

Prentice Hall Higher Education Design

March 2008

PMS Color Guide for One Color Print Supplements

When creating a one color print supplement, such as a cover or media label with a bar code, a PMS color must be used which can be read by bar code scanners.

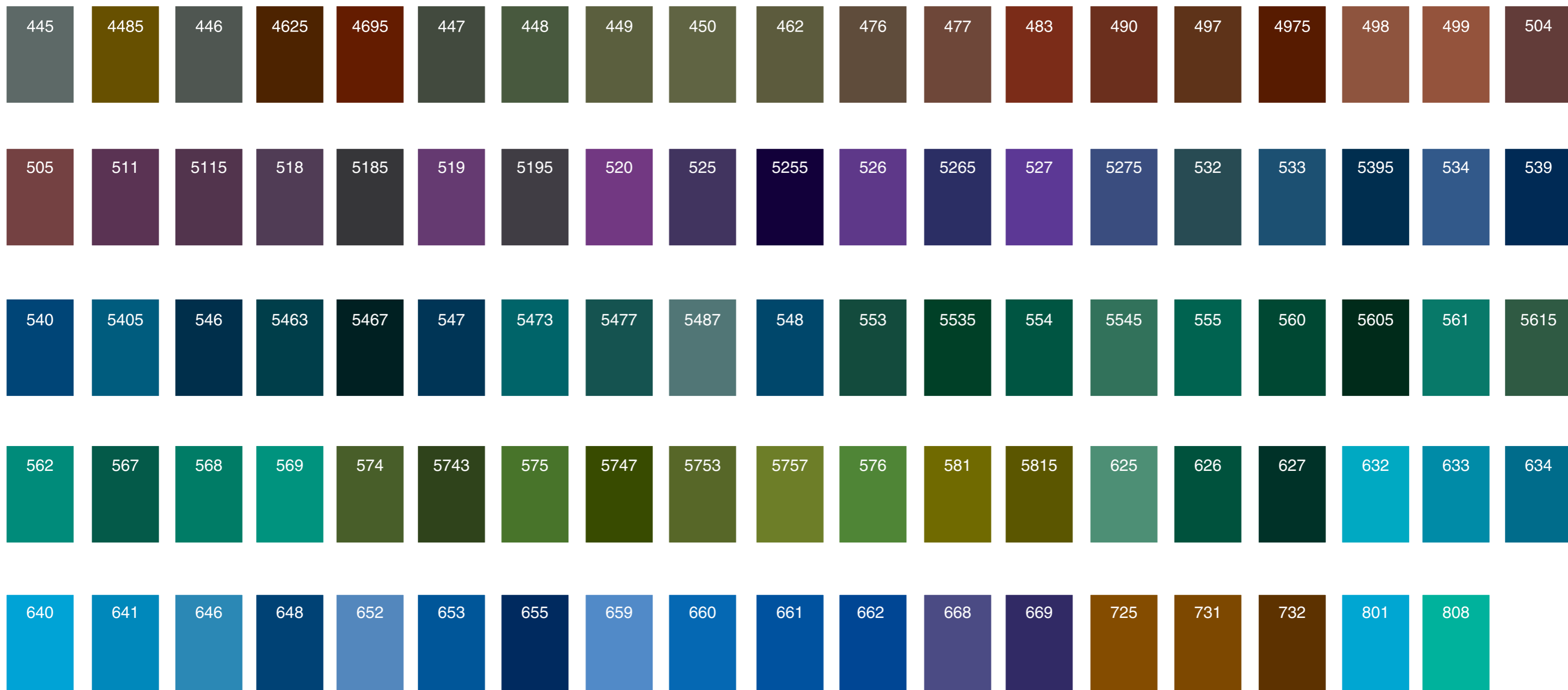
This PDF shows three pages of PMS colors that are safe to use. You may use any of the colors on PDF pages 2, 3, or 4.

Backup technical details for your reference are in the pages that follow.

