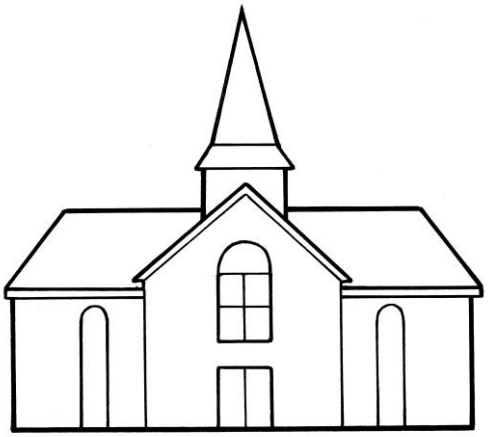
MTG - Standard Plan - Stevens - AP Placement Report v.2

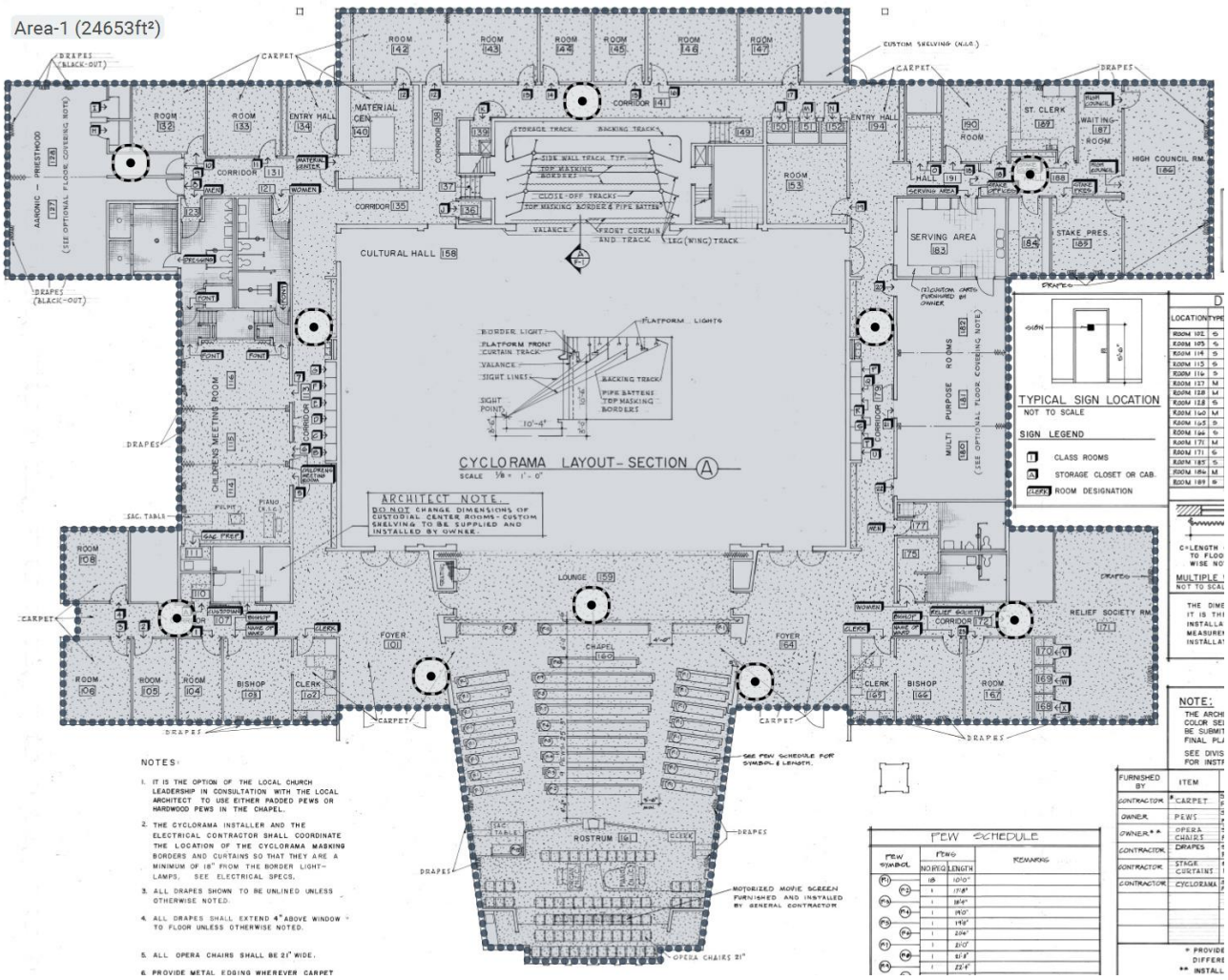


v.2 Completed by: **Jon Loutensock**
v.2 Completion date: 12/10/2025

Project description
The AP placement and signal strength predictions are based on assumptions made for signal propagation through interior wall materials. Based on those assumptions there will be a greater margin of error between the prediction and what may be experienced. Interior wall material was set as hollow block (cinder block). Without measured attenuation and AP signal