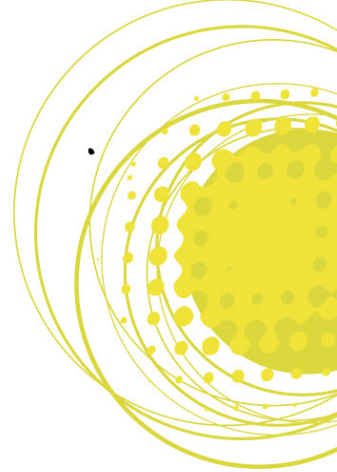
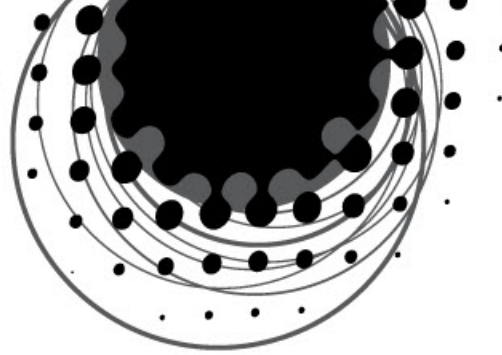




Color Measurement and Instruments

Abhay Sharma
Professor, Ryerson University, Toronto

February 12, 2015 • India Expo Centre • Greater Noida, Delhi NCR

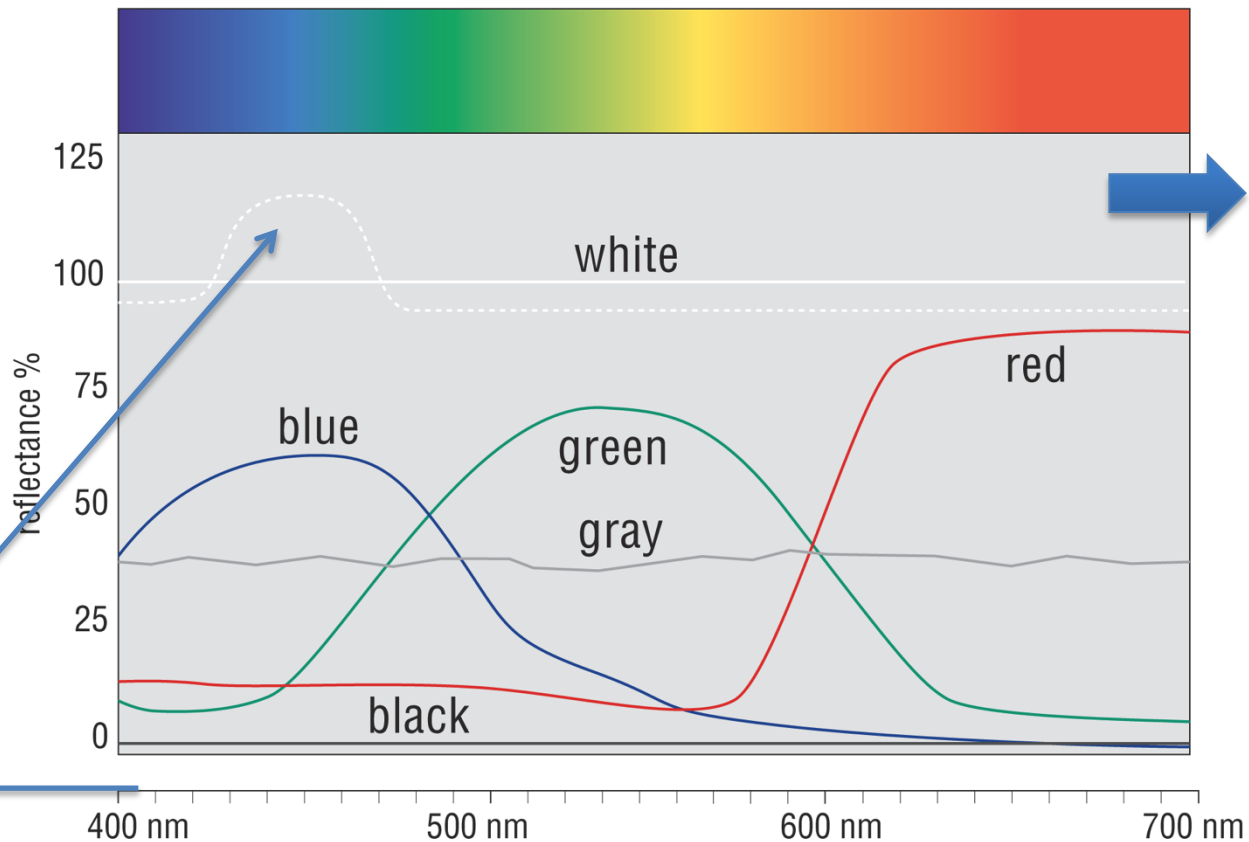
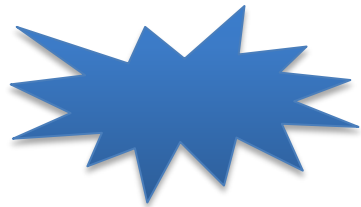


