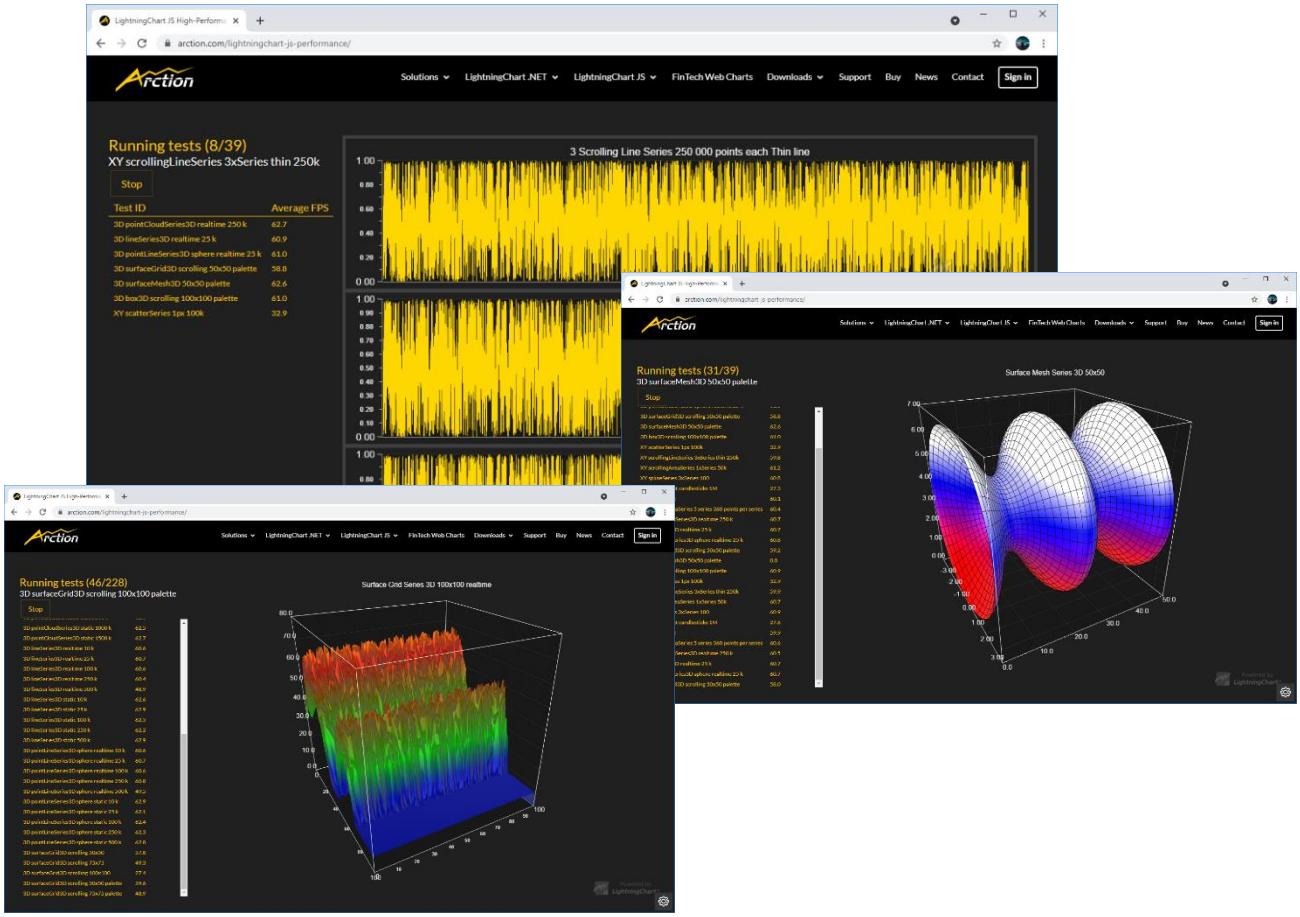
Introduction

The **Performance Tester** results were composed of 7 different 3D chart series, 7 different Cartesian (XY) chart series and 4 different Polar chart series with a variety of devices, which include desktops, laptops, tablet, and smartphone. All the charts were set to the same size and simplest appearance. All the data come from performance tester on May 3rd, 2021 with newest browser versions. Based on this compatible performance tester platform, we can provide realistic testing data.

