Shenzhen POCE Technology Co.,Ltd.

H Building, Hongfa Science and Technology Park,
Tangtou, Shiyan, Bao'an District, Shenzhen, China

CERTIFICATE OF CONFORMITY

Certificate No.	:	POCE220922641TCE
Applicant	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Manufacturer	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Product	:	Portable Electric Nail Drill
Trade Name	:	N/A
Model(s)	:	VC-008, VC-008A, VC-008B, VC-008C, VC-008D, VC-008E, VC-008F
Test Report No.	:	POCE220922641TRE
Test Standards	:	**EN IEC 55014-1:2021** **EN IEC 55014-2:2021** **EN IEC 61000-3-2:2019/A1:2021** **EN 61000-3-3:2013/A2:2021**

The EUT described above has been tested by us with the listed standards and found in compliance with the council **EMC** Directive 2014/30/EU. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.

CE

SHENZHEN POCE TECHNOLOGY CO.,LTD. APPROVED

Tom Chen

For Chief Executive / Tom Chen
Date: Sep. 26, 2022

This certificate of conformity is based on a single evaluation of the submitted sample(s) of the above mentioned product. It does not imply an assessment of the whole production and other relevant directives have to be observed.

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Web: http://www.poce-cert.com Tel: +86-755-29113252 E-mail: service@poce-cert.com

EMC TEST REPORT

For

Shenzhen Vantrend Beauty Technology Co., Ltd

Product Name: Portable Electric Nail Drill

Model No.:VC-008

Prepared for	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Prepared by	:	SHENZHEN POCE TECHNOLOGY CO., LTD.
Address	:	102 Building H1 & 1/F., Building H, Hongfa Science & Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, Guangdong, China
Report No.	:	POCE220922641TRE
Date of Receiver	:	Sep. 21, 2022
Number of tested samples	:	1
Date of Test	:	Sep. 21, 2022 - Sep. 26, 2022
Date of Report	:	Sep. 26, 2022

Note: *This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of Shenzhen POCE Technology Co., Ltd*

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Description

Test Report Description Page

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	Portable Electric Nail Drill
Trade Mark	:	N/A
Model	:	VC-008
Supplementary Model	:	VC-008A, VC-008B, VC-008C, VC-008D, VC-008E, VC-008F
Test Voltage	:	DC 5V
Rating	:	DC 5 V, 1A Battery：DC3.7V
Applicant	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Manufacturer	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Test Standards	:	EN IEC 55014-1:2021 EN IEC 55014-2:2021 EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021
Test Result	:	PASS
Test Engineer	:	
Reviewed By	:	

1.2. Test Standards

PASS Indicates that the test is applicable
N/A Indicates that the test is not applicable

Standard	Test Items	Status
EN IEC 55014-1:2021	Disturbance Voltage at The Mains Terminals (150KHz To 30MHz)	N/A
	Radiated Disturbances (30MHz To 1000MHz)	PASS
EN IEC 61000-3-2:2019/A1:2021	Harmonic Current	N/A
EN61000-3-3:2013/A2:2021	Voltage Fluctuations	N/A
EN61000-4-2:2009	Electrostatic discharge Immunity	PASS
EN61000-4-3: 2006/A2:2010	Radiated Susceptibility (80MHz to 1GHz)	PASS
EN61000-4-4:2012	Electrostatic Fast Transient/Burst Immunity	N/A
EN61000-4-5: 2014/A1:2017	Surge Immunity	N/A
EN61000-4-6: 2014/AC:2015	Conducted Susceptibility (150KHz to 230MHz)	N/A
EN61000-4-11: 2004/A1:2017	Voltage Dips Short Interruptions Immunity Tests	N/A

1.3.Test Methodology

All measurements contained in this report were conducted with CISPR 16-1, radio disturbance and immunity measuring apparatus, and CISPR16-2, Method of measurement of disturbances and immunity.
All measurement required was performed at laboratory of Shenzhen POCE Technology Co., Ltd., at 101-102, H5 Building & floor 1, Building H, Hongfa Science and Technology Park, Tangtou, Shiyan, Bao'An District, Shenzhen, China

1.4.Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS Registration Number. is L8229

The facility also complies with the radiated and AC line conducted test site criteria set forth in CISPR 16-1, CISPR16-2.

2. MEASURING DEVICE AND TEST EQUIPMENT

2.1.For Power Line Conducted Emission

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K03-102109-MH	Dec. 27, 2021
2.	L.I.S.N	Rohde & Schwarz	ESH3-Z5.831.5518.52	9561-G071	Dec. 27, 2021
3.	50ΩCoaxial Switch	Anritsu	MP59B	M20531	N/A
4.	Pulse Limiter	SCHWARZ BECK	VTSD 9561-F Pulse limiter 10dB Ateennator	561-G071	Dec. 27, 2021
5.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021

2.2.For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K03-102109-MH	Dec. 27, 2021
2.	Bilog Antenna	Sunol Sciences	Model JB6 Antenna	A090414	Dec. 27, 2021
3.	50ΩCoaxial Switch	Anritsu	MP59B	M20531	N/A
4.	control	Positioning Controller	Model MF-7802	MF780208362	Dec. 27, 2021
5.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021
6.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021

2.3.For Harmonic Current / Flicker Measurement

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Coupling decoupling network	SCHAFFNER	M016	20812	Dec. 27, 2021
2.	PC	N/A	P2L97	N/A	Dec. 27, 2021

2.4. For Electrostatic Discharge Immunity Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	ESD Tester	Prima	ESD61002A	144305	Dec. 27, 2021

2.5. For RF Strength Susceptibility Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Signal Generator	HP	8648A	3625U00573	Dec. 27, 2021
2.	Amplifier	AR	500A100	17034	NCR
3.	Amplifier	AR	100W/1000VC-008	17028	NCR
4.	Isotropic Field Monitor	AR	FM2000	16829	NCR
5.	Isotropic Field Probe	AR	FP2000	16755	Dec. 27, 2021
6.	Biconic Antenna	EMCO	3108	9507-2534	NCR
7.	Log-periodic Antenna	AR	AT1080	16812	NCR
8.	PC	N/A	486DX2	N/A	N/A

2.6. For Electrical Fast Transient /Burst Immunity Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Burst Tester	HTEC	HEFT 51	144303	Dec. 27, 2021
2.	Coupling Clamp	HTEC	IP-4A	147147	Dec. 27, 2021

2.7. For Surge Immunity Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Surge Tester	HTEC	HCWG	144302	Dec. 27, 2021

2.8. For Injected Current Susceptibility Test

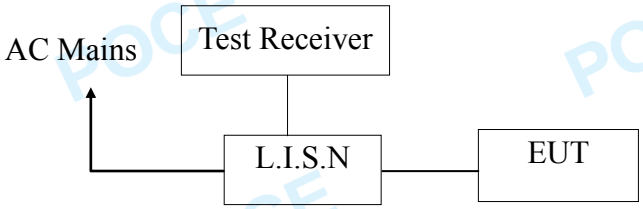
Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Simulator	EMTEST	CWS500C	0900-12	Dec. 27, 2021
2.	CDN	EMTEST	CDN-M2	5VC-00800100	Dec. 27, 2021
3.	CDN	EMTEST	CDN-M3	0900-11	Dec. 27, 2021
4.	Injection Clamp	EMTEST	F-2031-23MM	368	Dec. 27, 2021
5.	Attenuator	EMTEST	ATT6	0010222A	Dec. 27, 2021

2.9. For Voltage Dips and Interruptions Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Dips Tester	HTEC	HPFS	144304	Dec. 27, 2021

3. POWER LINE CONDUCTED EMISSION MEASUREMENT

3.1.Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

3.2.Measuring Standard

EN IEC 55014-1:2021

Power Line Conducted Emission Limits

Frequency (MHz)	Limit (dBμV)	
	Quasi-Peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	59.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

3.3.EUT Configuration on Measurement

The following equipments are installed on Conducted Emission Measurement to meet EN55014 requirements and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.4.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are investigated to find out the maximum conducted emission according to the EN55014 regulations during conducted emission measurement.

The bandwidth of the field strength meter (R&S Test Receiver ESVC-008) is set at 9KHz in 150KHz~30MHz and 200Hz in 9KHz~150KHz.

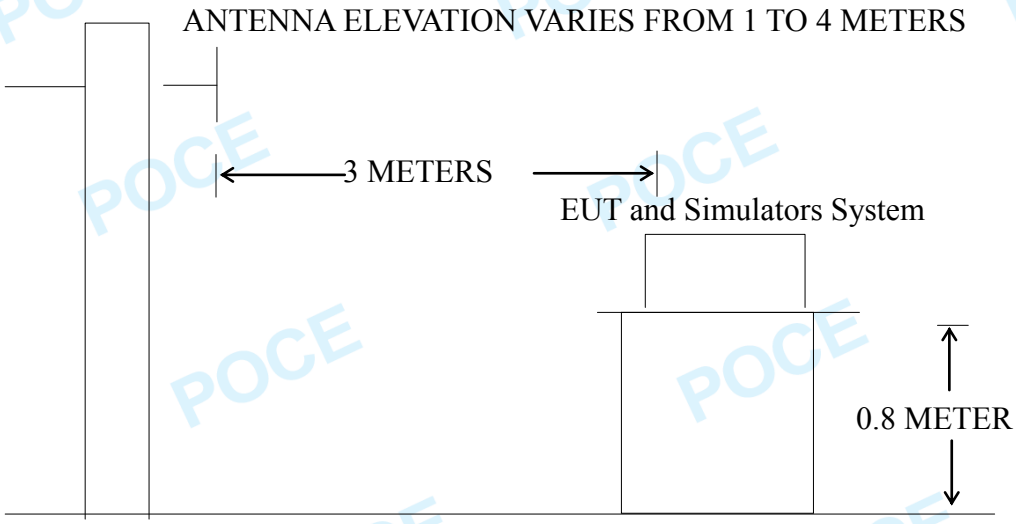
The frequency range from 150kHz to 30MHz is investigated.

Conduction Uncertainty: Uc = ± 2.72 Db

4. RADIATED EMISSION MEASUREMENT

4.1.Block Diagram of Test

4.1.1.Block diagram of test setup (In chamber)



(EUT: Portable Electric Nail Drill)

4.2.Measuring Standard

EN IEC 55014-1:2021
Radiated Emission Limits
including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMIT (dBμV/m)
30 ~ 230	3	40
230 ~ 1000	3	47

Note: (1) The smaller limit shall apply at the combination point between two frequency bands.
(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.

4.3.EUT Configuration on Test

The EN55014 regulations test method must be used to find the maximum emission during radiated emission measurement.

4.4. Test Procedure

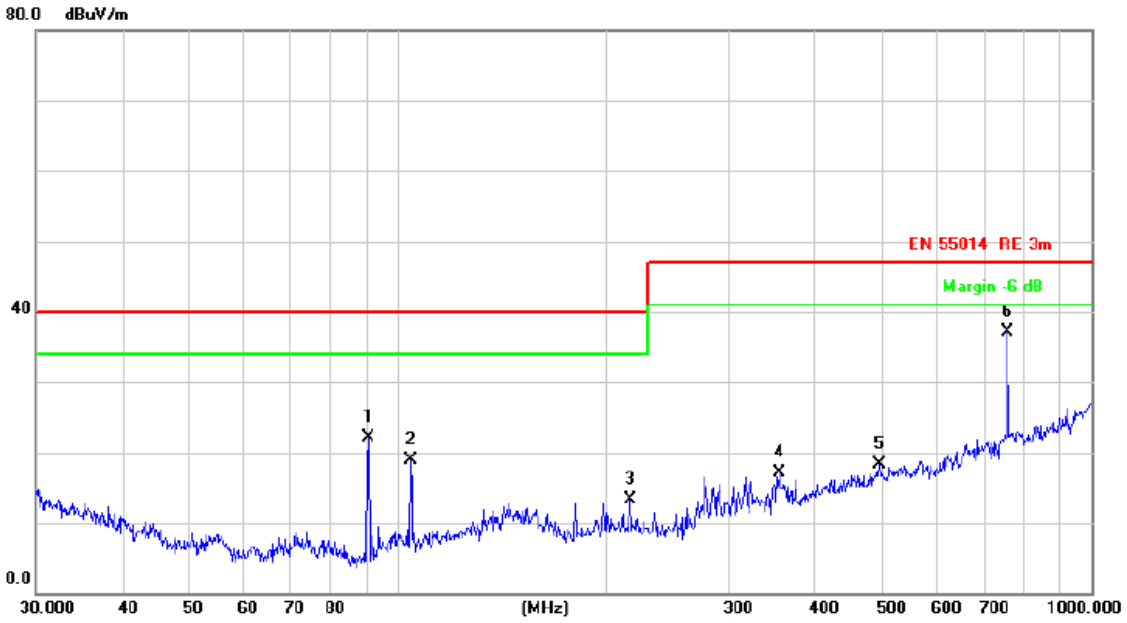
The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the Receiver (ESVC-008) is set at 120kHz.
The frequency range from 30MHz to 1000MHz is investigated.

Radiation Uncertainty: Ur = ± 3.84 dB

Radiated Emission Test Data

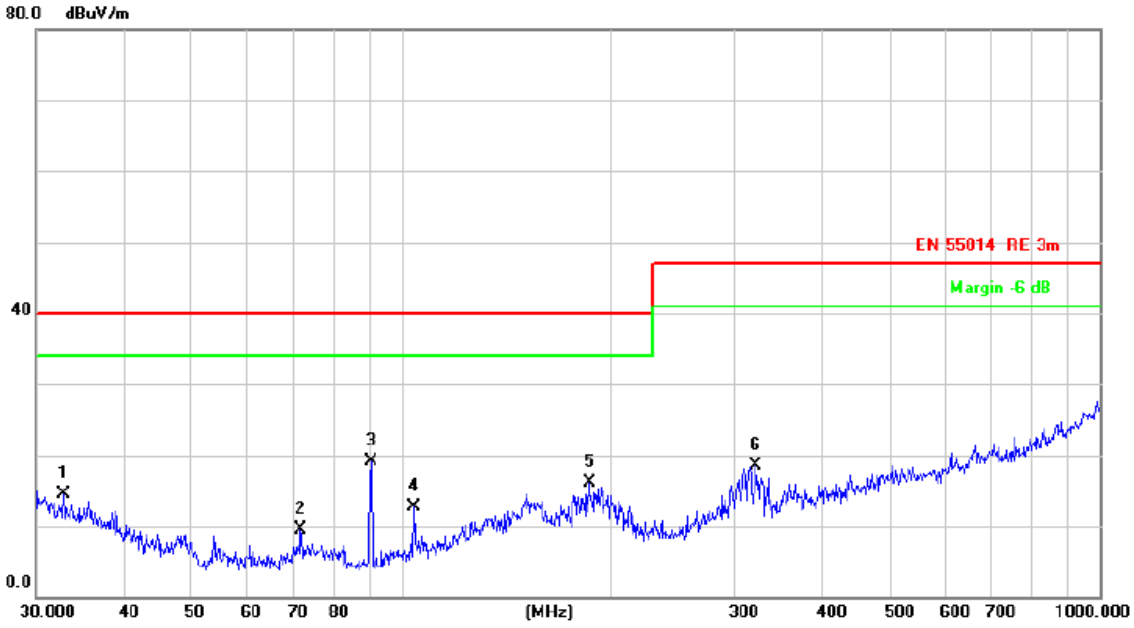
EUT	:	Portable Electric Nail Drill	Temperature:	20℃
M/N	:	VC-008	Humidity	:	50%
Test Voltage	:	DC 5V	Test Mode	:	ON
Test Engineer	:	Bill	Polarization	:	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		90.5374	37.37	-15.29	22.08	40.00	-17.92	QP			
2		104.1701	32.00	-13.18	18.82	40.00	-21.18	QP			
3		216.0240	23.57	-10.24	13.33	40.00	-26.67	QP			
4		354.1831	23.93	-6.79	17.14	47.00	-29.86	QP			
5		494.1984	21.69	-3.35	18.34	47.00	-28.66	QP			
6	*	758.0408	35.97	1.18	37.15	47.00	-9.85	QP			