deviation measurements, the actual signal propagation will vary. The AP placement was made based on optimizing 5 GHz signals for primary signal strength. Secondary coverage was not a requirement. The CW9172I access point is represented in this prediction. v.2 – Per request and to provide coverage to the rostrum in the chapel, an access point was added to the overflow area.

Stevens - Standard Plan A - Furn Plan

Survey routes and Access Points for Stevens - Standard Plan A - Furn Plan



View as / Project Offset:	Mobile Device

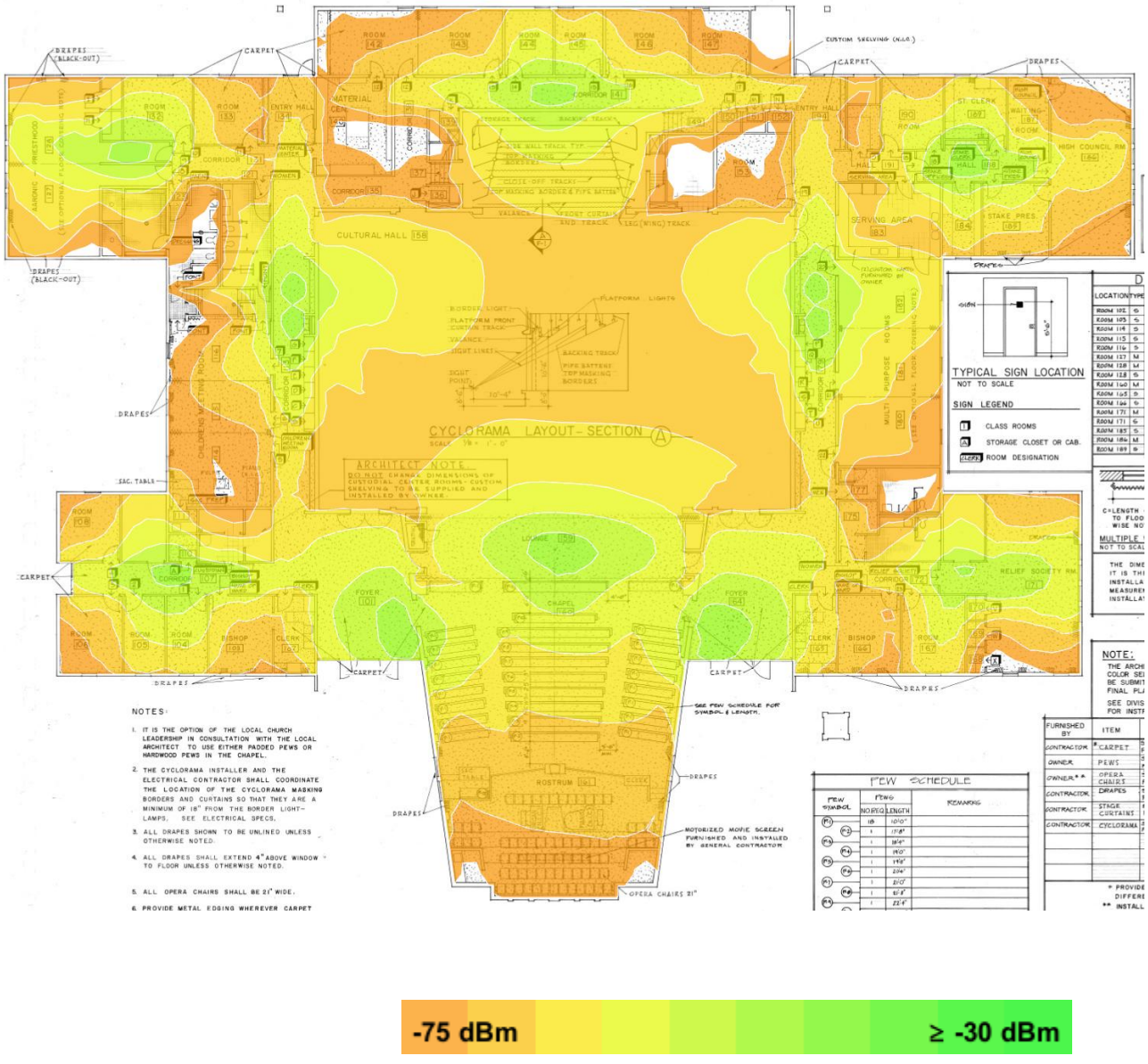
Area-1 (24,653 ft²)

