

Profile-Test

2023-10-30

Profile Information

Name	PRAJET_E1_xilux_1H_720x2400 8Pass .icc
Path	C:/Program Files (x86)/SAI/.../PRAJET_E1_xilux_1H_720x2400 8Pass .icc
Size	1370592
Version	4.2
Class	prtr
ColorSpace	CMYK
PCS	Lab
Date	2022-11-16 16:39:54
Rendering	0
Creator	ScAm

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 show as average and maximum deviations.

The DCS to PCS statistic shows how precise 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.

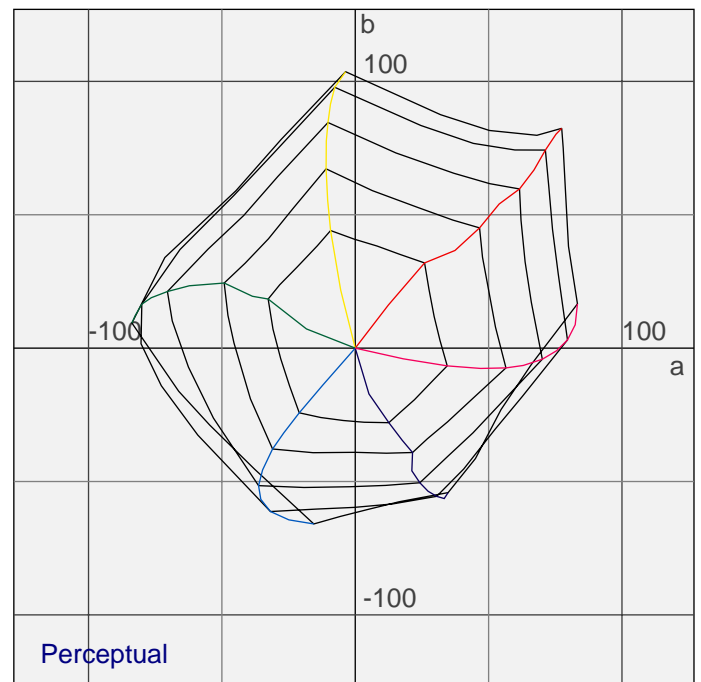
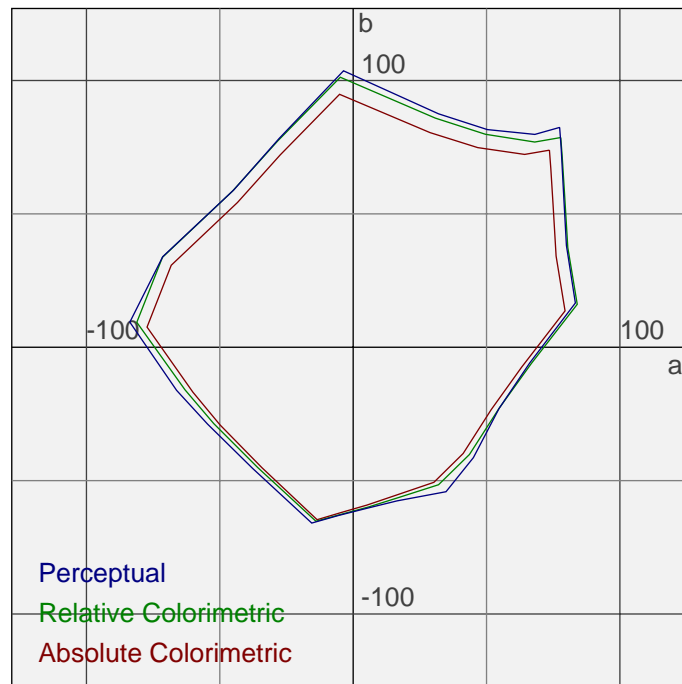
Integrity (DCS) perceptual	1.9/16.1 (Avg/Max CMYK)
Integrity (DCS) relative colorimetric	1.6/13.9 (Avg/Max CMYK)
Integrity (DCS) saturation	2.8/19.1 (Avg/Max CMYK)
Integrity (PCS) perceptual	1.2/7.7 (Avg/Max Lab)
Integrity (PCS) relative colorimetric	0.8/5.8 (Avg/Max Lab)
Integrity (PCS) saturation	1.9/11.8 (Avg/Max Lab)
Precision (DCS-to-PCS) absolute colorimetric	0.1/2.5 (Avg/Max Lab)
BlackPoint (PCS-to-DCS) perceptual	77.2 66.9 55.9 99.9 (CMYK) TAC=299.8%
BlackPoint (PCS-to-DCS) relative colorimetric	77.2 66.7 56.0 100.0 (CMYK) TAC=300.0%
BlackPoint (PCS-to-PCS) perceptual	2.62 0.33 -0.62 (Lab)
BlackPoint (PCS-to-PCS) relative colorimetric	2.62 0.33 -0.62 (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	94.28 -0.55 -3.28 (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.



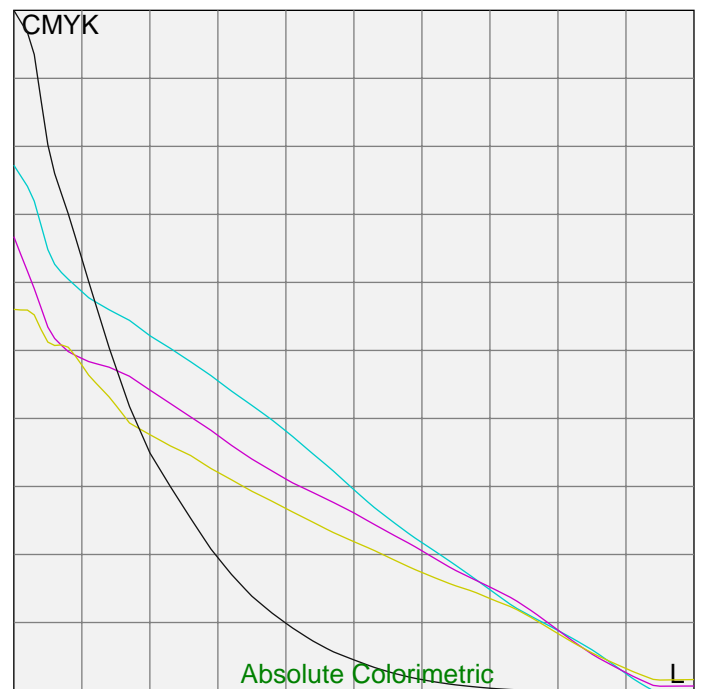
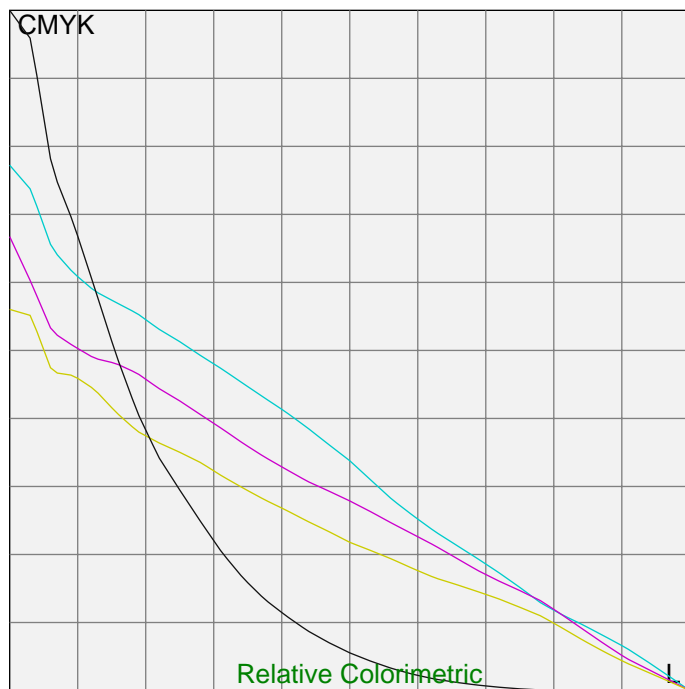
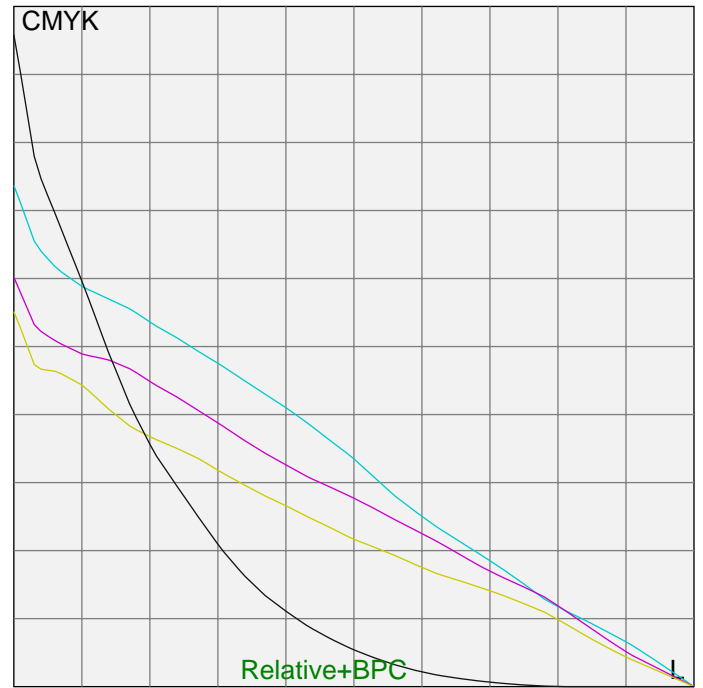
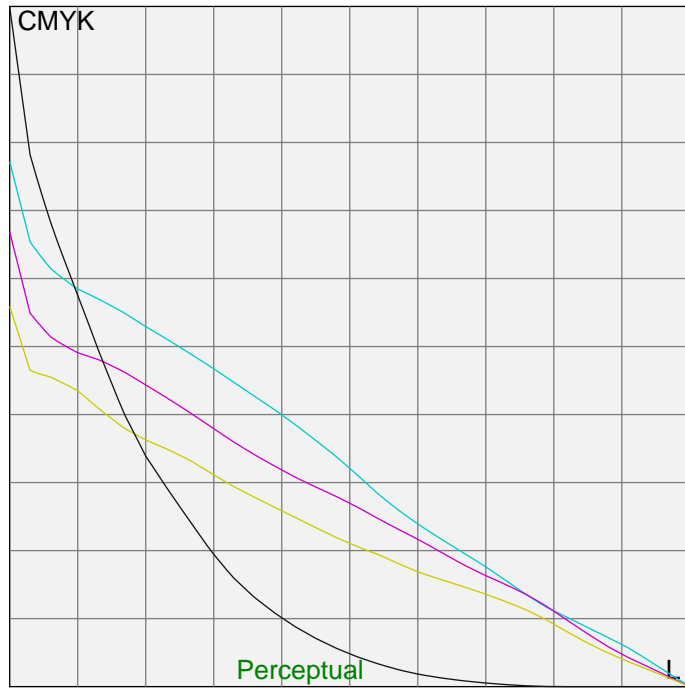
3. Gamut Volume