Radiated Emission Test Data

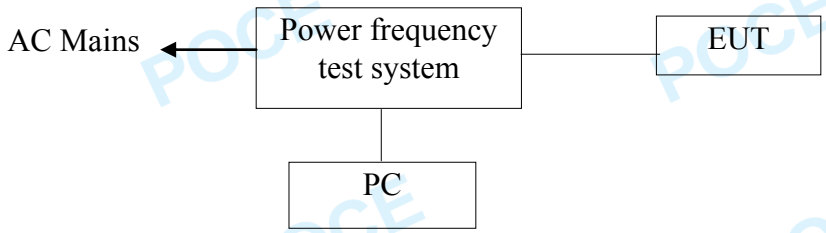
EUT	:	Portable Electric Nail Drill	Temperature:	20℃
M/N	:	VC-008	Humidity	:	50%
Test Voltage	:	DC 5V	Test Mode	:	ON
Test Engineer	:	Bill	Polarization	:	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		32.8637	20.60	-6.19	14.41	40.00	-25.59	QP			
2		71.8320	24.59	-15.12	9.47	40.00	-30.53	QP			
3	*	90.5374	34.41	-15.29	19.12	40.00	-20.88	QP			
4		104.1701	25.97	-13.18	12.79	40.00	-27.21	QP			
5		185.7882	26.68	-10.59	16.09	40.00	-23.91	QP			
6		322.1886	26.11	-7.55	18.56	47.00	-28.44	QP			

5. HARMONIC CURRENT EMISSION MEASUREMENT

5.1Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

5.2 Measuring Standard

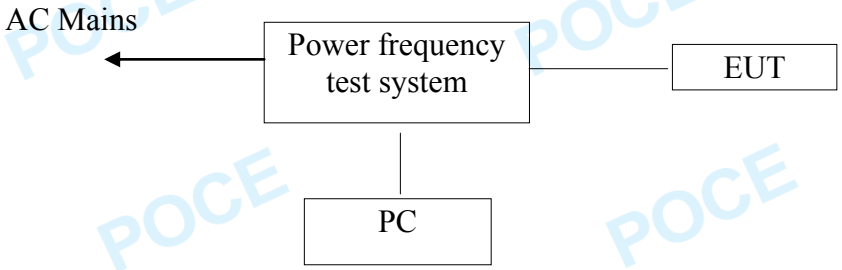
EN IEC 61000-3-2:2019/A1:2021

5.3Description of test Equipment

Note: Equipment is less than 75W, no corresponding harmonic current limit.

6. VOLTAGE FLUCTUATION AND FLICKER MEASUREMENT

6.1 Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

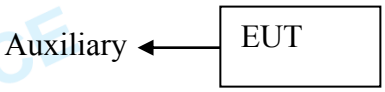
6.2 Measuring Standard

EN61000-3-3:2013/A2:2021

7. ELECTROSTATIC DISCHARGE IMMUNITY TEST

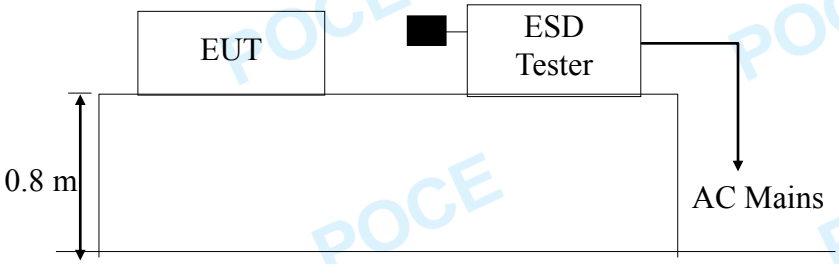
7.1 Block Diagram of Test Setup

7.1.1 Block Diagram of the EUT and the simulators



(EUT: Portable Electric Nail Drill)

7.1.2 Block diagram of ESD test setup



(EUT: Portable Electric Nail Drill)

7.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-2: 2009)
Severity Level: 3 / Air Discharge: ±8KV Level: 2 / Contact Discharge: ±4KV)

7.3 Severity Levels and Performance Criterion

7.3.1 Severity level

Level	Test Voltage Contact Discharge (KV)	Test Voltage Air Discharge (KV)
1.	±2	±2
2.	±4	±4
3.	±6	±8
4.	±8	±15
X	Special	Special

7.3.2Performance criterion: **B**

7.4 Test Procedure

7.4.1 Air Discharge:

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

7.4.2 Contact Discharge:

All the procedure shall be same as Section 7.4.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

7.4.3 Indirect discharge for horizontal coupling plane

At least 10 single discharges (in the most sensitive polarity) shall be applied at the front edge of each HCP opposite the center point of each unit (if applicable) of the EUT and 0.1m from the front of the EUT. The long axis of the discharge electrode shall be in the plane of the HCP and perpendicular to its front edge during the discharge.

7.4.4 Indirect discharge for vertical coupling plane

At least 10 single discharge (in the most sensitive polarity) shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

Electrostatic Discharger Test Results

Standard	☐ IEC 61000-4-2 ☑ EN 61000-4-2		
EUT	Portable Electric Nail Drill	**Temperature**	24℃
M/N	VC-008	**Humidity**	53%
Criterion	B	**Pressure**	1021mbar
Test Mode	Normal	**Test Date**	2022-09-23
Test Engineer	Bill		

Air Discharge

Test Points	Test Levels			Results		
	± 2KV	± 4KV	± 8KV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☒	☐	☐A ☒B
Top	☒	☒	☒	☒	☐	☐A ☒B
Bottom	☒	☒	☒	☒	☐	☐A ☒B

Contact Discharge

Test Points	Test Levels		Results		
	± 2 kV	±4 kV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☐	☐A ☒B
Top	☒	☒	☒	☐	☐A ☒B
Bottom	☒	☒	☒	☐	☐A ☒B

Discharge To Horizontal Coupling Plane

Side of EUT	Test Levels		Results		
	± 2 kV	± 4 kV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☐	☐A ☒B

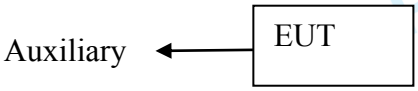
Discharge To Vertical Coupling Plane

Side of EUT	Test Levels		Results		
	± 2 kV	± 4 kV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☐	☐A ☒B

8. RF FIELD STRENGTH SUSCEPTIBILITY TEST

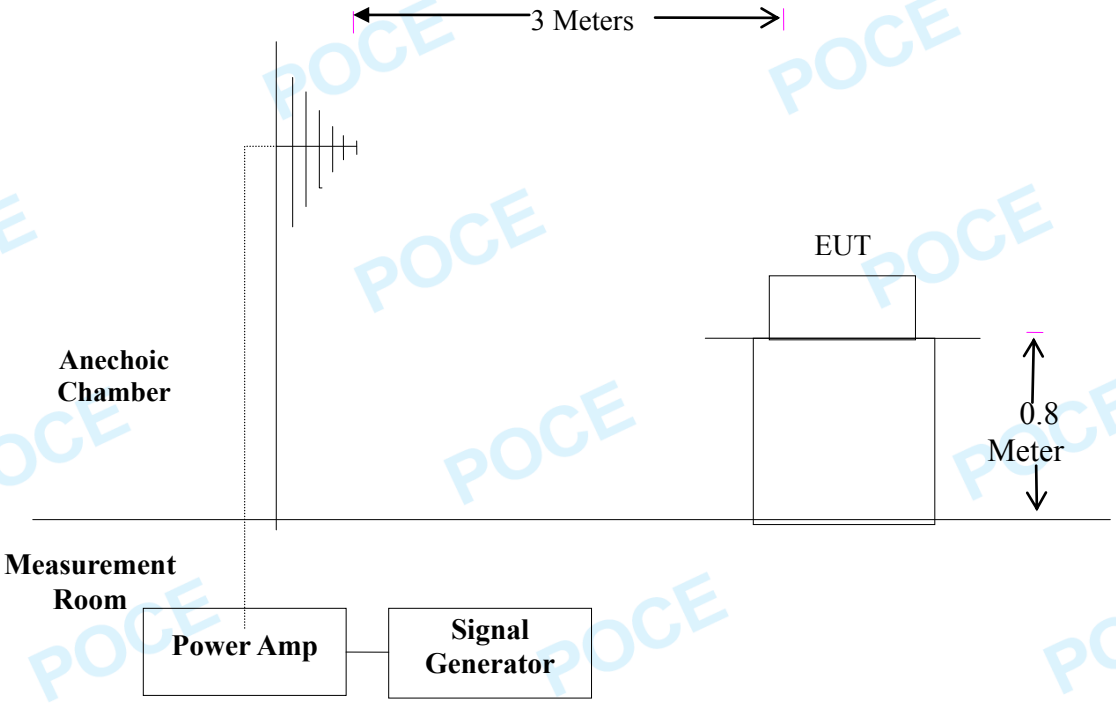
8.1 Block Diagram of Test

8.1.1 Block diagram of connection between the EUT and Load



(EUT: Portable Electric Nail Drill)

8.1.2 Block diagram of RS test setup



(EUT: Portable Electric Nail Drill)

8.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-3: 2006/A2:2010 (Severity Level: 2, 3V / m))

8.3 Severity Levels and Performance Criterion

8.3.1 Severity Levels

Level	Field Strength V/m
1.	1
2.	3
3.	10
X	Special

8.3.2 Performance Criterion: **A**

8.4Test Procedure

The EUT are placed on a table which is 0.8 meter high above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of the EUT must be faced this transmitting antenna and measured individually.
In order to judge the EUT performance, a CCD camera is used to monitor its screen.
All the scanning conditions are as following:

Condition of Test	Remark
1. Fielded Strength	3V/m (Severity Level 2)
2. Radiated Signal	Modulated
3. Scanning Frequency	80-1000MHz
4. Sweep time of radiated	0.0015 Decade/s
5. Dwell Time	1 Sec.

RF Field Strength Susceptibility Test Results

EUT :	Portable Electric Nail Drill	Temperature :	22℃
M/N :	VC-008	Humidity :	50 %
Test Voltage :	DC 5V	Test Mode :	On
Field Strength :	3 V/m	Test Date :	2022-09-23
Test Engineer:	Bill	Frequency Range:	80 MHz to1000 MHz

Modulation:	☐None	☐ Pulse	☑AM 1KHz	80%

	Frequency Rang 1: 80~ 1000MHz			Frequency Rang 2:		
Steps	1	/	%	#	/	%

	Horizontal	Vertical	Horizontal	Vertical
Front	PASS	PASS		
Right	PASS	PASS		
Rear	PASS	PASS		
Left	PASS	PASS		

Test Equipment **:**

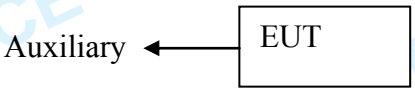
1. Signal Generator : 2031 (MARCONI)
2. Power Amplifier : 500A100 & 100W/1000VC-008(A&R)
3. Power Antenna : 3108 (EMCO) & AT1080 (A&R)
4. Field Monitor : FM2000 (A&R)

Note: Note: (The Criterion)
A:Normal performance within the specification limits;
B:Temporary degradation or less of function or performance which is self-recoverable;
C:Temporary degradation or loss of function or performance which requires operator intervention or system reset;

9. ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST

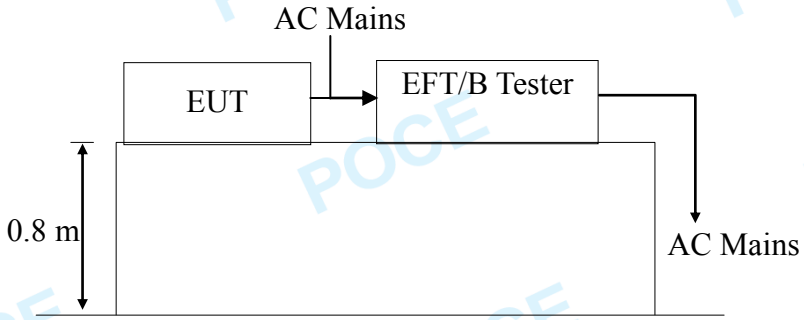
9.1 Block Diagram of Test Setup

9.1.1. Block Diagram of the EUT



(EUT: Portable Electric Nail Drill)

9.1.2. EFT Test Setup



(EUT: Portable Electric Nail Drill)

9.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-4:2012, Severity Level, Level 2**:** 1KV)

9.3 Severity Levels and Performance Criterion

9.3.1 Severity level

Open Circuit Output Test Voltage ±10%		
Level	On Power Supply Lines	On I/O (Input/Output) Signal data and control lines
1.	0.5 KV	0.25 KV
2.	1 KV	0.5 KV
3.	2 KV	1 KV
4.	4 KV	2 KV
X	Special	Special

9.3.2 Performance criterion**: B**

9.4 Test Procedure

The EUT is put on the table which is 0.8 meter high above the ground. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

9.4.1 For input and output AC power ports**:**

The EUT is connected to the power mains by using a coupling device which couples the EFT interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the duration of the test is 2 mins.

9.4.2 For signal lines and control lines ports**:**

No I/O ports. It's unnecessary to test.

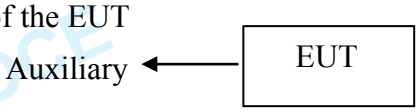
9.4.3 For DC output line ports**:**

It's unnecessary to test.

