FCC Part 15B
Measurement and Test Report

For

Shenzhen Jimi Software Co., Ltd

Floor 4th, Building C, Gaoxinqi Industrial Park, Liuxian 1st Road, District 67, Bao'an, Shenzhen, China

FCC ID: 2AMLFJH09

Test Rule(s):	FCC Part 15 Subpart B
Product Description:	3G camera
Tested Model:	JH09
Report No.:	STR17058333I-3
Tested Date:	2017-06-12 to 2017-07-03
Issued Date:	2017-07-05
Tested By:	Iven Guo / Engineer
Reviewed By:	Silin Chen / EMC Manager
Approved & Authorized By:	Jandy So / PSQ Manager

Prepared By:

Shenzhen SEM.Test Technology Co., Ltd.
1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road,
Bao'an District, Shenzhen, P.R.C.（518101）
Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

TABLE OF CONTENTS

1. GENERAL INFORMATION 3
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) 3
1.2 TEST STANDARDS 4
1.3 TEST METHODOLOGY 4
1.4 TEST FACILITY 4
1.5 EUT SETUP AND OPERATION MODE 5
1.6 MEASUREMENT UNCERTAINTY 5
1.7 TEST EQUIPMENT LIST AND DETAILS 6
2. SUMMARY OF TEST RESULTS 7
3. CONDUCTED EMISSIONS 8
3.1 TEST PROCEDURE 8
3.2 BASIC TEST SETUP BLOCK DIAGRAM 8
3.3 ENVIRONMENTAL CONDITIONS 8
3.4 SUMMARY OF TEST RESULTS/PLOTS 8
3.5 CONDUCTED EMISSIONS TEST DATA 9
4. RADIATED EMISSIONS 13
4.1 TEST PROCEDURE 13
4.2 TEST RECEIVER SETUP 14
4.3 CORRECTED AMPLITUDE & MARGIN CALCULATION 14
4.4 ENVIRONMENTAL CONDITIONS 14
4.5 SUMMARY OF TEST RESULTS/PLOTS 14

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Shenzhen Jimi Software Co., Ltd
Address of applicant:	Floor 4th, Building C, Gaoxinqi Industrial Park, Liuxian 1st Road, District 67, Bao'an, Shenzhen, China
Manufacturer:	Shenzhen Jimi Software Co., Ltd
Address of manufacturer:	Floor 4th, Building C, Gaoxinqi Industrial Park, Liuxian 1st Road, District 67, Bao'an, Shenzhen, China

General Description of EUT	
Product Name:	3G camera
Trade Name:	Jimi
Model No.:	JH09
Adding Model(s):	JH09S, JH07
Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model JH09, but the circuit and the electronic construction do not change, declared by the manufacturer.	

Technical Characteristics of EUT	
Rated Voltage:	DC 3.7V by battery
Rated Current:	/
Rated Power:	/
Power Adapter Model:	HJ-0502000N1-EU
	Input:100-240V,50/60Hz,0.3A; Output:DC5V,2.0A
Highest Internal Frequency:	1.3GHz
Classification of ITE:	Class B

1.2 Test Standards

The following report is prepared on behalf of the Shenzhen Jimi Software Co., Ltd in accordance with Part 2, Subpart J, and Part 15, Subparts A and B of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart B, and section 15.205, 15.107, and 15.109 rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

1.4 Test Facility

FCC – Registration No.: 934118

Shenzhen SEM.Test Technology 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 and the Registration is 934118.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

CNAS Registration No.: L4062

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101).

1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List:

Test Mode	Description	Remark
TM1	Charging	/
TM2	Downloading	/

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
adapter Cable	3.0	Shielded	Without Ferrite

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	E10	LR-63C8R

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	1.0	Shielded	Without Ferrite

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Conducted Emissions	Conducted	±2.88dB
Transmitter Spurious Emissions	Radiated	±5.1dB

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2017-06-12	2018-06-11
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2017-06-12	2018-06-11
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2017-06-12	2018-06-11
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2017-06-12	2018-06-11
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2017-06-12	2018-06-11
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2017-06-12	2018-06-11
SEMT-1042	Horn Antenna	ETS	3117	00086197	2017-06-12	2018-06-11
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2017-06-12	2018-06-11
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2017-06-12	2018-06-11
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2017-06-12	2018-06-11
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2017-06-12	2018-06-11

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 15.107 (a)	Conducted Emissions	Compliant
§ 15.109 (a)	Radiated Emissions	Compliant

