TEST REPORT

Reference No......	:	WTN24X09222286W002
FCC ID.....	:	2BLDD-P00-99
Applicant.....	:	CROCBIRD INNOVATION
Address.....	:	69 TREMAINE DR., KITCHENER,ON, N2A 4L7,CANADA
Manufacturer.....	:	CROCBIRD INNOVATION(Hangzhou)CO., LTD
Address.....	:	Room 5689, 5th Floor, 159 Longzhang Road, Xihu District, Hangzhou, Zhejiang,Province, China
Product Name.....	:	CrocBird linear motion toothbrush
Model No......	:	P80
Standards.....	:	KDB 680106 D01 V04
Date of Receipt sample.....	:	2024-09-23
Date of Test.....	:	2024-09-23 to 2024-10-18
Date of Issue.....	:	2024-10-18
Test Report Form No......	:	WTX_KDB 680106 D01 V04W
Test Result.....	:	**Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

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Report version

Version No.	Date of issue	Description
Rev.00	2024-10-18	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	CrocBird linear motion toothbrush
Trade Name:	Crocbird
Model No.:	P80
Adding Model(s):	PXX, x=0~9
Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model P80, but the circuit and the electronic construction do not change, declared by the manufacturer.	

Technical Characteristics of EUT	
Frequency Range:	110 kHz
Modulation Type:	/
Antenna Type:	Coil Antenna
Rated Voltage:	Input : DC5V
Rated Current:	Input : 0.5A
Rated Power:	Wireless Output : 1W
Note The Antenna Gain is provided by the customer and can affect the validity of results.	

1.2 Auxiliary Equipment List and Details

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Adapter	Xiaomi	MDY-08-ES	/
linear motion toothbrush	CROCBIR	P80	

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	1.0	shielded	With Ferrite

1.3 Test Equipment List and Details

Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
ELECTRIC AND MAGNETIC FIELD ANALYZER	Narda	EHP-200AC	180ZX10226	2024-03-05	2025-03-04

2. RF Exposure Test Report

2.1 Standard Applicable

According to §1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

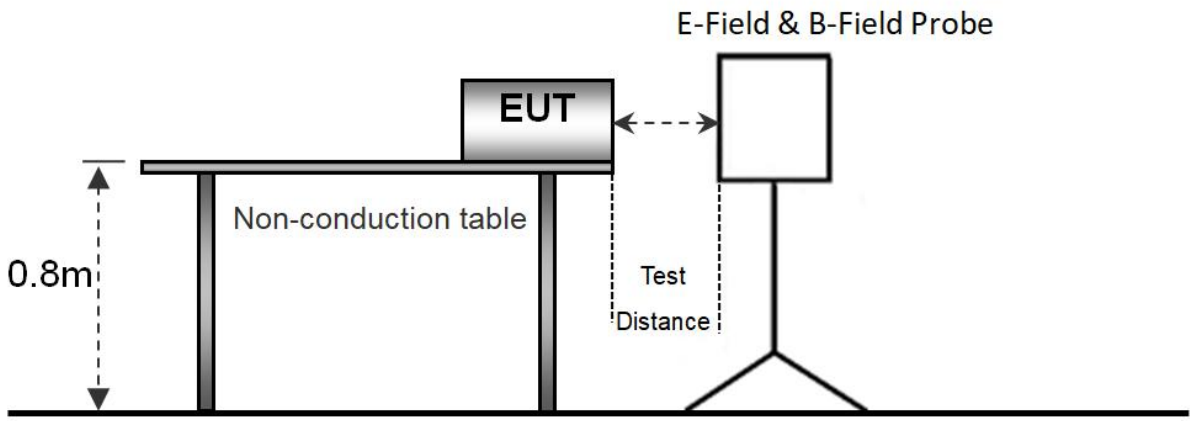
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	$*900/f^2$	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			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

