



# **RF Test Report**

## For

## **HUNAN FN-LINK TECHNOLOGY LIMITED**

Test Standards: Part 15C Subpart C §15.247				
Product Name:	WIFI+BT Module			
Tested Model:	<u>K255B-SR</u>			
Brand Name:	FN-LÎNK			
FCC ID:	2AATL-K255B-SR			
Classification	(DTS) Digital Transmission System			
Report No.:	EC2105014RF02			
Tested Date:	2021-05-25 to 2021-07-14			
Issued Date:	<u>2021-07-14</u>			
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Note: The test results in this report apply exclusively to the tested model / sample. Without written approval of Hunan Ecloud Testing Technology Co., Ltd., the test report shall not be reproduced except in full.



Report No.: EC2105014RF02

# **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	2021.07.14	Valid	Original Report

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# **Summary Of Test Result**

FCC Rule	Description	Limit	Result	Remark
15.247(a)(2)	6dB Bandwidth	≥ 0.5MHz	Pass	-
-	99% Bandwidth	-	Pass	-
15.247(b)(3)	Output Power	≤ 30dBm	Pass	-
15.247(e)	Power Spectral Density	≤ 8dBm/3kHz	Pass	-
15.247(d)	Conducted Band Edges and Spurious Emission	≤ 30dBc	Pass	-
15.247(d)	Radiated Band Edges and Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 2.86 dB at 4824 MHz
15.207 AC Conducted Emission		15.207(a)	Pass	Under limit 15.51 dB at 0.549 MHz
15.203 & 15.247(b)	5.203 & 15.247(b) Antenna Requirement		Pass	-

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## 1 Test Laboratory

### 1.1 Test facility

CNAS (accreditation number: L11138)

Hunan Ecloud Testing Technology Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

FCC (Designation number: CN1244, Test Firm Registration Number: 793308)

Hunan Ecloud Testing Technology Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

ISED(CAB identifier: CN0012, ISED# :24347)

Hunan Ecloud Testing Technology Co., Ltd. has been listed on the Wireless Device Testing Laboratories list of innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements.

A2LA (Certificate Code: 4895.01)

Hunan Ecloud Testing Technology Co., Ltd. has been listed by American Association for Laboratory

Accreditation to perform electromagnetic emission measurement.





## 2 General Description

## 2.1 Applicant

#### **HUNAN FN-LINK TECHNOLOGY LIMITED**

No. 8 , Litong Road , Liuyang Economic Development Zone , Liuyang City, Hunan Province, China

#### 2.2 Manufacturer

#### **HUNAN FN-LINK TECHNOLOGY LIMITED**

No. 8 , Litong Road , Liuyang Economic Development Zone , Liuyang City, Hunan Province, China

### 2.3 General Description Of EUT

Product	WIFI+BT Module
Model No.	K255B-SR
Additional No.	N/A
<b>Difference Description</b>	N/A
FCC ID	2AATL-K255B-SR
Power Supply	3.3Vdc for EUT
Modulation Technology	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Madulation Tuna	802.11b : DSSS
Modulation Type	802.11g/n : OFDM
Operating Frequency	2412-2462MHz
Number Of Channel	11
Max. Output Power	802.11b : 14.64 dBm (0.0291 W) 802.11g : 14.65 dBm (0.0292 W) 802.11n HT20 : 14.58 dBm (0.0287 W) 802.11n HT40 : 14.60 dBm (0.0288 W)
Antenna Type	FPC Antenna with 2dBi gain
HW Version	V5.0
SW Version	V5.0
I/O Ports	Refer to user's manual

#### NOTE:

- 1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- 2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

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### 2.4 Modification of EUT

No modifications are made to the EUT during all test items.

### 2.5 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- ANSI C63.10-2013
- KDB 558074 D01 15.247 Meas Guidance v05r02

#### Remark:

1. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

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# 3 Test Configuration of Equipment Under Test

## 3.1 Descriptions of Test Mode

11 channels are provided for 802.11b, 802.11g and 802.11n(HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

7 channels are provided for 802.11n(HT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
		7	2442 MHz
		8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz		
5	2432 MHz		
6	2437 MHz		

The transmitter has a maximum conducted output power as follows:

Frequency Range(MHz)	Mode	Rate	Output Power(dBm)
2412~2462	802.11b	1Mbps	14.64
2412~2462	802.11g	6Mbps	14.65
2412~2462	802.11n HT20	MCS0	14.58
2422~2452	802.11n HT40	MCS0	14.60

a. Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

#### 3.2 Test Mode

#### 3.2.1 Antenna Port Conducted Measurement

Summary table of Test Cases				
Took Itom	Modulation			
Test Item	802.11 b	802.11 g	802.11n HT20	802.11n HT40
Conducted	Mode 1: CH01	Mode 1: CH01	Mode 1: CH01	Mode 1: CH03

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Test Cases	Mode 2: CH06	Mode 2: CH06	Mode 2: CH06	Mode 2: CH06
	Mode 3: CH011	Mode 3: CH011	Mode 3: CH011	Mode 3: CH09

### 3.2.2 Radiated Emission Test (Below 1GHz)

Radiated	802.11 b
Test Cases	Mode 1: CH01

Note: 1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type. Z orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Z orientation.

2. Following channel(s) was (were) selected for the final test as listed above

### 3.2.3 Radiated Emission Test (Above 1GHz)

Test Item	Modulation			
rest item	802.11 b	802.11 g	802.11n HT20	802.11n HT40
Dodistod	Mode 1: CH01	Mode 1: CH01	Mode 1: CH01	Mode 1: CH03
Radiated Test Cases	Mode 2: CH06	Mode 2: CH06	Mode 2: CH06	Mode 2: CH06
	Mode 3: CH11	Mode 3: CH11	Mode 3: CH11	Mode 3: CH09

Note: 1. The fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z it was determined that Z orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Z orientation.

- 2. Following channel(s) was (were) selected for the final test as listed above
- For frequency above 18GHz, the measured value is much lower than the limit, therefore, it is not reflected in the report.

#### 3.2.4 Power Line Conducted Emission Test:

AC	
Conducted	Mode 1 : WLAN Linking+ RJ45 Ping + Adapter
Emission	

## 3.3 Support Equipment

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1	WLAN AP	NETGARE	R7800	PY315100319	N/A	unshielded AC
١.	1. VVLAN AP	NETGARE	K7000	P1313100319	IN/A	I/P cable1.2 m
2.	Natabaak	Lamava	E 4700	F00 aDa0	NI/A	shielded cable
۷.	2. Notebook	Lenovo	E470C	FCC sDoC	N/A	DC O/P 1.8 m

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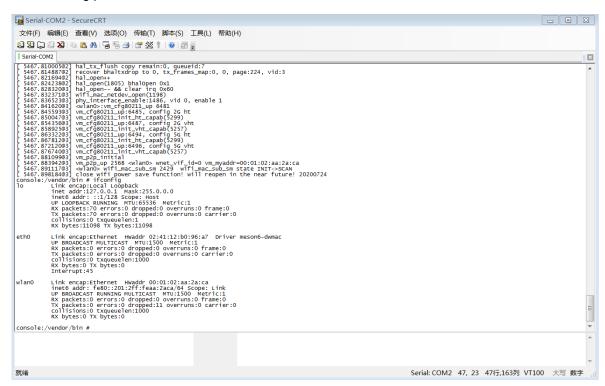
						unshielded AC
						I/P cable1.2 m
3.	Adapter	SWITHCHING	FJ-SW0502000U	FCC sDoC	N/A	N/A
4	WiFi ANT/FPC	OMTO	ID45A0	N1/A	N1/A	N1/0
4.	/L=55mm x2	GMTC	IP15A3	N/A	N/A	N/A
5.	Logitech	Wired Mouse	M-U0026	FCC sDoC	N/A	N/A

### 3.4 Test Setup

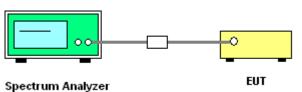
The EUT is continuously communicating to the WIFI tester during the tests.

EUT was set in the Hidden menu mode to enable WIFI communications.

The following picture is a screenshot of the test software



### **Setup diagram for Conducted Test**



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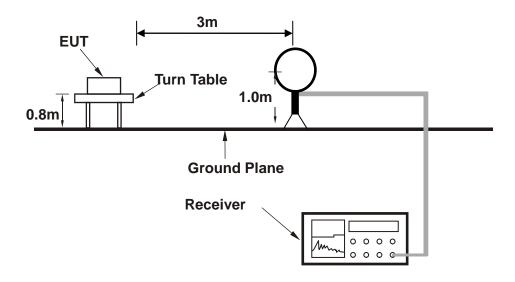
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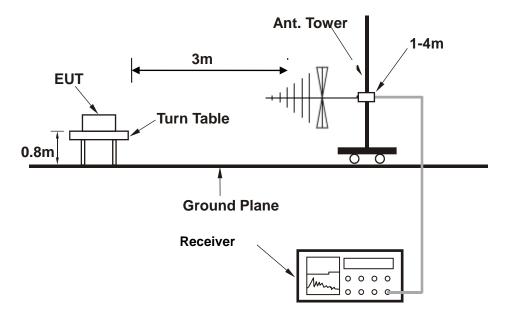
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#### Setup diagram for Raidation(9KHz~30MHz) Test



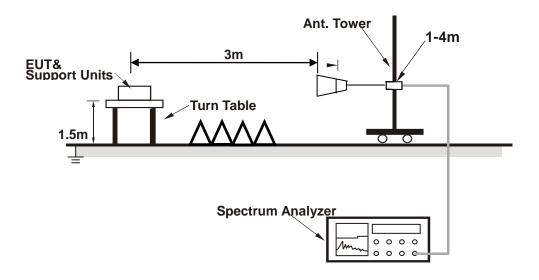
### Setup diagram for Radiation(Below 1G) Test



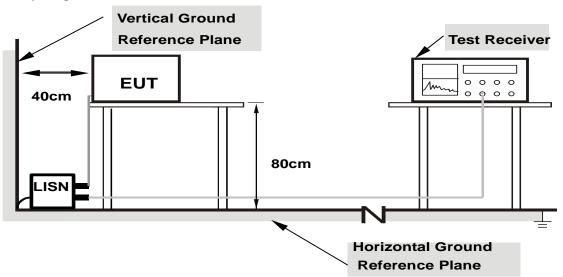
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#### Setup diagram for Radiation (Above1G) Test



#### **Setup diagram for AC Conducted Emission Test**



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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### 3.5 Measurement Results Explanation Example

#### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

#### Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5 dB and 10dB attenuator.

 $Offset(dB) = RF \ cable \ loss(dB) + attenuator \ factor(dB).$ 

$$= 5 + 10 = 15 (dB)$$

#### For all radiated test items:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level Over Limit (dB  $\mu$  V/m) = Level(dB  $\mu$  V/m) - Limit Level (dB  $\mu$  V/m)

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#### 4 Test Result

### 4.1 DTS and Occupied Channel Bandwidth Measurement

#### 4.1.1 Limit of 6dB Bandwidth

FCC §15.247 (a) (2)

The minimum 6 dB bandwidth shall be at least 500 kHz.

#### 4.1.2 Test Procedures

- 1. The testing follows FCC KDB Publication No. 558074 DTS D01 Meas. Guidance v05r02.
- 2. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 3. Turn on the EUT and connect it to measurement instrument.
- 4. Set to the maximum power setting and enable Transmitting 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 6 dB bandwidth must be greater than 500 kHz.
- 6. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) setting should be 1%-5% of OBW, please revise and set the Video bandwidth (VBW) ≥3\* RBW.

#### 4.1.3 Test Result of 6dB Bandwidth

Refer to Appendix A of this test report.

#### 4.1.4 Test Result of 99% Bandwidth

Refer to Appendix B of this test report.

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### 4.2 Maximum Conducted Output Power Measurement

### 4.2.1 Limit of Output Power

FCC §15.247 (b)(3)

For systems using digital modulation in the 2400-2483.5 MHz bands: 30dBm.

#### 4.2.2 Test Procedures

- The testing follows the Measurement Procedure of ANSI C63.10-2013 section 11.9.2.2.4
   Measurement using a spectrum analyzer.
- 2. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 3. Turn on the EUT and connect it to spectrum analyzer.
- 4. Set to the maximum power setting and enaBle Transmitting the EUT transmit continuously
- 5. Measure the duty cycle, x, of the transmitter output signal as described in below:
  - a. Set the center frequency of the instrument to the center frequency of the transmission.
  - b. Set RBW to the largest available Transmitting value.
  - c. Set detector = peak
- Set span to at least 1.5\*OBW.Set RBW=510KHz,VBW=2MHz, Number of points in sweep ≥ 2/3\* span, Sweep time = auto. Detector = RMS
- 7. Allow the sweep to "free run". Trace average 100 traces in RMS mode
- 8. Compute power by integrating the spectrum across the OBW of the signal using the instrument's Channel power measurement function with band limits set equal to the OBW band edges.
- 9. Add 10 log (1/x), where x is the duty cycle. The duty cycle factor has been compensated to the 'offset" of the spectrum analyser.

