

MAXIMUM PERMISSIBLE EXPOSURE EVALUATION REPORT

Applicant: NEXhome Smart Technologies Co., Ltd.

Address: 7th Floor, Building A, Star-Net Plaza, No. 33 Xinguang Avenue, High-tech Zone, Fuzhou City, Fujian Province, China

Product Name: IP Video Door Phone

FCC ID: 2BPYV-M10H90

Standard(s): 47 CFR §1.1310, 47 CFR §2.1091
447498 D01 General RF Exposure Guidance v06

Report Number: 2602R47902E-RF-00D

Report Date: 2026/4/9

The above device has been tested and found compliant with the requirement of the relevant standards by Bay Area Compliance Laboratories Corp. (Dongguan).

Alice Tan

Reviewed By: Alice Tan
Title: RF Engineer

Pedro Yun

Approved By: Pedro Yun
Title: RF Supervisor

Bay Area Compliance Laboratories Corp. (Dongguan)
No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China

Tel: +86-769-86858888

Fax: +86-769-86858891

www.baclcorp.com.cn

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2602R47902E-RF-00D	Original Report	2026/4/9

1. GENERAL INFORMATION

1.1 General Description Of Equipment under Test

EUT Name:	IP Video Door Phone
EUT Model:	DH-H90K
Multiple Model:	DH-H90S
Rated Input Voltage:	DC 12V From Adapter or DC48V from POE
Serial Number:	3IBN-1
EUT Received Date:	2026/3/12
EUT Received Status:	Good

Note:

1. The multiple models are electrically identical with the test model. The difference is Model DH-H90K have mechanical keyboard and Model DH-H90S only have one mechanical button. Please refer to the declaration letter for more detail, which was provided by manufacturer.
2. The 15B report has tested two models, and Model DH-H90K was test for this report.

2. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1 Applicable Standard

According to 1.1310, 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for Maximum Permissible Exposure (MPE)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz;

* = Plane-wave equivalent power density;

According with KDB 680106 D01 Wireless Power Transfer v04 clause 3.2

The RF exposure limits, as set forth in § 1.1310, do not cover the frequency range below 100 kHz for Specific Absorption Rate (SAR) and below 300 kHz for Maximum Permitted Exposure (MPE). In addition, present limitations of RF exposure evaluation systems prevent an accurate evaluation of SAR below 4 MHz. For these reasons, a specific MPE-based RF Exposure compliance procedure for devices operating in the aforementioned low-frequency ranges has been set in place. This procedure is applicable to Equipment Authorization of all RF devices, thus including, but not limited to, Part 18 and WPT devices.

Accordingly, for § 2.1091-Mobile devices, the MPE limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310, that is, 614 V/m and 1.63 A/m, for the electric field and magnetic field, respectively. For § 2.1093-Portable devices below 4 MHz and down to 100 kHz, the MPE limits in § 1.1310 (with the 300 kHz limit applicable all the way down to 100 kHz) can be used for the purpose of equipment authorization in lieu of SAR evaluations.

2.2 Calculation For Test Exclusion:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

2.3 MPE Test Procedure

1. Place the EUT's antenna was vertical polarization on the table.
2. The EUT was set to transmit at the frequency at maximum RF power.
3. The Distance between the test probe and the investigated EUT's antenna equal to the distance be specified as safety distance in the user manual.
4. Power density measurements were taken at different heights of the probe from the ground (0.8 to 2.8 meters) while rotating versus azimuth (from 0° to 360°) the antenna.
5. adjusted the distance between the test probe and the tested antenna to the real safe distance, R_{real} , such that the measured highest power density in the "worst case" position was the same or slightly less than the test limit.
6. The measurement results of final measurements conducted at the chosen azimuth and different heights of the probe above the ground.

