

```

GET DATA /TYPE=XLSX
  /FILE='C:\Users\common\Desktop\tpad\Experiment 2 - InfCapture\exp2-consolid
ated.xlsx'
  /SHEET=name 'Sheet1'
  /CELLRANGE=full
  /READNAMES=on
  /ASSUMEDSTRWIDTH=32767.
SORT CASES BY Method.
SPLIT FILE LAYERED BY Method.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=Device MEANSE(TimeMillis, 1)[na
me="MEAN_TimeMillis" LOW="MEAN_TimeMillis_LOW" HIGH="MEAN_TimeMillis_HIGH"] S
ize MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: Device=col(source(s), name("Device"), unit.category())
  DATA: MEAN_TimeMillis=col(source(s), name("MEAN_TimeMillis"))
  DATA: Size=col(source(s), name("Size"), unit.category())
  DATA: LOW=col(source(s), name("MEAN_TimeMillis_LOW"))
  DATA: HIGH=col(source(s), name("MEAN_TimeMillis_HIGH"))
  COORD: rect(dim(1,2), cluster(3,0))
  GUIDE: axis(dim(3), label("Device"))
  GUIDE: axis(dim(2), label("Mean TimeMillis"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("Size"))
  GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: interval(position(Size*MEAN_TimeMillis*Device), color.interior(Siz
e), shape.interior(shape.square))
  ELEMENT: interval(position(region.spread.range(Size*(LOW+HIGH)*Device)), sh
ape.interior(shape.ibeam))
END GPL.

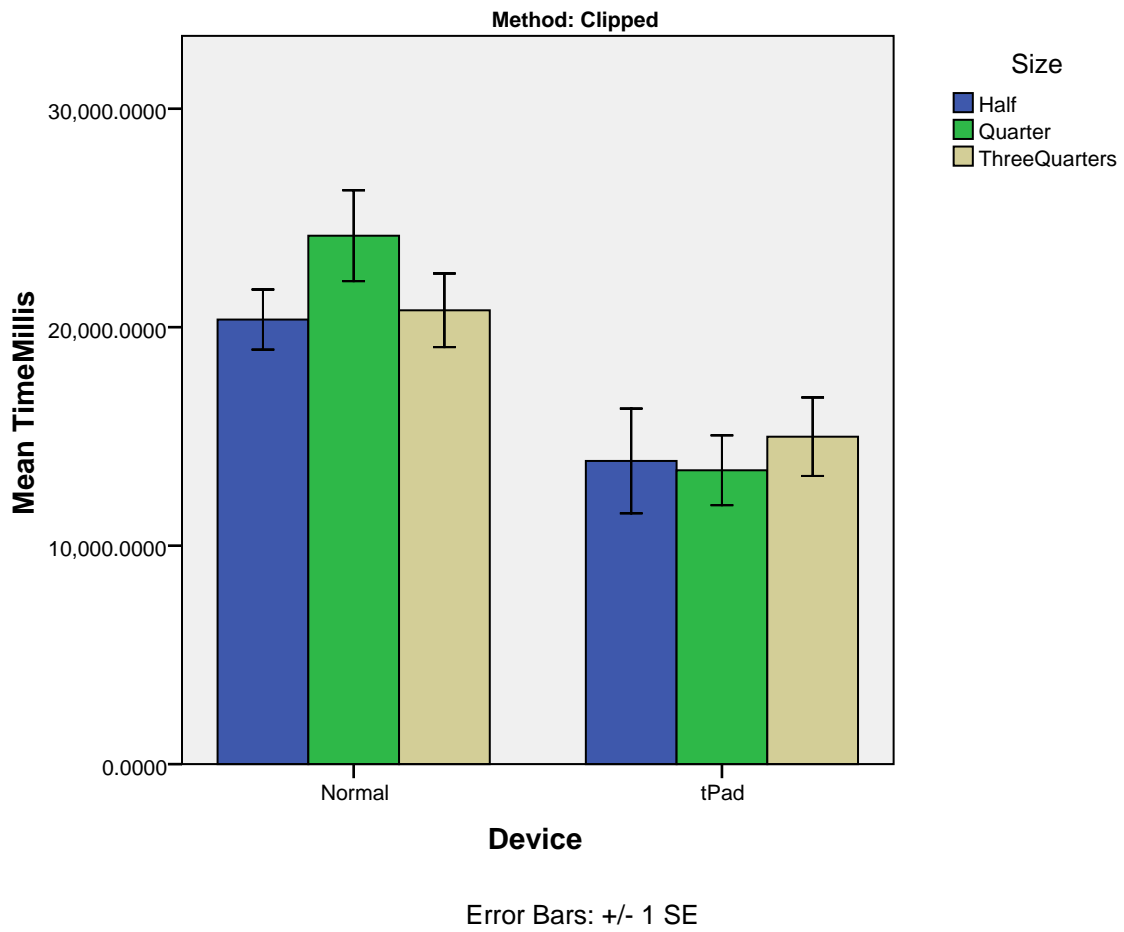
```

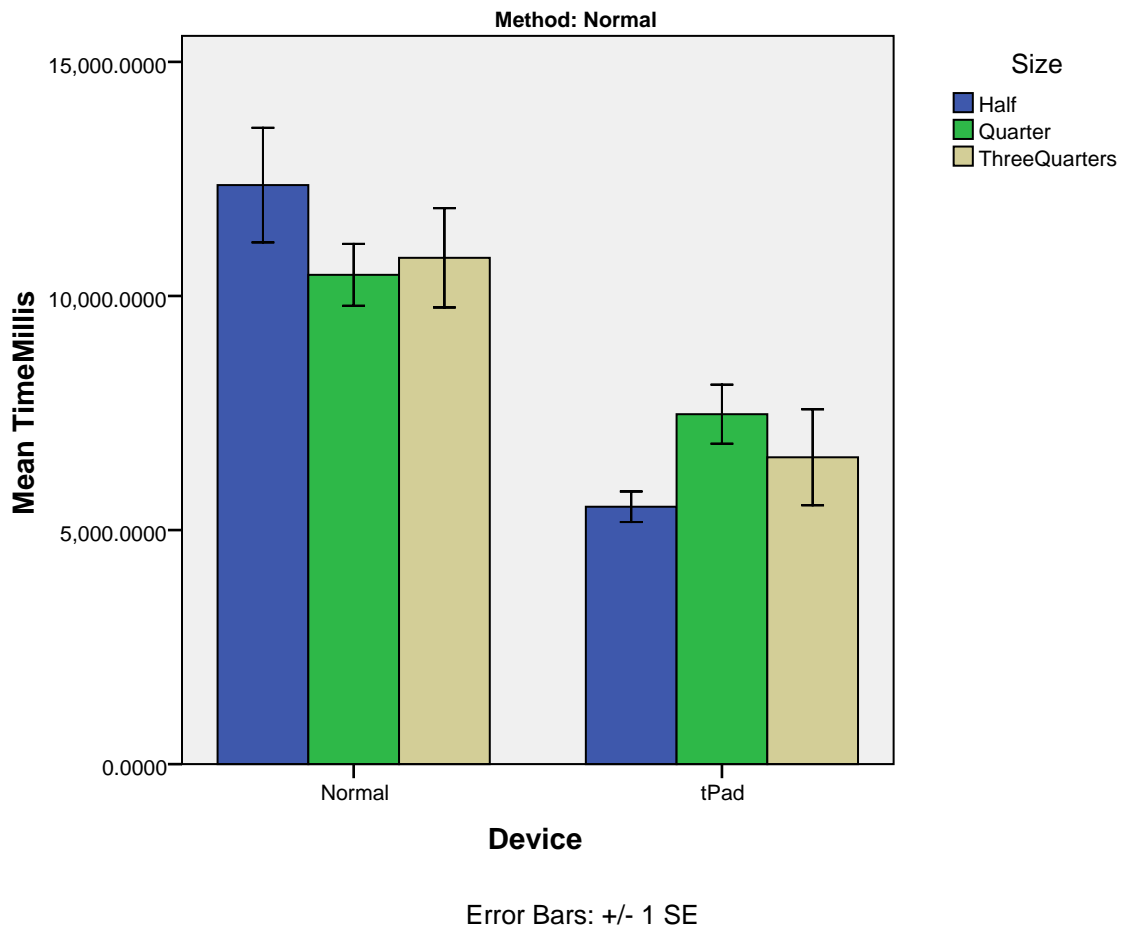
## GGraph

## Notes

Output Created	02-Sep-2013 15:53:22	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	Method
	N of Rows in Working Data File	324
Syntax	<pre> GGRAPH   /GRAPHDATASET NAME=" graphdataset" VARIABLES=Device MEANSE(TimeMillis, 1)[name=" MEAN_TimeMillis" LOW=" MEAN_TimeMillis_LOW" HIGH=" MEAN_TimeMillis_HIGH"] Size MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL   SOURCE: s=userSource(id ("graphdataset"))   DATA: Device=col(source(s), name ("Device"), unit.category())   DATA: MEAN_TimeMillis=col (source(s), name ("MEAN_TimeMillis"))   DATA: Size=col(source(s), name ("Size"), unit.category())   DATA: LOW=col(source(s), name ("MEAN_TimeMillis_LOW"))   DATA: HIGH=col(source(s), name ("MEAN_TimeMillis_HIGH"))   COORD: rect(dim(1,2), cluster (3,0))   GUIDE: axis(dim(3), label ("Device"))   GUIDE: axis(dim(2), label("Mean TimeMillis"))   GUIDE: legend(aesthetic (aesthetic.color.interior), label ("Size"))   GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))   SCALE: linear(dim(2), include(0))   ELEMENT: interval(position (Size*MEAN_TimeMillis*Device), color.interior(Size), shape.interior (shape.square))   ELEMENT: interval(position(region. spread.range(Size*(LOW+HIGH) *Device)), shape.interior(shape. ibeam)) END GPL. </pre>	
Resources	Processor Time	0:00:00.390
	Elapsed Time	0:00:00.406

[DataSet1]





\* Chart Builder.

GGRAPH

```
/GRAPHDATASET NAME="graphdataset" VARIABLES=Device MEANSE(Offset, 1)[name="
MEAN_Offset" LOW="MEAN_Offset_LOW" HIGH="MEAN_Offset_HIGH"] Size MISSING=LIST
WISE REPORTMISSING=NO
```

```
/GRAPHSPEC SOURCE=INLINE.
```

BEGIN GPL

```
SOURCE: s=userSource(id("graphdataset"))
DATA: Device=col(source(s), name("Device"), unit.category())
DATA: MEAN_Offset=col(source(s), name("MEAN_Offset"))
DATA: Size=col(source(s), name("Size"), unit.category())
DATA: LOW=col(source(s), name("MEAN_Offset_LOW"))
DATA: HIGH=col(source(s), name("MEAN_Offset_HIGH"))
COORD: rect(dim(1,2), cluster(3,0))
GUIDE: axis(dim(3), label("Device"))
GUIDE: axis(dim(2), label("Mean Offset"))
```

```

GUIDE: legend(aesthetic(aesthetic.color.interior), label("Size"))
GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
SCALE: linear(dim(2), include(0))
ELEMENT: interval(position(Size*MEAN_Offset*Device), color.interior(Size),
shape.interior(shape.square))
ELEMENT: interval(position(region.spread.range(Size*(LOW+HIGH)*Device)), sh
ape.interior(shape.ibeam))
END GPL.