To run the **Performance Tester,** go to

https://www.arction.com/lightningchart-js-performance/



Device hardware and Operating system

Desktop PC

- CPU: AMD Ryzen 2700X Eight-Core Processor
- RAM: 16.0 GB
- GPU: NVIDIA GeForce GTX 1070
- Screen Resolution: 1920x1080
- Screen Refresh Rate: 60Hz
- Browser: Chrome full version 90.0.4430.93
- Operating system: Windows 10 64-bit OS

Laptop

- CPU: Intel® Core™ i5 3210M
- RAM: 8.0 GB
- GPU: NVIDIA GeForce 610M
- Screen Resolution: 1600x900
- Screen Refresh Rate: 60Hz
- Browser: Chrome full version 90.0.4430.93
- Operating system: Windows 10 64-bit OS

Mobile phone OnePlus 7Pro

- SoC: Qualcomm Snapdragon 855
- RAM: 8.0 GB
- GPU: Adreno 640
- Screen Resolution: 3120x1440
- Screen Refresh Rate: 90Hz
- Browser: Chrome full version 90.0.4430.91
- Operating system: Android 11 OS

Tablet device iPad Air 2:

- SoC: Apple A8X
- RAM: 2.0 GB
- GPU: PowerVR GXA6850
- Screen Resolution: 2048x1536
- Screen Refresh Rate: 60Hz
- Browser: Safari full version 13.3.1
- Operating system: iOS 13.3.1

Performance Test Legend

What does the **Performance Tester** Measure?

Average FPS

FPS was measured by using JavaScript API: window.requestAnimationFrame starting from after Chart is first loaded and until the test is completed

In the result table, the “goodness” of the value is shown in color, as well as a bar.

	High FPS, Very good
	Satisfactory FPS
	Performance degradation clearly visible with the data point count

Loadup

The Performance Tester measures delay between initiating Chart creation to first rendered frame was measured. This logic relies on window.requestAnimationFrame too. For static tests this delay also includes the processing and rendering of all the date.

Run the Performance Tester yourself, to the get the Loadup time for each test.

Data generation delay

Performance tests generate random test data. This processing time is the data generation delay. Data generation delay is not any kind of proof of speed or slowness, or goodness or badness in LightningChart JS library, and for clarity we excluded in from the test.

Run the Performance Tester yourself, to the get the Data generation time for each test.

Test result 1 - XY Scatter Series

A data array is generated and passed to each chart rendering delay is measured. All charts are set to equal size, and simplest possible appearance. The test is performed with various data point counts.

The data point was generated in random position of the chart.

Scatter Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
XY scatterSeries 1px 1k	60.2	60.0	87.7	87.9
XY scatterSeries 1px 10k	60.2	60.2	87.1	88.0
XY scatterSeries 1px 50k	60.0	56.1	74.2	46.4
XY scatterSeries 1px 100k	59.6	38.4	52.2	25.7
XY scatterSeries 3px 1k	60.2	60.2	86.7	89.3
XY scatterSeries 3px 10k	60.3	59.0	86.1	87.4
XY scatterSeries 3px 50k	60.2	35.0	72.7	45.5
XY scatterSeries 3px 100k	59.4	17.7	46.5	25.9

Test result 2 - XY Point, Line and Area Series

A data array was generated and passed to each chart rendering delay was measured. All charts are set to equal size, and simplest possible appearance. The test was performed with various data point counts.

Series types in the test are: Point, Line and Area. The data point was generated in random position in the chart.

