

















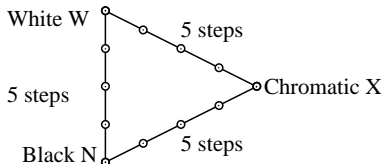






## Equality of 5 step colour series by two definitions (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:

Black N, White W and Chromatic X

Ten pages include 10 hue planes

X = OYLCVM and RJGB

Any colour is defined by two different PS-operators in center and surround field

**All** colours of the three series N–W, W–X and X–N should equal on **all** pages

**Are the center and surround field colours equal on all pages?** **underline: Yes/No only if No:**

How many of the  $3 \times 4 = 12$  steps are equal?

Page 1: equal are out of 12 steps: ..... steps of O = Orange Red

Page 2: equal are out of 12 steps: ..... steps of Y = Yellow

Page 3: equal are out of 12 steps: ..... steps of L = Leaf Green

Page 4: equal are out of 12 steps: ..... steps of C = Cyan Blue

Page 5: equal are out of 12 steps: ..... steps of V = Violet Blue

Page 6: equal are out of 12 steps: ..... steps of M = Magenta Red

Page 7: equal are out of 12 steps: ..... steps of R = Elementary Red

Page 8: equal are out of 12 steps: ..... steps of J = Elementary Yellow

Page 9: equal are out of 12 steps: ..... steps of G = Elementary Green

Page 10: equal are out of 12 steps: ..... steps of B = Elementary Blue

Sum: Of the given  $3 \times 4 \times 10 = 120$  steps ..... steps are equal

i	LAB*ref		l*out		LAB*out		LAB*out/c-ref			ΔE*	Start output S1	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G	
2	6.36	0.0	0.0	0.07	6.36	0.0	0.0	0.0	0.0	0.01		
3	12.72	0.0	0.0	0.13	12.72	0.0	0.0	0.0	0.0	0.01		
4	19.08	0.0	0.0	0.2	19.08	0.0	0.0	0.0	0.0	0.01		
5	25.44	0.0	0.0	0.27	25.44	0.0	0.0	0.0	0.0	0.01		
6	31.8	0.0	0.0	0.33	31.8	0.0	0.0	0.0	0.0	0.01		
7	38.16	0.0	0.0	0.4	38.16	0.0	0.0	0.0	0.0	0.01		
8	44.52	0.0	0.0	0.47	44.52	0.0	0.0	0.0	0.0	0.01		
9	50.89	0.0	0.0	0.53	50.89	0.0	0.0	0.0	0.0	0.01		
10	57.25	0.0	0.0	0.6	57.25	0.0	0.0	0.0	0.0	0.01		
11	63.61	0.0	0.0	0.67	63.61	0.0	0.0	0.0	0.0	0.01		
12	69.97	0.0	0.0	0.73	69.97	0.0	0.0	0.0	0.0	0.01		
13	76.33	0.0	0.0	0.8	76.33	0.0	0.0	0.0	0.0	0.01		
14	82.69	0.0	0.0	0.87	82.69	0.0	0.0	0.0	0.0	0.01		
15	89.05	0.0	0.0	0.93	89.05	0.0	0.0	0.0	0.0	0.01	Mean lightness difference (16 steps)	
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.01	ΔE* <sub>CIELAB</sub> = 0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01		
18	23.85	0.0	0.0	0.25	23.85	0.0	0.0	0.0	0.0	0.01		
19	47.71	0.0	0.0	0.5	47.71	0.0	0.0	0.0	0.0	0.01		
20	71.56	0.0	0.0	0.75	71.56	0.0	0.0	0.0	0.0	0.01	Mean lightness difference (5 steps)	
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.01	ΔL* <sub>CIELAB</sub> = 0.0	
Mean colour reproduction index:										R* <sub>ab,m</sub> = 100		

















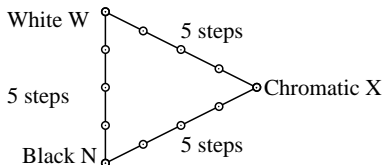






## Equality of 5 step colour series by two definitions (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:

Black N, White W and Chromatic X

Ten pages include 10 hue planes

X = OYLCVM and RJGB

Any colour is defined by two different

PS-operators in center and surround field

**All** colours of the three series N–W, W–X and X–N should equal on **all** pages

**Are the center and surround field colours equal on all pages?**

**underline: Yes/No**

**only if No:**

How many of the  $3 \times 4 = 12$  steps are equal?

