Profile Report

2018-12-19

Ercoli Massimo :: Editing Line S.r.l.

General Profile Information

Name	PageWide_CSH_CartaBiancaDiatec_OK.icc
Path	/Users/Massimo/Desktop/Dati/.../PageWide_CSH_CartaBiancaDiatec_OK.icc
Size	1655388
Version	2.4
Class	prtr
ColorSpace	CMYK
PCS	Lab
Date	2018-12-19 17:22:32
Rendering	0
Creator	CoLg

1. Profile Statistic

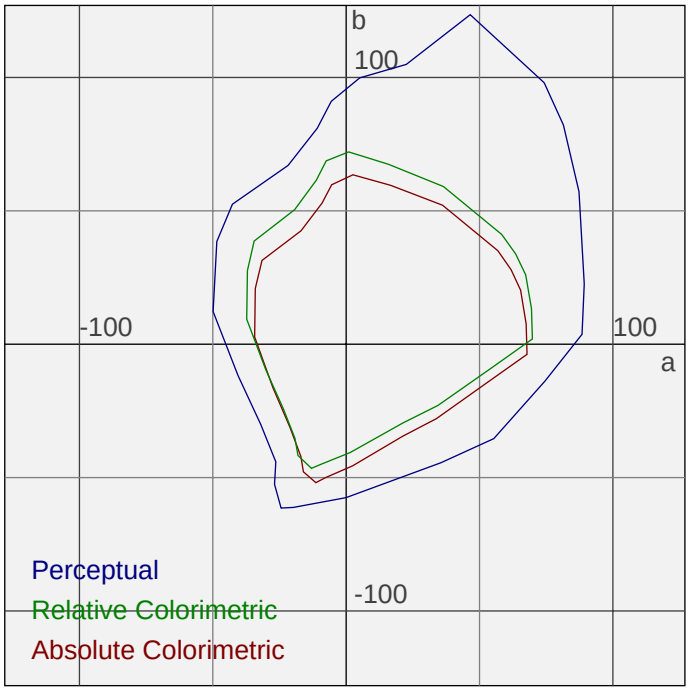
The statistic tests the profile integrity and some profile properties.
The profile integrity indicates how precise a profile converts between the color spaces. The integrity values are shown as average and maximum deviations.
The DCS to PCS statistic shows how precisely the profile matches the measurement data and should be very low.
The black point DCS for RGB profiles should be low or 0/0/0.
The black point DCS for CMYK+ profiles should match the allowed total amount of ink.
The black point PCS should be dark and approximately neutral.
The white point DCS should match the device white point.
The white point PCS should match Lab-White.

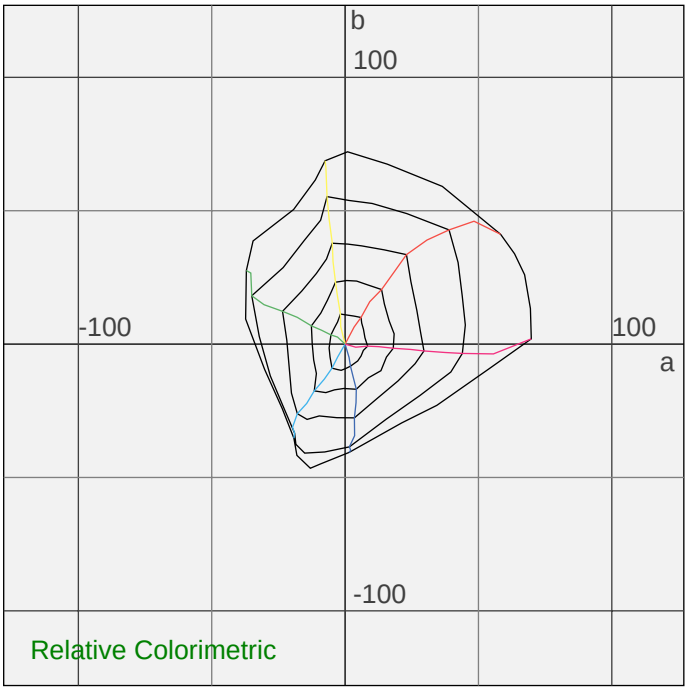
Integrity (DCS) perceptual	2.1/21.6 (Avg/Max CMYK)
Integrity (DCS) relative colorimetric	2.2/15.7 (Avg/Max CMYK)
Integrity (DCS) saturation	2.7/13.8 (Avg/Max CMYK)
Integrity (PCS) perceptual	1.7/19.8 (Avg/Max Lab)
Integrity (PCS) relative colorimetric	1.0/6.4 (Avg/Max Lab)
Integrity (PCS) saturation	2.3/19.3 (Avg/Max Lab)
Precision (DCS-to-PCS) absolute colorimetric	0.2/4.2 (Avg/Max Lab)
BlackPoint (PCS-to-DCS) perceptual	82.7 50.9 43.8 97.6 (CMYK) TAC=275.0%
BlackPoint (PCS-to-DCS) relative colorimetric	82.7 50.9 43.8 97.6 (CMYK) TAC=275.0%
BlackPoint (PCS-to-PCS) perceptual	37.06 0.76 -0.86 (Lab)
BlackPoint (PCS-to-PCS) relative colorimetric	37.06 0.76 -0.86 (Lab)
WhitePoint (PCS-to-DCS) perceptual	0.0 0.0 0.0 0.0 (CMYK)
WhitePoint (PCS-to-DCS) relative colorimetric	0.0 0.0 0.0 0.0 (CMYK)
WhitePoint (DCS-to-PCS) perceptual	100.00 0.00 0.00 (Lab)
WhitePoint (DCS-to-PCS) relative colorimetric	100.00 0.00 0.00 (Lab)
WhitePoint (DCS-to-PCS) absolute colorimetric	94.38 1.78 -9.09 (Lab)

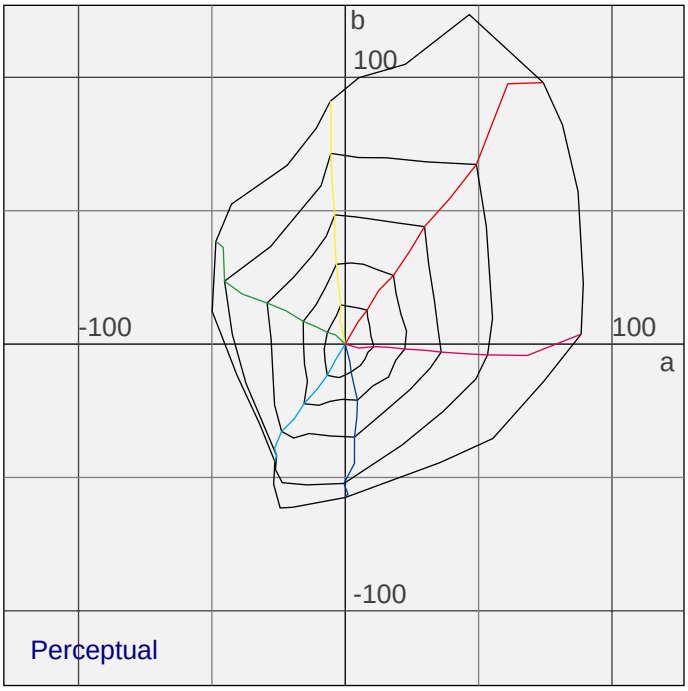
2. Gamut

The gamut plot illustrates the maximum gamuts in the a/b-diagram when converting from device color space to Lab.

These plots show the gamut for the different rendering intents. Typically the perceptual gamut is the largest one and the absolute colorimetric gamut is the smallest.







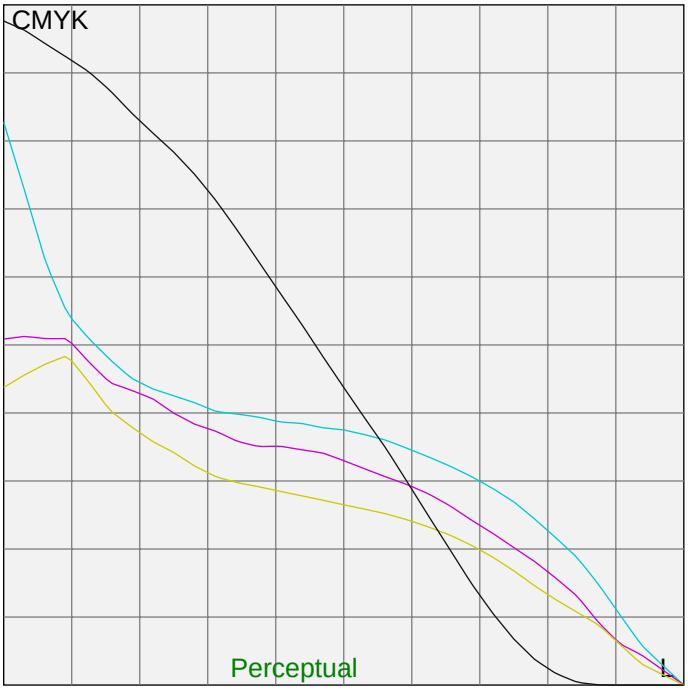
3. Gamut Volume

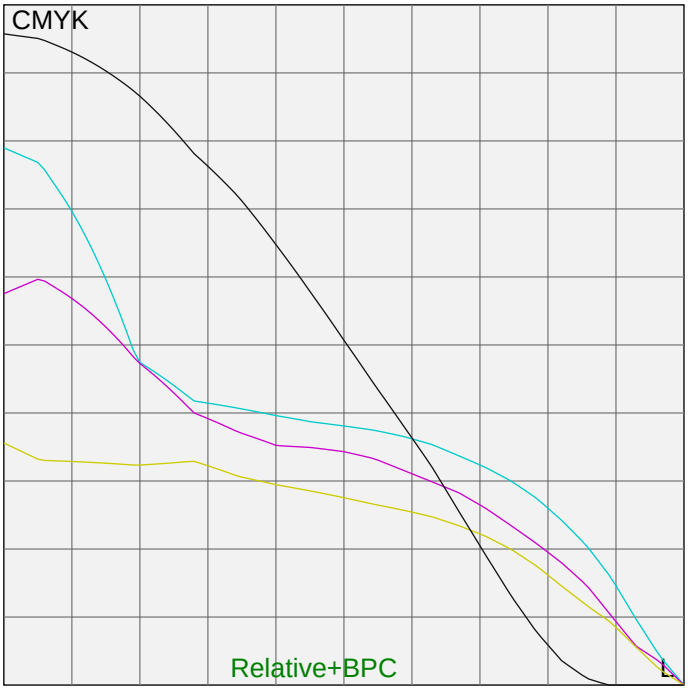
This table shows the gamut size in Lab volume and compares it to some standard color spaces.

