

Henan Taide Electronic Technology Co., Ltd.

Application For Certification

FCC ID: 2AC7RCAMIPC07

Wireless IP Camera

Model: CAM-IP-HDW

WiFi Transceiver

Report No.: 140909021SZN-001

We hereby certify that the sample of the above item is considered to comply with the requirements of FCC Part 15, Subpart C for Intentional Radiator, mention 47 CFR [10-1-13]

Prepared and Checked by:	Approved by:
Sign on file	
Robert Li Project Engineer	Andy Yan Senior Project Engineer Date: October 27, 2014

- The test results reported in this test report shall refer only to the sample actually tested and shall not refer or be deemed to refer to bulk from which such a sample may be said to have been obtained.
- This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results referenced from this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.
- For Terms And Conditions of the services, it can be provided upon request.
- The evaluation data of the report will be kept for 3 years from the date of issuance.

TRF no.: FCC 15C_Tx_b

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MEASUREMENT/TECHNICAL REPORT

Wireless IP Camera

Model: CAM-IP-HDW

FCC ID: 2AC7RCAMIPC07

This report concerns (check one)	Original Grant X Class II Change
Equipment Type: <u>DTS - Part 15 D</u> portion)	Digital Transmission Systems (WiFi transmitter
Deferred grant requested per 47 CFF	R 0.457(d)(1)(ii)? Yes NoX
	If yes, defer until:
Company Name agrees to notify the	date
Company Name agrees to notify the	date
issued on that date.	nent of the product so that the grant can be
Transition Rules Request per 15.37? Yes NoX	
If no, assumed Part 15, Subpart ([10-01-13] Edition] provision.	C for intentional radiator - the new 47 CFR
Report prepared by:	
	Robert Li Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch 6F, Block D, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China Phone: (86 755) 8614 0657 Fax: (86 755) 8614 6751

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List of attached file

Exhibit type	File Description	Filename
Test Report	Test Report	report.pdf
Test Setup Photo	Radiated Emission	radiated photos.pdf
Test Setup Photo	Conducted Emission	conducted photos.pdf
External Photo	External Photo	external photos.pdf
Internal Photo	Internal Photo	internal photos.pdf
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
Operation Description	Technical Description	descri.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
Cover Letter	Confidentiality Letter	request.pdf
Cover Letter	Letter of Agency	agency.pdf
Cover Letter	Certification Agreement	agreement.pdf

EXHIBIT 1

SUMMARY OF TEST RESULTS

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

1.0 Summary of Test results

Wireless IP Camera

Model: CAM-IP-HDW

FCC ID: 2AC7RCAMIPC07

TEST	REFERENCE	RESULTS
Max. Output power	15.247(b)(3)	Pass
6 dB Bandwidth	15.247(a)(2)	Pass
Max. Power Density	15.247(e)	Pass
Out of Band Antenna Conducted Emission	15.247(d)	Pass
Radiated Emission in Restricted Bands	15.247(d)	Pass
AC Conducted Emission	15.207	Pass
Antenna Requirement	15.203	Pass (See Notes)

Notes: The EUT uses an Integral Antenna which in accordance to Section 15.203 is considered sufficient to comply with the provisions of this section.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

EXHIBIT 2

GENERAL DESCRIPTION

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07
Report No.: 14000003157N 0

Report No.: 140909021SZN-001

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2.0 **General Description**

2.1 Product Description

The Equipment Under Test (EUT) is a Wireless IP Camera with WiFi function operating at 2412-2462MHz for 802.11b/g/n-HT20, 11 channels with 5MHz channel spacing and 2422-2452MHz for 802.11n-HT40, 9 channels with 5MHz channel spacing. The EUT was powered by AC/DC adapter with input of 100-240Vac, 50/60Hz, 0.5A and output of 5Vdc, 2000mA. For more detailed features description, please refer to the user's manual.

Accessories:

(1) AC/DC Adapter Model: JK050200-S04USA

Input: AC 100-240V, 50/60Hz, 0.5A

Output: DC 5.0V, 2000mA

(2) USB Cable Unshielded, Length 300cm

Type of Modulation: BPSK, QPSK, 16QAM, 64QAM, CCK, DQPSK, DBPSK.

Antenna Type: Integral Antenna.

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

2.2 Related Submittal(s) Grants

This is an application for certification of:

DTS- Part 15 Digital Transmission Systems (WiFi transmitter portion), and there is no corresponding unit for certification.

For the Bluetooth 4.0 function, please refer to the report 140909021SZN-002

2.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2009) and KDB 558074. Radiated emission measurement was performed in semi-anechoic chamber and conducted emission measurement was performed in shield room. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "Justification Section" of this Application. All other measurements were made in accordance with the procedures in part 2 of CFR 47.

2.4 Test Facility

The Semi-Anechoic chamber and shield room used to collect the radiated data and conducted data are **Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch** and located at 6F, Block D, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China. This test facility and site measurement data have been fully placed on file with the FCC (Registration Number: 242492).

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07
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EXHIBIT 3 SYSTEM TEST CONFIGURATION

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

3.0 **System Test Configuration**

3.1 Justification

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables were manipulated to produce worst case emissions. The EUT was powered by AC/DC Adapter (Input: 120Vac, 60Hz, Output: 5Vdc, 2000mA) during the testing. Only the worst case data was reported.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

The rear of unit shall be flushed with the rear of the table.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000 MHz. The resolution is 1 MHz or greater for frequencies above 1000 MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

Radiated emission measurement were performed the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

3.2 EUT Exercising Software

The EUT exercise program (provided by client) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The worst case configuration is used in all specified testing.

The parameters of test software setting:

During the test, Channel and power controlling software provided by the applicant was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the application and is going to be fixed on the firmware of the end product.

We test all data rate and only the worst – case data is shown in the report.

3.3 Special Accessories

N/A.

3.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

Uncertainty and Compliance – Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

3.5 Equipment Modification

Any modifications installed previous to testing by Henan Taide Electronic Technology Co., Ltd will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch.

3.6 Support Equipment List and Description

This product was tested in the following configuration:

Refer List:

ti-		
Description	Manufacturer	Model No.
USB Cable	Henan Taide Electronic Technology Co,.Ltd	Unshielded, Length 300cm
TF Card	SanDisk	8G
Adapter	Henan Taide Electronic Technology Co,.Ltd	JK050200-S04USA Input: AC 100~240V, 50/60Hz, 0.5A; Output: DC 5.0V, 2000mA
Iphone 5S	Apple	A1518

EXHIBIT 4

MEASUREMENT RESULTS

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.0 Measurement Results

4.1 Maximum Conducted Output Power at Antenna Terminals, FCC Rules 15.247(b)(3):

The antenna power of the EUT was connected to the input of a broadband peak RF power meter. The power meter have a video bandwidth that is greater than DTS bandwidth and utilize a fast-responding diode detector. Power was read directly at the EUT antenna terminals with cable loss added.

For antennas with gains of 6 dBi or less, maximum allowed Transmitter output is 1 watt (+30 dBm).

IEEE 802.11b (Antenna Gain = 3.0dBi) (CCK, 1Mbps)		
Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	13.7	23.44
Middle Channel: 2437	13.8	23.99
High Channel: 2462	14.0	25.12

IEEE 802.11g (Antenna Gain = 3.0dBi) (16QAM, 6Mbps)		
Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	13.2	20.89
Middle Channel: 2437	13.5	22.39
High Channel: 2462	13.8	23.99

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FCC ID: 2AC7RCAMIPC07
Report No : 14090902157N-00

IEEE 802.11n-HT20 (Antenna Gain = 3.0dBi) (16QAM, 6.5Mbps)		
Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2412	13.2	20.89
Middle Channel: 2437	13.4	21.88
High Channel: 2462	13.5	22.39

IEEE 802.11n-HT40 (Antenna Gain = 3.0dBi) (64QAM, 13.5Mbps)		
Frequency (MHz)	Output in dBm	Output in mWatt
Low Channel: 2422	12.3	16.98
Middle Channel: 2437	12.5	17.78
High Channel: 2452	12.9	19.50

Cable loss: <u>0.5</u> dB External Attenuation: 0 dB

Cable loss, external attenuation has been included in OFFSET function

EUT max. output level = 14.0dBm

For RF Exposure, the information is saved with filename: RF exposure.pdf.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.2 Minimum 6 dB RF Bandwidth, FCC Rule 15.247(a)(2):

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 KHz according to FCC KDB 558074. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 6 dB lower than PEAK level. The 6dB bandwidth was determined from where the channel output spectrum intersected the display line.