Coverage Requirement: **Ekahau Best Practices**		
2.4 GHz	Signal Strength Min	**-67.0 dBm**
	Signal-to-Noise Ratio Min	**20.0 dB**
	Data Rate Min	**24 Mbps**
	Channel Interference Max	**2 at min. -85.0 dBm**
	Round Trip Time (RTT) Max	**200 ms**

	Packet Loss Max	**0.0 %**
5 GHz	Signal Strength Min	**-67.0 dBm**
	Secondary Signal Strength Min	**-67.0 dBm**
	Signal-to-Noise Ratio Min	**25.0 dB**
	Data Rate Min	**24 Mbps**
	Channel Interference Max	**1 at min. -85.0 dBm**
	Round Trip Time (RTT) Max	**200 ms**
	Packet Loss Max	**0.0 %**
6 GHz	Signal Strength Min	**-67.0 dBm**
	Secondary Signal Strength Min	**-67.0 dBm**
	Signal-to-Noise Ratio Min	**25.0 dB**
	Data Rate Min	**24 Mbps**
	Channel Interference Max	**1 at min. -85.0 dBm**
	Round Trip Time (RTT) Max	**200 ms**
	Packet Loss Max	**0.0 %**
Capacity Requirement	No capacity devices for this area	
Notes		

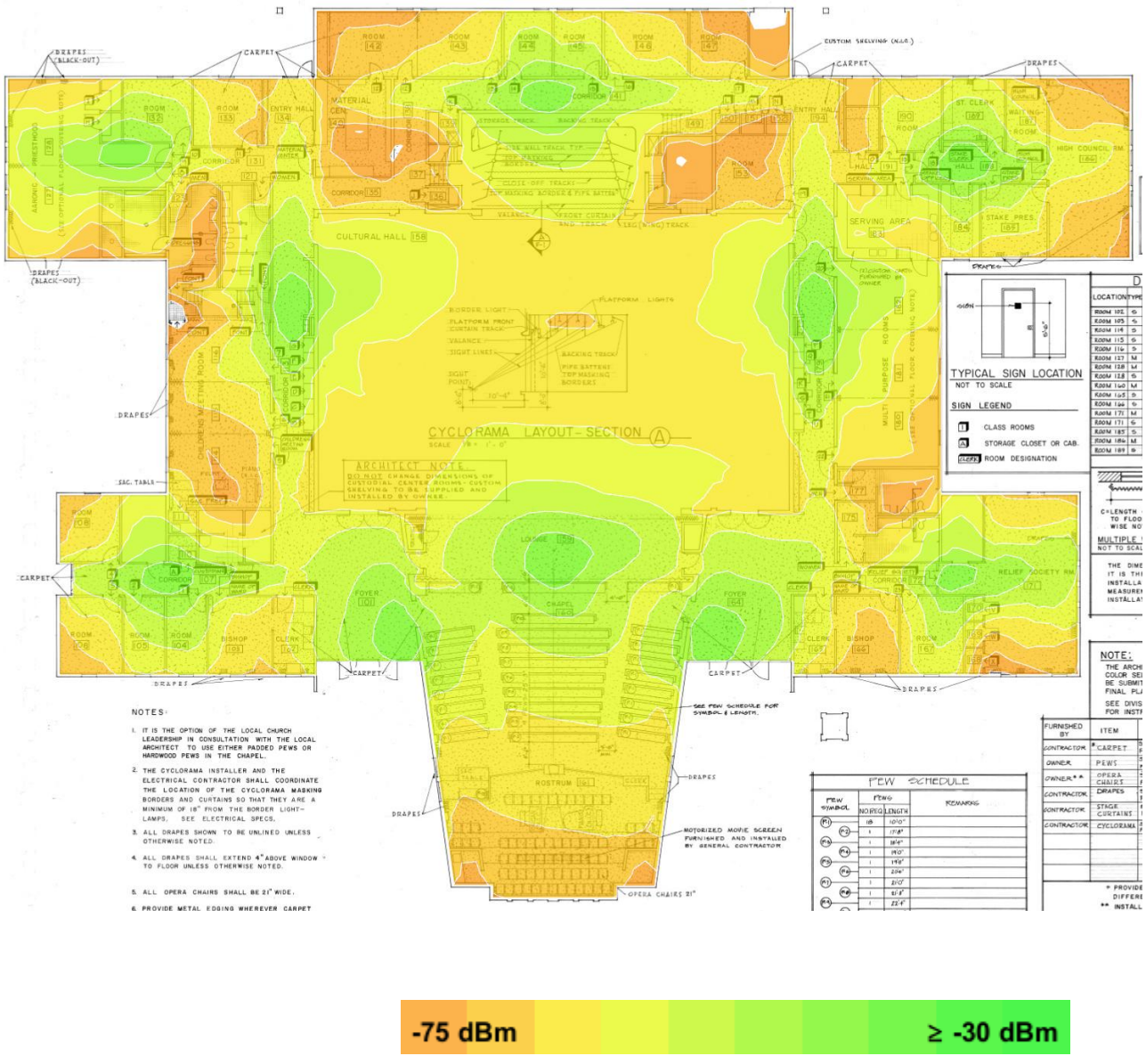
Signal Strength for Stevens - Standard Plan A - Furn Plan on 2.4 GHz band

Signal Strength - sometimes called coverage - is the most basic requirement for a wireless network. As a general guideline, low signal strength means unreliable connections, and low data throughput.



