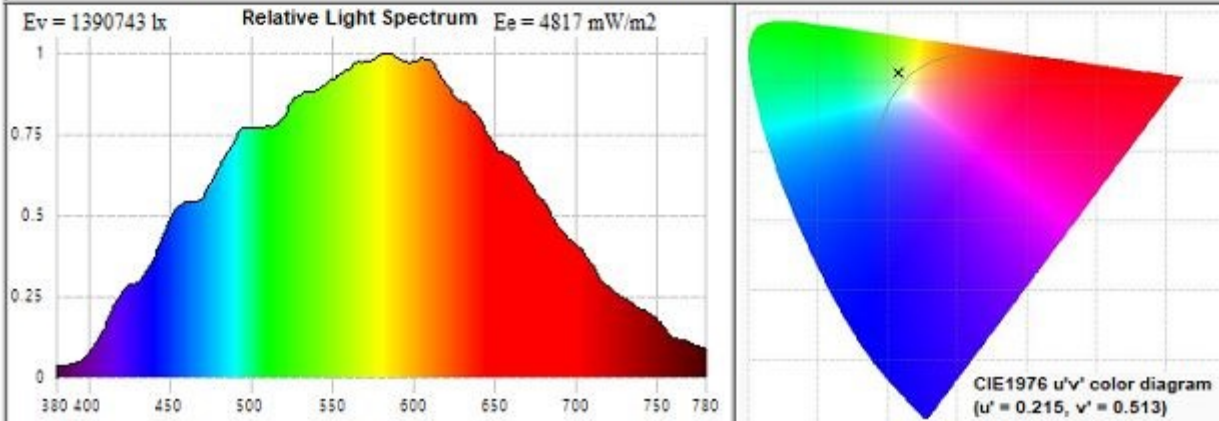
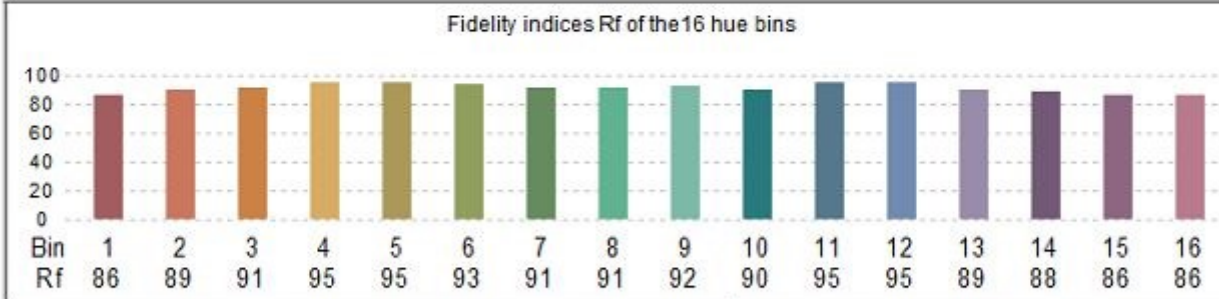
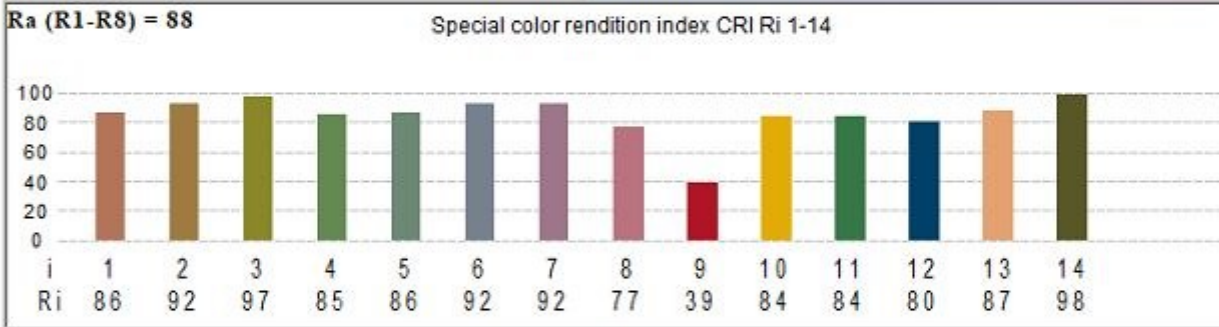
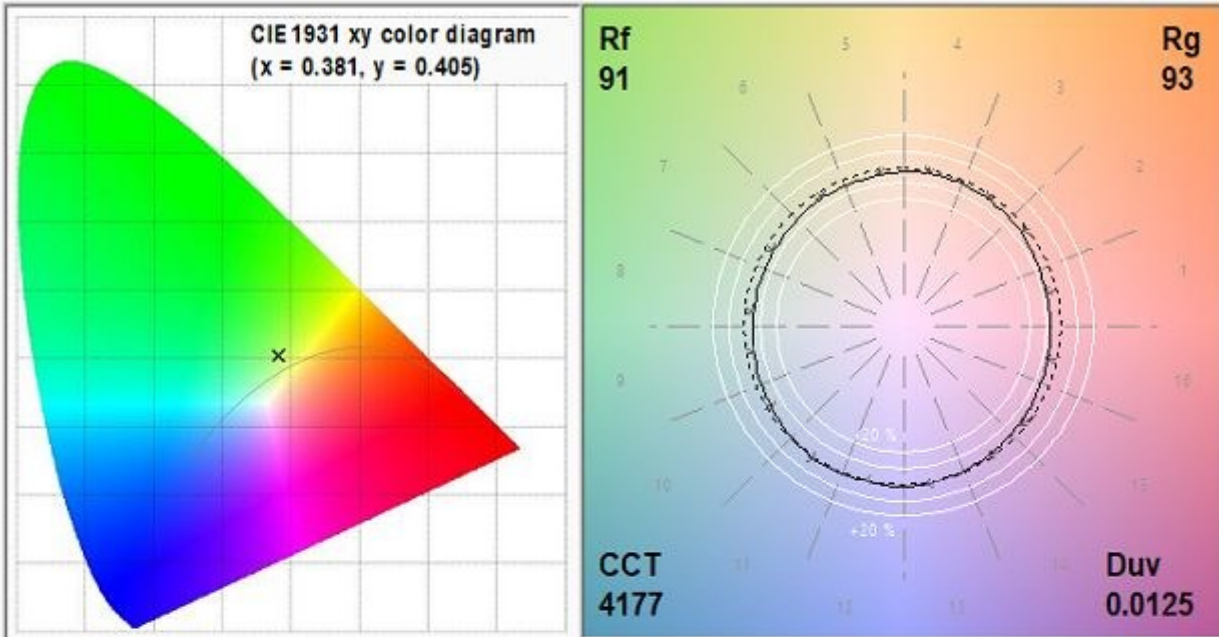