```

## GGraph

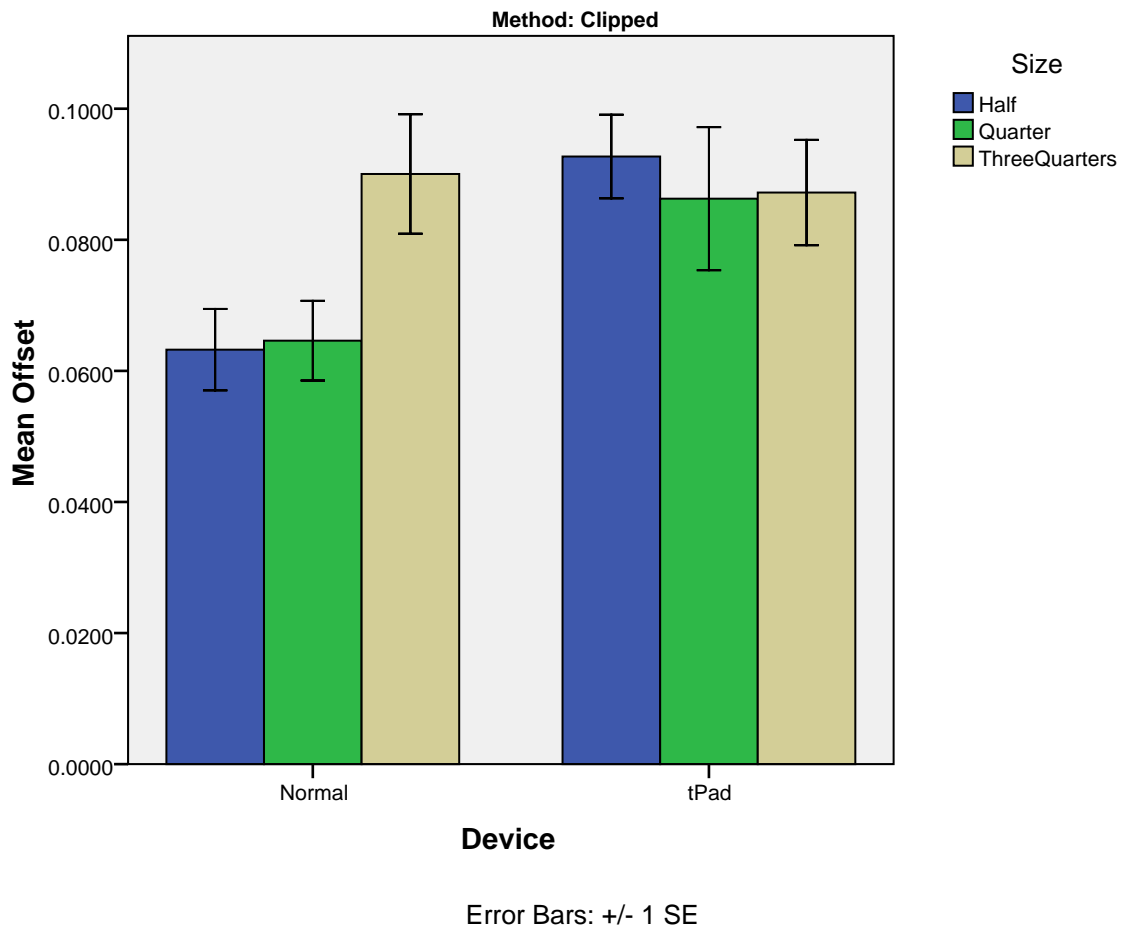
### Notes

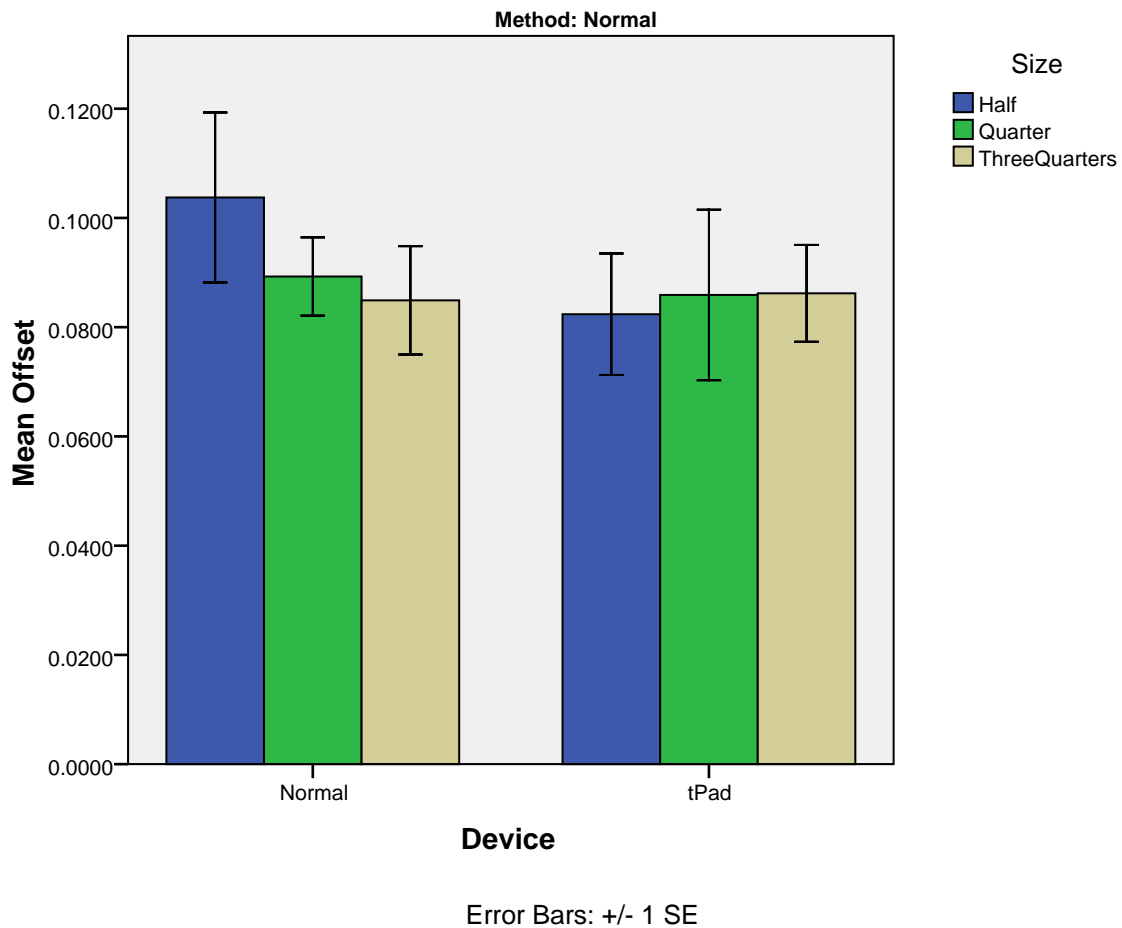
Output Created	02-Sep-2013 15:55:17
Comments	
Input    Active Dataset	DataSet1
Filter	<none>
Weight	<none>
Split File	Method
N of Rows in Working Data File	324

## Notes

Syntax	<pre> GGRAPH   /GRAPHDATASET NAME=" graphdataset" VARIABLES=Device MEANSE(Offset, 1)[name=" MEAN_Offset" LOW=" MEAN_Offset_LOW" HIGH=" MEAN_Offset_HIGH"] Size MISSING=LISTWISE REPORTMISSING=NO   /GRAPHSPEC SOURCE=INLINE. BEGIN GPL   SOURCE: s=userSource(id ("graphdataset"))   DATA: Device=col(source(s), name ("Device"), unit.category())   DATA: MEAN_Offset=col(source(s), name("MEAN_Offset"))   DATA: Size=col(source(s), name ("Size"), unit.category())   DATA: LOW=col(source(s), name ("MEAN_Offset_LOW"))   DATA: HIGH=col(source(s), name ("MEAN_Offset_HIGH"))   COORD: rect(dim(1,2), cluster (3,0))   GUIDE: axis(dim(3), label ("Device"))   GUIDE: axis(dim(2), label("Mean Offset"))   GUIDE: legend(aesthetic (aesthetic.color.interior), label ("Size"))   GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))   SCALE: linear(dim(2), include(0))   ELEMENT: interval(position (Size*MEAN_Offset*Device), color. interior(Size), shape.interior(shape. square))   ELEMENT: interval(position(region. spread.range(Size*(LOW+HIGH) *Device)), shape.interior(shape. ibeam)) END GPL. </pre>		
Resources	Processor Time	0:00:00.188	
	Elapsed Time	0:00:00.202	

[DataSet1]





\* Chart Builder.

GGRAPH

```
/GRAPHDATASET NAME="graphdataset" VARIABLES=Device MEANSE(Angle, 1)[name="MEAN_Angle" LOW="MEAN_Angle_LOW" HIGH="MEAN_Angle_HIGH"] Size MISSING=LISTWISE REPORTMISSING=NO
```

```
/GRAPHSPEC SOURCE=INLINE.
```

BEGIN GPL

```
SOURCE: s=userSource(id("graphdataset"))
DATA: Device=col(source(s), name("Device"), unit.category())
DATA: MEAN_Angle=col(source(s), name("MEAN_Angle"))
DATA: Size=col(source(s), name("Size"), unit.category())
DATA: LOW=col(source(s), name("MEAN_Angle_LOW"))
DATA: HIGH=col(source(s), name("MEAN_Angle_HIGH"))
COORD: rect(dim(1,2), cluster(3,0))
GUIDE: axis(dim(3), label("Device"))
GUIDE: axis(dim(2), label("Mean Angle"))
```



```

GUIDE: legend(aesthetic(aesthetic.color.interior), label("Size"))
GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
SCALE: linear(dim(2), include(0))
ELEMENT: interval(position(Size*MEAN_Angle*Device), color.interior(Size), s
hape.interior(shape.square))
ELEMENT: interval(position(region.spread.range(Size*(LOW+HIGH)*Device)), sh
ape.interior(shape.ibeam))
END GPL.

```

## GGraph

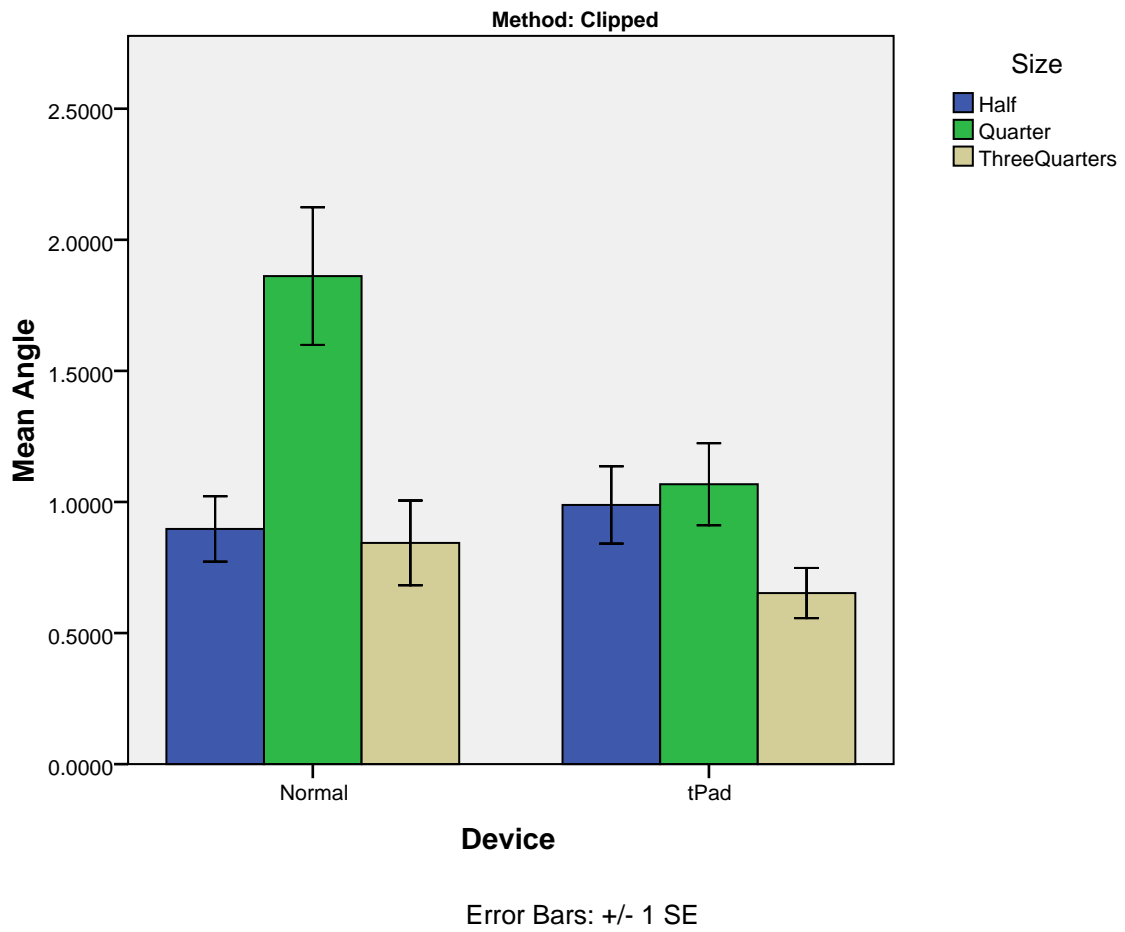
### Notes

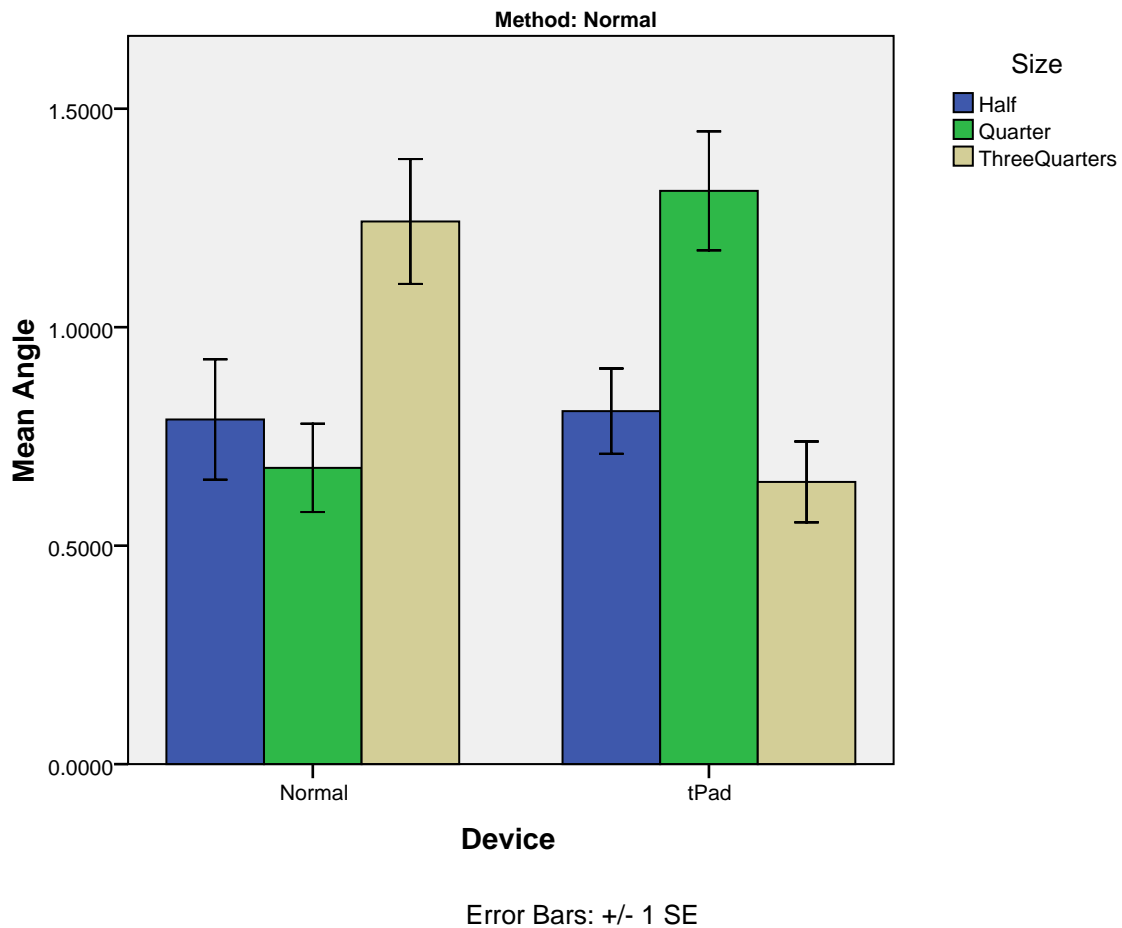
Output Created	02-Sep-2013 15:55:51
Comments	
Input    Active Dataset	DataSet1
Filter	<none>
Weight	<none>
Split File	Method
N of Rows in Working Data File	324

## Notes

Syntax	<pre> GGRAPH   /GRAPHDATASET NAME=" graphdataset" VARIABLES=Device MEANSE(Angle, 1)[name=" MEAN_Angle" LOW=" MEAN_Angle_LOW" HIGH=" MEAN_Angle_HIGH"] Size MISSING=LISTWISE REPORTMISSING=NO   /GRAPHSPEC SOURCE=INLINE. BEGIN GPL   SOURCE: s=userSource(id ("graphdataset"))   DATA: Device=col(source(s), name ("Device"), unit.category())   DATA: MEAN_Angle=col(source(s), name("MEAN_Angle"))   DATA: Size=col(source(s), name ("Size"), unit.category())   DATA: LOW=col(source(s), name ("MEAN_Angle_LOW"))   DATA: HIGH=col(source(s), name ("MEAN_Angle_HIGH"))   COORD: rect(dim(1,2), cluster (3,0))   GUIDE: axis(dim(3), label ("Device"))   GUIDE: axis(dim(2), label("Mean Angle"))   GUIDE: legend(aesthetic (aesthetic.color.interior), label ("Size"))   GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))   SCALE: linear(dim(2), include(0))   ELEMENT: interval(position (Size*MEAN_Angle*Device), color. interior(Size), shape.interior(shape. square))   ELEMENT: interval(position(region. spread.range(Size*(LOW+HIGH) *Device)), shape.interior(shape. ibeam)) END GPL. </pre>		
Resources	Processor Time	0:00:00.203	
	Elapsed Time	0:00:00.218	

[DataSet1]





\* Chart Builder.