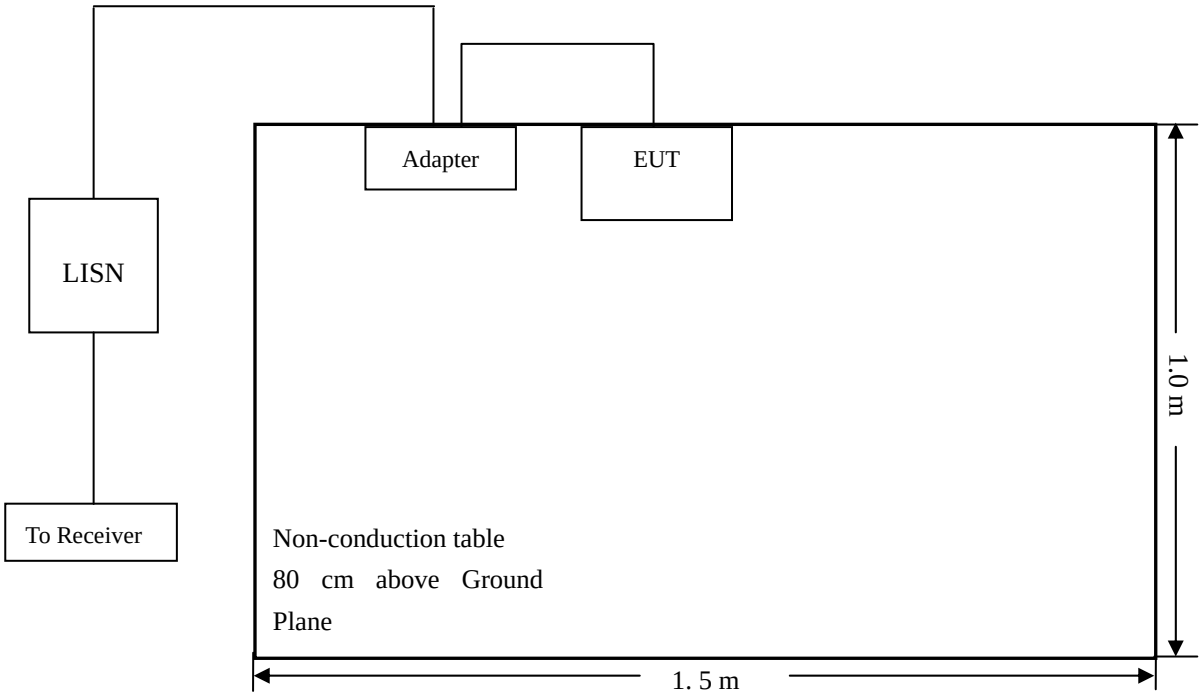
N/A: not applicable

3. Conducted Emissions

3.1 Test Procedure

Test is conducting under the description of ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

3.2 Basic Test Setup Block Diagram



3.3 Environmental Conditions

Temperature:	23 °C
Relative Humidity:	52%
ATM Pressure:	1011 mbar

3.4 Summary of Test Results/Plots

According to the data in section 3.5, the EUT complied with the FCC Part 15.107(a) Conducted margin for a Class B device, with the *worst* margin reading of:

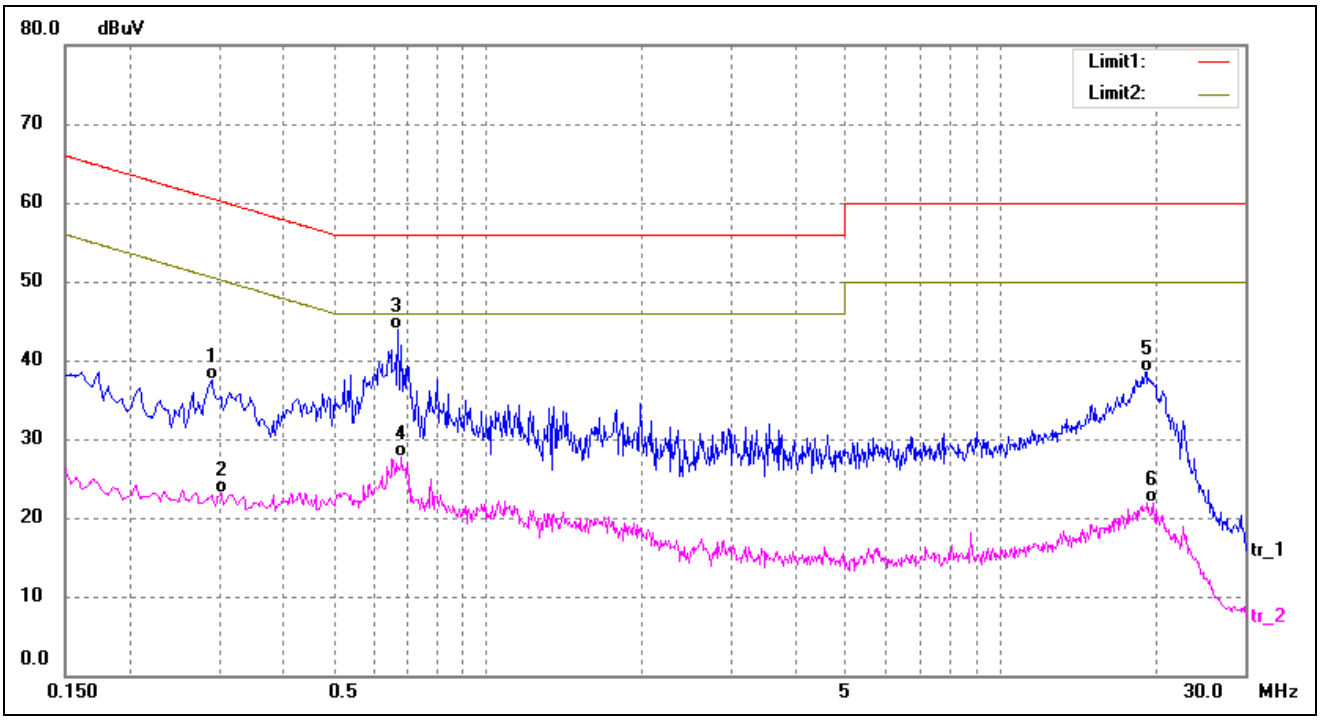
-9.47 dB at **0.6460 MHz** in the **Line**, **Average** detector, **TM2** Mode, 0.15-30MHz

