

Aerohive Planning Report

Introduction

Thank you for using the Aerohive Planning Tool. This tool is designed to help scope and plan a WiFi Deployment to determine the number of APs required to achieve an intended coverage, AP placement and data rates. This tool calculates the loss in signal strength as it passes through open air and various materials to show predicted coverage.

RF Prediction with Optional Site Survey

An RF prediction is an estimate of WLAN performance and coverage. It uses intelligent algorithms to examine AP behavior based upon an imported floor plan with assigned building characteristics. The accuracy of an RF prediction is dependent upon the confidence level with which the building's RF characteristics are assigned, and the accuracy of AP placement. It is ideal for typical office environments with uniform wall types. In addition RF itself can be unpredictable, due to the difficulty of characterizing the behavior of RF when interacting with various materials.

Complex environments should be verified with a survey to verify the assumptions used in an RF prediction.

Assumptions

The guidelines in this document are based on the following conditions and assumptions:

- Client Data Terminal Transmit (Tx) Power: ≥ 15 dBm.
- Client Data Terminal Antenna Gain: ≥ 0 dBi.
- The map environment type (e.g. Warehouse, Office) relates to an average density which is quantified as a path loss exponent value. It estimates how quickly an RF signal attenuates with distance.
- The indicated wall path-through loss number (e.g. 12dB for a concrete wall) is the attenuation of an RF signal as it travels through the wall under a right angle. For any other angle, the loss will be higher.
- The EIRP (Effective Isotropic Radiated Power) of an AP's radio is determined by the Tx power setting, the antenna gain and cable losses. The antenna gain is an average gain obtained through measurements for the different AP types.
- Data rates are based on receive sensitivity numbers obtained through measurements for the different AP types, and a fade margin which is user configurable.

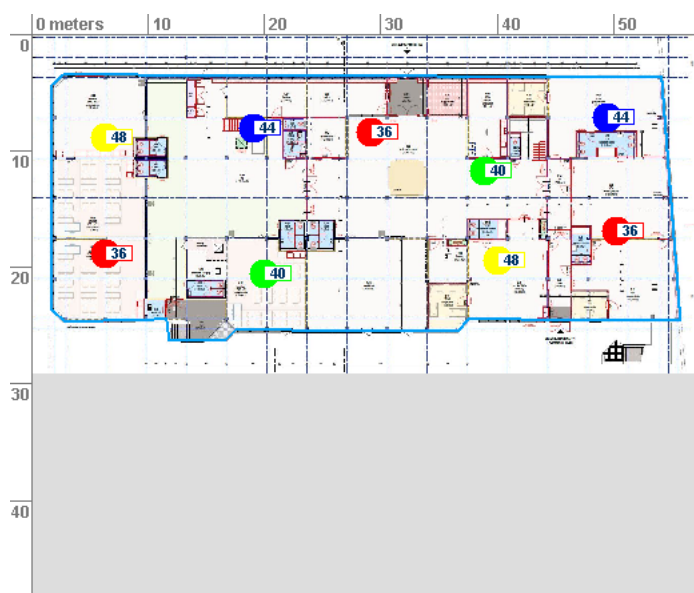
Note: These assumptions are typical for available 802.11 client Data Terminals and typical cubicle densities.

1. Asch van Wijk

Device Total For Asch van Wijk

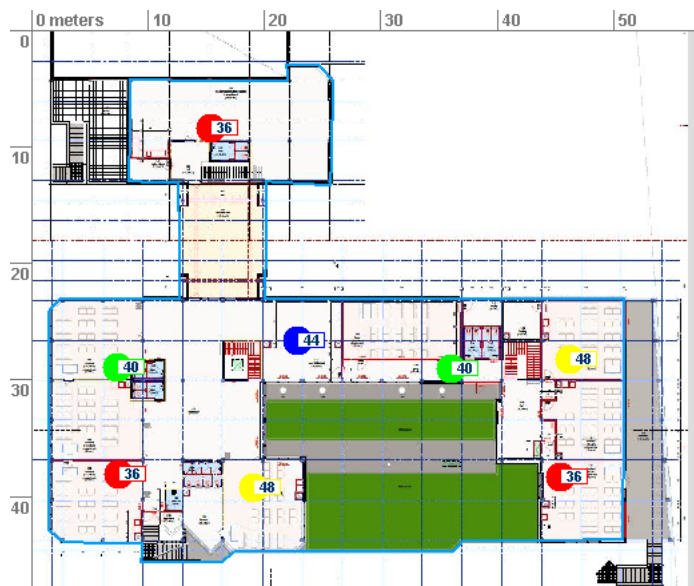
Model	Part number	Total
AP130	AH-AP-130-N-CE	17

1.0 Building view



Laag 0

Number of APs	9
Service Area	1138.83 sq m
Average Area per AP	126.54 sq m
Floor Alignment	
X: 0.00 meters	
Y: 0.00 meters	



