

**Table S1.** The field measurement equipment parameters

Equipment	Calibration	Resolution and settings	Device range
IEQ multiprobe. (Air quality and thermal measurements)	Coverage factor (2), Probability (95%), $T_o$ ( $\pm 0.2^\circ\text{C}$ ), $\text{CO}_2$ ( $\pm 35$ ppm), RH ( $\pm 1\%$ )	Omni directional probe, Sampling Interval (5secs), Data logging via USB connection to a computer.	$\text{CO}_2$ (ppm), Operative temperature ( $^\circ\text{C}$ ) - $T_o$ , Relative humidity - RH (%), Atmospheric pressure (Pa), VOCs, Illuminance (lux).
TROTEC BQ20. (Particulate matter measurements)	PM (Resolution: 1 $\mu\text{m}$ ) RH = $\pm 5\%$ $T_a = \pm 1^\circ\text{C}$	Particle size: 2.5 $\mu\text{m}$ , and 10 $\mu\text{m}$ , flow rate: 0.9 l/min, efficiency: 100% for particles > 0.45 $\mu\text{m}$ (ISO 21501), Start delay: 5 secs., mode: concentration.	PM <sub>2.5</sub> and PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ), Air temperature - $T_a$ ( $^\circ\text{C}$ ), Relative humidity - RH (%), Measure range: 0 - 2000 $\mu\text{m}$
Flow (Particulate matter measurements)	Flow is at 90 to 95% correlation with static reference monitors.	0 and 2000 parts per billion or 0 and 200 micrograms, Sampling: 24H of continuous readings at full charge.	PM <sub>1</sub> ( $\mu\text{g}/\text{m}^3$ ), PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ), PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ), NO <sub>2</sub> (ppb), and VOC (ppb).
TROTEC SL400 (Noise measurements)	Calibrated/accuracy: IEC 61672-1 Class 2, ANSI S1.4 Type 2	Class 2 accuracy, Reversible time weighting (fast/slow), Logging capacity of 32,700 Resolution: 0.1 dB	Dynamic range, Type A and Type C frequencies, 30 dBA - 130 dBA, Frequency; 31.5 Hz – 8 kHz.

## Nomenclature

### Abbreviations

AI Articulation index

ASHRAE American Society of Heating, Refrigerating, and Air Conditioning Engineers

CEN European Committee for Standardization

CRP composite rate of preference

DTC Developing Tropical Countries

EPA US Environmental Protection Agency

EU European Union

IAQ Indoor air quality

IAQ Indoor air quality

IC Indoor climate

IEQ Indoor Environmental Quality

IEQ Indoor Environmental Quality

ISO International Standard Organization

NESREA National Environmental Standards and Regulations Enforcement Agency

OSHA Occupational Safety and Health Administration

PMV Predicted Mean Vote

ppb Parts per billion

PPD Percentage of Persons Dissatisfied

ppm parts per million

PSIL predicted speech interference level.

PWL Sound power level

RH Relative humidity

SAE Society of Automotive Engineers

SD Standard deviation

SIL Sound intensity level

SPL Sound pressure level

VIC volatile inorganic compound

VOC Volatile organic compound

WHO World Health Organization

***Symbols and others***

°C Degree Celsius

µm micrometers

CO Carbon-monoxide

CO<sub>2</sub> Carbon-dioxide

db Decibels

dBA A-weighted decibels

L<sub>eq</sub> or L<sub>Aeq</sub> Noise equivalent level or Equivalent Continuous Sound Pressure Level

Lux or L<sub>x</sub> Illuminance

mg/m<sup>3</sup> milligrams per cubic meter

PM<sub>10</sub> Coarse particulate matter

PM<sub>2.5</sub> Fine particulate matter

Q Fresh air flow rate

T<sub>a</sub> Air temperature

$T_o$  Operative temperature

$T_r$  Mean radiant temperature

$\lambda_v$  Air exchange rate

$\mu\text{g}/\text{m}^3$  Microgram per cubic meter