Spectroradiometric Test Report



Demomstration Lamp276

Table 1. Test settings and conditions.

Device	Ta (C)	R.H. (%)	Colorimeter	
			SPEKTRI 80	

Table 2. Summary of the results.

x	y	u'	v'	u	v	Duv
0.3807	0.4046	0.2147	0.5133	0.2147	0.3422	0.0125
CCT [K]	CRI, Ra	Rf	Rg	Ev (lx)		
4177	88.2	91.1	92.5	1390742.9		
R10	R11	R12	R13			
84.2	83.5	79.8	87.2			

Table 3. Special color rendering indices.

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
85.9	92.3	96.9	84.6	86.0	91.6	91.6	76.7	39.1	84.2	83.5	79.8	87.2	98.1

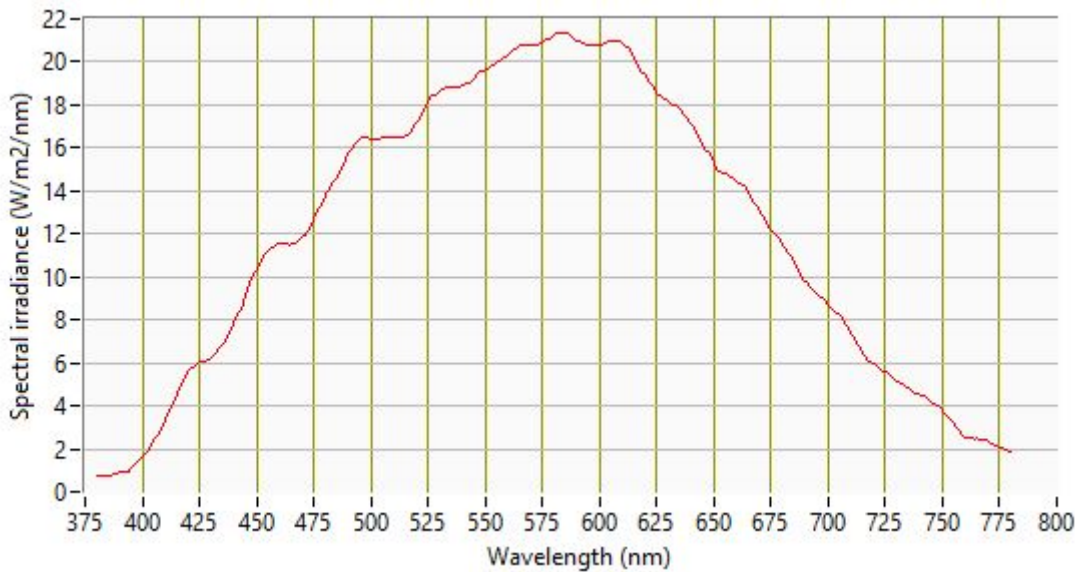


Figure 1. Spectral irradiance

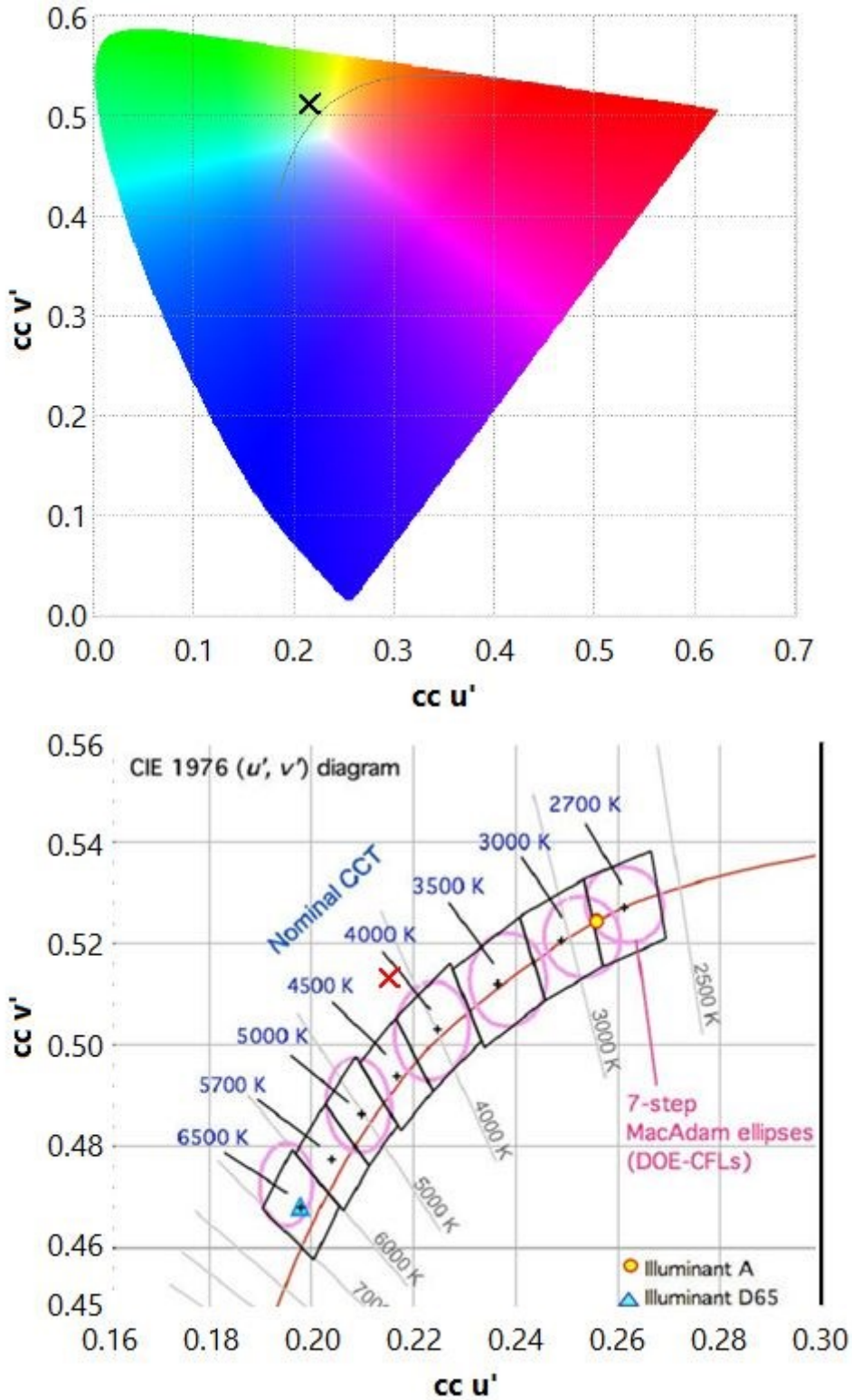


