



TEST REPORT

ENERGY EFFICIENCY - ELECTRIC FAN

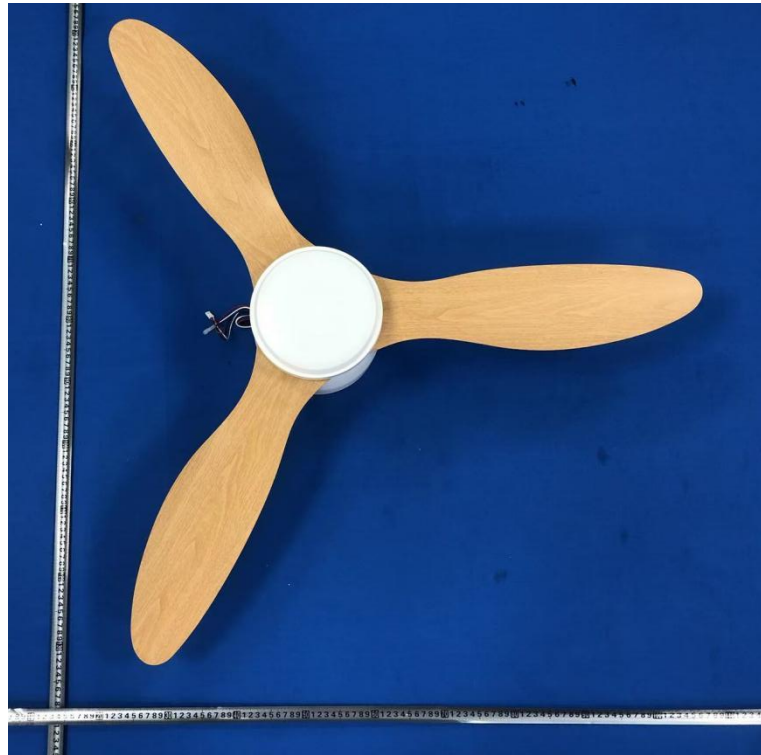
Report Number:	JAT250108014S1-ERP00
Date of Issue:	05-03-2025
Date of Revise:	NONE
Tested by (Test Engineer)	Tanac
Reviewed by (Supervisor)	Roger Zheng
Approved by (Chief Engineer)	Tim You
Testing Laboratory/Address:	Dongguan Junan Testing & Certification Co., Ltd. Room 303, Building 1, No.316, Renzhou Road, Shatian Town, Dongguan City, Guangdong Province, China.
Applicant/Address:	Zhongshan Fantasy Appliance Co.,Ltd. 3/F building 2 No.8 Yongxing North Road,Yongxing Industrial Zone, Henglan town Zhongshan Guangdong China.
Manufacturing Site/Address:	Zhongshan Fantasy Appliance Co.,Ltd. 3/F building 2 No.8 Yongxing North Road,Yongxing Industrial Zone, Henglan town Zhongshan Guangdong China.
Testing Location/Address:	Room 303, Building 1, No.316, Renzhou Road, Shatian Town, Dongguan City, Guangdong Province, China.
Product:	Ceiling fan with light
Trade Mark:	N/A
Model(s):	FSD-L4221d
Model Similarity:	N/A
Ratings:	220-240V~, 50/60Hz, 53W
Date of Sample(s)	08-Nov-2025
Received: Date of Test	08-Nov-2025
Started:	08-Nov-2025
Date of Test Finished:	08-Nov-2025
Standard(s)/Regulation(s):	(EU) No 327/2011 + (EU) No 2016/2282 EN IEC 60879:2019 EN 50564:2011 EN 60704-1:2010 + A11:2012 / EN IEC 60704-1:2021 EN IEC 60704-2-7:2020
Conclusion:	The product tested comply with the ErP requirements.
Prepared by (name, function, signature):	Engineer
Approved by (name, function, signature):	Performance Manager

Photos:**1. Nameplate showing model number and serial number (if applicable)**

Ceiling fan with light
FSD-L4221d
220-240V~, 50/60Hz 53W

Manufacturer: Zhongshan xinhe Technology Co., Ltd.
3/F building 2 No.8 Yongxing North Road, Yongxing Industrial
Zone, Henglan town Zhongshan Guangdong China.

**2. Photo of sample.**

3. Photo of sample.

**Product Details**

Item	Data
Model Number of Unit Under Tested	FSD-L4221d
Serial Number	N/A
Condition of Sample(s)	Production
Type of Fan	Ceiling fan with light
Sweep size or equivalent sweep size (for bladeless fan) [mm]	N/A
Number of fan speed	6
Control type of fan speed	Remote control
Oscillation style	vertically downward

Critical Components

Name	Manufacturer / Trademark	Type / Model	Technical data
Motor	Zhongshan Fantasy Appliance Co. Ltd.	FSD-01	Class 130(B), DC24V, Max:35W