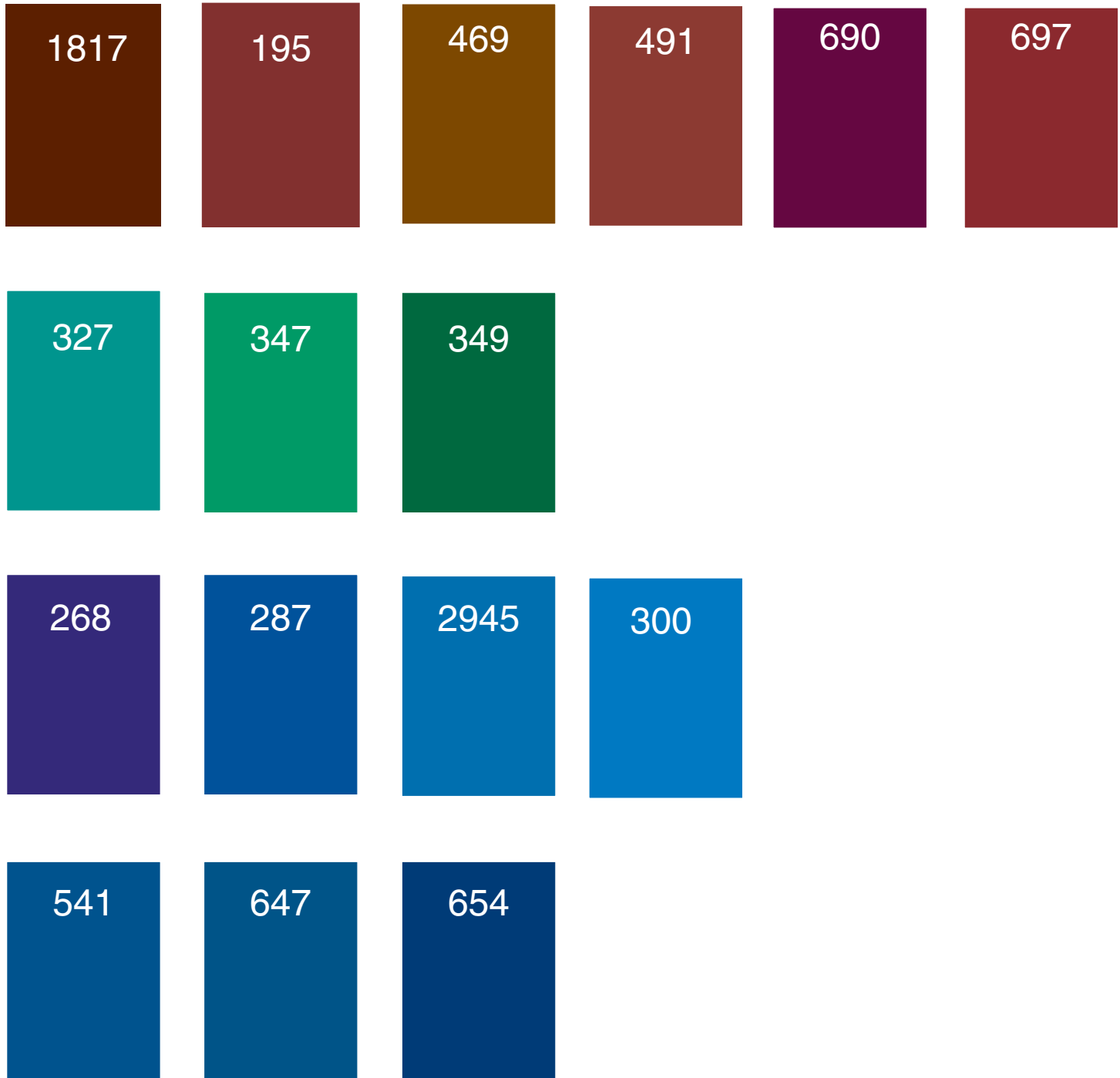
Page 5 lists PMS COLORS NOT TO BE USED IN UPC OR EAN BOOKLAN BARCODES, based on information provided by Phoenix Color.

The last 12 pages are technical reference. It is a "Guide to Color Selection" by Bar Code Graphics, Inc. that explains how to choose a PMS color so that it will scan, especially if that bar code is falling on a background color other than white. However, since most of our bar cards print on white, the work has already been done for you. Just choose a color from the bar charts at the beginning of the document.

