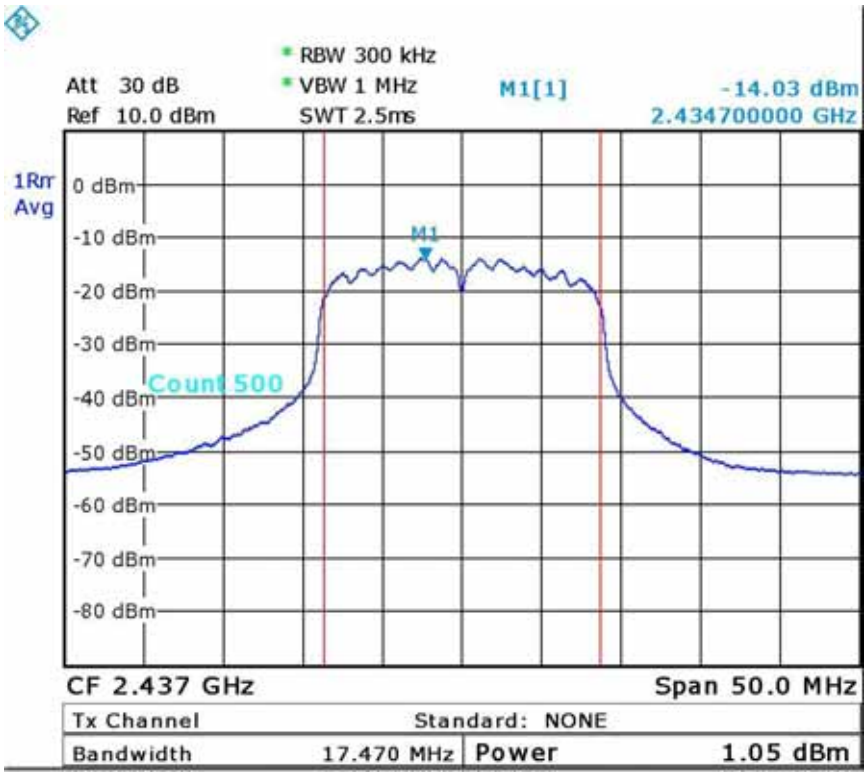
Temperature:	25 °C	Humidity:	64 %RH
Detector:	RMS	Test Mode:	802.11n - HT20
RBW:	300 kHz	VBW:	1 MHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	99% Bandwidth (MHz)	Peak Conducted Output Power		Limit (dBm)
			(dBm)	(mW)	
N_CH01	2412	17.56	0.59	1.15	30
N_CH06	2437	17.47	1.05	1.27	30
N_CH11	2462	17.47	0.53	1.13	30

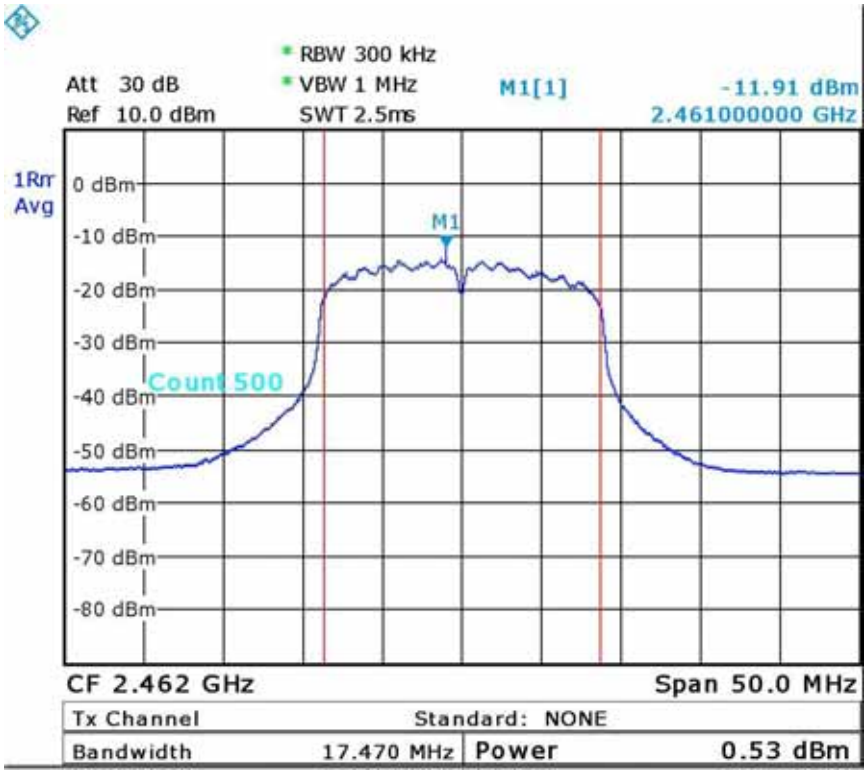
N_CH01：



N_CH06：


RBW 300 kHz
Att 30 dB
VBW 1 MHz
M1[1]
-14.03 dBm
Ref 10.0 dBm
SWT 2.5ms
2.434700000 GHz
1Rm
Avg
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
Count 500
CF 2.437 GHz
Span 50.0 MHz
Tx Channel
Standard: NONE
Bandwidth
17.470 MHz
Power
1.05 dBm

N_CH11：


RBW 300 kHz
Att 30 dB
VBW 1 MHz
M1[1]
-11.91 dBm
Ref 10.0 dBm
SWT 2.5ms
2.461000000 GHz
1Rm
Avg
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
Count 500
CF 2.462 GHz
Span 50.0 MHz
Tx Channel
Standard: NONE
Bandwidth
17.470 MHz
Power
0.53 dBm

8. BAND EDGE TEST

8.1 LIMIT

FCC Part15, Subpart C Section 15.247(d).

In any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

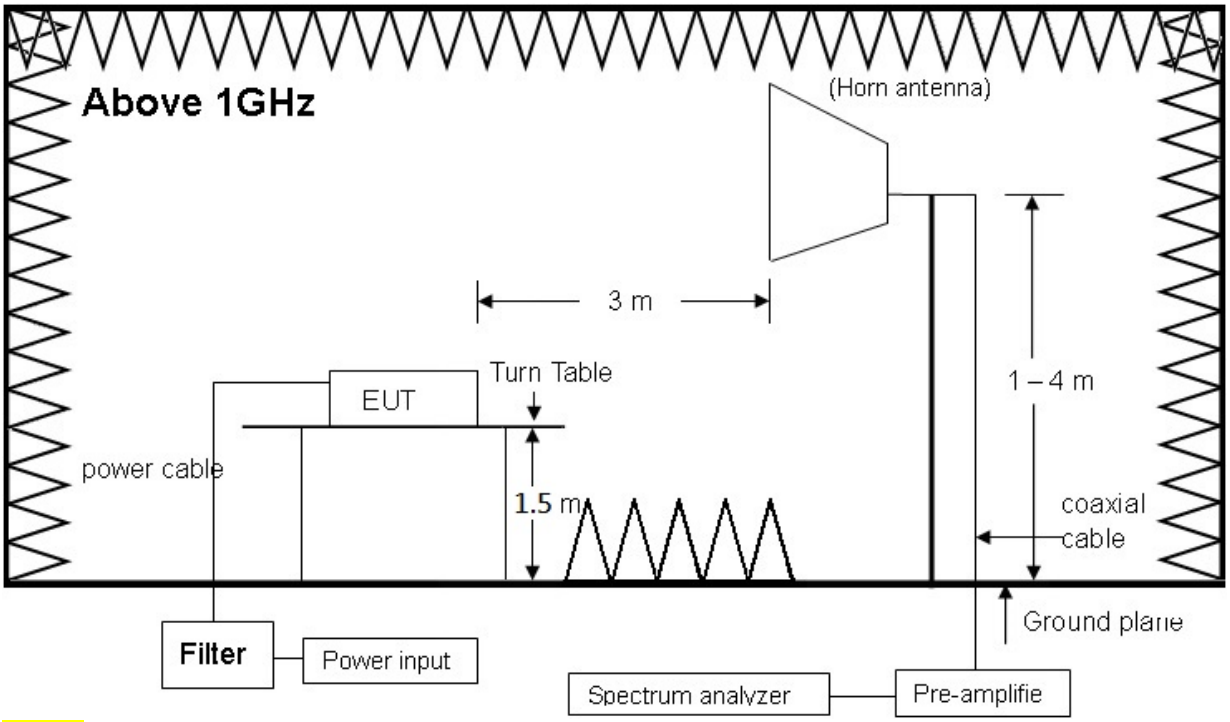
8.2 TEST EQUIPMENT

The following test equipment was used during the test:

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER	FINAL TEST BE USED
SPECTRUM ANALYZER	9 kHz ~ 40GHz	Advantest	R3182/ 131001635	2023/10/04 ETC	■
HORN ANTENNA	1 GHz ~ 18 GHz	EMCO	3115/ 9602-4681	FEB. 23, 2024 ETC	■
PRE-AMPLIFIER	1 GHz ~ 26.5 GHz	AGILENT	8449B/ 3008A01995	MAR. 06, 2024 ETC	■
HORN ANTENNA	18 GHz ~ 40 GHz	ETS	3116/ 00032255	MAY.14, 2024 ETC	■
ANECHOIC CHAMBER	3 M MEASUREMENT	SRT	A01 / SRT001	JUN. 05, 2024 ETC	■
RF CABLE	UP TO 18 GHz 1.5 m	JYEBAO	A30A30-L 142 / EQF-0035(001)	FEB. 16, 2024 ETC	■
RF CABLE	UP TO 26.5 GHz 3.5 m	EMCI	EMC104-SM-SM-3500 / 150601	SEP. 13, 2023 ETC	■
K-TYPE CABLE	UP TO 40 GHz 3 m	HUBER+ SUHNER	SF102-46/2* 11SK252 / MY2611/2	APR. 24, 2024 ETC	■
K-TYPE CABLE	UP TO 40 GHz, 1 m	HUBER+ SUHNER	SF102/2* 11SK252 / MY3331/2	FEB. 13, 2024 ETC	■
FILTER	2 LINE, 30 A	FIL.COIL	FC-943 / 869	NCR	■
THERMO-HYGRO	15 – 40 °C, 0- 100% RH	TOP	20-A / 9326	MAR. 26, 2024 ETC	■
MEASUREMENT SOFTEARE	N/A	EZ-EMC	SRT-03A1	NCR	■

NOTE: The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

8.3 TEST SETUP



NOTE: The EUT system was put on a wooden table with 0.8m heights above a ground plane. For the actual test configuration, please refer to the photos of testing.

