

TR-398 Issue 4

WiFi Performance Test Plan

Sat Dec 16 08:17:32 PST 2023



Test Setup Information		
Device Under Test	Name	be800
	SSIDs	be800_2g be800_5g be800_6g TP-Link_F5F0_MLO
	Passwords	lanforge lanforge lanforge 91912022
	BSSIDs	40:ed:00:14:f5:f2 40:ed:00:14:f5:f3 52:ed:00:14:f5:f4
	Notes	[BLANK]
Operator	Ben Greear	
Estimated Run Time	2.267 h	
Actual Run Time	1.304 h	

Objective

The TR-398 Issue 4 WiFi Performance test plan by the Broadband forum provides a comprehensive set of tests to qualify the performance of WiFi access points (APs) designed for residential and small office environments. Radio performance, Throughput, Connection Stability, Airtime Fairness, AP Co-existence, MU_MIMO Performance, Spatial Consistency, Long-term Stability and Mesh performance are some of the test areas covered in this test plan. The test plan is designed for service providers deploying in home WiFi APs to qualify the APs in the lab before deployment and for equipment makers to test during the development of the APs. Candela Technologies offers a fully automated TR-398 test system. The user can select from the list of tests available. Most tests can run fully automated, though some require user interaction. Measurements are made and compared to the specified PASS/FAIL criteria in the TR-398 test plan and this report will show the summary PASS/FAIL results followed by more detailed results for each test.

Summary Results

Test	Result	Candela Score	Elapsed	Info
6.2.3 Airtime Fairness Test	2.4Ghz FAIL 5Ghz FAIL 6Ghz PASS	97	1.285 h	N 2.4Ghz passed 8 / 9 AC 5Ghz passed 8 / 9 AX 2.4Ghz passed 9 / 9 AX 5Ghz passed 9 / 9 AX 6Ghz-160 passed 9 / 9 BE 2.4Ghz passed 9 / 9 BE 5Ghz passed 9 / 9 BE 6Ghz passed 9 / 9

6.2.3 Airtime Fairness Test

Summary

Airtime Fairness Test intends to verify the capability of Wi-Fi device to ensure the fairness of airtime usage. This test uses two stations at a time, with one station running in optimum configuration. The second station varies between optimum configuration, weaker signal, and legacy mode configurations. In each setting, TCP traffic is used to determine maximum capacity of each station running by itself. Then, UDP traffic is created on STA1 to run at 75% of the TCP throughput and UDP traffic is created on the second station at 50% of the TCP throughput for that station. This overdrives the AP and causes it to drop frames. The pass/fail criteria is that each station gets at least 45% of the TCP throughput when both stations are running the prescribed UDP traffic.

Test Procedure

1. Establish the setup using default configuration for the 802.11n 2.4 GHz frequency band with $N_{ss} = 2$ operating mode for STA1 and STA2. Use or configure a STA3 to only use 802.11b/g and single spatial stream.
2. Associate STA1 and STA2 with DUT. Establish the LAN connection and wait for 10 seconds. For 6Ghz mode, configure STA1 and STA2 to 160Mhz.
3. Measure the achievable downlink TCP throughput through STA1, using a test time of 120 seconds. Record this value as STA1_Throughput_Max_DL_1.
4. Measure the achievable downlink TCP throughput through STA2, using a test time of 120 seconds. Record this value as STA2_Throughput_Max_DL_1.
5. Configure the downlink UDP traffic streams to use a downlink data rate set to 75% of STA1_Throughput_Max_DL_1 for STA1 and 50% of STA2_Throughput_Max_DL_1 for STA2.
6. Simultaneously run the two UDP traffic streams for 120 seconds, recording the throughput for each stream. Record these values as STA1_Throughput_1 and STA2_Throughput_1 respectively.
7. Move STA2 to a medium distance to the DUT (equivalent to 35 dB@2.4GHz and 30 dB @5GHz attenuation between DUT and STA2, plus 2m calibrated distance). Wait for 10 seconds.
8. Measure the achievable downlink TCP throughput through STA2, using a test time of 120 seconds. Record this value as STA2_Throughput_Max_DL_2.
9. Configure the downlink UDP traffic streams to use a downlink data rate set to 75% of STA1_Throughput_Max_DL_1 for STA1 and 50% of STA2_Throughput_Max_DL_2 for STA2.
10. Simultaneously run the two UDP traffic streams for 120 seconds, recording the throughput for each stream. Record these values as STA1_Throughput_2 and STA2_Throughput_2 respectively.
11. Disassociate STA2 with the DUT. Replace STA 2 with STA 3, configured for the specified Wi-Fi operating mode, and remove the attenuation. Establish the Wi-Fi connection between STA3 and DUT and wait for 10 seconds.
12. Measure the achievable downlink TCP throughput through STA3, using a test time of 120 seconds. Record this value as STA3_Throughput_Max_DL_3.
13. Configure the downlink UDP traffic streams to use a downlink data rate set to 75% of STA1_Throughput_Max_DL_1 for STA1 and 50% of STA3_Throughput_Max_DL_3 for STA3.
14. Simultaneously run the two UDP traffic streams for 120 seconds, recording the throughput for each stream. Record these values as STA1_Throughput_3 and STA3_Throughput_3 respectively.
15. Set the DUT to operating mode to 802.11ac 5 GHz frequency band with $N_{ss} = 2$. Replace or reconfigure STA3 with a STA that uses only 802.11a and single spatial stream. Repeat steps 2 through 14.
16. Set the DUT to operating mode to 802.11ax 2.4 GHz frequency band with $N_{ss} = 2$. Replace or reconfigure STA3 with a STA that uses only 802.11n and single spatial stream. Repeat steps 2 through 14.
17. Set the DUT to operating mode 802.11ax 5 GHz frequency band with $N_{ss} = 2$. Replace or reconfigure STA3 with a STA that uses only 802.11ac and single spatial stream. Repeat steps 2 through 14.
18. Set the DUT to operating mode to 802.11ax 6 GHz frequency band with $N_{ss} = 2$ and 160Mhz bandwidth. Ensure STA1 and STA2 are configured for 160Mhz. Replace or reconfigure STA3 with a STA that uses NSS1 and 80Mhz bandwidth. Repeat steps 2 through 14.

Pass/Fail Criteria

1. For each UDP measurement, the throughput shall be at least 45% of the TCP Throughput Max speeds reported on the station being tested. This ensures that the AP properly limits the over-driven STA1 connection and gives the other station a fair amount of airtime.

To verify over-all throughput while ensuring airtime fairness, the throughput of the DUT SHALL meet the requirements below.

1. For the test in 802.11n 2.4 GHz frequency band with Nss = 2:
 1. The summation of STA1_throughput_1 and STA2_throughput_1 SHALL be larger than 100 Mbps.
 2. The summation of STA1_throughput_2 and STA2_throughput_2 SHALL be larger than 85 Mbps.
 3. The summation of STA1_throughput_3 and STA3_throughput_3 SHALL be larger than 60 Mbps.
2. For the test in 802.11ac 5 GHz frequency band with Nss = 2:
 1. The summation of STA1_throughput_1 and STA2_throughput_1 SHALL be larger than 560 Mbps.
 2. The summation of STA1_throughput_2 and STA2_throughput_2 SHALL be larger than 500 Mbps.
 3. The summation of STA1_throughput_3 and STA3_throughput_3 SHALL be larger than 300 Mbps.
3. For the test in 802.11ax 2.4 GHz frequency band with Nss = 2:
 1. The summation of STA1_throughput_1 and STA2_throughput_1 SHALL be larger than 200 Mbps.
 2. The summation of STA1_throughput_2 and STA2_throughput_2 SHALL be larger than 150 Mbps.
 3. The summation of STA1_throughput_3 and STA3_throughput_3 SHALL be larger than 95 Mbps.
4. For the test in 802.11ax 5 GHz frequency band with Nss = 2:
 1. The summation of STA1_throughput_1 and STA2_throughput_1 SHALL be larger than 720 Mbps.
 2. The summation of STA1_throughput_2 and STA2_throughput_2 SHALL be larger than 600 Mbps.
 3. The summation of STA1_throughput_3 and STA3_throughput_3 SHALL be larger than 400 Mbps.
5. For the test in 802.11ax 6 GHz frequency band with Nss = 2:
 1. The summation of STA1_throughput_1 and STA2_throughput_1 SHALL be larger than 1.44 Gbps.
 2. The summation of STA1_throughput_2 and STA2_throughput_2 SHALL be larger than 1.2 Gbps.
 3. The summation of STA1_throughput_3 and STA3_throughput_3 SHALL be larger than 800 Mbps.

Candela Score

The Candela Score for Airtime Fairness Test is calculated as the percentage sub-tests that passed the pass/fail criteria.

