Interoperability Test

2025-09-05-18-30-54

Objective

The Candela Interoperability test is designed to measure an Access Point's client performance when handling different amounts of Real clients like Android, Linux, Windows, MacOS and IOS. The test allows the user to increase the number of clients in user-defined steps for each test iteration and measure the per-client throughput for each trial. Along with throughput other measurements made are client connection times, Station 4-Way Handshake time, DHCP times, and more. The expected behavior is for the AP to be able to handle several stations (within the limitations of the AP specs) and make sure all Clients get a fair amount of airtime both upstream and downstream. An AP that scales well will not show a significant overall throughput decrease as more Real clients are added.

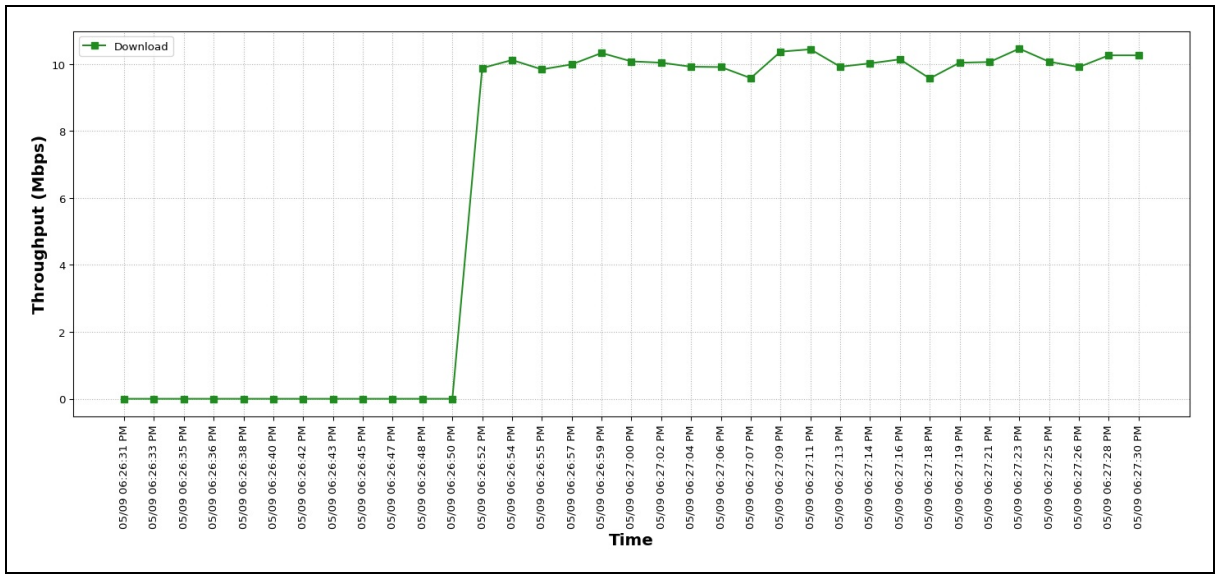
Input Parameters

The below tables provides the input parameters for the test

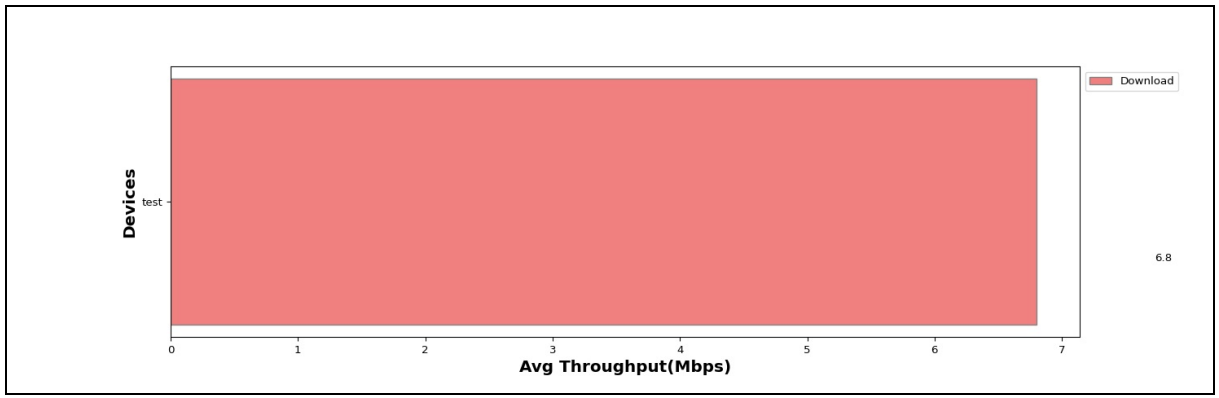
Test Configuration	Test name	Interoperability_test
	Device List	test(Windows), macbooks-MacBook-Air.local(Mac), Samsung_M14(Android), 1phone12_home(iOS)
	No of Devices	Total(4) Android(1) Windows(1) Mac(1) iOS(1)
	Traffic Duration in minutes	4.0
	Traffic Type	TCP
	Traffic Direction	Download
	Upload Rate(Mbps)	0.0Mbps
	Download Rate(Mbps)	10.0Mbps

1. Test On Device test:

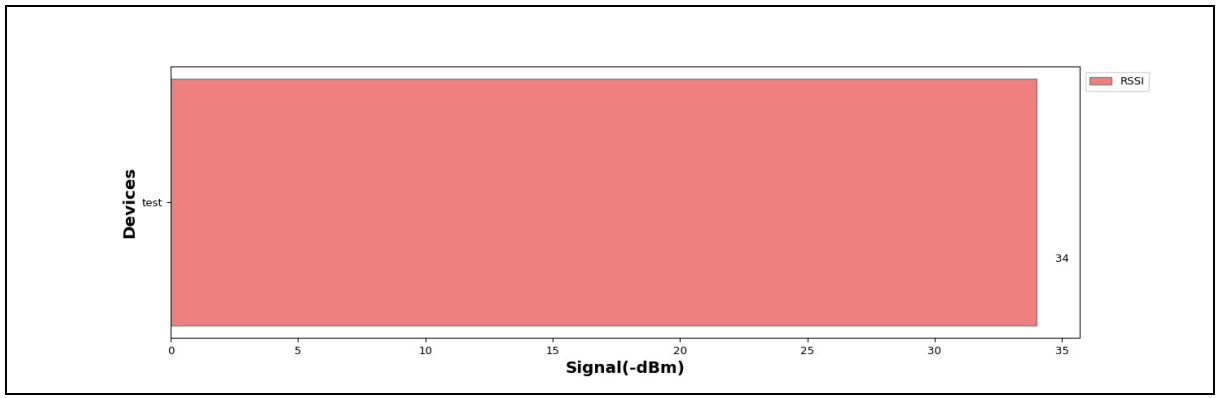
Real Time Throughput: Achieved Throughput: Download: 6.8 Mbps