8.4 TEST PROCEDURE

The EUT was tested according to the requirement of ANSI C63.10:2013 and EN 55022. The measurements were made at an open area test site with 3 meter measurement distance under 1 GHz and with 3m distance above 1GHz. The frequency spectrum measured started from 30 MHz. Under 1 GHz. All readings were quasi-peak values with 120 kHz resolution bandwidth of the test receiver. Above 1 GHz, the measurements were made at an open area test site with 3 meter measurement distance and all readings were peak and average values with 1 MHz resolution bandwidth of the test receiver. The EUT system was operated in all typical methods by users. The cables connected to EUT and support units were moved to find the maximum emission levels for each frequency.

8.5 EUT OPERATING CONDITION

1. Set the EUT under continuous transmission condition.
2. The EUT was set to the highest available power level.

8.6 TEST RESULT

Below 2400MHz (B_CH01)

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	2.30 GHz ~ 2.44 GHz	Tested Mode:	802.11b
Detector Type:	PK. and AV.	IF Bandwidth:	100 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

Frequency (MHz)	Correct Factor (dB)	Ant. Fac. (dB/m)	Ant. Pol. (H/V)	Reading (dBuV)		Emission (dBuV/m)		Limit Line (dBuV/m)		Over Limit (dB)	
				PK	AV	PK	AV	PK	AV	PK	AV
2398.45	-30.83	28.00	H	49.18	38.65	46.35	35.82	74.00	54.00	-27.65	-18.18
2398.81	-30.83	28.00	V	51.42	40.93	48.59	38.10	74.00	54.00	-25.41	-15.90
2400.00	-30.83	28.00	H	45.77	35.27	42.94	32.44	74.00	54.00	-31.06	-21.56
2400.00	-30.83	28.00	V	50.88	40.39	48.05	37.56	74.00	54.00	-25.95	-16.44

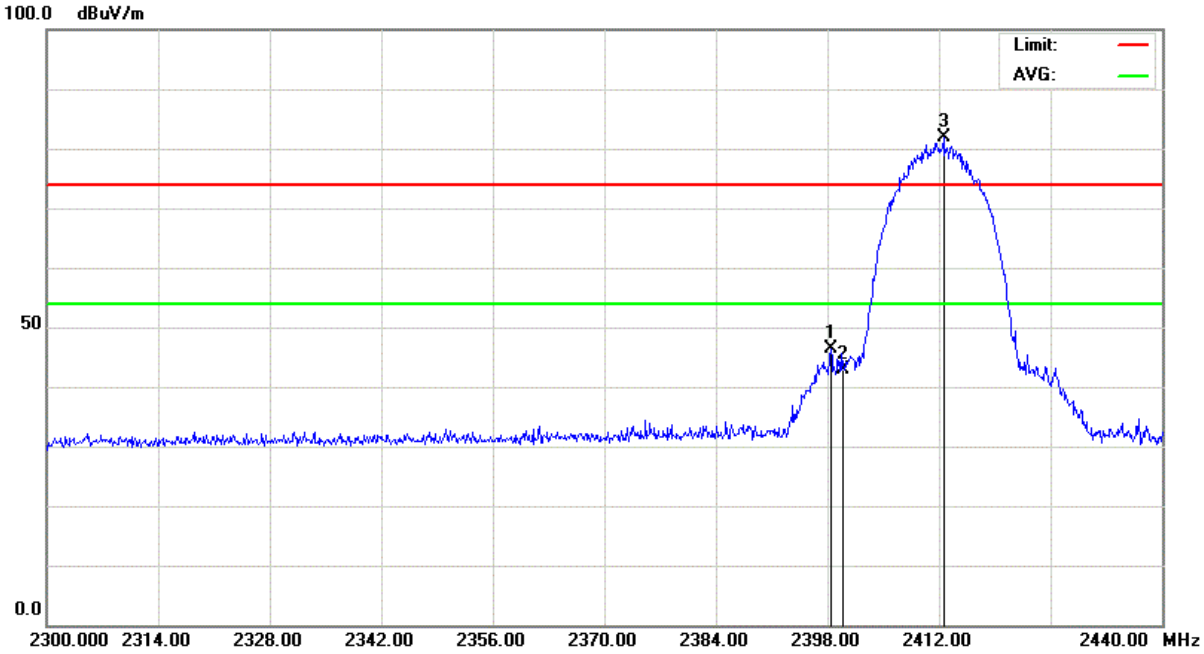
Above 2483.5MHz (B_CH11)

Temperature:	27 °C	Humidity:	79 %RH
Frequency Range:	2.440 GHz ~ 2.60 GHz	Tested Mode:	802.11b
Detector Type:	PK. and AV.	IF Bandwidth:	100 kHz
Tested By:	Richard Lin	Tested Date:	Aug. 15, 2023

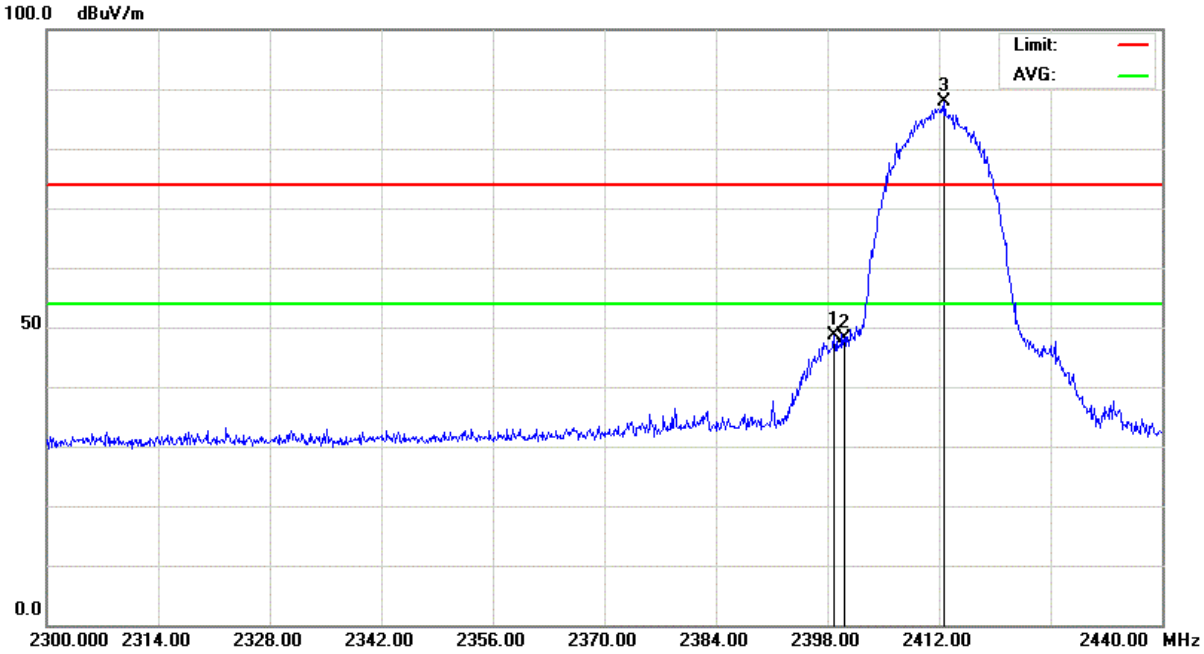
Frequency (MHz)	Correct Factor (dB)	Ant. Fac. (dB/m)	Ant. Pol. (H/V)	Reading (dBuV)		Emission (dBuV/m)		Limit Line (dBuV/m)		Over Limit (dB)	
				PK	AV	PK	AV	PK	AV	PK	AV
2483.50	-30.75	28.33	H	33.85	28.61	31.44	26.20	74.00	54.00	-42.56	-27.80
2483.50	-30.75	28.33	V	34.06	28.75	31.65	26.34	74.00	54.00	-42.35	-27.66
2496.78	-30.73	28.38	H	36.18	28.55	33.83	26.20	74.00	54.00	-40.17	-27.80
2485.93	-30.74	28.34	V	35.68	28.63	33.28	26.23	74.00	54.00	-40.72	-27.77

