



IxNetwork Report

Test: RFC2544 - Throughput/Latency

Test Date: 7/9/2022 16:24:58

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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 :	7/9/2022
Time Executed :	16:24:58
User Name :	
Number of Trials Executed :	1
Stream Duration (sec) :	20

Output Parameters

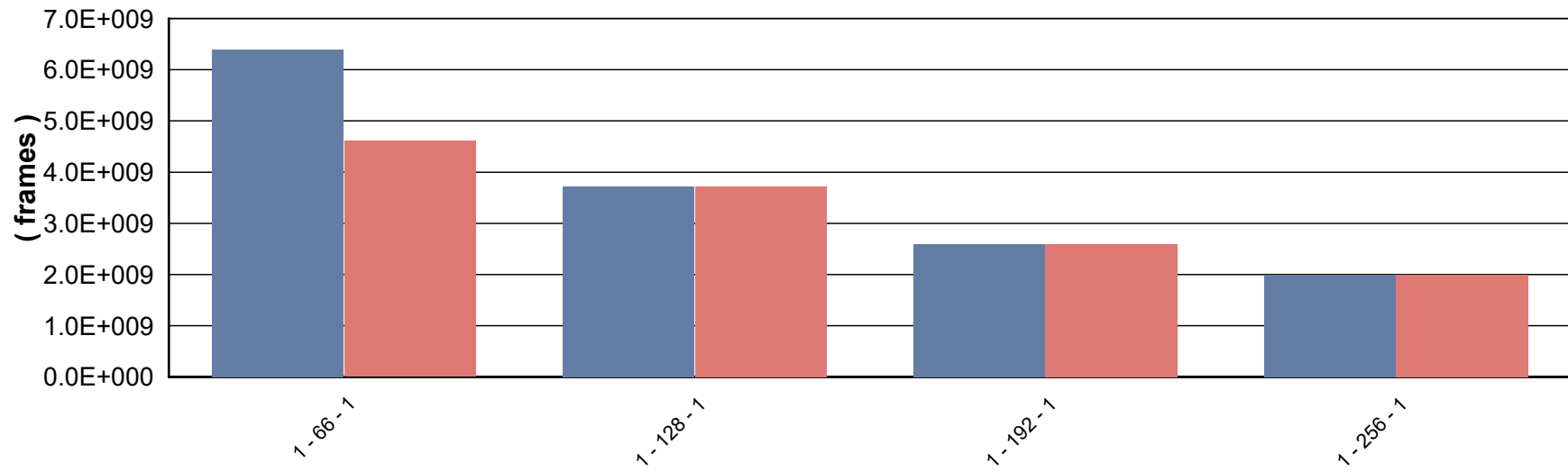
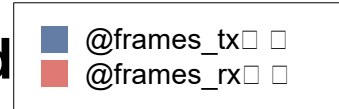
Number of Trials Passed :	N/A
Test Duration :	00:02:45

RFC2544 - Throughput/Latency - Port Map Information

Port Map :	Tx Port	Tx Speed (Mbps)	Rx Port	Rx Speed (Mbps)
	172.20.65.181:1:5	10000	172.20.65.181:1:6	10000
	172.20.65.181:2:7	100000	172.20.65.181:2:8	100000
	172.20.65.181:1:6	10000	172.20.65.181:1:5	10000
	172.20.65.181:2:8	100000	172.20.65.181:2:7	100000

RFC2544 - Throughput/Latency - Aggregated Graph

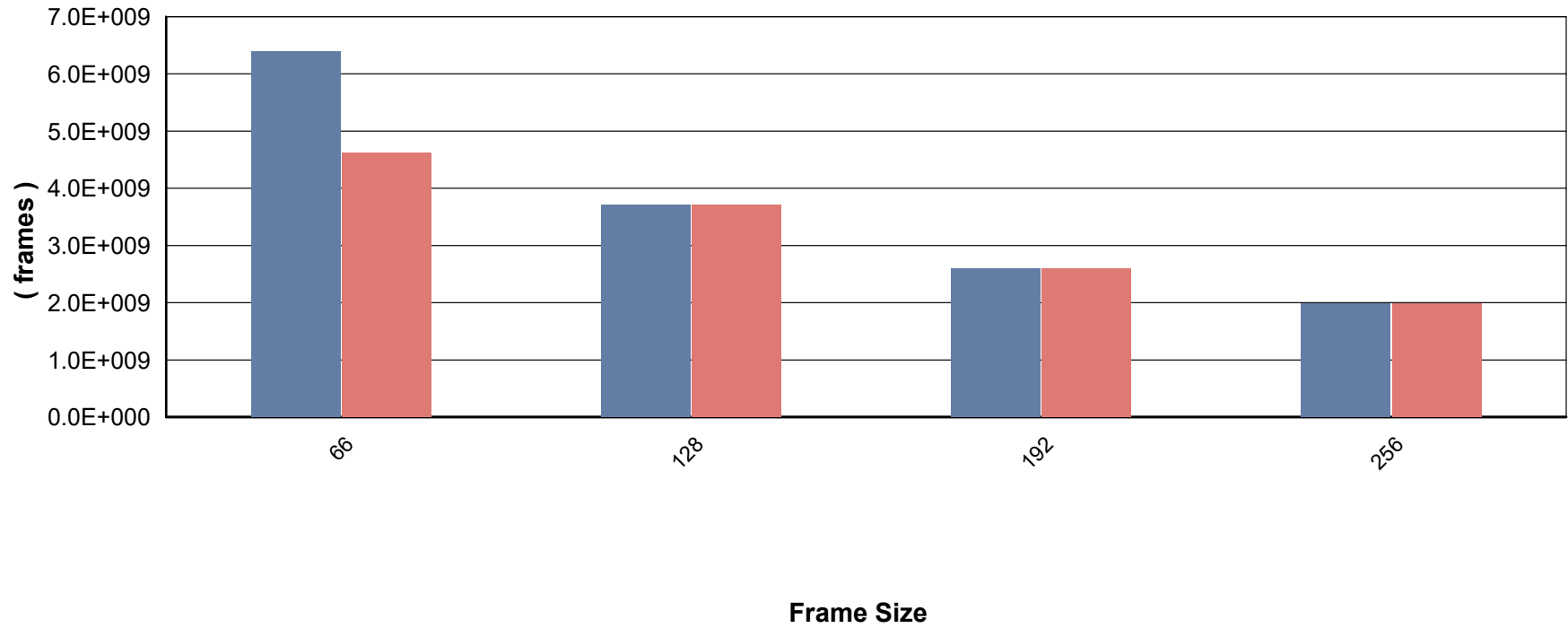
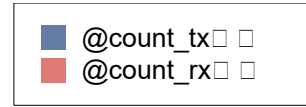
Total Frames Transmitted and Received



