

Test Report

Product: Plaud Note Pro AI Note Taker

Trade Mark: PLAUD

Model Number: PN0300

FCC ID: 2BQL2-PN0300

Prepared for

PLAUD Inc.

8 The Green, Ste A, Dover, Kent County, Delaware 19901

Prepared by

Shenzhen HongBiao Certification& Testing Co., Ltd

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TEST RESULT CERTIFICATION**Applicant's Name**..... : PLAUD Inc.

Address : 8 The Green, Ste A, Dover, Kent County, Delaware 19901

Manufacturer's Name : PLAUD Inc.

Address : 8 The Green, Ste A, Dover, Kent County, Delaware 19901

Product description

Product name : Plaud Note Pro AI Note Taker

Model Number : PN0300

Standards : FCC Part 15.407

Test procedure..... : IEEE/ANSI C63.10-2020

789033 D02 General UNII Test Procedures New Rules v02r01

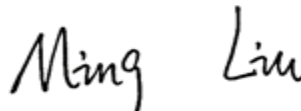
This device described above has been tested by Shenzhen HongBiao Certification& Testing Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.

Date of Test

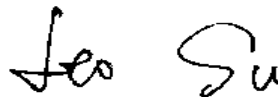
Date (s) of performance of tests..... : June 26, 2025~ July 09, 2025

Test Result..... : **Pass****Testing Engineer** :

(Z o e S u)

Technical Manager :

(M i n g L i u)

Authorized Signatory :

(L e o S u)

Revision History

[illegible]

1 General Description

1.1 Description of EUT

Product name:	Plaud Note Pro AI Note Taker
Model name:	PN0300
Series Model:	PN0301, PN0302, PN0303, PN0304, PN0305, PN0306, PN0307, PN0308, PN0309
Different of series model:	All the models are the same circuit and module, except the colour.
Frequency range:	5150~5250MHz
Modulation type:	OFDM with BPSK/QPSK/16QAM/64QAM for 802.11a/n;
Transfer rate:	802.11a: 6,9,12,18, 24, 36, 48, 54Mbps; 802.11n(HT20/HT40): MCS0-MCS7;
Channel bandwidth:	802.11a: 20 MHz 802.11n: 20 MHz, 40 MHz
Antenna type:	Chip Antenna
Antenna gain:	1.86dBi
Max. output power:	14.38dBm
Hardware version:	V1.0
Software version:	V1.0
Battery:	DC 3.87V, 500mAh
Power supply:	Input: 5V=0.5A
Adapter information:	N/A

1.2 Test Mode

For 802.11a/n(HT20)

U-NII-1 (5150 - 5250 MHz)		
Channel Number	Channel	Frequency (MHz)
36	Low	5180
40	Mid	5200
48	High	5240

For 802.11n (HT40)

U-NII-1 (5150 - 5250 MHz)

Channel Number	Channel	Frequency (MHz)
38	Low	5190
46	High	5230

1.3 Operation Channel List

For U-NII-1:

20 MHz		40 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	--	--
48	5240	--	--

1.4 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.5 Power setting configuration parameters

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product. Transmitting duty cycle is no less 98%.

The software is TermAssist and SecureCRT tool Use together.

Test Items	Mode	Data Rate	TX/RX
Radiated Emissions	802.11a (HT20)	6 Mbps	TX
	802.11n/(HT20/40)	MCSO	TX
Duty Cycle	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCSO	TX
Band Edge	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCSO	TX
26dB Bandwidth and 99% Occupied Bandwidth	802.11a (HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCSO	TX
Conducted Output Power	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCSO	TX
Power Spectral Density	802.11a(HT20)	6 Mbps	TX
	802.11n(HT20/40)	MCSO	TX
Frequency Stability	Un-modulation	/	TX

1.6 Ancillary Equipment

Equipment	Model	S/N	Manufacturer
Laptop	BDR-WDH	A3RQPM242 0004454	HONR
Adapter	CD289	35810	Ugreen Group Limited

Note: The laptop is used to assist the RF test. In order to prevent the laptop from causing unnecessary impact on the test, the laptop will be removed from the test environment after the EUT successfully transmits at a fixed frequency using the laptop.

2 Summary of Test Result

No.	Standard Section	Test Item	Result	Remark
1	15.203/15.407	Antenna Requirement	Pass	
2	15.207	Power Line Conducted Emission	Pass	
3	15.407(b) 15.209	Radiation Spurious Emission	Pass	
4	15.407(a)	RF Output Power	Pass	
5	15.407(a)	Power Spectral Density	Pass	
6	15.407(a)	26dB Emission Bandwidth and Occupied bandwidth	Pass	
7	15.407(b)	Out Of Band Emission	Pass	
8	15.407(b)	Spurious RF Conducted Emissions	Pass	

3 Test Facilities and Accreditations

3.1 Test Laboratory

Test Site	Shenzhen HongBiao Certification& Testing Co., Ltd
Test Site Location	Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China
Telephone:	(86-755) 2998 9321
Fax:	(86-755) 2998 5110
FCC Registration No.:	CN1341
A2LA Certificate No.:	6765.01

3.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15°C~35°C
Relative Humidity:	20%~75%
Air Pressure:	98kPa~101kPa

3.3 Measurement Uncertainty

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

The data and results quoted in this document are true and accurate values, and uncertainties are not involved in the calculations.

In addition, components and mass production processes that are similar to testing equipment may introduce additional deviations, and the manufacturer is solely responsible for the continued compliance of the equipment.

Measurement Frequency Range	U, (dB)	Note
RF frequency	2×10^{-5}	
RF power, conducted	± 0.57 dB	
Conducted emission(150kHz~30MHz)	± 2.5 dB	
Radiated emission(9kHz-30MHz)	± 2.5 dB	
Radiated emission(30MHz~1GHz)	± 4.2 dB	
Radiated emission (above 1GHz)	± 4.7 dB	
Occupied Bandwidth	$\pm 3\%$	
Temperature	± 1 degree	

Humidity	$\pm 5 \%$	
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3.4 Test Software

Software name	Manufacturer	Model	Version
Conducted Emission test Software	Farad	EZ-EMC	EMC-CON 3A1.1+
Radiated Emission test Software	Farad	EZ-EMC	FA-03A2
RF Test System	MWRF	MTS 8310	2.0.0.0

4 List of Test Equipment

Radiation emission							
Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E001	Horn Antenna	Schwarzbeck	BBHA 9120D	02592	2024-05-18	2026-05-17
2	HB-E002	Biconical log-periodic composite antenna	Schwarzbeck	VULB 9168	01340	2024-05-18	2026-05-17
3	HB-E003	SHF-EHF Horn	Schwarzbeck	BBHA 91270	01193	2024-05-18	2026-05-17
4	HB-E005	Preamplifier	Noyetec	LAN-0118	NYCM1420102	2025-05-07	2026-05-06
5	HB-E006	Preamplifier	Noyetec	LAN-1840	NYCM1420103	2025-05-07	2026-05-06
6	HB-E007	EMI TEST RECEIVER	R&S	ESR7	102520	2025-05-07	2026-05-06
7	HB-E009	POSITINAL COTROLLE R	Noyetec	N/A	N/A	/	/
8	HB-E013	RF switch	Noyetec	NY-RF4	NY0CM1420204	/	/
9	HB-E066	Illuminance Tester	TASI	TA8121	N/A	2025-05-13	2026-05-12
10	HB-E075	Active loop antenna	Schwarzbeck	FMZB 1519B	1519B-245	2024-05-18	2026-05-17
11	HB-E076	Preamplifier	Hewlett Packard	8447D	1937A02278	2025-05-07	2026-05-06
Conduction emission							
Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E014	4 Path V-LISN	Schwarzbeck	NNLK 8121	00770	2025-05-07	2026-05-06
2	HB-E015	Pulse Limiter	Schwarzbeck	VTSD 9561-F	00949	2025-05-07	2026-05-06
3	HB-E016	ZN23201	Noyetec	ZN23201	N/A	2025-05-10	2026-05-09
4	HB-E059	Attenuator	Xianghua	TS2-6-1	220215166	2025-05-10	2026-05-09
5	HB-E069	EMI TEST RECEIVER	R&S	ESCI	N/A	2025-05-07	2026-05-06
RF							
Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E041	MXG AnaioG Signal Generator	Agilent	N5181A	MY47070421	2025-05-07	2026-05-06

2	HB-E042	WIDEBAND RADIO COMMUNICA TION TESTER	R&S	CMW500	132108	2025-05-08	2026-05-07
3	HB-E043	MXG Anaio Signal Generator	Agilent	N5182A	US46240335	2025-05-08	2026-05-07
4	HB-E044	Signal& spectrum Analyzer	R&S	FSV3044	101264	2025-05-07	2026-05-06
5	HB-E045	RF Control Box	Noyetec	NY100-R FCB	N/A	2025-05-08	2026-05-07
6	HB-E058	Thermometer Clock Humidity Monitor	N/A	HTC-1S	N/A	2025-05-09	2026-05-08

Note: the calibration interval of the above test instruments is 12&24 months and the calibrations are traceable to international system unit (SI).

5 Test Item And Results

5.1 Antenna Requirement

5.1.1 Standard Requirement

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

5.1.2 Test Result

The antenna is Chip Antenna, which was permanently affixed to the device and un-replaced, complies with 15.203. In addition, the maximum antenna gain is 1.86dBi.

5.2 Power Line Conducted Emission

5.2.1 Limits

Limits – Class B		
Frequency (MHz)	Limit (dBμV)	
	Quasi-Peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5	56	46
5 to 30	60	50
Note: 1. the tighter limit applies at the band edges. 2. the limit of "*" marked band means the limitation decreases linearly with the logarithm of the frequency in the range.		