Below 2400MHz (B_CH01)

Antenna Polarization：Horizontal

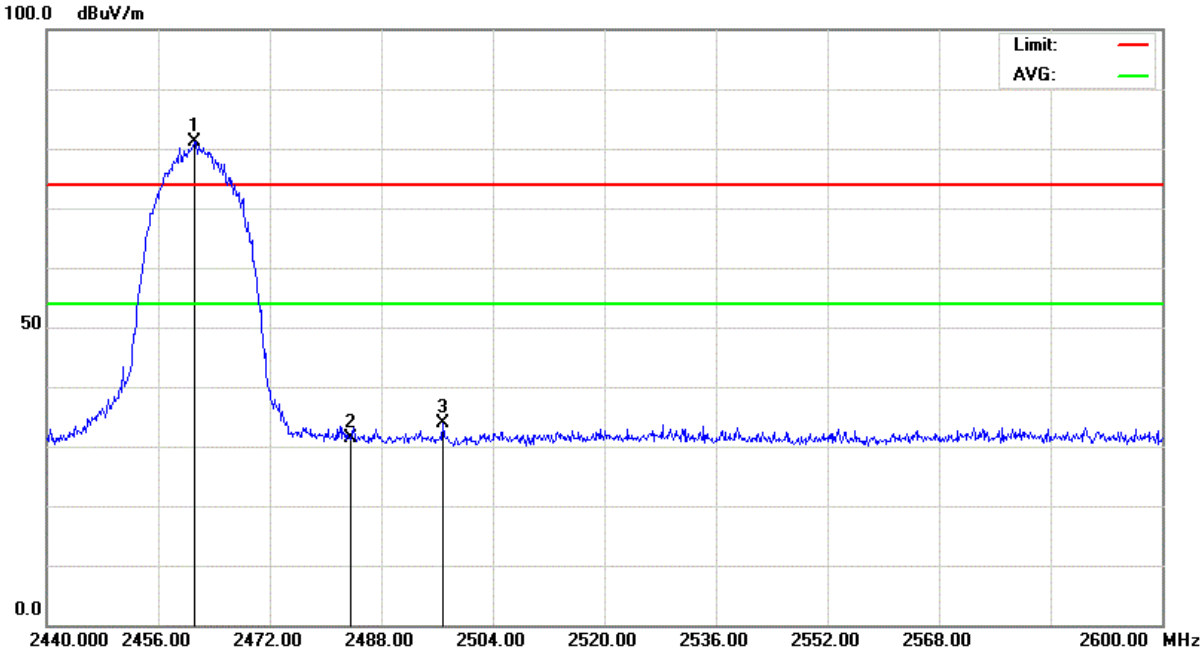


Antenna Polarization：Vertical

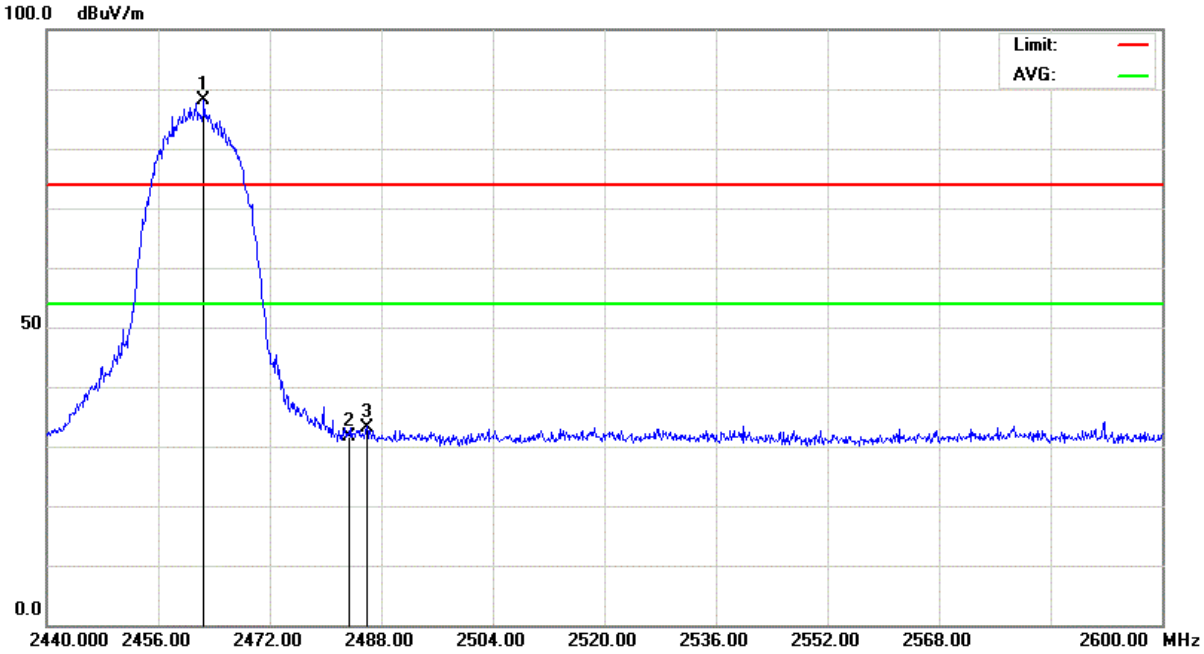


Above 2483.5MHz (B_CH11)

Antenna Polarization：Horizontal



Antenna Polarization：Vertical



Below 2400MHz (G_CH01)

Temperature: 27 °C Humidity: 79 %RH

Frequency Range: 2.30 GHz ~ 2.44 GHz Tested Mode: 802.11g

Detector Type: PK. and AV. IF Bandwidth: 100 kHz

Tested By: Richard Lin Tested Date: Aug. 15, 2023

Frequency (MHz)	Correct Factor (dB)	Ant. Fac. (dB/m)	Ant. Pol. (H/V)	Reading (dBuV)		Emission (dBuV/m)		Limit Line (dBuV/m)		Over Limit (dB)	
				PK	AV	PK	AV	PK	AV	PK	AV
2399.40	-30.83	28.00	H	46.12	35.61	43.29	32.78	74.00	54.00	-30.71	-21.22
2399.42	-30.83	28.00	V	55.31	44.87	52.48	42.04	74.00	54.00	-21.52	-11.96
2400.00	-30.83	28.00	H	47.45	36.94	44.62	34.11	74.00	54.00	-29.38	-19.89
2400.00	-30.83	28.00	V	55.99	45.43	53.16	42.60	74.00	54.00	-20.84	-11.40

Above 2483.5MHz (G_CH11)

Temperature: 27 °C Humidity: 79 %RH

Frequency Range: 2.440 GHz ~ 2.60 GHz Tested Mode: 802.11g

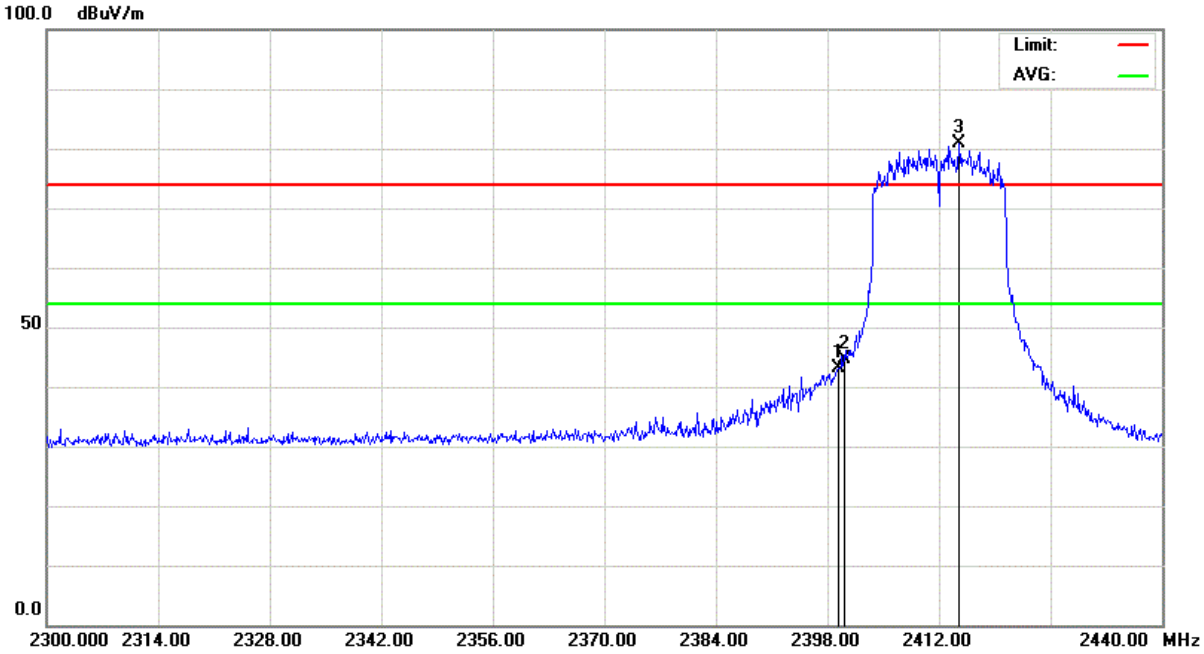
Detector Type: PK. and AV. IF Bandwidth: 100 kHz

