
# IxNetwork Report

**Test:** RFC2544 - Throughput/Latency

**Test Date:** 08/02/2017 20:59:06

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# RFC2544 - Throughput/Latency - Info

## Test Information

### Product Information

| | |
|---|---|
| Product Label : | Your switch/router name here |
| Product Version : | Your firmware version here |
| Serial Number : | Your switch/router serial number here |
| Comments : | |

### Test Settings

| | |
|---|---|
| Date Executed : | 08/02/2017 |
| Time Executed : | 20:59:06 |
| User Name : | |
| Number of Trials Executed : | 1 |
| Stream Duration (sec) : | 20 |

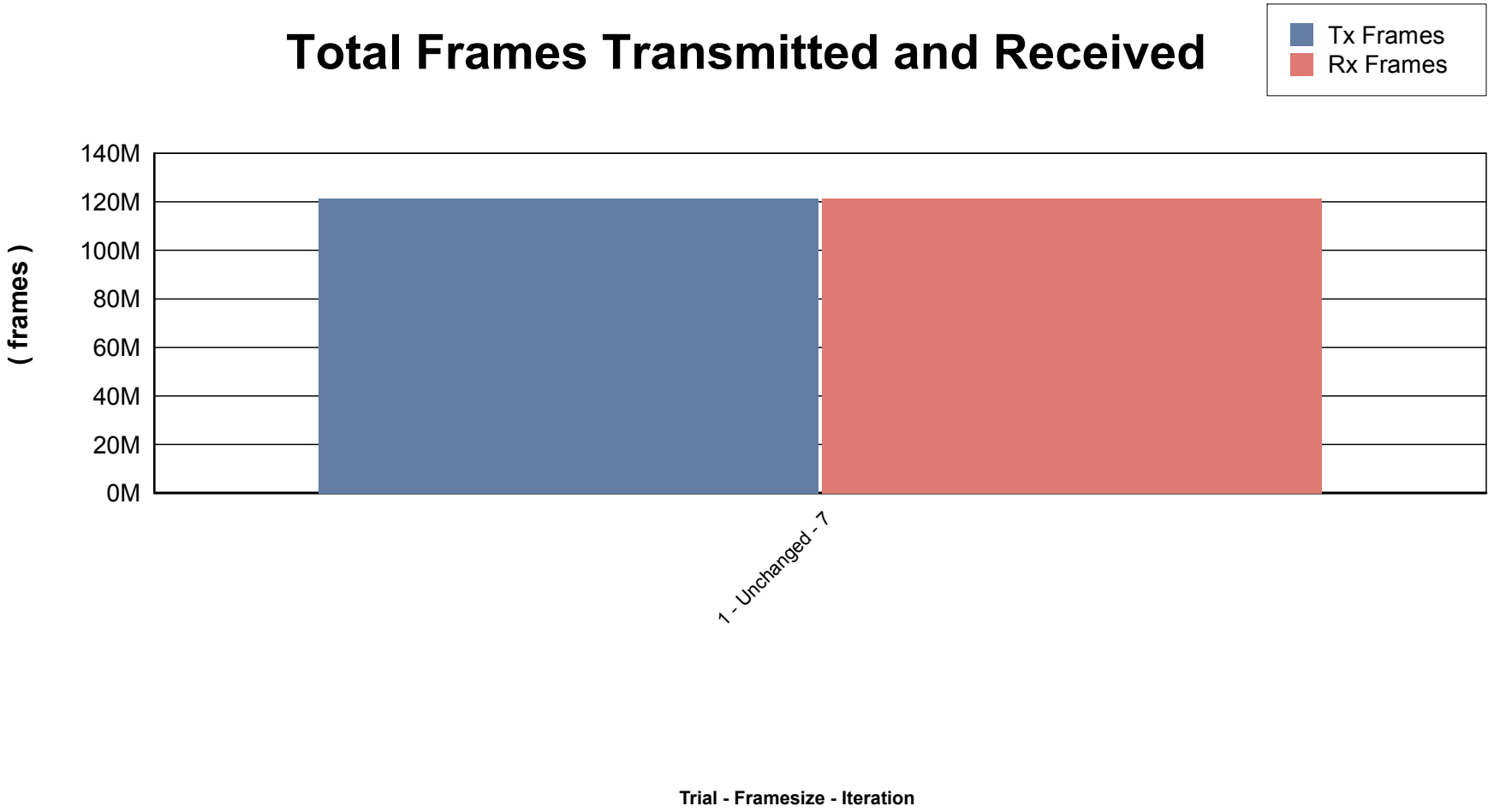
### Output Parameters

| | |
|---|---|
| Number of Trials Passed : | N/A |
| Test Duration : | 00:04:42 |