Per Client Avg-Throughput



RSSI Of The Clients Connected



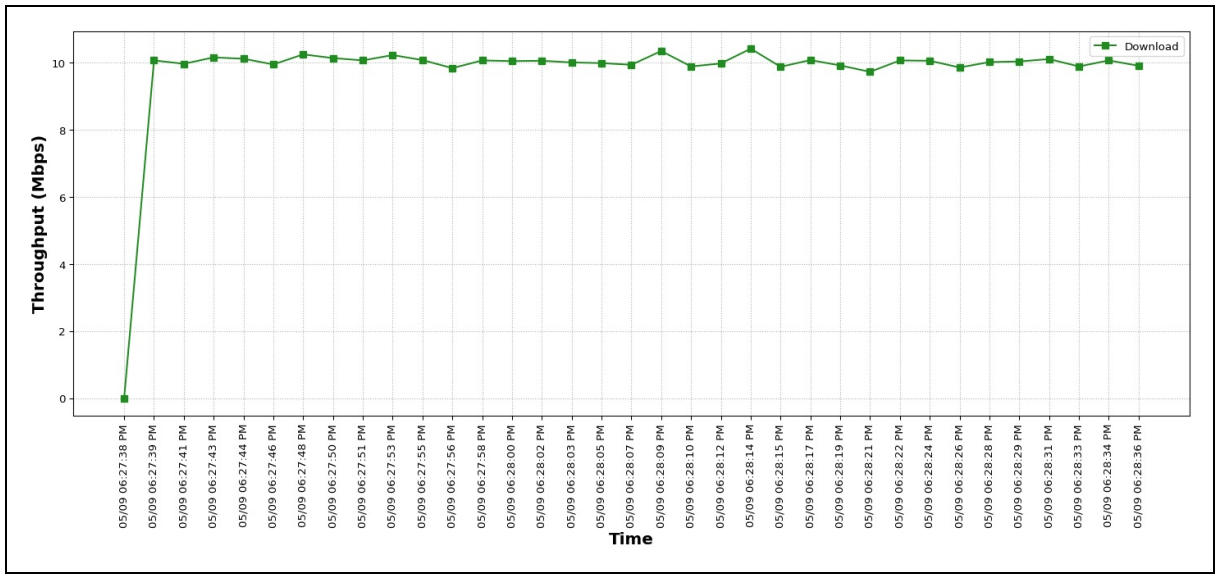
Detailed Result Table

The below tables provides detailed information for the throughput test on each device.

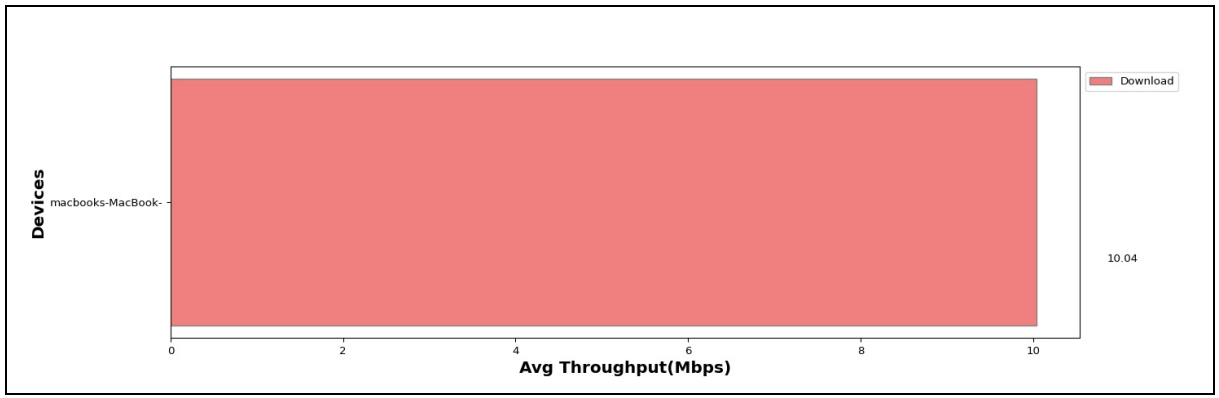
Device Type	Username	SSID	MAC	Channel	Mode	Offered download rate (Mbps)	Observed Average download rate (Mbps)	Offered upload rate (Mbps)	Observed Average upload rate (Mbps)	Average RTT (ms)	RSSI (dBm)	Average Rx Drop %	Average Tx Drop %
Windows	test	Testhouse	64:5d:86:28:c3:87	100	802.11abgn-AC 20 1x1	10.0	6.8	0.0	0	3	-34	0.0	0.0

