ExtremeCloud IQ Planning Report

Introduction

Thank you for using the ExtremeCloud IQ 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 datarates. 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.

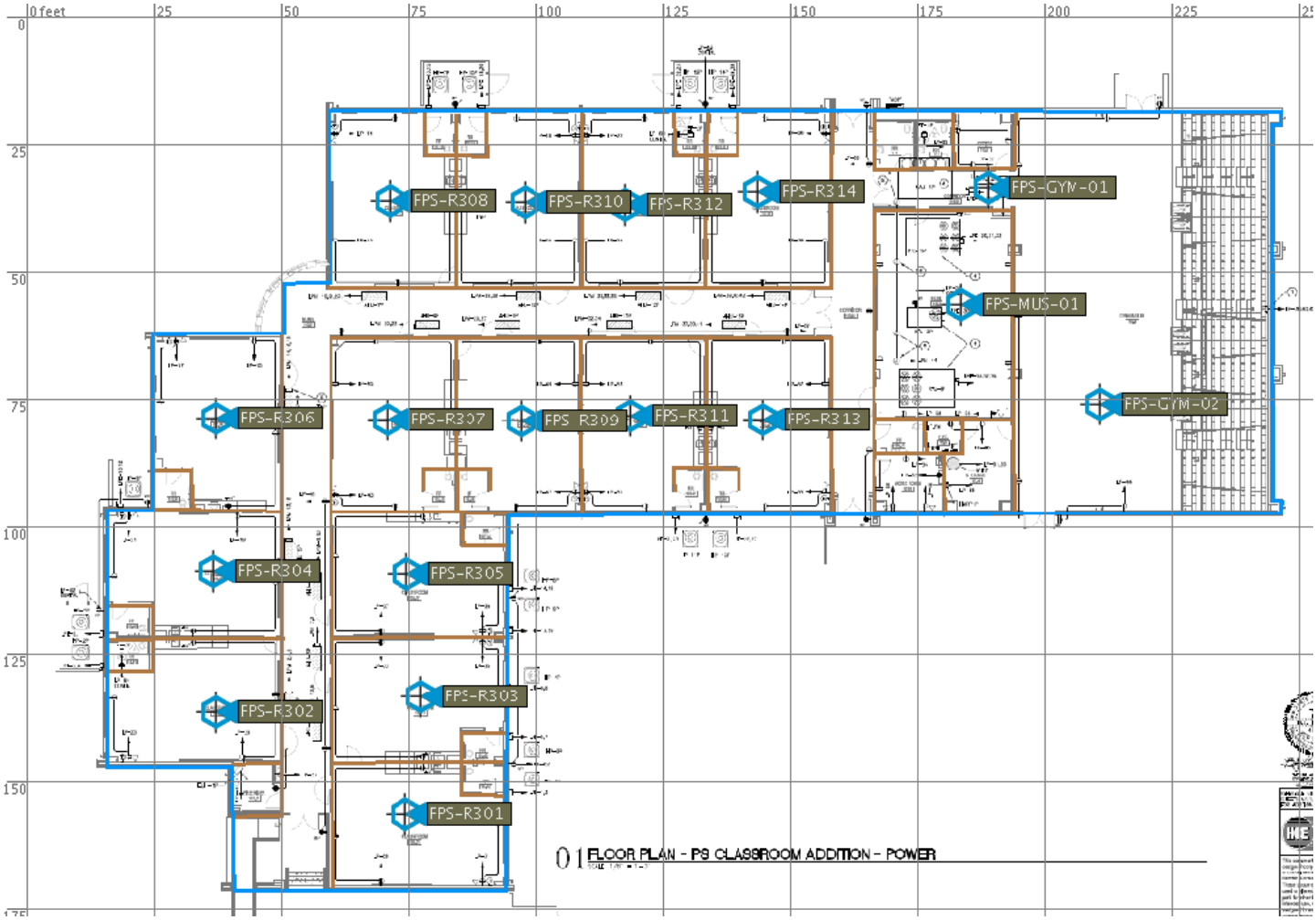
1 Primary Addition

Summary

Number of Devices assigned to Primary Addition

- 17

Devices on Primary Addition



Device Details

Name	Model	Type	Wifi0		Wifi1		Description
			Channel	Power	Channel	Power	
FPS-R305	AP_250	802.11ac	6	5dBm	48	20 dBm	
FPS-R314	AP_250	802.11ac	11	5dBm	149	18 dBm	
FPS-MUS-01	AP_250	802.11ac	1	5dBm	Auto(0)	0 dBm	
FPS-R304	AP_250	802.11ac	11	5dBm	153	20 dBm	
FPS-GYM-02	AP_250	802.11ac	6	11dBm	40	20 dBm	
FPS-R313	AP_250	802.11ac	1	5dBm	48	20 dBm	

FPS-R302	AP_250	802.11ac	1	5dBm	36	20 dBm	
FPS-R303	AP_250	802.11ac	1	5dBm	157	20 dBm	
FPS-R308	AP_250	802.11ac	1	5dBm	40	20 dBm	
FPS-R301	AP_250	802.11ac	11	5dBm	44	20 dBm	
FPS-R306	AP_250	802.11ac	1	5dBm	149	18 dBm	
FPS-R307	AP_250	802.11ac	6	5dBm	165	20 dBm	
FPS-R312	AP_250	802.11ac	6	5dBm	36	20 dBm	
FPS-R310	AP_250	802.11ac	11	5dBm	161	20 dBm	
FPS-R311	AP_250	802.11ac	11	5dBm	157	20 dBm	
FPS-GYM-01	AP_250	802.11ac	11	5dBm	165	20 dBm	
FPS-R309	AP_250	802.11ac	6	5dBm	44	20 dBm	

Device Total For Primary Addition

Model	Part number	Total
AP_250	AH-AP-250-N-FCC	17