



## IxNetwork Report

**Test:** RFC2544 - Throughput/Latency

**Test Date:** 08/02/2017 20:35:40

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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 :	20:35:40
User Name :	
Number of Trials Executed :	1
Stream Duration (sec) :	20

**Output Parameters**

Number of Trials Passed :	N/A
Test Duration :	00:04:24

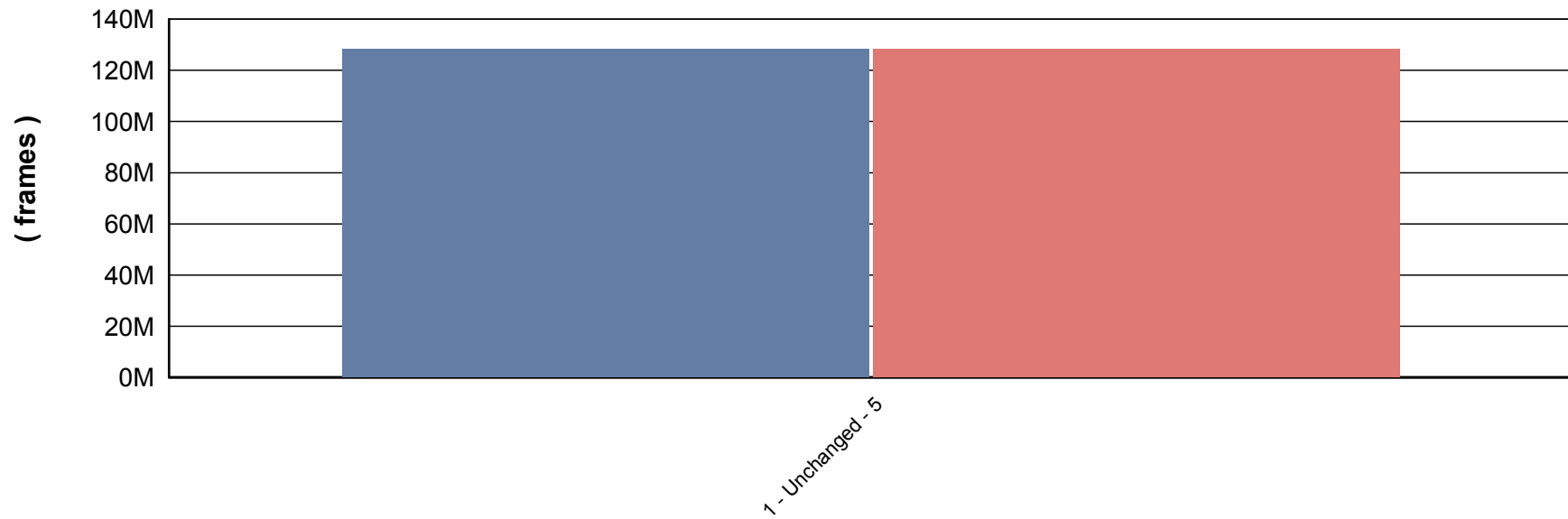
**RFC2544 - Throughput/Latency - Port Map Information**