Page 1: equal are out of 12 steps: ..... steps of O = Orange Red

Page 2: equal are out of 12 steps: ..... steps of Y = Yellow

Page 3: equal are out of 12 steps: ..... steps of L = Leaf Green

Page 4: equal are out of 12 steps: ..... steps of C = Cyan Blue

Page 5: equal are out of 12 steps: ..... steps of V = Violet Blue

Page 6: equal are out of 12 steps: ..... steps of M = Magenta Red

Page 7: equal are out of 12 steps: ..... steps of R = Elementary Red

Page 8: equal are out of 12 steps: ..... steps of J = Elementary Yellow

Page 9: equal are out of 12 steps: ..... steps of G = Elementary Green

Page 10: equal are out of 12 steps: ..... steps of B = Elementary Blue

Sum: Of the given  $3 \times 4 \times 10 = 120$  steps ..... steps are equal

i	LAB*ref			l*out			LAB*out			LAB*out/c-ref			$\Delta E^*$	Start output S1	
1	5.69	0.0	0.0	0.0	5.69	0.0	0.0	0.0	0.0	0.0	0.01	Specification according to			
2	11.67	0.0	0.0	0.1	14.73	0.0	0.0	3.06	0.0	0.0	3.06	ISO/IEC 15775 Annex G			
3	17.65	0.0	0.0	0.18	21.96	0.0	0.0	4.3	0.0	0.0	4.3	and DIN 33866-1 Annex G			
4	23.63	0.0	0.0	0.26	28.63	0.0	0.0	4.99	0.0	0.0	4.99				
5	29.62	0.0	0.0	0.33	34.96	0.0	0.0	5.34	0.0	0.0	5.34				
6	35.6	0.0	0.0	0.39	41.05	0.0	0.0	5.46	0.0	0.0	5.46				
7	41.58	0.0	0.0	0.46	46.96	0.0	0.0	5.38	0.0	0.0	5.38				
8	47.56	0.0	0.0	0.52	52.72	0.0	0.0	5.16	0.0	0.0	5.16				
9	53.54	0.0	0.0	0.59	58.36	0.0	0.0	4.82	0.0	0.0	4.82				
10	59.52	0.0	0.0	0.65	63.88	0.0	0.0	4.36	0.0	0.0	4.36				
11	65.5	0.0	0.0	0.71	69.32	0.0	0.0	3.82	0.0	0.0	3.82				
12	71.48	0.0	0.0	0.77	74.67	0.0	0.0	3.19	0.0	0.0	3.19				
13	77.47	0.0	0.0	0.83	79.95	0.0	0.0	2.49	0.0	0.0	2.49				
14	83.45	0.0	0.0	0.89	85.16	0.0	0.0	1.72	0.0	0.0	1.72				
15	89.43	0.0	0.0	0.94	90.31	0.0	0.0	0.89	0.0	0.0	0.89	Mean lightness difference (16 steps)			
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	$\Delta E^*_{\text{CIELAB}} = 3.4$			
17	5.69	0.0	0.0	0.0	5.69	0.0	0.0	0.0	0.0	0.0	0.01				
18	28.12	0.0	0.0	0.31	33.4	0.0	0.0	5.28	0.0	0.0	5.28				
19	50.55	0.0	0.0	0.56	55.55	0.0	0.0	5.0	0.0	0.0	5.0				
20	72.98	0.0	0.0	0.78	76.0	0.0	0.0	3.02	0.0	0.0	3.02	Mean lightness difference (5 steps)			
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	$\Delta L^*_{\text{CIELAB}} = 2.7$			
Mean colour reproduction index:											$R^*_{\text{ab,m}} = 85$				



















