

# Dataplane Test



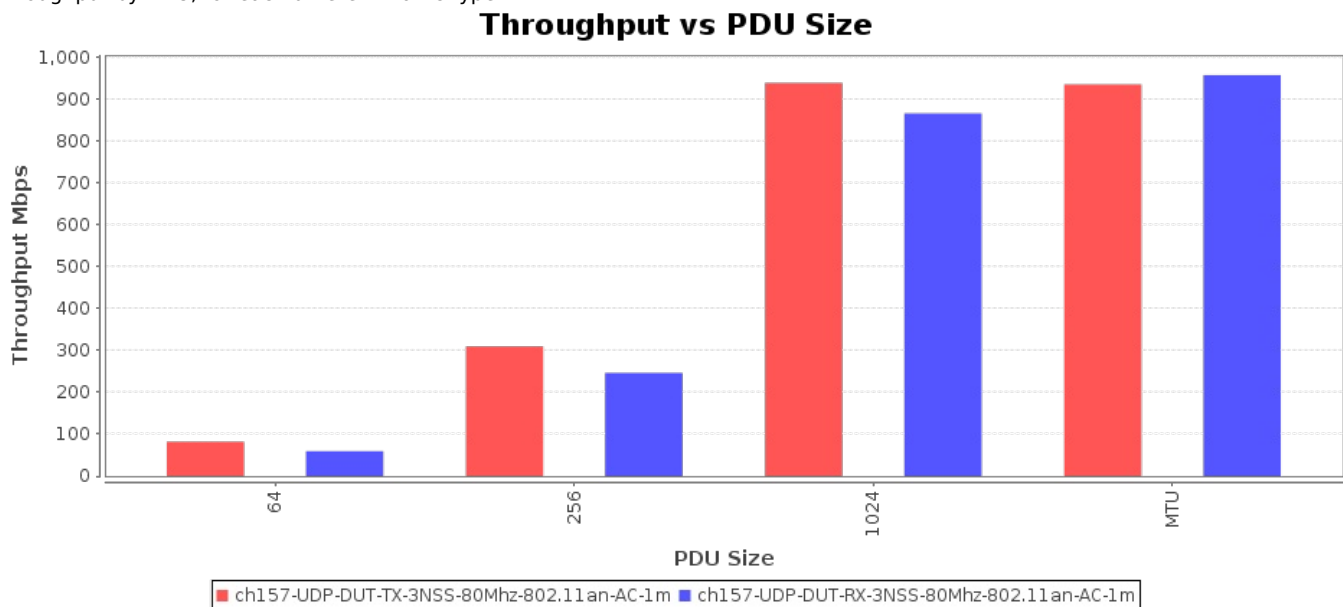
Fri May 31 16:52:14 PDT 2019

Test Setup Information				
Device Under Test	Name	APUT		
	Software Version	v5.62.1		
	Model Number	AP640	Serial Number	234-23-sd-35
	SSIDs	labap		
	BSSIDs	78:d2:94:bf:16:43		
Operator	John Smith@Company.com			