Scrolling Line Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
XY scrollingLineSeries 1xSeries thin 1k	60.4	60.4	77.9	88.3
XY scrollingLineSeries 1xSeries thin 10k	60.4	60.4	79.1	87.6
XY scrollingLineSeries 1xSeries thin 100k	60.6	30.3	78.9	86.9
XY scrollingLineSeries 1xSeries thin 250k	60.5	25.8	76.7	83.4
XY scrollingLineSeries 1xSeries thin 1M	60.4	21.4	78.3	46.8
XY scrollingLineSeries 1xSeries thin 10M	56.5	17.5	63.5	1.1
XY scrollingLineSeries 1xSeries thick 1k	60.6	60.3	78.5	88.8
XY scrollingLineSeries 1xSeries thick 10k	60.6	47.8	77.6	88.8
XY scrollingLineSeries 1xSeries thick 100k	60.6	26.7	77.5	87.7
XY scrollingLineSeries 1xSeries thick 250k	60.5	23.2	73.7	83.7
XY scrollingLineSeries 1xSeries thick 1M	60.5	20.1	76.3	47.6
XY scrollingLineSeries 1xSeries thick 10M	58.4	16.7	51.5	1.1
XY scrollingLineSeries 3xSeries thin 1k	60.5	53.0	61.7	87.9
XY scrollingLineSeries 3xSeries thin 10k	60.4	40.7	61.5	86.3
XY scrollingLineSeries 3xSeries thin 100k	60.5	27.3	61.7	84.4
XY scrollingLineSeries 3xSeries thin 250k	60.5	22.8	57.2	74.5
XY scrollingLineSeries 3xSeries thin 1M	60.5	19.4	57.7	37.6
XY scrollingLineSeries 3xSeries thick 1k	60.5	51.5	62.3	87.1
XY scrollingLineSeries 3xSeries thick 10k	60.5	40.4	61.2	86.2
XY scrollingLineSeries 3xSeries thick 100k	60.5	22.3	61.1	84.5
XY scrollingLineSeries 3xSeries thick 250k	60.5	19.5	56.9	71.4
XY scrollingLineSeries 3xSeries thick 1M	60.5	16.1	58.0	37.8
XY scrollingLineSeries 5xSeries thin 1k	60.5	39.8	50.3	82.2
XY scrollingLineSeries 5xSeries thin 10k	60.5	35.8	51.5	84.2
XY scrollingLineSeries 5xSeries thin 100k	60.5	26.7	50.6	75.0
XY scrollingLineSeries 5xSeries thin 250k	60.6	22.5	46.3	64.4
XY scrollingLineSeries 5xSeries thin 1M	60.1	17.8	46.7	29.6
XY scrollingLineSeries 5xSeries thick 1k	60.4	39.6	48.8	84.3
XY scrollingLineSeries 5xSeries thick 10k	60.6	36.3	48.3	81.0
XY scrollingLineSeries 5xSeries thick 100k	60.6	22.4	48.2	77.4
XY scrollingLineSeries 5xSeries thick 250k	60.4	17.7	45.2	62.4
XY scrollingLineSeries 5xSeries thick 1M	60.3	16.1	45.1	29.6

Static Line Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
XY staticLineSeries 1xSeries thin 1k	60.4	59.8	55.6	85.8
XY staticLineSeries 1xSeries thin 10k	60.5	49.0	52.4	85.3
XY staticLineSeries 1xSeries thin 100k	60.6	47.7	55.8	84.3
XY staticLineSeries 1xSeries thin 1M	60.0	35.5	52.4	83.2
XY staticLineSeries 1xSeries thin 10M	58.6	42.3	52.2	80.9
XY staticLineSeries 1xSeries thick 1k	60.5	56.7	55.3	86.9
XY staticLineSeries 1xSeries thick 10k	60.3	40.3	55.4	86.7
XY staticLineSeries 1xSeries thick 100k	60.2	40.8	56.6	85.2
XY staticLineSeries 1xSeries thick 1M	60.1	37.5	55.9	84.4
XY staticLineSeries 1xSeries thick 10M	58.2	35.8	52.9	80.4
XY staticLineSeries 3xSeries thin 1k	60.4	54.1	47.9	83.4
XY staticLineSeries 3xSeries thin 10k	60.4	45.2	48.2	83.1
XY staticLineSeries 3xSeries thin 100k	52.3	44.6	48.9	81.9
XY staticLineSeries 3xSeries thin 1M	58.8	37.5	47.3	80.0
XY staticLineSeries 3xSeries thick 1k	60.6	53.5	47.6	82.9
XY staticLineSeries 3xSeries thick 10k	60.5	39.3	48.2	83.3
XY staticLineSeries 3xSeries thick 100k	60.6	37.1	47.0	81.1
XY staticLineSeries 3xSeries thick 1M	58.3	33.3	48.5	77.8
XY staticLineSeries 5xSeries thin 1k	60.5	47.0	42.4	78.7
XY staticLineSeries 5xSeries thin 10k	60.4	43.8	41.6	80.9
XY staticLineSeries 5xSeries thin 100k	60.5	41.5	42.8	78.8
XY staticLineSeries 5xSeries thin 1M	56.8	32.9	41.8	76.4
XY staticLineSeries 5xSeries thick 1k	60.3	43.4	40.7	80.5
XY staticLineSeries 5xSeries thick 10k	60.4	39.0	41.8	82.1
XY staticLineSeries 5xSeries thick 100k	60.5	35.7	41.2	80.0
XY staticLineSeries 5xSeries thick 1M	57.4	28.2	40.5	75.2

