

2.

(KS A ISO 3745),⁽²⁾

(KS A ISO 9614),⁽³⁾

(KS A ISO 3741)⁽⁴⁾

가

B&K社 PULSE System(Type

7536)

2.1

(KS A ISO 3745)

10



Figure 1. Measurement of the sound power level in the semi-anechoic room.

2

3

2 m

Figure 2

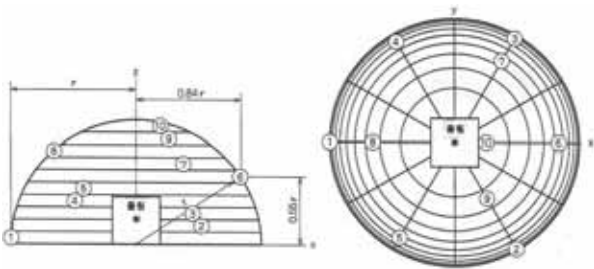


Figure 2. Hemispherical measurement surface - Key measurement points

2.2

B&K社

(Sound

Intensity Probe Kit - Type 3599)

Figure 3

KS A

ISO 9614-2()



Figure 3. Measurement of the sound power level by intensity method

()

(0.1~0.5 m/s)

5

(, , , ,)

1

20

가 20 mm

2.3

가

3.

3.1

(1)

Figure 4
1,000 Hz

45 dBA

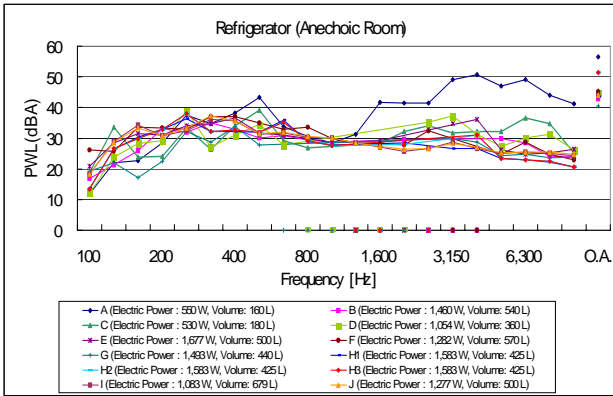


Figure 4. Sound power level of refrigerator measured by semi-anechoic room method.

(2)

Figure 5 . Figure 5 41 dBA , 1,000 Hz

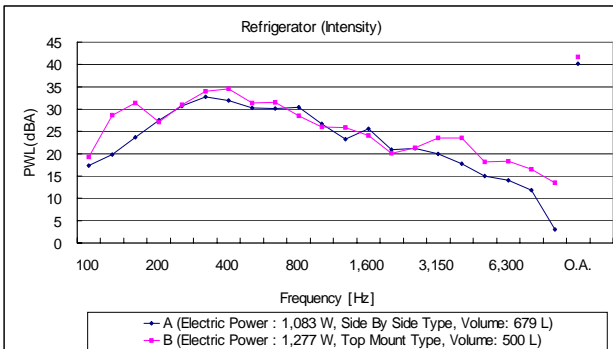


Figure 5. Sound power level of refrigerator measured by intensity method.

(3)

Figure 6 가 44 dBA , 1,000 Hz

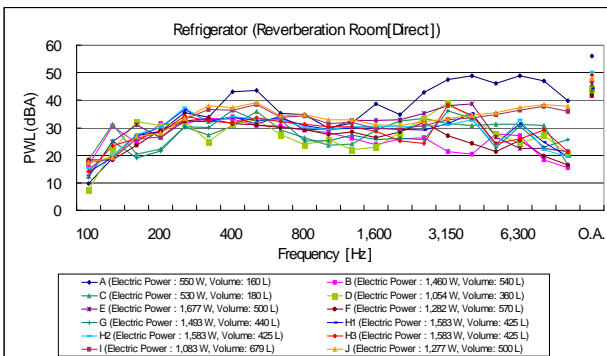


Figure 6. Sound power level of refrigerator measured by direct method in the reverberation room