Limit: The 6 dB Bandwidth is at least 500 kHz.

IEEE 802.11b (CCK, 1Mbps)		
Frequency (MHz)	6 dB Bandwidth (MHz)	
2412	10.07	
2437	10.07	
2462	9.64	

IEEE 802.11g (16QAM, 6Mbps)		
Frequency (MHz)	6 dB Bandwidth (MHz)	
2412	16.19	
2437	16.19	
2462	15.46	

IEEE 802.11n-HT20 (16QAM, 6.5Mbps)		
Frequency (MHz)	6 dB Bandwidth (MHz)	
2412	16.63	
2437	16.63	
2462	15.46	

TRF no.: FCC 15C_TX_b
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IEEE 802.11n-HT40 (64QAM, 13.5Mbps)		
Frequency (MHz)	6 dB Bandwidth (MHz)	
2422	35.41	
2437	35.37	
2452	35.41	

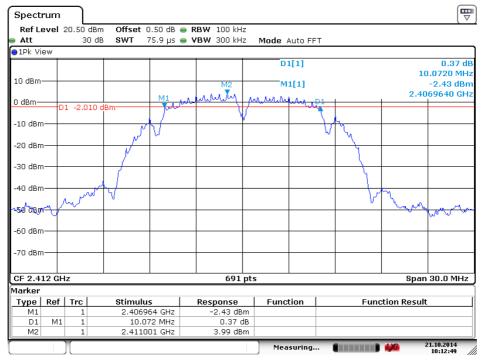
The test plots are attached as below.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

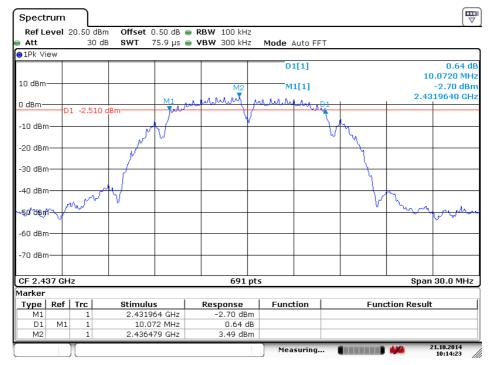
Report No.: 140909021SZN-001

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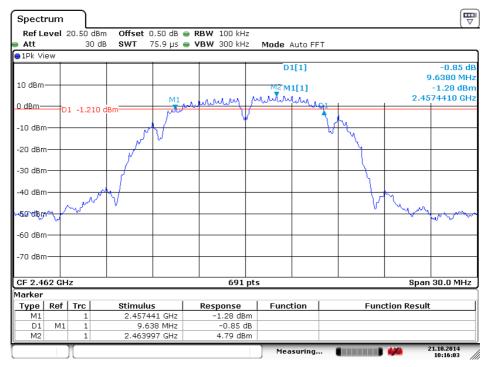
802.11b



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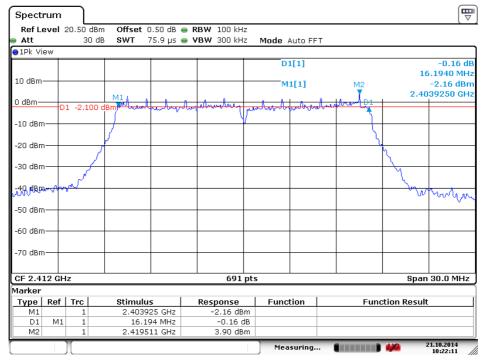


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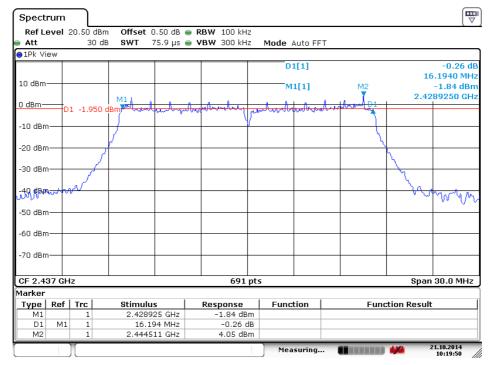


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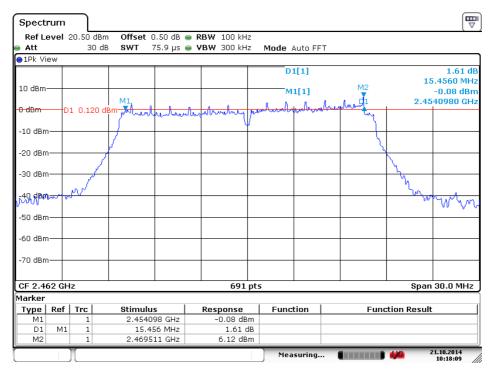
802.11g



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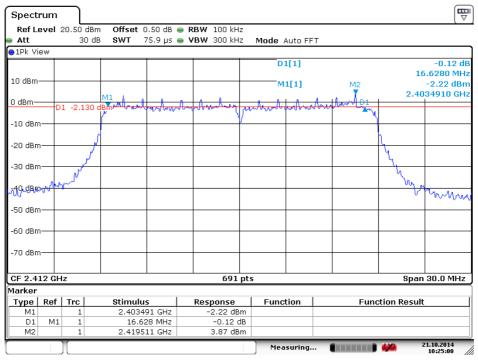


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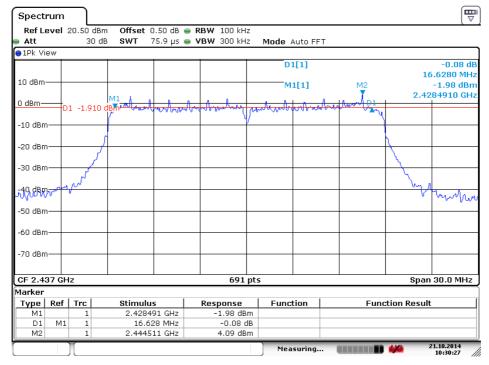


Date: 21.OCT.2014 10:18:10

802.11 n-HT20

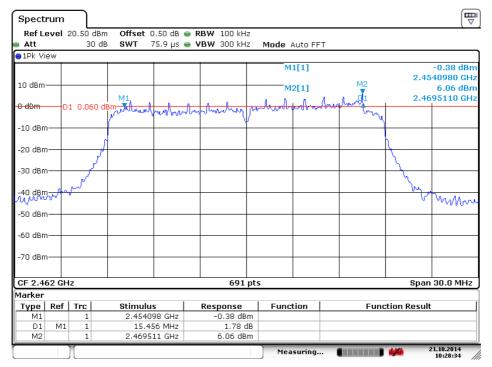


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Date: 21.0CT.2014 10:30:27

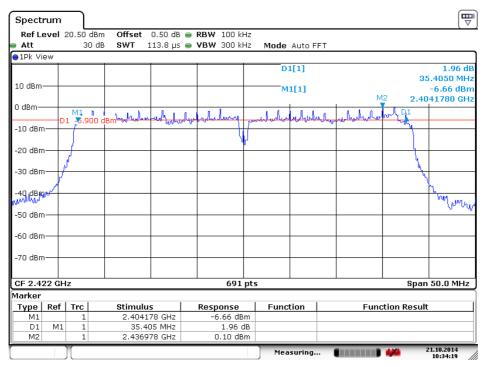
TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07