Laag 1

Number of APs	8
Service Area	1284.60 sq m
Average Area per AP	160.58 sq m
Floor Alignment	
X: 0.00 meters	
Y: 0.00 meters	

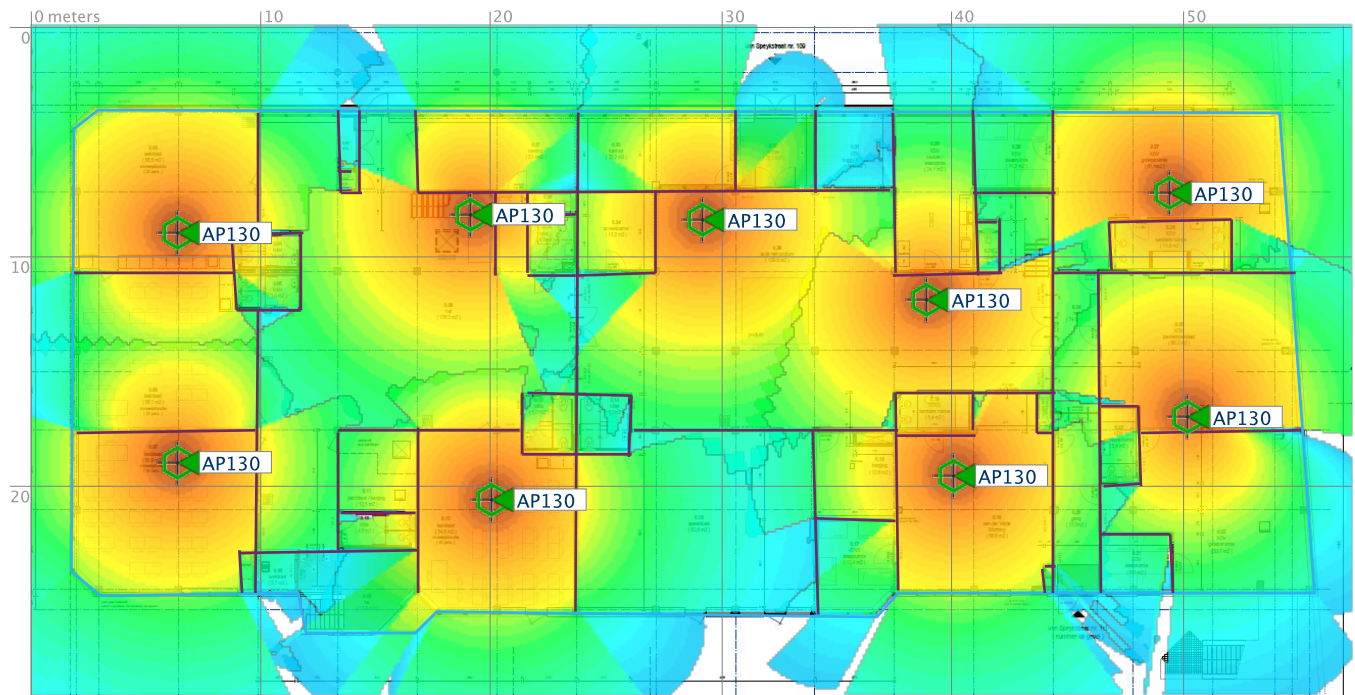
1.1 Laag 0

Summary

Number of Devices assigned to Laag 0

- 9 APs

Devices on Laag 0 (5 GHz, RSSI View: -35 -70dBm)



Device Details

Name	Model	Type	wifi 0		wifi 1		Description
			Channel	Power	Channel	Power	
AP130-1942949	AP130	802.11ac	Auto(5)	10 dBm	Auto(48)	10 dBm	
AP130-1942941	AP130	802.11ac	Auto(13)	10 dBm	Auto(44)	10 dBm	
AP130-1942946	AP130	802.11ac	Auto(1)	10 dBm	Auto(40)	10 dBm	
AP130-1942938	AP130	802.11ac	Auto(5)	10 dBm	Auto(48)	10 dBm	
AP130-1942953	AP130	802.11ac	Auto(9)	10 dBm	Auto(36)	10 dBm	
AP130-1942942	AP130	802.11ac	Auto(1)	10 dBm	Auto(40)	10 dBm	
AP130-1942939	AP130	802.11ac	Auto(9)	10 dBm	Auto(36)	10 dBm	
AP130-1942945	AP130	802.11ac	Auto(9)	10 dBm	Auto(36)	10 dBm	
AP130-1942951	AP130	802.11ac	Auto(13)	10 dBm	Auto(44)	10 dBm	