5.2.2 Test Procedures

a) EUT Operating Conditions

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

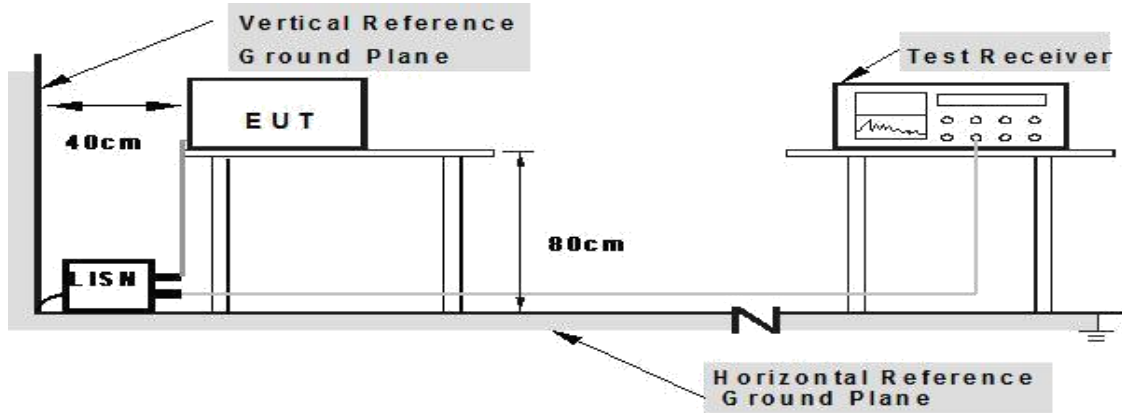
b) The following table is the setting of the receiver

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

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

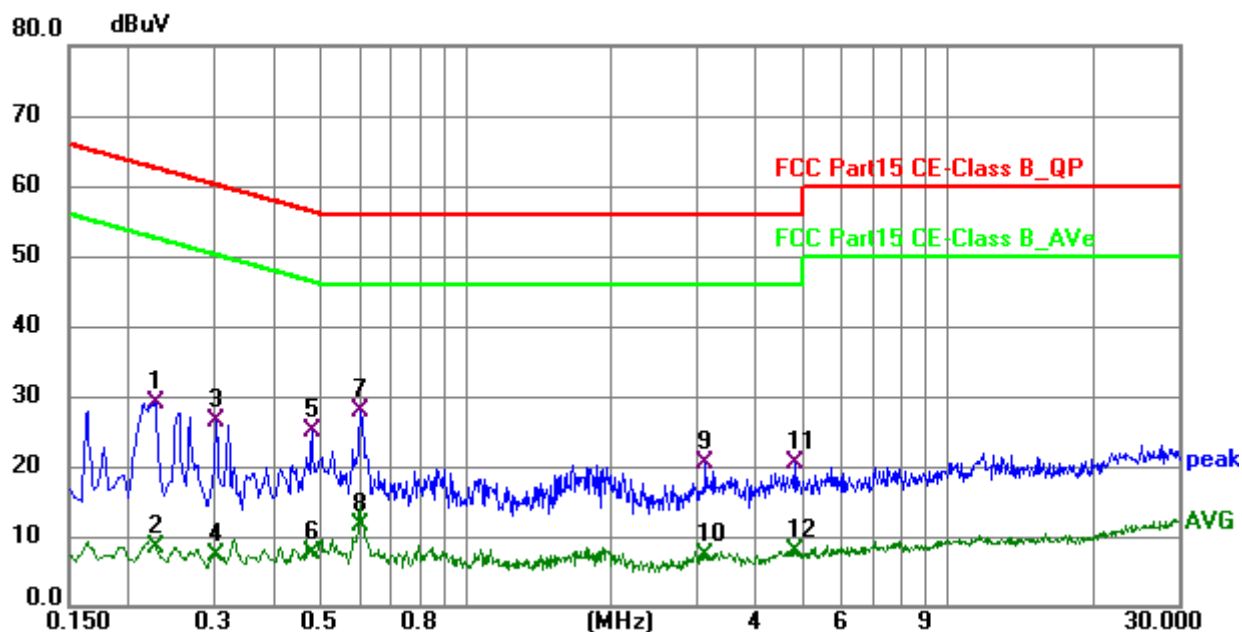
setup.

5.2.3 Test Setup



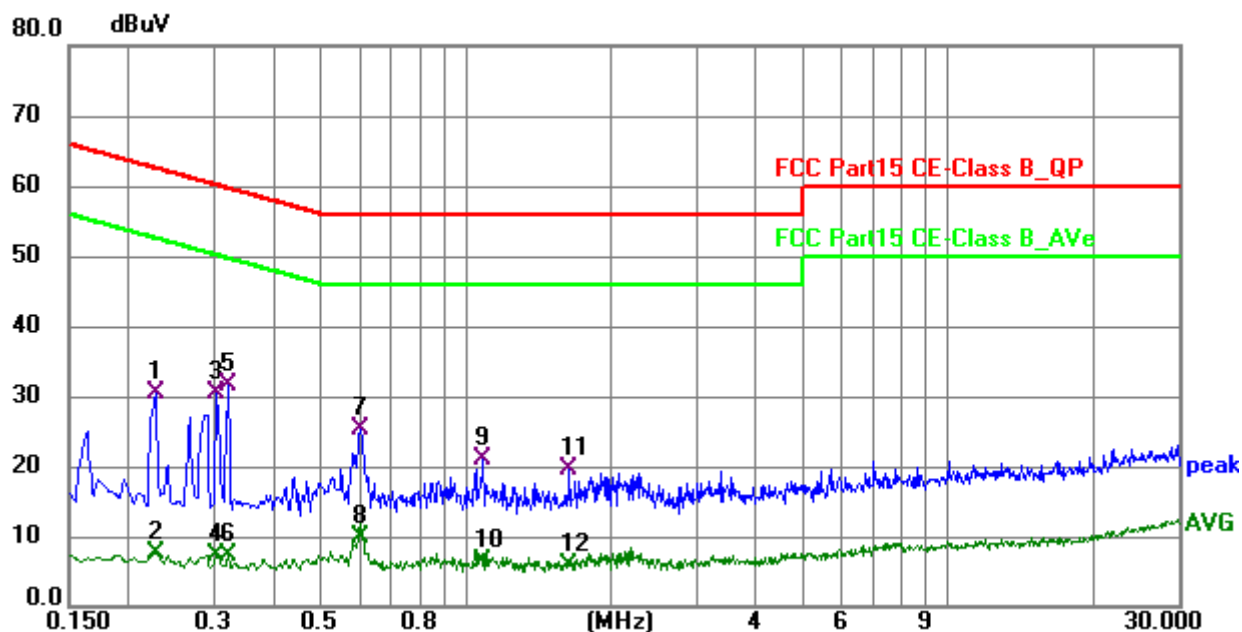
5.2.4 Test Result

EUT:	Plaud Note Pro AI Note Taker	Model Name:	PN0300
Test Mode:	Charging + TX	Phase:	L
Test Voltage:	DC 5V from adapter AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.227	18.82	10.11	28.93	62.56	-33.63	QP
2	0.227	-1.77	10.11	8.34	52.56	-44.22	AVG
3	0.303	16.29	10.08	26.37	60.16	-33.79	QP
4	0.303	-2.76	10.08	7.32	50.16	-42.84	AVG
5	0.478	14.85	10.10	24.95	56.37	-31.42	QP
6	0.478	-2.57	10.10	7.53	46.37	-38.84	AVG
7 *	0.605	17.74	10.11	27.85	56.00	-28.15	QP
8	0.605	1.32	10.11	11.43	46.00	-34.57	AVG
9	3.151	9.88	10.68	20.56	56.00	-35.44	QP
10	3.151	-3.41	10.68	7.27	46.00	-38.73	AVG
11	4.848	8.98	11.33	20.31	56.00	-35.69	QP
12	4.848	-3.43	11.33	7.90	46.00	-38.10	AVG

EUT:	Plaud Note Pro AI Note Taker	Model Name:	PN0300
Test Mode:	Charging + TX	Phase:	N
Test Voltage:	DC 5V from adapter AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.227	20.16	10.14	30.30	62.56	-32.26	QP
2	0.227	-2.54	10.14	7.60	52.56	-44.96	AVG
3	0.303	20.42	10.12	30.54	60.16	-29.62	QP
4	0.303	-2.76	10.12	7.36	50.16	-42.80	AVG
5 *	0.321	21.33	10.13	31.46	59.68	-28.22	QP
6	0.321	-2.97	10.13	7.16	49.68	-42.52	AVG
7	0.605	15.17	10.12	25.29	56.00	-30.71	QP
8	0.605	-0.22	10.12	9.90	46.00	-36.10	AVG
9	1.086	10.77	10.15	20.92	56.00	-35.08	QP
10	1.086	-3.60	10.15	6.55	46.00	-39.45	AVG
11	1.639	9.28	10.27	19.55	56.00	-36.45	QP
12	1.639	-4.40	10.27	5.87	46.00	-40.13	AVG

5.3 Radiated Emission

5.3.1 Limits

1. For transmitters operating in the 5.15-5.25 GHz band:

All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

2. For transmitters operating in the 5.25-5.35 GHz band:

All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

3. For transmitters operating in the 5.47-5.725 GHz band:

All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

4. For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

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

Frequency Range	RBW	VBW	Measurement
30MHz-1GHz	1MHz	3MHz	Peak
Above 1GHz	1MHz	10Hz ^{Note1}	Average
	1MHz	>1/T ^{Note2}	Average
Note1	When duty cycle is no less than 98%		

Note2	When duty cycle is less than 98%
-------	----------------------------------

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

5.3.2 Test Procedures

The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.