3.5 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

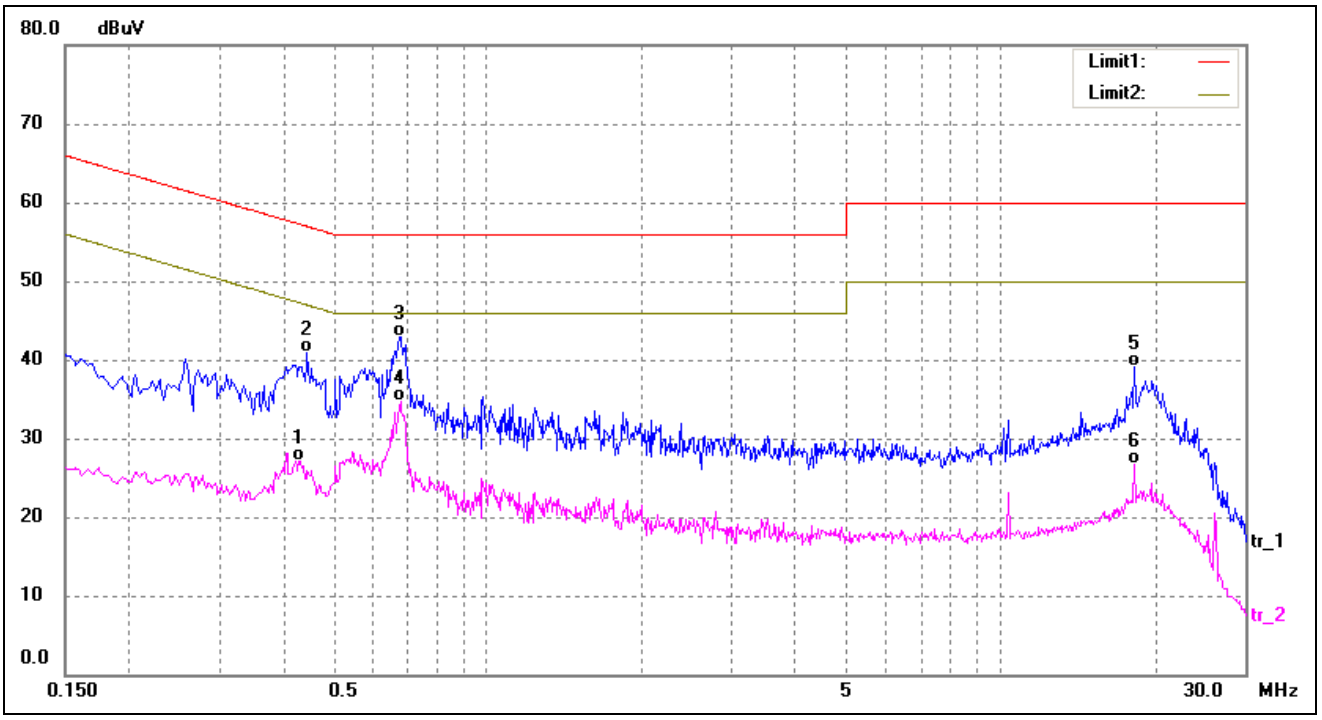
EUT: *3G camera*
Tested Model: *JH09*
Operating Condition: *TM1*
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.2900	27.71	9.80	37.51	60.52	-23.01	QP
2	0.3020	13.40	9.80	23.20	50.19	-26.99	AVG
3*	0.6700	34.08	9.79	43.87	56.00	-12.13	QP
4	0.6820	17.92	9.79	27.71	46.00	-18.29	AVG
5	19.2580	28.92	9.67	38.59	60.00	-21.41	QP
6	19.8860	12.18	9.68	21.86	50.00	-28.14	AVG

Test Specification: *Line*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.4300	17.36	9.80	27.16	47.25	-20.09	AVG
2	0.4460	31.16	9.80	40.96	56.95	-15.99	QP
3	0.6740	33.13	9.79	42.92	56.00	-13.08	QP
4*	0.6780	24.87	9.79	34.66	46.00	-11.34	AVG
5	18.3180	29.45	9.66	39.11	60.00	-20.89	QP
6	18.3180	17.06	9.66	26.72	50.00	-23.28	AVG