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

AbsoluteColorimetric	Lab-Volume	%	Intersection	Union
PRAJET_E1_xilux_1H_720x2400 8Pass .icc	620905	100.0%	-	-
sRGB	826794	133.2%	79.7%	153.5%
AdobeRGB	1179791	190.0%	92.2%	197.8%
CoatedFOGRA39	369189	59.5%	59.3%	100.2%

4. Gray Balance

The diagram show the curves for the primaries for a neutral Lab-ramp. The curves should be smooth

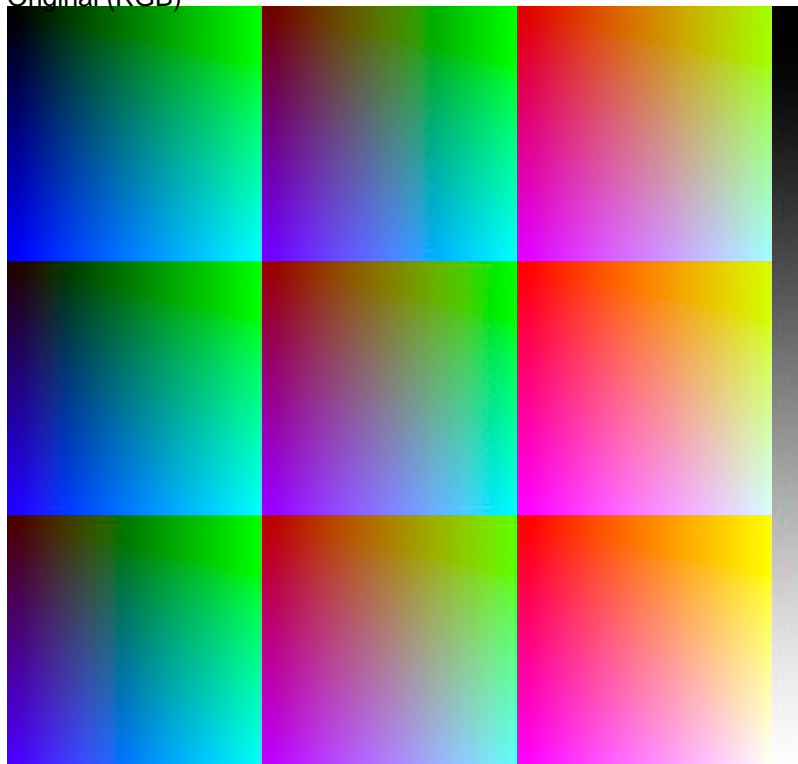


5. Sample Images

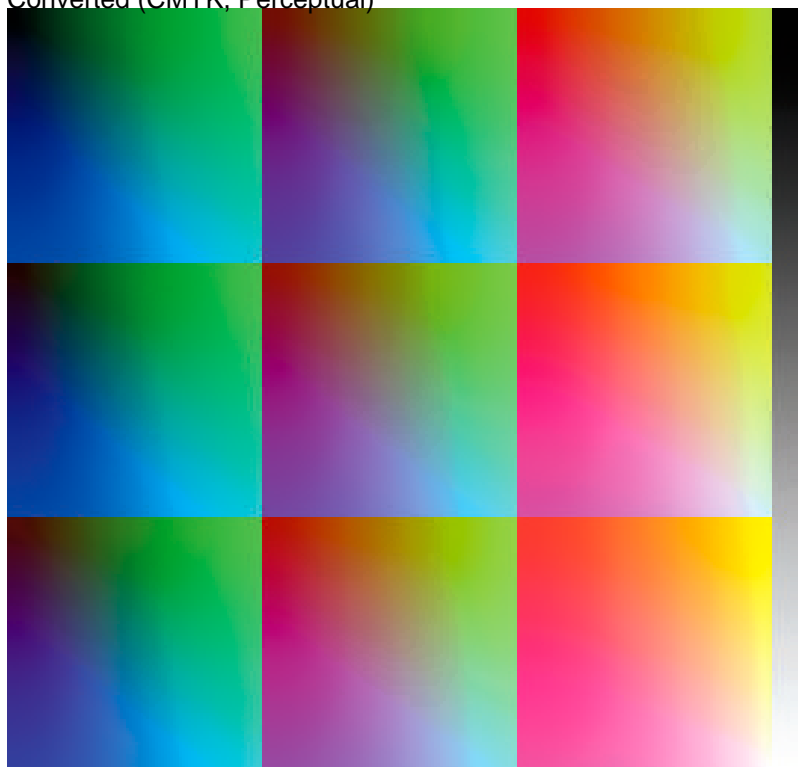
SmoothRGB.tif

Source Profile: Adobe RGB (1998)

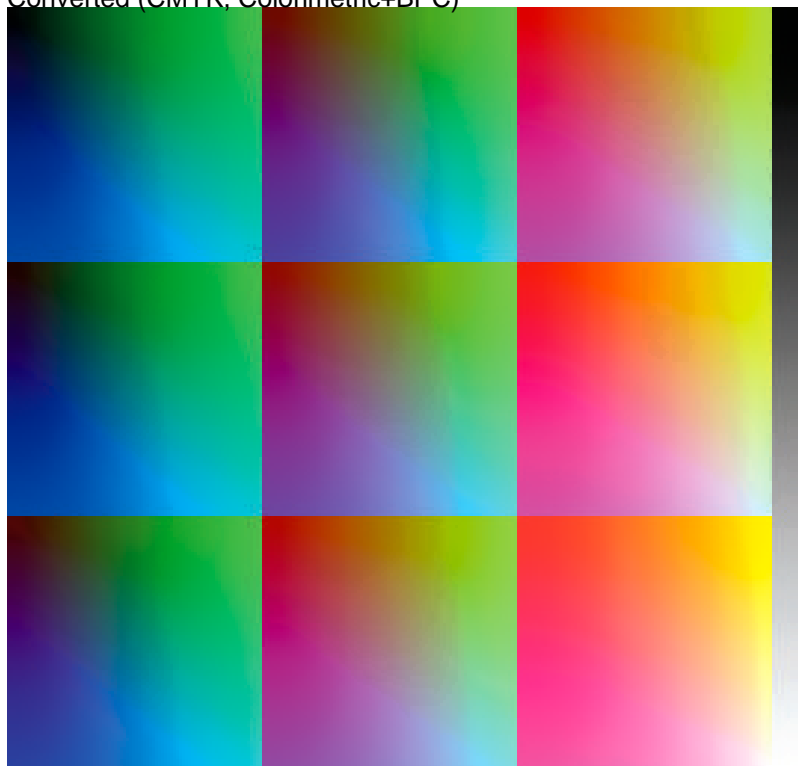
Original (RGB)