The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

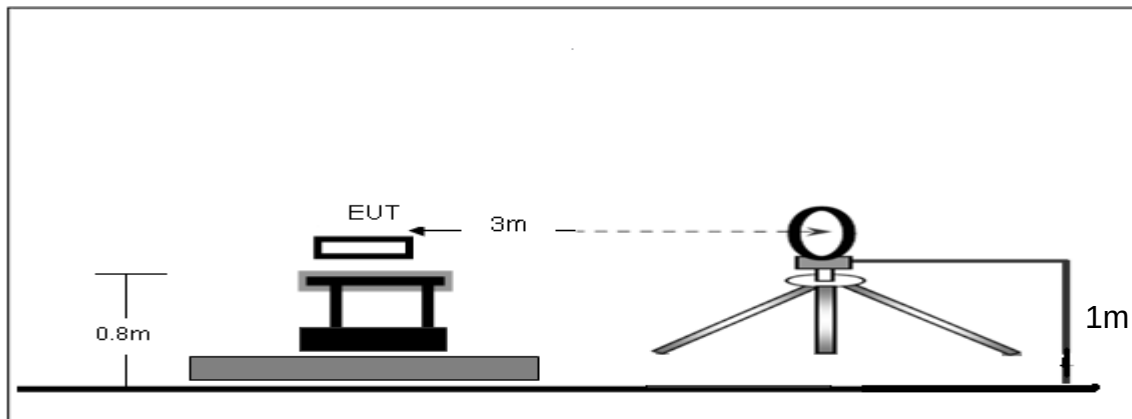
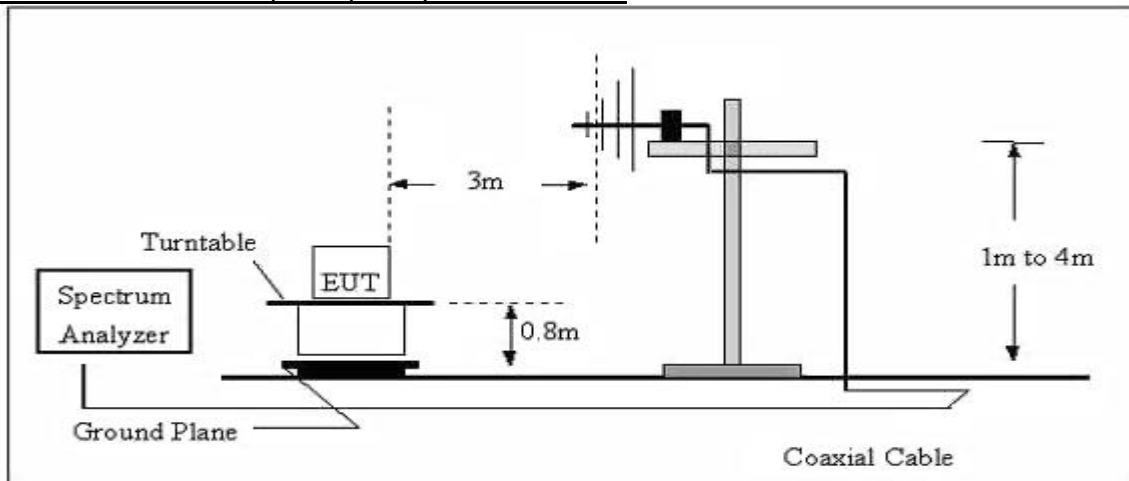
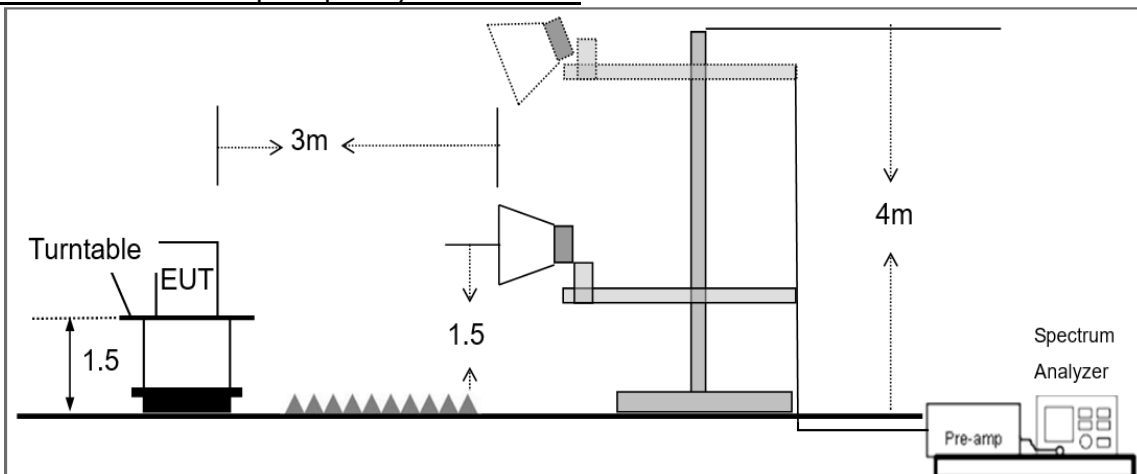
For emission measurements above 1 GHz, the EUT shall be placed at a height of 1.5 m above the floor on a support that is RF transparent for the frequencies of interest. Final measurements for the EUT require a measurement antenna height scan of 1 m to 4 m.

The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. For the actual test configuration, please refer to the related Item –EUT Test Photos.

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

5.3.3 Test Setup

Radiated Emission Test-Up Frequency Below 30MHzRadiated Emission Test-Up Frequency 30MHz~1GHzRadiated emission test-up frequency above 1GHz**5.3.4 Test Result**

Below 30MHz

EUT:	Plaud Note Pro AI Note Taker	Model Name:	PN0300
Pressure:	1010 hPa	Test Voltage:	DC 3.87V from battery
Test Mode:	TX	Polarization:	--

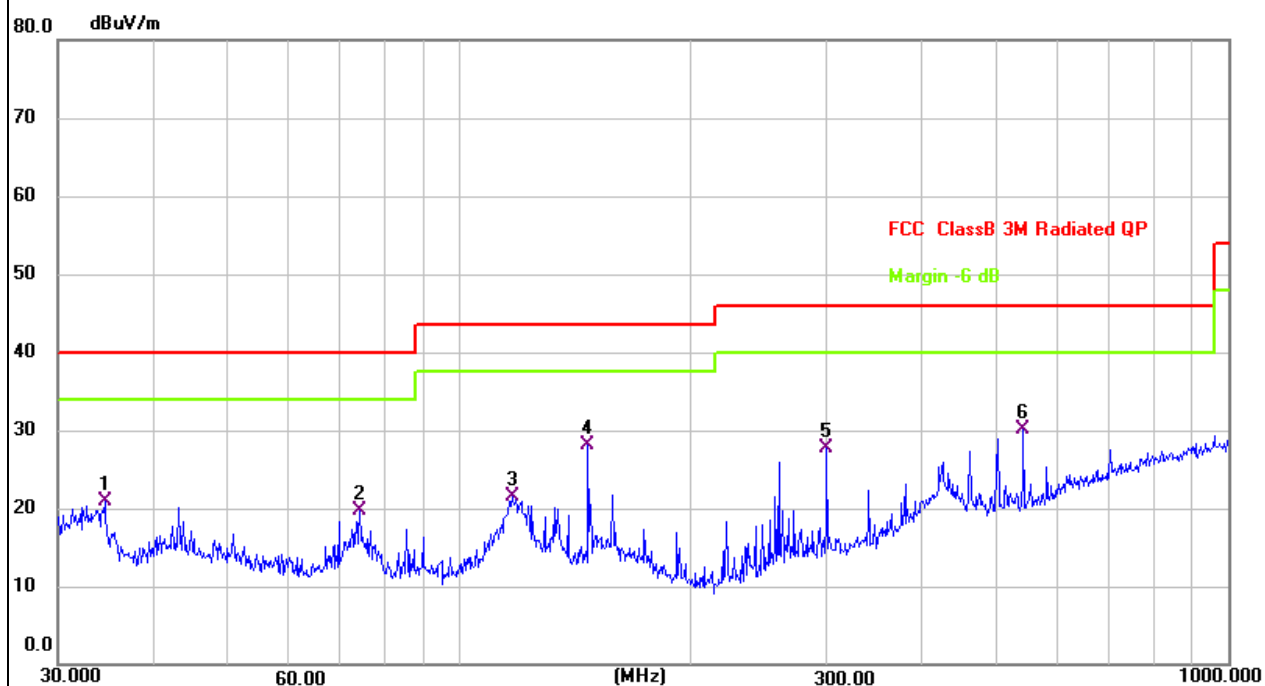
Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	Pass
--	--	--	--	Pass

Note:

1. For 9kHz-30MHz, the amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
2. Distance extrapolation factor = $40 \log (\text{specific distance}/\text{test distance})$ (dB);
3. Limit line = specific limits (dBuV) + distance extrapolation factor.