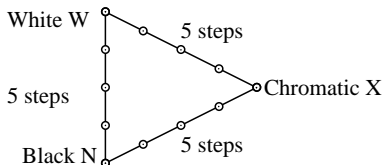






## Equality of 5 step colour series by two definitions (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:

Black N, White W and Chromatic X

Ten pages include 10 hue planes

X = OYLCVM and RJGB

Any colour is defined by two different PS-operators in center and surround field

**All** colours of the three series N–W, W–X and X–N should equal on **all** pages

**Are the center and surround field colours equal on all pages?** underline: Yes/No  
**only if No:**

How many of the  $3 \times 4 = 12$  steps are equal?

Page 1: equal are out of 12 steps: ..... steps of O = Orange Red

Page 2: equal are out of 12 steps: ..... steps of Y = Yellow

Page 3: equal are out of 12 steps: ..... steps of L = Leaf Green

Page 4: equal are out of 12 steps: ..... steps of C = Cyan Blue

Page 5: equal are out of 12 steps: ..... steps of V = Violet Blue

Page 6: equal are out of 12 steps: ..... steps of M = Magenta Red

Page 7: equal are out of 12 steps: ..... steps of R = Elementary Red

Page 8: equal are out of 12 steps: ..... steps of J = Elementary Yellow

Page 9: equal are out of 12 steps: ..... steps of G = Elementary Green

Page 10: equal are out of 12 steps: ..... steps of B = Elementary Blue

Sum: Of the given  $3 \times 4 \times 10 = 120$  steps ..... steps are equal

i	LAB*ref			l*out			LAB*out			LAB*out/c-ref			$\Delta E^*$	Start output S1	
1	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01	Specification according to			
2	16.62	0.0	0.0	0.14	22.52	0.0	0.0	5.9	0.0	0.0	5.9	ISO/IEC 15775 Annex G			
3	22.25	0.0	0.0	0.23	30.18	0.0	0.0	7.93	0.0	0.0	7.93	and DIN 33866-1 Annex G			
4	27.88	0.0	0.0	0.31	36.84	0.0	0.0	8.97	0.0	0.0	8.97				
5	33.5	0.0	0.0	0.38	42.93	0.0	0.0	9.43	0.0	0.0	9.43				
6	39.13	0.0	0.0	0.45	48.63	0.0	0.0	9.5	0.0	0.0	9.5				
7	44.76	0.0	0.0	0.51	54.03	0.0	0.0	9.27	0.0	0.0	9.27				
8	50.39	0.0	0.0	0.57	59.19	0.0	0.0	8.81	0.0	0.0	8.81				
9	56.02	0.0	0.0	0.63	64.17	0.0	0.0	8.15	0.0	0.0	8.15				
10	61.64	0.0	0.0	0.69	68.98	0.0	0.0	7.33	0.0	0.0	7.33				
11	67.27	0.0	0.0	0.74	73.65	0.0	0.0	6.38	0.0	0.0	6.38				
12	72.9	0.0	0.0	0.8	78.2	0.0	0.0	5.3	0.0	0.0	5.3				
13	78.53	0.0	0.0	0.85	82.64	0.0	0.0	4.11	0.0	0.0	4.11				
14	84.15	0.0	0.0	0.9	86.98	0.0	0.0	2.82	0.0	0.0	2.82				
15	89.78	0.0	0.0	0.95	91.23	0.0	0.0	1.45	0.0	0.0	1.45	Mean lightness difference (16 steps)			
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	$\Delta E^*_{\text{CIELAB}} = 6.0$			
17	10.99	0.0	0.0	0.0	10.99	0.0	0.0	0.0	0.0	0.0	0.01				
18	32.1	0.0	0.0	0.36	41.45	0.0	0.0	9.36	0.0	0.0	9.36				
19	53.2	0.0	0.0	0.6	61.7	0.0	0.0	8.5	0.0	0.0	8.5				
20	74.31	0.0	0.0	0.81	79.32	0.0	0.0	5.01	0.0	0.0	5.01	Mean lightness difference (5 steps)			
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	$\Delta L^*_{\text{CIELAB}} = 4.6$			
Mean colour reproduction index:												$R^*_{\text{ab,m}} = 74$			

