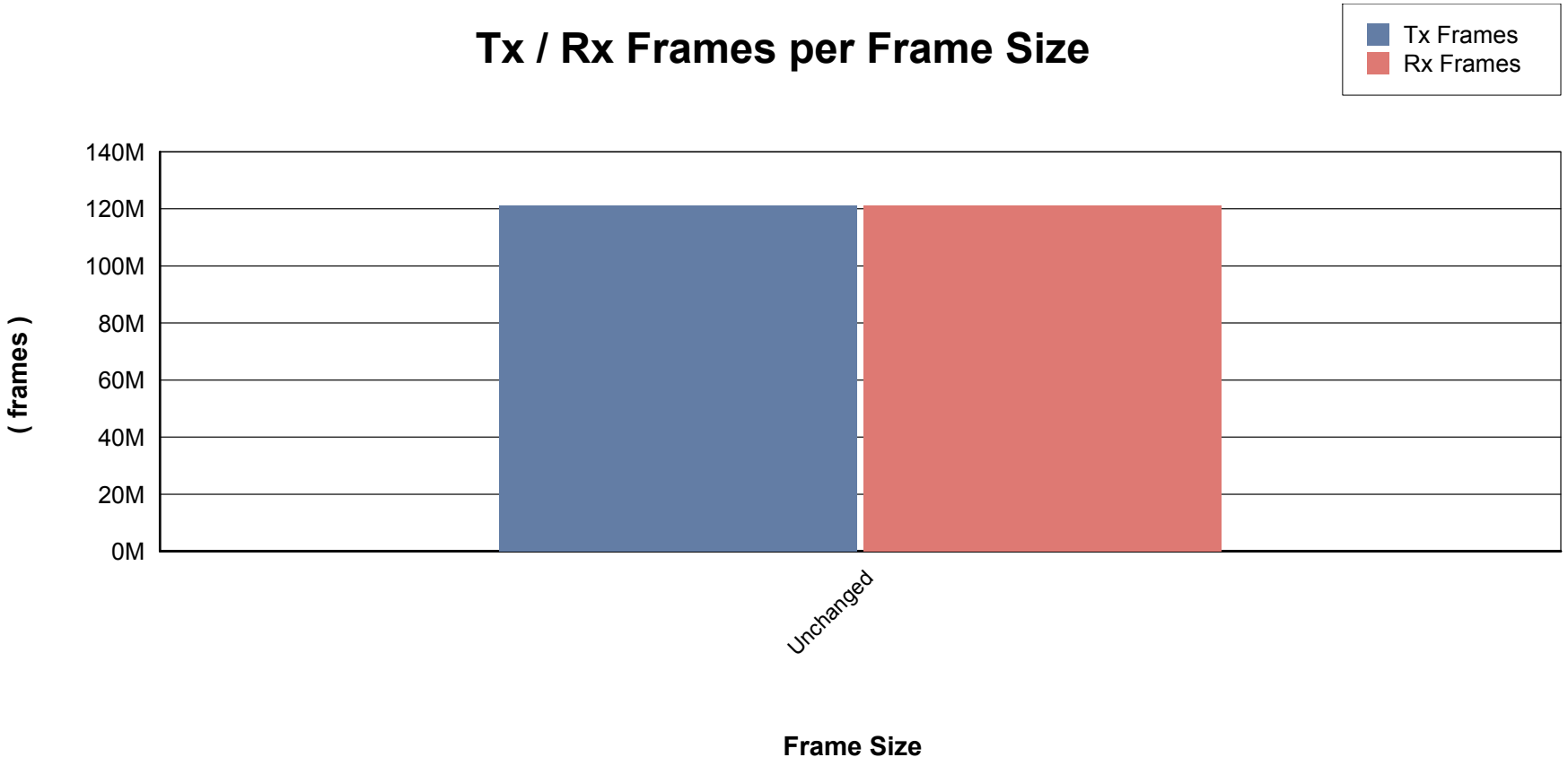
## RFC2544 - Throughput/Latency - Port Map Information

| Port Map : | Tx Port | Tx Speed (Mbps) | Rx Port | Rx Speed (Mbps) |
|---|---|---|---|---|
| | 172.16.0.9:2:1 | 10000 | 172.16.0.9:2:2 | 10000 |

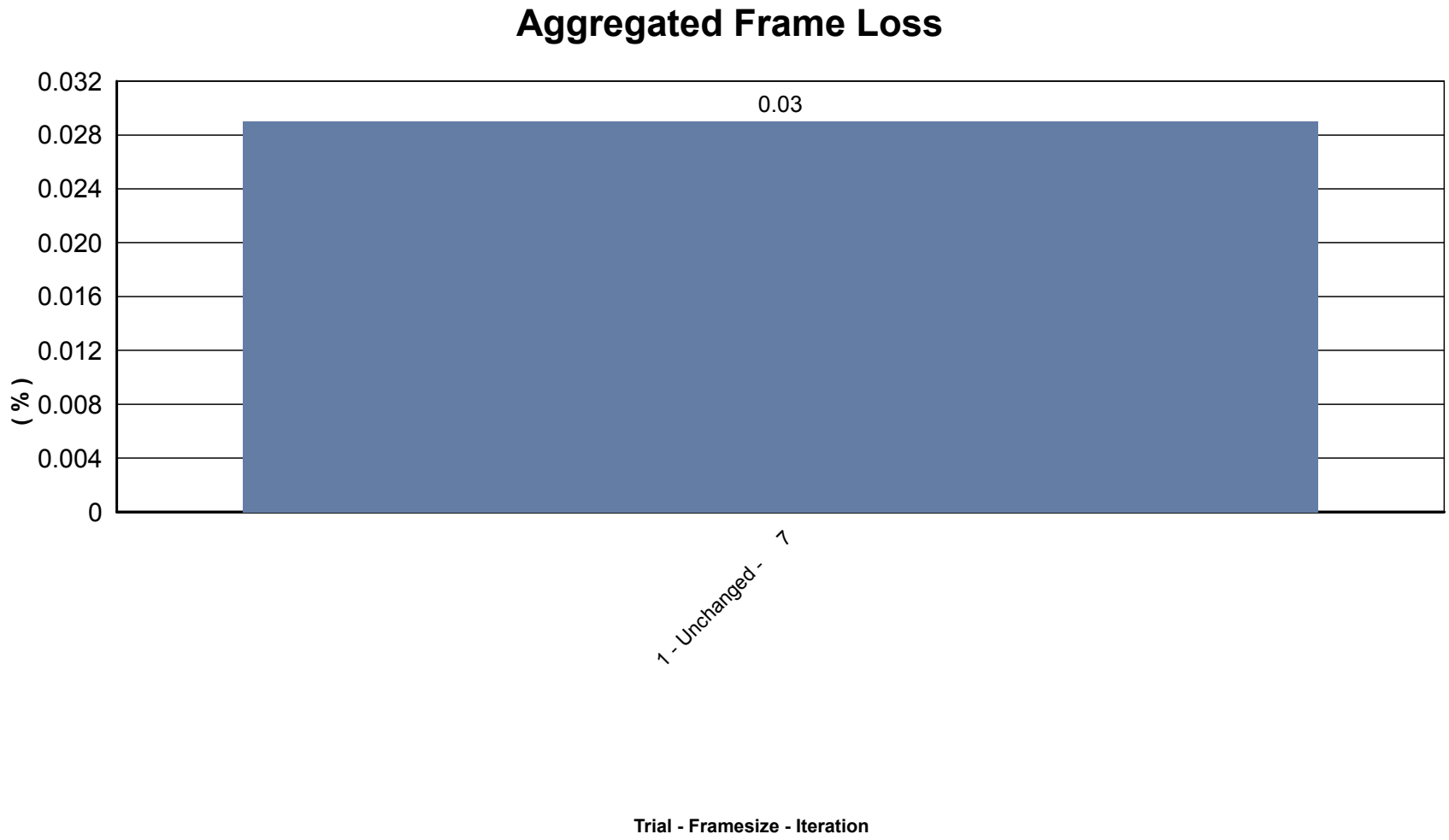
## RFC2544 - Throughput/Latency - Aggregated Graph



