Shenzhen Huatongwei International Inspection Co., Ltd.
1/F,Bldg 3,Hongfa Hi-tech Industrial Park,Genyu Road,Tianliao,Gongming,Shenzhen,China
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TEST REPORT

Report Reference No. ..... :	**TRE16050077**	R/C…….: 67357
FCC ID ..... :	**2AAP6SC241BA**	
Applicant's name ..... :	**SHENZHEN ZOWEE TECHNOLOGY CO.,LTD**	
Address.....:	Science &Technology Industrial Park of Privately Owned Enterprises, Pingshan, Xili, Nanshan District, Shenzhen, CHINA	
Manufacturer.....:	SHENZHEN ZOWEE TECHNOLOGY CO.,LTD	
Address.....:	Science &Technology Industrial Park of Privately Owned Enterprises, Pingshan, Xili, Nanshan District, Shenzhen, CHINA	
Test item description ..... :	**Smart Wifi Camera**	
Trade Mark .....:	Zowee	
Model/Type reference.....:	SC-241AA	
Listed Model(s) .....:	IPC3516C-241AA-ZW	
Standard ..... :	**FCC CFR Title 47 Part 15 Subpart C Section 15.247**	
Date of receipt of test sample……..:	Jul. 01, 2016	
Date of testing……:	Jul. 01, 2016~ Jul. 06, 2016	
Date of issue……...:	Jul. 06, 2016	
Result..... ……..:	**PASS**	

Compiled by (position+printedname+signature)...:	File administrators Candy Liu	Candy Liu
Supervised by (position+printedname+signature)....:	Project Engineer Jeff Sun	Jeff Sun
Approved by (position+printedname+signature)....:	RF Manager Hans Hu	Hans Hu

Testing Laboratory Name ..... :	**Shenzhen Huatongwei International Inspection Co., Ltd.**
Address.....:	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

Contents

1. APPLICABLE STANDARDS ANDTEST DESCRIPTION

1.1. Applicable Standards

The tests were performed according to following standards:
FCC Rules Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

ANSI C63.10-2013:AmericanNationalStandardforTestingUnlicensedWirelessDevices

KDB 558074 D01 DTS Meas Guidance v03r05: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating under § 15.247

1.2. Test Description

Test Item	Section in CFR 47	Result
Spurious Emission	15.247(d)/15.209	Pass

Remark: The measurement uncertainty is not included in the test result.

2. SUMMARY

2.1. Client Information

Applicant:	SHENZHEN ZOWEE TECHNOLOGY CO.,LTD
Address:	Science &Technology Industrial Park of Privately Owned Enterprises, Pingshan, Xili, Nanshan District, Shenzhen, CHINA
Manufacturer:	SHENZHEN ZOWEE TECHNOLOGY CO.,LTD
Address:	Science &Technology Industrial Park of Privately Owned Enterprises, Pingshan, Xili, Nanshan District, Shenzhen, CHINA

2.2. Product Description

Name of EUT	Smart Wifi Camera
Trade Mark:	Zowee
Model No.:	SC-241AA
Listed Model(s):	IPC3516C-241AA-ZW
Power supply:	AC 120V/60Hz
Adapter information 1:	Model:LPL-A005050100Z Input: AC 100-240V 50/60Hz 200mA Max Output: 5Vd.c., 1000mA
Adapter information 2:	Model:RD0501000-USBA-18MG Input: AC 100-240V 50/60Hz 0.25A Max Output: 5Vd.c., 1000mA
Hardware version:	V1.0
Software version:	V1.0
WIFI	
Supported type:	802.11b/802.11g/802.11n(H20)/802.11n(H40)
Modulation:	802.11b: DSSS 802.11g/802.11n(H20)/802.11n(H40):OFDM
Operation frequency:	802.11b/802.11g/802.11n(H20): 2412MHz~2462MHz 802.11n(H40): 2422MHz~2452MHz
Channel number:	802.11b/802.11g/802.11n(H20): 11 802.11n(H40): 9
Channel separation:	5MHz
Antenna type:	FPC
Antenna gain:	2.5dBi

Report version information:
This copy was issued based on TRE1605007401(Issued dated:2016-06-12)
Only the data of test item Spurious Emission (radiated) was updated.
New models were added in the new report.
Internal photos was updated.

2.3. Operation state

◆ **Test frequency list**

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channel which were tested. the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the above gray bottom.

Channel	Frequency (MHz)
01	2412
02	2417
03	2422
04	2427
05	2432
06	2437
07	2442
08	2447
09	2452
10	2457
11	2462

◆ **Test mode**

For RF test items:

the engineering test program was provided and enabled to make EUT continuous transmit/receive.

For AC power line conducted emissions:

the EUT was set to connect with the WLAN AP under large package sizes transmission.

2.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer

○ - supplied by the lab

○	PowerCable	Length (m) :	/
		Shield :	/
		Detachable :	/
○	Multimeter	Manufacturer :	/
		Model No. :	/

2.5. Modifications

No modifications were implemented to meet testing criteria.

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Laboratory:Shenzhen Huatongwei International Inspection Co., Ltd.
Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China
Phone: 86-755-26748019 Fax: 86-755-26748089

3.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225
Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: February 28, 2015. Valid time is until February 27, 2018.

A2LA-Lab Cert. No. 3902.01
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until December 31, 2016.

FCC-Registration No.: 317478
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 317478, Renewal date Jul. 18, 2014, valid time is until Jul. 18, 2017.

IC-Registration No.: 5377A&5377B
The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377A on Dec. 31, 2013, valid time is until Dec. 31, 2016.
Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377B on Dec.03, 2014, valid time is until Dec.03, 2017.

ACA
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

VCCI
Radiated disturbance above 1GHz measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-292. Date of Registration: Dec. 24, 2013. Valid time is until Dec. 23, 2016.
Telecommunication Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-1837. Date of Registration: May 07, 2013. Valid time is until May 06, 2016.

DNV
Shenzhen Huatongwei International Inspection Co., Ltd. has been found to comply with the requirements of DNV towards subcontractor of EMC and safety testing services in conjunction with the EMC and Low voltage Directives and in the voluntary field. The acceptance is based on a formal quality Audit and follow-ups according to relevant parts of ISO/IEC Guide 17025 (2005), in accordance with the requirements of the DNV Laboratory Quality Manual towards subcontractors. Valid time is until Aug. 24, 2016.

3.3. Equipments Used during the Test

Radiated Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI TEST RECEIVER	Rohde&Schwarz	ESI 26	100009	2015/11/02
2	RF TEST PANEL	Rohde&Schwarz	TS / RSP	335015/ 0017	N/A
3	EMI TEST SOFTWARE	Rohde&Schwarz	ESK1	N/A	N/A
4	Ultra-Broadband Antenna	ShwarzBeck	VULB9163	538	2015/11/08
5	HORN ANTENNA	ShwarzBeck	9120D	1011	2015/11/08
6	Loop Antenna	Rohde&Schwarz	HZ-9	838622\013	2015/11/08
7	Pre-amplifer	SCHWARZBECK	BBV 9743	9743-0022	2015/11/02
8	TURNTABLE	MATURO	TT2.0	----	N/A
9	ANTENNA MAST	MATURO	TAM-4.0-P	----	N/A
10	EMI TEST SOFTWARE	Audix	E3	N/A	N/A
11	Test cable	Siva Cables Italy	RG 58A/U	W14.02	2015/12/05

The Cal.Interval was one year

3.4. Environmental conditions

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

Temperature:	15~35°C
lative Humidity:	30~60 %
Air Pressure:	950~1050mba

3.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01"Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurementof mobile radio equipment characteristics;Part 1"and TR-100028-02 "Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurementof mobile radio equipment characteristics;Part 2 " and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test Items	MeasurementUncertainty	Notes
Radiated spurious emission 9KHz-40 GHz	2.20 dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