(4)

Figure 7 . Figure 7 45 dBA , 1,000 Hz

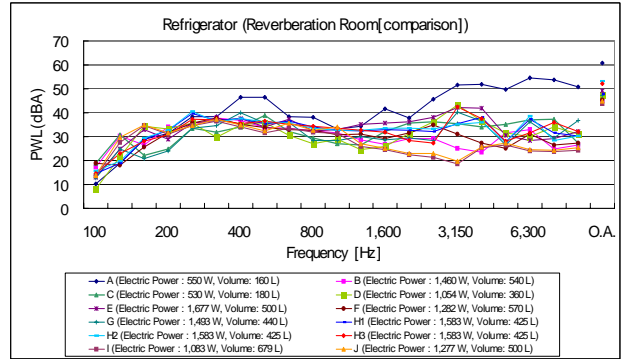


Figure 7. Sound power level of refrigerator measured by comparison method in the reverberation room

가
() 3.0 dB ,
50.8 dBA 40.1~60.8 dBA

3.2
(1)

Figure 8 64.9 dBA , 1,000 Hz

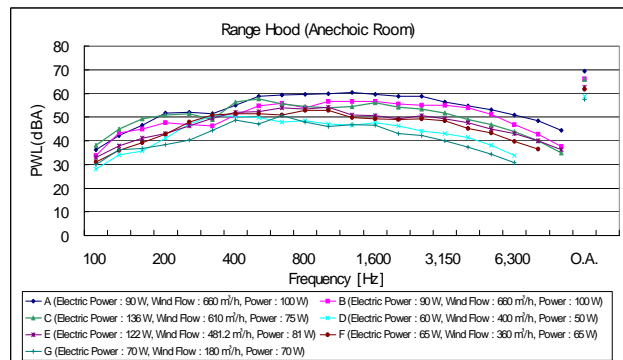


Figure 8. Sound power level of range hood measured by anechoic room method

(2)

Figure 9 74.7 dBA , 1,000 Hz

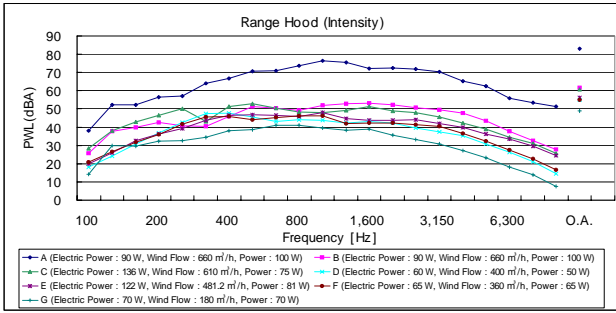


Figure 9. Sound power level of range hood measured by intensity method

(3)

Figure 10
62.6 dBA , 1,000 Hz

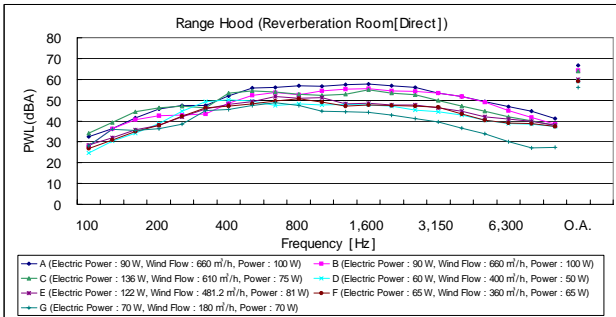


Figure 10. Sound power level of range hood measured by direct method in reverberation room

(4)

