



TEST REPORT

Test Report No.: 022005-01/01

Issued: 16. 9. 2020

Name of product: Toothbrush
Type of product: IONICKISS (Europe)
KISS YOU (Japan)
Ratings: Internal battery 3 V DC
Serial number: ---
Manufacturer: Ionic Corporation
914-1 Nazukari, Nagareyama, Chiba,
270-0145 Japan
Production site: ---
Ordering firm: ORTUS HEALTH s. r. o.
Nad Oborou 514, 252 42 Jesenice - Osnice,
Czech Republic
Number of tested samples: 1
Samples submitted on: 7. 9. 2020
Location of testing: Elektrotechnický zkušební ústav, s. p.
Tests performed from 7. 9. 2020 through 10. 9. 2020
Other data: ---
Tested according to: ČSN EN 61000-6-3 ed. 2:07+A1:11,
ČSN EN 61000-6-1 ed. 3:19

Compiled by: Pavel Vošický

Approved by: Miroslav Vondra
Testing laboratory technical manager

No. of pages: 10

No. of annexes: 0

No. of annexes pages: 0

The test results stated in the test report apply only to the tested subject and unless specified otherwise in the test report, the tests were performed using the method and under the conditions determined in the test regulations, technical norm, instructions for use and information provided by the manufacturer on the tested subject and using accessories required by the manufacturer.
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(ČSN) EN 61000-6-3 *Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments*

Product: Toothbrush

Type: IONICKISS

Requirements at tests:

Standard	Frequency band	Allowed values	Note
ČSN EN 61000-6-3 tab. 2.1	f [MHz] 0.15 - 0.5 0.5 - 5 5 - 30	QP / AV [dB(μV)] 66-56 / 56-46 56/ 46 60 / 50	N/A *1)
ČSN EN 61000-6-3 tab. 3.1	f [MHz] 0.15 - 0.5 0.5- 30	QP / AV [dB(μV)] 79 / 66 73 / 60	N/A *1)
ČSN EN 61000-6-3 tab. 4.1	f [MHz] 0.15 - 0.5 0.5 - 5 5 - 30	QP / AV [dB(μV)] 84-74 / 74-64 74/ 64 74 / 64	N/A *1)
ČSN EN 61000-6-3 tab. 1.1	f [MHz] 30 - 230 230 - 1000	QP dB (μV/m) 40 47	Pass
ČSN EN 61000-6-3 tab. 1.4	f [GHz] 1 - 3 3 - 6	QP / AV [dB(μV)] 70 / 50 74/ 54	N/A *2)
ČSN EN 61000-3-2 Čl. - Art. 7.4	0 - 2 kHz	Class A	N/A *1)
ČSN EN 61000-3-3	--	Pst 1; Plt 0,65	N/A *1)

Notes:

*1) the EUT does not contain appropriate inputs/ outputs

*2) Internal frequency of EUT is lower than 108 MHz, the measurement shall only be made up to 1 GHz.

