Rate vs Orientation Test

Thu Jul 21 06:32:36 PDT 2022

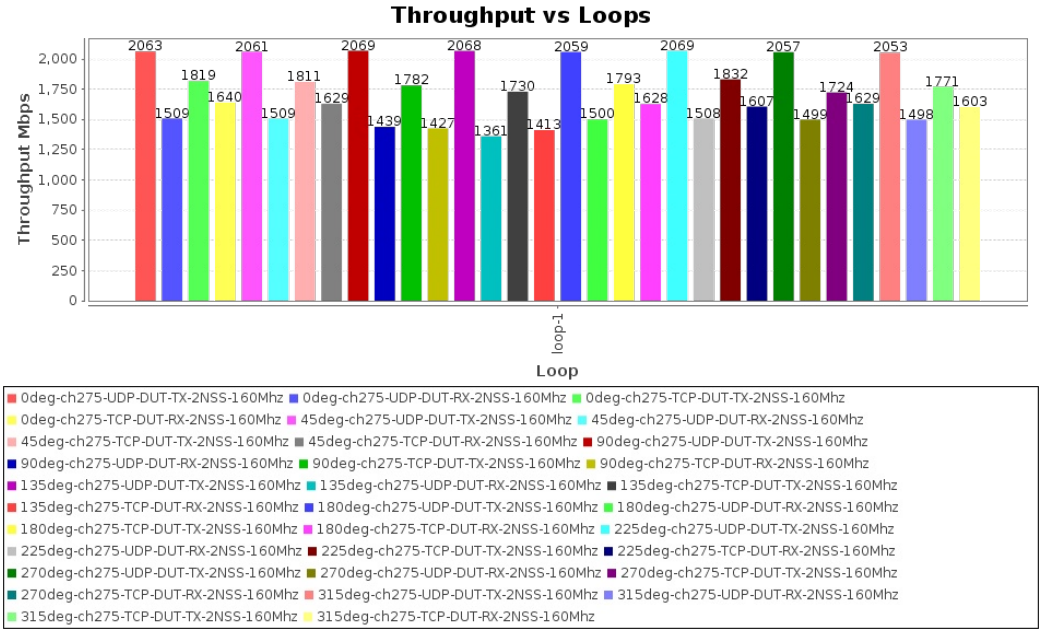
Test Setup Information		
Device Under Test	Name	ASUS_GT_AXE11000
	SSIDs	ASUS_2.4G ASUS_5G ASUS_6G
	Passwords	Password@123 Password@123 Password@123
	BSSIDs	
	Notes	[BLANK]

Objective

This test measures the performance over distance of the Device Under Test. Distance is emulated using programmable attenuation and a throughput test is run at each distance/RSSI step and plotted on a chart. The test allows the user to plot RSSI curves both upstream and downstream for different types of traffic and different station types.

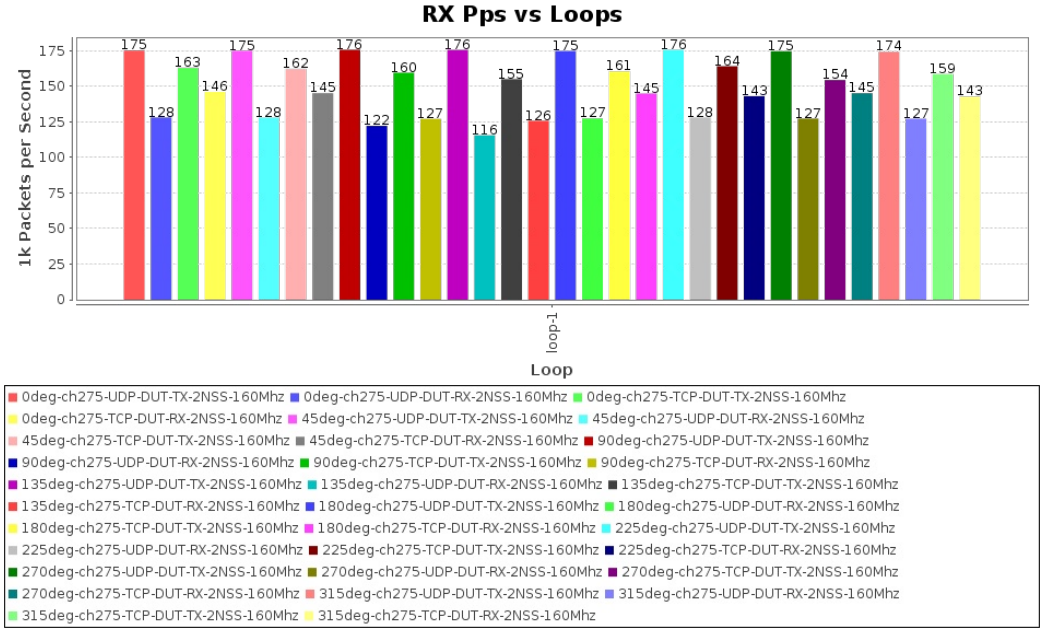
Throughput for each different traffic type. Datasets with names ending in '-LL' will include the IP, TCP, UDP and Ethernet header bytes in their calculation. For Armageddon traffic only, low-level throughput includes the Ethernet FCS and preamble. Other datasets report 'goodput' for the protocol.

