

FCC ID: 2AQ8A-KP1LINKD

Report No.: T210716W04-RP2



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RADIO TEST REPORT FCC 47 CFR PART 15 SUBPART C

Test Standard FCC Part 15.247

Konil Tson

Product name Kapture WIFI Bridge

Brand Name Pamex

Model No. KP1-LINK

Test Result Pass

Statements of Determination of compliance is based on the results of the

Conformity compliance measurement, not taking into account

measurement instrumentation uncertainty.

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2013 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.

The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc. (Wugu Laboratory).

Approved by:

Kevin Tsai

Deputy Manager

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	August 18, 2021	Initial Issue	ALL	Doris Chu
01	August 31, 2021	See the following Note Rev. (01)	P.12	Doris Chu

Rev. (01)

^{1.} Revised test voltage in section 3.2.



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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	Pamex Inc. 4680 Vinita Court, Chino, CA, 91710, United States
Manufacturer	ALZK Co., Ltd. 9F., No. 36, Sec. 3, Bade Rd., Songshan Dist., Taipei City, Taiwan
Equipment	Kapture WIFI Bridge
Model No.	KP1-LINK
Model Discrepancy	N/A
Trade Name	Pamex
Received Date	July 16, 2021
Date of Test	July 28 ~ August 4, 2021
Power Supply	Power from host device.
HW Version	V0.0.4
SW Version	X1.00.04

Remark:

- 1. For more details, please refer to the User's manual of the EUT.
- 2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.



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1.2 EUT CHANNEL INFORMATION

Frequency Range	802.11b/g/n HT 20: 2412MHz ~ 2462MHz 802.11n HT40: 2422MHz ~ 2452MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT 20 MHz mode : OFDM 4. IEEE 802.11n HT 40 MHz mode : OFDM
Number of channel	1. IEEE 802.11b mode: 11 Channels 2. IEEE 802.11g mode: 11 Channels 3. IEEE 802.11n HT 20 MHz mode: 11 Channels 4. IEEE 802.11n HT 40 MHz mode: 7 Channels

Remark:

Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 and RSS-GEN Table A1 for test channels.

Number of frequencies to be tested					
Frequency range in Number of Location in frequency which device operates frequencies range of operation					
☐ 1 MHz or less	1	Middle			
1 MHz to 10 MHz 2 1 near top and 1 near bottom					
	3	1 near top, 1 near middle, and 1 near bottom			



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1.3 ANTENNA INFORMATION

Antenna Type	□ PCB □ Dipole □ Coils
Antenna Gain	Gain :3.3 dBi
Antenna Connector	N/A

Remark:

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
3M Semi Anechoic Chamber / 30M~200M	+/- 4.12
3M Semi Anechoic Chamber / 200M~1000M	+/- 4.68
3M Semi Anechoic Chamber / 1G~8G	+/- 5.18
3M Semi Anechoic Chamber / 8G~18G	+/- 5.47
3M Semi Anechoic Chamber / 18G~26G	+/- 3.81
3M Semi Anechoic Chamber / 26G~40G	+/- 3.87

Remark:

- 1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
- 2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

^{1.}The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203.



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1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan. (R.O.C.)

CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	Jack Chen	-
Radiation	Ray Li	-
RF Conducted	Jack Chen	-

Remark: The lab has been recognized as the FCC accredited lad under the KDB 974614 D01 and is listed in the FCC pubic Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309

1.6 INSTRUMENT CALIBRATION

RF Conducted Test Site						
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due	
EXA Signal Analyzer	KEYSIGHT	N9010B	MY55460167	05/25/2021	05/24/2022	
Power Meter	Anritsu	ML2495A	1149001	05/24/2021	05/23/2022	
Power Seneor	Anritsu	MA2491A	030982	05/24/2021	05/23/2022	
Software	Radio Test Software					

Conducted Emission Room						
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due	
CABLE	EMCI	CFD300-NL	CERF	06/28/2021	06/27/2022	
EMI Test Receiver	R&S	ESCI	100064	07/05/2021	07/04/2022	
LISN	SCHAFFNER	NNB 41	03/10013	02/02/2021	02/01/2022	
Software	EZ-EMC(CCS-3A1-CE-wugu)					

Remark: Each piece of equipment is scheduled for calibration once a year.



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3M 966 Chamber Test Site						
Equipment	Manufacturer	Model	Serial Number	Cal Date	Cal Due	
Band Reject Filters	MICRO TRONICS	BRM 50702	120	02/08/2021	02/07/2022	
Bilog Antenna	Sunol Sciences	JB3	A030105	07/19/2021	07/18/2022	
Horn Antenna	ETS LINDGREN	3116	00026370	12/11/2020	12/10/2021	
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/24/2021	02/23/2022	
Coaxial Cable	EMCI	EMC105	190914+327109/4	09/19/2020	09/18/2021	
K Type Cable	Huber+Suhner	SUCOFLEX 102	29406/2	12/09/2020	12/08/2021	
K Type Cable	Huber+Suhner	SUCOFLEX 102	22470/2	12/09/2020	12/08/2021	
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/06/2021	01/05/2022	
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	09/30/2020	09/29/2021	
Loop Ant	COM-POWER	AL-130	121051	04/07/2021	04/06/2022	
Pre-Amplifier	EMEC	EM330	060609	02/24/2021	02/23/2022	
Pre-Amplifier	HP	8449B	3008A00965	12/25/2020	12/24/2021	
Pre-Amplifier	MITEQ	AMF-6F-18004000-37-8P	985646	09/02/2020	09/01/2021	
Signal Analyzer	R&S	FSV 40	101073	09/17/2020	09/16/2021	
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R	
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R	
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R	
Software		e3 6.11-2	20180413			

Remark: Each piece of equipment is scheduled for calibration once a year.