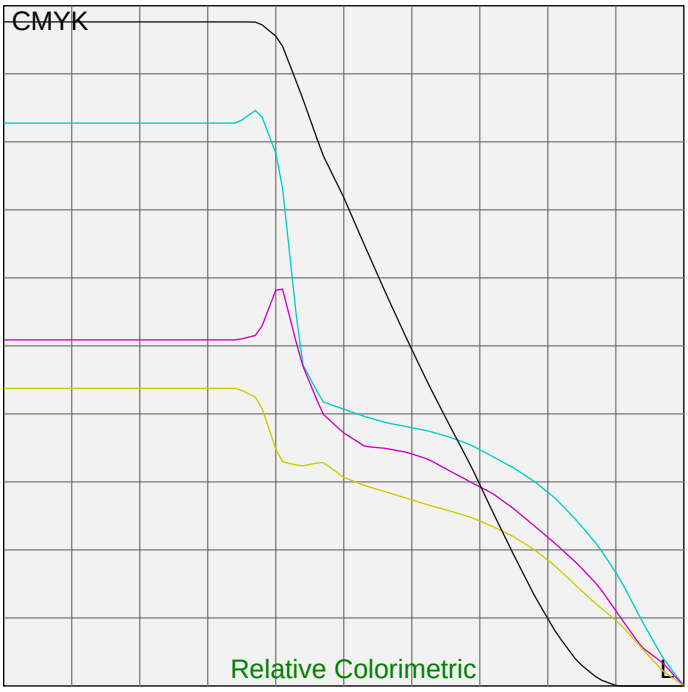
Absolute Colorimetric	Lab-Volume	%	Intersection	Union
PageWide_CSH_CartaBiancaDiatec_OK.icc	160576	100.0%	-	-
sRGB	826794	514.9%	99.6%	515.3%
AdobeRGB	1179791	734.7%	100.0%	734.7%
ISOcoated_v2_eci	368907	229.7%	91.7%	238.0%

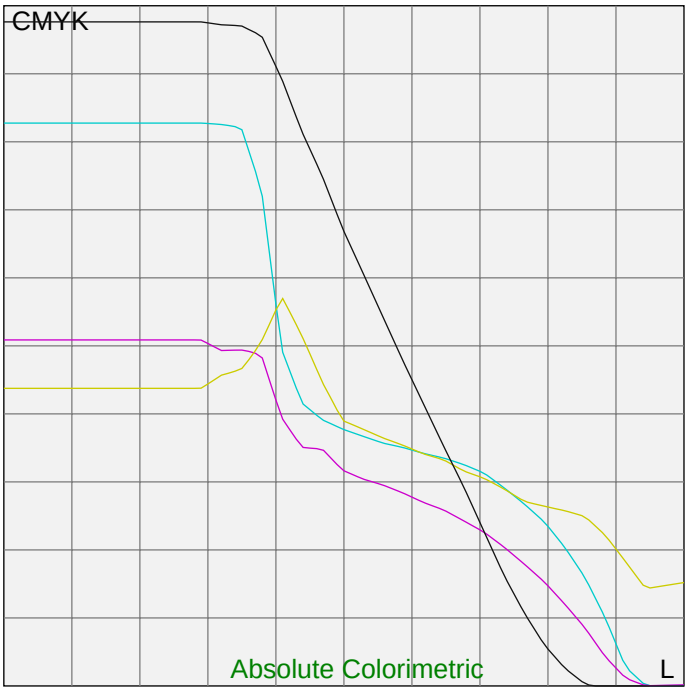
4. Gray Balance

The diagrams show the curves for the primaries for a neutral gray Lab ramp. The curves should be smooth.





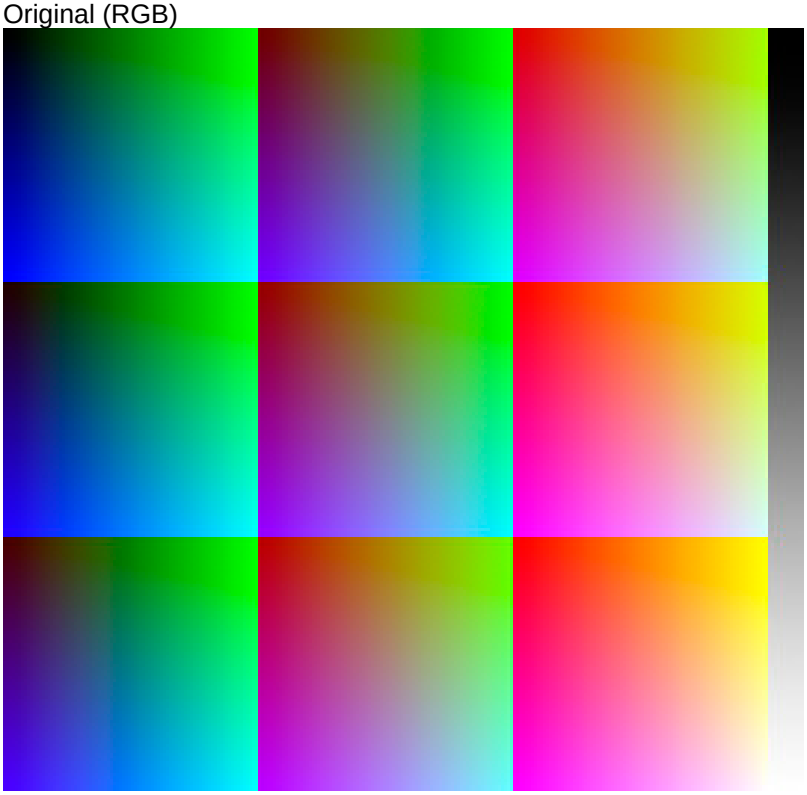




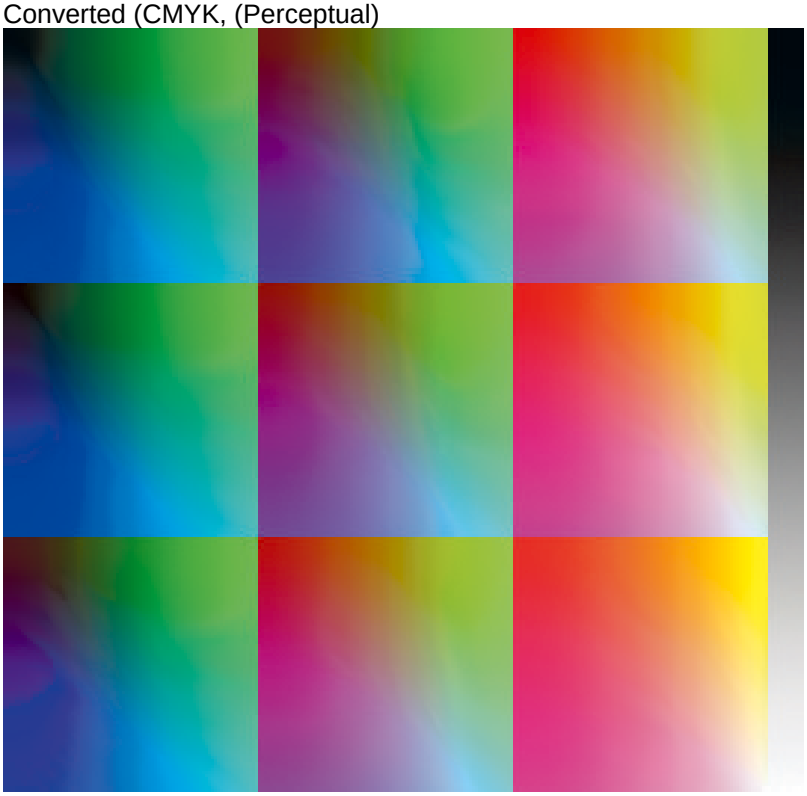
5. Sample Images

SmoothRGB.tif
Source Profile: Adobe RGB (1998)

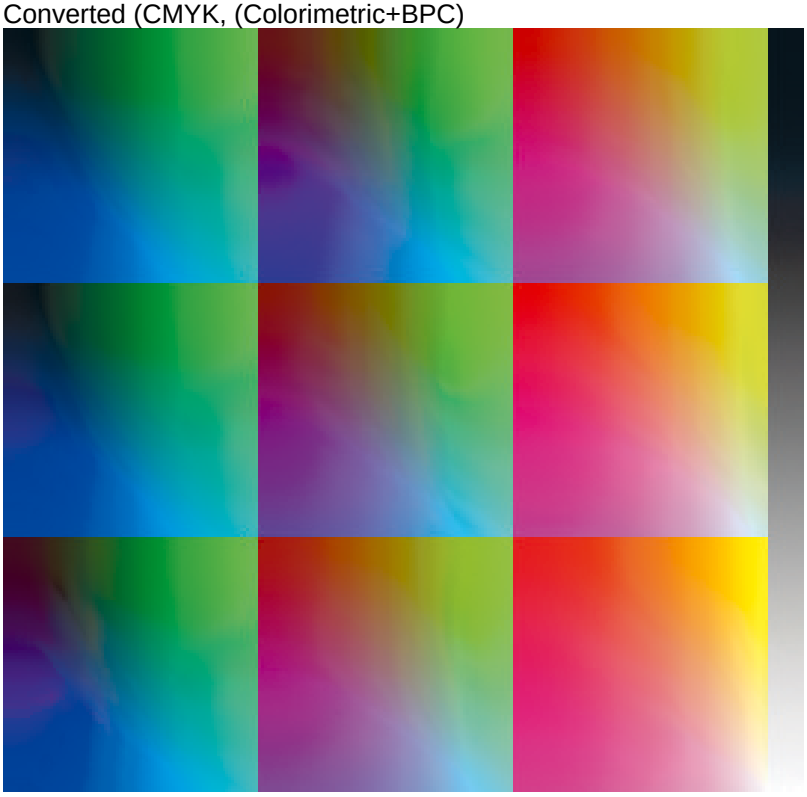
Original (RGB)



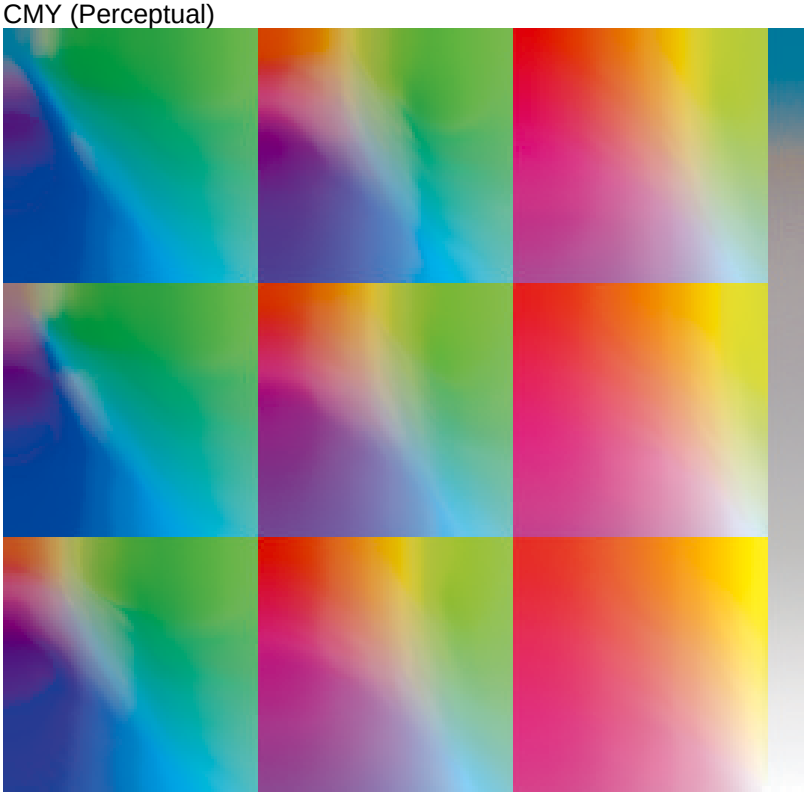
Converted (CMYK, (Perceptual)



