

HLG1



HLG2



HLG3



HLG4



HLG5



HLG6



HLG7



HLG6_old



Overview

Considering the content is BT.2020 Limited range

1 picture = 8294400 samples

	out-of-range samples	Texture	Global Motion	Local Motion	Content gamut	Dynamic range
HLG1 (birds/snow)	No	Sharp & complex	Slight	Medium complex	<< BT.709	Medium
HLG2 (ice sea)	No	Flat	Medium	No	<< BT.709	Small
HLG3 (river/forest)	Yes	Sharp & complex	Medium	Slight	Mostly in BT.709 *	Medium
HLG4 (cascading water far)	Yes	Sharp & complex	No	Complex	Mostly in BT.709 *	Large
HLG5 (cascading water close)	Yes	Sharp & complex	No	Complex	Mostly in BT.709 *	Large
HLG6 (trees)	Yes	Sharp & complex	Medium	Almost no	Mostly in BT.709 *	Medium
HLG7 (sun rise)	Almost no	Medium	No	Medium complex	Mostly << BT.709 *	Large
HLG6_old (butterfly/flowers)	Almost no	Medium	No	Almost no	> BT.709	Large

* samples outside BT.709 located in black areas or around edges (chroma resampling issues) and are not visible

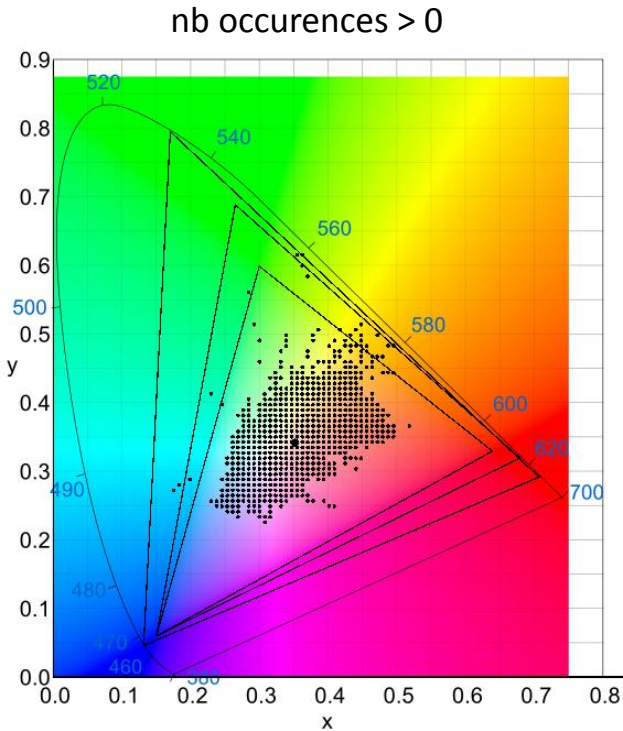
Gamut test

Considering the content is BT.2100 Limited range

1 picture = 8294400 samples

Seq	Y'min	%<64	Y'max	%>940	Umin	Umax	Vmin	Vmax	% RGB<0	% RGB>1
HLG1	106	0.0%	921	0.0%	391	552	480	605	0.0%	0.0%
HLG2	170	0.0%	786	0.0%	459	631	373	580	0.0%	0.0%
HLG3	4	0.1%	960	0.0%	286	639	358	705	2.2%	0.0%
HLG4	4	0.1%	1019	0.0%	235	726	443	641	0.6%	0.1%
HLG5	6	0.0%	997	0.0%	318	687	400	630	0.4%	0.0%
HLG6	4	1.3%	1019	0.0%	185	737	292	772	7.0%	0.1%
HLG7	59	0.0%	953	0.0%	198	565	479	668	0.0%	0.0%
HLG6_old	60	0.0%	954	0.0%	198	565	479	668	0.1%	0.0%