Figure 11
73.4 dBA , 1,000 Hz

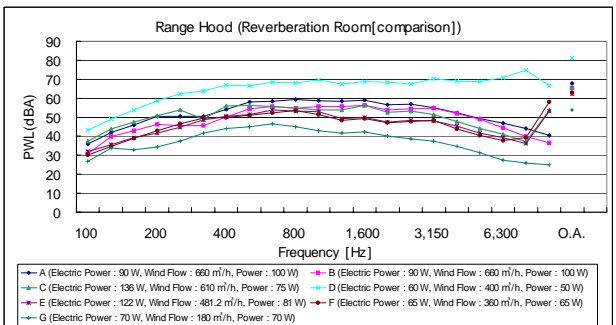


Figure 11. Sound power level of range hood measured by comparison method in reverberation room

가
() 2.3 dB
(40~50 dBA) 49.1 dBA

(70~90 dBA) 69.5 dBA 가

가

3.3
(1)

Figure 12
82.1 dBA

30,000 rpm

1,000Hz

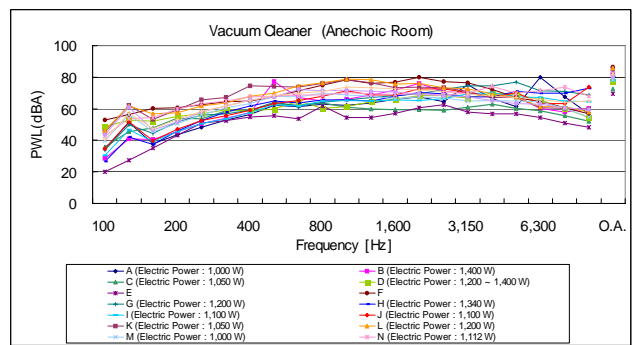


Figure 12. Sound power level of vacuum cleaner measured by anechoic room method

(2)

Figure 13
, 1,000 Hz 80.2 dBA

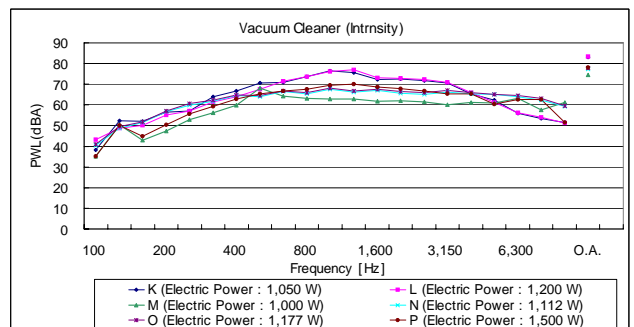


Figure 13. Sound power level of vacuum cleaner measured by intensity method

(3)

Figure 14
80.7 dBA , 1,000 Hz

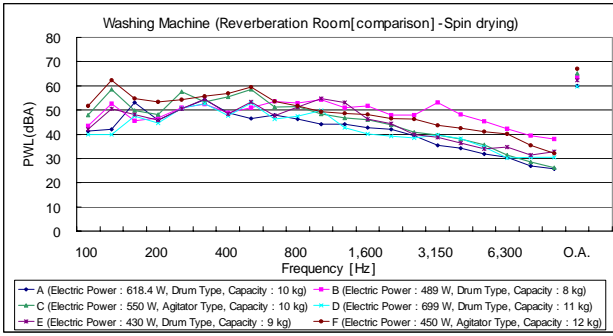


Figure 18. Sound power level of washing machine measured by comparison method in reverberation room (spin drying)

3.5

가

가

(KS C IEC 60704-1)

(1)

Figure 19, 20

58.6 dBA

68.7 dBA

10.1 dB

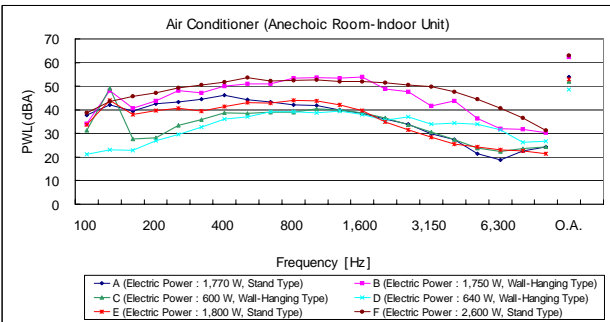


Figure 19. Sound power level of indoor unit of air-conditioner measured by anechoic room method