4. TEST CONDITIONS AND RESULTS

4.1. Spurious Emission (radiated)

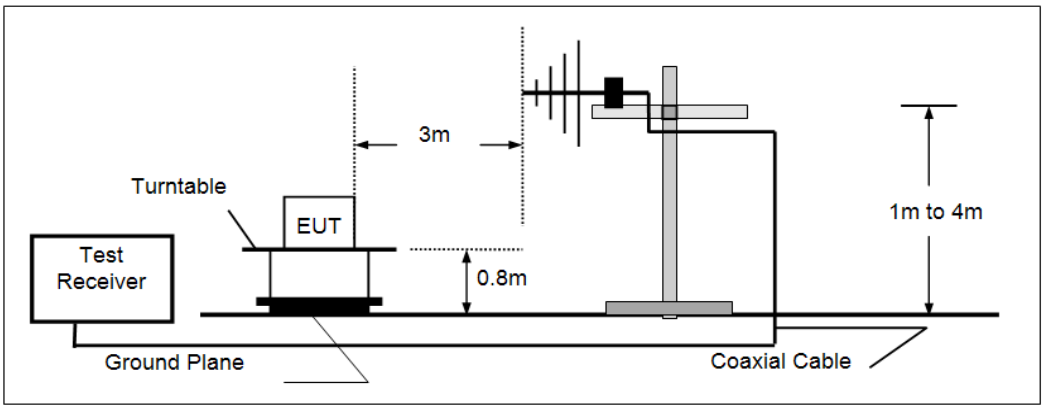
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

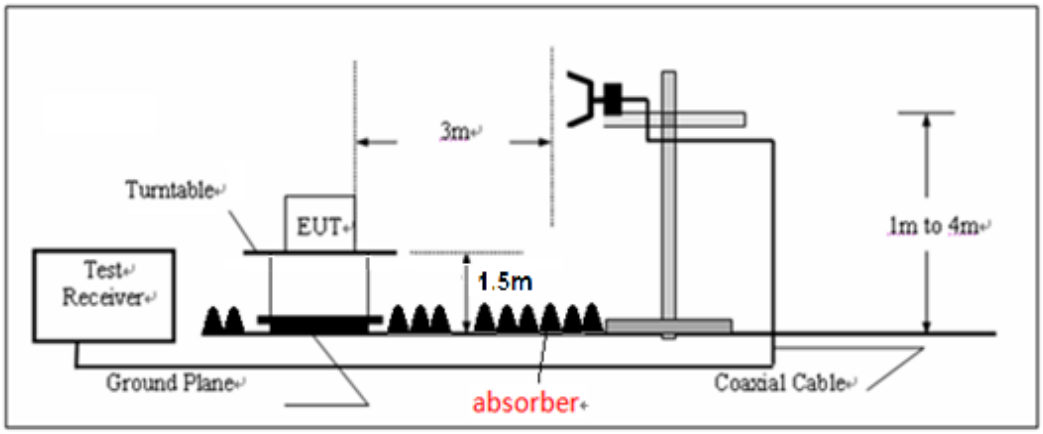
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

- 30MHz ~ 1GHz



- Above 1GHz



TEST PROCEDURE

1. The EUT was tested according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
2. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated360 degrees to determine the position of the maximum emission level.
3. The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. Thisis repeated for both horizontal and vertical polarization of the antenna.
5. Use the following spectrum analyzer settings
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Below 1GHz, RBW=120KHz, VBW=300KHz, Sweep=auto, Detector function=peak, Trace=max hold; *If the emission level of the EUT measured by the peak detectoris 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, theemission measurement will be repeated using the quasi-peak detector and reported.*
   (3) Above 1GHz, RBW=1MHz, VBW=3MHz for Peak value
   RBW=1MHz, VBW=3MHz for Average value.

TEST RESULTS

Measurement data:

Remark:

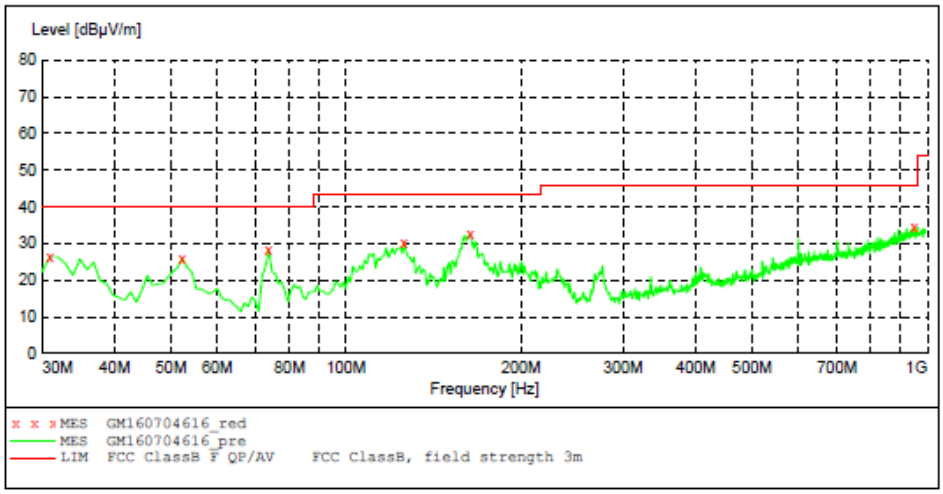
1.Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2."", means this data is the too weak instrument of signal is unable to test.*

3.The emission levels of other frequencies are very lower than the limit and not show in test report.

■ **30MHz ~ 1GHz**

Worst case mode	Vertical

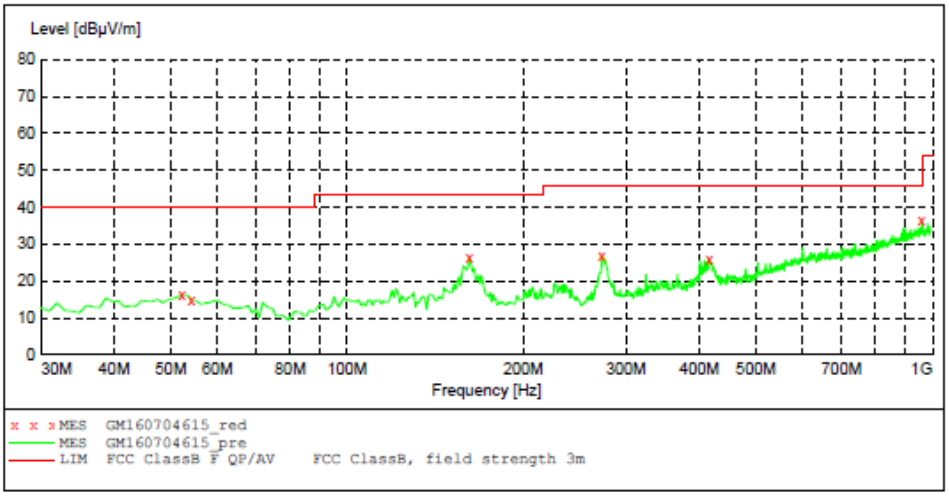


MEASUREMENT RESULT: "GM160704616_red"

7/4/2016 10:24AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.970000	26.50	-16.7	40.0	13.5	QP	100.0	302.00	VERTICAL
52.310000	25.90	-14.4	40.0	14.1	QP	100.0	7.00	VERTICAL
73.650000	28.30	-17.6	40.0	11.7	QP	100.0	237.00	VERTICAL
126.030000	30.10	-16.6	43.5	13.4	QP	100.0	190.00	VERTICAL
163.860000	32.50	-16.9	43.5	11.0	QP	100.0	122.00	VERTICAL
950.530000	34.40	3.7	46.0	11.6	QP	100.0	73.00	VERTICAL

Worst case mode	Horizontal



MEASUREMENT RESULT: "GM160704615_red"