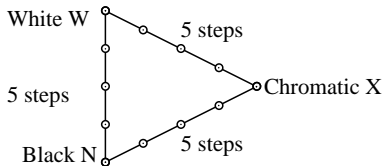






## Equality of 5 step colour series by two definitions (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:  
Black N, White W and Chromatic X

Ten pages include 10 hue planes  
X = OYLCVM and RJGB

Any colour is defined by two different  
PS-operators in center and surround field

**All** colours of the three series N–W, W–X and X–N should equal on **all** pages

**Are the center and surround field colours equal on all pages?** **underline: Yes/No**  
**only if No:**

How many of the  $3 \times 4 = 12$  steps are equal?

Page 1: equal are out of 12 steps: ..... steps of O = Orange Red

Page 2: equal are out of 12 steps: ..... steps of Y = Yellow

Page 3: equal are out of 12 steps: ..... steps of L = Leaf Green

Page 4: equal are out of 12 steps: ..... steps of C = Cyan Blue

Page 5: equal are out of 12 steps: ..... steps of V = Violet Blue

Page 6: equal are out of 12 steps: ..... steps of M = Magenta Red

Page 7: equal are out of 12 steps: ..... steps of R = Elementary Red

Page 8: equal are out of 12 steps: ..... steps of J = Elementary Yellow

Page 9: equal are out of 12 steps: ..... steps of G = Elementary Green

Page 10: equal are out of 12 steps: ..... steps of B = Elementary Blue

Sum: Of the given  $3 \times 4 \times 10 = 120$  steps ..... steps are equal

i	LAB*ref			l*out			LAB*out			LAB*out/c-ref			$\Delta E^*$	Start output S1	
1	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G			
2	23.17	0.0	0.0	0.17	31.35	0.0	0.0	8.18	0.0	0.0	8.18				
3	28.33	0.0	0.0	0.27	38.93	0.0	0.0	10.6	0.0	0.0	10.6				
4	33.49	0.0	0.0	0.35	45.23	0.0	0.0	11.74	0.0	0.0	11.74				
5	38.65	0.0	0.0	0.42	50.82	0.0	0.0	12.17	0.0	0.0	12.17				
6	43.81	0.0	0.0	0.49	55.93	0.0	0.0	12.12	0.0	0.0	12.12				
7	48.97	0.0	0.0	0.55	60.7	0.0	0.0	11.73	0.0	0.0	11.73				
8	54.13	0.0	0.0	0.61	65.2	0.0	0.0	11.07	0.0	0.0	11.07				
9	59.29	0.0	0.0	0.66	69.47	0.0	0.0	10.18	0.0	0.0	10.18				
10	64.45	0.0	0.0	0.72	73.56	0.0	0.0	9.11	0.0	0.0	9.11				
11	69.61	0.0	0.0	0.77	77.49	0.0	0.0	7.88	0.0	0.0	7.88				
12	74.77	0.0	0.0	0.82	81.29	0.0	0.0	6.52	0.0	0.0	6.52				
13	79.93	0.0	0.0	0.87	84.97	0.0	0.0	5.04	0.0	0.0	5.04				
14	85.09	0.0	0.0	0.91	88.54	0.0	0.0	3.45	0.0	0.0	3.45				
15	90.25	0.0	0.0	0.96	92.02	0.0	0.0	1.77	0.0	0.0	1.77	Mean lightness difference (16 steps)			
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	$\Delta E^*_{\text{CIELAB}} = 7.6$			
17	18.01	0.0	0.0	0.0	18.01	0.0	0.0	0.0	0.0	0.0	0.01				
18	37.36	0.0	0.0	0.41	49.47	0.0	0.0	12.11	0.0	0.0	12.11				
19	56.71	0.0	0.0	0.64	67.36	0.0	0.0	10.65	0.0	0.0	10.65				
20	76.06	0.0	0.0	0.83	82.22	0.0	0.0	6.16	0.0	0.0	6.16	Mean lightness difference (5 steps)			
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	$\Delta L^*_{\text{CIELAB}} = 5.8$			
Mean colour reproduction index:												$R^*_{\text{ab,m}} = 67$			



