GGRAPH

```
/GRAPHDATASET NAME="graphdataset" VARIABLES=Device MEANSE(CaptureRatio, 1)[
name="MEAN_CaptureRatio" LOW="MEAN_CaptureRatio_LOW" HIGH="MEAN_CaptureRatio_
HIGH"] Size MISSING=LISTWISE REPORTMISSING=NO
```

```
/GRAPHSPEC SOURCE=INLINE.
```

BEGIN GPL

```
SOURCE: s=userSource(id("graphdataset"))
DATA: Device=col(source(s), name("Device"), unit.category())
DATA: MEAN_CaptureRatio=col(source(s), name("MEAN_CaptureRatio"))
DATA: Size=col(source(s), name("Size"), unit.category())
DATA: LOW=col(source(s), name("MEAN_CaptureRatio_LOW"))
DATA: HIGH=col(source(s), name("MEAN_CaptureRatio_HIGH"))
COORD: rect(dim(1,2), cluster(3,0))
GUIDE: axis(dim(3), label("Device"))
GUIDE: axis(dim(2), label("Mean CaptureRatio"))
```

```

GUIDE: legend(aesthetic(aesthetic.color.interior), label("Size"))
GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
SCALE: linear(dim(2), include(0))
ELEMENT: interval(position(Size*MEAN_CaptureRatio*Device), color.interior(Size), shape.interior(shape.square))
ELEMENT: interval(position(region.spread.range(Size*(LOW+HIGH)*Device)), shape.interior(shape.ibeam))
END GPL.

```

## GGraph

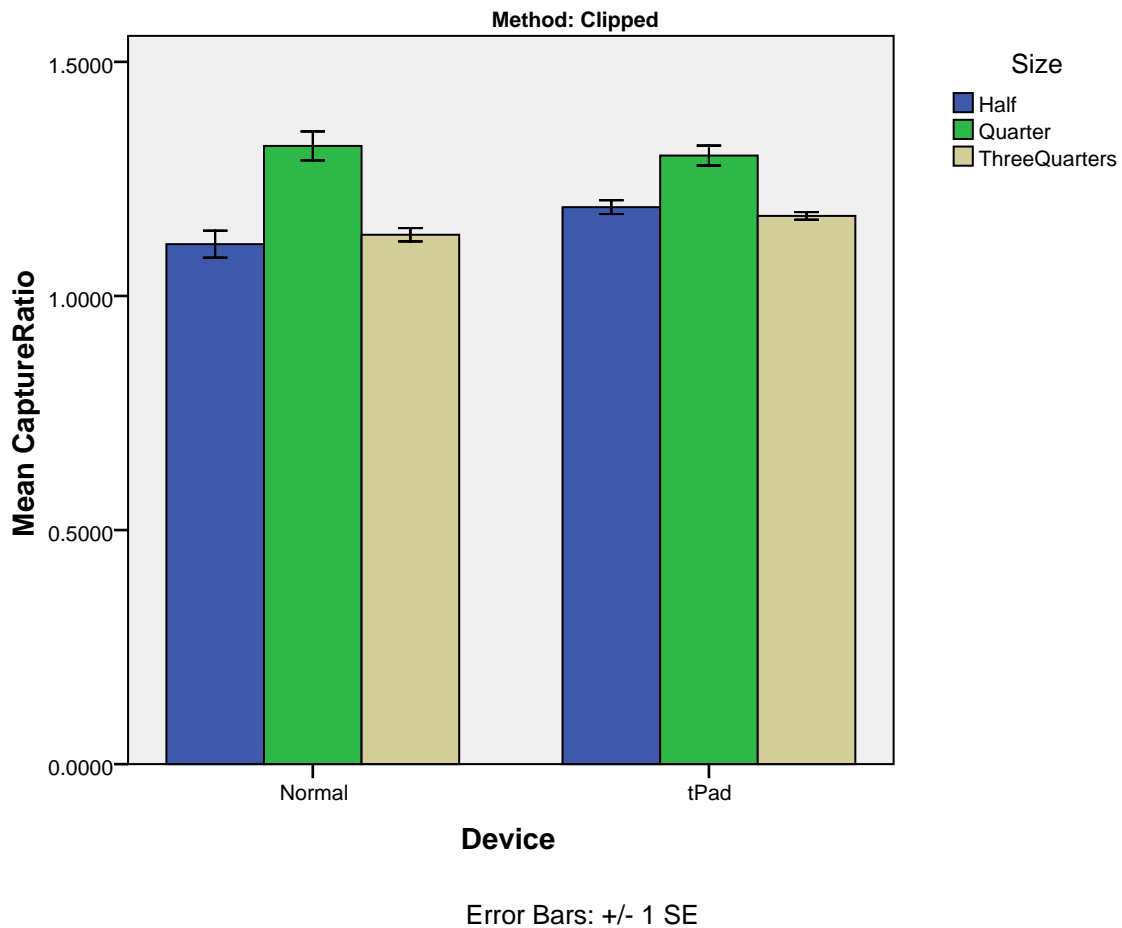
### Notes

Output Created	02-Sep-2013 15:56:28
Comments	
Input    Active Dataset	DataSet1
Filter	<none>
Weight	<none>
Split File	Method
N of Rows in Working Data File	324

## Notes

Syntax	<pre> GGRAPH   /GRAPHDATASET NAME=" graphdataset" VARIABLES=Device MEANSE(CaptureRatio, 1)[name=" MEAN_CaptureRatio" LOW=" MEAN_CaptureRatio_LOW" HIGH=" MEAN_CaptureRatio_HIGH"] Size MISSING=LISTWISE REPORTMISSING=NO   /GRAPHSPEC SOURCE=INLINE. BEGIN GPL   SOURCE: s=userSource(id ("graphdataset"))   DATA: Device=col(source(s), name ("Device"), unit.category())   DATA: MEAN_CaptureRatio=col (source(s), name ("MEAN_CaptureRatio"))   DATA: Size=col(source(s), name ("Size"), unit.category())   DATA: LOW=col(source(s), name ("MEAN_CaptureRatio_LOW"))   DATA: HIGH=col(source(s), name ("MEAN_CaptureRatio_HIGH"))   COORD: rect(dim(1,2), cluster (3,0))   GUIDE: axis(dim(3), label ("Device"))   GUIDE: axis(dim(2), label("Mean CaptureRatio"))   GUIDE: legend(aesthetic (aesthetic.color.interior), label ("Size"))   GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))   SCALE: linear(dim(2), include(0))   ELEMENT: interval(position (Size*MEAN_CaptureRatio*Device), color.interior(Size), shape.interior (shape.square))   ELEMENT: interval(position(region. spread.range(Size*(LOW+HIGH) *Device)), shape.interior(shape. ibeam)) END GPL. </pre>		
Resources	Processor Time	0:00:00.203	
	Elapsed Time	0:00:00.202	

[DataSet1]



\* Chart Builder.

GGRAPH

```
/GRAPHDATASET NAME="graphdataset" VARIABLES=Device MEANSE(MissRatio, 1)[name="MEAN_MissRatio" LOW="MEAN_MissRatio_LOW" HIGH="MEAN_MissRatio_HIGH"] Size
MISSING=LISTWISE REPORTMISSING=NO
```

```
/GRAPHSPEC SOURCE=INLINE.
```

BEGIN GPL

```
SOURCE: s=userSource(id("graphdataset"))
DATA: Device=col(source(s), name("Device"), unit.category())
DATA: MEAN_MissRatio=col(source(s), name("MEAN_MissRatio"))
DATA: Size=col(source(s), name("Size"), unit.category())
DATA: LOW=col(source(s), name("MEAN_MissRatio_LOW"))
DATA: HIGH=col(source(s), name("MEAN_MissRatio_HIGH"))
COORD: rect(dim(1,2), cluster(3,0))
GUIDE: axis(dim(3), label("Device"))
GUIDE: axis(dim(2), label("Mean MissRatio"))
```

```

GUIDE: legend(aesthetic(aesthetic.color.interior), label("Size"))
GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
SCALE: linear(dim(2), include(0))
ELEMENT: interval(position(Size*MEAN_MissRatio*Device), color.interior(Size
), shape.interior(shape.square))
ELEMENT: interval(position(region.spread.range(Size*(LOW+HIGH)*Device)), sh
ape.interior(shape.ibeam))
END GPL.

```

## GGraph

### Notes

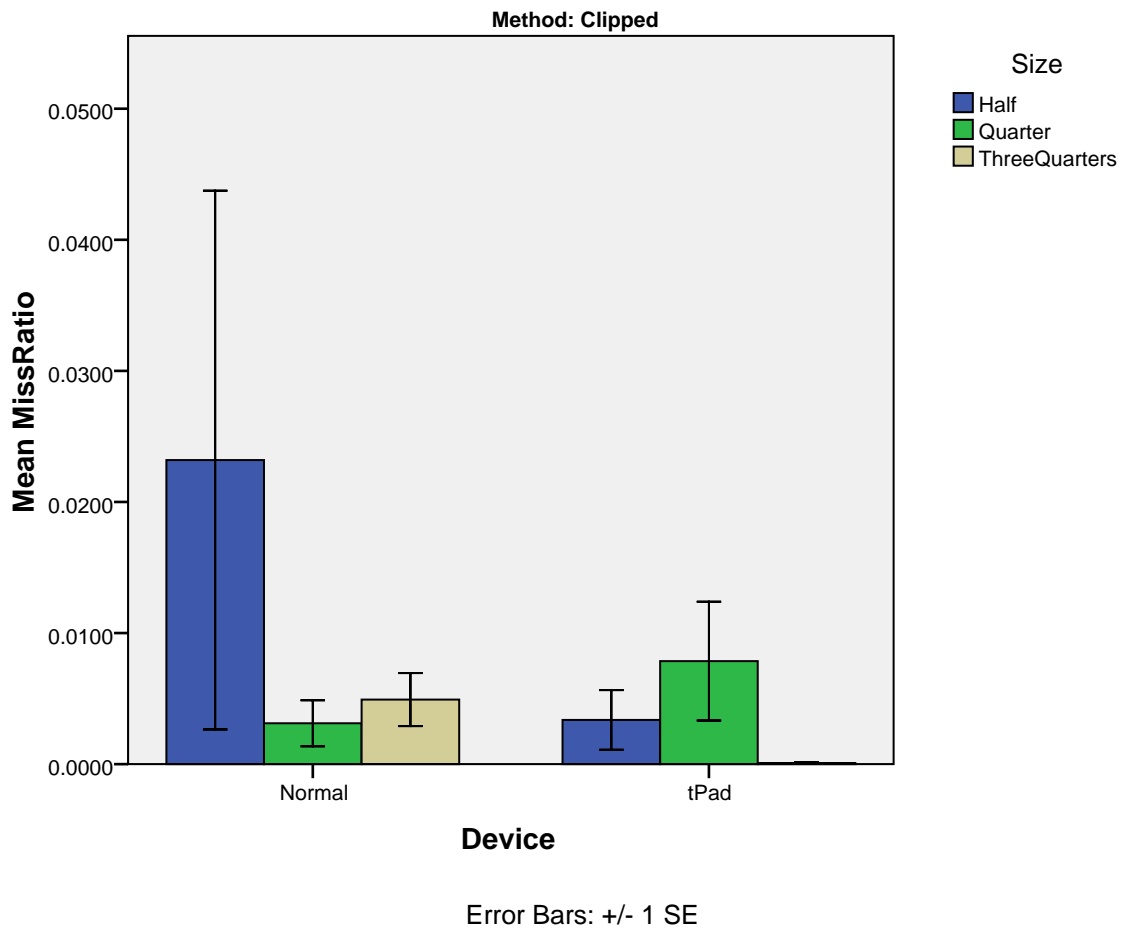
Output Created	02-Sep-2013 15:56:48
Comments	
Input    Active Dataset	DataSet1
Filter	<none>
Weight	<none>
Split File	Method
N of Rows in Working Data File	324



## Notes

Syntax	<pre> GGRAPH   /GRAPHDATASET NAME=" graphdataset" VARIABLES=Device MEANSE(MissRatio, 1)[name=" MEAN_MissRatio" LOW=" MEAN_MissRatio_LOW" HIGH=" MEAN_MissRatio_HIGH"] Size MISSING=LISTWISE REPORTMISSING=NO   /GRAPHSPEC SOURCE=INLINE. BEGIN GPL   SOURCE: s=userSource(id ("graphdataset"))   DATA: Device=col(source(s), name ("Device"), unit.category())   DATA: MEAN_MissRatio=col (source(s), name ("MEAN_MissRatio"))   DATA: Size=col(source(s), name ("Size"), unit.category())   DATA: LOW=col(source(s), name ("MEAN_MissRatio_LOW"))   DATA: HIGH=col(source(s), name ("MEAN_MissRatio_HIGH"))   COORD: rect(dim(1,2), cluster (3,0))   GUIDE: axis(dim(3), label ("Device"))   GUIDE: axis(dim(2), label("Mean MissRatio"))   GUIDE: legend(aesthetic (aesthetic.color.interior), label ("Size"))   GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))   SCALE: linear(dim(2), include(0))   ELEMENT: interval(position (Size*MEAN_MissRatio*Device), color.interior(Size), shape.interior (shape.square))   ELEMENT: interval(position(region. spread.range(Size*(LOW+HIGH) *Device)), shape.interior(shape. ibeam)) END GPL. </pre>		
Resources	Processor Time	0:00:00.218	
	Elapsed Time	0:00:00.219	

[DataSet1]



```
DESCRIPTIVES VARIABLES=TimeMillis  
  /SAVE  
  /STATISTICS=MEAN STDDEV MIN MAX.
```

## Descriptives

## Notes

Output Created	02-Sep-2013 16:00:28	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	Method
	N of Rows in Working Data File	324
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax	DESCRIPTIVES VARIABLES=TimeMillis /SAVE /STATISTICS=MEAN STDDEV MIN MAX.	
Resources	Processor Time	0:00:00.016
	Elapsed Time	0:00:00.016
Variables Created or Modified	ZTimeMillis	Zscore(TimeMillis)

[DataSet1]

## Descriptive Statistics

Method	N	Minimum	Maximum	Mean	Std. Deviation
Clipped TimeMillis	162	6079.3477	71779.1055	1.793721E4	1.0306975E4
Valid N (listwise)	162				
Normal TimeMillis	162	3008.1721	32146.8387	8860.333940	5.1331014E3
Valid N (listwise)	162				

```

SORT CASES BY Method Device Size.
SPLIT FILE LAYERED BY Method Device Size.
DESCRIPTIVES VARIABLES=TimeMillis
  /SAVE
  /STATISTICS=MEAN STDDEV MIN MAX.

