

Page 1 of 90

FCC Test Report

Test Report On Behalf of Hangzhou Guowen Technology Co., Ltd. For OBOOK Reader Model No.: OBOOK6, OBOOK6A, OBOOK6B, OBOOK6C

FCC ID: 2BKOI-OBOOK6

Prepared For:

Hangzhou Guowen Technology Co., Ltd.

Room 706-8, Building A5, No. 2-150 Yunlian Road, Yuhang District, Hangzhou, Zhejiang Province, China

Prepared By:

Shenzhen HUAK Testing Technology Co., Ltd. 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

 Date of Test:
 Aug. 27, 2024 ~ Sept. 09, 2024

 Date of Report:
 Sept. 09, 2024

 Report Number:
 HK2408274970-3E

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Test Result Certification

Applicant's Name	Hangzhou Guowen Technology Co., Ltd.
Address	Room 706-8, Building A5, No. 2-150 Yunlian Road, Yuhang District, Hangzhou, Zhejiang Province, China
Manufacturer's Name	Hangzhou Guowen Technology Co., Ltd.
Address	Room 706-8, Building A5, No. 2-150 Yunlian Road, Yuhang District, Hangzhou, Zhejiang Province, China
Product Description	
Trade Mark	OBOOK
Product Name	OBOOK Reader
Model and/or Type Reference :	OBOOK6, OBOOK6A, OBOOK6B, OBOOK6C
Standards	FCC Rules and Regulations Part 15 Subpart C Section 15.247 ANSI C63.10: 2013

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Date of Test	
Date (s) of Performance of Tests	Aug. 27, 2024 ~ Sept. 09, 2024
Date of Issue	Sept. 09, 2024
Test Result	Pass

Testing Engineer

len lian

(Len Liao)

Technical Manager

Authorized Signatory:

Mon IVOY

(Sliver Wan)

Jason Hou

(Jason Zhou)

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Т 691

** Modified History **

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	Sept. 09, 2024	Jason Zhou
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1. Test Result Summary

1.1 Test Procedures and Results

Requirement	CFR 47 Section	Result	
Antenna Requirement	§15.203/§15.247(b)(4)	PASS	
Ac Power Line Conducted Emission	§15.207	PASS	
Conducted Peak Output Power	§15.247(b)(3)	PASS	
6dB Emission Bandwidth	§15.247(a)(2)	PASS	
Power Spectral Density	§15.247(e)	PASS	
Band Edge	1§5.247(d)	PASS	
Spurious Emission	§15.205/§15.209	PASS	

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

1.2 Information of the Test Laboratory

Shenzhen HUAK Testing Technology Co., Ltd. Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory Authorization:

A2LA Accreditation Code is 4781.01. FCC Designation Number is CN1229. Canada IC CAB identifier is CN0045. CNAS Registration Number is L9589.

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1.3 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 %.

No.	ltem	MU
^{NG} 1	Conducted Emission	±0.37dB
2	RF Power, Conducted	±3.35dB
3	Spurious Emissions, Conducted	±2.20dB
4	All Emissions, Radiated(<1G)	±3.90dB
5	All Emissions, Radiated(>1G)	±4.28dB
6	Temperature	±0.1°C
TS 7	Humidity	±1.0%

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2. EUT Description

HUAK TESTING

2.1 General Description of EUT

Equipment:	OBOOK Reader	O HUAK IL	C HUNK IL
Model Name:	OBOOK6	TING	
Series Model:	OBOOK6A, OBOOK6B, O	OBOOK6C	TESTING
Model Difference:	All model's the function, s same, only with product n sample model: OBOOK6.	model named differen	
Trade Mark:	OBOOK	AK TESTING	- WAK TESTING
FCC ID:	2BKOI-OBOOK6	O m	0
Antenna Type:	FPC Antenna		
Antenna Gain:	2.02dBi	OKTESTING	AK TESTING
Operation Frequency:	802.11b/g/n/ax(HT20): 24 802.11n/ax(HT40): 2422~		O m
Number of Channels:	802.11b/g/n/ax(HT20): 11 802.11n/ax(HT40): 7CH	1CH	HUAKTESTING
Modulation Type:	DSSS, OFDM	CSTNG Q	Ð
Power Source:	DC5V from Type-C or DC	C3.8V from battery	
Power Rating:	DC5V from Type-C or DC	C3.8V from battery	HUAKTE
Hardware Version:	V3.0 MWH628S		<i>S</i>
Software Version:	aic8800d_linux_sdk_V3.0	0_2024_0712_e2a93	32c1

Note:

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

- 2. Antenna gain Refer to the antenna specifications.
- 3. The cable loss data is obtained from the supplier.
- 4. The test results in the report only apply to the tested sample.