Figure 2. Color coordinates in CIE1976 $u'v'$ color diagram

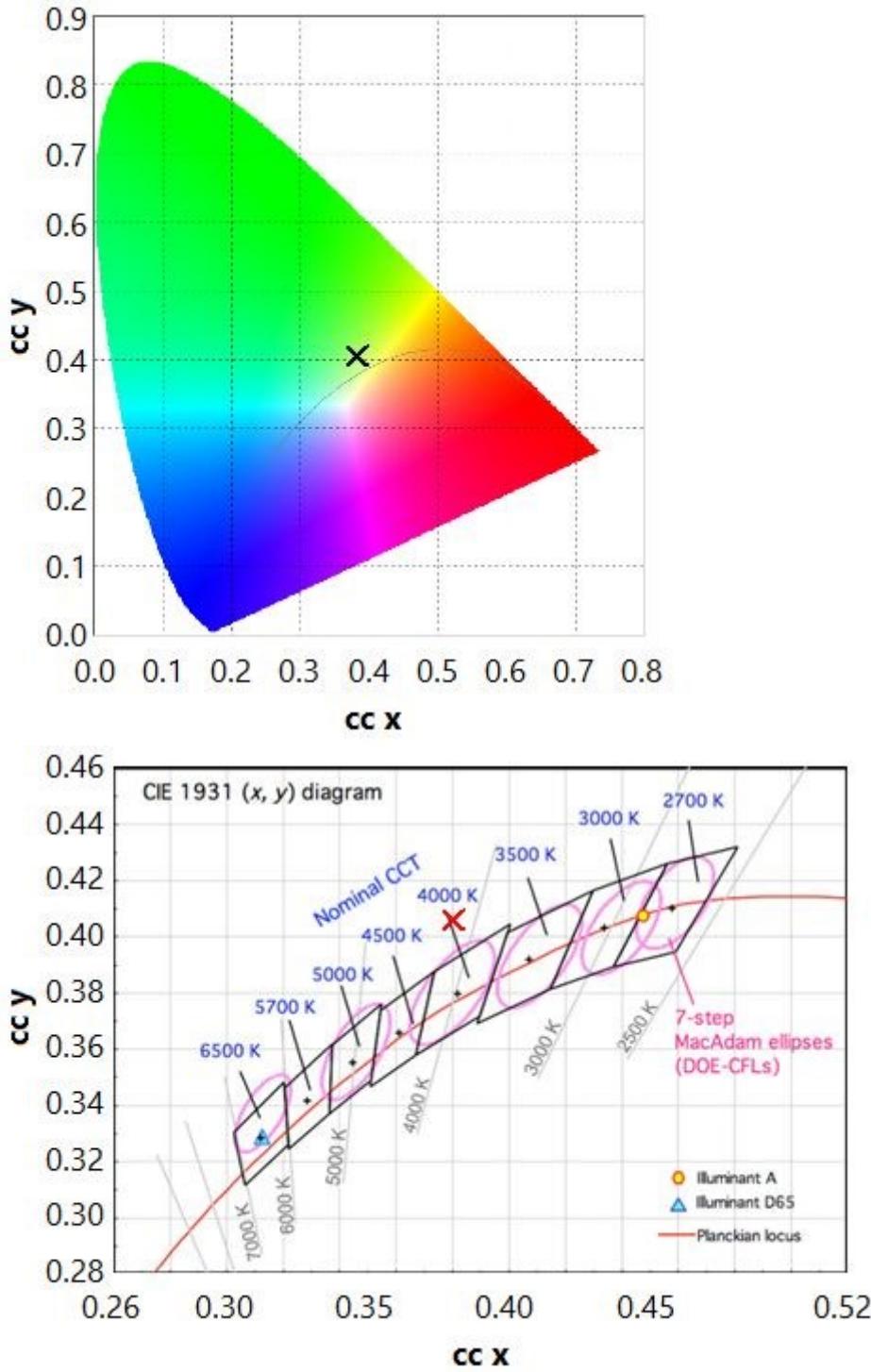


Figure 3. Color coordinates in CIE1931 xy color diagram

SAE_J578-2020: None

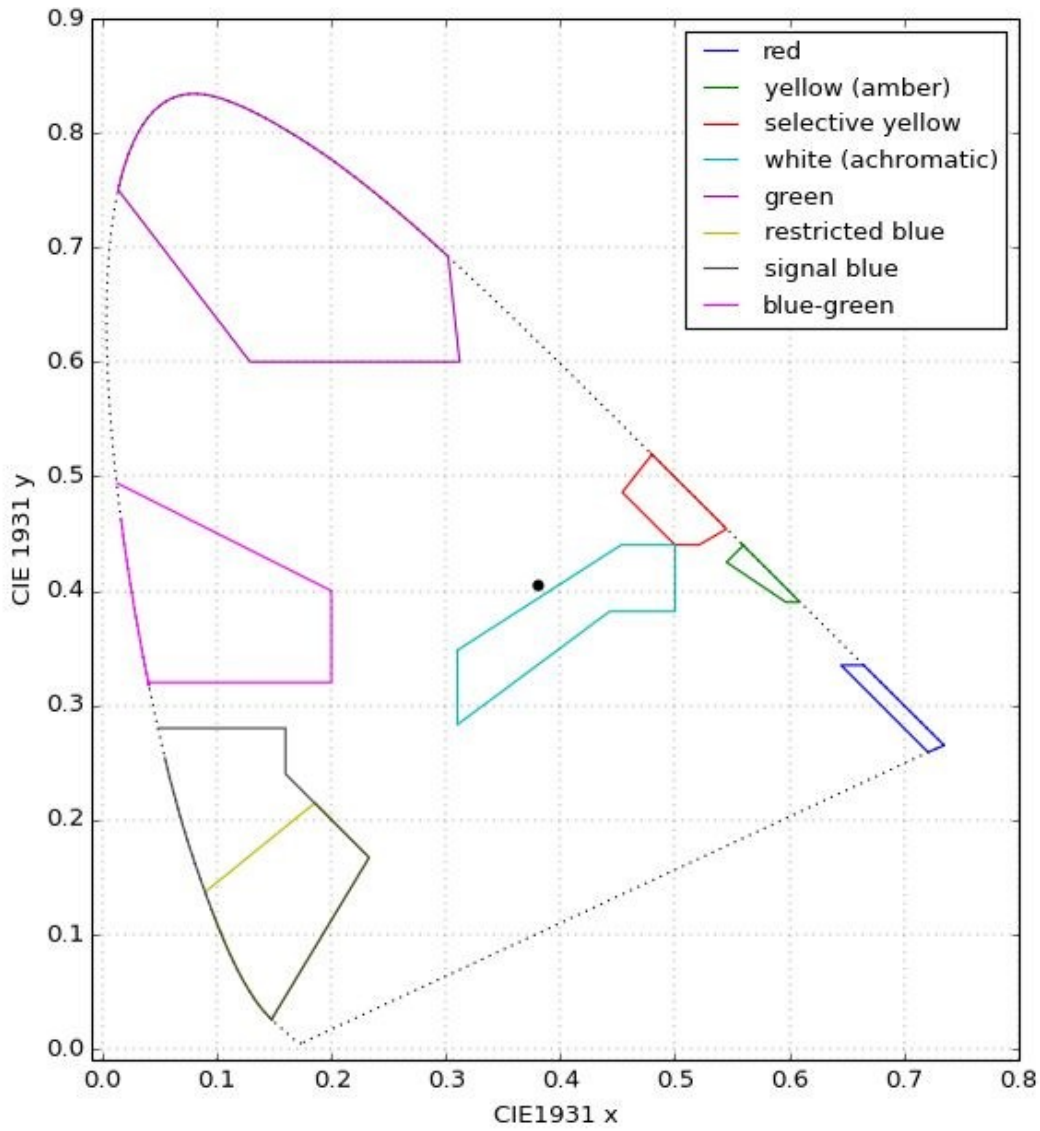


Figure 4. Color classification analysis on the basis of the chosen color target specification.