```

## Descriptives

### Notes

Output Created		02-Sep-2013 16:01:38
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	Method, Device, Size
	N of Rows in Working Data File	324
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=TimeMillis /SAVE /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	0:00:00.000
	Elapsed Time	0:00:00.000
Variables Created or Modified	ZTimeMillis	Zscore(TimeMillis)

[DataSet1]

### Descriptive Statistics

Method	Device	Size		N	Minimum	Maximum
Clipped	Normal	Half	TimeMillis	27	10539.6028	44246.5308
			Valid N (listwise)	27		
		Quarter	TimeMillis	27	12603.7208	56999.2602
			Valid N (listwise)	27		
		ThreeQuarters	TimeMillis	27	9327.5335	40579.3210
			Valid N (listwise)	27		
	tPad	Half	TimeMillis	27	6079.3477	71779.1055
			Valid N (listwise)	27		
		Quarter	TimeMillis	27	6895.3944	42731.4441
			Valid N (listwise)	27		

### Descriptive Statistics

Method	Device	Size		Mean	Std. Deviation
Clipped	Normal	Half	TimeMillis	2.0348E4	7.1492868E3
			Valid N (listwise)		
		Quarter	TimeMillis	2.4186E4	1.0803021E4
			Valid N (listwise)		
		ThreeQuarters	TimeMillis	2.0772E4	8.7603961E3
			Valid N (listwise)		
	tPad	Half	TimeMillis	1.3877E4	1.2456180E4
			Valid N (listwise)		
	Quarter		TimeMillis	1.3450E4	8.3035695E3
			Valid N (listwise)		

### Descriptive Statistics

Method	Device	Size		N	Minimum	Maximum
Clipped	tPad	ThreeQuarters	TimeMillis	27	6489.3712	51483.9447
			Valid N (listwise)	27		
Normal	Normal	Half	TimeMillis	27	4690.2683	25916.4820
			Valid N (listwise)	27		
		Quarter	TimeMillis	27	5571.3187	17871.0222
			Valid N (listwise)	27		
		ThreeQuarters	TimeMillis	27	4744.2713	24031.3745
			Valid N (listwise)	27		
	tPad	Half	TimeMillis	27	3384.1936	9807.5609
			Valid N (listwise)	27		
		Quarter	TimeMillis	27	3129.1790	14763.8445
			Valid N (listwise)	27		
		ThreeQuarters	TimeMillis	27	3008.1721	32146.8387
			Valid N (listwise)	27		

### Descriptive Statistics

Method	Device	Size		Mean	Std. Deviation
Clipped	tPad	ThreeQuarters	TimeMillis	1.498715E4	9.3369469E3
			Valid N (listwise)		
Normal	Normal	Half	TimeMillis	1.236830E4	6.3579226E3
			Valid N (listwise)		
		Quarter	TimeMillis	1.045156E4	3.4339995E3
			Valid N (listwise)		
		ThreeQuarters	TimeMillis	1.081480E4	5.5090199E3
			Valid N (listwise)		
	tPad	Half	TimeMillis	5498.055200	1.6978530E3
			Valid N (listwise)		
		Quarter	TimeMillis	7474.723826	3.2751255E3
			Valid N (listwise)		
		ThreeQuarters	TimeMillis	6554.560096	5.3249894E3
			Valid N (listwise)		

```
SAVE OUTFILE='C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav'
```

```
  /COMPRESSED.
```

```
USE ALL.
```

```
COMPUTE filter_$=(ZTimeMillis > -3 & ZTimeMillis < 3).
```

```
VARIABLE LABEL filter_$ 'ZTimeMillis > -3 & ZTimeMillis < 3 (FILTER)'.
```

```
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
```

```
FORMAT filter_$ (f1.0).
```

```
FILTER BY filter_$.
```

```
EXECUTE.
```

```
EXAMINE VARIABLES=TimeMillis
```

```
  /PLOT BOXPLOT HISTOGRAM NPLOT
```

```
  /COMPARE GROUPS
```

```
  /STATISTICS DESCRIPTIVES
```

```
  /CINTERVAL 95
```

```
  /MISSING LISTWISE
```

```
  /NOTOTAL.
```

## Explore

## Notes

Output Created		02-Sep-2013 16:03:47
Comments		
Input	Data	C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav
	Active Dataset	DataSet1
	Filter	ZTimeMillis > -3 & ZTimeMillis < 3 (FILTER)
	Weight	<none>
	Split File	Method, Device, Size
	N of Rows in Working Data File	318
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=TimeMillis /PLOT BOXPLOT HISTOGRAM NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /INTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	0:00:05.414
	Elapsed Time	0:00:05.564

[DataSet1] C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav

### Tests of Normality

Method	Device	Size		Kolmogorov-Smirnov <sup>a</sup>		
				Statistic	df	Sig.
Clipped	Normal	Half	TimeMillis	.077	26	.200
		Quarter	TimeMillis	.164	26	.071
		ThreeQuarters	TimeMillis	.131	27	.200
	tPad	Half	TimeMillis	.203	26	.007
		Quarter	TimeMillis	.307	26	.000
		ThreeQuarters	TimeMillis	.166	26	.064
Normal	Normal	Half	TimeMillis	.186	27	.017
		Quarter	TimeMillis	.130	27	.200
		ThreeQuarters	TimeMillis	.206	27	.005
	tPad	Half	TimeMillis	.172	27	.040
		Quarter	TimeMillis	.200	27	.007
		ThreeQuarters	TimeMillis	.141	26	.197

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

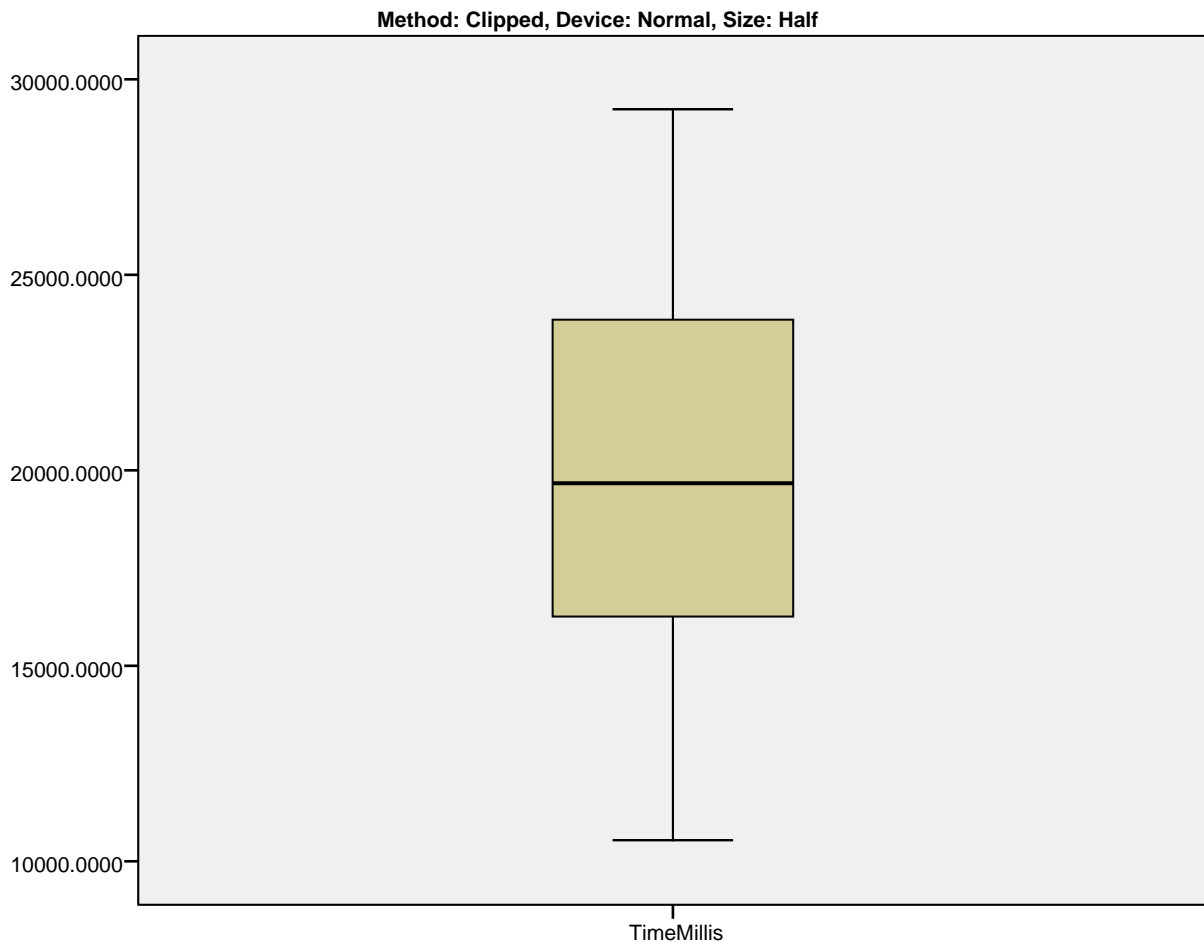
### Tests of Normality

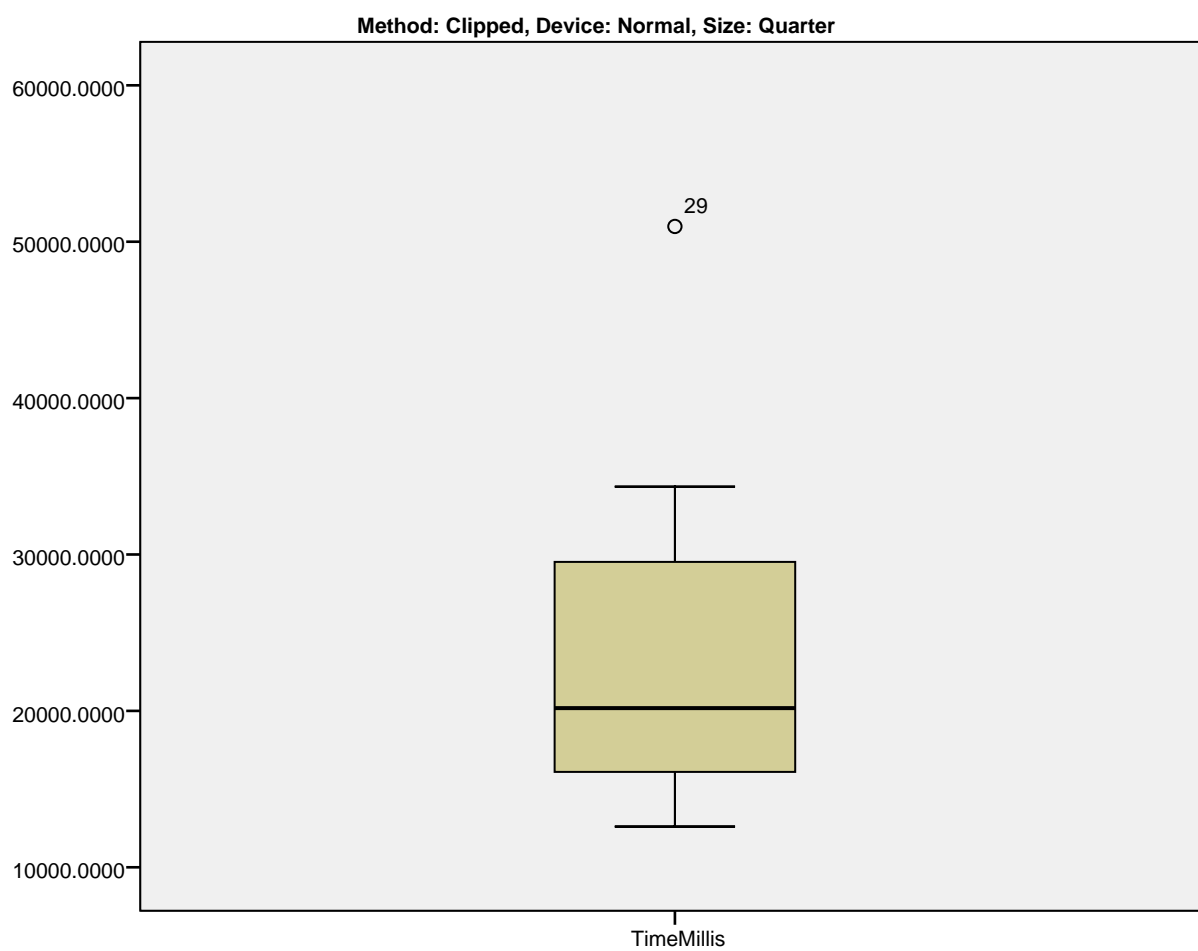
Method	Device	Size		Shapiro-Wilk		
				Statistic	df	Sig.
Clipped	Normal	Half	TimeMillis	.966	26	.530
		Quarter	TimeMillis	.865	26	.003
		ThreeQuarters	TimeMillis	.929	27	.066
	tPad	Half	TimeMillis	.883	26	.007
		Quarter	TimeMillis	.781	26	.000
		ThreeQuarters	TimeMillis	.894	26	.012
Normal	Normal	Half	TimeMillis	.899	27	.012
		Quarter	TimeMillis	.948	27	.190
		ThreeQuarters	TimeMillis	.892	27	.009
	tPad	Half	TimeMillis	.914	27	.028
		Quarter	TimeMillis	.896	27	.011
		ThreeQuarters	TimeMillis	.943	26	.156