Plot of Conducted Emissions Test Data

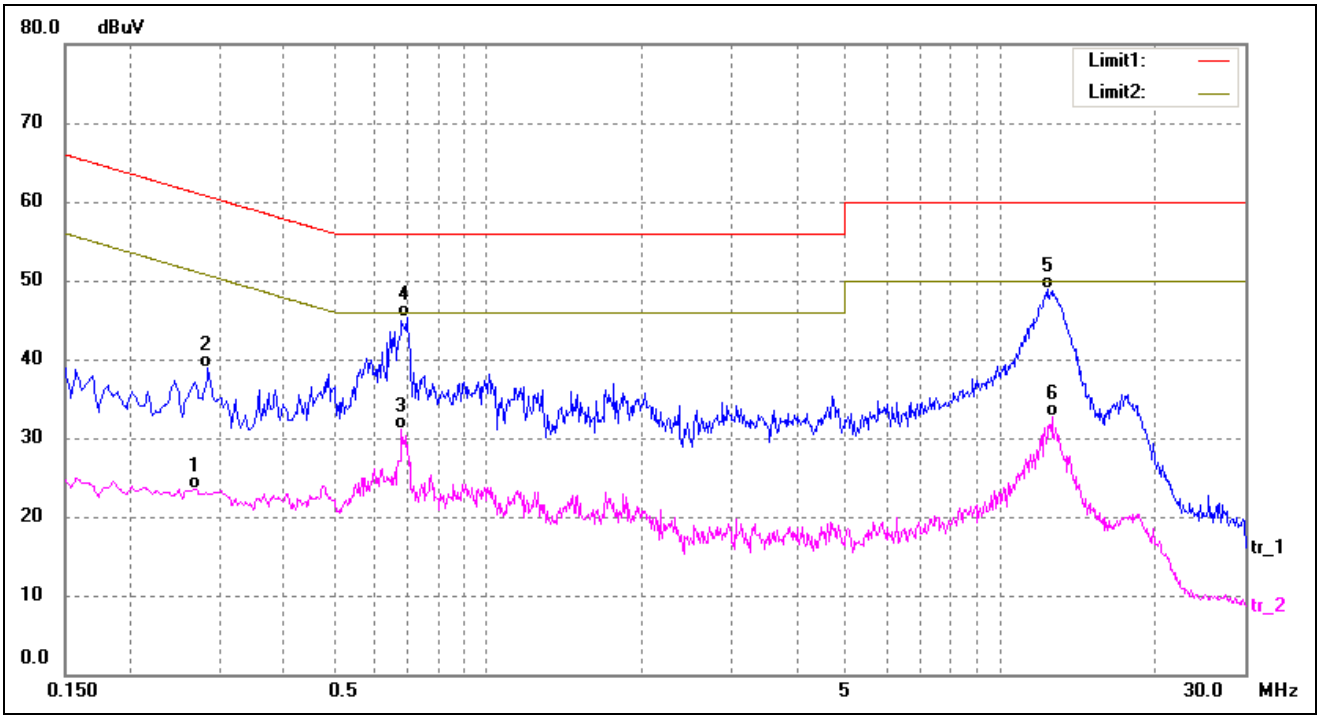
EUT: *3G camera*

Tested Model: *JH09*

Operating Condition: *TM2*

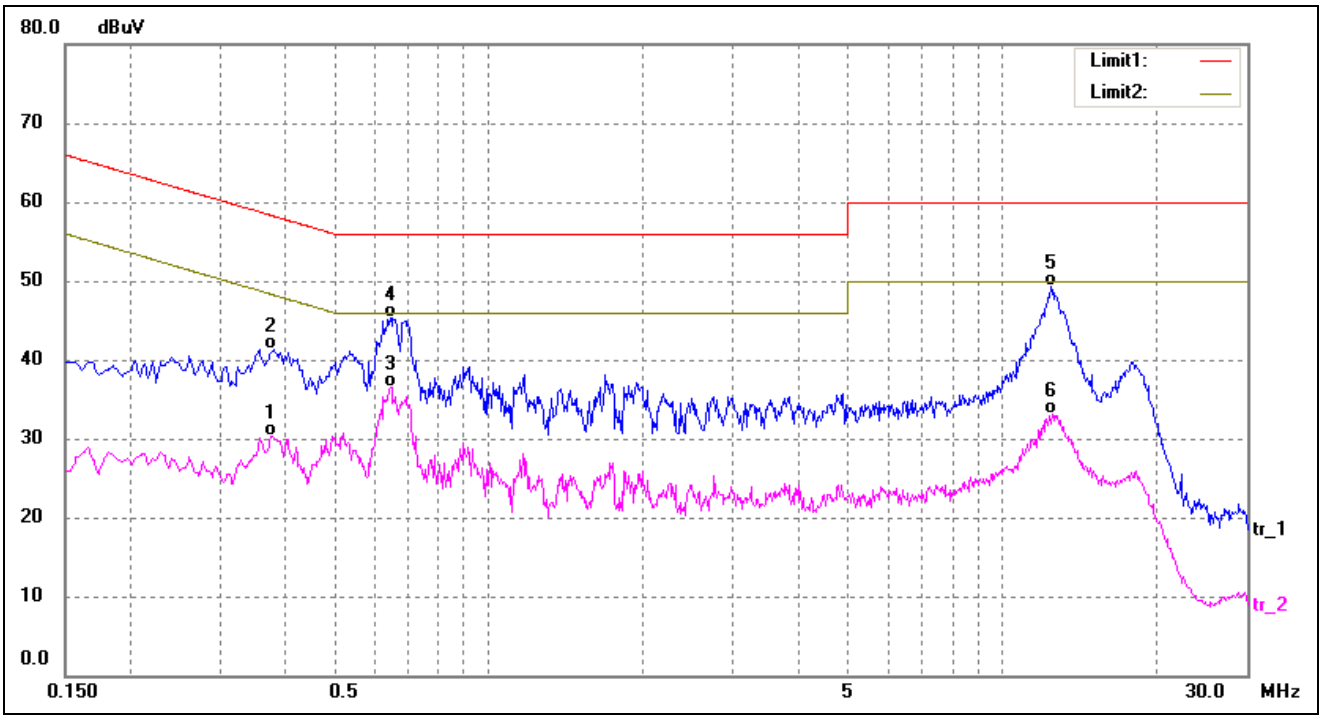
Comment: *AC 120V/60Hz;USB 5V*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.2700	13.76	9.80	23.56	51.12	-27.56	AVG
2	0.2860	29.02	9.80	38.82	60.64	-21.82	QP
3	0.6820	21.22	9.79	31.01	46.00	-14.99	AVG
4*	0.6980	35.47	9.78	45.25	56.00	-10.75	QP
5	12.3620	39.31	9.56	48.87	60.00	-11.13	QP
6	12.6300	23.05	9.57	32.62	50.00	-17.38	AVG

