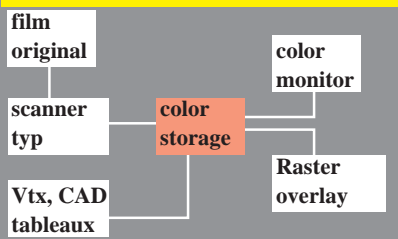


http://130.149.60.45/~farbmetrik/ME25/ME25LONA.TXT /.PS; start output
 N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

diagram for interfaces in the area image handling – printing



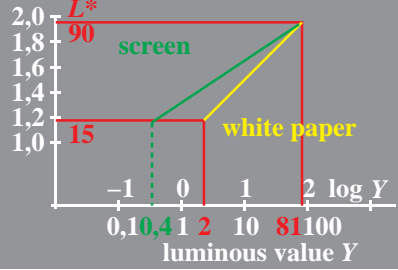
ME250-1, B6_28

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

log L^* lightness (75 steps)



ME250-3, B6_30

colorness luminous value

$N^* \quad L^* \quad Y = (L^*/10)^2 Y = (L^*/10)^3 / 9$

N^*	L^*	Y	Y_{max}	$Y_{normalized}$
0	90	81	Y_{max}	81,0 (=Y _{paper})
2	80	64		56,9
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}	0,4

ME250-4, B6_31

linear scan area Y lightness- area $L^* h^*$ color 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 cover-
 $O^* L^* V^* ness N^* value Y$ range 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

**colorness yellow- luminous cover-
 $O^* L^* V^* ness Y^* value Y$ range b**

15,15,15	0	81	Y_{max}	0,00
15,15,13	2			0,22
15,15,11	4			0,41
15,15, 9	6			0,57
15,15, 7	8			0,71
15,15, 5	10			0,83
15,15, 3	12			0,91
15,15, 1	14			0,98
15,15, 0	15	76	Y_{min}	1,00

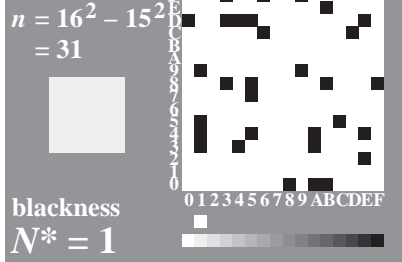
ME250-7, B6_34

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

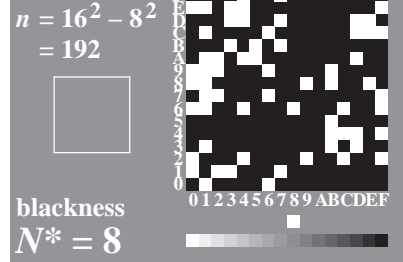
ME250-8, B6_35

point amount:



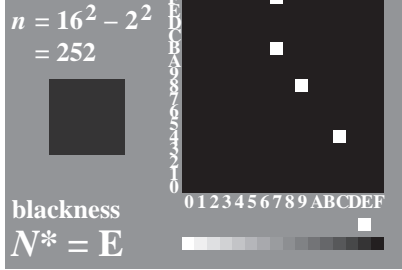
ME251-1, B6_36_1

point amount:



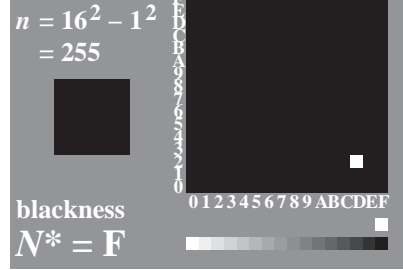
ME251-2, B6_36_2

point amount:



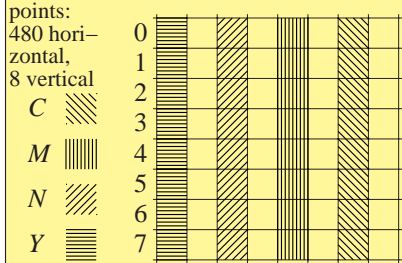
ME251-3, B6_36_3

point amount:



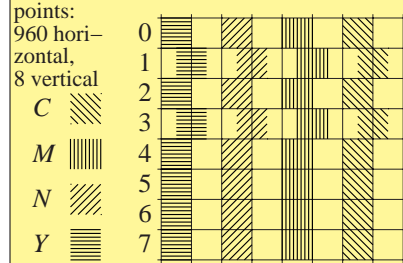
ME251-4, B6_36_4

print positions by matrix printer



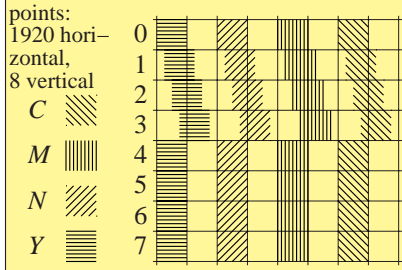
ME251-5, B7_01

print positions by matrix printer



ME251-6, B7_02_1

print positions by matrix printer



ME251-7, B7_02_2

**colorness black- luminous cover-
 $O^* L^* V^* ness N^* value Y$ range 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_03

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

input: *cmymk setcmymkcolor*
 output: no colour data change

See original or copy: <http://web.me.com/klaus.richter/ME25/ME25LONA.TXT> /.PS
 Technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20101101-ME25/ME25LONA.TXT /.PS
 application for measurement of printer or monitor systems
 TUB material: code=rh4ta