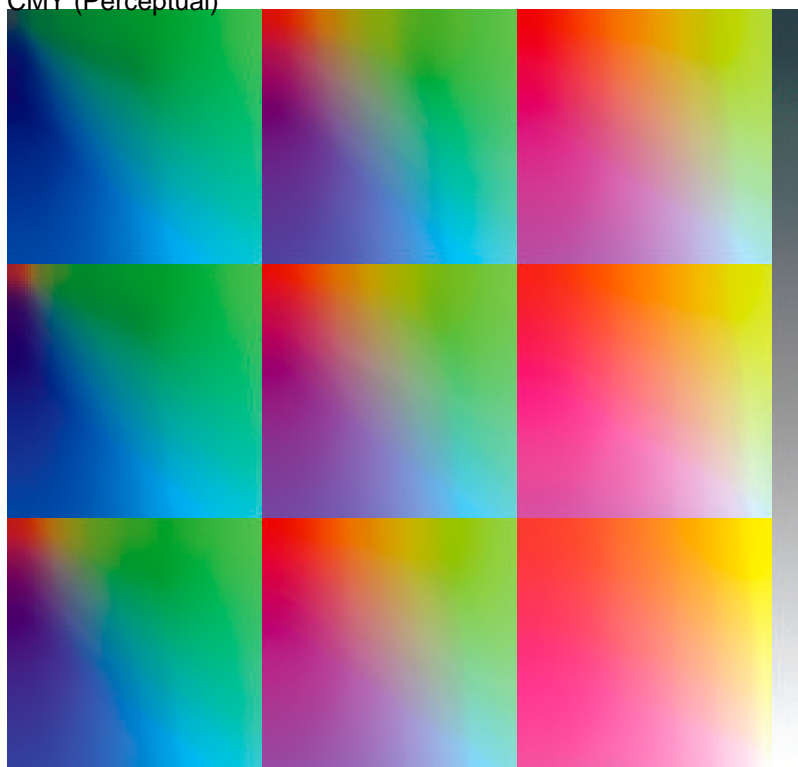
Converted (CMYK, Perceptual)



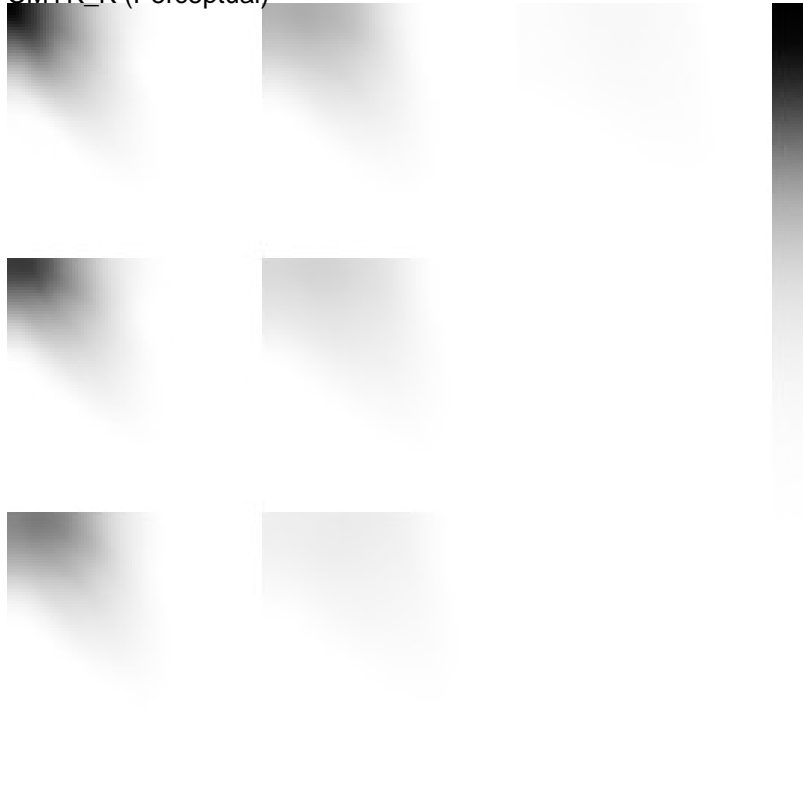
Converted (CMYK, Colorimetric+BPC)



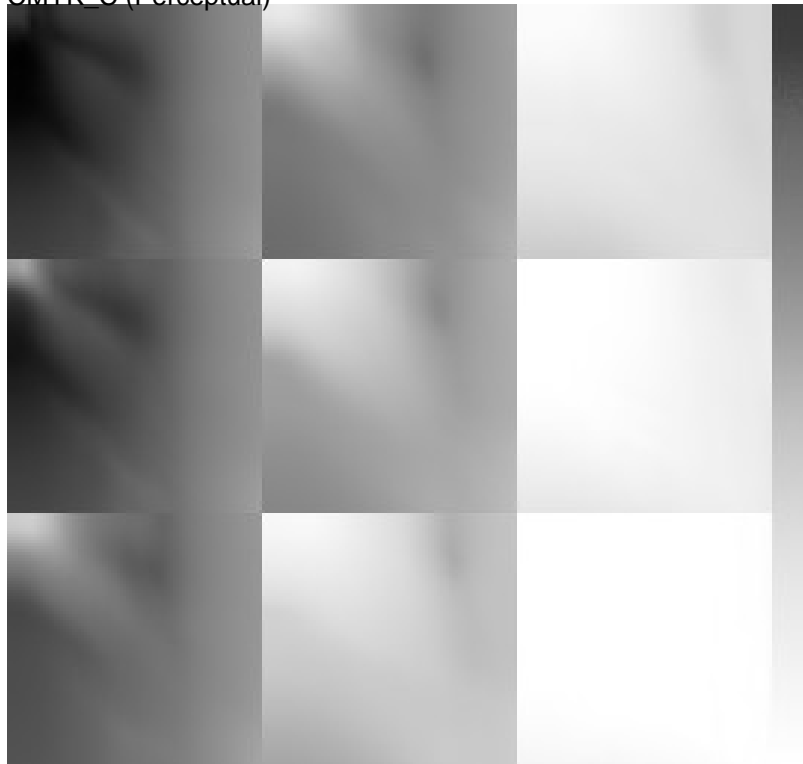
CMY (Perceptual)



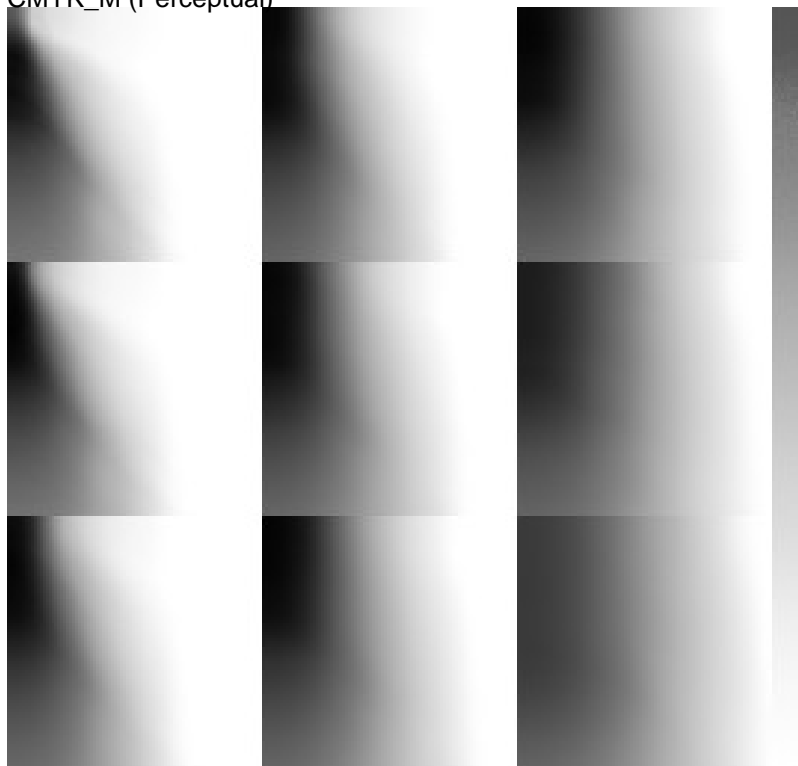
CMYK_K (Perceptual)