Trial - Framesize - Iteration

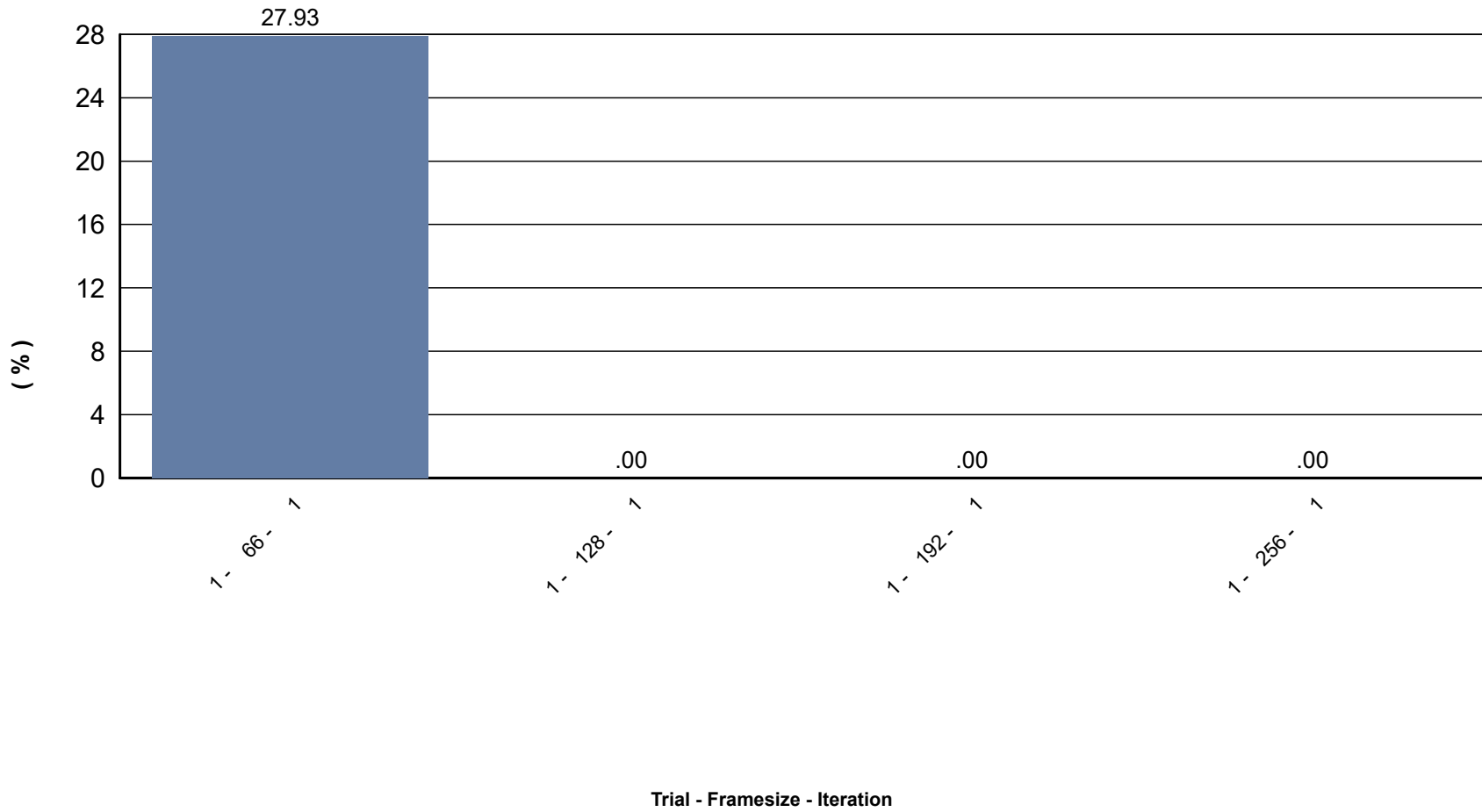
RFC2544 - Throughput/Latency - Aggregated Graph