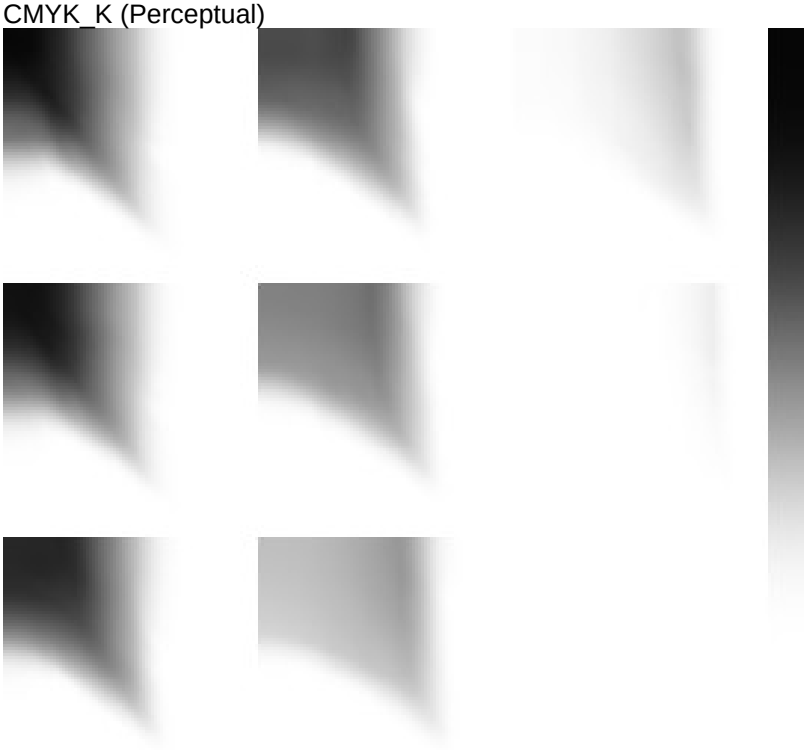
Converted (CMYK, (Colorimetric+BPC)



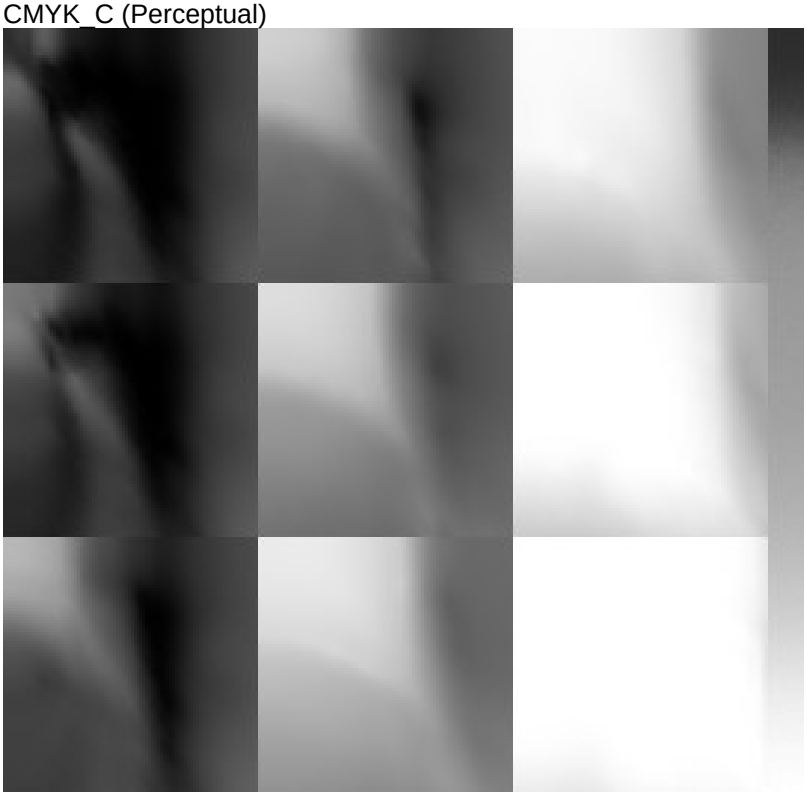
CMY (Perceptual)



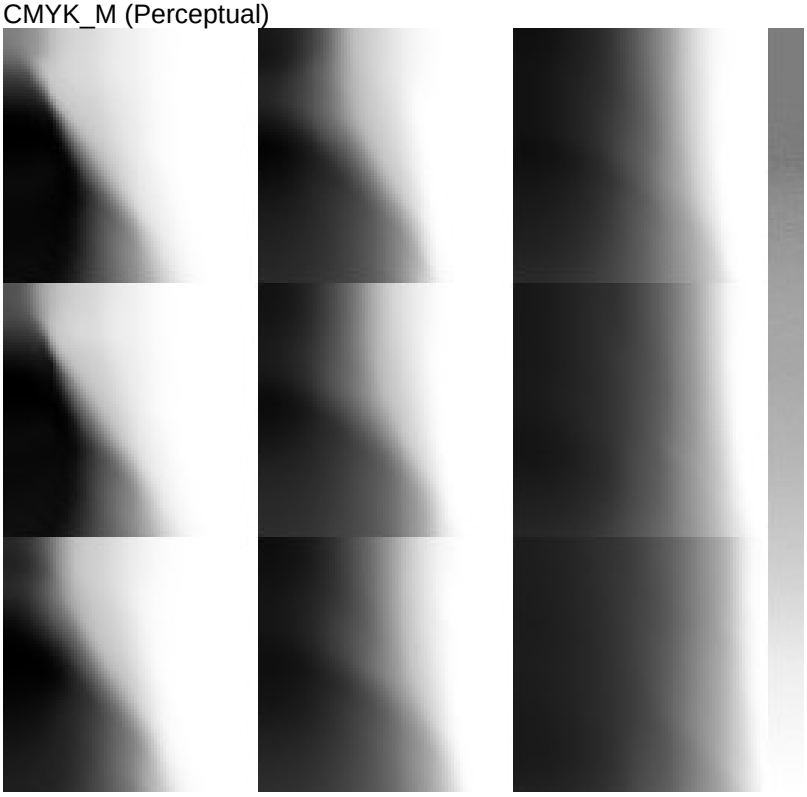
CMYK_K (Perceptual)



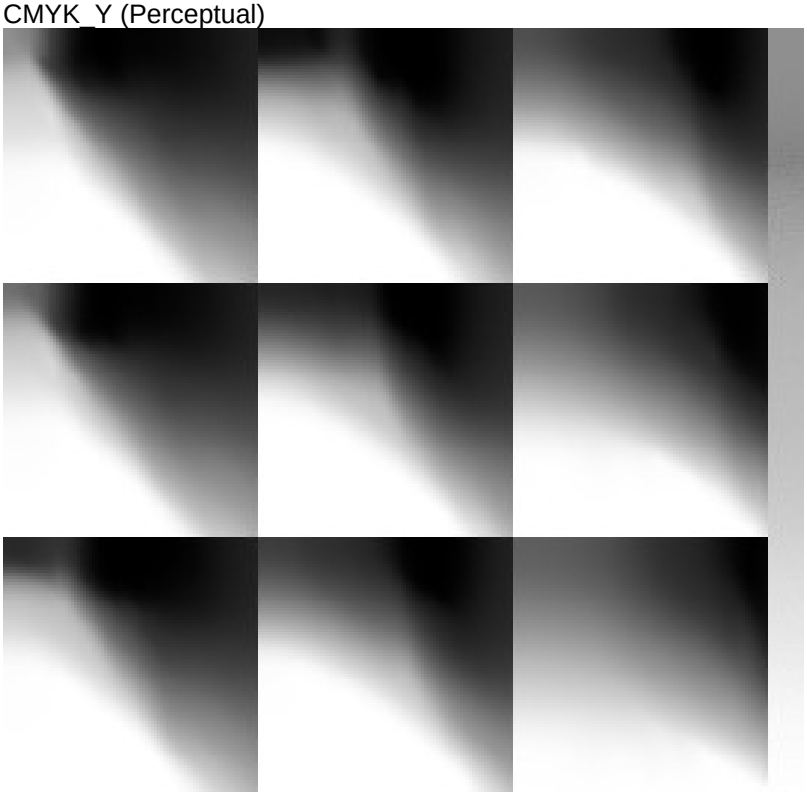
CMYK_C (Perceptual)



CMYK_M (Perceptual)



CMYK_Y (Perceptual)



CLEditRGB.tif
Source Profile: Adobe RGB (1998)

Original (RGB)

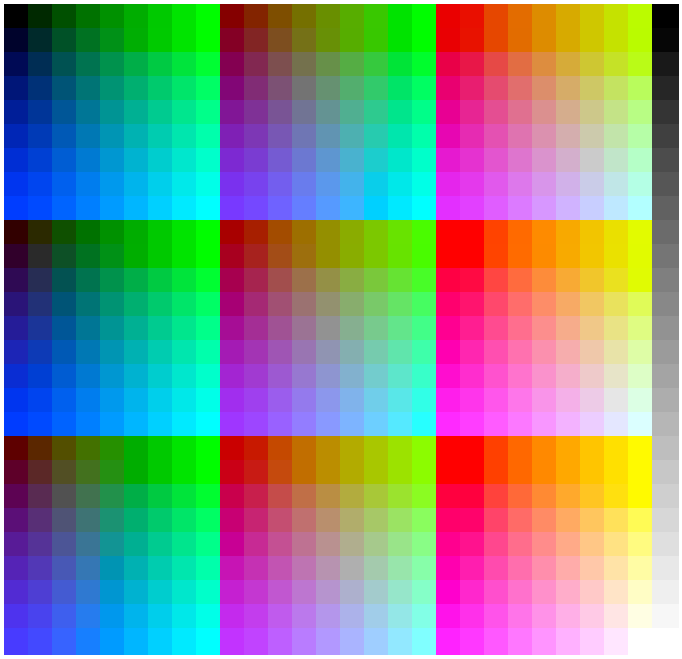
Converted (CMYK, (Perceptual)

Converted (CMYK, (Colorimetric+BPC)

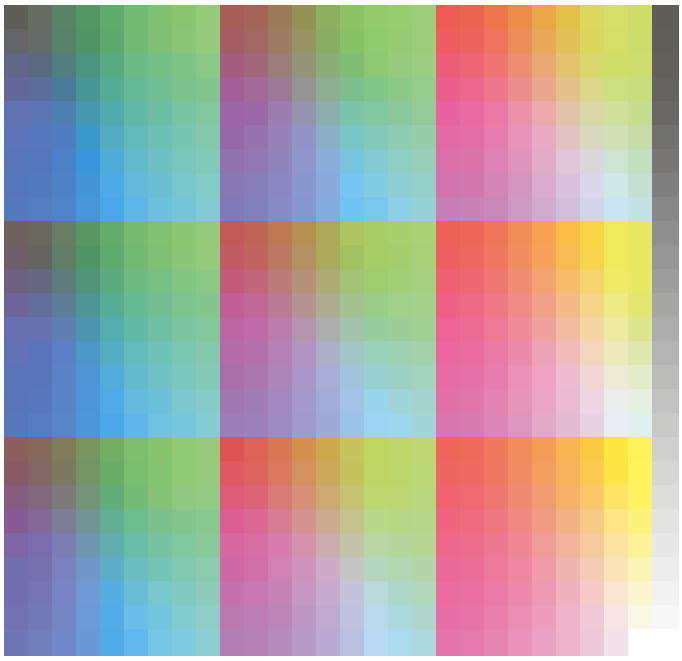
6. RGB Conversion (ECI-RGB v1.0)

RGB samples are converted with the profile. For CMYK+ color spaces the K-channel will be shown, too. The display of the converted data is relative colorimetric to RGB. The result should be smooth and color consistent.