## Objective

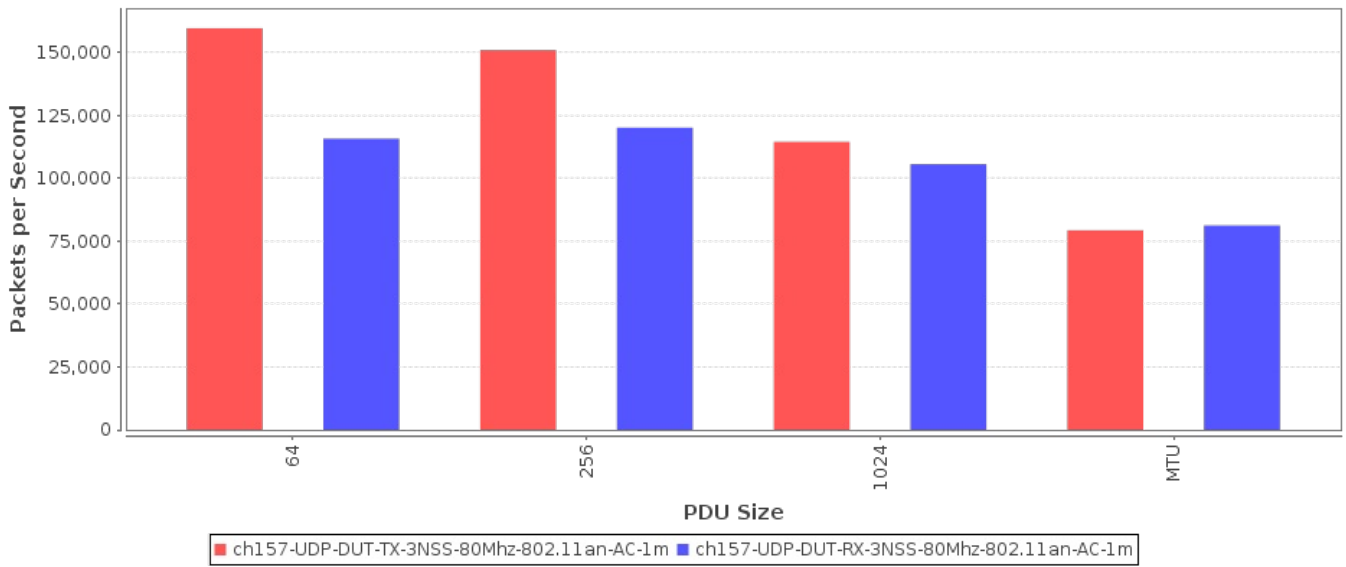
The Candela WiFi data plane test is designed to conduct an automatic testing of all combinations of station types, MIMO types, Channel Bandwidths, Traffic types, Traffic direction, Frame sizes etc... It will run a quick throughput test at every combination of these test variables and plot all the results in a set of charts to compare performance. The user is allowed to define an intended load as a percentage of the max theoretical PHY rate for every test combination. The expected behavior is that for every test combination the achieved throughput should be at least 70% of the theoretical max PHY rate under ideal test conditions. This test provides a way to go through hundreds of combinations in a fully automated fashion and very easily find patterns and problem areas which can be further debugged using more specific testing.

Throughput by MTU, for each different traffic type.



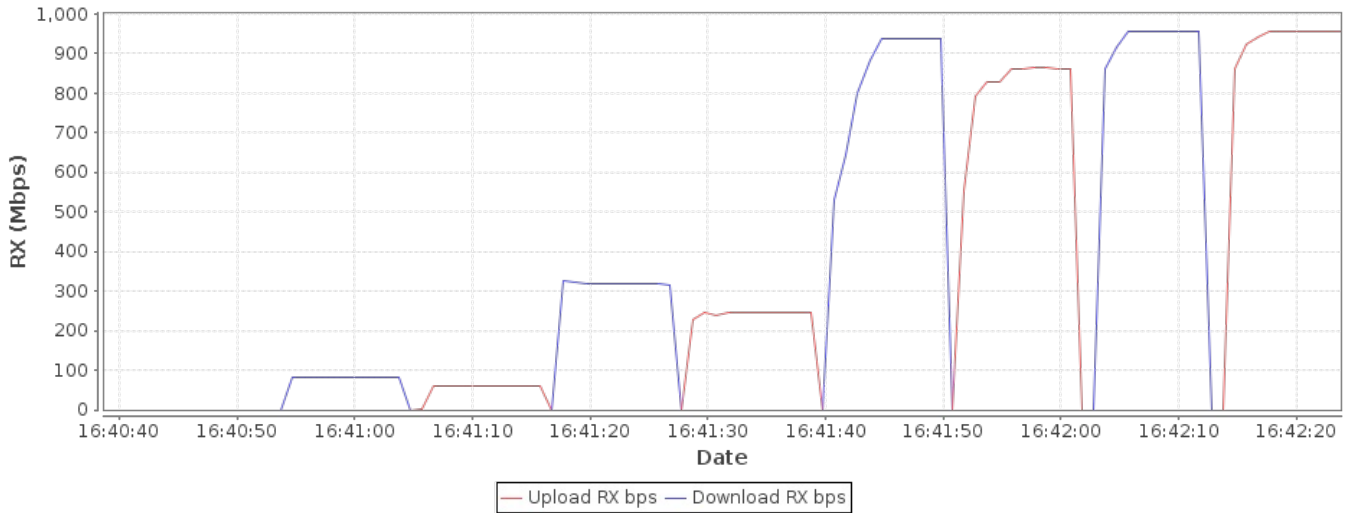
Pps throughput by MTU, for each different traffic type. The values are estimated packets-per-second over the DUT, but some protocols such as TCP make this difficult to know for certain, so the value is extrapolated.