2. Test On Device macbooks-MacBook-Air.local:

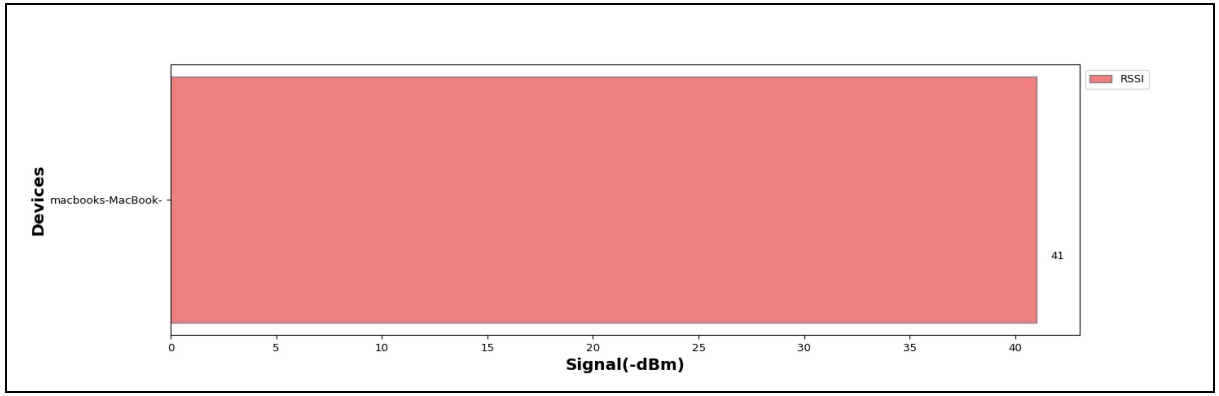
Real Time Throughput: Achieved Throughput: Download: 10.04 Mbps



Per Client Avg-Throughput



RSSI Of The Clients Connected



Detailed Result Table

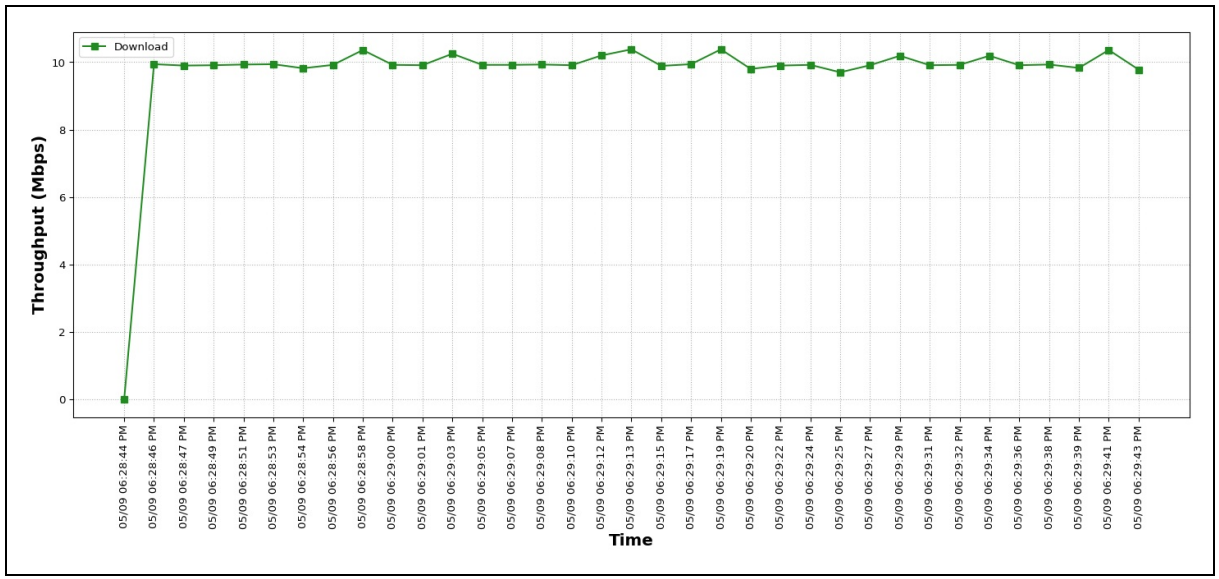
The below tables provides detailed information for the throughput test on each device.