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

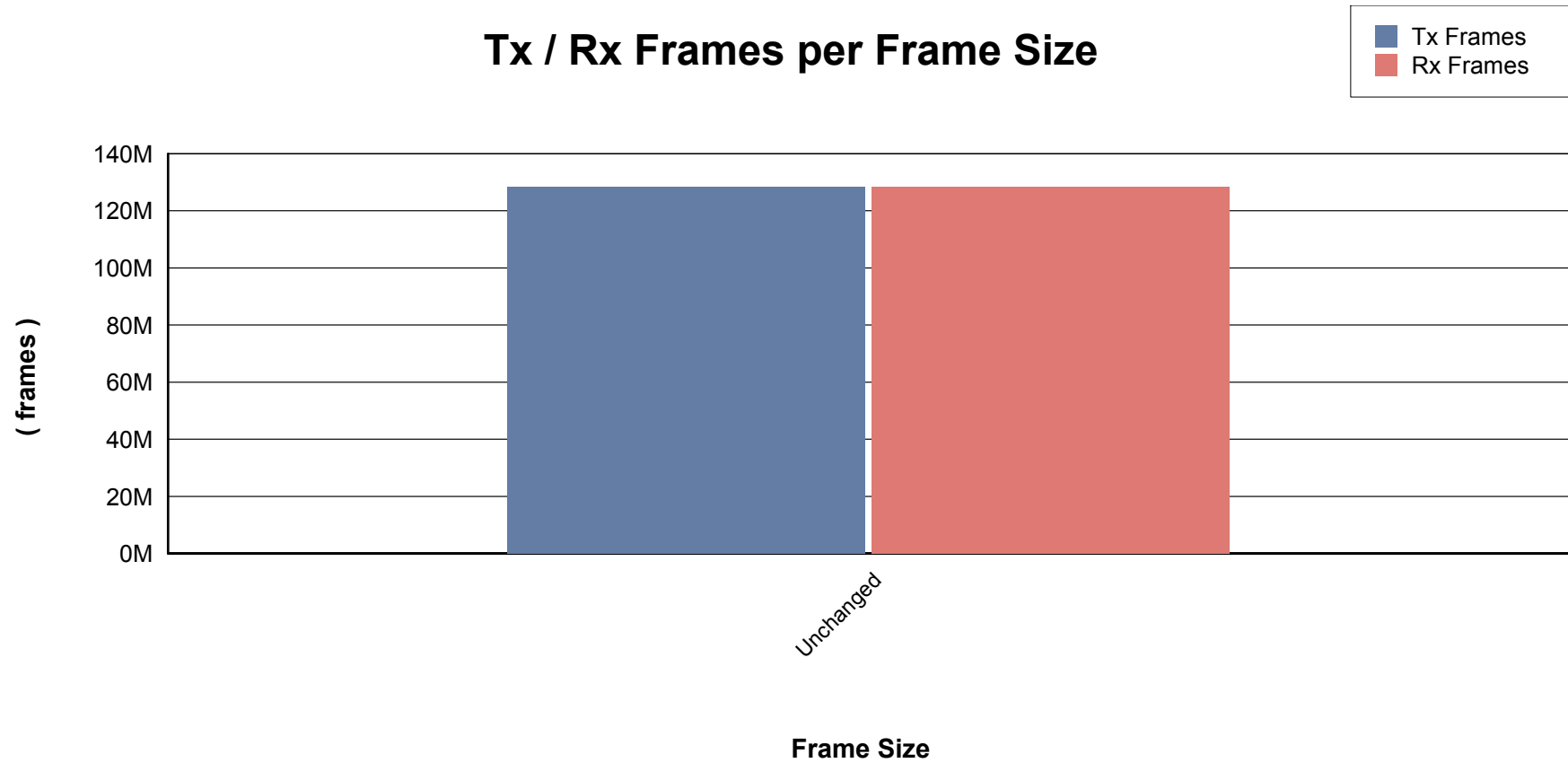
# Total Frames Transmitted and Received

■ Tx Frames  
■ Rx Frames