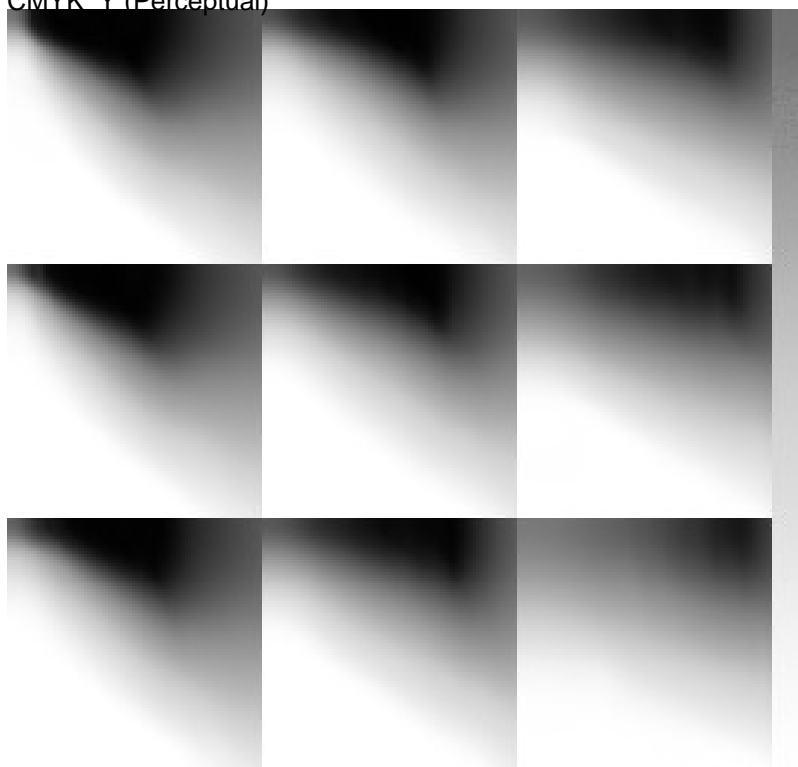
CMYK_C (Perceptual)



CMYK_M (Perceptual)

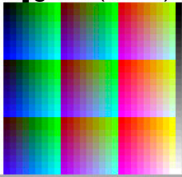


CMYK_Y (Perceptual)



CLEditRGB.tif
Source Profile: Adobe RGB (1998)

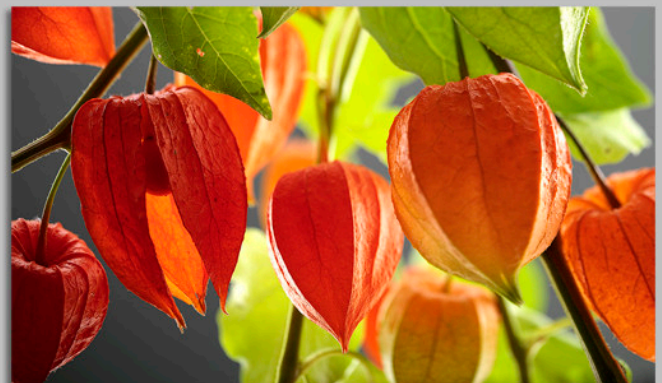
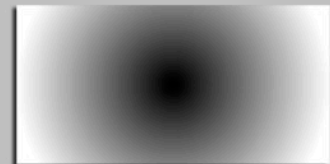
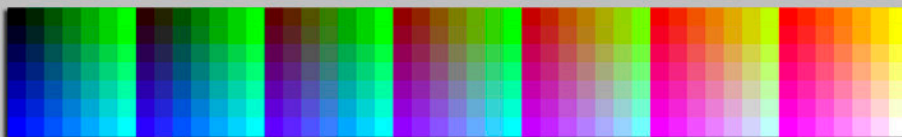
Original (RGB)



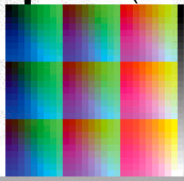
CLEditRGB v2.0
© ColorLogic GmbH 2006
Resolution 144dpi



You may add or change pictures in this area. Please do not use masks for editing.
All corrections must be applied to the whole page. Do NOT scale this page.



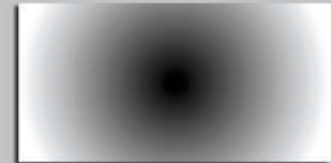
Converted (CMYK, Perceptual)



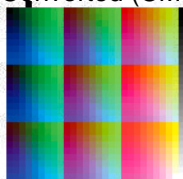
CLEditRGB v2.0
© ColorLogic GmbH 2006
Resolution 144dpi



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All corrections must be applied to the whole page. Do NOT scale this page.



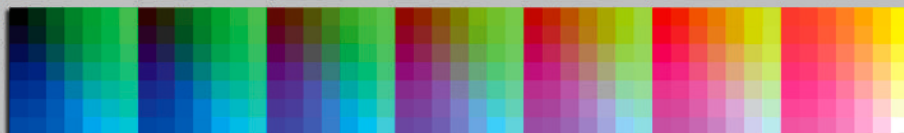
Converted (CMYK, Colorimetric+BPC)



CLEditRGB v2.0
© ColorLogic GmbH 2006
Resolution 144dpi

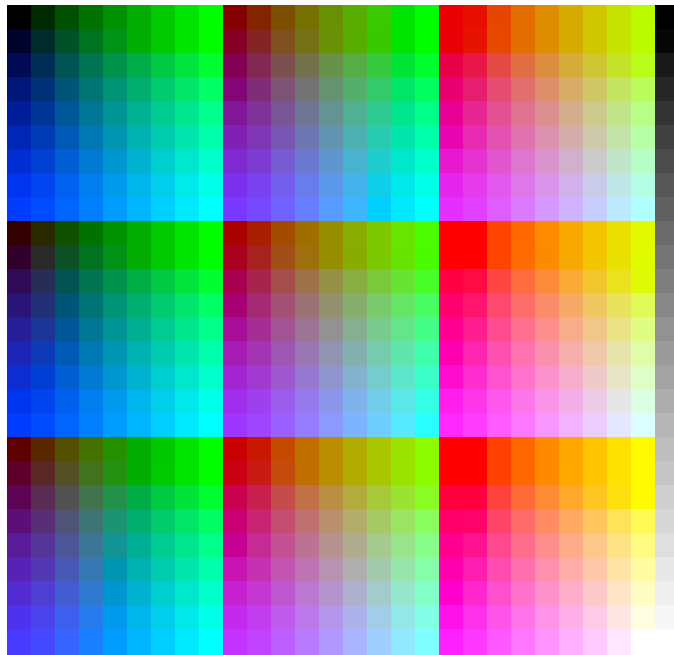


You may add or change pictures in this area. Please do not use masks for editing.
All corrections must be applied to the whole page. Do NOT scale this page.

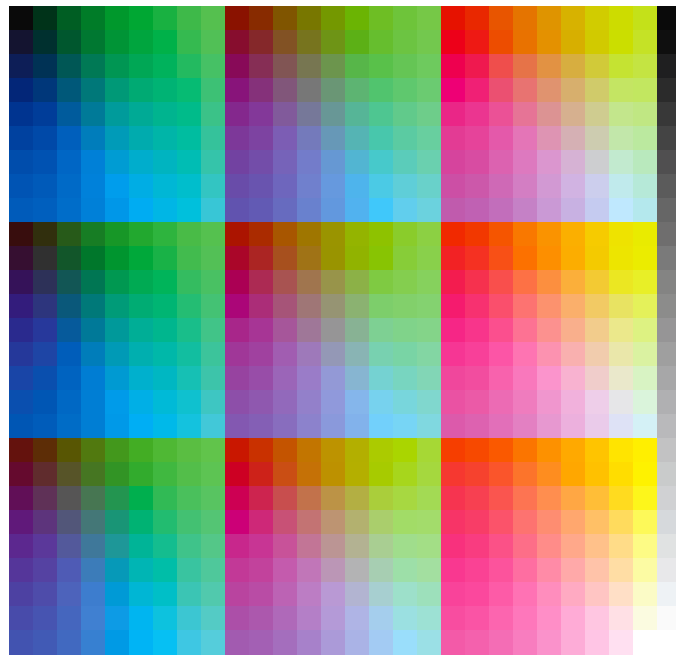


6. RGB Conversion (ECI-RGB v1.0)

This test converts RGB samples with the test 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 -> TestProfile -> Colorimetric -> RGB)