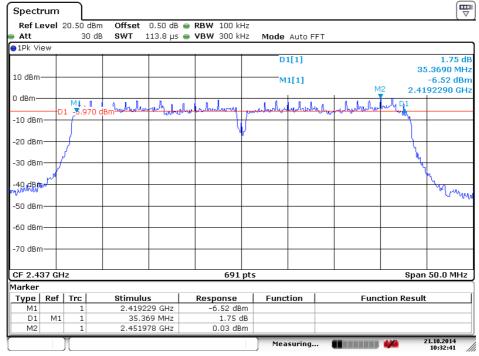
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TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

802.11 n-HT40

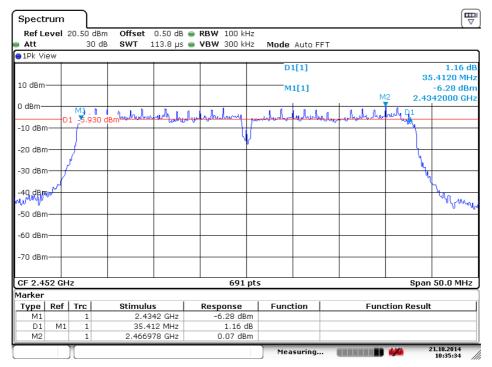


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Date: 21.OCT.2014 10:32:41

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07



Date: 21.OCT.2014 10:35:34

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.3 Maximum Power Density Reading, FCC Rule 15.247(e):

The Measurement Procedure PKPSD was set according to the FCC KDB 558074.

Antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

Limit: The Power Density does not exceed 8dBm/3 kHz.

IEEE 802.11b (CCK, 1Mbps)		
Frequency (MHz)	Power Density with RBW 100KHz	
2412	6.66	
2437	6.79	
2462	7.41	

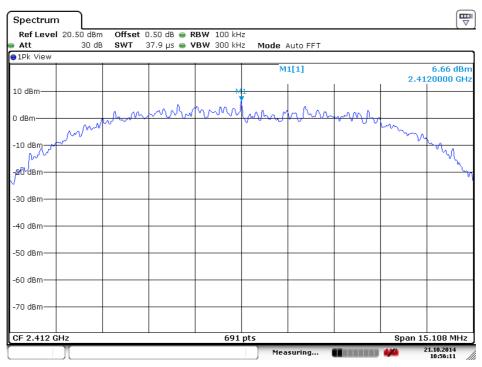
IEEE 802.11g (16QAM, 6Mbps)		
Frequency (MHz)	Power Density with RBW 100KHz	
2412	3.09	
2437	3.04	
2462	3.34	

IEEE 802.11n-HT20 (16QAM, 6.5Mbps)		
Frequency (MHz)	Power Density with RBW 100KHz	
2412	3.26	
2437	3.08	
2462	3.00	

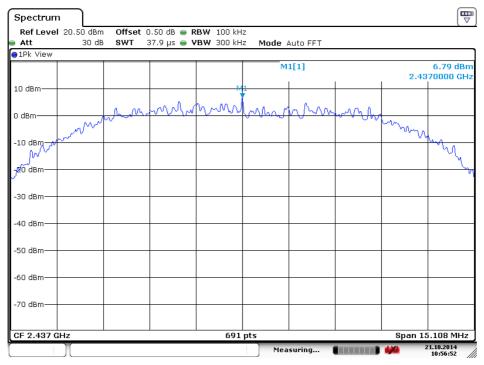
IEEE 802.11n-HT40 (64QAM, 13.5Mbps)	
Frequency (MHz)	Power Density with RBW 100KHz
2422	-0.05
2437	0.12
2452	1.93

The test plots are attached as below.

802.11b

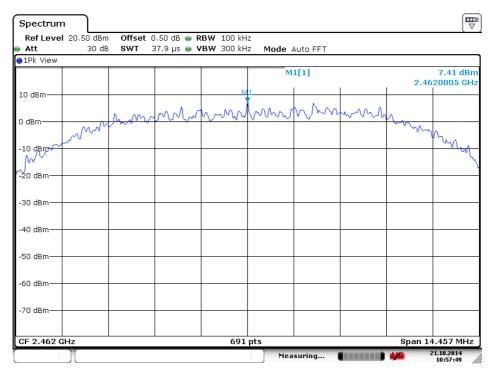


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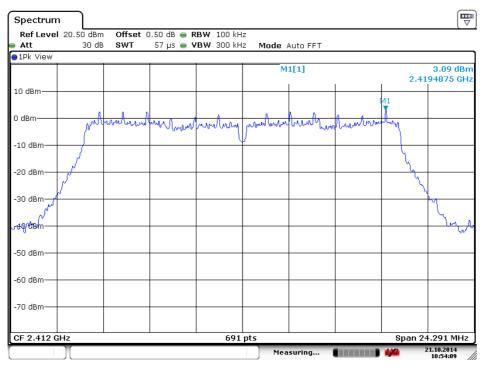
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TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

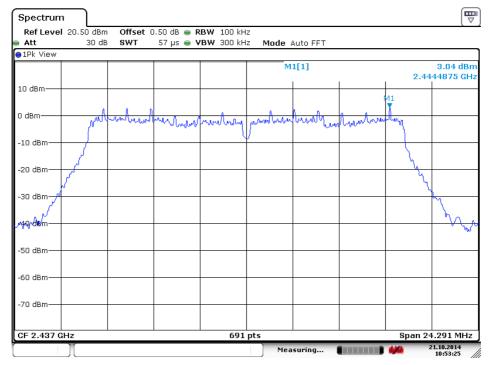


Date: 21.OCT.2014 10:57:49

802.11g



Date: 21.OCT.2014 10:54:10



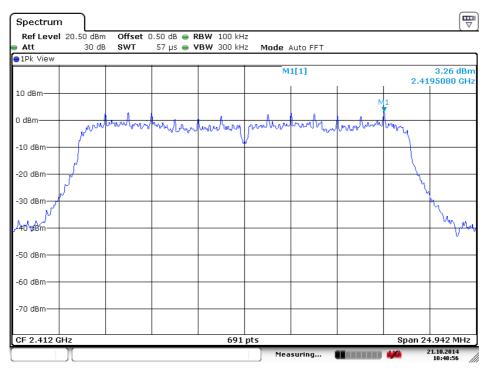
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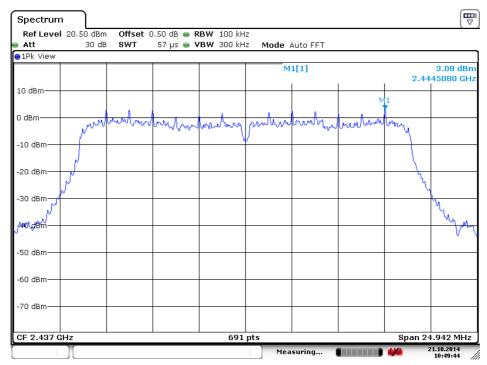
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FCC ID: 2AC7RCAMIPC07