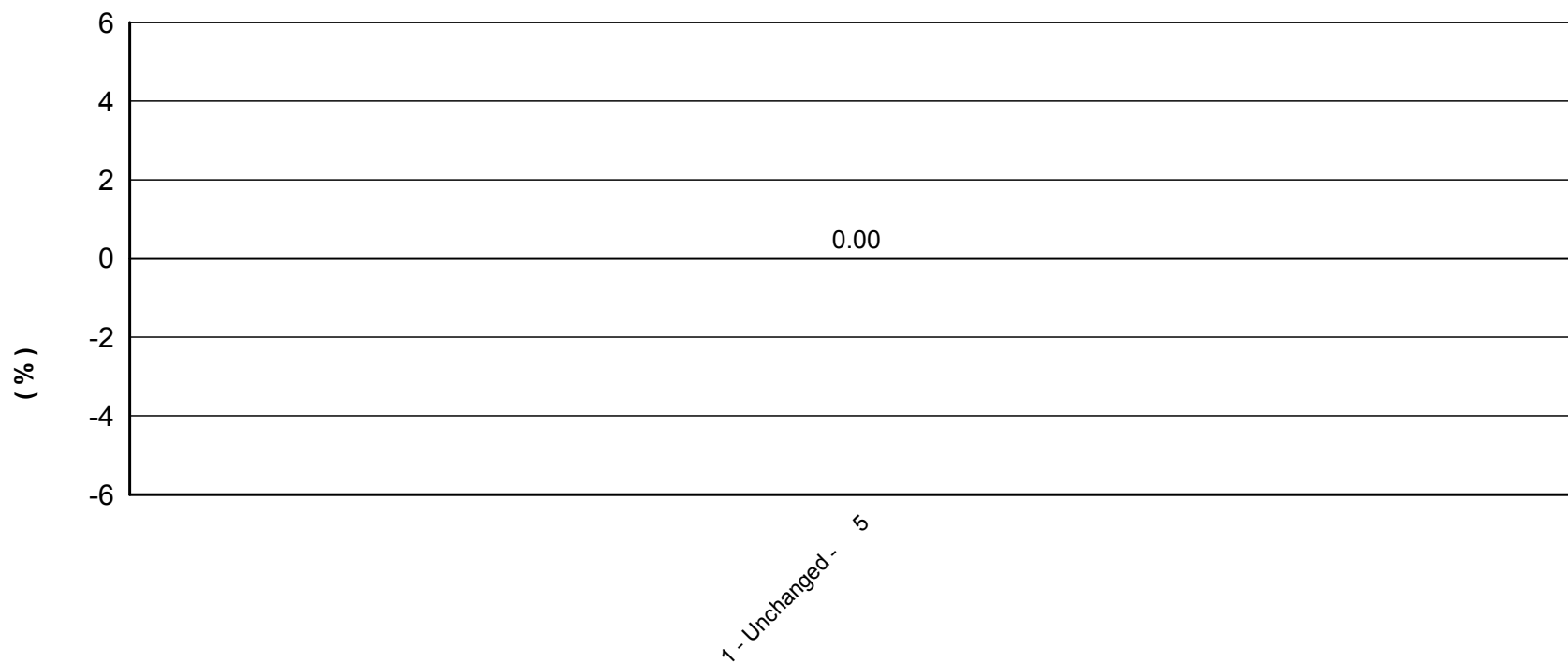
Trial - Framesize - Iteration

RFC2544 - Throughput/Latency - Aggregated Graph



RFC2544 - Throughput/Latency - Aggregated Graph

