

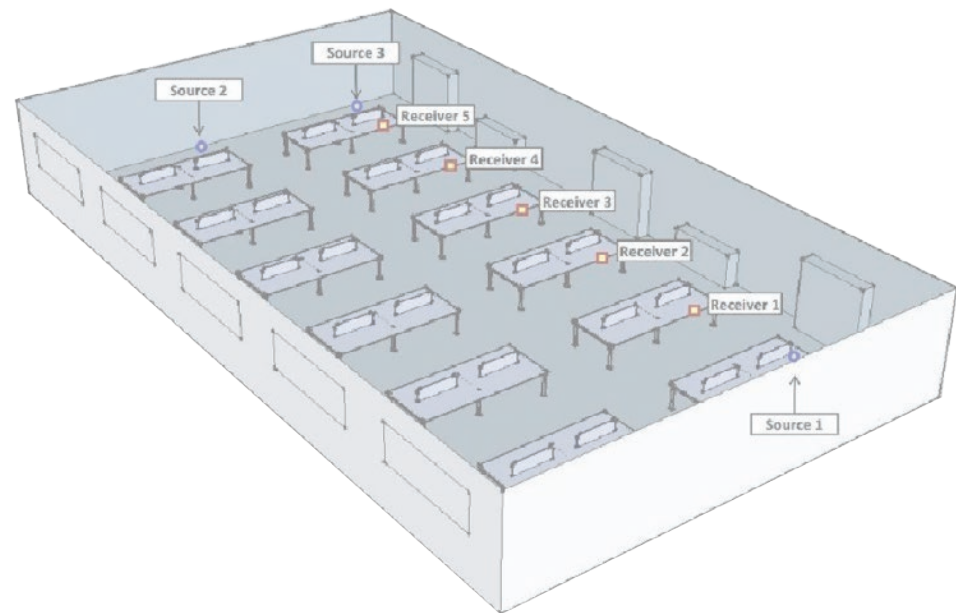
introduction

Koikas Acoustics Pty Ltd assessed the acoustic performance of the ThinkingQuietly Workstation system. Specifically a 4 person back to back workstation model was assessed. The objective of the acoustic assessment was to measure and assess the acoustic privacy of the ThinkingQuietly workstation against the old style cubicle workstation which has proven to provide better acoustic privacy than modern day open plan workstations.

assessment methodology

The methodology used by Koikas Acoustics was derived from guidelines published within international standard ISO 3382-3:2012 Acoustics - Measurement of room acoustic parameters - Part 3: Open plan offices with the simulation analysis using Odeon Room Acoustic Modelling Software.

The specific model used in the assessment was set-up to represent a typical office environment complete with floors, walls, ceilings, bookshelves, windows and workstations. The room was then filled with sound sources and receivers in locations where occupant workers would be located.



ThinkingQuietly™

acoustic report synopsis

assessed workstations

A number of ThinkingQuietly workstation configuration models were assessed and compared to open plan style workstations and a generic cubicle style workstation.

thinkingquietly workstation range



Type A Canopy, screens, deskpads and briefscreens



Type B Canopy, screens, and deskpads



Type C Canopy and screens



Type D Canopy and deskpads



Type E Canopy only

open plan workstation

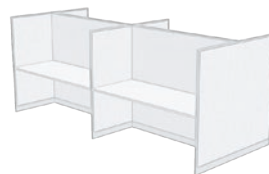


Open Plan with screens



Open Plan no screens

cubicle workstation



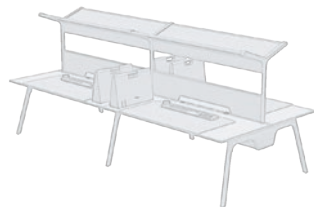
Cubicle fabric wrapped screens

ThinkingQuietly™

acoustic report synopsis

analysis

The acoustic parameter that was the basis for comparison in this assessment is the 'Distraction distance' (rD) - which is the distance from the speaker where the Speech Transmission Index (STI) falls below 0.5. Concentration levels and privacy start to dramatically improve beyond the distraction distance. These rD values can then be used to see the improvement in acoustic privacy when comparing each scenario. Some of the analysis scenarios are shown below. In real world offices, performance will vary depending on the specifications of the room and workstation furniture layout.



Type A

VS



Open Plan with screens

**= up to 44%
improvement**



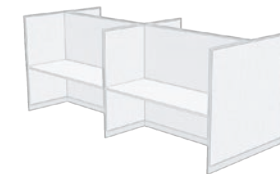
Type E

VS



Open Plan no screens

**= up to 34%
improvement**



Cubicle

VS



Open Plan with screens

**= up to 50%
improvement**

conclusions

The use of ThinkingQuietly workstation under almost all assessment conditions would result in improvements in acoustic privacy compared to the open plan style workstations within an open plan office environment. ThinkingQuietly Workstation Type A was shown to have the best performance in acoustic privacy and as acoustic elements are removed through Types B,C,D and E naturally the acoustic privacy reduces.

As expected, the cubicle style workstations were found to have the best acoustic privacy, however the ThinkingQuietly variants Type A, B and C were assessed to have only marginally less effectiveness in maintaining acoustic privacy whilst providing open communication within the open workplace.