

Design Score Report

Eye-Tracking based Insights

Agenda

This report contains:

1. Purpose of the study
2. Methodology
3. Study results
4. Summary
5. Appendix - methodology



Purpose - Design Analysis

Provide eye-tracking analysis for 3 billboard creatives to find out **which parts of them grab viewers attention most** and match design expectations.

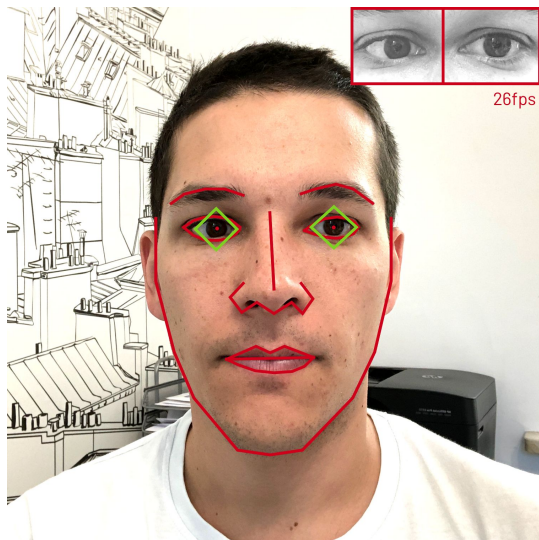
This is based on chosen by customer Areas Of Interest (AOIs) - it may be performed even before launching a campaign.



AOIs & their wages for chosen creatives: iPhone, Samsung S10 "White", Samsung S10+ "Black"

Methodology - Eye-Tracking

RealEye register all the **testers gaze-points** while they're watching the creatives, using regular webcams. Set of gaze-points allow us to calculate **Design Score**.



Eye-tracking algorithm



Gaze points presented on a sample creation

Methodology - Design Analysis

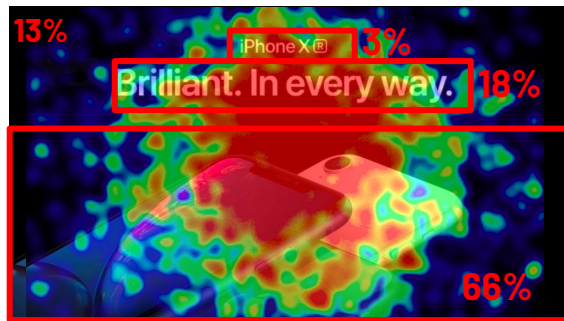
The **Design Score** is based on expected **exposure time vs. real exposure time** for chosen areas. The design score is higher the smaller the difference between expected vs real exposure times.

RealEye sums up and normalizes all AOl's offsets to calculate the **Design Score**.

example (read more in appendix)