CSV Data for Throughput vs Loops



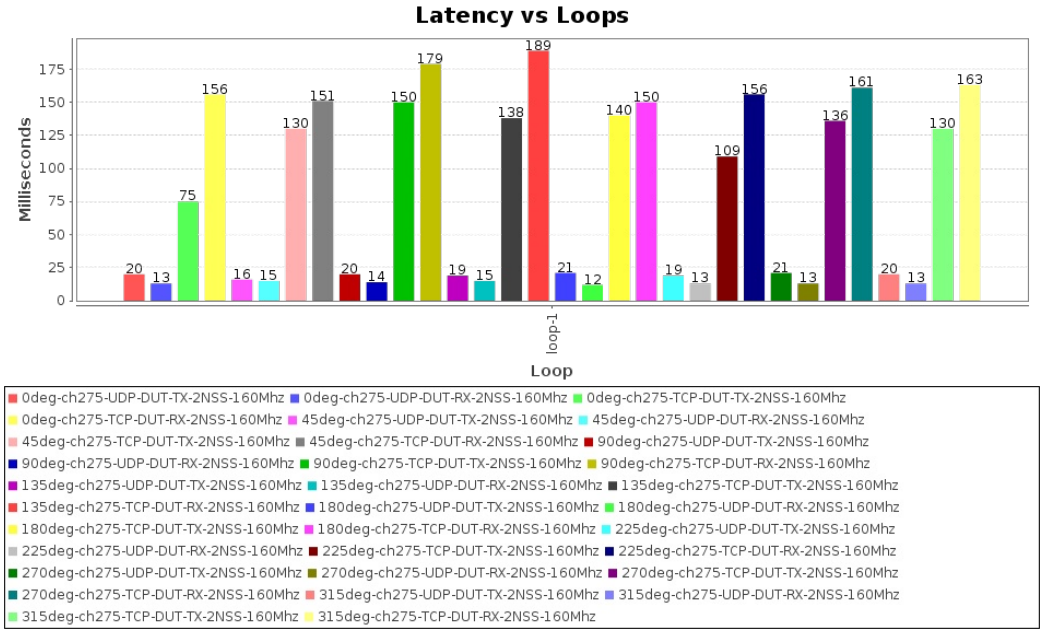
Pps throughput for each different traffic type. The values are estimated packets-per-second over the DUT, but some protocols such as TCP make this difficult to know for certain, so the value is extrapolated.