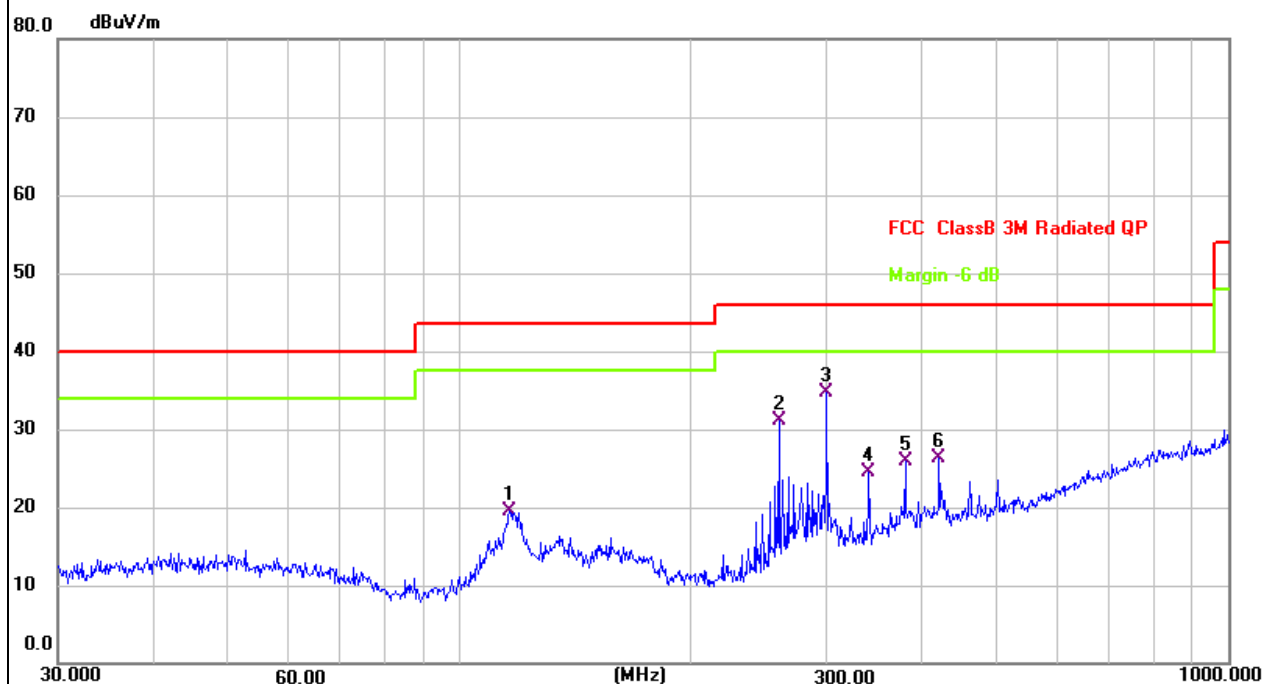
Frequency range (30MHz – 1GHz)

EUT:	Plaud Note Pro AI Note Taker	Model Name:	PN0300
Test Mode:	TX	Phase:	Vertical
Test Voltage:	DC 3.87V from battery		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	34.5173	35.62	-14.69	20.93	40.00	-19.07	QP
2	74.1351	36.47	-16.68	19.79	40.00	-20.21	QP
3	116.9495	37.27	-15.84	21.43	43.50	-22.07	QP
4 *	146.8877	41.81	-13.66	28.15	43.50	-15.35	QP
5	300.3672	40.21	-12.46	27.75	46.00	-18.25	QP
6	541.3725	36.45	-6.31	30.14	46.00	-15.86	QP

EUT:	Plaud Note Pro AI Note Taker	Model Name:	PN0300
Test Mode:	TX	Phase:	Horizontal
Test Voltage:	DC 3.87V from battery		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	116.1321	35.43	-16.01	19.42	43.50	-24.08	QP
2	260.1444	45.11	-14.05	31.06	46.00	-14.94	QP
3 *	300.3672	47.15	-12.46	34.69	46.00	-11.31	QP
4	340.7817	35.84	-11.25	24.59	46.00	-21.41	QP
5	379.9141	36.02	-10.17	25.85	46.00	-20.15	QP
6	420.5803	34.96	-8.74	26.22	46.00	-19.78	QP

Frequency range (1GHz-40GHz)

For U-NII-1

Polar	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamplifier Factor	Emission Level	Limits	Margin	Detector Type
(H/V)	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G									
Vertical	4436.259	56.51	5.94	35.40	44.00	53.85	74.00	-20.15	Pk
Vertical	4434.347	45.17	5.94	35.40	44.00	42.51	54.00	-11.49	AV
Vertical	10371.322	61.94	8.46	39.75	44.50	65.65	74.00	-8.35	Pk
Vertical	10371.569	43.67	8.46	39.75	44.50	47.38	54.00	-6.62	Pk
Vertical	15541.547	55.39	10.12	38.80	44.10	60.21	74.00	-13.79	AV
Horizontal	15540.917	42.23	10.12	38.80	42.70	48.45	54.00	-5.55	Pk
Horizontal	4435.827	58.86	5.94	35.18	44.00	55.98	74.00	-18.02	AV
Horizontal	4435.616	43.63	5.94	35.18	44.00	40.75	54.00	-13.25	Pk
Horizontal	10371.979	60.53	8.46	38.71	44.50	63.20	74.00	-10.80	Pk
Horizontal	10731.764	45.20	8.46	38.71	44.50	47.87	54.00	-6.13	AV
middle Channel (5200 MHz)-Above 1G									
Vertical	4593.765	58.47	6.48	36.35	44.05	57.25	74.00	-16.75	Pk
Vertical	4593.944	42.80	6.48	36.35	44.05	41.58	54.00	-12.42	AV
Vertical	10402.963	60.75	8.47	37.88	44.51	62.59	74.00	-11.41	Pk
Vertical	10401.447	46.32	8.47	37.88	44.51	48.16	54.00	-5.84	Pk
Vertical	15600.561	56.48	10.12	38.8	44.10	61.30	74.00	-12.70	AV
Horizontal	15601.316	41.41	10.12	38.8	42.70	47.63	54.00	-6.37	Pk
Horizontal	4592.852	59.74	6.48	36.37	44.05	58.54	74.00	-15.46	AV
Horizontal	4592.786	42.83	6.48	36.37	44.05	41.63	54.00	-12.37	Pk
Horizontal	10401.241	60.74	8.47	38.64	44.50	63.35	74.00	-10.65	Pk
Horizontal	10400.760	46.35	8.47	38.64	44.50	48.96	54.00	-5.04	AV
High Channel (5240 MHz)-Above 1G									
Vertical	4740.225	60.16	7.10	37.24	43.50	61.00	74.00	-13.00	Pk
Vertical	4740.415	45.41	7.10	37.24	43.50	46.25	54.00	-7.75	AV
Vertical	10481.824	61.02	8.46	37.68	44.50	62.66	74.00	-11.34	Pk
Vertical	10482.268	45.17	8.46	37.68	44.50	46.81	54.00	-7.19	Pk
Vertical	15720.517	57.52	10.12	38.8	44.10	62.34	74.00	-11.66	AV
Horizontal	15721.196	43.21	10.12	38.8	42.70	49.43	54.00	-4.57	Pk
Horizontal	4740.723	59.58	7.10	37.24	43.50	60.42	74.00	-13.58	AV
Horizontal	4739.654	44.22	7.10	37.24	43.50	45.06	54.00	-8.94	Pk
Horizontal	10481.599	59.62	8.46	38.57	44.50	62.15	74.00	-11.85	Pk
Horizontal	10483.130	43.88	8.46	38.57	44.50	46.41	54.00	-7.59	AV

Note:

All modes have been tested, and only the worst mode 802.11a mode is mentioned in the report.

5.3.5 Radiated Band Edge

For U-NII-1

For 802.11a mode: (CH36 5180MHz&CH48 5240MHz)

Polarization	Frequency	Read Level	Cable loss	Antenna Factor	Preamplifier Factor	Emission Level	Limits	Over Limit	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Horizontal	5150.00	65.78	8.69	29.4	42.59	61.28	74	-12.72	Pk
Horizontal	5350.00	63.64	9.37	30.41	43.25	60.17	74	-13.83	Pk
Horizontal	5460.00	63.94	9.37	30.41	43.25	60.47	74	-13.53	Pk
Vertical	5150.00	69.47	9.21	29.4	42.59	65.49	74	-8.51	Pk
Vertical	5350.00	59.38	9.12	30.41	43.25	55.66	74	-18.34	Pk
Vertical	5460.00	68.73	9.21	29.4	42.59	64.75	74	-9.25	Pk
Polarization	Frequency	Read Level	Cable loss	Antenna Factor	Preamplifier Factor	Emission Level	Limits	Over Limit	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Horizontal	5150.00	46.55	8.69	29.4	42.59	42.05	54	-11.95	AV
Horizontal	5350.00	51.46	8.46	30.41	43.25	47.08	54	-6.92	AV
Horizontal	5460.00	46.91	8.69	29.4	42.59	42.41	54	-11.59	AV
Vertical	5150.00	48.64	9.21	29.4	42.59	44.66	54	-9.34	AV
Vertical	5350.00	51.13	9.12	30.41	43.25	47.41	54	-6.59	AV
Vertical	5460.00	51.50	9.12	30.41	43.25	47.78	54	-6.22	AV

For 802.11n-(HT20) mode: (CH36 5180MHz&CH48 5240MHz)

Polarization	Frequency	Read Lavel	Cable loss	Antenna Factor	Preampl Factor	Emission Level	Limits	Over Limit	Detector Type
/	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Horizontal	5150.00	65.02	8.69	29.4	42.59	60.52	74	-13.48	Pk
Horizontal	5350.00	68.32	9.37	30.41	43.25	64.85	74	-9.15	Pk
Horizontal	5460.00	65.87	8.69	29.4	42.59	61.37	74	-12.63	Pk
Vertical	5150.00	65.44	9.21	29.4	42.59	61.46	74	-12.54	Pk
Vertical	5350.00	68.80	9.12	30.41	43.25	65.08	74	-8.92	Pk
Vertical	5460.00	66.58	9.21	29.4	42.59	62.60	74	-11.40	Pk
Polarization	Frequency	Read Lavel	Cable loss	Antenna Factor	Preampl Factor	Emission Level	Limits	Over Limit	Detector Type
/	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Horizontal	5150.00	47.89	8.69	29.4	42.59	43.39	54	-10.61	AV
Horizontal	5350.00	45.85	8.46	30.41	43.25	41.47	54	-12.53	AV
Horizontal	5460.00	47.26	8.69	29.4	42.59	42.76	54	-11.24	AV
Vertical	5150.00	50.14	9.21	29.4	42.59	46.16	54	-7.84	AV
Vertical	5350.00	50.15	9.12	30.41	43.25	46.43	54	-7.57	AV
Vertical	5460.00	50.49	9.21	29.4	42.59	46.51	54	-7.49	AV