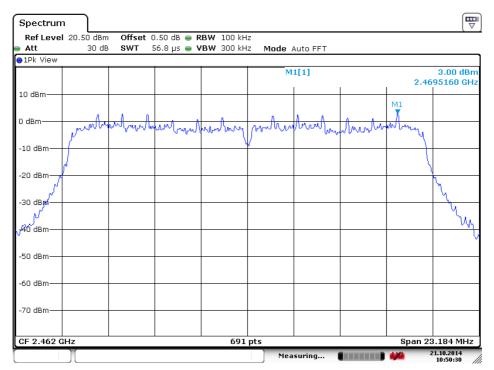
802.11 n-HT20



Date: 21.OCT.2014 10:48:57



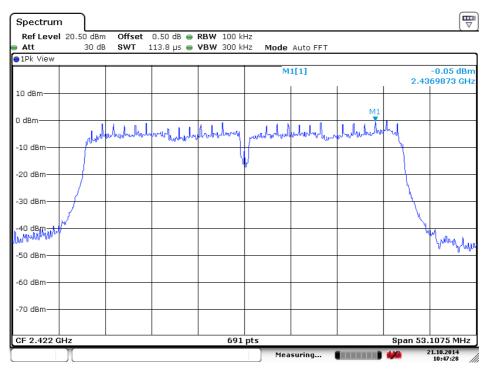
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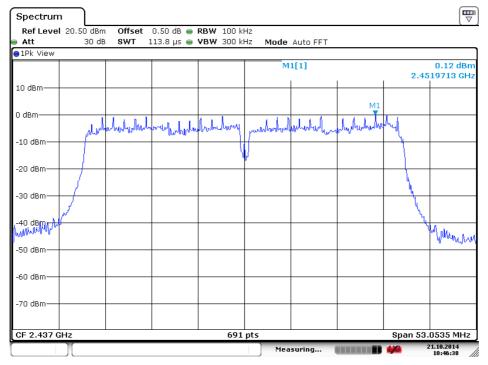
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Papart No.: 14000003157N 0

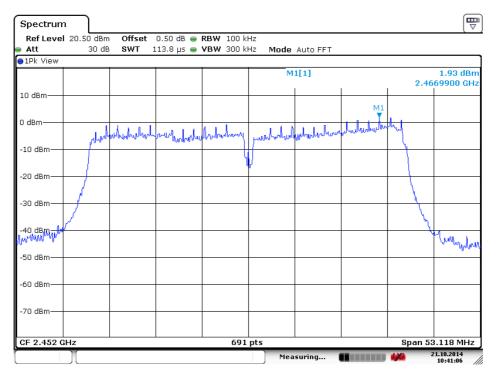
802.11 n-HT40



Date: 21.OCT.2014 10:47:28



Date: 21.OCT.2014 10:46:38



Date: 21.OCT.2014 10:41:06

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.4 Out of Band Conducted Emissions, FCC Rule 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. The Measurement Procedure was set according to the FCC KDB 558074.

All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the passband.

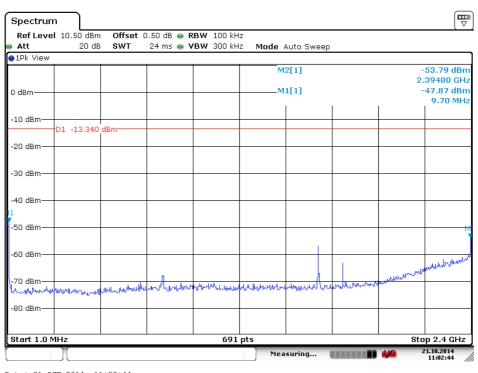
Refer to the attached test plots for out of band conducted emissions data with rate of 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n-HT20 and 13.5Mbps for 802.11n-HT40.

The test plots showed all spurious emission up to the tenth harmonic were measured and they were found to be at least 20 dB below the highest level of the desired power in the passband.

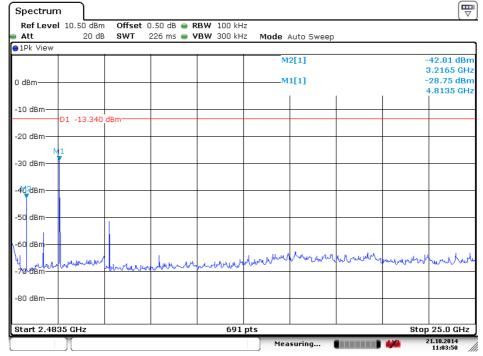
The test plots are attached as below.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

802.11b Channel 01 (2412MHz) Reference Level: 6.66dBm

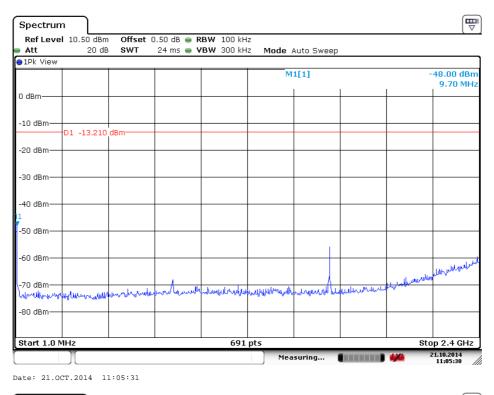


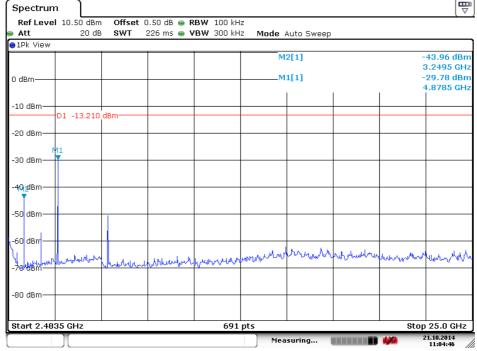
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Date: 21.OCT.2014 11:03:50

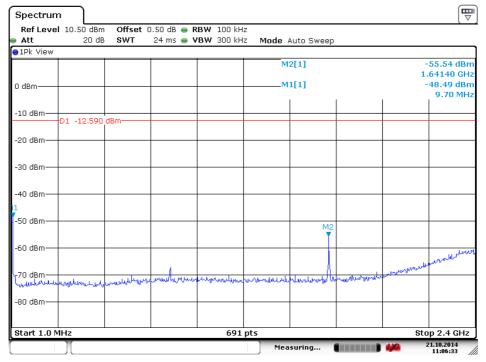
Channel 06 (2437MHz) Reference Level: 6.79dBm