Device Type	Username	SSID	MAC	Channel	Mode	Offered download rate (Mbps)	Observed Average download rate (Mbps)	Offered upload rate (Mbps)	Observed Average upload rate (Mbps)	Average RTT (ms)	RSSI (dBm)	Average Rx Drop %	Average Tx Drop %
Mac	macbooks-MacBook-Air.local	Testhouse	aa:37:65:db:da:c6	-1	802.11abgn-AX 20 2x2	10.0	10.04	0.0	0	10	-41	0.0	0.0

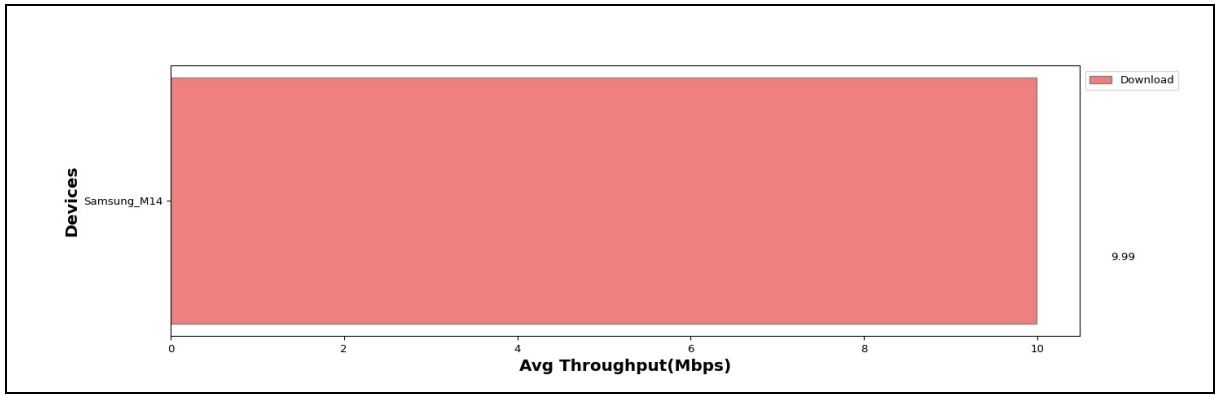
---

3. Test On Device Samsung_M14:

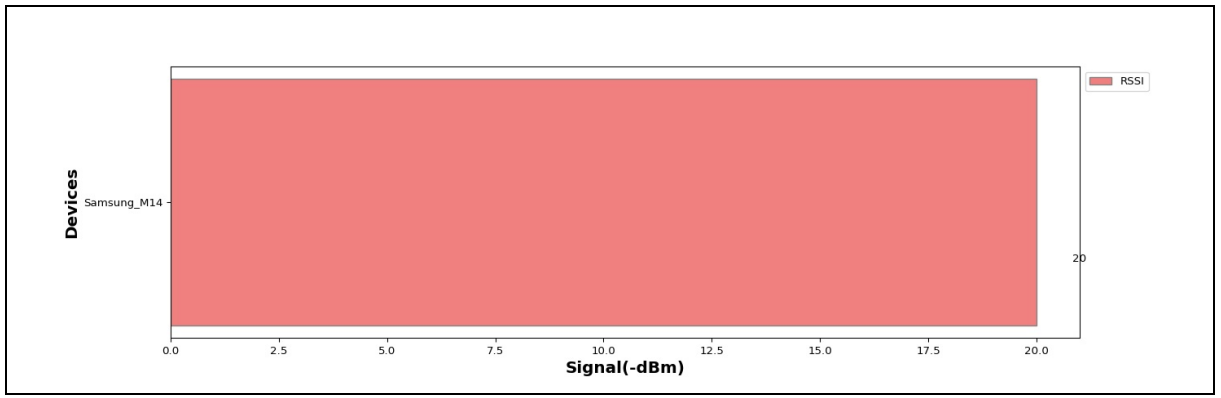
Real Time Throughput: Achieved Throughput: Download: 9.99 Mbps