1405	147	1545	161	168	175	181	216	222	229	242	249	259	2593	2597	260	2602	2603	2607
261	2612	2613	2617	262	2622	2623	2627	266	267	2685	269	2695	2718	2727	2728	273	2735	2736
2738	274	2745	2746	2747	2748	2755	2756	2757	2758	2765	2766	2767	2768	280	281	282	286	288
289	2925	293	2935	294	295	2955	296	2965	299	300	3005	301	3015	302	3025	303	3035	306
307	308	309	312	313	3135	314	3145	315	3155	316	3165	320	321	322	323	326	3262	3265
3268	3272	3275	3278	328	3282	3285	3288	329	3292	3295	3298	330	3302	3305	3308	334	335	336
339	340	3405	341	3415	342	3425	343	3435	348	350	354	355	356	357	361	362	363	364
368	369	370	371	377	378	405	411	412	417	418	419	425	426	432	433	438	439	440



Most Often Used PMS Colors for One Color Supplements



**PHOENIX COLOR TECHNICAL SPECIFICATION
PMS COLORS NOT TO BE USED IN UPC OR EAN BOOKLAN BARCODES**

These are the PMS colors we have determined will not scan properly when used to reproduce UPC and Booklan barcodes. As such, it is recommended that they be avoided in these printing applications. We do not guarantee this to be an all inclusive list - it represents all those colors we have determined through experience to be troublesome.

yellow	1375	1775	236	312	389	4545	514	5585
warm red	1385	1785	237	3105	393	457	515	5595
rubine red	141	1795	238	3115	394	458	516	564
rhodamine	142	1805	239	3125	395	459	517	565
purple	143	182	240	317	396	460	5145	566
12	144	183	243	318	397	461	5155	5635
21	145	184	244	319	398	465	5165	5645
32	146	185	245	324	3935	466	5175	5655
process Y	148	186	246	325	3945	467	521	5665
process M	149	187	247	3242	3955	468	522	571
100	150	189	250	3252	3965	4655	523	572
101	151	190	251	3262	400	4665	524	573
102	152	191	252	3245	401	4675	5115	577
103	153	192	253	3255	402	4685	5125	578
106	155	193	256	3248	403	472	5135	579
107	156	196	257	3258	406	473	5145	580
108	157	197	2563	331	407	474	528	5773
109	158	198	2567	332	408	475	529	5783
110	159	199	263	333	413	4725	530	5793
111	160	200	264	337	414	4735	531	5803
113	1555	201	2635	338	420	4745	5285	5777
114	1565	203	270	3375	421	4755	8295	5787
115	1575	204	271	3385	422	479	5305	5797
116	1585	205	272	3395	427	480	5315	583
117	1595	206	2075	344	428	481	535	584
118	162	207	2715	345	429	482	536	585
120	163	210	2725	346	434	485	537	586
121	164	211	277	351	435	486	538	587
122	165	212	278	352	441	487	543	5845
123	166	213	279	353	442	488	544	5855
124	167	214	283	358	warm gray 1	489	545	5865
125	1625	215	284	359	warm gray 2	493	5435	5875
127	1635	217	285	360	warm gray 3	494	5445	
128	1645	218	290	365	warm gray 4	495	5455	
129	1655	219	291	366	warm gray 5	496	550	
130	1665	220	292	367	cool gray 1	500	551	
131	169	221	297	372	cool gray 2	501	552	
132	170	223	298	373	cool gray 3	502	5503	
134	171	224	299	374	cool gray 4	503	5513	
135	172	225	2975	375	cool gray 5	5005	5523	
136	173	226	2985	379	451	5015	5507	
137	176	227	2995	380	452	5025	5517	
138	177	230	304	381	453	5035	5527	
139	178	231	305	382	454	507	557	
1345	179	232	306	386	4515	508	558	
1355	180	233	310	387	4525	509	559	
1365	1765	234	311	388	4535	510	5575	



GUIDE TO COLOR SELECTION

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INTRODUCTION TO COLOR CODING

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This guide is intended to allow designers, printers and packagers to select the colors necessary to provide a scanning system with the highest Print Contrast Signals (PCS) possible. PCS is the value of the changes in reflectivity between the dark bars and light spaces of a symbol read by a scanner. If a scanner cannot properly measure the bar/space widths and arrangements, the scan will most likely fail. A good printing job giving well-defined bar and space edges and widths will be pointless if the scanner cannot define those edges and widths due to use of colors it cannot distinguish.

When bar codes of any symbology are printed, the best color combinations are black or dark blue bars on a white background. However package design, limited color selection or designer esthetics may require other color considerations. Contrast values as seen by a scanning laser may not be the same as what the human eye perceives. A good guide is to place the warm colors of the spectrum (Red, Orange, Yellow) for background and the cold colors of the spectrum (Blue, Green, Indigo, Violet) for the dark bars of a symbol.

It is important to note that results can vary depending on printing methods and materials used of the final piece. We recommend that PCS testing always be conducted under actual conditions used for the final job to achieve best results.