7/4/2016 10:21AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
52.310000	16.30	-14.4	40.0	23.7	QP	300.0	354.00	HORIZONTAL
54.250000	14.90	-14.6	40.0	25.1	QP	100.0	219.00	HORIZONTAL
161.920000	26.50	-17.0	43.5	17.0	QP	100.0	154.00	HORIZONTAL
272.500000	26.70	-14.7	46.0	19.3	QP	100.0	358.00	HORIZONTAL
416.060000	25.80	-10.2	46.0	20.2	QP	100.0	137.00	HORIZONTAL
959.260000	36.40	3.9	46.0	9.6	QP	300.0	209.00	HORIZONTAL

■ **Above 1 GHz ~12.75GHz**

CH01 for 802.11b									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
2400.00	48.26	27.58	3.90	35.62	44.12	74.00	-29.88	Vertical	Peak
4824.00	40.92	29.18	8.61	37.99	40.72	74.00	-33.28	Vertical	
7236.00	36.00	36.17	10.95	38.15	44.97	74.00	-29.03	Vertical	
9648.00	37.54	38.20	12.17	38.08	49.83	74.00	-24.17	Vertical	
12060.00	*					74.00		Vertical	
2400.00	48.06	27.58	3.90	35.62	43.92	74.00	-30.08	Horizontal	
4824.00	38.98	32.00	9.53	38.39	42.12	74.00	-31.88	Horizontal	
7236.00	38.15	35.92	6.94	35.18	45.83	74.00	-28.17	Horizontal	
9648.00	40.99	38.20	12.17	38.08	53.28	74.00	-20.72	Horizontal	
12060.00	*					74.00		Horizontal	
2400.00	40.62	27.58	3.90	35.62	36.48	54.00	-17.52	Vertical	Average
4824.00	40.14	29.18	8.61	37.99	39.94	54.00	-14.06	Vertical	
7236.00	27.95	36.17	10.95	38.15	36.92	54.00	-17.08	Vertical	
9648.00	28.08	38.20	12.17	38.08	40.37	54.00	-13.63	Vertical	
12060.00	*					54.00		Vertical	
2400.00	40.18	27.58	3.90	35.62	36.04	54.00	-17.96	Horizontal	
4824.00	41.54	32.00	9.53	38.39	44.68	54.00	-9.32	Horizontal	
7236.00	28.58	35.92	6.94	35.18	36.26	54.00	-17.74	Horizontal	
9648.00	28.03	38.20	12.17	38.08	40.32	54.00	-13.68	Horizontal	
12060.00	*					54.00		Horizontal	

CH06 for 802.11b									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
4874.00	39.15	30.91	8.99	38.34	40.71	74.00	-33.29	Vertical	Peak
7311.00	35.16	35.44	10.53	38.02	43.11	74.00	-30.89	Vertical	
9748.00	38.13	38.02	12.17	38.08	50.24	74.00	-23.76	Vertical	
12185.00	*					74.00		Vertical	
4874.00	38.15	30.24	8.81	38.17	39.03	74.00	-34.97	Horizontal	
7311.00	36.88	35.44	10.53	38.02	44.83	74.00	-29.17	Horizontal	
9748.00	37.32	38.20	12.17	38.08	49.61	74.00	-24.39	Horizontal	
12185.00	*					74.00		Horizontal	
4874.00	39.86	30.91	8.99	38.34	41.42	54.00	-12.58	Vertical	Average
7311.00	29.19	35.44	10.53	38.02	37.14	54.00	-16.86	Vertical	
9748.00	28.38	38.02	12.17	38.08	40.49	54.00	-13.51	Vertical	
12185.00	*					54.00		Vertical	
4874.00	43.30	30.24	8.81	38.17	44.18	54.00	-9.82	Horizontal	
7311.00	28.28	35.44	10.53	38.02	36.23	54.00	-17.77	Horizontal	
9748.00	27.71	38.20	12.17	38.08	40.00	54.00	-14.00	Horizontal	
12185.00	*					54.00		Horizontal	

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

CH11 for 802.11b									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
2483.50	49.76	27.85	3.96	35.65	45.92	74.00	-28.08	Vertical	Peak
4924.00	45.62	31.17	9.31	38.62	47.48	74.00	-26.52	Vertical	
7386.00	35.87	36.72	11.24	38.24	45.59	74.00	-28.41	Vertical	
9848.00	37.66	38.33	12.39	38.12	50.26	74.00	-23.74	Vertical	
12310.00	*					74.00		Vertical	
2400.00	47.51	27.85	3.96	35.65	43.67	74.00	-30.33	Horizontal	
4924.00	48.79	31.17	9.31	38.62	50.65	74.00	-23.35	Horizontal	
7386.00	39.51	36.13	10.93	38.14	48.43	74.00	-25.57	Horizontal	
9848.00	41.13	38.33	12.39	38.12	53.73	74.00	-20.27	Horizontal	
12310.00	*					74.00		Horizontal	
2483.50	41.90	27.85	3.96	35.65	38.06	54.00	-15.94	Vertical	Average
4924.00	39.41	31.17	9.31	38.62	41.27	54.00	-12.73	Vertical	
7386.00	27.60	36.72	11.24	38.24	37.32	54.00	-16.68	Vertical	
9848.00	26.91	38.33	12.39	38.12	39.51	54.00	-14.49	Vertical	
12310.00	*					54.00		Vertical	
2483.50	39.44	27.85	3.96	35.65	35.60	54.00	-18.40	Horizontal	
4924.00	42.75	31.17	9.31	38.62	44.61	54.00	-9.39	Horizontal	
7386.00	38.60	36.13	10.93	38.14	47.52	54.00	-6.48	Horizontal	
9848.00	28.37	38.33	12.39	38.12	40.97	54.00	-13.03	Horizontal	
12310.00	*					54.00		Horizontal	

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

CH01 for 802.11g									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
2400.00	47.80	27.58	3.90	35.62	43.66	74.00	-30.34	Vertical	Peak
4824.00	43.59	29.18	8.61	37.99	43.39	74.00	-30.61	Vertical	
7236.00	35.58	36.17	10.95	38.15	44.55	74.00	-29.45	Vertical	
9648.00	35.18	38.20	12.17	38.08	47.47	74.00	-26.53	Vertical	
12060.00	*					74.00		Vertical	
2400.00	46.25	27.58	3.90	35.62	42.11	74.00	-31.89	Horizontal	
4824.00	41.22	32.00	9.53	38.39	44.36	74.00	-29.64	Horizontal	
7236.00	35.61	35.92	6.94	35.18	43.29	74.00	-30.71	Horizontal	
9648.00	36.22	38.20	12.17	38.08	48.51	74.00	-25.49	Horizontal	
12060.00	*					74.00		Horizontal	
2400.00	40.45	27.58	3.90	35.62	36.31	54.00	-17.69	Vertical	Average
4824.00	38.38	29.18	8.61	37.99	38.18	54.00	-15.82	Vertical	
7236.00	28.40	36.17	10.95	38.15	37.37	54.00	-16.64	Vertical	
9648.00	27.34	38.20	12.17	38.08	39.63	54.00	-14.37	Vertical	
12060.00	*					54.00		Vertical	
2400.00	39.81	27.58	3.90	35.62	35.67	54.00	-18.33	Horizontal	
4824.00	35.00	32.00	9.53	38.39	38.14	54.00	-15.86	Horizontal	
7236.00	28.95	35.92	6.94	35.18	36.63	54.00	-17.37	Horizontal	
9648.00	27.61	38.20	12.17	38.08	39.90	54.00	-14.10	Horizontal	
12060.00	*					54.00		Horizontal	