Per Client Avg-Throughput



RSSI Of The Clients Connected



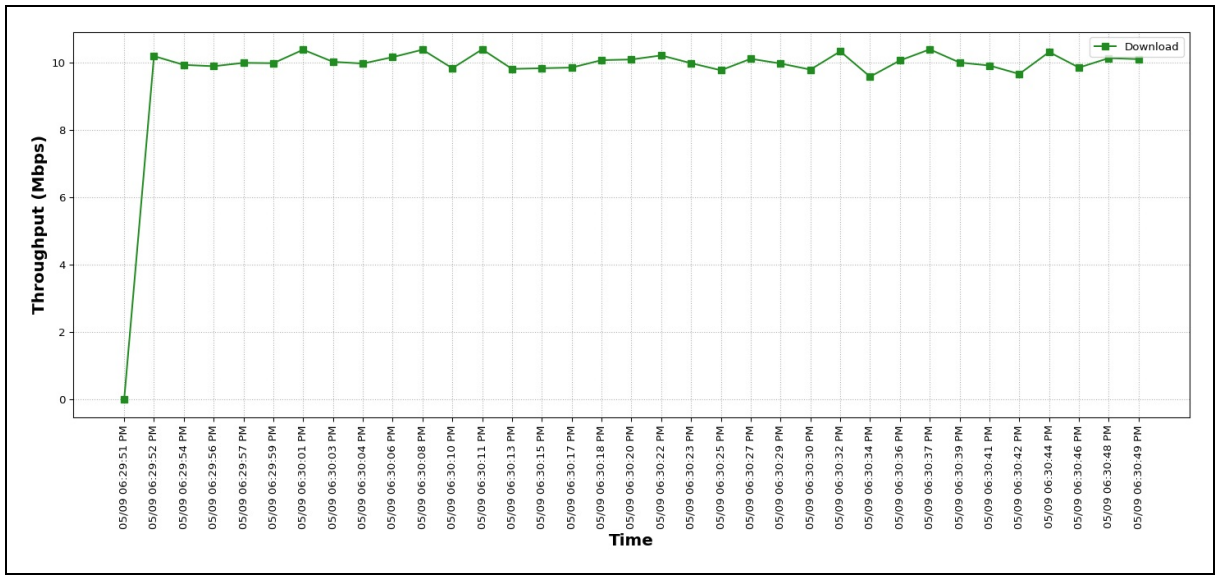
Detailed Result Table

The below tables provides detailed information for the throughput test on each device.

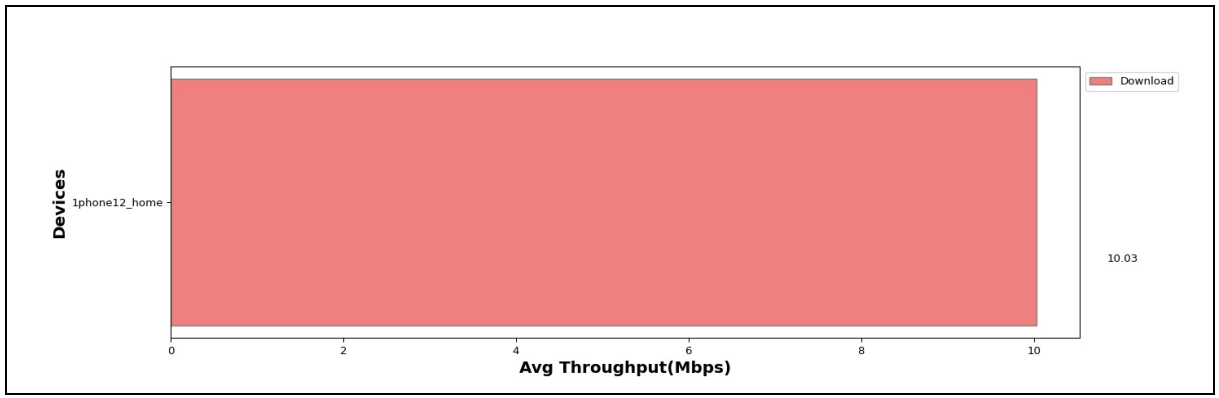
Device Type	Username	SSID	MAC	Channel	Mode	Offered download rate (Mbps)	Observed Average download rate (Mbps)	Offered upload rate (Mbps)	Observed Average upload rate (Mbps)	Average RTT (ms)	RSSI (dBm)	Average Rx Drop %	Average Tx Drop %
Android	Samsung_M14	Testhouse	2a:ec:5c:bf:0b:c6	100	802.11abgn-AC 80	10.0	9.99	0.0	0	13	-20	0.0	0.0