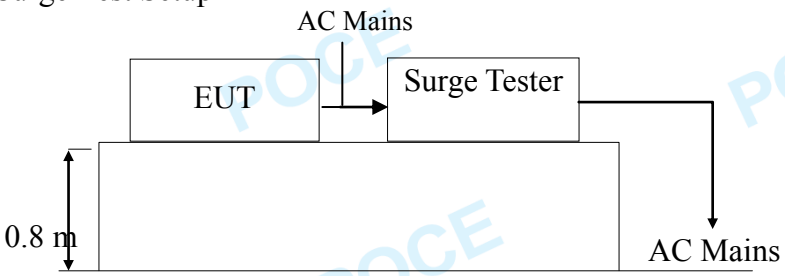
10. SURGE IMMUNITY TEST

10.1 Block Diagram of Test Setup

10.1.1 Block Diagram of the EUT



10.1.2. Surge Test Setup



(EUT: Portable Electric Nail Drill)

10.2 Test Standard

EN IEC 55014-2:2021 (EN61000-4-5: 2014/A1:2017)
Severity Level**:** Line to Line: Level 2, 1.0KV

10.3 Severity Levels and Performance Criterion

10.3.1. Severity level

Severity Level	Open-Circuit Test Voltage KV
1	0.5
2	1.0
3	2.0
4	4.0
*	Special

10.3.2 Performance criterion**: B**

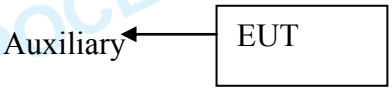
10.4 Test Procedure

1) Set up the EUT and test generator as shown on Section 10.1.2.
2) For line to line coupling mode, provide a 1.0 KV 1.2/50us voltage surge (at open-circuit condition) and 8/20us current surge to EUT selected points.
3) At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are conducted during test.
4) Different phase angles are done individually.
5) Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

11. INJECTED CURRENTS SUSCEPTIBILITY TEST

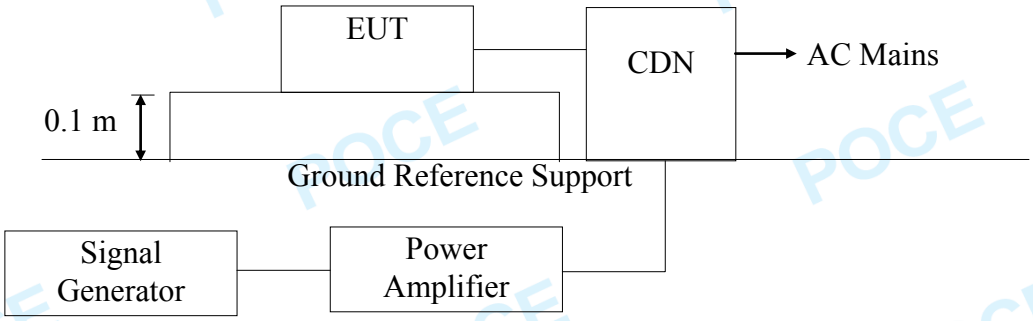
11.1 Block Diagram of Test Setup

11.1.1 Block Diagram of the EUT



(EUT: Portable Electric Nail Drill)

11.1.2 Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

11.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-6: 2014/AC:2015, Severity Level: Level 2, 3V (rms), (0.15MHz ~ 80MHz)

11.3 Severity Levels and Performance Criterion

11.3.1 Severity level

Level	Field Strength V
1	1
2	3
3	10
X	Special

11.3.2 Performance criterion: **A**

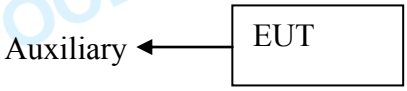
11.4 Test Procedure

1) Set up the EUT, CDN and test generators as shown on Section 11.1.2.
2) Let the EUT work in test mode and measure it.
3) The EUT are placed on an insulating support 0.1m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50 mm (where possible).
4) The disturbance signal described below is injected to EUT through CDN.
5) The EUT operates within its operational mode(s) under intended climatic conditions after power on.
6) The frequency range is swept from 150KHz to80MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with a 1KHz sine wave.
7) The rate of sweep shall not exceed $1.5*10^{-3}$decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.
8) Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

12. VOLTAGE DIPS AND INTERRUPTIONS TEST

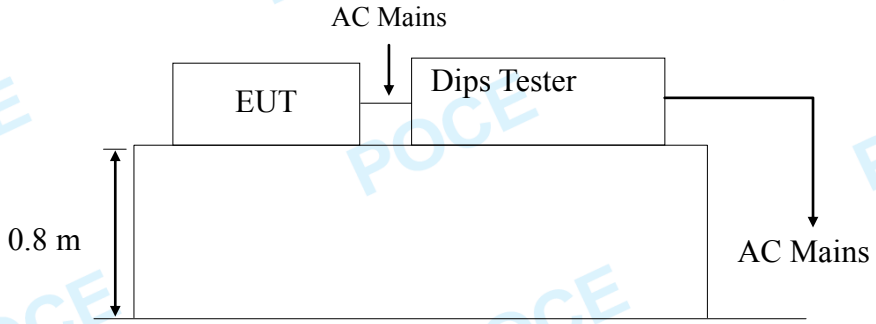
12.1 Block Diagram of Test Setup

12.1.1 Block Diagram of the EUT



(EUT: Portable Electric Nail Drill)

12.1.2 Dips Test Setup



(EUT: Portable Electric Nail Drill)

12.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-11: 2004/A1:2017)

12.3 Severity Levels and Performance Criterion

12.3.1 Severity level

Test Level %UT	Voltage dip and short interruptions %UT	Duration (in period)
70	30	25P
40	60	10P
0	100	0.5P

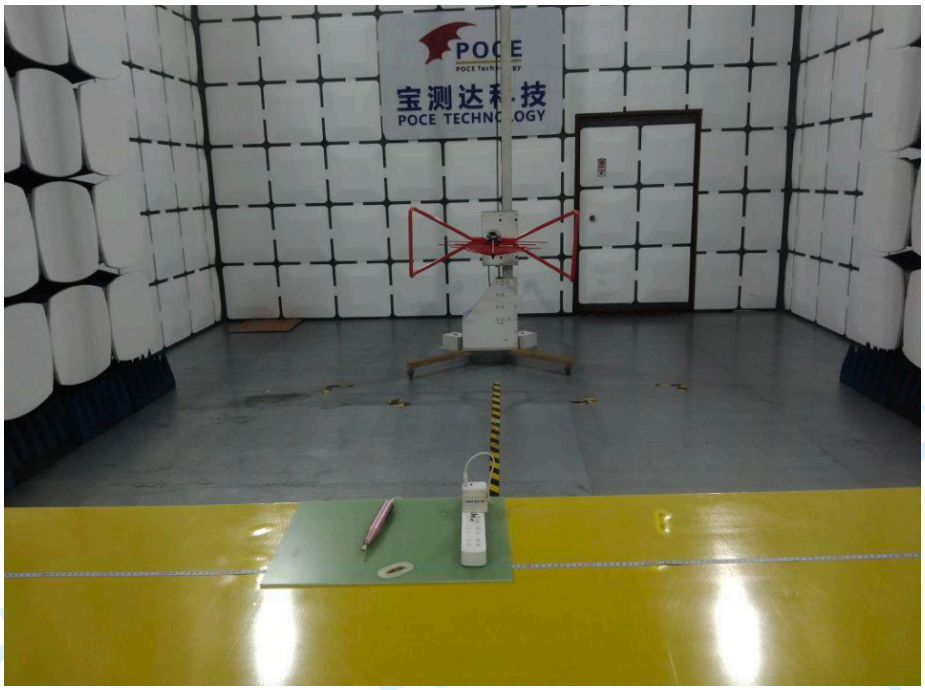
12.3.2 Performance criterion**: C&C&C**

12.4 Test Procedure

1) Set up the EUT and test generator as shown on Section 13.1.2.
2) The interruption is introduced at selected phase angles with specified duration.
3) Record any degradation of performance.

13. TEST PHOTO

13.1 Photo of Radiated Emission Measurement



14. PHOTOGRAPHS OF EUT

Photo 1

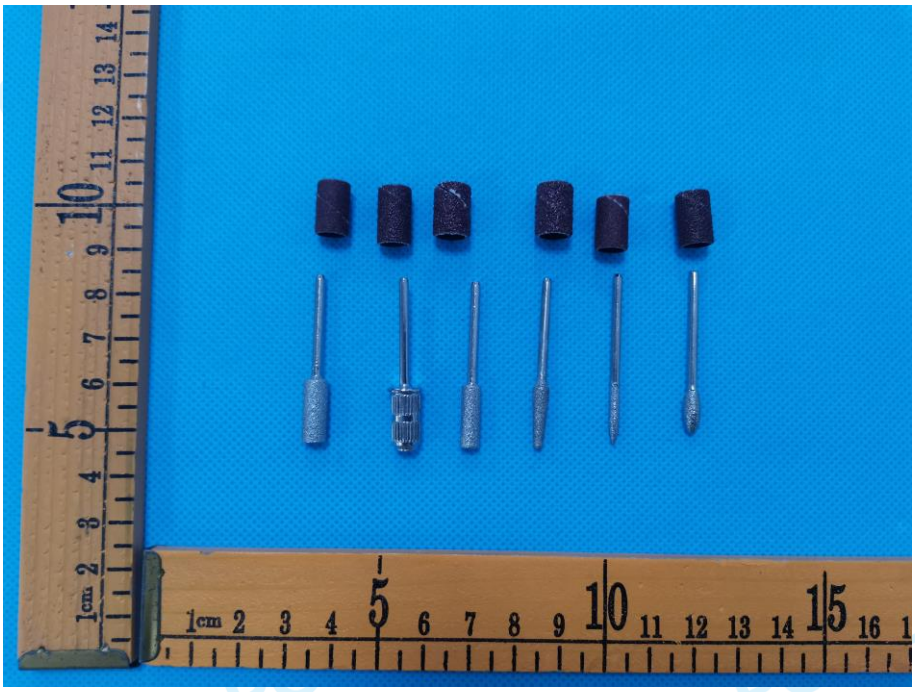


Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

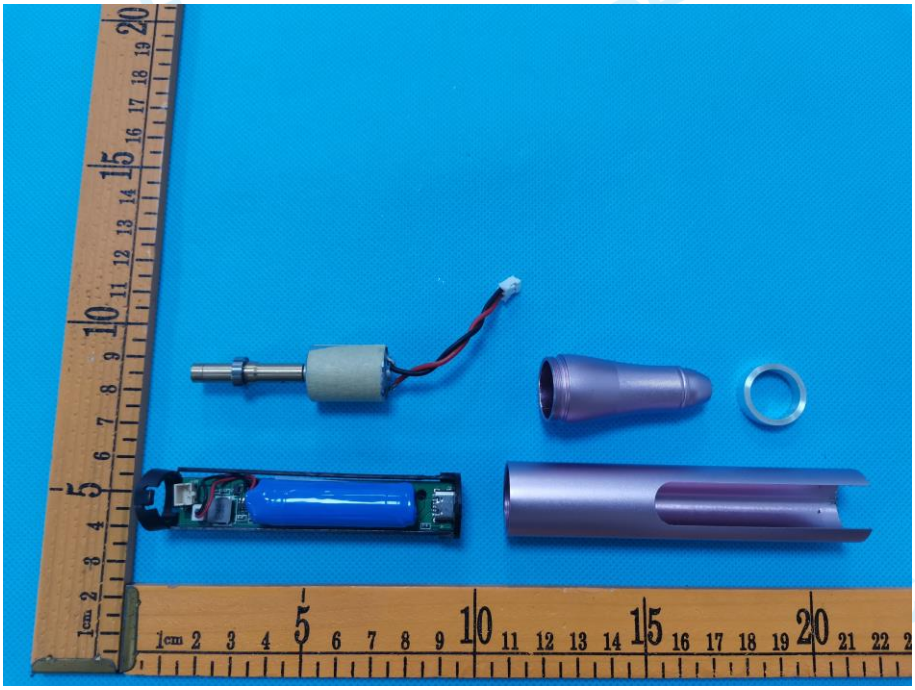


Photo 7

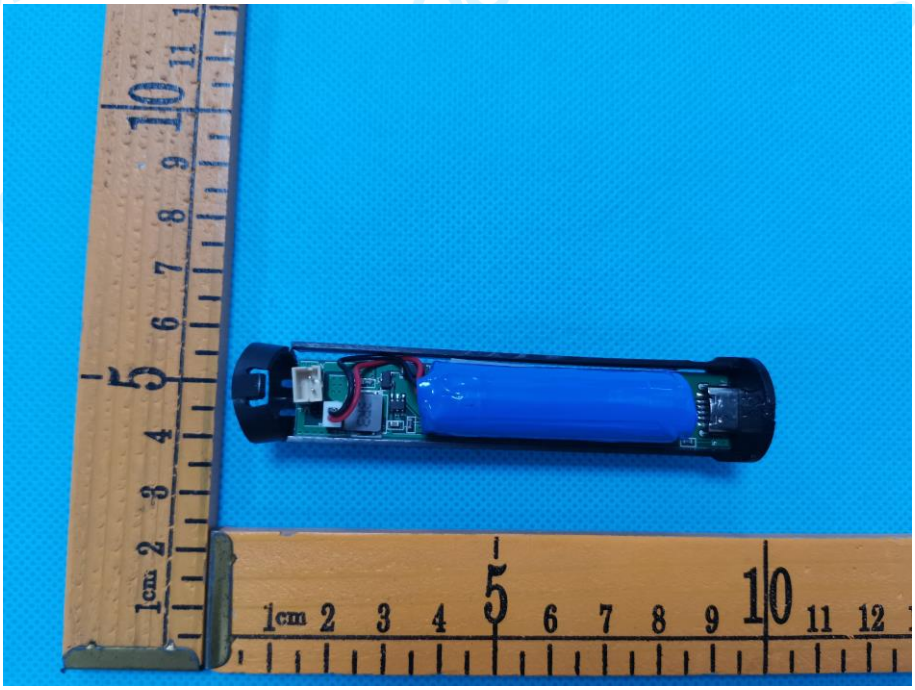


Photo 8

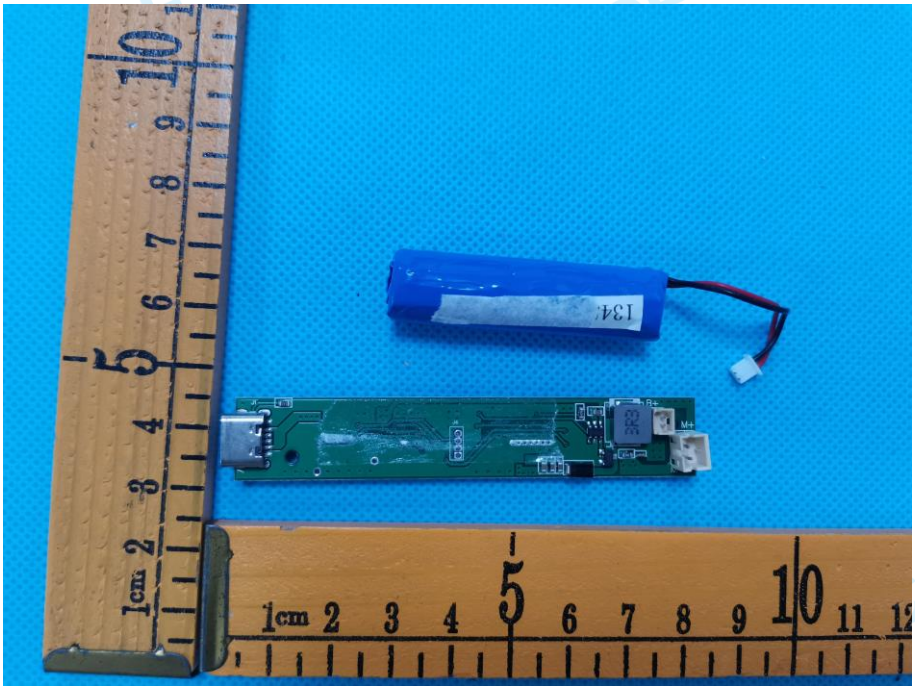


Photo 9

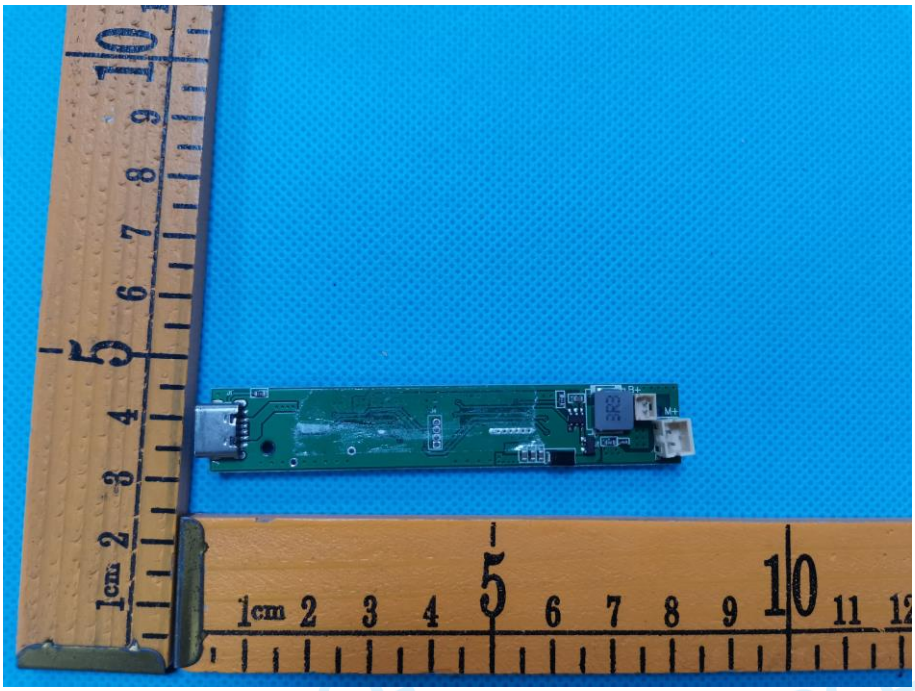


Photo 10

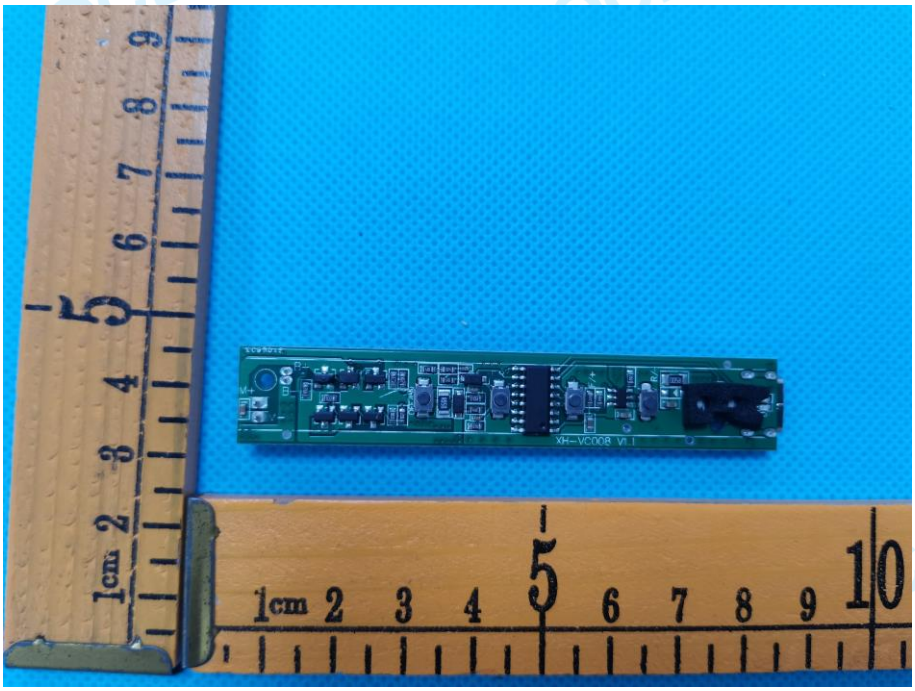


Photo 11

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

Shenzhen POCE Technology Co.,Ltd.