Test Specification: *Line*

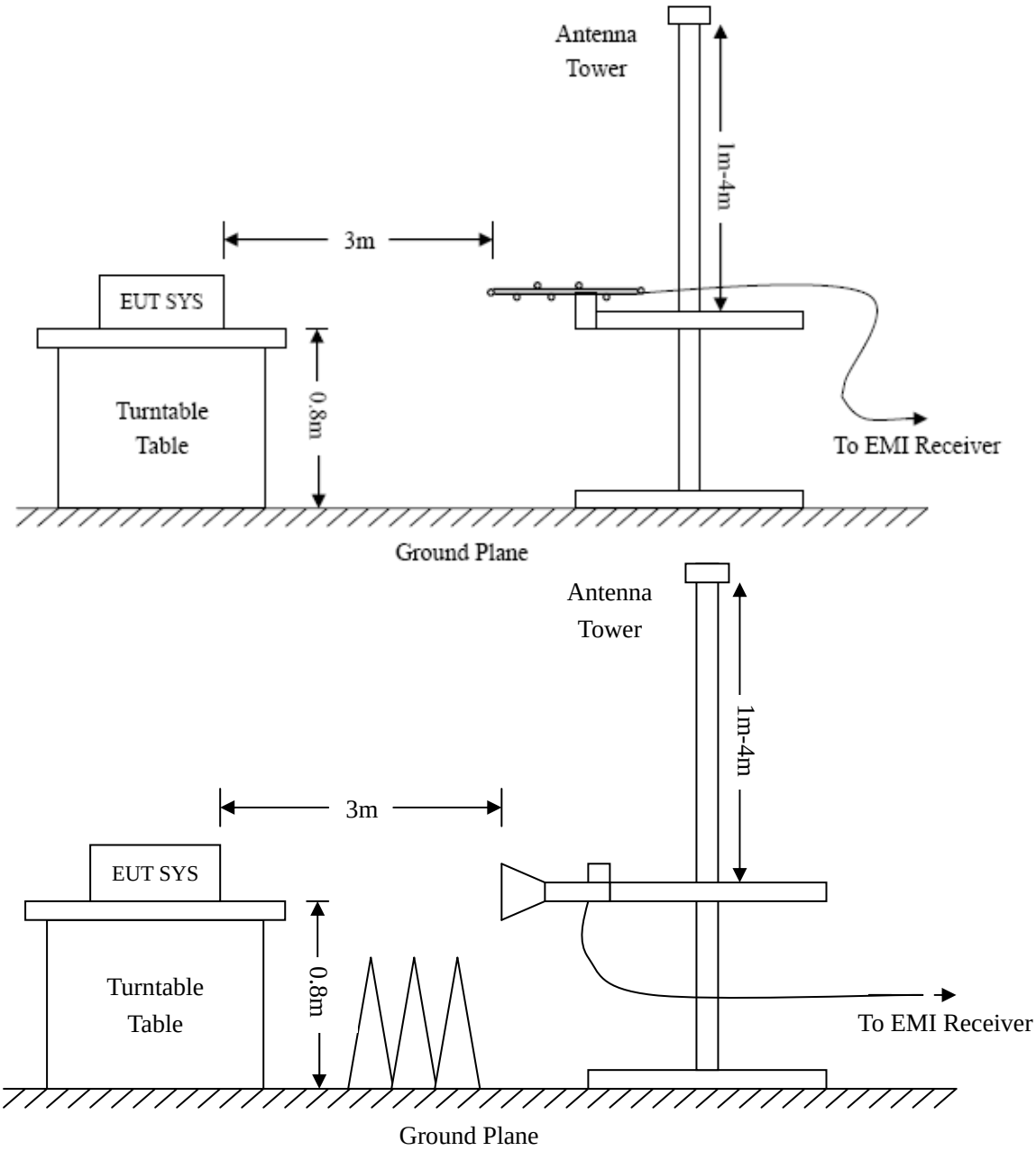


No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.3780	20.50	9.80	30.30	48.32	-18.02	AVG
2	0.3820	31.47	9.80	41.27	58.24	-16.97	QP
3*	0.6460	26.74	9.79	36.53	46.00	-9.47	AVG
4	0.6540	35.54	9.79	45.33	56.00	-10.67	QP
5	12.4820	39.71	9.56	49.27	60.00	-10.73	QP
6	12.5620	23.52	9.57	33.09	50.00	-16.91	AVG

4. Radiated Emissions

4.1 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15.109 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.