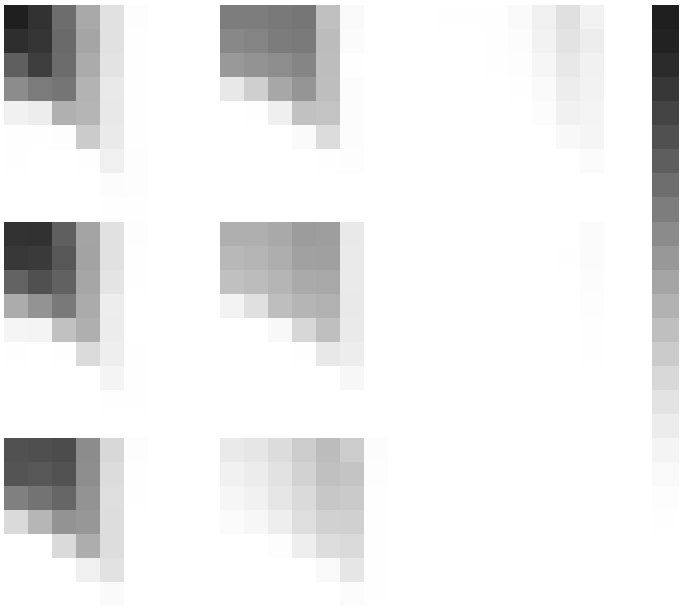
Original RGB Test Patches



Perceptual (RGB -> Perceptual -> Profile -> Colorimetric -> RGB)



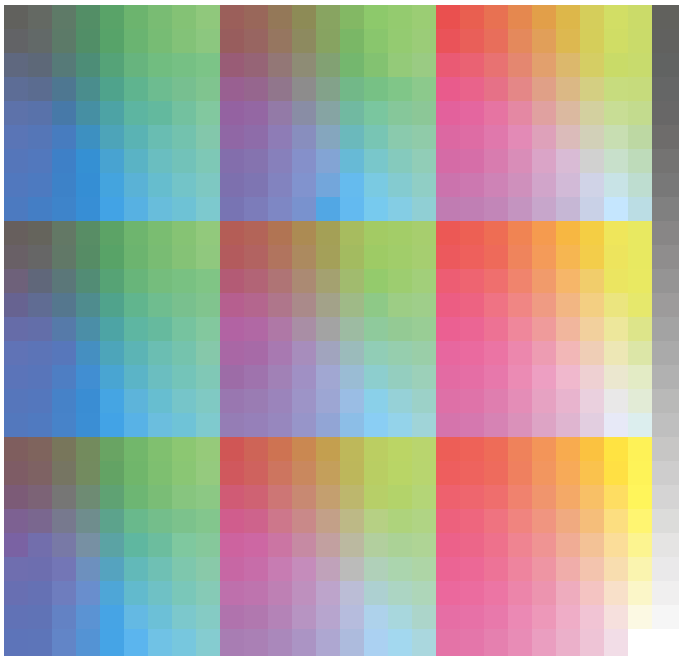
Black Channel (RGB -> Perceptual -> Profile)



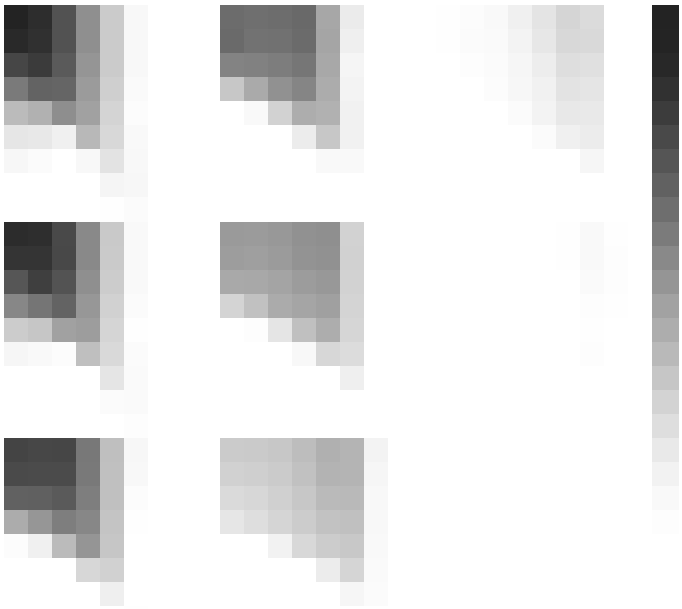
Samples (Perceptual)

Black	83 / 51 / 44 / 98
White	0 / 0 / 0 / 0
Red	0 / 90 / 68 / 0
Green	73 / 0 / 88 / 0
Blue	93 / 89 / 0 / 0
Cyan	67 / 0 / 33 / 0
Magenta	6 / 87 / 0 / 0
Yellow	5 / 1 / 99 / 0
Cyan Light	56 / 0 / 28 / 0
Magenta Light	2 / 65 / 1 / 0
Yellow Light	3 / 0 / 70 / 0

Colorimetric (RGB -> Colorimetric+BPC -> Profile -> Colorimetric -> RGB)



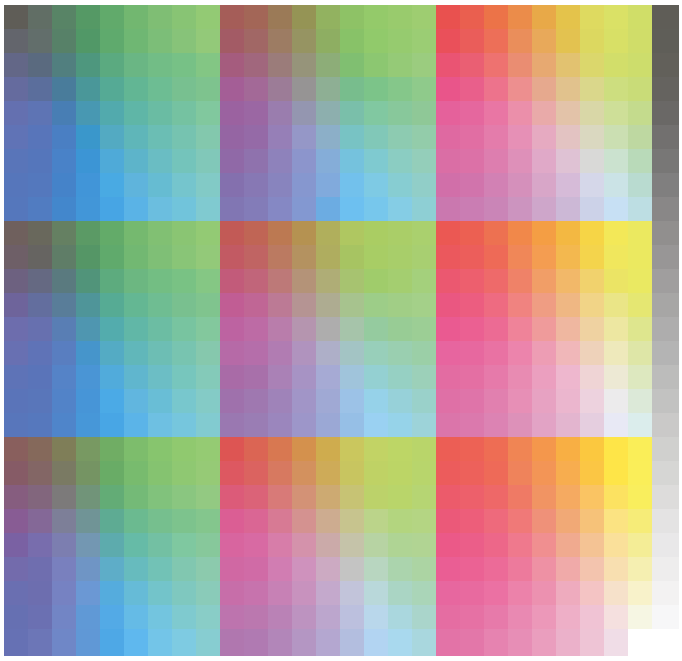
Black Channel (RGB -> Colorimetric+BPC -> Profile)



Samples (Colorimetric+BPC)

Black	79 / 58 / 36 / 96
White	0 / 0 / 0 / 0
Red	0 / 94 / 71 / 0
Green	76 / 0 / 87 / 0
Blue	97 / 87 / 0 / 0
Cyan	71 / 0 / 35 / 0
Magenta	7 / 88 / 0 / 0
Yellow	3 / 2 / 100 / 0
Cyan Light	57 / 0 / 28 / 0
Magenta Light	2 / 68 / 0 / 0
Yellow Light	2 / 1 / 72 / 0

Colorimetric (RGB -> Saturation -> Profile -> Colorimetric -> RGB)



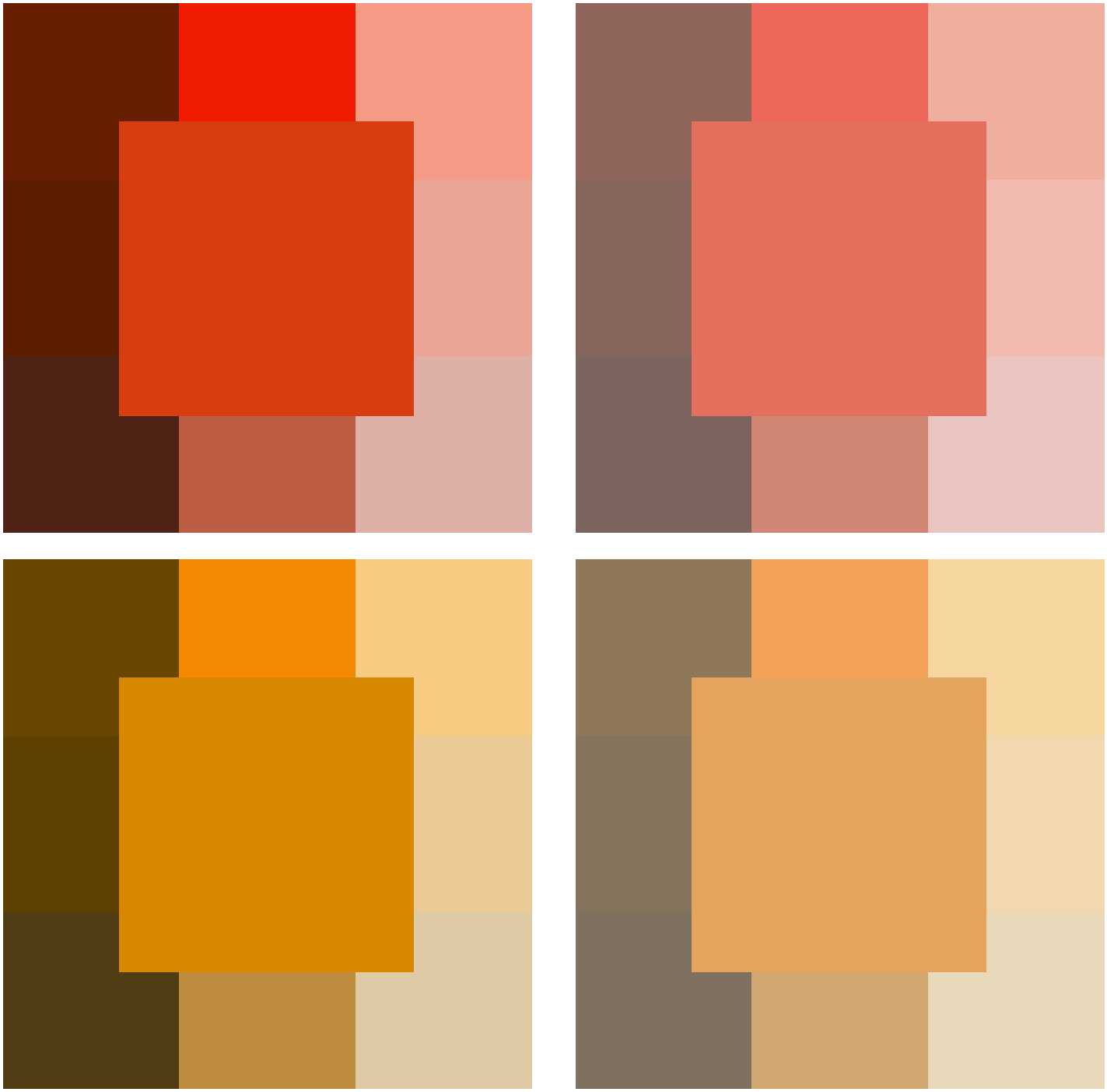
Black Channel (RGB -> Saturation -> Profile)