Scrolling Area Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
XY scrollingAreaSeries 1xSeries 1k	60.4	60.4	77.9	88.0
XY scrollingAreaSeries 1xSeries 10k	60.5	46.4	76.3	88.3
XY scrollingAreaSeries 1xSeries 50k	60.6	28.4	75.6	88.2
XY scrollingAreaSeries 1xSeries 100k	60.6	20.2	55.0	82.1
XY scrollingAreaSeries 1xSeries 1M	52.4	4.4	6.6	2.1
XY scrollingAreaSeries 3xSeries 1k	60.5	46.6	58.1	86.4
XY scrollingAreaSeries 3xSeries 10k	59.1	37.5	57.5	82.2
XY scrollingAreaSeries 3xSeries 50k	60.3	26.7	44.4	78.7
XY scrollingAreaSeries 3xSeries 100k	59.8	18.0	32.8	58.5

Scrolling Point-Line Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
XY scrollingPointLineSeries 1xSeries 1k	60.4	60.2	77.4	88.5
XY scrollingPointLineSeries 1xSeries 10k	60.4	55.1	76.8	88.7
XY scrollingPointLineSeries 1xSeries 100k	60.4	19.8	54.1	87.3
XY scrollingPointLineSeries 1xSeries 1M	60.5	8.8	8.4	12.0
XY scrollingPointLineSeries 5xSeries 1k	60.4	35.6	48.2	84.0
XY scrollingPointLineSeries 5xSeries 10k	60.6	32.8	43.5	79.7
XY scrollingPointLineSeries 5xSeries 100k	60.4	16.6	26.6	58.2

Spline Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
XY splineSeries 1xSeries 100	60.6	60.2	85.7	88.4
XY splineSeries 1xSeries 1k	60.4	59.6	85.4	87.8
XY splineSeries 1xSeries 10k	60.0	43.2	78.3	84.2
XY splineSeries 3xSeries 100	60.4	51.8	62.4	85.9
XY splineSeries 3xSeries 1k	60.4	47.8	56.9	82.4
XY splineSeries 3xSeries 10k	60.5	34.9	39.3	54.3

Test result 3 - OHLC Series and Dashboard Cells

A data array is generated and passed to each chart rendering delay is measured. All charts are set to equal size, and simplest possible appearance. The test is performed with various counts.

Series types in the test are: OHLC and Dashboard cells. The data point was generated in random position of the chart.