Device Total For Laag 0

Model	Part number	Total
AP130	AH-AP-130-N-CE	9

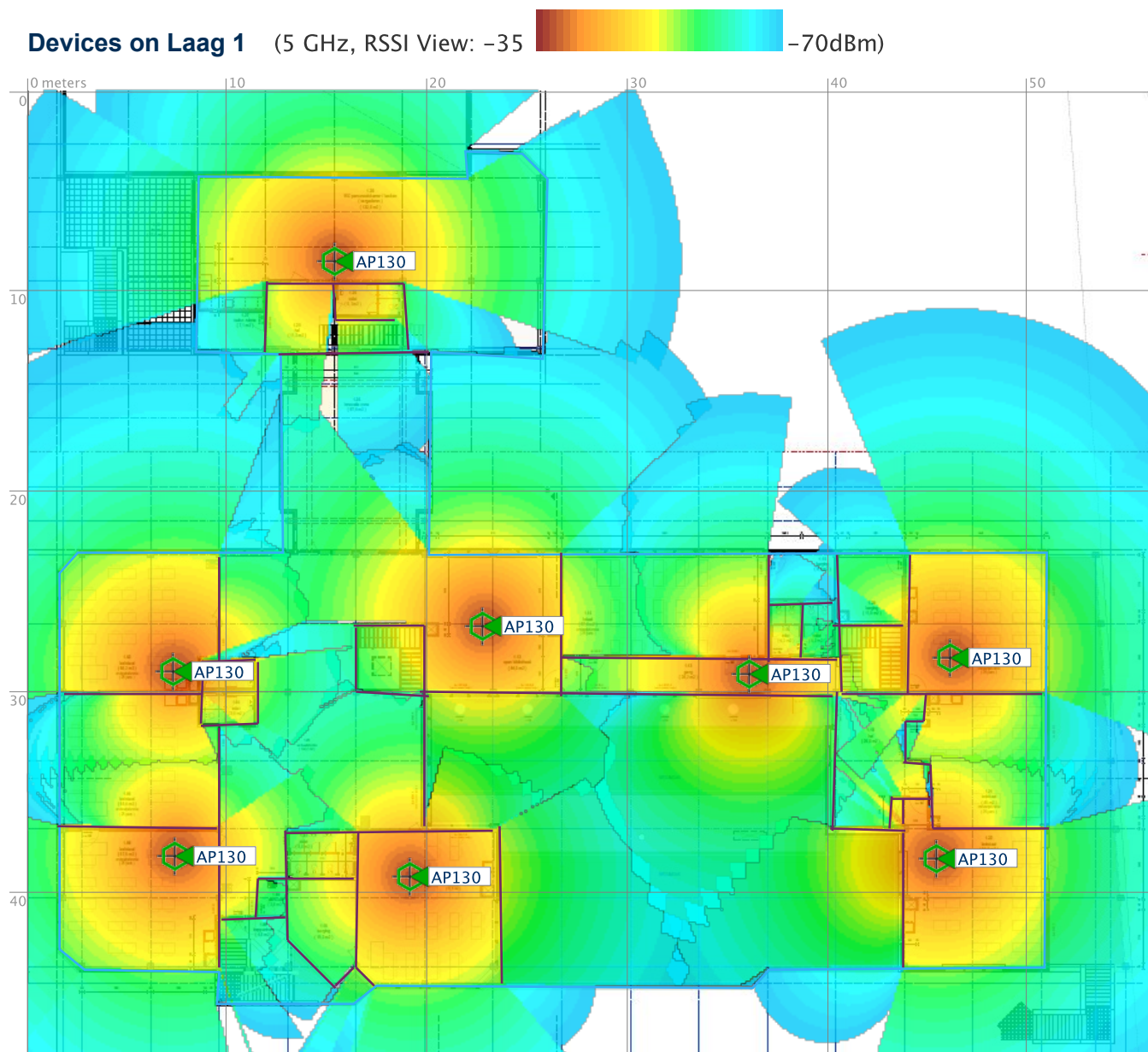
1.2 Laag 1

Summary

Number of Devices assigned to Laag 1

- 8 APs

Devices on Laag 1 (5 GHz, RSSI View: -35 -70dBm)



Device Details

Name	Model	Type	wifi 0		wifi 1		Description
			Channel	Power	Channel	Power	
AP130-1943016	AP130	802.11ac	Auto(9)	10 dBm	Auto(36)	10 dBm	
AP130-1943019	AP130	802.11ac	Auto(9)	10 dBm	Auto(36)	10 dBm	

Name	Model	Type	wifi 0		wifi 1		Description
			Channel	Power	Channel	Power	
AP130-1943026	AP130	802.11ac	Auto(9)	10 dBm	Auto(36)	10 dBm	
AP130-1943021	AP130	802.11ac	Auto(13)	10 dBm	Auto(44)	10 dBm	
AP130-1943037	AP130	802.11ac	Auto(5)	10 dBm	Auto(48)	10 dBm	
AP130-1943018	AP130	802.11ac	Auto(1)	10 dBm	Auto(40)	10 dBm	
AP130-1943025	AP130	802.11ac	Auto(5)	10 dBm	Auto(48)	10 dBm	
AP130-1943023	AP130	802.11ac	Auto(1)	10 dBm	Auto(40)	10 dBm	

Device Total For Laag 1

Model	Part number	Total
AP130	AH-AP-130-N-CE	8