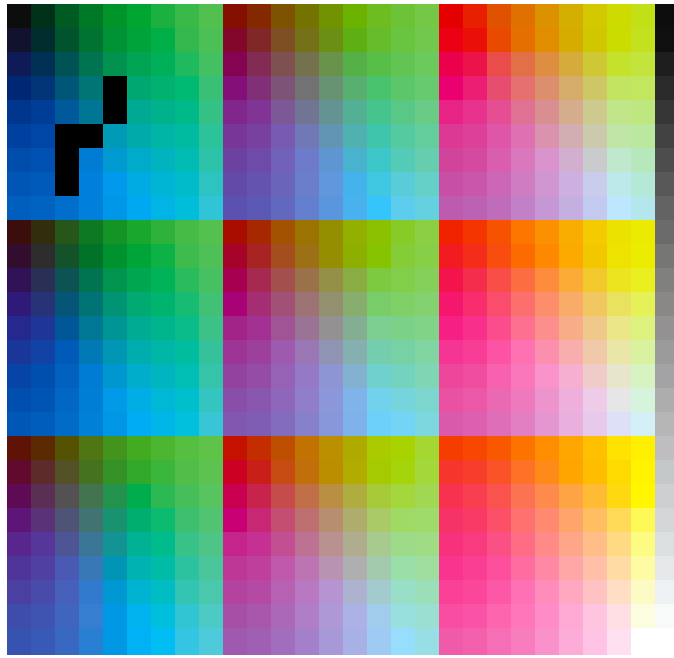
Black Channel (RGB -> Perceptual -> TestProfile)



Samples (Perceptual)

Black	77 / 67 / 56 / 100
White	0 / 0 / 0 / 0
Red	0 / 77 / 71 / 0
Green	44 / 0 / 65 / 0
Blue	83 / 34 / 0 / 0
Cyan	42 / 0 / 10 / 0
Magenta	3 / 59 / 0 / 0
Yellow	0 / 0 / 82 / 0
Cyan Light	25 / 0 / 7 / 0
Magenta Light	2 / 32 / 0 / 0
Yellow Light	0 / 1 / 30 / 0

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



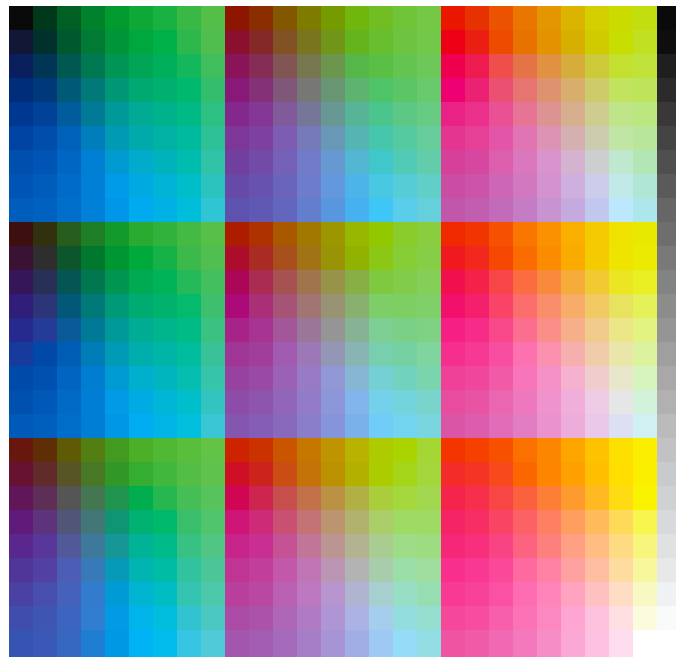
Black Channel (RGB -> Colorimetric+BPC -> TestProfile)



Samples (Colorimetric+BPC)

Black	74 / 60 / 55 / 96
White	0 / 0 / 0 / 0
Red	0 / 78 / 73 / 0
Green	44 / 0 / 66 / 0
Blue	86 / 30 / 0 / 0
Cyan	44 / 0 / 10 / 0
Magenta	3 / 59 / 0 / 0
Yellow	0 / 0 / 84 / 0
Cyan Light	27 / 0 / 8 / 0
Magenta Light	2 / 33 / 0 / 0
Yellow Light	0 / 0 / 31 / 0

Colorimetric (RGB -> Saturation -> TestProfile -> Colorimetric -> RGB)



Black Channel (RGB -> Saturation -> TestProfile)

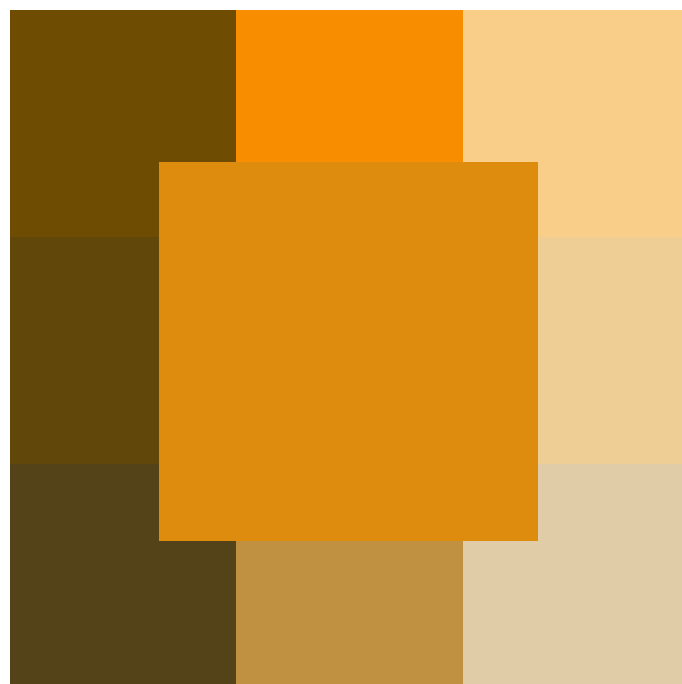
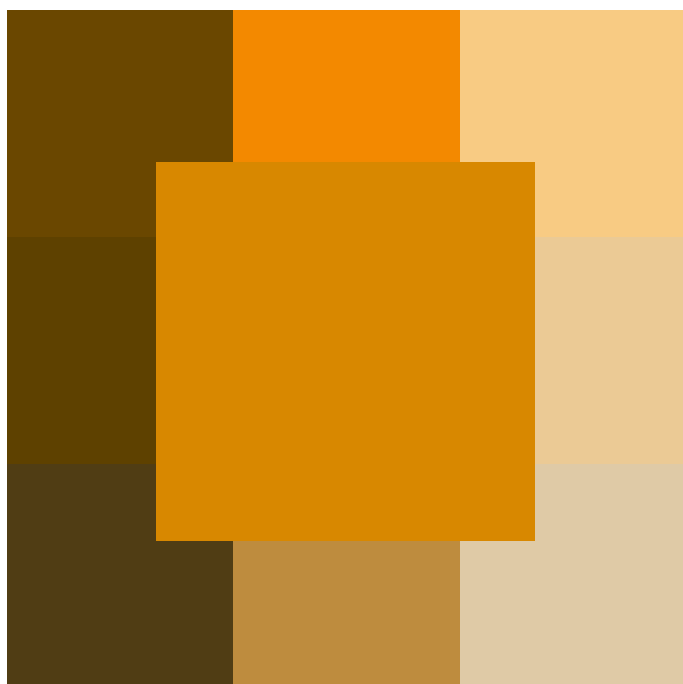
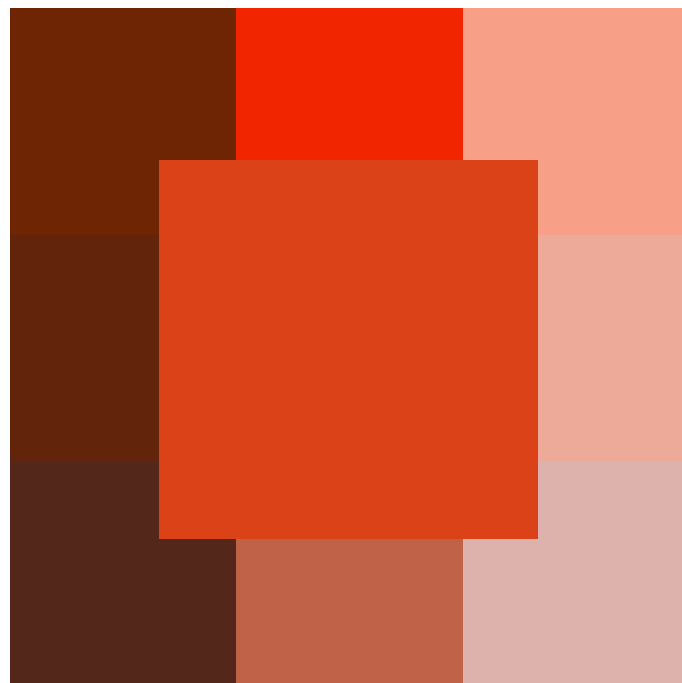
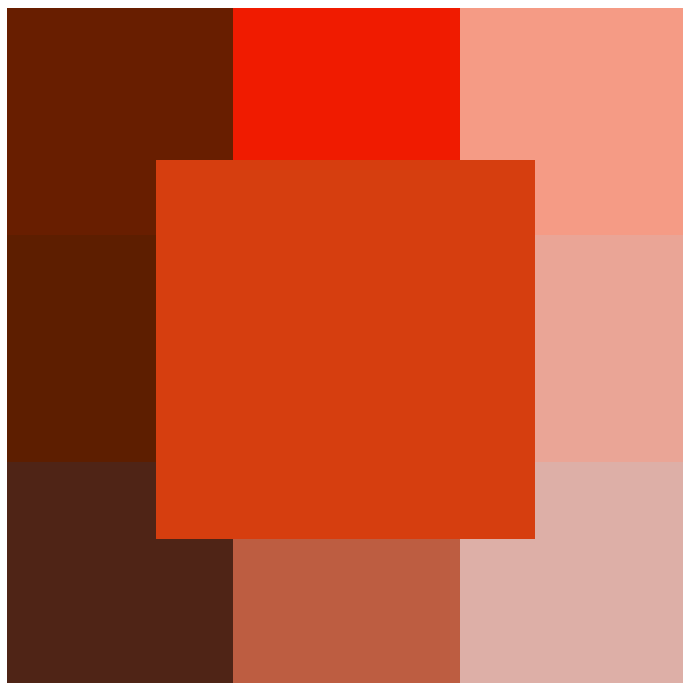