Test result: Pass

Compiled by: Vošický



Date: 10. 9. 2020

**Measurement of interfering radiation in the 30 – 1 000 MHz, 1 GHz - 6 GHz band
(ČSN) EN 55032/B**

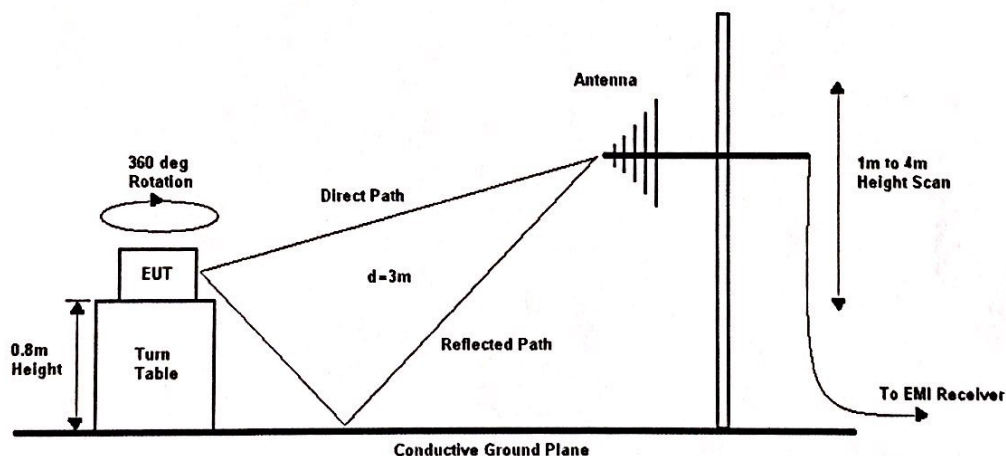
Product: Toothbrush
Type: IONICKISS

Temperature: 22 - 24 °C

Rel. humidity: 45 - 50 %

Applied limits:

Band (MHz)	Quasi-peak limit dB(μV/m) at 3m
30 - 230	40
230 - 1000	47
1000 - 3000	70 /50
3000 - 6000	74 /54



Note:

As load was used rezistor 100 kΩ.

Test result: Pass

Measured by: Vošický

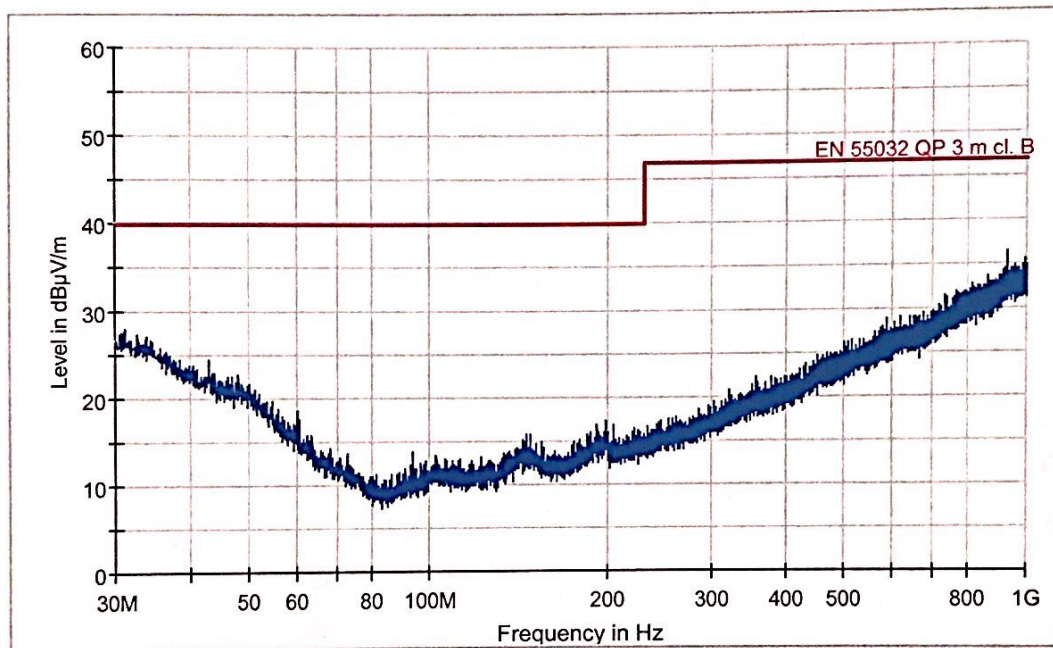
Date: 7. 9. 2020

EMI Measurement

Common Information

Type	IONICKISS
Test Description	ČSN EN 55032/ Class B
Operating Conditions	100 k Ω load
Comment:	Horizontal polarization