6.2.3 Airtime Fairness Test Results

Type	Result	Value	P/F Value	Notes
Configuration NOTE	INFO			Traffic duration is set to: 60s, default is 120s
N 2.4Ghz STA1 Near	INFO			Reported TCP throughput: 104.89 Mbps STA-RSSI Data/Beacon: -19/-16 Rx-Rate: 144.4M Tx-Rate: 144.4M 802.11bgn-20-2x2
N 2.4Ghz STA2 Near	INFO			Reported TCP throughput: 105.27 Mbps STA-RSSI Data/Beacon: -17/-18 Rx-Rate: 144.4M Tx-Rate: 144.4M 802.11bgn-20-2x2
N 2.4Ghz STA2 Medium	INFO			Reported TCP throughput: 105.13 Mbps STA-RSSI Data/Beacon: -48/-48 Rx-Rate: 144.4M Tx-Rate: 144.4M 802.11bgn-20-2x2
N 2.4Ghz Near: STA1, STA2 Total UDP Throughput	PASS	111	100	Check UDP tput with Near STA1 and STA2 STA1: UDP Tput 58.36 Mbps Req: 78.67 Drop: 24.17% STA-RSSI Data/Beacon: -19/-16 Rx-Rate: 144.4M Tx-Rate: 144.4M 802.11bgn-20-2x2 STA2: UDP Tput 52.36 Req: 52.64 Mbps Drop: 0.08% STA-RSSI Data/Beacon: -16/-18 Rx-Rate: 144.4M Tx-Rate: 144.4M 802.11bgn-20-2x2
N 2.4Ghz Near: STA1 ATF Throughput	PASS	58.36	47.20	UDP Throughput must be at least 45% of stand-alone TCP throughput: 104.89 Mbps
N 2.4Ghz Near: STA2 ATF Throughput	PASS	52.36	47.37	UDP Throughput must be at least 45% of stand-alone TCP throughput: 105.27 Mbps
N 2.4Ghz Medium: STA1+2 Total Throughput	PASS	111	85	Check UDP tput with Near STA1 and Medium STA2 STA1: UDP Tput 58.60 Req: 78.67 Mbps Drop: 24.82% STA-RSSI Data/Beacon: -19/-16 Rx-Rate: 144.4M Tx-Rate: 144.4M 802.11bgn-20-2x2 STA2: UDP Tput 52.37 Req: 52.57 Mbps Drop: 0.04%

				STA-RSSI Data/Beacon: -48/-48 Rx-Rate: 144.4M Tx-Rate: 144.4M 802.11bgn-20-2x2
N 2.4Ghz Medium: STA1 ATF Throughput	PASS	58.60	47.20	UDP Throughput must be at least 45% of stand-alone TCP throughput: 104.89 Mbps
N 2.4Ghz Medium: STA2 ATF Throughput	PASS	52.37	47.31	UDP Throughput must be at least 45% of stand-alone Medium-Distance TCP throughput: 105.13 Mbps
N 2.4Ghz STA3 Legacy	INFO			Reported TCP throughput: 24.56 Mbps STA-RSSI Data/Beacon: -19/-28 Rx-Rate: 54M Tx-Rate: 54M 802.11bg-20-1x1
N 2.4Ghz Legacy: STA1+3 Total Throughput	PASS	84	60	Check UDP tput with Near STA1 and Legacy STA3 STA1: UDP Tput 77.80 Req: 78.67 Mbps Drop: 0.03% STA-RSSI Data/Beacon: -19/-16 Rx-Rate: 144.4M Tx-Rate: 144.4M 802.11bgn-20-2x2 STA3: UDP Tput 6.28 Req: 12.28 Mbps Drop: 47.79% STA-RSSI Data/Beacon: -19/-28 Rx-Rate: 54M Tx-Rate: 54M 802.11bg-20-1x1
N 2.4Ghz Legacy: STA1 ATF Throughput	PASS	77.80	47.20	UDP Throughput must be at least 45% of stand-alone TCP throughput: 104.89 Mbps
N 2.4Ghz Legacy: STA3 ATF Throughput	FAIL	6.28	11.05	UDP Throughput must be at least 45% of stand-alone TCP throughput: 24.56 Mbps
AC 5Ghz STA1 Near	INFO			Reported TCP throughput: 520.25 Mbps STA-RSSI Data/Beacon: -36/-34 Rx-Rate: 866.7M Tx-Rate: 866.7M 802.11an-AC-160-2x2
AC 5Ghz STA2 Near	INFO			Reported TCP throughput: 682.96 Mbps STA-RSSI Data/Beacon: -35/-32 Rx-Rate: 866.7M Tx-Rate: 866.7M 802.11an-AC-160-2x2
AC 5Ghz STA2 Medium	INFO			Reported TCP throughput: 285.42 Mbps STA-RSSI Data/Beacon: -60/-58 Rx-Rate: 390M Tx-Rate: 866.7M 802.11an-AC-160-2x2
AC 5Ghz Near: STA1, STA2 Total UDP Throughput	PASS	722	560	Check UDP tput with Near STA1 and STA2 STA1: UDP Tput 383.66 Mbps Req: 390.19 Drop: 0.48% STA-RSSI Data/Beacon: -36/-34 Rx-Rate: 866.7M Tx-Rate: 866.7M 802.11an-AC-160-2x2 STA2: UDP Tput 338.09 Req: 341.48 Mbps Drop: 0.13% STA-RSSI Data/Beacon: -34/-32 Rx-Rate: 866.7M Tx-Rate: 866.7M 802.11an-AC-160-2x2
AC 5Ghz Near: STA1 ATF Throughput	PASS	383.66	234.11	UDP Throughput must be at least 45% of stand-alone TCP throughput: 520.25 Mbps
AC 5Ghz Near: STA2 ATF Throughput	PASS	338.09	307.33	UDP Throughput must be at least 45% of stand-alone TCP throughput: 682.96 Mbps
AC 5Ghz Medium: STA1+2 Total Throughput	PASS	526	500	Check UDP tput with Near STA1 and Medium STA2 STA1: UDP Tput 385.89 Req: 390.19 Mbps Drop: 0% STA-RSSI Data/Beacon: -36/-34 Rx-Rate: 866.7M Tx-Rate: 866.7M 802.11an-AC-160-2x2 STA2: UDP Tput 139.85 Req: 142.71 Mbps Drop: 1.34% STA-RSSI Data/Beacon: -60/-58 Rx-Rate: 520M Tx-Rate: 866.7M 802.11an-AC-160-2x2
AC 5Ghz Medium: STA1 ATF Throughput	PASS	385.89	234.11	UDP Throughput must be at least 45% of stand-alone TCP throughput: 520.25 Mbps
				UDP Throughput must be at least 45% of

AC 5Ghz Medium: STA2 ATF Throughput	PASS	139.85	128.44	stand-alone Medium-Distance TCP throughput: 285.42 Mbps
AC 5Ghz STA3 Legacy	INFO			Reported TCP throughput: 26.07 Mbps STA-RSSI Data/Beacon: -32/-33 Rx-Rate: 54M Tx-Rate: 54M 802.11a-20-1x1
AC 5Ghz Legacy: STA1+3 Total Throughput	PASS	391	300	Check UDP tput with Near STA1 and Legacy STA3 STA1: UDP Tput 381.90 Req: 390.19 Mbps Drop: 0% STA-RSSI Data/Beacon: -36/-34 Rx-Rate: 866.7M Tx-Rate: 866.7M 802.11an-AC-160-2x2 STA3: UDP Tput 8.86 Req: 13.03 Mbps Drop: 31.07% STA-RSSI Data/Beacon: -33/-33 Rx-Rate: 54M Tx-Rate: 54M 802.11a-20-1x1
AC 5Ghz Legacy: STA1 ATF Throughput	PASS	381.90	234.11	UDP Throughput must be at least 45% of stand-alone TCP throughput: 520.25 Mbps
AC 5Ghz Legacy: STA3 ATF Throughput	FAIL	8.86	11.73	UDP Throughput must be at least 45% of stand-alone TCP throughput: 26.07 Mbps
AX 2.4Ghz STA1 Near	INFO			Reported TCP throughput: 206.90 Mbps STA-RSSI Data/Beacon: -22/-17 Rx-Rate: 286.7M Tx-Rate: 286.7M 802.11bgn-AX-20-2x2
AX 2.4Ghz STA2 Near	INFO			Reported TCP throughput: 207.60 Mbps STA-RSSI Data/Beacon: -19/-18 Rx-Rate: 286.7M Tx-Rate: 286.7M 802.11bgn-AX-20-2x2
AX 2.4Ghz STA2 Medium	INFO			Reported TCP throughput: 207.96 Mbps STA-RSSI Data/Beacon: -50/-49 Rx-Rate: 286.7M Tx-Rate: 270.8M 802.11bgn-AX-20-2x2
AX 2.4Ghz Near: STA1, STA2 Total UDP Throughput	PASS	221	200	Check UDP tput with Near STA1 and STA2 STA1: UDP Tput 117.38 Mbps Req: 155.18 Drop: 23.17% STA-RSSI Data/Beacon: -22/-17 Rx-Rate: 286.7M Tx-Rate: 286.7M 802.11bgn-AX-20-2x2 STA2: UDP Tput 103.24 Req: 103.80 Mbps Drop: 0% STA-RSSI Data/Beacon: -19/-18 Rx-Rate: 286.7M Tx-Rate: 258M 802.11bgn-AX-20-2x2
AX 2.4Ghz Near: STA1 ATF Throughput	PASS	117.38	93.11	UDP Throughput must be at least 45% of stand-alone TCP throughput: 206.90 Mbps
AX 2.4Ghz Near: STA2 ATF Throughput	PASS	103.24	93.42	UDP Throughput must be at least 45% of stand-alone TCP throughput: 207.60 Mbps
AX 2.4Ghz Medium: STA1+2 Total Throughput	PASS	220	150	Check UDP tput with Near STA1 and Medium STA2 STA1: UDP Tput 117.14 Req: 155.18 Mbps Drop: 23.20% STA-RSSI Data/Beacon: -22/-17 Rx-Rate: 286.7M Tx-Rate: 286.7M 802.11bgn-AX-20-2x2 STA2: UDP Tput 103.26 Req: 103.98 Mbps Drop: 0.05% STA-RSSI Data/Beacon: -50/-49 Rx-Rate: 286.7M Tx-Rate: 258M 802.11bgn-AX-20-2x2
AX 2.4Ghz Medium: STA1 ATF Throughput	PASS	117.14	93.11	UDP Throughput must be at least 45% of stand-alone TCP throughput: 206.90 Mbps
AX 2.4Ghz Medium: STA2 ATF Throughput	PASS	103.26	93.58	UDP Throughput must be at least 45% of stand-alone Medium-Distance TCP throughput: 207.96 Mbps
AX 2.4Ghz STA3 Legacy	INFO			Reported TCP throughput: 52.62 Mbps STA-RSSI Data/Beacon: -19/-29 Rx-Rate: 72.2M Tx-Rate: 72.2M 802.11bgn-20-1x1