OHLC Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
XY ohlc ohlcInput candlesticks 100	60.3	60.3	64.4	77.0
XY ohlc ohlcInput candlesticks 1k	60.2	43.2	44.2	80.7
XY ohlc ohlcInput candlesticks 10k fitted	60.4	59.3	65.6	85.6
XY ohlc ohlcInput candlesticks 100k fitted	60.4	60.1	65.4	82.2
XY ohlc ohlcInput candlesticks 500k fitted	59.6	58.6	55.9	40.5
XY ohlc ohlcInput candlesticks 1M fitted	59.0	50.8	22.7	22.7
XY ohlc xyInput candlesticks 100	60.2	59.6	65.8	75.7
XY ohlc xyInput candlesticks 1k	60.4	60.2	66.0	77.4
XY ohlc xyInput candlesticks 10k	60.4	59.5	65.8	82.3
XY ohlc xyInput candlesticks 100k	60.5	60.4	66.3	82.8
XY ohlc xyInput candlesticks 500k	60.4	60.3	66.0	55.4
XY ohlc xyInput candlesticks 1M	60.0	58.7	65.5	28.5
XY ohlc xyInput candlesticks 10M	60.4	43.0	55.0	0.6
XY ohlc fitData candlesticks 100	60.6	37.8	51.8	83.4
XY ohlc fitData candlesticks 1k	60.6	29.0	45.0	81.6
XY ohlc fitData candlesticks 10k fitted	59.8	28.9	48.5	78.2
XY ohlc fitData candlesticks 100k fitted	59.4	29.2	37.7	47.0

Dashboard, several charts resizing - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
dashboard 2x2	59.0	45.6	29.7	57.4
dashboard 2x4	51.8	36.6	23.3	51.4
dashboard 3x3	52.7	31.9	26.4	50.1
dashboard 5x5	41.5	24.9	21.0	42.1

Test result 4 - 3D Point Series

A data array is generated and passed to each chart rendering delay is measured. All charts are set to equal size, and simplest possible appearance. The test is performed with various data point counts.

Each data point is represented as a 3D cube shape. The data point was generated in random position in the chart.

3D Point Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
3D pointSeries3D cube realtime 100 k	*60.3*	*60.4*	*67.3*	*84.4*
3D pointSeries3D cube realtime 1000 k	*60.1*	*40.4*	*29.0*	*13.0*
3D pointSeries3D cube static 100 k	62.8	62.3	39.6	92.2
3D pointSeries3D cube static 250 k	62.6	62.6	39.0	92.0
3D pointSeries3D cube static 1000 k	62.3	62.8	39.5	91.7

Test result 5 - 3D Point Cloud Series

A data array is generated and passed to each chart rendering delay was measured. All charts were set to equal size, and simplest possible appearance. The test was performed with various data point counts.

Each data point was represented as a 2D point shape. The data points were generated in random position in the chart.

3D Point Cloud Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
3D pointCloudSeries3D realtime 100 k	*60.3*	*55.9*	*67.8*	*84.5*
3D pointCloudSeries3D realtime 250 k	*60.3*	*60.5*	*67.7*	*79.6*
3D pointCloudSeries3D realtime 500 k	*60.4*	*58.7*	*66.8*	*55.8*
3D pointCloudSeries3D realtime 1000 k	*60.3*	*48.6*	*67.1*	*23.9*
3D pointCloudSeries3D realtime 1500 k	*58.1*	*35.6*	*66.9*	*12.4*
3D pointCloudSeries3D static 100 k	62.7	62.4	39.7	91.7
3D pointCloudSeries3D static 250 k	62.1	62.0	39.0	92.0
3D pointCloudSeries3D static 500 k	62.9	62.8	39.2	92.4
3D pointCloudSeries3D static 1000 k	62.5	62.3	40.4	91.5
3D pointCloudSeries3D static 1500 k	62.6	61.9	39.6	91.9

Test result 6 - 3D Line Series

A data array was generated and passed to each chart rendering delay was measured. All charts were set to equal size, and simplest possible appearance. The test was performed with various data point counts.

A 3-dimensional line is drawn between each connected point. The data point was generated in a predetermined pattern, which is repeated along one axis of the chart.

3D Line Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
3D lineSeries3D realtime 10 k	60.4	60.4	67.6	87.5
3D lineSeries3D realtime 25 k	60.4	51.9	67.7	85.6
3D lineSeries3D realtime 100 k	60.4	24.9	35.3	39.1
3D lineSeries3D static 10 k	62.5	62.0	39.5	92.6
3D lineSeries3D static 25 k	62.0	62.7	39.5	92.1
3D lineSeries3D static 100 k	62.9	62.4	39.6	91.6

Test result 7 - 3D PointLine Series

A data array was generated and passed to each chart rendering delay was measured. All charts are set to equal size, and simplest possible appearance. The test was performed with various data point counts.