EFS EZU 1

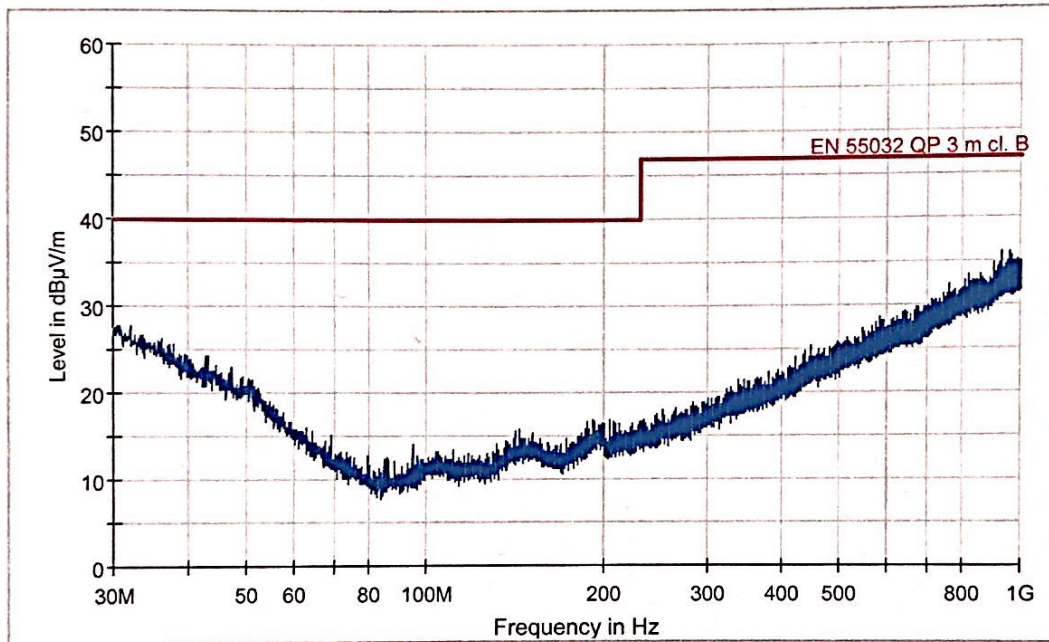


EMI Measurement

Common Information

Type	IONICKISS
Test Description	ČSN EN 55032/ Class B
Operating Conditions	100 kΩ load
Comment:	Vertical polarization

EFS EZU 1



(ČSN) EN 61000-6-1 Electromagnetic compatibility (EMC) – Part 6-1: Generic standards – Immunity for residential, commercial and light industrial environments

Product: Toothbrush
Type: IONICKISS

Tests requirements

Standard	Level	Performance criterion *1)	Result
(ČSN) EN61000-4-2	±4 kV contact ±8 kV air	B	Pass
(ČSN) EN61000-4-3	3 V/m; 80 – 1000 MHz 3 V/m; 1.4 – 6.0 GHz	A	Pass
(ČSN) EN61000-4-4	0,5kV/ 1kV	B	N/A *2)
(ČSN) EN61000-4-5	0,5 kV / 1 kV / 2kV	B	N/A *2)
(ČSN) EN61000-4-6	3 V; 0,15 – 80 MHz, 1 kHz, 80% AM	A	N/A *2)
(ČSN) EN61000-4-8	1 A/m	A	Pass without test *3)
(ČSN) EN61000-4-11	0% Ut/10 ms	B	N/A *2)
	70% Ut/500 ms	C	
	0% Ut/5000 ms	C	

Notes:

The EUT in operation by the manufacturer

*1) Performance criteria A, B, C according to (ČSN) EN 61000-6-1 art. 4.

*2) The EUT does not contain AC power supply input.

*3) The EUT does not contain parts sensitive to the magnetic field.

Test result: Pass

Compiled by: Vošický

Date: 10. 9. 2020

Immunity test - radiated electromagnetic field requirements
According to: (ČSN) EN 61000-4-3

Product: Toothbrush
Type: IONICKISS

Temperature: 22 - 24 °C

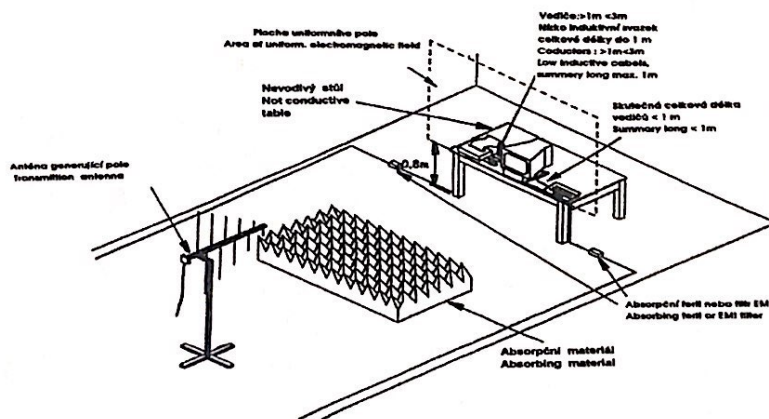
Rel. humidity: 45 - 50 %

Applied limits:

Frequency Band	Intensity of field	Polarization	Tested side of the EUT	Note
80 MHz – 1 GHz	3 V/m	H, V	Front, Right, Left, Back	80% AM, 1kHz
1.4 GHz - 6.0 GHz				

Performance criterion allowed/achieved : A / A

Measuring arrangement:



Notes:

No change of function of the EUT was detected during the test.

Test result: Pass

Tested by: Vošický

Vošický

Date: 8. 9. 2020

Test of electric discharge resistance
According to: (ČSN) EN 61000-4-2

Product: Toothbrush
Type: IONICKISS

Temperature: 22 - 24 °C

Rel. humidity: 45 - 50 %

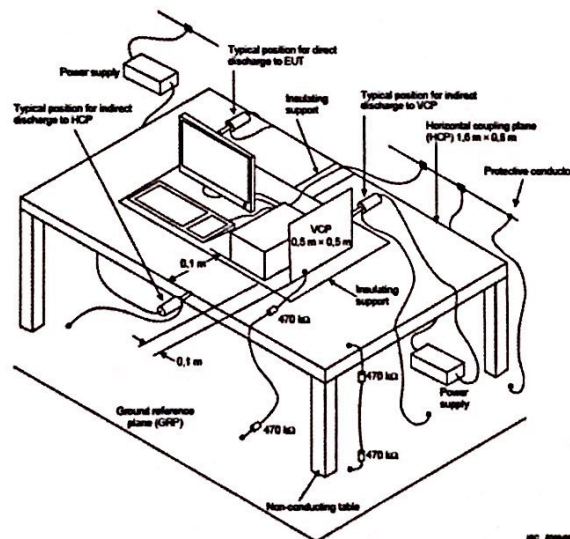
Number of testing discharges: 10/10 contact/air discharge to every test-places in each polarity, besides indirect contact discharges into a coupling plane.

Tested points: The contact discharges into metal parts of the EUT. The air discharge into the non-conducted parts of the EUT - see photo documentation.

Testing voltage (kV): ± 4 - contact discharge
 ± 8 - air discharge

Performance criterion: B
Achieved criterion: A

Measuring arrangement:



Notes:

No change of function of the EUT was detected during the test.