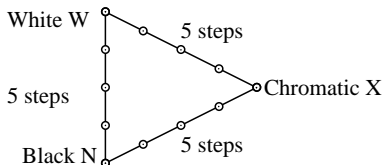






## Equality of 5 step colour series by two definitions (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:

Black N, White W and Chromatic X

Ten pages include 10 hue planes

X = OYLCVM and RJGB

Any colour is defined by two different

PS-operators in center and surround field

**All** colours of the three series N–W, W–X and X–N should equal on **all** pages

**Are the center and surround field colours equal on all pages?**

**underline: Yes/No**

**only if No:**

How many of the  $3 \times 4 = 12$  steps are equal?

Page 1: equal are out of 12 steps: ..... steps of O = Orange Red

Page 2: equal are out of 12 steps: ..... steps of Y = Yellow

Page 3: equal are out of 12 steps: ..... steps of L = Leaf Green

Page 4: equal are out of 12 steps: ..... steps of C = Cyan Blue

Page 5: equal are out of 12 steps: ..... steps of V = Violet Blue

Page 6: equal are out of 12 steps: ..... steps of M = Magenta Red

Page 7: equal are out of 12 steps: ..... steps of R = Elementary Red

Page 8: equal are out of 12 steps: ..... steps of J = Elementary Yellow

Page 9: equal are out of 12 steps: ..... steps of G = Elementary Green

Page 10: equal are out of 12 steps: ..... steps of B = Elementary Blue

Sum: Of the given  $3 \times 4 \times 10 = 120$  steps ..... steps are equal

i	LAB*ref		l*out		LAB*out		LAB*out/c-ref			$\Delta E^*$	Start output S1	
1	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	31.42	0.0	0.0	0.21	41.05	0.0	0.0	9.63	0.0	0.0	9.63	
3	35.99	0.0	0.0	0.31	48.1	0.0	0.0	12.11	0.0	0.0	12.11	
4	40.56	0.0	0.0	0.39	53.75	0.0	0.0	13.18	0.0	0.0	13.18	
5	45.13	0.0	0.0	0.46	58.64	0.0	0.0	13.51	0.0	0.0	13.51	
6	49.7	0.0	0.0	0.53	63.05	0.0	0.0	13.34	0.0	0.0	13.34	
7	54.27	0.0	0.0	0.59	67.09	0.0	0.0	12.82	0.0	0.0	12.82	
8	58.84	0.0	0.0	0.64	70.87	0.0	0.0	12.02	0.0	0.0	12.02	
9	63.41	0.0	0.0	0.69	74.42	0.0	0.0	11.01	0.0	0.0	11.01	
10	67.99	0.0	0.0	0.74	77.79	0.0	0.0	9.81	0.0	0.0	9.81	
11	72.56	0.0	0.0	0.79	81.01	0.0	0.0	8.46	0.0	0.0	8.46	
12	77.13	0.0	0.0	0.84	84.1	0.0	0.0	6.97	0.0	0.0	6.97	
13	81.7	0.0	0.0	0.88	87.07	0.0	0.0	5.37	0.0	0.0	5.37	
14	86.27	0.0	0.0	0.92	89.94	0.0	0.0	3.67	0.0	0.0	3.67	
15	90.84	0.0	0.0	0.96	92.71	0.0	0.0	1.88	0.0	0.0	1.88	Mean lightness difference (16 steps)
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	$\Delta E^*_{\text{CIELAB}} = 8.4$
17	26.85	0.0	0.0	0.0	26.85	0.0	0.0	0.0	0.0	0.0	0.01	
18	43.99	0.0	0.0	0.45	57.47	0.0	0.0	13.48	0.0	0.0	13.48	
19	61.13	0.0	0.0	0.67	72.67	0.0	0.0	11.54	0.0	0.0	11.54	
20	78.27	0.0	0.0	0.85	84.85	0.0	0.0	6.58	0.0	0.0	6.58	Mean lightness difference (5 steps)
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	$\Delta L^*_{\text{CIELAB}} = 6.3$
Mean colour reproduction index:											$R^*_{\text{ab,m}} = 64$	

