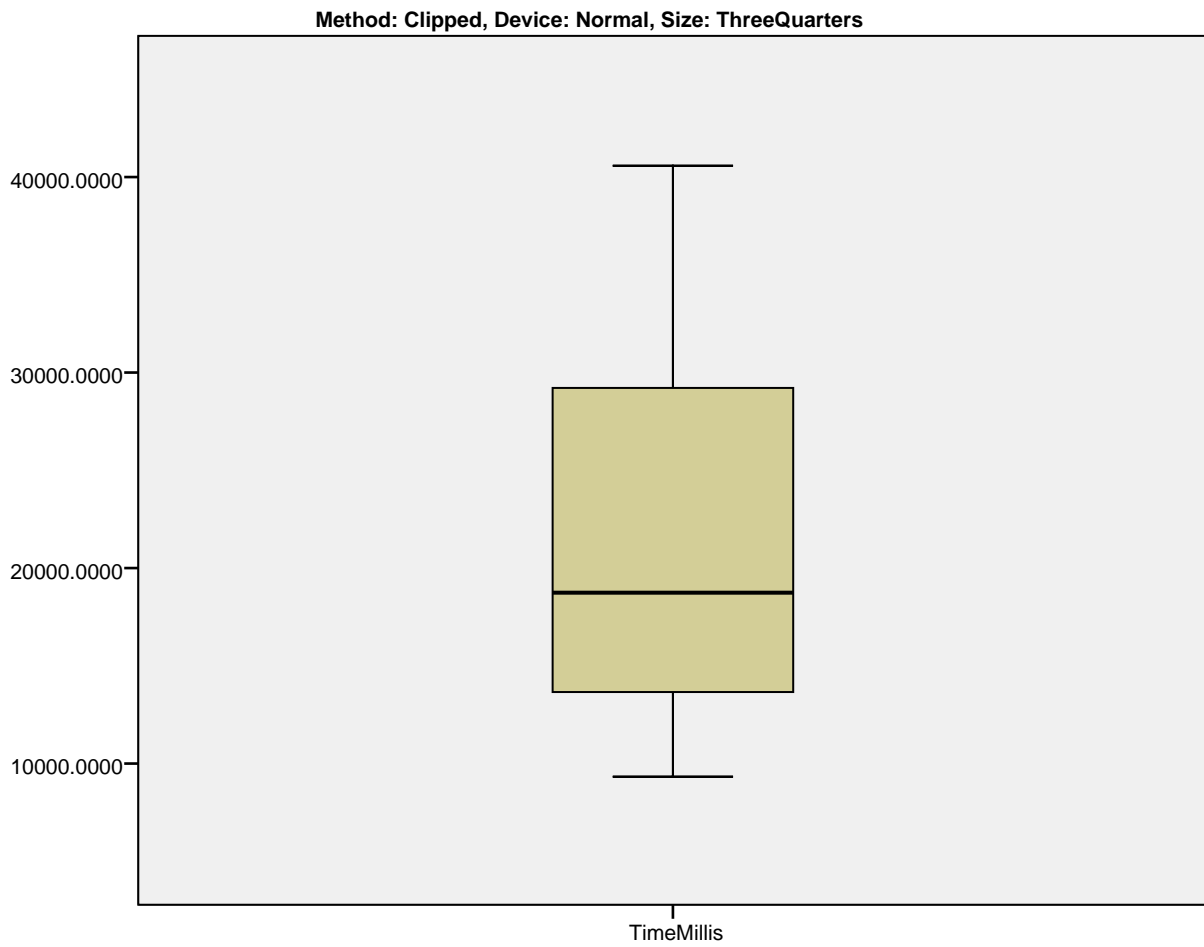
**TimeMillis**

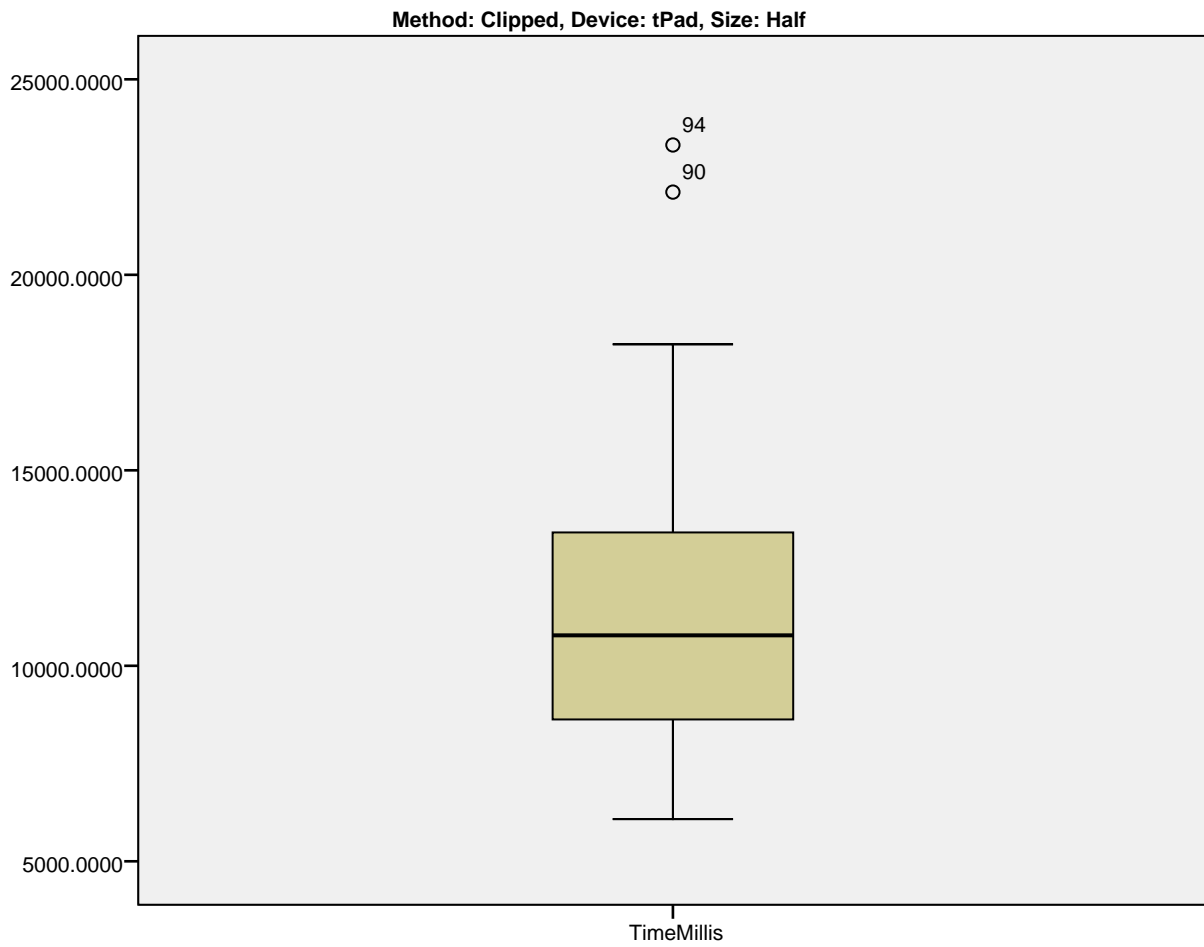
**Boxplots**

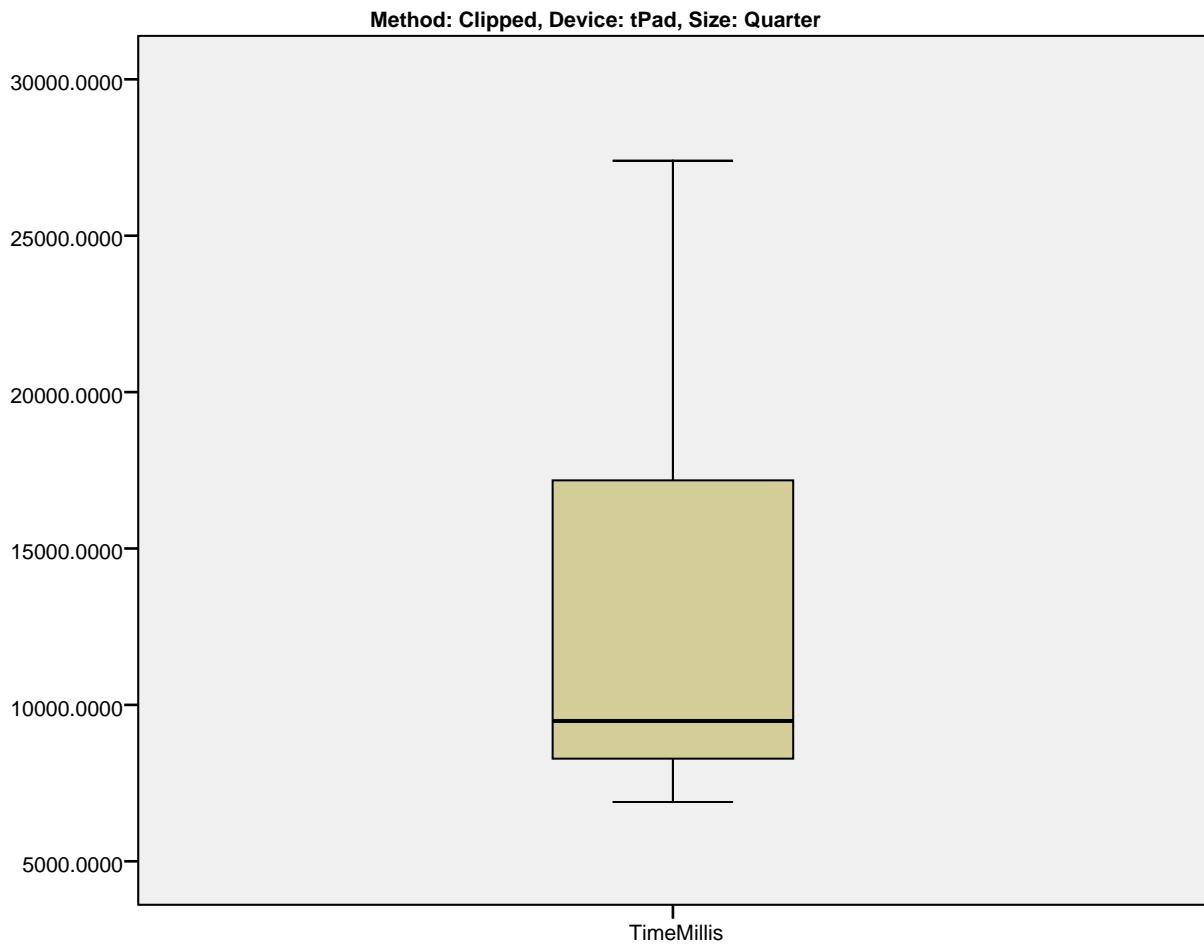


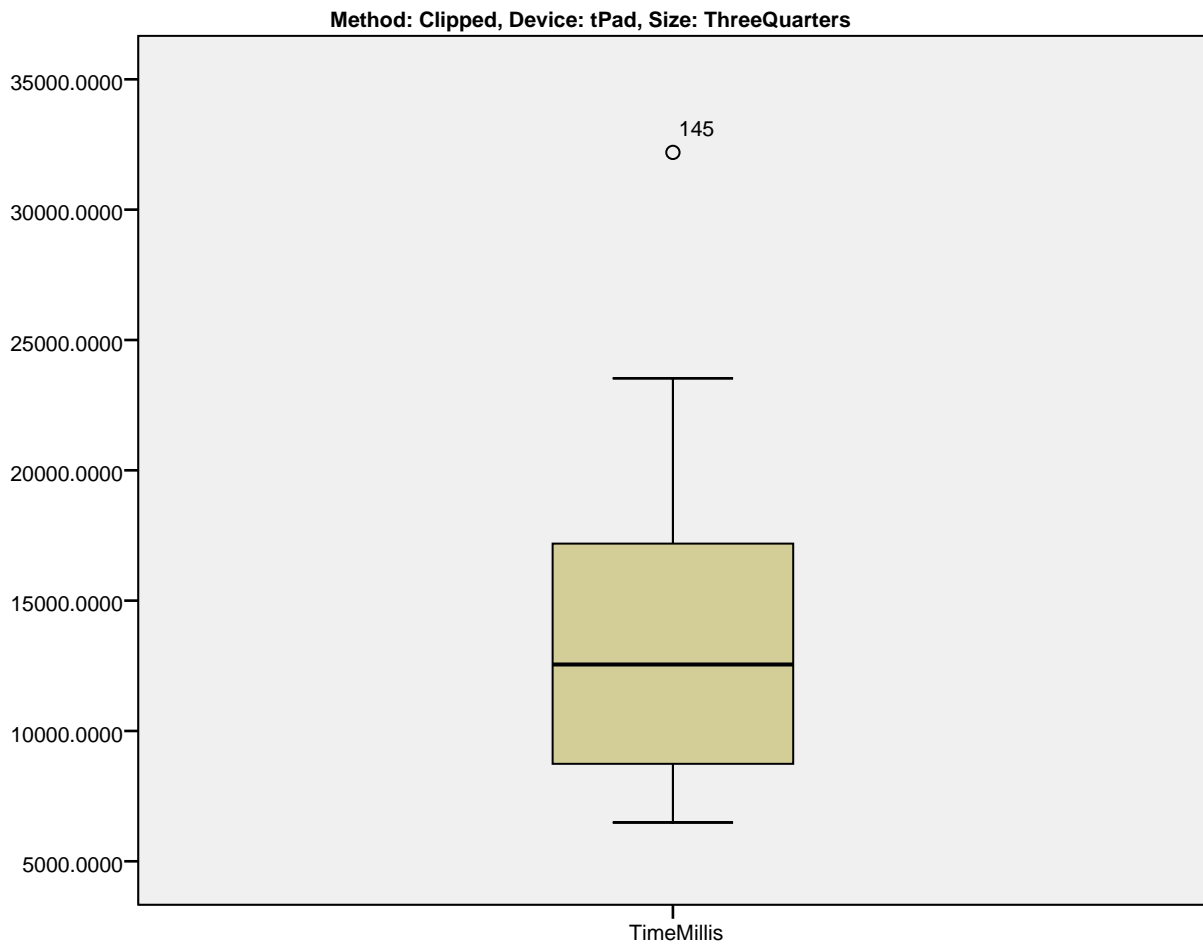


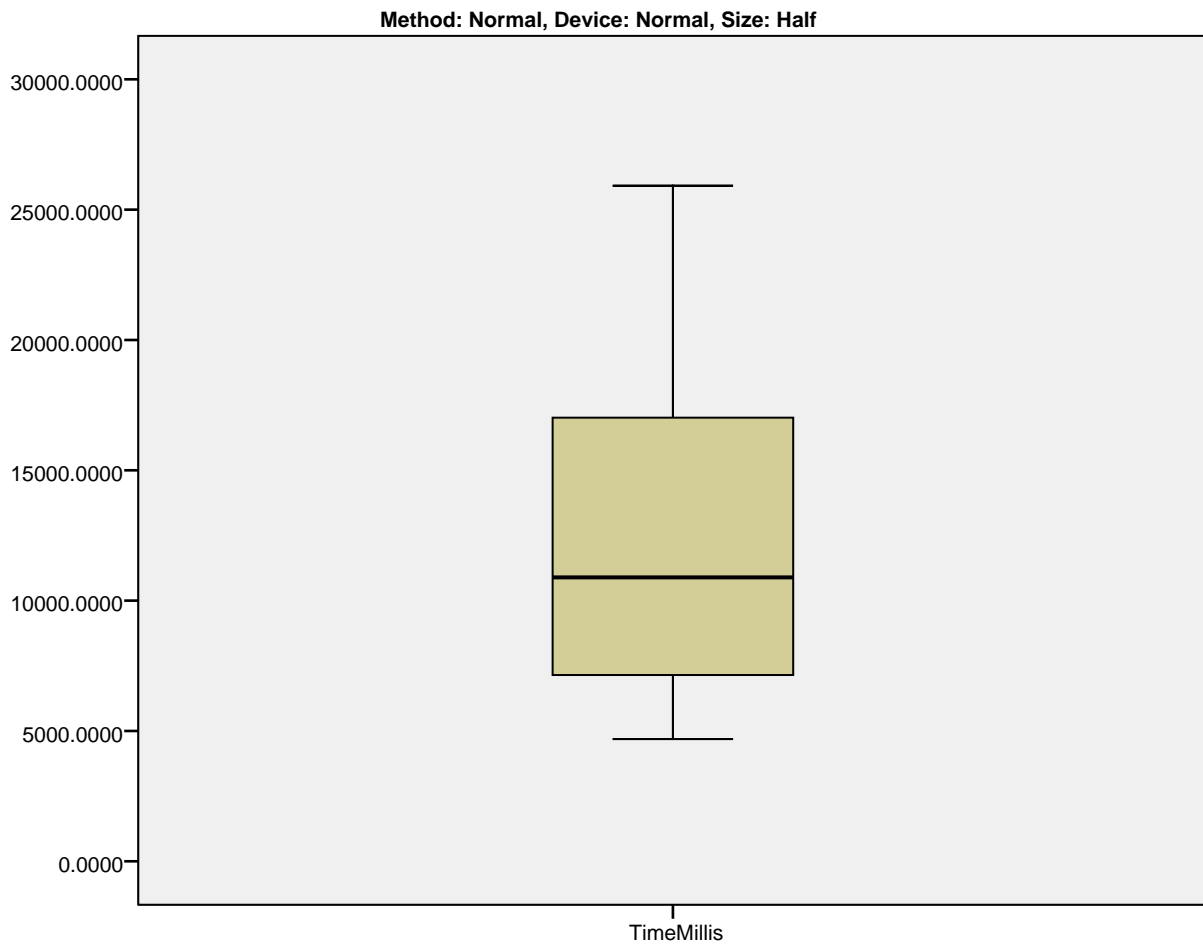


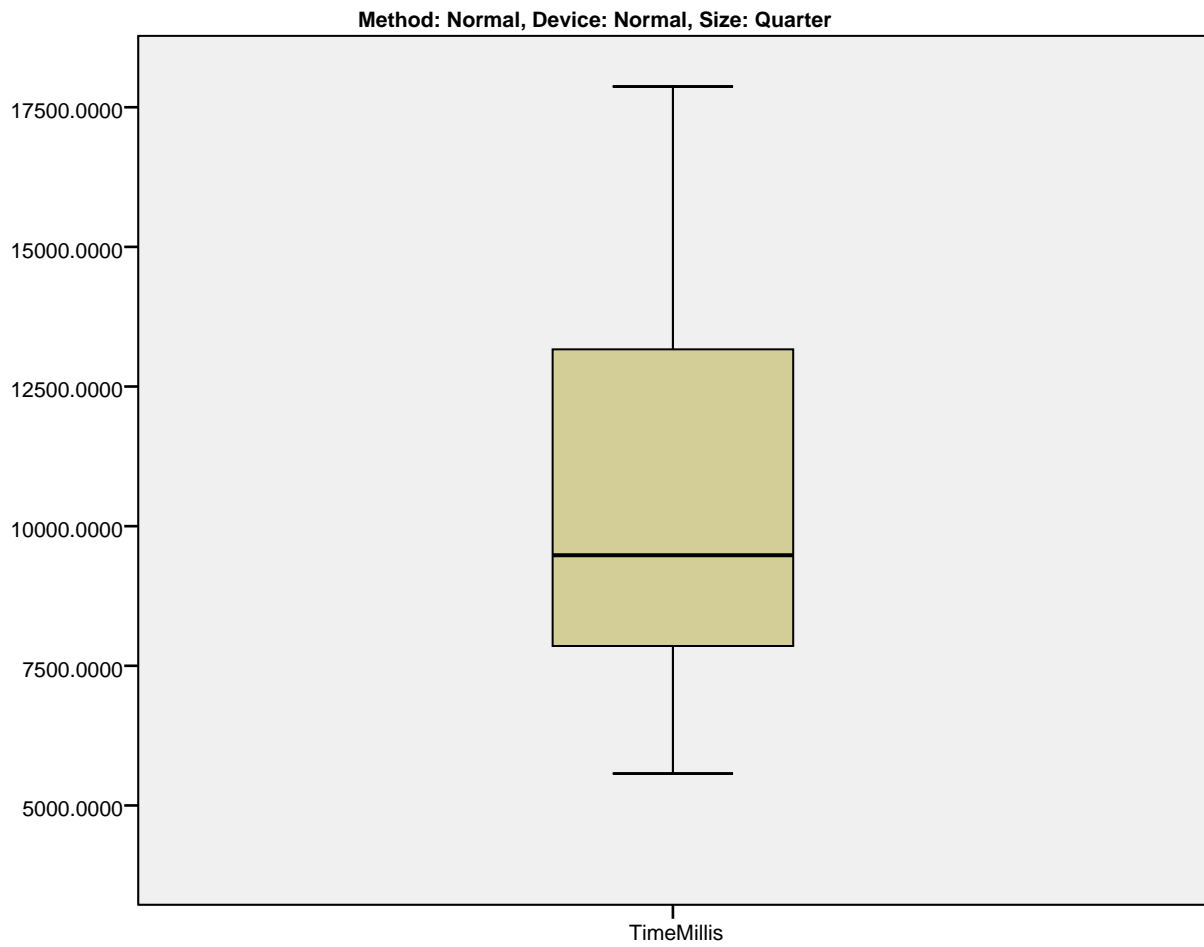




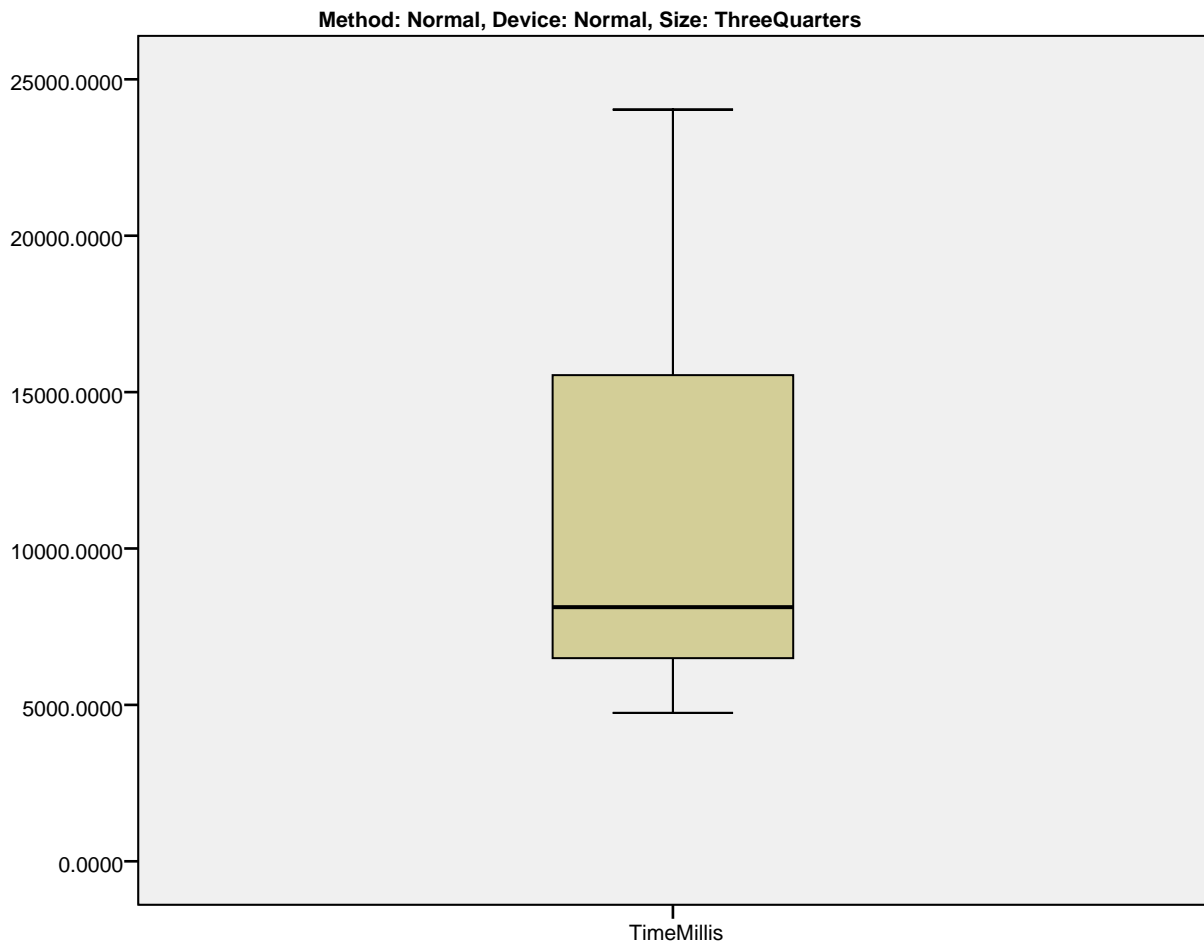


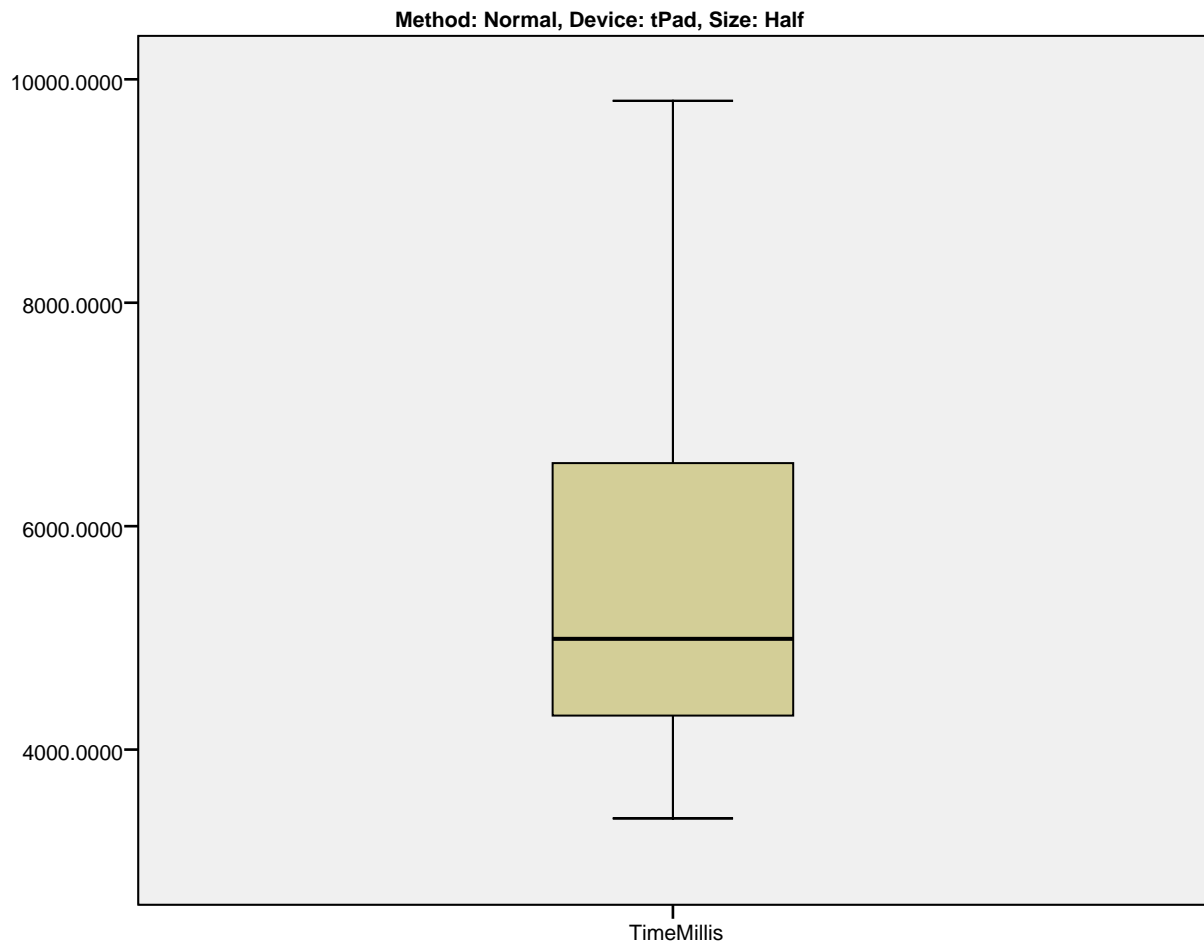


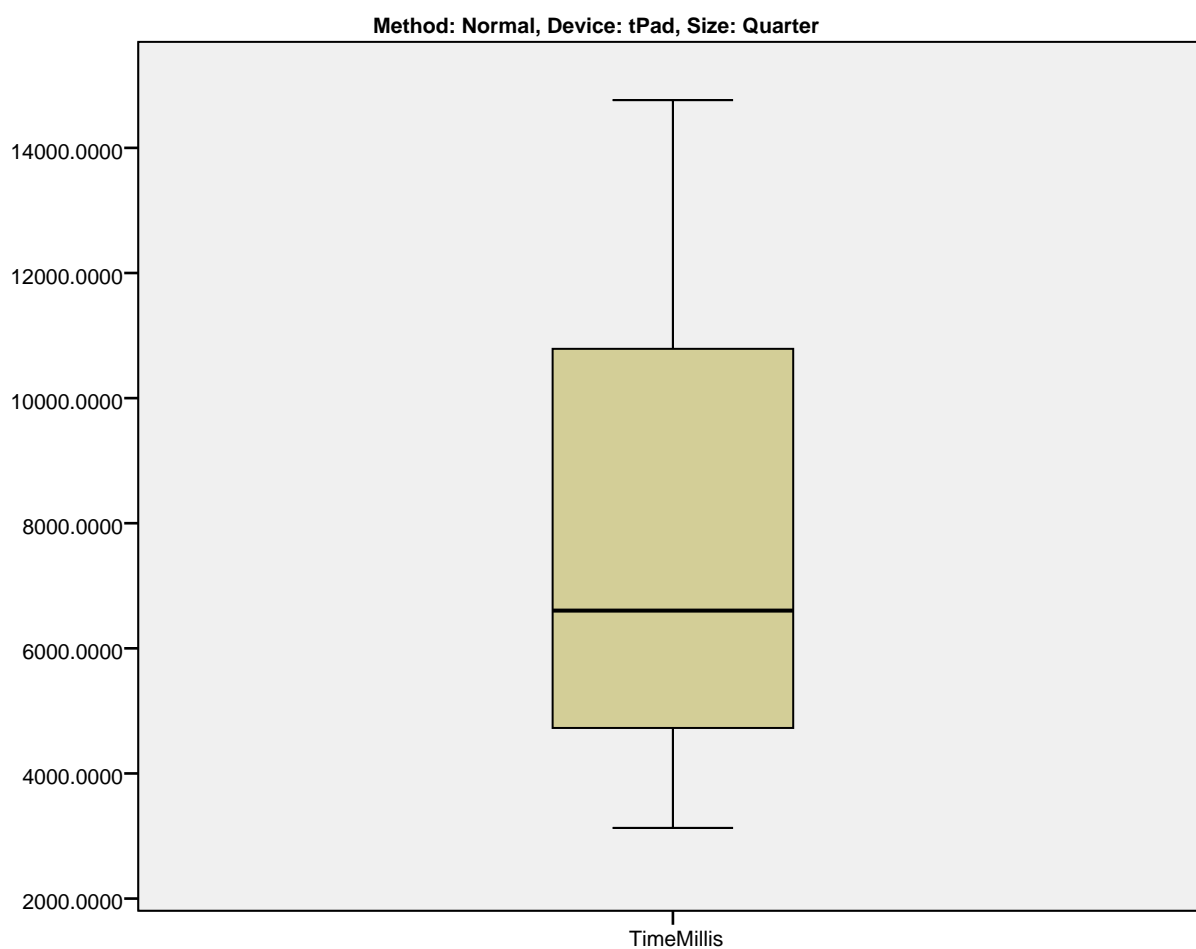


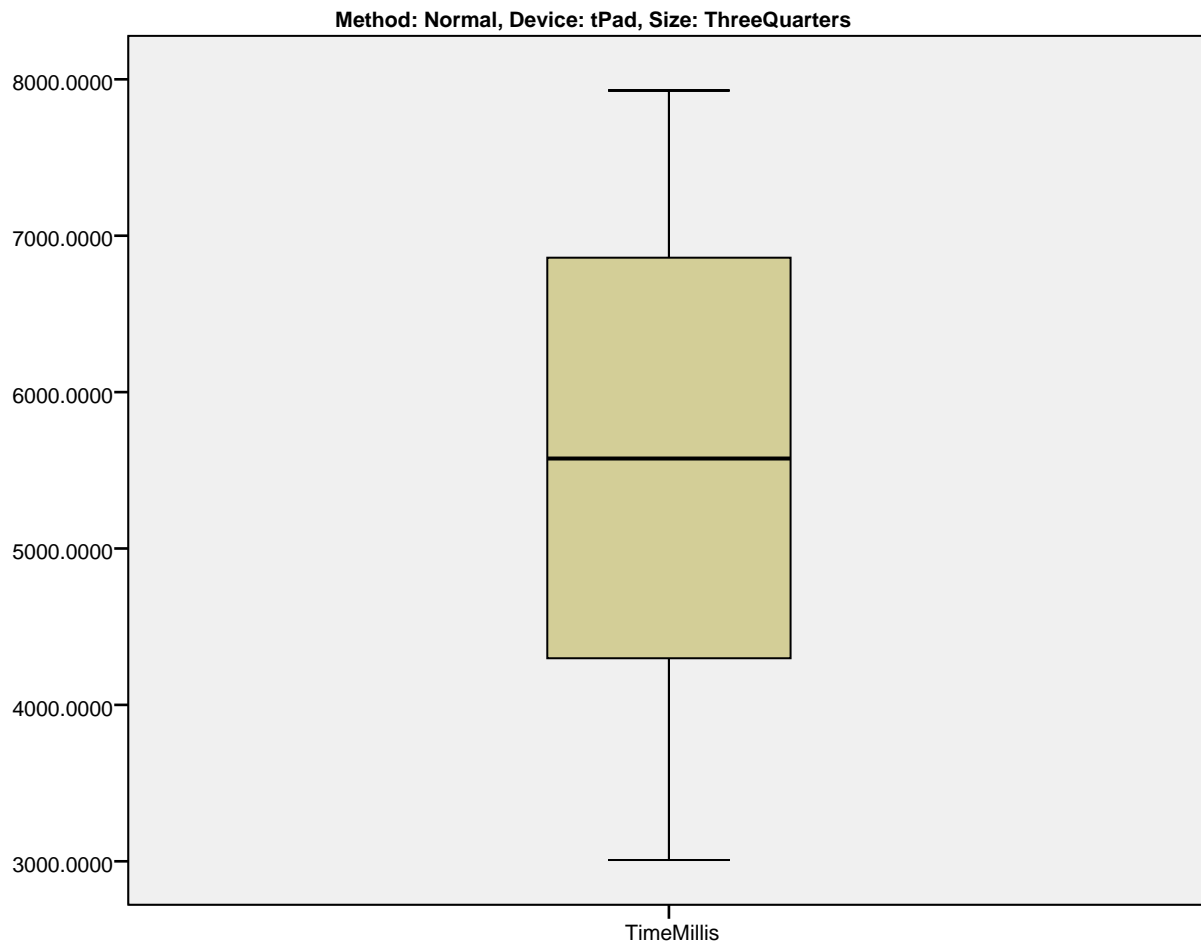












```

SPLIT FILE OFF.
SAVE OUTFILE='C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav'
/COMPRESSED.
UNIANOVA TimeMillis BY Device Method Size Participant
  /RANDOM=Participant
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=Size(BONFERRONI)
  /EMMEANS=TABLES(Device) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Method) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Size) COMPARE ADJ(BONFERRONI)
  /PRINT=HOMOGENEITY
  /CRITERIA=ALPHA(.05)

```

/DESIGN=Device Method Size Participant Device\*Method Device\*Size Device\*Participant Method\*Size Method\*Participant Size\*Participant Device\*Method\*Size Device\*Method\*Participant Device\*Size\*Participant Method\*Size\*Participant Device\*Method\*Size\*Participant.

## Univariate Analysis of Variance

### Notes

Output Created	02-Sep-2013 16:06:43	
Comments		
Input	Data	C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav
	Active Dataset	DataSet1
	Filter	ZTimeMillis > -3 & ZTimeMillis < 3 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	318
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	UNIANOVA TimeMillis BY Device Method Size Participant /RANDOM=Participant /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Size(BONFERRONI) /EMMEANS=TABLES(Device) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES(Method) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES(Size) COMPARE ADJ(BONFERRONI) /PRINT=HOMOGENEITY /CRITERIA=ALPHA(.05) /DESIGN=Device Method Size Participant Device*Method Device*Size Device*Participant Method*Size Method*Participant Size*Participant Device*Method*Size Device*Method*Participant Device*Size*Participant Method*Size*Participant Device*Method*Size*Participant.	
Resources	Processor Time	0:00:00.031
	Elapsed Time	0:00:00.039

[DataSet1] C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav

### Between-Subjects Factors

		N
Device	Normal	160
	tPad	158
Method	Clipped	157
	Normal	161
Size	Half	106
	Quarter	106
	ThreeQuarters	106
Participant	P1	103
	P2	107
	P3	108

### Levene's Test of Equality of Error Variances

Dependent Variable: TimeMillis

F	df1	df2	Sig.
3.499	35	282	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Device + Method + Size + Participant + Device \* Method + Device \* Size + Device \* Participant + Method \* Size + Method \* Participant + Size \* Participant + Device \* Method \* Size + Device \* Method \* Participant + Device \* Size \* Participant + Method \* Size \* Participant + Device \* Method \* Size \* Participant

# Tests of Between-Subjects Effects

Dependent Variable:TimeMillis

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	5.209E10	1	5.209E10
	Error	3.956E9	2.000	1.978E9
Device	Hypothesis	3.586E9	1	3.586E9
	Error	4.831E8	2.000	2.416E8
Method	Hypothesis	5.351E9	1	5.351E9
	Error	3.827E8	2.000	1.913E8
Size	Hypothesis	7.745E7	2	3.873E7
	Error	1.228E8	4.001	3.070E7
Participant	Hypothesis	3.957E9	2	1.979E9
	Error	6.149E8	1.948	3.156E8
Device * Method	Hypothesis	2.321E8	1	2.321E8
	Error	1.115E8	2.000	5.576E7
Device * Size	Hypothesis	1.658E7	2	8288821.274
	Error	2.700E8	4.000	6.748E7
Device * Participant	Hypothesis	4.832E8	2	2.416E8
	Error	3.608E8	3.586	1.006E8
Method * Size	Hypothesis	9.862E7	2	4.931E7
	Error	1.899E8	4.001	4.748E7
Method * Participant	Hypothesis	3.828E8	2	1.914E8