HLG1





HLG1

out of BT.709 samples in red



HLG1

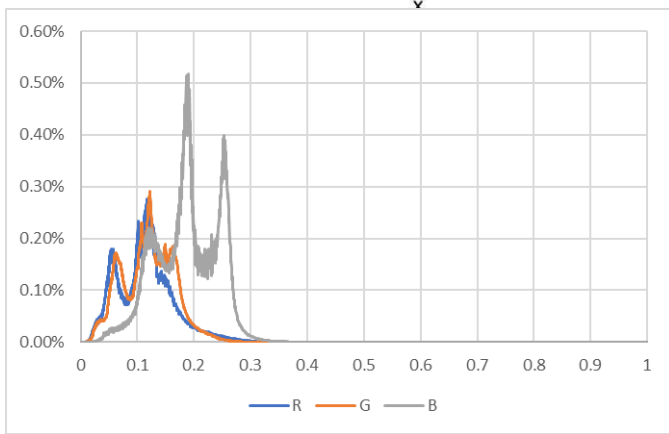
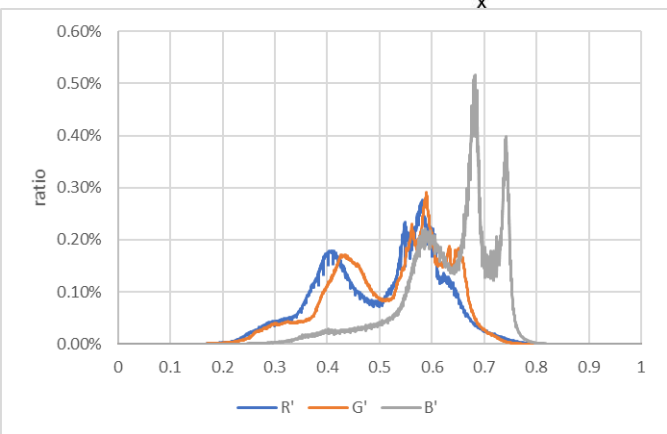
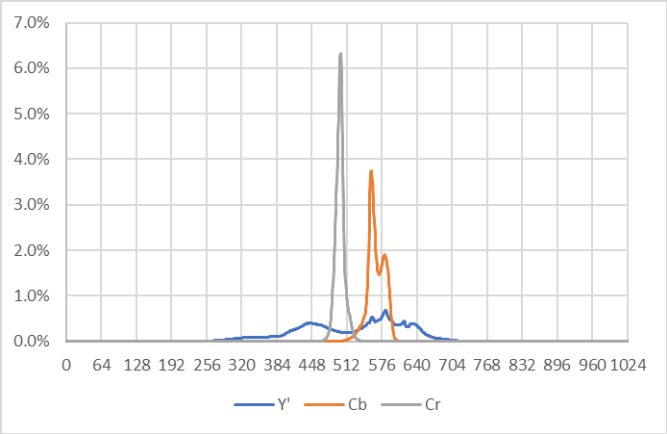
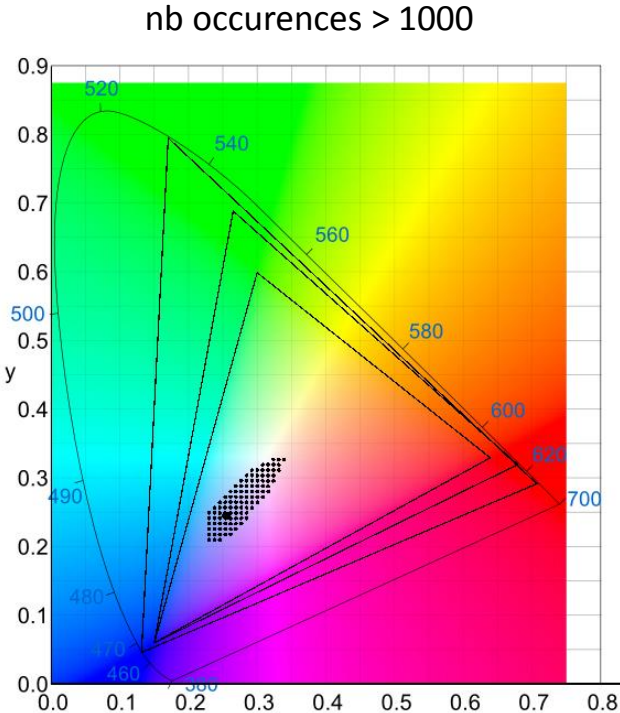
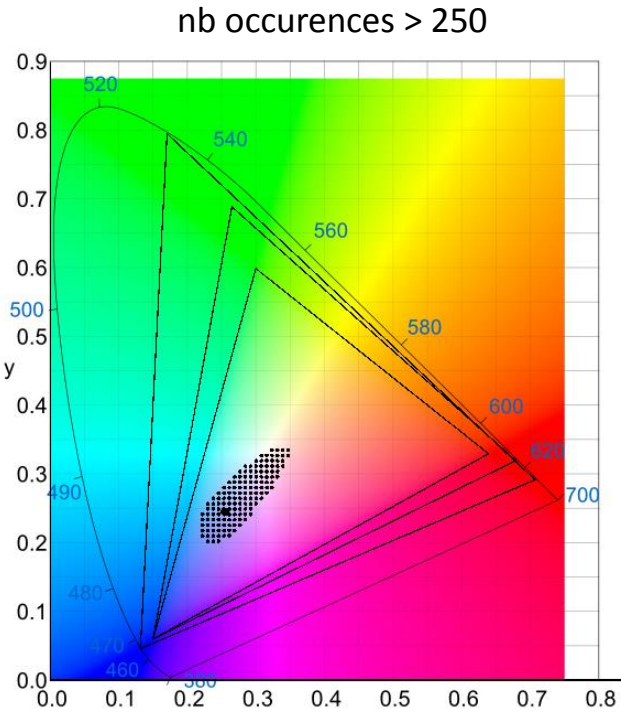
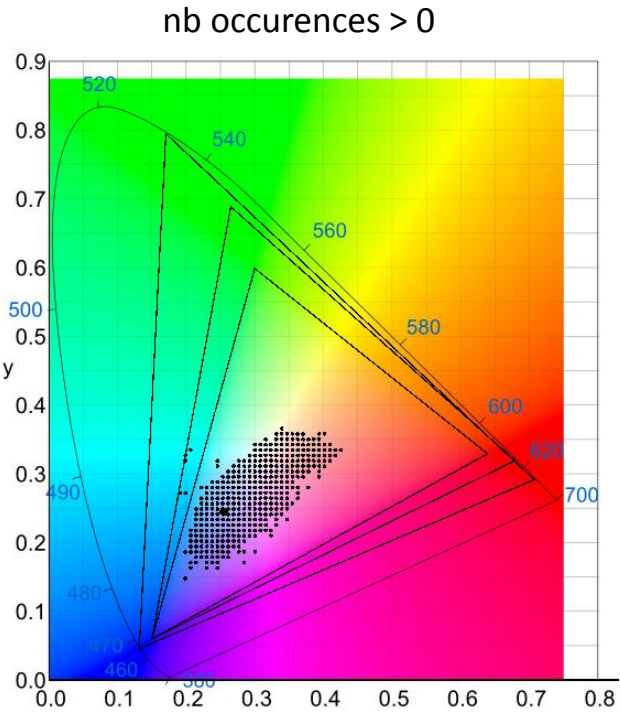
200