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1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

EUT Accessories Equipment							
No.	No. Equipment Brand Model Series No. FCC ID						
	N/A						

	Support Equipment						
No.	Equipment	Brand	Model	Series No.	FCC ID	IC	
1	NB	TOSHIBA	Satellite L40	N/A	CJ6UPA3613WL	248H-DPA3613W	

1.8 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10:2013, FCC Part 2, FCC Part 15.247.



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2. TEST SUMMARY

FCC Standard Section	Report Section	Test Item	Result
15.203	1.3	Antenna Requirement	Pass
15.207(a)	4.1	AC Conducted Emission	Pass
15.247(a)(2)	4.2	6 dB Bandwidth	Pass
-	4.2	Occupied Bandwidth (99%)	Pass
15.247(b)(3)	4.3	Output Power Measurement	Pass
15.247(e)	4.4	Power Spectral Density	Pass
15.247(d)	4.5	Conducted Band Edge	Pass
15.247(d)	4.5	Conducted Emission	Pass
15.247(d)	4.6	Radiation Band Edge	Pass
15.247(d)	4.6	Radiation Spurious Emission	Pass



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3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	IEEE 802.11b mode :1Mbps IEEE 802.11g mode :6Mbps IEEE 802.11n HT20 mode :MCS0 IEEE 802.11n HT40 Mode: MCS0
Test Channel Frequencies	IEEE 802.11b mode: 1. Lowest Channel: 2412MHz 2. Middle Channel: 2462MHz 3. Highest Channel: 2462MHz IEEE 802.11g mode: 1. Lowest Channel: 2412MHz 2. Middle Channel: 2437MHz 3. Highest Channel: 2462MHz IEEE 802.11n HT20 mode: 1. Lowest Channel: 2412MHz 2. Middle Channel: 2437MHz 3. Highest Channel: 2462MHz IEEE 802.11n HT40 Mode: 1. Lowest Channel: 2422MHz 2. Middle Channel: 2437MHz 3. Highest Channel: 2437MHz 3. Highest Channel: 2437MHz 3. Highest Channel: 2452MHz
Operation Transmitter	IEEE 802.11b mode :1T1R IEEE 802.11g mode :1T1R IEEE 802.11n HT20 mode : 1T1R IEEE 802.11n HT40 mode : 1T1R

Remark:

^{1.} EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.



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3.2 THE WORST MODE OF MEASUREMENT

AC Power Line Conducted Emission						
Test Condition	AC Power line conducted emission for line and neutral					
Power supply Mode	Mode 1: EUT power by AC (120V)					
Worst Mode	Mode 1					
R	adiated Emission Measurement Above 1G					
Test Condition	Radiated Emission Above 1G					
Power supply Mode	Mode 1: EUT power by AC (120V)					
Worst Mode						
Worst Position	 ☐ Placed in fixed position. ☐ Placed in fixed position at X-Plane (E2-Plane) ☐ Placed in fixed position at Y-Plane (E1-Plane) ☐ Placed in fixed position at Z-Plane (H-Plane) 					
Radiated Emission Measurement Below 1G						
Test Condition Radiated Emission Below 1G						
Power supply Mode	Mode 1: EUT power by AC (120V)					

Remark:

Worst Mode

- 1. The worst mode was record in this test report.
- 2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(Z-Plane) were recorded in this report

3. AC power line conducted emission and for below 1G radiation emission were performed the EUT transmit at the highest output power channel as worse case.



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4. EUT DUTY CYCLE

Temperature: $20.2 \sim 25.8^{\circ}$ C **Humidity:** $46 \sim 53\%$ RH

Tested by: Jack Chen Test date: July 30 ~ August 4, 2021

Duty Cycle						
Configuration	Duty Cycle (%)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)		
802.11b	100.00	0.00	0.00	0.01		
802.11g	100.00	0.00	0.00	0.01		
802.11n HT20	100.00	0.00	0.00	0.01		
802.11n HT40	100.00	0.00	0.00	0.01		





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5. TEST RESULT

5.1 AC POWER LINE CONDUCTED EMISSION

5.1.1 Test Limit

According to §15.207(a)(2) and RSS-GEN section 8.8.

Frequency Range	Limits(dBµV)		
(MHz)	Quasi-peak	Average	
0.15 to 0.50	66 to 56*	56 to 46*	
0.50 to 5	56	46	
5 to 30	60	50	

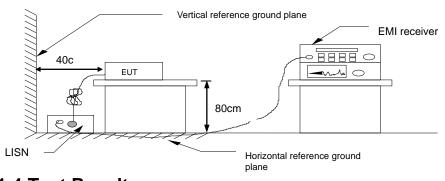
^{*} Decreases with the logarithm of the frequency.

