MPE REPORT

FCC ID:2ATIH-LT-T7S

Date of issue: Apr. 10, 2020

Report number:	MTi20030613-4E2
Sample description:	Smart LED Lamp
Model(s):	LT-T7s, LT-T6, LT-T7, LT-T7R, LT-T21, LT-T22, LT-T23, LT-T24, LT-T25, LT-T26, LT-T27, LT-T28, LT-T29, LT-T30
Applicant:	Aukey Technology Co., Ltd.
Address:	Room 102, Building P09, South China City Electronic trading center, Longgang District, Shenzhen, China.
Date of test:	Mar. 23, 2020 to Apr. 10, 2020

Shenzhen Microtest Co., Ltd.

http://www.mtitest.com

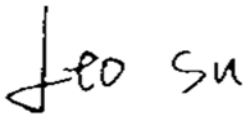
Tel:(86-755)88850135 Fax: (86-755) 88850136 Web: http://www.mtitest.com E-mail: mti@51mti.com
Address: No.102A & 302A, East Block, Hengfang Industrial Park, Xingye Road, Xixiang, Bao'an District, Shenzhen, Guangdong, China

TEST RESULT CERTIFICATION	
Applicant's name:	Aukey Technology Co., Ltd.
Address:	Room 102, Building P09, South China City Electronic trading center, Longgang District, Shenzhen, China.
Manufacture's name:	Pulnda International Limited
Address:	CHANGZHI SCIENCE PARK ,No. 7 WEST INDUSTRIAL ZONE, SHAJING TOWN, BAOAN DISTRICT, SHENZHEN CITY, CHINA
Product name:	Smart LED Lamp
Trademark:	AUKEY
Model and/or type reference .:	LT-T7s
Serial model:	LT-T6, LT-T7, LT-T7R, LT-T21, LT-T22, LT-T23, LT-T24, LT-T25, LT-T26, LT-T27, LT-T28, LT-T29, LT-T30
RF exposure procedures:	KDB 447498 D01 v06

This device described above has been tested by Shenzhen Microtest Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Tested by: 

Danny Xu Apr. 10, 2020

Reviewed by: 

Leo Su Apr. 10, 2020

Approved by: 

Tom Xue Apr. 10, 2020

RF EXPOSURE EVALUATION

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/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

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= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1415926

R= distance between observation point and center of the radiator in cm(20cm)

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

Measurement Result

WIFI:

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz,

Power density limited: 1mW/ cm^2

Antenna Type: FPC Antenna;
antenna gain: -2dBi

R=20cm

mW=10^(dBm/10)

antenna gain Numeric=10^(dBi/10)= 10^(-2/10)=0.63

Channel Freq. (MHz)	modulation	conducted power	Tune-up power	Max		Antenna	Evaluation result at 20cm	Power density Limits
		(dBm)	(dBm)	tune-up power		Gain	Power density(mW/cm2)	(mW/cm2)
				(dBm)	(mW)	Numeric		
		Ant A	Ant A	Ant A	Ant A	Ant A	Ant A	
2412	802.11b	16.45	16±1	17	50.118723	0.63	0.00628	1
2437		16.48	16±1	17	50.118723	0.63	0.00628	1
2462		16.05	16±1	17	50.118723	0.63	0.00628	1
2412	802.11g	16.63	16±1	17	50.118723	0.63	0.00628	1
2437		16.38	16±1	17	50.118723	0.63	0.00628	1
2462		16.72	16±1	17	50.118723	0.63	0.00628	1
2412	802.11n H20	16.62	16±1	17	50.118723	0.63	0.00628	1
2437		16.79	16±1	17	50.118723	0.63	0.00628	1
2462		16.36	16±1	17	50.118723	0.63	0.00628	1

Conclusion:

For the max result: 0.00628≤ 1.0 for 1g SAR, No SAR is required.

----END OF REPORT----