AX 2.4Ghz Legacy: STA1+3 Total Throughput	PASS	142	95	<p>Check UDP tput with Near STA1 and Legacy STA3 STA1: UDP Tput 116.43 Req: 155.18 Mbps Drop: 24.24% STA-RSSI Data/Beacon: -22/-17 Rx-Rate: 286.7M Tx-Rate: 286.7M 802.11bgn-AX-20-2x2 STA3: UDP Tput 26.04 Req: 26.31 Mbps Drop: 0.03% STA-RSSI Data/Beacon: -19/-29 Rx-Rate: 72.2M Tx-Rate: 72.2M 802.11bgn-20-1x1</p>
AX 2.4Ghz Legacy: STA1 ATF Throughput	PASS	116.43	93.11	UDP Throughput must be at least 45% of stand-alone TCP throughput: 206.90 Mbps
AX 2.4Ghz Legacy: STA3 ATF Throughput	PASS	26.04	23.68	UDP Throughput must be at least 45% of stand-alone TCP throughput: 52.62 Mbps
AX 5Ghz STA1 Near	INFO			<p>Reported TCP throughput: 770.37 Mbps STA-RSSI Data/Beacon: -38/-34 Rx-Rate: 1.081G Tx-Rate: 245M 802.11an-AX-160-2x2</p>
AX 5Ghz STA2 Near	INFO			<p>Reported TCP throughput: 944.15 Mbps STA-RSSI Data/Beacon: -36/-32 Rx-Rate: 1.201G Tx-Rate: 1.201G 802.11an-AX-160-2x2</p>
AX 5Ghz STA2 Medium	INFO			<p>Reported TCP throughput: 495.89 Mbps STA-RSSI Data/Beacon: -60/-58 Rx-Rate: 648.5M Tx-Rate: 960.7M 802.11an-AX-160-2x2</p>
AX 5Ghz Near: STA1, STA2 Total UDP Throughput	PASS	982	720	<p>Check UDP tput with Near STA1 and STA2 STA1: UDP Tput 514.01 Mbps Req: 577.78 Drop: 9.86% STA-RSSI Data/Beacon: -38/-34 Rx-Rate: 1.081G Tx-Rate: 245M 802.11an-AX-160-2x2 STA2: UDP Tput 467.61 Req: 472.08 Mbps Drop: 0.31% STA-RSSI Data/Beacon: -36/-32 Rx-Rate: 1.201G Tx-Rate: 864.8M 802.11an-AX-160-2x2</p>
AX 5Ghz Near: STA1 ATF Throughput	PASS	514.01	346.67	UDP Throughput must be at least 45% of stand-alone TCP throughput: 770.37 Mbps
AX 5Ghz Near: STA2 ATF Throughput	PASS	467.61	424.87	UDP Throughput must be at least 45% of stand-alone TCP throughput: 944.15 Mbps
AX 5Ghz Medium: STA1+2 Total Throughput	PASS	762	600	<p>Check UDP tput with Near STA1 and Medium STA2 STA1: UDP Tput 515.91 Req: 577.78 Mbps Drop: 8.85% STA-RSSI Data/Beacon: -38/-34 Rx-Rate: 1.081G Tx-Rate: 245M 802.11an-AX-160-2x2 STA2: UDP Tput 245.68 Req: 247.94 Mbps Drop: 0.37% STA-RSSI Data/Beacon: -59/-58 Rx-Rate: 648.5M Tx-Rate: 1.081G 802.11an-AX-160-2x2</p>
AX 5Ghz Medium: STA1 ATF Throughput	PASS	515.91	346.67	UDP Throughput must be at least 45% of stand-alone TCP throughput: 770.37 Mbps
AX 5Ghz Medium: STA2 ATF Throughput	PASS	245.68	223.15	UDP Throughput must be at least 45% of stand-alone Medium-Distance TCP throughput: 495.89 Mbps
AX 5Ghz STA3 Legacy	INFO			<p>Reported TCP throughput: 335.80 Mbps STA-RSSI Data/Beacon: -37/-32 Rx-Rate: 433.3M Tx-Rate: 433.3M 802.11an-AC-160-1x1</p>
AX 5Ghz Legacy: STA1+3 Total Throughput	PASS	673	400	<p>Check UDP tput with Near STA1 and Legacy STA3 STA1: UDP Tput 506.27 Req: 577.78 Mbps Drop: 9.43% STA-RSSI Data/Beacon: -38/-34 Rx-Rate: 1.081G Tx-Rate: 245M 802.11an-AX-160-2x2 STA3: UDP Tput 166.40 Req: 167.90 Mbps Drop:</p>

				0.09% STA-RSSI Data/Beacon: -37/-32 Rx-Rate: 433.3M Tx-Rate: 433.3M 802.11an-AC-160-1x1
AX 5Ghz Legacy: STA1 ATF Throughput	PASS	506.27	346.67	UDP Throughput must be at least 45% of stand-alone TCP throughput: 770.37 Mbps
AX 5Ghz Legacy: STA3 ATF Throughput	PASS	166.40	151.11	UDP Throughput must be at least 45% of stand-alone TCP throughput: 335.80 Mbps
AXe 6Ghz STA1 Near	INFO			Reported TCP throughput: 1,927.85 Mbps STA-RSSI Data/Beacon: -35/-42 Rx-Rate: 2.402G Tx-Rate: 2.402G 802.11a-AX-160-2x2
AXe 6Ghz STA2 Near	INFO			Reported TCP throughput: 1,925.88 Mbps STA-RSSI Data/Beacon: -40/-49 Rx-Rate: 2.402G Tx-Rate: 490M 802.11a-AX-160-2x2
AXe 6Ghz STA2 Medium	INFO			Reported TCP throughput: 1,508.70 Mbps STA-RSSI Data/Beacon: -55/-65 Rx-Rate: 1.921G Tx-Rate: 1.441G 802.11a-AX-160-2x2
AXe 6Ghz Near: STA1, STA2 Total UDP Throughput	PASS	2,093	720	Check UDP tput with Near STA1 and STA2 STA1: UDP Tput 1,145.42 Mbps Req: 1,445.88 Drop: 20.21% STA-RSSI Data/Beacon: -35/-42 Rx-Rate: 2.402G Tx-Rate: 2.402G 802.11a-AX-160-2x2 STA2: UDP Tput 947.18 Req: 962.94 Mbps Drop: 0.44% STA-RSSI Data/Beacon: -40/-49 Rx-Rate: 2.402G Tx-Rate: 1.441G 802.11a-AX-160-2x2
AXe 6Ghz Near: STA1 ATF Throughput	PASS	1,145.42	867.53	UDP Throughput must be at least 45% of stand-alone TCP throughput: 1,927.85 Mbps
AXe 6Ghz Near: STA2 ATF Throughput	PASS	947.18	866.64	UDP Throughput must be at least 45% of stand-alone TCP throughput: 1,925.88 Mbps
AXe 6Ghz Medium: STA1+2 Total Throughput	PASS	1,908	600	Check UDP tput with Near STA1 and Medium STA2 STA1: UDP Tput 1,167.24 Req: 1,445.88 Mbps Drop: 18.58% STA-RSSI Data/Beacon: -35/-42 Rx-Rate: 2.402G Tx-Rate: 2.402G 802.11a-AX-160-2x2 STA2: UDP Tput 740.97 Req: 754.35 Mbps Drop: 1.29% STA-RSSI Data/Beacon: -54/-65 Rx-Rate: 1.921G Tx-Rate: 2.161G 802.11a-AX-160-2x2
AXe 6Ghz Medium: STA1 ATF Throughput	PASS	1,167.24	867.53	UDP Throughput must be at least 45% of stand-alone TCP throughput: 1,927.85 Mbps
AXe 6Ghz Medium: STA2 ATF Throughput	PASS	740.97	678.92	UDP Throughput must be at least 45% of stand-alone Medium-Distance TCP throughput: 1,508.70 Mbps
AXe 6Ghz STA3 Legacy	INFO			Reported TCP throughput: 486.86 Mbps STA-RSSI Data/Beacon: -50/-53 Rx-Rate: 600.4M Tx-Rate: 1.201G 802.11a-AX-160-1x1
AXe 6Ghz Legacy: STA1+3 Total Throughput	PASS	1,373	400	Check UDP tput with Near STA1 and Legacy STA3 STA1: UDP Tput 1,131.00 Req: 1,445.88 Mbps Drop: 20.76% STA-RSSI Data/Beacon: -35/-42 Rx-Rate: 2.402G Tx-Rate: 2.402G 802.11a-AX-160-2x2 STA3: UDP Tput 241.92 Req: 243.43 Mbps Drop: 0.28% STA-RSSI Data/Beacon: -50/-52 Rx-Rate: 600.4M Tx-Rate: 1.201G 802.11a-AX-160-1x1
AXe 6Ghz Legacy: STA1 ATF Throughput	PASS	1,131.00	867.53	UDP Throughput must be at least 45% of stand-alone TCP throughput: 1,927.85 Mbps

