TEST REPORT

Report Reference No.	:	6055395.51QS
Tested by (name + signature)	:	Jiawei Chen *(signature: Jiawei Chen)*
Approved by (name + signature)	:	David Yang *(signature: David Yang)*
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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
Applicant	:	LEE YEONG INDUSTRIAL CO., Ltd.
Address	:	No.2, Kejia Rd. Douliu City 64057 YUNLIN COUNTY TAIWAN

Test specification:

Standards	:	EN 60745-1:2009+A11:2010, EN 60745-2-3:2011
Test procedure	:	☐ Basic safety test ☐ Screen test ☐ Quick scan ☐ Basic EMC test ☐ Flash test ☐ IP 54 ☒ Noise test ☒ Vibration test

Test object description	:	Dry wall sander
Trade Mark	:	AGP
Manufacturer	:	LEE YEONG INDUSTRIAL CO., Ltd.
Address	:	No.2, Kejia Rd. Douliu City 64057 YUNLIN COUNTY TAIWAN
Model/Type reference	:	SB9
Ratings	:	100-240 Vac, 400W
Number of test objects	:	1 pc for noise and vibration measurement

Conclusion:

- The following noise and vibration values (minimum) shall be declared on instruction manual:

Declared dual-number noise emission values in accordance with ISO 4871

Measured A-weighted sound power level, L_{WA} (ref.1pW),in decibels	**88,5 dB(A)**
Uncertainty, K_{WA},in decibels	**3 dB(A)**
Measured A-weighted emission sound pressure level at the work station, L_{pA} (ref.20μPa),in decibels	**77,5 dB(A)**
Uncertainty, K_{pA},in decibels	**3 dB(A)**

Values determined according to noise test code given in EN 60745-1:2009+A11:2010, using the basic standards EN 60745-2-3:2011.

NOTE - The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.

Vibration total values (triaxial vector sum) determined according to EN60745

	the work mode description "Disc sanding"
Vibration emission Value a_h	**3,3 m/s²**
Uncertainty K	**1,5 m/s²**

Summary of testing:	
Location of testing and Environmental condition:	
Location:	Noise lab of DEKRA Testing and Certification (Shanghai) Ltd.
Background noise:	25,5 dB(A)
Dimension:	3,95m*2,8m*2,4m
Air temperature:	25℃
Relative humidity:	50%
Barometric pressure:	101,1kPa
Wind velocity:	0m/s

Test equipment list:

Equipment	Type	Serial number	Manufacturer	Calibration due date
Microphone	4189	3148398	Brüel & Kjær	2021/03/24
Pulse	3050-A-060	3050-112020	Brüel & Kjær	2021/04/07
Calibrator	4231	3022391	Brüel & Kjær	2021/03/18
Accelerometer	4535B001	32675	Brüel & Kjær	2021/03/22
Accelerometer	4535B001	32674	Brüel & Kjær	2021/03/22

Part 1   Noise test

1.1 Test standards

EN 60745-1:2009+A11:2010, EN 60745-2-3:2011

1.2 Description of the hand-held tool

Product: Dry wall sander

Model: SB9

Technical data: 100-240 Vac, 400W

1.3 Description of mounting and operation conditions

Mounting: The dry wall sander was suspended and hold horizontally.

Operating conditions: No load/max.speed

1.4 Microphone positions:
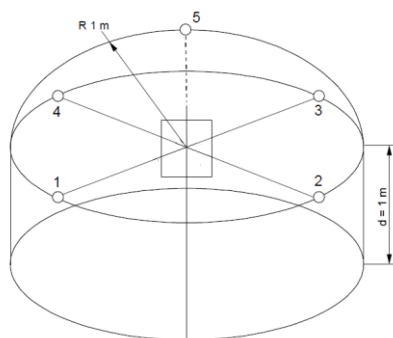
1.5 Measurement data

cycle \ point	1	2	3	4	5
1	77,4	78,2	77,6	76,3	77,5
2	77,3	78,1	77,7	76,2	77,4
3	77,6	78,0	77,7	76,6	77,4

1.6 Test result

1.6.1 Sound power level Determination

A-weighted time-average 1 meter surface sound pressure level:

$$\overline{L_{pA\iota,1m}} = 10lg\left[\frac{1}{5}\sum_{i=1}^{5} 10^{0,1L'_{pA,i}}\right] - K_{1A} - K_{2A}$$