	Error	2.330E8	2.891	8.060E7
Size * Participant	Hypothesis	1.228E8	4	3.070E7
	Error	4.298E8	4.655	9.232E7
Device * Method * Size	Hypothesis	1.822E8	2	9.112E7
	Error	9.066E7	4.001	2.266E7

- 1.000 MS(Participant) + .000 MS(Error)
- 1.000 MS(Device \* Participant) + .000 MS(Error)
- 1.000 MS(Method \* Participant) + .000 MS(Error)
- 1.000 MS(Size \* Participant) + .000 MS(Error)
- MS(Device \* Participant) + MS(Method \* Participant) + 1.000 MS(Size \* Participant) - MS(Device \* Method \* Participant) - 1.000 MS(Device \* Size \* Participant) - 1.000 MS(Method \* Size \* Participant) + 1.000 MS(Device \* Method \* Size \* Participant)
- 1.000 MS(Device \* Method \* Participant) + .000 MS(Error)
- 1.000 MS(Device \* Size \* Participant) + .000 MS(Error)
- MS(Device \* Method \* Participant) + 1.000 MS(Device \* Size \* Participant) - 1.000 MS(Device \* Method \* Size \* Participant)
- 1.000 MS(Method \* Size \* Participant) + .000 MS(Error)
- MS(Device \* Method \* Participant) + 1.000 MS(Method \* Size \* Participant) - 1.000 MS(Device \* Method \* Size \* Participant)
- MS(Device \* Size \* Participant) + MS(Method \* Size \* Participant) - MS(Device \* Method \* Size \* Participant)
- 1.000 MS(Device \* Method \* Size \* Participant) + .000 MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:TimeMillis

Source		F	Sig.
Intercept	Hypothesis	26.336	.036
Device	Hypothesis	14.845	.061
Method	Hypothesis	27.968	.034
Size	Hypothesis	1.261	.376
Participant	Hypothesis	6.269	.142
Device * Method	Hypothesis	4.162	.178
Device * Size	Hypothesis	.123	.888
Device * Participant	Hypothesis	2.402	.218
Method * Size	Hypothesis	1.039	.433
Method * Participant	Hypothesis	2.374	.245
Size * Participant	Hypothesis	.333	.845
Device * Method * Size	Hypothesis	4.022	.110



### Tests of Between-Subjects Effects

Dependent Variable:TimeMillis

Source		Type III Sum of Squares	df	Mean Square
Device * Method * Participant	Hypothesis	1.115E8	2	5.577E7
	Error	9.064E7	4.000	2.266E7
Device * Size * Participant	Hypothesis	2.700E8	4	6.750E7
	Error	9.063E7	4	2.266E7
Method * Size * Participant	Hypothesis	1.899E8	4	4.749E7
	Error	9.063E7	4	2.266E7
Device * Method * Size * Participant	Hypothesis	9.063E7	4	2.266E7
	Error	3.916E9	282	1.389E7

m.  $1.000 \text{ MS}(\text{Device} * \text{Method} * \text{Size} * \text{Participant}) + 3.47\text{E-}005 \text{ MS}(\text{Error})$

n.  $\text{MS}(\text{Device} * \text{Method} * \text{Size} * \text{Participant})$

o.  $\text{MS}(\text{Error})$

### Tests of Between-Subjects Effects

Dependent Variable:TimeMillis

Source		F	Sig.
Device * Method * Participant	Hypothesis	2.461	.201
Device * Size * Participant	Hypothesis	2.979	.158
Method * Size * Participant	Hypothesis	2.096	.246
Device * Method * Size * Participant	Hypothesis	1.632	.166

**Expected Mean Squares<sup>a,b</sup>**

Source	Variance Component			
	Var (Participant)	Var(Device * Participant)	Var(Method * Participant)	Var(Size * Participant)
Intercept	105.796	52.898	52.898	35.265
Device	.000	52.898	.000	.000
Method	.000	.000	52.898	.000
Size	.000	.000	.000	35.265
Participant	105.822	52.911	52.911	35.274
Device * Method	.000	.000	.000	.000
Device * Size	.000	.000	.000	.000
Device * Participant	.000	52.911	.000	.000
Method * Size	.000	.000	.000	.000
Method * Participant	.000	.000	52.911	.000
Size * Participant	.000	.000	.000	35.275
Device * Method * Size	.000	.000	.000	.000
Device * Method * Participant	.000	.000	.000	.000
Device * Size * Participant	.000	.000	.000	.000
Method * Size * Participant	.000	.000	.000	.000

a. For each source, the expected mean square equals the sum of the coefficients in the cells times the variance components, plus a quadratic term involving effects in the Quadratic Term cell.