#### 4.2.3 Test Result of Output Power

Refer to Appendix C of this test report.

#### 4.2.4 Test Result of Duty Cycle

Refer to Appendix D of this test report.

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### 4.3 Maximum Power Spectral Density Measurement

### 4.3.1 Limits of Power Spectral Density

FCC§15.247(e)

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

#### 4.3.2 Test Procedure

- 1. The testing follows Measurement Procedure 8.4 DTS maximum power spectral density level in the fundamental emission of ANSI C63.10-2013 section 11.10.5
- 2. Turn on the EUT and connect it to measurement instrument.
- 3. Measure the duty cycle, x, of the transmitter output signal as described in below:
  - a. Set the center frequency of the instrument to the center frequency of the transmission.
  - b. Set RBW to the largest available Transmitting value.
  - c. Set detector = peak
- Set span to at least 1.5\*OBW.Set RBW= 3 KHz,VBW=10 KHz, Number of points in sweep ≥ 2/3\* span, Sweep time = auto.
- 5. Detector = power averaging (rms), Sweep time = auto couple, Trace mode = averaging (rms) mode over a minimum of 100 traces. Use the peak marker function to determine the maximum power level.
- 6. Add 10 log (1/x), where x is the duty cycle.
- 7. Measure and record the results in the test report.
- 8. The Measured power density (dBm)/ 100kHz is a reference level and used as 30dBc down limit line for Conducted Band Edges and Conducted Spurious Emission.
- 9. Add 10 log(1/x), where x is the duty cycle. The duty cycle factor has been compensated to the 'offset' of the spectrum analyser.

#### 4.3.3 Test Result of Power Spectral Density

Refer to Appendix E of this test report.

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#### 4.4 **Band Edges and Spurious Emission Measurement**

#### 4.4.1 **Limit of Conducted Band Edges and Spurious Emission**

FCC §15.247 (d)

Maximum conducted (average) output power was used to determine compliance, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

#### Test Procedures 4.4.2

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Turn on the EUT and connect it to measurement instrument.
- 3. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If 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 per 15.247(d).
- 4. Measure and record the results in the test report.
- 5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

#### 4.4.3 Test Result of Conducted Band Edges

Refer to Appendix F of this test report.

#### 4.4.4 Test Result of Conducted Spurious Emission

Refer to Appendix G of this test report.

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#### 4.5 Radiated Band Edges and Spurious Emission Measurement

#### 4.5.1 **Limit of Radiated Band Edges and Spurious Emission**

FCC §15.247 (d)

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 30 dB below the highest emission level within the authorized band. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(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

#### 4.5.2 **Test Procedures**

- 1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
- 2. The measurement distance is 3 meter.
- 3. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
- 4. Set to the maximum power setting and enable the EUT transmit continuously.
- 5. Use the following spectrum analyzer settings:
  - Span shall wide enough to fully capture the emission being measured;
  - Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz; VBW RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
  - (3) For average measurement:

VBW = 10 Hz, when duty cycle is no less than 98 percent.

VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control

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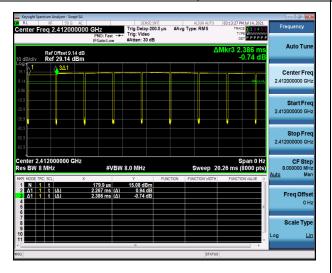
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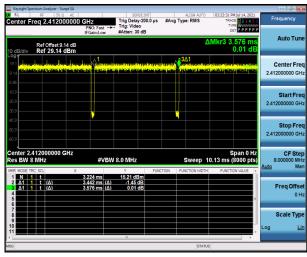
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level for the tested mode of operation.

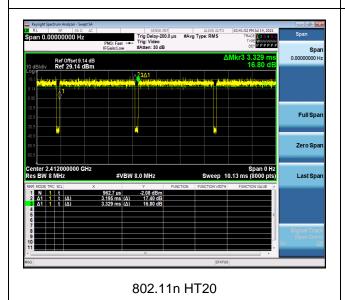
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11b	93.03	2.27	0.440	1kHz
802.11g	96.36	3.44	0.290	300Hz
802.11n HT20	95.80	3.19	0.313	1kHz
802.11n HT40	85.71	0.84	1.190	3kHz





802.11b





6. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

#### 4.5.3 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

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### 4.5.4 Test Result of Radiated Spurious at Band Edges

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal

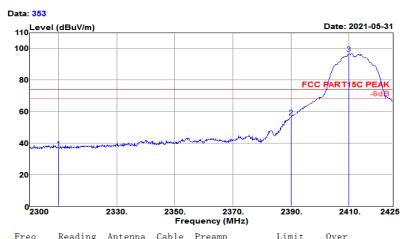
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11b CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m		factor	level	level dBuV/m	limit dB	Remark
2310.000	40.97	27.38	4.08	35.68	36. 75	74.00	-37.25	Peak
2390, 000	60. 59	27. 56	4. 16	35. 88	56. 43	74.00	-17.57	Peak
2410.000	100.99	27.60	4.17	35. 93	96.83	74.00	22. 83	Peak

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Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal

Test Site Temp/Humi : 24℃/62% : 3m Chamber Tested by Pol/Phase : HORIZONTAL : Jack Test Mode Power rating: 120VAc : 802.11b CH01(2412MHz)

EUT : WIFI+BT Module

Model No. : K255B-SR

## Data: 354 110 Level (dBuV/m) Date: 2021-05-31 100 80 60 40 20 0<mark>2300</mark> 350. 2370. Frequency (MHz)

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310. 000	28. 71	27. 38	4. 08	35. 68	24. 49	54. 00	-17.14	Average
2382. 750	41. 03	27. 54	4. 15	35. 86	36. 86	54. 00		Average
2390. 000	35. 46	27. 56	4. 16	35. 88	31. 30	54. 00		Average
2411. 250	92. 37	27. 60	4. 17	35. 93	88. 21	54. 00		Average

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Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

#### Data: 356 110 Level (dBuV/m) Date: 2021-05-31 100 80 60 40 20 0<mark>2300</mark> 350. 2370. Frequency (MHz) 2330. 2390. 2410. 2425 Freq Reading Antenna Cable Preamp Limit 0ver

MHz	level	factor dB/m		factor	level dBuV/m	Remark
2310.000 2390.000 2413.125	57. 93	27. 56	4. 16		74.00	Peak

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Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical

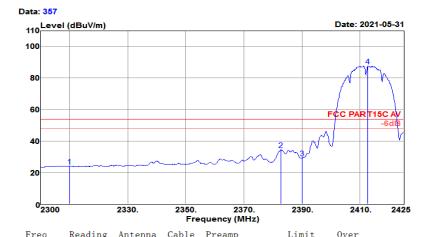
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB	Remark
2310.000	28. 24	27.38	4.08	35. 68	24.02	54.00	-29.98	Average
2382, 750	38.60	27.54	4.15	35.86	34. 43	54.00	-19.57	Average
2390,000	33, 35	27. 56	4.16	35, 88	29. 19	54.00	-24.81	Average
2412.750	91.87	27.61	4.17	35. 93	87.72	54.00	33.72	Average

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Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site Temp/Humi : 3m Chamber : 24℃/62% Tested by Pol/Phase : HORIZONTAL : Jack Test Mode Power rating: 120VAc : 802.11b CH11(2462MHz)

**EUT** : WIFI+BT Module

Model No. : K255B-SR

### Data: 369 110 Level (dBuV/m) Date: 2021-05-31 100 80 60 40 20 0<mark>2450</mark> 2480 2500. Frequency (MHz)

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level	Limit level dBuV/m	Over limit dB	Remark
2463. 140	99. 80	27. 72	4. 19	36. 06	95. 65	74. 00	21. 65	Peak
2483. 500	58. 15	27. 76	4. 19	36. 11	53. 99	74. 00	-20. 01	Peak
2500. 000	46. 52	27. 80	4. 19	36. 15	42. 36	74. 00	-31. 64	Peak

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Tel.:+86-731-89634887





Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi

Tested by : Jack Pol/Phase

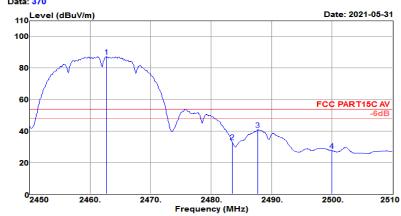
Test Mode : 802.11b CH11(2462MHz) Power rational Power rations and power rational Power ration

Temp/Humi : 24℃/62%

: HORIZONTAL

Power rating: 120VAc

Data: 370



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB		Limit level dBuV/m	Over limit dB	Remark
2462. 720	91. 40	27. 72	4. 19	36. 06	87. 25	54. 00		Average
2483. 500	37. 35	27. 76	4. 19	36. 11	33. 19	54. 00		Average
2487. 740	44. 96	27. 77	4. 19	36. 12	40. 80	54. 00		Average
2500. 000	31. 82	27. 80	4. 19	36. 15	27. 66	54. 00		Average

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Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site : 3m Chamber Tested by : Jack Test Mode : 802.11b CH11(2462MHz) **EUT** 

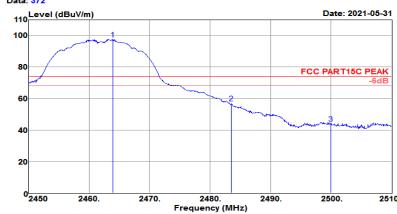
Pol/Phase : VERTICAL Power rating: 120VAc

: 24℃/62%

Temp/Humi

: WIFI+BT Module Model No. : K255B-SR

#### Data: 372



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level	Limit level dBuV/m	Over limit dB	Remark
2463. 980	101. 79	27. 72	4. 19	36. 06	97. 64	74. 00	23. 64	
2483. 500	61. 28	27. 76	4. 19	36. 11	57. 12	74. 00	-16. 88	
2500. 000	48. 33	27. 80	4. 19	36. 15	44. 17	74. 00	-29. 83	

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Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site Temp/Humi : 24℃/62% : 3m Chamber Tested by Pol/Phase : VERTICAL : Jack Test Mode Power rating: 120VAc : 802.11b CH11(2462MHz) **EUT** : WIFI+BT Module

Model No. : K255B-SR

### Data: 373 110 Level (dBuV/m) Date: 2021-05-31 100 80 60 FCC PART15C AV 40 20 0<mark>2450</mark> 2480 2500. 2510 Frequency (MHz)

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2461. 220	92. 65	27. 71	4. 19	36. 05	88. 50	54. 00		Average
2483. 500	39. 90	27. 76	4. 19	36. 11	35. 74	54. 00		Average
2487. 740	47. 68	27. 77	4. 19	36. 12	43. 52	54. 00		Average
2500. 000	33. 89	27. 80	4. 19	36. 15	29. 73	54. 00		Average

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Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal

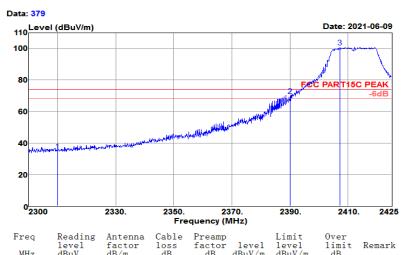
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11g CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m	loss dB	factor dB		level dBuV/m		Remark
2310. 000 2390. 000 2407. 250	74. 17	27. 56	4. 16		70.01	74.00	-3. 99	Peak

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Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11g CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

#### Data: 380 110 Level (dBuV/m) Date: 2021-06-09 100 80 60 40 20 0<mark>2300</mark> 350. 2370. Frequency (MHz) 2330. 2390. 2410. Reading level dBuV Antenna factor dB/m Cable loss dB Preamp factor dB Limit level dBuV/m Over limit dB Freq level dBuV/m Remark MHz 29. 51 53. 23 93. 19 27. 38 27. 56 27. 60 4. 08 4. 16 4. 17 25. 29 49. 07 89. 04 54. 00 54. 00 54. 00 -28. 71 -4. 93 35. 04 2310.000 35.68 Average 2390. 000 2409. 625 Average Average 35. 88 35. 92