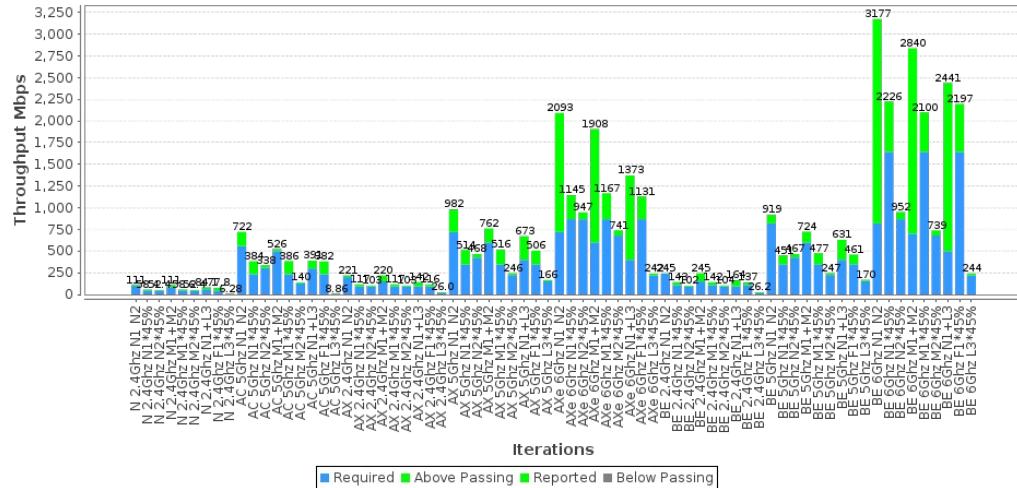
Axe 6Ghz Legacy: STA3 ATF Throughput	PASS	241.92	219.09	UDP Throughput must be at least 45% of stand-alone TCP throughput: 486.86 Mbps
BE 2.4Ghz STA1 Near	INFO			Reported TCP throughput: 239.78 Mbps STA-RSSI Data/Beacon: -23/-17 Rx-Rate: 344.1M Tx-Rate: 344.1M 802.11bgn-BE-20-2x2
BE 2.4Ghz STA2 Near	INFO			Reported TCP throughput: 204.60 Mbps STA-RSSI Data/Beacon: -19/-18 Rx-Rate: 286.7M Tx-Rate: 286.7M 802.11bgn-AX-20-2x2
BE 2.4Ghz STA2 Medium	INFO			Reported TCP throughput: 208.47 Mbps STA-RSSI Data/Beacon: -50/-49 Rx-Rate: 286.7M Tx-Rate: 270.8M 802.11bgn-AX-20-2x2
BE 2.4Ghz Near: STA1, STA2 Total UDP Throughput	PASS	245	240	Check UDP tput with Near STA1 and STA2 STA1: UDP Tput 142.76 Mbps Req: 179.83 Drop: 19.37% STA-RSSI Data/Beacon: -23/-17 Rx-Rate: 344.1M Tx-Rate: 344.1M 802.11bgn-BE-20-2x2 STA2: UDP Tput 101.90 Req: 102.30 Mbps Drop: 0.05% STA-RSSI Data/Beacon: -19/-18 Rx-Rate: 286.7M Tx-Rate: 286.7M 802.11bgn-AX-20-2x2
BE 2.4Ghz Near: STA1 ATF Throughput	PASS	142.76	107.90	UDP Throughput must be at least 45% of stand-alone TCP throughput: 239.78 Mbps
BE 2.4Ghz Near: STA2 ATF Throughput	PASS	101.90	92.07	UDP Throughput must be at least 45% of stand-alone TCP throughput: 204.60 Mbps
BE 2.4Ghz Medium: STA1+2 Total Throughput	PASS	245	150	Check UDP tput with Near STA1 and Medium STA2 STA1: UDP Tput 141.60 Req: 179.83 Mbps Drop: 20.43% STA-RSSI Data/Beacon: -23/-17 Rx-Rate: 344.1M Tx-Rate: 344.1M 802.11bgn-BE-20-2x2 STA2: UDP Tput 103.83 Req: 104.23 Mbps Drop: 0% STA-RSSI Data/Beacon: -50/-49 Rx-Rate: 286.7M Tx-Rate: 286.7M 802.11bgn-AX-20-2x2
BE 2.4Ghz Medium: STA1 ATF Throughput	PASS	141.60	107.90	UDP Throughput must be at least 45% of stand-alone TCP throughput: 239.78 Mbps
BE 2.4Ghz Medium: STA2 ATF Throughput	PASS	103.83	93.81	UDP Throughput must be at least 45% of stand-alone Medium-Distance TCP throughput: 208.47 Mbps
BE 2.4Ghz STA3 Legacy	INFO			Reported TCP throughput: 52.59 Mbps STA-RSSI Data/Beacon: -20/-29 Rx-Rate: 72.2M Tx-Rate: 72.2M 802.11bgn-20-1x1
BE 2.4Ghz Legacy: STA1+3 Total Throughput	PASS	164	95	Check UDP tput with Near STA1 and Legacy STA3 STA1: UDP Tput 137.42 Req: 179.83 Mbps Drop: 23.23% STA-RSSI Data/Beacon: -23/-17 Rx-Rate: 344.1M Tx-Rate: 344.1M 802.11bgn-BE-20-2x2 STA3: UDP Tput 26.20 Req: 26.30 Mbps Drop: 0% STA-RSSI Data/Beacon: -20/-29 Rx-Rate: 72.2M Tx-Rate: 72.2M 802.11bgn-20-1x1
BE 2.4Ghz Legacy: STA1 ATF Throughput	PASS	137.42	107.90	UDP Throughput must be at least 45% of stand-alone TCP throughput: 239.78 Mbps
BE 2.4Ghz Legacy: STA3 ATF Throughput	PASS	26.20	23.67	UDP Throughput must be at least 45% of stand-alone TCP throughput: 52.59 Mbps
BE 5Ghz STA1 Near	INFO			Reported TCP throughput: 774.01 Mbps STA-RSSI Data/Beacon: -38/-34 Rx-Rate: 1.081G Tx-Rate: 1.441G 802.11an-BE-160-2x2

BE 5Ghz STA2 Near	INFO			Reported TCP throughput: 946.80 Mbps STA-RSSI Data/Beacon: -36/-32 Rx-Rate: 1.201G Tx-Rate: 1.201G 802.11an-AX-160-2x2
BE 5Ghz STA2 Medium	INFO			Reported TCP throughput: 497.94 Mbps STA-RSSI Data/Beacon: -60/-58 Rx-Rate: 648.5M Tx-Rate: 864.8M 802.11an-AX-160-2x2
BE 5Ghz Near: STA1, STA2 Total UDP Throughput	PASS	919	820	Check UDP tput with Near STA1 and STA2 STA1: UDP Tput 451.49 Mbps Req: 580.51 Drop: 19.62% STA-RSSI Data/Beacon: -36/-34 Rx-Rate: 960.7M Tx-Rate: 1.441G 802.11an-BE-160-2x2 STA2: UDP Tput 467.27 Req: 473.40 Mbps Drop: 0.93% STA-RSSI Data/Beacon: -36/-32 Rx-Rate: 1.201G Tx-Rate: 864.8M 802.11an-AX-160-2x2
BE 5Ghz Near: STA1 ATF Throughput	PASS	451.49	348.31	UDP Throughput must be at least 45% of stand-alone TCP throughput: 774.01 Mbps
BE 5Ghz Near: STA2 ATF Throughput	PASS	467.27	426.06	UDP Throughput must be at least 45% of stand-alone TCP throughput: 946.80 Mbps
BE 5Ghz Medium: STA1+2 Total Throughput	PASS	724	600	Check UDP tput with Near STA1 and Medium STA2 STA1: UDP Tput 476.95 Req: 580.51 Mbps Drop: 17.15% STA-RSSI Data/Beacon: -38/-34 Rx-Rate: 1.081G Tx-Rate: 1.441G 802.11an-BE-160-2x2 STA2: UDP Tput 247.20 Req: 248.97 Mbps Drop: 0% STA-RSSI Data/Beacon: -59/-58 Rx-Rate: 648.5M Tx-Rate: 1.081G 802.11an-AX-160-2x2
BE 5Ghz Medium: STA1 ATF Throughput	PASS	476.95	348.31	UDP Throughput must be at least 45% of stand-alone TCP throughput: 774.01 Mbps
BE 5Ghz Medium: STA2 ATF Throughput	PASS	247.20	224.07	UDP Throughput must be at least 45% of stand-alone Medium-Distance TCP throughput: 497.94 Mbps
BE 5Ghz STA3 Legacy	INFO			Reported TCP throughput: 341.41 Mbps STA-RSSI Data/Beacon: -37/-32 Rx-Rate: 433.3M Tx-Rate: 433.3M 802.11an-AC-160-1x1
BE 5Ghz Legacy: STA1+3 Total Throughput	PASS	631	400	Check UDP tput with Near STA1 and Legacy STA3 STA1: UDP Tput 461.01 Req: 580.51 Mbps Drop: 20.01% STA-RSSI Data/Beacon: -38/-34 Rx-Rate: 1.081G Tx-Rate: 1.441G 802.11an-BE-160-2x2 STA3: UDP Tput 169.99 Req: 170.71 Mbps Drop: 0.09% STA-RSSI Data/Beacon: -37/-32 Rx-Rate: 433.3M Tx-Rate: 433.3M 802.11an-AC-160-1x1
BE 5Ghz Legacy: STA1 ATF Throughput	PASS	461.01	348.31	UDP Throughput must be at least 45% of stand-alone TCP throughput: 774.01 Mbps
BE 5Ghz Legacy: STA3 ATF Throughput	PASS	169.99	153.64	UDP Throughput must be at least 45% of stand-alone TCP throughput: 341.41 Mbps
BE 6Ghz STA1 Near	INFO			Reported TCP throughput: 3,653.87 Mbps STA-RSSI Data/Beacon: -35/-42 Rx-Rate: 5.187G Tx-Rate: 5.765G 802.11a-BE-320-2x2
BE 6Ghz STA2 Near	INFO			Reported TCP throughput: 1,927.14 Mbps STA-RSSI Data/Beacon: -40/-49 Rx-Rate: 2.402G Tx-Rate: 490M 802.11a-AX-160-2x2
BE 6Ghz STA2 Medium	INFO			Reported TCP throughput: 1,511.04 Mbps STA-RSSI Data/Beacon: -55/-65 Rx-Rate: 1.921G Tx-Rate: 1.441G 802.11a-AX-160-2x2