CSV Data for RX Pps vs Loops

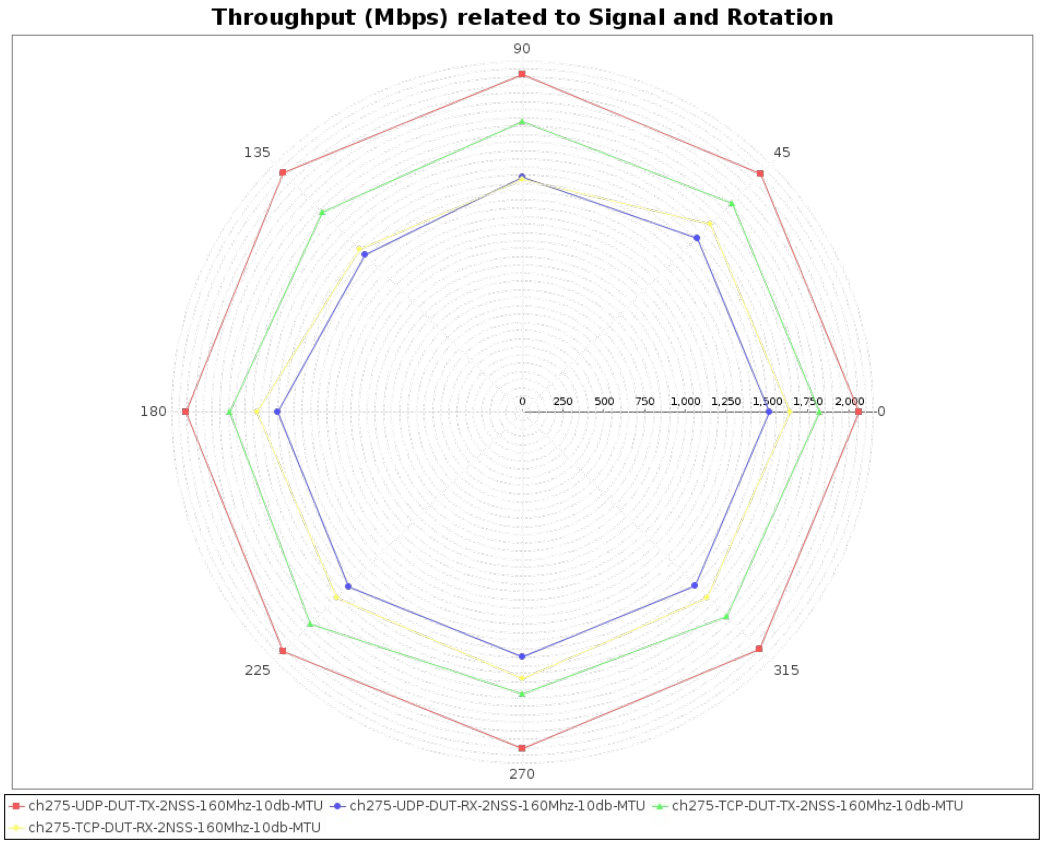


Latency for each different traffic type. If opposite-direction traffic is non-zero, then round-trip time will be reported. Otherwise, one-way latency will be reported.