5.1.2 Test Procedure

Test method Refer as ANSI C63.10: 2013 clause 6.2,

- 1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
- 2. EUT connected to the line impedance stabilization network (LISN)
- Receiver set RBW of 9kHz and Detector Peak, and note as quasi-peak and average.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. Recorded Line for Neutral and Line.

5.1.3 Test Setup



5.1.4 Test Result

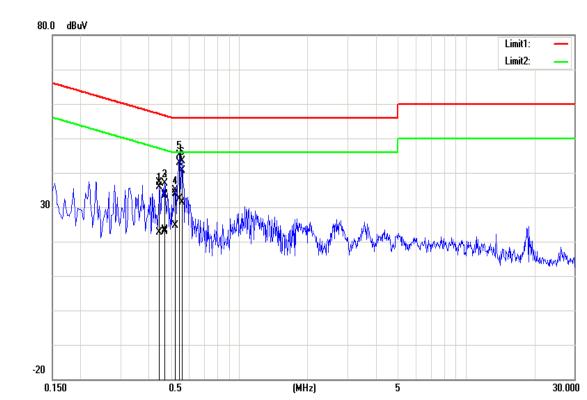
PASS



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Test Data

Test Mode:	Mode 1	Temp/Hum	26(°C)/ 50%RH
Phase:	Line	Test Date	July 28, 2021
		Test Engineer	Jack Chen



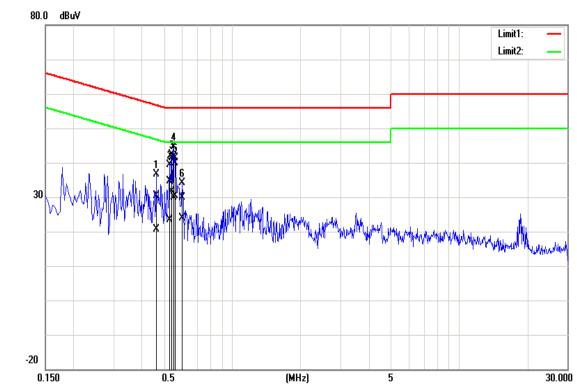
Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correctio n factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak Iimit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.4460	26.90	12.28	10.29	37.19	22.57	56.95	46.95	-19.76	-24.38	Pass
0.4620	23.41	13.15	10.29	33.70	23.44	56.66	46.66	-22.96	-23.22	Pass
0.4700	23.10	12.64	10.29	33.39	22.93	56.51	46.51	-23.12	-23.58	Pass
0.5220	23.63	14.36	10.29	33.92	24.65	56.00	46.00	-22.08	-21.35	Pass
0.5460	32.47	22.17	10.29	42.76	32.46	56.00	46.00	-13.24	-13.54	Pass
0.5620	30.27	21.10	10.29	40.56	31.39	56.00	46.00	-15.44	-14.61	Pass

Note: Correction factor = LISN loss + Cable loss.



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Test Mode:	Mode 1	Temp/Hum	26(°C)/ 50%RH
Phase:	Neutral	Test Date	July 28, 2021
		Test Engineer	Jack Chen
80 O dRuV			



Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correctio n factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak Iimit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.4620	20.20	10.34	10.29	30.49	20.63	56.66	46.66	-26.17	-26.03	Pass
0.5300	24.42	13.17	10.29	34.71	23.46	56.00	46.00	-21.29	-22.54	Pass
0.5420	31.00	21.35	10.29	41.29	31.64	56.00	46.00	-14.71	-14.36	Pass
0.5540	31.28	19.56	10.29	41.57	29.85	56.00	46.00	-14.43	-16.15	Pass
0.5620	29.51	20.08	10.29	39.80	30.37	56.00	46.00	-16.20	-15.63	Pass
0.6020	19.63	13.52	10.29	29.92	23.81	56.00	46.00	-26.08	-22.19	Pass

Note: Correction factor = LISN loss + Cable loss.



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5.26dB BANDWIDTH AND OCCUPIED BANDWIDTH (99%)

5.2.1 Test Limit

According to §15.247(a)(2) and RSS-247 section 5.2(a),

6 dB Bandwidth :

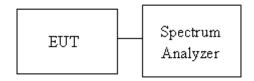
Limit	Shall be a	t least 500kHz

5.2.2 Test Procedure

Test method Refer as ANSI C63.10: 2013,

- 1. The EUT RF output connected to the spectrum analyzer by RF cable.
- 2. Setting maximum power transmit of EUT
- 3. SA set RBW = 100kHz, VBW = 300kHz and Detector = Peak, to measurement 6 dB Bandwidth.
- 4. SA set RBW = 1% ~ 5% OBW, VBW = three times the RBW and Detector = Peak, to measurement 99% Bandwidth
- 5. Measure and record the result of 6 dB Bandwidth and 99% Bandwidth. in the test report.