A 3-dimensional line was drawn between each connected point. In addition, each data point was represented as a 3D sphere shape. The data points were generated in a predetermined pattern, which is repeated along one axis of the chart.

3D Point-Line Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
3D pointLineSeries3D sphere realtime 10 k	60.4	60.4	67.5	84.6
3D pointLineSeries3D sphere realtime 25 k	60.4	52.8	67.1	86.1
3D pointLineSeries3D sphere realtime 100 k	60.4	27.4	32.6	34.0
3D pointLineSeries3D sphere static 10 k	62.7	62.5	39.4	91.8
3D pointLineSeries3D sphere static 25 k	62.7	62.8	39.5	92.0
3D pointLineSeries3D sphere static 100 k	62.6	62.4	39.7	91.9

Test result 8 - 3D Surface Grid Series

A data array was generated and passed to each chart rendering delay was measured. All charts were set to equal size, and simplest possible appearance. The test was performed with various data point counts.

A 3-dimensional surface was drawn based on the points. The data point was generated in a random pattern, which is repeated along one axis of the chart.

3D Surface Grid Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
3D surfaceGrid3D scrolling 50x50	58.5	52.0	65.4	50.3
3D surfaceGrid3D scrolling 75x75	47.7	26.4	61.0	20.4
3D surfaceGrid3D scrolling 100x100	25.9	15.8	36.9	11.2
3D surfaceGrid3D scrolling 50x50 palette	59.5	53.2	63.7	49.0
3D surfaceGrid3D scrolling 75x75 palette	47.4	26.8	58.0	22.0
3D surfaceGrid3D scrolling 100x100 palette	24.9	15.4	35.1	11.3
3D surfaceGrid3D static 50x50	62.0	62.8	41.3	91.7
3D surfaceGrid3D static 75x75	62.2	62.7	40.7	91.9
3D surfaceGrid3D static 100x100	62.7	61.9	40.0	91.7
3D surfaceGrid3D static 50x50 palette	62.4	62.2	40.3	92.0
3D surfaceGrid3D static 75x75 palette	62.1	62.4	41.8	92.2
3D surfaceGrid3D static 100x100 palette	62.2	62.8	39.9	92.3

Test result 9 - 3D Surface Mesh Series

A data array was generated and passed to each chart, and rendering delay was measured. All charts are set to equal size, and simplest possible appearance. The test was performed with various data point counts.

A 3-dimensional surface was drawn based on the points, with a wireframe drawn on top of the surface. The data points were generated in a predetermined pattern, which was repeated along one axis of the chart.

3D Surface Mesh Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
3D surfaceMesh3D 50x50	62.2	62.4	39.3	91.6
3D surfaceMesh3D 100x100	62.4	62.6	39.4	92.3
3D surfaceMesh3D 250x250	62.2	62.4	37.1	92.1
3D surfaceMesh3D 500x500	62.9	61.8	37.5	92.0
3D surfaceMesh3D 50x50 palette	62.2	62.3	39.9	91.7
3D surfaceMesh3D 100x100 palette	62.1	62.5	39.2	91.7
3D surfaceMesh3D 250x250 palette	62.0	62.6	37.0	92.1
3D surfaceMesh3D 500x500 palette	62.6	62.0	37.1	92.1

Test result 10 - 3D Box Series

A data array was generated and passed to each chart, and rendering delay was measured. All charts were set to equal size, and simplest possible appearance. The test was performed with various data point counts.

Each point was drawn as a 3D box. The data point was generated in a random pattern, which was repeated along one axis of the chart.