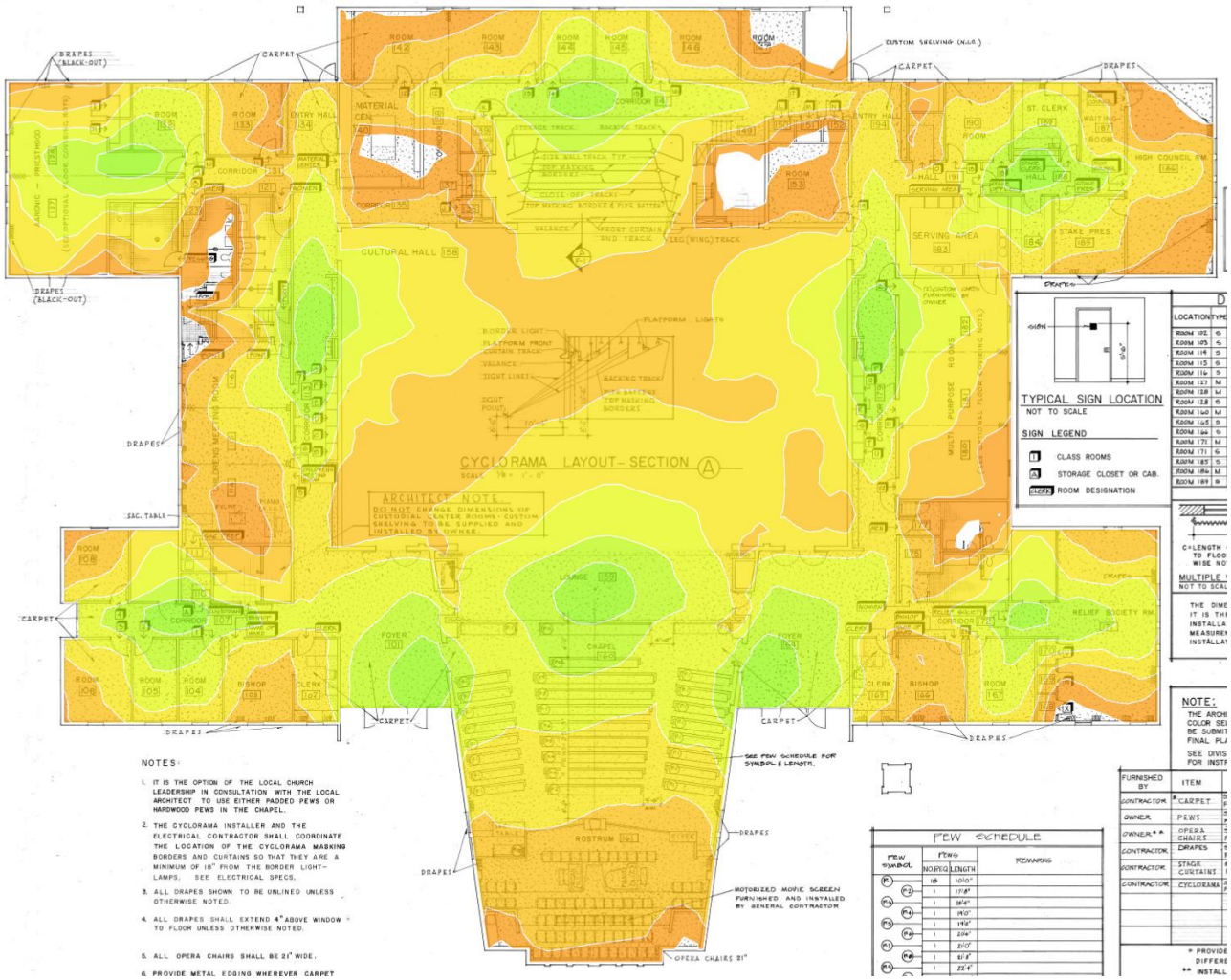
Signal Strength for Stevens - Standard Plan A - Furn Plan on 5 GHz band

Signal Strength - sometimes called coverage - is the most basic requirement for a wireless network. As a general guideline, low signal strength means unreliable connections, and low data throughput.

