Test Report issued under the responsibility of

DEKRA

TEST REPORT

IEC 62841-2-4

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety

Part 2-4: Particular requirements for hand-held sanders and polishers other than disk type

Report Number. .....:	6018730.50B
Date of issue .....:	2019-05-06
Total number of pages.....	8 pages
Name of Testing Laboratory preparing the Report.....:	DEKRA Testing and Certification (Shanghai) Ltd. 3F., #250 Jiangchangsan Road, Building 16, Headquarter Economy Park Shibei Hi-Tech Park, Zhabei District, Shanghai, 200436, China
Applicant's name.....:	LEE YEONG INDUSTRIAL CO., LTD.
Address .....:	No.2, Kejia Rd., Douliu City, Yunlin County 64057, Taiwan
Test specification:	
Standard .....:	IEC 62841-2-4:2014 (First Edition) for use in combination with IEC 62841-1:2014 (First Edition)
Test procedure .....:	CB Scheme
Non-standard test method.....:	N/A
Test Report Form No.....:	IEC62841_2_4A
Test Report Form(s) Originator .....:	DEKRA Certification B.V.
Master TRF.....:	2014-09

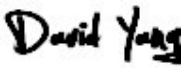
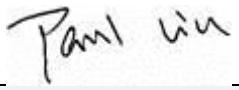
If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test item description ..... :	Sander
Trade Mark ..... :	AGP
Manufacturer ..... :	LEE YEONG INDUSTRIAL CO., LTD. No.2, Kejia Rd., Douliu City, Yunlin County 64057, Taiwan
Model/Type reference ..... :	DP100; SMDKIT; SM100; WS760; SMWKIT; RSM 760; RAIL-MATE;WS620; RSM 620
Ratings ..... :	WS620; RSM 620: 110-120 Vac; 50-60 Hz; 1300 W; Class II 220-240 Vac; 50-60 Hz; 1500 W; Class II DP100; SMDKIT; SM100; WS760; SMWKIT; RSM 760; RAIL-MATE: 110-120 Vac; 50-60 Hz; 850 W; Class II 220-240 Vac; 50-60 Hz; 1200 W; Class II

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):			
☒	**CB Testing Laboratory:**	DEKRA Testing and Certification (Shanghai) Ltd.	
Testing location/ address .....:		3F, #250 Jiangchangsan Road, Building 16, Headquarter Economy Park Shibei Hi-Tech Park, Zhabei District, Shanghai, 200436, China	
☐	**Associated Testing Laboratory:**		
Tested by (name, function, signature) .....:		David Yang	
Approved by (name, function, signature) ...:		Paul Liu	
☐	~~**Testing procedure: TMP/CTF Stage 1:**~~		
~~**Testing location/ address .....:**~~			
~~**Tested by (name, function, signature) .....:**~~			
~~**Approved by (name, function, signature) ...:**~~			
☐	~~**Testing procedure: WMT/CTF Stage 2:**~~		
~~**Testing location/ address .....:**~~			
~~**Tested by (name + signature) .....:**~~			
~~**Witnessed by (name, function, signature)..:**~~			
~~**Approved by (name, function, signature) ...:**~~			
☐	~~**Testing procedure: SMT/CTF Stage 3 or 4:**~~		
~~**Testing location/ address .....:**~~			
~~**Tested by (name, function, signature) .....:**~~			
~~**Witnessed by (name, function, signature)..:**~~			
~~**Approved by (name, function, signature) ...:**~~			
~~**Supervised by (name, function, signature) :**~~			

List of Attachments (including a total number of pages in each attachment):

See part 1

Summary of testing:

See part 1

Tests performed (name of test and test clause):	**Testing location:**
See part 1	See part 1

Summary of compliance with National Differences

See part 1

Copy of marking plate

See part 1

Test item particulars ..... :	
Category of equipment ..... :	Hand held
Protection Class of tool..... :	Class II
Method of supply cord attachment ..... :	Type Y
Duty conditions ..... :	Normal
Type of operation..... :	Normal
Degree of protection ..... :	-
Mass of equipment (kg)..... :	2,98 kg
Accessories and detachable parts included ..... :	Dust collection device
Other options included..... :	-
Possible test case verdicts:	
- test case does not apply to the test object..... :	N/A
- test object does meet the requirement ..... :	P (Pass)
- test object does not meet the requirement ..... :	F (Fail)
Testing ..... :	
Date of receipt of test item ..... :	2018-10-02
Date (s) of performance of tests ..... :	2018-10-02 to 2019-02-21

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.
"(see Enclosure #)" refers to additional information appended to the report.
"(see appended table)" refers to a table appended to the report.

Throughout this report a ☒ comma / ☐ point is used as the decimal separator.

This Test Report Form can be used for the investigation of hand-held electric motor-operated sanders in accordance with IEC62841-2-4. It can only be used together with IEC 62841-1. This standard applies to sanders and polishers with the exception of all types of disc-type tools, which are covered by IEC 62841-2-3.

Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided ..... :

☐ **Yes**

☒ **Not applicable**

When differences exist; they shall be identified in the General Product Information section.