Expected exposure time



Real data exposure time

$$|10\% - 3\%| = 0.07$$

$$|30\% - 18\%| = 0.12$$

$$|60\% - 66\%| = 0.06$$

$$S = 1 - (0.07 + 0.12 + 0.06) / 2 =$$

87.5%

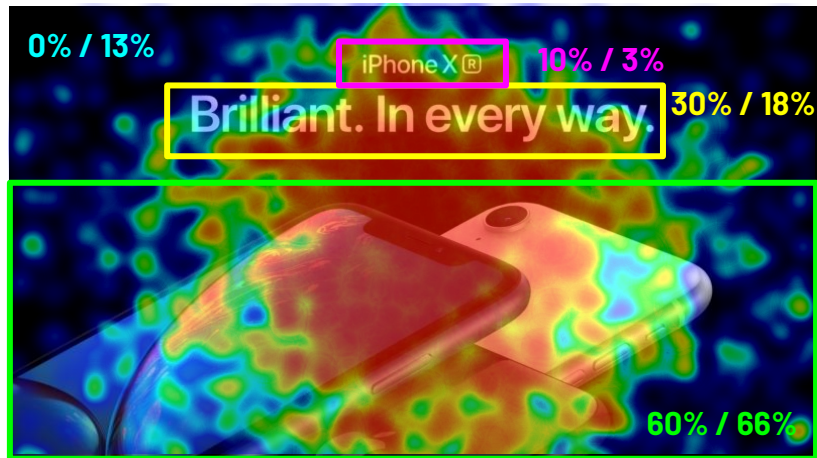
Methodology - Glossary

- **AOI - Area Of Interest**, an area for which eye-tracking data is calculated (i.e. total time spent looking at this particular area).
- **Expected exposure time** - expected time for a given area to be viewed (% of total time).
- **Real exposure time** - real time that a given area was viewed (% of total time).
- **Design Score** - total score for a given design; it describes how close the design is to the expectations.

Design Score Results

Analysis made on N = 150 testers

Design Results – iPhone X



Expected vs Real exposure time (% of total time)

This billboard fulfills assumed expectations satisfactorily. **It's score is in the high range.**

- Visual part was noticed as planned
- Claim "Brilliant. In every way" got ~12ppt less attention than expected,
- The brand got only 3% of attention while the desired level was on 10%,

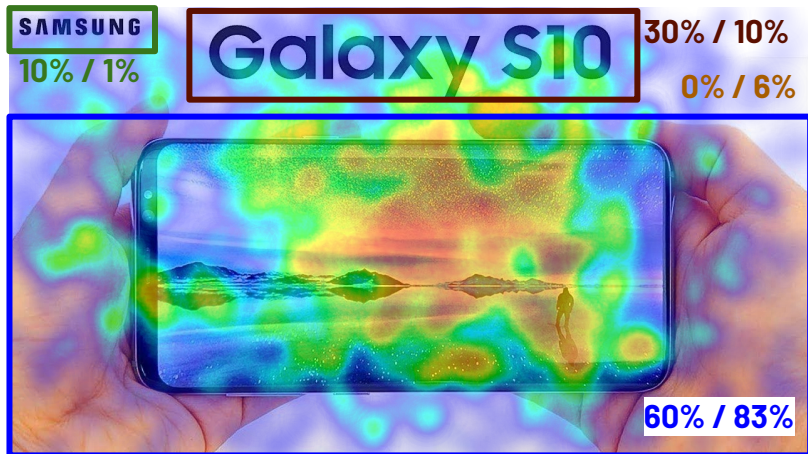
Potential improvements: brand and claim visibility should be improved by making it bigger

Design Score Calculation

- $|10\% - 3\%| = 0.07$
- $|30\% - 18\%| = 0.12$
- $|60\% - 66\%| = 0.06$
- background score

$$\text{Design Score} = 1 - (0.07 + 0.12 + 0.06) / 2 = \mathbf{87.5\%}$$

Design Results - Samsung S10 "White"



This billboard fulfills assumed expectations with **medium Score**.

- The brand got only 1% of attention while the desired level was on 10%,
- Brand got 20ppt less attention than expected,
- Visual part was noticed more than planned and took attention from other parts

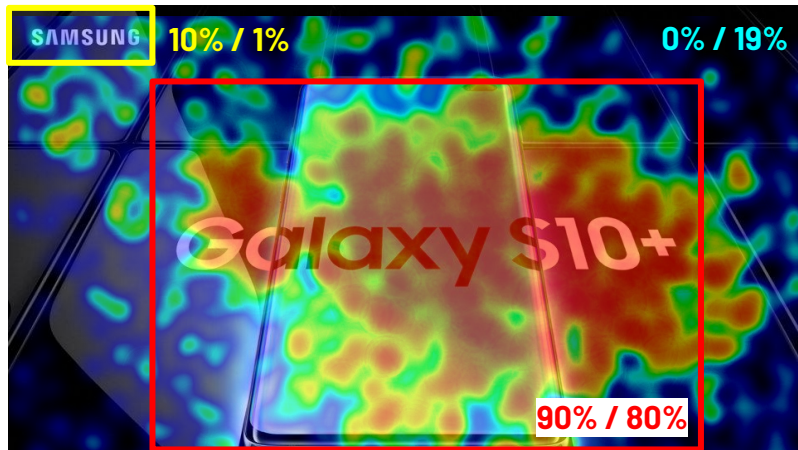
Potential improvements: brand visibility should be improved, "Galaxy S10" caption may be smaller to catch less attention

