Shenzhen Most Technology Service Co., Ltd.
East A, 1 floor of New Aolin Factory buiding, Langshan Erlu, North District,
Hi-tech Industry Park, Nanshan,Shenzhen,Guangdong,China

RF Exposure Evaluation Report

Report Reference No..... :	**MTEB24070452-H**
FCC ID..... :	**2BH3H-LP365P**
Compiled by (position+printed name+signature).. :	File administrators Alisa Luo
Supervised by (position+printed name+signature).. :	Test Engineer Sunny Deng
Approved by (position+printed name+signature).. :	Manager Yvette Zhou
Date of issue.....:	July 31,2024
Representative Laboratory Name. :	**Shenzhen Most Technology Service Co., Ltd.**
Address..... :	No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.
Applicant's name.....:	**FRIZZLIFE INC**
Address..... :	201 E CENTER ST STE 112 #3500,ANAHEIM,CA 92805,United States
Test specification/ Standard.....**:**	**47 CFR Part 1.1307;47 CFR Part 1.1310** **KDB447498D01 General RF Exposure Guidance v06**
TRF Originator.....:	Shenzhen Most Technology Service Co., Ltd.

Test item description.....:	Smart Water Monitor and Shutoff
Trade Mark.....:	FRIZZLIFE
Model/Type reference..... :	LP365-P
Listed Models ..... :	LP365,LP365-PRO,LP365-A,LP365-B,LP365-C,LP365-PA,LP365-PB,LP365-PC,ST01,ST01-P,ST01-PA,ST99,ST99-P,ST99-PA, ST99-A,ST99-B,DP01,DP01-P,DP01-PA,DP01-A,DP01-B,WP-01,WP-02,WP-01P,WP-02P,WP365-X,WP365-XS
Modulation Type..... :	GFSK b: DSSS ,CCK g/n: BPSK,QPSK,QAM OFDM
Operation Frequency..... :	From 2402MHz to 2480MHz From 2412MHz~2462MHz From 5180MHz-5240MHz；5260MHz-5320MHz； 5500MHz-5700MHz；5745MHz-5825MHz
Hardware Version.....	V1.0.2
Software Version.....	1.1.14

Rating.....:	DC 5V by Adapter DC 3.7V by Battery
Result.....:	**PASS**

T E S T R E P O R T

Equipment under Test	:	Smart Water Monitor and Shutoff
Model /Type	:	LP365-P
Listed Models	:	LP365,LP365-PRO,LP365-A,LP365-B,LP365-C,LP365-PA,LP365-PB,LP365-PC,ST01,ST01-P,ST01-PA,ST99,ST99-P,ST99-PA,ST99-A,ST99-B,DP01,DP01-P,DP01-PA,DP01-A,DP01-B,WP-01,WP-02,WP-01P,WP-02P,WP365-X,WP365-XS
Remark		It's just that the product models are called differently
Applicant	:	FRIZZLIFE INC
Address	:	201 E CENTER ST STE 112 #3500,ANAHEIM,CA 92805,United States
Manufacturer	:	Haining Beirui Environmental protection Technology Co., LTD
Address	:	East side,2-4 Floor,Ist Floor,Building E,No 2,Xiner Road,Changan Town,Haining City, Jiaxing City,Zhejiang Province

Test Result:	**PASS**

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2024.07.31	Initial Issue	Alisa Luo

2. SAR Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
4.3.1. Standalone SAR test exclusion considerations
Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

2.1.2 Limits

According to FCC Part1.1310: 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 part1.1307(b)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f^2)	6
30–300	61.4	0.163	1.0	6
300–1500	.....	.....	f/300	6
1500–100,000	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
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
Friis Formula
Friis transmission 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 id 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.