H Building, Hongfa Science and Technology Park,
Tangtou, Shiyan, Bao'an District, Shenzhen, China

Supplier's Declaration of Conformity

Certificate No.	:	POCE220922642MCE
Applicant	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Manufacturer	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Product	:	Portable Electric Nail Drill
Trade Mark	:	N/A
Model(s)	:	VC-008, VC-008A, VC-008B, VC-008C, VC-008D, VC-008E, VC-008F
Test Report No.	:	POCE220922642MRE

Applicable Standard
FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014
The EUT has been tested and verified to comply with FCC Part 15 subpart B, Class B digital device requirements.

Responsibilities and obligations

Strictly follow the FCC rules of 2.906, 2.908, 2.909.

Responsible party in US.

Company:
Address:
Contact person (print name):

Email:
Tel:
Fax:

Signature: _____
Date: _____

Tom Chen

For Chief Executive Tom Chen
Date: Sep. 26, 2022

This certificate of conformity is based on a single evaluation of the submitted sample(s) of the above mentioned product. It does not imply an assessment of the whole production and other relevant directives have to be observed.

扫一扫关注　扫码查证书

FCC TEST REPORT

For

Shenzhen Vantrend Beauty Technology Co., Ltd

Product Name: Portable Electric Nail Drill

Model No.: VC-008

Prepared for	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Prepared by	:	SHENZHEN POCE TECHNOLOGY CO., LTD.
Address	:	102 Building H1 & 1/F., Building H, Hongfa Science & Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, Guangdong, China
Report No.	:	POCE220922642MRE
Date of Receiver	:	Sep. 22, 2022
Number of tested samples	:	1
Date of Test	:	Sep. 22, 2022 - Sep. 26, 2022
Date of Report	:	Sep. 26, 2022

Note: *This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of Shenzhen POCE Technology Co., Ltd*

TABLE OF CONTENT

Description

Test Report Description Page

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	Portable Electric Nail Drill
Trade Name	:	N/A
Model	:	VC-008
Supplementary Model(s)	:	VC-008A, VC-008B, VC-008C, VC-008D, VC-008E, VC-008F
Test Voltage	:	DC 5V
Rating	:	DC 5V, 1A Battery: DC 3.7V
Applicant	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Manufacturer	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Test Standards	:	FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014
Test Result	:	PASS
Test Engineer	:	
Reviewed By	:	

1.2. Test Standards

Pass Indicates that the test is applicable
N/A Indicates that the test is not applicable

Standard	Test Items	Status
FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014	Disturbance Voltage at The Mains Terminals (150KHz To 30MHz)	N/A
	Radiated Disturbances (30MHz To 1000MHz)	Pass
	Radiated Disturbances (1000MHz To 6000MHz)	N/A

1.3.Test Methodology

All measurements contained in this report were conducted with CISPR 16-1, radio disturbance and immunity measuring apparatus, and CISPR16-2, Method of measurement of disturbances and immunity.
All measurement required was performed at laboratory of Shenzhen POCE Technology Co., Ltd., at 101-102, H5 Building & floor 1, Building H, Hongfa Science and Technology Park, Tangtou, Shiyan, Bao'An District, Shenzhen, China

1.4.Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

.

2. MEASURING DEVICE AND TEST EQUIPMENT

2.1.For Power Line Conducted Emission

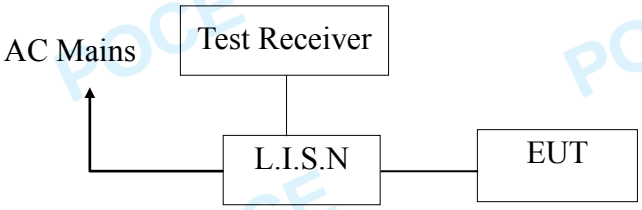
Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K03-102109-MH	Dec. 27, 2021
2.	L.I.S.N	Rohde & Schwarz	ESH3-Z5.831.5518.52	9561-G071	Dec. 27, 2021
3.	50ΩCoaxial Switch	Anritsu	MP59B	M20531	N/A
4.	Pulse Limiter	SCHWARZ BECK	VTSD 9561-F Pulse limiter 10dB Ateennator	561-G071	Dec. 27, 2021
5.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021

2.2.For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K03-102109-MH	Dec. 27, 2021
2.	Bilog Antenna	Sunol Sciences	Model JB6 Antenna	A090414	Dec. 27, 2021
3.	50ΩCoaxial Switch	Anritsu	MP59B	M20531	N/A
4.	control	Positioning Controller	Model MF-7802	MF780208362	Dec. 27, 2021
5.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021
6.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021
7.	Horn Antenna	Sunol Sciences	DRH-118	A091114	Dec. 27, 2021
8.	High Frequency Amplifier	SCHWARZ BECK	BBV9718	9718-282	Dec. 27, 2021
9.	Low Frequency Amplifier	SCHWARZ BECK	BBV9743	9743-151	Dec. 27, 2021
10.	PC	HP	HP 285G2	2XR63PA#AB2	WIN7
11.	keyboard	A4TECH	KB-8	Z190KB8U	N/A
12.	Mouse	DELL	MS111-P	N/A	N/A
13.	monitor	LG	24MP55VA	503NDPH7T144	N/A
14.	notebook	Tongfang Co., Ltd.	Z2 Air-s	421026H32110570987	WIN10

3. POWER LINE CONDUCTED EMISSION MEASUREMENT

3.1.Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

3.2.Measuring Standard

FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014
Power Line Conducted Emission Limits (Class B)

Frequency (MHz)	Limit (dBμV)	
	Quasi-Peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

3.3.EUT Configuration on Measurement

The following equipments are installed on Conducted Emission Measurement to meet FCC Part 15B requirements and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.4.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are investigated to find out the maximum conducted emission according to the FCC Part 15B regulations during conducted emission measurement.
The bandwidth of the field strength meter (R&S Test Receiver ESCI3) is set at 9KHz in 150KHz~30MHz and 200Hz in 9KHz~150KHz.
The frequency range from 150kHz to 30MHz is investigated .
Conduction Uncertainty: Uc = ± 2.72 dB

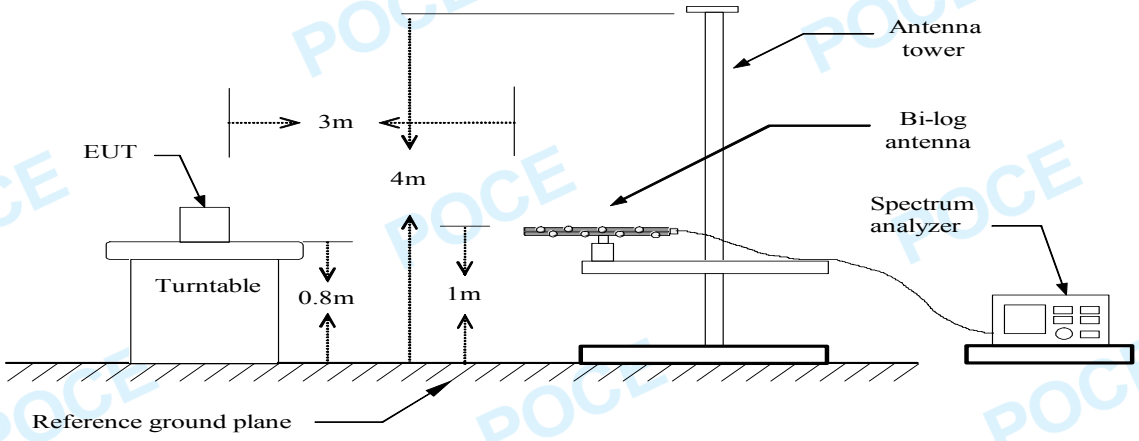
Note: 1. N/A denotes test is not applicable in this test report.
2. There was not any unintentional transmission in standby mode.

4. RADIATED EMISSION MEASUREMENT

4.1.Block Diagram of Test

4.1.1.Block diagram of test setup (In chamber)

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



Below 1000MHz

4.2.Measuring Standard

FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014
Radiated Emission Limits
All emanations from a class B device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		V/m	(dBμV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3		54(AV) 74(PK)

Note: (1) The smaller limit shall apply at the combination point between two frequency bands.
(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.

4.3. EUT Configuration on Test

The FCC Part 15B regulations test method must be used to find the maximum emission during radiated emission measurement.

4.4. Test Procedure

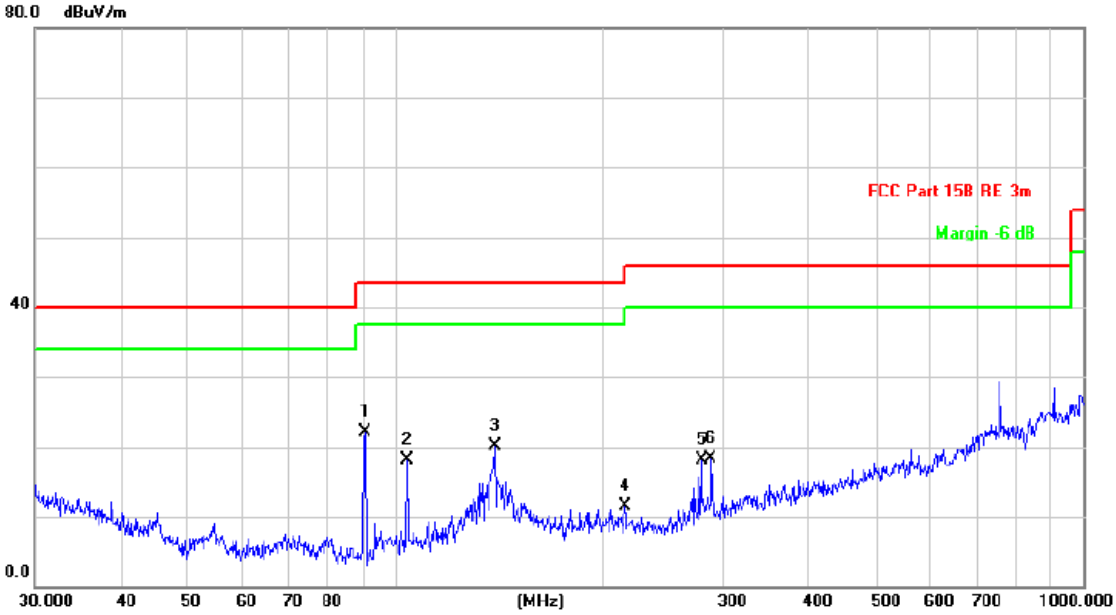
The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the Receiver (ESCI3) is set at 120kHz.
The frequency range from 30MHz to 1000MHz is investigated.

Radiation Uncertainty: Ur = ± 3.84 dB

Radiated Emission Test Data

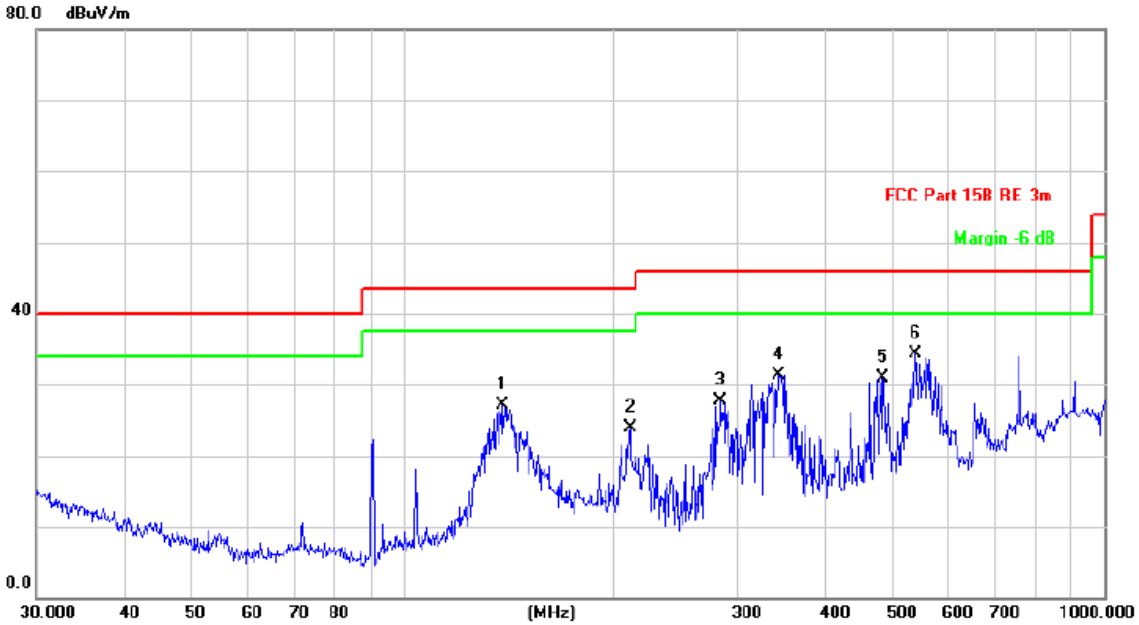
EUT :	Portable Electric Nail Drill	Temperature:	20℃
M/N :	VC-008	Humidity :	50%
Test Voltage :	DC 5V	Test Mode :	ON
Test Engineer :	Bill	Polarization :	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	90.5374	37.35	-15.29	22.06	43.50	-21.44	QP			
2		104.1701	31.31	-13.18	18.13	43.50	-25.37	QP			
3		139.8508	29.95	-9.90	20.05	43.50	-23.45	QP			
4		216.0240	21.81	-10.24	11.57	46.00	-34.43	QP			
5		279.0436	27.22	-9.18	18.04	46.00	-27.96	QP			
6		287.9904	26.99	-8.70	18.29	46.00	-27.71	QP			