RYERSON UNIVERSITY



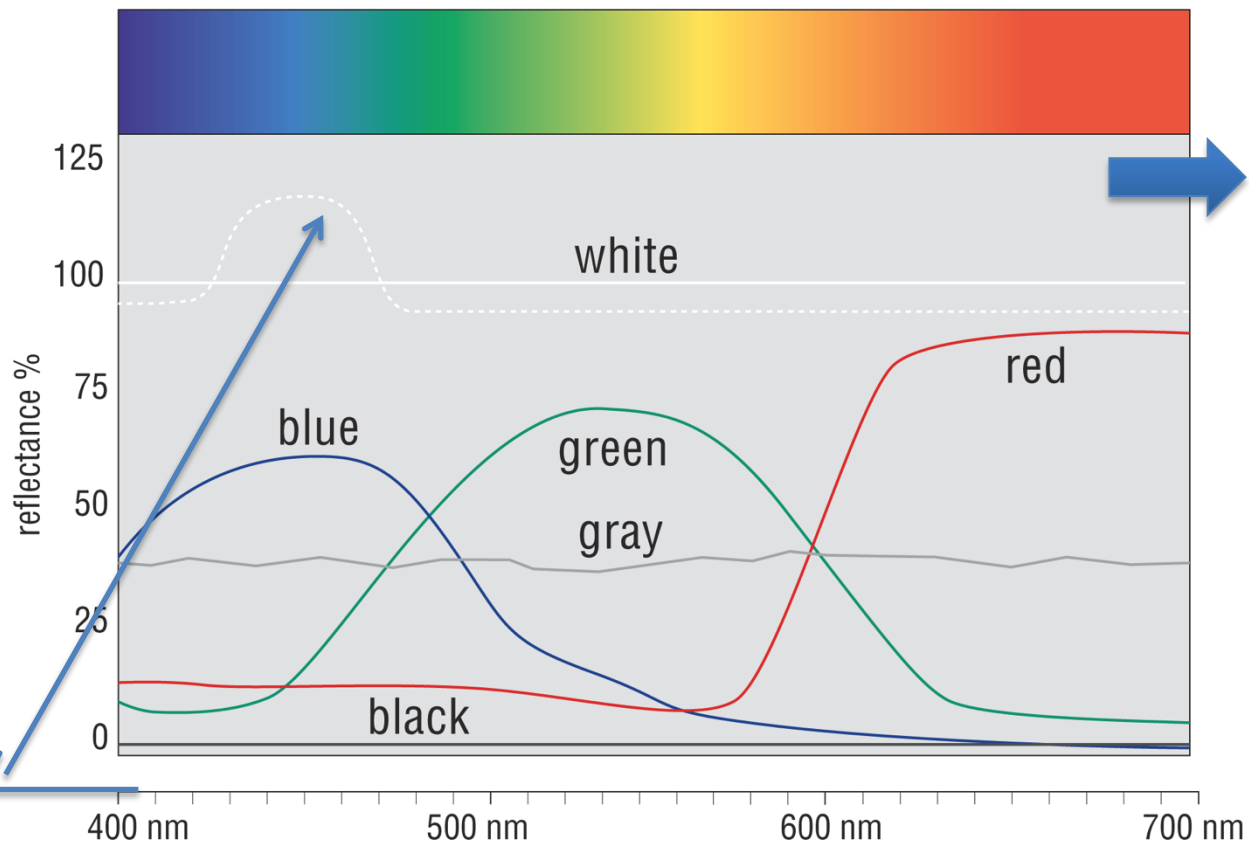
Fluorescence due to UV

UV



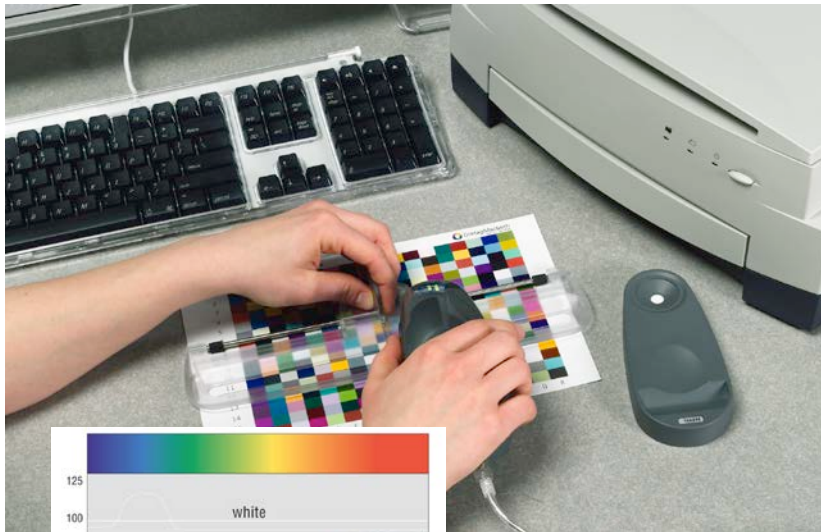
CIELAB
Density
Yxy

The UV component was not specified !

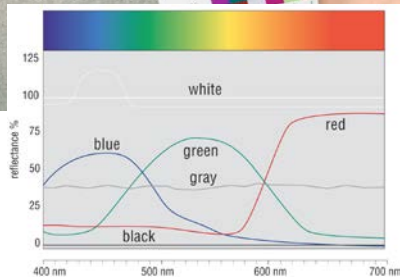
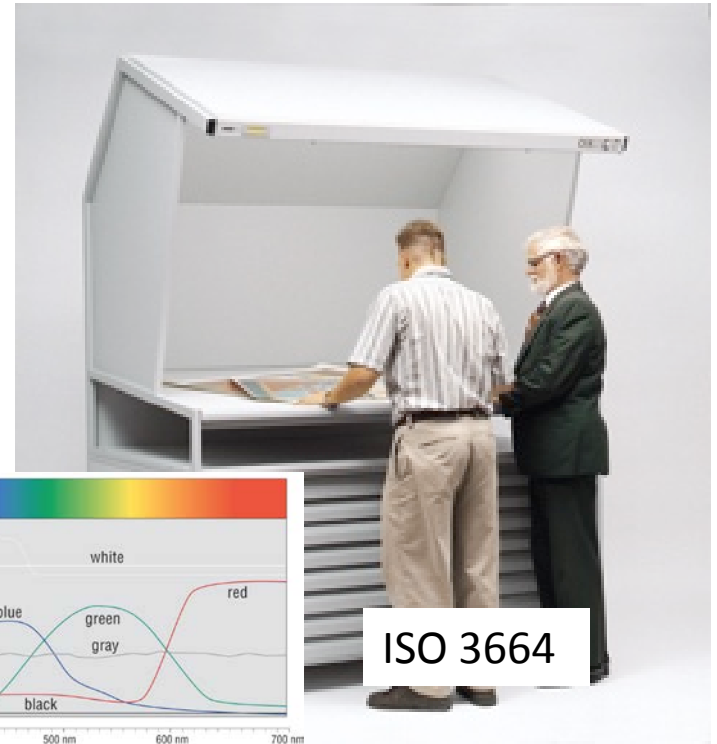


CIELAB
Density
Yxy

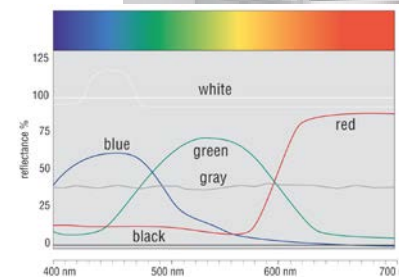
When papers have OBAs, proofs did not match press sheets