Tx / Rx Frames per Frame Size



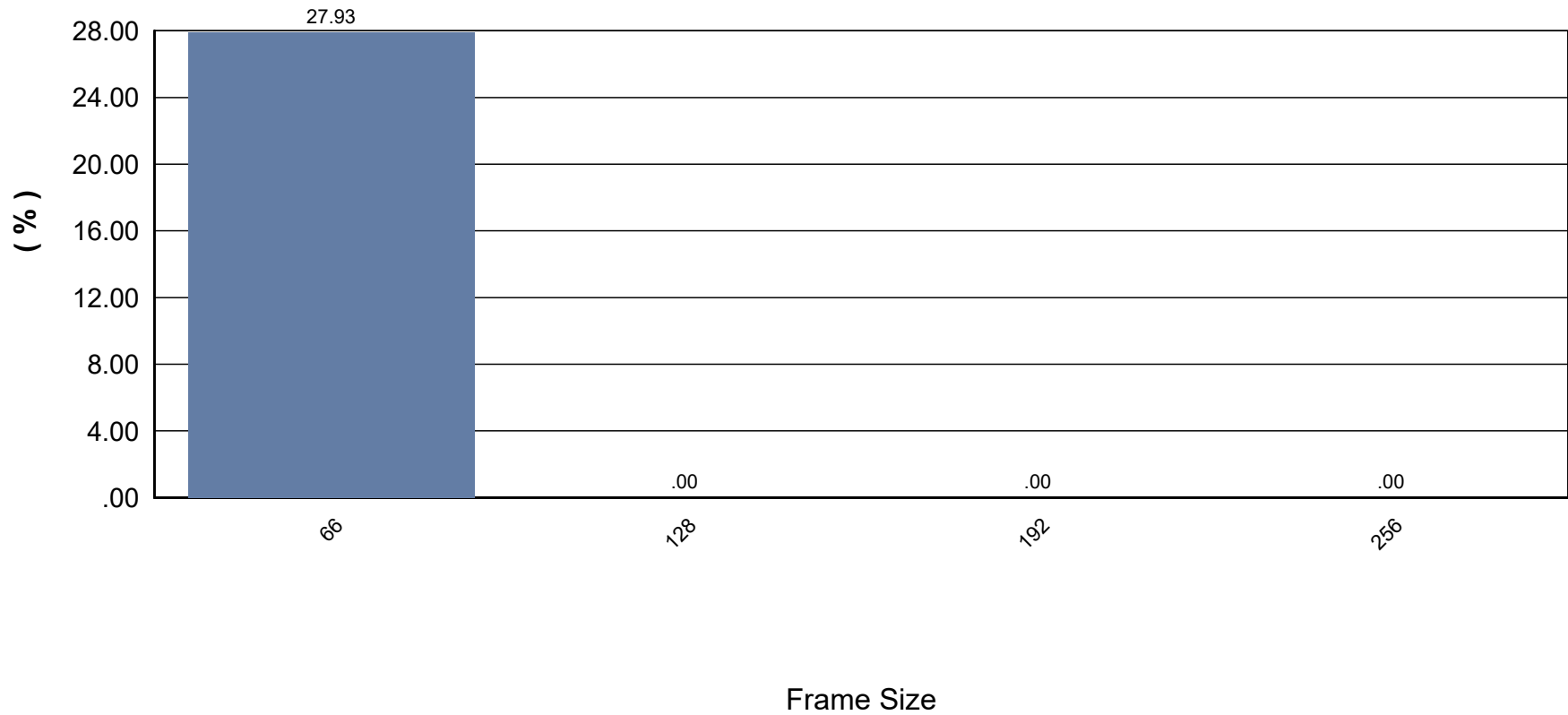
RFC2544 - Throughput/Latency - Aggregated Graph

Aggregated Frame Loss



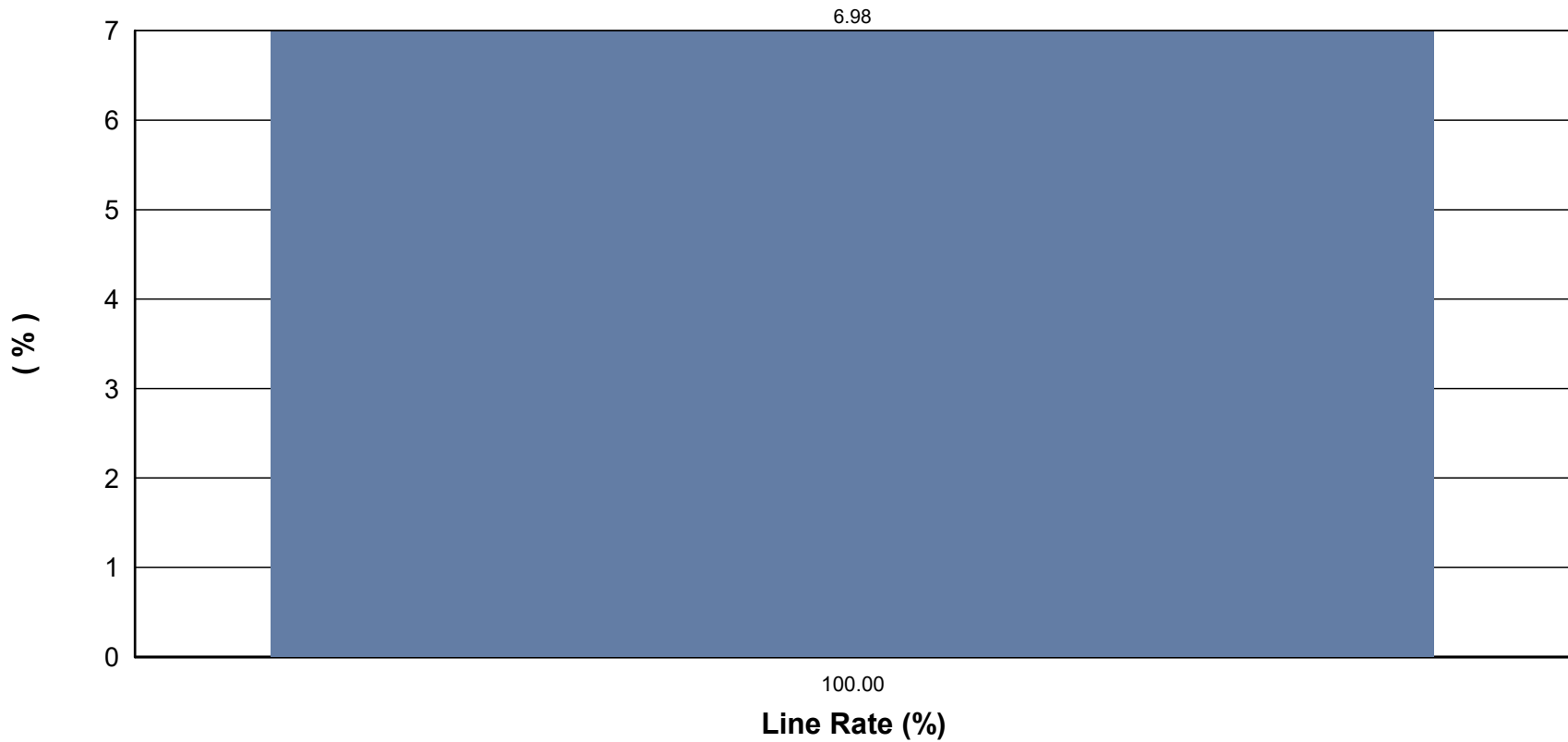
RFC2544 - Throughput/Latency - Aggregated Graph