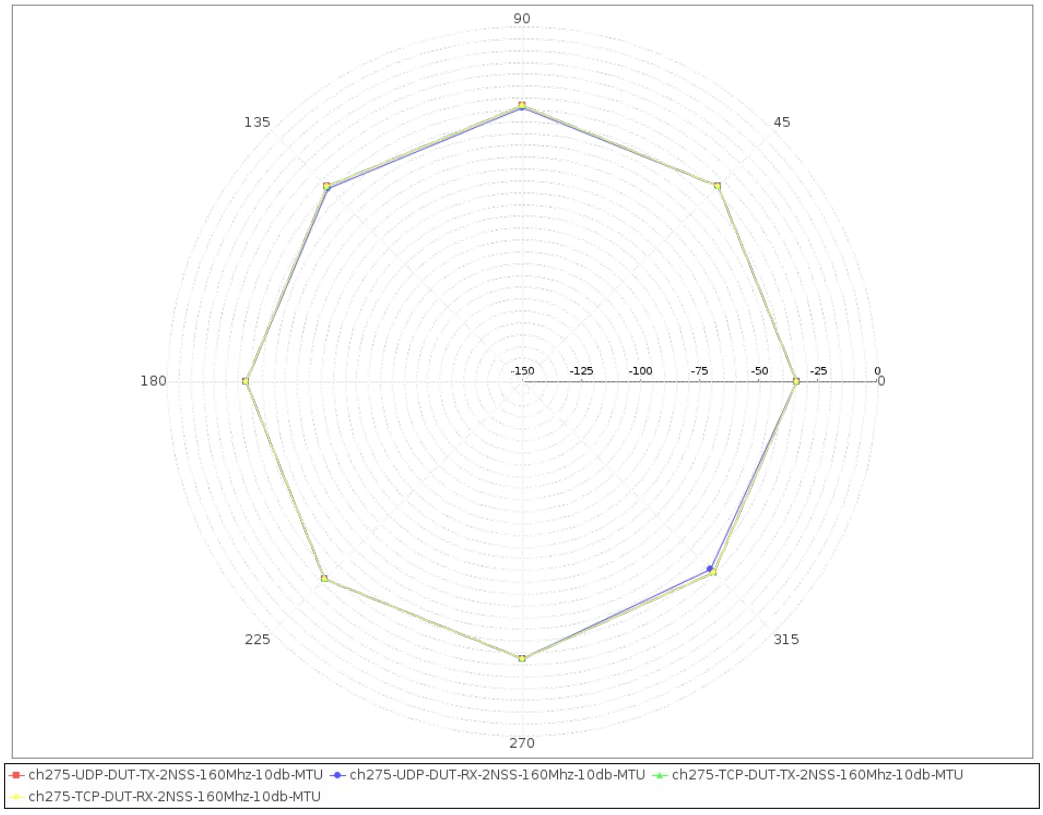
CSV Data for Latency vs Loops



Throughput by Calculated Signal and Rotation

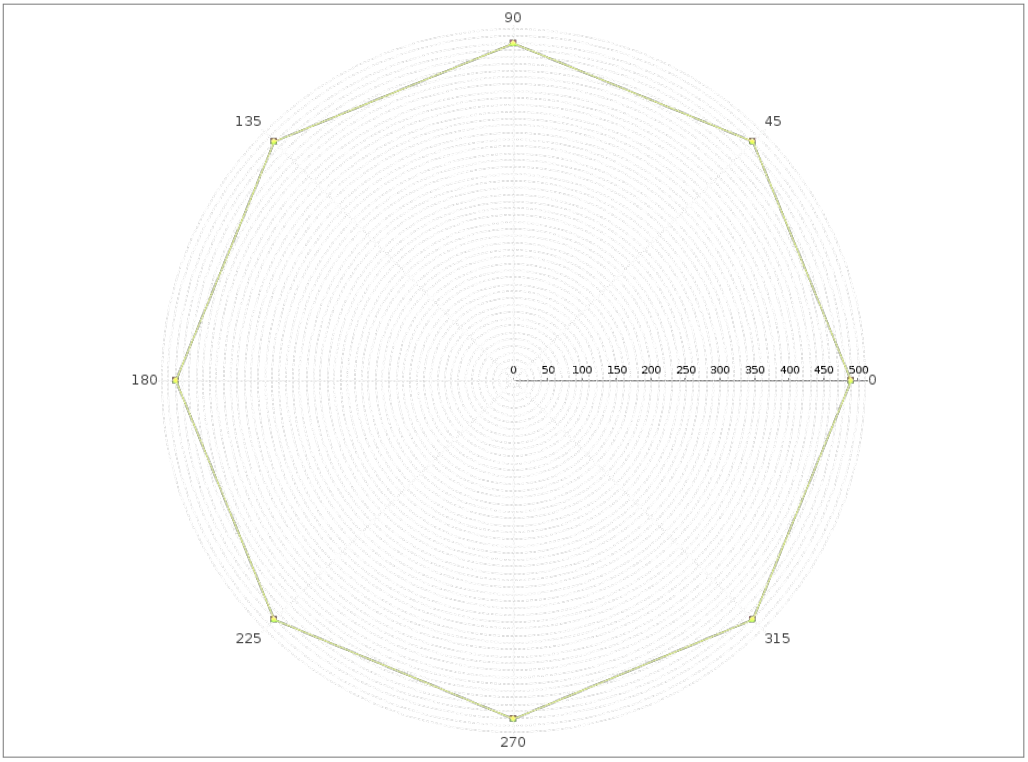


RSSI for Calculated Signal and Rotation



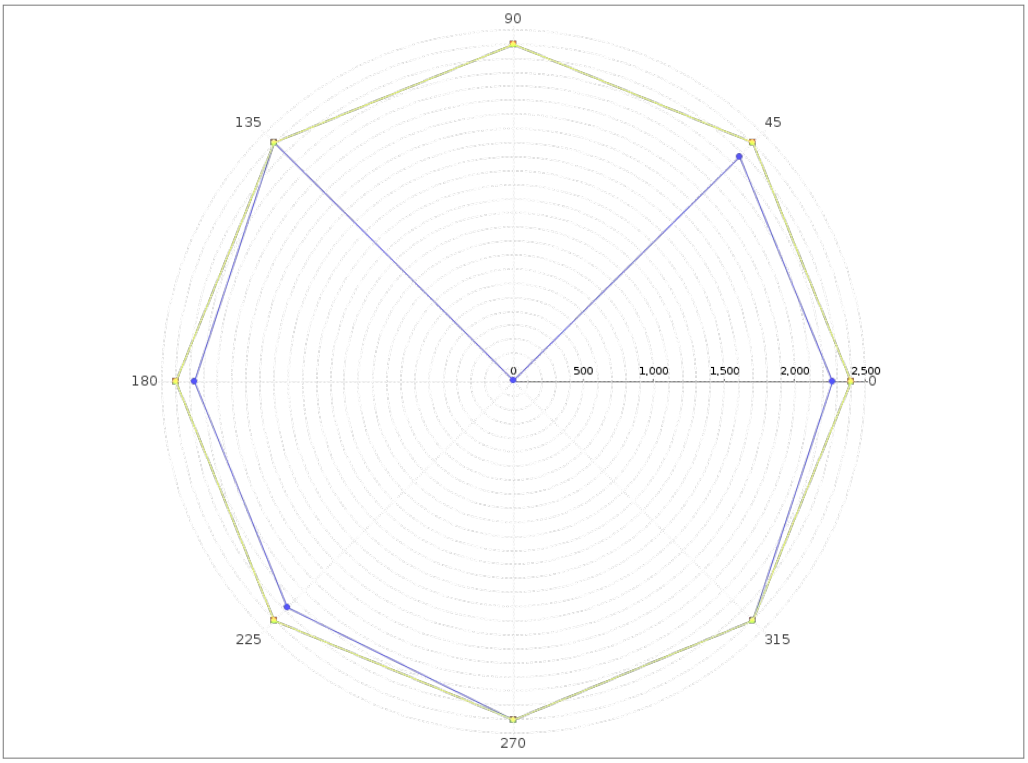
TX-Bitrate (Phy Rate) in Mbps, for Calculated Signal and Rotation