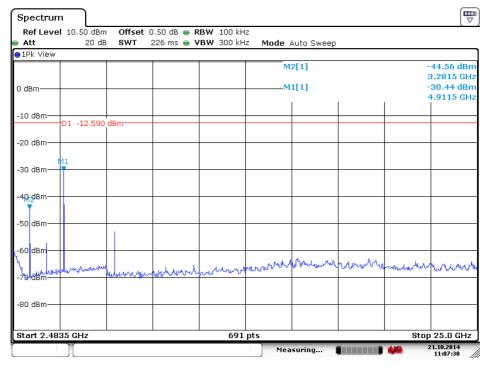


Date: 21.OCT.2014 11:04:46

Channel 11 (2462MHz) Reference Level: 7.41dBm

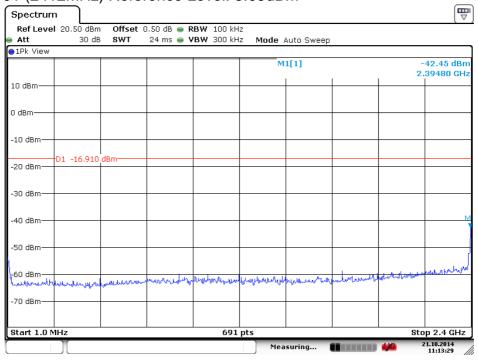


Date: 21.0CT.2014 11:06:33

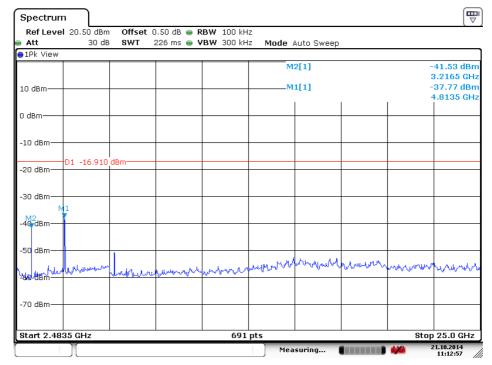


Date: 21.0CT.2014 11:07:30

802.11g Channel 01 (2412MHz) Reference Level: 3.09dBm

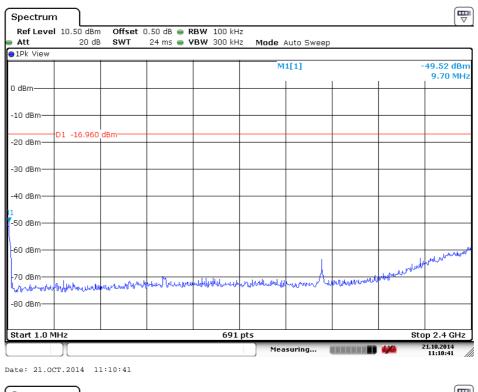


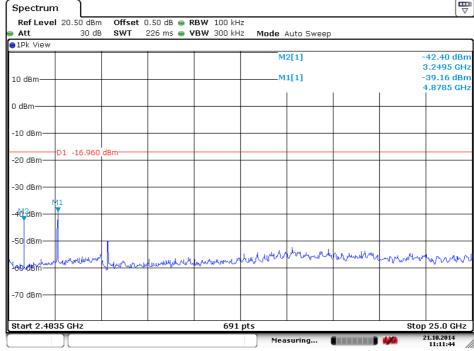
Date: 21.0CT.2014 11:13:28



Date: 21.OCT.2014 11:12:58

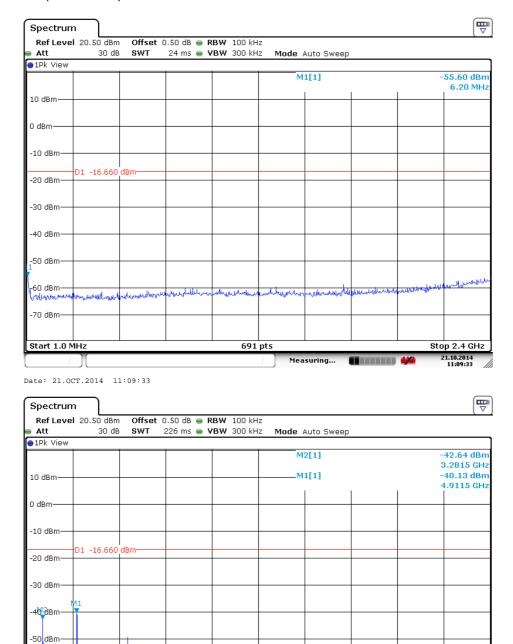
Channel 06 (2437MHz) Reference Level: 3.04dBm





Date: 21.OCT.2014 11:11:44

Channel 11 (2462MHz) Reference Level: 3.34dBm



691 pts

Measuring...

Date: 21.OCT.2014 11:08:43

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

Start 2.4835 GHz

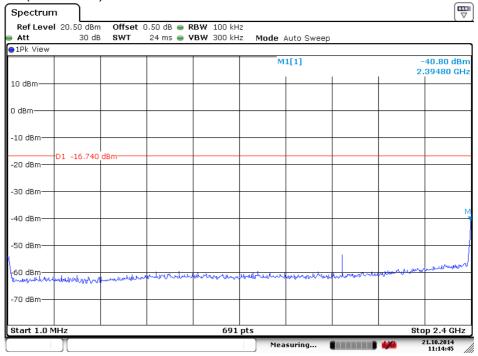
-70 dBm-

Stop 25.0 GHz

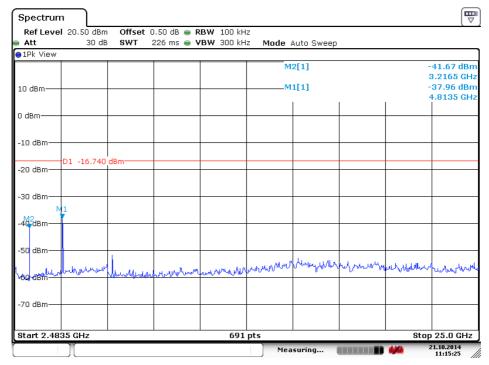
21.10.2014 11:08:44

802.11 n-HT20

Channel 01 (2412MHz) Reference Level: 3.26dBm

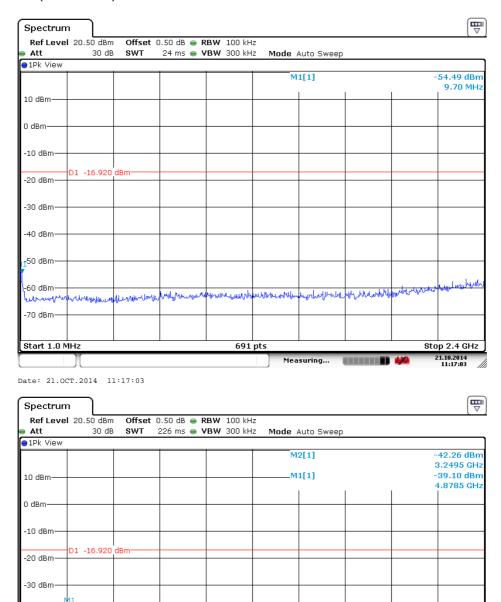


Date: 21.OCT.2014 11:14:45



Date: 21.OCT.2014 11:15:25

Channel 06 (2437MHz) Reference Level: 3.08dBm



691 pts

Measuring...

