



lightSTUDIO Interior

Interior equipment

18 November 2020



INTRODUCTION

lightSTUDIO is designed to be a reference scene that allows subjective image quality assessment. Therefore it comes with the complete interior, background chart and lightHEADS with different illuminants.

We try to keep the interior consistent as long as possible. But products may vary over time change or are no longer available. In these cases we search for an equivalent product.

The interior is available as replacement kit. The exchange of the interior can eliminate differences to older versions. Replacement kits are also ideal if pieces of the equipment are broken or filthy.

LIST OF INTERIOR

1. Text markers, 4 pieces
2. colored felt-tip pens, 24 pieces
3. Red, green and blue ball of wool
4. Teddy bear
5. Vine bottle
6. TE111 in white wooden frame
7. X-rite ColorChecker
8. Sieve, stainless steel
9. Wooden plate
10. Cork plate
11. Newspaper (cover paper reprinted to provide higher permanence)
12. Cup, plates and spoon, white porcelain and metal
13. Silverware (teaspoon and knife)
14. Purple chocolate packaging
15. Wicker basket
16. Rope
17. Bouquet of red roses (artificial)
18. Green vase
19. Artificial bananas (3), apples (3), pears (3) and bunch of grapes (1)
20. Ivy tendril (artificial)
21. Piece of gray cloth (reflecting NIR)
22. Piece of blue/white checked pattern
23. Piece of black cloth



1) The text markers represent high saturated (neon) colors.



2) A set of 24 different colored felt-tip pens.



3) The red, green, and blue colored balls of wool are used to visualize the camera's ability to reproduce low contrast/fine detail in different colors.



4) The Teddy Bear serves the same purpose as the wool balls but its brown color is composed of red, green and blue and therefore represents natural objects superiorly.



5) The wine bottle with fine details on the label is a challenge for the resolution of the camera. The sharpness and readability of the text is an important issue. In the dark areas the shadow details can be evaluated.



6) TE111: The three women represent human skin tone colors and in the image their reproduction by the camera.



7) If there is a standard color chart in the world it is the X-Rite ColorChecker. This chart is used everywhere to check the color fidelity of cameras.



8) Some cameras produce aliasing artifacts often also referred to as moiré. A camera reveals this problem typically with an object like a sieve.



9 + 10) Wooden structure and colors can be proofed by examining the reproduction of the wood and the cork plate in the image.



11) Sharpness, resolution, and text readability can be determined from the newspaper. The cover page has been reprinted on paper with a much higher image permanence than the original paper.



12 + 13) The cup, the plates, and the silverware exhibit highlight detail content.



14) Many cameras have problems reproducing the purple color of this chocolate brand.



15 + 16) Sharpness and resolution, as well as low contrast detail, can be surveyed from the rope. Our rope consists of structures with different spatial frequencies.



17 + 18) On the basis of the red roses in the green vase, details in high saturated colors as well as in shadows can be analyzed.



19) The artificial bananas, apples, grapes and pears can be used as memory colors and should look like natural food in the image.



20) Ivy tendril (artificial) has the same effect as the fruit, but here for plants.



21) The gray cloth reflects near IR to a certain extent. If the camera is sensitive in the near IR - which is usually prevented by using an IR-cut filter - the gray cloth will appear reddish.



22) Strong distortion as well as highlight details can be determined by means of the blue plaid pattern.



23) Shadow details can be scrutinized with the help of the black cloth.