Aggregated Frame Loss per Frame Size



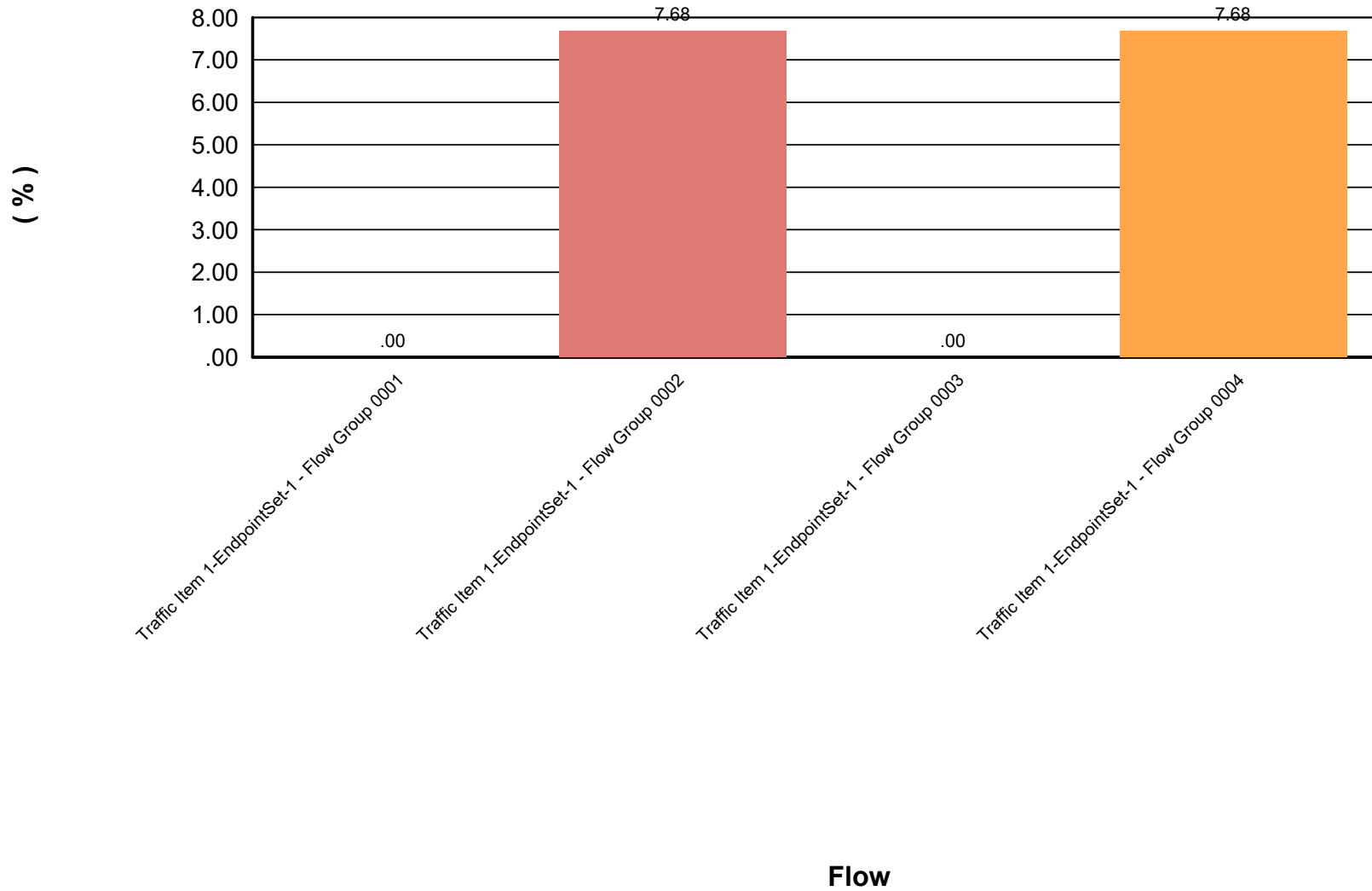
RFC2544 - Throughput/Latency - Aggregated Graph