For 802.11n-(HT40) mode: (CH38 5190MHz)

Polarization	Frequency	Read Lavel	Cable loss	Antenna Factor	Preampl Factor	Emission Level	Limits	Over Limit	Detec tor Type
/	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Horizontal	5150.00	68.34	8.69	29.4	42.59	63.84	74	-10.16	Pk
Horizontal	5350.00	60.80	9.37	30.41	43.25	57.33	74	-16.67	Pk
Horizontal	5460.00	68.28	8.69	29.4	42.59	63.78	74	-10.22	Pk
Vertical	5150.00	65.30	9.21	29.4	42.59	61.32	74	-12.68	Pk
Vertical	5350.00	59.76	9.12	30.41	43.25	56.04	74	-17.96	Pk
Vertical	5460.00	65.40	9.21	29.4	42.59	61.42	74	-12.58	Pk
Polarization	Frequency	Read Lavel	Cable loss	Antenna Factor	Preampl Factor	Emission Level	Limits	Over Limit	Detec tor Type
/	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Horizontal	5150.00	45.59	8.69	29.4	42.59	41.09	54	-12.91	AV
Horizontal	5350.00	46.82	8.46	30.41	43.25	42.44	54	-11.56	AV
Horizontal	5460.00	48.03	8.69	29.4	42.59	43.53	54	-10.47	AV
Vertical	5150.00	50.15	9.21	29.4	42.59	46.17	54	-7.83	AV
Vertical	5350.00	50.23	9.12	30.41	43.25	46.51	54	-7.49	AV
Vertical	5460.00	50.23	9.21	29.4	42.59	46.25	54	-7.75	AV

5.4 Peak Output Power

5.4.1 Limit

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz band

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

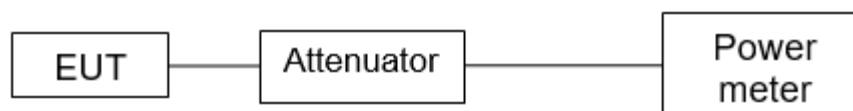
For the band 5.725-5.85 GHz

The maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.4.2 Test Procedure

The maximum peak conducted output power may be measured using a broadband Average RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the emission bandwidth and utilize a fast-responding diode detector.

5.4.3 Test Setup



5.4.4 Test Results

EUT:	Plaud Note Pro AI Note Taker	Model Name:	PN0300
Test Mode:	TX	Test Voltage:	DC 3.87V from battery

For U-NII-1

Modulation mode	Test Channel	Frequency(MHz)	Average Conducted Power		Limit(mW)
			(dBm)	(mW)	
11a	CH36	5180	13.24	21.09	250
11a	CH40	5200	13.63	23.07	250
11a	CH48	5240	13.29	21.33	250
11n (HT20)	CH36	5180	14.38	27.42	250
11n (HT20)	CH40	5200	13.07	20.28	250
11n (HT20)	CH48	5240	14.18	26.18	250
11n (HT40)	CH38	5190	9.3	8.51	250
11n (HT40)	CH46	5230	9.63	9.18	250

5.5 Power Spectral Density

5.5.1 Limit

For the band 5.15-5.25 GHz

For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz

The maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.5.2 Test Procedure

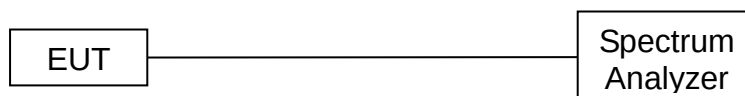
For U-NII-1

1. Set analyzer center frequency to NII channel center frequency.
2. Set the RBW $\geq$ 1MHz.
3. Set the VBW $\geq$ 3 x RBW.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level.

For U-NII-3

1. Set analyzer center frequency to NII channel center frequency.
2. Set the RBW $\geq$ 510kHz.
3. Set the VBW $\geq$ 3 x RBW.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level.

5.5.3 Test Setup

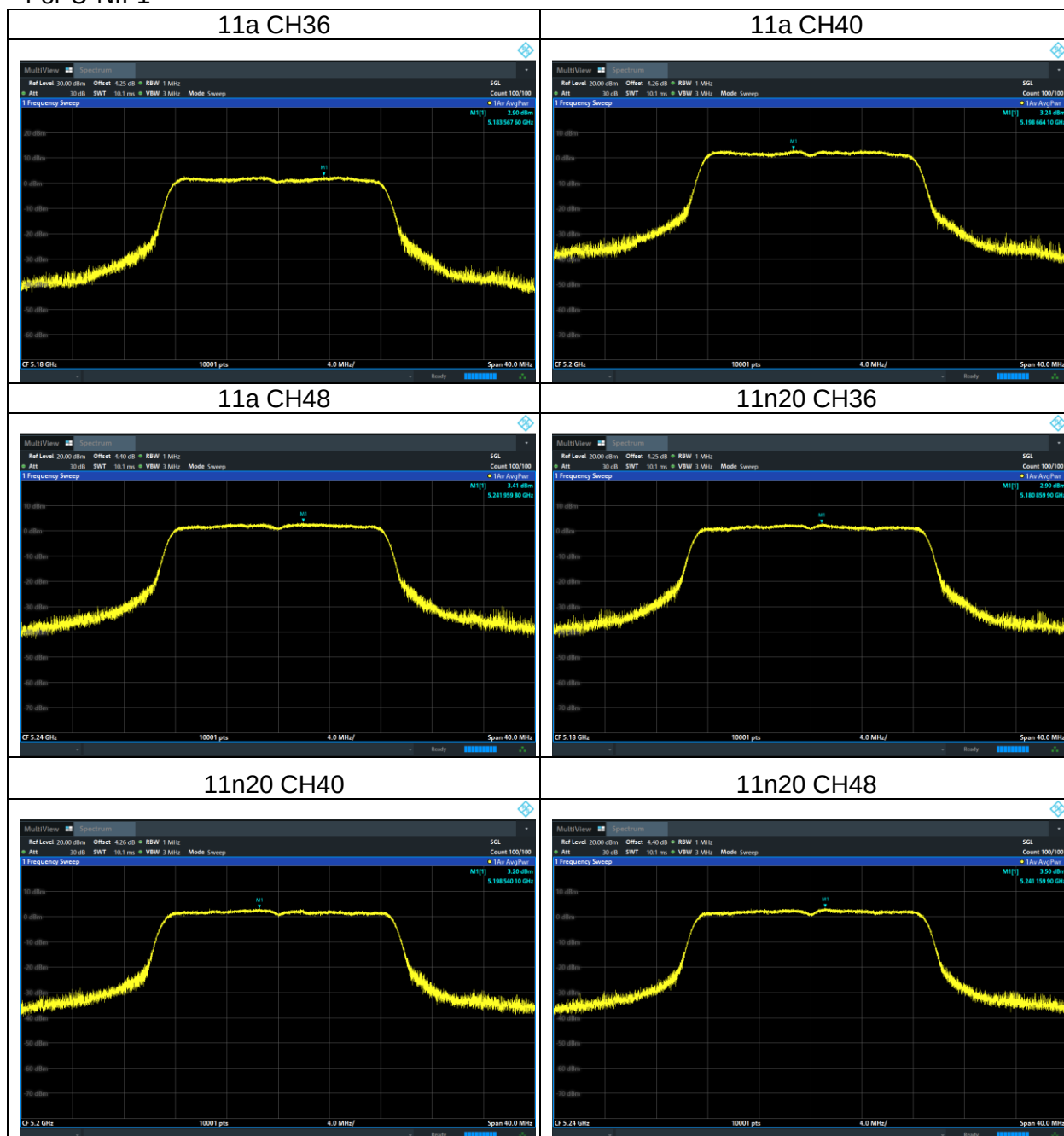


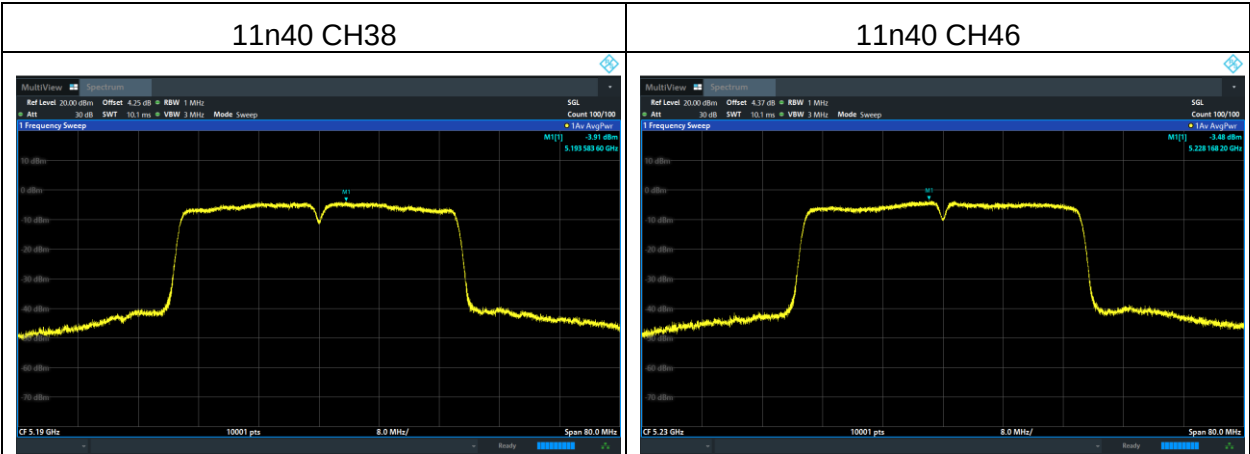
5.5.4 Test ResultsFor U-NII-1

Mode	Channel	Frequency(MHz)	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm/MHz)	Result
11a	CH36	5180	2.9	1.75	4.65	11	Pass
11a	CH40	5200	3.24	1.75	4.99	11	Pass
11a	CH48	5240	3.41	1.75	5.16	11	Pass
11n(HT20)	CH36	5180	2.9	1.85	4.75	11	Pass
11n(HT20)	CH40	5200	3.2	1.85	5.05	11	Pass
11n(HT20)	CH48	5240	3.5	1.85	5.35	11	Pass
11n(HT40)	CH38	5190	-3.91	3.18	-0.73	11	Pass
11n(HT40)	CH46	5230	-3.48	3.17	-0.31	11	Pass

Test plots

For U-NII-1





5.6 26dB Emission Bandwidth and Occupied bandwidth

5.6.1 Limit

For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier

5.6.2 Test Procedure

26dB Emission bandwidth

Set RBW = approximately 1% of the emission bandwidth.