5.2.3 Test Setup





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5.2.4 Test Result

Temperature: $20.2 \sim 25.8^{\circ}$ C **Humidity:** $46 \sim 53\%$ RH

Tested by: Jack Chen **Test date:** July 30 ~ August 4, 2021

Test mode: IEEE 802.11b mode / 2412-2462 MHz							
Channel	Frequency (MHz)	6dB BW (MHz)	6dB limit (kHz)				
Low	2412	10.03					
Mid	2437	9.556	≥500				
High	2462	9.568					

Test mode: IEEE 802.11g mode / 2412-2462 MHz									
Channel	Frequency (MHz)	6dB BW (MHz)	6dB limit (kHz)						
Low	2412	16.32							
Mid	2437	16.31	≥500						
High	2462	16.32							

Test mode: IEEE 802.11n HT 20 MHz mode / 2412-2462 MHz								
Channel Frequency (MHz)		6dB BW (MHz)	6dB limit (kHz)					
Low	2412	17.57						
Mid	2437	17.58	≥500					
High	2462	17.56						

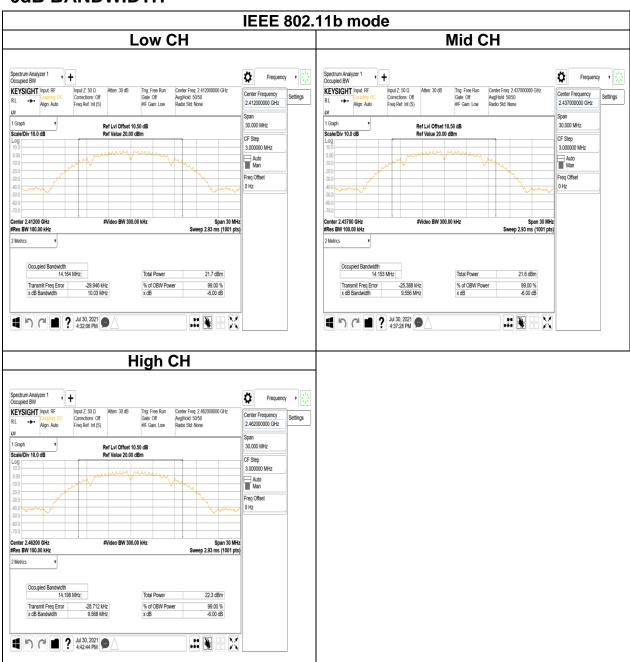
Test mode: IEEE 802.11n HT40 Mode / 2422-2452 MHz									
Channel	Frequency (MHz)	6dB BW (MHz)	6dB limit (kHz)						
Low	2422	35.78							
Mid	2437	35.81	≥500						
High	2452	35.69							



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Test Data

6dB BANDWIDTH





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5.3 OUTPUT POWER MEASUREMENT

5.3.1 Test Limit

According to §15.247(b),

Peak output power:

FCC:

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement,

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IC:

For systems using digital modulation in the 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt(30 dBm) and the e.i.r.p. shall not exceed 4Watt(36 dBm), base on the use of antennas with directional gain not exceed 6 dBi If transmitting antennas of directional gain greater than 6dBi are used the peak output power the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement,

Limit Antenna with DG greater than 6 dBi: [Limit = 30 - (DG - 6)] Point-to-point operation:	Limit	[Limit = 30 - (DG - 6)]
--	-------	-------------------------

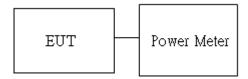
Average output power: For reporting purposes only.

5.3.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

- 1. The EUT RF output connected to the power meter by RF cable.
- Setting maximum power transmit of EUT.
- 3. The path loss was compensated to the results for each measurement.
- Measure and record the result of Peak output power and Average output power. in the test report.

5.3.3 Test Setup





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5.3.4 Test Result

Temperature: $20.2 \sim 25.8^{\circ}$ C **Humidity:** $46 \sim 53\%$ RH

Tested by: Jack Chen **Test date:** July 30 ~ August 4, 2021

Peak output power:

802.11b Ch0									
СН	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT			
1	2412	1	28	21.13	30.00	PASS			
6	2437	1	28	21.35	30.00	PASS			
11	2462	1	28	21.40	30.00	PASS			

802.11g Ch0									
СН	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT			
1	2412	6	28	23.26	30.00	PASS			
6	2437	6	2A	23.09	30.00	PASS			
11	2462	6	28	23.29	30.00	PASS			

802.11n_HT20M Ch0									
СН	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT			
1	2412	MCS0	2A	23.11	30.00	PASS			
6	2437	MCS0	2B	23.13	30.00	PASS			
11	2462	MCS0	28	23.26	30.00	PASS			

802.11n_HT40M Ch0									
СН	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT			
3	2422	MCS0	26	22.89	30.00	PASS			
6	2437	MCS0	29	22.65	30.00	PASS			
9	2452	MCS0	26	22.77	30.00	PASS			



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Average output power:

802.1	802.11b Ch0									
СН	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT				
1	2412	1	28	19.58	30.00	PASS				
6	2437	1	28	19.84	30.00	PASS				
11	2462	1	28	19.86	30.00	PASS				

802.11g Ch0									
СН	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT			
1	2412	6	28	19.16	30.00	PASS			
6	2437	6	2A	19.04	30.00	PASS			
11	2462	6	28	18.88	30.00	PASS			

802.1	802.11n_HT20M Ch0									
СН	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT				
1	2412	MCS0	2A	19.32	30.00	PASS				
6	2437	MCS0	2B	19.05	30.00	PASS				
11	2462	MCS0	28	18.13	30.00	PASS				

802.1	802.11n_HT40M Ch0									
СН	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT				
3	2422	MCS0	26	16.89	30.00	PASS				
6	2437	MCS0	29	17.50	30.00	PASS				
9	2452	MCS0	26	17.04	30.00	PASS				



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5.4 POWER SPECTRAL DENSITY

5.4.1 Test Limit

According to §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.