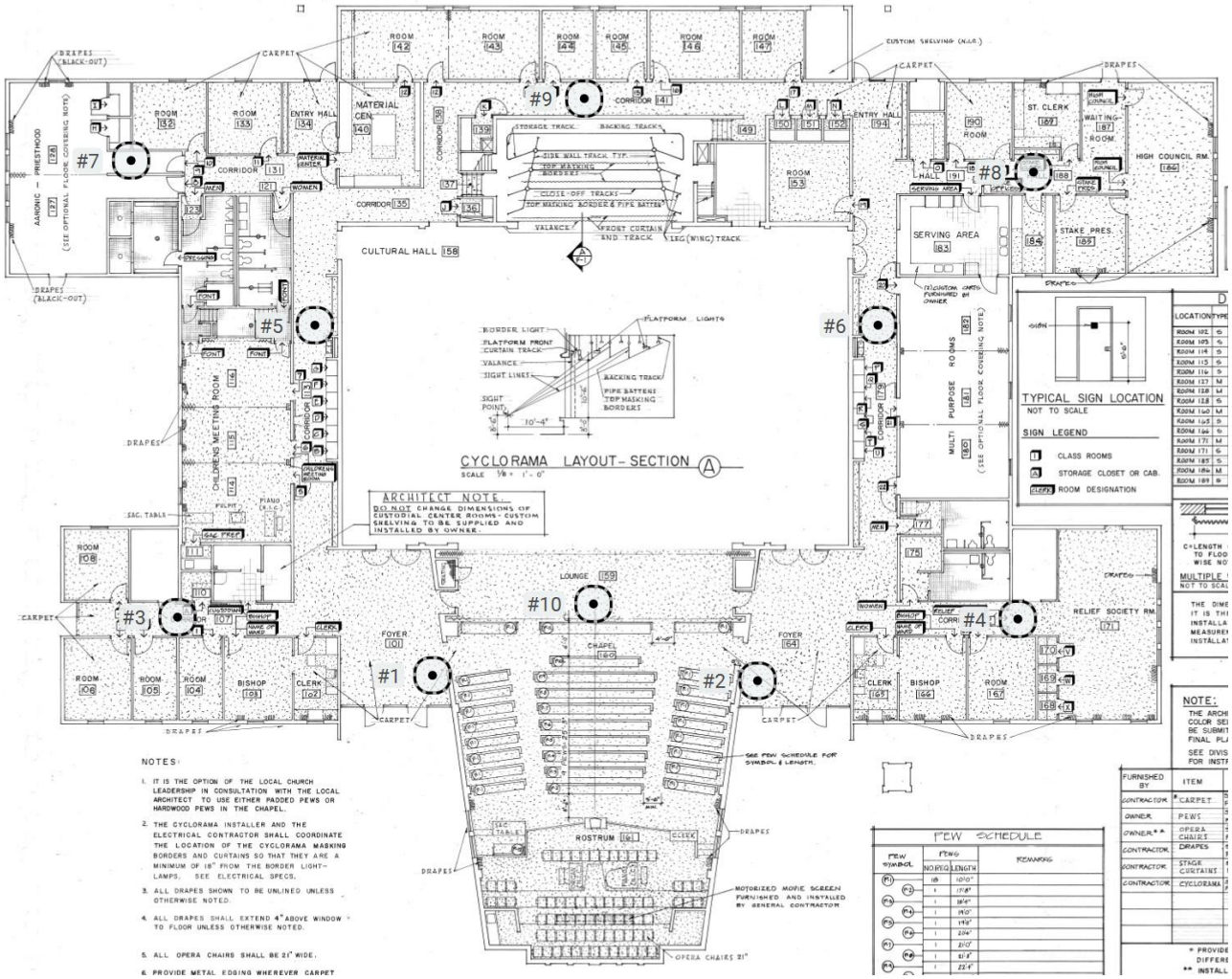


Signal Strength for Stevens - Standard Plan A - Furn Plan on 6 GHz band

Signal Strength - sometimes called coverage - is the most basic requirement for a wireless network. As a general guideline, low signal strength means unreliable connections, and low data throughput.



Access Points on Stevens - Standard Plan A - Furn Plan



Access Points on Stevens - Standard Plan A - Furn Plan

Simulated Access Points on Stevens - Standard Plan A - Furn Plan

AP #	Access Point			
1	Simulated AP-001		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
2	Simulated AP-002		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
3	Simulated AP-003		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
4	Simulated AP-004		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
5	Simulated AP-005		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz

	Bluetooth	-	1 mW	Cisco CW9172I BLE
6	Simulated AP-006		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
7	Simulated AP-007		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
8	Simulated AP-008		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
9	Simulated AP-009		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE
10	Simulated AP-010		Cisco CW9172I	
	Wi-Fi 7	1	14 mW	Cisco CW9172I 2.4GHz
	Wi-Fi 7	36	25 mW	Cisco CW9172I 5GHz
	Wi-Fi 7	1@80 (6 GHz)	25 mW	Cisco CW9172I 6GHz
	Bluetooth	-	1 mW	Cisco CW9172I BLE