

Table 4. Preferred Reproduction Densities (above base + fog) for Different Zones, (approximate values; scene luminance range 160:1, scene illumination level 128 lux, flare factor 2)

Zone	Scene Tone	Log Luminance	Log Exposure	Preferred Reproduction Density		
				A	B*	C
0	Absolute black - Dmax	-0.60	-0.20	2.1	2.4	3.0
1	Edge of detail in black	0.00	0.00	1.9	2.2	2.7
2	Texture in black	0.55	0.36	1.6	1.88	2.3
3	Average dark objects	0.88	0.63	1.32	1.56	1.89
4	Dark midtones	1.15	0.88	1.0	1.18	1.42
4.5	Average scene reflectance	1.25	0.98	0.85	1.02	1.21
5	Midtone 18% reflectance	1.37	1.09	0.7	0.85	1.0
6	Light midtones	1.58	1.29	0.47	.0.6	0.7
7	Average light objects	1.79	1.50	0.27	0.37	0.45
8	Texture in white	1.99	1.69	0.12	0.2	0.25
9	Edge of detail in white	2.20	1.90	0.04	0.08	0.1
10	Absolutewhite - Base +fog	2.50	2.20	0.0	0.0	0.0
Preferred midtone gamma				1.15	1.27	1.62
Preferred average gradient				0.98	1.12	1.37

A: Print (reflection hardcopy).

B: Transparency (for viewing on a light table).

C: Transparency (for projection viewing in a darkened room). *Note that a mismatch exists between typical reversal film gammas of approximately 1.6 and the preferred value for transparencies to be viewed on a light table. This mismatch occurs because transparency films are designed for projection in a darkened room, table viewing or magazine reproduction. A scene range of approximately 32:1 will produce an appropriate density range for light table viewing, and a scene range of approximately 16:1 will produce an appropriate density range for reflection hardcopy. These lower scene ranges require somewhat more exposure in order to keep the highlights at the preferred density levels.

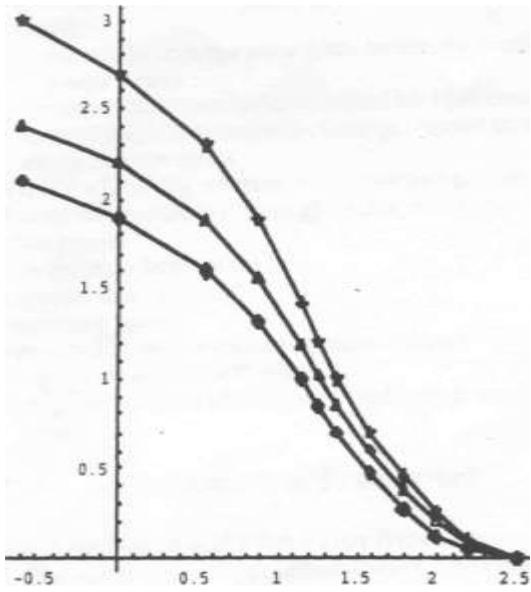


Figure 2. Preferred Tone Reproduction Curves. From top to bottom: transparency (projection), transparency (light table), print.