FCC ID: 2AATL-K255B-SR www.hn-ecloud.com





Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical

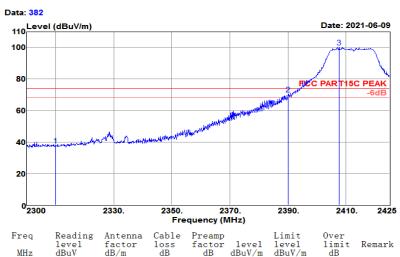
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11g CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m	loss dB	factor dB		level dBuV/m	Remark
2310. 000 2390. 000 2407. 625	74. 51	27. 56	4. 16		70. 35	74.00	Peak

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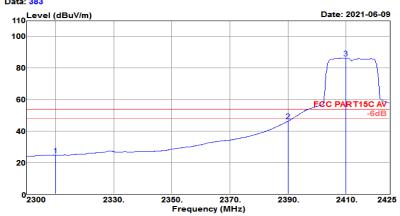


Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical

Test Site Temp/Humi : 24℃/62% : 3m Chamber Tested by Pol/Phase : VERTICAL : Jack Power rating: 120VAc Test Mode : 802.11g CH01(2412MHz)

**EUT** : WIFI+BT Module Model No. : K255B-SR

#### Data: 383



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310. 000	29. 04	27. 38	4. 08	35. 68	24. 82	54. 00		Average
2390. 000	50. 62	27. 56	4. 16	35. 88	46. 46	54. 00		Average
2410. 000	90. 51	27. 60	4. 17	35. 93	86. 35	54. 00		Average

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Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal

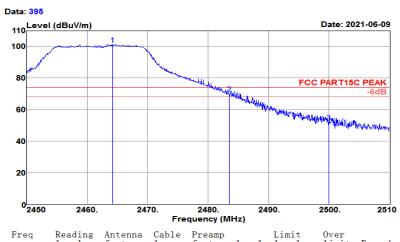
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11g CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level	factor dB/m		factor	level	level dBuV/m		Remark
2483.480	105. 52 74. 18 56. 08	27.76	4. 19	36. 11	70.02	74.00	-3.98	Peak

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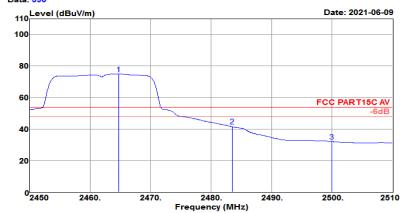


Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site Temp/Humi : 3m Chamber : 24℃/62% Tested by Pol/Phase : HORIZONTAL : Jack Test Mode : 802.11g CH11(2462MHz) Power rating: 120VAc

**EUT** : WIFI+BT Module Model No. : K255B-SR

## Data: 396



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2464. 700	79. 09	27. 72	4. 19	36. 06	74. 94	54. 00	20. 94	Average
2483. 500	45. 89	27. 76	4. 19	36. 11	41. 73	54. 00	-12. 27	Average
2500. 000	36. 29	27. 80	4. 19	36. 15	32. 13	54. 00	-21. 87	Average

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Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical

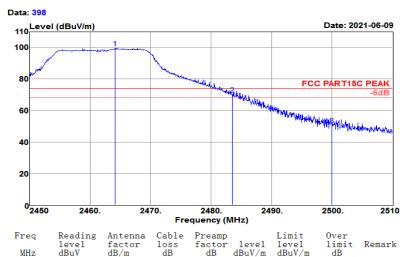
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11g CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level	factor dB/m		factor		level dBuV/m		Remark
	74. 12	27.76	4. 19	36. 11	69.96	74.00		Peak
2500.000	54.87	27.80	4.19	36. 15	50.71	74.00	-23.29	Peak

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Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11g CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

#### Data: 399 110 Level (dBuV/m) Date: 2021-06-09 100 80 60 FCC PART15C AV 40 20 0<mark>2450</mark> 2480 2500. 2510 Frequency (MHz) Freq Reading Antenna Cable Preamp Limit 0ver

MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB 	Remark
2465. 360 2483. 500 2500. 000	77. 78 46. 19 36. 40	27. 72 27. 76 27. 80	4. 19 4. 19 4. 19	36. 06 36. 11 36. 15	73. 63 42. 03 32. 24	54. 00 54. 00 54. 00	-11.97	Average Average

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Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT20 CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

EUT : WIFI+BT Module

Model No. : K255B-SR

MHz	level dBuV	factor dB/m						Remark
2310. 000 2389. 250 2390. 000 2408. 500	74. 38 74. 19	27. 56 27. 56	4. 16 4. 16	35. 87 35. 88	70. 23 70. 03	74.00 74.00	-3. 77 -3. 97	Peak Peak

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Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT20 CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

del No. : K255B-SR

## Data: 406 110 Level (dBuV/m) Date: 2021-06-09 100 80 60 40 20 0<mark>2300</mark> 350. 2370. Frequency (MHz) 2330. 2390. 2425 Freq Reading Antenna Cable Preamp ${\tt Limit}$ 0ver

MHz	level dBuV	factor dB/m	loss dB			level dBuV/m	limit dB	Remark
2310. 000 2390. 000 2409. 625	53. 71	27. 38 27. 56 27. 60	4. 08 4. 16	35. 68 35. 88 35. 92	25. 00 49. 55 87. 30	54. 00 54. 00 54. 00	-4.45	Average Average Average

FCC ID: 2AATL-K255B-SR www.hn-ecloud.com

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Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT20 CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

EUT : WIFI+BT Module

Model No. : K255B-SR

Data: 408 110 Level (dBuV/m) Date: 2021-06-09 100 80 والدرور ويتطالها بالمراجعة والمجار والمجارة والمراجعة وا 60 40 20 0<mark>2300</mark> 350. 2370. Frequency (MHz) 2330. 2390. 2425 Reading level dBuV Antenna factor dB/m Cable loss dB Preamp factor dB Limit level dBuV/m Over limit dB Freq level dBuV/m Remark MHz

35.68

35. 87 35. 88 35. 92 38. 86 69. 48 68. 44 99. 75 74.00 74.00 74.00 74.00 -35. 14 -4. 52 -5. 56 25. 75

Peak

Peak Peak Peak

Building A1, Changsha E Center, No. 18 Xiangtai Avenue, Liuyang Economic and Technological Development Zone, Hunan, P.R.C

2310. 000 2388. 750 2390. 000 2407. 500 43. 08 73. 63 72. 60 103. 90 27. 38 27. 56 27. 56 27. 60 4. 08 4. 16 4. 16 4. 17

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Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.425GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 24 C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT20 CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

odel No. : K255B-SR

## Data: 409 110 Level (dBuV/m) Date: 2021-06-09 100 80 60 40 20 0<mark>2300</mark> 2350. 2370. Frequency (MHz) 2390. 2410. Over Freq Reading Antenna Cable Preamp Limit

MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	Kemark
2310. 000 2390. 000 2408. 250	51.81	27. 38 27. 56 27. 60	4. 08 4. 16 4. 17	35. 68 35. 88 35. 92	26. 15 47. 65 86. 36	54. 00 54. 00 54. 00	-6.35	Average Average Average

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Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal

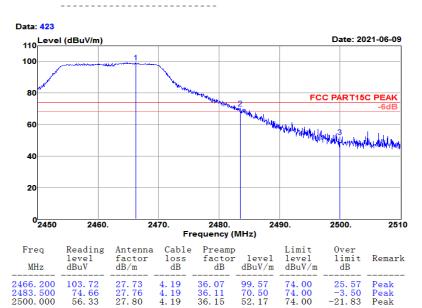
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT20 CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi : 24°C/62%

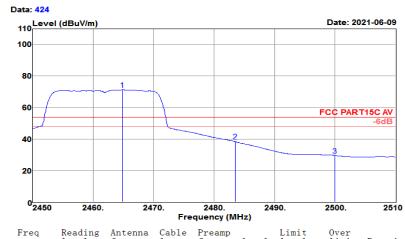
Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT20 CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

-----



MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB 	Remark
2464. 880 2483. 500 2500. 000	42.81	27. 72 27. 76 27. 80	4. 19 4. 19 4. 19	36. 06 36. 11 36. 15	71. 28 38. 65 29. 67	54. 00 54. 00 54. 00	-15.35	Average Average

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Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site Temp/Humi : 24℃/62% : 3m Chamber Tested by Pol/Phase : Jack : VERTICAL Test Mode : 802.11N HT20 CH11(2462MHz) Power rating: 120VAc

**EUT** : WIFI+BT Module Model No. : K255B-SR

> Data: 426 110 Level (dBuV/m) Date: 2021-06-09 100 80 FCC PART15C PEAK 60 40 20 0<mark>2450</mark> 2460. 2480 2500. Frequency (MHz) Reading level dBuV Antenna factor dB/m Cable loss dB Preamp factor dB Limit level dBuV/m Over limit dB Freq level dBuV/m Remark

> > 36. 07 36. 11 36. 15

100. 89 70. 29 50. 43

74. 00 74. 00 74. 00

26.89

-3. 71 -23. 57

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MHz

2468.000

2483. 500 2500. 000

105. 04 74. 45 54. 59

27. 73 27. 76 27. 80

4. 19 4. 19 4. 19



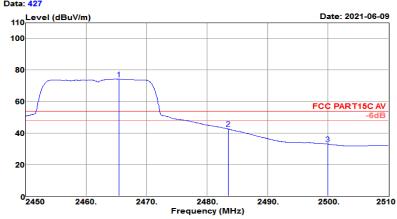


Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site Temp/Humi : 24℃/62% : 3m Chamber Tested by Pol/Phase : VERTICAL : Jack Test Mode : 802.11N HT20 CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module Model No. : K255B-SR

Data: 427



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2465. 480	78. 37	27. 72	4. 19	36. 06	74. 22	54. 00	-11. 13	Average
2483. 500	47. 03	27. 76	4. 19	36. 11	42. 87	54. 00		Average
2500. 000	37. 26	27. 80	4. 19	36. 15	33. 10	54. 00		Average





Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.45GHz	Polarization :	Horizontal

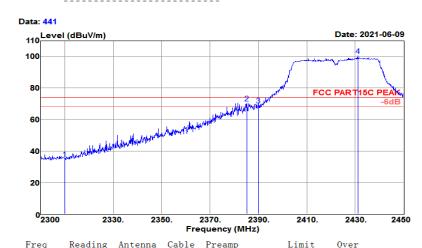
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT40 CH03(2422MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

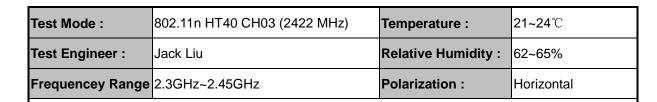


MHz	level	factor dB/m		factor	level	level dBuV/m	limit dB	Remark
2310.000	39. 37				35. 15		-38.85	
2385. 200	74.63					74.00		
2390.000	73. 21	27. 56	4.16	35. 88	69. 05	74.00	-4. 95	
2431.100	104.67	27. 65	4. 18	35. 98	100. 52	74.00	26. 52	Peak

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Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT40 CH03(2422MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

# Data: 442 110 Level (dBuV/m) 80 60 60 60 7 FCC PARTI5C-AV. -6dB 40 20 23300 2330. 2350. 2370. 2390. 2410. 2430. 2450. Frequency (MHz) Freq Reading Antenna Cable Preamp Limit Over

MHz	level dBuV	factor dB/m	loss dB	factor dB		level dBuV/m	limit dB	Remark
2310. 000	28. 21	27. 38	4. 08	35. 68	23. 99	54. 00	-4.82	Average
2390. 000	53. 34	27. 56	4. 16	35. 88	49. 18	54. 00		Average
2437. 400	89. 72	27. 66	4. 18	35. 99	85. 57	54. 00		Average

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Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.45GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT40 CH03(2422MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

MHz	level	factor dB/m		factor	level	level dBuV/m	Remark
2310. 000 2390. 000 2411. 750	69. 52	27. 38 27. 56 27. 61	4. 16		65. 36		Peak

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Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.3GHz~2.45GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT40 CH03(2422MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

## 

MHz	level dBuV	factor dB/m	loss dB	factor dB		level dBuV/m	limit dB	Remark
2310. 000	29. 62	27. 38	4. 08	35. 68	25. 40	54. 00	-8. 69	Average
2390. 000	49. 47	27. 56	4. 16	35. 88	45. 31	54. 00		Average
2410. 850	84. 55	27. 60	4. 17	35. 93	80. 39	54. 00		Average

FCC ID: 2AATL-K255B-SR www.hn-ecloud.com Tel.:+86-731-89634887 Fax.: +86-731-89634887





Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.425GHz~2.51GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT40 CH09(2452MHz) Power rating: 120VAc

EUT : WIFI+BT Module

EUT : WIFI+BT Module

Model No. : K255B-SR

105. 08 74. 91 67. 53

2442.510

2483. 500 2500. 000 27. 67 27. 76 27. 80 4. 18 4. 19 4. 19

Data: 458 110 Level (dBuV/m) Date: 2021-06-03 100 80 60 40 20 02425 2450. 2470 Frequency (MHz) Reading level dBuV Antenna factor dB/m Cable loss dB Preamp factor dB Limit level dBuV/m Over limit dB Freq level dBuV/m Remark MHz

> 36. 01 36. 11 36. 15

100.92

70. 75 63. 37 74. 00 74. 00 74. 00 26.92 Peak -3.25 Peak -10.63 Peak

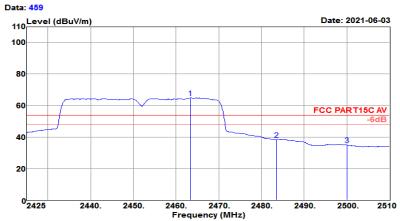




Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.425GHz~2.51GHz	Polarization :	Horizontal

Test Site Temp/Humi : 24℃/62% : 3m Chamber Tested by Pol/Phase : HORIZONTAL : Jack Test Mode : 802.11N HT40 CH09(2452MHz) Power rating: 120VAc

EUT : WIFI+BT Module Model No. : K255B-SR



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2463. 420	69. 00	27. 72	4. 19	36. 06	64. 85	54. 00	10. 85	Average
2483. 500	42. 62	27. 76	4. 19	36. 11	38. 46	54. 00	-15. 54	Average
2500. 000	39. 16	27. 80	4. 19	36. 15	35. 00	54. 00	-19. 00	Average

Tel.:+86-731-89634887





Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.425GHz~2.51GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT40 CH09(2452MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

## Data: 455 110 Level (dBuV/m) 80 FCC PART 15C PEAK -6dB 60 40 20 2425 2440. 2450. 2460. 2470. 2480. 2490. 2500. 2510 Frequency (MHz) Freq Reading Antenna Cable Preamp Limit Over

MHz	level	factor dB/m		factor	level	level dBuV/m		Remark
2467. 160 2483. 500 2500. 000	69.32	27. 73 27. 76 27. 80	4. 19		65. 16		-8.84	Peak

Tel.:+86-731-89634887





Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	2.425GHz~2.51GHz	Polarization :	Vertical

Test Site Temp/Humi : 24℃/62% : 3m Chamber Tested by Pol/Phase : VERTICAL : Jack Test Mode : 802.11N HT40 CH09(2452MHz) Power rating: 120VAc

EUT : WIFI+BT Module Model No. : K255B-SR

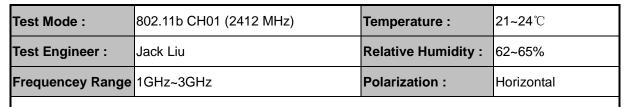
## Data: 456 110 Level (dBuV/m) Date: 2021-06-03 100 80 60 FCC PART15C AV 40 20 0 2425 Frequency (MHz)

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2465. 460	64. 62	27. 72	4. 19	36. 06	60. 47	54. 00	6. 47	Average
2483. 500	38. 50	27. 76	4. 19	36. 11	34. 34	54. 00	-19. 66	Average
2500. 000	35. 92	27. 80	4. 19	36. 15	31. 76	54. 00	-22. 24	Average



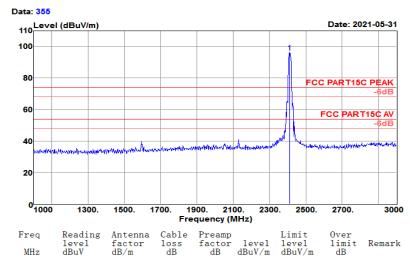


## Test Result of Radiated Spurious Emission (1GHz ~ 10<sup>th</sup> Harmonic)



Test Site Temp/Humi : 24℃/62% : 3m Chamber Tested by : Jack Pol/Phase : HORIZONTAL Power rating: 120VAc Test Mode : 802.11b CH01(2412MHz) : WIFI+BT Module

Model No. : K255B-SR



limit Remark loss factor dB dBuV/m 2412.000 27. 61 4. 17 35. 93 96.37

FCC ID: 2AATL-K255B-SR

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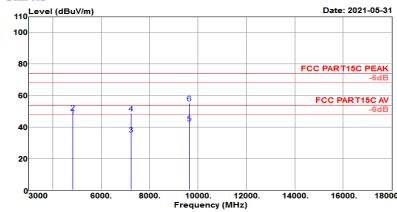
Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

Test Site Temp/Humi : 3m Chamber : 24℃/62% Tested by Pol/Phase : HORIZONTAL : Jack Test Mode Power rating: 120VAc : 802.11b CH01(2412MHz)

EUT : WIFI+BT Module

Model No. : K255B-SR

### Data: 362

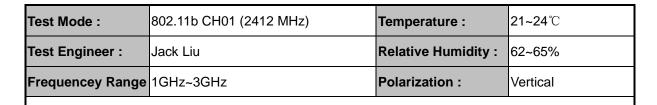


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824. 000	43. 29	30. 95	6. 59	34. 09	46. 74	54. 00	-24.72	Average
4824. 000	45. 83	30. 95	6. 59	34. 09	49. 28	74. 00		Peak
7236. 000	25. 58	35. 47	8. 71	34. 41	35. 35	54. 00		Average
7236. 000	38. 93	35. 47	8. 71	34. 41	48. 70	74. 00		Peak
9648. 000	26. 84	38. 42	11. 55	34. 16	42. 65	54. 00		Average
9648. 000	39. 45	38. 42	11. 55	34. 16	55. 26	74. 00		Peak

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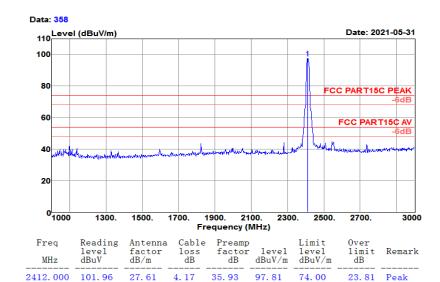
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

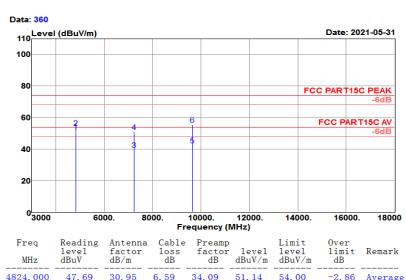
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



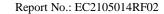
MHZ	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dВ	
4824. 000 4824. 000 7236. 000 7236. 000 9648. 000 9648. 000	47. 69 49. 95 29. 68 41. 12 26. 83 39. 56	30. 95 30. 95 35. 47 35. 47 38. 42 38. 42	6. 59 6. 59 8. 71 8. 71 11. 55 11. 55	34. 09 34. 09 34. 41 34. 41 34. 16 34. 16	51. 14 53. 40 39. 45 50. 89 42. 64 55. 37	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-20. 60 -14. 55 -23. 11	Average Peak Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

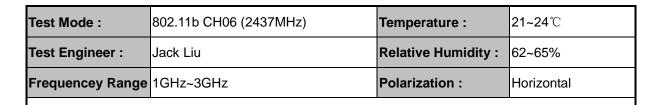
Building A1, Changsha E Center, No. 18 Xiangtai Avenue, Liuyang Economic and Technological Development Zone, Hunan, P.R.C

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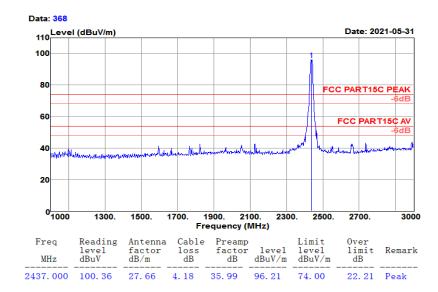
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11b CH06(2437MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11b CH06 (2437MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

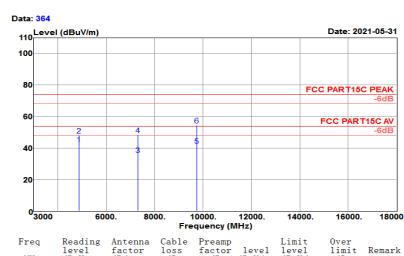
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11b CH06(2437MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB	Remark
4874. 000 4874. 000 7311. 000 7311. 000 9748. 000 9748. 000	38. 66 44. 15 25. 67 38. 40 26. 04 38. 94	31. 02 31. 02 35. 65 35. 65 38. 50 38. 50	6. 97 6. 97 8. 95 8. 95 11. 20 11. 20	34. 04 34. 04 34. 48 34. 48 34. 20 34. 20	42. 61 48. 10 35. 79 48. 52 41. 54 54. 44	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-18. 21 -25. 48	Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

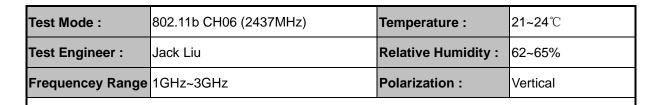
Building A1, Changsha E Center, No. 18 Xiangtai Avenue,

Liuyang Economic and Technological Development Zone, Hunan, P.R.C

FCC ID: 2AATL-K255B-SR www.hn-ecloud.com Tel.:+86-731-89634887







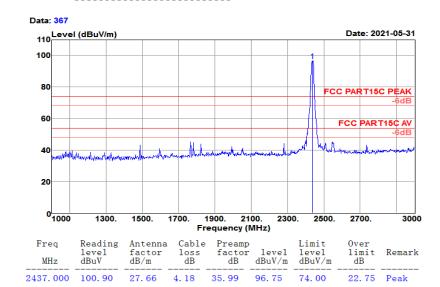
Test Site : 3m Chamber Temp/Humi : 24°C/62%

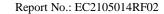
Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH06(2437MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11b CH06 (2437MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

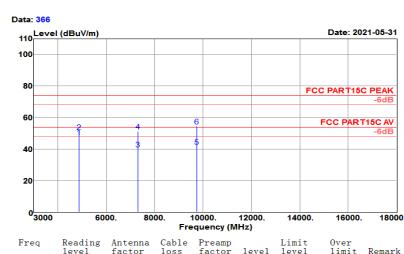
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH06(2437MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB	Remark
4874. 000 4874. 000 7311. 000 7311. 000 9748. 000 9748. 000	43. 60 47. 10 29. 71 41. 21 26. 09 38. 92	31. 02 31. 02 35. 65 35. 65 38. 50 38. 50	6. 97 6. 97 8. 95 8. 95 11. 20 11. 20	34. 04 34. 04 34. 48 34. 48 34. 20 34. 20	47. 55 51. 05 39. 83 51. 33 41. 59 54. 42	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-22. 95 -14. 17	Average Peak Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal

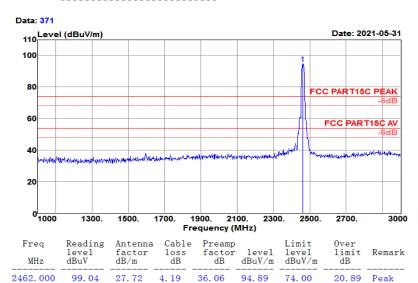
Test Site : 3m Chamber Temp/Humi : 24℃/62%

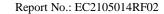
Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11b CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11b CH11 (2462MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11b CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

Data: 378 110 Level (dBuV/m) Date: 2021-05-31 100 80 FCC PART15C PEAK 60 FCC PART15C AV 40 20 03000 14000. 16000. Frequency (MHz) Reading Antenna Cable Preamp Limit 0ver

MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB	Remark
4924. 000	30. 23	31. 09	7. 35	33. 98	34. 69	54. 00	-19. 31	Average
4924. 000	42. 27	31. 09	7. 35	33. 98	46. 73	74. 00	-27. 27	Peak
7386. 000	25. 62	35. 83	9. 19	34. 55	36. 09	54. 00	-17. 91	Average
7386. 000	38. 55	35. 83	9. 19	34. 55	49. 02	74. 00	-24. 98	Peak
9848. 000	26. 53	38. 58	11. 49	34. 24	42. 36	54. 00	-11. 64	Average
9848. 000	39. 90	38. 58	11. 49	34. 24	55. 73	74. 00	-18. 27	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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Test Mode :	802.11b CH11 (2462MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical

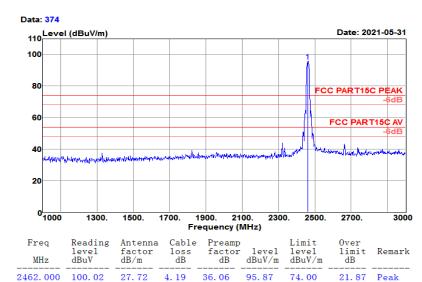
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

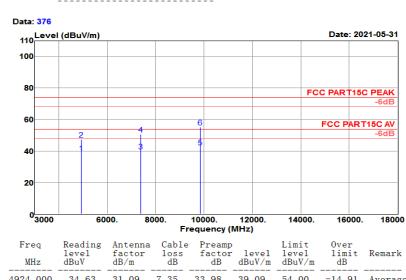
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	dBuV	factor dB/m	loss dB	factor dB	dBuV/m	dBuV/m	limit dB	Kemark
4924. 000 4924. 000 7386. 000 7386. 000 9848. 000 9848. 000	34. 63 42. 78 29. 33 40. 14 26. 55 39. 46	31. 09 31. 09 35. 83 35. 83 38. 58 38. 58	7. 35 7. 35 9. 19 9. 19 11. 49 11. 49	33. 98 33. 98 34. 55 34. 55 34. 24 34. 24	39. 09 47. 24 39. 80 50. 61 42. 38 55. 29	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-26. 76 -14. 20 -23. 39	Average Peak Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

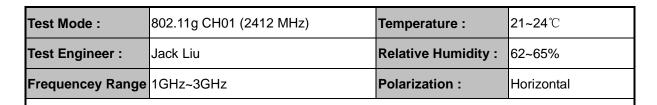
FCC ID: 2AATL-K255B-SR www.hn-ecloud.com

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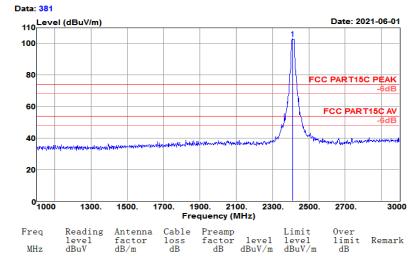
Temp/Humi Test Site : 3m Chamber : 24℃/62%

Tested by Pol/Phase : HORIZONTAL : Jack

: 802.11g CH01(2412MHz) Test Mode Power rating: 120VAc

**EUT** : WIFI+BT Module

Model No. : K255B-SR



level dBuV/m 2412.000 107.28 27.61 4.17 35. 93 103. 13 74.00 29.13 Peak

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Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

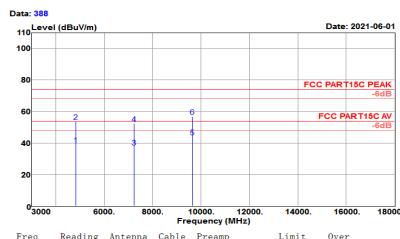
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11g CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

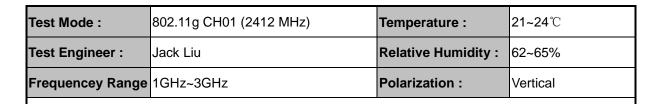


MHz	level dBuV	factor dB/m	loss dB	factor dB		level dBuV/m	limit dB	Remark
4824.000 4824.000 7236.000 7236.000 9648.000 9648.000	35. 60 50. 12 27. 70 42. 55 28. 08 41. 06		6. 59 6. 59 8. 71 8. 71 11. 55 11. 55	34. 09 34. 09 34. 41 34. 41 34. 16 34. 16	39. 05 53. 57 37. 47 52. 32 43. 89 56. 87	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-20. 43 -16. 53 -21. 68	Average Peak Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.







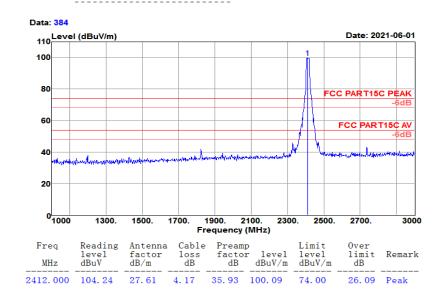
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11g CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

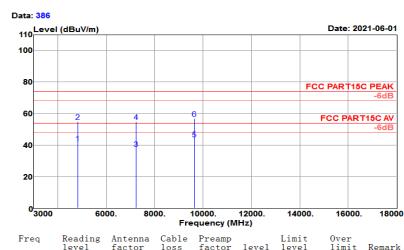
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11g CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	dBuV	factor dB/m	loss dB	factor dB	dBuV/m	dBuV/m	limit dB	Kemark
4824. 000 4824. 000 7236. 000 7236. 000 9648. 000 9648. 000	37. 78 51. 45 27. 86 44. 99 28. 09 41. 15	30. 95 30. 95 35. 47 35. 47 38. 42 38. 42	6. 59 6. 59 8. 71 8. 71 11. 55 11. 55	34. 09 34. 09 34. 41 34. 41 34. 16 34. 16	41. 23 54. 90 37. 63 54. 76 43. 90 56. 96	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-19. 10 -16. 37 -19. 24	Average Peak Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Building A1, Changsha E Center, No. 18 Xiangtai Avenue,

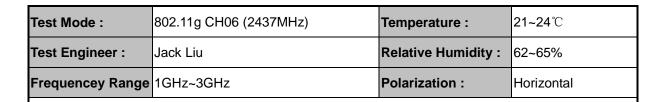
Liuyang Economic and Technological Development Zone, Hunan, P.R.C

FCC ID: 2AATL-K255B-SR www.hn-ecloud.com

Tel.:+86-731-89634887







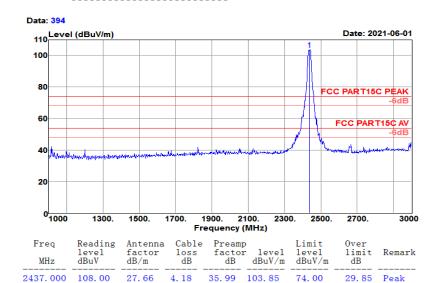
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11g CH06(2437MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

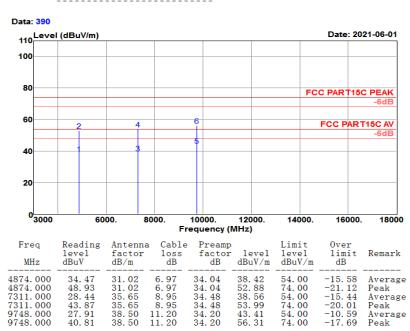
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11g CH06(2437MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.





Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical

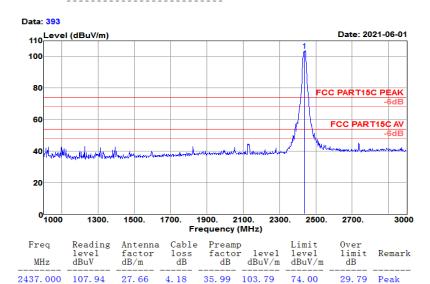
Temp/Humi Test Site : 3m Chamber : 24℃/62%

Tested by Pol/Phase : Jack : VERTICAL

Test Mode : 802.11g CH06(2437MHz) Power rating: 120VAc

**EUT** : WIFI+BT Module

Model No. : K255B-SR



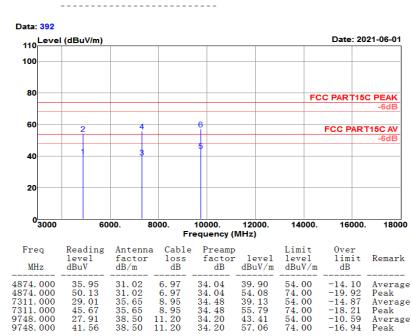




Test Mode :	802.11g CH06 (2437MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

Temp/Humi : 24℃/62% Test Site : 3m Chamber Tested by Pol/Phase : Jack : VERTICAL : 802.11g CH06(2437MHz) Power rating: 120VAc Test Mode **EUT** : WIFI+BT Module

: K255B-SR Model No.



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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Average Peak





Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal

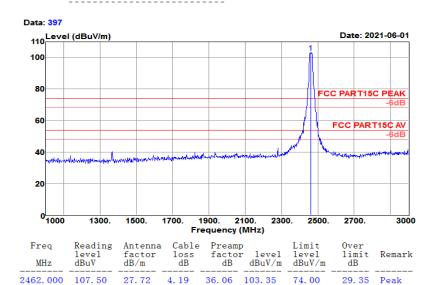
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11g CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR







Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

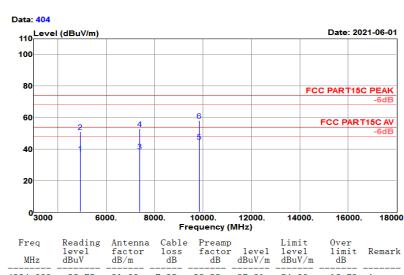
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11g CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



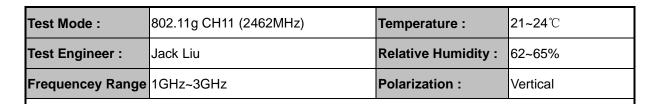
MHz	dBuV	factor dB/m	loss dB	factor dB		dBuV/m	limit dB	Remark
4924. 000 4924. 000 7386. 000 7386. 000 9848. 000 9848. 000	32. 75 46. 66 28. 29 42. 58 28. 84 42. 30	31. 09 31. 09 35. 83 35. 83 38. 58 38. 58	7. 35 7. 35 9. 19 9. 19 11. 49 11. 49	33. 98 33. 98 34. 55 34. 55 34. 24 34. 24	37. 21 51. 12 38. 76 53. 05 44. 67 58. 13	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-22. 88 -15. 24 -20. 95	Average Peak Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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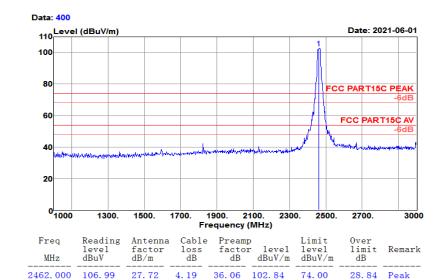
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11g CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



FCC ID: 2AATL-K255B-SR www.hn-ecloud.com





Test Mode :	802.11g CH11 (2462MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range 3GHz~18GHz		Polarization :	Vertical

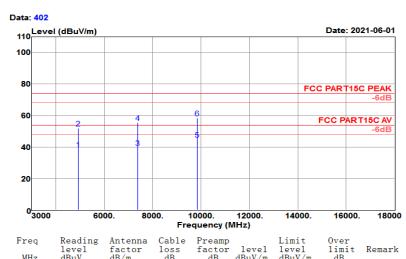
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11g CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	dBuV	factor dB/m	loss dB	factor dB		dBuV/m	limit dB	Kemark
4924. 000 4924. 000 7386. 000 7386. 000 9848. 000 9848. 000	34. 26 47. 51 29. 15 45. 06 28. 80 42. 47	31. 09 31. 09 35. 83 35. 83 38. 58 38. 58	7. 35 7. 35 9. 19 9. 19 11. 49 11. 49	33. 98 33. 98 34. 55 34. 55 34. 24 34. 24	38. 72 51. 97 39. 62 55. 53 44. 63 58. 30	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-22. 03 -14. 38 -18. 47	Average Peak Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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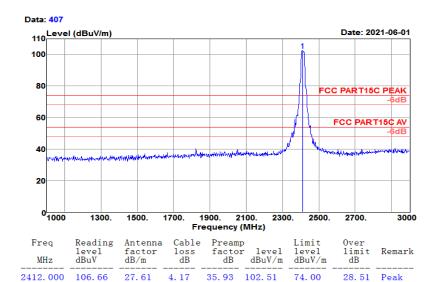


Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi : 24℃/62% Tested by Pol/Phase : HORIZONTAL : Jack