300

1

400

HLG2



	Nb samples < 0	Nb samples > 1
R'	0	0
G'	0	0
B'	0	0
total	0	0

over 8294400 samples



HLG2

out of BT.709 samples in red

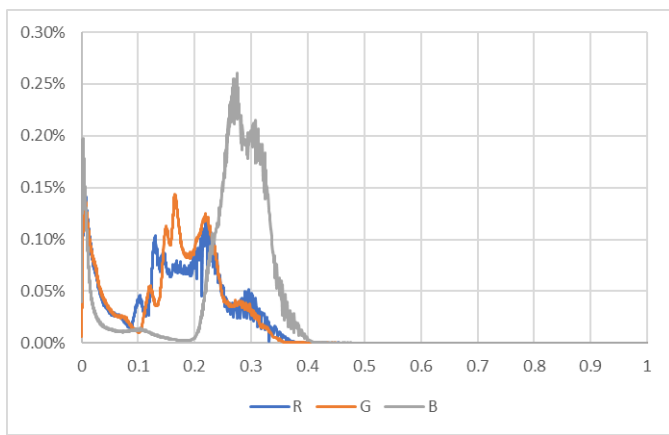
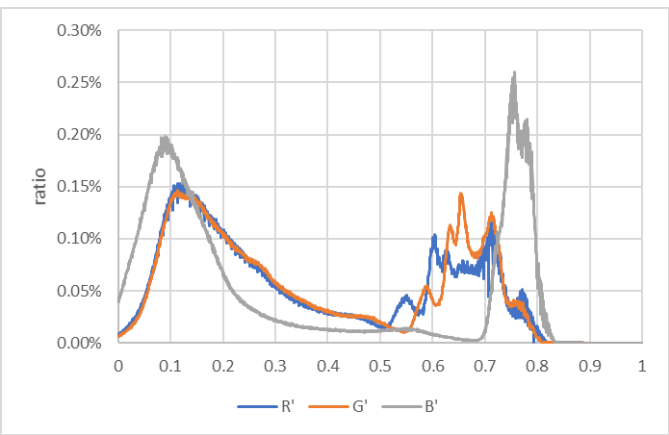
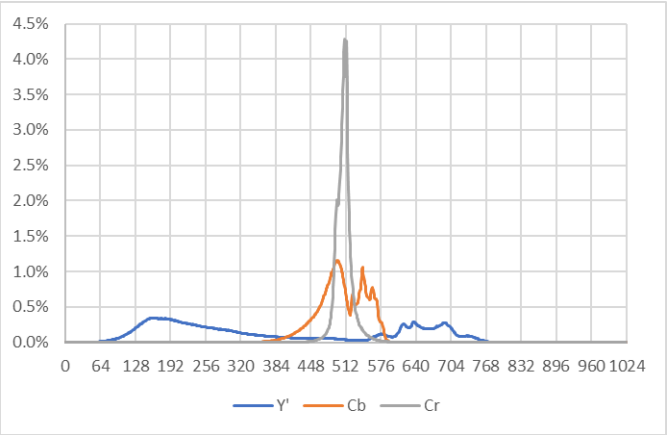
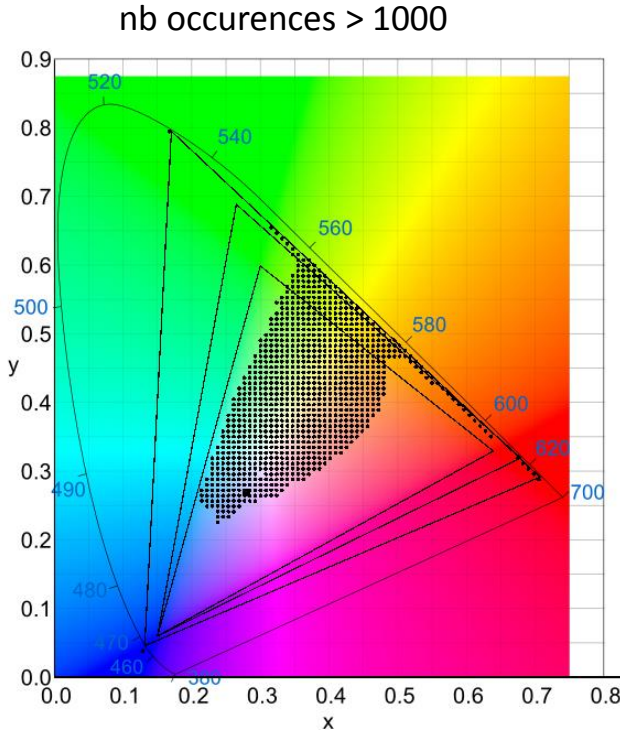
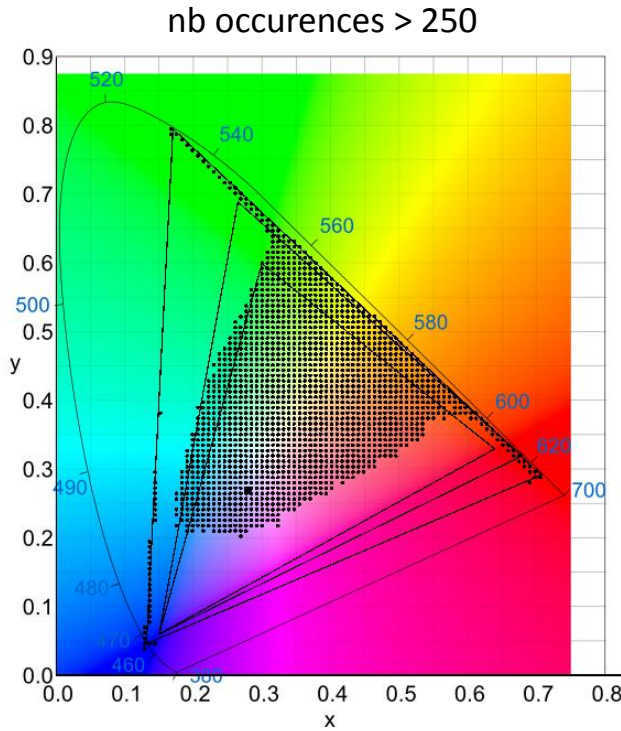
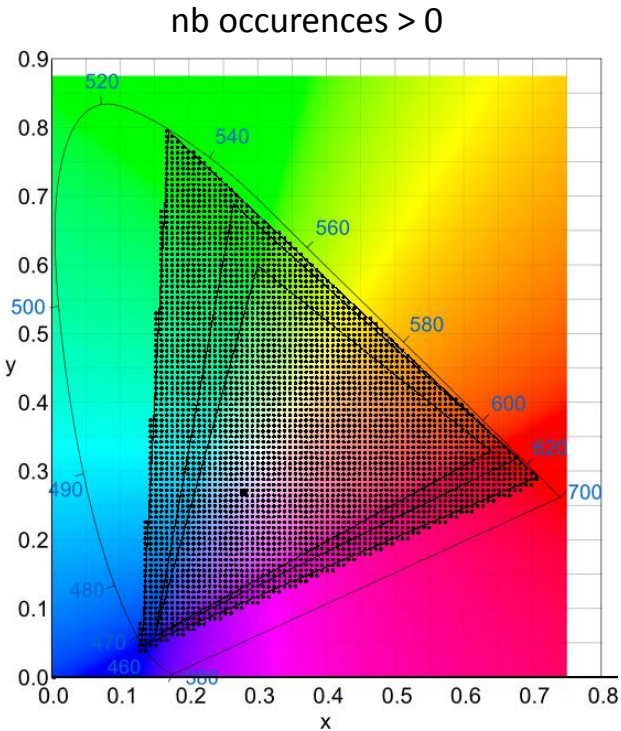


4-5

100-200

100-150

HLG3



	Nb samples < 0	Nb samples > 1
R'	21968	39
G'	17249	8
B'	144313	11
total	164915 (2.0%)	53

over 8294400 samples



HLG3

out of BT.709 samples in green



HLG3

out of BT.2020 samples in green



300

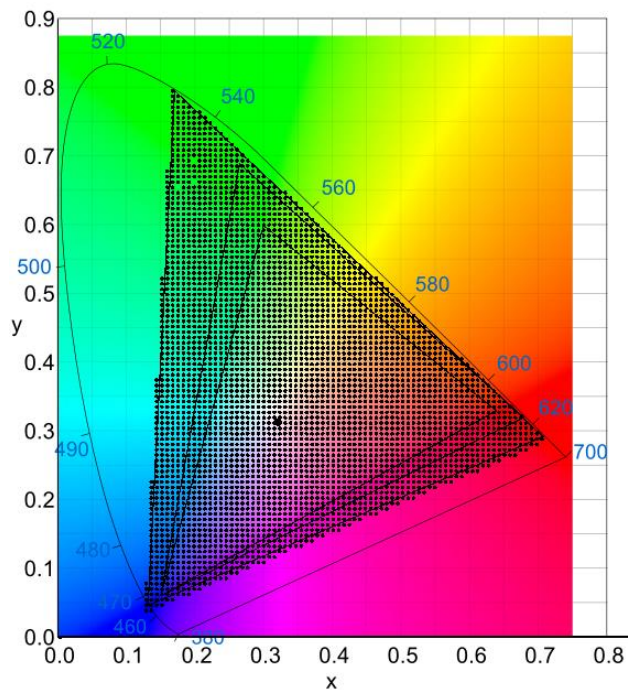
100-200

50

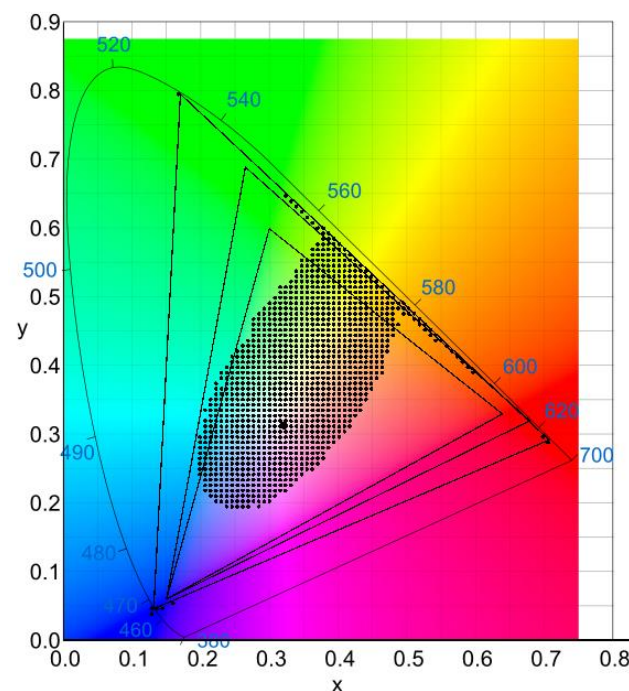
A few 10s to a few
hundreds for specular