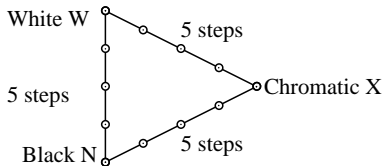






## Equality of 5 step colour series by two definitions (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:  
Black N, White W and Chromatic X

Ten pages include 10 hue planes  
X = OYLCVM and RJGB

Any colour is defined by two different  
PS-operators in center and surround field

**All** colours of the three series N–W, W–X and X–N should equal on **all** pages

**Are the center and surround field colours equal on all pages?** **underline: Yes/No**  
**only if No:**

How many of the  $3 \times 4 = 12$  steps are equal?

Page 1: equal are out of 12 steps: ..... steps of O = Orange Red

Page 2: equal are out of 12 steps: ..... steps of Y = Yellow

Page 3: equal are out of 12 steps: ..... steps of L = Leaf Green

Page 4: equal are out of 12 steps: ..... steps of C = Cyan Blue

Page 5: equal are out of 12 steps: ..... steps of V = Violet Blue

Page 6: equal are out of 12 steps: ..... steps of M = Magenta Red

Page 7: equal are out of 12 steps: ..... steps of R = Elementary Red

Page 8: equal are out of 12 steps: ..... steps of J = Elementary Yellow

Page 9: equal are out of 12 steps: ..... steps of G = Elementary Green

Page 10: equal are out of 12 steps: ..... steps of B = Elementary Blue

Sum: Of the given  $3 \times 4 \times 10 = 120$  steps ..... steps are equal

i	LAB*ref		l*out		LAB*out		LAB*out/c-ref			ΔE*	Start output S1
1	37.99	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	41.81	0.0	0.0	0.24	51.79	0.0	0.0	9.98	0.0	0.0	
3	45.64	0.0	0.0	0.35	57.87	0.0	0.0	12.23	0.0	0.0	
4	49.47	0.0	0.0	0.43	62.6	0.0	0.0	13.13	0.0	0.0	
5	53.3	0.0	0.0	0.5	66.63	0.0	0.0	13.33	0.0	0.0	
6	57.13	0.0	0.0	0.56	70.19	0.0	0.0	13.07	0.0	0.0	
7	60.96	0.0	0.0	0.62	73.44	0.0	0.0	12.48	0.0	0.0	
8	64.78	0.0	0.0	0.67	76.44	0.0	0.0	11.65	0.0	0.0	
9	68.61	0.0	0.0	0.72	79.23	0.0	0.0	10.62	0.0	0.0	
10	72.44	0.0	0.0	0.76	81.87	0.0	0.0	9.43	0.0	0.0	
11	76.27	0.0	0.0	0.81	84.37	0.0	0.0	8.11	0.0	0.0	
12	80.1	0.0	0.0	0.85	86.76	0.0	0.0	6.66	0.0	0.0	
13	83.93	0.0	0.0	0.89	89.05	0.0	0.0	5.12	0.0	0.0	
14	87.75	0.0	0.0	0.93	91.24	0.0	0.0	3.49	0.0	0.0	
15	91.58	0.0	0.0	0.96	93.36	0.0	0.0	1.78	0.0	0.0	Mean lightness difference (16 steps)
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.01	ΔE* <sub>CIELAB</sub> = 8.2
17	37.99	0.0	0.0	0.0	37.99	0.0	0.0	0.0	0.0	0.0	
18	52.34	0.0	0.0	0.48	65.67	0.0	0.0	13.33	0.0	0.0	
19	66.7	0.0	0.0	0.69	77.86	0.0	0.0	11.16	0.0	0.0	
20	81.05	0.0	0.0	0.86	87.34	0.0	0.0	6.29	0.0	0.0	Mean lightness difference (5 steps)
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.01	ΔL* <sub>CIELAB</sub> = 6.2
Mean colour reproduction index:										R* <sub>ab,m</sub> = 65	



