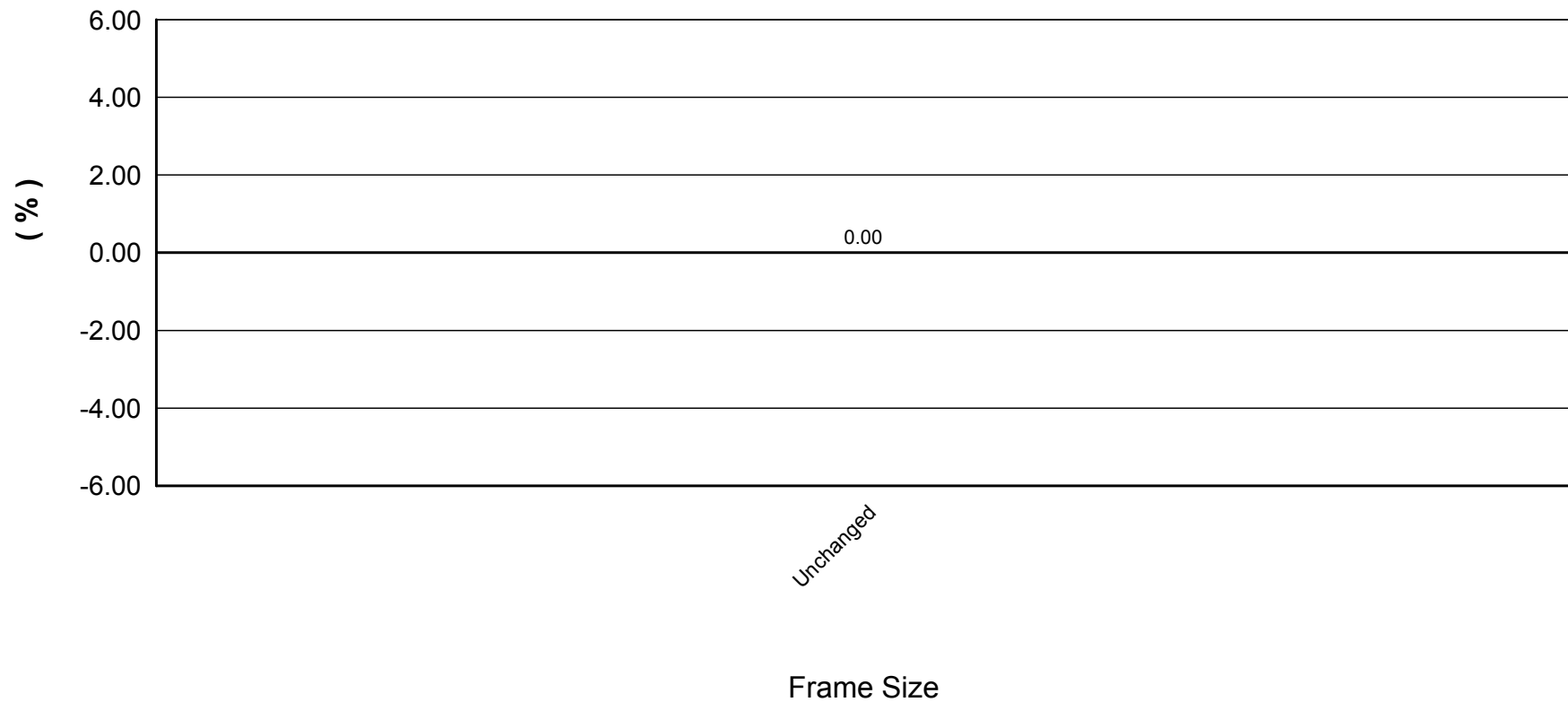
# Aggregated Frame Loss



Trial - Framesize - Iteration

## RFC2544 - Throughput/Latency - Aggregated Graph

