Interpretation *rgb* −> *rgb and CIELAB data of a 48 step elementary hue circle**
for a sRGB standard display with the luminance reflection L_r=5% compared to the white reference (100%)
48 step elementary hue circle with hues: *RJGB*: $h_{ab,a}$ = 25.5, 92.3, 162.2, 271.7, and *C' M'* = 217.0, 328.6
comparison with six device hues *OYLCVM*: $h_{ab,a}$ = 31.9, 103.7, 137.6, 196.6, 302.8, 327.9
9 step equidistant grey scale: *L = 26.8, 35.4, 44.0, 52.6, 61.1, 69.7, 78.3, 86.8, 95.4**

u^*_{Ma}	h_{rgb}	[*L**, *a**, *b**, *C**$_{ab}$, h_{ab}]$_{Ma,e}$						rgb −> rgb*$_{Ma}$				u^*_{Ma}	h_{rgb}	[*L**, *a**, *b**, *C**$_{ab}$, h_{ab}]$_{Ma,e}$						rgb −> rgb*$_{Ma}$		
r00j=R	30.0	55.1	67.8	32.3	75.1	25.5	1.000	0.000	0.000		c'00b=C'	210.0	80.4	−31.6	−23.7	39.6	217.0	0.000	1.000	1.000
r12j	36.6	55.9	64.0	42.9	77.0	33.8	1.000	0.125	0.000	*O*	c'12b	216.6	78.2	−28.1	−26.9	39.0	223.8	0.000	0.875	1.000
r25j	43.9	60.2	52.6	47.7	71.0	42.2	1.000	0.250	0.000		c'25b	223.9	76.1	−24.9	−30.4	39.5	230.7	0.000	0.750	1.000
r37j	51.8	64.0	42.7	51.9	67.2	50.5	1.000	0.375	0.000		c'37b	231.8	74.1	−21.4	−33.6	39.9	237.5	0.000	0.625	1.000
r50j	60.0	67.7	33.6	55.8	65.1	58.9	1.000	0.500	0.000		c'50b	240.0	72.1	−17.4	−36.3	40.4	244.4	0.000	0.500	1.000
r62j	68.2	71.4	24.9	59.3	64.3	67.2	1.000	0.625	0.000		c'62b	248.2	69.9	−13.4	−39.7	42.0	251.2	0.000	0.375	1.000
r75j	76.1	75.3	16.3	63.5	65.6	75.6	1.000	0.750	0.000		c'75b	256.1	67.5	−9.2	−43.8	44.9	258.0	0.000	0.250	1.000
r87j	83.4	79.5	7.1	67.4	67.7	84.0	1.000	0.875	0.000		c'87b	263.4	65.0	−4.2	−47.5	47.8	264.9	0.000	0.125	1.000
j00g=J	90.0	84.4	−2.8	72.1	72.1	92.3	1.000	1.000	0.000		b00m'=B	270.0	62.3	1.6	−51.6	51.7	271.7	0.000	0.000	1.000
j12g	96.6	90.8	−15.2	78.2	79.6	101.1	0.875	1.000	0.000	*Y*	b12m'	276.6	58.7	9.0	−57.6	58.4	278.8	0.125	0.000	1.000
j25g	103.9	91.3	−27.9	77.9	82.8	109.8	0.750	1.000	0.000		b25m'	283.9	54.7	18.3	−63.8	66.4	286.0	0.250	0.000	1.000
j37g	111.8	89.1	−40.7	75.1	85.4	118.5	0.625	1.000	0.000		b37m'	291.8	49.6	30.6	−71.8	78.2	293.1	0.375	0.000	1.000
j50g	120.0	87.0	−54.9	72.3	90.9	127.3	0.500	1.000	0.000		b50m'	300.0	42.7	48.4	−83.1	96.3	300.2	0.500	0.000	1.000
j62g	128.2	84.8	−71.7	69.3	99.8	136.0	0.375	1.000	0.000	*L*	b62m'	308.2	43.5	62.1	−81.5	102.6	307.3	0.625	0.000	1.000
j75g	136.1	84.8	−70.5	49.9	86.4	144.7	0.250	1.000	0.000		b75m'	316.1	49.5	70.2	−71.6	100.3	314.4	0.750	0.000	1.000
j87g	143.4	85.3	−64.6	32.3	72.3	153.5	0.125	1.000	0.000		b87m'	323.4	55.3	77.9	−61.9	99.5	321.5	0.875	0.000	1.000
g00c'=G	150.0	85.8	−59.3	19.0	62.4	162.2	0.000	1.000	0.000		m'00r=M'	330.0	60.5	84.2	−51.3	98.7	328.6	1.000	0.000	1.000
g12c'	156.6	86.2	−55.6	10.7	56.7	169.1	0.000	1.000	0.125		m'12r	336.6	58.9	79.8	−35.9	87.6	335.7	1.000	0.000	0.875
g25c'	163.9	86.5	−52.0	3.7	52.3	175.9	0.000	1.000	0.250		m'25r	343.9	57.9	76.6	−23.6	80.2	342.8	1.000	0.000	0.750
g37c'	171.8	86.8	−48.9	−2.3	49.1	182.8	0.000	1.000	0.375		m'37r	351.8	57.2	74.4	−13.1	75.6	349.9	1.000	0.000	0.625
g50c'	180.0	87.1	−46.1	−7.7	46.9	189.6	0.000	1.000	0.500		m'50r	360.0	56.6	72.8	−3.7	72.9	357.0	1.000	0.000	0.500
g62c'	188.2	87.4	−42.7	−12.5	44.6	196.4	0.000	1.000	0.625	*C*	m'62r	368.2	56.1	71.0	5.2	71.2	4.2	1.000	0.000	0.375
g75c'	196.1	85.1	−39.4	−16.9	43.0	203.3	0.000	1.000	0.750		m'75r	376.1	55.7	69.9	13.9	71.3	11.3	1.000	0.000	0.250
g87c'	203.4	82.7	−35.6	−20.6	41.3	210.1	0.000	1.000	0.875		m'87r	383.4	55.4	68.9	22.9	72.6	18.4	1.000	0.000	0.125