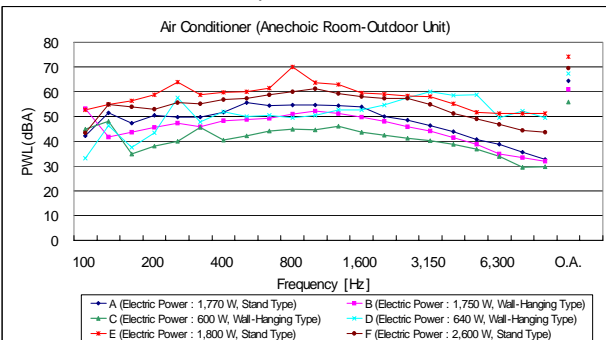


Figure 20. Sound power level of outdoor unit of air-conditioner measured by anechoic room method

(2)

Figure 21, 22

53.1 dBA

65.9 dBA

12.8 dB

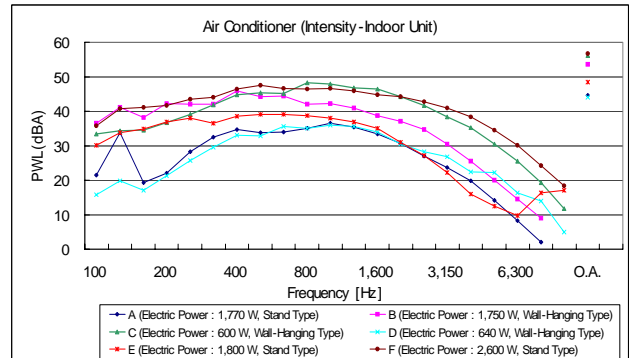


Figure 21. Sound power level of indoor unit of air-conditioner measured by intensity method

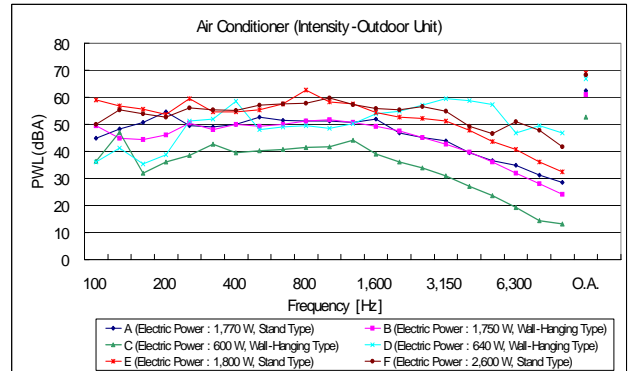


Figure 22. Sound power level of outdoor unit of air-conditioner measured by intensity method

(3)

Figure 23, 24

56.8 dBA

68.9 dBA

11.9 dB

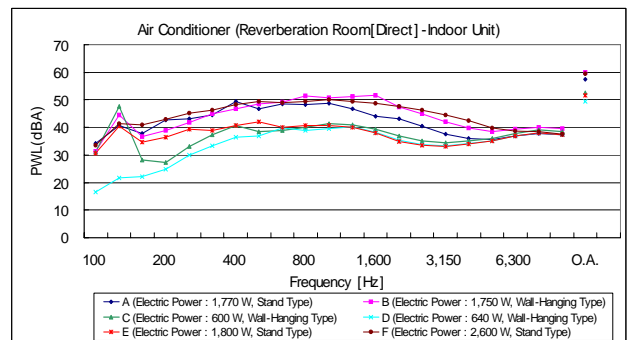


Figure 23. Sound power level of indoor unit of air-conditioner measured by direct method in reverberation room