≠

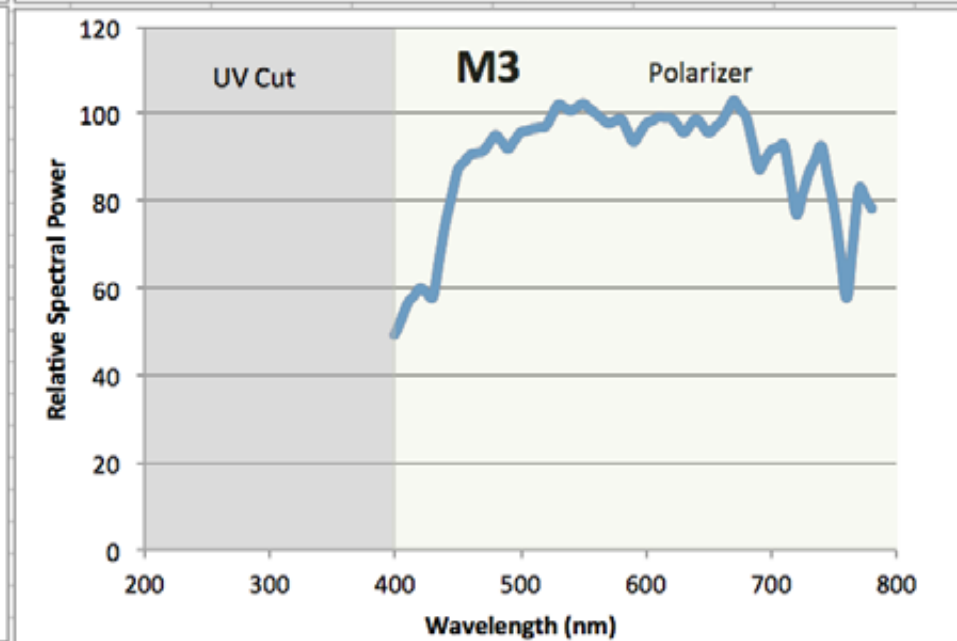
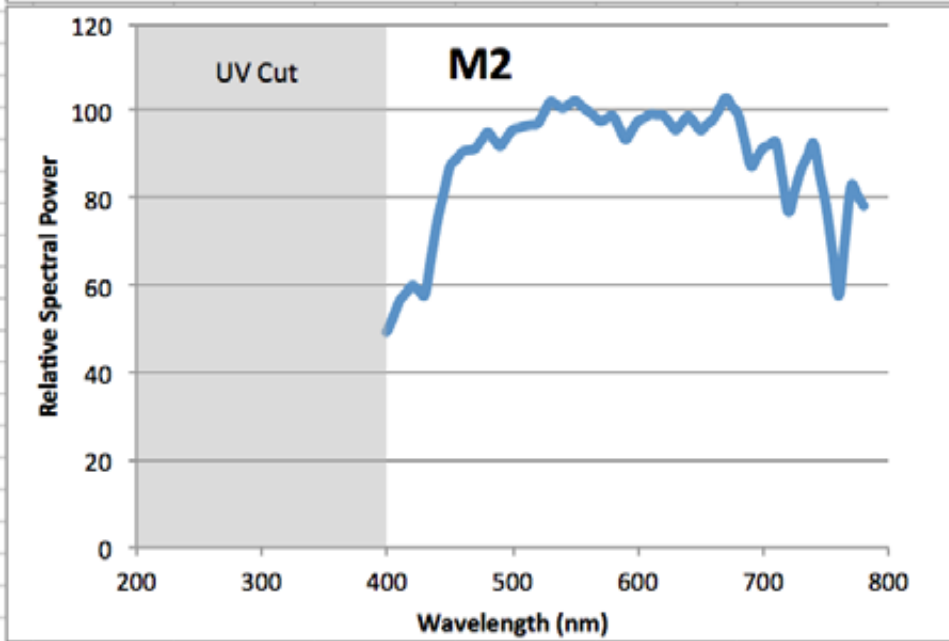