TX-Bitrate (Phy Rate) in Mbps, related to Signal and Rotation



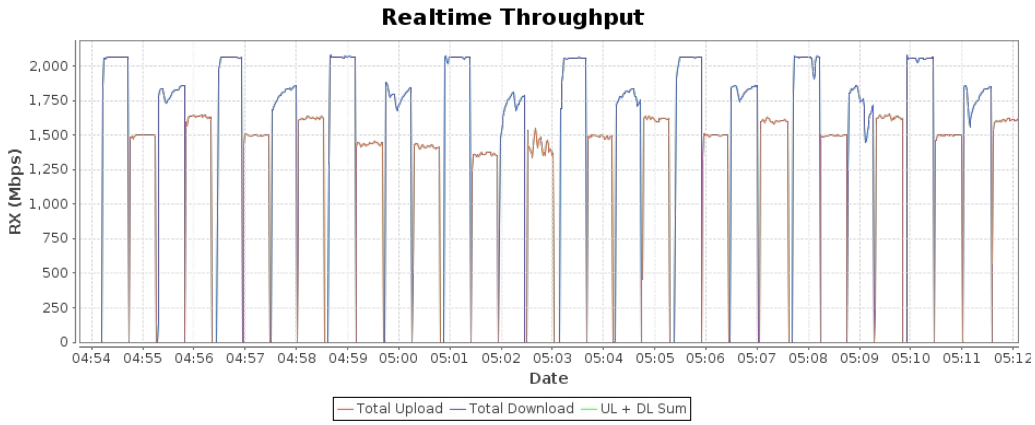
RX-Bitrate (Phy Rate) in Mbps, for Calculated Signal and Rotation

RX-Bitrate (Phy Rate) in Mbps, related to Signal and Rotation



Realtime Graph shows summary download and upload RX Goodput rate of connections created by this test. Goodput does not include Ethernet, IP, UDP/TCP header overhead.

CSV Data for Realtime Throughput



Test Information

Message
Starting Rate vs Range test with: 32 iterations.

Constant values related to the table below.

Iteration-Duration	30s

CSV data focussed on throughput. The values reported are gathered at the end of the test iteration before traffic is stopped. The test iterations consider 'Received' traffic to be received in the dominant direction. So, if the iteration is DUT-TX, then Received traffic is traffic received on the Station from the AP. If the iteration is DUT-RX, then Received traffic is received on Ethernet port from DUT and sent by the station. Columns starting with RSSI are from the perspective of the Station, so Tx-Rate is the Station transmit Phy Rate, and Rx-Rate is the Phy Rate received by the station. Rpt-Mode is negotiated mode, not necessarily Phy Rate mode.