HLG4

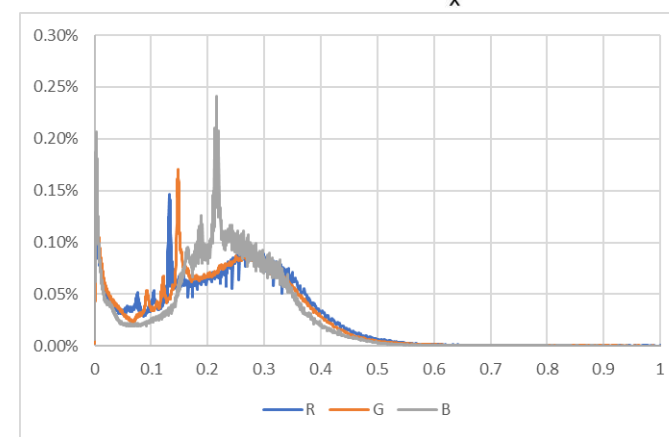
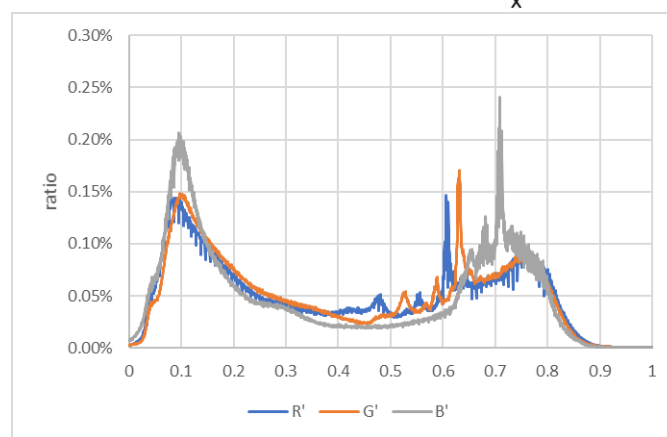
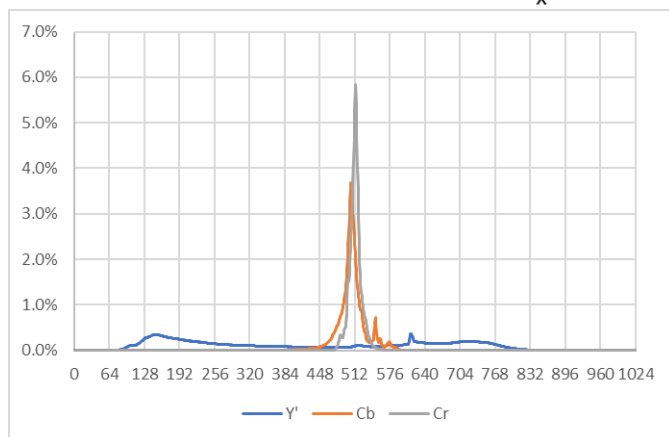
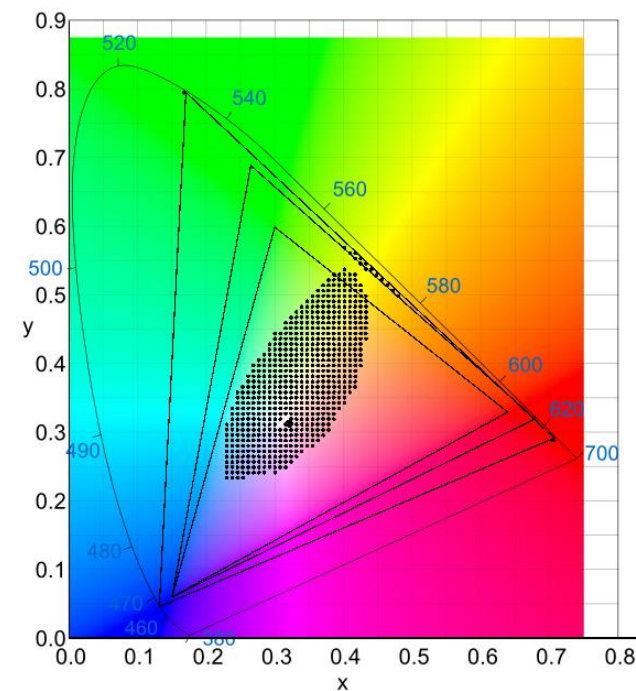
nb occurrences > 0



nb occurrences > 250



nb occurrences > 1000



	Nb samples < 0	Nb samples > 1
R'	6466	2040
G'	10852	1245
B'	32528	2093
total	41125 (0.5%)	3318