## RFC2544 - Throughput/Latency - Aggregated Graph

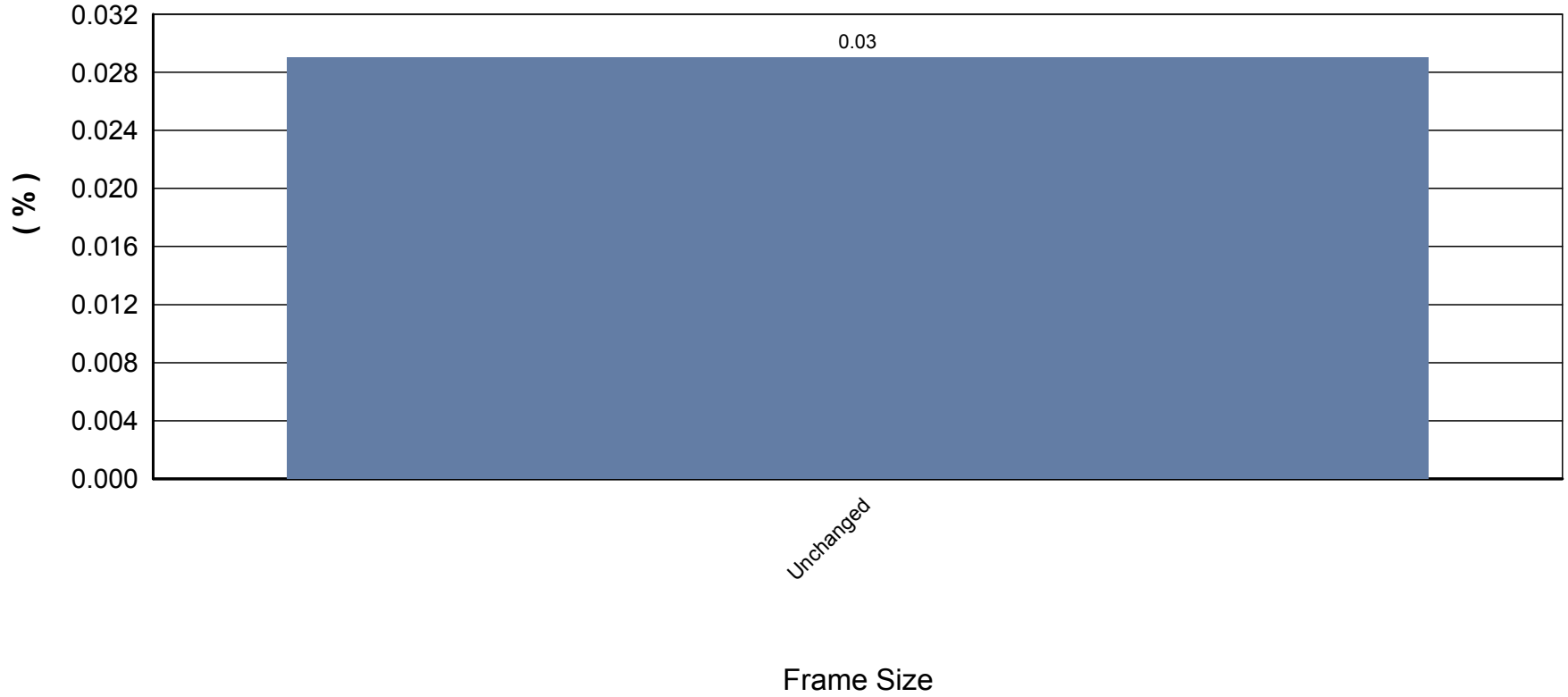


## RFC2544 - Throughput/Latency - Aggregated Graph