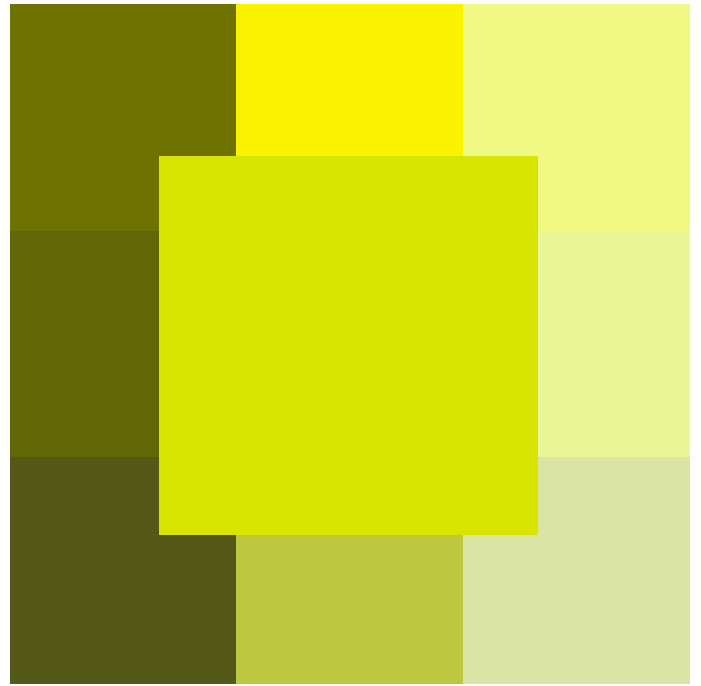
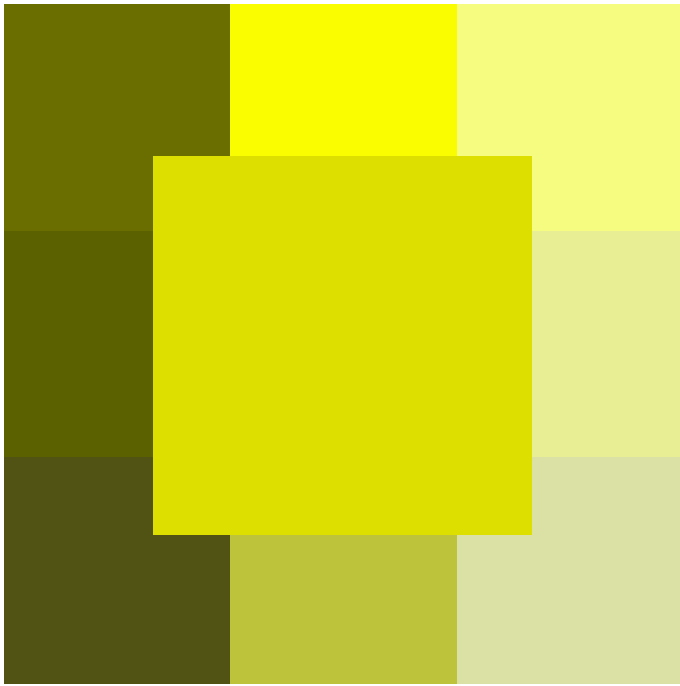
Samples (Saturation)

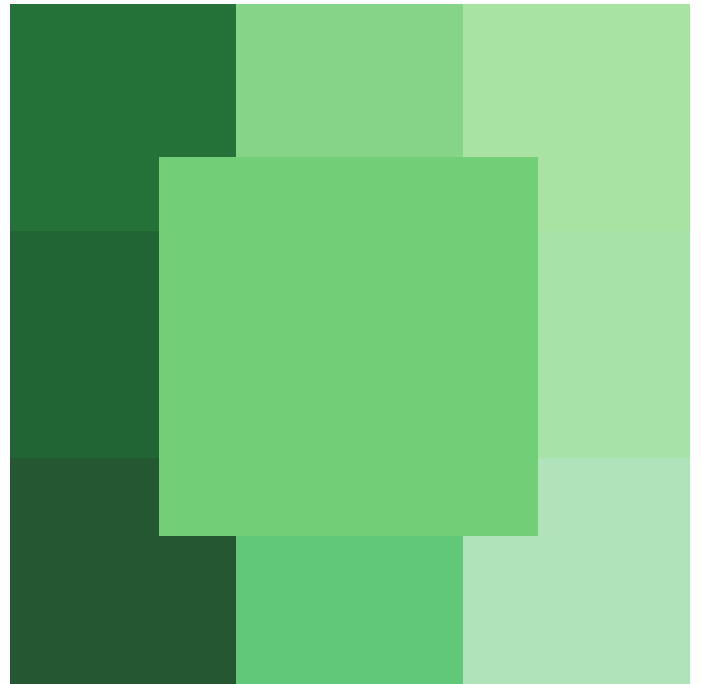
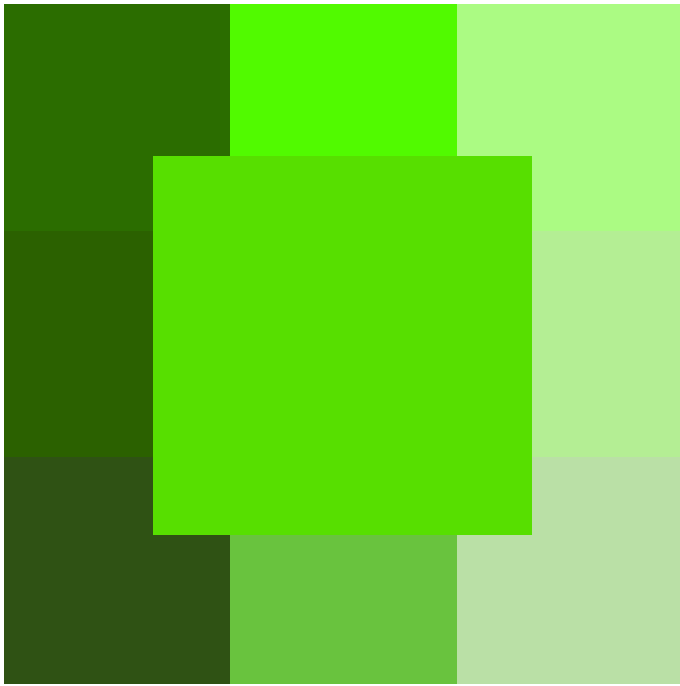
Black	77 / 67 / 56 / 100
White	0 / 0 / 0 / 0
Red	0 / 81 / 73 / 0
Green	44 / 0 / 69 / 0
Blue	85 / 32 / 0 / 0
Cyan	43 / 0 / 11 / 0
Magenta	4 / 62 / 1 / 0
Yellow	2 / 1 / 82 / 0
Cyan Light	28 / 0 / 8 / 0
Magenta Light	2 / 35 / 1 / 0
Yellow Light	2 / 2 / 33 / 0