b. Expected Mean Squares are based on the Type III Sums of Squares.

**Expected Mean Squares<sup>a,b</sup>**

Source	Variance Component				
	Var(Device * Method * Participant)	Var(Device * Size * Participant)	Var(Method * Size * Participant)	Var(Device * Method * Size * Participant)	Var(Error)
Intercept	26.449	17.633	17.633	8.816	1.000
Device	26.449	17.633	.000	8.816	1.000
Method	26.449	.000	17.633	8.816	1.000
Size	.000	17.633	17.633	8.816	1.000
Participant	26.455	17.637	17.637	8.818	1.000
Device * Method	26.449	.000	.000	8.816	1.000
Device * Size	.000	17.633	.000	8.816	1.000
Device * Participant	26.455	17.637	.000	8.818	1.000
Method * Size	.000	.000	17.633	8.816	1.000
Method * Participant	26.455	.000	17.637	8.818	1.000
Size * Participant	.000	17.638	17.638	8.819	1.000
Device * Method * Size	.000	.000	.000	8.816	1.000
Device * Method * Participant	26.455	.000	.000	8.818	1.000
Device * Size * Participant	.000	17.638	.000	8.819	1.000
Method * Size * Participant	.000	.000	17.638	8.819	1.000

a. For each source, the expected mean square equals the sum of the coefficients in the cells times the variance components, plus a quadratic term involving effects in the Quadratic Term cell.

b. Expected Mean Squares are based on the Type III Sums of Squares.

Expected Mean Squares<sup>a,b</sup>

Source	Variance ...
	Quadratic Term
Intercept	Intercept, Device, Method, Size, Device * Method, Device * Size, Method * Size, Device * Method * Size
Device	Device, Device * Method, Device * Size, Device * Method * Size
Method	Method, Device * Method, Method * Size, Device * Method * Size
Size	Size, Device * Size, Method * Size, Device * Method * Size
Participant	
Device * Method	Device * Method, Device * Method * Size
Device * Size	Device * Size, Device * Method * Size
Device * Participant	
Method * Size	Method * Size, Device * Method * Size
Method * Participant	
Size * Participant	
Device * Method * Size	Device * Method * Size
Device * Method * Participant	
Device * Size * Participant	
Method * Size * Participant	

a. For each source, the expected mean square equals the sum of the coefficients in the cells times the variance components, plus a quadratic term involving effects in the Quadratic Term cell.

b. Expected Mean Squares are based on the Type III Sums of Squares.

### Expected Mean Squares<sup>a,b</sup>

Source	Variance Component			
	Var (Participant)	Var(Device * Participant)	Var(Method * Participant)	Var(Size * Participant)
Device * Method * Size * Participant	.000	.000	.000	.000
Error	.000	.000	.000	.000

a. For each source, the expected mean square equals the sum of the coefficients in the cells times the variance components, plus a quadratic term involving effects in the Quadratic Term cell.

b. Expected Mean Squares are based on the Type III Sums of Squares.

### Expected Mean Squares<sup>a,b</sup>

Source	Variance Component				
	Var(Device * Method * Participant)	Var(Device * Size * Participant)	Var(Method * Size * Participant)	Var(Device * Method * Size * Participant)	Var(Error)
Device * Method * Size * Participant	.000	.000	.000	8.819	1.000
Error	.000	.000	.000	.000	1.000

a. For each source, the expected mean square equals the sum of the coefficients in the cells times the variance components, plus a quadratic term involving effects in the Quadratic Term cell.

b. Expected Mean Squares are based on the Type III Sums of Squares.

### Expected Mean Squares<sup>a,b</sup>

Source	Variance ...
	Quadratic Term
Device * Method * Size * Participant	
Error	

a. For each source, the expected mean square equals the sum of the coefficients in the cells times the variance components, plus a quadratic term involving effects in the Quadratic Term cell.

b. Expected Mean Squares are based on the Type III Sums of Squares.

