

See original or copy: <http://web.me.com/klaus.richter/NE38/NE38L0NA.TXT> / .PS
Technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~fabdmetrik>

TUB registration: 2010I101-NE38/NE38L0NA.TXT / PS
application for measurement of printer or monitor systems

TUB material: code=rha4ta

PSL2-program code: Kodak-photo-CD EPS-file with 17 CIE-test colors

[illegible]

NE380-3, B8 44

CIEBasedABC-color space in PSL2
 $LMN^* / OLV^* / RGB^* \rightarrow XYZ$
 EBU-screen phosphors, D65

$$\begin{aligned} L &= \text{Decode}L^* = \{2.2 \text{ exp}\} \\ M &= \text{Decode}M^* = \{2.2 \text{ exp}\} \\ N &= \text{Decode}N^* = \{2.2 \text{ exp}\} \end{aligned}$$

$$\begin{pmatrix} X \\ Y \\ Z \end{pmatrix} = \begin{pmatrix} 0,4303 & 0,3416 & 0,1782 \\ 0,2219 & 0,7068 & 0,0713 \\ 0,0202 & 0,1296 & 0,9387 \end{pmatrix} \times \begin{pmatrix} L \\ M \\ N \end{pmatrix}$$

NE380-5, B8 45 1

CIEBasedABC-color space in PSL2
 $OLV^* \rightarrow OLV \rightarrow XYZ$
 EBU-screen phosphors, D65

O	$=$	DecodeO^*	$=$	$\{2.2 \text{ exp}\}$
L	$=$	DecodeL^*	$=$	$\{2.2 \text{ exp}\}$
V	$=$	DecodeV^*	$=$	$\{2.2 \text{ exp}\}$

$$\begin{pmatrix} X \\ Y \\ Z \end{pmatrix} = \begin{pmatrix} 0,4303 & 0,3416 & 0,1782 \\ 0,2219 & 0,7068 & 0,0713 \\ 0,0202 & 0,1296 & 0,9387 \end{pmatrix} \times \begin{pmatrix} O \\ L \\ V \end{pmatrix}$$

NE380-6, B8 45 2

photo-CD with CIE-test colors: u =unnormalized data							
no.	O_u^*	L_u^*	V_u^*	$X_{\text{aim},u}$	$Y_{\text{aim},u}$	$Z_{\text{aim},u}$	
1	141	109	95	0.3298	0.2976	0.2459	
2	128	119	65	0.2749	0.2890	0.1501	
3	102	129	45	0.2393	0.3043	0.0966	
4	83	130	29	0.2045	0.2948	0.1217	
5	82	132	130	0.2502	0.3087	0.4042	
6	95	132	158	0.2826	0.2983	0.5791	
7	136	115	60	0.3333	0.2939	0.3321	
8	187	117	48	0.3757	0.3131	0.4544	
9 R	173	40	43	0.2048	0.1120	0.0436	
10 J	190	168	43	0.5487	0.5894	0.1208	
11 G	55	106	64	0.1212	0.2035	0.1533	
12 B	9	50	99	0.0628	0.0647	0.2773	
13	204	166	124	0.5885	0.5709	0.4139	
14	61	78	37	0.0935	0.1171	0.0543	
15 N	39	42	39	0.0342	0.0359	0.0394	
16 Z	89	95	88	0.1885	0.1983	0.2157	
17 W	220	222	211	0.7239	0.7615	0.8289	

NE380-7, B8 47 1

photo-CD with CIE-TEC colors: n =normalized data							
no.	O_n^*	L_n^*	V_n^*	$X_{aim,n}$	$Y_{aim,n}$	$Z_{aim,n}$	
1	163	125	114	0.4556	0.3908	0.2967	
2	148	136	78	0.3797	0.3795	0.1811	
3	118	148	54	0.3306	0.3996	0.1202	
4	96	149	35	0.2825	0.3871	0.2566	
5	95	151	157	0.3456	0.4054	0.4876	
6	19	140	190	0.3904	0.3917	0.5896	
7	157	132	193	0.4604	0.3859	0.6421	
8	216	134	178	0.5190	0.4112	0.5482	
9	R	200	45	0.2829	0.1471	0.0526	
10	J	220	192	0.51	0.7580	0.7740	0.1457
11	G	63	121	0.77	0.1674	0.2672	0.1849
12	B	10	57	0.119	0.0868	0.0850	0.3345
13		236	190	149	0.8130	0.7497	0.4993
14		70	89	44	0.1292	0.1538	0.0655
15	N	45	48	47	0.0472	0.0471	0.0475
16	Z	103	109	106	0.2604	0.2604	0.2602
17	W	255	255	255	1.0000	1.0000	1.0000

NE380-8, B8 47 2

PSL2-program code: color space transformation photo-CD-image with 17 CIE-test colors

[illegible]

NE381-7

TUB-test chart NE38; Richter: Computer graphics, colorimetry
Colour book series: *PostScript* and CIE colour spaces no. 12

input: *rgb* *setrgbcolor*
output: no colour data change