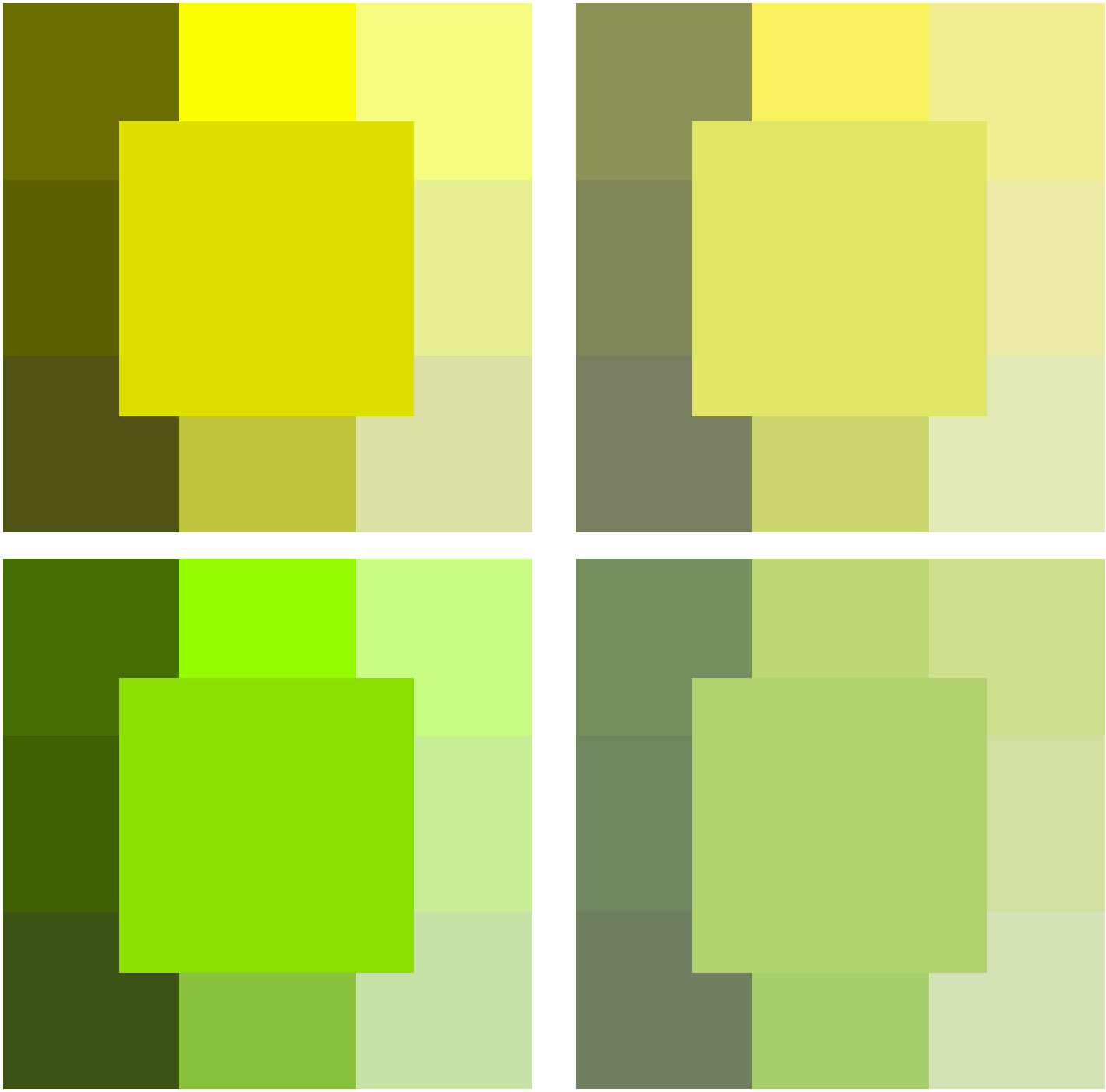
Samples (Saturation)

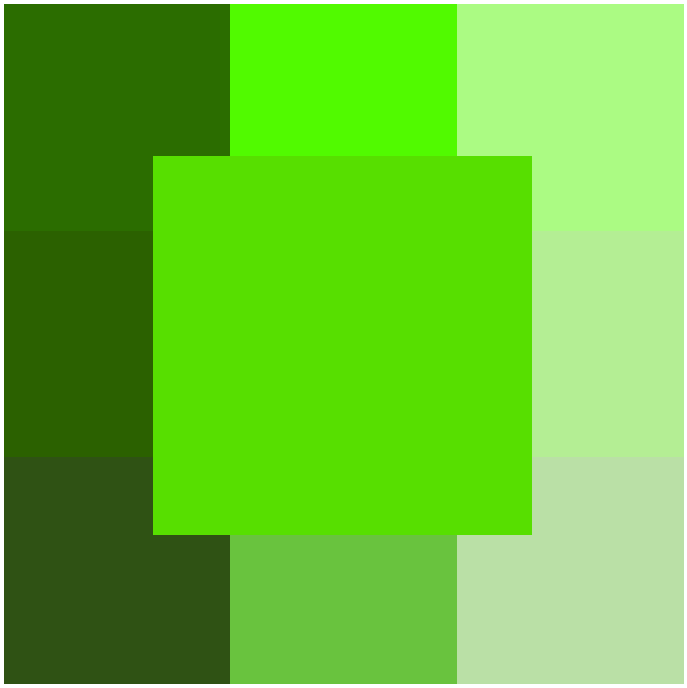
Black	83 / 51 / 44 / 98
White	0 / 0 / 0 / 0
Red	0 / 94 / 73 / 0
Green	74 / 0 / 89 / 0
Blue	93 / 91 / 0 / 0
Cyan	69 / 0 / 33 / 0
Magenta	8 / 88 / 2 / 0
Yellow	8 / 4 / 98 / 0
Cyan Light	58 / 0 / 27 / 0
Magenta Light	2 / 68 / 2 / 0
Yellow Light	9 / 3 / 70 / 0

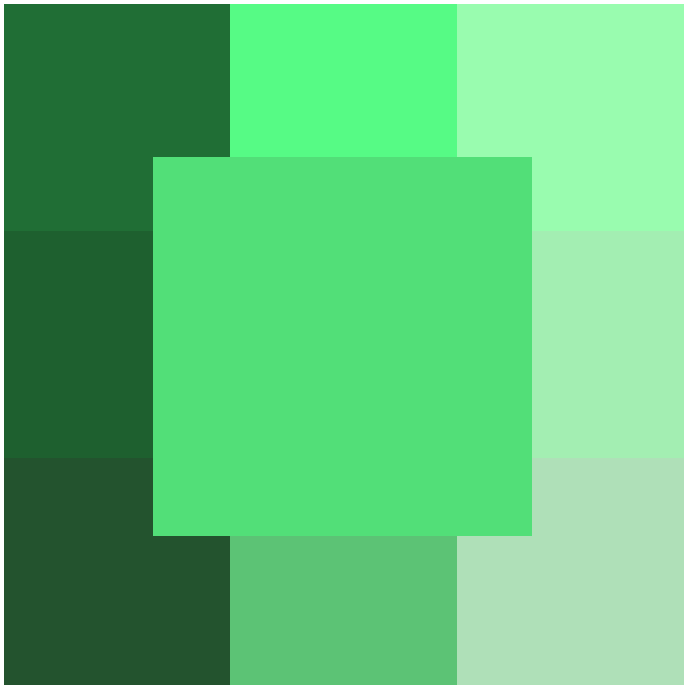
7. Hue Samples

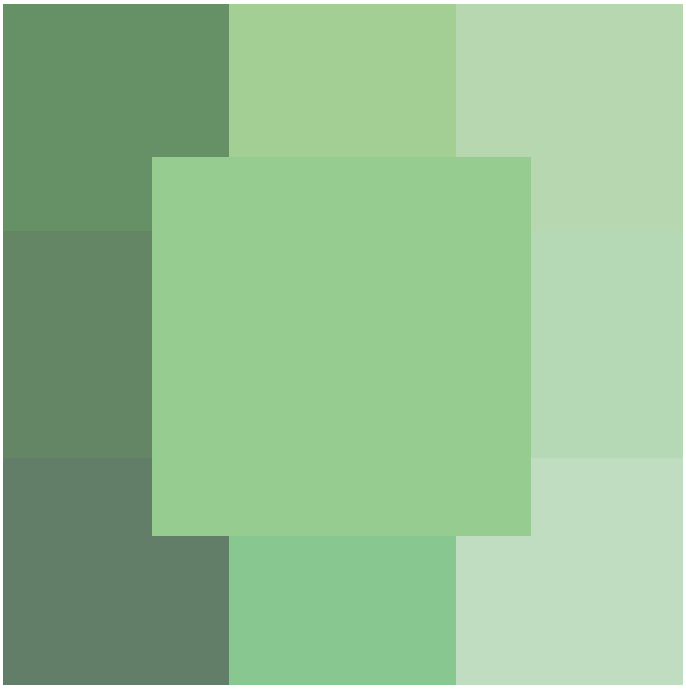
On the left side the original colors and on the right side the (perceptual) converted colors are displayed.