Tested By: Richard Lin Tested Date: Aug. 15, 2023

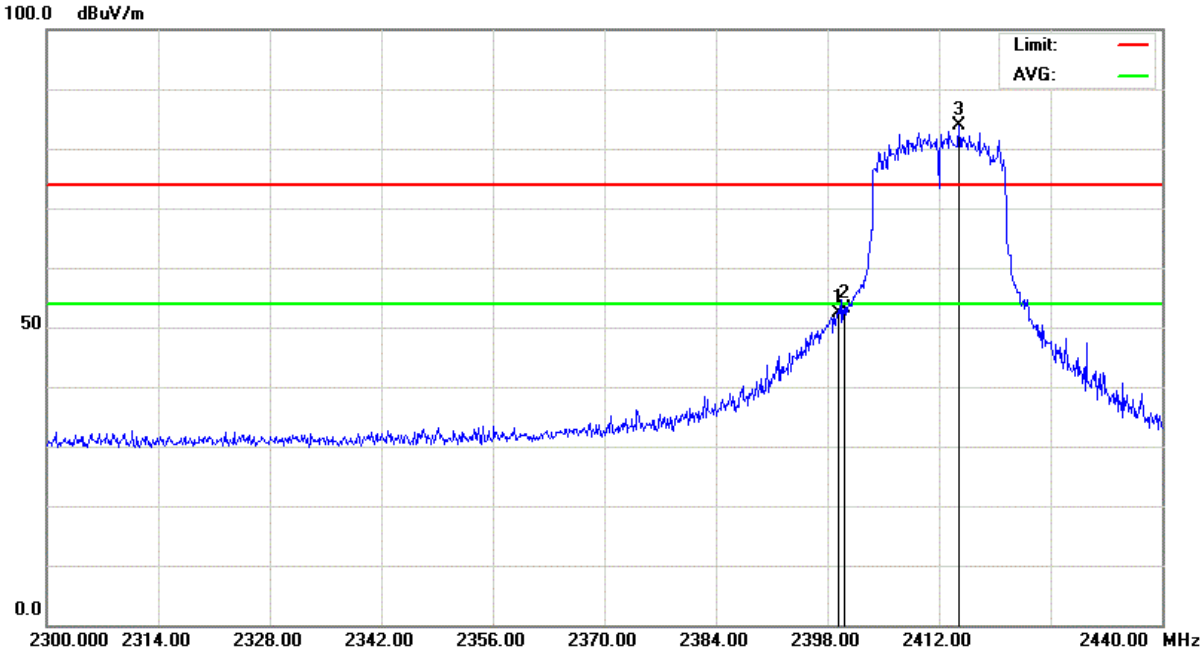
Frequency (MHz)	Correct Factor (dB)	Ant. Fac. (dB/m)	Ant. Pol. (H/V)	Reading (dBuV)		Emission (dBuV/m)		Limit Line (dBuV/m)		Over Limit (dB)	
				PK	AV	PK	AV	PK	AV	PK	AV
2483.50	-30.75	28.33	H	33.46	28.61	31.05	26.20	74.00	54.00	-42.95	-27.80
2483.50	-30.75	28.33	V	36.34	28.77	33.93	26.36	74.00	54.00	-40.07	-27.64
2504.18	-30.73	28.42	H	36.96	29.01	34.65	26.70	74.00	54.00	-39.35	-27.30
2488.61	-30.74	28.35	V	37.48	28.84	35.09	26.45	74.00	54.00	-38.91	-27.55

Below 2400MHz (G_CH01)

Antenna Polarization：Horizontal

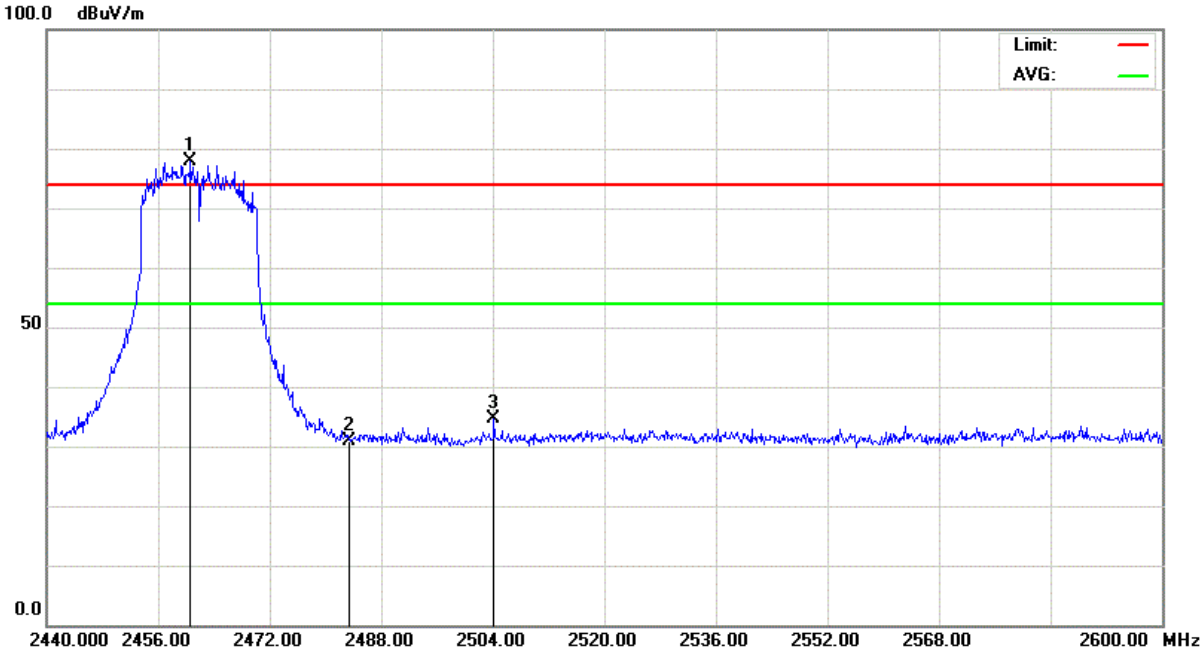


Antenna Polarization：Vertical

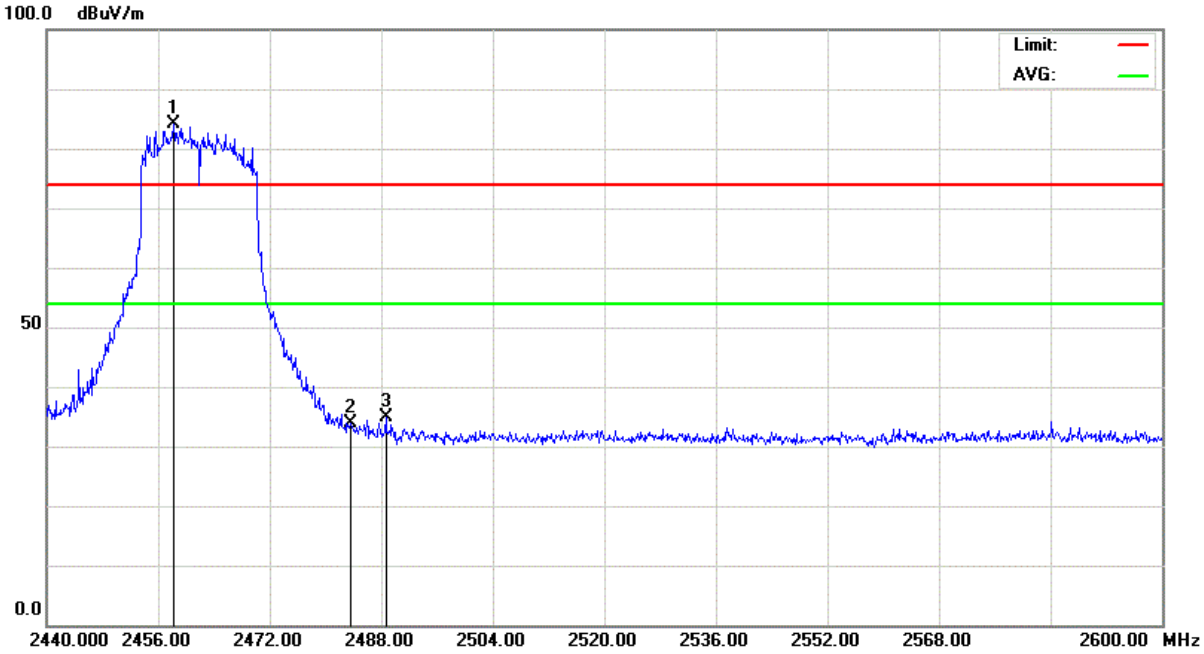


Above 2483.5MHz (G_CH11)

Antenna Polarization：Horizontal



Antenna Polarization：Vertical



Below 2400MHz (N_CH01)