KE890−3N, 2

Interpretation *rgb* −> *rgb and CIELAB data of a 48 step elementary hue circle**
for a sRGB standard display with the luminance reflection L_r=20% compared to the white reference (100%)
48 step elementary hue circle with hues: *RJGB*: $h_{ab,a}$ = 25.5, 92.3, 162.2, 271.7, and *C' M'* = 217.0, 328.6
comparison with six device hues *OYLCVM*: $h_{ab,a}$ = 25.0, 105.5, 140.5, 197.2, 297.3, 327.0
9 step equidistant grey scale: *L = 52.0, 57.4, 62.9, 68.3, 73.7, 79.1, 84.6, 90.0, 95.4**

u^*_{Ma}	h_{rgb}	[*L**, *a**, *b**, *C**$_{ab}$, h_{ab}]$_{Ma,e}$						rgb −> rgb*$_{Ma}$				u^*_{Ma}	h_{rgb}	[*L**, *a**, *b**, *C**$_{ab}$, h_{ab}]$_{Ma,e}$						rgb −> rgb*$_{Ma}$		
r00j=R	30.0	65.7	44.6	21.2	49.4	25.5	1.000	0.000	0.000		c'00b=C'	210.0	83.8	−24.5	−18.4	30.8	217.0	0.000	1.000	1.000
r12j	36.6	68.5	37.6	25.2	45.2	33.8	1.000	0.125	0.000		c'12b	216.6	82.1	−21.4	−20.6	29.9	223.8	0.000	0.875	1.000
r25j	43.9	71.1	31.6	28.6	42.6	42.2	1.000	0.250	0.000		c'25b	223.9	80.6	−19.0	−23.3	30.2	230.7	0.000	0.750	1.000
r37j	51.8	73.4	26.0	31.6	40.9	50.5	1.000	0.375	0.000		c'37b	231.8	79.1	−16.3	−25.6	30.5	237.5	0.000	0.625	1.000
r50j	60.0	75.7	21.0	34.7	40.6	58.9	1.000	0.500	0.000		c'50b	240.0	77.6	−13.3	−27.7	30.9	244.4	0.000	0.500	1.000
r62j	68.2	78.0	15.8	37.6	40.8	67.2	1.000	0.625	0.000		c'62b	248.2	76.0	−10.1	−29.9	31.7	251.2	0.000	0.375	1.000
r75j	76.1	80.5	10.5	40.9	42.2	75.6	1.000	0.750	0.000		c'75b	256.1	74.2	−6.9	−33.0	33.9	258.0	0.000	0.250	1.000
r87j	83.4	83.2	4.7	44.2	44.5	84.0	1.000	0.875	0.000		c'87b	263.4	72.3	−3.1	−35.8	36.0	264.9	0.000	0.125	1.000
j00g=J	90.0	86.4	−1.8	48.2	48.2	92.3	1.000	1.000	0.000		b00m'=B	270.0	70.3	1.2	−38.8	38.9	271.7	0.000	0.000	1.000
j12g	96.6	90.8	−10.4	53.6	54.6	101.1	0.875	1.000	0.000	*Y*	b12m'	276.6	67.6	6.7	−43.1	43.7	278.8	0.125	0.000	1.000
j25g	103.9	92.5	−19.8	55.3	58.8	109.8	0.750	1.000	0.000		b25m'	283.9	64.4	13.8	−48.0	50.1	286.0	0.250	0.000	1.000
j37g	111.8	90.9	−28.7	52.9	60.3	118.5	0.625	1.000	0.000		b37m'	291.8	60.3	23.2	−54.4	59.3	293.1	0.375	0.000	1.000
j50g	120.0	89.2	−38.3	50.5	63.5	127.3	0.500	1.000	0.000		b50m'	300.0	58.2	33.6	−57.7	66.8	300.2	0.500	0.000	1.000
j62g	128.2	87.5	−49.6	47.9	69.0	136.0	0.375	1.000	0.000	*L*	b62m'	308.2	60.8	40.8	−53.4	67.3	307.3	0.625	0.000	1.000
j75g	136.1	86.8	−53.7	38.0	65.8	144.7	0.250	1.000	0.000		b75m'	316.1	63.5	47.9	−48.8	68.5	314.4	0.750	0.000	1.000
j87g	143.4	87.3	−49.1	24.5	54.9	153.5	0.125	1.000	0.000		b87m'	323.4	66.6	55.2	−43.8	70.5	321.5	0.875	0.000	1.000
g00c'=G	150.0	87.7	−45.1	14.5	47.5	162.2	0.000	1.000	0.000		m'00r=M'	330.0	69.0	60.2	−36.6	70.5	328.6	1.000	0.000	1.000
g12c'	156.6	88.0	−42.5	8.2	43.4	169.1	0.000	1.000	0.125		m'12r	336.6	68.1	56.5	−25.4	62.0	335.7	1.000	0.000	0.875
g25c'	163.9	88.2	−39.9	2.9	40.1	175.9	0.000	1.000	0.250		m'25r	343.9	67.4	53.7	−16.5	56.2	342.8	1.000	0.000	0.750
g37c'	171.8	88.5	−37.8	−1.7	37.9	182.8	0.000	1.000	0.375		m'37r	351.8	67.0	51.8	−9.1	52.6	349.9	1.000	0.000	0.625
g50c'	180.0	88.7	−35.8	−6.0	36.4	189.6	0.000	1.000	0.500		m'50r	360.0	66.6	50.2	−2.5	50.2	357.0	1.000	0.000	0.500
g62c'	188.2	88.9	−33.4	−9.8	34.9	196.4	0.000	1.000	0.625	*C*	m'62r	368.2	66.3	48.6	3.5	48.7	4.2	1.000	0.000	0.375
g75c'	196.1	87.4	−30.7	−13.2	33.5	203.3	0.000	1.000	0.750		m'75r	376.1	66.0	47.3	9.4	48.2	11.3	1.000	0.000	0.250
g87c'	203.4	85.6	−27.7	−16.0	32.2	210.1	0.000	1.000	0.875		m'87r	383.4	65.7	46.1	15.3	48.6	18.4	1.000	0.000	0.125