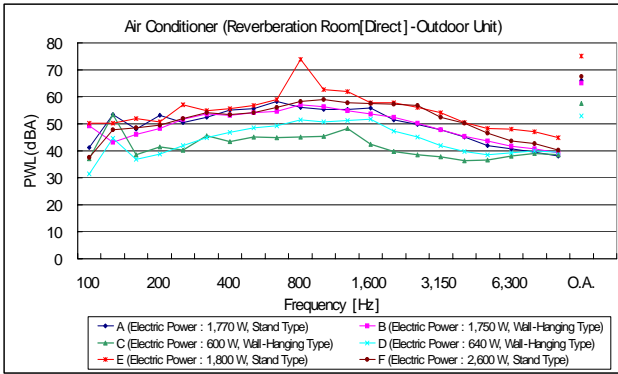


Figure 24. Sound power level of outdoor unit of air-conditioner measured by direct method in reverberation room

(4)

Figure 25, 26

57.5 dBA

69.8 dBA

12.3 dB

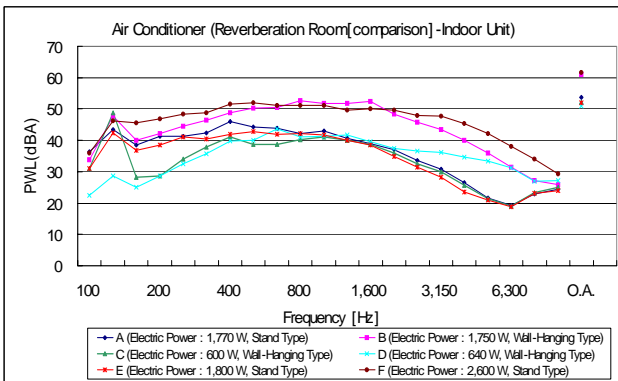


Figure 25. Sound power level of indoor unit of air-conditioner measured by comparison method in reverberation room

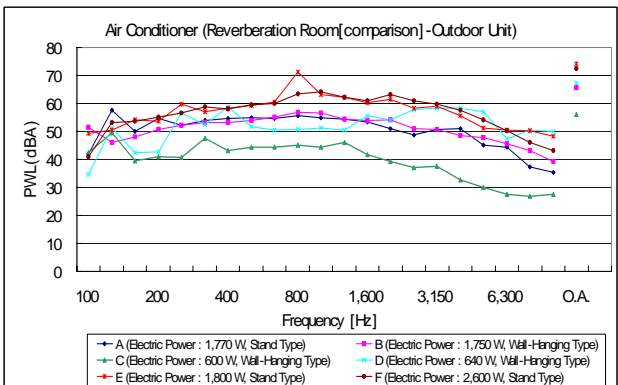


Figure 26. Sound power level of outdoor unit of air-conditioner measured by comparison method in reverberation room

가

3.3 dB

가 44.5~62.2 dBA,

(가)

52.9~67.4 dBA

3.6

가

(1)

Figure 27

59.9 dBA , 150 Hz

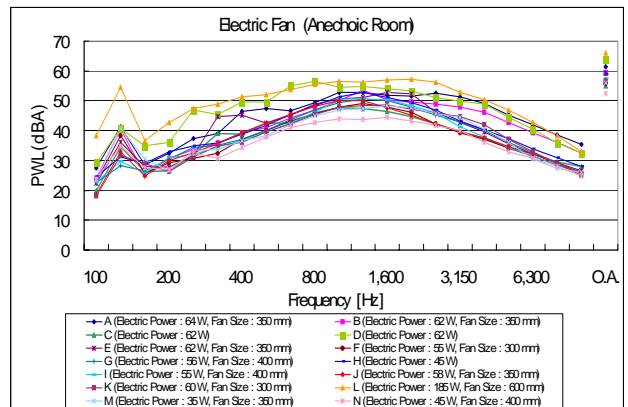


Figure 27. Sound power level of electric fan measured by anechoic room method

(2)

