Maximum Permissible Exposure report

For

Mango IOT (Changzhou) Co.,Ltd.

B910, Tianrun Building, Wujin District, Changzhou,China

FCC ID:2AF68WSQ

This Report Concerns: Original Report	Equipment Type: Remote Pet Feeder	
Test Engineer:	Lisa Chen *Lisa Chen*	
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Reviewed By:	*Mike moo* Mike Moo	
Prepared By:	**BSL Testing Co.,LTD.** NO. 24, ZH Park, Nantou, Shenzhen, 518000 China Tel: 86- 755-26508703 Fax: 86- 755-26508703	

1.§ 15.247 (i) and §1.1307 (b) (1) – Maximum Permissible exposure (MPE)

1.1 Standard Applicable

According to subpart 15.247 (i) and subpart 1.1307 (b)(1), 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 General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3–3.0	614	1.63	*(100)	30
3.0–30	824/f	2.19/f	*(180/f2)	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

1.2 Test Data

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S = PG/4\pi R^2$

S: Power density, in mW/cm²

P: Power input to the antenna, in mW
G: numeric gain of the antenna
R: distance to the center of the antenna, in cm

802.11b Mode

Maximum AV output power at antenna input terminal (dBm):	14.99
Maximum AV output power at antenna input terminal (mW):	31.55
Prediction distance (cm):	20
Prediction frequency (MHz):	2462
Antenna Gain, typical (dBi):	0
Maximum Antenna Gain (numeric):	1
Power density at predication frequency and distance (mW/cm^2):	0.00628
MPE limit for the predication frequency (mW/cm^2):	1.0

802.11g Mode

Maximum AV output power at antenna input terminal (dBm):	13.59
Maximum AV output power at antenna input terminal (mW):	22.86
Prediction distance (cm):	20
Prediction frequency (MHz):	2437
Antenna Gain, typical (dBi):	0
Maximum Antenna Gain (numeric):	1
Power density at predication frequency and distance (mW/cm^2):	0.00455
MPE limit for the predication frequency (mW/cm^2):	1.0

802.11n Mode

Maximum AV output power at antenna input terminal (dBm):	13.2
Maximum AV output power at antenna input terminal (mW):	20.89
Prediction distance (cm):	20
Prediction frequency (MHz):	2462
Antenna Gain, typical (dBi):	0
Maximum Antenna Gain (numeric):	1
Power density at predication frequency and distance (mW/cm^2):	0.00416
MPE limit for the predication frequency (mW/cm^2):	1.0

1.3 Test Result

The device is compliant with the requirement MPE limit of General Population/Uncontrolled Exposure at predication frequency 1.0 mW/cm2 .And the precaution is outlined in the user's manual to prevent to high level of RF energy.