

ACCREDITED Cert, # 3235.01	Test report No: 2032061R-RF-US-P20V01			
TEST REPORT C Rules&Requiations For Declaration	CC Exposure Evaluation			
Product Name	Level lock			
Trademark	Level			
Model and /or type reference	B1, B2, B3, B4, G1, G2, G3, G4, G6, G7, G8, G9			
FCC ID	2ATIO2			
Applicant´s name / address	Level Home Inc 935 Main St Redwood City, CA 94063			
Test method requested, standard	KDB 447498D01V06 FCC Part1.1310			
Verdict Summary	IN COMPLIANCE			
Documented By (name / position & signature)	Kitty Li/ Project Assistant Kitty Li			
Tested by (name / position & signature)	Frank He/ Technical Supervisor			
Approved by (name / position & signature)	Jack Zhang/ Supervisor Jack Zhong			
Date of issue	2020-03-25			
Report template No	_ 2032061R-RF-US-P20V01			

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INDEX

	page
Competences and Guarantees	3
General conditions	3
Environmental conditions	3
Possible test case verdicts	4
Abbreviations	4
Document History	5
Remarks and Comments	5
1. RF Exposure Evaluation	6
1.1. Limits	
1.2. Test Procedure	8
1.3. Test Result of RF Exposure Evaluation	8



COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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GENERAL CONDITIONS

- 1. This report is only referred to the item that has undergone the test.
- 2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
- 3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
- 4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.



POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT : Equipment Under Test QP : Quasi-Peak : CISPR Average CAV AV : Average : Coupling Decoupling Network CDN SAC : Semi-Anechoic Chamber OATS : Open Area Test Site BW : Bandwidth AM : Amplitude Modulation ΡM : Pulse Modulation HCP : Horizontal Coupling Plane VCP Vertical Coupling Plane : $U_{\rm N}$: Nominal voltage Тx : Transmitter Rx Receiver : N/A : Not Applicable N/M : Not Measured



DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2032061R-RF-US-P20V01	V1.0	Initial issue of report.	2020-03-25

REMARKS AND COMMENTS

- 1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
- 2. These test results on a sample of the device are for the purpose of demonstrating Compliance with KDB 447498 and FCC Part 1.1310
- 3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result, unless the specification, standard or customer have special requirements
- 4. The test results presented in this report relate only to the object tested.
- 5. The test results relate only to the samples tested.
- 6. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification

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7. This report will not be used for social proof function in China market.

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1. RF Exposure Evaluation

1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b) LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Average Time (Minutes)	
(A) Limits for Occupational/ Control Exposures					
300-1500			F/300	6	
1500-100,000			5	6	
(B) Limits for General Population/ Uncontrolled Exposures					
300-1500			F/1500	6	
1500-100,000			1	30	

F= Frequency in MHz

Friis Formula Friis transmission formula: Pd = (Pout*G)/(4*pi*r2)

Where Pd = power density in mW/cm2 Pout = output power to antenna in mW G = gain of antenna in linear scale Pi = 3.1416R = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, 1 mW/cm2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

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According to RSS 102 Issue 5: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in RSS 102 Clause 4 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field (V/m rms)	Magnetic Field (A/m rms) 90	Power Density (W/m ²)	Reference Period (minutes) Instantaneous* 6** 6** 6 6 6 6 6 6 6 6 6
$0.003 - 10^{21}$	83			
0.1-10	1	0.73/ f		
1.1-10	87/ f ^{0.5} 27.46	- 0.0728	- 2 8.944/ f ^{0.5} 1.291	
10-20				
20-48	58.07/ f ^{0.25}	$0.1540/f^{0.25}$		
48-300	22.06	0.05852		
300-6000	$3.142 f^{0.3417}$	$0.008335 f^{0.3417}$	$0.02619f^{0.6834}$	6
6000-15000	61.4	0.163	10	6
15000-150000	61.4	0.163	10	$616000/f^{1.2}$
150000-300000	$0.158 f^{0.5}$	$4.21 \times 10^{-4} f^{0.5}$	$6.67 \ge 10^{-5} f$	616000/ f ^{1.2}
Note: f is frequency *Based on nerve stim ** Based on specific	in MHz.			d <u>đ</u>



1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°Cand 78% RH.

1.3. Test Result of RF Exposure Evaluation

Product	:	Level lock
Test Item	:	RF Exposure Evaluation
Test Site	••	AC-5

Power Density

Test Mode	Frequency Band (MHz)	EIRP (dBm)	Limit of Power Density	Power Density at R = 20 cm
			S(mW/cm ²)	(mW/cm^2)
BT	2400 ~ 2483.5	1.66	1	0.0003

Note:

The maximum power density is 0.0003mW/cm² for Level lock without any other radio equipment.

The End _____