

Before you begin using the ColorChecker Image Reproduction Target

- When using the Target, make sure the lighting conditions are similar to the conditions that will be used for the photo shoot.
- Make sure that your camera is properly White or Gray balanced for the photographic conditions under which you are shooting. To help in a white or gray balancing process you can use the Munsell Color White Balance or the Gray Scale card.
- Make sure that your computer monitor is calibrated.

Steps for using the chart

1. Place the ColorChecker chart in the setting that you plan to photograph.
2. Capture an image of the ColorChecker Chart using the desired camera settings.
3. Save the image in the format used in your normal workflow.
4. Open the saved image in Adobe Photoshop or similar software.
 Note: If you receive an error message regarding an embedded profile, do not convert! It is important to first evaluate the captured color without a profile conversion.
5. Place the ColorChecker Chart next to your Monitor in an ambient lighting condition that is similar to your computer monitors.
6. Using either your personal visual evaluation or the software's color tools, adjust the ColorChecker image to the desired color. For numerical values you will find the RGB and CIE L*a*b* values in the chart at the end of this document.

Some signs of color balance issues

- Check patch numbers 6 and 11. If there is a problem in the blues or the yellows, these two patches will reverse.
- Check the blue patch number 13. This patch will turn purple very easily if there is too much red (warmth) in the lighting.
- If the grays remain neutral but the above patches have changed, then you have either a blue, yellow or red problem. Make sure that there are no gels on the flash units and that the bulbs are in good condition.
- Learn more about color control in a color reproduction workflow at www.xrite.com or www.itlcolor.com.

No.	Number	sRGB			CIE L*a*b*			Munsell Notation Hue Value / Chroma
		R	G	B	L*	a*	b*	
1.	dark skin	115	82	68	37.986	13.555	14.059	3 YR 3.7/3.2
2.	light skin	194	150	130	65.711	18.13	17.81	2.2 YR 6.47/4.1
3.	blue sky	98	122	157	49.927	-4.88	-21.925	4.3 PB 4.95/5.5
4.	foliage	87	108	67	43.139	-13.095	21.905	6.7 GY 4.2/4.1
5.	blue flower	133	128	177	55.112	8.844	-25.399	9.7 PB 5.47/6.7
6.	bluish green	103	189	170	70.719	-33.397	-0.199	2.5 BG 7/6
7.	orange	214	126	44	62.661	36.067	57.096	5 YR 6/11
8.	purplish blue	80	91	166	40.002	10.41	-45.964	7.5 PB 4/10.7
9.	moderate red	193	90	99	51.124	48.239	16.248	2.5 R 5/10
10.	purple	94	60	108	30.325	22.976	-21.567	5 P 3/7
11.	yellow green	157	188	64	72.532	-23.709	57.255	5 YG 7.1/9.1
12.	orange yellow	224	163	46	71.941	19.363	67.857	10 YR 7/10.5
13.	blue	56	61	150	28.778	14.179	-50.297	7.5 PB 2.9/12.7
14.	green	70	148	73	55.261	-38.342	31.37	0.25 G 5.4/8.65
15.	red	175	54	60	42.101	53.378	28.19	5 R 4/12
16.	yellow	231	199	31	81.733	4.039	79.819	5 Y 8/11.1
17.	magenta	187	86	149	51.935	49.986	-14.574	2.5 RP 5/12
18.	cyan	8	133	161	51.038	-28.031	-28.638	5 B 5/8
19.	white (05*)	243	243	242	96.539	-0.425	1.186	N 9.5/1
20.	neutral 8 (23*)	200	200	200	81.257	-0.638	-0.335	N 8/
21.	neutral 6.5 (44*)	160	160	160	66.766	-0.734	-0.504	N 6.5/
22.	neutral 5 (70*)	122	122	121	50.867	-0.153	-0.27	N 5/
23.	neutral 3.5 (1.05*)	85	85	85	35.656	-0.421	-1.231	N 3.5/
24.	black (1.50*)	52	52	52	20.461	-0.079	-0.973	N 2/

Cie L*a*b* values use Illuminant D50 2 degree observer sRGB values for Illuminate D65.



Munsell Color

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Using Your ColorChecker®
 Image Reproduction Target

ColorChecker