4.2 Test Receiver Setup

Frequency :9kHz-30MHz	Frequency :30MHz-1GHz	Frequency :Above 1GHz
RBW=10KHz,	RBW=120KHz,	RBW=1MHz,
VBW =30KHz	VBW=300KHz	VBW=3MHz(Peak), 10Hz(AV)
Sweep time= Auto	Sweep time= Auto	Sweep time= Auto
Trace = max hold	Trace = max hold	Trace = max hold
Detector function = peak	Detector function = peak, QP	Detector function = peak, AV

4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading – Corr. Factor

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for a Class B device. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Part 15.109(a) Limit

4.4 Environmental Conditions

Temperature:	23 °C
Relative Humidity:	55 %
ATM Pressure:	1011 mbar

4.5 Summary of Test Results/Plots

According to the data, the EUT complied with the FCC Part 15.109(a) rule, and had the worst margin of:

-1.58 dB at **284.9767 MHz** in the **Horizontal** polarization, **TM2** Mode, **30MHz** to **12.75 GHz**, **3Meters**

Plot of Radiated Emissions Test Data

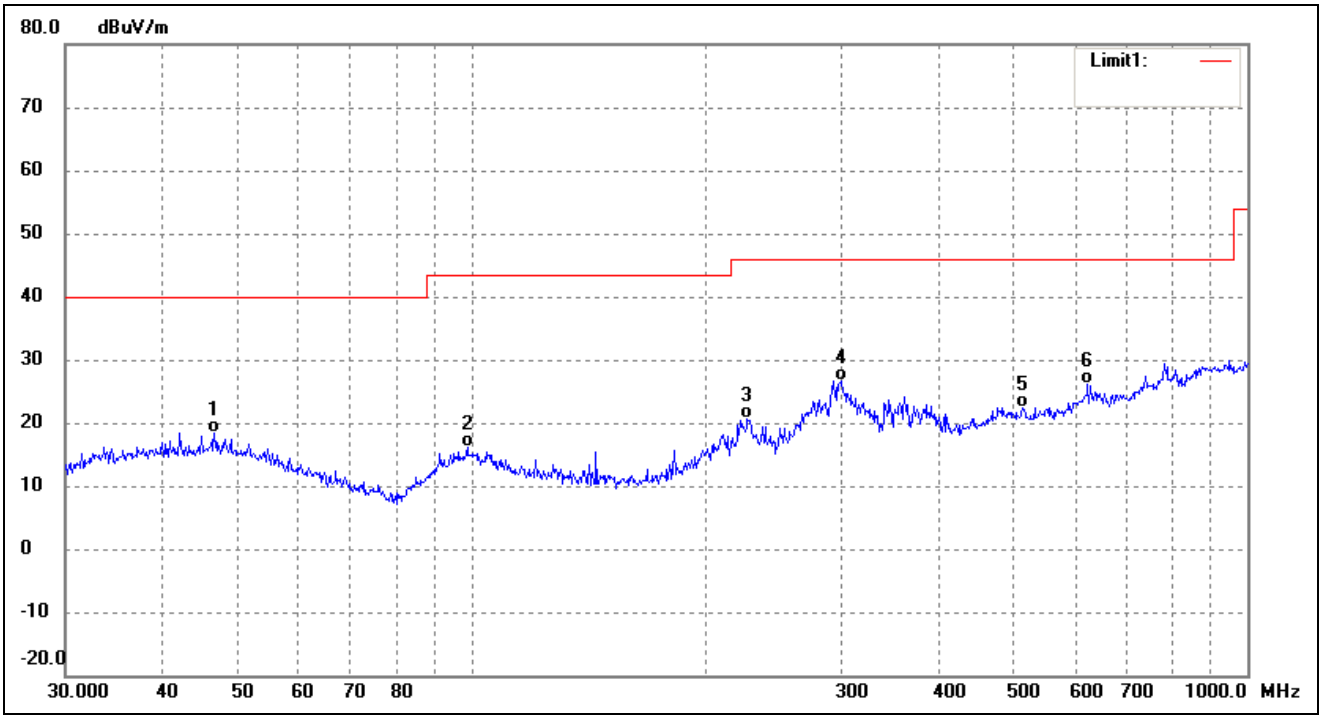
EUT: *3G camera*

Tested Model: *JH09*

Operating Condition: *TM1*

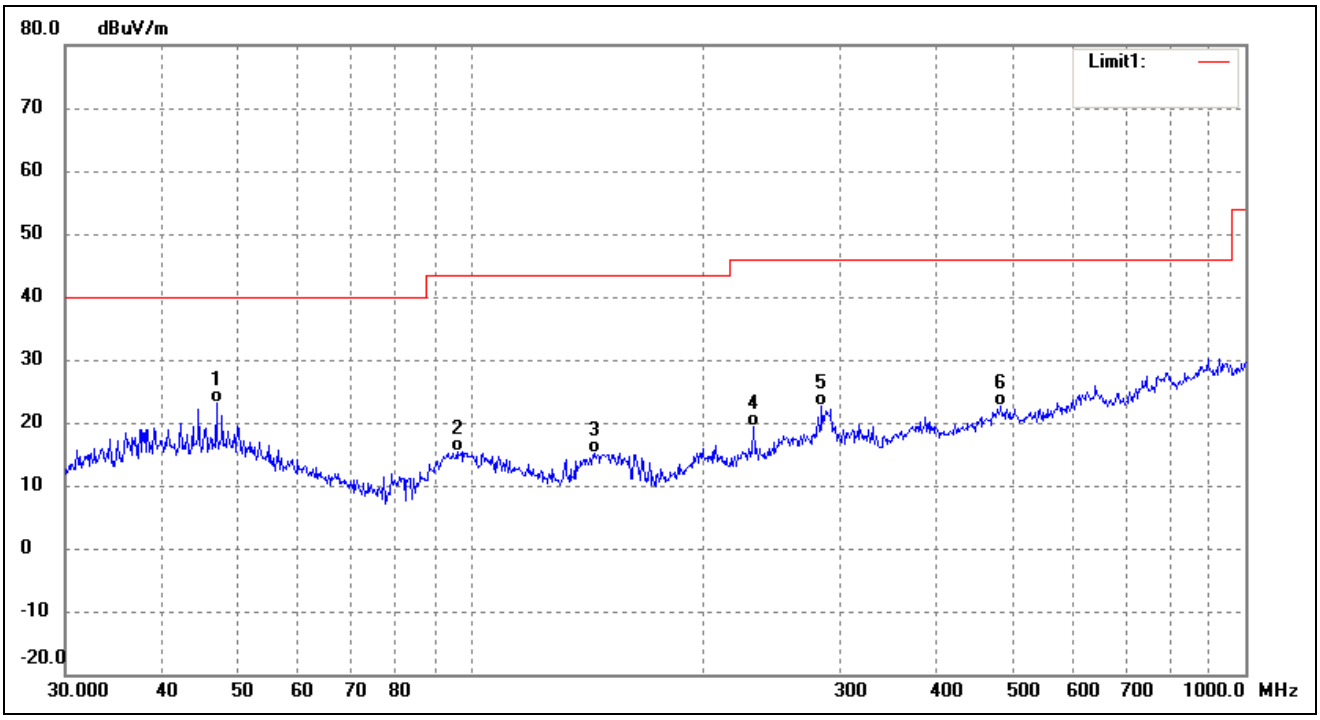
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	46.6664	29.01	-10.64	18.37	40.00	-21.63	200	100	QP
2	98.8326	27.73	-11.66	16.07	43.50	-27.43	130	100	QP
3	226.8936	32.47	-11.96	20.51	46.00	-25.49	108	100	QP
4	300.3672	36.45	-9.75	26.70	46.00	-19.30	132	100	QP
5	513.6331	28.47	-6.07	22.40	46.00	-23.60	270	100	QP
6	622.8900	28.96	-2.85	26.11	46.00	-19.89	244	100	QP