Test Mode : 802.11N HT20 CH01(2412MHz) Power rating: 120VAc

**EUT** : WIFI+BT Module Model No. : K255B-SR



FCC ID: 2AATL-K255B-SR www.hn-ecloud.com





Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

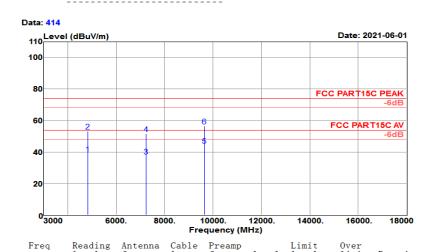
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT20 CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m	loss dB	factor dB	dBuV/m	level dBuV/m	limit dB	Remark
4824. 000	35. 53	30. 95	6. 59	34. 09	38. 98	54. 00	-16.54	Average
4824. 000	49. 72	30. 95	6. 59	34. 09	53. 17	74. 00		Peak
7236. 000	27. 69	35. 47	8. 71	34. 41	37. 46	54. 00		Average
7236. 000	41. 83	35. 47	8. 71	34. 41	51. 60	74. 00		Peak
9648. 000	28. 17	38. 42	11. 55	34. 16	43. 98	54. 00		Average
9648. 000	40. 78	38. 42	11. 55	34. 16	56. 59	74. 00		Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

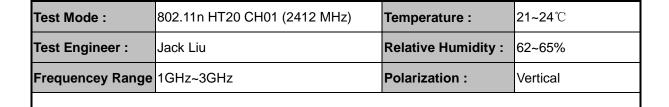
FCC ID: 2AATL-K255B-SR www.hn-ecloud.com

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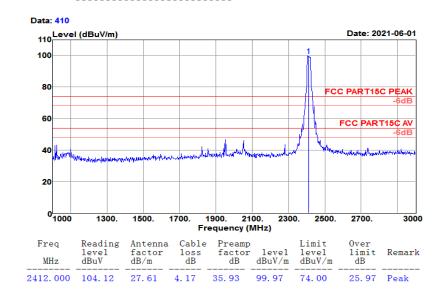
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT20 CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



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Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT20 CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

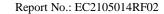
Model No. : K255B-SR

Data: 412 110 Level (dBuV/m) Date: 2021-06-01 100 80 FCC PART15C PEAK 60 FCC PART15C AV 20 03000 10000. 14000. 16000. Frequency (MHz) Limit Reading Antenna Cable Preamn Over

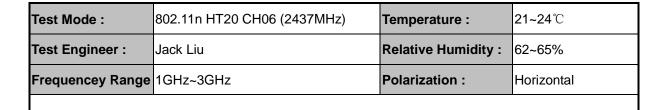
MHz	level dBuV	factor dB/m	l Cable loss dB	factor dB		level dBuV/m	limit dB	Remark
4824. 000 4824. 000 7236. 000 7236. 000 9648. 000 9648. 000	38. 12 51. 54 27. 90 45. 27 28. 16 41. 63		6. 59 6. 59 8. 71 8. 71 11. 55 11. 55	34. 09 34. 09 34. 41 34. 41 34. 16 34. 16	41. 57 54. 99 37. 67 55. 04 43. 97 57. 44	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-19. 01 -16. 33 -18. 96	Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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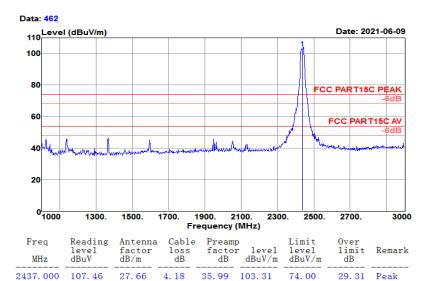




Test Site : 3m Chamber Temp/Humi : 24℃/62% Tested by Pol/Phase : HORIZONTAL : Jack

Test Mode : 802.11N HT20 CH06(2437MHz) Power rating: 120VAc

**EUT** : WIFI+BT Module Model No. : K255B-SR



FCC ID: 2AATL-K255B-SR www.hn-ecloud.com





Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

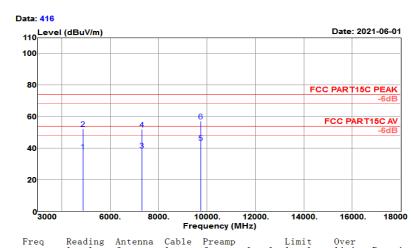
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT20 CH06(2437MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



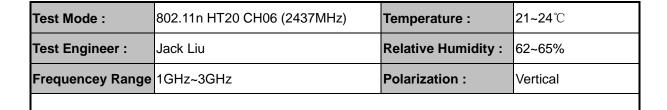
MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB	Remark
4874. 000 4874. 000 7311. 000 7311. 000 9748. 000 9748. 000	33. 95 48. 27 28. 51 41. 75 28. 02 41. 67	31. 02 31. 02 35. 65 35. 65 38. 50 38. 50	6. 97 6. 97 8. 95 8. 95 11. 20 11. 20	34. 04 34. 04 34. 48 34. 48 34. 20 34. 20	37. 90 52. 22 38. 63 51. 87 43. 52 57. 17	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-21. 78 -15. 37 -22. 13	Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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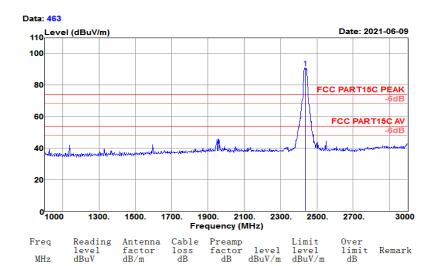




Test Site : 3m Chamber Temp/Humi : 24℃/62% Tested by Pol/Phase : Jack : VERTICAL

Test Mode : 802.11N HT20 CH06(2437MHz) Power rating: 120VAc

**EUT** : WIFI+BT Module Model No. : K255B-SR



35.99

90.95

74.00

2437.000

95. 10

27.66

4.18

FCC ID: 2AATL-K255B-SR www.hn-ecloud.com





Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	<b>21~24</b> ℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

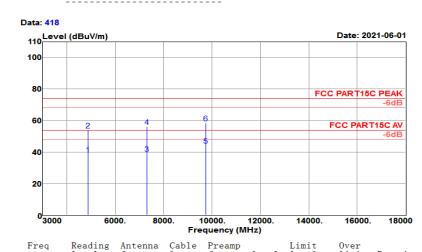
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT20 CH06(2437MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB	Remark
4874. 000	34. 80	31. 02	6. 97	34. 04	38. 75	54. 00		Average
4874. 000	49. 79	31. 02	6. 97	34. 04	53. 74	74. 00		Peak
7311. 000	28. 95	35. 65	8. 95	34. 48	39. 07	54. 00		Average
7311. 000	46. 15	35. 65	8. 95	34. 48	56. 27	74. 00		Peak
9748. 000	28. 57	38. 50	11. 20	34. 20	44. 07	54. 00		Average
9748. 000	42. 89	38. 50	11. 20	34. 20	58. 39	74. 00		Peak

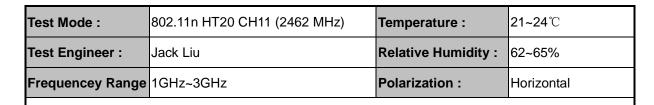
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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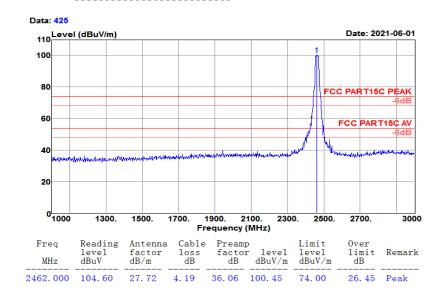


Test Site : 3m Chamber Temp/Humi :  $24^{\circ}$ C/62% Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT20 CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



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Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

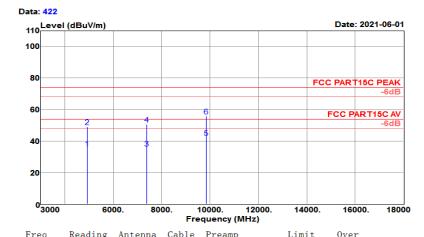
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT20 CH11(2462MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

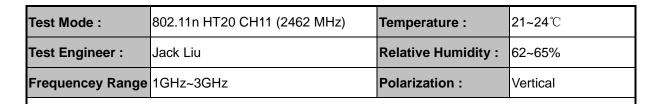


MHz	level dBuV	factor dB/m	loss dB	factor dB		level dBuV/m	limit dB	Remark
4924. 000 4924. 000 7386. 000 7386. 000 9848. 000 9848. 000	30. 96 44. 46 25. 05 40. 15 26. 20 39. 87	31. 09 31. 09 35. 83 35. 83 38. 58 38. 58	7. 35 7. 35 9. 19 9. 19 11. 49 11. 49	33. 98 33. 98 34. 55 34. 55 34. 24 34. 24	35. 42 48. 92 35. 52 50. 62 42. 03 55. 70	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-25. 08 -18. 48	Average Peak Average

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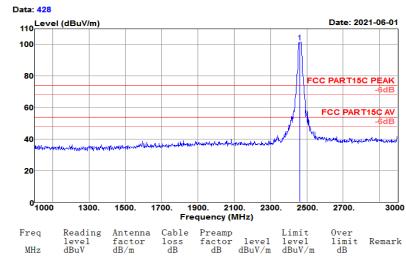




Test Site : 3m Chamber Temp/Humi : 24℃/62% Tested by Pol/Phase : Jack : VERTICAL Test Mode : 802.11N HT20 CH11(2462MHz) Power rating: 120VAc

**EUT** : WIFI+BT Module

Model No. : K255B-SR



FCC ID: 2AATL-K255B-SR www.hn-ecloud.com

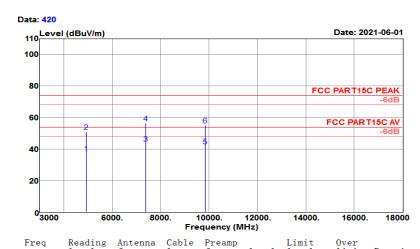




Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical



Model No. : K255B-SR



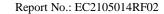
MHz	level dBuV	factor dB/m	loss dB	factor dB	dBuV/m	level dBuV/m	limit dB	Remark
4924. 000 4924. 000 7386. 000 7386. 000 9848. 000 9848. 000	32. 92 46. 42 32. 91 45. 93 26. 16 39. 21	31. 09 31. 09 35. 83 35. 83 38. 58 38. 58	7. 35 7. 35 9. 19 9. 19 11. 49 11. 49	33. 98 33. 98 34. 55 34. 55 34. 24 34. 24	37. 38 50. 88 43. 38 56. 40 41. 99 55. 04	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-23. 12 -10. 62 -17. 60 -12. 01	Average Peak Average Peak Average Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

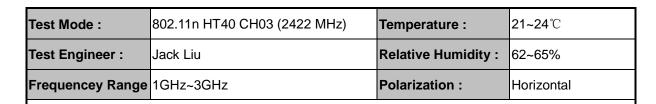
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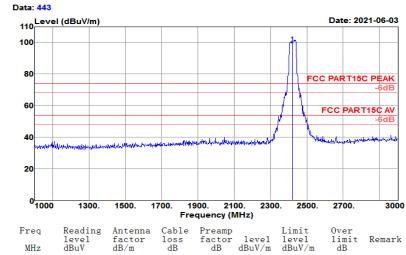
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by Pol/Phase : HORIZONTAL : Jack

Test Mode : 802.11N HT40 CH03(2422MHz) Power rating: 120VAc

**EUT** : WIFI+BT Module

Model No. : K255B-SR



level dBuV/m MHz dB 2422.000 103.33 27.63 4.18 35.96 99.18 74.00 25.18 Peak

FCC ID: 2AATL-K255B-SR

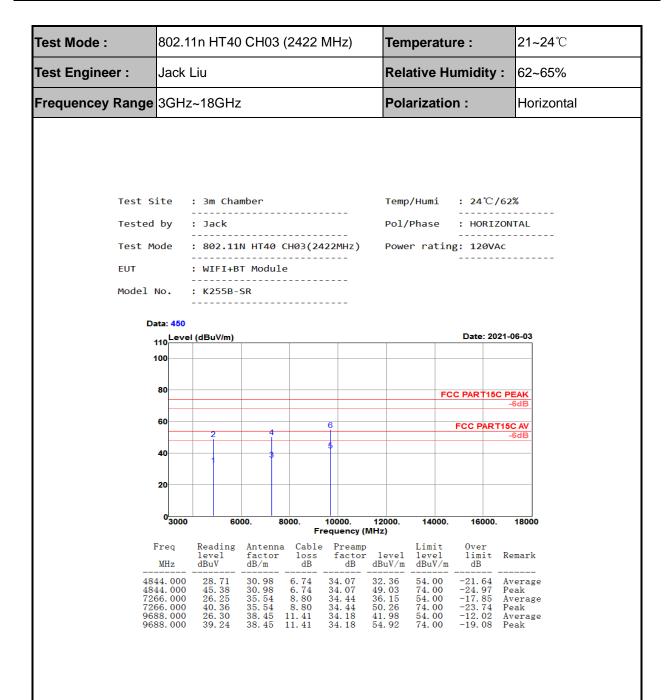
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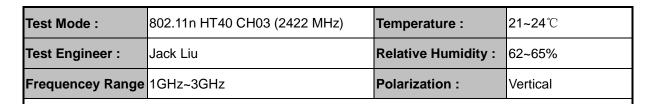


Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

FCC ID: 2AATL-K255B-SR www.hn-ecloud.com







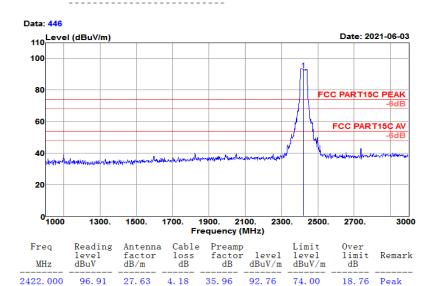
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT40 CH03(2422MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR



FCC ID: 2AATL-K255B-SR www.hn-ecloud.com





Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	<b>21~24℃</b>
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

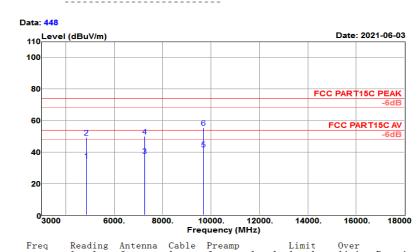
Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT40 CH03(2422MHz) Power rating: 120VAC

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB	Remark
4844. 000	30. 92	30. 98	6. 74	34. 07	34. 57	54. 00	-19. 43	Average
4844. 000	45. 65	30. 98	6. 74	34. 07	49. 30	74. 00	-24. 70	Peak
7266. 000	27. 62	35. 54	8. 80	34. 44	37. 52	54. 00	-16. 48	Average
7266. 000	40. 16	35. 54	8. 80	34. 44	50. 06	74. 00	-23. 94	Peak
9688. 000	26. 35	38. 45	11. 41	34. 18	42. 03	54. 00	-11. 97	Average
9688. 000	39. 80	38. 45	11. 41	34. 18	55. 48	74. 00	-18. 52	Peak

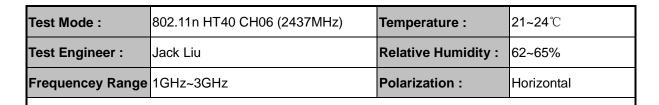
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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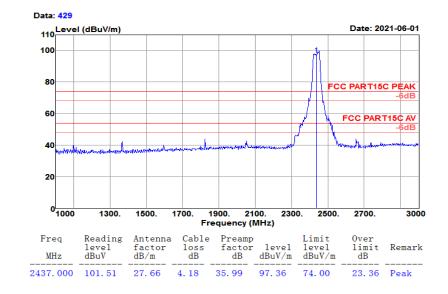
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT40 CH06(2437MHz) Power rating: 120VAc

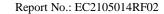
EUT : WIFI+BT Module

Model No. : K255B-SR

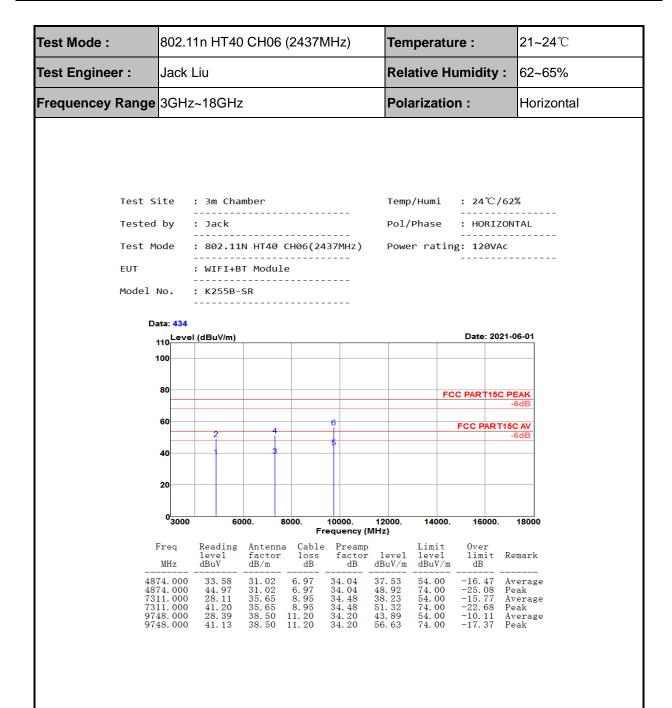


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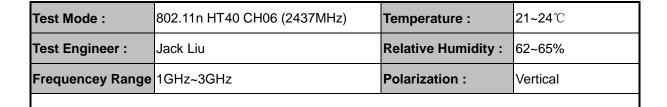


Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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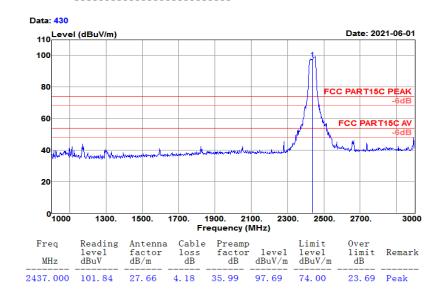






EUT : WIFI+BT Module

Model No. : K255B-SR



FCC ID: 2AATL-K255B-SR www.hn-ecloud.com





Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

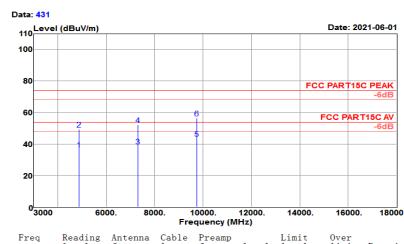
Test Site : 3m Chamber Temp/Humi : 24°C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT40 CH06(2437MHz) Power rating: 120VAC

EUT : WIFI+BT Module

Model No. : K255B-SR



MHz	dBuV	factor dB/m	loss dB	factor dB		dBuV/m	limit dB	Remark
4874. 000 4874. 000 7311. 000 7311. 000 9748. 000 9748. 000	32. 73 45. 27 28. 62 42. 11 28. 06 41. 10	31. 02 31. 02 35. 65 35. 65 38. 50 38. 50	6. 97 6. 97 8. 95 8. 95 11. 20 11. 20	34. 04 34. 04 34. 48 34. 48 34. 20 34. 20	36. 68 49. 22 38. 74 52. 23 43. 56 56. 60	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-24. 78 -15. 26 -21. 77	Average Peak Average

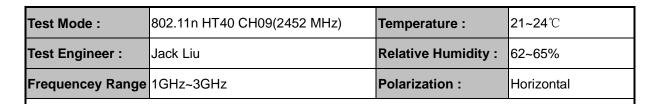
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT40 CH09(2452MHz) Power rating: 120VAc

EUT : WIFI+BT Module

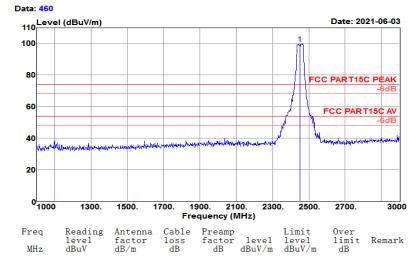
Model No. : K255B-SR

2452.000 104.09

27.69

4.18

el No. : K255B-SR



36.03

99. 93

74.00

25.93 Peak

FCC ID: 2AATL-K255B-SR www.hn-ecloud.com





Test Mode :	802.11n HT40 CH09(2452 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber Temp/Humi : 24°C/62%

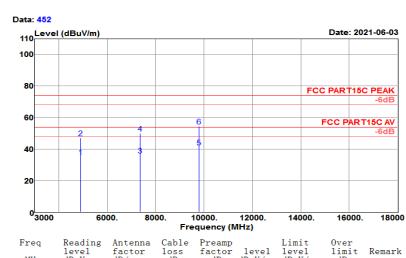
Tested by : Jack Pol/Phase : HORIZONTAL

Test Mode : 802.11N HT40 CH09(2452MHz) Power rating: 120VAc

EUT : WIFI+BT Module

. WILLIAM HOUSE

Model No. : K255B-SR



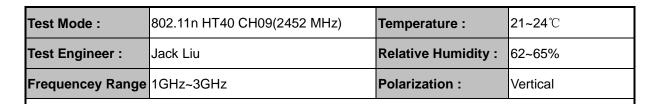
MHz	level dBuV	factor dB/m	loss dB	factor dB	level dBuV/m	level dBuV/m	limit dB	Remark
4904. 000 4904. 000 7356. 000 7356. 000 9808. 000 9808. 000	30. 85 42. 92 25. 55 39. 59 25. 95 39. 09	31. 07 31. 07 35. 75 35. 75 38. 55 38. 55	7. 20 7. 20 9. 09 9. 09 11. 10 11. 10	34. 01 34. 01 34. 52 34. 52 34. 22 34. 22	35. 11 47. 18 35. 87 49. 91 41. 38 54. 52	54. 00 74. 00 54. 00 74. 00 54. 00 74. 00	-24.09	Average Peak Average

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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Test Site : 3m Chamber Temp/Humi : 24℃/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11N HT40 CH09(2452MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

Data: 457 110 Level (dBuV/m) Date: 2021-06-03 100 80 60 20 01000 1500. 1900. 2100. Frequency (MHz) Reading level dBuV Antenna factor dB/m Cable loss dB Preamp factor dB Limit level dBuV/m Over limit dB Freq level dBuV/m Remark MHz

36.03

93. 98

74.00

2452.000

98.14

27.69

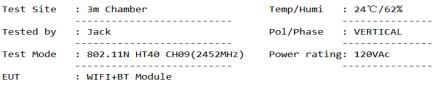
4.18

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Test Mode :	802.11n HT40 CH09(2452 MHz)	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical



Model No. : K255B-SR

Data: 454 110 Level (dBuV/m) Date: 2021-06-03 100 80 FCC PART15C PEAK 60 FCC PART15C AV 40 20 03000 10000. 14000. 16000. Frequency (MHz) Limit Reading Antenna Cable Preamn

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4904. 000	31. 52	31. 07	7. 20	34. 01	35. 78	54. 00	-18. 22	Average
4904. 000	41. 88	31. 07	7. 20	34. 01	46. 14	74. 00	-27. 86	Peak
7356. 000	25. 68	35. 75	9. 09	34. 52	36. 00	54. 00	-18. 00	Average
7356. 000	39. 59	35. 75	9. 09	34. 52	49. 91	74. 00	-24. 09	Peak
9808. 000	25. 46	38. 55	11. 10	34. 22	40. 89	54. 00	-13. 11	Average
9808. 000	38. 91	38. 55	11. 10	34. 22	54. 34	74. 00	-19. 66	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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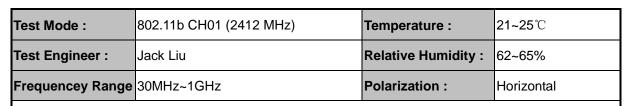
Liuyang Economic and Technological Development Zone, Hunan, P.R.C

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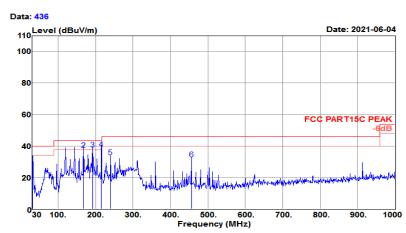
# Test Result of Radiated Spurious Emission (30MHz ~ 1GHz)



Test Site : 3m Chamber Temp/Humi : 23℃/62% Tested by : Jack Pol/Phase : HORIZONTAL Power rating: 120VAc Test Mode : 802.11b CH01(2412MHz)

: WIFI+BT Module

Model No. : K255B-SR



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB		Limit level dBuV/m	Over limit dB	Remark
31. 940	47. 15	13. 88	0. 95	32. 60	29. 38	40. 00	-10. 62	QP
167. 740	54. 70	13. 45	2. 22	32. 57	37. 80	43. 50	-5. 70	QP
191. 990	57. 45	10. 80	2. 38	32. 59	38. 04	43. 50	-5. 46	QP
215. 270	58. 49	9. 89	2. 55	32. 60	38. 33	43. 50	-5. 17	QP
239. 520	51. 35	11. 77	2. 73	32. 60	33. 25	46. 00	-12. 75	QP
455. 830	44. 54	16. 25	3. 75	32. 76	31. 78	46. 00	-14. 22	QP

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Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~25℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequencey Range	30MHz~1GHz	Polarization :	Vertical

Test Site : 3m Chamber Temp/Humi : 23 °C/62%

Tested by : Jack Pol/Phase : VERTICAL

Test Mode : 802.11b CH01(2412MHz) Power rating: 120VAc

EUT : WIFI+BT Module

Model No. : K255B-SR

#### Data: 435 110 Level (dBuV/m) Date: 2021-06-04 100 80 60 FCC PART15C PEAK 40 100. 200. 300. 400. 500. 600. 700. 800. 900. 1000 Frequency (MHz)

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level	Limit level dBuV/m	Over limit dB	Remark
31, 940	52, 62	13.88	0. 95	32, 60	34, 85	40.00	-5, 15	QΡ
95, 960		8. 84	1. 63	32, 51	39. 12	43.50	-4. 38	
107, 600	49.32	10.09	1.75	32.51	28, 65	43.50	-14.85	QP
119.240	53. 26	11.23	1.86	32. 52	33.83	43.50	-9.67	QP
167, 740	47.19	13.45	2.22	32.57	30, 29	43.50	-13.21	QP
500.450	44.38	16.84	4.00	32.80	32.42	46.00	-13.58	QP



## 4.6 AC Conducted Emission Measurement

### 4.6.1 Limit of AC Conducted Emission

FCC §15.207

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted	d limit (dBμV)
Frequency of emission (MHZ)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

<sup>\*</sup>Decreases with the logarithm of the frequency.