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Frequency (MHz) 2457 2462



arrier	arrier Frequency of Channels							
	Channel	List for 802	2.11b/ 802.11g	/ 802.11n (H	IT20)/ 802.11a	x (HT20)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel		
01	2412	04	2427	07	2442	10		
02	2417	05	2432	08	2447	11		
03	2422	06	2437	09	2452	TESTIN		

2.2

Channel List for 802.11n (HT40) / 802.11ax (HT40)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
S'"	LAK TEN	04	2427	07	2442	TES	- JAK
(3)`		05	2432	08	2447	AD HO!	0 , "
03	2422	06	2437	09	2452	~	

Note:

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

2.3 Operation of EUT during Testing

Operating Mode

The mode is used: Transmitting mode for 802.11b/802.11g/ 802.11n(HT20)/ 802.11ax (HT20)

Low Channel: 2412MHz Middle Channel: 2437MHz High Channel: 2462MHz

The mode is used: Transmitting mode for 802.11n (HT40)/ 802.11ax (HT40)

Low Channel: 2422MHz Middle Channel: 2437MHz High Channel: 2452MHz

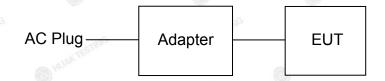
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2.4 Description of Test Setup

Operation of EUT during Conducted and Radiation below 1GHz testing:



Operation of EUT during Radiation Above 1GHz testing:

EUT

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. The worst case is X position.

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2.5 Description of Support Units

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

Equipment	Trade Mark	Model/Type No.	Specification	Remark
OBOOK Reader	ОВООК	OBOOK6	N/A	EUT
Adapter	N/A	MDY-10-EH	Input: AC100-240V, 50/60Hz, 0.7A Output: DC5V/3A, 9V/3A, 12V/2.25A, 20V/1.35A	Peripheral
O HOL	© ¹	O HON	O HURE O	01
3 TEST	ş6	ESTING TESTING	TESTING	TESTING
O HUAN	O HUA	O HUAN	O HUAT	HUAN
-0	at Test	∂µ	N TESTING	
	OBOOK Reader	OBOOK Reader OBOOK	OBOOK Reader OBOOK OBOOK6	OBOOK Reader OBOOK OBOOK6 N/A Adapter N/A MDY-10-EH Input: AC100-240V, 50/60Hz, 0.7A Output: DC5V/3A, 9V/3A, Output: DC5V/3A, 9V/3A,

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

 Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
 For conducted measurements (Output Power, 6dB Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

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3. General Information

3.1 Test Environment and Mode

Operating Environment:				
Temperature:	25.0 °C	WAKTESTIN	MAKTESTIN	IN AK TESTIN
Humidity:	56 % RH	0	0	0
Atmospheric Pressure:	1010 mbar		TESTING	
Test Mode:				

Engineering Mode:

Keep the EUT in continuous transmitting by select channel and modulations (The value of duty cycle is 98.46%)

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. For the full battery state and The output power to the maximum state.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode		Data rate
802.11b		1Mbps
LAK TESTING	802.11g	6Mbps
802.11n(HT20)/ax (HT20)		6.5Mbps
802.11n(HT40)/ax (HT40)		13.5Mbps

Final Test Mode:

Operation mode:	Keep the EUT in continuous transmitting with modulation
-----------------	---

1. For WIFI function, the engineering test program was provided and enabled to make EUT continuous transmit/receive.

2.According to ANSI C63.10 standards, the test results are both the "worst case" and "worst setup" 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(HT20)/ax (HT20), 13.5Mbps for 802.11n(HT40)/ax (HT40).