**Ecodesign requirements**

Clause	Ecodesign requirements - GENERIC ECODESIGN REQUIREMENTS	Result - Remark	Verdict
2	REQUIREMENTS FOR MAXIMUM POWER CONSUMPTION IN OFF-MODE AND STANDBY MODE		Pass
(a)	From 1 January 2013 comfort fans shall fulfil the requirements on standby and off mode as indicated in Table 2.		Pass
Off mode	Power consumption of equipment in any off-mode condition shall not exceed 1,00 W		N/A
Standby mode	The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 1,00 W	0.954W	Pass
	The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 2,00 W		N/A
Availability of standby and/or off mode	Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source		Pass
(d)	From 1 January 2014 comfort fans shall correspond to requirements as indicated in Table 7		Pass
Off mode	Power consumption of equipment in any off-mode condition shall not exceed 0,50 W		N/A
Standby mode	The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 W	0.954W	Pass
	The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 1,00 W		N/A



Availability of standby and/or off mode	Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source		Pass
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Clause	Ecodesign requirements - GENERIC ECODESIGN REQUIREMENTS	Result - Remark	Verdict
Power management	When equipment is not providing the main function, or when other energy- using product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into: — standby mode, or — off mode, or — another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source. The power management function shall be activated before delivery.		N/A
3	PRODUCT INFORMATION REQUIREMENTS		Pass
(a)	From 1 January 2013, as regards comfort fans, the information set out in points below and calculated in accordance with Annex II shall be provided on:		Pass
(i)	the technical documentation of the product		Pass
(ii)	free access websites of manufacturers of comfort fans		Pass
(b)	The manufacturer of comfort fans shall provide laboratories performing market surveillance checks, upon request, the necessary information on the setting of the unit as applied for the establishment of service values and provide contact information for obtaining such information.		Not checked
(e)	Information requirements for comfort fans		Pass
	Manufacturer shall provide information as detailed in the table		Pass

**Measurements****Standby mode**

How is the mode selected or programmed	Connect the product to the power supply.
Providing information or status display	N/A
Sequence of events to reach the mode where the product automatically changes mode	N/A
Any notes regarding the operation of the product	N/A
Ambient temp. in °C	23.1
Test voltage in V	230
Test frequency in Hz	50
Total harmonic distortion of the supply system in %	1
Test method	Average reading method
Power in W	0.954W

Sound power test

Item	Unit	Value									
Method	--	Parallelepiped measurement surface									
a	mm	1150									
b	mm	1150									
c	mm	1940									
S	m ²	23.14									
Test setting	-	High speed									
Test voltage	V	230.1									
Test frequency	Hz	50.0									
Ambient temperature	°C	23.1									
Relative humidity	%	64.8									
Background noise level	dB	17.0									
Microphone	--	1	2	3	4	5	6	7	8	9	
L _{pi} (Average)	dB	45.17	45.33	43.78	46.94	41.11	38.66	41.48	39.69	36.93	
10 ^{0.1} L _{pi}	--	32885	34119	23878	49431	12912	7345	14060	9311	4932	
Averaged sound pressure level	dB(A)	43.2									
Sound power level	dB(A)	55.4									

Co-ordinates of microphone positions:

N°	x	y	z
1	a	0	0,5c
2	0	b	0,5c
3	-a	0	0,5c
4	0	-b	0,5c
5	a	b	c
6	-a	b	c
7	-a	-b	c
8	a	-b	c
9	0	0	c

Measurement surface area:

$$S = 2 (2bc + 2ac + 2ab)$$

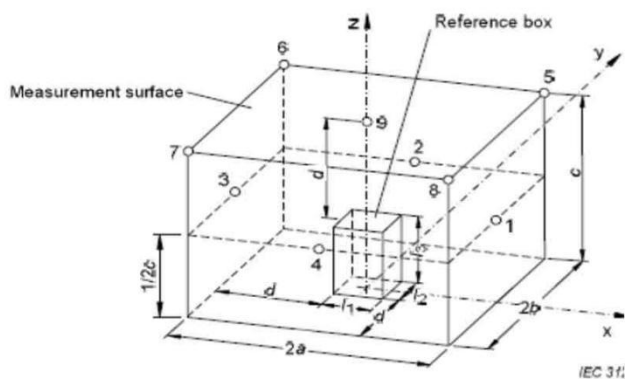


Figure 1 – Measurement surface – parallelepiped – with key microphone positions, for floor free-standing appliances



Conclusion

Item	Symb ol	Unit	Teste d	Rated
Maximum fan flow rate	F	m^3/min	76.2	-
Fan power input	P	W	31.8	-
Service value	SV	$(m^3/min)/W$	2.4	-
Standby power consumption	P_{SB}	W	0.954	-
Seasonal electricity consumption	Q	kWh/a	4.9	-
Fan sound power level	L_{WA}	$dB(A)$	43.2	-
Maximum air velocity	c	$meters/sec$	2.7	-



Remark:

1.comfort fan is shown in the following table:

Energy efficiency grade	Seasonal space cooling energy efficiency grade(SV) ((m3/min)/W)	
A (highest grade)	$SV \geq 6$	☐
B	$5 \leq SV < 6$	☐
C	$4 \leq SV < 5$	☐
D	$3 \leq SV < 4$	☐
E	$2 \leq SV < 3$	☒
F	$1 \leq SV < 2$	☐
G (lowest energy level)	$SV < 1$	☐



2. comfort fans are shown in the following table:

Energy efficiency level	sound power(dB(A))	
A	< 45	☐
B	≥ 45 and<55	☐
C	≥ 55 and<65	☒
D	≥ 65	☐