4. Test On Device 1phone12_home:

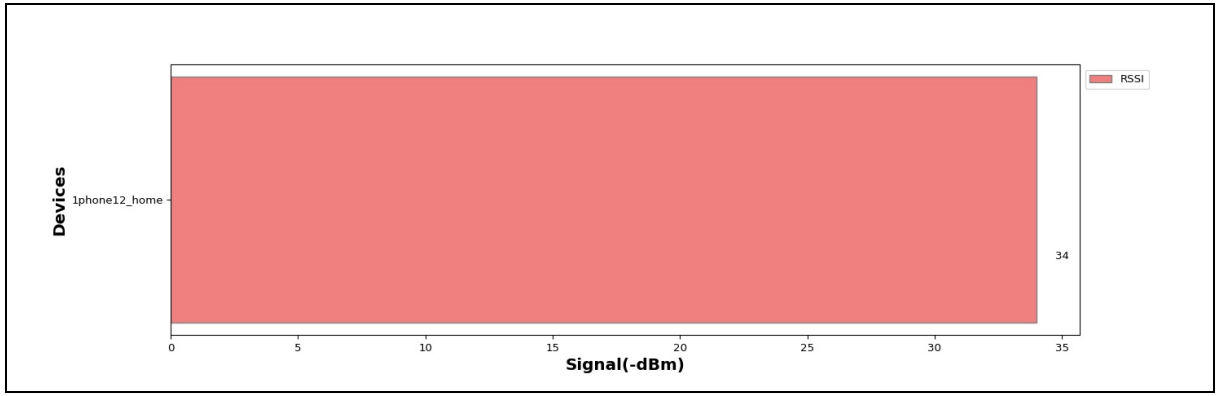
Real Time Throughput: Achieved Throughput: Download: 10.03 Mbps