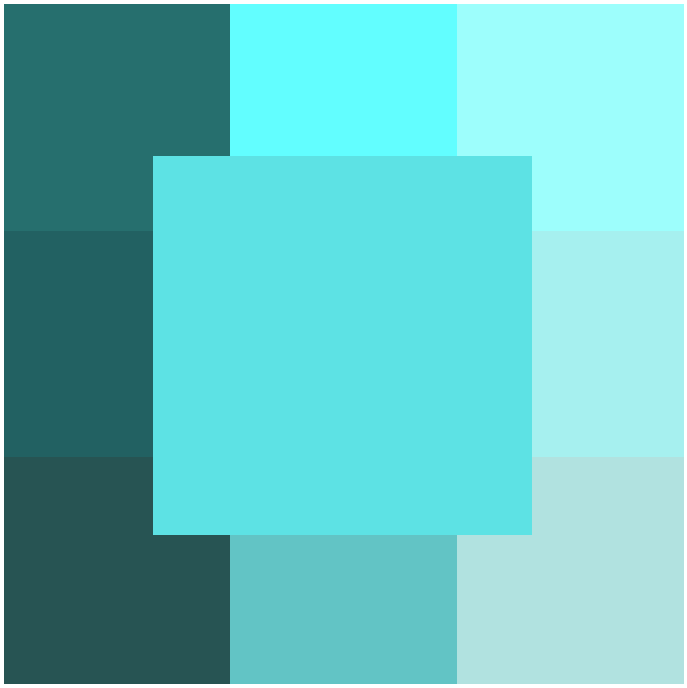


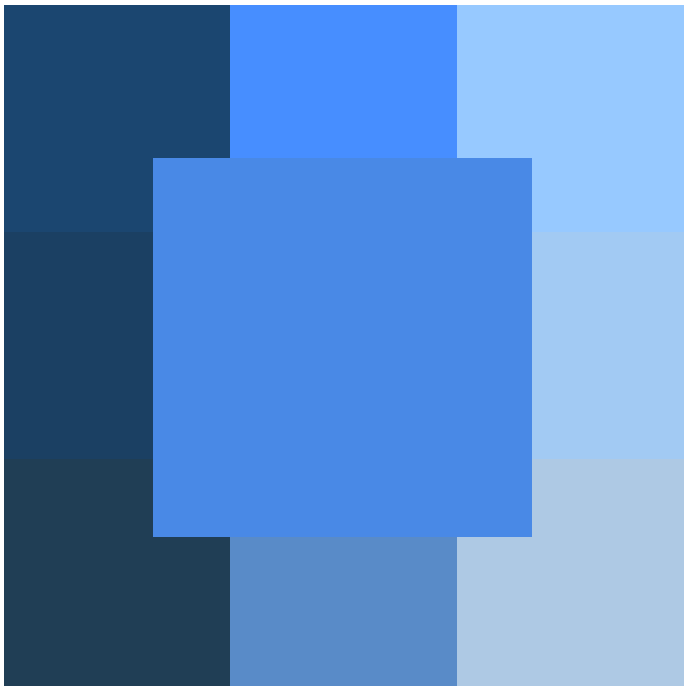


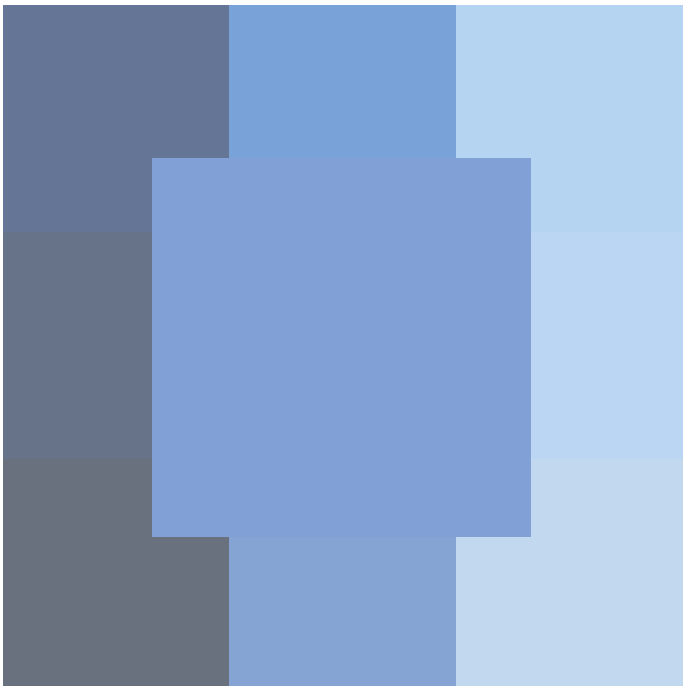


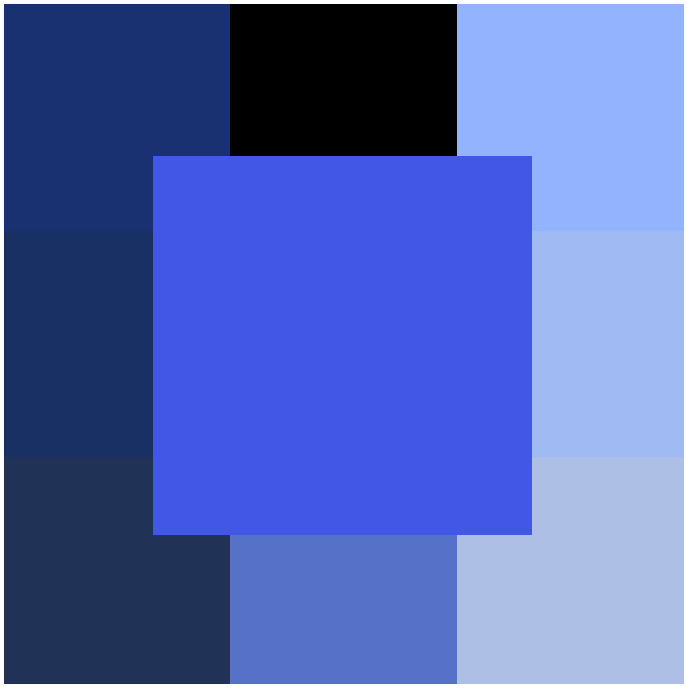


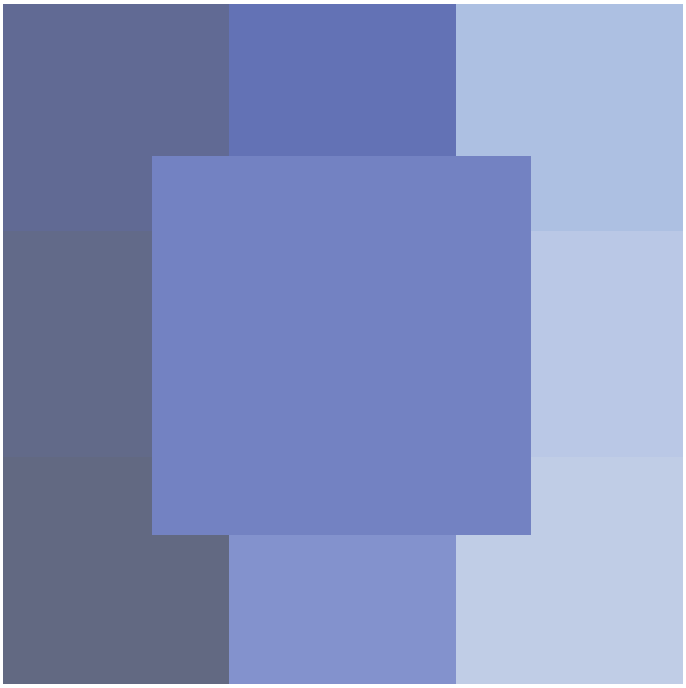


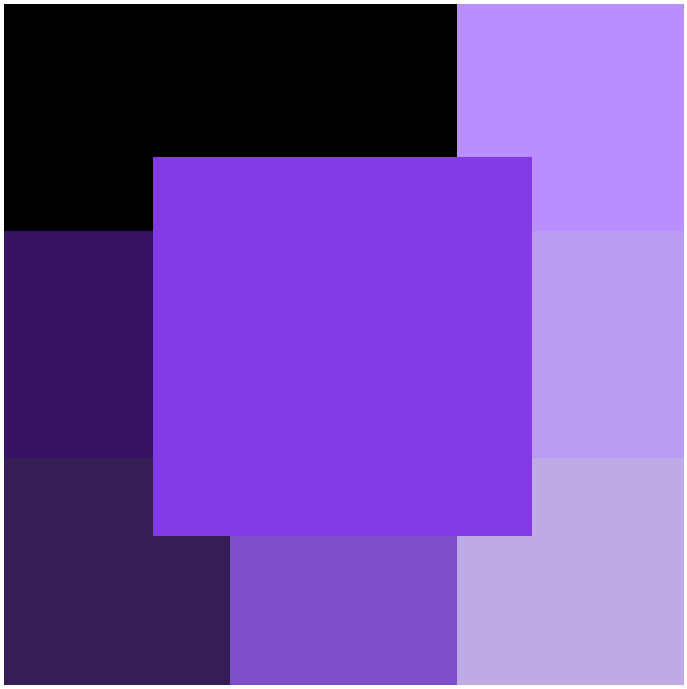


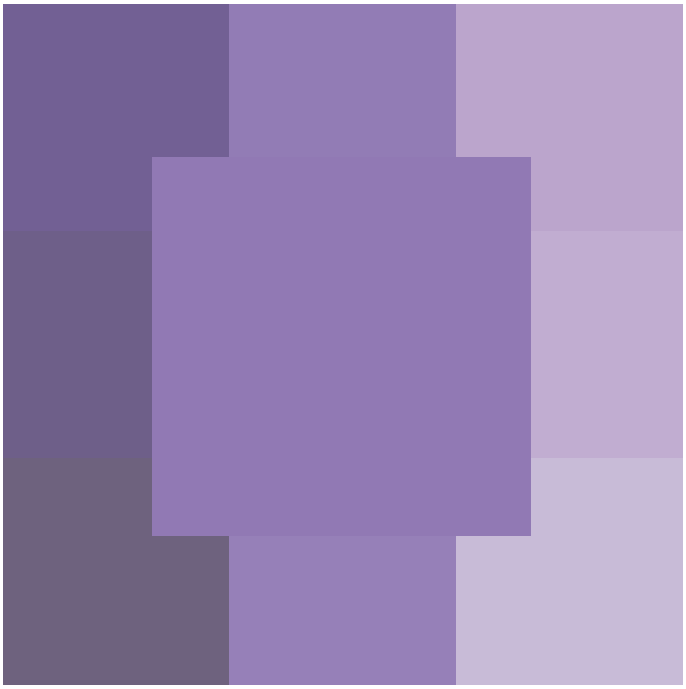


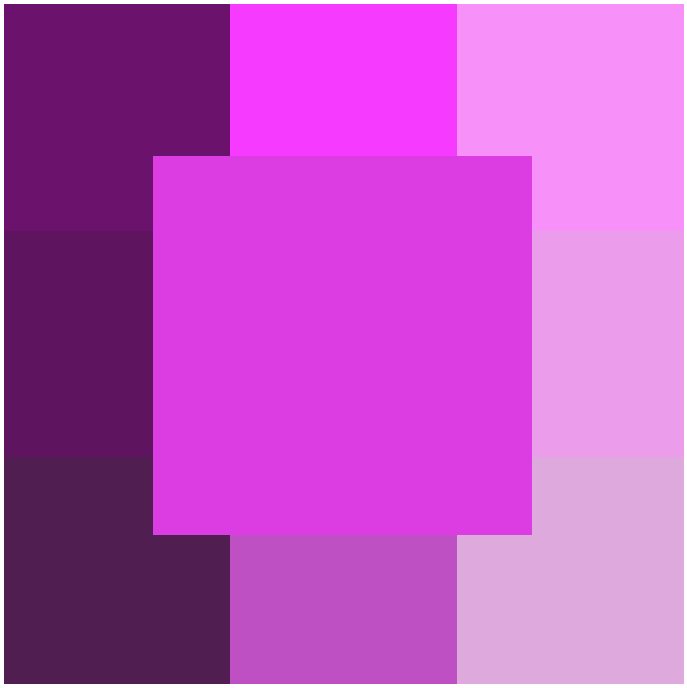


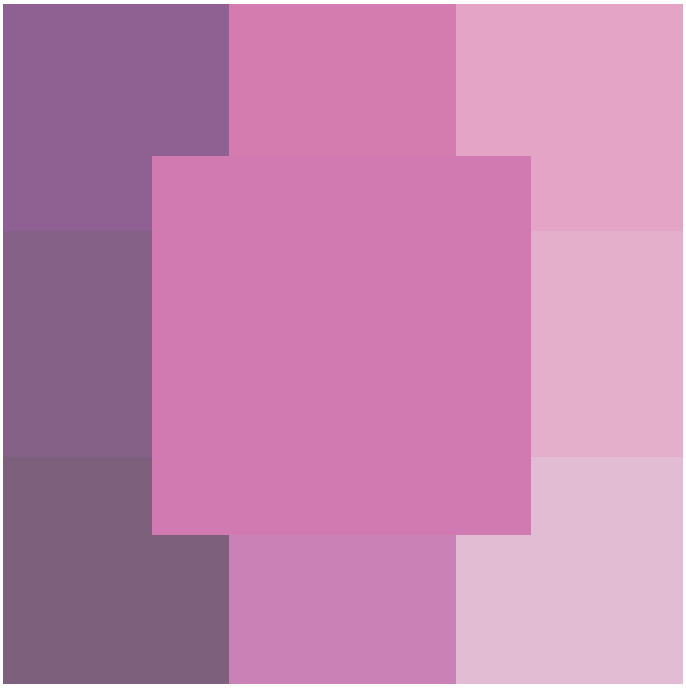


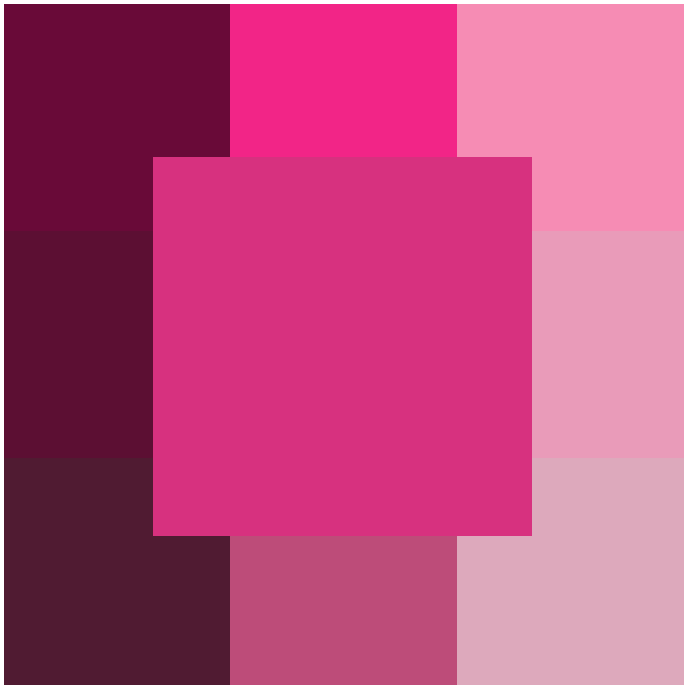


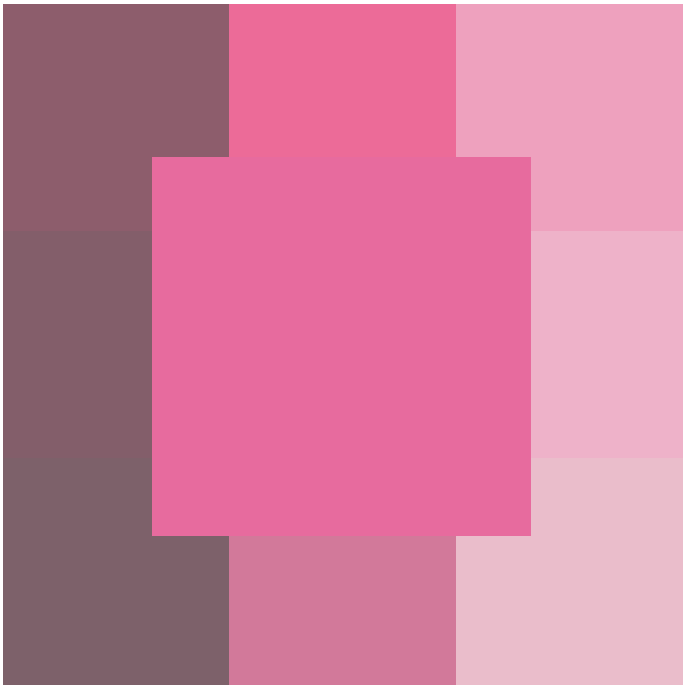