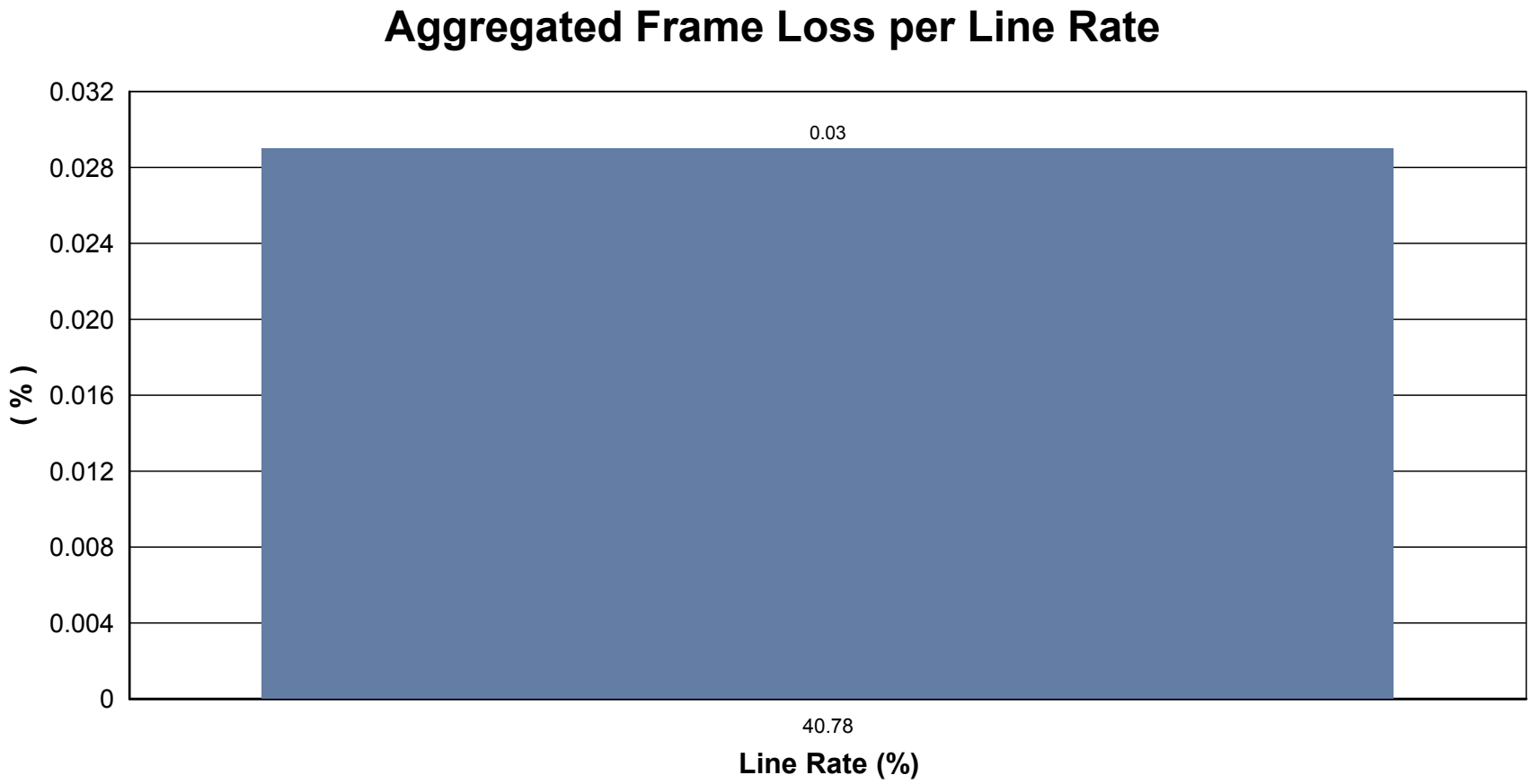


**RFC2544 - Throughput/Latency - Aggregated Graph**

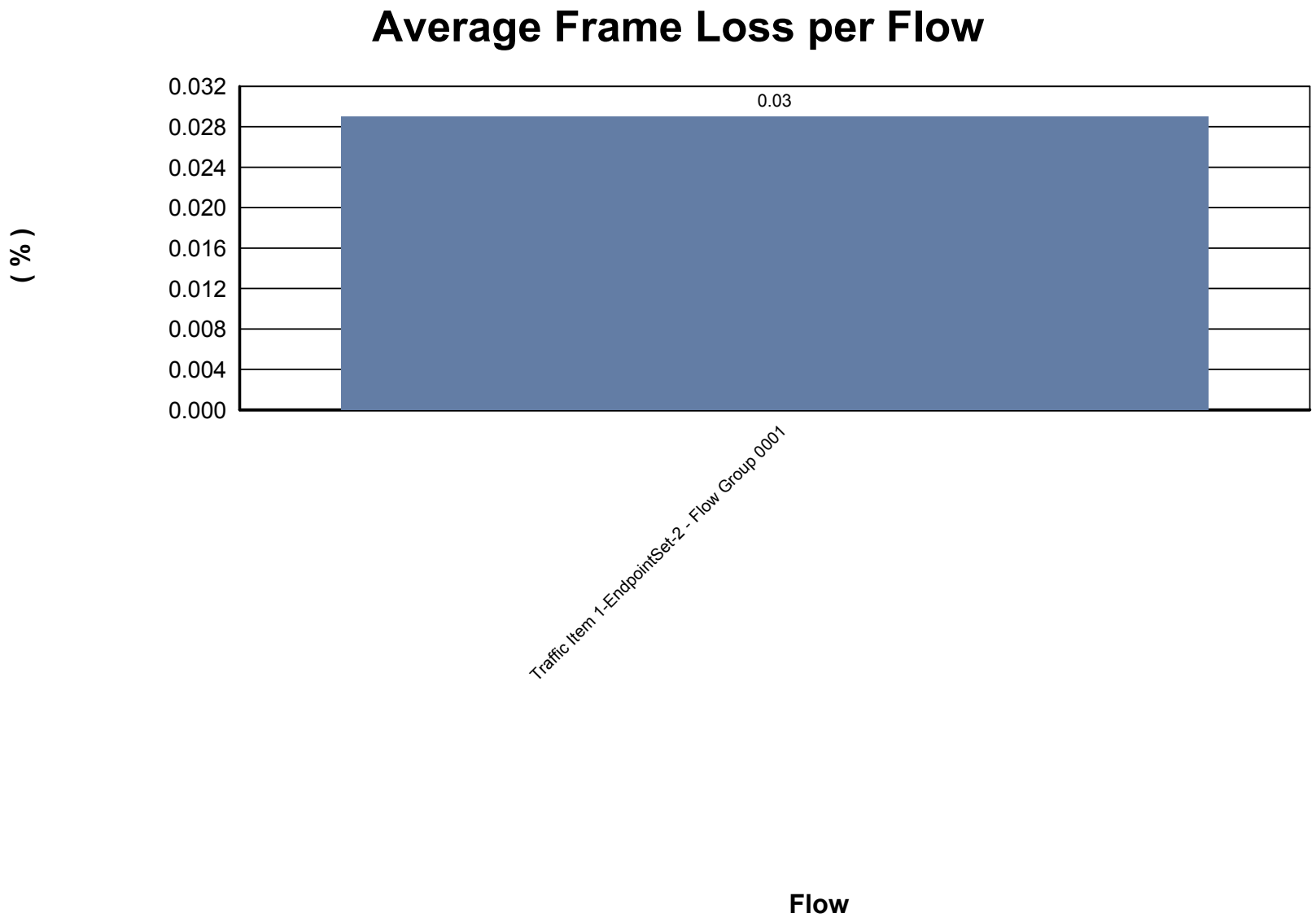