Radiated Emission Test Data

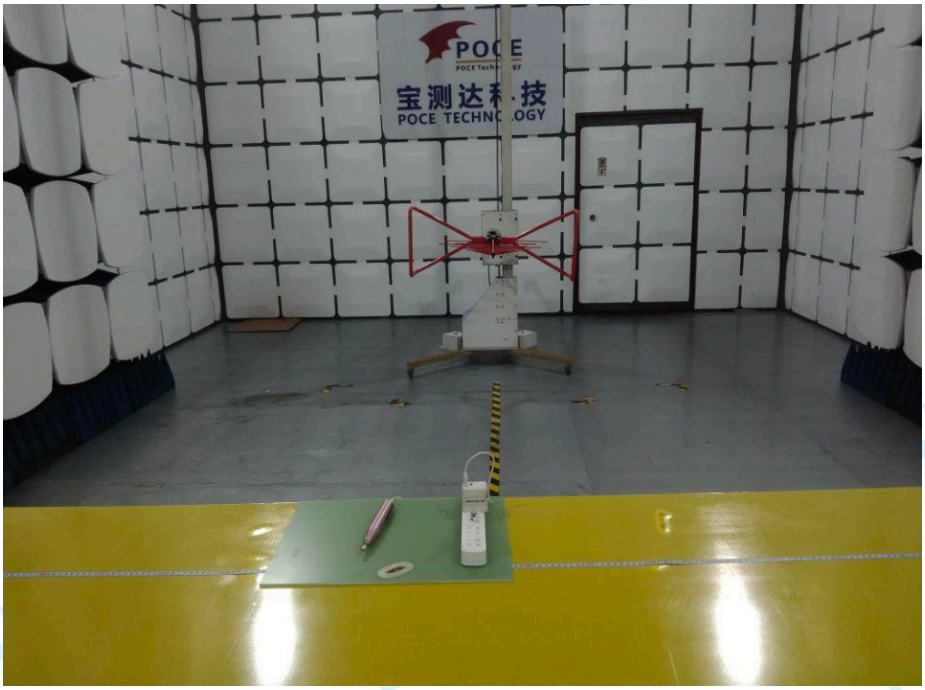
EUT :	Portable Electric Nail Drill	Temperature:	20℃
M/N :	VC-008	Humidity :	50%
Test Voltage :	DC 5V	Test Mode :	ON
Test Engineer :	Bill	Polarization :	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		138.8735	37.09	-9.94	27.15	43.50	-16.35	QP			
2		210.7860	34.14	-10.16	23.98	43.50	-19.52	QP			
3		283.9791	36.66	-8.92	27.74	46.00	-18.26	QP			
4		343.1800	38.32	-7.05	31.27	46.00	-14.73	QP			
5		482.2156	34.62	-3.65	30.97	46.00	-15.03	QP			
6	*	537.5891	37.13	-2.80	34.33	46.00	-11.67	QP			

5. PHOTOGRAPH

5.1.Photo of Radiated Emission Measurement



6. PHOTOGRAPHS OF EUT

Photo 1

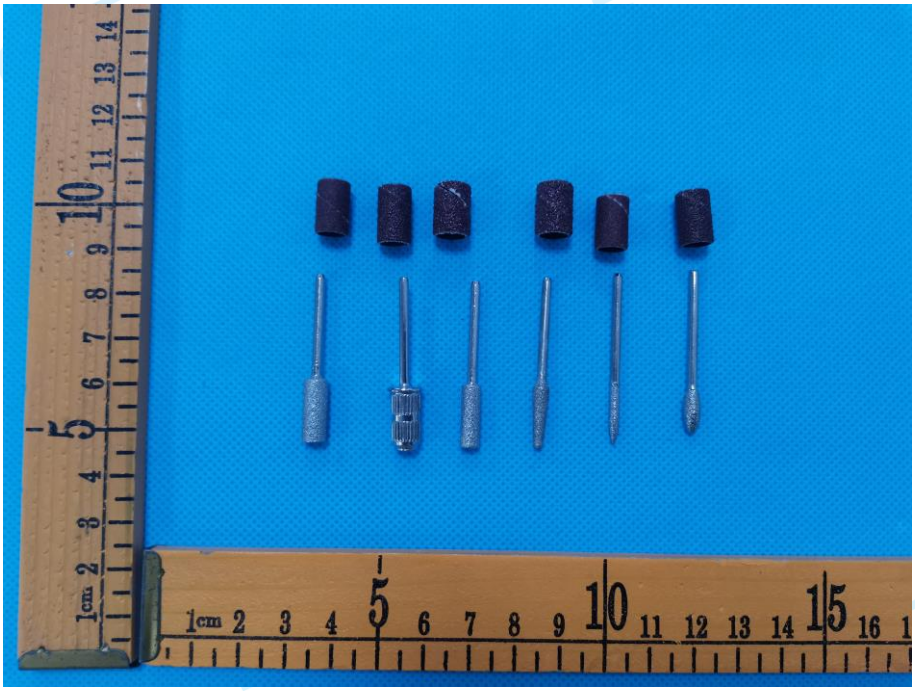


Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

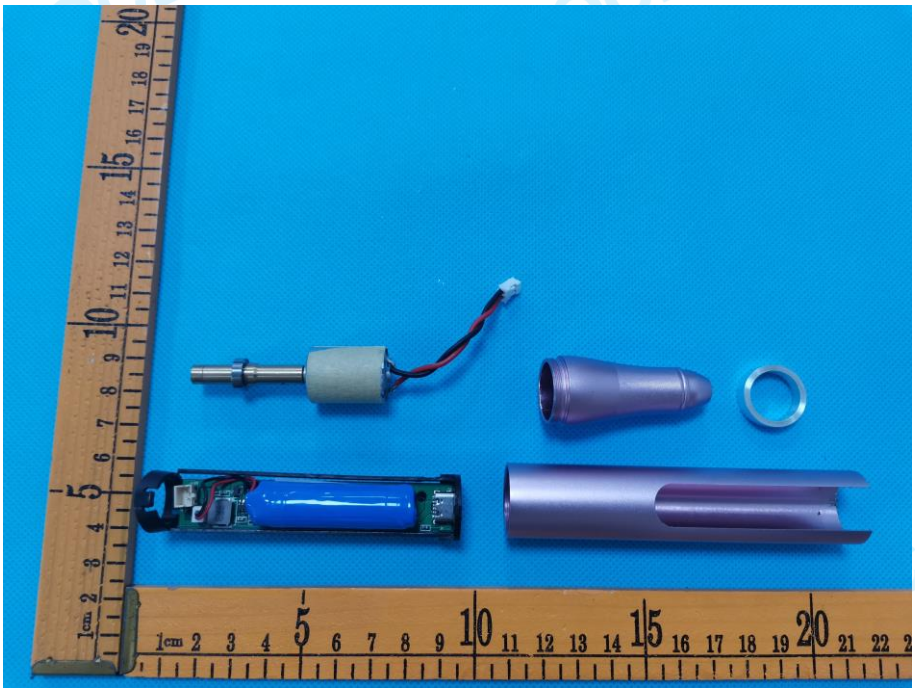


Photo 7

Photo 8

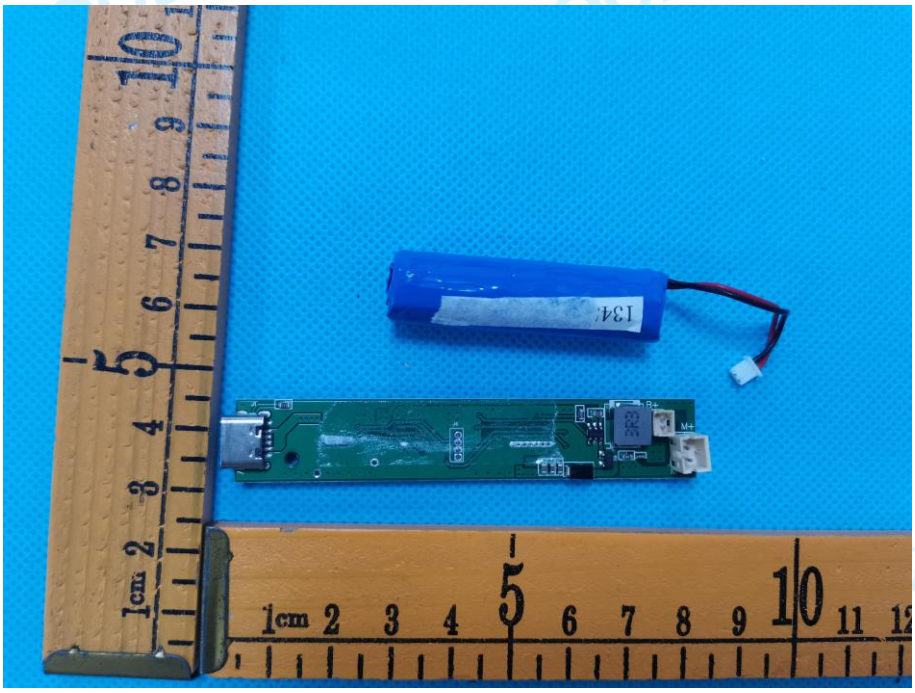


Photo 9

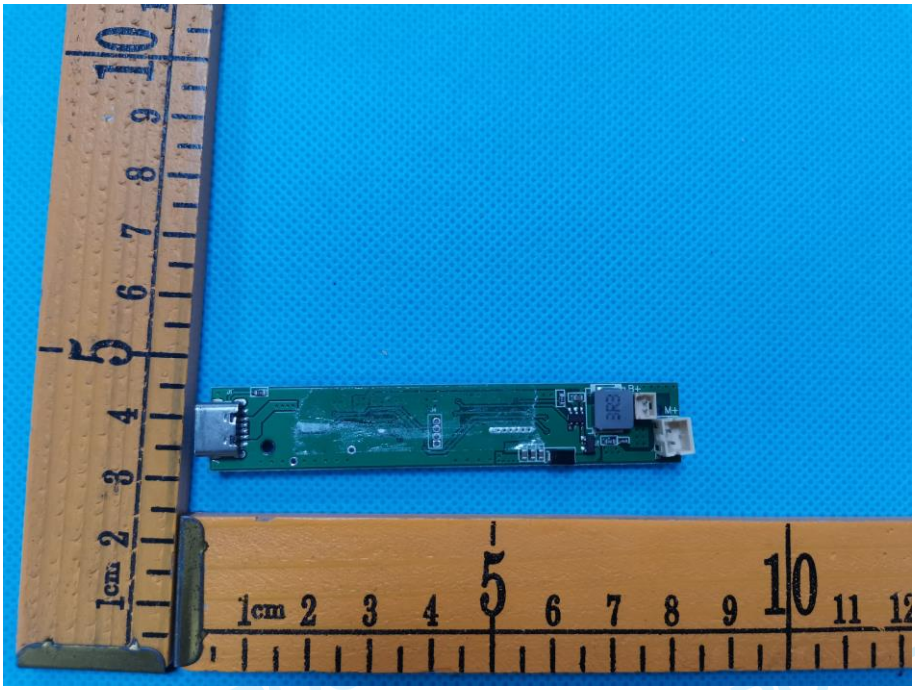


Photo 10

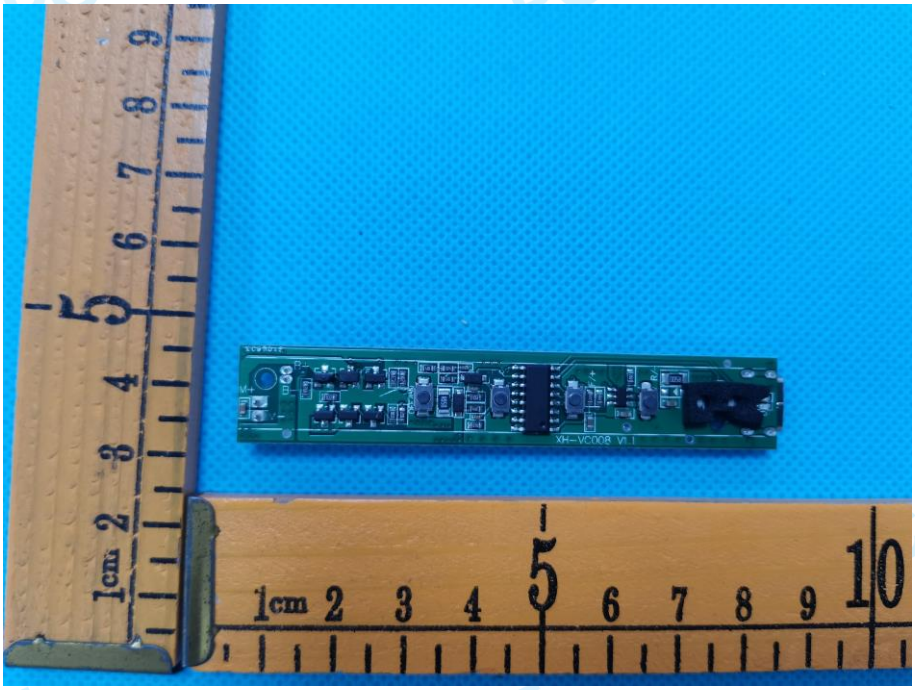


Photo 11

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

EMC TEST REPORT

For

Shenzhen Vantrend Beauty Technology Co., Ltd

Product Name: Portable Electric Nail Drill

Model No.:VC-008

Prepared for	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Prepared by	:	SHENZHEN POCE TECHNOLOGY CO., LTD.
Address	:	102 Building H1 & 1/F., Building H, Hongfa Science & Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, Guangdong, China
Report No.	:	POCE220922643NRE
Date of Receiver	:	Sep. 21, 2022
Number of tested samples	:	1
Date of Test	:	Sep. 21, 2022 - Sep. 26, 2022
Date of Report	:	Sep. 26, 2022

Note: *This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of Shenzhen POCE Technology Co., Ltd*

TABLE OF CONTENT

Description

Test Report Description Page

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	Portable Electric Nail Drill
Trade Mark	:	N/A
Model	:	VC-008
Supplementary Model	:	VC-008A, VC-008B, VC-008C, VC-008D, VC-008E, VC-008F
Test Voltage	:	DC 5V
Rating	:	DC 5 V, 1A Battery：DC3.7V
Applicant	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Manufacturer	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Test Standards	:	BS EN IEC 55014-1:2021 BS EN IEC 55014-2:2021 BS EN IEC 61000-3-2:2019/A1:2021 BS EN 61000-3-3:2013/A2:2021
Test Result	:	PASS
Test Engineer	:	
Reviewed By	:	

1.2. Test Standards

PASS Indicates that the test is applicable
N/A Indicates that the test is not applicable

Standard	Test Items	Status
BS EN IEC 55014-1:2021	Disturbance Voltage at The Mains Terminals (150KHz To 30MHz)	N/A
	Radiated Disturbances (30MHz To 1000MHz)	PASS
BS EN IEC 61000-3-2:2019/A1:2021	Harmonic Current	N/A
BS EN61000-3-3:2013/A2:2021	Voltage Fluctuations	N/A
BS EN61000-4-2:2009	Electrostatic discharge Immunity	PASS
BS EN61000-4-3: 2006/A2:2010	Radiated Susceptibility (80MHz to 1GHz)	PASS
BS EN61000-4-4:2012	Electrostatic Fast Transient/Burst Immunity	N/A
BS EN61000-4-5: 2014/A1:2017	Surge Immunity	N/A
BS EN61000-4-6: 2014/AC:2015	Conducted Susceptibility (150KHz to 230MHz)	N/A
BS EN61000-4-11: 2004/A1:2017	Voltage Dips Short Interruptions Immunity Tests	N/A

1.3.Test Methodology

All measurements contained in this report were conducted with CISPR 16-1, radio disturbance and immunity measuring apparatus, and CISPR16-2, Method of measurement of disturbances and immunity.
All measurement required was performed at laboratory of Shenzhen POCE Technology Co., Ltd., at 101-102, H5 Building & floor 1, Building H, Hongfa Science and Technology Park, Tangtou, Shiyan, Bao'An District, Shenzhen, China

1.4.Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS Registration Number. is L8229

The facility also complies with the radiated and AC line conducted test site criteria set forth in CISPR 16-1, CISPR16-2.

