Appendix 1: Measuring Germs (bacteria and fungi)

The amount of air velocity in pump vacuums, to support EMS-E6 400 holes, is set at the standard of microorganisms to the media to authenticate their findings. The correction table validates the parameters used to calculate fungus and bacteria colony counts. Table 1 shows the number of bacterial colonies.

Table 1 Example of number of bacterial colonies based on the correction table

Box model type	Media	Data collection date	The number of bacterial colonies (CFU/*plate*)	The number of colonies based on the correction table (CFU/*plate*) [54]
Outdoor	TSA	(Week 1) Day 1		
			31	32.2
			26	26.8
		Day 2	20	20.5
			9	9.1

The number of bacterial colonies in a plate (Table 1) = 31 and 26 (CFU/plate)
The number of bacterial colonies according to the correction table = 32.2 and 26.8 (CFU/plate)

According to the corrected table, the typical number of colonies = $\frac{32.2+26.8}{2} = 29.5\ CFU/plate$

Range of bacterial colonies = Correction average ± (2 × standard deviation) = 29.5 ± (2 × 1)
= 27.5 – 31.5 CFU/plate

Range of bacterial colonies (1) = $\frac{Number\ of\ colonies}{Qp\ .t} = \frac{27.5}{0.0283\frac{m3}{minute}\times2}$ = 485.86 CFU/m^3

Range of bacterial colonies (2) = $\frac{Number\ of\ colonies}{Qp\ .t} = \frac{31.5}{0.0283\frac{m3}{minute}\times2}$ = 556.53 CFU/m^3

Appendix 2: Chicken inside the box model