Aggregated Frame Loss per Line Rate



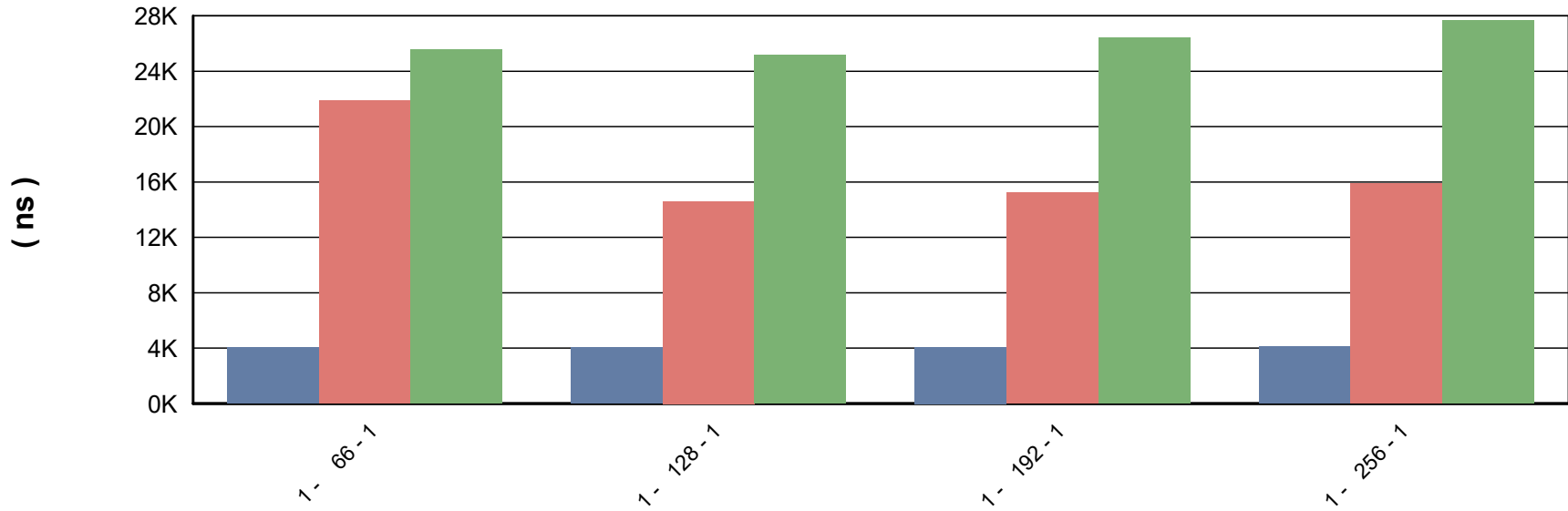
RFC2544 - Throughput/Latency - Per Flow Graph

Average Frame Loss per Flow



RFC2544 - Throughput/Latency - Aggregated Graph

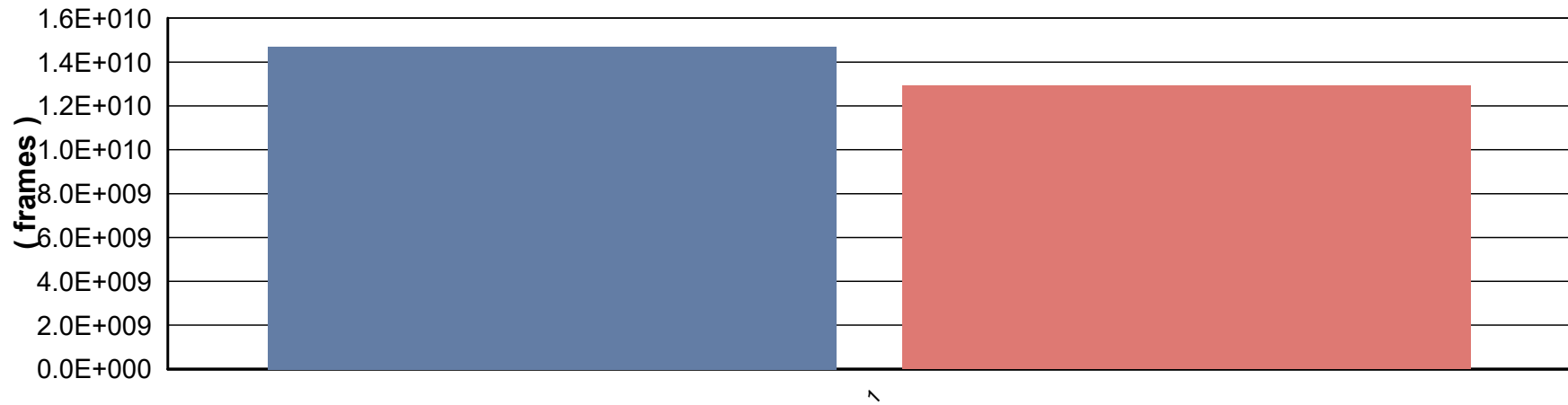
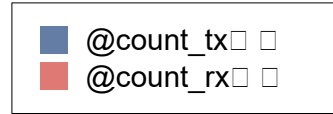
Aggregated Latency