# Aggregated Frame Loss per Frame Size



## RFC2544 - Throughput/Latency - Aggregated Graph



## RFC2544 - Throughput/Latency - Per Flow Graph



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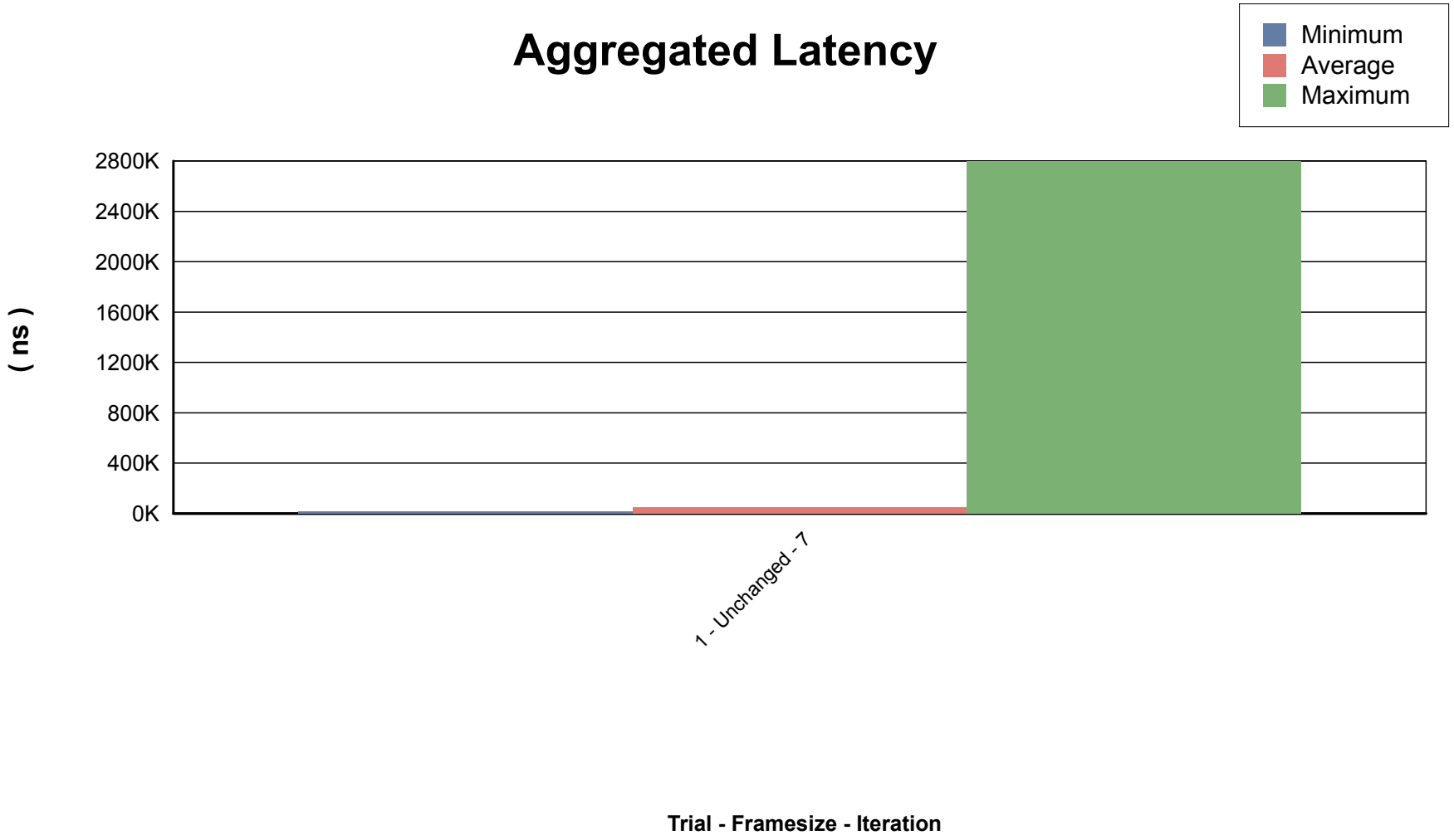
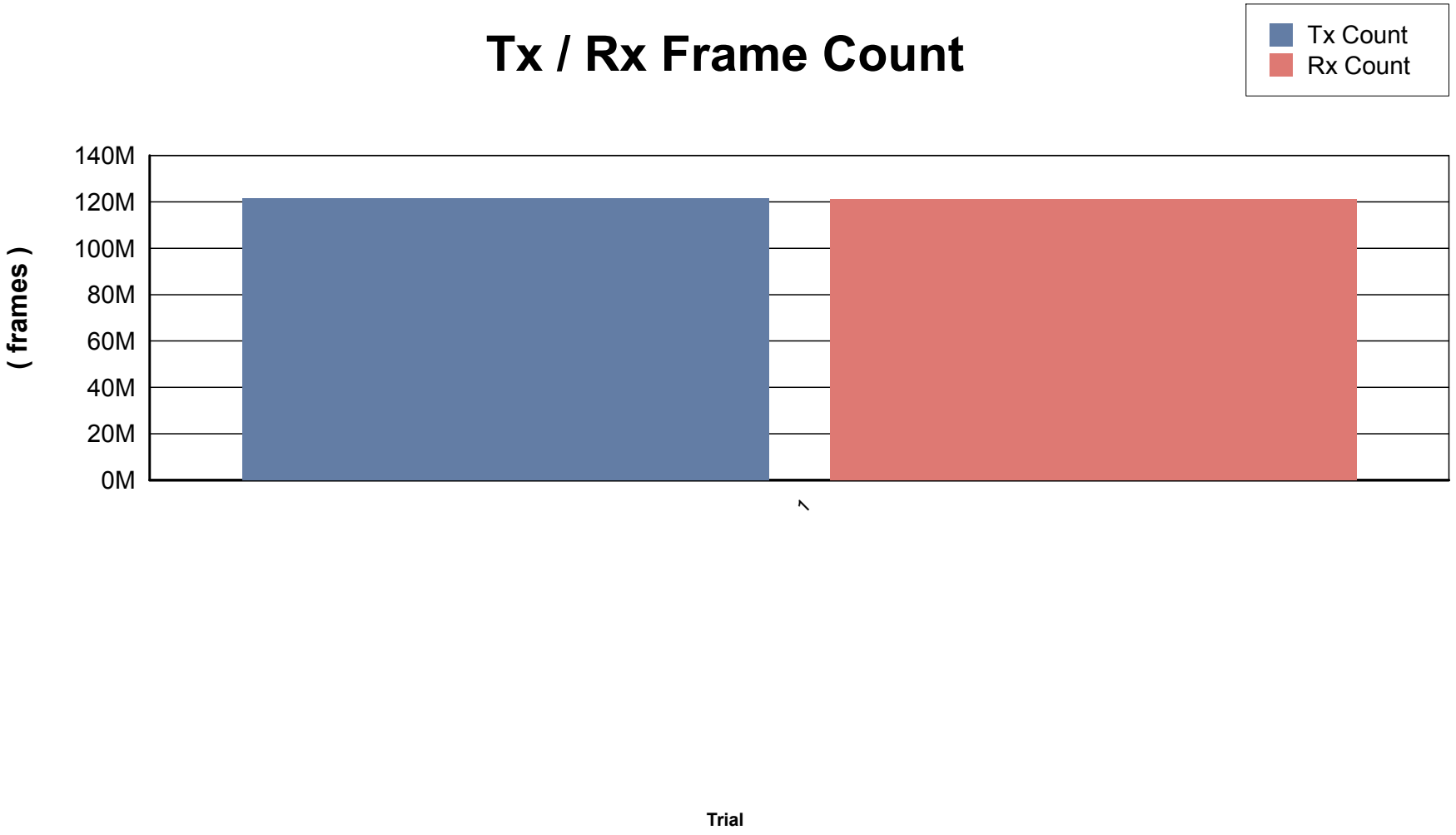
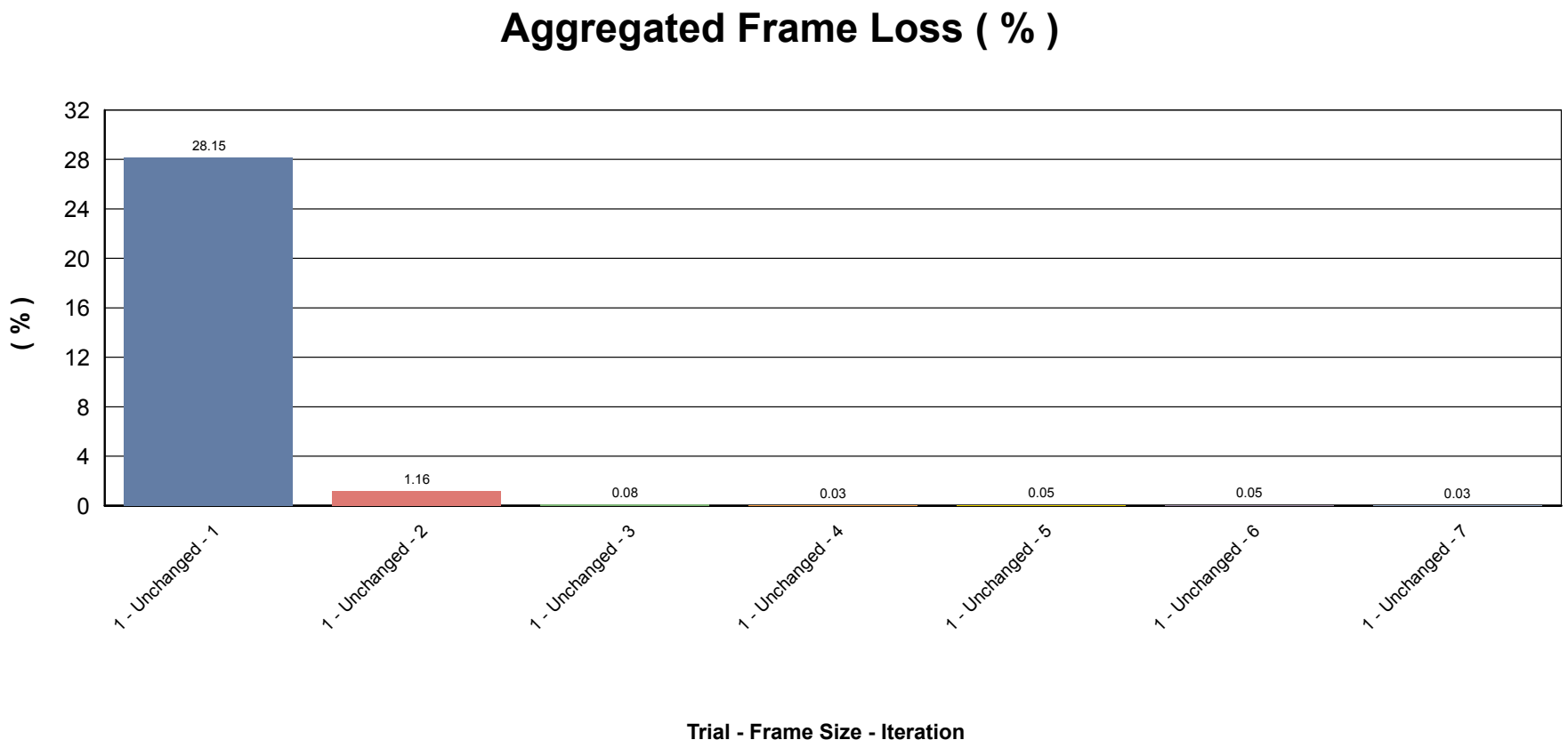


