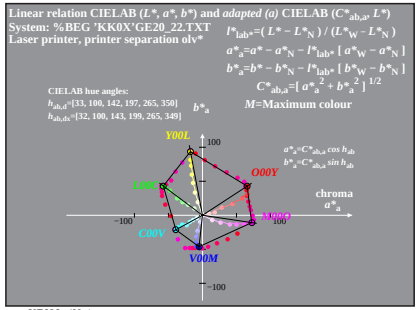

KE020−4N, 1

48 step device hue circle and
3 steps of a 16 step elementary hue circle
with equal CIELAB hue steps

no.	$h_{ab,a}$	L*	a*a	b*a	no.	$h_{ab,a}$	L*	a*a	b*a	no.	$h_{ab,a}$	L*	a*a	b*a	no.	$h_{ab,a}$	L*	a*a	b*a	no.	$h_{ab,a}$	L*	a*a	b*a	no.	$h_{ab,a}$	L*	a*a	b*a
648	33.0	48.1	64.4	41.8	720	100.4	93.5	−17.5	95.4	72	143.3	60.2	−59.3	44.2	80	206.6	56.3	−40.9	−20.5	8	264.0	38.6	−4.8	−46.2	656	351.1	48.2	72.1	−11.2
657	33.9	48.9	63.2	42.5	639	110.9	82.3	−29.6	77.5	73	143.9	59.6	−60.0	43.6	71	224.4	52.4	−36.0	−35.4	89	265.1	39.2	−4.0	−47.3	655	354.9	48.2	75.4	−6.6
666	38.7	49.8	61.3	49.2	558	121.5	74.0	−39.4	64.2	74	144.4	59.6	−59.5	42.4	62	242.1	51.2	−25.4	−48.1	170	266.8	38.9	−2.6	−47.4	654	359.6	47.8	73.7	−0.5
675	46.9	54.8	51.5	55.1	477	131.8	67.1	−45.9	51.2	75	147.0	58.6	−60.3	39.1	53	248.3	48.1	−19.1	−48.1	251	269.7	37.2	−0.2	−48.6	653	5.8	48.0	71.1	7.2
684	60.6	63.0	35.4	63.1	396	139.7	62.0	−53.2	45.1	76	150.3	58.2	−59.5	33.9	44	253.0	45.4	−14.6	−48.1	332	280.1	36.1	8.3	−46.3	652	10.6	48.2	69.3	12.9
693	75.5	72.0	18.5	72.0	315	141.6	61.1	−55.1	43.6	77	154.4	57.5	−59.3	28.4	35	257.5	43.0	−10.6	−47.9	413	297.4	36.8	21.3	−41.1	651	16.6	47.9	67.3	20.1
702	87.7	80.7	3.2	81.1	234	143.6	60.0	−59.0	43.3	78	164.0	58.0	−54.6	15.6	26	262.2	41.1	−6.4	−47.7	494	316.3	38.9	36.9	−35.2	650	23.5	48.1	65.5	28.5
711	96.3	88.8	−10.0	90.8	153	144.0	59.6	−59.8	43.4	79	181.2	59.7	−46.3	−0.9	17	264.7	39.8	−4.3	−47.4	575	332.3	41.9	51.3	−26.9	649	29.5	48.3	64.8	36.7

RJGB*$_{ton}$**, 25.4, 92.3, 162.2, 271.7 ***RJGB*$_{all}$:** 25.4 42.1 58.8 75.6 92.3 109.7 127.2 144.7 162.2 189.6 216.9 244.3 271.7 300.1 328.6 357.0 ***LAB*Nio: 12.9, 0.3, 1.4 ***LAB*Wio:*** 97.2, −0.8, 1.8