KE891−3N, 2

Interpretation *rgb* −> *rgb and CIELAB data of a 48 step elementary hue circle**
for a sRGB standard display with the luminance reflection L_r=10% compared to the white reference (100%)
48 step elementary hue circle with hues: *RJGB*: $h_{ab,a}$ = 25.5, 92.3, 162.2, 271.7, and *C' M'* = 217.0, 328.6
comparison with six device hues *OYLCVM*: $h_{ab,a}$ = 28.5, 104.4, 138.8, 196.8, 300.4, 327.6
9 step equidistant grey scale: *L = 38.0, 45.2, 52.3, 59.5, 66.7, 73.9, 81.1, 88.2, 95.4**

u^*_{Ma}	h_{rgb}	[*L**, *a**, *b**, *C**$_{ab}$, h_{ab}]$_{Ma,e}$						rgb −> rgb*$_{Ma}$				u^*_{Ma}	h_{rgb}	[*L**, *a**, *b**, *C**$_{ab}$, h_{ab}]$_{Ma,e}$						rgb −> rgb*$_{Ma}$		
r00j=R	30.0	58.9	58.9	28.1	65.3	25.5	1.000	0.000	0.000		c'00b=C'	210.0	81.6	−29.1	−21.9	36.6	217.0	0.000	1.000	1.000
r12j	36.6	61.2	51.9	34.8	62.5	33.8	1.000	0.125	0.000	*O*	c'12b	216.6	79.5	−25.7	−24.7	35.8	223.8	0.000	0.875	1.000
r25j	43.9	64.7	43.1	39.1	58.2	42.2	1.000	0.250	0.000		c'25b	223.9	77.7	−22.9	−27.9	36.2	230.7	0.000	0.750	1.000
r37j	51.8	67.8	35.4	43.0	55.7	50.5	1.000	0.375	0.000		c'37b	231.8	75.9	−19.6	−30.8	36.6	237.5	0.000	0.625	1.000
r50j	60.0	70.9	28.2	46.8	54.7	58.9	1.000	0.500	0.000		c'50b	240.0	74.0	−15.9	−33.3	37.0	244.4	0.000	0.500	1.000
r62j	68.2	73.9	21.0	50.0	54.3	67.2	1.000	0.625	0.000		c'62b	248.2	72.0	−12.3	−36.2	38.3	251.2	0.000	0.375	1.000
r75j	76.1	77.3	13.9	54.1	55.9	75.6	1.000	0.750	0.000		c'75b	256.1	69.8	−8.4	−40.0	41.0	258.0	0.000	0.250	1.000
r87j	83.4	80.9	6.1	58.0	58.3	84.0	1.000	0.875	0.000		c'87b	263.4	67.6	−3.8	−43.3	43.6	264.9	0.000	0.125	1.000
j00g=J	90.0	85.0	−2.4	62.6	62.6	92.3	1.000	1.000	0.000		b00m'=B	270.0	65.1	1.4	−47.0	47.1	271.7	0.000	0.000	1.000