Trial - Framesize - Iteration

RFC2544 - Throughput/Latency - Per Flow Graph

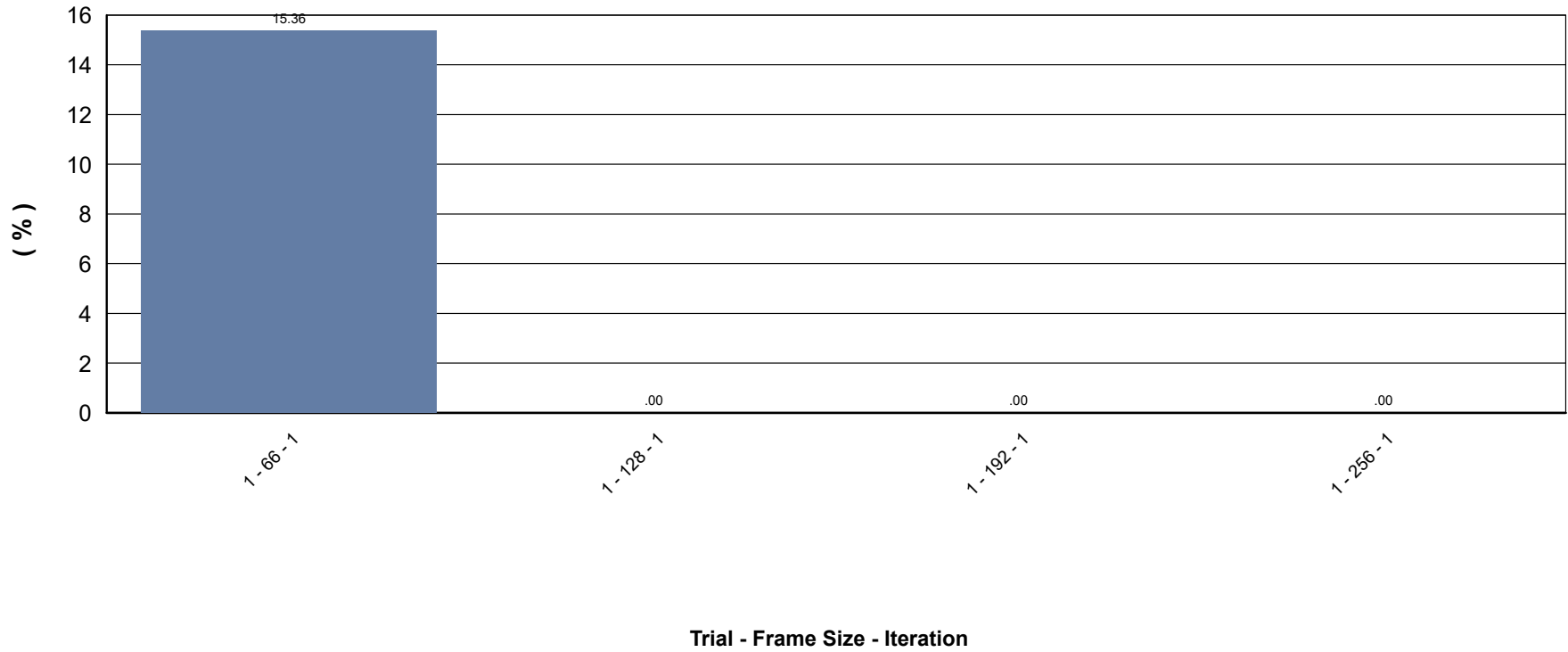
Tx / Rx Frame Count



Trial

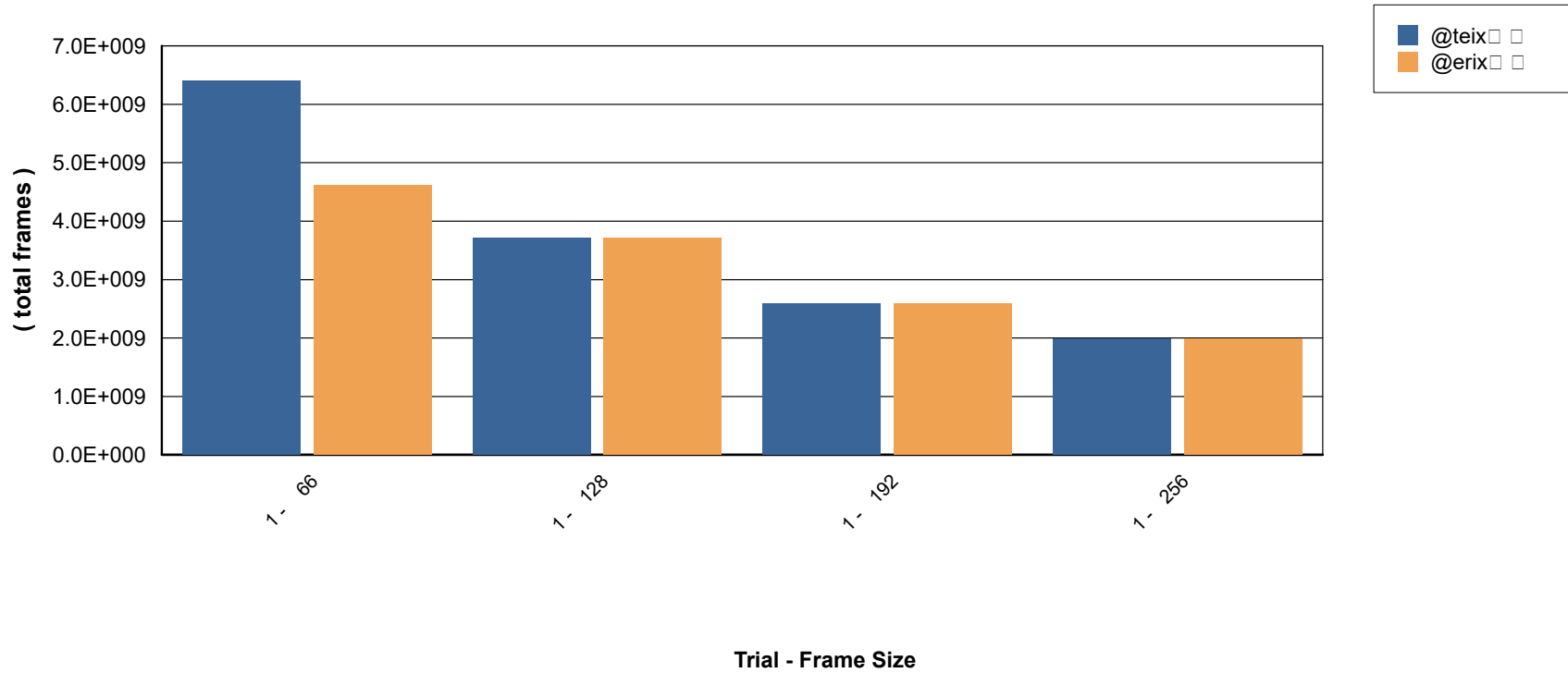
RFC2544 - Throughput/Latency - Iteration Graph