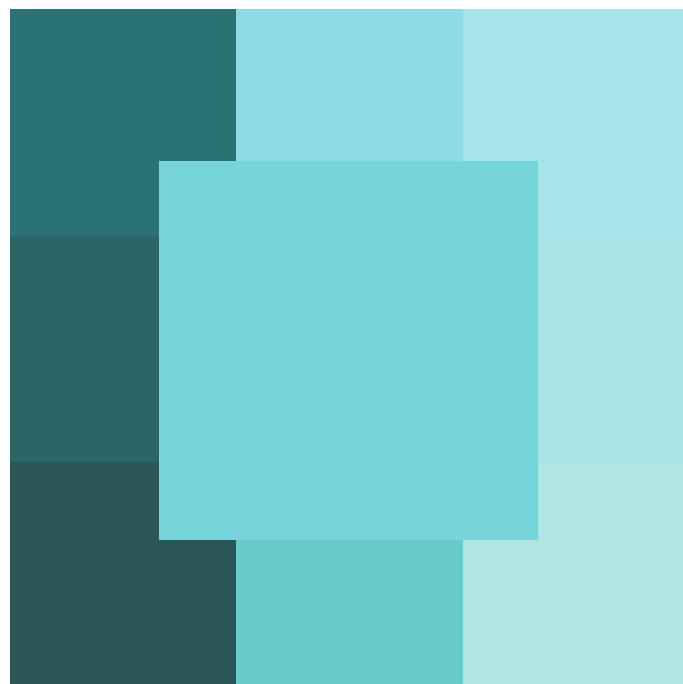
7. Hue Samples

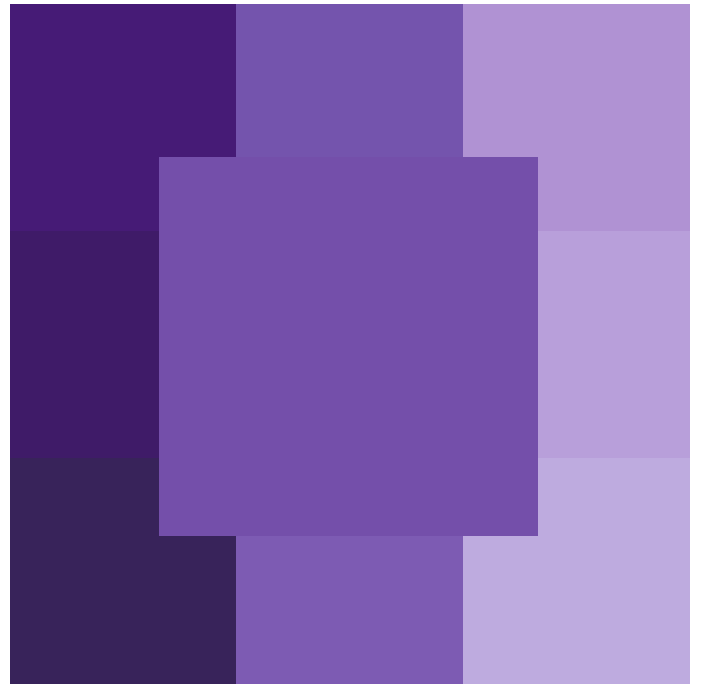
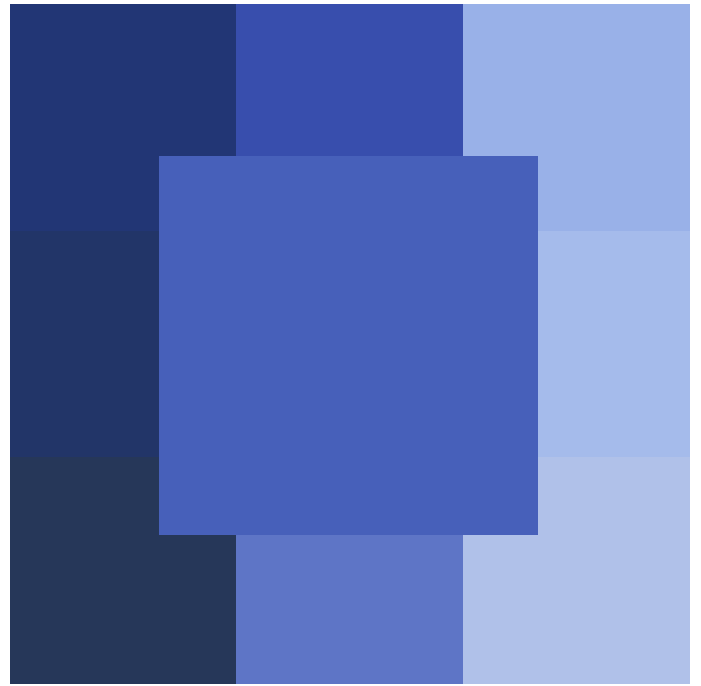
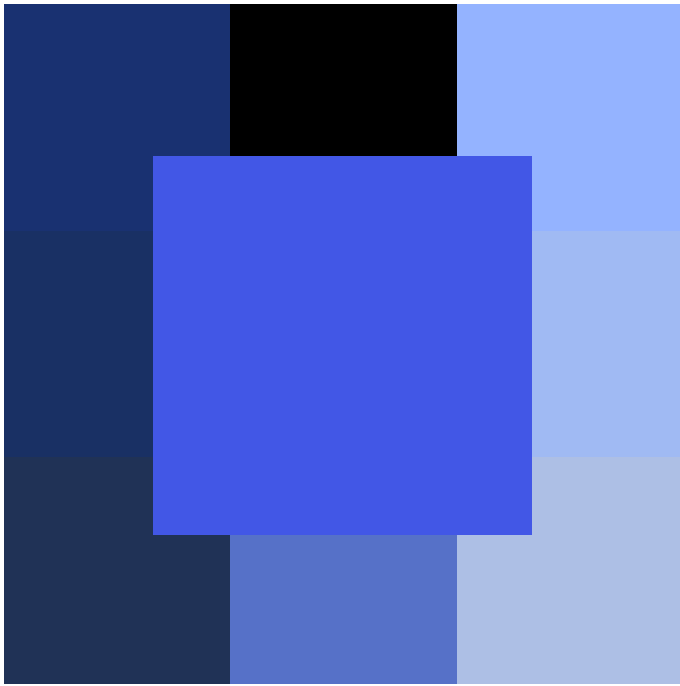
On the left side you see the original colors, on the right side the (perceptual) converted colors.