Date: 21.0CT.2014 11:16:10

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Start 2.4835 GHz

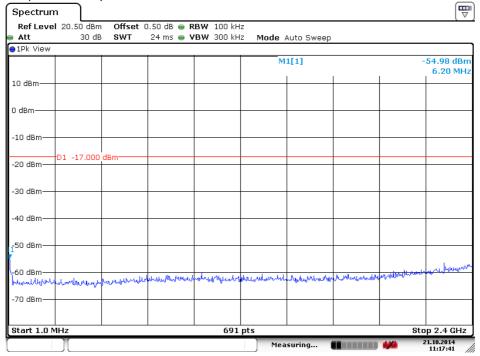
-400 dBm -50 dBm

-70 dBm-

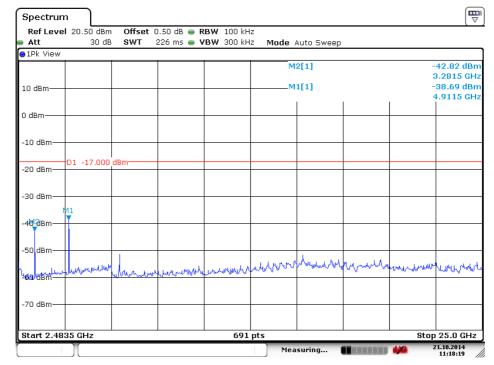
Report No.: 140909021SZN-001

Stop 25.0 GHz



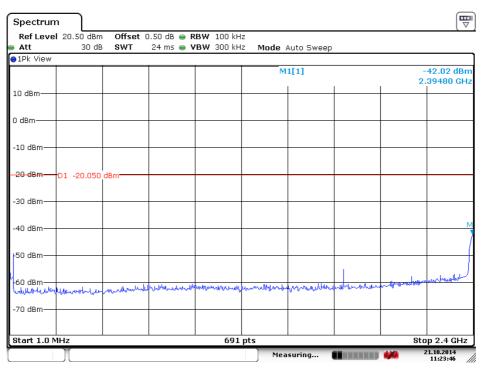


Date: 21.OCT.2014 11:17:41

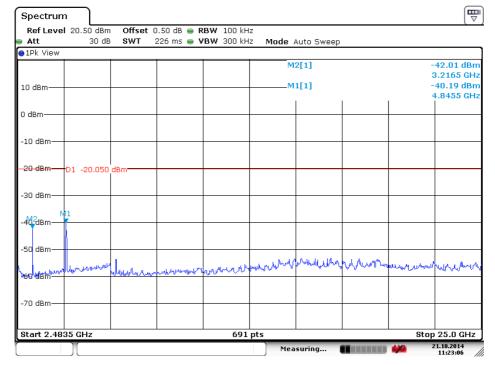


Date: 21.OCT.2014 11:18:19

802.11 n-HT40 Channel 03 (2422MHz) Reference Level: -0.05dBm

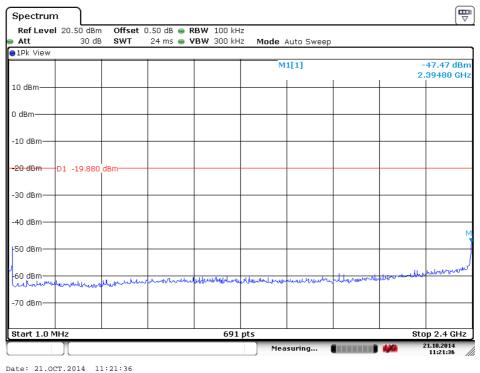


Date: 21.OCT.2014 11:23:46

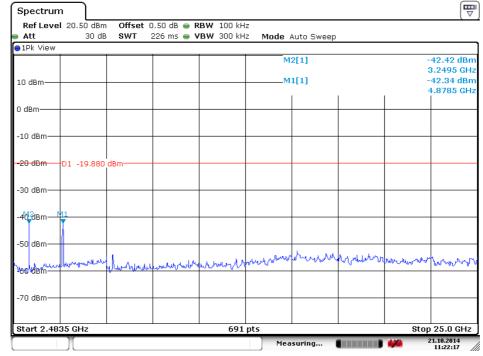


Date: 21.0CT.2014 11:23:06

Channel 06 (2437MHz) Reference Level: 0.12dBm



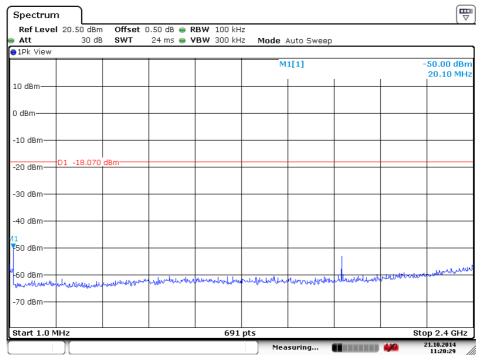




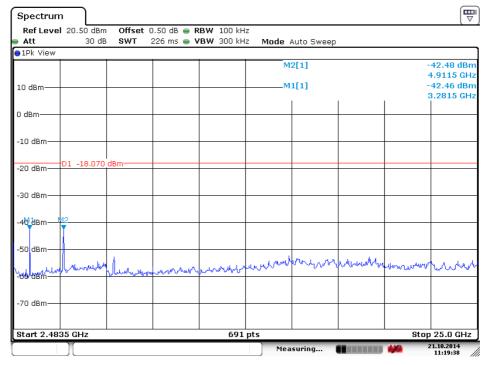
Date: 21.0CT.2014 11:22:17

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Channel 9 (2452MHz) Reference Level: 1.93dBm



Date: 21.OCT.2014 11:20:29



Date: 21.0CT.2014 11:19:39

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.5 Out of Band Radiated Emissions (for emissions in 4.4 above that are less than 20dB below carrier), FCC Rule 15.247(d):

For out of band emissions that are close to or that exceed the 20dB attenuation requirement described in the specification, radiated measurements were performed at a 3m separation distance to determine whether these emissions complied with the general radiated emission requirement.

[x] Not required, since all emissions are more than 20dB below fundamental

[] See attached data sheet

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.6 Transmitter Radiated Emissions in Restricted Bands, FCC Rule 15.35(b), (c):

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included. All measurements were performed with peak detection unless otherwise specified.

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.7 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD

Where $FS = Field Strength in dB\mu V/m$

RA = Receiver Amplitude (including preamplifier) in $dB\mu V$

CF = Cable Attenuation Factor in dB

AF = Antenna Factor in dB AG = Amplifier Gain in dB

PD = Pulse Desensitization in dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

$$FS = RA + AF + CF - AG + PD$$

Example

Assume a receiver reading of 62.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB. The net field strength for comparison to the appropriate emission limit is 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

 $RA = 62.0 \text{ dB}\mu\text{V}$ AF = 7.4 dB CF = 1.6 dB AG = 29.0 dBPD = 0 dB

 $FS = 62 + 7.4 + 1.6 - 29 + 0 = 42 dB\mu V/m$

Level in mV/m = Common Antilogarithm [(42 dB μ V/m)/20] = 125.9 μ V/m

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.8 Radiated Spurious Emission

Worst Case Radiated Spurious Emission (802.11 b) at 4824.000MHz is passed by 3.6 dB margin.

For the electronic filing, the worst case radiated emission configuration photographs are saved with filename: radiated photos.pdf.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

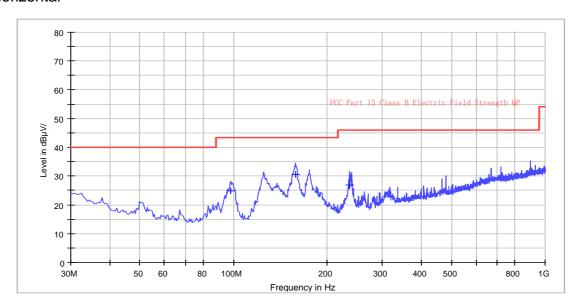
Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

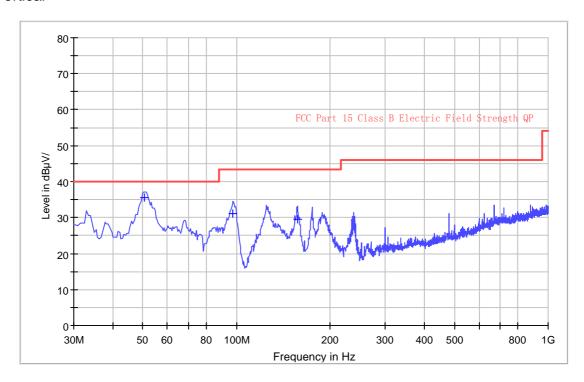
Model: CAM-IP-HDW

Worst Case Operating Mode: 802.11 n-HT20 (TX-Channel 01)

Horizontal



Vertical



Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Worst Case Operating Mode: 802.11 n-HT20 (TX-Channel 01)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	97.920	34.7	20.0	10.1	24.8	43.5	-18.7
Horizontal	158.040	39.8	20.0	10.7	30.5	43.5	-13.0
Horizontal	236.610	33.5	20.0	13.3	26.8	46.0	-19.2
Vertical	50.745	45.8	20.0	9.7	35.5	40.0	-4.5
Vertical	97.415	41.0	20.0	10.1	31.1	43.5	-12.4
Vertical	157.070	39.0	20.0	10.6	29.6	43.5	-13.9

NOTES: 1. Quasi-Peak detector is used except for others stated.