j12g	96.6	90.7	−13.3	68.7	70.0	101.1	0.875	1.000	0.000	*Y*	b12m'	276.6	61.8	8.2	−52.4	53.2	278.8	0.125	0.000	1.000
j25g	103.9	91.7	−24.8	69.3	73.7	109.8	0.750	1.000	0.000		b25m'	283.9	58.1	16.7	−58.2	60.7	286.0	0.250	0.000	1.000
j37g	111.8	89.8	−36.1	66.6	75.8	118.5	0.625	1.000	0.000		b37m'	291.8	53.3	28.1	−65.8	71.6	293.1	0.375	0.000	1.000
j50g	120.0	87.8	−48.5	63.8	80.2	127.3	0.500	1.000	0.000		b50m'	300.0	46.9	44.3	−76.1	88.1	300.2	0.500	0.000	1.000
j62g	128.2	85.8	−63.1	61.0	87.8	136.0	0.375	1.000	0.000	*L*	b62m'	308.2	50.7	53.2	−69.8	87.8	307.3	0.625	0.000	1.000
j75g	136.1	85.5	−64.5	45.7	79.2	144.7	0.250	1.000	0.000		b75m'	316.1	55.0	61.3	−62.6	87.7	314.4	0.750	0.000	1.000
j87g	143.4	86.0	−59.1	29.6	66.2	153.5	0.125	1.000	0.000		b87m'	323.4	59.6	69.2	−55.0	88.5	321.5	0.875	0.000	1.000
g00c'=G	150.0	86.4	−54.3	17.4	57.1	162.2	0.000	1.000	0.000		m'00r=M'	330.0	63.5	75.4	−45.9	88.3	328.6	1.000	0.000	1.000
g12c'	156.6	86.8	−51.0	9.9	52.0	169.1	0.000	1.000	0.125		m'12r	336.6	62.2	71.2	−32.0	78.1	335.7	1.000	0.000	0.875
g25c'	163.9	87.1	−47.8	3.4	48.0	175.9	0.000	1.000	0.250		m'25r	343.9	61.3	68.0	−20.9	71.2	342.8	1.000	0.000	0.750
g37c'	171.8	87.4	−45.1	−2.1	45.2	182.8	0.000	1.000	0.375		m'37r	351.8	60.7	65.9	−11.6	66.9	349.9	1.000	0.000	0.625
g50c'	180.0	87.6	−42.6	−7.1	43.3	189.6	0.000	1.000	0.500		m'50r	360.0	60.2	64.2	−3.2	64.3	357.0	1.000	0.000	0.500
g62c'	188.2	87.9	−39.5	−11.6	41.3	196.4	0.000	1.000	0.625	*C*	m'62r	368.2	59.8	62.5	4.5	62.7	4.2	1.000	0.000	0.375
g75c'	196.1	85.9	−36.4	−15.6	39.7	203.3	0.000	1.000	0.750		m'75r	376.1	59.5	61.2	12.2	62.4	11.3	1.000	0.000	0.250
g87c'	203.4	83.7	−32.9	−19.0	38.1	210.1	0.000	1.000	0.875		m'87r	383.4	59.2	60.1	20.0	63.3	18.4	1.000	0.000	0.125