HOW TO USE THE GUIDE TO COLOR SELECTION

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The colors listed in this guide show their percent reflectance to the immediate right of the PMS Number. A simple formula used along with Value and PCS Table should allow proper color selection for symbol printing.

1. Find the PMS Number of the color desired for the background and note its percent reflectance.
2. Locate that percent reflectance in the first column of Value and PCS Table.
3. Read across the same line of the Value and PCS Table to find the maximum percent reflectance acceptable for the dark bars.
4. Choose a PMS color for the dark bars with a percent reflectance no greater than the value found.

PMS 393U or Yellow Green is the desired background color for the symbol.

1. In the Color Reflectance Chart, note that PMS 393U has a reflectance value of 82%.

P 392U	.....19%
P 393U	.....82%
P 394U	.....77%
P 395U	.....72%

2. Referring to the Value and PCS Table, the next lowest value from 82% is 79.4% (choosing the next lowest value can ensure proper contrasting for bar color selection).

89.1
84.1
79.4
74.9

3. Following across the PCS Table to Column 2, note that the color selected for the dark bars should not exceed a 27.6% reflectance value.

89.1	37.1
84.1	32.0
79.4	27.6
74.9	23.7

4. Returning to the Color Reflectance Chart, find colors in the cool spectrum (Blue, Green, Indigo, Violet) with a reflectance lower than 27.6 for the dark bars.

It is important to remind the user that these are approximate values. If inks, substrates and printing methods are different from a high quality stock and method, refrain from using colors resulting in a marginal PCS.

REFLECTANCE VALUE AND PCS TABLE

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Light Background: % Reflectance	Dark Bars: % Reflectance	Minimum Print Contrast
100.00	50.1	.499
94.4	43.1	.543
89.1	37.1	.583
84.1	32.0	.619
79.4	27.6	.653
74.9	23.7	.683
70.8	20.4	.712
66.8	17.6	.737
63.1	15.1	.760
56.2	11.2	.801
53.1	9.6	.818
50.1	8.3	.834
47.3	7.2	.849
44.7	6.2	.862
42.2	5.3	.874
39.9	4.6	.886
37.5	3.9	.904
35.5	2.9	.914
31.6	2.5	.921