Channel	Frequency	Security	NSS	Cfg-Mode	Bandwidth	Pkt	Traffic-Type	Direction	Atten	Rotation	Offered-1m	Rx-Bps	Rx-Bps-1m	Rx-Bps-LL	Rx-Bps-3s	RSSI	Tx-Failed	Tx-Failed%	Tx-Rate	Rx-Rate	Rpt-Mode	Rpt-Mode-Brief
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	NA	0	2.395 Gbps	2.061 Gbps	2.063 Gbps	2.122 Gbps	2.061 Gbps	-34	0 / 6068974	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	NA	0	1.508 Gbps	1.497 Gbps	1.509 Gbps	1.552 Gbps	1.492 Gbps	-34	0 / 1928707	0	490 Mbps	2.268 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	NA	0	1.824 Gbps	1.808 Gbps	1.819 Gbps	1.889 Gbps	1.859 Gbps	-34	0 / 4707939	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	NA	0	1.647 Gbps	1.632 Gbps	1.64 Gbps	1.703 Gbps	1.627 Gbps	-34	0 / 94214	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	NA	45	2.401 Gbps	2.054 Gbps	2.061 Gbps	2.12 Gbps	2.063 Gbps	-33	0 / 6154906	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	NA	45	1.509 Gbps	1.497 Gbps	1.509 Gbps	1.552 Gbps	1.497 Gbps	-33	0 / 1928102	0	490 Mbps	2.268 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	NA	45	1.818 Gbps	1.8 Gbps	1.811 Gbps	1.881 Gbps	1.857 Gbps	-33	0 / 4483728	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	NA	45	1.638 Gbps	1.621 Gbps	1.629 Gbps	1.692 Gbps	1.622 Gbps	-33	0 / 93597	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	NA	90	2.399 Gbps	2.064 Gbps	2.069 Gbps	2.128 Gbps	2.067 Gbps	-33	0 / 6061909	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	NA	90	1.439 Gbps	1.435 Gbps	1.439 Gbps	1.48 Gbps	1.444 Gbps	-34	0 / 1815824	0	490 Mbps	6 Mbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	NA	90	1.79 Gbps	1.782 Gbps	1.782 Gbps	1.851 Gbps	1.789 Gbps	-33	0 / 4725285	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	NA	90	1.436 Gbps	1.416 Gbps	1.427 Gbps	1.482 Gbps	1.41 Gbps	-33	0 / 81798	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	NA	135	2.404 Gbps	2.059 Gbps	2.068 Gbps	2.127 Gbps	2.066 Gbps	-33	0 / 6187524	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	NA	135	1.361 Gbps	1.359 Gbps	1.361 Gbps	1.4 Gbps	1.347 Gbps	-34	0 / 1728247	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	NA	135	1.739 Gbps	1.728 Gbps	1.73 Gbps	1.797 Gbps	1.798 Gbps	-33	0 / 4287034	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	NA	135	1.42 Gbps	1.412 Gbps	1.413 Gbps	1.467 Gbps	1.366 Gbps	-33	0 / 87035	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	NA	180	2.412 Gbps	2.042 Gbps	2.059 Gbps	2.118 Gbps	2.056 Gbps	-33	0 / 6312253	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax

275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	NA	180	1.5 Gbps	1.489 Gbps	1.5 Gbps	1.543 Gbps	1.494 Gbps	-33	0 / 1912957	0	490 Mbps	2.268 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	NA	180	1.801 Gbps	1.781 Gbps	1.793 Gbps	1.862 Gbps	1.754 Gbps	-33	0 / 4635320	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	NA	180	1.637 Gbps	1.616 Gbps	1.628 Gbps	1.691 Gbps	1.612 Gbps	-33	0 / 93342	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	NA	225	2.41 Gbps	2.055 Gbps	2.069 Gbps	2.128 Gbps	2.063 Gbps	-32	0 / 6153834	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	NA	225	1.508 Gbps	1.498 Gbps	1.508 Gbps	1.551 Gbps	1.504 Gbps	-32	0 / 1922261	0	490 Mbps	2.268 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	NA	225	1.838 Gbps	1.822 Gbps	1.832 Gbps	1.903 Gbps	1.858 Gbps	-32	0 / 5055067	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	NA	225	1.614 Gbps	1.598 Gbps	1.607 Gbps	1.668 Gbps	1.599 Gbps	-32	0 / 98579	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	NA	270	2.406 Gbps	2.047 Gbps	2.057 Gbps	2.116 Gbps	2.066 Gbps	-33	0 / 6289572	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	NA	270	1.5 Gbps	1.495 Gbps	1.499 Gbps	1.542 Gbps	1.499 Gbps	-33	0 / 1923624	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	NA	270	1.731 Gbps	1.723 Gbps	1.724 Gbps	1.791 Gbps	1.713 Gbps	-33	0 / 4456904	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	NA	270	1.638 Gbps	1.628 Gbps	1.629 Gbps	1.692 Gbps	1.614 Gbps	-33	0 / 94090	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	NA	315	2.394 Gbps	2.053 Gbps	2.053 Gbps	2.112 Gbps	2.06 Gbps	-36	0 / 6045177	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	NA	315	1.498 Gbps	1.498 Gbps	1.498 Gbps	1.541 Gbps	1.498 Gbps	-38	0 / 1918462	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	NA	315	1.779 Gbps	1.771 Gbps	1.771 Gbps	1.84 Gbps	1.851 Gbps	-36	0 / 4919161	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	NA	315	1.611 Gbps	1.603 Gbps	1.603 Gbps	1.665 Gbps	1.603 Gbps	-36	0 / 92564	0	490 Mbps	2.402 Gbps	802.11a-AX	802.11ax

CSV data focussed on TX and RX Link Rate and RSSI reports. The values reported are gathered at the end of the test iteration before traffic is stopped. The Phy Rate and RSSI are from the perspective of the Station, so Tx-MCS is MCS at which station is sending to the AP, and Rx-MCS is MCS at which the AP is sending to the station.