## RFC2544 - Throughput/Latency - Per Flow Graph



## RFC2544 - Throughput/Latency - Iteration Graph



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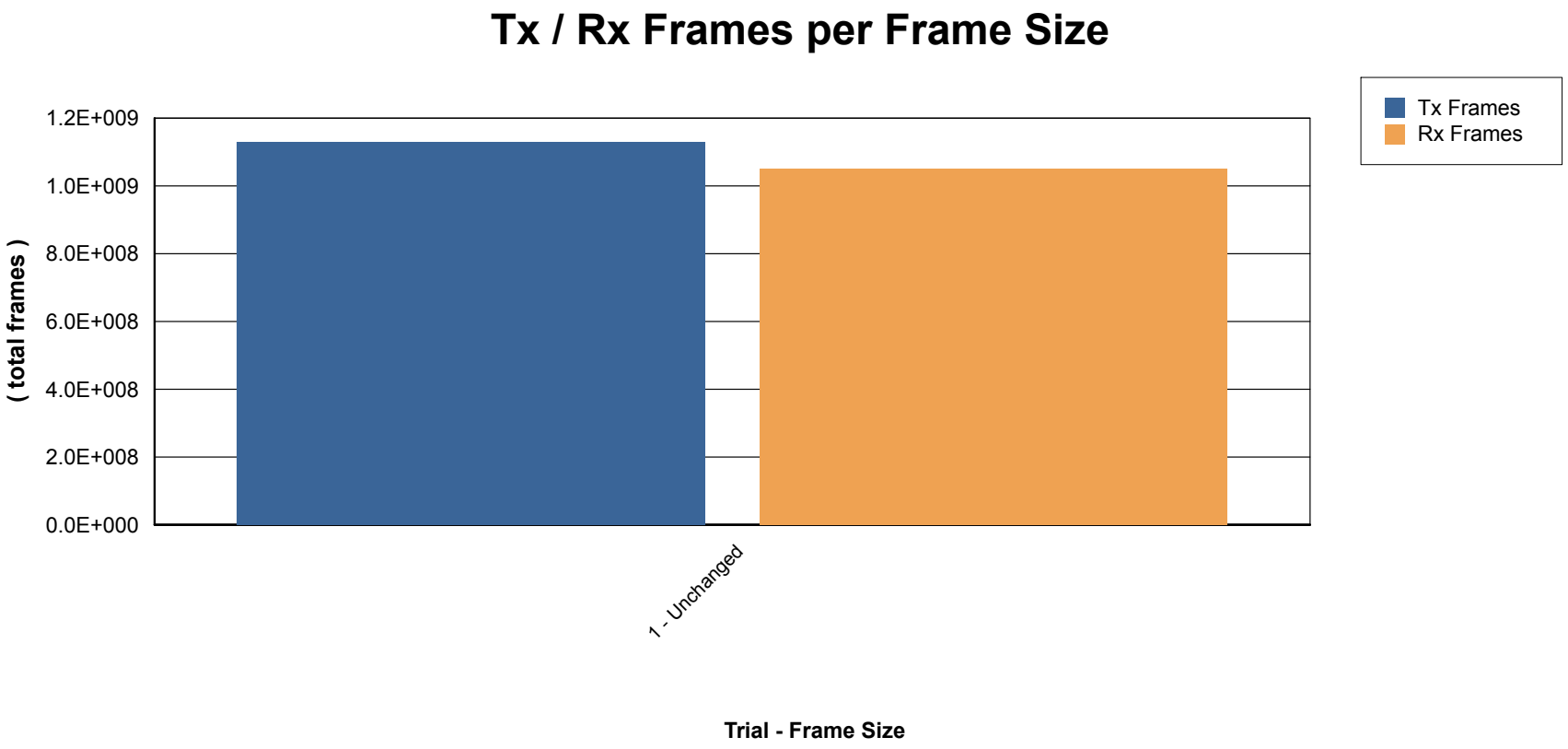
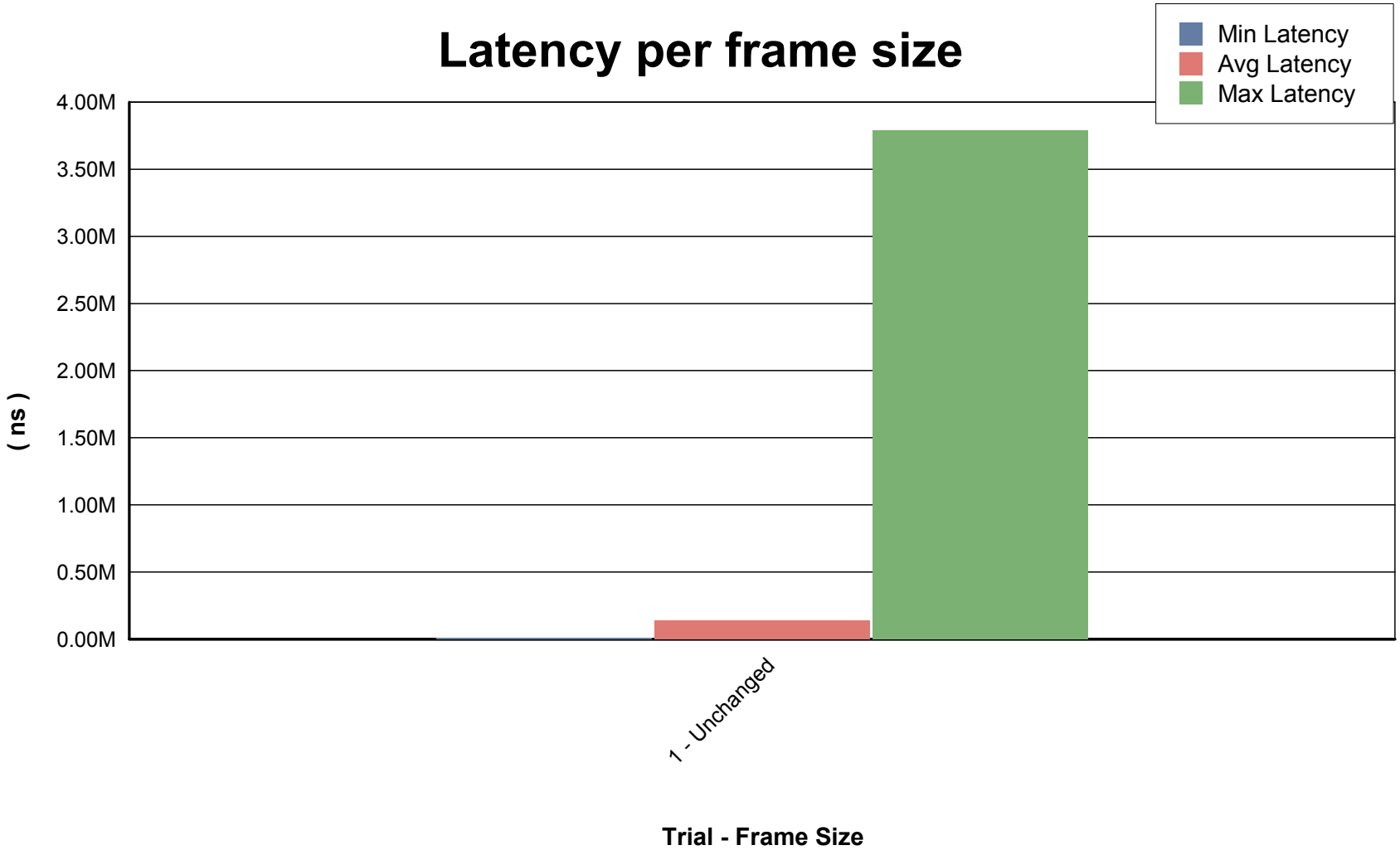


## RFC2544 - Throughput/Latency - Iteration Graph



## RFC2544 - Throughput/Latency - Aggregated Results

| Trial / Framesize / Iteration | Agg L2 Throughput | | | | Agg L1 Throughput | | Throughput (frames) | | Agg Latency | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AggTx Rate % | Agg Rx Rate | | | Tx Rate Mbps | Rx Rate Mbps | | | Min (ns) | Max (ns) | Average (ns) |
| | | % | FPS | Mbps | | | | | | | |
| Trial: 1 / FS: Unchanged / Iter: 7 | 40.78 | 41 | 5200211.0 | 3244.932 | | | Tx : 121372768.000<br>Rx : 121337686.000<br>Loss : 35082<br>Loss% : 0.03 | | 12725 | 2796575 | 47860.000 |