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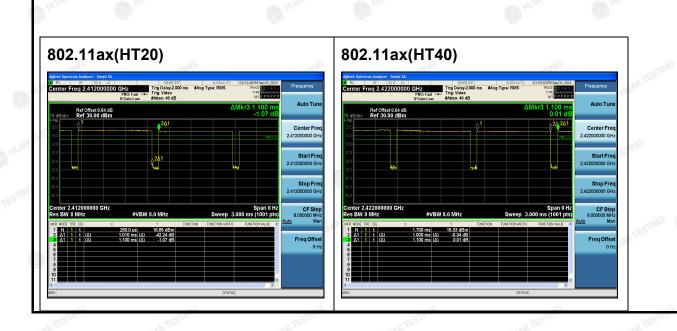
3. Mode Te	est Duty Cycle	HUAKTES. OHUAKT	HUAN TES.	O HUAK IL
	Mode	Duty Cycle	Duty Cycle Factor (dB)	
	802.11b	0.918	-0.371	CO HUAK
	802.11g	0.918	-0.371	
	802.11n(HT20)	0.918	-0.371	STING
	802.11n(HT40)	0.918	-0.371	HUAKTEL
	802.11ax(HT20)	0.918	-0.371	
	802.11ax(HT40)	0.909	-0.414	
~9'''	1 Per	~S''''''''''''''''''''''''''''''''''''	-G'''	170



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4. Test Results and Measurement Data

4.1 Conducted Emission

4.1.1 Test Specification

-mile -mile	-muG -mu	G	NG					
Test Requirement:	FCC Part15 C Section	15.207	HUAK TE					
Test Method:	ANSI C63.10:2013	ANSI C63.10:2013						
Frequency Range:	150 kHz to 30 MHz	O HUAKTES	AK TESTING					
Receiver Setup:	RBW=9 kHz, VBW=30	kHz, Sweep time	=auto					
Limits:	Frequency range (MHz) Limit (dBuV) 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50							
	Reference	e Plane	. 16 					
Test Setup:	Image: stable / lnsulation plane Remark E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m							
Test Mode:	Charging + transmitting	with modulation						
Test Procedure:	 The E.U.T is connect line impedance stabil provides a 50ohm/50 measuring equipmen The peripheral device power through a LISN coupling impedance of refer to the block diag photographs). Both sides of A.C. line conducted interference emission, the relative the interface cables in ANSI C63.10: 2013 content 	ization network (l uH coupling impert t. es are also conner that provides a with 50ohm termi gram of the test s e are checked for ce. In order to find positions of equi nust be changed	L.I.S.N.). This edance for the ected to the main 50ohm/50uH nation. (Please etup and r maximum d the maximum pment and all of according to					
Test Result:	PASS	O HUAN	O HUAN					
n ¹⁹	-TING	TING						

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Conducted Emission Shielding Room Test Site (843)							
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due		
Receiver	R&S	ESR	HKE-005	Feb. 20, 2024	Feb. 19, 2025		
LISN	R&S	ENV216	HKE-002	Feb. 20, 2024	Feb. 19, 2025		
LISN	R&S	ENV216	HKE-059	Feb. 20, 2024	Feb. 19, 2025		
Coax cable (9KHz-30MHz)	Times	381806-0 02	N/A	Feb. 20, 2024	Feb. 19, 2025		
EMI Test Software	Tonscend	JS32-CE 2.5.0.6	HKE-081	N/A	N/A		
10dB Attenuator	Schwarzbeck	VTSD956 1F	HKE-153	Feb. 20, 2024	Feb. 19, 2025		

4.1.2 Test Instruments

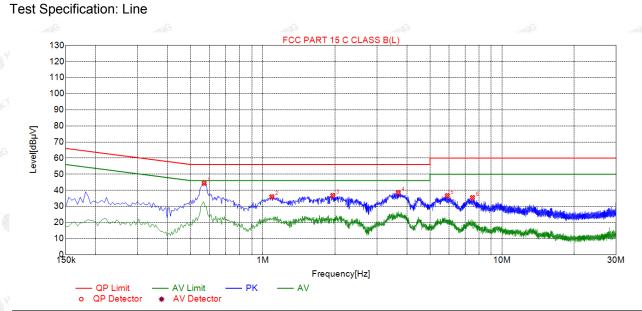
Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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4.1.3 Test data