Figure 28

59.7 dBA , 150 Hz

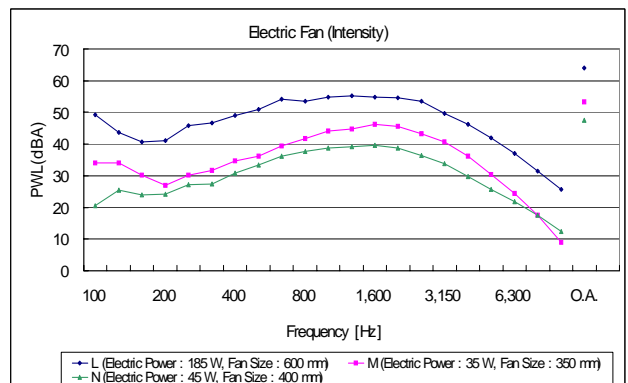


Figure 28. Sound power level of electric fan measured by intensity method

(3)

Figure 29

59.8 dBA , 150 Hz

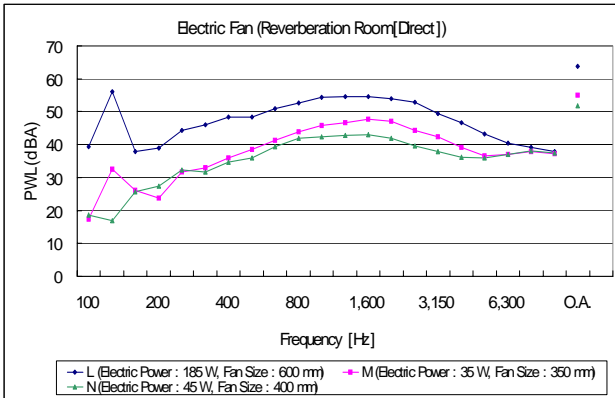


Figure 29. Sound power level of electric fan measured by direct method in reverberation room

(4)

Figure 30

61.6 dBA , 150 Hz

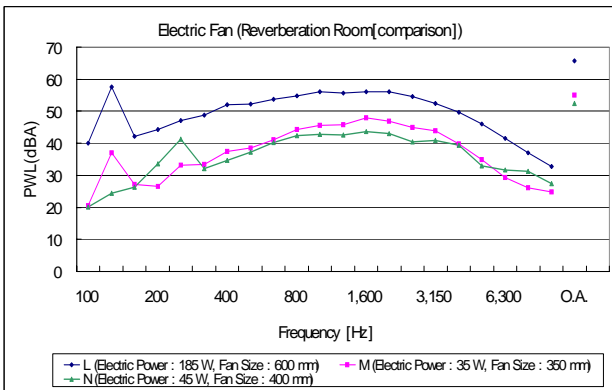


Figure 30. Sound power level of electric fan measured by comparison method in reverberation room

가 53.3~66.1 dBA ,
() 2.7 dB .

4.

Figure 31 6 가

가 가 가

가 가 가
(81.3 dBA) 가 가
(50.8 dBA)가 가 가
가 20 dBA 가
가 7 dBA 가

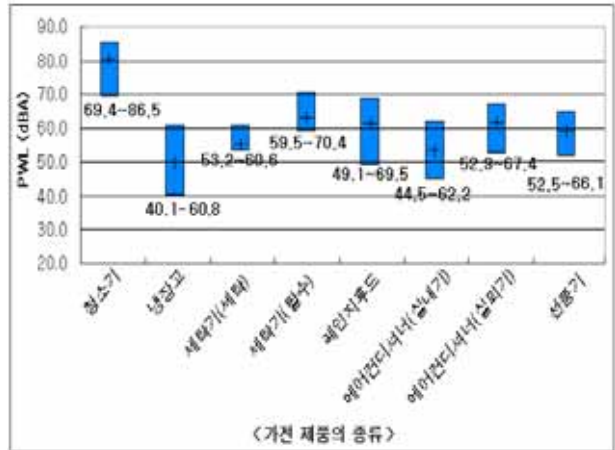


Figure 31. Sound power level of six electric home appliances.

(1) 4 , 2005, 가

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, pp. 449~452

(2) KS A ISO 3745, 2002,

(3) KS A ISO 3741, 2002,

(4) KS A ISO 9614-2, 2004,

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