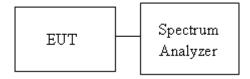
	Antenna not exceed 6 dBi : 8dBm Antenna with DG greater than 6 dBi :
Limit	[Limit = 8 − (DG − 6)] □ Point-to-point operation :

5.4.2 Test Procedure

Test method Refer as ANSI C63.10:2013

- 1. The EUT RF output connected to the spectrum analyzer by RF cable.
- 2. Setting maximum power transmit of EUT
- 3. SA set RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS Bandwidth (6 dB BW), Detector = Peak, Sweep Time = Auto and Trace = Max hold.
- 4. The path loss and Duty Factor were compensated to the results for each measurement by SA.
- 5. Mark the maximum level.
- 6. Measure and record the result of power spectral density. in the test report.

5.4.3 Test Setup





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5.4.4 Test Result

Temperature: $20.2 \sim 25.8^{\circ}$ C **Humidity:** $46 \sim 53\%$ RH

Tested by: Jack Chen **Test date:** July 30 ~ August 4, 2021

POWER DENSITY 802.11b				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-2.842	-2.84	8.00	PASS
2437	-3.018	-3.02	8.00	PASS
2462	-2.68	-2.68	8.00	PASS

POWER DENSITY 802.11g				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-5.037	-5.04	8.00	PASS
2437	-4.663	-4.66	8.00	PASS
2462	-4.056	-4.06	8.00	PASS

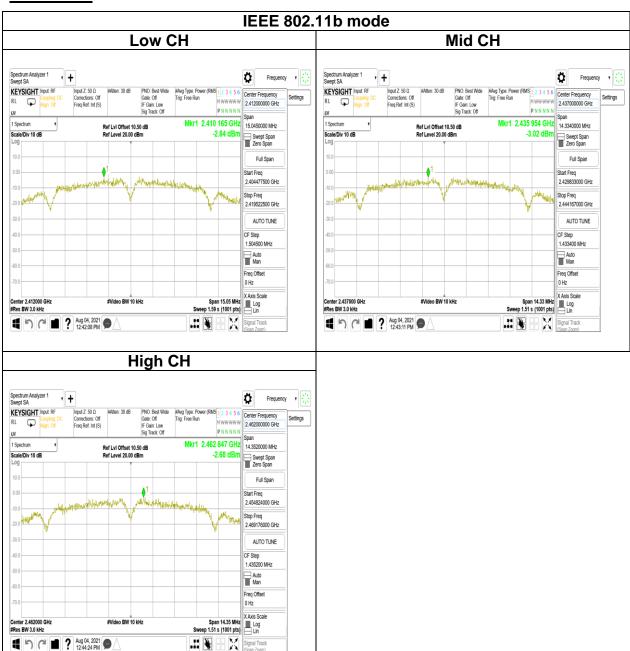
POWER DENSITY 802.11n HT20				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-4.881	-4.88	8.00	PASS
2437	-6.106	-6.11	8.00	PASS
2462	-5.054	-5.05	8.00	PASS

POWER DENSITY 802.11n HT40				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2422	-8.201	-8.20	8.00	PASS
2437	-9.644	-9.64	8.00	PASS
2452	-8.78	-8.78	8.00	PASS



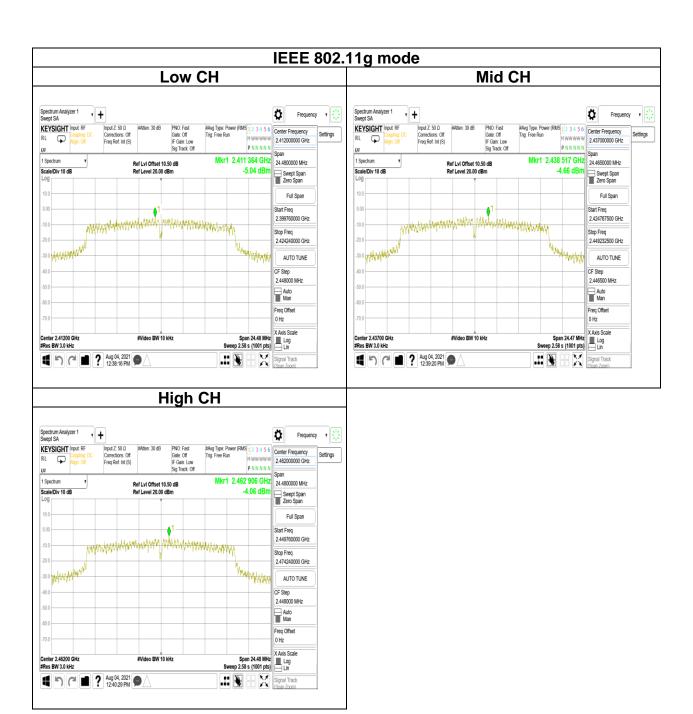
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Test Data