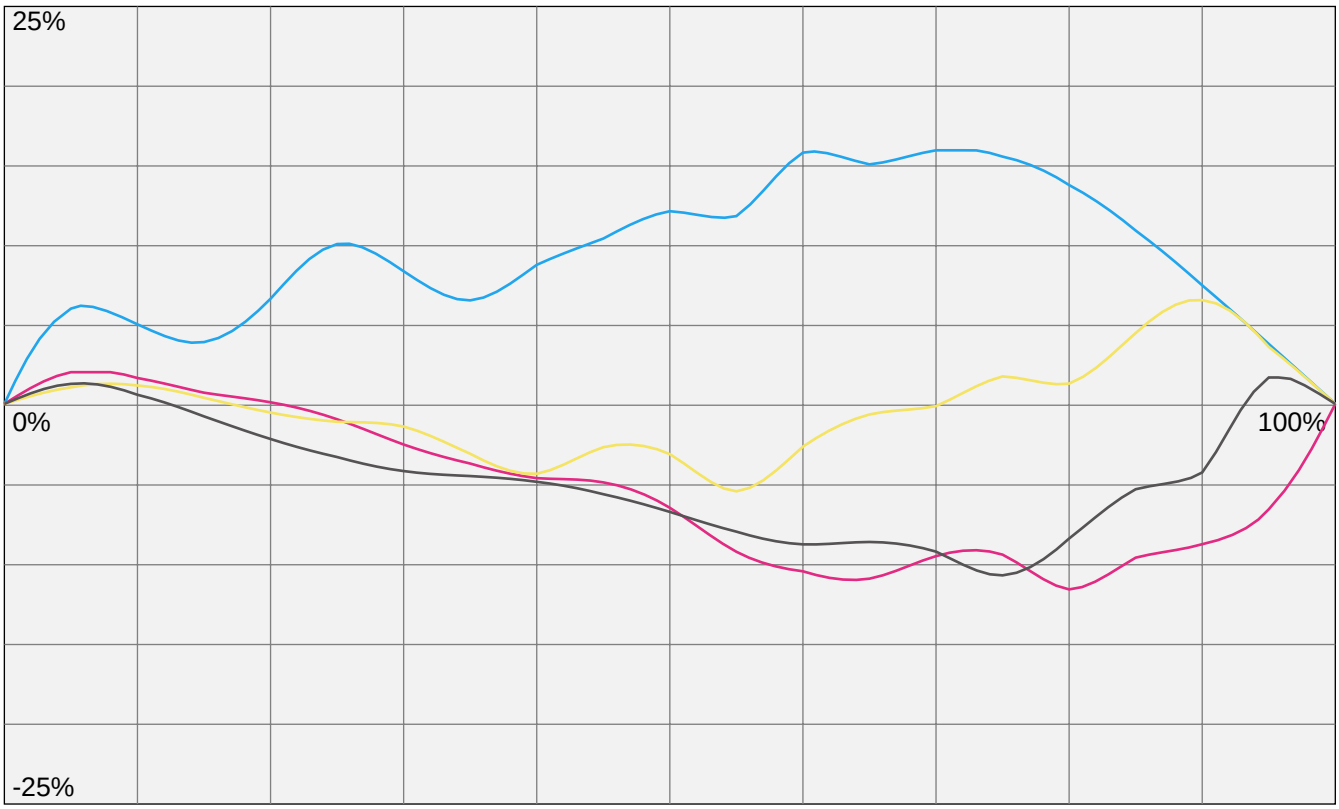




8. Linearity

Note: The dot gain cannot be estimated seriously from colorimetric data, therefore we display the ISO 20654 based linearity of the primaries.Unlike density curves a dot gain is not desirably for colorimetric curves. The colorimetry respects visual distances better than density.

Linearity (ISO 20654): The diagram shows the colorimetric linearity of the primaries. Flat curves indicate perfect linearity according to ISO 20654 (SCTV).