## RX Pps vs PDU Size



Realtime Graph shows summary download and upload RX bps of connections created by this test.

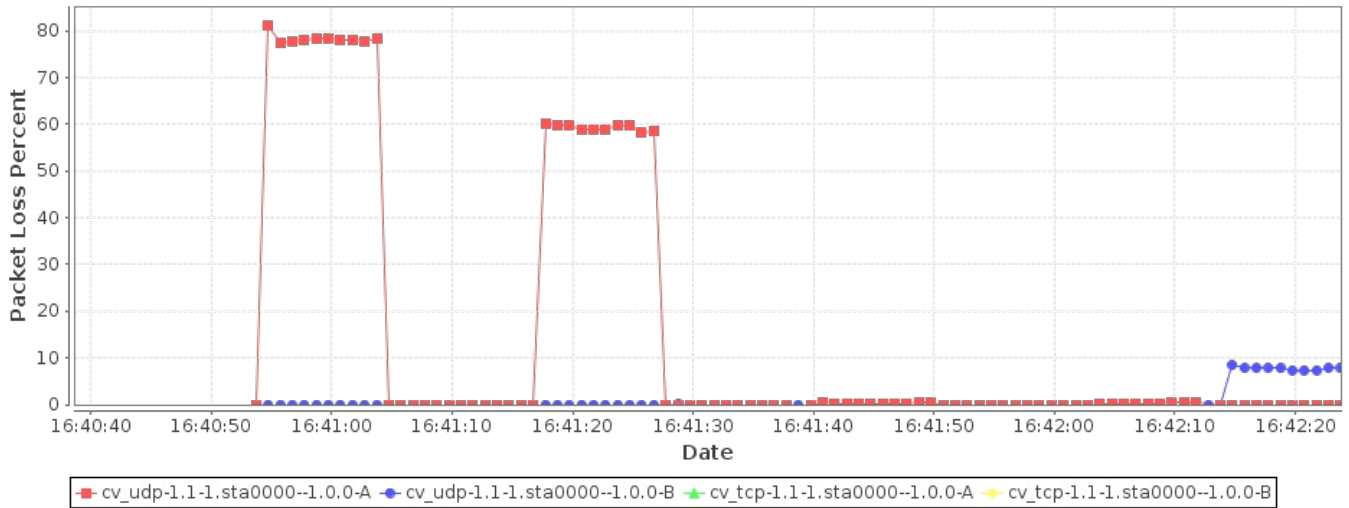
## Realtime Throughput



Channel	Security	NSS	Mode	Bandwidth	PDU	Traffic-Type	Direction	Atten	Duration	Offered-1m	Rx-Bps	Rx-Bps-1m	Rx-Bps-3s	Theoretical	RSSI	Tx-Failed	Tx-Failed%	Tx-Rate	Rx-Rate	Mode
157	AUTO	3	802.11an-AC	80	64	UDP	DUT-TX	NA	10	372853214	81777287	81825017	82136805	1299900000	-43	0 / 10	0	780 Mbps	1.3 Gbps	802.11an-AC
157	AUTO	3	802.11an-AC	80	64	UDP	DUT-RX	NA	10	59171449	58903554	59312813	58938640	1299900000	-35	0 / 1115450	0	1170 Mbps	1.3 Gbps	802.11an-AC
157	AUTO	3	802.11an-AC	80	256	UDP	DUT-TX	NA	10	779671592	308300051	309460528	316218037	1299900000	-44	0 / 2	0	1300 Mbps	1.3 Gbps	802.11an-AC
157	AUTO	3	802.11an-AC	80	256	UDP	DUT-RX	NA	10	245235023	244610292	246214791	244594298	1299900000	-36	0 / 1249429	0	1300 Mbps	1.3 Gbps	802.11an-AC
157	AUTO	3	802.11an-AC	80	1024	UDP	DUT-TX	NA	10	941251683	937452886	938735825	939516925	1299900000	-44	0 / 3	0	1170 Mbps	1.3 Gbps	802.11an-AC
157	AUTO	3	802.11an-AC	80	1024	UDP	DUT-RX	NA	10	869167320	861948842	865776282	863072525	1299900000	-36	0 / 1005122	0	1300 Mbps	1.3 Gbps	802.11an-AC
157	AUTO	3	802.11an-AC	80	MTU	UDP	DUT-TX	NA	10	966348382	930351762	935042559	956789200	1299900000	-44	0 / 0	FAILED	1300 Mbps	1.3 Gbps	802.11an-AC
157	AUTO	3	802.11an-AC	80	MTU	UDP	DUT-RX	NA	10	1040328439	956989472	957354843	957330234	1299900000	-36	0 / 857602	0	1300 Mbps	1.3 Gbps	802.11an-AC