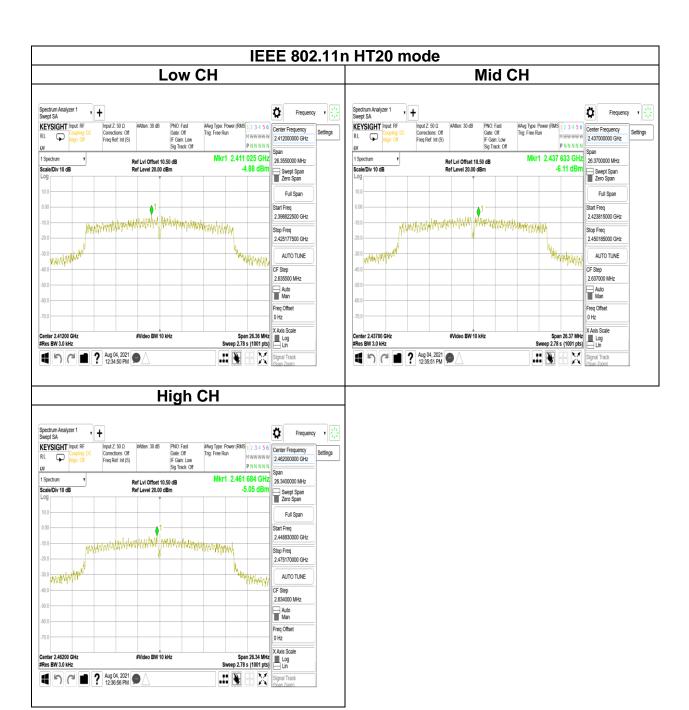


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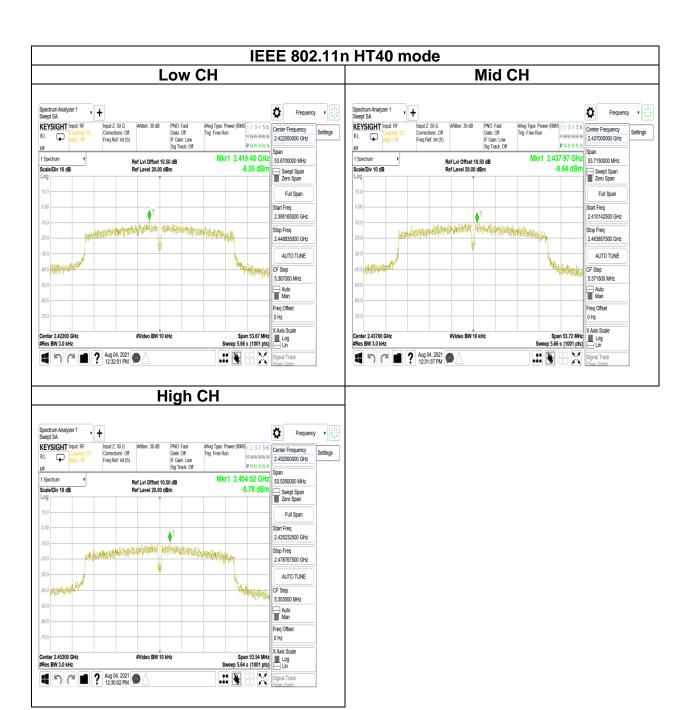


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5.5 CONDUCTED BANDEDGE AND SPURIOUS EMISSION

5.5.1 Test Limit

According to §15.247(d),

FCC:

In any 100 kHz bandwidth outside the authorized frequency band,

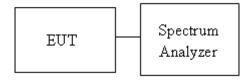
Non-restricted bands shall be attenuated at least 20 dB/30 dB relative to the maximum PSD level in 100 kHz by RF conducted or a radiated measurement which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

5.5.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

- 1. EUT RF output port connected to the SA by RF cable, and the path loss was compensated to result.
- 2. SA setting, RBW=100kHz, VBW=300kHz, Detector=Peak, Trace mode = max hold, SWT = Auto.
- 3. In any 100 kHz bandwidth outside the authorized frequency band, shall be attenuated at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when conducted power procedure is used. f the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.5.3 Test Setup





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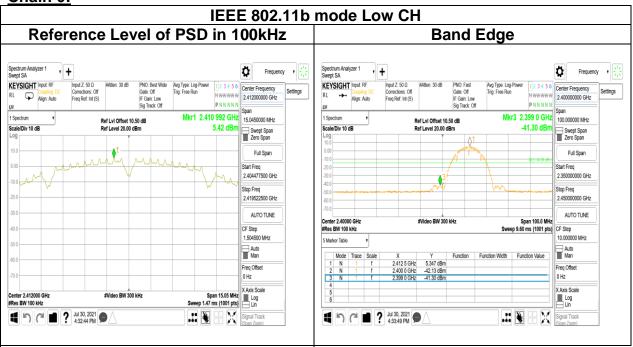
5.5.4 Test Result

Test Data

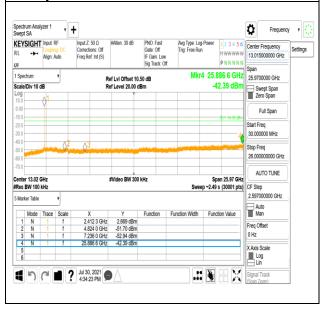
Temperature: $20.2 \sim 25.8^{\circ}$ **Humidity:** $46 \sim 53\%$ RH

Tested by: Jack Chen **Test date:** July 30 ~ August 4, 2021

Chain 0:

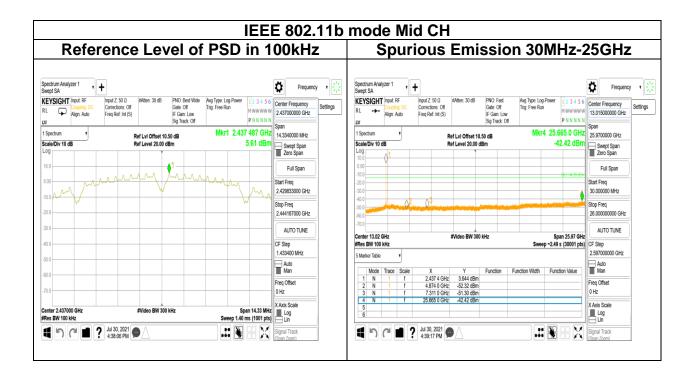


Spurious Emission 30MHz-25GHz



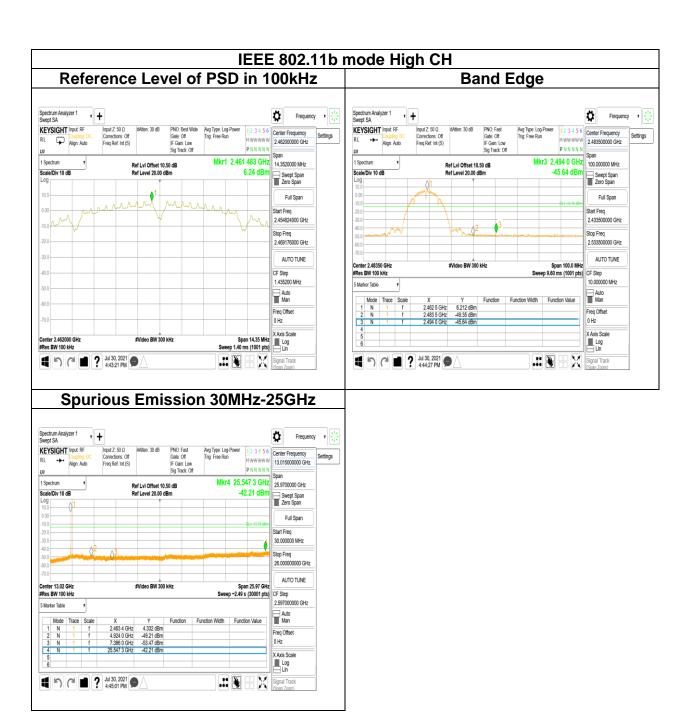


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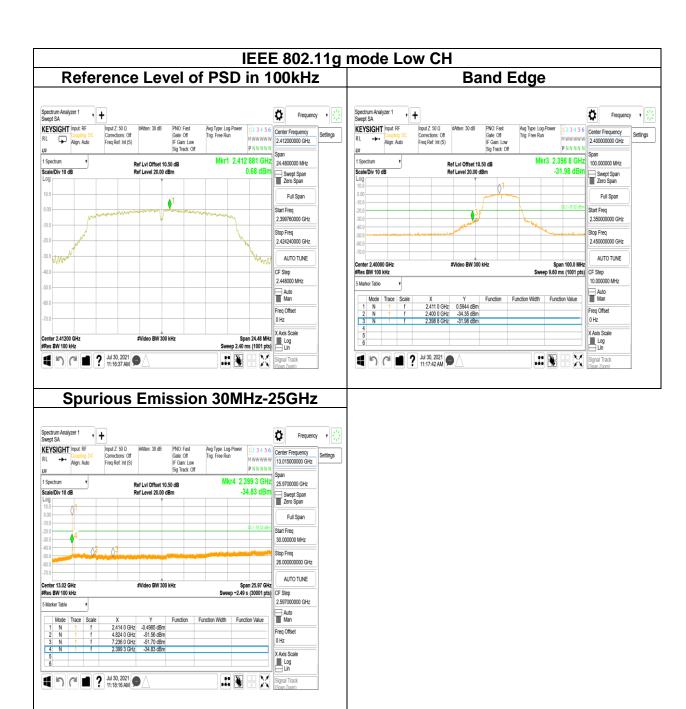


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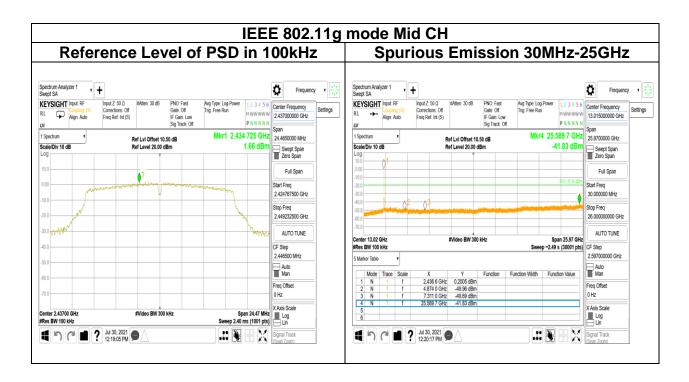