Table 4. Wavelength Analysis

Band nr	Peak WL (nm)	Peak Intensity	FWHM Bandwidth (nm)	Effective WL (nm)
Full	583.4	21.36E+0	233.3	577.4
Band 1	499.2	16.43E+0	NA	NA
Band 2	583.4	21.36E+0	NA	NA
Band 3	606.3	21.00E+0	NA	NA

Table 5. Photosynthetic photon flux analysis of plant growth lights

Band	WL range (nm)	Value	Unit	Rel. (%)
PPFD	400 - 700	20925.0	umol/m2/s	90.1
PPFD-Blue	400 - 499	3648.7	umol/m2/s	15.7
PPFD-Green	500 - 599	8886.3	umol/m2/s	38.3
PPFD-Red	600 - 699	8339.0	umol/m2/s	35.9
PFD-UV	380 - 399	61.1	umol/m2/s	0.3
PFD-FarRed	700 - 780	2288.4	umol/m2/s	9.9
PFD, Full	380 - 780	23223.5	umol/m2/s	100.0
PAR	400 - 700	4423.5	W/m2	91.9
Irradiance	380 - 780	4815.5	W/m2	100
B:G Ratio	420-490 : 500-570	0.5		
R:FR Ratio	650-670 : 720-740	2.5		

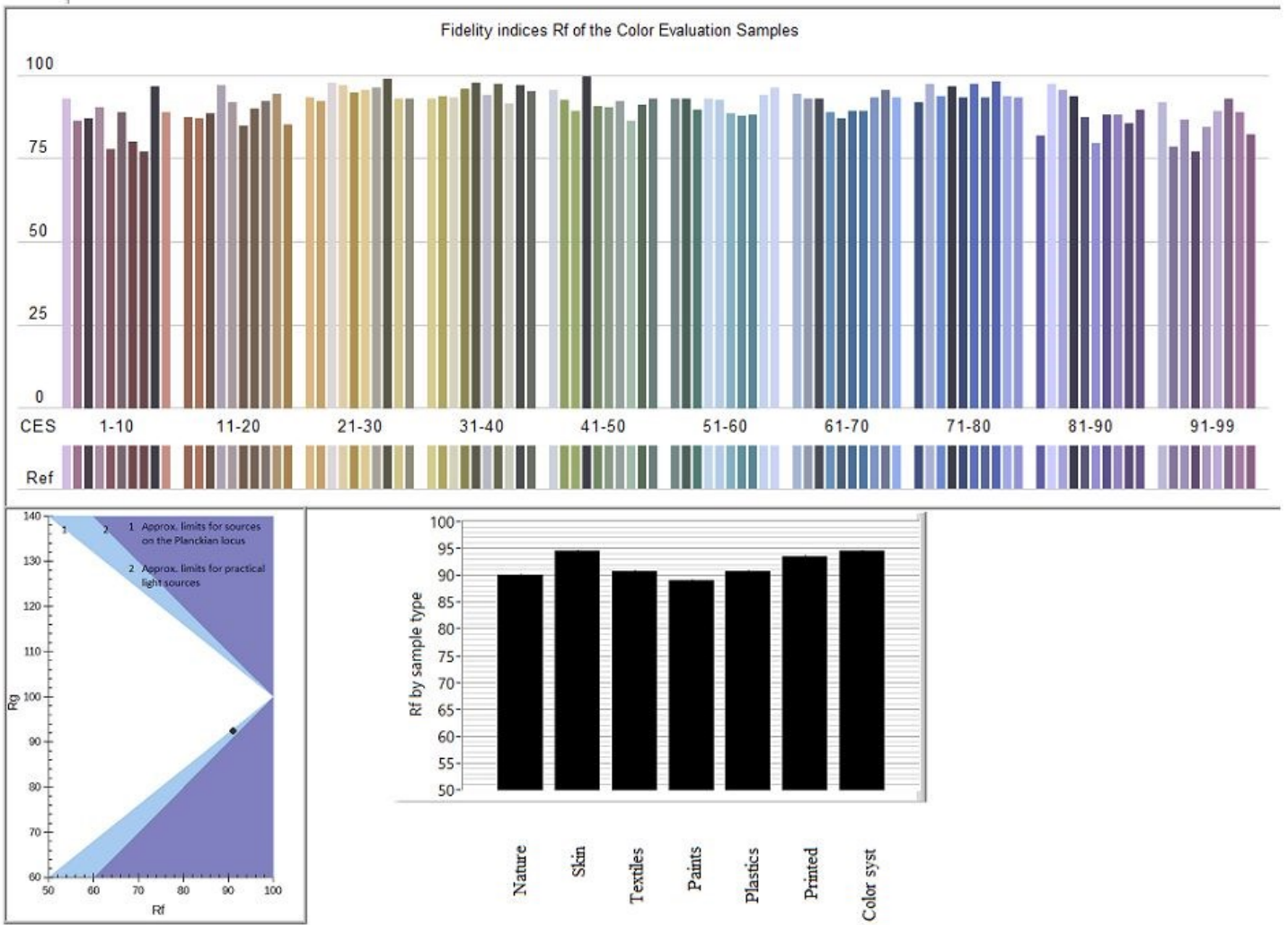
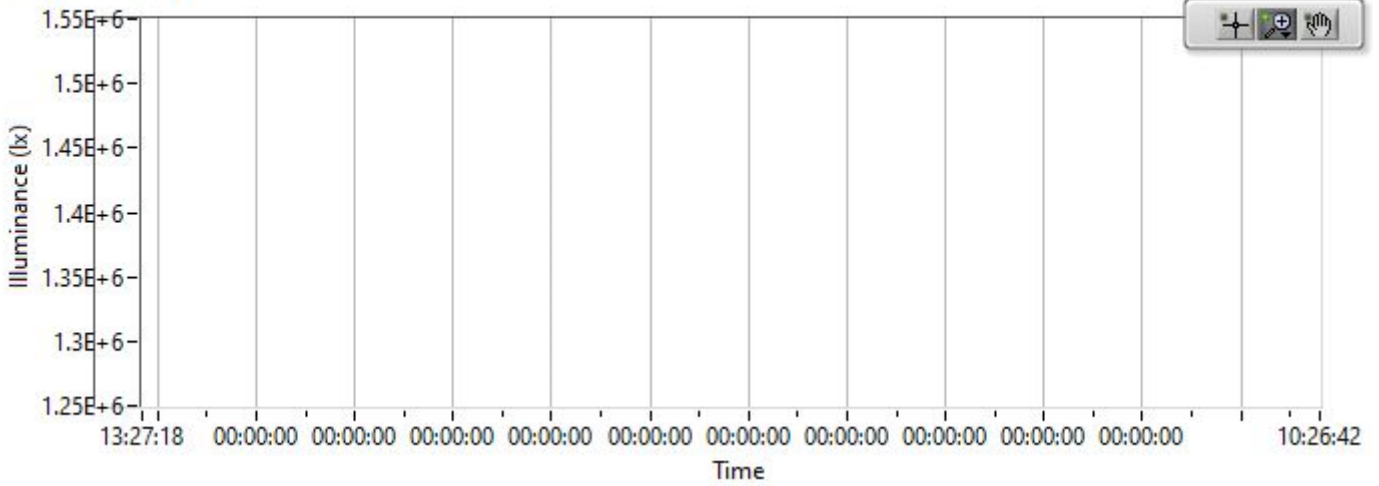