CH06 for 802.11g									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
4874.00	43.41	30.91	8.99	38.34	44.97	74.00	-29.03	Vertical	Peak
7311.00	34.78	35.44	10.53	38.02	42.73	74.00	-31.27	Vertical	
9748.00	36.06	38.02	12.17	38.08	48.17	74.00	-25.83	Vertical	
12185.00	*					74.00		Vertical	
4874.00	44.85	30.24	8.81	38.17	45.73	74.00	-28.27	Horizontal	
7311.00	35.79	35.44	10.53	38.02	43.74	74.00	-30.26	Horizontal	
9748.00	34.59	38.20	12.17	38.08	46.88	74.00	-27.12	Horizontal	
12185.00	*					74.00		Horizontal	
4874.00	36.82	30.91	8.99	38.34	38.38	54.00	-15.62	Vertical	Average
7311.00	29.23	35.44	10.53	38.02	37.18	54.00	-16.82	Vertical	
9748.00	27.36	38.02	12.17	38.08	39.47	54.00	-14.53	Vertical	
12185.00	*					54.00		Vertical	
4874.00	38.13	30.24	8.81	38.17	39.01	54.00	-14.99	Horizontal	
7311.00	28.55	35.44	10.53	38.02	36.50	54.00	-17.50	Horizontal	
9748.00	27.70	38.20	12.17	38.08	39.99	54.00	-14.01	Horizontal	
12185.00	*					54.00		Horizontal	

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

CH11 for 802.11g									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
2483.50	47.23	27.85	3.96	35.65	43.39	74.00	-30.61	Vertical	Peak
4924.00	41.43	31.17	9.31	38.62	43.29	74.00	-30.71	Vertical	
7386.00	34.18	36.72	11.24	38.24	43.90	74.00	-30.10	Vertical	
9848.00	35.71	38.33	12.39	38.12	48.31	74.00	-25.69	Vertical	
12310.00	*					74.00		Vertical	
2483.50	45.72	27.85	3.96	35.65	41.88	74.00	-32.12	Horizontal	
4924.00	42.93	31.17	9.31	38.62	44.79	74.00	-29.21	Horizontal	
7386.00	34.50	36.13	10.93	38.14	43.42	74.00	-30.58	Horizontal	
9848.00	34.77	38.33	12.39	38.12	47.37	74.00	-26.63	Horizontal	
12310.00	*					74.00		Horizontal	
2483.50	39.05	27.85	3.96	35.65	35.21	54.00	-18.79	Vertical	Average
4924.00	36.03	31.17	9.31	38.62	37.89	54.00	-16.11	Vertical	
7386.00	28.59	36.72	11.24	38.24	38.31	54.00	-15.69	Vertical	
9848.00	27.51	38.33	12.39	38.12	40.11	54.00	-13.89	Vertical	
12310.00	*					54.00		Vertical	
2483.50	38.29	27.85	3.96	35.65	34.45	54.00	-19.55	Horizontal	
4924.00	36.60	31.17	9.31	38.62	38.46	54.00	-15.54	Horizontal	
7386.00	28.69	36.13	10.93	38.14	37.61	54.00	-16.39	Horizontal	
9848.00	27.19	38.33	12.39	38.12	39.79	54.00	-14.21	Horizontal	
12310.00	*					54.00		Horizontal	

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

CH01 for 802.11n(H20)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
2400.00	48.33	27.58	3.90	35.62	44.19	74.00	-29.81	Vertical	Peak
4824.00	40.94	29.18	8.61	37.99	40.74	74.00	-33.26		
7236.00	34.85	36.17	10.95	38.15	43.82	74.00	-30.18	Vertical	
9648.00	35.52	38.20	12.17	38.08	47.81	74.00	-26.19	Vertical	
12060.00	*					74.00		Vertical	
2400.00	45.62	27.58	3.90	35.62	41.48	74.00	-32.52	Horizontal	
4824.00	33.92	32.00	9.53	38.39	37.06	74.00	-36.94	Horizontal	
7236.00	38.46	35.92	6.94	35.18	46.14	74.00	-27.86	Horizontal	
9648.00	36.05	38.20	12.17	38.08	48.34	74.00	-25.66	Horizontal	
12060.00	*					74.00		Horizontal	
2400.00	39.83	27.58	3.90	35.62	35.69	54.00	-18.31	Vertical	Average
4824.00	35.16	29.18	8.61	37.99	34.96	54.00	-19.04	Vertical	
7236.00	27.86	36.17	10.95	38.15	36.83	54.00	-17.17	Vertical	
9648.00	26.64	38.20	12.17	38.08	38.93	54.00	-15.07	Vertical	
12060.00	*					54.00		Vertical	
2400.00	39.80	27.58	3.90	35.62	35.66	54.00	-18.34	Horizontal	
4824.00	33.03	32.00	9.53	38.39	36.17	54.00	-17.83	Horizontal	
7236.00	29.60	35.92	6.94	35.18	37.28	54.00	-16.72	Horizontal	
9648.00	28.99	38.20	12.17	38.08	41.28	54.00	-12.72	Horizontal	
12060.00	*					54.00		Horizontal	

CH06 for 802.11n(H20)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
4874.00	39.69	30.91	8.99	38.34	41.25	74.00	-32.75	Vertical	Peak
7311.00	35.47	35.44	10.53	38.02	43.42	74.00	-30.58	Vertical	
9748.00	34.56	38.02	12.17	38.08	46.67	74.00	-27.33	Vertical	
12185.00	*					74.00		Vertical	
4874.00	41.97	30.24	8.81	38.17	42.85	74.00	-31.15	Horizontal	
7311.00	35.35	35.44	10.53	38.02	43.30	74.00	-30.70	Horizontal	
9748.00	35.42	38.20	12.17	38.08	47.71	74.00	-26.29	Horizontal	
12185.00	*					74.00		Horizontal	
4874.00	35.06	30.91	8.99	38.34	36.62	54.00	-17.38	Vertical	Average
7311.00	27.29	35.44	10.53	38.02	35.24	54.00	-18.76	Vertical	
9748.00	27.16	38.02	12.17	38.08	39.27	54.00	-14.73	Vertical	
12185.00	*					54.00		Vertical	
4874.00	35.32	30.24	8.81	38.17	36.20	54.00	-17.80	Horizontal	
7311.00	29.19	35.44	10.53	38.02	37.14	54.00	-16.86	Horizontal	
9748.00	27.05	38.20	12.17	38.08	39.34	54.00	-14.66	Horizontal	
12185.00	*					54.00		Horizontal	

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

CH11 for 802.11n(H20)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
2483.50	47.78	27.85	3.96	35.65	43.94	74.00	-30.06	Vertical	Peak
4924.00	39.59	31.17	9.31	38.62	41.45	74.00	-32.55		
7386.00	34.01	36.72	11.24	38.24	43.73	74.00	-30.27	Vertical	
9848.00	35.19	38.33	12.39	38.12	47.79	74.00	-26.21	Vertical	
12310.00	*					74.00		Vertical	
2483.50	47.14	27.85	3.96	35.65	43.30	74.00	-30.70	Horizontal	
4924.00	41.41	31.17	9.31	38.62	43.27	74.00	-30.73	Horizontal	
7386.00	36.21	36.13	10.93	38.14	45.13	74.00	-28.87	Horizontal	
9848.00	36.10	38.33	12.39	38.12	48.70	74.00	-25.30	Horizontal	
12310.00	*					74.00		Horizontal	
2483.50	40.99	27.85	3.96	35.65	37.15	54.00	-16.85	Vertical	Average
4924.00	33.60	31.17	9.31	38.62	35.46	54.00	-18.54	Vertical	
7386.00	27.71	36.72	11.24	38.24	37.43	54.00	-16.57	Vertical	
9848.00	27.87	38.33	12.39	38.12	40.47	54.00	-13.53	Vertical	
12310.00	*					54.00		Vertical	
2483.50	40.22	27.85	3.96	35.65	36.38	54.00	-17.62	Horizontal	
4924.00	34.72	31.17	9.31	38.62	36.58	54.00	-17.42	Horizontal	
7386.00	28.88	36.13	10.93	38.14	37.80	54.00	-16.20	Horizontal	
9848.00	27.90	38.33	12.39	38.12	40.50	54.00	-13.50	Horizontal	
12310.00	*					54.00		Horizontal	