Test result: Pass

Tested by: Vošický

Date: 9. 9. 2020

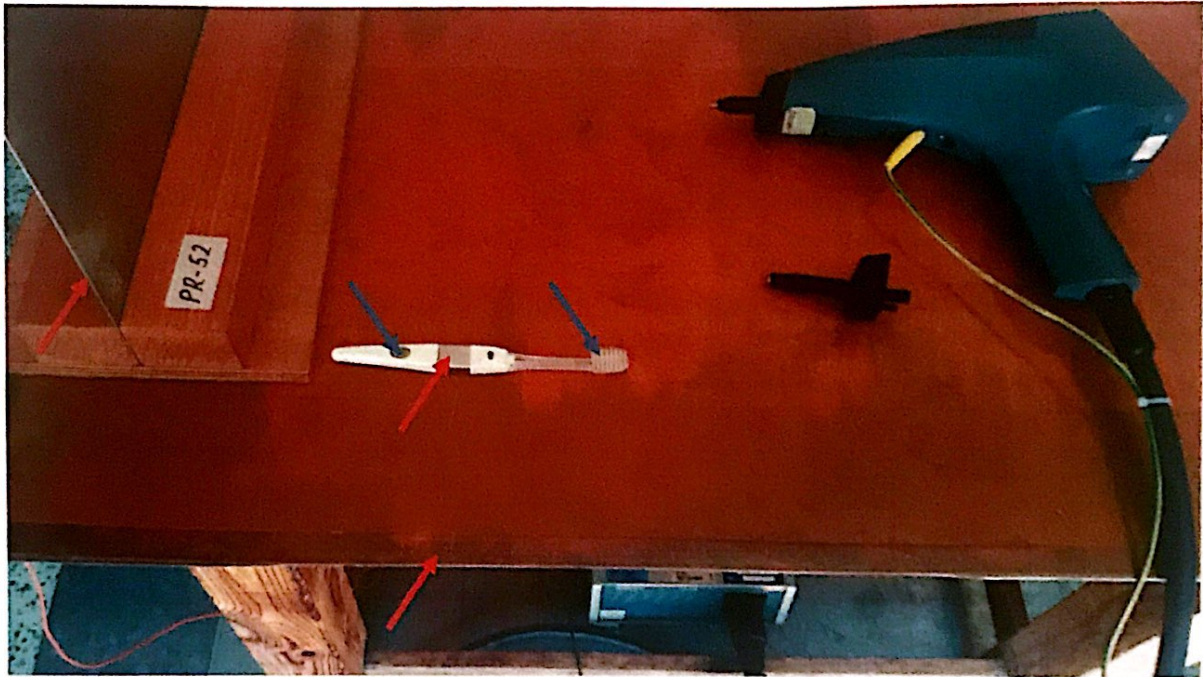
Measuring equipment used:

Description	Type	Evidence No.	Cal. date
☒ Test receiver RaS	ESU26	110252	1.2021
☐ Artificial mains RaS	EMCO 3825/2	5852	7.2022
☐ Artificial mains Narda	L3-32	110250	12.2022
☐ 8 – Wire ISN CAT 6	NTFM 8158	110271	9.2020
☒ Antenna Frankonia	BTA-M	6321	5.2023
☒ Antenna Double Ridget	HF 907	110177	3.2021
☐ Injection clamp	EM 101	110233	12.2022
☐ Tester EM TEST	UCS 500N	110235	2.2021
☐ Tester EM TEST	CWS 500N1	110342	3.2021
☐ Tester EM TEST	EFT 500N	110316	1.2022
☐ Tester EM TEST	VCS 500M	110182	1.2022
☒ ESD generator - EM TEST	ESD 30N	110196	5.2021
☐ Supply source EM TEST	HFS300	6042	2.2021
☐ 3 F. Supply source EM TEST	NetWave	00110299	1.2021
☐ Ref. impedance SCHAFFNER	LR4	---	2.2021
☐ Amplifier BONN ELEKTRONIK	BSA0115-50	6038	---
☒ Amplifier PRANA	AP32LT225	110145	---
☐ Amplifier MILMEGA	AS0822-100	110009	---
☐ Amplifier MILMEGA	AS0204-125	110144	---
☐ Amplifier MILMEGA	AS1860-100	110219	---
☒ Amplifier TESEQ	CBA 6G-200D	110351	---
☐ Preamplifier HP 1- 26,5 GHz	HP8449B	5846	---
☒ E-field isotropic probe Narda	EP603	110273	5.2021
☒ Signal. generator- signal generator RaS	SMF 100A	110167	5.2021
☐ Pulse Limiter RaS	ESH3-Z2	5424	2.2022
☐ Coupling/dec. EM TEST	CDN-M1	---	7.2022
☐ Coupling/dec. EM TEST	CDN-M2	---	12.2022
☐ Coupling/dec. EM TEST	CDN-M3	---	12.2022
☐ Coupling/dec. EM TEST	CDN-M5	---	8.2021
☐ Coupling. SCHAFFNER	Txxx	---	---
☒ Thermometer/hygrometer	625	50021821	11.2020
☒ Anechoic chamber	---	6341	2.2025
Cables:			
☒ K11, K13a , K15	---	---	---
☐ K7a , K9a , K1	---	---	---
☒ K23	---	---	---
☒ K26	---	---	---
☒ K24	---	---	---

Photo documentation

Product: Toothbrush
Type: IONICKISS

Electrostatic discharge, tested points
(→ contact, → air discharge)



End of Test Report No. 022005-01/01