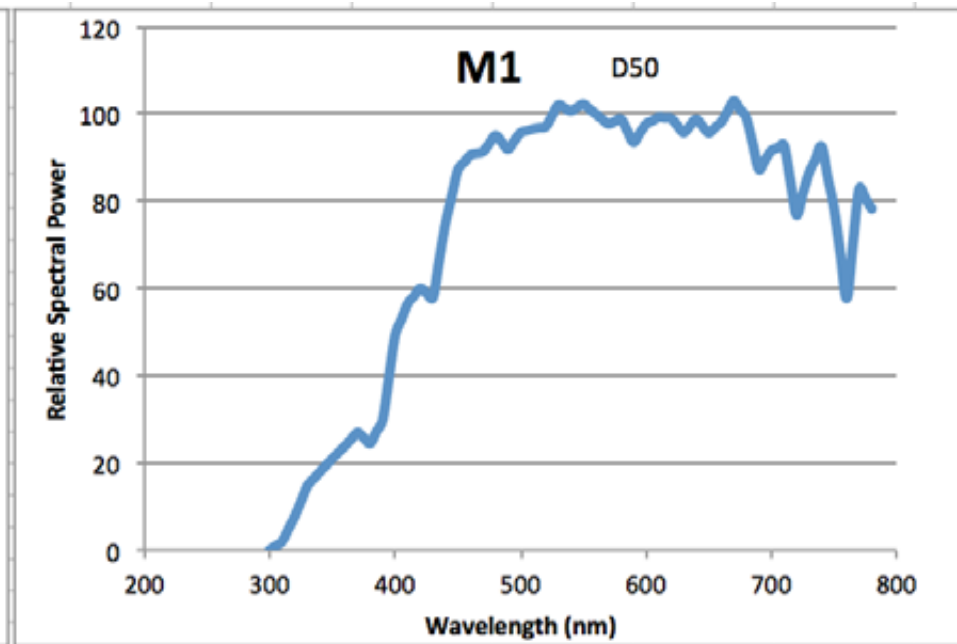
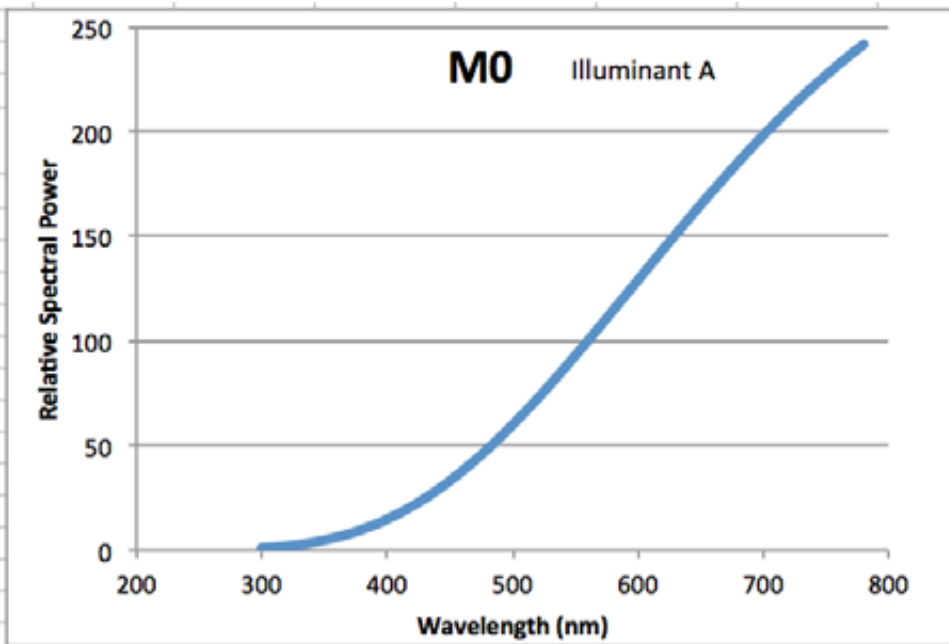