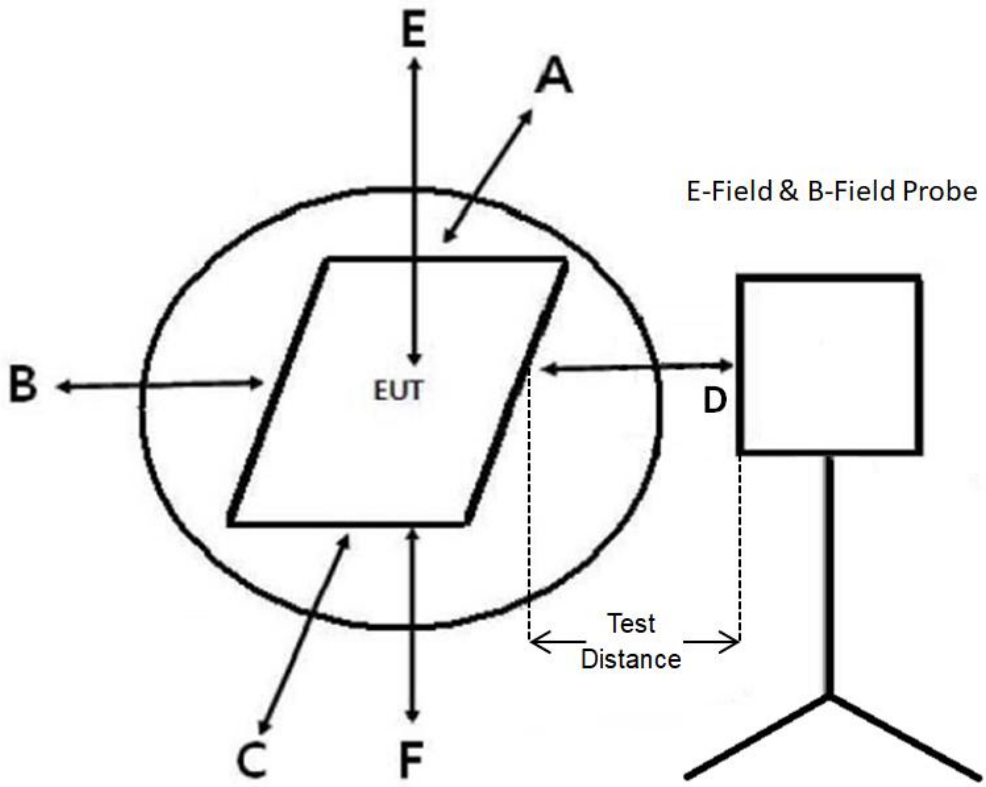
f = frequency in MHz * = Plane-wave equivalent power density

2.2 Test Conditions

Test Mode	Description	Remark
TM1	Wireless Charging	output 1W
Note: The EUT was tested with empty load, half load, and full load, and recorded the worst mode (full load) data in the report.		
Measurement Distance:	15 cm and 20 cm	

2.3 Test Procedure





a. The measurement probe was placed at test distance(15 cm for A,B,C,D,F and 20 cm for E), which is between the edge of the charger and the edge of probe.
b. The highest emission level was recorded at the measurement points (A, B, C, D, E, F).
c. The EUT was measured according to the distance of KDB 680106 D01 v04.

2.4 Test Result

The EUT complies with item 5.2 of KDB 680106 D01V04

(1) The power transfer frequency is below 1 MHz.
Yes, the device operate in the frequency range from 110kHz.

(2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.
Yes, the maximum output power of the primary coil is less than 1W.

(3) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)
Yes, Client device is placed directly in contact with the transmitter.

(4) Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).
Yes, It is mobile exposure conditions only.

(5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.
Yes, The EUT field strength levels are less than 50% of the MPE limit, refer to test TM1 list.

(6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.
Yes, The EUT field strength levels are less than 50% of the MPE limit, refer to test list; and the coils can’t transmitted simultaneous.

Test Mode: TM1

Electric Field Emissions			
Test Position	**Measure Value (V/m)**	**Limit(V/m)**	**50% Limit (V/m)**
Point E	6.19	614	307
Point F	3.56	614	307
Point A	4.32	614	307
Point B	5.70	614	307
Point C	3.25	614	307
Point D	2.38	614	307
Magnetic Field Emissions			
Test Position	**Measure Value (A/m)**	**Limit(A/m)**	**50% Limit (A/m)**
Point E	0.72	1.63	0.815
Point F	0.45	1.63	0.815
Point A	0.49	1.63	0.815
Point B	0.53	1.63	0.815
Point C	0.74	1.63	0.815
Point D	0.25	1.63	0.815

2.5 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Electric Field Emissions	Radiated	±1.56 (V/m)
Magnetic Field Emissions	Radiated	±0.08(A/m)

2.6 Test Photos

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

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