A-weighted sound power level: $L_{WA} = \overline{L_{pA\iota,1m}} + 10lg\frac{S}{S_0}$

Where:

K_{1A} = 0dB(A);

K_{2A} = 0dB(A);

$10lg\frac{S}{S_0}$ =11dB(A).

cycle	$\overline{L_{pA\iota,1m}}$	L_{WAi}
1	77,4	88,4
2	77,4	88,4
3	77,5	88,5

sound power level: $L_{WA} = \frac{1}{3}\sum_{i=1}^{3} L_{WAi} = 88,4 dB(A)$

1.6.2 Emission sound pressure level Determination

A-weighted Emission sound pressure level at the work station: $L_{pA} = L_{WA} - Q$

Where:

Q = 11 dB(A).

Emission sound pressure level at the work station: $L_{pA} = L_{WA} - Q = 88,4 - 11 = 77,4 dB(A)$

Part 2   Vibration test

2.1 Test standards

EN 60745-1:2009+A11:2010, EN 60745-2-3:2011

2.2 Description of the hand-held tool

Product: Dry wall sander

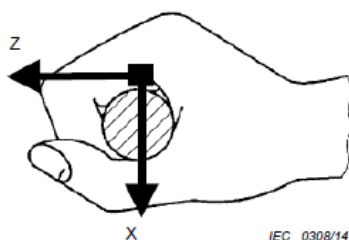Model: SB9

Technical data: 100-240 Vac, 400W

2.3 Description of operating and testing conditions

Testing conditions: Sanding the steel plate

Feed force: 50N±5N

2.4 Measurement direction

2.5 Measurement data

Main handle:

Operator A

No. \ Direction	a_{hwx}	a_{hwy}	a_{hwz}	The vibration total value
1	3,081	0,453	1,293	3,372
2	3,590	0,460	0,954	3,743
3	3,040	0,537	1,058	3,263
4	3,469	0,596	1,099	3,688
5	3,008	0,597	1,226	3,302
the arithmetic mean total vibration				3,474

Operator B

No. \ Direction	a_{hwx}	a_{hwy}	a_{hwz}	The vibration total value
1	2,623	0,611	1,170	2,936
2	3,221	0,452	1,259	3,487
3	2,795	0,552	0,992	3,017
4	3,167	0,603	1,161	3,426
5	2,991	0,538	1,046	3,214
the arithmetic mean total vibration				3,216

Operator C

No. \ Direction	a_{hwx}	a_{hwy}	a_{hwz}	The vibration total value
1	2,986	0,483	1,184	3,248
2	2,600	0,490	1,151	2,885
3	2,772	0,604	0,978	3,001
4	3,004	0,553	1,085	3,241
5	2,650	0,523	1,260	2,980
the arithmetic mean total vibration				3,071

Auxiliary handle:

Operator A

No. \ Direction	a_{hwx}	a_{hwy}	a_{hwz}	The vibration total value
1	3,121	0,780	0,739	3,301
2	3,094	0,827	0,851	3,314
3	3,198	0,794	0,677	3,364
4	3,223	0,729	0,766	3,392
5	3,022	0,826	0,879	3,254
the arithmetic mean total vibration				3,325

Operator B

Direction No.	a_{hwx}	a_{hwy}	a_{hwz}	The vibration total value
1	3,420	0,675	0,664	3,549
2	2,730	0,758	0,691	2,916
3	2,765	0,660	0,771	2,946
4	2,886	0,652	0,662	3,032
5	3,463	0,758	0,676	3,609
the arithmetic mean total vibration				3,210

Operator C

Direction No.	a_{hwx}	a_{hwy}	a_{hwz}	The vibration total value
1	2,970	0,849	0,878	3,211
2	3,448	0,706	0,884	3,629
3	2,937	0,834	0,867	3,173
4	2,949	0,787	0,838	3,165
5	2,964	0,769	0,720	3,146
the arithmetic mean total vibration				3,265

2.6 Test result

Main handle:

The average vibration total value $a_{h,DS}$:3,254 m/s^2

$K = 1,65 s_R = 0,204 m/s^2$ or $K = 1,5 m/s^2$, *Whatever is higher.*

Auxiliary handle:

The average vibration total value $a_{h,DS}$: 3,267 m/s^2

$K = 1,65 s_R = 0,057 m/s^2$ or $K = 1,5 m/s^2$, *Whatever is higher.*

The test results shown in this report relate only to the tests performed according to the test program. The test object has not been submitted to a full test program.

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