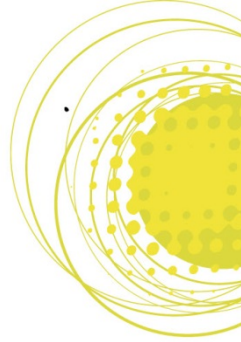
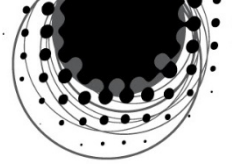
ISO 13655



ISO 3664

Everything is fixed by M0, M1, M2, M3





Need to update everything to M1

Instruments



X-Rite i1Pro2/eXact



Techkon SpectroDens

Light Booths



JUST Normlicht

Datasets

[illegible]

USA CRPC 5

[illegible]

Fogra 51



Need to update everything to M1

ISO28178
ORIGINATOR "CGATS"
FILE_DESCRIPTOR "CGATS21-2-CRPC5"
Characterized Reference Printing Conditions, Universal Pub Coated
CREATED "December, 2012"
MEASUREMENT_GEOMETRY "ISO 13655 - Reflection, M1, white backing"
FILTER "D50"
Reference White Point (LAB) = 92.00 0.00 0.00
Reference Black Point (LAB) = 9.20 0.00 1.86

NUMBER_OF_FIELDS 8

BEGIN_DATA_FORMAT
SAMPLE_ID CMYK_C CMYK_M CMYK_Y CMYK_

END_DATA_FORMAT

NUMBER_OF_SETS 1617

BEGIN_DATA

1	0	0	0	0	92.00	0.00	0.00	
2	0	10	0	0	87.15	6.56	-1.04	
3	0	20	0	0	82.54	12.94	-2.02	
4	4	0	30	0	0	77.8	19.7	-2.89
5		0	40	0	0	73.1	26.65	-3.64

Thank you
Abhay Sharma