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# **TEST REPORT**

Product Name .....: Collaboration Touch Screen

Trademark ...... : NewLine

Model/Type reference .....: X5

**Listed Model(s)** ...... X5xxxxx (x=0-9,a-z,A-Z, - or blank)

**FCC ID**...... 2ACYT-BNL16X5

Test Standards ...... FCC Per 47 CFR 2.1091

Applicant ...... SHENZHEN Hitevision Technology Co., Ltd.

518118, P. R. China.

Date of Receipt ...... June 10, 2016

Date of Test Date...... June 11, 2016 to June 15, 2016

**Data of issue.** ...... June 16, 2016

Test result	Pass *
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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above





**GENERAL DESCRIPTION OF EUT** Collaboration Touch Screen Equipment X5 Model Name X5xxxxx (x=0-9,a-z,A-Z, - or blank) Adding model: x=0-9,a-z,A-Z, - or blank, It's with different model number Model differenct only. Different model number should be used in different sales region and channels) Manufacturer: Newline Interactive Inc. Manufacturer Address: 101 East Park Blvd. Suite 807 Plano TX 75074 U.S.A. Input: 100-240V~, 50/60Hz, Max2A Power Rating:

Compiled By:

(Thomas Morgan)

Thomas Morgan

Reviewed By:

(Tony Wang)

Approved By:

(Walter Chen)

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3.4.

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### 1. SUMMARY

# 1.1. Test Facility

### 1.3.1 Address of the test laboratory

### Shenzhen GTI Technology Co., Ltd

1F, 2 Block, Jiaquan Building, Guanlan High-tech Park Baoan District, Shenzhen, Guangdong, China

### 1.3.2 Laboratory accreditation

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

### IC Registration No.: 9783A

The 3m alternate test site of Shenzhen GTI Technology Co., Ltd.EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Aug, 2011.

### FCC-Registration No.: 214666

Shenzhen GTI 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. Registration 214666, Sep 19, 2011

### 1.2. Statement of the measurement uncertainty

	Measurement	Notes
Test Items	Uncertainty	
Transmitter power conducted	0.57 dB	(1)

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





2. GENERAL INFORMATION

## 2.1. Environmental conditions

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

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

# 2.2. General Description of EUT

Product Name:	Collaboration Touch Screen
Model/Type reference:	X5
Listed Model(s):	X5xxxxx (x=0-9,a-z,A-Z, - or blank)
Model(s) Differences:	x=0-9,a-z,A-Z, - or blank, It's with different model number only.  Different model number should be used in different sales region and channels)
Power Rating:	Input: 100-240VAC, 50/60Hz, Max2A
Hardware version:	UC-918-X5 V02
Software version:	V4.3
WIFI	
Supported type:	802.11b/802.11g/802.11n(H20)/802.11n(H40)
Modulation technology:	802.11b: DSSS 802.11g/802.11n(H20)/802.11n(H40): OFDM
Modulation type:	802.11b: BPSK/QPSK/CCK 802.11g/802.11n(H20)/802.11n(H40): BPSK/QPSK/16QAM/64QAM
Operation frequency:	802.11b/802.11g/802.11n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz
Channel number:	802.11b/802.11g/802.11n(HT20): 11 802.11n(HT40): 7
Channel separation:	5MHz
Antenna type:	Monopole Antenna
Antenna gain:	3.0dBi

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

Shenzhen General Testing & Inspection Technology Co., Ltd.

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### 3. Method of measurement

# 3.1. Applicable Standard

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate,

since exposures are assumed to occur at distances of 20 cm or more from persons.

### 3.2. LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm²)	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

### 3.3. MPE EVALUATION FORMULA

# $Pd=(Pout*G)(4*pi*R^2)$

Where

Pd= Power density in mW/cm2

Pout=output power to antenna in Mw

G= gain of antenna in linear scale

Pi=3.1416

R= distance between observation point and center of the radiator in cm

Pd the limit of MPE, 1mW/cm2.



# 3.4. Evaluation Results

### 802.11 b

Test Frequency	Antenna Gain	Conducted Power (dBm)		Distance (cm)	Power Density	Limit (mW/cm²)	Verdict
(MHz)	(Numeric)	dBm	mW	, ,	(mW/cm <sup>2</sup> )	,	
2412	1.9953	11.13	12.9718	20	0.0051	1.0	PASS
2437	1.9953	11.41	13.8357	20	0.0055	1.0	PASS
2462	1.9953	10.46	11.1173	20	0.0044	1.0	PASS

802.11 g

Test Frequency	Antenna Gain	Conducted Power (dBm)		Distance (cm)	Power Density	Limit (mW/cm²)	Verdict
(MHz)	(Numeric)	dBm	mW	, ,	(mW/cm <sup>2</sup> )	,	
2412	1.9953	12.45	17.5792	20	0.0070	1.0	PASS
2437	1.9953	12.73	18.7499	20	0.0074	1.0	PASS
2462	1.9953	11.82	15.2055	20	0.0060	1.0	PASS

### 802.11 n20

Test Frequency	Antenna Gain	Conducted Power (dBm)		Distance (cm)	(cm) Density		Verdict
(MHz)	(Numeric)	dBm	mW		(mW/cm <sup>2</sup> )	(mW/cm²)	
2412	1.9953	11.81	15.1705	20	0.0060	1.0	PASS
2437	1.9953	11.96	15.7036	20	0.0062	1.0	PASS
2462	1.9953	11.25	13.3352	20	0.0053	1.0	PASS

### 802.11 n40

Test Frequency	Antenna Gain	Conducted Power (dBm)		Distance (cm)	m) Density	Limit (mW/cm²)	Verdict
(MHz)	(Numeric)	dBm	mW	, ,	(mW/cm <sup>2</sup> )	,	
2422	1.9953	11.61	14.4877	20	0.0058	1.0	PASS
2437	1.9953	11.64	14.5881	20	0.0058	1.0	PASS
2452	1.9953	11.51	14.1579	20	0.0056	1.0	PASS

### **Conclusion**

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure and SAR Exclusion Threshold.