

Compensation Curves Correcting Digital Printing

The manufacturers of digital photographic papers produce ICC profiles so that the prints made on their paper will come out properly balanced. These profiles however are not necessarily all that accurate. Most often the bottom of the print drops below what is printable and you lose detail and separation in the shadows. Most profiles are also off for the midtones and this must be corrected so that middle gray really comes out Middle grey. The highlights are usually close for the whitest white but a photographic print must contain some ink at the top end and cannot be paper white. The paper reflects light differently from the ink and if you have a blank spot in your photo it will look terrible.

So I have worked for you to produce a range test prints so you can see just how off the ICC profiles are and to find out exactly how to correct for this.

Matte:

Epson Ultra-Prem Presentation Matte 192
black = 20 middle gray = 119 white = 252

Inkpress Cool Tone Rag 200
black = 16 middle gray = 103 white = 249

Arista II Duo Matte 215
black = 12 middle gray = 117 white = 251

Inkpress DuoMatte-80 215
use Epson EMP profile
(Inkpress profile too red)
black = 20 middle gray = 109 white = 251

Moab Lasal Matte 230
use the Epson EMP-MK profile
(Moab too magenta)
black = 14 middle gray = 109 white = 251

Brilliant Supreme Double-sided Matte 230
black = 16 middle gray = 117 white = 252

Innova FibraPrint Matte 280
use the Epson EMP-MK profile
(Innova profile too blue)
black = 18 middle gray 9 white = 250

Harmon Matt FB 310
black = 16 middle gray = 105 white = 252

Canson Edition Etching Rag 310
black = 22 middle gray = 105 White 240

Innova Soft Textured Natural White 315
black = 20 middle gray = 117 white = 247

Luster/Satin/Silk:

Arista II Luster 10.1 mill
black = 19 middle grey = 127 white = 251

Arista II Gloss 170
black = 17 middle gray = 127 white = 252

ProJet Royal Satin 170
use Epson ESPP 170 profile
(Inkpress profile too green)
black = 18 middle gray = 117 white = 252

ProJet Smooth Silk 230
use Epson ESPP 250 profile
(Inkpress profile too green)
black = 18 middle gray = 121 white = 252

ProJet Luster Supreme 250
use Epson ELPP 260 profile
black = 16 middle gray = 129 white = 253

Canson Photo Satin Premium RC 270
black = 22 middle gray = 121 white = 252

Innova Warmtone Gloss 300
black = 20 middle gray = 127 white = 252

Brilliant Supreme Luster 300
black = 18 middle grey = 117 white = 253

Ilford Gallerie Prestige Gold Fiber Silk 310
use Epson PLPP260-PK profile
(Ilford profile too blue)
black = 18 Middle gray = 141 White = 25