Suspected List

3									
<i>n</i>	NO.	Freq. [MHz]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Reading [dBµV]	Detector	Туре
	1	0.5685	44.34	19.86	56.00	11.66	24.28	PK	L
2	2	1.0905	35.97	19.88	56.00	20.03	15.89	PK	L
2	3	1.9590	36.77	19.96	56.00	19.23	16.61	PK	L
	4	3.6825	38.47	20.09	56.00	17.53	18.18	PK	L
2	5	5.9055	36.64	20.09	60.00	23.36	16.35	PK	L
	6	7.5255	35.49	20.05	60.00	24.51	15.24	PK	L
2							144		

Remark: Margin = Limit – Level Correction factor = Cable lose + ISN insertion loss

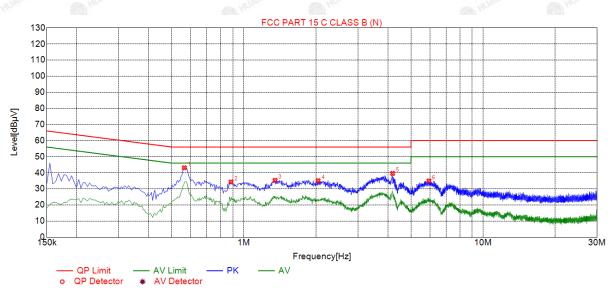
Level=Test receiver reading + correction factor

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Test Specification: Neutral



ż	Suspected List									
Ś	NO.	Freq. [MHz]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Reading [dBµV]	Detector	Туре	
	1	0.5640	43.10	19.75	56.00	12.90	23.55	PK	Ν	
	2	0.8835	34.27	19.74	56.00	21.73	14.73	PK	Ν	
	3	1.3515	35.30	19.79	56.00	20.70	15.71	PK	Ν	
2	4	2.0445	35.07	19.84	56.00	20.93	15.43	PK	Ν	
	5	4.1865	39.61	19.98	56.00	16.39	19.83	PK	Ν	
ě.	6	5.9370	34.92	19.98	60.00	25.08	15.14	PK	Ν	

Remark: Margin = Limit – Level Correction factor = Cable lose + ISN insertion loss Level=Test receiver reading + correction factor

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4.2 Maximum Conducted Output Power

4.2.1 Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)					
Test Method:	KDB 558074 D01 15.247 Meas Guidance v05r02					
Limit:	30dBm					
Test Setup:	Power meter EUT					
Test Mode:	Transmitting mode with modulation					
Test Procedure:	 The testing follows the Measurement Procedure of FCC KDB 558074 D01 15.247 Meas Guidance v05r02. The RF output of EUT was connected to the power met by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. Measure the Peak output power and record the results the test report. 					
Test Result:	PASS					

4.2.2 Test Instruments

	RF Test Room							
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due			
Spectrum analyzer	Agilent	N9020A	HKE-025	Feb. 20, 2024	Feb. 19, 2025			
Power meter	Agilent	E4419B	HKE-085	Feb. 20, 2024	Feb. 19, 2025			
Power Sensor	Agilent	E9300A	HKE-086	Feb. 20, 2024	Feb. 19, 2025			
RF cable	Times	1-40G	HKE-034	Feb. 20, 2024	Feb. 19, 2025			
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 20, 2024	Feb. 19, 2025			
RF Test Software	Tonscend	JS1120-3 Version 3.3.23	HKE-083	N/A	N/A			

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

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4.2.3 Test Data

Mode	Test channel	Frequency (MHz)	Maximum Conducted Output Power (dBm)	Limit (dBm)	Result
802.11b	CH01	2412	13.87	30	PASS
802.11b	CH06	2437	13.42	30	PASS
802.11b	CH11	2462	13.26	30	PASS
802.11g	CH01	2412	13.95	30	PASS
802.11g	CH06	2437	14.85	30	PASS
802.11g	CH11	2462	14.00	30	PASS
802.11n(HT20)	CH01	2412	13.84	30	PASS
802.11n(HT20)	CH06	2437	15.10	30	PASS
802.11n(HT20)	CH11	2462	14.56	30	PASS
802.11n(HT40)	CH03	2422	13.18	30	PASS
802.11n(HT40)	CH06	2437	14.98	30	PASS
802.11n(HT40)	CH09	2452	13.72	30	PASS
802.11ax(HT20)	CH01	2412	13.44	30	PASS
802.11ax(HT20)	CH06	2437	14.67	30	PASS
802.11ax(HT20)	CH11	2462	13.13	30	PASS
802.11ax(HT40)	CH03	2422	14.14	30	PASS
802.11ax(HT40)	CH06	2437	14.09	30	PASS
802.11ax(HT40)	CH09	2452	13.25	30	PASS