Figure 5. New color render index according to the TM30-18 standard.

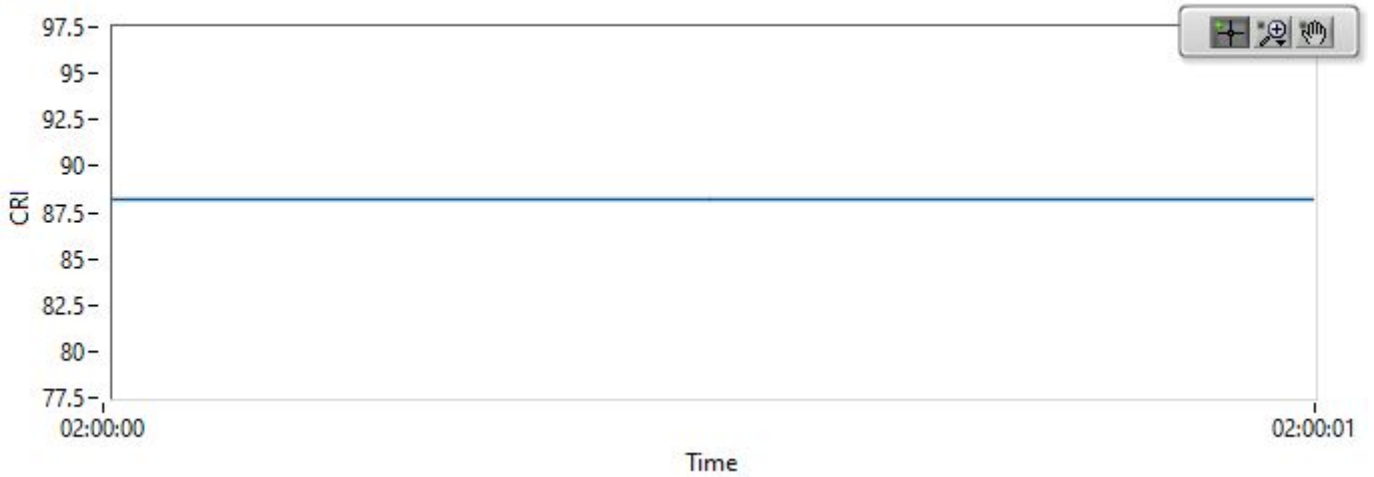