2. MEASURING DEVICE AND TEST EQUIPMENT

2.1.For Power Line Conducted Emission

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K03-102109-MH	Dec. 27, 2021
2.	L.I.S.N	Rohde & Schwarz	ESH3-Z5.831.5518.52	9561-G071	Dec. 27, 2021
3.	50ΩCoaxial Switch	Anritsu	MP59B	M20531	N/A
4.	Pulse Limiter	SCHWARZ BECK	VTSD 9561-F Pulse limiter 10dB Ateennator	561-G071	Dec. 27, 2021
5.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021

2.2.For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K03-102109-MH	Dec. 27, 2021
2.	Bilog Antenna	Sunol Sciences	Model JB6 Antenna	A090414	Dec. 27, 2021
3.	50ΩCoaxial Switch	Anritsu	MP59B	M20531	N/A
4.	control	Positioning Controller	Model MF-7802	MF780208362	Dec. 27, 2021
5.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021
6.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021

2.3.For Harmonic Current / Flicker Measurement

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Coupling decoupling network	SCHAFFNER	M016	20812	Dec. 27, 2021
2.	PC	N/A	P2L97	N/A	Dec. 27, 2021

2.4. For Electrostatic Discharge Immunity Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	ESD Tester	Prima	ESD61002A	144305	Dec. 27, 2021

2.5. For RF Strength Susceptibility Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Signal Generator	HP	8648A	3625U00573	Dec. 27, 2021
2.	Amplifier	AR	500A100	17034	NCR
3.	Amplifier	AR	100W/1000VC-008	17028	NCR
4.	Isotropic Field Monitor	AR	FM2000	16829	NCR
5.	Isotropic Field Probe	AR	FP2000	16755	Dec. 27, 2021
6.	Biconic Antenna	EMCO	3108	9507-2534	NCR
7.	Log-periodic Antenna	AR	AT1080	16812	NCR
8.	PC	N/A	486DX2	N/A	N/A

2.6. For Electrical Fast Transient /Burst Immunity Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Burst Tester	HTEC	HEFT 51	144303	Dec. 27, 2021
2.	Coupling Clamp	HTEC	IP-4A	147147	Dec. 27, 2021

2.7. For Surge Immunity Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Surge Tester	HTEC	HCWG	144302	Dec. 27, 2021

2.8. For Injected Current Susceptibility Test

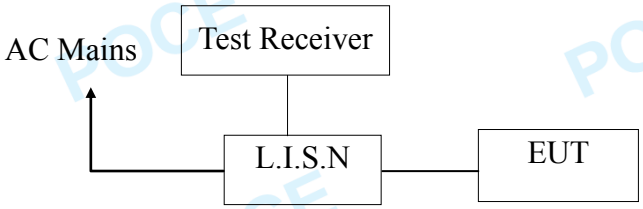
Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Simulator	EMTEST	CWS500C	0900-12	Dec. 27, 2021
2.	CDN	EMTEST	CDN-M2	5VC-00800100	Dec. 27, 2021
3.	CDN	EMTEST	CDN-M3	0900-11	Dec. 27, 2021
4.	Injection Clamp	EMTEST	F-2031-23MM	368	Dec. 27, 2021
5.	Attenuator	EMTEST	ATT6	0010222A	Dec. 27, 2021

2.9. For Voltage Dips and Interruptions Test

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.
1.	Dips Tester	HTEC	HPFS	144304	Dec. 27, 2021

3. POWER LINE CONDUCTED EMISSION MEASUREMENT

3.1.Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

3.2.Measuring Standard

BS EN IEC 55014-1:2021

Power Line Conducted Emission Limits

Frequency (MHz)	Limit (dBμV)	
	Quasi-Peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	59.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

3.3.EUT Configuration on Measurement

The following equipments are installed on Conducted Emission Measurement to meet EN55014 requirements and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.4.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are investigated to find out the maximum conducted emission according to the EN55014 regulations during conducted emission measurement.

The bandwidth of the field strength meter (R&S Test Receiver ESVC-008) is set at 9KHz in 150KHz~30MHz and 200Hz in 9KHz~150KHz.

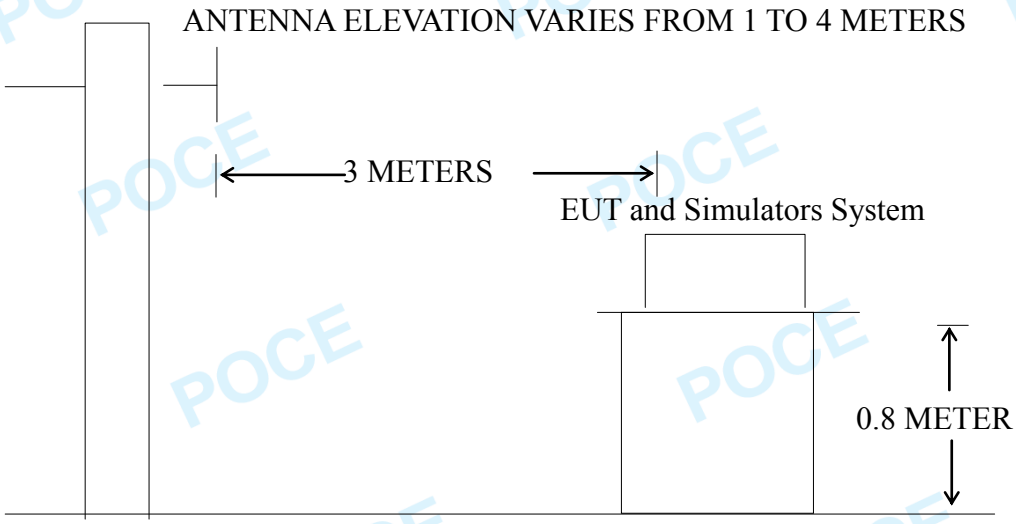
The frequency range from 150kHz to 30MHz is investigated.

Conduction Uncertainty: Uc = ± 2.72 Db

4. RADIATED EMISSION MEASUREMENT

4.1.Block Diagram of Test

4.1.1.Block diagram of test setup (In chamber)



(EUT: Portable Electric Nail Drill)

4.2.Measuring Standard

BS EN IEC 55014-1:2021
Radiated Emission Limits
including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMIT (dBμV/m)
30 ~ 230	3	40
230 ~ 1000	3	47

Note: (1) The smaller limit shall apply at the combination point between two frequency bands.
(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.

4.3.EUT Configuration on Test

The EN55014 regulations test method must be used to find the maximum emission during radiated emission measurement.

4.4. Test Procedure

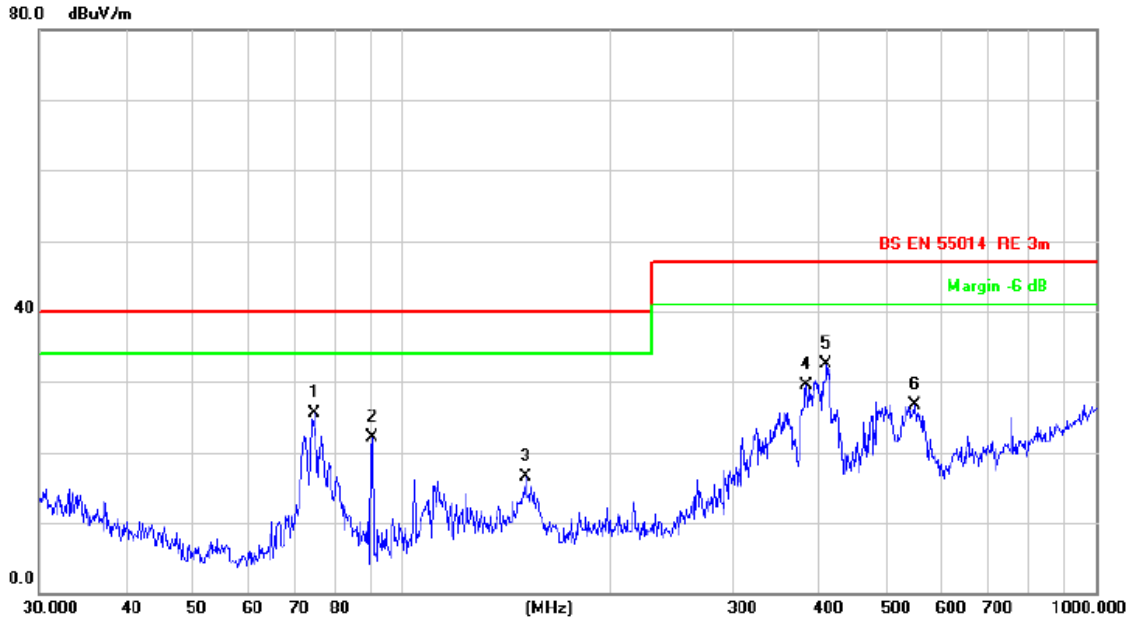
The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the Receiver (ESVC-008) is set at 120kHz.
The frequency range from 30MHz to 1000MHz is investigated.

Radiation Uncertainty: Ur = ± 3.84 dB

Radiated Emission Test Data

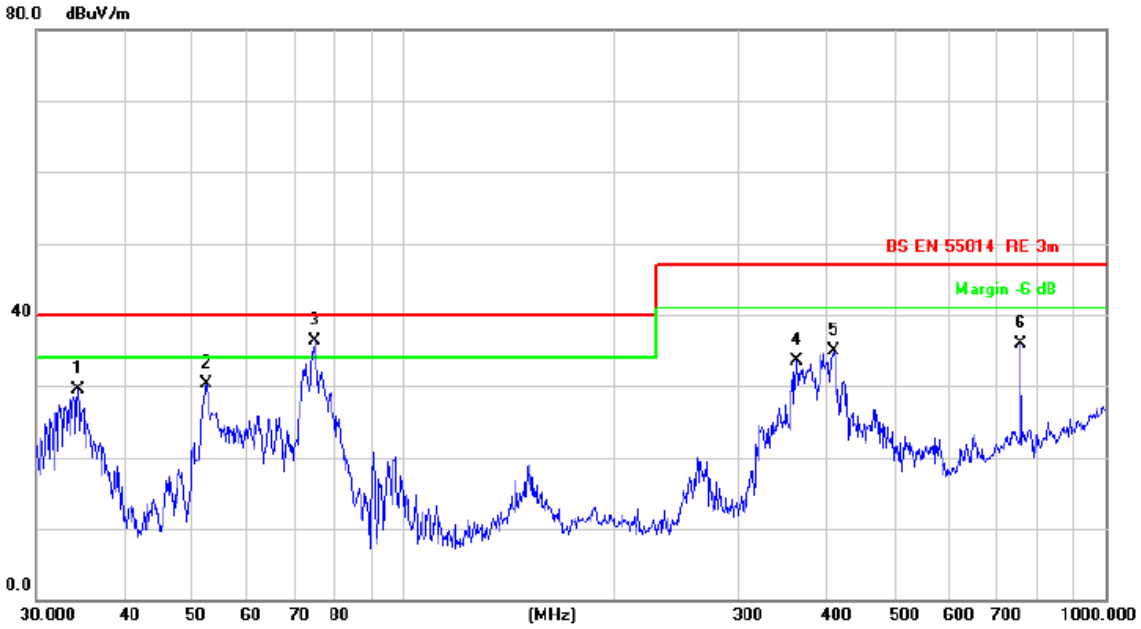
EUT	:	Portable Electric Nail Drill	Temperature:	20℃
M/N	:	VC-008	Humidity	:	50%
Test Voltage	:	DC 5V	Test Mode	:	ON
Test Engineer	:	Bill	Polarization	:	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	74.6569	40.69	-15.14	25.55	40.00	-14.45	QP			
2		90.5374	37.45	-15.29	22.16	40.00	-17.84	QP			
3		151.0666	26.02	-9.58	16.44	40.00	-23.56	QP			
4		382.5879	35.69	-6.13	29.56	47.00	-17.44	QP			
5		408.9460	37.97	-5.50	32.47	47.00	-14.53	QP			
6		547.0977	29.40	-2.70	26.70	47.00	-20.30	QP			

Radiated Emission Test Data

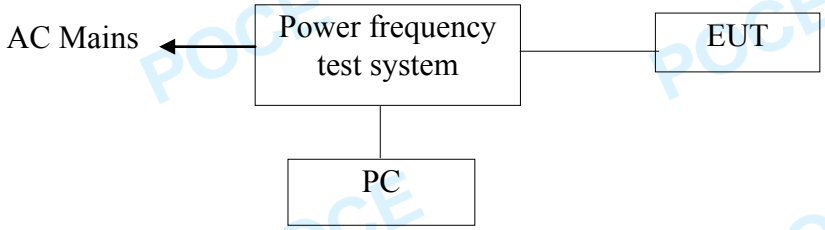
EUT	:	Portable Electric Nail Drill	Temperature:	20℃
M/N	:	VC-008	Humidity	:	50%
Test Voltage	:	DC 5V	Test Mode	:	ON
Test Engineer	:	Bill	Polarization	:	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		34.3964	36.52	-7.05	29.47	40.00	-10.53	QP			
2		52.3912	45.84	-15.55	30.29	40.00	-9.71	QP			
3	*	74.6569	51.47	-15.14	36.33	40.00	-3.67	QP			
4		362.9844	40.12	-6.60	33.52	47.00	-13.48	QP			
5		410.3825	40.38	-5.47	34.91	47.00	-12.09	QP			
6		758.0408	34.67	1.18	35.85	47.00	-11.15	QP			

5. HARMONIC CURRENT EMISSION MEASUREMENT

5.1Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

5.2 Measuring Standard

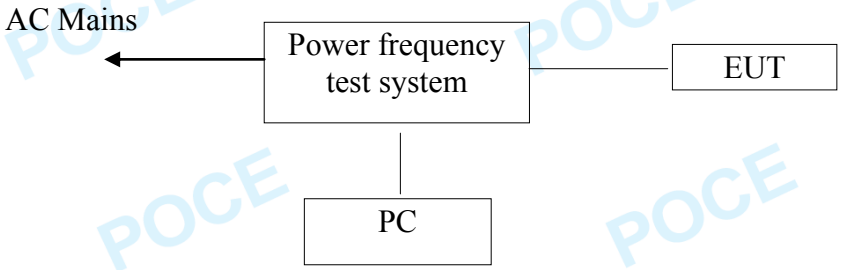
EN IEC 61000-3-2:2019/A1:2021

5.3Description of test Equipment

Note: Equipment is less than 75W, no corresponding harmonic current limit.

6. VOLTAGE FLUCTUATION AND FLICKER MEASUREMENT

6.1 Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

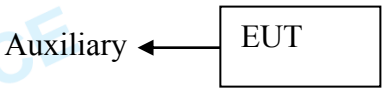
6.2 Measuring Standard

EN61000-3-3:2013/A2:2021

7. ELECTROSTATIC DISCHARGE IMMUNITY TEST

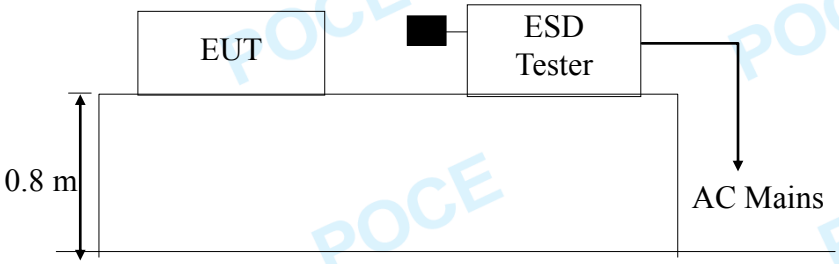
7.1 Block Diagram of Test Setup

7.1.1 Block Diagram of the EUT and the simulators



(EUT: Portable Electric Nail Drill)

7.1.2 Block diagram of ESD test setup



(EUT: Portable Electric Nail Drill)

7.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-2: 2009)
Severity Level: 3 / Air Discharge: ±8KV Level: 2 / Contact Discharge: ±4KV)

7.3 Severity Levels and Performance Criterion

7.3.1 Severity level

Level	Test Voltage Contact Discharge (KV)	Test Voltage Air Discharge (KV)
1.	±2	±2
2.	±4	±4
3.	±6	±8
4.	±8	±15
X	Special	Special

7.3.2Performance criterion: **B**

7.4 Test Procedure

7.4.1 Air Discharge:

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

7.4.2 Contact Discharge:

All the procedure shall be same as Section 7.4.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

7.4.3 Indirect discharge for horizontal coupling plane

At least 10 single discharges (in the most sensitive polarity) shall be applied at the front edge of each HCP opposite the center point of each unit (if applicable) of the EUT and 0.1m from the front of the EUT. The long axis of the discharge electrode shall be in the plane of the HCP and perpendicular to its front edge during the discharge.