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4.3 Emission Bandwidth

4.3.1 Test Specification

Test Requirement:	FCC Part15 C Section 15	FCC Part15 C Section 15.247 (a)(2)					
Test Method:	KDB 558074 D01 15.247	KDB 558074 D01 15.247 Meas Guidance v05r02					
Limit:	>500kHz	W TESTING					
Test Setup:	Spectrum Analyzer	EUT NG HUMA TESTING					
Test Mode:	Transmitting mode with n	nodulation					
Test Procedure:	D01 15.247 Meas Gu 2. Set to the maximum po EUT transmit continue 3. Make the measuremen resolution bandwidth Video bandwidth (VB) an accurate measurement	 The testing follows FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02. Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz. 					
Test Result:	PASS	O HUNK O HUN					

4.3.2 Test Instruments

	RF Test Room							
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due			
Spectrum analyzer	Agilent	N9020A	HKE-025	Feb. 20, 2024	Feb. 19, 2025			
RF cable	Times	1-40G	HKE-034	Feb. 20, 2024	Feb. 19, 2025			
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 20, 2024	Feb. 19, 2025			
RF Test Software	Tonscend	JS1120-3 Version 3.3.23	HKE-083	N/A	N/A			

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

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4.3.3 Test Data

Test channel		6dB Emission Bandwidth (MHz)						
	802.11b	802.11g	802.11n (HT20)	802.11n (HT40)	802.11ax (HT20)	802.11ax (HT40)		
Lowest	9.120	16.040	16.760	31.920	18.440	37.040		
Middle	9.080	15.520	16.800	33.120	18.480	37.600		
Highest	9.000	16.320	16.000	35.760	16.200	36.480		
Limit:	ANTESTING OF	NDAN	>5	00KHz	TESTING	AK TESTING		
Test Result:	HOM	O HUR	Mun F	PASS	O HUM	O HOM		

Test plots as follows:

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T ovi

802.11b Modulation

Lowest channel



Middle channel



Highest channel



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802.11g Modulation

Lowest channel



Middle channel



Highest channel



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FICATION

802.11n (HT20) Modulation

Lowest channel



Middle channel



Highest channel



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802.11n (HT40) Modulation

Lowest channel



Middle channel



Highest channel



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802.11ax (HT20) Modulation

Lowest channel



Middle channel



Highest channel



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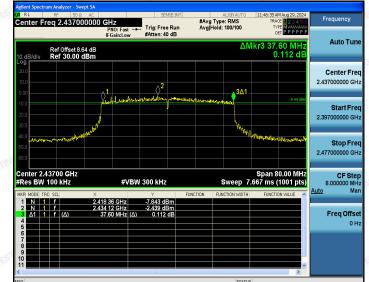
PE

802.11ax (HT40) Modulation

Lowest channel



Middle channel



Highest channel



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4.4 Power Spectral Density

4.4.1 Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (e)				
Test Method:	KDB 558074 D01 15.247 Meas Guidance v05r02				
Limit:	The average power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.				
Test Setup:	Spectrum Analyzer				
Test Mode:	Transmitting mode with modulation				
Test Procedure:	 The testing follows Measurement procedure 10.2 method PKPSD of FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW): 3 kHz ≤ RBW ≤ 100 kHz. Video bandwidth VBW ≥ 3 x RBW. Set the span to at least 1.5 times the OBW. Detector = Peak, Sweep time = auto couple. Employ trace averaging (Peak) mode over a minimum of 100 traces. Use the peak marker function to determine the maximum power level. Measure and record the results in the test report. 				
Test Result:	PASS				