### 4.6.2 Test Procedures

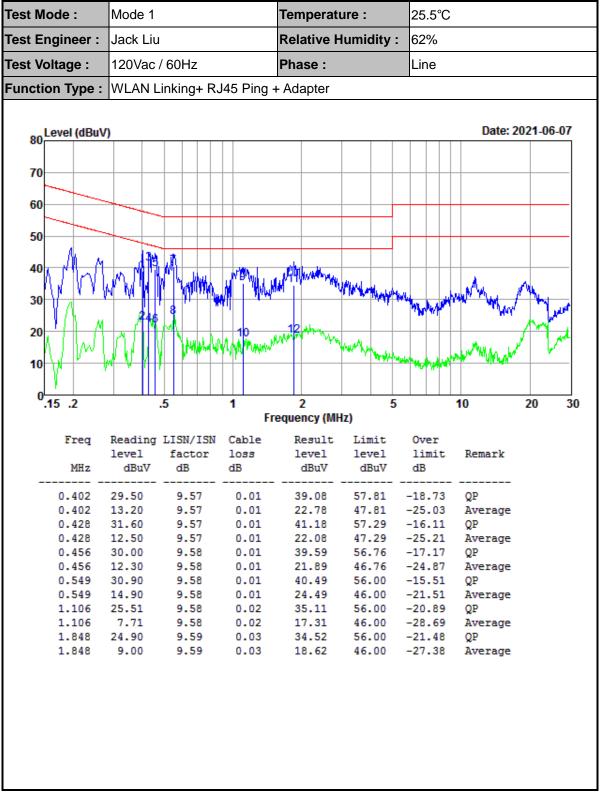
- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- 6. Both sides of AC line were checked for maximum conducted interference.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

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### 4.6.3 Test Result of AC Conducted Emission



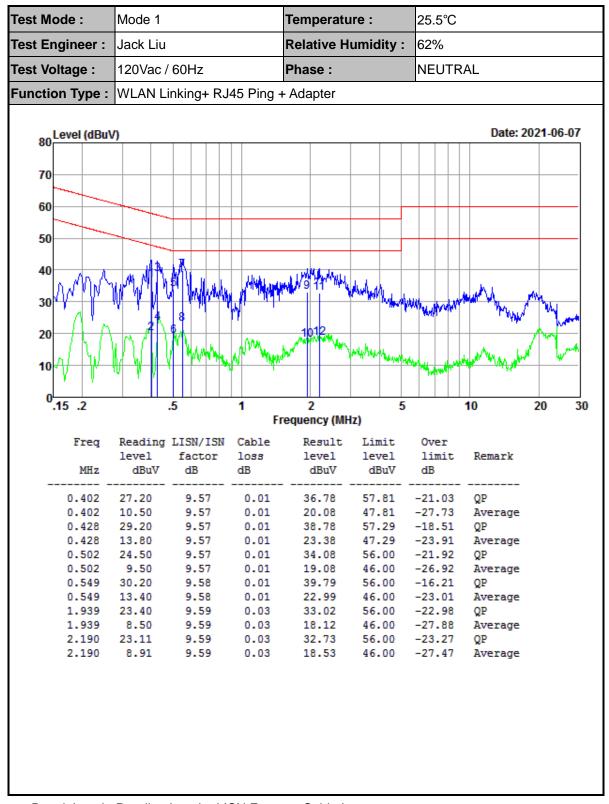
Result Level= Reading Level + LISN Factor + Cable Loss

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Result Level= Reading Level + LISN Factor + Cable Loss

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4.7 Antenna Requirements

4.7.1 Standard Applicable

According to antenna requirement of §15.203.

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the

responsible party shall be used with the device. The use of a permanently attached antenna or of an

antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to

comply with the provisions of this Section. The manufacturer may design the unit so that a broken

antenna can be re-placed by the user, but the use of a standard antenna jack or electrical connector

is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does

the providence of Goodiene Toletti, Tolette, Toletti, Tolette, or Toletti and Toletti and Toletti and Toletti

not apply to intentional radiators that must be professionally installed, such as perimeter protection

systems and some field disturbance sensors, or to other intentional radiators which, in accordance

with Section 15.31(d), must be measured at the installation site. However, the installer shall be

responsible for ensuring that the proper antenna is employed so that the limits in this Part are not

exceeded..

And according to §15.247(4)(1), system operating in the 2400-2483.5MHz bands that are used

exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain

greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1

dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 Antenna Connected Construction

FPC type Antenna design is used.

4.7.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum

peak output power limit.

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# 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	Keysight	N9010A	MY56070788	2021-01-05	2022-01-04	Conducted
Power Sensor	Keysight	U2021XA	MY56510025	2021-01-05	2022-01-04	Conducted
Power Sensor	Keysight	U2021XA	MY57030005	2021-01-05	2022-01-04	Conducted
Power Sensor	Keysight	U2021XA	MY56510018	2021-01-05	2022-01-04	Conducted
Power Sensor	Keysight	U2021XA	MY56480002	2021-01-05	2022-01-04	Conducted
Thermal Chamber	Howkin	UHL-34	19111801	2021-04-21	2022-04-20	Conducted
Base Station	R&S	CMW 270	101231	2021-01-05	2022-01-04	Conducted
Signal Generator (Interferer)	Keysight	N5182B	MY56200384	2021-01-05	2022-01-04	Conducted
Signal Generator (Blocker)	Keysight	N5171B	MY56200661	2021-01-05	2022-01-04	Conducted

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV 40	101433	2021-01-05	2022-01-04	Radiation
Amplifier	Sonoma	310	363917	2021-01-06	2022-01-05	Radiation
Amplifier	Schwarzbeck	BBV 9718	327	2021-01-06	2022-01-05	Radiation
Amplifier	Narda	TTA1840-35-HG	2034380	2020-11-28	2021-11-27	Radiation
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	2020-02-14	2023-02-13	Radiation
Broadband Antenna	Schwarzbeck	VULB 9168	9168-757	2020-09-27	2023-09-26	Radiation
Horn Antenna	Schwarzbeck	BBHA 9120 D	1677	2020-02-14	2023-02-13	Radiation
Horn Antenna	COM-POWER	AH-1840	101117	2021-06-05	2024-06-04	Radiation
Test Software	Audix	E3	6.111221a	N/A	N/A	Radiation
Filter	Micro-Tronics	BRM 50702	G266	N/A	N/A	Radiation

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Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
LISN	R&S	ENV216	102125	2021-01-05	2022-01-04	Conducted
LISN	R&S	ENV432	101327	2021-01-06	2022-01-05	Conducted
EMI Test	R&S	ESR3	102143	2021-01-06	2022-01-05	Conducted
Receiver	1.ac	LONG	102140	2021 01 00	2022 01 00	Conducted
EMI Test	Audix	E3	N/A	N/A	N/A	Conducted
Software	Audix	E3	IN/A	IN/A	IN/A	Conducted

N/A: No Calibration Required

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# 6 Uncertainty of Evaluation

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.42dB
Radiated emission	30MHz ~ 1GMHz	2.50dB
	1GHz ~ 18GHz	3.51dB
	18GHz ~ 40GHz	3.96dB

MEASUREMENT	UNCERTAINTY
Occupied Channel Bandwidth	±196.4Hz
RF output power, conducted	±2.31dB
Power density, conducted	±2.31dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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# Appendix A: DTS Bandwidth

# **Test Result**

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
		2412	12.080	2406.000	2418.080	>=0.5	PASS
11B	Ant1	2437	11.160	2431.920	2443.080	>=0.5	PASS
		2462	12.120	2455.960	2468.080	>=0.5	PASS
		2412	16.480	2403.760	2420.240	>=0.5	PASS
11G	Ant1	2437	16.400	2428.800	2445.200	>=0.5	PASS
		2462	16.400	2453.800	2470.200	>=0.5	PASS
		2412	17.680	2403.160	2420.840	>=0.5	PASS
11N20SISO	Ant1	2437	17.680	2428.160	2445.840	>=0.5	PASS
		2462	17.680	2453.160	2470.840	>=0.5	PASS
		2422	36.560	2403.760	2440.320	>=0.5	PASS
11N40SISO	Ant1	2437	36.480	2418.760	2455.240	>=0.5	PASS
		2452	36.480	2433.760	2470.240	>=0.5	PASS

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# **Test Graphs**



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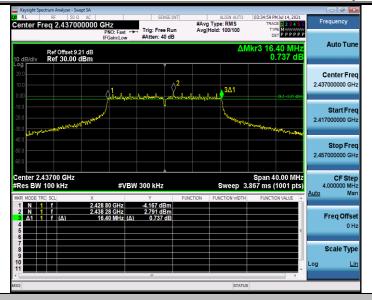


## 11B\_Ant1\_2462

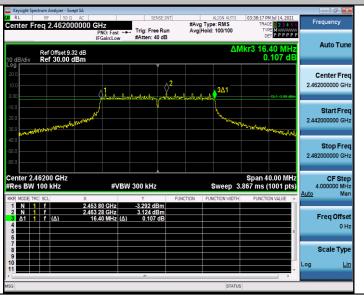


11G\_Ant1\_2412

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# 11G\_Ant1\_2437



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## 11N20SISO\_Ant1\_2412



11N20SISO\_Ant1\_2437

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# 11N20SISO\_Ant1\_2462

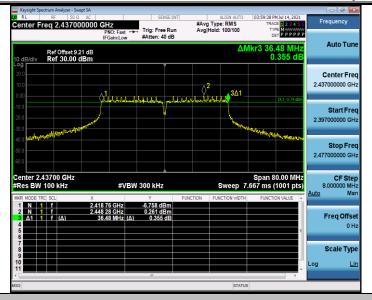


11N40SISO\_Ant1\_2422

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# 11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452





# **Appendix B: Occupied Channel Bandwidth**

# **Test Result**

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
		2412	16.326	2403.850	2420.176		PASS
11B	Ant1	2437	16.315	2428.864	2445.179		PASS
		2462	16.309	2453.851	2470.160		PASS
		2412	18.985	2402.413	2421.398		PASS
11G	Ant1	2437	19.275	2427.409	2446.684		PASS
		2462	19.292	2452.276	2471.568		PASS
		2412	19.707	2402.223	2421.930		PASS
11N20SISO	Ant1	2437	19.877	2427.204	2447.081		PASS
		2462	19.771	2452.061	2471.832		PASS
		2422	36.993	2403.539	2440.532		PASS
11N40SISO	Ant1	2437	38.241	2417.603	2455.844		PASS
		2452	37.883	2432.854	2470.737		PASS

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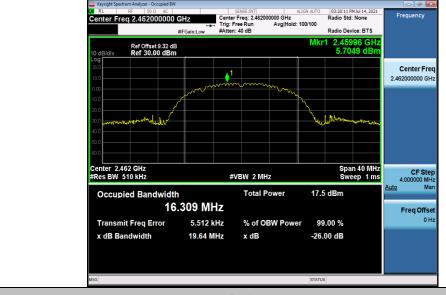


# **Test Graphs**



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## 11B\_Ant1\_2462



11G\_Ant1\_2412

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