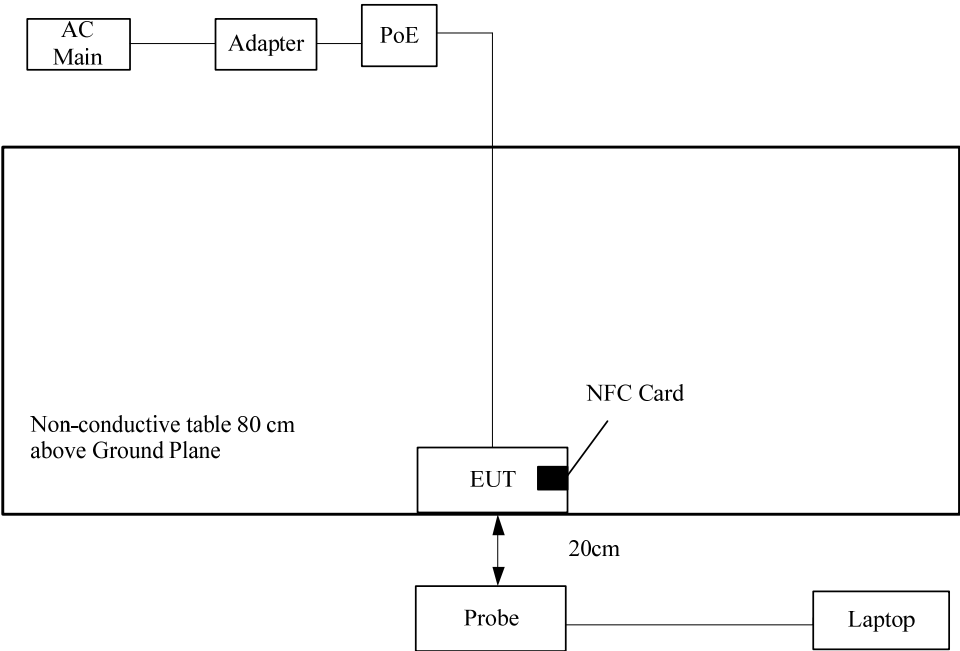
2.4 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
HEWEISHUN	Adapter	BN073-A12012E	220617-27055ERFS1
NEXhome Smart Technologies Co., Ltd.	PoE	SN3108	unknown
DELL	Laptop	E6410	GMLGPM1
/	NFC Card	EINOLDA	EMZBNC22081501

2.5 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45 Cable	no	no	1.5	PoE	EUT
DC Cable	no	no	1.5	PoE	Adapter
Signal Cable	No	No	3	Probe	Laptop

2.6 Block Diagram of Test Setup



2.7 Test Data:

Test Information:

Serial No.:	3IBN-1	Test Date:	2026/3/30
Test Site:	Chamber A	Test Mode:	Transmitting
Tester:	Jayce Wang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C):	25.4	Relative Humidity: (%)	53	ATM Pressure: (kPa)	100.3
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Narda	Electric and Magnetic Field Probe-Analyzer	EHP-200AC	180ZX10204	2023/9/1	2026/8/31

* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

H-Field Strength

Frequency Range (kHz)	Position A (A/m)	Position B (A/m)	Position C (A/m)	Position D (A/m)	Position E (A/m)	Limit (A/m)
122	1.020	0.910	0.840	0.580	0.510	1.63

Note: Test with 20cm distance from the center of the probe(s) to the edge of the device.

E-Field Strength

Frequency Range (kHz)	Position A (V/m)	Position B (V/m)	Position C (V/m)	Position D (V/m)	Position E (V/m)	Limit (V/m)
122	0.84	0.46	0.65	0.53	0.44	614

Note: Test with 20cm distance from the center of the probe(s) to the edge of the device.

For NFC(13.56MHz):

Operation Modes	Frequency (MHz)	Conducted output power [▲]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBm)	(mW)			
NFC(13.56MHz)	13.56	-41.3	0.0001	20.00	<<0.0001	0.98

Note: NFC field strength is 53.9dBμV/m @ 3m = -41.3 dBm(0.0001mW) EIRP. That equal to antenna gain is 0dBi and used the EIRP value as conducted power.

For BLE:

Operation Modes	Frequency (MHz)	Antenna Gain [▲]		Conducted output power including Tune-up Tolerance [▲]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402-2480	1.6	1.45	5.0	3.16	20.00	0.001	1.0

Note:

1. The Antenna Gain and Conducted output power including Tune-up Tolerance is provided by manufacturer.
2. For Simultaneous transmission (BLE, NFC 13.56MHz and RFID 122kHz), the NFC 13.56MHz and RFID 122kHz are so low as to be negligible, so it is enough to only focus on the evaluation results of BLE.

Result: The device meet FCC MPE at 20 cm distance.

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2602R47902E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and
2602R47902E-RF-INP EUT INTERNAL PHOTOGRAPHS

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2602R47902E-RF-00D-TSP test setup photographs.

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