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

CH03 for 802.11n(H40)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
2400.00	47.95	27.58	3.90	35.62	43.81	74.00	-30.19	Vertical	Peak
4824.00	41.38	29.18	8.61	37.99	41.18	74.00	-32.82		
7236.00	33.91	36.17	10.95	38.15	42.88	74.00	-31.12	Vertical	
9648.00	35.03	38.20	12.17	38.08	47.32	74.00	-26.68	Vertical	
12060.00	*					74.00		Vertical	
2400.00	47.08	27.58	3.90	35.62	42.94	74.00	-31.06	Horizontal	
4824.00	40.20	32.00	9.53	38.39	43.34	74.00	-30.66	Horizontal	
7236.00	37.37	35.92	6.94	35.18	45.05	74.00	-28.95	Horizontal	
9648.00	36.21	38.20	12.17	38.08	48.50	74.00	-25.50	Horizontal	
12060.00	*					74.00		Horizontal	
2400.00	40.58	27.58	3.90	35.62	36.44	54.00	-17.56	Vertical	Average
4824.00	35.78	29.18	8.61	37.99	35.58	54.00	-18.42	Vertical	
7236.00	28.11	36.17	10.95	38.15	37.08	54.00	-16.92	Vertical	
9648.00	27.87	38.20	12.17	38.08	40.16	54.00	-13.84	Vertical	
12060.00	*					54.00		Vertical	
2400.00	40.50	27.58	3.90	35.62	36.36	54.00	-17.64	Horizontal	
4824.00	35.54	32.00	9.53	38.39	38.68	54.00	-15.32	Horizontal	
7236.00	30.74	35.92	6.94	35.18	38.42	54.00	-15.58	Horizontal	
9648.00	27.62	38.20	12.17	38.08	39.91	54.00	-14.09	Horizontal	
12060.00	*					54.00		Horizontal	

CH06 for 802.11n(H40)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
4874.00	39.58	30.91	8.99	38.34	41.14	74.00	-32.86	Vertical	Peak
7311.00	34.99	35.44	10.53	38.02	42.94	74.00	-31.06	Vertical	
9748.00	35.98	38.02	12.17	38.08	48.09	74.00	-25.91	Vertical	
12185.00	*					74.00		Vertical	
4874.00	40.75	30.24	8.81	38.17	41.63	74.00	-32.37	Horizontal	
7311.00	35.96	35.44	10.53	38.02	43.91	74.00	-30.09	Horizontal	
9748.00	36.16	38.20	12.17	38.08	48.45	74.00	-25.55	Horizontal	
12185.00	*					74.00		Horizontal	
4874.00	34.98	30.91	8.99	38.34	36.54	54.00	-17.46	Vertical	Average
7311.00	27.91	35.44	10.53	38.02	35.86	54.00	-18.14	Vertical	
9748.00	28.22	38.02	12.17	38.08	40.33	54.00	-13.67	Vertical	
12185.00	*					54.00		Vertical	
4874.00	37.17	30.24	8.81	38.17	38.05	54.00	-15.95	Horizontal	
7311.00	29.50	35.44	10.53	38.02	37.45	54.00	-16.55	Horizontal	
9748.00	28.02	38.20	12.17	38.08	40.31	54.00	-13.69	Horizontal	
12185.00	*					54.00		Horizontal	

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

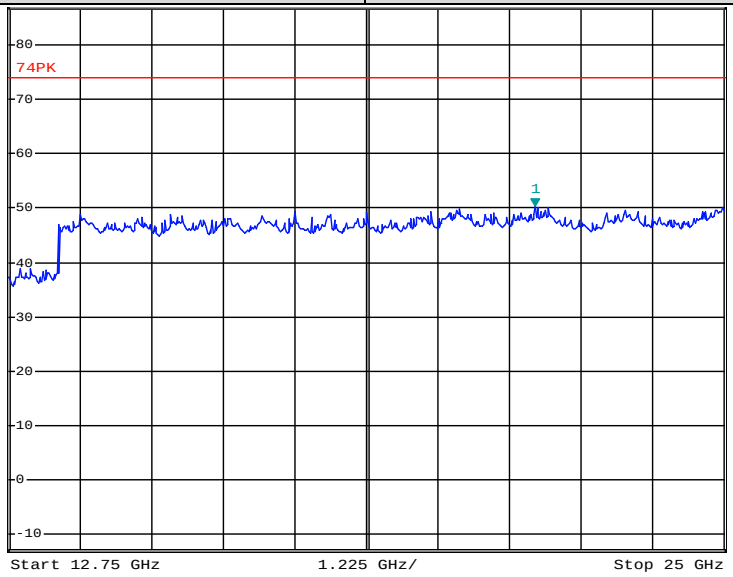
CH09 for 802.11n(H40)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin Limit (dB)	Polarization	Test value
2483.50	47.12	27.85	3.96	35.65	43.28	74.00	-30.72	Vertical	Peak
4924.00	39.67	31.17	9.31	38.62	41.53	74.00	-32.47	Vertical	
7386.00	34.25	36.72	11.24	38.24	43.97	74.00	-30.03	Vertical	
9848.00	34.69	38.33	12.39	38.12	47.29	74.00	-26.71	Vertical	
12310.00	*					74.00		Vertical	
2483.50	46.21	27.85	3.96	35.65	42.37	74.00	-31.63	Horizontal	
4924.00	41.88	31.17	9.31	38.62	43.74	74.00	-30.26	Horizontal	
7386.00	35.36	36.13	10.93	38.14	44.28	74.00	-29.72	Horizontal	
9848.00	35.60	38.33	12.39	38.12	48.20	74.00	-25.80	Horizontal	
12310.00	*					74.00		Horizontal	
2483.50	39.78	27.85	3.96	35.65	35.94	54.00	-18.06	Vertical	Average
4924.00	33.91	31.17	9.31	38.62	35.77	54.00	-18.23	Vertical	
7386.00	27.71	36.72	11.24	38.24	37.43	54.00	-16.57	Vertical	
9848.00	25.85	38.33	12.39	38.12	38.45	54.00	-15.56	Vertical	
12310.00	*					54.00		Vertical	
2483.50	39.84	27.85	3.96	35.65	36.00	54.00	-18.00	Horizontal	
4924.00	35.06	31.17	9.31	38.62	36.92	54.00	-17.08	Horizontal	
7386.00	29.10	36.13	10.93	38.14	38.02	54.00	-15.98	Horizontal	
9848.00	27.20	38.33	12.39	38.12	39.80	54.00	-14.20	Horizontal	
12310.00	*					54.00		Horizontal	