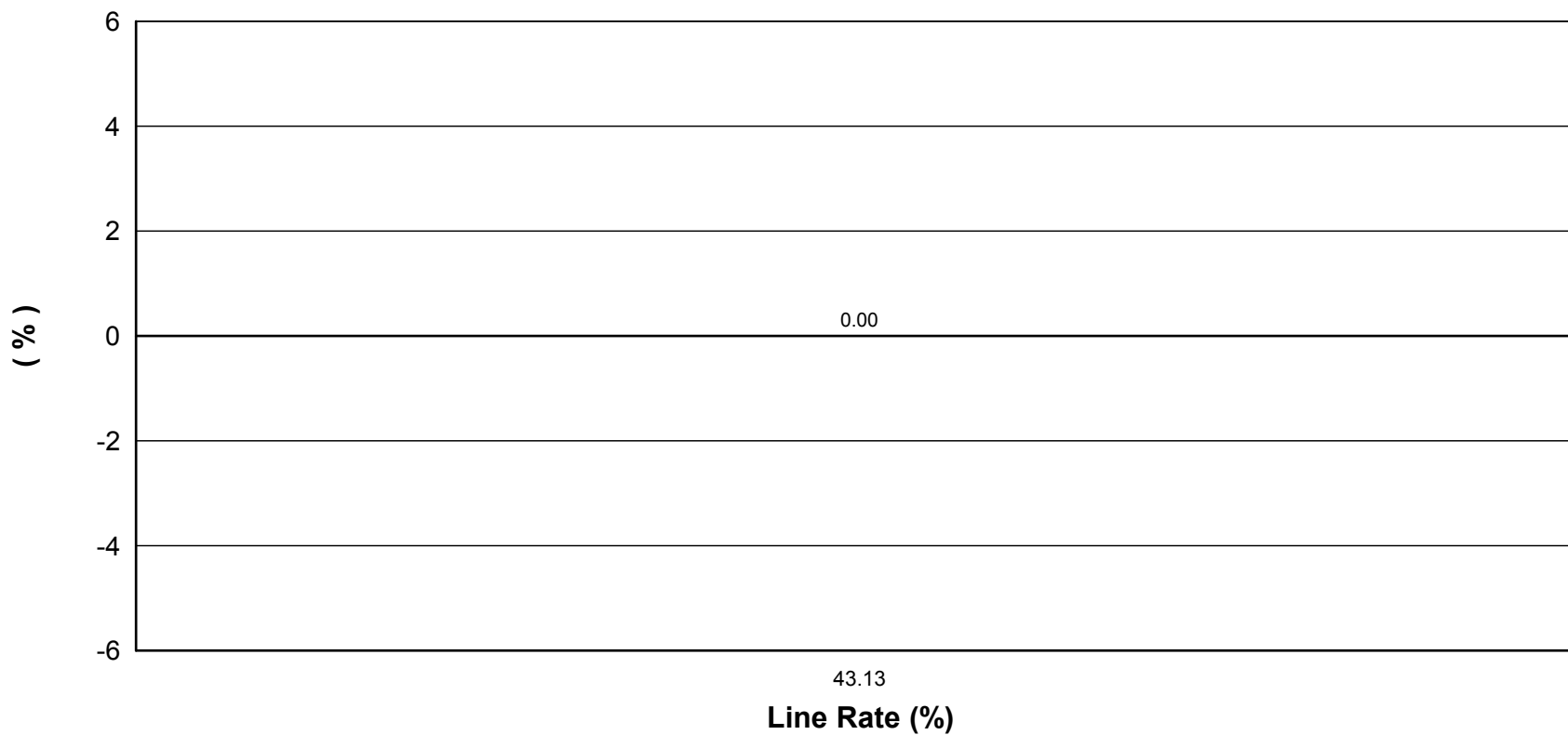
## Aggregated Frame Loss per Frame Size





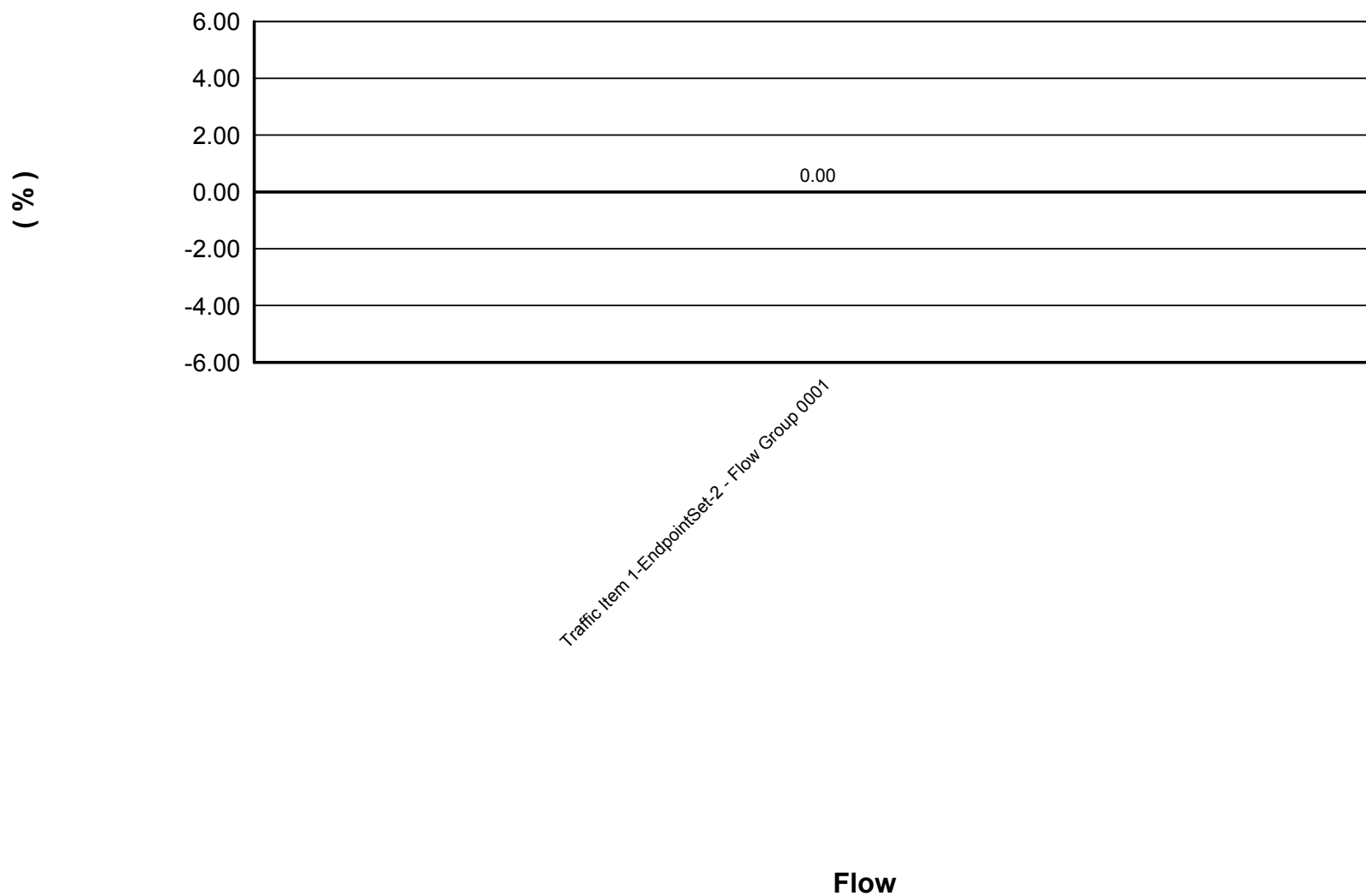
RFC2544 - Throughput/Latency - Aggregated Graph