7.4.4 Indirect discharge for vertical coupling plane

At least 10 single discharge (in the most sensitive polarity) shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

Electrostatic Discharger Test Results

Standard	☐ IEC 61000-4-2 ☑ EN 61000-4-2		
EUT	Portable Electric Nail Drill	**Temperature**	24℃
M/N	VC-008	**Humidity**	53%
Criterion	B	**Pressure**	1021mbar
Test Mode	Normal	**Test Date**	2022-09-23
Test Engineer	Bill		

Air Discharge

Test Points	Test Levels			Results		
	± 2KV	± 4KV	± 8KV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☒	☐	☐A ☒B
Top	☒	☒	☒	☒	☐	☐A ☒B
Bottom	☒	☒	☒	☒	☐	☐A ☒B

Contact Discharge

Test Points	Test Levels		Results		
	± 2 kV	±4 kV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☐	☐A ☒B
Top	☒	☒	☒	☐	☐A ☒B
Bottom	☒	☒	☒	☐	☐A ☒B

Discharge To Horizontal Coupling Plane

Side of EUT	Test Levels		Results		
	± 2 kV	± 4 kV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☐	☐A ☒B

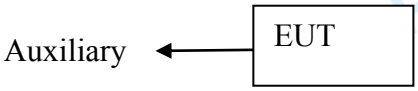
Discharge To Vertical Coupling Plane

Side of EUT	Test Levels		Results		
	± 2 kV	± 4 kV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☐	☐A ☒B

8. RF FIELD STRENGTH SUSCEPTIBILITY TEST

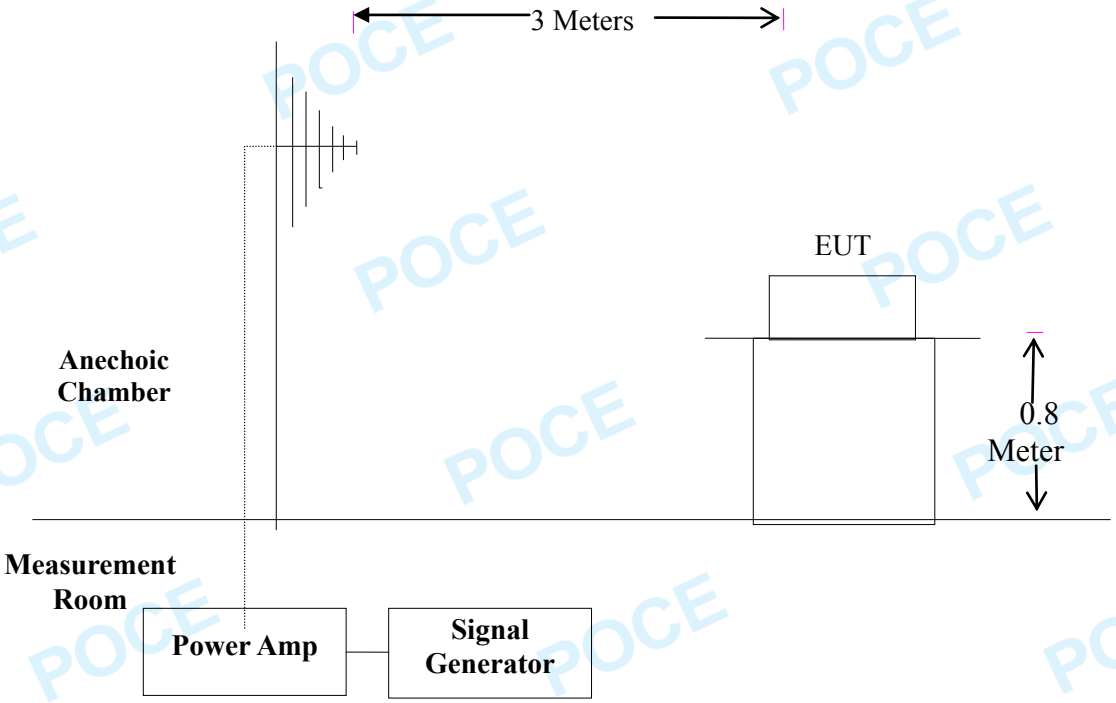
8.1 Block Diagram of Test

8.1.1 Block diagram of connection between the EUT and Load



(EUT: Portable Electric Nail Drill)

8.1.2 Block diagram of RS test setup



(EUT: Portable Electric Nail Drill)

8.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-3: 2006/A2:2010 (Severity Level: 2, 3V / m))

8.3 Severity Levels and Performance Criterion

8.3.1 Severity Levels

Level	Field Strength V/m
1.	1
2.	3
3.	10
X	Special

8.3.2 Performance Criterion: **A**

8.4Test Procedure

The EUT are placed on a table which is 0.8 meter high above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of the EUT must be faced this transmitting antenna and measured individually.
In order to judge the EUT performance, a CCD camera is used to monitor its screen.
All the scanning conditions are as following:

Condition of Test	Remark
1. Fielded Strength	3V/m (Severity Level 2)
2. Radiated Signal	Modulated
3. Scanning Frequency	80-1000MHz
4. Sweep time of radiated	0.0015 Decade/s
5. Dwell Time	1 Sec.

RF Field Strength Susceptibility Test Results

EUT	: Portable Electric Nail Drill		Temperature	:	22℃
M/N	: VC-008		Humidity	:	50 %
Test Voltage	: DC 5V		Test Mode	:	On
Field Strength	: 3 V/m		Test Date	:	2022-09-23
Test Engineer:	Bill		Frequency Range:		80 MHz to1000 MHz
Modulation:	☐None		☐ Pulse		☑AM 1KHz 80%

	Frequency Rang 1: 80~ 1000MHz			Frequency Rang 2:		
Steps	1	/	%	#	/	%

	Horizontal	Vertical	Horizontal	Vertical
Front	PASS	PASS		
Right	PASS	PASS		
Rear	PASS	PASS		
Left	PASS	PASS		

Test Equipment **:**

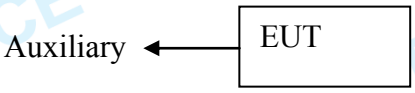
1. Signal Generator : 2031 (MARCONI)
2. Power Amplifier : 500A100 & 100W/1000VC-008(A&R)
3. Power Antenna : 3108 (EMCO) & AT1080 (A&R)
4. Field Monitor : FM2000 (A&R)

Note: Note: (The Criterion)
A:Normal performance within the specification limits;
B:Temporary degradation or less of function or performance which is self-recoverable;
C:Temporary degradation or loss of function or performance which requires operator intervention or system reset;

9. ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST

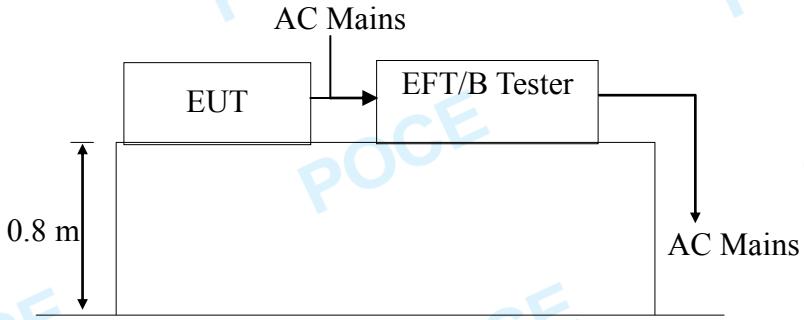
9.1 Block Diagram of Test Setup

9.1.1. Block Diagram of the EUT



(EUT: Portable Electric Nail Drill)

9.1.2. EFT Test Setup



(EUT: Portable Electric Nail Drill)

9.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-4:2012, Severity Level, Level 2**:** 1KV)

9.3 Severity Levels and Performance Criterion

9.3.1 Severity level

Open Circuit Output Test Voltage ±10%		
Level	On Power Supply Lines	On I/O (Input/Output) Signal data and control lines
1.	0.5 KV	0.25 KV
2.	1 KV	0.5 KV
3.	2 KV	1 KV
4.	4 KV	2 KV
X	Special	Special

9.3.2 Performance criterion**: B**

9.4 Test Procedure

The EUT is put on the table which is 0.8 meter high above the ground. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

9.4.1 For input and output AC power ports**:**

The EUT is connected to the power mains by using a coupling device which couples the EFT interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the duration of the test is 2 mins.

9.4.2 For signal lines and control lines ports**:**

No I/O ports. It's unnecessary to test.

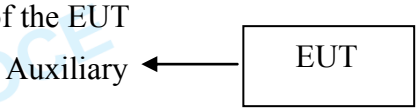
9.4.3 For DC output line ports**:**

It's unnecessary to test.

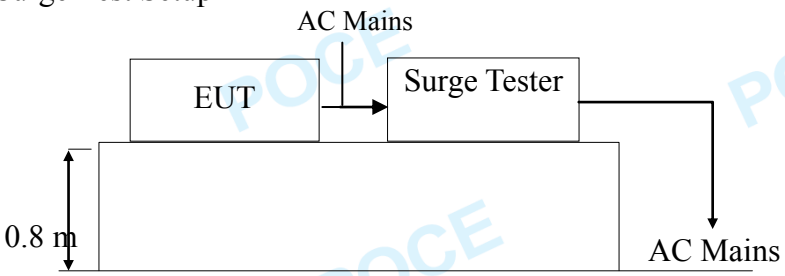
10. SURGE IMMUNITY TEST

10.1 Block Diagram of Test Setup

10.1.1 Block Diagram of the EUT



10.1.2. Surge Test Setup



(EUT: Portable Electric Nail Drill)

10.2 Test Standard

EN IEC 55014-2:2021 (EN61000-4-5: 2014/A1:2017)
Severity Level**:** Line to Line: Level 2, 1.0KV

10.3 Severity Levels and Performance Criterion

10.3.1. Severity level

Severity Level	Open-Circuit Test Voltage KV
1	0.5
2	1.0
3	2.0
4	4.0
*	Special

10.3.2 Performance criterion**: B**

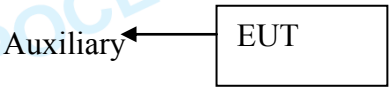
10.4 Test Procedure

1) Set up the EUT and test generator as shown on Section 10.1.2.
2) For line to line coupling mode, provide a 1.0 KV 1.2/50us voltage surge (at open-circuit condition) and 8/20us current surge to EUT selected points.
3) At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are conducted during test.
4) Different phase angles are done individually.
5) Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

11. INJECTED CURRENTS SUSCEPTIBILITY TEST

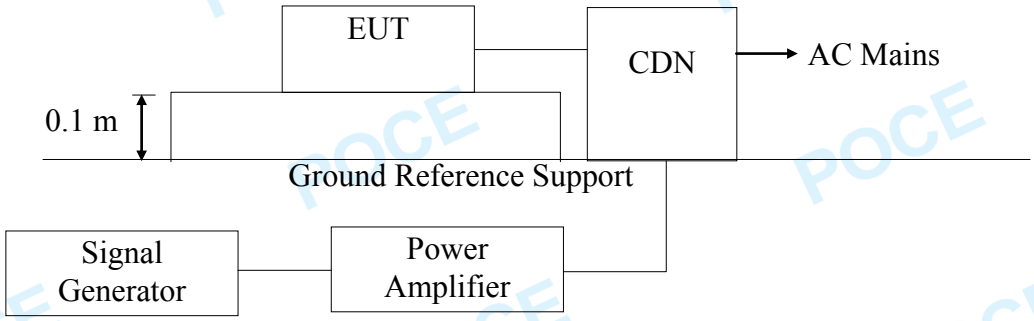
11.1 Block Diagram of Test Setup

11.1.1 Block Diagram of the EUT



(EUT: Portable Electric Nail Drill)

11.1.2 Block Diagram of Test Setup



(EUT: Portable Electric Nail Drill)

11.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-6: 2014/AC:2015, Severity Level: Level 2, 3V (rms), (0.15MHz ~ 80MHz)

11.3 Severity Levels and Performance Criterion

11.3.1 Severity level

Level	Field Strength V
1	1
2	3
3	10
X	Special

11.3.2 Performance criterion: **A**

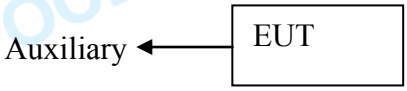
11.4 Test Procedure

1) Set up the EUT, CDN and test generators as shown on Section 11.1.2.
2) Let the EUT work in test mode and measure it.
3) The EUT are placed on an insulating support 0.1m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50 mm (where possible).
4) The disturbance signal described below is injected to EUT through CDN.
5) The EUT operates within its operational mode(s) under intended climatic conditions after power on.
6) The frequency range is swept from 150KHz to80MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with a 1KHz sine wave.
7) The rate of sweep shall not exceed $1.5*10^{-3}$decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.
8) Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

12. VOLTAGE DIPS AND INTERRUPTIONS TEST

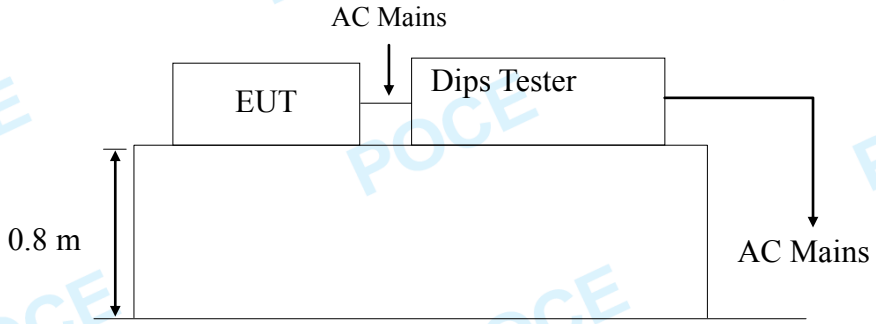
12.1 Block Diagram of Test Setup

12.1.1 Block Diagram of the EUT



(EUT: Portable Electric Nail Drill)

12.1.2 Dips Test Setup



(EUT: Portable Electric Nail Drill)

12.2 Test Standard

EN IEC 55014-2:2021(EN61000-4-11: 2004/A1:2017)

12.3 Severity Levels and Performance Criterion

12.3.1 Severity level

Test Level %UT	Voltage dip and short interruptions %UT	Duration (in period)
70	30	25P
40	60	10P
0	100	0.5P

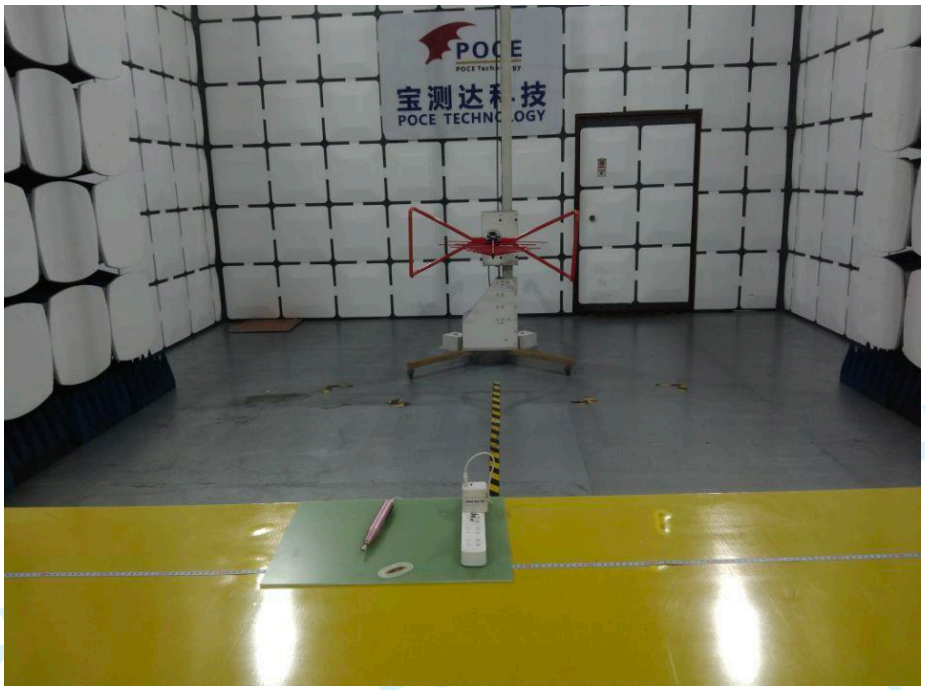
12.3.2 Performance criterion**: C&C&C**

12.4 Test Procedure

1) Set up the EUT and test generator as shown on Section 13.1.2.
2) The interruption is introduced at selected phase angles with specified duration.
3) Record any degradation of performance.