Aggregated Frame Loss (%)

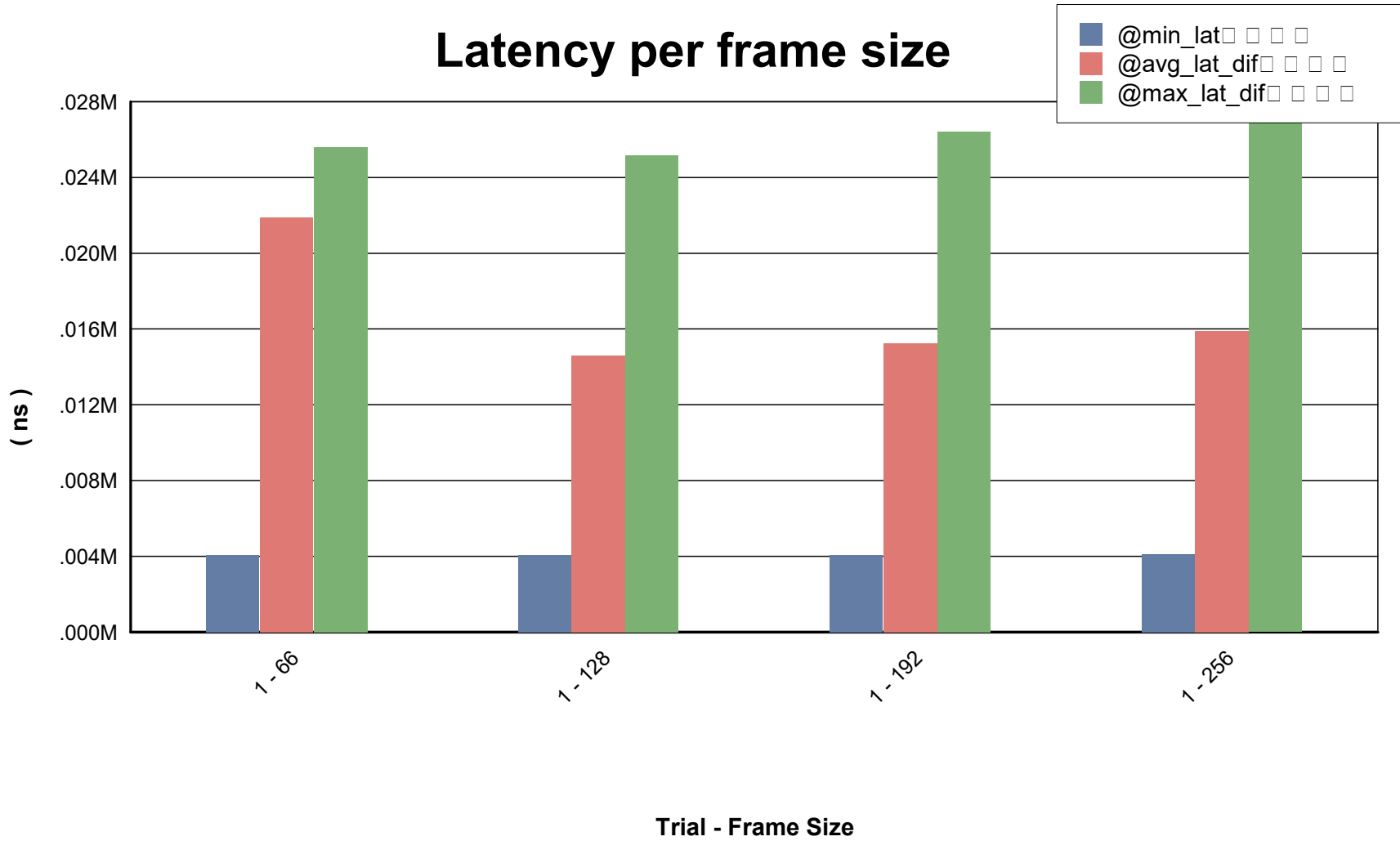


RFC2544 - Throughput/Latency - Iteration Graph

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		
	Agg Tx Rate %	Agg Rx Rate			Tx Rate Mbps	Rx Rate Mbps		Min (ns)	Max (ns)	Average (ns)
		%	FPS	Mbps						
Trial: 1 / FS: 66 / Iter: 1	100.00	72	230469765.3	121688.036			Tx : 6395348836.000 Rx : 4609397950.000 Loss : 1785950886 Loss% : 27.93	4060	25585	21900.250
Trial: 1 / FS: 128 / Iter: 1	100.00	100	185810809.9	190270.269			Tx : 3716216216.000 Rx : 3716216216.000 Loss : 0 Loss% : .00	4072	25177	14607.000
Trial: 1 / FS: 192 / Iter: 1	100.00	100	129716980.5	199245.282			Tx : 2594339622.000 Rx : 2594339622.000 Loss : 0 Loss% : .00	4095	26430	15247.250
Trial: 1 / FS: 256 / Iter: 1	100.00	100	99637680.7	204057.970			Tx : 1992753622.000 Rx : 1992753622.000 Loss : 0 Loss% : .00	4132	27650	15883.250