3D Box Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
3D box3D scrolling 50x50	60.5	60.3	54.1	77.5
3D box3D scrolling 100x100	60.8	60.4	65.9	79.1
3D box3D scrolling 250x250	60.5	39.7	65.9	77.8
3D box3D scrolling 500x500	60.5	20.3	56.2	47.0
3D box3D scrolling 50x50 palette	60.5	60.3	53.8	78.5
3D box3D scrolling 100x100 palette	60.5	60.4	66.3	79.9
3D box3D scrolling 250x250 palette	60.6	36.4	66.1	79.7
3D box3D scrolling 500x500 palette	60.5	20.7	49.8	46.9
3D box3D static 50x50	62.3	62.2	41.9	91.7
3D box3D static 100x100	62.1	62.8	41.4	91.6
3D box3D static 250x250	62.8	62.0	41.4	91.6
3D box3D static 500x500	63.0	62.2	39.0	92.1
3D box3D static 50x50 palette	62.7	62.7	41.6	91.7
3D box3D static 100x100 palette	63.0	62.7	40.4	91.8
3D box3D static 250x250 palette	62.6	61.8	40.1	91.2
3D box3D static 500x500 palette	62.0	62.8	39.2	92.1

Test result 11 - Polar Chart Series

A data array was generated and passed to each chart, and rendering delay was measured. All charts were set to equal size, and simplest possible appearance. The test was performed with various data point counts.

Series types in the test were: Point, Line, Point Line and Area. The data points were generated in random position of the chart.

Polar Line Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
Polar polarLineSeries 1 series 360 points per series	60.3	59.5	83.5	87.7
Polar polarLineSeries 1 series 3600 points per series	60.3	58.5	77.1	86.9
Polar polarLineSeries 5 series 360 points per series	60.3	58.9	81.0	88.1
Polar polarLineSeries 5 series 3600 points per series	59.8	47.4	47.8	56.6
Polar polarLineSeries 10 series 360 points per series	60.4	58.4	74.4	87.2
Polar polarLineSeries 10 series 3600 points per series	58.9	30.3	31.9	31.6

Polar Point Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
Polar polarPointSeries 1 series 360 points per series	60.2	59.8	84.3	88.7
Polar polarPointSeries 1 series 3600 points per series	60.3	58.8	77.8	88.7
Polar polarPointSeries 5 series 360 points per series	60.2	59.6	79.4	88.4
Polar polarPointSeries 5 series 3600 points per series	60.4	41.0	47.6	57.9
Polar polarPointSeries 10 series 360 points per series	60.3	57.5	71.7	88.3
Polar polarPointSeries 10 series 3600 points per series	59.3	35.1	30.2	33.4

Polar Point-Line Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
Polar polarPointLineSeries 1 series 360 points per series	60.3	60.1	81.6	88.7
Polar polarPointLineSeries 1 series 3600 points per series	60.3	58.5	71.3	87.2
Polar polarPointLineSeries 5 series 360 points per series	60.3	57.9	72.0	88.4
Polar polarPointLineSeries 5 series 3600 points per series	59.6	39.9	36.0	45.7
Polar polarPointLineSeries 10 series 360 points per series	60.3	54.5	61.7	87.1
Polar polarPointLineSeries 10 series 3600 points per series	58.1	26.1	23.1	24.8

Polar Area Series - Average FPS measured				
Device	**Desktop PC**	**Laptop**	**iPad Air 2**	**OnePlus 7 Pro**
Browser	Chrome	Chrome	Safari	Chrome
Polar polarAreaSeries 1 series 360 points per series	60.2	59.6	84.5	88.6
Polar polarAreaSeries 1 series 3600 points per series	59.9	57.1	52.8	84.8
Polar polarAreaSeries 5 series 3600 points per series	47.8	22.5	16.0	24.9
Polar polarAreaSeries 10 series 360 points per series	60.3	39.9	62.8	86.8
Polar polarAreaSeries 10 series 3600 points per series	24.2	12.2	8.4	12.5

Conclusion

Summarized, LightningChart JS is cross-platform data visualization library, which can run on practically in all existing platforms, including Microsoft Windows, Linux, MacOS, iOS and Android. LightningChart JS is Capable of handling 10M+ points in high-end hardware in streaming line charts, and is capable of handling 500k points with different series in desktop, laptop and phone, and 10k points in mid/low-end tablets and phones.

Based on the collected data, LightningChart JS is a top, high-performance charting library for developers needing to make **the best performing solutions** to the end users.