over 8294400 samples



HLG4

out of BT.709 samples in green



HLG4

out of BT.2020 samples in green



400-500

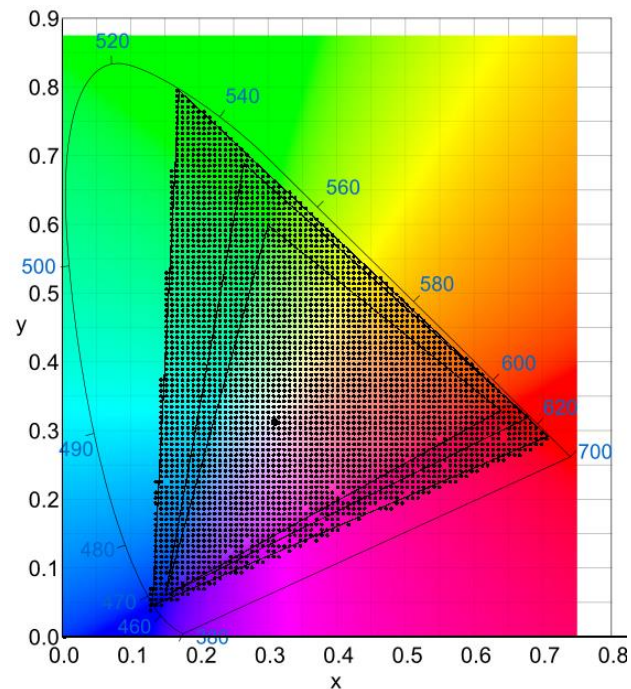
0.1-1

100-250, 700+ on specular

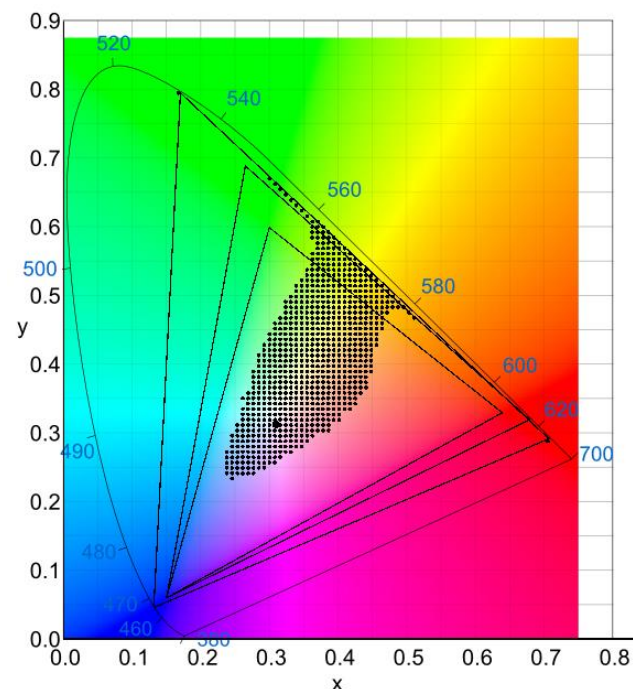
HLG4

HLG5

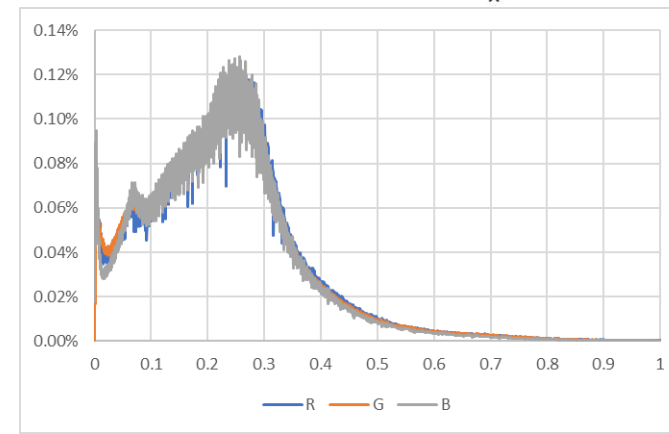
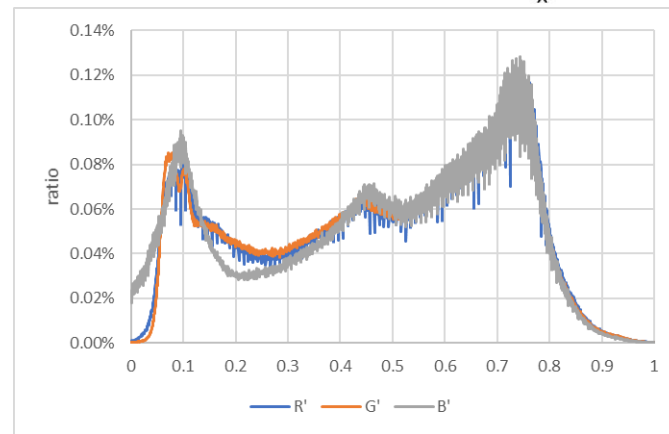
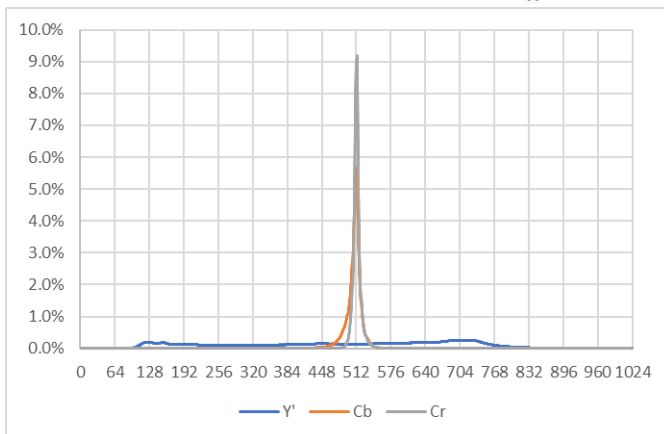
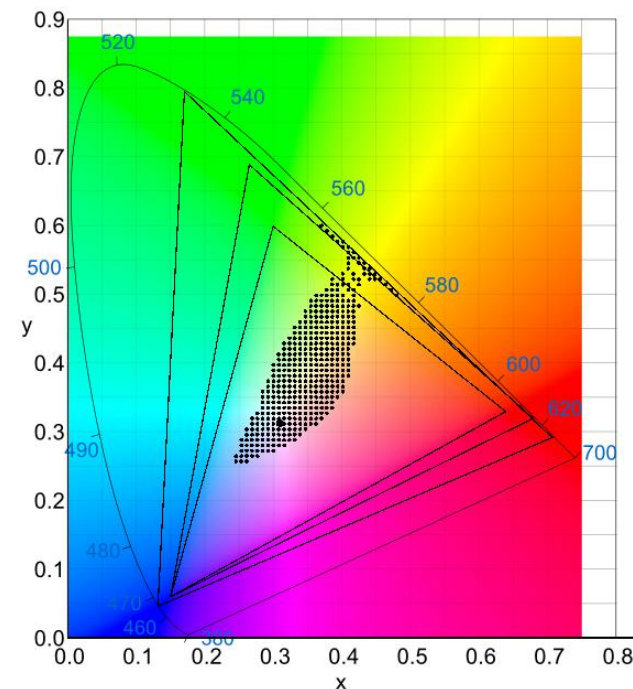
nb occurrences > 0



nb occurrences > 250



nb occurrences > 1000



	Nb samples < 0	Nb samples > 1
R'	918	875
G'	664	501
B'	28856	720
total	29705 (0.4%)	1684