Set VBW $\geq 3 \times \text{RBW}$

Detector = Peak.

Trace mode = Max hold.

Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

Occupied Bandwidth

Set Span = 1.5 times to 5.0 times the OBW

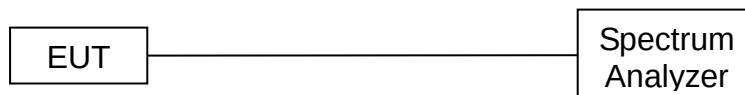
Set RBW = 1% to 5% of the OBW.

Set VBW $\geq 3 \times \text{RBW}$, Detector = Peak.

Trace mode = Max hold.

Use the 99% power bandwidth function of the instrument.

5.6.3 Test Setup



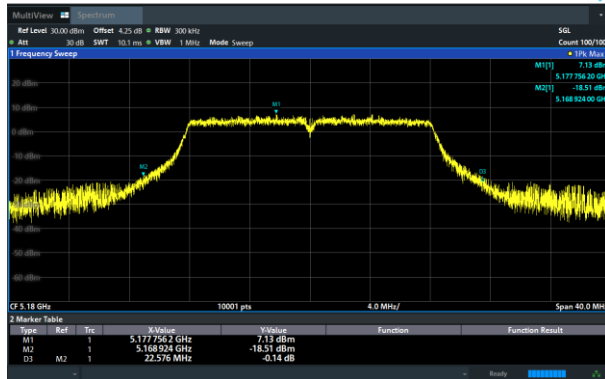
5.6.4 Test Results

For U-NII-1

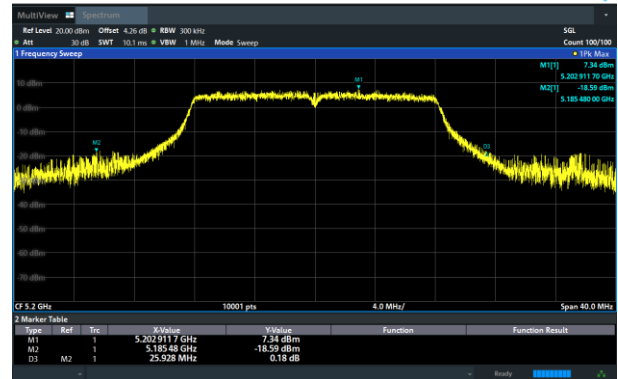
Channel	Test Channel	Frequency (MHz)	26dB bandwidth (MHz)	99% bandwidth	Limit (kHz)	Result
11a	CH36	5180	22.576	16.672	/	Pass
11a	CH40	5200	25.928	16.666	/	Pass
11a	CH48	5240	22.424	16.663	/	Pass
11n (HT20)	CH36	5180	30.748	17.873	/	Pass
11n (HT20)	CH40	5200	33.956	17.911	/	Pass
11n (HT20)	CH48	5240	25.568	17.882	/	Pass
11n (HT40)	CH38	5190	38.504	36.01	/	Pass
11n (HT40)	CH46	5230	38.552	36.023	/	Pass