- 2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. All emissions are below the QP limit.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11b (TX-Channel 01)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4824.000	67.7	36.1	34.2	65.8	74.0	-8.2
Horizontal	*7236.000	59.8	36.8	36.9	59.9	74.0	-14.1
Horizontal	*2388.990	62.5	36.2	28.2	54.5	74.0	-19.5

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4824.000	52.3	36.1	34.2	50.4	54.0	-3.6
Horizontal	*7236.000	45.0	36.8	36.9	45.1	54.0	-8.9
Horizontal	*2388.990	46.5	36.2	28.2	38.5	54.0	-15.5

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07
Papert No : 140000031\$7N

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11b (TX-Channel 06)

Radiated Emissions

ſ	Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
		(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
		, ,	, , ,	Gain	(dB)	(dBµV/m)	(dBµV/m)	, ,
				(dB)				
ľ	Horizontal	*4874.000	66.5	36.1	34.6	65.0	74.0	-9.0
Ī	Horizontal	*7311.000	55.9	35.6	37.1	57.4	74.0	-16.6

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4874.000	51.3	36.1	34.6	49.8	54.0	-4.2
Horizontal	*7311.000	42.0	35.6	37.1	43.5	54.0	-10.5

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11b (TX-Channel 11)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin		
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)		
			Gain	(dB)	(dBµV/m)	(dBµV/m)			
			(dB)						
Horizontal	*4924.000	65.1	36.1	34.6	63.6	74.0	-10.4		
Horizontal	*7386.000	55.6	35.6	37.2	57.2	74.0	-16.8		
Horizontal	*2483.810	64.8	36.3	28.0	56.5	74.0	-17.5		

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4924.000	50.3	36.1	34.6	48.8	54.0	-5.2
Horizontal	*7386.000	41.3	35.6	37.2	42.9	54.0	-11.1
Horizontal	*2483.810	49.5	36.3	28.0	41.2	54.0	-12.8

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11g (TX-Channel 01)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4824.000	66.8	36.1	34.2	64.9	74.0	-9.1
Horizontal	*7236.000	60.9	36.8	36.9	61.0	74.0	-13.0
Horizontal	*2389.590	69.9	35.6	27.8	62.1	74.0	-11.9

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4824.000	50.7	36.1	34.2	48.8	54.0	-5.2
Horizontal	*7236.000	45.1	36.8	36.9	45.2	54.0	-8.8
Horizontal	*2389.590	53.9	35.6	27.8	46.1	54.0	-7.9

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11g (TX-Channel 06)

Radiated Emissions

					_		
Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
	, ,	, , ,	Gain	(dB)	(dBµV/m)	(dBµV/m)	, ,
			(dB)	, ,			
Horizontal	*4874.000	64.8	36.1	34.6	63.3	74.0	-10.7
Horizontal	*7311.000	60.0	35.6	37.1	61.5	74.0	-12.5

Polarization	Frequency (MHz)	Reading (dBµV)	Pre- Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	49.2	36.1	34.6	47.7	54.0	-6.3
Horizontal	*7311.000	43.7	35.6	37.1	45.2	54.0	-8.8

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07
Papert No.: 14000002157N 00

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11g (TX-Channel 11)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
	, ,	, , ,	Gain	(dB)	(dBµV/m)	(dBµV/m)	, ,
			(dB)				
Horizontal	*4924.000	66.2	36.1	34.6	64.7	74.0	-9.3
Horizontal	*7386.000	55.2	35.6	37.2	56.8	74.0	-17.2
Horizontal	*2484.210	70.6	35.6	28.0	63.0	74.0	-11.0

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4924.000	48.9	36.1	34.6	47.4	54.0	-6.6
Horizontal	*7386.000	41.5	35.6	37.2	43.1	54.0	-10.9
Horizontal	*2484.210	55.3	35.6	28.0	47.7	54.0	-6.3

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11 n-HT20 (TX-Channel 01)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4824.000	67.4	36.1	34.2	65.5	74.0	-8.5
Horizontal	*7236.000	60.1	36.8	36.9	60.2	74.0	-13.8
Horizontal	*2388.690	70.2	35.6	27.8	62.4	74.0	-11.6

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4824.000	50.8	36.1	34.2	48.9	54.0	-5.1
Horizontal	*7236.000	44.1	36.8	36.9	44.2	54.0	-9.8
Horizontal	*2388.69	54.4	35.6	27.8	46.6	54.0	-7.4

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07
Papert No.: 14000003187N 6

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11 n-HT20 (TX-Channel 06)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	. ,
			(dB)				
Horizontal	*4874.000	66.0	36.1	34.6	64.5	74.0	-9.5
Horizontal	*7311.000	58.9	35.6	37.1	60.4	74.0	-13.6

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
	•		Gain	(dB)	(dBµV/m)	(dBµV/m)	,
			(dB)				
Horizontal	*4874.000	49.0	36.1	34.6	47.5	54.0	-6.5
Horizontal	*7311.000	43.1	35.6	37.1	44.6	54.0	-9.4

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11 n-HT20 (TX-Channel 11)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4924.000	65.6	36.1	34.6	64.1	74.0	-9.9
Horizontal	*7386.000	54.9	35.6	37.2	56.5	74.0	-17.5
Horizontal	*2484.510	71.7	35.6	28.0	64.1	74.0	-9.9

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4924.000	48.7	36.1	34.6	47.2	54.0	-6.8
Horizontal	*7386.000	41.6	35.6	37.2	43.2	54.0	-10.8
Horizontal	*2484.510	56.9	35.6	28.0	49.3	54.0	-4.7

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07
Papert No.: 14000003157N

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11 n-HT40 (TX-Channel 03)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
	, ,	, , ,	Gain	(dB)	(dBµV/m)	(dBµV/m)	, ,
			(dB)				
Horizontal	*4844.000	52.7	36.1	34.2	50.8	74.0	-23.2
Horizontal	*7266.000	57.0	36.8	37.1	57.3	74.0	-16.7
Horizontal	*2389.560	71.3	35.6	27.7	63.4	74.0	-10.6

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4844.000	43.3	36.1	34.2	41.4	54.0	-12.6
Horizontal	*7266.000	43.1	36.8	37.1	43.4	54.0	-10.6
Horizontal	*2389.560	54.3	35.6	27.7	46.4	54.0	-7.6

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11 n-HT40 (TX-Channel 06)

Radiated Emissions

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ſ	Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
		(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
		, ,		Gain	(dB)	(dBµV/m)	(dBµV/m)	, ,
				(dB)	, ,			
Ī	Horizontal	*4874.000	59.7	36.1	34.2	57.8	74.0	-16.2
ſ	Horizontal	*7311.000	58.5	35.6	37.1	60.0	74.0	-14.0

Polarization	Frequency (MHz)	Reading (dBµV)	Pre- Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	43.2	36.1	34.2	41.3	54.0	-12.7
Horizontal	*7311.000	44.4	35.6	37.1	45.9	54.0	-8.1

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07
Papert No : 14000002157N 00

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Mode: 802.11 n-HT40 (TX-Channel 9)

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4904.000	59.4	36.1	34.6	57.9	74.0	-16.1
Horizontal	*7356.000	56.4	35.6	37.0	57.8	74.0	-16.2
Horizontal	*2484.370	72.9	35.6	28.0	65.3	74.0	-8.7

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average Limit	Margin
	(MHz)	(dBµV)	Amp	Factor	at 3m	at 3m	(dB)
			Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Horizontal	*4904.000	42.3	36.1	34.6	40.8	54.0	-13.2
Horizontal	*7356.000	41.7	35.6	37.0	43.1	54.0	-10.9
Horizontal	*2484.370	57.0	35.6	28.0	49.4	54.0	-4.6

NOTES: 1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna used for the emission over 1000MHz.
- * Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

4.9 Conducted Emission

Worst Case Conducted emission at 0.690MHz is Passed by 8.8 dB margin

For electronic filing, the worst case conducted emission configuration photograph is saved with filename: conducted photos.pdf.