## RFC2544 - Throughput/Latency - Per Flow Statistics - Part 1 of 2

| Trial / Framesize / Iteration | Tx Port | Rx Port | Flow Group | L2 Throughput | | | | L1 Throughput | | Throughput (frames) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tx Rate % | Rx Rate | | | Tx Rate Mbps | Rx Rate Mbps | | |
| | | | | | % | FPS | Mbps | | | | |
| Trial: 1 / FS: Unchanged / Iter: 7 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 40.78 | 41 | 5200211.0 | 3244.93 | | | Tx : 121372768<br>Rx : 121337686<br>Loss : 35082<br>Loss% : 0.029 | |

## RFC2544 - Throughput/Latency - Per Flow Statistics - Part 2 of 2

| Trial / Framesize / Iteration | Tx Port | Rx Port | Flow Group | Min Latency (ns) | Max Latency (ns) | Avg Latency (ns) |
|---|---|---|---|---|---|---|
| Trial: 1 / FS: Unchanged / Iter: 7 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 12725 | 2796575 | 47860 |

## RFC2544 - Throughput/Latency - Iteration Statistics - Part 1 of 2

| Trial / Framesize / Iteration | Tx Port | Rx Port | Flow Group | L2 Throughput | | | | L1 Throughput | | Throughput (frames) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tx Rate % | Rx Rate | | | Tx Rate Mbps | Rx Rate Mbps | | |
| | | | | | % | FPS | Mbps | | | | |
| Trial: 1 / FS: Unchanged / Iter: 1 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 90.00 | 64.67 | 8248029.3 | 5146.77 | | | Tx : 267857143<br>Rx : 192462602<br>Loss : 75394541<br>Loss% : 28.147 | |
| Trial: 1 / FS: Unchanged / Iter: 2 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 65.00 | 64.24 | 8194289.7 | 5113.24 | | | Tx : 193452381<br>Rx : 191207513<br>Loss : 2244868<br>Loss% : 1.160 | |
| Trial: 1 / FS: Unchanged / Iter: 3 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 52.50 | 52.46 | 6691102.2 | 4175.25 | | | Tx : 156250000<br>Rx : 156124925<br>Loss : 125075<br>Loss% : 0.080 | |
| Trial: 1 / FS: Unchanged / Iter: 4 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 46.25 | 46.24 | 5897539.8 | 3680.07 | | | Tx : 137648810<br>Rx : 137609048<br>Loss : 39762<br>Loss% : 0.029 | |
| Trial: 1 / FS: Unchanged / Iter: 5 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 43.13 | 43.10 | 5497748.3 | 3430.60 | | | Tx : 128348214<br>Rx : 128280343<br>Loss : 67871<br>Loss% : 0.053 | |
| Trial: 1 / FS: Unchanged / Iter: 6 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 41.56 | 41.54 | 5298653.0 | 3306.36 | | | Tx : 123697917<br>Rx : 123634752<br>Loss : 63165<br>Loss% : 0.051 | |
| Trial: 1 / FS: Unchanged / Iter: 7 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 40.78 | 40.77 | 5200211.0 | 3244.93 | | | Tx : 121372768<br>Rx : 121337686<br>Loss : 35082<br>Loss% : 0.029 | |

## RFC2544 - Throughput/Latency - Iteration Statistics - Part 2 of 2

| Trial / Framesize / Iteration | Tx Port | Rx Port | Flow Group | Min Latency (ns) | Max Latency (ns) | Avg Latency (ns) |
|---|---|---|---|---|---|---|
| Trial: 1 / FS: Unchanged / Iter: 1 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 111172 | 3790767 | 581630.00 |
| Trial: 1 / FS: Unchanged / Iter: 2 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 14932 | 2807997 | 168416.00 |
| Trial: 1 / FS: Unchanged / Iter: 3 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 10945 | 2824022 | 49172.00 |
| Trial: 1 / FS: Unchanged / Iter: 4 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 13440 | 2831252 | 45976.00 |
| Trial: 1 / FS: Unchanged / Iter: 5 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 11565 | 2828707 | 48418.00 |
| Trial: 1 / FS: Unchanged / Iter: 6 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 11812 | 2816485 | 49058.00 |
| Trial: 1 / FS: Unchanged / Iter: 7 | Ethernet - 001 | Ethernet - 002 | Traffic Item 1-EndpointSet-2 - Flow Group 0001 | 12725 | 2796575 | 47860.00 |

## Theoretical maximum Frame Rates (frames/second) for different frame sizes (bytes)

| Speed | 64 | 128 | 256 | 512 | 1024 | 1280 | 1518 |
|---|---|---|---|---|---|---|---|
| 10 Mbps | 14881 | 8446 | 4529 | 2350 | 1198 | 962 | 813 |
| 100 Mbps | 148810 | 84460 | 45290 | 23497 | 11973 | 9616 | 8128 |
| 1000 Mbps | 1488096 | 844595 | 452899 | 234963 | 119732 | 96154 | 81275 |
| 10 Gbps | 14880952 | 8445946 | 4528986 | 2349625 | 1197318 | 961539 | 812744 |
| 25 Gbps | 37202380 | 21114864 | 11322463 | 5874060 | 2993295 | 2403846 | 2031859 |
| 40 Gbps | 59523809 | 33783783 | 18115942 | 9398496 | 4789272 | 3846153 | 3250975 |
| 100 Gbps | 148809523 | 84459459 | 45289855 | 23496240 | 11973180 | 9615384 | 8127438 |
| 155 Mbps (Oc - 3) | 288000 | 145116 | 72840 | 36491 | 18263 | 14614 | 12324 |
| 622 Mbps (Oc - 12) | 1152000 | 580465 | 291362 | 145965 | 73054 | 58454 | 49296 |
| 2488 Mbps (Oc - 48) | 4608000 | 2321860 | 1165447 | 583860 | 292215 | 233817 | 197182 |
| 9952 Mbps (Oc - 192) | 18432000 | 9287442 | 4661790 | 2335439 | 1168859 | 935270 | 788730 |