KE890−7N, 2

Interpretation *rgb* −> *rgb and CIELAB data of a 48 step elementary hue circle**
for a sRGB standard display with the luminance reflection L_r=40% compared to the white reference (100%)
48 step elementary hue circle with hues: *RJGB*: $h_{ab,a}$ = 25.5, 92.3, 162.2, 271.7, and *C' M'* = 217.0, 328.6
comparison with six device hues *OYLCVM*: $h_{ab,a}$ = 21.9, 107.3, 142.4, 197.9, 293.8, 326.1
9 step equidistant grey scale: *L = 69.7, 72.9, 76.1, 79.3, 82.6, 85.8, 89.0, 92.2, 95.4**

u^*_{Ma}	h_{rgb}	[*L**, *a**, *b**, *C**$_{ab}$, h_{ab}]$_{Ma,e}$						rgb −> rgb*$_{Ma}$				u^*_{Ma}	h_{rgb}	[*L**, *a**, *b**, *C**$_{ab}$, h_{ab}]$_{Ma,e}$						rgb −> rgb*$_{Ma}$		
r00j=R	30.0	77.2	24.5	11.7	27.1	25.5	1.000	0.000	0.000		c'00b=C'	210.0	87.8	−16.2	−12.2	20.4	217.0	0.000	1.000	1.000
r12j	36.6	78.8	20.8	13.9	25.1	33.8	1.000	0.125	0.000		c'12b	216.6	86.6	−14.0	−13.4	19.5	223.8	0.000	0.875	1.000
r25j	43.9	80.2	17.7	16.0	23.9	42.2	1.000	0.250	0.000		c'25b	223.9	85.7	−12.4	−15.1	19.7	230.7	0.000	0.750	1.000
r37j	51.8	81.6	14.8	18.0	23.3	50.5	1.000	0.375	0.000		c'37b	231.8	84.7	−10.6	−16.7	19.9	237.5	0.000	0.625	1.000
r50j	60.0	82.9	11.9	19.7	23.0	58.9	1.000	0.500	0.000		c'50b	240.0	83.7	−8.6	−18.1	20.1	244.4	0.000	0.500	1.000
r62j	68.2	84.3	9.1	21.7	23.6	67.2	1.000	0.625	0.000		c'62b	248.2	82.8	−6.5	−19.2	20.4	251.2	0.000	0.375	1.000
r75j	76.1	85.7	6.1	23.6	24.4	75.6	1.000	0.750	0.000		c'75b	256.1	81.6	−4.4	−21.3	21.8	258.0	0.000	0.250	1.000
r87j	83.4	87.3	2.7	25.9	26.1	84.0	1.000	0.875	0.000		c'87b	263.4	80.4	−2.0	−23.0	23.2	264.9	0.000	0.125	1.000
j00g=J	90.0	89.2	−1.0	28.4	28.5	92.3	1.000	1.000	0.000		b00m'=B	270.0	79.1	0.8	−24.9	25.0	271.7	0.000	0.000	1.000
