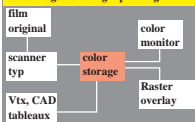


http://130.149.60.45/~farbmetrik/ME25/ME25L0N1.TXT /PS; start output
 N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

diagram for interfaces in the area image handling - printing

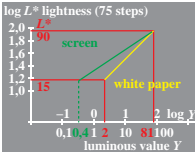


ME250-1, B6_28

sensation scaling functions

lightness L^* and luminous value Y
 adaptation on surround white:
 $L^* = 100 (Y / 100)^{1/2,0}$
 adaptation on surround gray:
 $L^* = 100 (Y / 100)^{1/2,4}$
 description with CIELAB 1976:
 $L^* = 116 (Y / 100)^{1/3,0} - 16$
 adaptation on surround black:
 $L^* = 100 (Y / 100)^{1/3,0}$

ME250-2, B6_29



ME250-3, B6_30

colorness luminous value

$N^* \quad L^* \quad Y = (L^*/10)^2 \quad Y = (L^*/10)^2 \quad 9$

N^*	L^*	Y_{max}	$Y_{normalized}$
0	90	81	81,0
2	80	64	56,9 (=Ypaper)
4	70	49	38,1
6	60	36	24,0
8	50	25	13,9
10	40	16	7,1
12	30	9	3,0
14	20	4	0,9
15	15	2,25	Y_{min}

ME250-4, B6_31

linear scan area Y lightness- lightness color area $L^* h^* no. d$

76,6 ... 85,5	87,5 ... 92,4	90	FFF	4095
60,1 ... 68,1	77,5 ... 82,4	80	DDD	3549
45,6 ... 52,5	67,5 ... 72,4	70	BBB	3003
33,1 ... 39,0	57,5 ... 62,4	60	999	2457
22,6 ... 27,5	47,5 ... 52,4	50	777	1911
14,1 ... 18,0	37,5 ... 42,4	40	555	1365
7,6 ... 10,5	27,5 ... 32,4	30	333	819
3,1 ... 5,0	17,5 ... 22,4	20	111	273
1,6 ... 3,0	12,5 ... 17,4	15	000	0

ME250-5, B6_32

colorness black- luminous value Y coverage b

$O^* L^* V^*$	N^*	Y_{max}	Y	b
15,15,15	0	81	Y_{max}	0,00
13,13,13	2	64	0,22	
11,11,11	4	49	0,41	
9, 9, 9	6	36	0,57	
7, 7, 7	8	25	0,71	
5, 5, 5	10	16	0,83	
3, 3, 3	12	9	0,91	
1, 1, 1	14	4	0,98	
0, 0, 0	15	2,25	Y_{min}	1,00

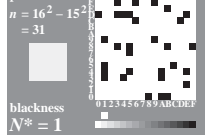
ME250-6, B6_33

interfaces in area of: color film original - color scanner - color storage - raster area coverage

1. color scanner with color measurement sensitivities = spectral values
2. minimum 12-Bit color image storage generates cubic screen and quadratic raster area function
3. minimum 8-bit resolution for linear photoelectric sensors

ME250-8, B6_35

point amount:



ME251-1, B6_36_1

point amount:



ME251-2, B6_36_2

point amount:



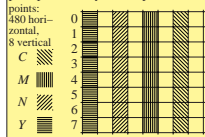
ME251-3, B6_36_3

point amount:



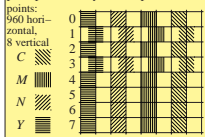
ME251-4, B6_36_4

print positions by matrix printer



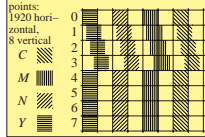
ME251-5, B7_37

print positions by matrix printer



ME251-6, B7_37_1

print positions by matrix printer



ME251-7, B7_37_2

colorness black- luminous value Y coverage b

$O^* L^* V^*$	N^*	Y_{max}	Y	b
15,15,15	0	81	Y_{max}	0,00
13,13,13	2	64	0,22	
11,11,11	4	49	0,41	
9, 9, 9	6	36	0,57	
7, 7, 7	8	25	0,71	
5, 5, 5	10	16	0,83	
3, 3, 3	12	9	0,91	
1, 1, 1	14	4	0,98	
0, 0, 0	15	2,25	Y_{min}	1,00

ME251-8, B7_37_3

See original or copy: http://web.me.com/klaus_richter/ME25/ME25L0N1.TXT /PS
 Technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20101101-ME25/ME25L0N1.TXT /PS
 application for measurement of printer or monitor systems

TUB material: code=thata

TUB-test chart ME25; Richter: Computer graphics, colorimetry
 Colour book series: Colour order and reproduction no. 7

input: *cmyk setcmkycol*
 output: no colour data change