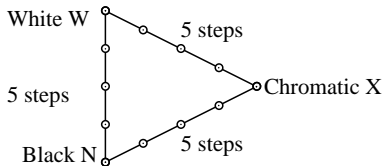






## Equality of 5 step colour series by two definitions (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:  
Black N, White W and Chromatic X

Ten pages include 10 hue planes  
X = OYLCVM and RJGB

Any colour is defined by two different  
PS-operators in center and surround field

**All** colours of the three series N–W, W–X and X–N should equal on **all** pages

**Are the center and surround field colours equal on all pages?** **underline: Yes/No**  
**only if No:**

How many of the  $3 \times 4 = 12$  steps are equal?

Page 1: equal are out of 12 steps: ..... steps of O = Orange Red

Page 2: equal are out of 12 steps: ..... steps of Y = Yellow

Page 3: equal are out of 12 steps: ..... steps of L = Leaf Green

Page 4: equal are out of 12 steps: ..... steps of C = Cyan Blue

Page 5: equal are out of 12 steps: ..... steps of V = Violet Blue

Page 6: equal are out of 12 steps: ..... steps of M = Magenta Red

Page 7: equal are out of 12 steps: ..... steps of R = Elementary Red

Page 8: equal are out of 12 steps: ..... steps of J = Elementary Yellow

Page 9: equal are out of 12 steps: ..... steps of G = Elementary Green

Page 10: equal are out of 12 steps: ..... steps of B = Elementary Blue

Sum: Of the given  $3 \times 4 \times 10 = 120$  steps ..... steps are equal

i	LAB*ref		l*out		LAB*out		LAB*out/c-ref			ΔE*	Start output S1	
1	52.02	0.0	0.0	0.0	52.02	0.0	0.0	0.0	0.0	0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	54.91	0.0	0.0	0.27	63.82	0.0	0.0	8.91	0.0	0.0	8.91	
3	57.8	0.0	0.0	0.38	68.49	0.0	0.0	10.69	0.0	0.0	10.69	
4	60.7	0.0	0.0	0.46	72.03	0.0	0.0	11.34	0.0	0.0	11.34	
5	63.59	0.0	0.0	0.53	75.0	0.0	0.0	11.41	0.0	0.0	11.41	
6	66.48	0.0	0.0	0.59	77.61	0.0	0.0	11.12	0.0	0.0	11.12	
7	69.37	0.0	0.0	0.64	79.95	0.0	0.0	10.57	0.0	0.0	10.57	
8	72.27	0.0	0.0	0.69	82.1	0.0	0.0	9.83	0.0	0.0	9.83	
9	75.16	0.0	0.0	0.74	84.09	0.0	0.0	8.93	0.0	0.0	8.93	
10	78.05	0.0	0.0	0.78	85.96	0.0	0.0	7.91	0.0	0.0	7.91	
11	80.95	0.0	0.0	0.82	87.72	0.0	0.0	6.78	0.0	0.0	6.78	
12	83.84	0.0	0.0	0.86	89.4	0.0	0.0	5.56	0.0	0.0	5.56	
13	86.73	0.0	0.0	0.9	91.0	0.0	0.0	4.26	0.0	0.0	4.26	
14	89.62	0.0	0.0	0.93	92.53	0.0	0.0	2.9	0.0	0.0	2.9	
15	92.52	0.0	0.0	0.97	93.99	0.0	0.0	1.48	0.0	0.0	1.48	Mean lightness difference (16 steps)
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	ΔE* <sub>CIELAB</sub> = 7.0
17	52.02	0.0	0.0	0.0	52.02	0.0	0.0	0.0	0.0	0.0	0.01	
18	62.87	0.0	0.0	0.51	74.3	0.0	0.0	11.43	0.0	0.0	11.43	
19	73.71	0.0	0.0	0.72	83.11	0.0	0.0	9.4	0.0	0.0	9.4	
20	84.56	0.0	0.0	0.87	89.81	0.0	0.0	5.24	0.0	0.0	5.24	Mean lightness difference (5 steps)
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.0	0.01	ΔL* <sub>CIELAB</sub> = 5.2
Mean colour reproduction index:										R* <sub>ab,m</sub> = 70		

