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

Mbps	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: 66 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	100.00	100	14534883.2	7674.42			Tx : 290697674	Rx : 290697674	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 66 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	100.00	69	100700010.3	53169.61			Tx : 2906976744	Rx : 2014002007	Loss : 892974737	Loss% : 30.718
	Trial: 1 / FS: 66 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	100.00	100	14534883.2	7674.42			Tx : 290697674	Rx : 290697674	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 66 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	100.00	69	100699988.6	53169.59			Tx : 2906976744	Rx : 2014000595	Loss : 892976149	Loss% : 30.718
	Trial: 1 / FS: 128 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	100.00	100	8445945.7	8648.65			Tx : 168918919	Rx : 168918919	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 128 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	100.00	100	84459459.2	86486.49			Tx : 1689189189	Rx : 1689189189	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 128 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	100.00	100	8445945.8	8648.65			Tx : 168918919	Rx : 168918919	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 128 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	100.00	100	84459459.2	86486.49			Tx : 1689189189	Rx : 1689189189	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 192 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	100.00	100	5896226.3	9056.60			Tx : 117924528	Rx : 117924528	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 192 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	100.00	100	58962264.0	90566.04			Tx : 1179245283	Rx : 1179245283	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 192 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	100.00	100	5896226.3	9056.60			Tx : 117924528	Rx : 117924528	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 192 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	100.00	100	58962264.0	90566.04			Tx : 1179245283	Rx : 1179245283	Loss : 0	Loss% : 0.000
	Trial: 1 / FS: 256 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	100.00	100	4528985.4	9275.36			Tx : 90579710	Rx : 90579710	Loss : 0	Loss% : 0.000

Trial: 1 / FS: 256 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	100.00	100	45289854.9	92753.62	Tx :	905797101
								Rx :	905797101
								Loss :	0
								Loss% :	0.000
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	100.00	100	4528985.4	9275.36	Tx :	90579710
								Rx :	90579710
								Loss :	0
								Loss% :	0.000
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	100.00	100	45289854.9	92753.62	Tx :	905797101
								Rx :	905797101
								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: 66 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	23667	24460	24378
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	4062	25585	25334
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	23640	24375	24288
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	4060	13710	13601
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	24632	25177	25107
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	4085	4175	4144
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	24685	25120	25040
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	4072	4165	4137
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	25922	26430	26372
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	4105	4190	4160
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	25840	26357	26304
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	4095	4182	4153
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	27152	27650	27595
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	4137	4232	4203
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	27167	27610	27541
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	4132	4222	4194

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: 66 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	100.00	100.00	14534883.2	7674.42			Tx : 290697674 Rx : 290697674 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	100.00	69.28	100700010.3	53169.61			Tx : 2906976744 Rx : 2014002007 Loss : 892974737 Loss% : 30.718
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	100.00	100.00	14534883.2	7674.42			Tx : 290697674 Rx : 290697674 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	100.00	69.28	100699988.6	53169.59			Tx : 2906976744 Rx : 2014000595 Loss : 892976149 Loss% : 30.718
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	100.00	100.00	8445945.7	8648.65			Tx : 168918919 Rx : 168918919 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	100.00	100.00	84459459.2	86486.49			Tx : 1689189189 Rx : 1689189189 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	100.00	100.00	8445945.8	8648.65			Tx : 168918919 Rx : 168918919 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	100.00	100.00	84459459.2	86486.49			Tx : 1689189189 Rx : 1689189189 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	100.00	100.00	5896226.3	9056.60			Tx : 117924528 Rx : 117924528 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	100.00	100.00	58962264.0	90566.04			Tx : 1179245283 Rx : 1179245283 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	100.00	100.00	5896226.3	9056.60			Tx : 117924528 Rx : 117924528 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	100.00	100.00	58962264.0	90566.04			Tx : 1179245283 Rx : 1179245283 Loss : 0 Loss% : 0.000
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	100.00	100.00	4528985.4	9275.36			Tx : 90579710 Rx : 90579710 Loss : 0 Loss% : 0.000

Trial: 1 / FS: 256 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	100.00	100.00	45289854.9	92753.62	Tx : 905797101
								Rx : 905797101
								Loss : 0
								Loss% : 0.000
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	100.00	100.00	4528985.4	9275.36	Tx : 90579710
								Rx : 90579710
								Loss : 0
								Loss% : 0.000
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	100.00	100.00	45289854.9	92753.62	Tx : 905797101
								Rx : 905797101
								Loss : 0
								Loss% : 0.000

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: 66 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	23667	24460	24378.00
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	4062	25585	25334.00
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	23640	24375	24288.00
Trial: 1 / FS: 66 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	4060	13710	13601.00
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	24632	25177	25107.00
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	4085	4175	4144.00
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	24685	25120	25040.00
Trial: 1 / FS: 128 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	4072	4165	4137.00
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	25922	26430	26372.00
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	4105	4190	4160.00
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	25840	26357	26304.00
Trial: 1 / FS: 192 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	4095	4182	4153.00
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-1 - Flow Group 0001	27152	27650	27595.00
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 003	Ethernet - 004	Traffic Item 1-EndpointSet-1 - Flow Group 0002	4137	4232	4203.00
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 002	Ethernet - 001	Traffic Item 1-EndpointSet-1 - Flow Group 0003	27167	27610	27541.00
Trial: 1 / FS: 256 / Iter: 1	Ethernet - 004	Ethernet - 003	Traffic Item 1-EndpointSet-1 - Flow Group 0004	4132	4222	4194.00

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