PANTONE COLOR REFLECTANCE CHART

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Yellow C88%	P 136C92%	P 169C91%	P 218C91%
Warm Red C88%	P 137C92%	P 170C90%	P 219C91%
Rubine Red C . . . . .	.88%	P 138C . . . . .	.76%	P 171C . . . . .	.91%	Rubine Red C . . . . .	.91%
Rhodamine Red C . . . . .	.82%	P 139C . . . . .	.45%	P 172C . . . . .	.92%	P 220C . . . . .	.90%
Purple C . . . . .	.82%	P 140C . . . . .	.25%	P 173C . . . . .	.71%	P 221C . . . . .	.81%
Violet C . . . . .	.22%	P 1345C . . . . .	.92%	P 174C . . . . .	.33%	P 222C . . . . .	.33%
Reflex Blue C . . . . .	.2%	P 1355C . . . . .	.92%	P 175C . . . . .	.21%	P 223C . . . . .	.91%
Process Blue C . . . . .	.2%	P 1365C . . . . .	.92%	P 176C . . . . .	.91%	P 224C . . . . .	.91%
Patone Green C . . . . .	.2%	P 1375C . . . . .	.92%	P 177C . . . . .	.91%	P 225C . . . . .	.91%
Yellow 012C . . . . .	.88%	P 1385C . . . . .	.62%	P 178C . . . . .	.91%	P 226C . . . . .	.91%
Orange 021C . . . . .	.88%	P 1395C . . . . .	.43%	Warm Red C . . . . .	.91%	P 227C . . . . .	.71%
Red 032C . . . . .	.86%	P 1405C . . . . .	.22%	P 179C . . . . .	.75%	P 228C . . . . .	.37%
Blue 072C . . . . .	.4%	P 141C . . . . .	.92%	P 180C . . . . .	.56%	P 229C . . . . .	.23%
Process Yellow C . . . . .	.86%	P 142C . . . . .	.92%	P 181C . . . . .	.30%	P 230C . . . . .	.91%
Process Magenta C . . . . .	.86%	P 143C . . . . .	.92%	P 1765C . . . . .	.91%	P 231C . . . . .	.91%
Process Cyan C . . . . .	.6%	P 144C . . . . .	.92%	P 1775C . . . . .	.91%	P 232C . . . . .	.92%
Process Black . . . . .	.0%	P 145C . . . . .	.73%	P 1785C . . . . .	.91%	Rhod.Red C . . . . .	.91%
P 100C . . . . .	.88%	P 146C . . . . .	.45%	P 1788C . . . . .	.91%	P 233C . . . . .	.80%
P 101C . . . . .	.88%	P 147C . . . . .	.21%	P 1795C . . . . .	.79%	P 234C . . . . .	.47%
P 102C . . . . .	.88%	P 148C . . . . .	.92%	P 1805C . . . . .	.53%	P 235C . . . . .	.31%
Yellow C . . . . .	.86%	P 149C . . . . .	.92%	P 1815C . . . . .	.36%	P 236C . . . . .	.91%
P 103C . . . . .	.61%	P 150C . . . . .	.92%	P 182C . . . . .	.91%	P 237C . . . . .	.91%
P 104C . . . . .	.42%	P 151C . . . . .	.92%	P 183C . . . . .	.91%	P 238C . . . . .	.91%
P 105C . . . . .	.20%	P 152C . . . . .	.66%	P 184C . . . . .	.91%	P 239C . . . . .	.91%
P 106C . . . . .	.92%	P 153C . . . . .	.48%	P 185C . . . . .	.91%	P 240C . . . . .	.76%
P 107C . . . . .	.92%	P 154C . . . . .	.34%	P 186C . . . . .	.91%	P 241C . . . . .	.50%
P 108C . . . . .	.92%	P 155C . . . . .	.92%	P 187C . . . . .	.70%	P 242C . . . . .	.47%
P 109C . . . . .	.92%	P 156C . . . . .	.92%	P 188C . . . . .	.45%	P 243C . . . . .	.91%
P 110C . . . . .	.76%	P 157C . . . . .	.92%	P 189C . . . . .	.91%	P 244C . . . . .	.91%
P 111C . . . . .	.51%	P 158C . . . . .	.92%	P 190C . . . . .	.91%	P 245C . . . . .	.91%
P 112C . . . . .	.39%	P 159C . . . . .	.73%	P 191C . . . . .	.91%	P 246C . . . . .	.91%
P 113C . . . . .	.92%	P 160C . . . . .	.41%	P 192C . . . . .	.91%	P 247C . . . . .	.77%
P 114C . . . . .	.92%	P 161C . . . . .	.20%	P 193C . . . . .	.67%	P 248C . . . . .	.50%
P 115C . . . . .	.92%	P 1555C . . . . .	.92%	P 194C . . . . .	.47%	P 249C . . . . .	.32%
P 116C . . . . .	.92%	P 1565C . . . . .	.92%	P 195C . . . . .	.27%	P 250C . . . . .	.91%
P 117C . . . . .	.63%	P 1575C . . . . .	.91%	P 196C . . . . .	.91%	P 251C . . . . .	.91%
P 118C . . . . .	.55%	P 1585C . . . . .	.91%	P 197C . . . . .	.91%	P 252C . . . . .	.91%
P 119C . . . . .	.28%	P 1595C . . . . .	.91%	P 198C . . . . .	.91%	Purple C . . . . .	.91%
P 120C . . . . .	.92%	P 1605C . . . . .	.74%	P 199C . . . . .	.91%	P 253C . . . . .	.86%
P 121C . . . . .	.92%	P 1615C . . . . .	.32%	P 200C . . . . .	.73%	P 254C . . . . .	.62%
P 122C . . . . .	.92%	P 162C . . . . .	.91%	P 201C . . . . .	.54%	P 255C . . . . .	.37%
P 123C . . . . .	.92%	P 163C . . . . .	.92%	P 202C . . . . .	.39%	P 256C . . . . .	.75%
P 124C . . . . .	.76%	P 164C . . . . .	.92%	P 203C . . . . .	.91%	P 257C . . . . .	.70%
P 125C . . . . .	.52%	P 165C . . . . .	.92%	P 204C . . . . .	.91%	P 258C . . . . .	.55%
P 126C . . . . .	.41%	P 166C . . . . .	.77%	P 205C . . . . .	.91%	P 259C . . . . .	.35%
P 127C . . . . .	.92%	P 167C . . . . .	.51%	P 206C . . . . .	.91%	P 260C . . . . .	.33%
P 128C . . . . .	.92%	P 168C . . . . .	.17%	P 207C . . . . .	.91%	P 261C . . . . .	.23%
P 129C . . . . .	.92%	P 1625C . . . . .	.92%	P 208C . . . . .	.52%	P 262C . . . . .	.23%
P 130C . . . . .	.92%	P 1635C . . . . .	.92%	P 209C . . . . .	.36%	P 2563C . . . . .	.84%
P 131C . . . . .	.74%	P 1645C . . . . .	.92%	P 210C . . . . .	.91%	P 2573C . . . . .	.82%
P 132C . . . . .	.45%	P 1655C . . . . .	.92%	P 211C . . . . .	.91%	P 2583C . . . . .	.62%
P 133C . . . . .	.22%	P 1665C . . . . .	.91%	P 212C . . . . .	.91%	P 2593C . . . . .	.59%
P 134C . . . . .	.92%	P 1675C . . . . .	.60%	P 216C . . . . .	.29%	P 2603C . . . . .	.45%
P 135C . . . . .	.92%	P 1685C . . . . .	.32%	P 217C . . . . .	.91%	P 2613C . . . . .	.46%