j12g	96.6	91.8	−6.2	32.0	32.6	101.1	0.875	1.000	0.000	*Y*	b12m'	276.6	77.4	4.3	−27.6	28.0	278.8	0.125	0.000	1.000
j25g	103.9	93.6	−12.2	34.3	36.4	109.8	0.750	1.000	0.000		b25m'	283.9	75.2	8.8	−30.7	32.1	286.0	0.250	0.000	1.000
j37g	111.8	92.6	−17.6	32.6	37.1	118.5	0.625	1.000	0.000		b37m'	291.8	72.5	14.9	−35.0	38.1	293.1	0.375	0.000	1.000
j50g	120.0	91.5	−23.5	31.0	38.9	127.3	0.500	1.000	0.000		b50m'	300.0	72.3	19.7	−33.8	39.3	300.2	0.500	0.000	1.000
j62g	128.2	90.3	−30.1	29.1	41.9	136.0	0.375	1.000	0.000	*L*	b62m'	308.2	74.4	24.2	−31.8	40.0	307.3	0.625	0.000	1.000
j75g	136.1	89.4	−34.7	24.6	42.7	144.7	0.250	1.000	0.000		b75m'	316.1	75.8	29.0	−29.5	41.5	314.4	0.750	0.000	1.000
j87g	143.4	89.8	−31.7	15.8	35.5	153.5	0.125	1.000	0.000		b87m'	323.4	77.4	34.1	−27.0	43.6	321.5	0.875	0.000	1.000
g00c'=G	150.0	90.1	−29.2	9.4	30.8	162.2	0.000	1.000	0.000		m'00r=M'	330.0	78.3	36.7	−22.3	43.0	328.6	1.000	0.000	1.000
g12c'	156.6	90.3	−27.6	5.4	28.2	169.1	0.000	1.000	0.125		m'12r	336.6	77.8	34.2	−15.3	37.5	335.7	1.000	0.000	0.875
g25c'	163.9	90.4	−26.1	1.9	26.3	175.9	0.000	1.000	0.250		m'25r	343.9	77.5	32.3	−9.9	33.8	342.8	1.000	0.000	0.750
g37c'	171.8	90.6	−24.8	−1.1	25.0	182.8	0.000	1.000	0.375		m'37r	351.8	77.2	30.9	−5.4	31.4	349.9	1.000	0.000	0.625
g50c'	180.0	90.7	−23.7	−3.9	24.1	189.6	0.000	1.000	0.500		m'50r	360.0	77.0	29.8	−1.4	29.8	357.0	1.000	0.000	0.500
g62c'	188.2	90.9	−22.2	−6.5	23.3	196.4	0.000	1.000	0.625	*C*	m'62r	368.2	76.8	28.6	2.1	28.7	4.2	1.000	0.000	0.375
g75c'	196.1	90.0	−20.4	−8.7	22.3	203.3	0.000	1.000	0.750		m'75r	376.1	76.7	27.6	5.5	28.2	11.3	1.000	0.000	0.250
g87c'	203.4	88.9	−18.4	−10.6	21.4	210.1	0.000	1.000	0.875		m'87r	383.4	76.5	26.7	8.9	28.2	18.4	1.000	0.000	0.125

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