13. TEST PHOTO

13.1 Photo of Radiated Emission Measurement



14. PHOTOGRAPHS OF EUT

Photo 1

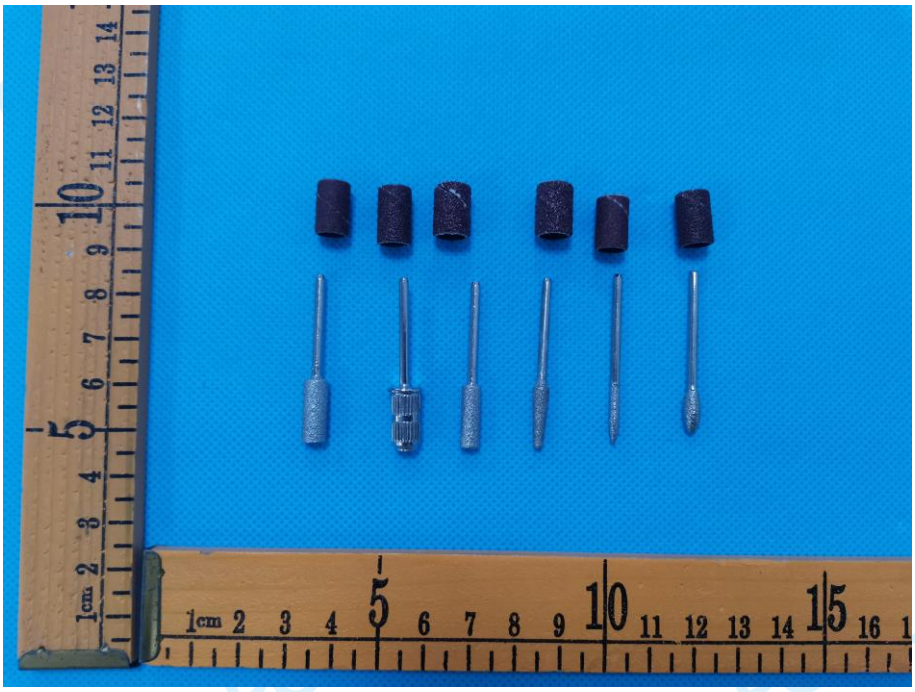


Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

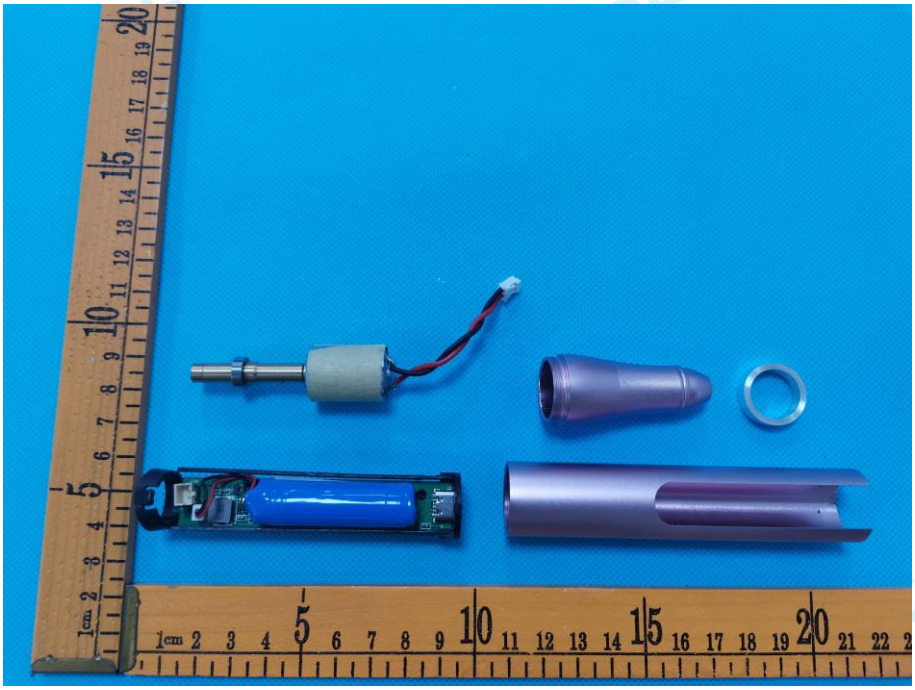


Photo 7

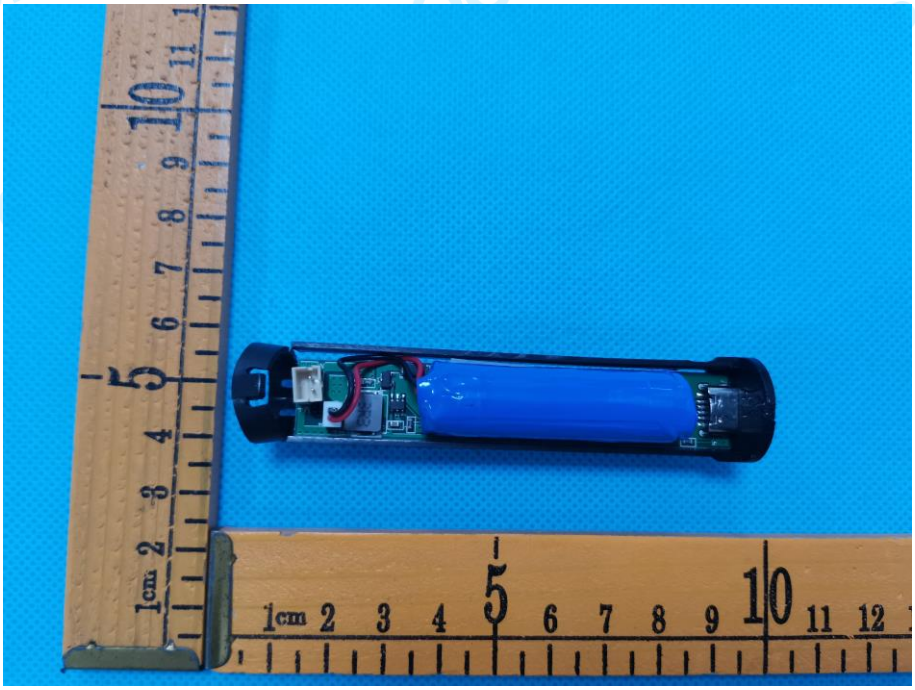


Photo 8

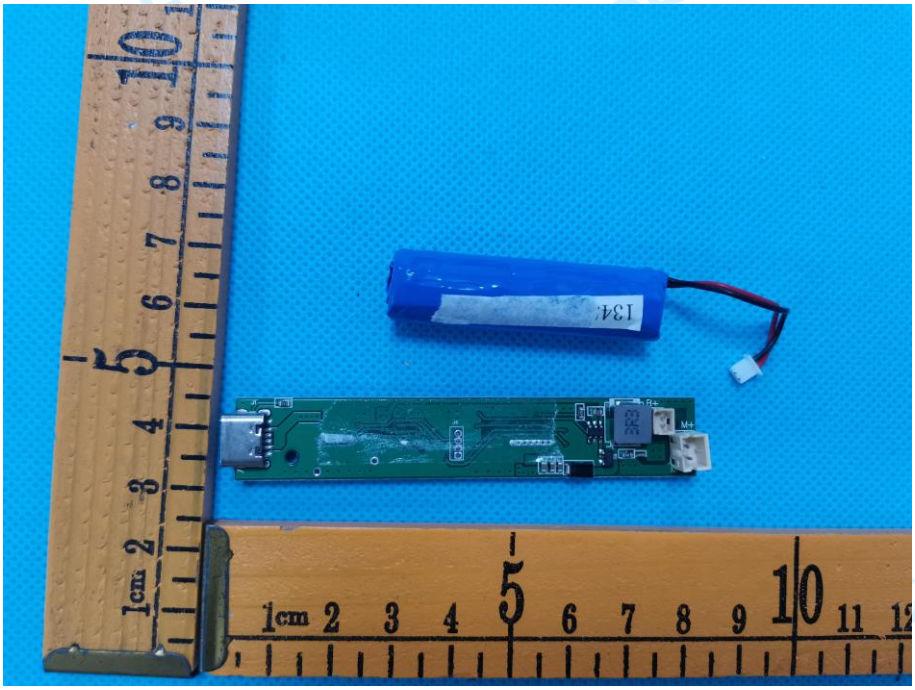


Photo 9

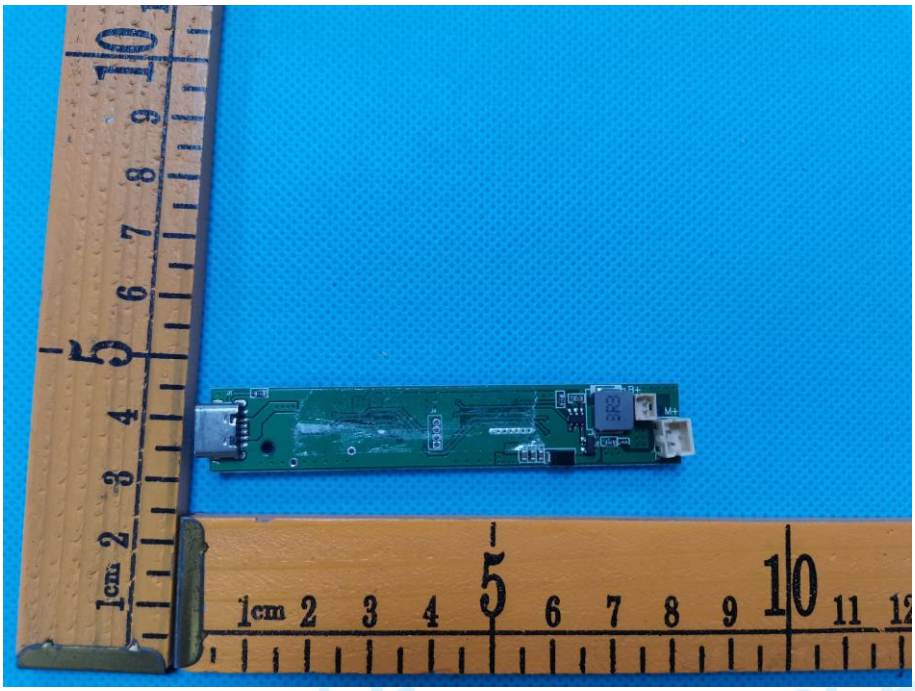


Photo 10

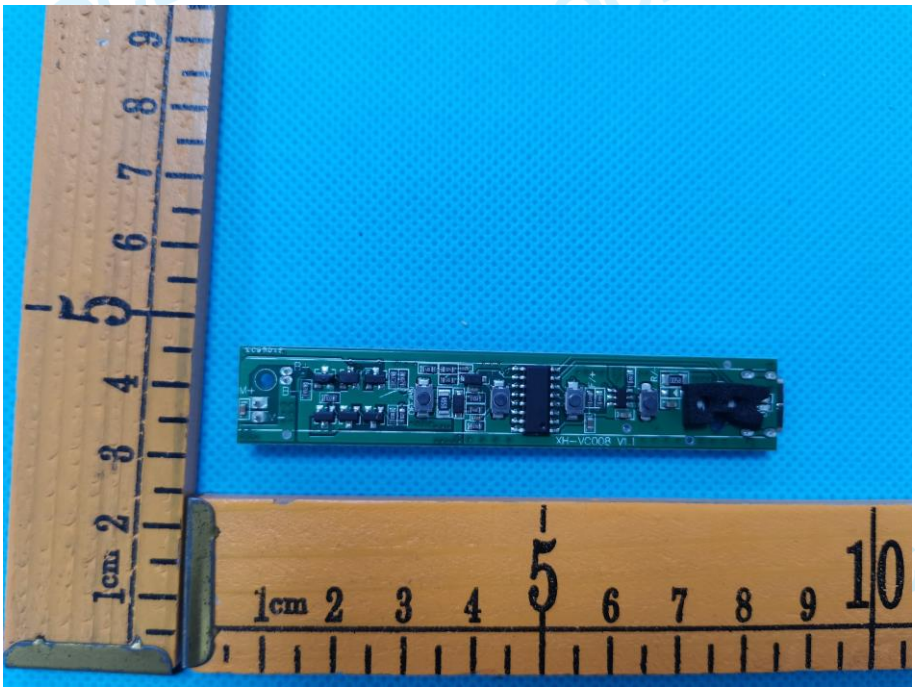


Photo 11

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

Shenzhen POCE Technology Co.,Ltd.

H Building, Hongfa Science and Technology Park,
Tangtou, Shiyan, Bao'an District, Shenzhen, China

CERTIFICATE OF CONFORMITY

Certificate No.	:	POCE220922643NCE
Applicant	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Manufacturer	:	Shenzhen Vantrend Beauty Technology Co., Ltd
Address	:	803, No.10 Huanguan South Road, Junzibu Community, guanlan street, Longhua District, Shenzhen City, Guangdong Province, China
Product	:	Portable Electric Nail Drill
Trade Name	:	N/A
Model(s)	:	VC-008, VC-008A, VC-008B, VC-008C, VC-008D, VC-008E, VC-008F
Test Report No.	:	POCE220922643NRE
Test Standards	:	**BS EN IEC 55014-1:2021** **BS EN IEC 55014-2:2021** **BS EN IEC 61000-3-2:2019/A1:2021** **BS EN 61000-3-3:2013/A2:2021**

The EUT described above has been tested by us with the listed standards and found in compliance with the council SI 2016 No. 1091Electromagnetic Compatibility Regulations 2016, It is possible to use UKCA marking to demonstrate the compliance with this EMC Directive.

UK CA

SHENZHEN POCE TECHNOLOGY CO.,LTD. APPROVED

For Chief Executive / Tom Chen
Date: Sep. 26, 2022

This certificate of conformity is based on a single evaluation of the submitted sample(s) of the above mentioned product. It does not imply an assessment of the whole production and other relevant directives have to be observed.

扫一扫关注　扫码查证书

Web: http://www.poce-cert.com Tel: +86-755-29113252 E-mail: service@poce-cert.com