Test Specification: *Vertical*

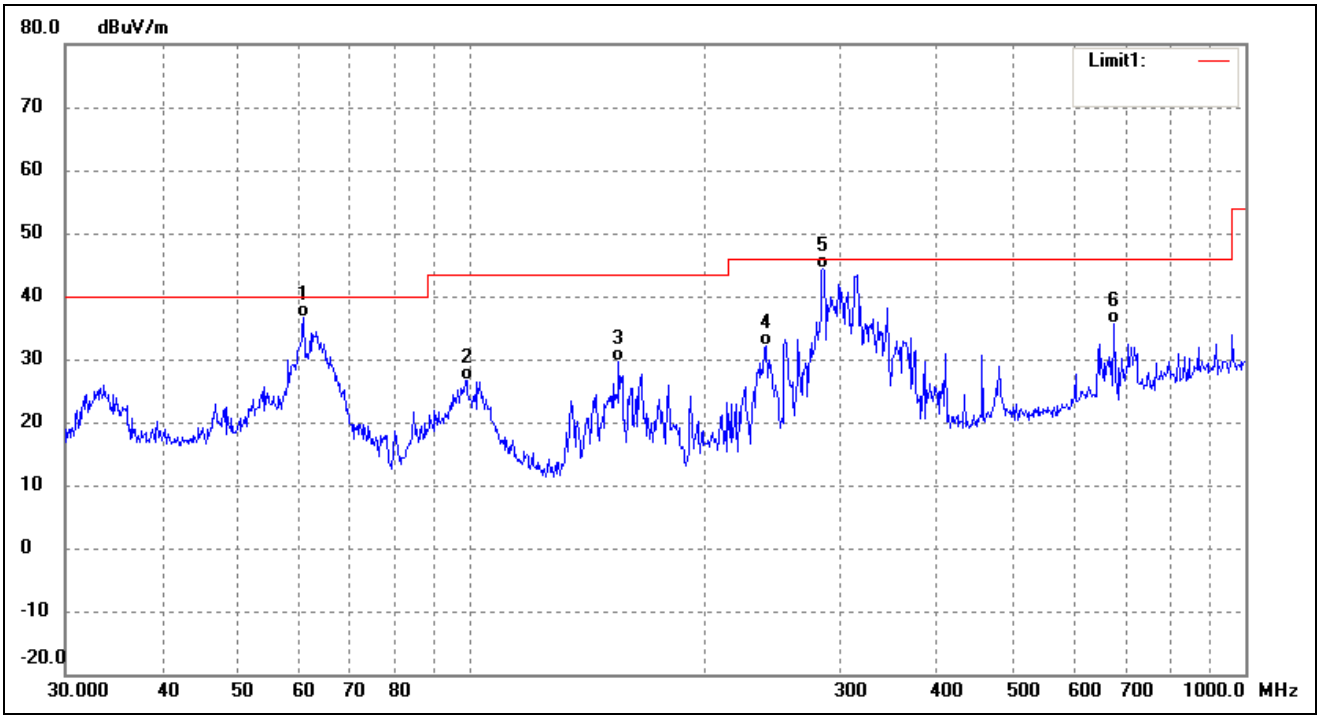


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	46.9948	33.56	-10.43	23.13	40.00	-16.87	89	100	QP
2	96.0986	27.60	-12.27	15.33	43.50	-28.17	97	100	QP
3	144.3348	30.09	-14.87	15.22	43.50	-28.28	126	100	QP
4	231.7179	30.98	-11.59	19.39	46.00	-26.61	106	100	QP
5	283.9791	32.20	-9.56	22.64	46.00	-23.36	261	100	QP
6	483.9094	28.02	-5.51	22.51	46.00	-23.49	283	100	QP

Plot of Radiated Emissions Test Data

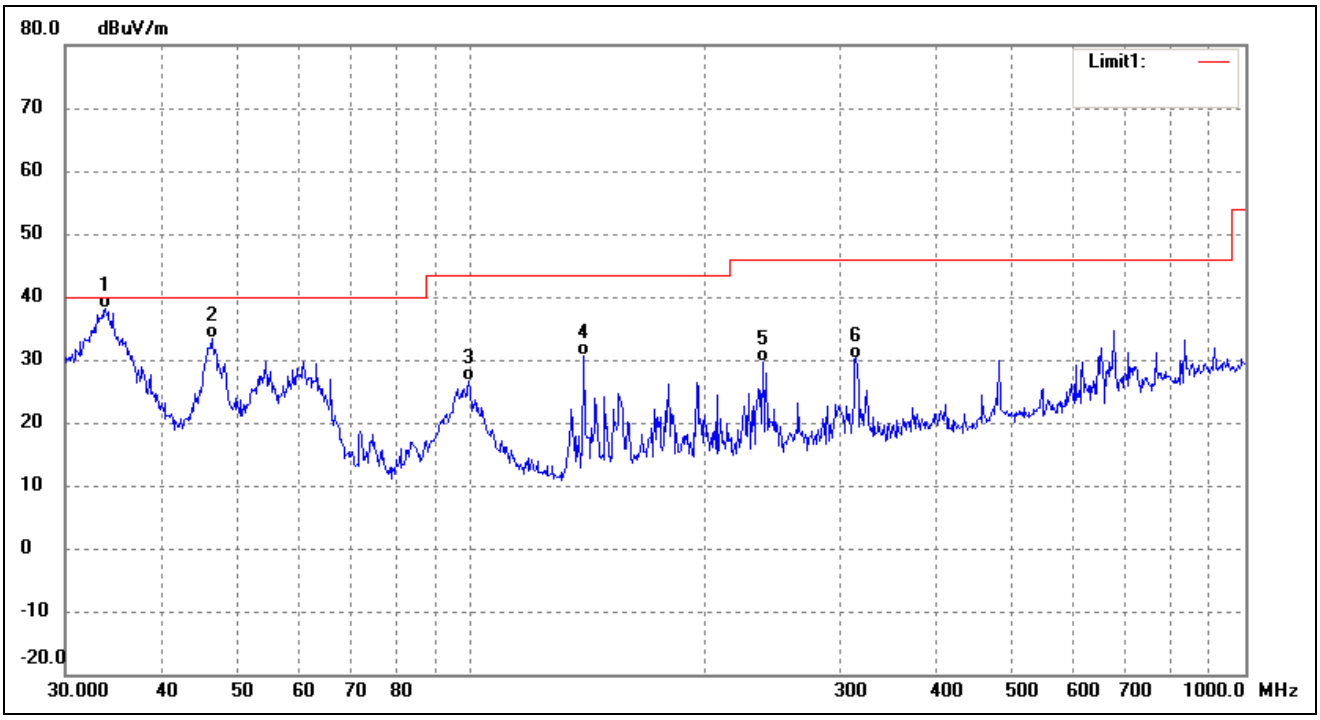
EUT: *3G camera*
Tested Model: *JH09*
Operating Condition: *TM2*
Comment: *AC 120V/60Hz;USB 5V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	60.9176	48.80	-12.06	36.74	40.00	-3.26	166	100	QP
2	98.8326	38.30	-11.66	26.64	43.50	-16.86	98	100	QP
3	155.3644	44.71	-15.00	29.71	43.50	-13.79	71	100	QP
4	240.8304	43.06	-10.93	32.13	46.00	-13.87	131	100	QP
5	284.9767	53.99	-9.57	44.42	46.00	-1.58	170	100	QP
6	677.5798	39.25	-3.52	35.73	46.00	-10.27	211	100	QP

Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	33.7986	50.07	-11.83	38.24	40.00	-1.76	72	100	QP
2	46.3402	43.84	-10.43	33.41	40.00	-6.59	279	100	QP
3	99.5281	38.03	-11.50	26.53	43.50	-16.97	58	100	QP
4	139.8508	45.42	-14.79	30.63	43.50	-12.87	171	100	QP
5	238.3102	40.69	-11.09	29.60	46.00	-16.40	356	100	QP
6	314.3765	39.92	-9.67	30.25	46.00	-15.75	256	100	QP

Note: Testing is carried out with frequency rang 30MHz to the 12.75GHz, which above 1GHz are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

******* END OF REPORT *******