Temperature: 27 °C Humidity: 79 %RH

Frequency Range: 2.30 GHz ~ 2.44 GHz Tested Mode: 802.11n

Detector Type: PK. and AV. IF Bandwidth: 100 kHz

Tested By: Richard Lin Tested Date: Aug. 15, 2023

Frequency (MHz)	Correct Factor (dB)	Ant. Fac. (dB/m)	Ant. Pol. (H/V)	Reading (dBuV)		Emission (dBuV/m)		Limit Line (dBuV/m)		Over Limit (dB)	
				PK	AV	PK	AV	PK	AV	PK	AV
2399.27	-30.83	28.00	H	48.99	38.46	46.16	35.63	74.00	54.00	-27.84	-18.37
2399.35	-30.83	28.00	V	54.37	43.82	51.54	40.99	74.00	54.00	-22.46	-13.01
2400.00	-30.83	28.00	H	47.90	37.41	45.07	34.58	74.00	54.00	-28.93	-19.42
2400.00	-30.83	28.00	V	54.82	44.30	51.99	41.47	74.00	54.00	-22.01	-12.53

Above 2483.5MHz (N_CH11)

Temperature: 27 °C Humidity: 79 %RH

Frequency Range: 2.440 GHz ~ 2.60 GHz Tested Mode: 802.11n

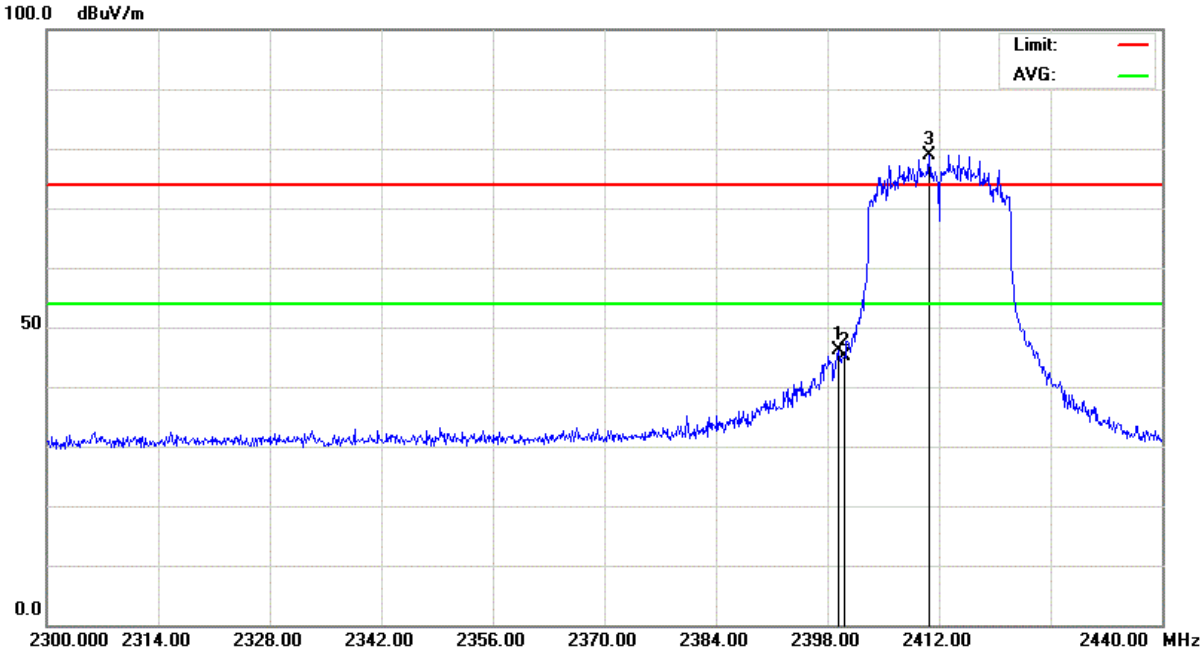
Detector Type: PK. and AV. IF Bandwidth: 100 kHz

Tested By: Richard Lin Tested Date: Aug. 15, 2023

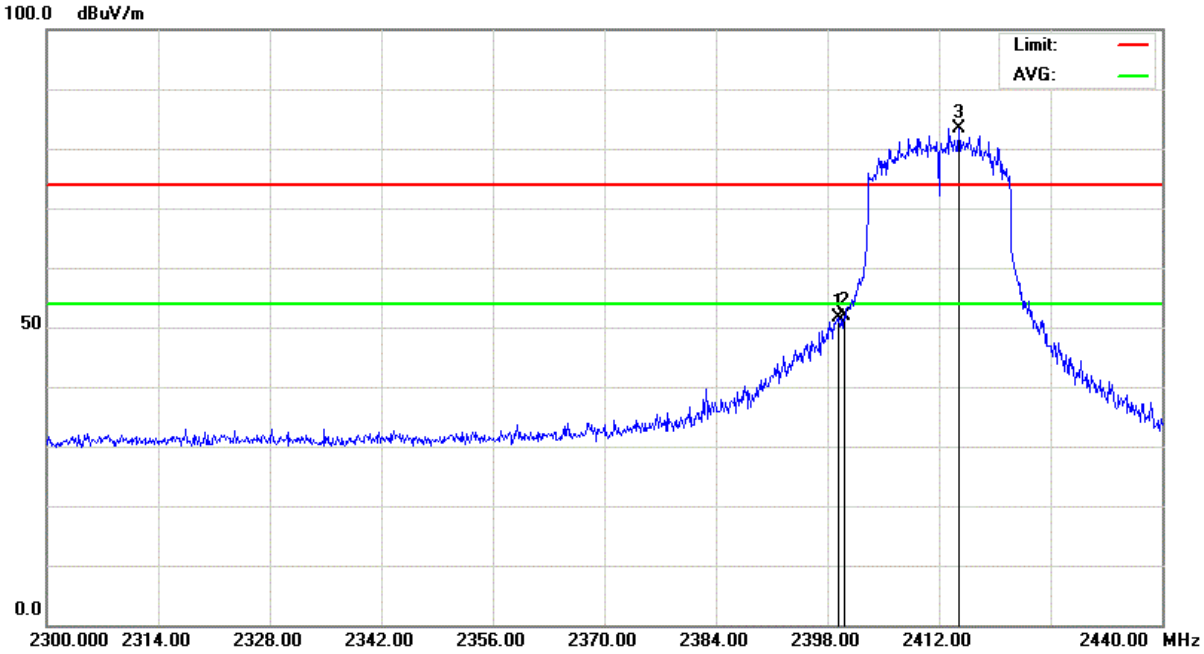
Frequency (MHz)	Correct Factor (dB)	Ant. Fac. (dB/m)	Ant. Pol. (H/V)	Reading (dBuV)		Emission (dBuV/m)		Limit Line (dBuV/m)		Over Limit (dB)	
				PK	AV	PK	AV	PK	AV	PK	AV
2483.50	-30.75	28.33	H	34.61	28.93	32.20	26.52	74.00	54.00	-41.80	-27.48
2483.50	-30.75	28.33	V	34.96	28.61	32.55	26.20	74.00	54.00	-41.45	-27.80
2488.19	-30.74	28.35	H	35.28	29.03	32.89	26.64	74.00	54.00	-41.11	-27.36
2484.49	-30.75	28.34	V	37.72	28.85	35.31	26.44	74.00	54.00	-38.69	-27.56

Below 2400MHz (N_CH01)