over 8294400 samples



HLG5

out of BT.709 samples in green



HLG5

out of BT.2020 samples in green

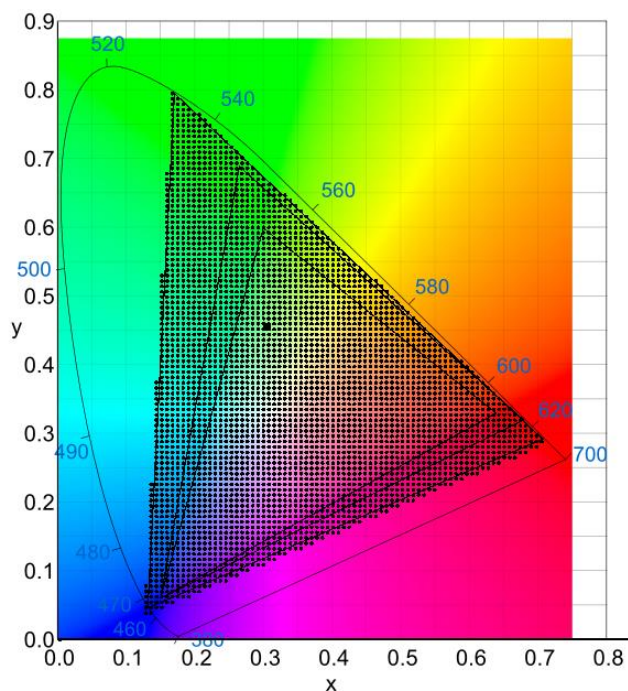


1

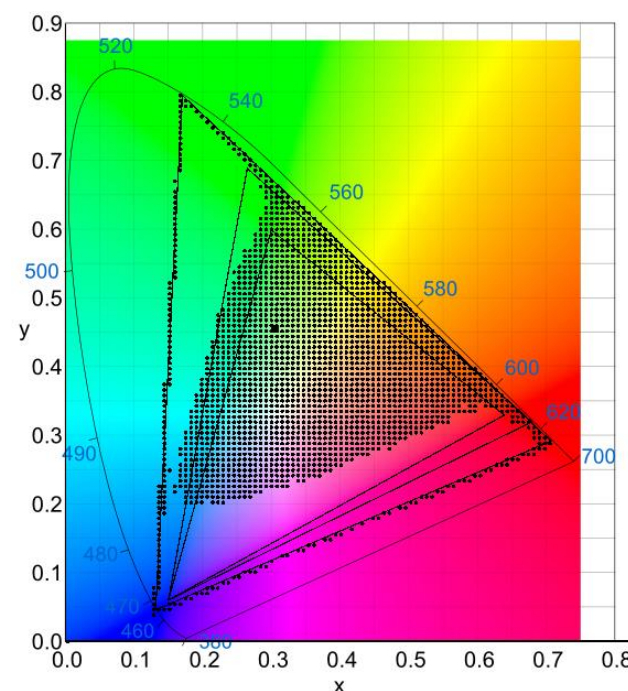
400-600, 700+ on specular

HLG6

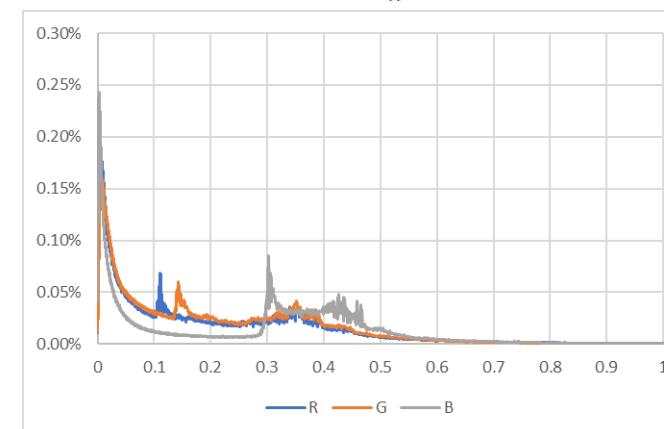
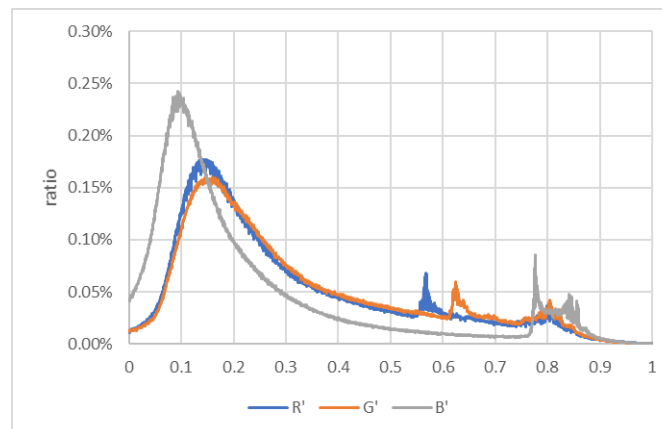
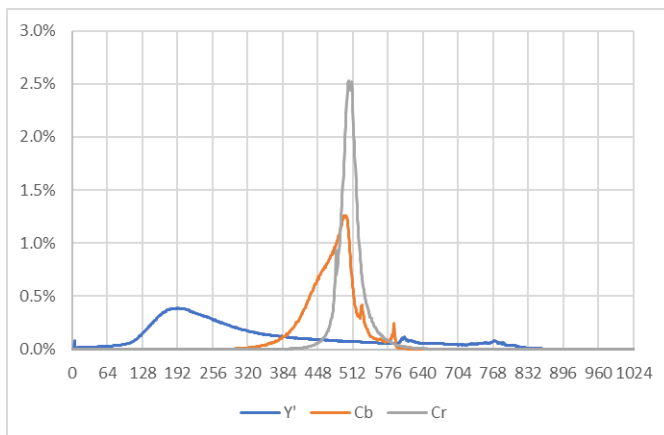
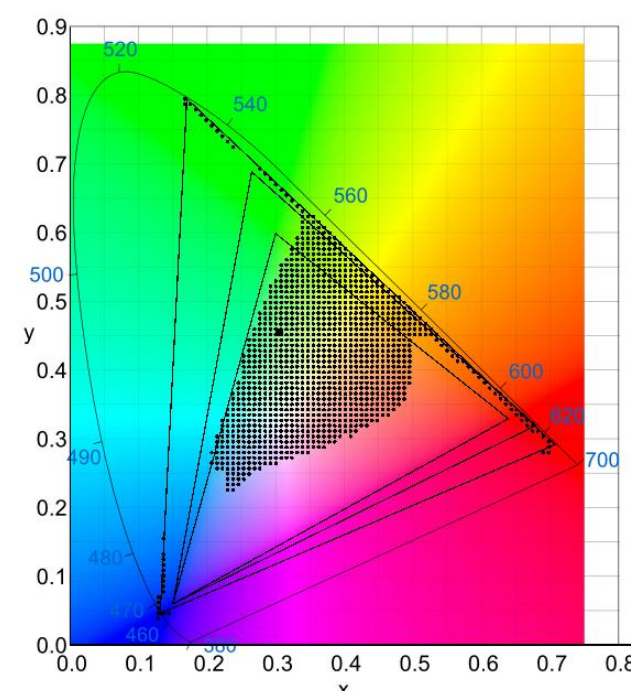
nb occurrences > 0



nb occurrences > 250



nb occurrences > 1000



	Nb samples < 0	Nb samples > 1
R'	110885	2814
G'	129726	480
B'	336007	2182
total	419204 (5.1%)	5197