Test plots:
For U-NII-1

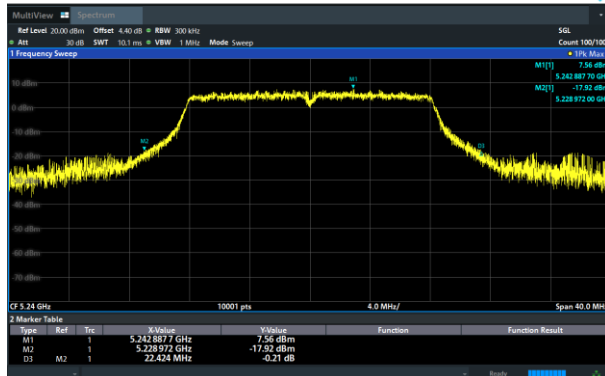
11a CH36_26dB



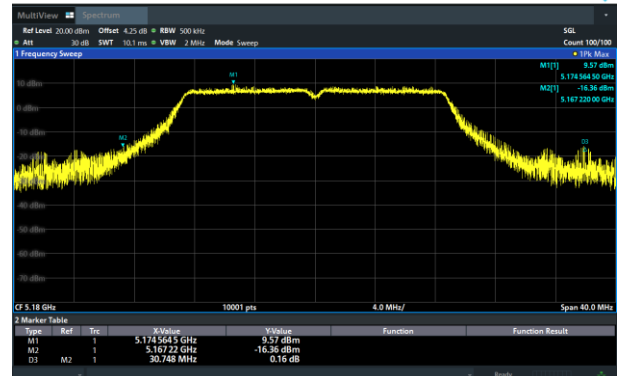
11a CH40_26dB



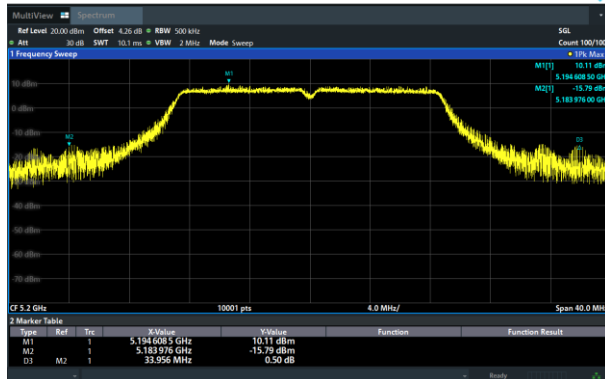
11a CH48_26dB



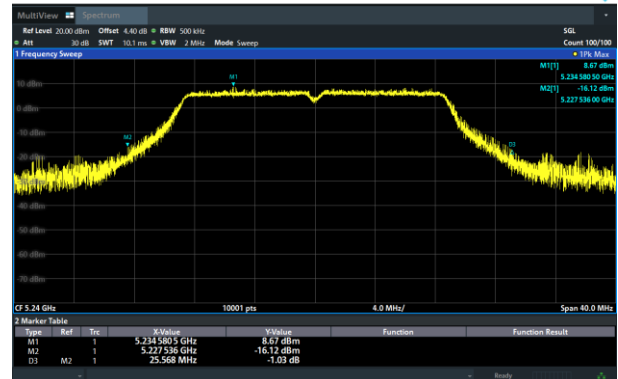
11n (HT20) CH36_26dB

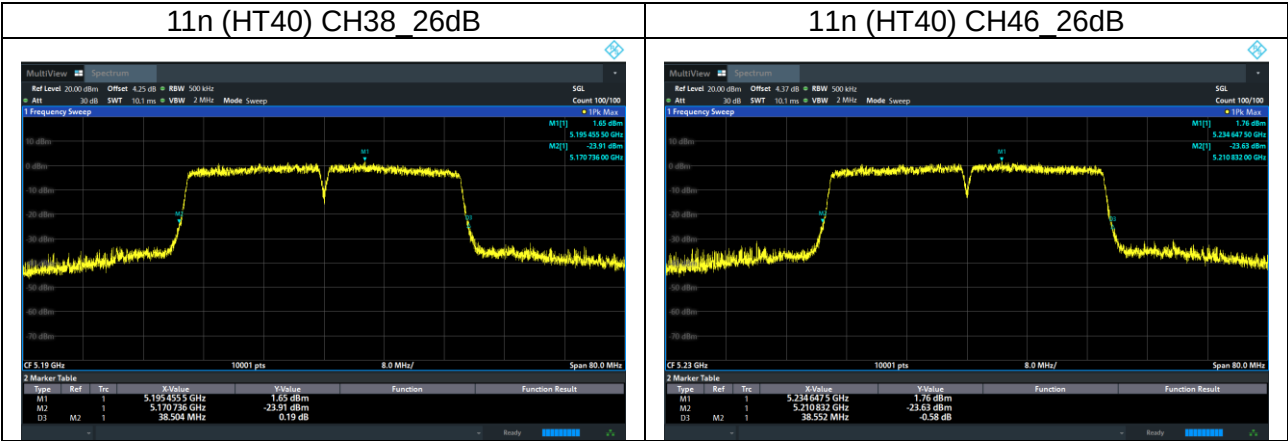


11n (HT20) CH40_26dB

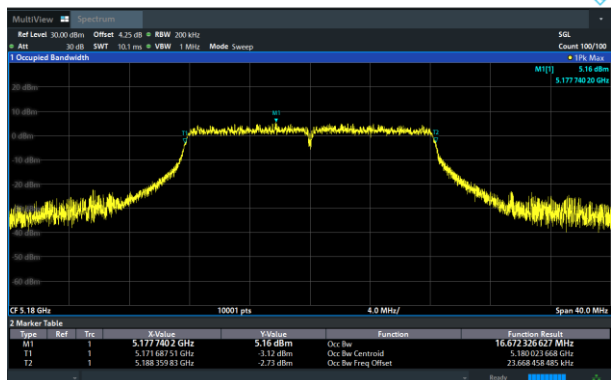


11n (HT20) CH48_26dB

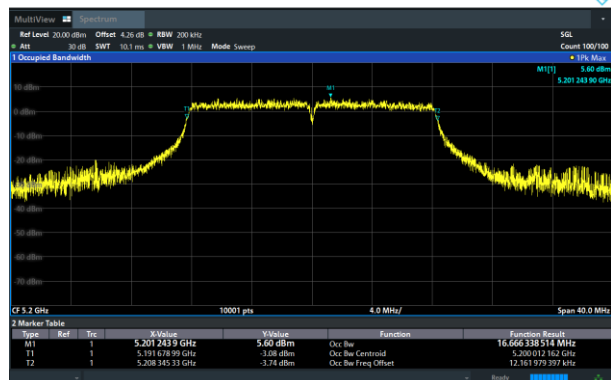




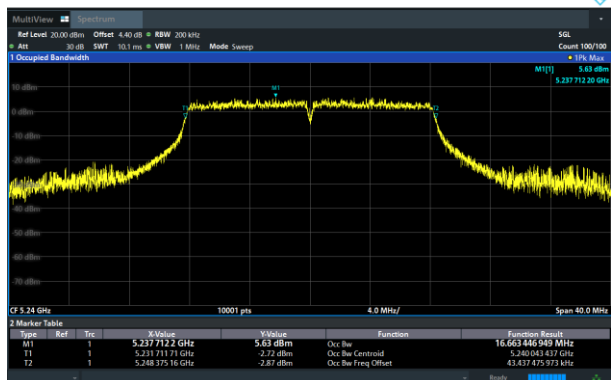
11a CH36_99%



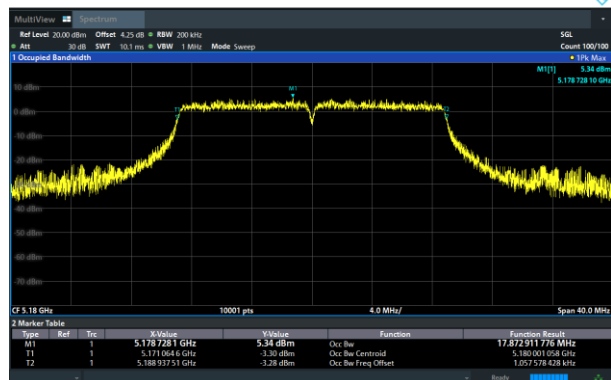
11a CH40_99%



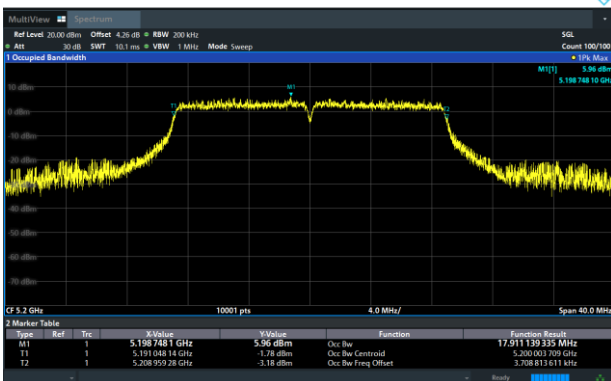
11a CH48_99%



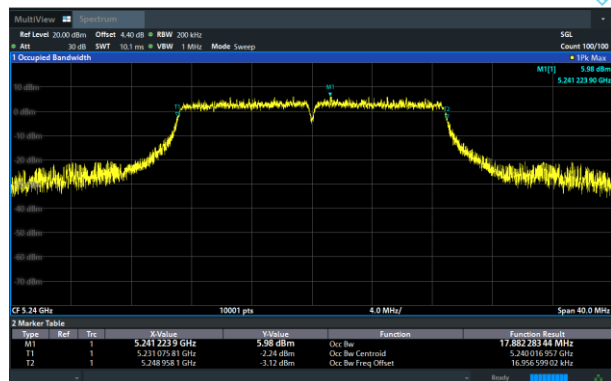
11n (HT20) CH36_99%

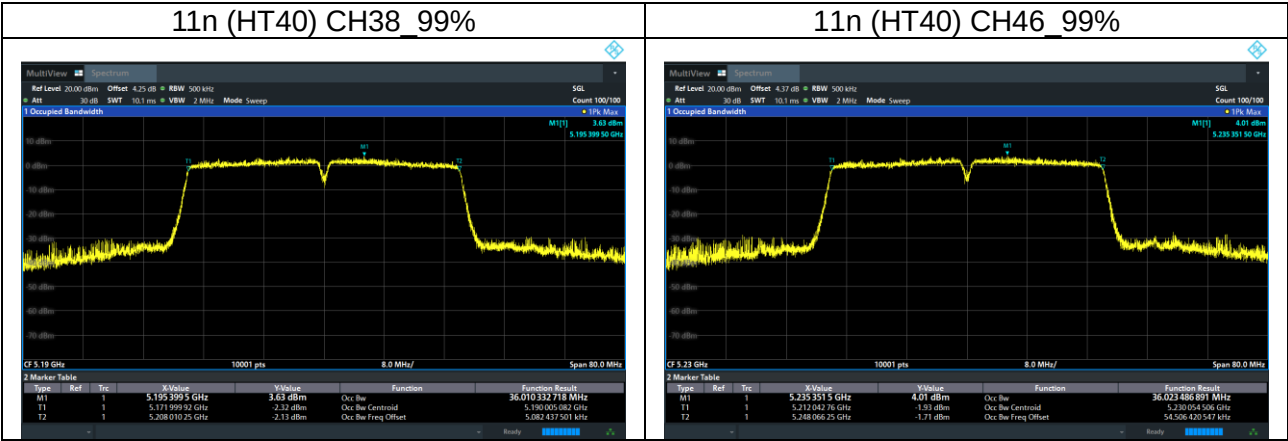


11n (HT20) CH40_99%



11n (HT20) CH48_99%





5.7 Out Of Band Emission

5.7.1 Limit

According to FCC §15.407(b).

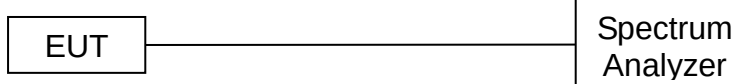
Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15–5.25 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25–5.35 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47–5.725 GHz band: All emissions outside of the 5.47–5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating solely in the 5.725–5.850 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

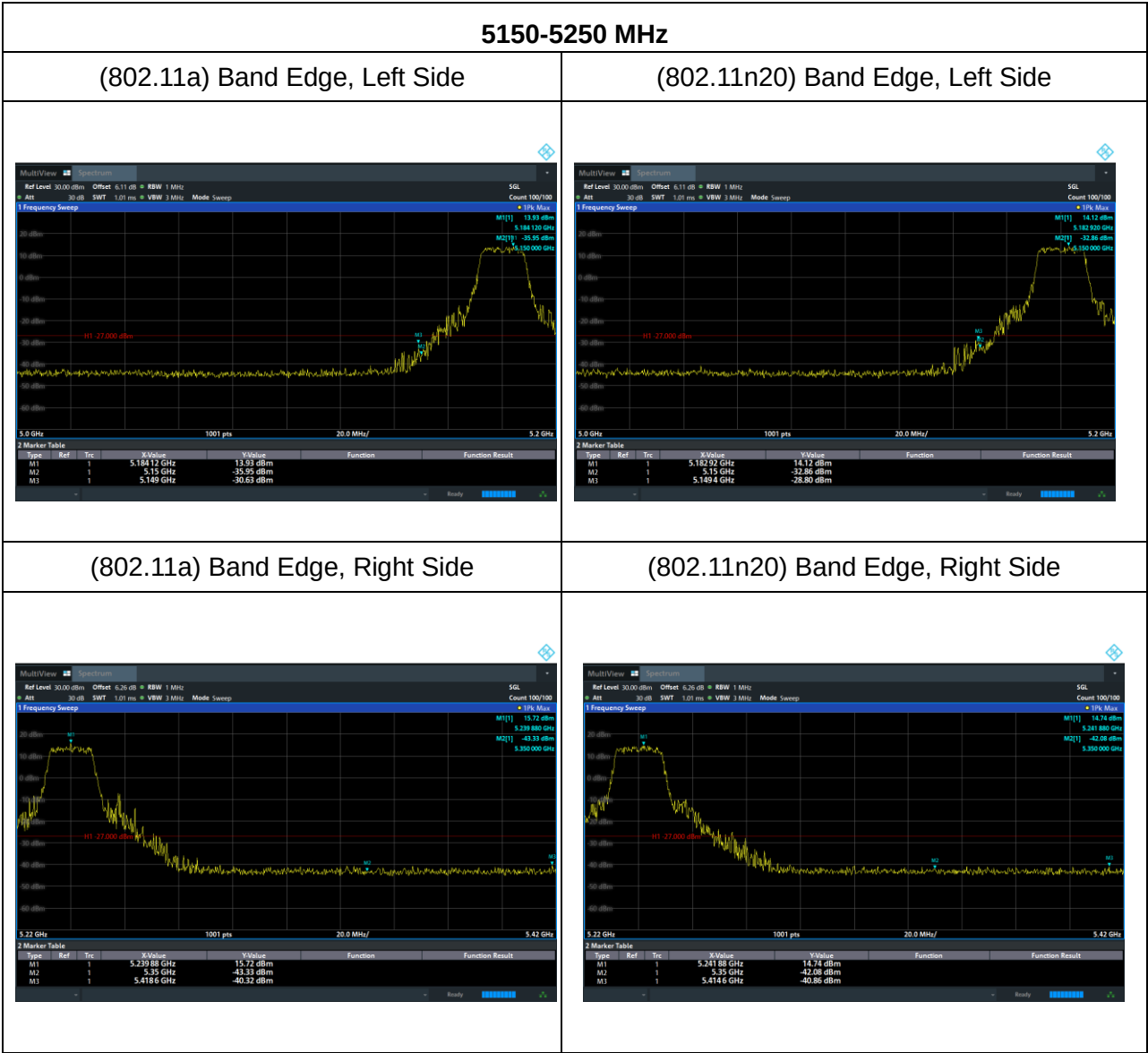
5.7.2 Test Procedure

- a) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- b) Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- c) Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
- d) Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- e) Repeat above procedures until all measured frequencies were complete.