## Aggregated Frame Loss per Line Rate



RFC2544 - Throughput/Latency - Per Flow Graph

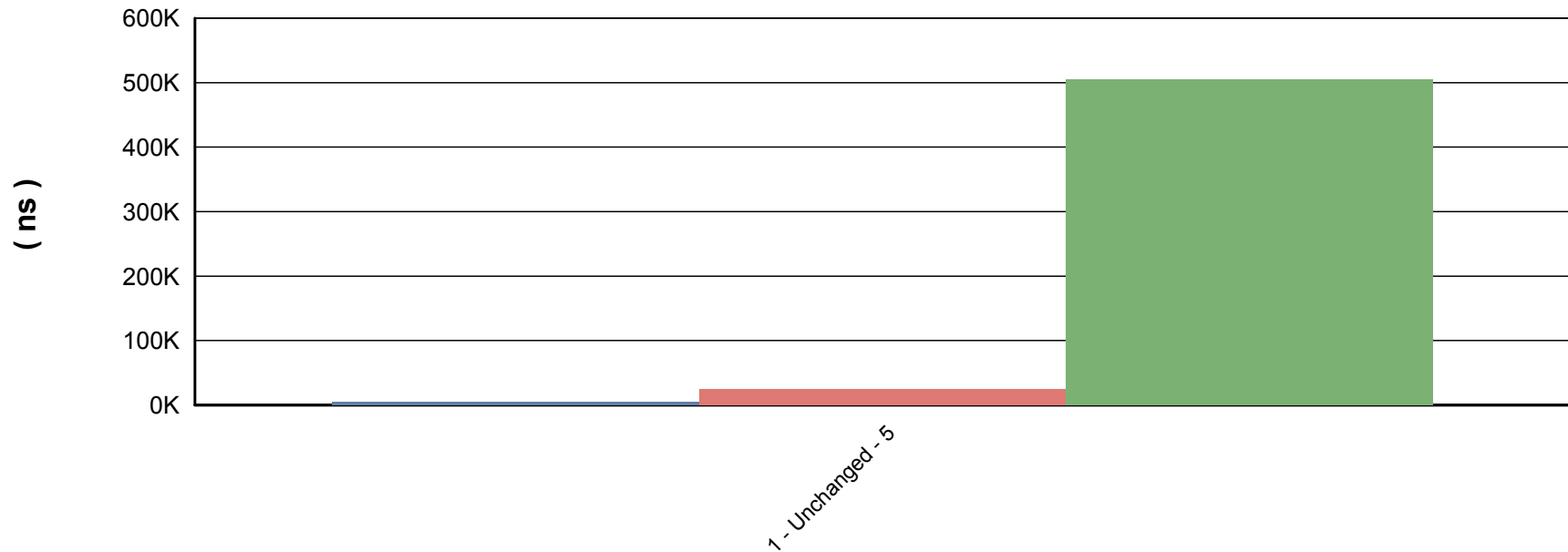
# Average Frame Loss per Flow



RFC2544 - Throughput/Latency - Aggregated Graph

# Aggregated Latency

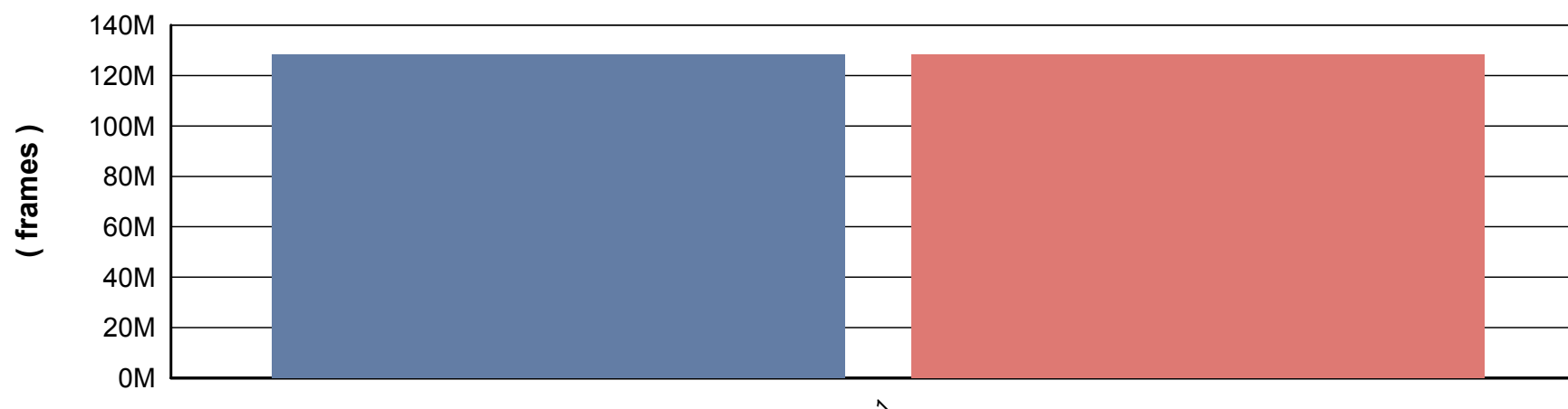
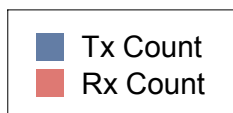
Minimum  
Average  
Maximum