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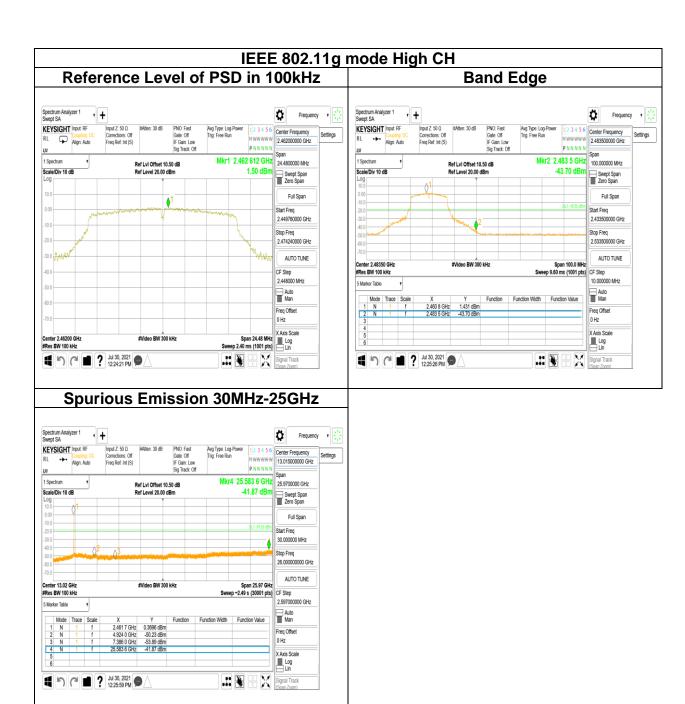


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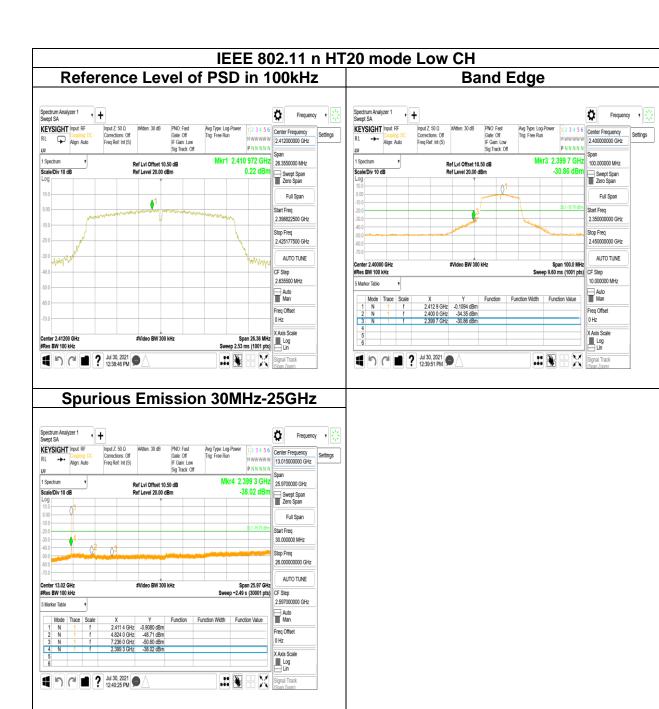
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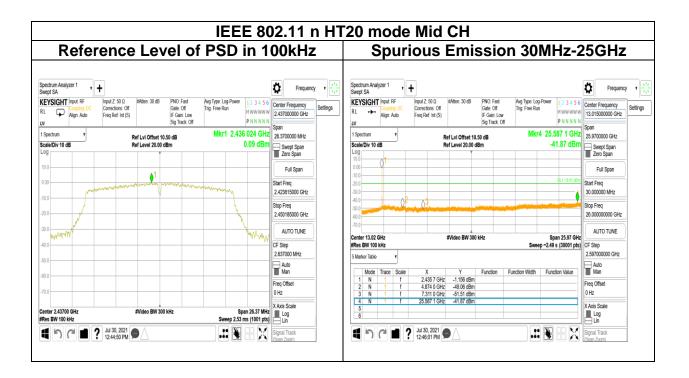
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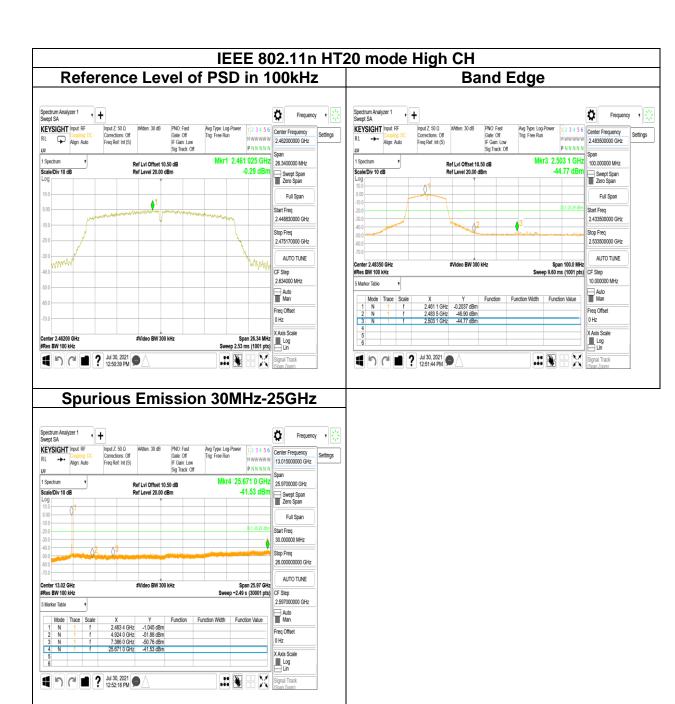
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