5.7.3 Test Setup



5.7.4 Test Results



5150-5250 MHz	
(802.11n40) Band Edge, Left Side	/
	/
(802.11n40) Band Edge, Right Side	/
	/

5.8 Spurious RF Conducted Emissions

5.8.1 Limit

According to FCC §15.407(b).

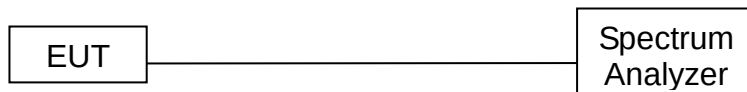
Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15–5.25 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25–5.35 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47–5.725 GHz band: All emissions outside of the 5.47–5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating solely in the 5.725–5.850 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

5.8.2 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2020 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBW=300kHz to measure the peak field strength, and measure frequency range from 9kHz to 26.5GHz.

5.8.3 Test Setup



5.8.4 Test Results

Note:

1: The measurement frequency range is from 9kHz to the 10th harmonic of the fundamental frequency; The lowest, middle and highest channels are tested to verify the spurious emissions and band edge measurement data.

U-NII-1

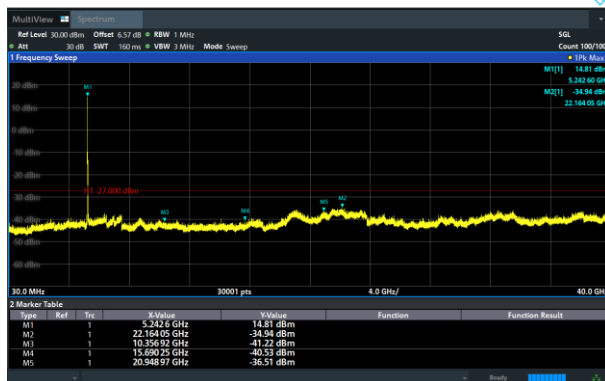
11a CH36



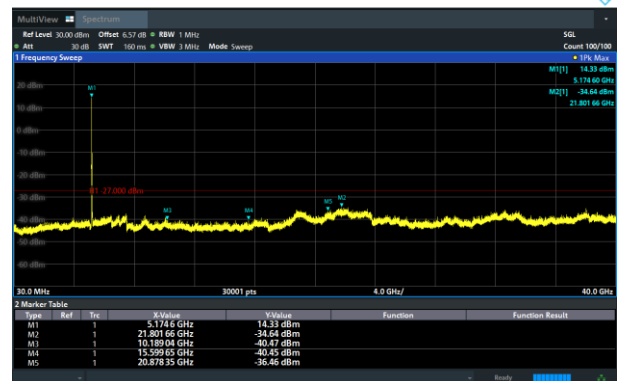
11a CH40



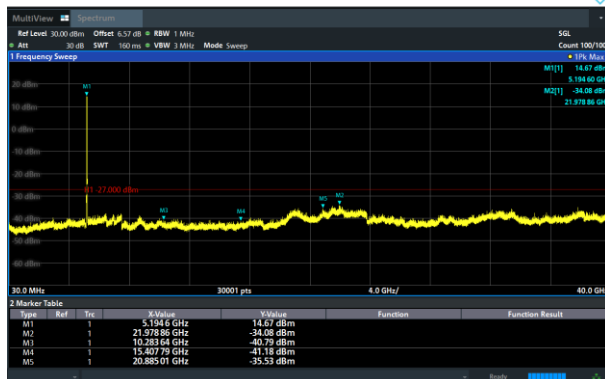
11a CH48



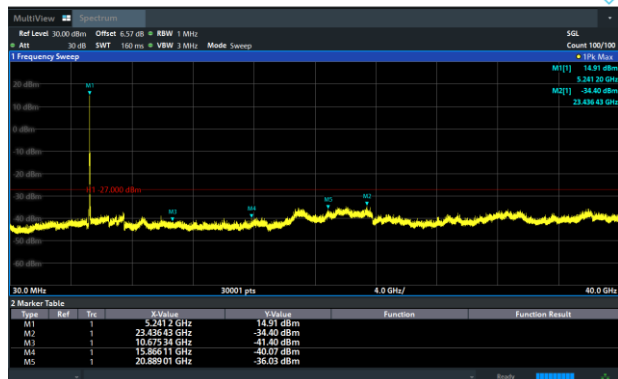
11n (HT20) CH36

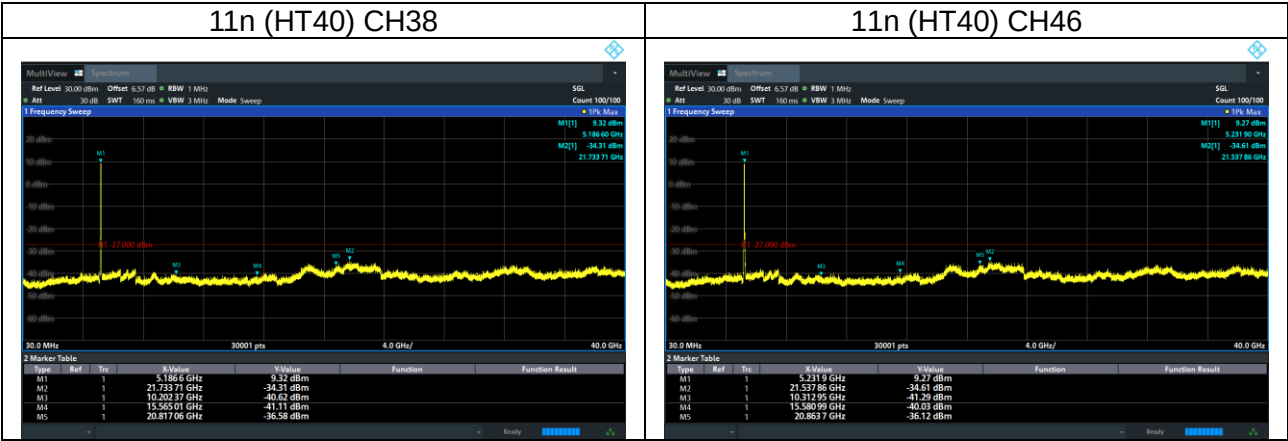


11n (HT20) CH40



11n (HT20) CH48





6 Photographs of the Test Setup

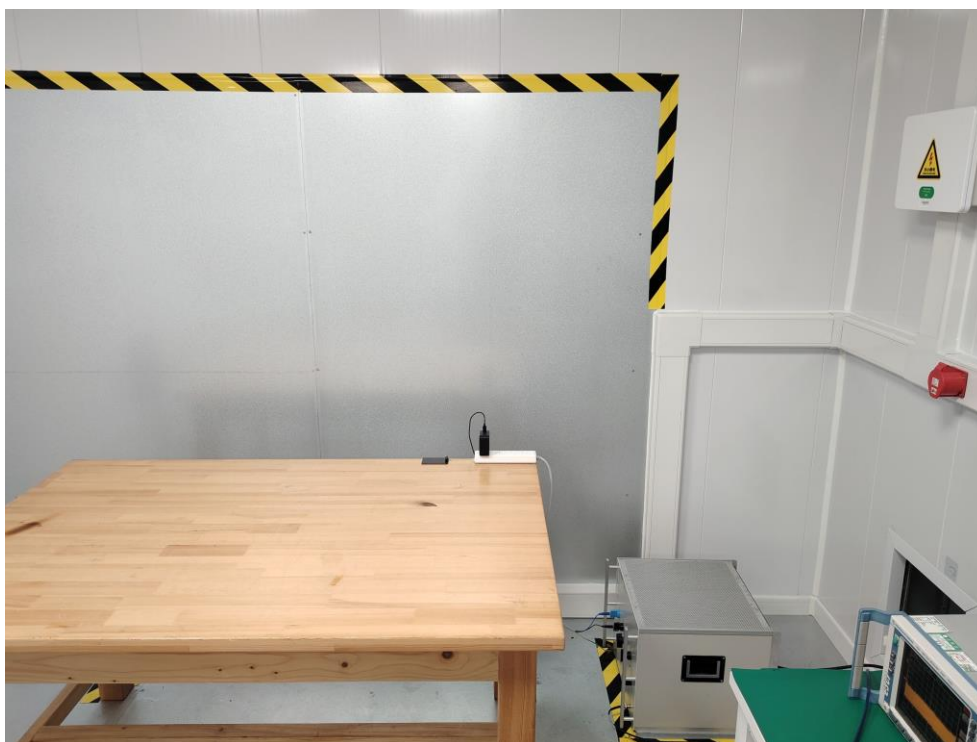
Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



Conducted Emission



7 Photographs of the EUT

Please refer to report HB20250626029E-01 for product photos.

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