Antenna Polarization：Horizontal

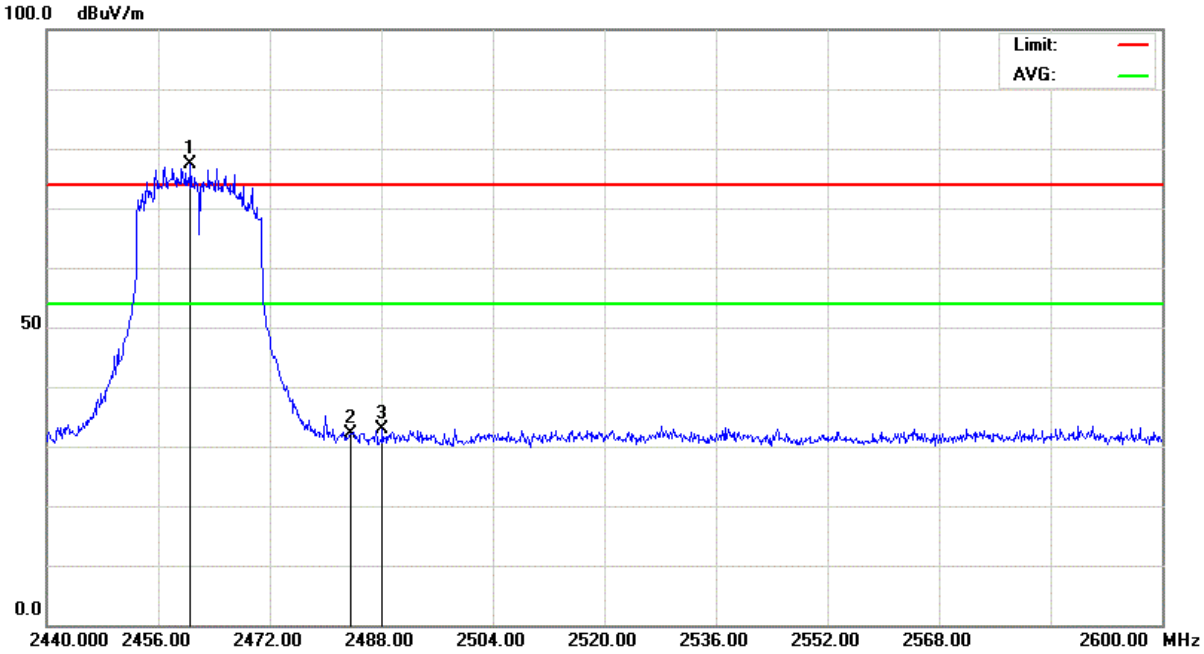


Antenna Polarization：Vertical

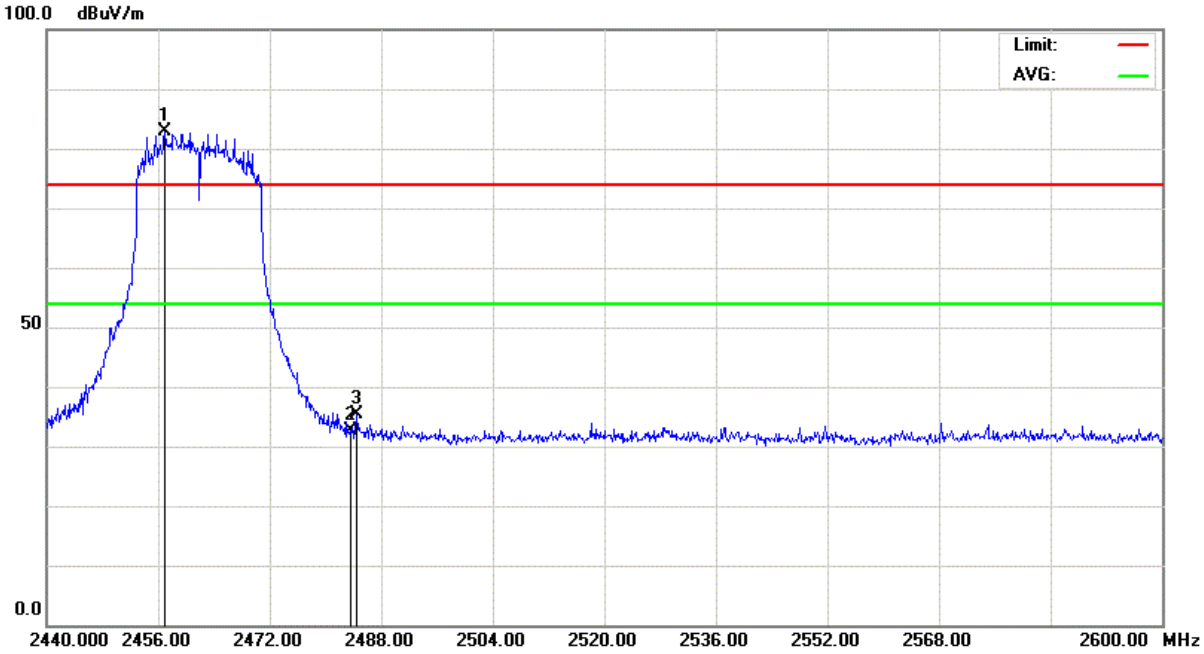


Above 2483.5MHz (N_CH11)

Antenna Polarization：Horizontal



Antenna Polarization：Vertical



9. POWER SPECTRAL DENSITY TEST

9.1 LIMIT

FCC Part15, Subpart C Section 15.247(e).

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

FREQUENCY RANGE	Limit
2.40 - 2.4835 GHz	8 dBm / 3 kHz

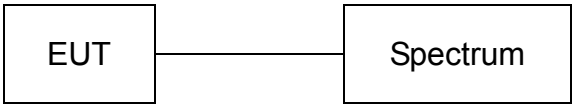
9.2 TEST EQUIPMENT

The following test equipment was used during the test：

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER
EMI TEST RECEIVER (INCLUDE SPECTRUM ANALYZER)	9 KHz ~ 6 GHz	ROHDE & SCHWARZ	ESL6 / 100176	SEP. 06, 2023 ETC

NOTE： The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

9.3 TEST SET-UP



The EUT was connected to a spectrum through a 50Ω RF cable.

9.4 TEST PROCEDURE

The EUT was operating in continuous transmission mode or could control its channel. Printed out the test result from the spectrum by hard copy function.

9.5 EUT OPERATING CONDITION

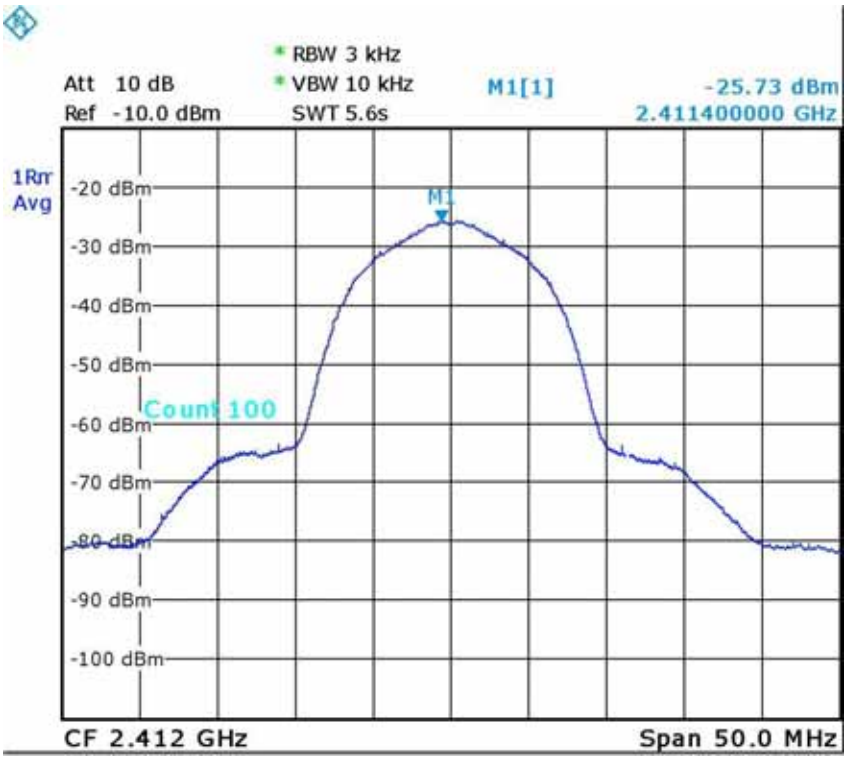
1. Set the EUT under continuous transmission condition.
2. The EUT was set to the highest available power level.

9.6 TEST RESULT

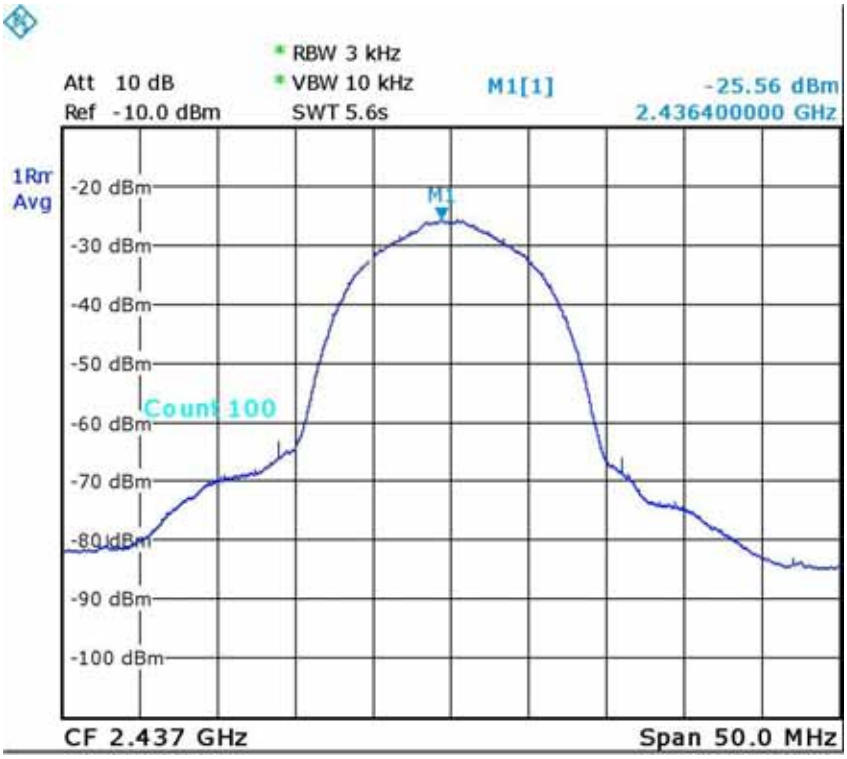
Temperature:	25 °C	Humidity:	64 %RH
Detector:	RMS	Test Mode:	802.11b
RBW:	3 kHz	VBW:	10 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)
B_CH01	2412	-25.73	8
B_CH06	2437	-25.56	8
B_CH11	2462	-25.70	8