Per Client Avg-Throughput



RSSI Of The Clients Connected



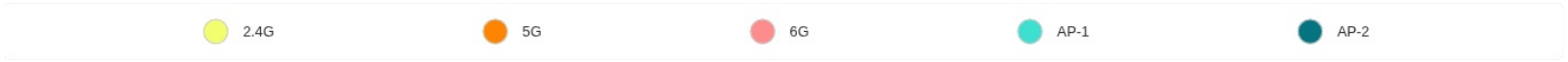
Detailed Result Table

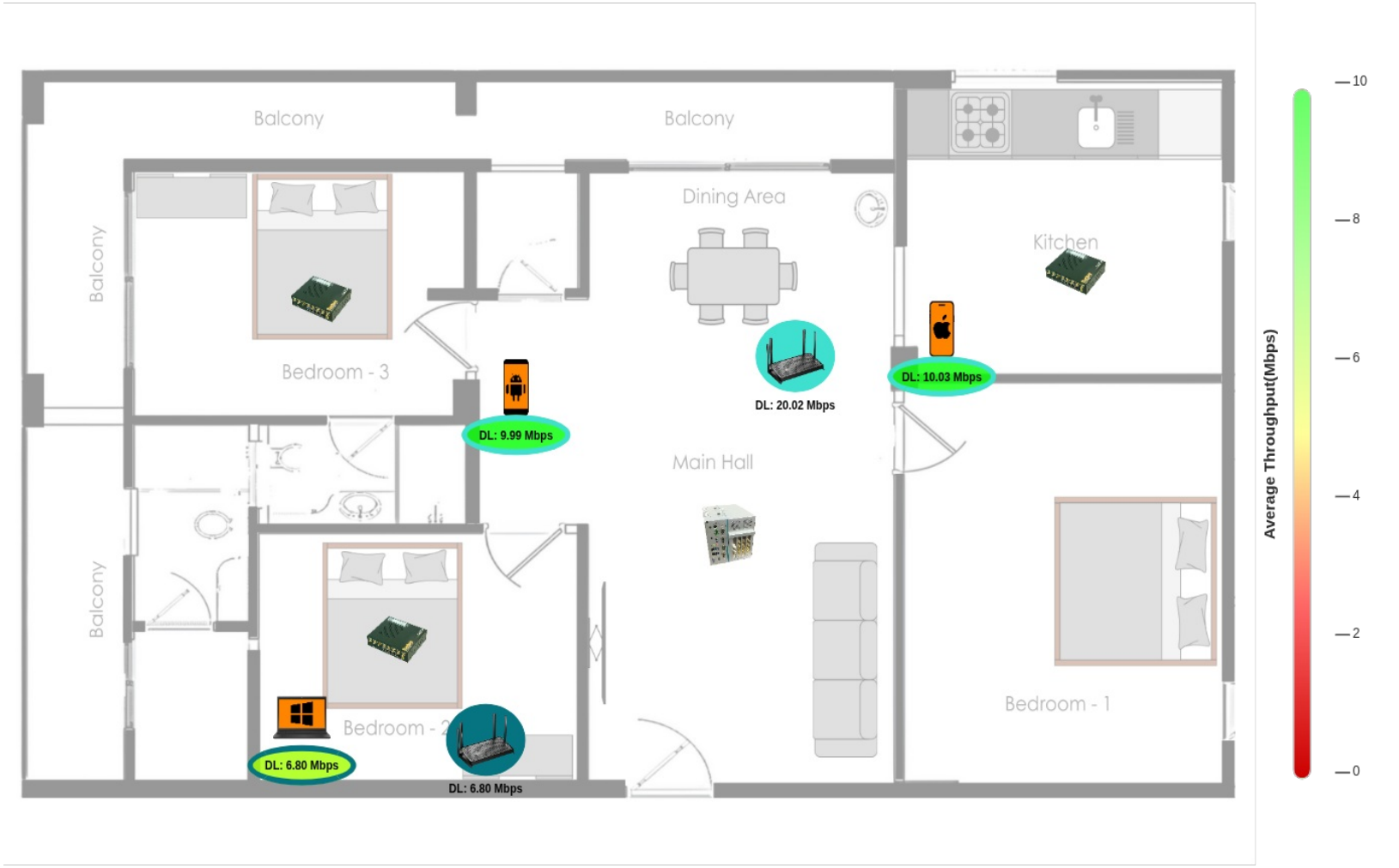
The below tables provides detailed information for the throughput test on each device.

Device Type	Username	SSID	MAC	Channel	Mode	Offered download rate (Mbps)	Observed Average download rate (Mbps)	Offered upload rate (Mbps)	Observed Average upload rate (Mbps)	Average RTT (ms)	RSSI (dBm)	Average Rx Drop %	Average Tx Drop %
iOS	1phone12_home	Testhouse	a6:40:a9:43:81:af	100	AUTO 80	10.0	10.03	0.0	0	9	-34	0.0	0.0

Achieved Average TCP Download Throughput

Floor Name: floor1234





Achieved Average RSSI

Floor: floor1234