25.4		42.1		58.8		75.6		92.3		109.7		127.2		144.7		162.2		189.6		216.9		244.3		271.7		300.1		328.6		357.0	
46		2		3		5		6		8		10		18		21		23		24		26		35		37		38		41	
16.6	23.5	33.9	38.7	38.7	46.9	60.6	75.5	75.5	87.7	96.3	100.4	110.9	121.5	143.9	144.4	150.3	154.4	164.0	181.2	181.2	206.6	224.4	242.1	266.8	269.7	280.1	297.4	297.4	316.3	351.1	354.9
29.5	33.0	46.9	60.6	60.6	75.5	87.7	96.3	96.3	100.4	110.9	121.5	131.8	139.7	147.0	150.3	164.0	181.2	206.6	224.4	224.4	242.1	248.3	253.0	280.1	297.4	316.3	332.3	332.3	351.1	359.6	5.8
0.323	0.423	0.871	0.006	0.533	0.891	0.553	0.103	0.812	0.329	0.58	0.354	0.192	0.144	0.765	0.451																
651	650	657	666	666	675	684	693	693	702	711	720	639	558	73	74	76	77	78	79	79	80	71	62	170	251	332	413	413	494	656	655
649	648	675	684	684	693	702	711	711	720	639	558	477	396	75	76	78	79	80	71	71	62	53	44	332	413	494	575	575	656	654	653
507	506	531	558	558	585	612	639	639	666	693	720	477	234	217	218	220	221	222	223	223	224	197	170	494	17	260	503	503	26	512	511
505	504	585	612	612	639	666	693	693	720	477	234	711	468	219	220	222	223	224	197	197	170	143	116	260	503	26	269	269	512	510	509

no./Code	*R (380nm − 725nm)*																		*X*	*Y*	*Z*	*L**	*a**	*b**	*L*a*	*a*a*	*b*a*	*C*ab,a*	*hab,a*
506	785	717	669	640	627	627	640	633	619	650	736	798	779	678	523	410	391	413											
	395	387	672	1970	4220	6296	7639	8350	8696	8854	8928	8943	8950	8950	8956	8974	8964	8969	30.4	16.9	7.0	48.1	65.4	30.1	48.1	65.5	28.5	92.7	23.5
505	584	514	461	425	406	403	414	422	436	500	638	757	773	686	534	422	402	424											
	405	398	684	1982	4244	6357	7736	8471	8831	8994	9071	9087	9094	9094	9106	9120	9113	9116	30.4	17.0	5.1	48.3	64.6	38.3	48.3	64.8	36.7	91.6	29.5
r00j=R	720	651	600	568	553	552	564	563	559	602	706	787	779	682	527	414	395	417											
	399	391	677	1977	4230	6315	7667	8384	8734	8893	8968	8983	8990	8990	8998	9015	9006	9010	30.4	16.9	6.4	48.2	65.1	32.6	48.2	65.2	31.0	72.2	25.4
558	342	277	232	208	190	189	193	209	240	326	539	784	889	829	665	534	510	538											
	514	501	832	2240	4540	6591	7883	8552	8876	9023	9092	9106	9111	9111	9116	9133	9124	9128	31.2	18.3	3.3	49.8	61.2	50.8	49.8	61.3	49.2	86.8	38.7
585	344	265	222	198	190	185	189	201	236	333	612	1026	1301	1322	1164	1013	986	1022											
	989	970	1366	2879	5127	6998	8116	8674	8939	9064	9122	9128	9130	9128	9134	9150	9140	9140	34.4	22.7	3.7	54.8	51.3	56.7	54.8	51.5	55.1	72.9	46.9
r25j	333	262	219	196	183	180	183	197	230	319	559	874	1047	1017	852	711	685	716											
	688	672	1034	2497	4787	6767	7986	8606	8904	9041	9105	9115	9119	9118	9123	9140	9131	9133	32.5	20.0	3.4	51.8	57.3	53.7	51.8	57.4	52.0	77.5	42.1
585	344	265	222	198	190	185	189	201	236	333	612	1026	1301	1322	1164	1013	986	1022											
	989	970	1366	2879	5127	6998	8116	8674	8939	9064	9122	9128	9130	9128	9134	9150	9140	9140	34.4	22.7	3.7	54.8	51.3	56.7	54.8	51.5	55.1	72.9	46.9
612	375	297	239	212	198	196	203	217	260	395	814	1523	2105	2307	2204	2046	2022	2069											
	2028	2005	2461	4009	6037	7565	8414	8821	9015	9106	9152	9151	9150	9146	9151	9166	9152	9156	40.3	31.6	4.9	63.0	35.1	64.8	63.0	35.4	63.1	50.1	60.6
r50j	369	292	236	209	196	194	200	214	256	385	785	1454	1993	2167	2053	1894	1869	1915											
	1874	1851	2303	3856	5920	7494	8377	8803	9005	9100	9148	9148	9147	9143	9148	9163	9150	9153	39.5	30.3	4.8	61.9	37.2	63.7	61.9	37.5	62.1	72.5	58.8