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4.4.2 Test Instruments

RF Test Room							
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due		
Spectrum analyzer	Agilent	N9020A	HKE-025	Feb. 20, 2024	Feb. 19, 2025		
RF cable	Times	1-40G	HKE-034	Feb. 20, 2024	Feb. 19, 2025		
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 20, 2024	Feb. 19, 2025		
RF Test Software	Tonscend	JS1120-3 Version 3.3.23	HKE-083	N/A restruct	N/A		

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

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4.4.3 Test Data

EUT Set Mode	Channel	Test Result (dBm/30kHz)	Result (dBm/3kHz)
802.11b	Lowest	1.16	-8.84
	Middle	2.21	-7.79
	Highest	3.08	-6.92
802.11g	Lowest	-1.92	-11.92
	Middle	-0.42	-10.42
	Highest	-2.42	-12.42
802.11n(HT20)	Lowest	-1.15	-11.15
	Middle	-1.18	-11.18
	Highest	-0.92	-10.92
802.11n(HT40)	Lowest	-3.63	-13.63
	Middle	-2.71	-12.71
	Highest	-3.51	-13.51
802.11ax(HT20)	Lowest	0.19	-9.81
	Middle	-1.16	-11.16
	Highest	-1.67	-11.67
802.11ax(HT40)	Lowest	-5.53	-15.53
	Middle	-4.17	-14.17
	Highest	-4.07	-14.07
PSD test result (dBi	m/3kHz)= PSD t	est result (dBm/30k	Hz)-10
Limit: 8dBm/3kHz			
Test Result:	HUAKTES	PASS	HUNKTES
. 1535	C 28 2		

Test plots as follows:

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802.11b Modulation



Middle channel



Highest channel



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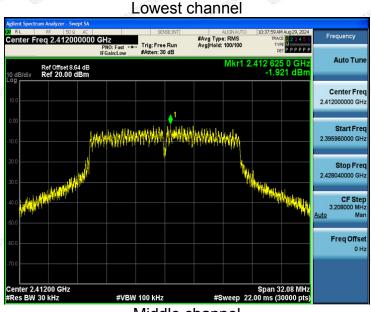
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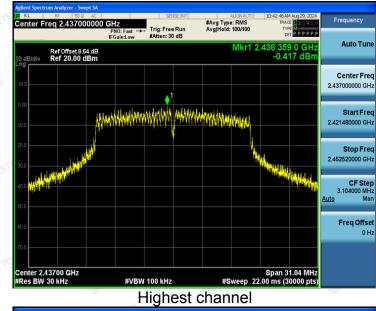
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802.11g Modulation



Middle channel





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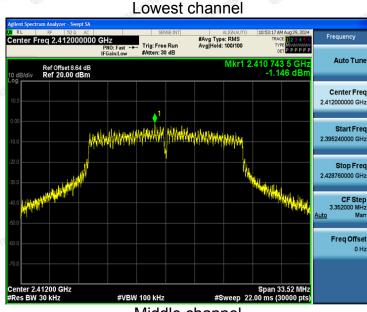
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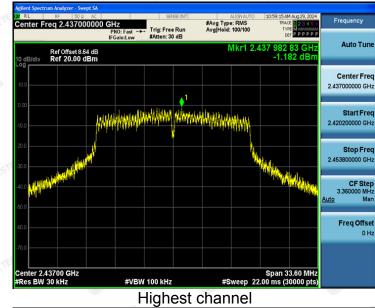
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PE

802.11n (HT20) Modulation



Middle channel



#Avg Type: RMS Avg|Hold: 100/100 D000 GHz PN0: Fast +++ IFGain:Low #Atten: 30 dB PPPPP 59 483 1 GH -0.915 dB Ref Offset 8.64 dB Ref 20.00 dBm Center Fred 2.462000000 GH ↓1 Annihier Ministerie Start Fre Stop Fre 2 4780000 **West** CF Ste 3.200000 MH uto Freq Offse Center 2.46200 GHz #Res BW 30 kHz Span 32.00 MHz 22.00 ms (30000 pts #VBW 100 kHz #Sw

