

Wireless Heatmap Design – Key Variables (Simplified)

This document summarizes the essential variables required to generate accurate Wi-Fi heatmaps. Values should be validated with on-site measurements for final design.

Category	Variable	Notes
Geometry	Scale	Correct floor plan scale
Geometry	Dimensions	Area size
Geometry	Ceiling Height	Critical for RF propagation
Geometry	AP Installation Height	Ceiling/wall mounting height
Materials	Wall Type	Drywall, concrete, glass
Materials	Attenuation (dB)	Use standard RF loss values
AP Design	AP Location	Exact placement (X,Y)
RF	Band	2.4 / 5 / 6 GHz
RF	Tx Power	Transmit power level
Targets	RSSI	-67 dBm (voice), -70 dBm (data)
Capacity	User Density	Users per area
Environment	Interference	External RF noise

Note: Start design in 5 GHz band and validate using real measurements (AP-on-a-stick).

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