Channel	Frequency	Security	NSS	Cfg-Mode	Bandwidth	Pkt	Traffic-Type	Direction	Rotation	Tx-Mode-Rpt	Tx-NSS-Rpt	Tx-MCS	Tx-BW-Rpt	Rx-Mode-Rpt	Rx-NSS-Rpt	Rx-MCS	Rx-BW-Rpt	RSSI dBm	Tx-Phy-Rate	Rx-Phy-Rate
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	0	HE	2	3	160	2	HE	3	160	-34 [-35, -38]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	0	HE	2	3	160	2	HE	3	160	-42 [-43, -47]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2268.5 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 1 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	0	HE	2	3	160	2	HE	3	160	-34 [-36, -38]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	0	HE	2	3	160	2	HE	3	160	-35 [-36, -39]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	45	HE	2	3	160	2	HE	3	160	-33 [-35, -37]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	45	HE	2	3	160	2	HE	3	160	-34 [-35, -38]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-	2268.5 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 1 HE-

																			DCM 0	DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	45	HE	2	3	160	2	HE	3	160	-33 [-35, -37]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	45	HE	2	3	160	2	HE	3	160	-34 [-35, -38]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	90	HE	2	3	160	2	HE	3	160	-33 [-35, -37]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	90	HE	2	3	160	1	OFDM	3	20	-40 [-44, -42]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	6.0 MBit/s
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	90	HE	2	3	160	2	HE	3	160	-34 [-36, -37]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	90	HE	2	3	160	2	HE	3	160	-34 [-36, -38]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	135	HE	2	3	160	2	HE	3	160	-33 [-37, -35]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	135	HE	2	3	160	2	HE	3	160	-34 [-38, -35]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	135	HE	2	3	160	2	HE	3	160	-33 [-37, -35]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	135	HE	2	3	160	2	HE	3	160	-34 [-38, -35]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	180	HE	2	3	160	2	HE	3	160	-33 [-40, -33]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	180	HE	2	3	160	2	HE	3	160	-33 [-40, -34]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI	2268.5 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI

																			2 HE-DCM 0	1 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	180	HE	2	3	160	2	HE	3	160	-33 [-40, -33]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	180	HE	2	3	160	2	HE	3	160	-33 [-40, -34]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	225	HE	2	3	160	2	HE	3	160	-32 [-40, -32]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	225	HE	2	3	160	2	HE	3	160	-33 [-41, -33]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2268.5 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 1 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	225	HE	2	3	160	2	HE	3	160	-32 [-41, -32]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	225	HE	2	3	160	2	HE	3	160	-32 [-41, -32]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	270	HE	2	3	160	2	HE	3	160	-33 [-40, -34]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	270	HE	2	3	160	2	HE	3	160	-34 [-40, -35]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	270	HE	2	3	160	2	HE	3	160	-33 [-40, -34]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	270	HE	2	3	160	2	HE	3	160	-34 [-40, -35]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-TX	315	HE	2	3	160	2	HE	3	160	-37 [-39, -40]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	UDP	DUT-RX	315	HE	2	3	160	2	HE	3	160	-37 [-39,	490.0 MBit/s 160MHz HE-MCS 3	2401.9 MBit/s 160MHz HE-MCS 11

																		-40]	HE-NSS 2 HE-GI 2 HE-DCM 0	HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-TX	315	HE	2	3	160	2	HE	3	160	-37 [-39, -40]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0
275	6375	WPA3	2	AUTO	160	MTU	TCP	DUT-RX	315	HE	2	3	160	2	HE	3	160	-37 [-39, -40]	490.0 MBit/s 160MHz HE-MCS 3 HE-NSS 2 HE-GI 2 HE-DCM 0	2401.9 MBit/s 160MHz HE-MCS 11 HE-NSS 2 HE-GI 0 HE-DCM 0