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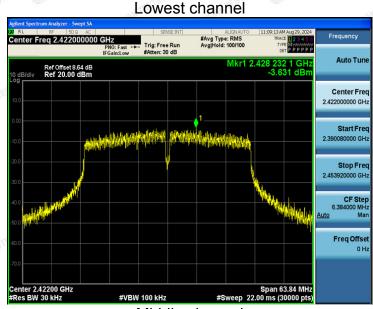
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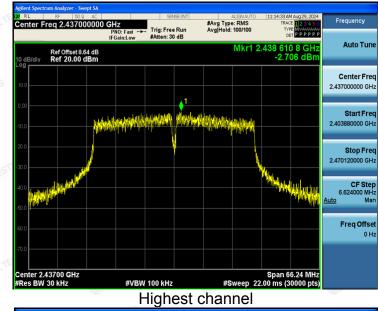
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802.11n (HT40) Modulation



Middle channel



000 GHz PN0: Fast +++ IFGain:Low #Atten: 30 dB #Avg Type: RMS Avg|Hold: 100/100 DET P P P P P Auto Tun Wkr1 2.447 984 0 GH -3.514 dB Ref Offset 8.64 dB Ref 20.00 dBm Center Fred 2.452000000 GH Start Fre 2.416240000 GH Stop Free 2.487760 CF Ste 7.152000 MH Auto Ma Freq Offse 0 H: Center 2.45200 GHz #Res BW 30 kHz Span 71.52 MHz #Sweep 22.00 ms (30000 pts) #VBW 100 kHz

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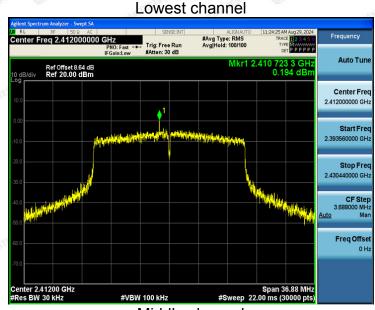
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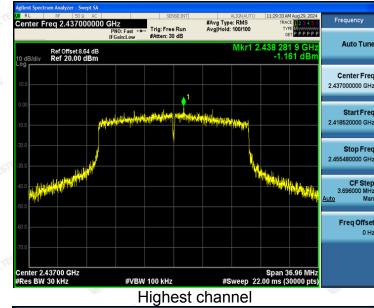
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802.11ax (HT20) Modulation



Middle channel



PR0: Fast →→ IFGain:Low #Atten: 30 dB Frequency #Avg Type: RMS Avg|Hold: 100/100 Auto Tun 965 47 GH -1.671 dB Ref Offset 8.64 dB Ref 20.00 dBm Center Free 462000000 GH Start Fre 2.445800000 GH Stop Free 2.478200000 GH CF Ste 3.240000 MH Auto Freq Offse Center 2.46200 GHz #Res BW 30 kHz Span 32.40 MH #VBW 100 kHz #Sw

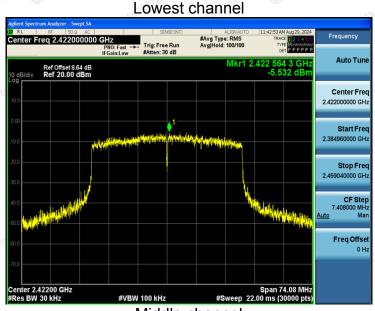
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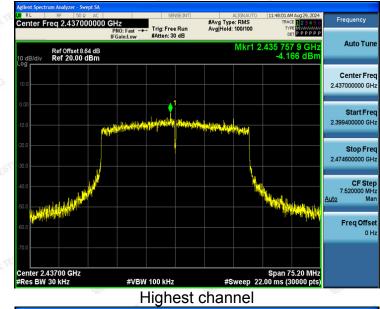


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802.11ax (HT40) Modulation



Middle channel



RF 100 R AC Q 2.4520000000 GHz PN0: Fast →→ IFGain:Low #Atten: 30 dB #Avg Type: RMS Avg|Hold: 100/100 Auto Tun 5 471 8 GH -4.070 dB Ref Offset 8.64 dB Ref 20.00 dBm Center Free 2.45200000 GH • Start Fre 2.415520000 GH Stop Free CF Step 7.296000 MH الالاندان والداد Auto Freq Offset 0 H: Center 2.45200 GHz #Res BW 30 kHz Span 72.96 MHz 22.00 ms (30000 pts #VBW 100 kHz #Sw

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