BE 6Ghz Near: STA1, STA2 Total UDP Throughput	PASS	3,177	820	Check UDP tput with Near STA1 and STA2 STA1: UDP Tput 2,225.83 Mbps Req: 2,740.41 Drop: 16.94% STA-RSSI Data/Beacon: -36/-42 Rx-Rate: 5.765G Tx-Rate: 5.765G 802.11a-BE-320-2x2 STA2: UDP Tput 951.51 Req: 963.57 Mbps Drop: 0% STA-RSSI Data/Beacon: -40/-49 Rx-Rate: 2.402G Tx-Rate: 1.441G 802.11a-AX-160-2x2
BE 6Ghz Near: STA1 ATF Throughput	PASS	2,225.83	1,644.24	UDP Throughput must be at least 45% of stand-alone TCP throughput: 3,653.87 Mbps
BE 6Ghz Near: STA2 ATF Throughput	PASS	951.51	867.21	UDP Throughput must be at least 45% of stand-alone TCP throughput: 1,927.14 Mbps
BE 6Ghz Medium: STA1+2 Total Throughput	PASS	2,840	700	Check UDP tput with Near STA1 and Medium STA2 STA1: UDP Tput 2,100.21 Req: 2,740.41 Mbps Drop: 20.59% STA-RSSI Data/Beacon: -36/-42 Rx-Rate: 5.187G Tx-Rate: 5.765G 802.11a-BE-320-2x2 STA2: UDP Tput 739.37 Req: 755.52 Mbps Drop: 1.76% STA-RSSI Data/Beacon: -55/-65 Rx-Rate: 1.921G Tx-Rate: 2.402G 802.11a-AX-160-2x2
BE 6Ghz Medium: STA1 ATF Throughput	PASS	2,100.21	1,644.24	UDP Throughput must be at least 45% of stand-alone TCP throughput: 3,653.87 Mbps
BE 6Ghz Medium: STA2 ATF Throughput	PASS	739.37	679.97	UDP Throughput must be at least 45% of stand-alone Medium-Distance TCP throughput: 1,511.04 Mbps
BE 6Ghz STA3 Legacy	INFO			Reported TCP throughput: 490.03 Mbps STA-RSSI Data/Beacon: -50/-53 Rx-Rate: 600.4M Tx-Rate: 1.201G 802.11a-AX-160-1x1
BE 6Ghz Legacy: STA1+3 Total Throughput	PASS	2,441	500	Check UDP tput with Near STA1 and Legacy STA3 STA1: UDP Tput 2,197.03 Req: 2,740.41 Mbps Drop: 18.10% STA-RSSI Data/Beacon: -36/-42 Rx-Rate: 5.765G Tx-Rate: 5.765G 802.11a-BE-320-2x2 STA3: UDP Tput 243.57 Req: 245.02 Mbps Drop: 0.28% STA-RSSI Data/Beacon: -50/-52 Rx-Rate: 600.4M Tx-Rate: 1.201G 802.11a-AX-160-1x1
BE 6Ghz Legacy: STA1 ATF Throughput	PASS	2,197.03	1,644.24	UDP Throughput must be at least 45% of stand-alone TCP throughput: 3,653.87 Mbps
BE 6Ghz Legacy: STA3 ATF Throughput	PASS	243.57	220.51	UDP Throughput must be at least 45% of stand-alone TCP throughput: 490.03 Mbps

[CSV Data for 6.2.3 Airtime Fairness Test](#)

6.2.3 Airtime Fairness Test



Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz N Near STA1+STA2

ATF: Near Distance STA1+STA2 Snapshot N 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	12.275 Kbps	33.837 Mbps	0.037	144.4 Mbps	144.4 Mbps	802.11bgn 20x2		6	236	-19	40:ED:00:14:F5:F2	192.168.0.104 e4:60:17:65:83:8f
1.4.15 wlan4	444.222 Kbps	73.692 Mbps	1.202	144.4 Mbps	144.4 Mbps	802.11bgn 20x2		6	78	-16	40:ED:00:14:F5:F2	192.168.0.63 e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	120.1 Mbps	343.993 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0-1.00-A	20.304 Kbps	58.859 Mbps	103	301039	215	238	0	23.915	0
cv_udp-3.2-4.wlan0-1.00-B	78.387 Mbps	20.009 Kbps	395660	101	23	238	11	0	0
cv_udp-3.2-4.wlan4-1.00-A	19.83 Kbps	52.649 Mbps	103	270288	18	45	0	0	0
cv_udp-3.2-4.wlan4-1.00-B	52.639 Mbps	20.033 Kbps	268017	103	27	45	13	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz N Near STA1 + Medium STA2

ATF: Near STA1 plus Medium Distance STA2 Snapshot N 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	19.702 Kbps	54.953 Mbps	0.038	144.4 Mbps	144.4 Mbps	802.11bgn 20x2		6	236	-19	40:ED:00:14:F5:F2	192.168.0.104 e4:60:17:65:83:8f
1.4.15 wlan4	19.699 Kbps	48.609 Mbps	1.207	144.4 Mbps	144.4 Mbps	802.11bgn 20x2		6	78	-48	40:ED:00:14:F5:F2	192.168.0.63 e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	124.732 Mbps	40.163 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0-1.00-A	20.083 Kbps	59.024 Mbps	103	302742	203	229	0	24.108	0
cv_udp-3.2-4.wlan0-1.00-B	78.681 Mbps	19.952 Kbps	398909	101	26	229	13	0	0
cv_udp-3.2-4.wlan4-1.00-A	20.021 Kbps	52.552 Mbps	104	272614	18	75	0	0	0
cv_udp-3.2-4.wlan4-1.00-B	52.574 Mbps	20.032 Kbps	268101	102	57	75	78	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz N Near STA1 + Legacy STA3

ATF: Near STA1 and Legacy STA3 Snapshot N 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	12.342 Kbps	45.46 Mbps	0.038	144.4 Mbps	144.4 Mbps	802.11bgn 20 2x2	6	236	-19	40:ED:00:14:F5:F2	192.168.0.104	e4:60:17:65:83:8f
1.4.16 wlan8	116.092 Kbps	13.847 Mbps	27.458	54 Mbps	54 Mbps	802.11bg 20 1x1	6	64	-19	40:ED:00:14:F5:F2	192.168.0.58	e4:60:17:66:21:5a

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	65.74 Mbps	106.195 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0-1.0.0-A	19.923 Kbps	78.666 Mbps	106	412941	0	9	0	0	0
cv_udp-3.2-4.wlan0-1.0.0-B	78.69 Mbps	19.886 Kbps	400335	102	9	9	6	0.943	0
cv_udp-3.2-4.wlan8-1.0.0-A	19.768 Kbps	6.305 Mbps	104	32753	1,818	1,829	1	48.236	0
cv_udp-3.2-4.wlan8-1.0.0-B	12.277 Mbps	20.155 Kbps	63274	104	11	1,829	6	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz AC Near STA1+STA2

ATF: Near Distance STA1+STA2 Snapshot AC 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.724 Kbps	379.154 Mbps	0.277	866.7 Mbps	866.7 Mbps	802.11an-AC 160 2x2	36	89	-36	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	20.633 Kbps	332.39 Mbps	5.304	866.7 Mbps	866.7 Mbps	802.11an-AC 160 2x2	36	71	-34	40:ED:00:14:F5:F3	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	694.548 Mbps	54.311 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0-1.0.0-A	19.664 Kbps	388.488 Mbps	103	1982952	1	15	0	0	0
cv_udp-3.2-4.wlan0-1.0.0-B	388.556 Mbps	19.828 Kbps	1979319	102	14	15	6	0	0
cv_udp-3.2-4.wlan4-1.0.0-A	19.695 Kbps	341.079 Mbps	103	1753146	3	19	0	0	0
cv_udp-3.2-4.wlan4-1.0.0-B	340.061 Mbps	19.828 Kbps	1732173	102	16	19	6	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz AC Near STA1 + Medium STA2

ATF: Near STA1 plus Medium Distance STA2 Snapshot AC 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	19.17 Kbps	355.19 Mbps	0.277	866.7 Mbps	866.7 Mbps	802.11an-AC 160 2x2	36	89	-36	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	19.665 Kbps	162.503 Mbps	5.319	866.7 Mbps	520 Mbps	802.11an-AC 160 2x2	36	71	-60	40:ED:00:14:F5:F3	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	535.486 Mbps	38.913 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0-1.0.0-A	19.927 Kbps	388.844 Mbps	103	1993495	0	16	0	0	0

cv_udp-3.2-4.wlan0-1.0.0-B	390.3 Mbps	19.844 Kbps	1993091	102	16		16	11	0	0
cv_udp-3.2-4.wlan4-1.0.0-A	19.858 Kbps	140.853 Mbps	103	724639	2		95	0	0.101	0
cv_udp-3.2-4.wlan4-1.0.0-B	142.745 Mbps	19.546 Kbps	725373	101	93		95	120	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz AC Near STA1 + Legacy STA3

ATF: Near STA1 and Legacy STA3 Snapshot AC 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.794 Kbps	376.696 Mbps	0.276	866.7 Mbps	866.7 Mbps	802.11an-AC 160 2x2	36	89	-36	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.16 wlan8	20.571 Kbps	8.464 Mbps	22.252	54 Mbps	54 Mbps	802.11a 20 1x1	36	86	-33	40:ED:00:14:F5:F3	192.168.0.58	e4:60:17:66:21:5a