Trial - Framesize - Iteration

## RFC2544 - Throughput/Latency - Per Flow Graph

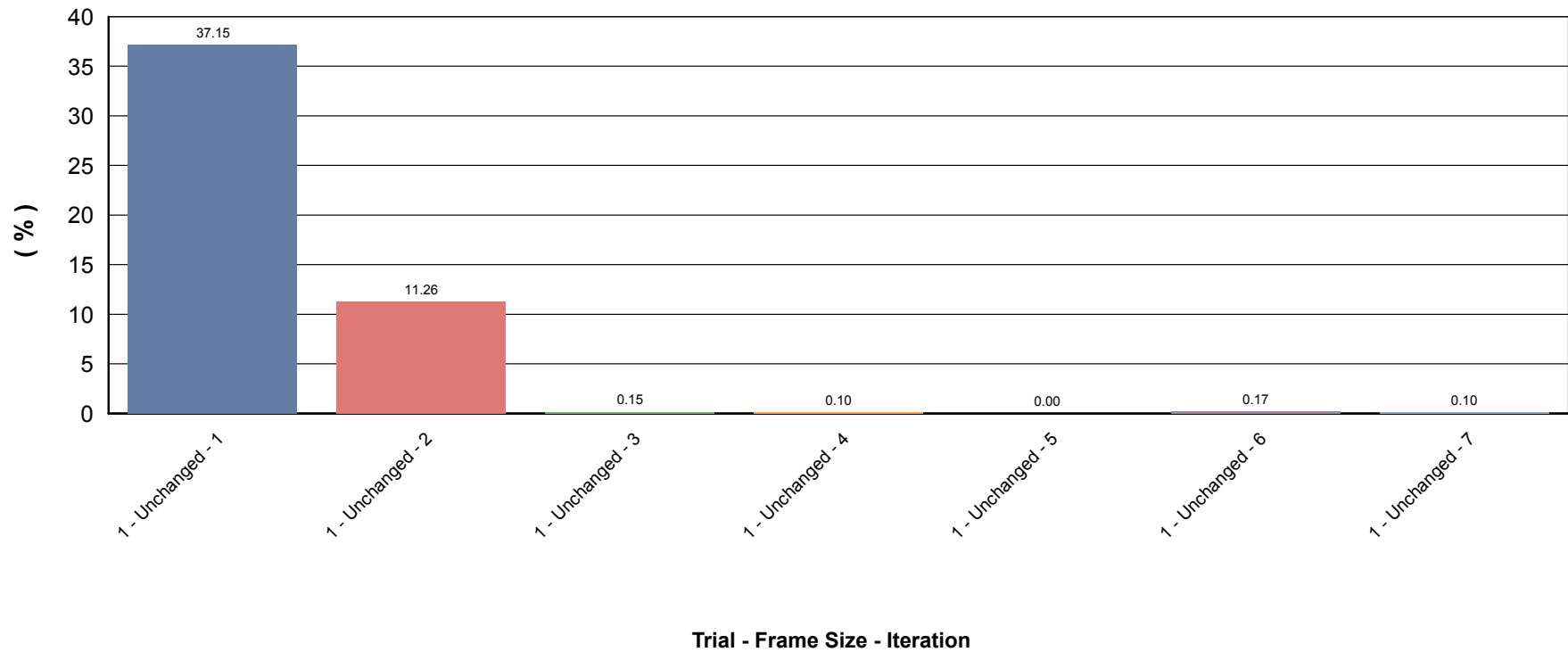
## Tx / Rx Frame Count



Trial

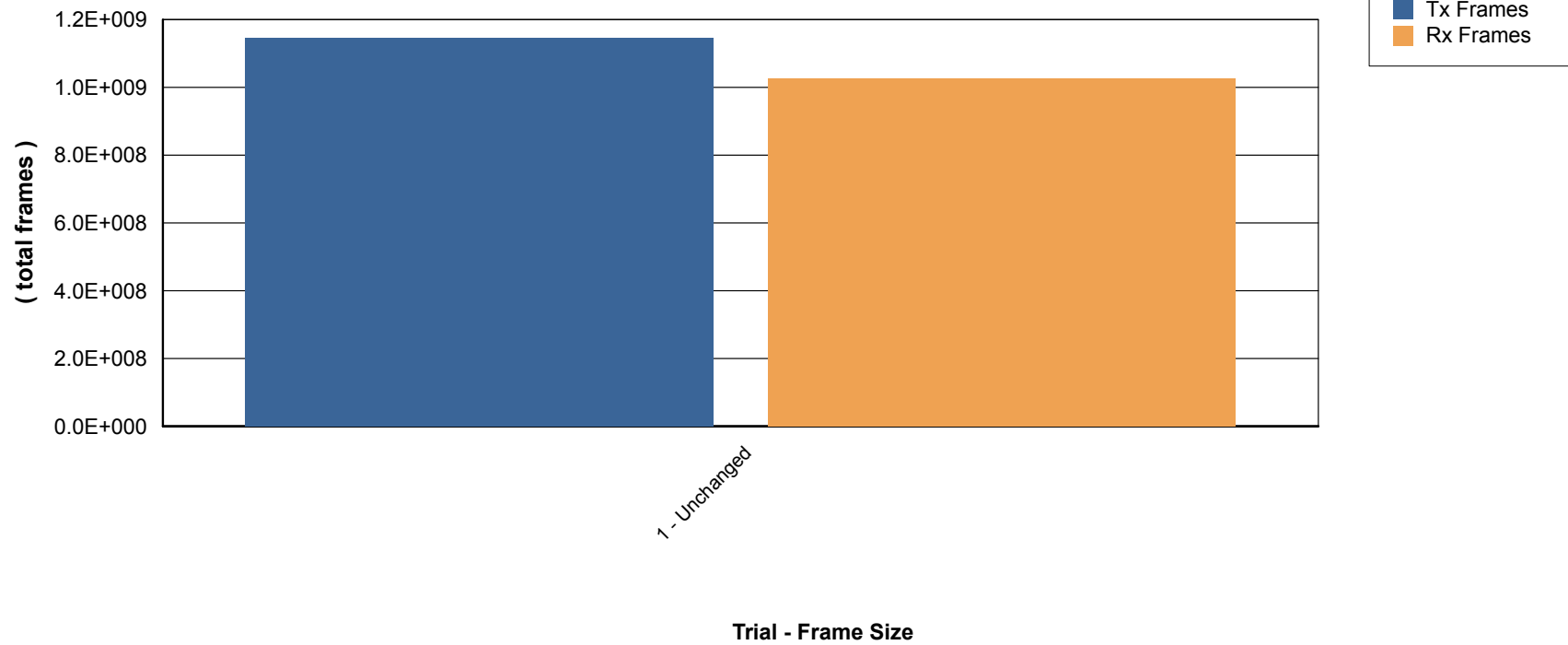
## RFC2544 - Throughput/Latency - Iteration Graph