Name and address of factory (ies)..... : See part 1

General product information: See Part 1

IEC 62841-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
5	**GENERAL CONDITIONS FOR THE TESTS**		**-**
5.17	The mass of the tool includes the dust extraction adapter, if any		P
8	**MARKING AND INSTRUCTIONS**		**-**
8.3	For belt sanders and drum sanders and polishers, the direction of rotation indicates on the tool by an arrow, raised or sunk, or by any other means no less visible and indelible. .....:	-	P
8.14.1	For belt sanders and drum sanders, the additional safety instructions as specified in 8.14.1.101 are given. This part may be printed separately from the “General Power Tool Safety Warnings”.		P
8.14.1.101	Belt sander and drum sander safety warnings		-
	Hold the power tool by insulated gripping surfaces, because the sanding surface may contact its own cord. Cutting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock		P
17	**ENDURANCE**		**-**
17.2	Orbital sanders and polishers, random orbit sanders and polishers, and reciprocating sanders and polishers are operated while the platen, fitted with abrasive paper in reverse position or a polishing bonnet as applicable, is resting under the weight of the sander or polisher on a steel plate		N/A
	The abrasive paper was replaced as required to avoid direct contact between platen and steel plate.		N/A
	These tools are only tested in the upright position where the platen is horizontal		N/A
18	**ABNORMAL OPERATION**		**-**
18.8	Required performance levels.....:		N/A
19	**MECHANICAL HAZARDS**		**-**
19.1	Moving and dangerous parts other than the abrasive belt and belt rollers of belt sanders, as far as is compatible with the use and working of the tool, be so positioned or enclosed to provide adequate protection against personal injury. The requirements for the abrasive belt and belt rollers of belt sanders are specified in 19.1.101, 19.1.102 and 19.1.103.		P

IEC 62841-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
19.1.101	Belt sanders designed to minimise the risk due to the nip hazard from the roller closest to the operator without limiting the intended functionality of the tool.	WS760 (belt sander): The distance from main-handle with main switch knob to the closest roller is more than 200 mm and the tool should be operated with 2 hands. WS620 (belt sander): The distance from main-handle with main switch knob to the closest roller is more than 300 mm and the tool should be operated with 2 hands.	P
	1) An test rod with 8 mm diameter, applied parallel to the axis of the roller, not able to enter the in-feed nip between the roller and the abrasive belt. As the rod is attempted to be inserted into this area, the abrasive belt not be displaced in any way that would allow the entry of the rod. See Figure 101.		N/A
	2) The abrasive belt is removed. A steel ball with 7 mm diameter is placed all along the in-feed gap between the intended belt contact surface of the roller and the belt housing enclosure with the tool turned upside down in the most unfavourable position, see Figure 102. The steel ball not move under its own weight into the gap between the roller and the belt housing beyond the line of complete passage as shown in Figure 102.		N/A
19.1.102	Belt sanders designed to limit access to in-feed nip locations from roller(s) other than those closest to the operator without limiting the intended functionality of the tool.		P
	In-feed nip locations are regarded to be located		P
	Either between the intended belt contact surface of the roller and the belt housing enclosure or		P
	Between the intended belt contact surface of the roller and the abrasive belt.		P
	a) The chain distance between any in-feed nip location and the closest point on a handle or grasping surface identified in accordance with 8.14.2 b) 6) is at least 100 mm.		N/A

IEC 62841-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
	b) If a stick-type auxiliary handle is mounted to the side with its axis perpendicular to the direction of movement of the abrasive belt, it provided with a flange having a height not less than 12 mm above the grasping surface between the grasping area and the in-feed nip location.		P
19.1.103	The ends of rollers that extend past the edge of the intended belt contact surface is smooth and free of sharp edges.		P
19.6	This subclause is not applicable.		N/A
20	**MECHANICAL STRENGTH**		**-**
20.5	This subclause is not applicable for sanders and polishers except for belt sanders and drum sanders.		P
21	**CONSTRUCTION**		**-**
21.18.1	For sanders other than belt sanders and drum sanders, power switches other than momentary power switches are permitted.		N/A
21.30	This subclause is not applicable for sanders and polishers except for belt sanders and drum sanders.		P
21.35	This subclause is applicable for:		-
	– belt sanders and random orbit sanders with a sanding contact surface exceeding 100 cm^2;	WS760: 70 cm^2 WS620: 56 cm^2	N/A
	– drum sanders other than spindle sanders;	For drum sander DP100	P
	– other sanders, with a sanding contact surface exceeding 200 cm^2, unless they are intended to process only metal in accordance with 8.14.2 b) 4).		N/A
Annex I	**MEASUREMENT OF NOISE AND VIBRATION EMISSIONS**		**-**
I.2	Noise test code (grade 2)		P
I.2.2	Sound pressure level		-
	Sound pressure level L_{pA} (dB(A))…….:	See report: 6018730.50A	P
I.2.2	Emission sound power level		-
	Sound power level L_{WA} (dB(A))…….:	See report: 6018730.50A	P
I.2.4	Installation and mounting conditions of the power tools during noise tests		P
	Sanders and polishers are suspended. The plate of the tool is horizontal.		P
I.2.5	Operating conditions		P

IEC 62841-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
	Sanders and polishers are tested at no-load.		P
I.2.6	Measurement uncertainties		-
	Uncertainty K (dB)…..:	See report: 6018730.50A	P
I.3	Vibration		-
I.3.3.2	Location of measurement		P
I.3.5.3	Operating conditions		-
	Sanders are tested under load observing the conditions shown in Tables I.101		P
	Polishers are tested under load observing the conditions shown in Tables I.102.		N/A
I.3.6.2	Declaration of the vibration total value (instruction manual)		-
	Vibration emission value ah (m/s²)…..:	See report: 6018730.50A	P
	Uncertainty K (m/s²)…..:	See report: 6018730.50A	P
Annex K	**BATTERY TOOLS AND BATTERY PACKS**		N/A
	Clauses K.8.14.1.101, K.17.2, K.20.5 and K.21.30 are not applicable		-
Annex L	**BATTERY TOOLS AND BATTERY PACKS PROVIDED WITH MAINS CONNECTION OR NON-ISOLATED SOURCES**		N/A
	All applicable Clauses of Annex L were applied	See Part 1	-

----------END----------