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

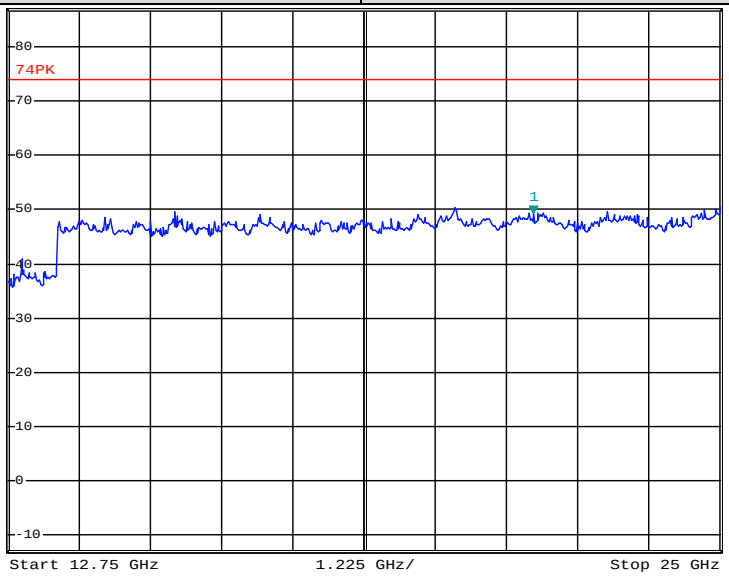
■ **Above 12.75GHz ~25 GHz**

CH01 for 802.11b	Worst case



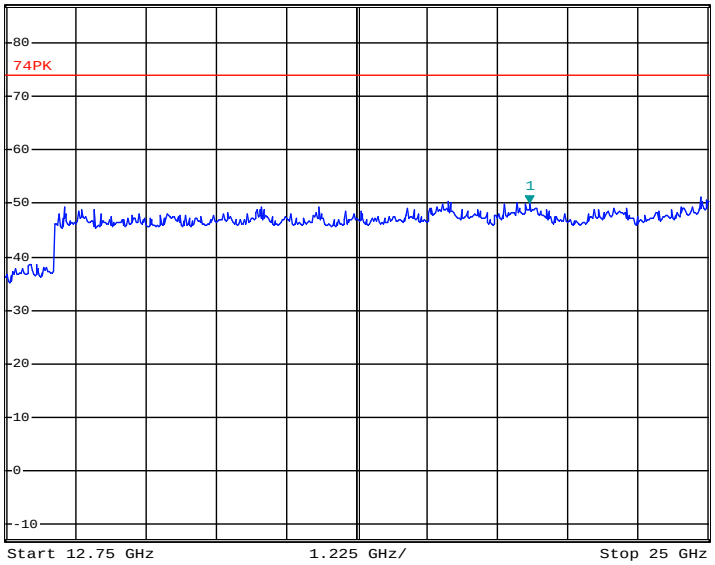
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
21.7660	50.27	74	Pass

CH07 for 802.11b	Worst case



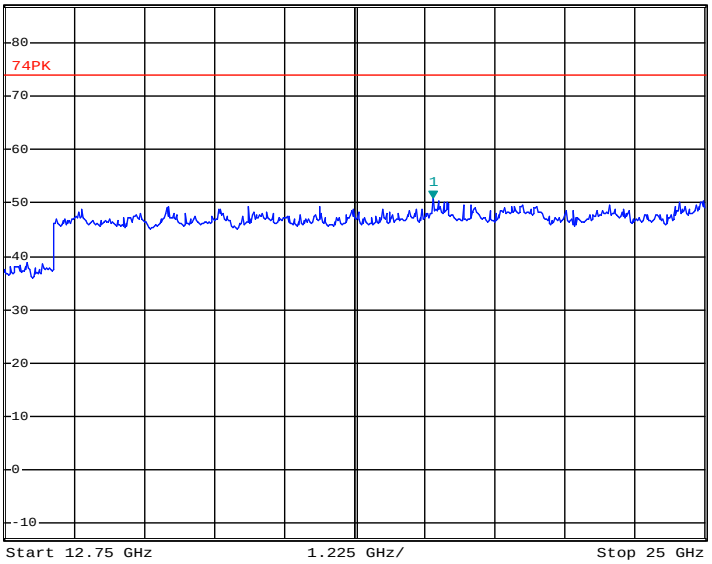
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
21.7905	49.45	74	Pass

CH11 for 802.11b	Worst case



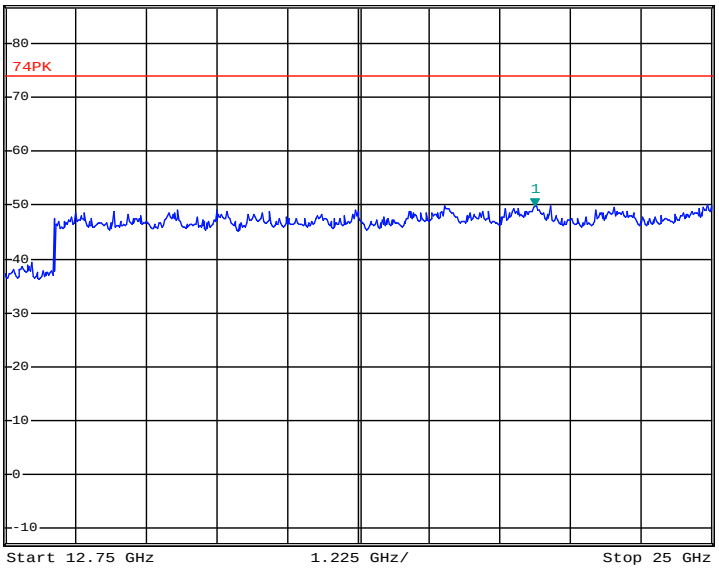
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
21.8885	50.20	74	Pass

CH01 for 802.11g	Worst case



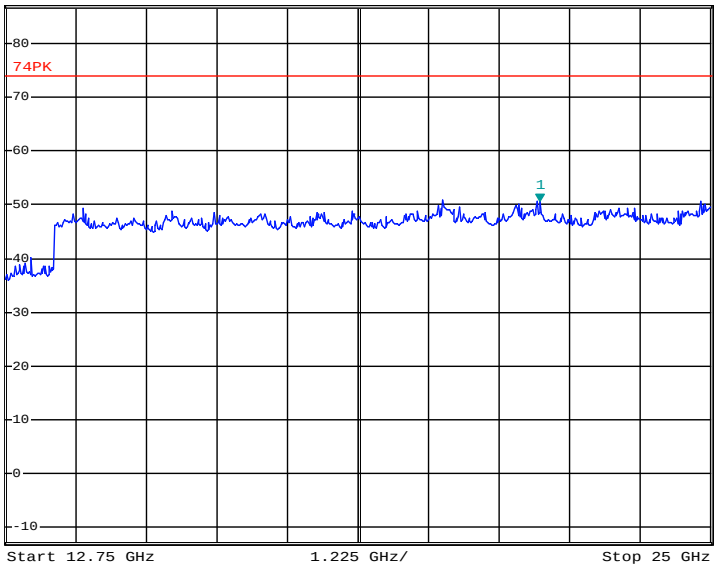
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
20.2470	51.00	74	Pass

CH07 for 802.11g	Worst case



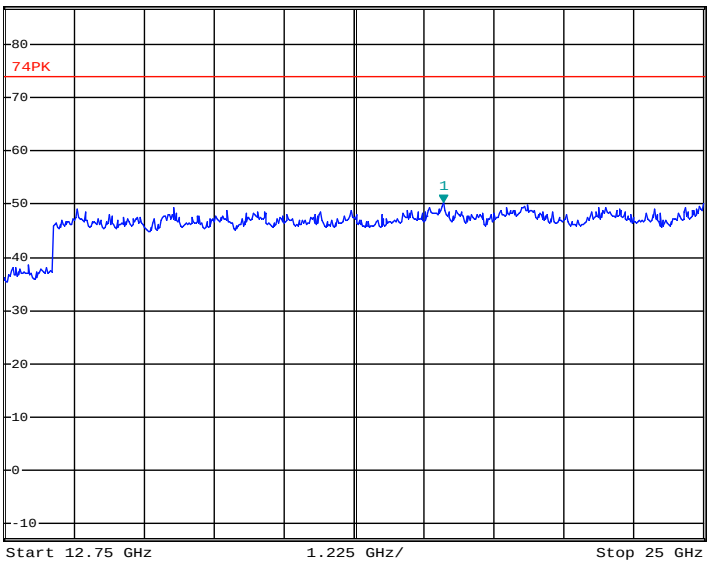
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
21.9375	49.95	74	Pass