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	375.983 Mbps	61.729 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %	
cv_udp-3.2-4.wlan0-1.0.0-A	19.711 Kbps	388.765 Mbps	105	2018441	-1		5	0	0	0
cv_udp-3.2-4.wlan0-1.0.0-B	389.441 Mbps	19.923 Kbps	1974567	103	6		5	1	0	0
cv_udp-3.2-4.wlan8-1.0.0-A	19.982 Kbps	8.981 Mbps	103	46032	1,281		1,287	1	30.996	0
cv_udp-3.2-4.wlan8-1.0.0-B	13.031 Mbps	19.849 Kbps	66709	103	6		1,287	1	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz AX Near STA1+STA2

ATF: Near Distance STA1+STA2 Snapshot AX 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.741 Kbps	115.679 Mbps	0.005	286.7 Mbps	286.7 Mbps	802.11bgn-AX 20 2x2	6	96	-22	40:ED:00:14:F5:F2	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	467.672 Kbps	148.57 Mbps	8.421	258 Mbps	286.7 Mbps	802.11bgn-AX 20 2x2	6	110	-19	40:ED:00:14:F5:F2	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	242.339 Mbps	212.873 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %	
cv_udp-3.2-4.wlan0-1.0.0-A	19.885 Kbps	119.245 Mbps	103	609928	116		143	0	22.980	0
cv_udp-3.2-4.wlan0-1.0.0-B	155.203 Mbps	19.939 Kbps	791911	103	27		143	15	0	0
cv_udp-3.2-4.wlan4-1.0.0-A	20.181 Kbps	103.805 Mbps	104	532884	8		27	0	0	0
cv_udp-3.2-4.wlan4-1.0.0-B	103.814 Mbps	19.706 Kbps	530640	102	19		27	11	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz AX Near STA1 + Medium STA2

ATF: Near STA1 plus Medium Distance STA2 Snapshot AX 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
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1.4.14 wlan0	25.741 Kbps	111.508 Mbps	0.005	286.7 Mbps	286.7 Mbps	802.11bgn-AX 20 2x2	6	96	-22	40:ED:00:14:F5:F2	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	21.282 Kbps	95.361 Mbps	8.432	258 Mbps	286.7 Mbps	802.11bgn-AX 20 2x2	6	110	-50	40:ED:00:14:F5:F2	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	247.608 Mbps	45.365 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	20.079 Kbps	119.114 Mbps	104	610695	132	159	0	23.179	0
cv_udp-3.2-4.wlan0--1.0.0-B	155.233 Mbps	19.775 Kbps	785795	102	27	159	9	0	0
cv_udp-3.2-4.wlan4--1.0.0-A	19.975 Kbps	103.952 Mbps	103	534974	32	122	0	0	0
cv_udp-3.2-4.wlan4--1.0.0-B	103.243 Mbps	19.868 Kbps	524832	101	90	122	115	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz AX Near STA1 + Legacy STA3

ATF: Near STA1 and Legacy STA3 Snapshot AX 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.804 Kbps	113.873 Mbps	0.005	286.7 Mbps	286.7 Mbps	802.11bgn-AX 20 2x2	6	96	-22	40:ED:00:14:F5:F2	192.168.0.104	e4:60:17:65:83:8f
1.4.16 wlan8	20.794 Kbps	25.29 Mbps	0.01	72.2 Mbps	72.2 Mbps	802.11bgn-20 1x1	6	80	-19	40:ED:00:14:F5:F2	192.168.0.58	e4:60:17:66:21:5a

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	149.224 Mbps	176.091 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	20.028 Kbps	118.235 Mbps	105	610471	123	180	0	22.619	0
cv_udp-3.2-4.wlan0--1.0.0-B	155.216 Mbps	19.785 Kbps	788919	103	57	180	51	0	0
cv_udp-3.2-4.wlan8--1.0.0-A	19.955 Kbps	26.301 Mbps	103	134975	17	90	0	0	0
cv_udp-3.2-4.wlan8--1.0.0-B	26.304 Mbps	19.953 Kbps	135050	103	73	90	53	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz AX Near STA1+STA2

ATF: Near Distance STA1+STA2 Snapshot AX 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.841 Kbps	511.933 Mbps	6.813	245 Mbps	1.081 Gbps	802.11an-AX 160 2x2	36	88	-38	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	20.894 Kbps	462.162 Mbps	1.362	864.8 Mbps	1.201 Gbps	802.11an-AX 160 2x2	36	94	-36	40:ED:00:14:F5:F3	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	833.173 Mbps	1.032 Mbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	19.903 Kbps	517.526 Mbps	102	2641703	43	107	0	9.423	0
cv_udp-3.2-4.wlan0--1.0.0-B	578.21 Mbps	20.024 Kbps	2916524	101	64	107	21	0	0
cv_udp-3.2-4.wlan4--1.0.0-A	19.972 Kbps	469.676 Mbps	102	2410340	4	24	0	0	0

cv_udp-3.2-4.wlan4--1.0.0-B	473.337 Mbps	20.241 Kbps	2385288	102	20	24	11	0	0
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Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz AX Near STA1 + Medium STA2

ATF: Near STA1 plus Medium Distance STA2 Snapshot AX 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	22.975 Kbps	486.07 Mbps	6.812	245 Mbps	1.081 Gbps	802.11an-AX 160 2x2	36	88	-38	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	20.205 Kbps	260.528 Mbps	1.387	1080.6 Mbps	648.5 Mbps	802.11an-AX 160 2x2	36	94	-59	40:ED:00:14:F5:F3	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	799.35 Mbps	40.343 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	19.749 Kbps	522.445 Mbps	103	2672323	33	53	0	9.388	0
cv_udp-3.2-4.wlan0--1.0.0-B	571.385 Mbps	19.968 Kbps	2890104	101	20	53	7	0	0
cv_udp-3.2-4.wlan4--1.0.0-A	20.216 Kbps	247.29 Mbps	104	1272962	8	46	0	0	0
cv_udp-3.2-4.wlan4--1.0.0-B	246.646 Mbps	19.457 Kbps	1242286	98	38	46	21	0.962	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz AX Near STA1 + Legacy STA3

ATF: Near STA1 and Legacy STA3 Snapshot AX 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.809 Kbps	503.795 Mbps	6.814	245 Mbps	1.081 Gbps	802.11an-AX 160 2x2	36	88	-38	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.16 wlan8	21.003 Kbps	161.337 Mbps	0.419	433.3 Mbps	433.3 Mbps	802.11an-AC 160 1x1	36	70	-37	40:ED:00:14:F5:F3	192.168.0.58	e4:60:17:66:21:5a

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	585.038 Mbps	610.685 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	19.515 Kbps	515.471 Mbps	104	2649240	40	88	0	10.249	0
cv_udp-3.2-4.wlan0--1.0.0-B	577.918 Mbps	19.879 Kbps	2951759	104	48	88	32	0	0
cv_udp-3.2-4.wlan8--1.0.0-A	20.078 Kbps	167.84 Mbps	102	857029	2	33	0	0	0
cv_udp-3.2-4.wlan8--1.0.0-B	167.835 Mbps	20.03 Kbps	846306	101	31	33	20	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 6Ghz AXe Near STA1+STA2

ATF: Near Distance STA1+STA2 Snapshot AXe 6Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
					802.11a-							

1.4.14 wlan0	19.567 Kbps	1.08 Gbps	0.012	2401.9 Mbps	2.402 Gbps	AX 160 2x2	259	90	-35	52:ED:00:14:F5:F4	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	162.084 Kbps	932.779 Mbps	2.729	1441.3 Mbps	2.402 Gbps	802.11a- AX 160 2x2	259	91	-40	52:ED:00:14:F5:F4	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	2.214 Gbps	435.491 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0-1.00-A	19.938 Kbps	1.155 Gbps	102	5901478	34	55	0	19.769	0
cv_udp-3.2-4.wlan0-1.00-B	1.446 Gbps	20.062 Kbps	7355581	102	21	55	15	0	0
cv_udp-3.2-4.wlan4-1.00-A	19.97 Kbps	950.337 Mbps	103	4890182	2	23	0	0	0
cv_udp-3.2-4.wlan4-1.00-B	963.237 Mbps	19.907 Kbps	4888286	101	21	23	13	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 6Ghz AXe Near STA1 + Medium STA2

ATF: Near STA1 plus Medium Distance STA2 Snapshot AXe 6Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	23.004 Kbps	1.109 Gbps	0.012	2401.9 Mbps	2.402 Gbps	802.11a-AX 160 2x2	259	90	-35	52:ED:00:14:F5:F4	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	19.653 Kbps	749.988 Mbps	2.738	2161.3 Mbps	1.921 Gbps	802.11a-AX 160 2x2	259	91	-54	52:ED:00:14:F5:F4	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	2.132 Gbps	42.609 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %	
cv_udp-3.2-4.wlan0-1.0.0-A	19.727 Kbps	1.177 Gbps	103	6051492	39		60	0	18.614	0
cv_udp-3.2-4.wlan0-1.0.0-B		1.446 Gbps	19.727 Kbps	7435505	103	21		60	11	0
cv_udp-3.2-4.wlan4-1.0.0-A	19.886 Kbps	744.278 Mbps	104	3866602		3		108	0	0.324
cv_udp-3.2-4.wlan4-1.0.0-B	754.425 Mbps	20.122 Kbps	3879189	104		105		108	57	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 6Ghz AXe Near STA1 + Legacy STA3

ATF: Near STA1 and Legacy STA3 Snapshot AXe 6Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	17.469 Kbps	949.238 Mbps	0.012	2401.9 Mbps	2.402 Gbps	802.11ac-AX 160 2x2	259	90	-35	52:ED:00:14:F5:F4	192.168.0.104	e4:60:17:65:83:8f
1.4.16 wlan8	160.423 Kbps	249.172 Mbps	0.904	1200.9 Mbps	600.4 Mbps	802.11ac-AX 160 1x1	259	88	-50	52:ED:00:14:F5:F4	192.168.0.58	e4:60:17:66:21:5a

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	1.387 Gbps	431.56 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