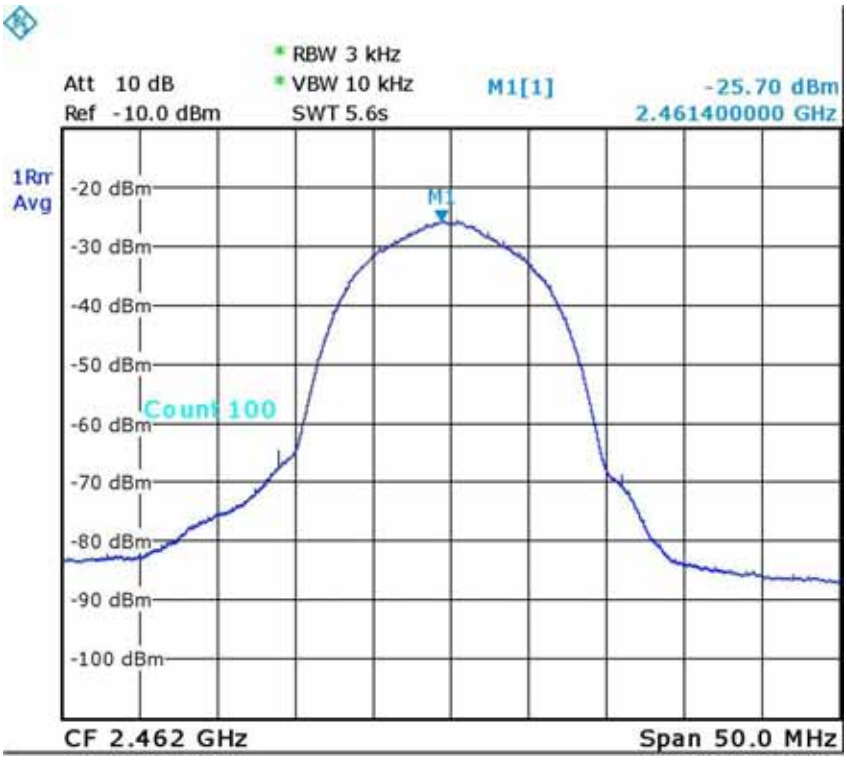
B_CH01：



B_CH06：


RBW 3 kHz
Att 10 dB
VBW 10 kHz
M1[1]
-25.56 dBm
Ref -10.0 dBm
SWT 5.6s
2.436400000 GHz
1Rm
Avg
-20 dBm
-30 dBm
-40 dBm
-50 dBm
Count 100
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.437 GHz
Span 50.0 MHz

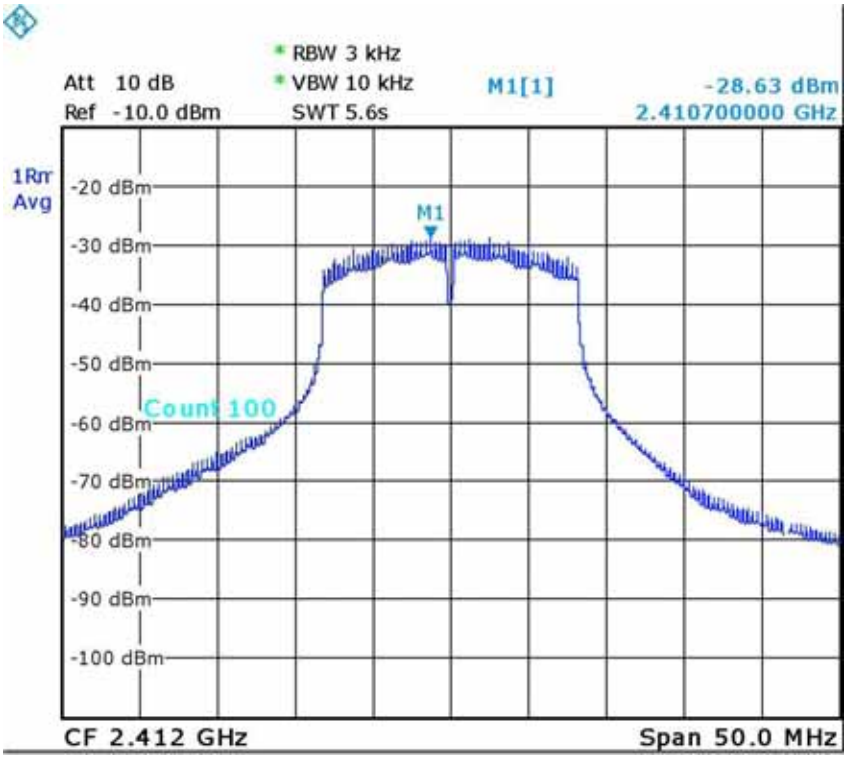
B_CH11：


RBW 3 kHz
Att 10 dB
VBW 10 kHz
M1[1]
-25.70 dBm
Ref -10.0 dBm
SWT 5.6s
2.461400000 GHz
1Rm
Avg
-20 dBm
-30 dBm
-40 dBm
-50 dBm
Count 100
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.462 GHz
Span 50.0 MHz

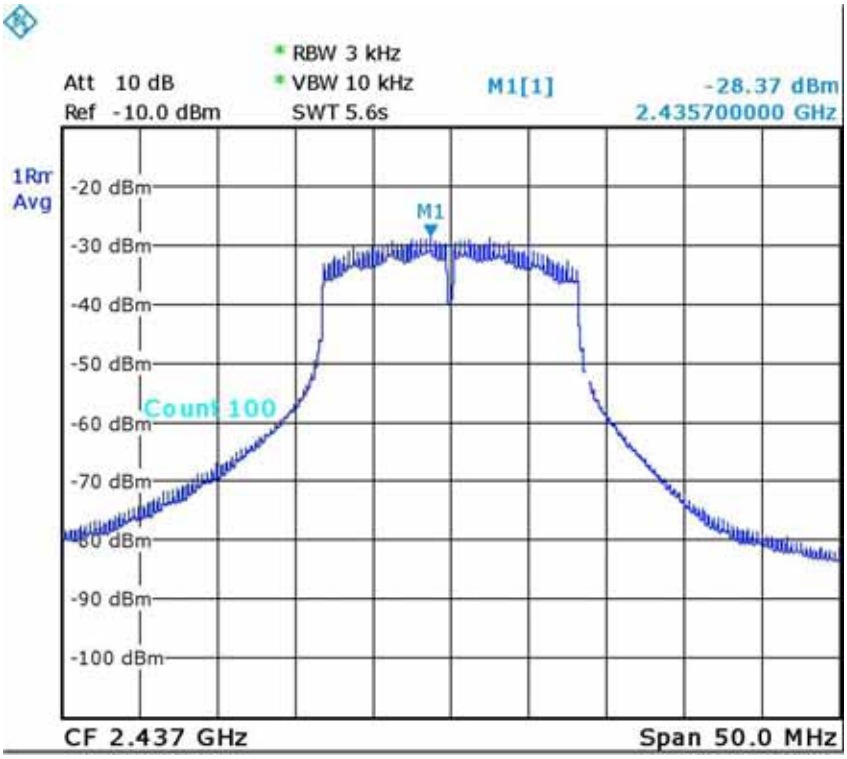
Temperature:	25 °C	Humidity:	64 %RH
Detector:	RMS	Test Mode:	802.11g
RBW:	3 kHz	VBW:	10 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)
G_CH01	2412	-28.63	8
G_CH06	2437	-28.37	8
G_CH11	2462	-28.60	8

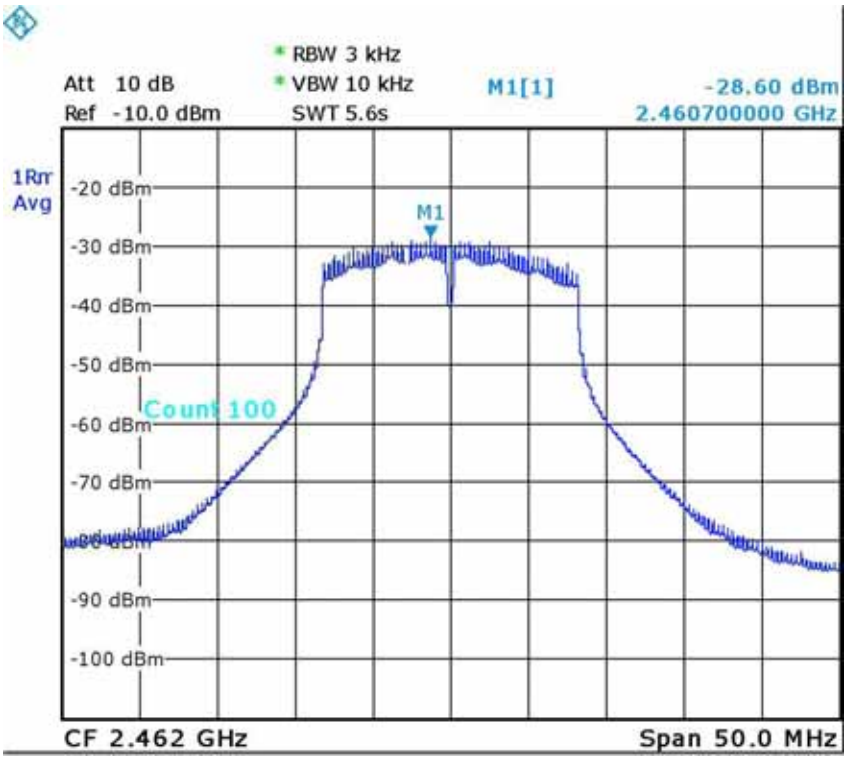
G_CH01：



G_CH06：


RBW 3 kHz
Att 10 dB
VBW 10 kHz
M1[1]
-28.37 dBm
Ref -10.0 dBm
SWT 5.6s
2.435700000 GHz
1Rm
Avg
-20 dBm
-30 dBm
-40 dBm
-50 dBm
Count 100
-60 dBm
-70 dBm
-90 dBm
-100 dBm
M1
CF 2.437 GHz
Span 50.0 MHz