CH11 for 802.11g	Worst case



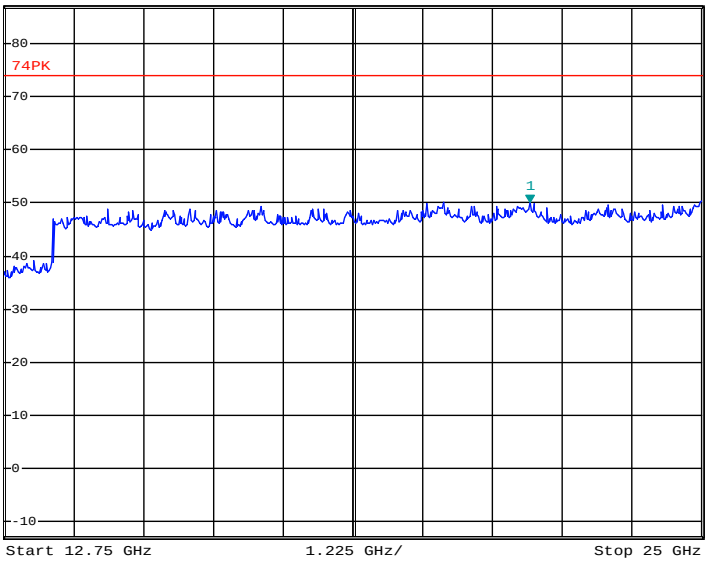
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
22.0355	50.56	74	Pass

CH01 for 802.11 n(H20)	Worst case



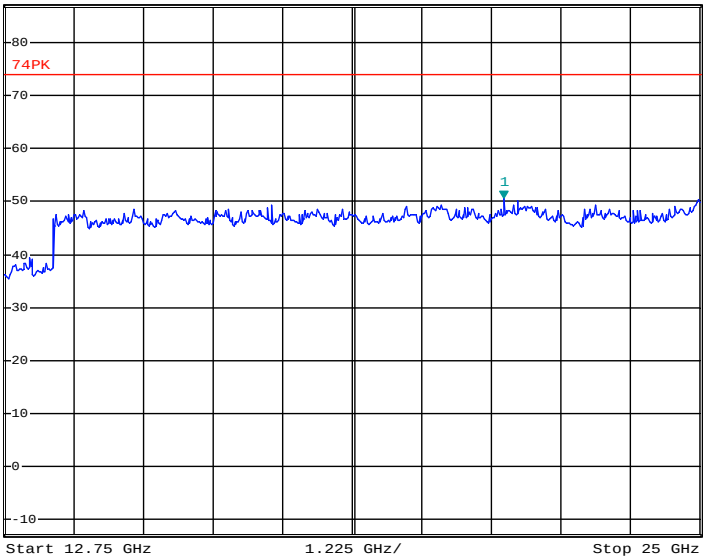
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
20.4430	50.33	74	Pass

CH07 for 802.11 n(H20)	Worst case



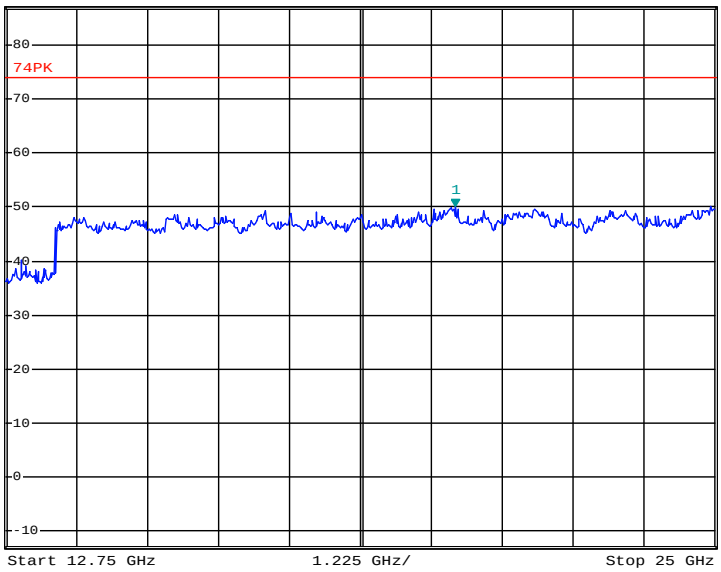
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
21.9865	50.24	74	Pass

CH11 for 802.11 n(H20)	Worst case



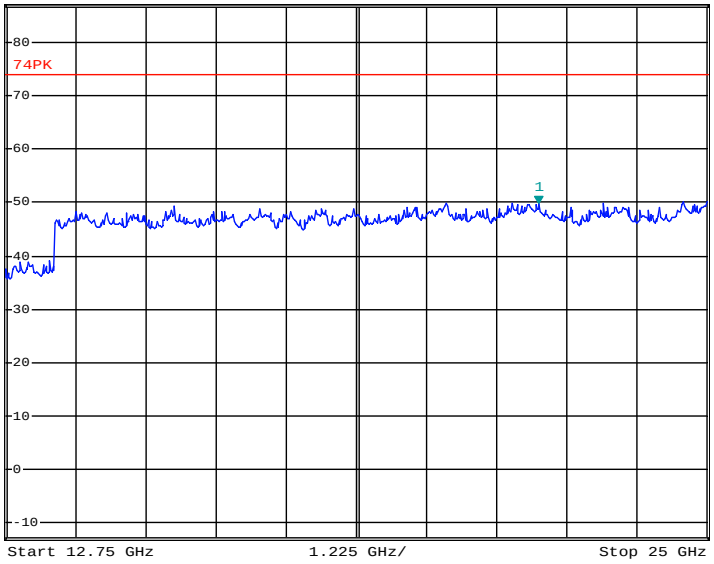
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
21.5455	50.65	74	Pass

CH03 for 802.11 n(H40)	Worst case



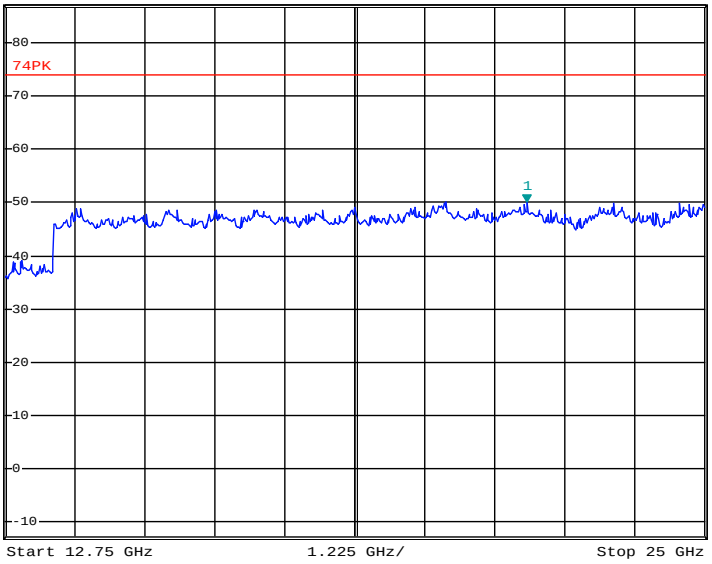
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
20.5165	50.10	74	Pass