## Aggregated Frame Loss ( % )

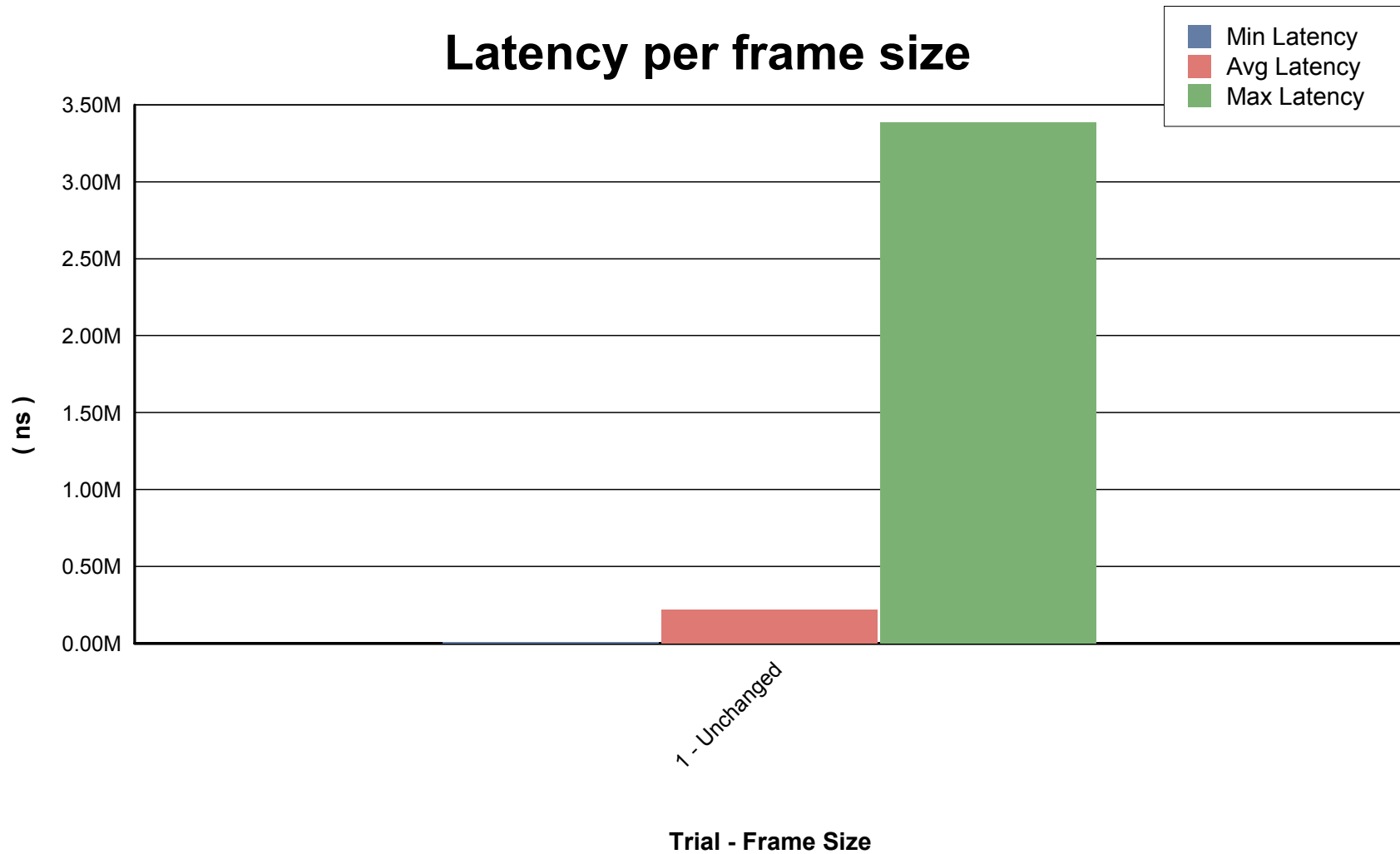


## RFC2544 - Throughput/Latency - Iteration Graph

## Tx / Rx Frames per Frame Size



## 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: 5	43.13	43	6268201.1	3309.610			Tx : Rx : Loss : Loss% :	128348214.000 128348214.000 0 0.00	5640	504577	25317.000	



**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: 5	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	43.13	43	6268201.1	3309.61			Tx : 128348214	
										Rx : 128348214	
										Loss : 0	
										Loss% : 0.000	

**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: 5	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	5640	504577	25317

## 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	56.57	8221658.8	4341.04			Tx : 267857143 Rx : 168358240 Loss : 99498903 Loss% : 37.146		
Trial: 1 / FS: Unchanged / Iter: 2	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	65.00	57.68	8383358.8	4426.41			Tx : 193452381 Rx : 171669667 Loss : 21782714 Loss% : 11.260		
Trial: 1 / FS: Unchanged / Iter: 3	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	52.50	52.42	7619292.5	4022.99			Tx : 156250000 Rx : 156012978 Loss : 237022 Loss% : 0.152		
Trial: 1 / FS: Unchanged / Iter: 4	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	46.25	46.20	6715691.8	3545.89			Tx : 137648810 Rx : 137510828 Loss : 137982 Loss% : 0.100		
Trial: 1 / FS: Unchanged / Iter: 5	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	43.13	43.13	6268201.1	3309.61			Tx : 128348214 Rx : 128348214 Loss : 0 Loss% : 0.000		
Trial: 1 / FS: Unchanged / Iter: 6	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	44.69	44.61	6484165.1	3423.64			Tx : 132998512 Rx : 132770280 Loss : 228232 Loss% : 0.172		
Trial: 1 / FS: Unchanged / Iter: 7	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	43.91	43.86	6375498.4	3366.26			Tx : 130673363 Rx : 130544964 Loss : 128399 Loss% : 0.098		

**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	118757	2269687	716205.00
Trial: 1 / FS: Unchanged / Iter: 2	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	7215	3036525	627179.00
Trial: 1 / FS: Unchanged / Iter: 3	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	6267	3004332	75432.00
Trial: 1 / FS: Unchanged / Iter: 4	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	5697	3385607	30723.00
Trial: 1 / FS: Unchanged / Iter: 5	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	5640	504577	25317.00
Trial: 1 / FS: Unchanged / Iter: 6	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	5610	3105967	33012.00
Trial: 1 / FS: Unchanged / Iter: 7	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	5647	3031355	28706.00

**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