Luminous log



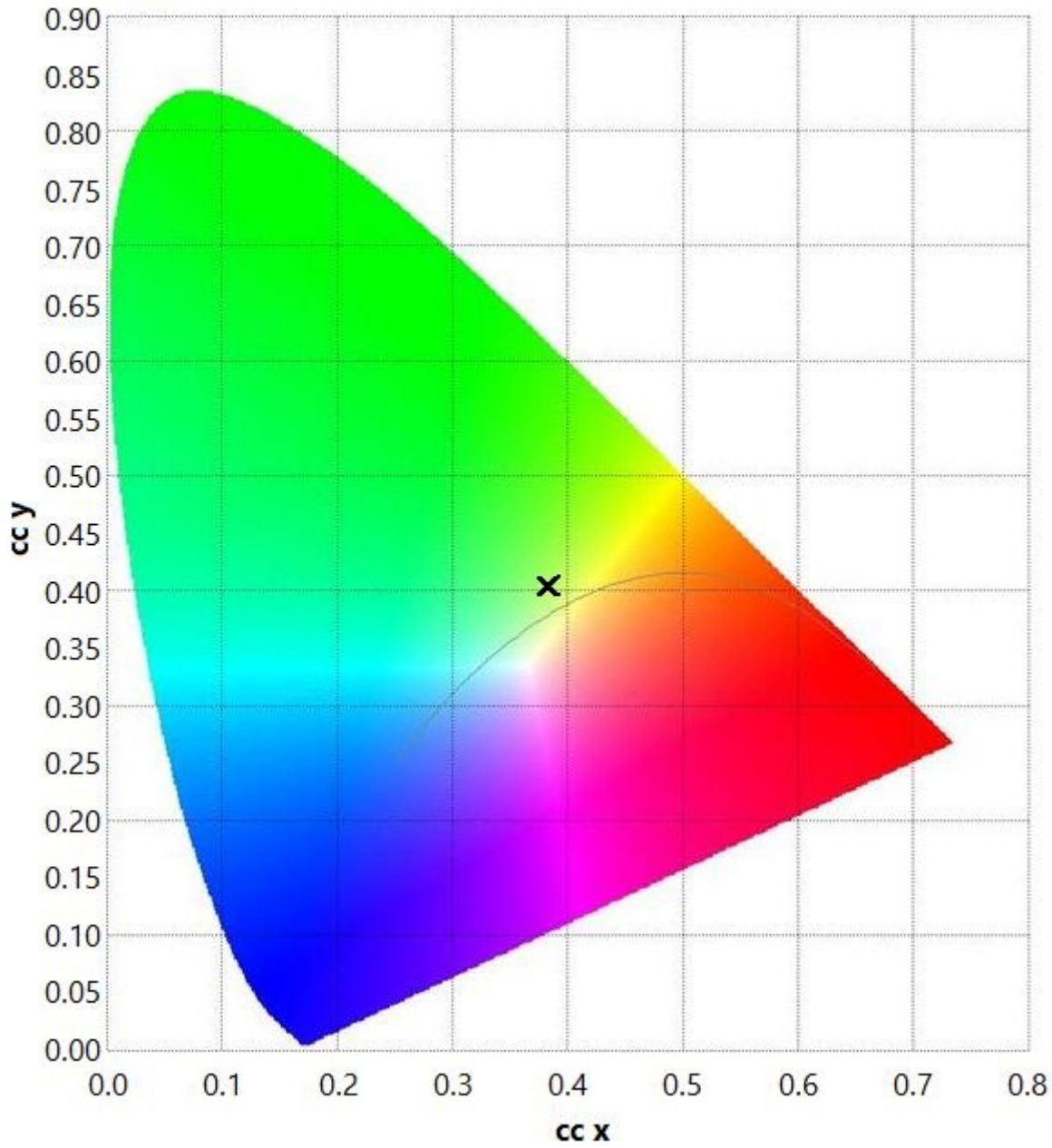
CCT log



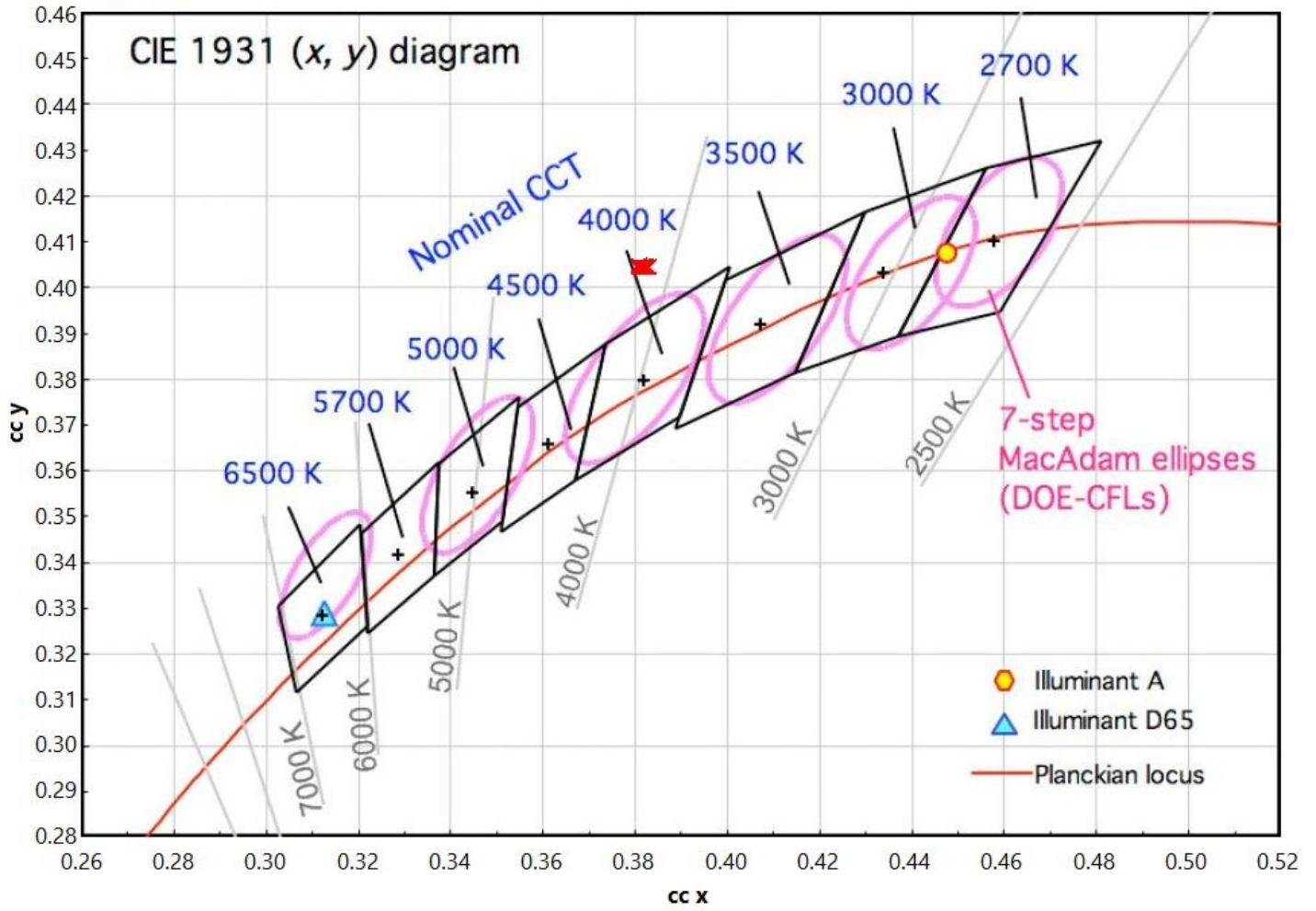
CRI log