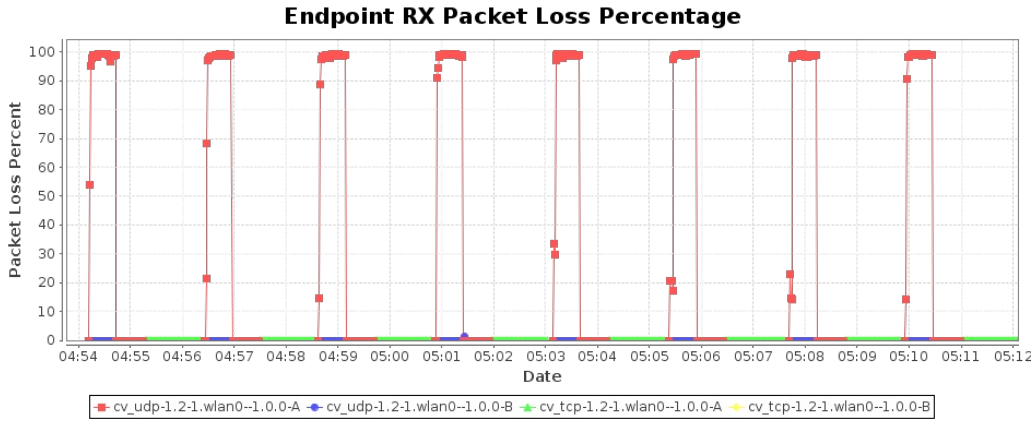
Brief csv report, may be imported into third-party tools.

Step Index	Position [Deg]	Attenuation [dB]	Throughput [Mbps]	Beacon RSSI [dBm]	Data RSSI [dBm]
0	0	0	2,060.74	-41	-34
1	0	0	1,496.93	-41	-34
2	0	0	1,807.55	-41	-34
3	0	0	1,631.80	-42	-34
4	45	0	2,053.70	-41	-33
5	45	0	1,496.89	-41	-33
6	45	0	1,800.31	-41	-33
7	45	0	1,620.60	-41	-33
8	90	0	2,063.79	-39	-33
9	90	0	1,435.45	-39	-34
10	90	0	1,781.84	-39	-33
11	90	0	1,416.11	-39	-33
12	135	0	2,058.61	-40	-33
13	135	0	1,359.03	-40	-34
14	135	0	1,727.56	-40	-33
15	135	0	1,411.67	-40	-33
16	180	0	2,042.44	-41	-33
17	180	0	1,488.76	-41	-33
18	180	0	1,780.91	-41	-33
19	180	0	1,616.28	-41	-33
20	225	0	2,054.64	-39	-32
21	225	0	1,498.31	-39	-32
22	225	0	1,821.75	-39	-32
23	225	0	1,597.98	-39	-32
24	270	0	2,046.70	-39	-33
25	270	0	1,494.66	-39	-33
26	270	0	1,722.69	-39	-33
27	270	0	1,627.86	-39	-33
28	315	0	2,052.56	-42	-36
29	315	0	1,497.82	-42	-38

30	315	0	1,770.93	-43	-36
31	315	0	1,602.93	-43	-36

Packet Loss Percentage graph shows the percentage of lost packets as detected by the receiving endpoint due to packet gaps. If there is full packet loss, then this will not report any loss since there will be no gap to detect. TCP protocol tests will never show drops since the TCP protcol will retransmit any lost frames.

CSV Data for Endpoint RX Packet Loss Percentage



Test configuration and LANforge software version	
AP Tx Power:	0
Path Loss	10
Requested Speed	100%
Requested Opposite Speed	0Kbps
Multi-Conn	1
Armageddon Multi-Pkt	1000
ToS	0
Station Bringup Wait:	1 min (1 m)
First Byte Wait:	30 sec (30 s)
Duration:	30 sec (30 s)
Settle Time:	1 sec (1 s)
Send Buffer Size:	OS Default
Receive Buffer Size:	OS Default
RvR Helper Script:	
Channels	AUTO
Spatial Streams	AUTO
Bandwidth	AUTO
Attenuator-1	0
Attenuation-1	0..+50..800
Attenuator-2	0
Attenuation-2	0..+50..950
Turntable Chamber	vendorB
Turntable Angles	0..+45..359
Modes	Auto
Packet Size	MTU

Security	AUTO
Traffic Type	UDP, TCP
Direction	DUT Transmit, DUT Receive
Upstream Port	1.1.2 eth2 Firmware: 0x80000aef, 1.1876.0 Resource: ct523c-c3d8
WiFi Port	1.1.16 wlan0 Resource: ct523c-c3d8
Continuous Traffic	false
Outer Loop is Attenuation	false
Show Events	true
Auto Save Report	false
Pass-Fail Tput Criteria	
Build Date	Fri 20 May 2022 09:36:36 PM PDT
Build Version	5.4.5
Git Version	b98d1c2ca17aea46b035480e1fafa9ec0f1fed1d

Key Performance Indicators CSV

META Information for Rate vs Orientation Test