CH07 for 802.11 n(H40)	Worst case



Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
22.0600	49.74	74	Pass

CH09 for 802.11 n(H40)	Worst case

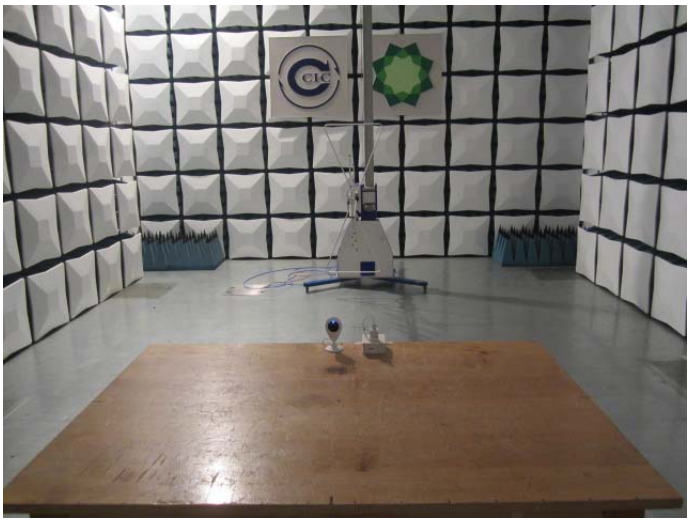


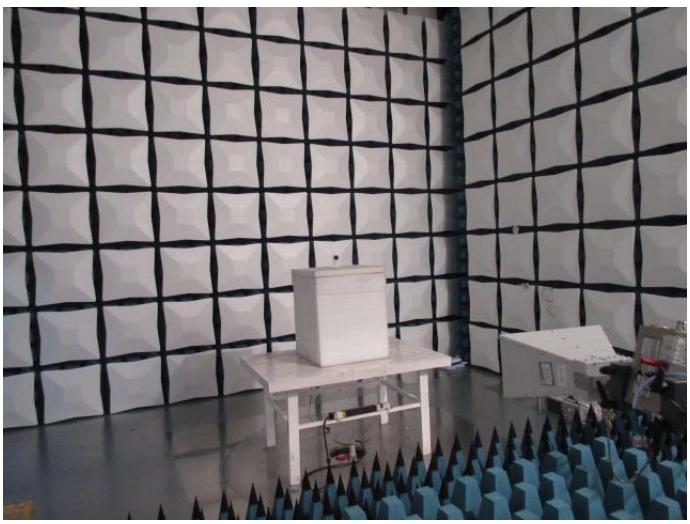
Frequency (GHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Result
21.8885	50.18	74	Pass

5. Test Setup Photos of the EUT

Conducted Emission

Radiated Emission



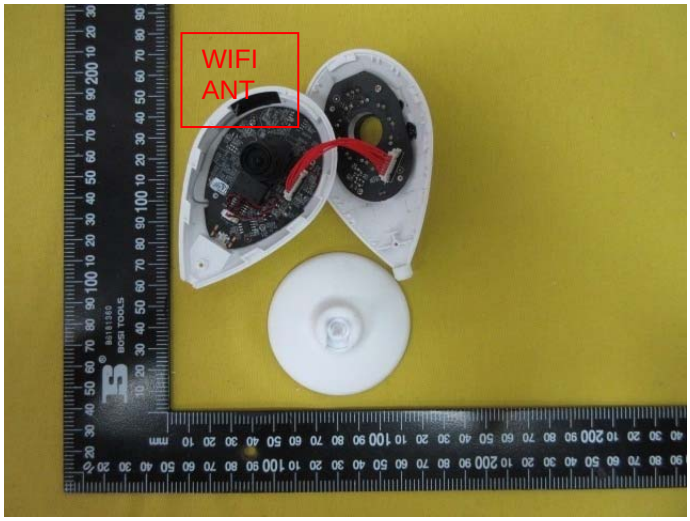


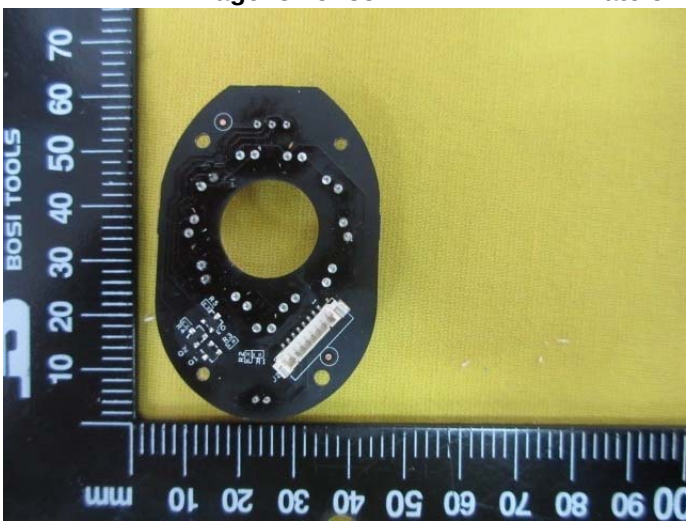
6. External and Internal Photos of the EUT

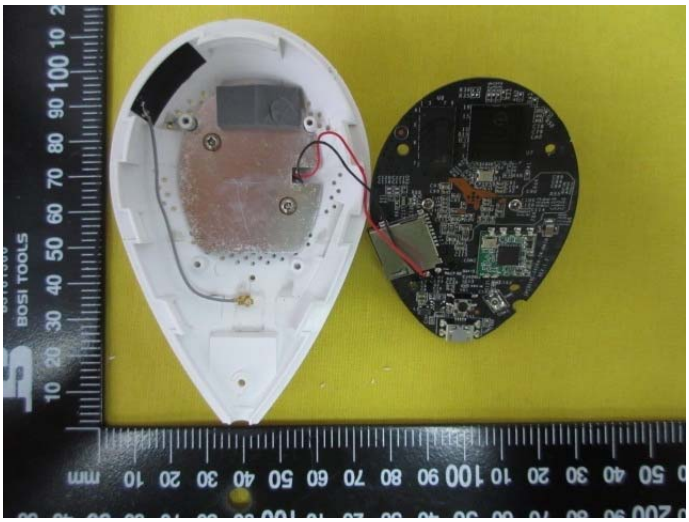
External photos

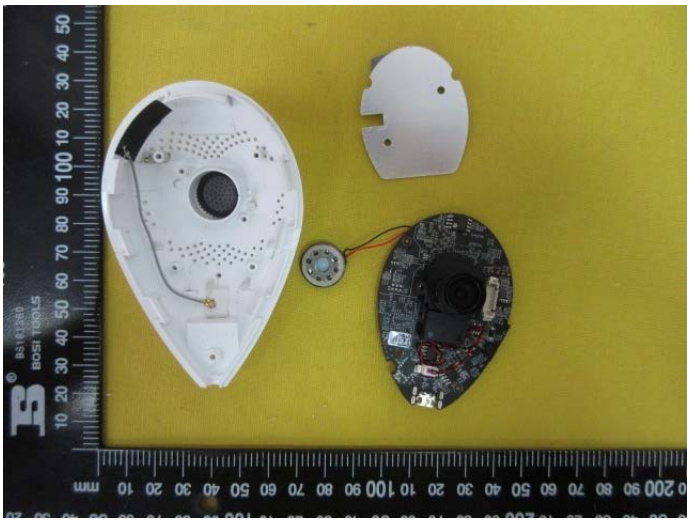

BOSI TOOLS
mm

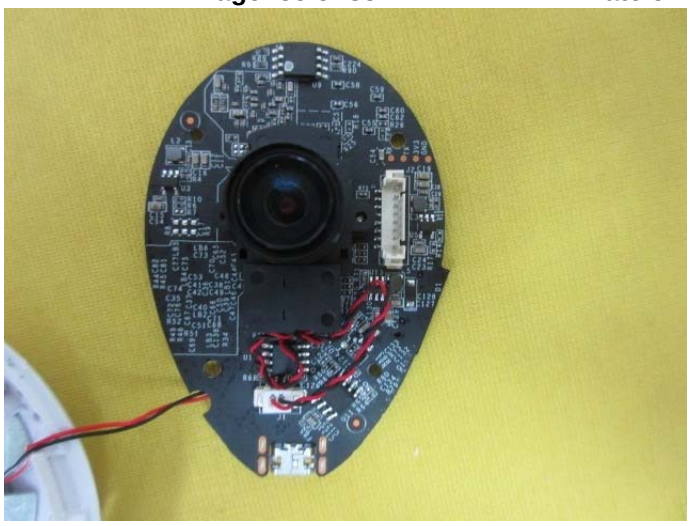
Internal photos




BOSI TOOLS
mm


BOSI TOOLS
mm


BOSI TOOLS
mm



.....End of Report.....