Design Score Calculation

- $|10\% - 1\%| = 0.09$
- $|30\% - 10\%| = 0.2$
- $|60\% - 83\%| = 0.23$
- background score

$$\text{Design Score} = 1 - (0.09 + 0.2 + 0.23) / 2 = \mathbf{74\%}$$

Design Results – Samsung S10+ “Black”



Expected vs Real exposure time (% of total time)

This billboard highly fulfills assumed expectations.

The design score falls in the top range.

- Visual part was noticed almost as highly as planned with 10ppt offset,
- The logotype got only 1% of attention while the desired level was on 10%,

Potential improvements: boosting Samsung logotype visibility by increasing its size.

Design Score Calculation

■ $|10\% - 1\%| = 0.09$

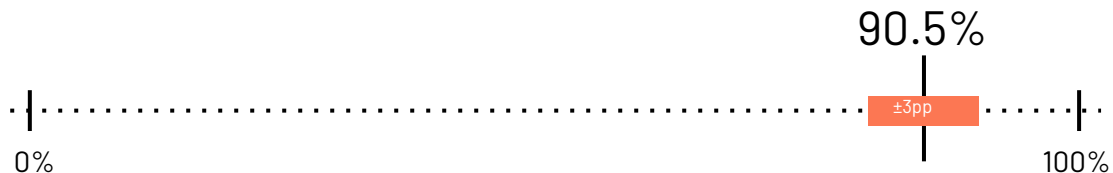
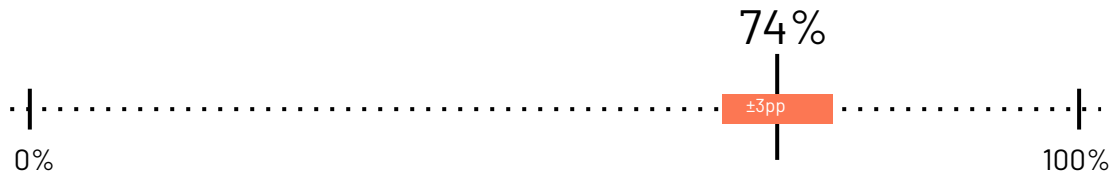
■ $|90\% - 80\%| = 0.1$

■ background score

$$\text{Design Score} = 1 - (0.09 + 0.1) / 2 = \mathbf{90.5\%}$$

Design Results - summary

Design Score for all creatives compared to each other



Conclusions

- All 3 creatives Scored above average level and all are definitely **fulfilling assumed expectations** - viewers are noticing all key parts of them with ease,
- **Samsung "Black"** Design Score is 90.5% which means that the information architecture was made really well in comparison to design expectations,
- all 3 billboards had an expectation to expose brand at 10% of view time but **none of them got higher result than 3%** - maybe expectation was not defined well.



iPhone X



Samsung S10 "White"



Samsung S10+ "Black"

Appendix: Methodology – Design Analysis

The **Design Score** [S] is calculated using an equation below:

$$S = 1 - \frac{\sum_1^N S_n}{2}$$

$$S_n = |expected\ time\ [0; 1] - real\ time\ [0; 1]|$$

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- **S_n** - **Score** of given AOI
 - **S** - **Design Score** is a score of all AOI's summed up for a studied design and normalized
 - **expected (exposure) time** - time a designer expect for a given element to be viewed
 - **real (exposure) time** - average time per view multiplied by percent of testers who have seen the given area expressed as a percent of a total time of the study (i.e. for 4 seconds study and 50 testers the whole study time is 200).

Contact us



We'll be happy to answer your questions!

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