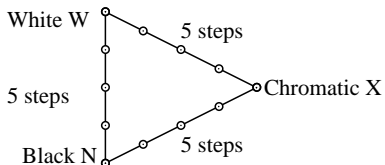






## Equality of 5 step colour series by two definitions (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:

Black N, White W and Chromatic X

Ten pages include 10 hue planes

X = OYLCVM and RJGB

Any colour is defined by two different

PS-operators in center and surround field

**All** colours of the three series N–W, W–X and X–N should equal on **all** pages

**Are the center and surround field colours equal on all pages?**

**underline: Yes/No**

**only if No:**

How many of the  $3 \times 4 = 12$  steps are equal?

Page 1: equal are out of 12 steps: ..... steps of O = Orange Red

Page 2: equal are out of 12 steps: ..... steps of Y = Yellow

Page 3: equal are out of 12 steps: ..... steps of L = Leaf Green

Page 4: equal are out of 12 steps: ..... steps of C = Cyan Blue

Page 5: equal are out of 12 steps: ..... steps of V = Violet Blue

Page 6: equal are out of 12 steps: ..... steps of M = Magenta Red

Page 7: equal are out of 12 steps: ..... steps of R = Elementary Red

Page 8: equal are out of 12 steps: ..... steps of J = Elementary Yellow

Page 9: equal are out of 12 steps: ..... steps of G = Elementary Green

Page 10: equal are out of 12 steps: ..... steps of B = Elementary Blue

Sum: Of the given  $3 \times 4 \times 10 = 120$  steps ..... steps are equal

i	LAB*ref		l*out		LAB*out		LAB*out/c-ref			$\Delta E^*$	Start output S1
1	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.01	Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G
2	71.41	0.0	0.0	0.3	77.46	0.0	0.0	6.04	0.0	6.04	
3	73.13	0.0	0.0	0.41	80.24	0.0	0.0	7.11	0.0	7.11	
4	74.84	0.0	0.0	0.49	82.31	0.0	0.0	7.47	0.0	7.47	
5	76.55	0.0	0.0	0.56	84.02	0.0	0.0	7.47	0.0	7.47	
6	78.27	0.0	0.0	0.62	85.51	0.0	0.0	7.24	0.0	7.24	
7	79.98	0.0	0.0	0.67	86.84	0.0	0.0	6.86	0.0	6.86	
8	81.7	0.0	0.0	0.71	88.05	0.0	0.0	6.35	0.0	6.35	
9	83.41	0.0	0.0	0.76	89.17	0.0	0.0	5.76	0.0	5.76	
10	85.12	0.0	0.0	0.8	90.21	0.0	0.0	5.08	0.0	5.08	
11	86.84	0.0	0.0	0.84	91.19	0.0	0.0	4.35	0.0	4.35	
12	88.55	0.0	0.0	0.87	92.11	0.0	0.0	3.56	0.0	3.56	
13	90.27	0.0	0.0	0.91	92.99	0.0	0.0	2.73	0.0	2.73	
14	91.98	0.0	0.0	0.94	93.83	0.0	0.0	1.85	0.0	1.85	
15	93.7	0.0	0.0	0.97	94.64	0.0	0.0	0.94	0.0	0.94	Mean lightness difference (16 steps)
16	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.01	$\Delta E^*_{\text{CIELAB}} = 4.6$
17	69.7	0.0	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.01	
18	76.13	0.0	0.0	0.54	83.62	0.0	0.0	7.5	0.0	7.5	
19	82.55	0.0	0.0	0.74	88.62	0.0	0.0	6.06	0.0	6.06	
20	88.98	0.0	0.0	0.88	92.34	0.0	0.0	3.35	0.0	3.35	Mean lightness difference (5 steps)
21	95.41	0.0	0.0	1.0	95.41	0.0	0.0	0.0	0.0	0.01	$\Delta L^*_{\text{CIELAB}} = 3.4$
Mean colour reproduction index:										$R^*_{\text{ab,m}} = 80$	