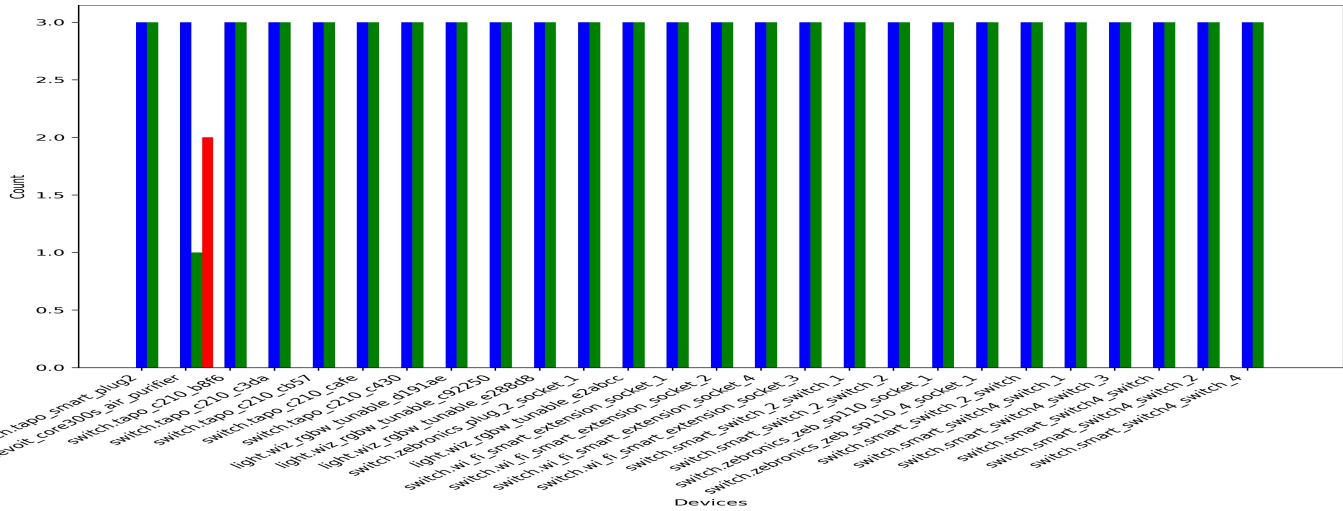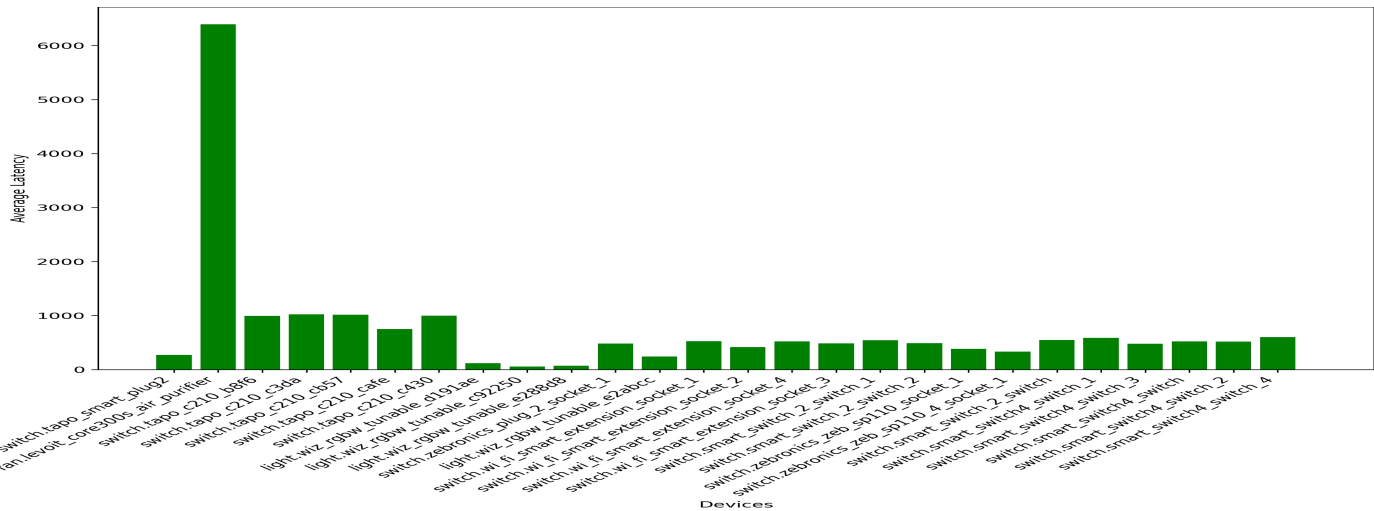## Objective

The Candela IoT test is designed to measure the performance of the Access Point by using different types of IoT devices connected to an Alexa which is connected to an AP. We measure the latencies in performing specific tasks at every iteration and note the number of times a command is successfully executed and failed. The expected behaviour is for the AP to be able to handle several IoT devices (within the limitations of the AP specs) and make sure all devices can be controlled.