B		1.446 Gbps	19.913 Kbps	75397191	105	24		61	7	0	0
cv_udp-3.2-4.wlan8--1.0.0-A		20.065 Kbps	242.827 Mbps	103	1248121	8		36	0	0	0
cv_udp-3.2-4.wlan8--1.0.0-B		243.439 Mbps	19.946 Kbps	1267274	104	28		36	19	0	0

[Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz BE Near STA1+STA2](#)

ATF: Near Distance STA1+STA2 Snapshot BE 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.842 Kbps	140.976 Mbps	1.069	344.1 Mbps	344.1 Mbps	802.11bgn-BE 20 2x2	6	99	-23	40:ED:00:14:F5:F2	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	20.901 Kbps	99.847 Mbps	7.243	286.7 Mbps	286.7 Mbps	802.11bgn-AX 20 2x2	6	85	-19	40:ED:00:14:F5:F2	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	251.511 Mbps	350.434 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	20.072 Kbps	144.23 Mbps	102	733429	97	137	0	18.255	0
cv_udp-3.2-4.wlan0--1.0.0-B	179.902 Mbps	20.105 Kbps	921380	103	40	137	17	0	0
cv_udp-3.2-4.wlan4--1.0.0-A	19.681 Kbps	102.34 Mbps	102	524830	9	29	0	0	0
cv_udp-3.2-4.wlan4--1.0.0-B	101.491 Mbps	19.85 Kbps	511278	100	20	29	8	0	0

[Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz BE Near STA1 + Medium STA2](#)

ATF: Near STA1 plus Medium Distance STA2 Snapshot BE 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	27.441 Kbps	134.362 Mbps	1.07	344.1 Mbps	344.1 Mbps	802.11bgn-BE 20 2x2	6	99	-23	40:ED:00:14:F5:F2	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	19.362 Kbps	96.946 Mbps	7.26	286.7 Mbps	286.7 Mbps	802.11bgn-AX 20 2x2	6	85	-50	40:ED:00:14:F5:F2	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	278.81 Mbps	41.382 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	19.639 Kbps	142.955 Mbps	102	729034	104	128	0	20.531	0
cv_udp-3.2-4.wlan0--1.0.0-B	179.879 Mbps	19.647 Kbps	917376	102	24	128	11	0	0
cv_udp-3.2-4.wlan4--1.0.0-A	19.701 Kbps	104.227 Mbps	102	534531	9	136	0	0	0
cv_udp-3.2-4.wlan4--1.0.0-B	104.261 Mbps	19.872 Kbps	530948	102	127	136	135	0	0

[Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 2.4Ghz BE Near STA1 + Legacy STA3](#)

ATF: Near STA1 and Legacy STA3 Snapshot BE 2.4Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	12.801 Kbps	83.565 Mbps	1.068	344.1 Mbps	344.1 Mbps	802.11bgn-BE 20 2x2	6	99	-23	40:ED:00:14:F5:F2	192.168.0.104	e4:60:17:65:83:8f

1.4.16 367.151 Kbps | 37.332 Mbps | 0.084 | 72.2 Mbps | 72.2 Mbps | 802.11bgn | 6 | 68 | -20 | 40:ED:00:14:F5:F2 | 192.168.0.58 | e4:60:17:66:21:5a
wlan8 20 1x1

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	151.408 Mbps	270.672 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0-1.00-A	19.735 Kbps	138.504 Mbps	103	710220	126	170	0	22.122	0
cv_udp-3.2-4.wlan0-1.00-B	179.212 Mbps	19.651 Kbps	911964	101	44	170	27	0	0
cv_udp-3.2-4.wlan8-1.00-A	20.096 Kbps	26.296 Mbps	102	134094	6	39	0	0	0
cv_udp-3.2-4.wlan8-1.00-B	26.297 Mbps	19.934 Kbps	133852	101	33	39	28	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz BE Near STA1+STA2

ATF: Near Distance STA1+STA2 Snapshot BE 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	11.614 Kbps	254.712 Mbps	4.554	1441.1 Mbps	960.7 Mbps	802.11an-BE 160 2x2	36	88	-36	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4					1.201 Gbps	802.11an-AX 160 2x2	36	88	-36	40:ED:00:14:F5:F3	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	812.369 Mbps	1.099 Mbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0-1.00-A	19.696 Kbps	454.667 Mbps	102	2321914	51	80	0	20.125	0
cv_udp-3.2-4.wlan0-1.00-B	580.641 Mbps	19.657 Kbps	2971238	102	29	80	21	0	0
cv_udp-3.2-4.wlan4-1.00-A	19.827 Kbps	469.257 Mbps	102	2402859	2	17	0	0.846	0
cv_udp-3.2-4.wlan4-1.00-B	470.188 Mbps	19.746 Kbps	2381066	100	15	17	6	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz BE Near STA1 + Medium STA2

ATF: Near STA1 plus Medium Distance STA2 Snapshot BE 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	23.832 Kbps	461.223 Mbps	4.585	1441.1 Mbps	1.081 Gbps	802.11an-BE 160 2x2	36	88	-38	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	21.029 Kbps	239.865 Mbps	1.401	1080.6 Mbps	648.5 Mbps	802.11an-AX 160 2x2	36	88	-59	40:ED:00:14:F5:F3	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	780.069 Mbps	44.937 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

B	249.377 Mbps	19.577 Kbps	1262175	101	31	34	21	0	0
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Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 5Ghz BE Near STA1 + Legacy STA3

ATF: Near STA1 and Legacy STA3 Snapshot BE 5Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	12.866 Kbps	292.878 Mbps	4.612	1441.1 Mbps	1.081 Gbps	802.11an-BE 160 2x2	36	88	-38	40:ED:00:14:F5:F3	192.168.0.104	e4:60:17:65:83:8f
1.4.16 wlan8	1.038 Mbps	232.396 Mbps	0.502	433.3 Mbps	433.3 Mbps	802.11an-AC 160 1x1	36	69	-37	40:ED:00:14:F5:F3	192.168.0.58	e4:60:17:66:21:5a

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	582.203 Mbps	956.397 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	19.867 Kbps	464.894 Mbps	103	2387595	42	96	0	20.028	0
cv_udp-3.2-4.wlan0--1.0.0-B	580.607 Mbps	19.864 Kbps	2985552	103	54	96	66	0	0
cv_udp-3.2-4.wlan8--1.0.0-A	20.026 Kbps	170.634 Mbps	102	871630	1	47	0	0	0
cv_udp-3.2-4.wlan8--1.0.0-B	170.729 Mbps	19.929 Kbps	875084	102	46	47	26	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 6Ghz BE Near STA1+STA2

ATF: Near Distance STA1+STA2 Snapshot BE 6Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.609 Kbps	2.492 Gbps	0.344	5764.6 Mbps	5.765 Gbps	802.11a-BE 320 2x2	259	59	-36	52:ED:00:14:F5:F4	192.168.0.104	e4:60:17:65:83:8f
1.4.15 wlan4	20.855 Kbps	940.576 Mbps	3.133	1441.3 Mbps	2.402 Gbps	802.11a-AX 160 2x2	259	84	-40	52:ED:00:14:F5:F4	192.168.0.63	e4:60:17:66:21:5f

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	3.335 Gbps	382.335 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.0.0-A	20.029 Kbps	2.242 Gbps	103	11451707	34	51	0	16.937	0
cv_udp-3.2-4.wlan0--1.0.0-B	2.727 Gbps	19.778 Kbps	13786755	101	17	51	9	0	0
cv_udp-3.2-4.wlan4--1.0.0-A	19.933 Kbps	955.36 Mbps	102	4895702	2	17	0	0.535	0
cv_udp-3.2-4.wlan4--1.0.0-B	963.827 Mbps	20.035 Kbps	4922031	102	15	17	5	0	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 6Ghz BE Near STA1 + Medium STA2

ATF: Near STA1 plus Medium Distance STA2 Snapshot BE 6Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14	25.986 Kbps	2.318 Gbps	0.344	5764.6 Mbps	5.187 Gbps	802.11a-BE 320	259	59	-36	52:ED:00:14:F5:F4	192.168.0.104	e4:60:17:65:83:8f

wlan0						2x2					
1.4.15	19.725 Kbps	741.932 Mbps	3.19	2401.9 Mbps	1.921 Gbps	802.11a-AX 160	259	84	-55	52:ED:00:14:F5:F4	192.168.0.63
wlan4						2x2				e4:60:17:66:21:f5	

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	3.384 Gbps	45.021 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %	
cv_udp-3.2-4.wlan0--1.0.0-A	19.841 Kbps	2.117 Gbps	102	10814204	46		61	0	21.693	0
cv_udp-3.2-4.wlan0--1.0.0-B	2.729 Gbps	19.959 Kbps	13810020	101	15		61	10	0	0
cv_udp-3.2-4.wlan4--1.0.0-A	19.875 Kbps	742.197 Mbps	103	3817218	2		153	0	1.568	0
cv_udp-3.2-4.wlan4--1.0.0-B	755.002 Mbps	19.83 Kbps	3807222	100	151		153	92	0.971	0

Collected CSV Data: CSV: 6.2.3 Airtime Fairness Test 6Ghz BE Near STA1 + Legacy STA3