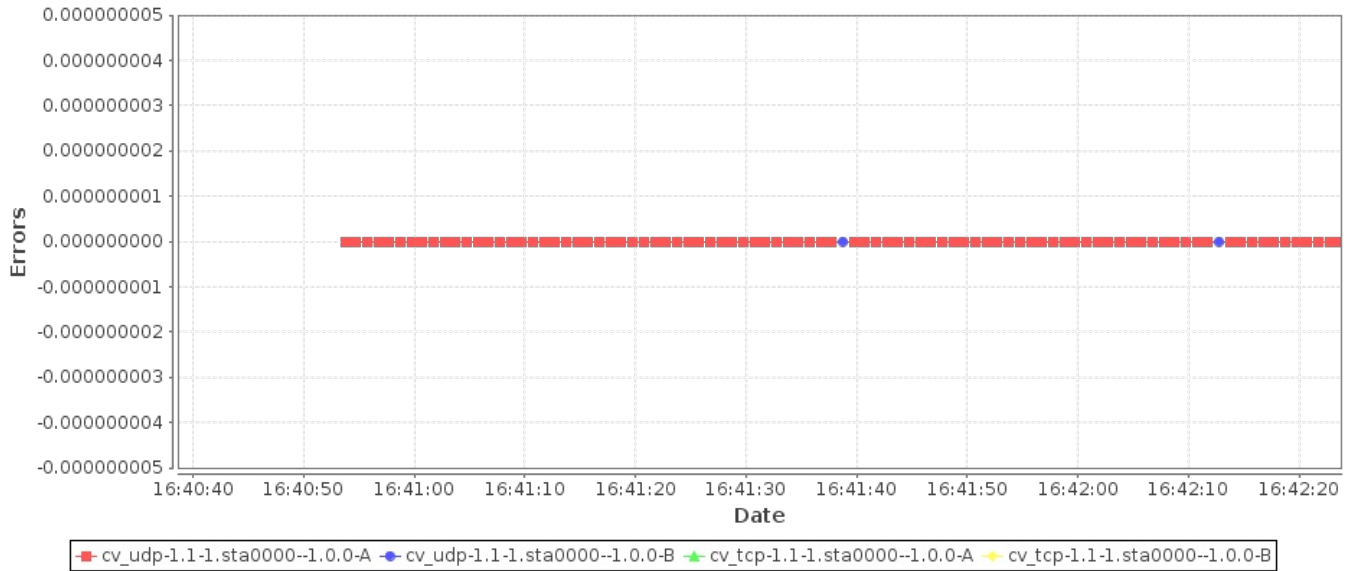
Packet Loss Percentage graph shows the percentage of lost packets as detected by the receiving endpoint due to packet gaps. If there is full packet loss, then this will not report any loss since there will be no gap to detect.

## Endpoint RX Packet Loss Percentage



Error Graph shows occurrences of packet errors.

## Rx Errors



Test configuration and LANforge software version	
Path Loss	25
Requested Speed	85%
ToS	0
Duration:	10 sec (10 s)
Upstream Port	1.1.1 eth1 Firmware: 0. 6-1 Resource: MobileStations
WiFi Port	1.1.7 sta0000 Firmware: 10.4b-ct-9984-xtH-012-f6434814c Resource: MobileStations
Show Events	true
Build Date	Fri May 31 14:05:40 PDT 2019
Build Version	5.3.9