## Test Statistics



## Request vs Average Latency (ms)



## Overall Report Table

| Device | Min. Latency (ms) | Avg. Latency (ms) | Max. Latency (ms) | No. of Iterations | Successful Iterations | Failed Iterations |
|---|---|---|---|---|---|---|
| switch.tapo_smart_plug2 | 126.59 | 270.07 | 383.32 | 3 | 3 | 0 |
| fan.levoit_core300s_air_purifier | 2.9 | 6395.52 | 18653.69 | 3 | 1 | 2 |
| switch.tapo_c210_b8f6 | 948.94 | 993.07 | 1065.72 | 3 | 3 | 0 |
| switch.tapo_c210_c3da | 946.57 | 1023.33 | 1067.08 | 3 | 3 | 0 |
| switch.tapo_c210_cb57 | 938.57 | 1016.37 | 1056.88 | 3 | 3 | 0 |
| switch.tapo_c210_cafe | 672.16 | 750.52 | 797.74 | 3 | 3 | 0 |
| switch.tapo_c210_c430 | 946.66 | 999.66 | 1042.26 | 3 | 3 | 0 |
| light.wiz_rgbw_tunable_d191ae | 10.22 | 117.59 | 332.3 | 3 | 3 | 0 |
| light.wiz_rgbw_tunable_c92250 | 0.37 | 57.17 | 90.72 | 3 | 3 | 0 |
| light.wiz_rgbw_tunable_e288d8 | 1.72 | 71.28 | 205.6 | 3 | 3 | 0 |
| switch.zebronics_plug_2_socket_1 | 480.91 | 483.73 | 487.5 | 3 | 3 | 0 |
| light.wiz_rgbw_tunable_e2abcc | 48.74 | 243.55 | 407.84 | 3 | 3 | 0 |
| switch.wi_fi_smart_extension_socket_1 | 482.84 | 523.9 | 551.64 | 3 | 3 | 0 |
| switch.wi_fi_smart_extension_socket_2 | 406.31 | 416.28 | 423.77 | 3 | 3 | 0 |
| switch.wi_fi_smart_extension_socket_4 | 424.28 | 522.77 | 593.7 | 3 | 3 | 0 |
| switch.wi_fi_smart_extension_socket_3 | 474.49 | 485.12 | 491.67 | 3 | 3 | 0 |
| switch.smart_switch_2_switch_1 | 497.09 | 543.86 | 596.6 | 3 | 3 | 0 |
| switch.smart_switch_2_switch_2 | 428.96 | 489.34 | 576.32 | 3 | 3 | 0 |
| switch.zebronics_zeb_sp110_socket_1 | 339.76 | 384.43 | 460.73 | 3 | 3 | 0 |
| switch.zebronics_zeb_sp110_4_socket_1 | 273.15 | 331.28 | 439.76 | 3 | 3 | 0 |
| switch.smart_switch_2_switch | 437.27 | 548.34 | 662.3 | 3 | 3 | 0 |
| switch.smart_switch4_switch_1 | 460.5 | 588.51 | 687.76 | 3 | 3 | 0 |
| switch.smart_switch4_switch_3 | 401.49 | 477.01 | 614.44 | 3 | 3 | 0 |
| switch.smart_switch4_switch | 492.38 | 521.39 | 552.45 | 3 | 3 | 0 |
| switch.smart_switch4_switch_2 | 463.31 | 519.69 | 627.89 | 3 | 3 | 0 |
| switch.smart_switch4_switch_4 | 551.05 | 602.88 | 693.51 | 3 | 3 | 0 |

## Input Parameters

The below table provides the input parameters for the test.

| | |
|---|---|
| Testname | IoTDeviceTest_2025-08-2110:32:57.105356 |
| Device List | switch.tapo_smart_plug2,fan.levoit_core300s_air_purifier,switch.tapo_c210_b8f6,switch.tapo_c210_c3da,switch.tapo_c210_cb57,switch.tapo_c210_cafe,switch.tapo_c210_c430,light.wiz_rgb |
| No. of devices | 26 |
| Iterations | 3 |
| Delay (seconds) | 10 |

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