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07
Papert No.: 14000003157N 0

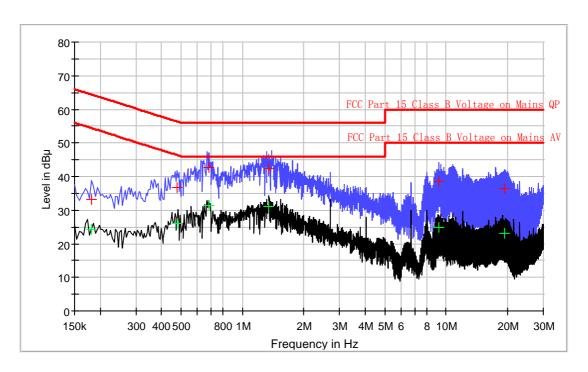
Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Worst Case Operating Mode: 802.11 n-HT20 (TX-Channel 01)

Conducted Emission Test - FCC



Result Table QP

Frequency	QuasiPeak	Line	Corr.	Margin	Limit
(MHz)	(dB µ V)		(dB)	(dB)	(dB µ V)
0.182000	33.3	L1	9.8	31.1	64.4
0.478000	36.6	L1	9.8	19.8	56.4
0.682000	42.8	L1	10.0	13.2	56.0
1.350000	42.3	L1	9.9	13.7	56.0
9.202000	38.4	L1	10.1	21.6	60.0
19.454000	36.5	L1	10.3	23.5	60.0

Result Table AV

Frequency	Average	Line	Corr.	Margin	Limit
(MHz)	(dB µ V)		(dB)	(dB)	(dB μ V)
0.182000	24.2	L1	9.8	30.2	54.4
0.478000	26.0	L1	9.8	20.4	46.4
0.682000	31.3	L1	10.0	14.7	46.0
1.350000	31.1	L1	9.9	14.9	46.0
9.202000	24.9	L1	10.1	25.1	50.0
19.454000	23.1	L1	10.3	26.9	50.0

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

21SZN-001 63

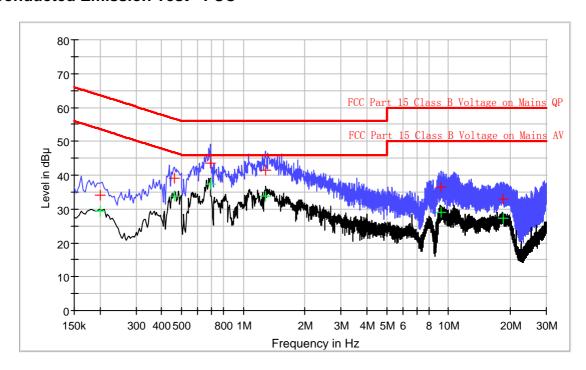
Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

Worst Case Operating Mode: 802.11n-HT20 (TX-Channel 01)

Conducted Emission Test - FCC



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Result Table QP

Frequency	QuasiPeak	Line	Corr.	Margin	Limit
(MHz)	(dB µ V)		(dB)	(dB)	(dB µ V)
0.202000	34.1	N	10.1	29.4	63.5
0.462000	39.1	N	10.1	17.6	56.7
0.690000	43.6	N	10.2	12.4	56.0
1.282000	41.5	N	10.2	14.5	56.0
9.162000	36.4	N	10.4	23.6	60.0
18.562000	32.8	N	10.5	27.2	60.0

Result Table AV

Frequency	Average	Line	Corr.	Margin	Limit
(MHz)	(dB µ V)		(dB)	(dB)	(dB µ V)
0.202000	29.3	N	10.1	24.2	53.5
0.462000	33.7	N	10.1	13.1	46.7
0.690000	37.2	N	10.2	8.8	46.0
1.282000	33.8	N	10.2	12.2	46.0
9.162000	29.1	N	10.4	20.9	50.0
18.562000	27.3	N	10.5	22.7	50.0

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07

Applicant: Henan Taide Electronic Technology Co., Ltd Date of Test: 21 October 2014 Model: CAM-IP-HDW
4.10 Radiated Emissions from Digital Section of Transceiver, FCC Ref: 15.109
[] Not required - No digital part
[] Test results are attached
[x] Included in the separated report.

Applicant: Henan Taide Electronic Technology Co., Ltd

Date of Test: 21 October 2014

Model: CAM-IP-HDW

4.11 Transmitter Duty Cycle Calculation and Measurements, FCC Rule 15.35(b), (c)

The EUT antenna output port was connected to the input of the spectrum analyzer. The analyzer center frequency was set to EUT RF channel carrier. The SWEP function on the analyzer was set to ZERO SPAN. The Transmitter ON time was determined from the resultant time-amplitude display:

	See attached spectrum analyzer chart (s) for Transmitter timing
	See Transmitter timing diagram provided by manufacturer
Х	Not applicable, duty cycle was not used.

EXHIBIT 5

EQUIPMENT PHOTOGRAPHS

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

5.0 **Equipment Photographs**

For electronic filing, the photographs are saved with filename: external photos.doc & internal photos.pdf.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

EXHIBIT 6

PRODUCT LABELLING

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

6.0 **Product Labeling**

For electronic filing, the FCC ID label artwork and location is saved with filename: label.pdf.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

EXHIBIT 7 TECHNICAL SPECIFICATIONS

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

7.0 <u>Technical Specifications</u>

For electronic filing, the block diagram and circuit diagram are saved with filename: block.pdf and circuit.pdf respectively.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

EXHIBIT 8

INSTRUCTION MANUAL

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

8.0 **Instruction Manual**

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

EXHIBIT 9

CONFIDENTIALITY REQUEST

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

9.0 **Confidentiality Request**

For electronic filing, the confidentiality request of the tested EUT is saved with filename: request.pdf.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

EXHIBIT 10

MISCELLANEOUS INFORMATION

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

10.0 <u>Discussion of Pulse Desensitization</u>

The determination of pulse desensitivity was made in accordance with Hewlett Packard Application Note 150-2, *Spectrum Analysis ... Pulsed RF.*

Pulse desensitivity is not applicable for this device since the transmitter transmits the RF signal continuously.

TRF no.: FCC 15C_TX_b FCC ID: 2AC7RCAMIPC07 Report No.: 140909021SZN-001

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EXHIBIT 11

TEST EQUIPMENT LIST

TRF no.: FCC 15C_TX_b
FCC ID: 2AC7RCAMIPC07

11.0 **Test Equipment List**

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ182-02	RF Power Meter	Anritsu	ML2496A	1302005	21-May-2014	21-May-2015
SZ182-02-01	Power Sensor	Anritsu	MA2411B	1207429	21-May-2014	21-May-2015
SZ061-03	BiConiLog Antenna	ETS	3142C	00066460	28-Jun-2014	28-Jun-2015
SZ185-01	EMI Receiver	R&S	ESCI	100547	10-Mar-2014	10-Mar-2015
SZ061-09	Horn Antenna	ETS	3115	00092346	16-Nov-2013	16-Nov-2014
SZ061-07	Pyramidal Horn Antenna	ETS	3160-09	00083067	03-Sep-2014	03-Sep-2015
SZ061-06	Active Loop Antenna	Electro- Metrics	EM-6876	217	29-Apr-2014	29-Apr-2015
EM031-03	EXA Spectrum Analyzer	R&S	FSV40	101506	09-Jun-2014	09-Jun-2015
SZ181-04	Preamplifier	Agilent	8449B	3008A024 74	10-Mar-2014	10-Mar-2015
SZ188-01	Anechoic Chamber	ETS	RFD-F/A- 100	4102	19-Apr-2014	19-Apr-2015
SZ062-02	RF Cable	RADIALL	RG 213U		03-Jul-2014	03-Jan-2015
SZ062-05	RF Cable	RADIALL	0.04- 26.5GHz		03-Jul-2014	03-Jan-2015
SZ062-12	RF Cable	RADIALL	0.04- 26.5GHz		03-Jul-2014	03-Jan-2015
SZ067-04	Notch Filter	Micro-Tronics	BRM5070 2-02		21-May-2014	21-May-2015
SZ185-02	EMI Test Receiver	R&S	ESCI	100692	09-Nov-2013	09-Nov-2014
SZ187-01	Two-Line V- Network	R&S	ENV216	100072	09-Nov-2013	09-Nov-2014
SZ187-02	Two-Line V- Network	R&S	ENV216	100073	09-Nov-2013	09-Nov-2014
SZ188-03	Shielding Room	ETS	RFD-100	4100	23-Aug-2014	23-Aug-2015

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