over 8294400 samples



HLG6

out of BT.709 samples in green



HLG6

out of BT.2020 samples in green



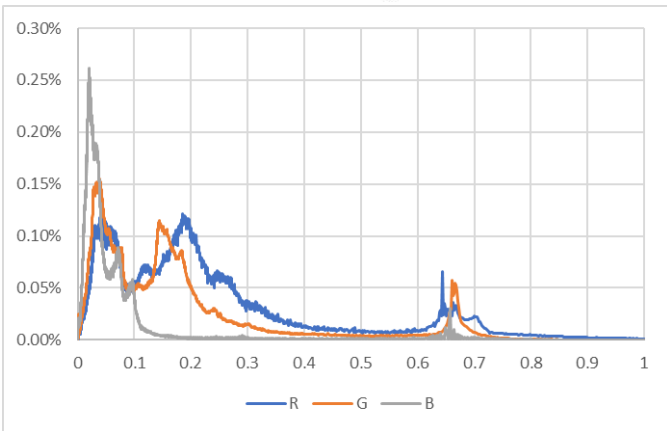
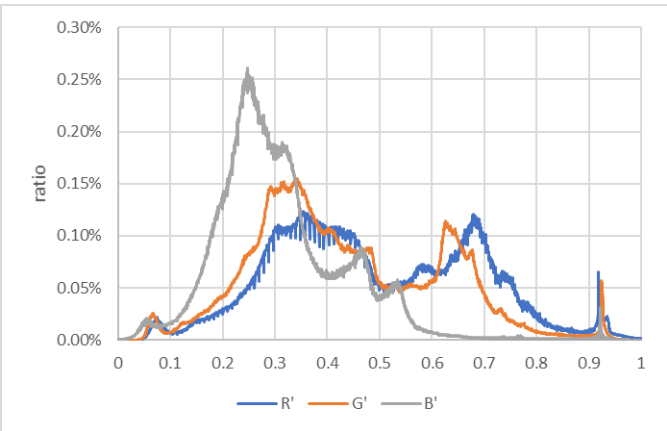
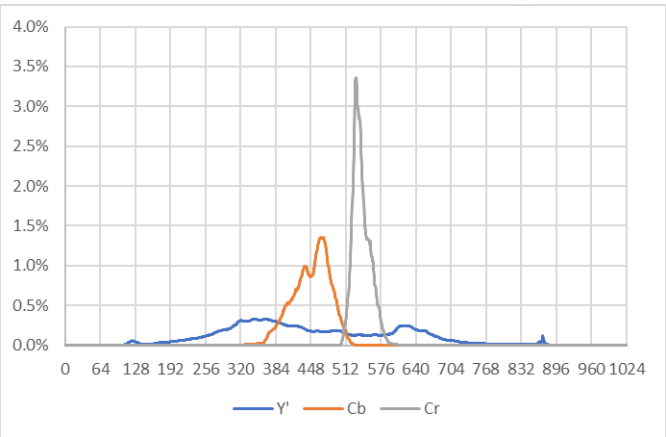
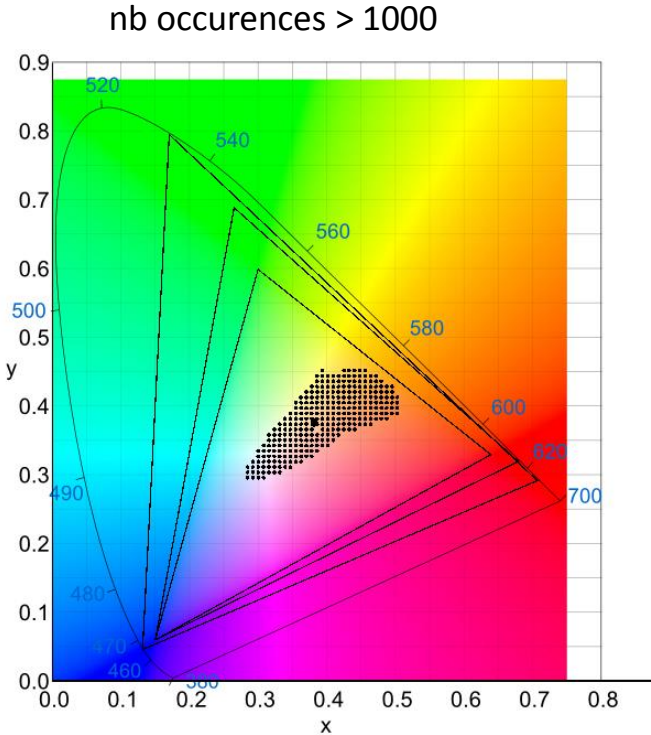
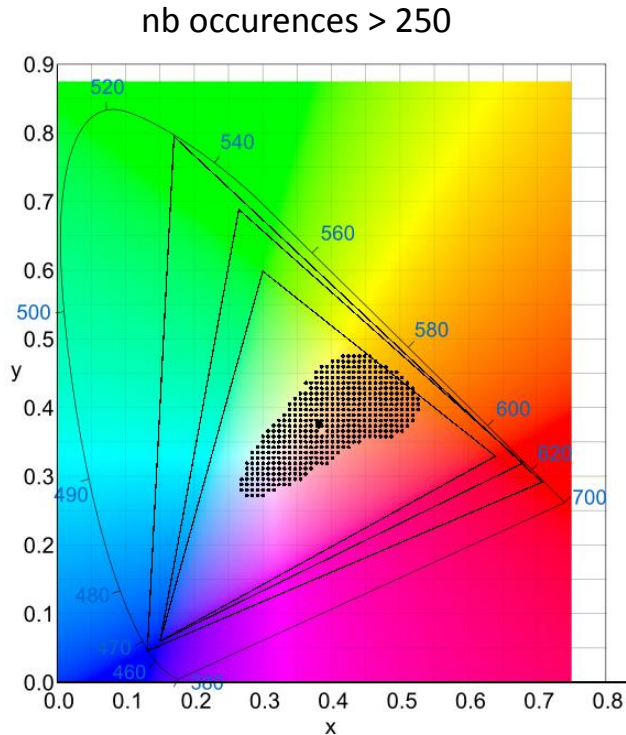
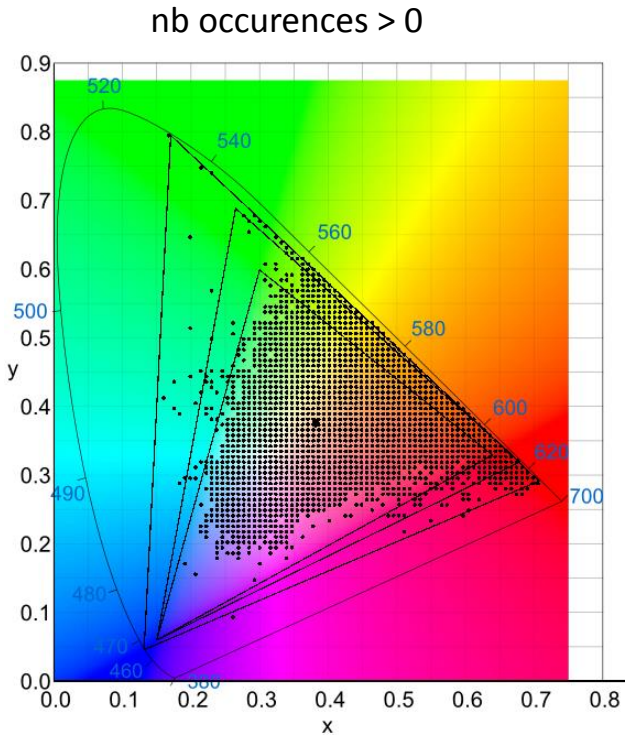
350-400