## Estimated Marginal Means

### 1. Device

#### Estimates

Dependent Variable: TimeMillis

Device	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Normal	16172.872	294.817	15592.550	16753.194
tPad	9450.163	296.830	8865.880	10034.446

### Pairwise Comparisons

Dependent Variable:TimeMillis

(I) Device	(J) Device	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Normal	tPad	6722.709	418.360	.000	5899.204	7546.214
tPad	Normal	-6722.709	418.360	.000	-7546.214	-5899.204

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable:TimeMillis

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	3.586E9	1	3.586E9	258.219	.000
Error	3.916E9	282	1.389E7		

The F tests the effect of Device. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

## 2. Method

### Estimates

Dependent Variable:TimeMillis

Method	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Clipped	16917.687	297.831	16331.433	17503.941
Normal	8705.348	293.806	8127.017	9283.679

### Pairwise Comparisons

Dependent Variable:TimeMillis

(I) Method	(J) Method	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Clipped	Normal	8212.339	418.360	.000	7388.834	9035.844
Normal	Clipped	-8212.339	418.360	.000	-9035.844	-7388.834

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable:TimeMillis

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	5.351E9	1	5.351E9	385.330	.000
Error	3.916E9	282	1.389E7		

The F tests the effect of Method. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

### 3. Size

#### Estimates

Dependent Variable:TimeMillis

Size	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Half	12251.127	362.310	11537.950	12964.303
Quarter	13452.971	362.310	12739.795	14166.147
ThreeQuarters	12730.455	362.310	12017.279	13443.631

#### Pairwise Comparisons

Dependent Variable:TimeMillis

(I) Size	(J) Size	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>
Half	Quarter	-1201.844	512.384	.059
	ThreeQuarters	-479.328	512.384	1.000
Quarter	Half	1201.844	512.384	.059
	ThreeQuarters	722.516	512.384	.479
ThreeQuarters	Half	479.328	512.384	1.000
	Quarter	-722.516	512.384	.479

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.



### Pairwise Comparisons

Dependent Variable: TimeMillis

		95% Confidence Interval for Difference	
(I) Size	(J) Size	Lower Bound	Upper Bound
Half	Quarter	-2435.844	32.155
	ThreeQuarters	-1713.328	754.671
Quarter	Half	-32.155	2435.844
	ThreeQuarters	-511.484	1956.515
ThreeQuarters	Half	-754.671	1713.328
	Quarter	-1956.515	511.484

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable: TimeMillis

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	7.745E7	2	3.873E7	2.788	.063
Error	3.916E9	282	1.389E7		

The F tests the effect of Size. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

## Post Hoc Tests

### Size

#### Multiple Comparisons

TimeMillis  
Bonferroni

(I) Size	(J) Size	Mean Difference (I-J)	Std. Error	Sig.
Half	Quarter	-1037.672560	511.8909250	.131
	ThreeQuarters	-569.475969	511.8909250	.801
Quarter	Half	1037.672560	511.8909250	.131
	ThreeQuarters	468.196592	511.8909250	1.000
ThreeQuarters	Half	569.475969	511.8909250	.801
	Quarter	-468.196592	511.8909250	1.000

Based on observed means.

The error term is Mean Square(Error) = 13887712.912.

## Multiple Comparisons

TimeMillis  
Bonferroni

		95% Confidence Interval	
(I) Size	(J) Size	Lower Bound	Upper Bound
Half	Quarter	-2270.483533	195.138412
	ThreeQuarters	-1802.286941	663.335004
Quarter	Half	-195.138412	2270.483533
	ThreeQuarters	-764.614381	1701.007564
ThreeQuarters	Half	-663.335004	1802.286941
	Quarter	-1701.007564	764.614381

Based on observed means.

The error term is Mean Square(Error) = 13887712.912.

GET

FILE='C:\Users\common\Desktop\tpad\Experiment 2 - InfCapture\exp2-consolidated.sav'.

UNIANOVA TimeMillis BY Device Method Size

/METHOD=SSTYPE(3)

/INTERCEPT=INCLUDE

/CRITERIA=ALPHA(0.05)

/DESIGN=Device Method Size Device\*Method Device\*Size Method\*Size Device\*Method\*Size.

## Univariate Analysis of Variance

### Notes

Output Created		02-Sep-2013 17:12:14
Comments		
Input	Data	C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav
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	Split File	<none>
	N of Rows in Working Data File	324
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA TimeMillis BY Device Method Size /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /CRITERIA=ALPHA(0.05) /DESIGN=Device Method Size Device*Method Device*Size Method*Size Device*Method*Size.
Resources	Processor Time	0:00:00.015
	Elapsed Time	0:00:00.005

[DataSet1] C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav

### Between-Subjects Factors

		N
Device	Normal	162
	tPad	162
Method	Clipped	162
	Normal	162
Size	Half	108
	Quarter	108
	ThreeQuarters	108

### Tests of Between-Subjects Effects

Dependent Variable: TimeMillis

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.033E10	11	9.391E8	16.562	.000
Intercept	5.817E10	1	5.817E10	1025.906	.000
Device	3.097E9	1	3.097E9	54.617	.000
Method	6.674E9	1	6.674E9	117.704	.000
Size	4.285E7	2	2.142E7	.378	.686
Device * Method	1.776E8	1	1.776E8	3.132	.078
Device * Size	5.499E7	2	2.750E7	.485	.616
Method * Size	3.845E7	2	1.923E7	.339	.713
Device * Method * Size	2.455E8	2	1.227E8	2.165	.116
Error	1.769E10	312	5.670E7		
Total	8.619E10	324			
Corrected Total	2.802E10	323			

a. R Squared = .369 (Adjusted R Squared = .346)

UNIANOVA Angle BY Device Method Size

/METHOD=SSTYPE(3)

/INTERCEPT=INCLUDE

/CRITERIA=ALPHA(0.05)

/DESIGN=Device Method Size Device\*Method Device\*Size Method\*Size Device\*Method\*Size.

### Univariate Analysis of Variance

### Notes

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	Split File	<none>
	N of Rows in Working Data File	324
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Angle BY Device Method Size /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /CRITERIA=ALPHA(0.05) /DESIGN=Device Method Size Device*Method Device*Size Method*Size Device*Method*Size.
Resources	Processor Time	0:00:00.016
	Elapsed Time	0:00:00.011

[DataSet1] C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav

### Between-Subjects Factors

		N
Device	Normal	162
	tPad	162
Method	Clipped	162
	Normal	162
Size	Half	108
	Quarter	108
	ThreeQuarters	108

### Tests of Between-Subjects Effects

Dependent Variable:Angle

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	36.860 <sup>a</sup>	11	3.351	5.905	.000
Intercept	312.531	1	312.531	550.750	.000
Device	1.575	1	1.575	2.775	.097
Method	1.576	1	1.576	2.778	.097
Size	9.968	2	4.984	8.783	.000
Device * Method	2.033	1	2.033	3.583	.059
Device * Size	2.865	2	1.432	2.524	.082
Method * Size	5.976	2	2.988	5.265	.006
Device * Method * Size	12.867	2	6.434	11.337	.000
Error	177.049	312	.567		
Total	526.441	324			
Corrected Total	213.909	323			

a. R Squared = .172 (Adjusted R Squared = .143)

```

USE ALL.
FILTER BY filter_$.
EXECUTE.
SAVE OUTFILE='C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav'
/COMPRESSED.
USE ALL.
COMPUTE filter_$(ZTimeMillis > -3 & ZTimeMillis < 3 & Method = "Clipped").
VARIABLE LABEL filter_$ 'ZTimeMillis > -3 & ZTimeMillis < 3 & Method = "Clipped" (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
UNIANOVA CaptureRatio BY Device Method Size
/METHOD=SSTYPE(3)
/INTERCEPT=INCLUDE
/CRITERIA=ALPHA(0.05)
/DESIGN=Device Method Size Device*Method Device*Size Method*Size Device*Method*Size.

UNIANOVA CaptureRatio BY Device Method Size
/METHOD=SSTYPE(3)
/INTERCEPT=INCLUDE

```

```

/EMMEANS=TABLES(Device) COMPARE ADJ(BONFERRONI)
/EMMEANS=TABLES(Size) COMPARE ADJ(BONFERRONI)
/CRITERIA=ALPHA(.05)
/DESIGN=Device Method Size Device*Method Device*Size Method*Size Device*Met
hod*Size.

```

## Univariate Analysis of Variance

### Notes

Output Created	02-Sep-2013 17:17:07	
Comments		
Input	Data	C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav
	Active Dataset	DataSet1
	Filter	ZTimeMillis > -3 & ZTimeMillis < 3 & Method = "Clipped" (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	157
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	UNIANOVA CaptureRatio BY Device Method Size /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /EMMEANS=TABLES(Device) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES(Size) COMPARE ADJ(BONFERRONI) /CRITERIA=ALPHA(.05) /DESIGN=Device Method Size Device*Method Device*Size Method*Size Device*Method*Size.	
Resources	Processor Time	0:00:00.016
	Elapsed Time	0:00:00.016

[DataSet1] C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav

### Between-Subjects Factors

		N
Device	Normal	79
	tPad	78
Method	Clipped	157
Size	Half	52
	Quarter	52
	ThreeQuarters	53

### Tests of Between-Subjects Effects

Dependent Variable: CaptureRatio

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.927 <sup>a</sup>	5	.185	15.320	.000
Intercept	226.691	1	226.691	18736.924	.000
Device	.052	1	.052	4.276	.040
Method	.000	0	.	.	.
Size	.819	2	.409	33.834	.000
Device * Method	.000	0	.	.	.
Device * Size	.054	2	.027	2.231	.111
Method * Size	.000	0	.	.	.
Device * Method * Size	.000	0	.	.	.
Error	1.827	151	.012		
Total	229.319	157			
Corrected Total	2.754	156			

a. R Squared = .337 (Adjusted R Squared = .315)

## Estimated Marginal Means

### 1. Device

#### Estimates

Dependent Variable: CaptureRatio

Device	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Normal	1.184	.012	1.159	1.208
tPad	1.220	.012	1.195	1.245



### Pairwise Comparisons

Dependent Variable: CaptureRatio

(I) Device	(J) Device	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Normal	tPad	-.036	.018	.040	-.071	-.002
tPad	Normal	.036	.018	.040	.002	.071

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable: CaptureRatio

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	.052	1	.052	4.276	.040
Error	1.827	151	.012		

The F tests the effect of Device. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

## 2. Size

### Estimates

Dependent Variable: CaptureRatio

Size	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Half	1.149	.015	1.119	1.179
Quarter	1.304	.015	1.274	1.334
ThreeQuarters	1.152	.015	1.122	1.182

### Pairwise Comparisons

Dependent Variable: CaptureRatio

(I) Size	(J) Size	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>
Half	Quarter	-.155	.022	.000
	ThreeQuarters	-.003	.021	1.000
Quarter	Half	.155*	.022	.000
	ThreeQuarters	.152*	.021	.000
ThreeQuarters	Half	.003	.021	1.000
	Quarter	-.152*	.021	.000

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

### Pairwise Comparisons

Dependent Variable: CaptureRatio

(I) Size	(J) Size	95% Confidence Interval for Difference	
		Lower Bound	Upper Bound
Half	Quarter	-.207	-.103
	ThreeQuarters	-.055	.048
Quarter	Half	.103	.207
	ThreeQuarters	.100	.204
ThreeQuarters	Half	-.048	.055
	Quarter	-.204	-.100

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable: CaptureRatio

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	.819	2	.409	33.834	.000
Error	1.827	151	.012		

The F tests the effect of Size. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

UNIANOVA MissRatio BY Device Method Size

/METHOD=SSTYPE(3)

/INTERCEPT=INCLUDE

/EMMEANS=TABLES(Device) COMPARE ADJ(BONFERRONI)

/EMMEANS=TABLES(Size) COMPARE ADJ(BONFERRONI)

```

/CRITERIA=ALPHA(.05)
/DESIGN=Device Method Size Device*Method Device*Size Method*Size Device*Met
hod*Size.

```

## Univariate Analysis of Variance

Notes		
Output Created		02-Sep-2013 17:17:44
Comments		
Input	Data	C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav
	Active Dataset	DataSet1
	Filter	ZTimeMillis > -3 & ZTimeMillis < 3 & Method = "Clipped" (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	157
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA MissRatio BY Device Method Size /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /EMMEANS=TABLES(Device) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES(Size) COMPARE ADJ(BONFERRONI) /CRITERIA=ALPHA(.05) /DESIGN=Device Method Size Device*Method Device*Size Method*Size Device*Method*Size.
Resources	Processor Time	0:00:00.015
	Elapsed Time	0:00:00.016

[DataSet1] C:\Users\common\Desktop\tPad\Experiment 2 - InfCapture\exp2-consolidated.sav

### Between-Subjects Factors

		N
Device	Normal	79
	tPad	78
Method	Clipped	157
Size	Half	52
	Quarter	52
	ThreeQuarters	53

### Tests of Between-Subjects Effects

Dependent Variable: MissRatio

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.010 <sup>a</sup>	5	.002	.916	.472
Intercept	.008	1	.008	3.967	.048
Device	.002	1	.002	.882	.349
Method	.000	0	.	.	.
Size	.004	2	.002	.845	.432
Device * Method	.000	0	.	.	.
Device * Size	.004	2	.002	1.011	.366
Method * Size	.000	0	.	.	.
Device * Method * Size	.000	0	.	.	.
Error	.319	151	.002		
Total	.337	157			
Corrected Total	.329	156			

a. R Squared = .029 (Adjusted R Squared = -.003)

## Estimated Marginal Means

### 1. Device

#### Estimates

Dependent Variable: MissRatio

Device	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Normal	.011	.005	.001	.021
tPad	.004	.005	-.006	.014

### Pairwise Comparisons

Dependent Variable:MissRatio

(I) Device	(J) Device	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Normal	tPad	.007	.007	.349	-.008	.021
tPad	Normal	-.007	.007	.349	-.021	.008

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable:MissRatio

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	.002	1	.002	.882	.349
Error	.319	151	.002		

The F tests the effect of Device. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

## 2. Size

### Estimates

Dependent Variable:MissRatio

Size	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Half	.014	.006	.001	.026
Quarter	.006	.006	-.007	.018
ThreeQuarters	.002	.006	-.010	.015

### Pairwise Comparisons

Dependent Variable:MissRatio

(I) Size	(J) Size	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>
Half	Quarter	.008	.009	1.000
	ThreeQuarters	.011	.009	.627
Quarter	Half	-.008	.009	1.000
	ThreeQuarters	.003	.009	1.000
ThreeQuarters	Half	-.011	.009	.627
	Quarter	-.003	.009	1.000

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

### Pairwise Comparisons

Dependent Variable:MissRatio

(I) Size	(J) Size	95% Confidence Interval for Difference	
		Lower Bound	Upper Bound
Half	Quarter	-.014	.030
	ThreeQuarters	-.010	.033
Quarter	Half	-.030	.014
	ThreeQuarters	-.019	.025
ThreeQuarters	Half	-.033	.010
	Quarter	-.025	.019

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable:MissRatio

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	.004	2	.002	.845	.432
Error	.319	151	.002		

The F tests the effect of Size. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.