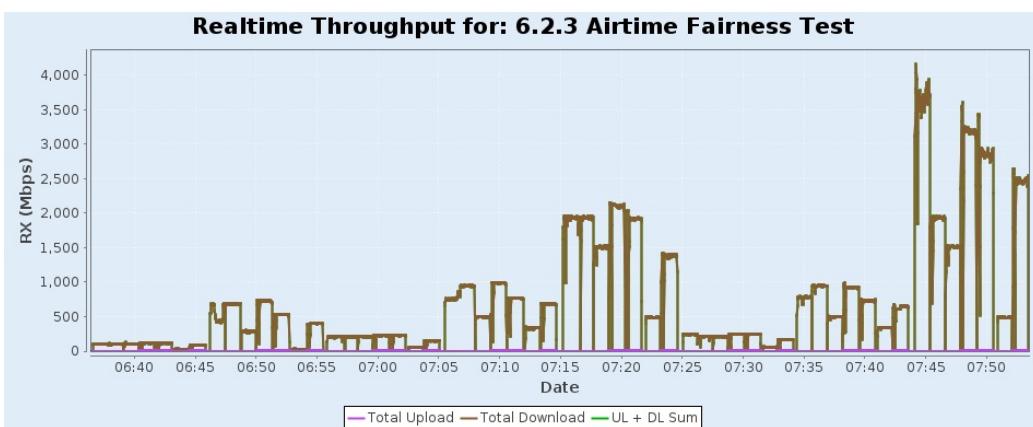
ATF: Near STA1 and Legacy STA3 Snapshot BE 6Ghz

Port	Tx-Bps 1m	Rx-Bps 1m	Tx-Fail %	Tx Link-Rate	Rx Link-Rate	Mode	Channel	Last CX-Time (ms)	RSSI (dBm)	AP	IP	MAC
1.4.14 wlan0	20.624 Kbps	2.329 Gbps	0.345	5764.6 Mbps	5.765 Gbps	802.11a-BE 320 2x2	259	59	-36	52:ED:00:14:F5:F4	192.168.0.104	e4:60:17:65:83:8f
1.4.16 wlan8	20.513 Kbps	235.266 Mbps	0.909	1200.9 Mbps	600.4 Mbps	802.11a-AX 160 1x1	259	82	-50	52:ED:00:14:F5:F4	192.168.0.58	e4:60:17:66:21:5a

Port	Tx-Bps 1m	Rx-Bps 1m	Link-Rate	IP	MAC
1.3.2 eth2	2,446 Gbps	375.065 Kbps	10 Gbps	192.168.0.56	9c:69:b4:63:76:c4

Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency (ms)	Round-Trip Latency (ms)	Jitter	Rx Packet Loss %	Rx OOO %
cv_udp-3.2-4.wlan0--1.00-A	19.897 Kbps	2.221 Gbps	103	11391494	46	62	0	19.025	0
cv_udp-3.2-4.wlan0--1.00-B	2.741 Gbps	19.895 Kbps	14067996	103	16	62	12	0	0
cv_udp-3.2-4.wlan8--1.00-A	19.967 Kbps	244.536 Mbps	102	1250354	6	27	0	0	0
cv_udp-3.2-4.wlan8--1.00-B	245.057 Mbps	19.895 Kbps	1257772	102	21	27	14	0	0

Realtime Throughput for: 6.2.3 Airtime Fairness Test



Key Performance Indicators CSV

Test configuration and LANforge software version

Auto-Helper	true
Allow-11w (MFP/PMF)	false
SAE-PWE	2
Disable-MLO	true
Extra TxStatus	false
Extra RxStatus	false
TXS All	false
Skip 2.4Ghz Tests	false
Skip 5Ghz Tests	false
Duration-120	20
Duration-60	20
Channel 2Ghz	6
Channel 5Ghz	36
Calibrate against LANforge AP	true
Adjust UL Atten with DUT TxPower	false
Adjust UL Atten with STA TxPower	false
Attenuation Adjustment	0
Extra Download Path-loss	0
TX Power	20
DUT TX Power 2.4G	30
DUT TX Power 5G	30
LANforge Calibration TxPower-2.4G	20
LANforge Calibration TxPower-5G	20
Multi-Conn	10
UDP-Burst	false
UDP-GRO	true
Multiple Endpoints:	2
ToS	0
Pld Pattern	RANDOM_FIXED
UDP Send Buffer Size:	0
UDP Receive Buffer Size:	0
TCP Send Buffer Size:	0
TCP Receive Buffer Size:	0
Upstream Port	1.3.2 eth2 Firmware: 0x80000aef, 1.1876.0 Resource: ct523c-2103
Alien Upstream Port	1.1.2 eth2 Firmware: 0x80000c67, 1.1276.0 Resource: ct523c-0b0b
Turn-Table Chamber	840B-Default-Chamber
Configured 2m 2.4Ghz RSSI	-25
Configured 2m 5Ghz RSSI	-30
Use Virtual AX Stations	false

Use AX Radios for AC tests	true
Virt-Sta Rotation 2.4Ghz	0
Virt-Sta Rotation 5Ghz	0
AX Rotation 2.4Ghz	125
AX Rotation 5Ghz	125
Opposite-Speed:	20000
1Gbps Throughput Limit:	925000000
ATF Max NSS:	2
ATF Attenuation:	0
Background Scan Module	simple
Background Short Interval	30
Background Long Interval	300
Background RSSI Threshold	-65
Mesh Settle Time:	60
Starting Low Atten:	30
Starting Max Atten:	70
Virt-Sta Radio 1	1.4.wiphy0 Firmware: 86.fb5c9aeb.0 gl-c0-fm-c0-86.uc Resource: ct523c-ccbc
AX Radio 0	1.4.wiphy0 Firmware: 86.fb5c9aeb.0 gl-c0-fm-c0-86.uc Resource: ct523c-ccbc
AX Radio 4	1.4.wiphy4 Firmware: 86.fb5c9aeb.0 gl-c0-fm-c0-86.uc Resource: ct523c-ccbc
AX Radio 8	1.4.wiphy8 Firmware: 86.fb5c9aeb.0 gl-c0-fm-c0-86.uc Resource: ct523c-ccbc
Attenuator 0	rssi-0-2.4Ghz: -26 rssi-0-5Ghz: -47 atten: 1.2.3343.0
Attenuator 1	rssi-0-2.4Ghz: -26 rssi-0-5Ghz: -47 atten: 1.2.3343.1
Attenuator 4	rssi-0-2.4Ghz: -19 rssi-0-5Ghz: -36 atten: 1.2.3342.0
Attenuator 5	rssi-0-2.4Ghz: -19 rssi-0-5Ghz: -36 atten: 1.2.3342.1
Attenuator 8	rssi-0-2.4Ghz: -23 rssi-0-5Ghz: -33 atten: 1.2.3340.0
Attenuator 9	rssi-0-2.4Ghz: -23 rssi-0-5Ghz: -33 atten: 1.2.3340.1
AX Attenuator 0	AX rssi-0-2.4Ghz: -29 rssi-0-5Ghz: -36 atten: 1.2.7.2
AX Attenuator 1	AX rssi-0-2.4Ghz: -29 rssi-0-5Ghz: -36 atten: 1.2.7.3
AX Attenuator 4	AX rssi-0-2.4Ghz: -31 rssi-0-5Ghz: -37 atten: 1.2.3300.2
AX Attenuator 5	AX rssi-0-2.4Ghz: -31 rssi-0-5Ghz: -37 atten: 1.2.3300.3
AX Attenuator 8	AX rssi-0-2.4Ghz: -29 rssi-0-5Ghz: -38 atten: 1.2.7.0
AX Attenuator 9	AX rssi-0-2.4Ghz: -29 rssi-0-5Ghz: -38 atten: 1.2.7.1
AX Attenuator 12	AX rssi-0-2.4Ghz: -35 rssi-0-5Ghz: -46 atten: 1.2.3300.0
AX Attenuator 14	AX rssi-0-2.4Ghz: -35 rssi-0-5Ghz: -46 atten: 1.2.3300.1
AX Attenuator 16	AX rssi-0-2.4Ghz: -35 rssi-0-5Ghz: -46 atten: 1.2.3300.0
AX Attenuator 18	AX rssi-0-2.4Ghz: 5 rssi-0-5Ghz: -46 atten: 1.2.3300.1
AX Attenuator 20	AX rssi-0-2.4Ghz: -35 rssi-0-5Ghz: -46 atten: 1.2.3300.0
AX Attenuator 22	AX rssi-0-2.4Ghz: -35 rssi-0-5Ghz: -46 atten: 1.2.3300.1
AX Attenuator 24	AX rssi-0-2.4Ghz: -31 rssi-0-5Ghz: -43 atten: 1.2.3348.0

AX Attenuator 26	AX rssi-0-2.4Ghz: -31 rssi-0-5Ghz: -43 atten: 1.2.3348.1
AX Attenuator 28	AX rssi-0-2.4Ghz: -26 rssi-0-5Ghz: -27 atten: 1.2.3348.2
AX Attenuator 30	AX rssi-0-2.4Ghz: -26 rssi-0-5Ghz: -27 atten: 1.2.3348.2
Mesh Attenuator 0	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten: 1.2.3340.0
Mesh Attenuator 1	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten: 1.2.3340.1
Mesh Attenuator 2	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten: 1.2.3340.2
Mesh Attenuator 3	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten: 1.2.3340.3
Mesh Attenuator 4	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 5	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 6	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 7	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 8	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 9	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 10	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 11	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 12	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 13	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 14	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 15	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 16	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 17	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 18	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 19	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 20	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 21	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 22	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Mesh Attenuator 23	Mesh rssi-0-2.4Ghz: -25 rssi-0-5Ghz: -30 atten:
Details for Resource: 1.1	Hostname: ct523c-0b0b LANforge ver: 5.4.7 64bit Kernel-Version: 6.7.0-rc1+
Details for Resource: 1.3	Hostname: ct523c-2103 LANforge ver: 5.4.7 64bit Kernel-Version: 6.7.0-rc5+
Details for Resource: 1.4	Hostname: ct523c-ccbc LANforge ver: 5.4.7 64bit Kernel-Version: 6.7.0-rc5+
Show Events	true
Build Date	Sat Dec 16 04:47:16 AM PST 2023
Git Version	b14b1210bc2979cf69ed9d255172b6c04815c26f

[CSV Data](#)

[META Information for TR-398 Issue 4](#)