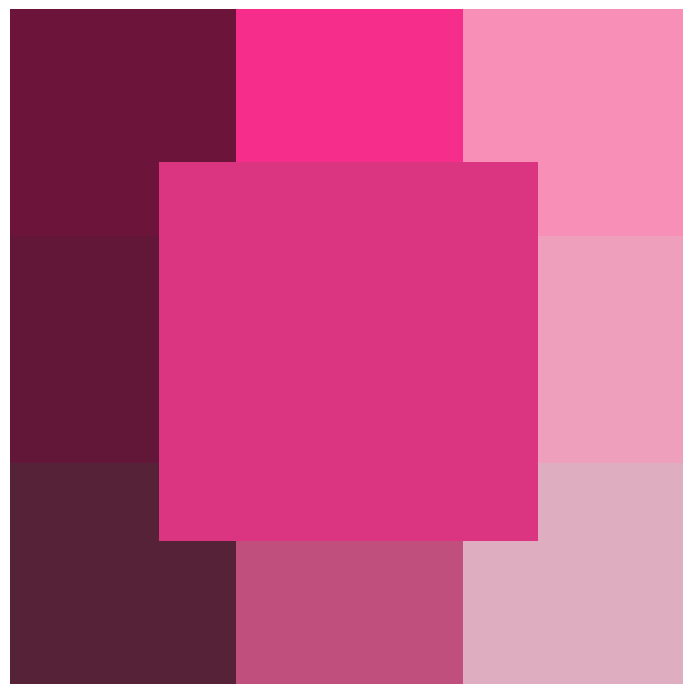
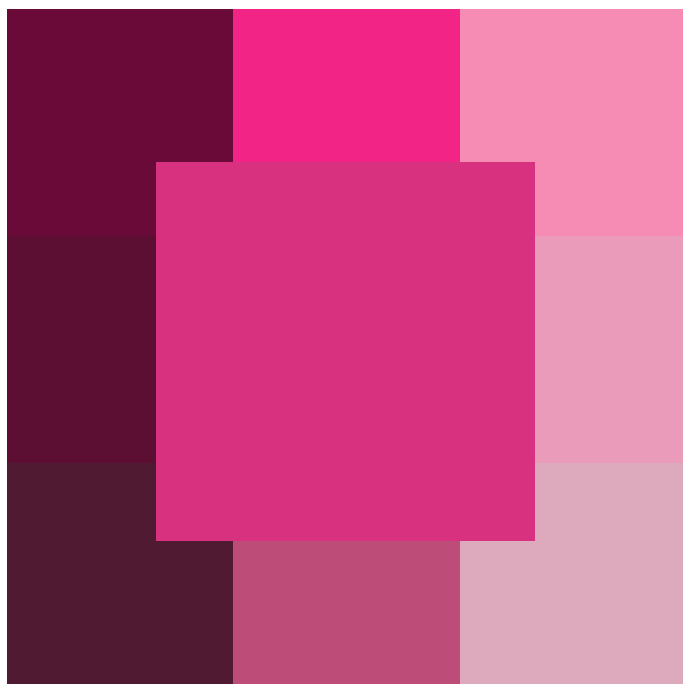
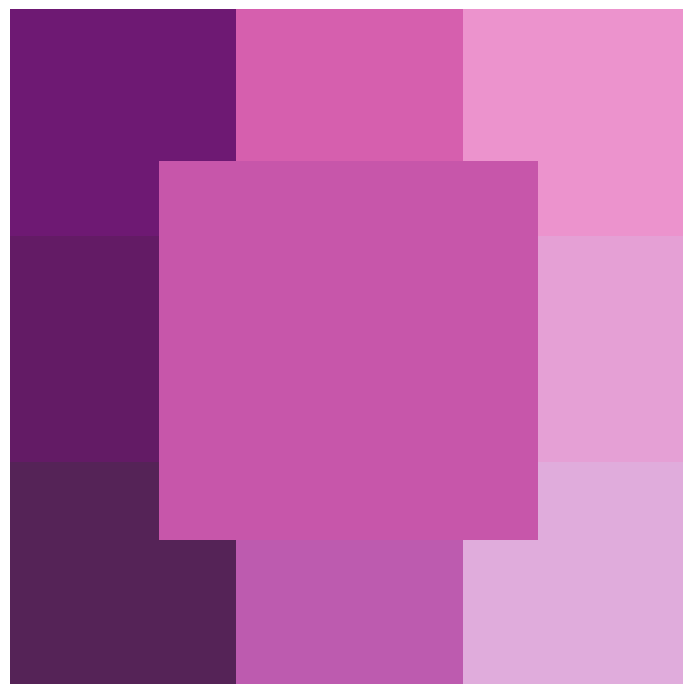
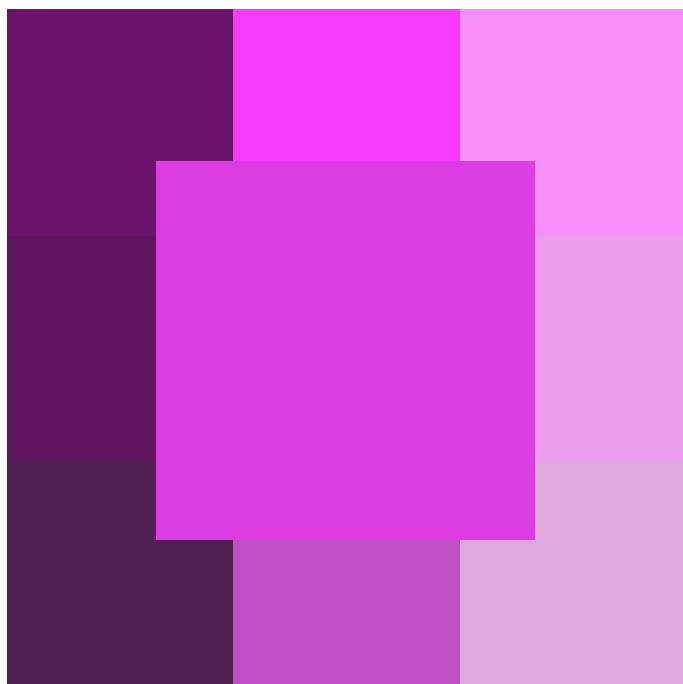








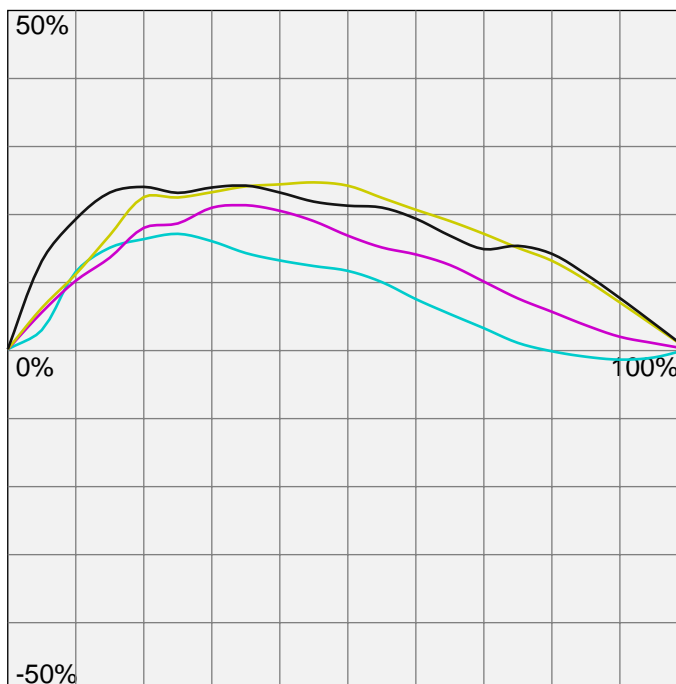




8. Linearity

Note: The dot gain cannot be estimated seriously from colorimetric data, therefore we display the deltaE-76 based deviation from linear primaries. Unlike density curves a dot gain is not desirably for colorimetric curves. The colorimetry respects visual distances better than density.

Colorimetric Linearity: The diagram shows the colorimetric linearity of the primaries. Flat curves indicate that the deltaE to white and solid color is proportional.



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	0.18	0.63	2.06	2.55	2.81	7.03	11.38	14.92	16.19	16.97	15.88	14.14	13.05
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	12.23	11.52	9.87	7.37	5.18	3.09	0.93	-0.30	-1.10	-1.53	-1.21		

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	0.13	0.43	1.65	3.75	5.42	8.31	10.07	13.46	17.85	18.49	20.81	21.17	20.35
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	18.83	16.70	14.96	13.93	12.39	9.94	7.47	5.51	3.52	1.83	0.89		

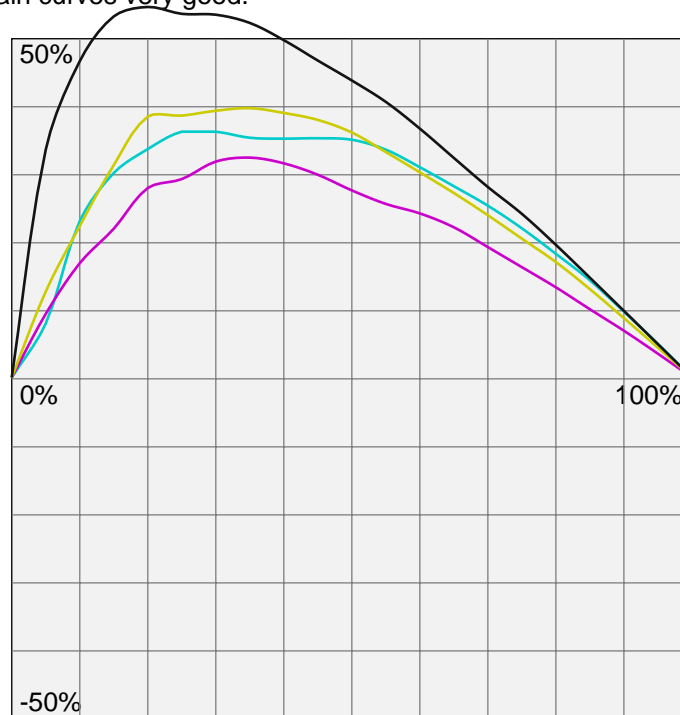
Yellow

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	0.14	0.45	1.91	4.24	6.07	9.16	11.04	16.76	22.38	22.31	23.08	23.94	24.24
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	24.53	24.04	22.27	20.51	18.85	16.97	14.91	13.01	10.18	6.87	3.45		

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	3.92	7.65	10.09	11.35	12.96	18.06	19.13	23.04	23.87	22.99	23.78	24.06	23.04
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	21.70	21.10	20.83	19.19	16.70	14.72	15.20	14.03	11.03	7.52	3.80		

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 very good.



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	1.01	2.46	5.49	6.93	7.94	15.26	22.99	30.07	33.58	36.14	36.13	35.25	35.11
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	35.17	34.95	33.49	30.92	28.12	25.26	21.93	18.18	14.30	9.69	4.95		

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	0.61	1.43	3.52	6.75	9.36	13.83	16.81	21.88	27.86	29.17	31.74	32.33	31.49
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	29.80	27.51	25.52	24.12	22.08	19.17	16.22	13.26	10.04	6.88	3.50		

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	0.89	2.04	4.99	9.20	12.64	18.29	22.27	31.23	38.35	38.50	39.22	39.60	38.89
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	37.87	36.02	33.14	30.16	27.12	23.86	20.41	16.97	12.99	8.73	4.39		

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	10.77	20.21	26.28	29.67	33.51	43.43	46.51	53.09	54.47	53.46	53.34	52.13	49.60
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	46.59	43.67	40.52	36.59	32.28	28.00	24.06	19.50	14.67	9.80	4.90		