

<http://farbe.li.tu-berlin.de/get1/get110np.pdf> / .ps; only vector graphic VG; start output
see separate images of this page: <http://farbe.li.tu-berlin.de/get1/get1.htm>

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TUB registration: 202240701-get1/get110np.pdf / .ps
application for evaluation and measurement of display or print output
TUB material: code=rh4t4

Table xyreh_1024 in hex (h 0:1023) calculated with xrehj=j & gamma

Table xyreh_1024, basic real data in hex (h, 0:1023) between x and y, gamma=2,000

0 0	1 0	2 0	3 0	4 0	5 0	6 0	7 0	8 0	9 0
10 0	11 0	12 0	13 0	14 0	15 0	16 0	17 0	18 0	19 0
20 0	21 0	22 0	23 0	24 0	25 0	26 0	27 0	28 0	29 0
30 0	31 0	32 1	33 1	34 1	35 1	36 1	37 1	38 1	39 1
40 1	41 1	42 1	43 1	44 1	45 1	46 2	47 2	48 2	49 2
50 2	51 2	52 2	53 2	54 2	55 2	56 3	57 3	58 3	59 3
60 3	61 3	62 3	63 3	64 4	65 4	66 4	67 4	68 4	69 4
70 4	71 4	72 5	73 5	74 5	75 5	76 5	77 5	78 5	79 6
80 6	81 6	82 6	83 6	84 6	85 7	86 7	87 7	88 7	89 7
90 7	91 8	92 8	93 8	94 8	95 8	96 9	97 9	98 9	99 9
100 9	101 9	102 10	103 10	104 10	105 10	106 10	107 11	108 11	109 11
110 11	111 12	112 12	113 12	114 12	115 12	116 13	117 13	118 13	119 13
120 14	121 14	122 14	123 14	124 15	125 15	126 15	127 15	128 16	129 16
130 16	131 16	132 17	133 17	134 17	135 17	136 18	137 18	138 18	139 18
140 19	141 19	142 19	143 19	144 20	145 20	146 20	147 21	148 21	149 21
150 21	151 22	152 22	153 22	154 23	155 23	156 23	157 24	158 24	159 24
160 25	161 25	162 25	163 25	164 26	165 26	166 26	167 27	168 27	169 27
170 28	171 28	172 28	173 29	174 29	175 29	176 30	177 30	178 30	179 31
180 31	181 32	182 32	183 32	184 33	185 33	186 33	187 34	188 34	189 34
190 35	191 35	192 36	193 36	194 36	195 37	196 37	197 37	198 38	199 38
200 39	201 39	202 39	203 40	204 40	205 41	206 41	207 41	208 42	209 42
210 43	211 43	212 43	213 44	214 44	215 45	216 45	217 46	218 46	219 46
220 47	221 47	222 48	223 48	224 49	225 49	226 49	227 50	228 50	229 51
230 51	231 52	232 52	233 53	234 53	235 53	236 54	237 54	238 55	239 55
240 56	241 56	242 57	243 57	244 58	245 58	246 59	247 59	248 60	249 60
250 61	251 61	252 62	253 62	254 63	255 63	256 64	257 64	258 65	259 65

For gamma=2 and j=0 to 1023: xrehj=yinhj=j, yrehj=xinhj, xrehj=xredj/1023

get11-3n

Table xyinh_1024 produced by FF_LM_xchart_gamma and xyreh_1024

Table xyinh_1024, invers data in hex (h, 0:1023) for xyreh_1024 (h, 0:1023), gamma=2,000

0 0	0 1	0 2	0 3	0 4	0 5	0 6	0 7	0 8	0 9
0 10	0 11	0 12	0 13	0 14	0 15	0 16	0 17	0 18	0 19
0 20	0 21	0 22	0 23	0 24	0 25	0 26	0 27	0 28	0 29
0 30	0 31	1 32	1 33	1 34	1 35	1 36	1 37	1 38	1 39
1 40	1 41	1 42	1 43	1 44	1 45	2 46	2 47	2 48	2 49
2 50	2 51	2 52	2 53	2 54	2 55	3 56	3 57	3 58	3 59
3 60	3 61	3 62	3 63	4 64	4 65	4 66	4 67	4 68	4 69
4 70	4 71	5 72	5 73	5 74	5 75	5 76	5 77	5 78	6 79
6 80	6 81	6 82	6 83	6 84	7 85	7 86	7 87	7 88	7 89
7 90	8 91	8 92	8 93	8 94	8 95	9 96	9 97	9 98	9 99
9 100	9 101	10 102	10 103	10 104	10 105	10 106	11 107	11 108	11 109
11 110	12 111	12 112	12 113	12 114	12 115	13 116	13 117	13 118	13 119
14 120	14 121	14 122	14 123	15 124	15 125	15 126	15 127	16 128	16 129
16 130	16 131	17 132	17 133	17 134	17 135	18 136	18 137	18 138	18 139
19 140	19 141	19 142	19 143	20 144	20 145	20 146	21 147	21 148	21 149
21 150	22 151	22 152	22 153	23 154	23 155	23 156	24 157	24 158	24 159
25 160	25 161	25 162	25 163	26 164	26 165	26 166	27 167	27 168	27 169
28 170	28 171	28 172	29 173	29 174	29 175	30 176	30 177	30 178	31 179
31 180	32 181	32 182	32 183	33 184	33 185	33 186	34 187	34 188	34 189
35 190	35 191	36 192	36 193	36 194	37 195	37 196	37 197	38 198	38 199
39 200	39 201	39 202	40 203	40 204	41 205	41 206	41 207	42 208	42 209
43 210	43 211	43 212	44 213	44 214	45 215	45 216	46 217	46 218	46 219
47 220	47 221	48 222	48 223	49 224	49 225	49 226	50 227	50 228	51 229
51 230	52 231	52 232	53 233	53 234	53 235	54 236	54 237	55 238	55 239
56 240	56 241	57 242	57 243	58 244	58 245	59 246	59 247	60 248	60 249
61 250	61 251	62 252	62 253	63 254	63 255	64 256	64 257	65 258	65 259