Cyan

Tone Value	1.00	2.00	3.00	4.00	5.00	7.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00
Linearity	2.44	4.38	5.30	5.70	5.95	5.42	4.97	3.86	6.57	9.99	8.29	6.47	8.69

Tone Value	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00
Linearity	10.33	12.04	11.73	15.70	14.97	15.85	15.45	13.68	10.83	7.41	3.75

Magenta

Tone Value	1.00	2.00	3.00	4.00	5.00	7.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00
Linearity	0.75	1.34	1.71	1.91	1.98	1.93	1.62	0.70	0.10	-0.96	-2.54	-3.73	-4.64

Tone Value	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00
Linearity	-4.90	-6.49	-9.24	-10.46	-10.92	-9.51	-9.42	-11.59	-9.61	-8.77	-6.59

Yellow

Tone Value	1.00	2.00	3.00	4.00	5.00	7.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00
Linearity	0.03	0.10	0.27	0.61	1.03	1.36	1.15	0.38	-0.54	-1.12	-1.42	-3.11	-4.37

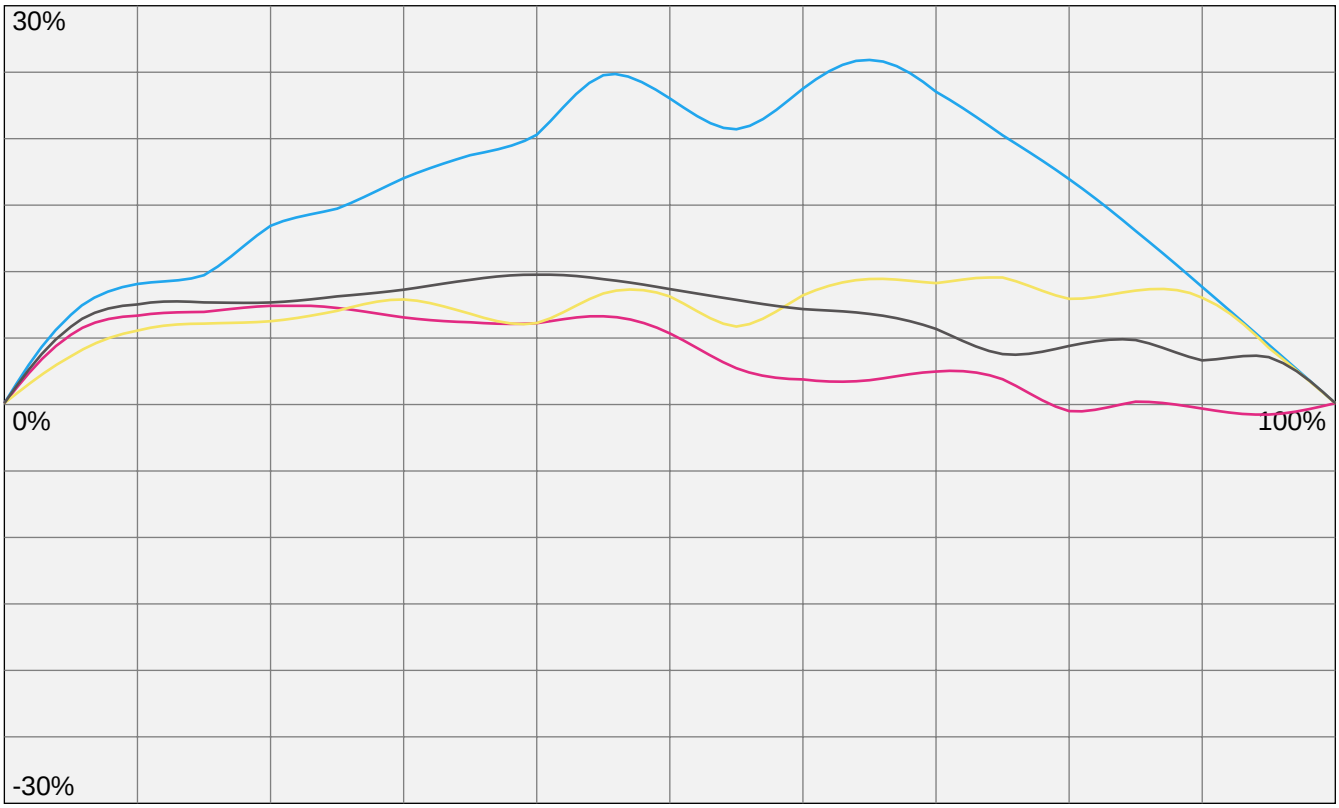
Tone Value	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00
Linearity	-2.71	-3.14	-5.46	-2.67	-0.66	-0.14	1.72	1.27	4.43	6.48	3.56

Black

Tone Value	1.00	2.00	3.00	4.00	5.00	7.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00
Linearity	0.77	1.19	1.32	1.31	1.25	1.06	0.57	-0.78	-2.19	-3.32	-4.20	-4.51	-4.87

Tone Value	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00
Linearity	-5.64	-6.75	-7.98	-8.78	-8.63	-9.23	-10.71	-8.41	-5.33	-4.28	1.65

Dot-Gain (CIE-based): The diagram shows the dot gain based on the XYZ data of the primaries. Note: Often these curves match the density based dot gain curves quite well.



Cyan

Tone Value	1.00	2.00	3.00	4.00	5.00	7.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00
Tone Value Increase	2.73	4.87	5.88	6.33	6.63	7.32	8.94	9.60	13.30	14.58	16.87	18.59	20.12

Tone Value	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00
Tone Value Increase	24.59	22.85	20.54	23.58	25.74	23.35	20.09	16.80	12.91	8.71	4.38

Magenta

Tone Value	1.00	2.00	3.00	4.00	5.00	7.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00
Tone Value Increase	1.59	2.91	3.89	4.60	5.13	5.86	6.56	6.84	7.30	7.14	6.43	6.07	6.00

Tone Value	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00
Tone Value Increase	6.52	5.23	2.62	1.78	1.72	2.37	1.80	-0.59	0.12	-0.40	-0.85

Yellow

Tone Value	1.00	2.00	3.00	4.00	5.00	7.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00
Tone Value Increase	0.48	1.01	1.66	2.54	3.52	4.70	5.44	5.97	6.14	6.92	7.78	6.71	6.01

Tone Value	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00
Tone Value Increase	8.23	8.00	5.75	8.09	9.31	9.00	9.42	7.82	8.44	7.90	4.15

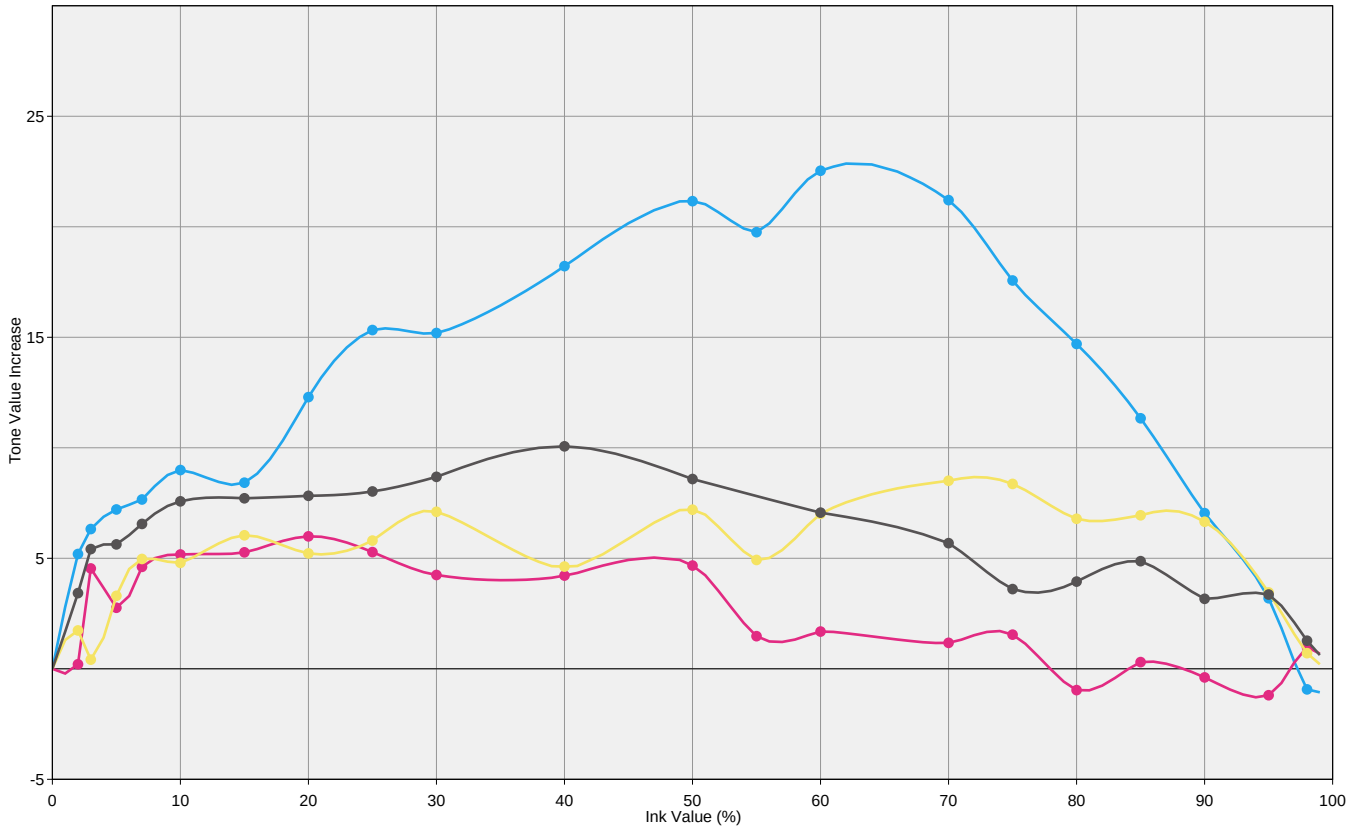
Black

Tone Value	1.00	2.00	3.00	4.00	5.00	7.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00
Tone Value Increase	2.11	3.57	4.49	5.17	5.74	6.71	7.40	7.56	7.55	8.01	8.51	9.25	9.63

Tone Value	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00	90.00	95.00
Tone Value Increase	9.30	8.55	7.75	7.06	6.69	5.57	3.68	4.29	4.73	3.21	3.45

9. Dot Gain

The diagram shows the dot gain of the primaries. The calculation is based on the spectral data found in the profile.



Cyan

Tone Value	2.00%	3.00%	5.00%	7.00%	10.00%	15.00%	20.00%	25.00%	30.00%	40.00%	50.00%	55.00%	60.00%
Tone Value Increase	5.19	6.32	7.21	7.66	8.99	8.42	12.29	15.33	15.19	18.22	21.16	19.75	22.54

Tone Value	70.00%	75.00%	80.00%	85.00%	90.00%	95.00%	98.00%
Tone Value Increase	21.21	17.57	14.70	11.33	7.04	3.19	-0.93

Magenta

Tone Value	2.00%	3.00%	5.00%	7.00%	10.00%	15.00%	20.00%	25.00%	30.00%	40.00%	50.00%	55.00%	60.00%
Tone Value Increase	0.20	4.54	2.76	4.61	5.17	5.27	5.99	5.28	4.24	4.22	4.67	1.48	1.68

Tone Value	70.00%	75.00%	80.00%	85.00%	90.00%	95.00%	98.00%
Tone Value Increase	1.17	1.55	-0.96	0.30	-0.39	-1.20	0.98

Yellow

Tone Value	2.00%	3.00%	5.00%	7.00%	10.00%	15.00%	20.00%	25.00%	30.00%	40.00%	50.00%	55.00%	60.00%
Tone Value Increase	1.74	0.41	3.30	4.97	4.79	6.04	5.22	5.80	7.10	4.63	7.20	4.92	7.01

Tone Value	70.00%	75.00%	80.00%	85.00%	90.00%	95.00%	98.00%
Tone Value Increase	8.51	8.36	6.79	6.94	6.65	3.46	0.71

Black

Tone Value	2.00%	3.00%	5.00%	7.00%	10.00%	15.00%	20.00%	25.00%	30.00%	40.00%	50.00%	60.00%	70.00%
Tone Value Increase	3.42	5.42	5.63	6.56	7.58	7.71	7.83	8.02	8.68	10.07	8.59	7.06	5.68

Tone Value	75.00%	80.00%	85.00%	90.00%	95.00%	98.00%
Tone Value Increase	3.61	3.95	4.87	3.17	3.36	1.27