A few 10s to a few
hundreds for specular

HLG6

0.3-0.4

HLG7



	Nb samples < 0	Nb samples > 1
R'	1	3742
G'	22	33
B'	2245	43
total	2251	3794

over 8294400 samples



HLG7

out of BT.709 samples in green



600+

600

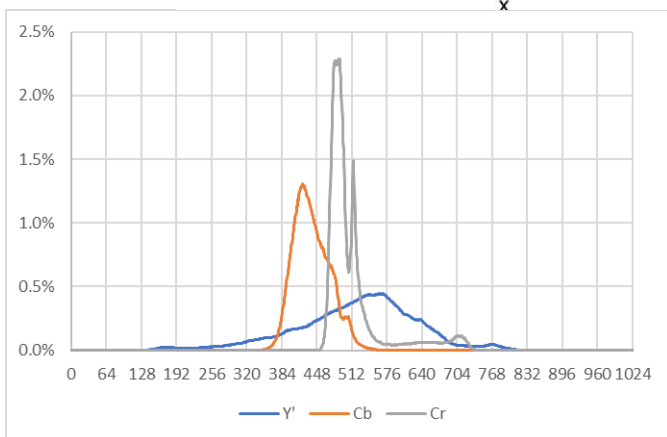
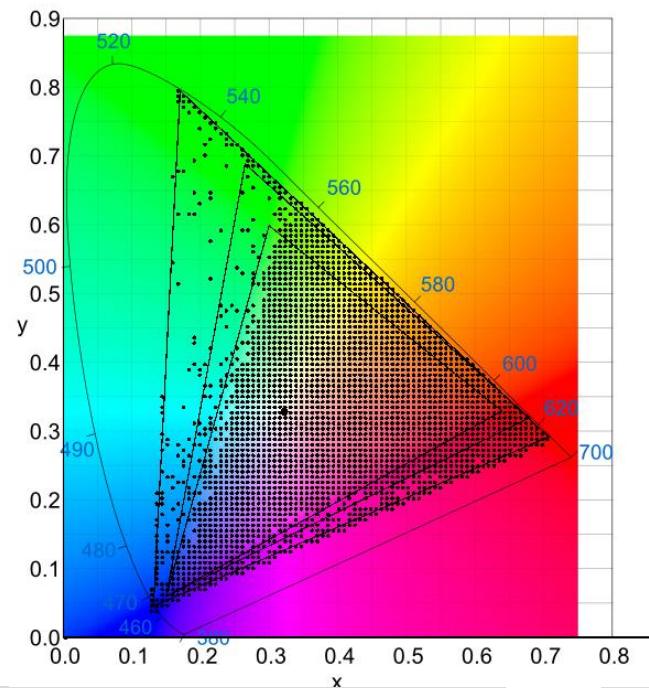
0.5

20-40

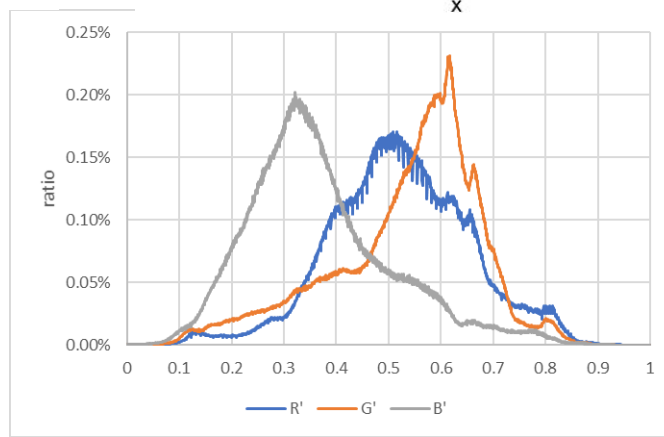
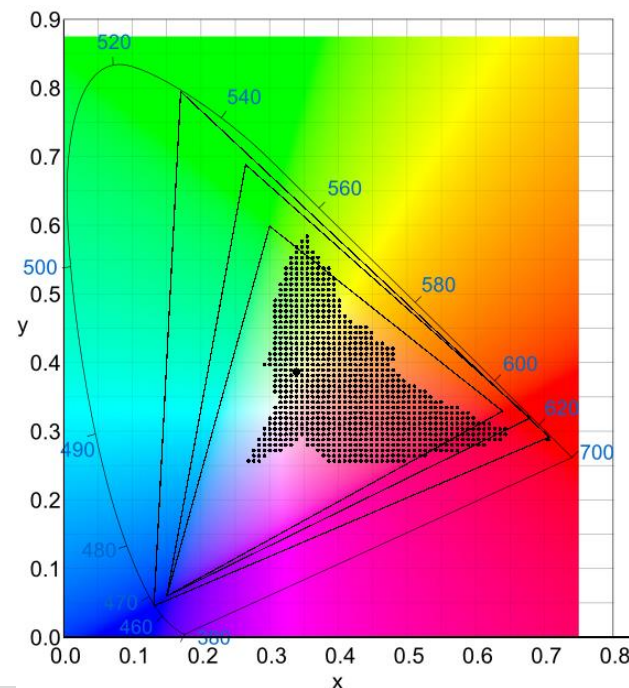
600+

HLG6_old

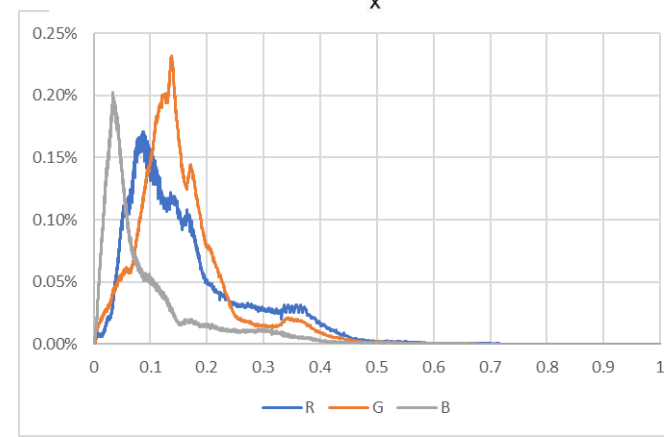
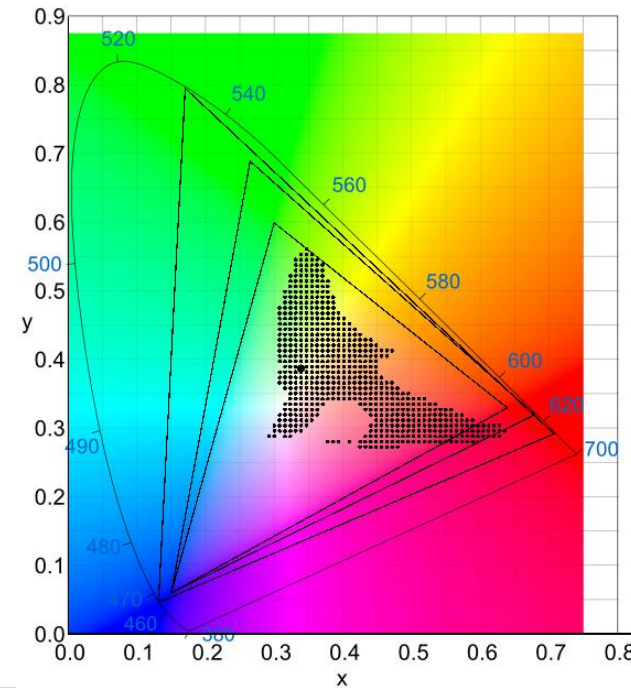
nb occurrences > 0



nb occurrences > 250



nb occurrences > 1000



	Nb samples < 0	Nb samples > 1
R'	684	6
G'	1528	1
B'	2606	13
total	3513	16

over 8294400 samples



HLG6_old

out of BT.709 samples in green



HLG6_old

out of BT.2020 samples in green