2.1.3 EUT RF Exposure

BLE

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402 MHz)	0.186	0.186±1	1.186
Middle(2440MHz)	-0.056	-0.056±1	0.944
Highest(2480MHz)	-1.576	-1.576±1	-0.576

BLE

Worst case: GFSK						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Lowest(2402 MHz)	1.186	1.31	0.40	0.00029	1.0	Pass

Note: 1) Refer to report MTEB24070452-R2 for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R^2)=(1.31*1.10)/(4*3.1416*20^2)=0.00029

WIFI 2.4G

802.11b			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2412MHz)	21.26	21.26±1	22.26
Middle(2437MHz)	12.75	12.75±1	13.75
Highest(2462MHz)	12.29	12.29±1	13.29

802.11g			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2412MHz)	12.70	12.70±1	13.7
Middle(2437MHz)	16.02	16.02±1	17.02
Highest(2462MHz)	15.31	15.31±1	16.31

802.11n(H20)			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2412MHz)	14.82	14.82±1	15.82
Middle(2437MHz)	15.22	15.22±1	16.22
Highest(2462MHz)	14.92	14.92±1	15.92

802.11n(H40)			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2422MHz)	14.91	14.91±1	15.91
Middle(2437MHz)	15.40	15.40±1	16.4
Highest(2452MHz)	15.37	15.37±1	16.37

WIFI 2.4G

Worst case: 802.11b						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Lowest(2412MHz)	22.26	168.27	0.40	0.03682	1.0	Pass

Note: 1) Refer to report MTEB24070452-R for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R^2)=(168.27*1.10)/(4*3.1416*20^2)=0.03682

WIFI 5G

IEEE for 802.11a U-NI-1			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
5180	18.03	18.03±1	19.03
5200	18.81	18.81±1	19.81
5240	19.0	19.0±1	20.0
IEEE for 802.11a U-NI-2A			
5260	20.04	20.04±1	21.04
5280	19.75	19.75±1	20.75
5320	18.81	18.81±1	19.81
IEEE for 802.11a U-NI-2C			
5500	18.55	18.55±1	19.55
5600	18.42	18.42±1	19.42
5700	16.72	16.72±1	17.72
IEEE for 802.11a U-NI-3			
5745	17.1	17.1±1	18.1
5785	16.74	16.74±1	17.74
5825	16.8	16.8±1	17.8

IEEE for 802.11n(HT20) U-NI-1			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
5180	17.87	17.87±1	18.87
5200	18.61	18.61±1	19.61
5240	18.86	18.86±1	19.86
IEEE for 802.11n(HT20) U-NI-2A			
5260	19.89	19.89±1	20.89
5280	19.5	19.5±1	20.5
5320	18.63	18.63±1	19.63
IEEE for 802.11n(HT20) U-NI-2C			
5500	18.16	18.16±1	19.16
5600	18.14	18.14±1	19.14
5700	16.53	16.53±1	17.53
IEEE for 802.11n(HT20) U-NI-3			
5745	17.13	17.13±1	18.13
5785	16.52	16.52±1	17.52
5825	16.61	16.61±1	17.61

IEEE for 802.11n(HT40) U-NI-1			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
5190	18.04	18.04±1	19.04
5230	18.69	18.69±1	19.69
IEEE for 802.11n(HT40) U-NI-2A			
5270	19.6	19.6±1	20.6
5310	18.66	18.66±1	19.66
IEEE for 802.11n(HT40) U-NI-2C			
5510	17.98	17.98±1	18.98
5590	18.3	18.3±1	19.3
5670	16.78	16.78±1	17.78
IEEE for 802.11n(HT40) U-NI-3			
5755	17.21	17.21±1	18.21
5795	16.35	16.35±1	17.35

U-NI-1

Worst case: IEEE for 802.11n(HT20)						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
5240	19.86	96.83	2.12	0.03	1.0	Pass

Note: 1) Refer to report **MTEB24070452-R1** for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R^2)=(96.83*1.63)/(4*3.1416*20^2)=0.03

U-NI-2A

Worst case: IEEE for 802.11a						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
5260	21.04	127.05	2.72	0.047	1.0	Pass

Note: 1) Refer to report **MTEB24070452-R1** for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R^2)=(127.05*1.87)/(4*3.1416*20^2)=0.047

U-NI-2C

Worst case: IEEE for 802.11a						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
5500	19.55	90.16	4.23	0.047	1.0	Pass

Note: 1) Refer to report **MTEB24070452-R1** for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R^2)=(90.16*2.65)/(4*3.1416*20^2)=0.047

U-NI-3

Worst case: IEEE for 802.11n(HT40)						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
5755	18.21	66.22	5.27	0.044	1.0	Pass

Note: 1) Refer to report **MTEB24070452-R1** for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R^2)=(66.22*3.36)/(4*3.1416*20^2)=0.044

.....THE END OF REPORT.....