For gamma=2 and j=0 to 1023: xinhj=yrehj, yinhj=xrehj=j, similar for decimal values xindj=yredj, yindj=xredj=xrehj/1023

get11-7n

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*****
%BEG Frame File Linearization Method FF_LM, real (re) hex (h) and decimal (d)
0 setgray
0 0 moveto 6000 0 rlineto 0 4000 rlineto %relative square
-6000 0 rlineto closepath stroke %60mm x 40 mm
This example EPS code is used in
http://color.li.tu-berlin.de/get1/get11-3n.txt
http://color.li.tu-berlin.de/get1/get11-3n.pdf

/xdd 050 def /ydd 138 def %x-position and line difference
TBL 0 setgray %font, size and black color
xdd 3820 moveto %top position and table text
(Table xyreh_1024 in hex (h 0:1023) calculated with xrehj=j & gamma) show Main Table text

/xrehj 1024 array def /yrehj 1024 array def %real data hex (h)
/xredj 1024 array def /yredj 1024 array def %real data decimal (d)
/xinhj 1024 array def /yinhj 1024 array def %invers data hex (h)
/xindj 1024 array def /yindj 1024 array def %invers data decimal (d)

/gamma 2.000 def %possible gamma changes: 1,0 -> 2,0, 0,5, 1,5, 0,667
%calculation of the table xyreh1024 (h=hex) of 1024 values (h 0:1023) with gamma
0 1 1023 {/j exch def %j=0,1023
  xrehj j j put %BEG h 0:1023
  xredj j j 1023 div put %decimal (d 0:1,000)
  yredj j j 1023 div gamma exp put %decimal (d 0:1,000)
  yrehj j yredj j get 1023 mul cvi put %END h 0:1023
} for %j=0,1023

TBV /yw0 3650 def xdd yw0 moveto %font, size, position
(Table xyreh_1024, basic real data in hex (h, 0:1023) between x and y, ) show
1 0 0 setrgbcolor (gamma=) show gamma cvsshows3g 0 setgray %gamma value in red Subtable text

TW /yw1 yw0 1.1 ydd mul sub def %font, size, position
0 1 0259 {/j exch def %j=0,0259
  /j0 j 10 idiv def
  /jd j j0 10 mul sub def
  xdd jd 600 mul add yw1 j0 ydd mul sub moveto
  xrehj j get cvishow ( ) show yredj j get cvsshows3g %output
} for %j=0,0259 Output xrehj, yredj

%END Frame File Linearization Method FF_LM, real (re) hex (h) and decimal (d)
*****
get10-3n
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*****
%BEG Frame File Linearization Method FF_LM, real (re), invers (in), hex (h), decimal (d)
/xdd 050 def /ydd 133 def %x-position and line difference
TBL 0 setgray %font, size and black color
xdd 3820 moveto %top position and table text
(Table xyinh_1024 produced by FF_LM_xchart_gamma from xyreh_1024) show Main Table text

/xrehj 1024 array def /yrehj 1024 array def %real data hex (h)
/xredj 1024 array def /yredj 1024 array def %real data decimal (d)
/xinhj 1024 array def /yinhj 1024 array def %inverse (in) data hex (h)
/xindj 1024 array def /yindj 1024 array def %invers (in) data decimal (d)
TBV /yw0 3650 def %font, size, position
xdd yw0 moveto Sub Table text
(Table xyinh_1024, invers data in hex (h, 0:1023) for xyreh_1024 (h, 0:1023), ) show,
1 0 0 setrgbcolor (gamma=) show gamma cvsshows3g 0 setgray

%procedure for transfer xrehj, yrehj -> xinhj, yinhj
%use of the table data xyreh1024 (h=hex) of real values (reh) with gamma
/FF_LM_xchart_gammaF {%BEG /FF_LM_xchart_gammaF 240715
  /yreh exch def %0<= yreh <=1023
  xinhj j yrehj yreh get put %invers data yrehj->xinhj
  yinhj j xrehj yreh get put %invers data xrehj->yinhj
  yinhj j get %output of yinhj
} def %END /FF_LM_xchart_gammaF 240715

%Application of FF_LM_xchart_gammaF and output
TW /yw1 yw0 1.1 ydd mul sub def
0 1 0259 {/j exch def %j=0,0259
  xrehj j get FF_LM_xchart_gammaF
  %available now xinhj, yinhj
  xindj j xinhj j get 1023 div put
  yindj j yinhj j get 1023 div put
  /j0 j 10 idiv def /jd j j0 10 mul sub def
  xdd jd 600 mul add yw1 j0 ydd mul sub moveto
  xinhj j get cvishow ( ) show yinhj j get cvishow
} for %j=0,0259 Output xinhj, yinhj

%similar for decimal values xindj=yredj, yindj=xredj=xrehj/1023 show
%END Frame File Linearization Method FF_LM, real (re) hex (h) and decimal (d)
*****
get10-7n
```

TUB-test chart get1; PostScript eps Code for output linearization and output, calculation of tables
xyrehj_1024 and xyinhj_1024 calculated with FF_LM_xchart_gammaF, for values j=0,259, gamma=2