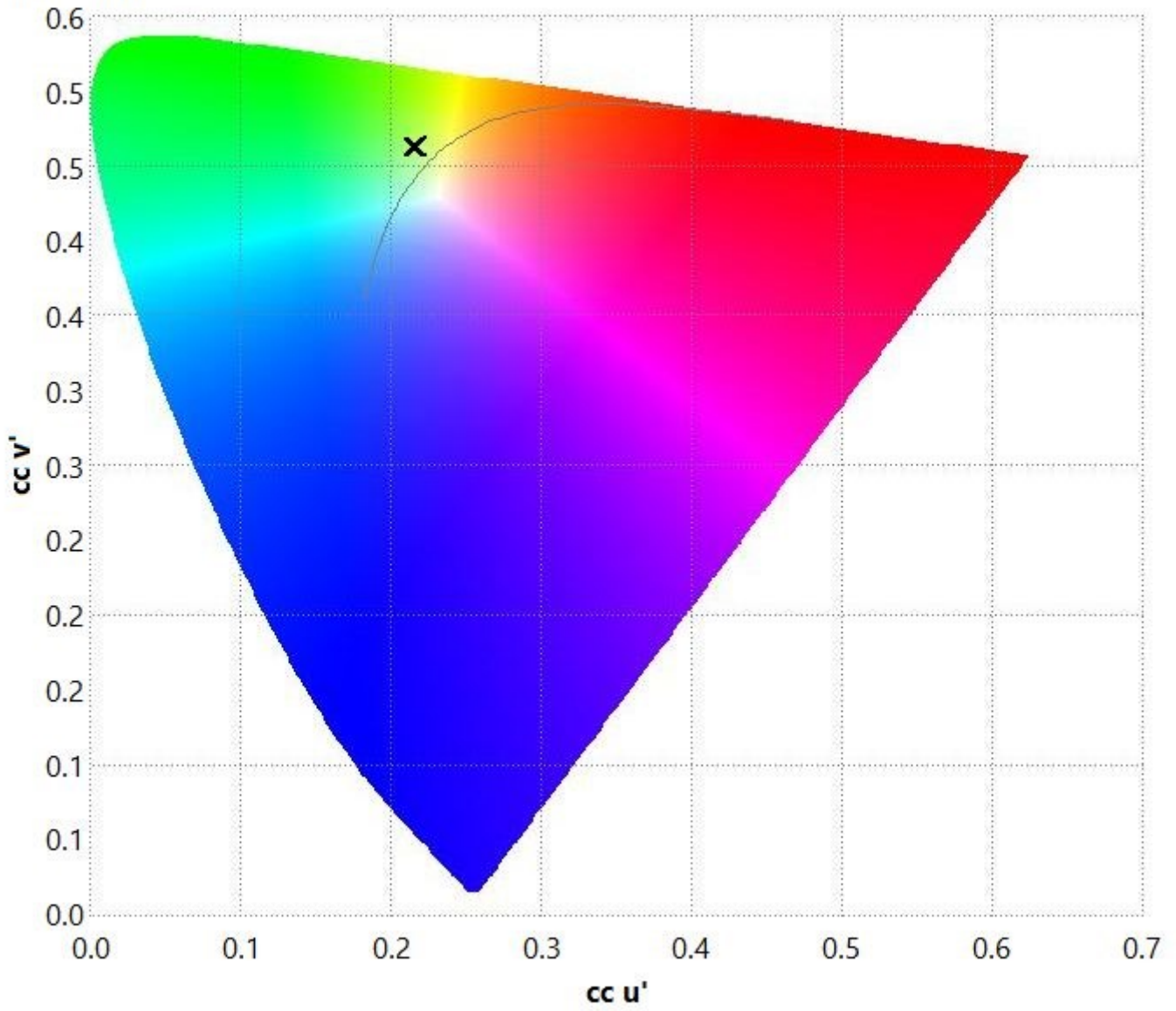
CIE1931 log



CIE1931 white log



CIE1976 log



CIE1976 white log