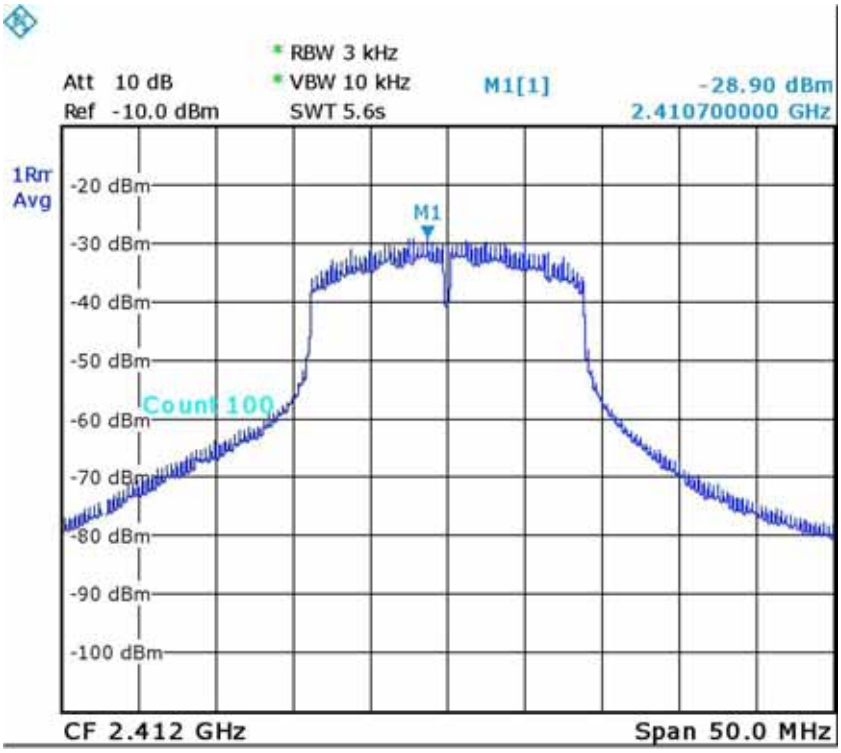
G_CH11：


RBW 3 kHz
Att 10 dB
VBW 10 kHz
M1[1]
-28.60 dBm
Ref -10.0 dBm
SWT 5.6s
2.460700000 GHz
1Rm
Avg
-20 dBm
-30 dBm
-40 dBm
-50 dBm
Count 100
-60 dBm
-70 dBm
-90 dBm
-100 dBm
M1
CF 2.462 GHz
Span 50.0 MHz

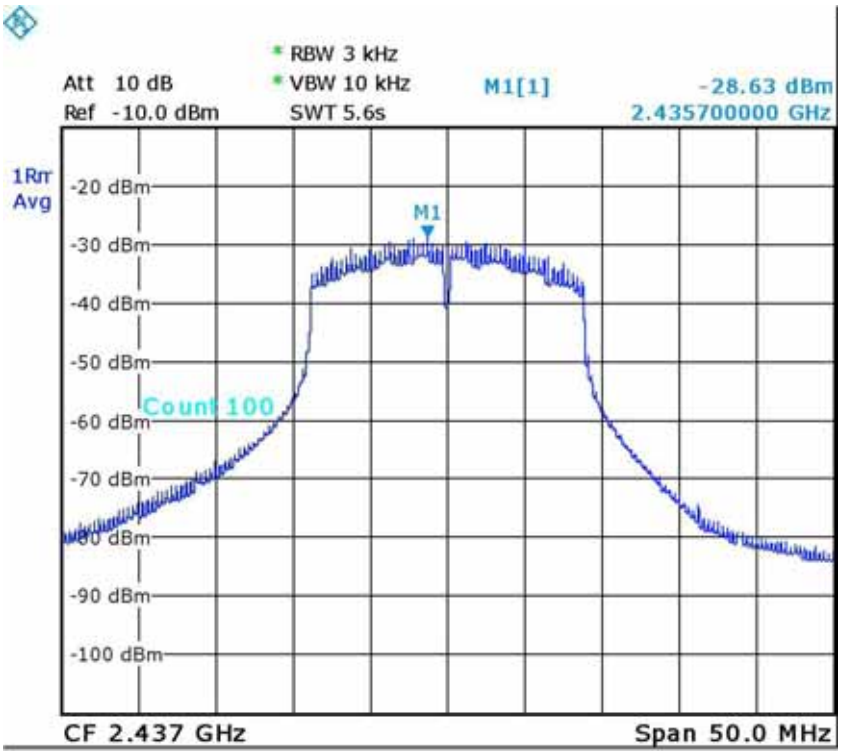
Temperature:	25 °C	Humidity:	64 %RH
Detector:	RMS	Test Mode:	802.11n - HT20
RBW:	3 kHz	VBW:	10 kHz
Tested By:	Richard Lin	Tested Date:	Jul. 07, 2023

Channel Number	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)
N_CH01	2412	-28.90	8
N_CH06	2437	-28.63	8
N_CH11	2462	-29.05	8

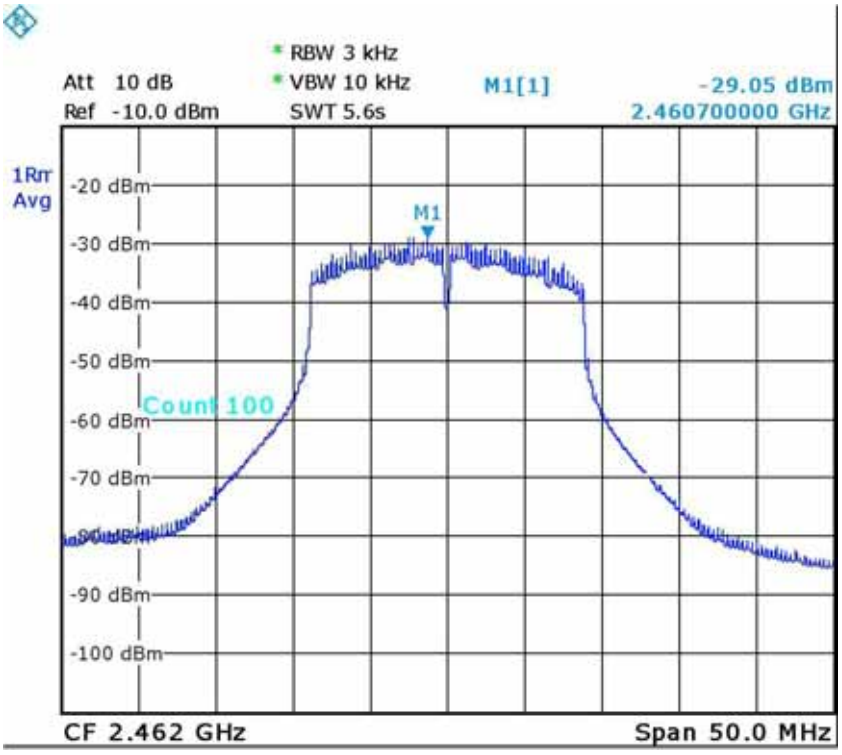
N_CH01：



N_CH06：


* RBW 3 kHz
Att 10 dB
* VBW 10 kHz
M1[1]
-28.63 dBm
Ref -10.0 dBm
SWT 5.6s
2.435700000 GHz
1Rm
Avg
-20 dBm
-30 dBm
-40 dBm
-50 dBm
Count 100
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
M1
CF 2.437 GHz
Span 50.0 MHz

N_CH11：


* RBW 3 kHz
Att 10 dB
* VBW 10 kHz
M1[1]
-29.05 dBm
Ref -10.0 dBm
SWT 5.6s
2.460700000 GHz
1Rm
Avg
-20 dBm
-30 dBm
-40 dBm
-50 dBm
Count 100
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
M1
CF 2.462 GHz
Span 50.0 MHz

10. §15.203 Antenna Requirement

10.1 Applicable Standard

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.

The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shell be considered sufficient to comply with the provisions of this Section.

The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

10.2 Result

The antenns for this device is IPEX terminal glue stick antenna connected to the main board in a fashion not readily accessible to the end user with maximum gain of 2.0 dBi which is under the 6 dBi limit.

Compliant. Please refer to the antenna photo for details the second photo on page 1 of the “PHOTOS OF EUT - Internal” document.

11. TERMS OF ABBREVIATION

AV.	Average detection
AZ(º)	Turn table azimuth
Correct.	Correction
EL(m)	Antenna height (meter)
EUT	Equipment Under Test
Horiz.	Horizontal direction
LISN	Line Impedance Stabilization Network
NSA	Normalized Site Attenuation
Q.P.	Quasi-peak detection
SRT Lab	Spectrum Research & Testing Laboratory, Inc.
Vert.	Vertical direction