Note: Variance +/- 3%

P 2623C	.47%	P 301C	.0%	P 3268C	.7%	P 379C	.69%
P 2567C	.68%	P 302C	.0%	P 3278C	.3%	P 380C	.64%
P 2577C	.64%	P 303C	.1%	P 3288C	.2%	P 381C	.57%
P 2587C	.55%	P 2975C	.44%	P 3298C	.1%	P 382C	.45%
P 2597C	.47%	P 2985C	.16%	P 3308C	.0%	P 383C	.36%
P 2607C	.47%	P 2995C	.7%	P 331C	.46%	P 384C	.27%
P 2617C	.34%	P 3005C	.1%	P 332C	.35%	P 385C	.15%
P 2627C	.36%	P 3015C	.0%	P 333C	.20%	P 386C	.62%
P 263C	.86%	P 3025C	.0%	Green C	.0%	P 387C	.57%
P 264C	.69%	P 3035C	.0%	P 334C	.0%	P 388C	.53%
P 265C	.46%	P 304C	.46%	P 335C	.0%	P 389C	.47%
P 266C	.26%	P 305C	.23%	P 336C	.1%	P 390C	.36%
P 267C	.22%	P 306C	.14%	P 337C	.46%	P 391C	.25%
P 268C	.30%	Process Blue	.0%	P 338C	.29%	P 392C	.17%
P 269C	.34%	P 307C	.1%	P 339C	.10%	P 393C	.68%
P 2635C	.70%	P 308C	.0%	P 340C	.4%	P 394C	.64%
P 2645C	.70%	P 309C	.0%	P 341C	.2%	P 395C	.61%
P 2655C	.65%	P 310C	.26%	P 342C	.2%	P 396C	.54%
P 2665C	.74%	P 311C	.16%	P 343C	.1%	P 397C	.38%
Violet C	.41%	P 312C	.5%	P 3375C	.33%	P 398C	.30%
P 2685C	.60%	P 313C	.0%	P 3385C	.19%	P 399C	.24%
P 2695C	.24%	P 314C	.0%	P 3395C	.8%	P 3935C	.67%
P 270C	.53%	P 315C	.0%	P 3405C	.1%	P 3945C	.64%
P 271C	.41%	P 316C	.1%	P 3415C	.1%	P 3955C	.61%
P 272C	.26%	P 3105C	.31%	P 3425C	.0%	P 3965C	.57%
P 273C	.4%	P 3115C	.16%	P 3434C	.0%	P 3975C	.34%
P 274C	.4%	P 3125C	.8%	P 344C	.51%	P 3985C	.23%
P 275C	.3%	P 3135C	.1%	P 345C	.38%	P 3995C	.11%
P 276C	.3%	P 3145C	.0%	P 346C	.24%	P 400C	.47%
P 2705C	.50%	P 3155C	.0%	P 347C	.4%	P 401C	.43%
P 2715C	.33%	P 3165C	.0%	P 348C	.3%	P 402C	.33%
P 2725C	.23%	P 317C	.58%	P 349C	.3%	P 403C	.24%
P 2735C	.8%	P 318C	.35%	P 350C	.2%	P 404C	.15%
P 2745C	.7%	P 319C	.17%	P 351C	.47%	P 405C	.11%
P 2755C	.5%	P 320C	.1%	P 352C	.42%	Black C	.5%
P 2765C	.3%	P 321C	.0%	P 353C	.26%	P 413C	.47%
P 272C	.55%	P 322C	.1%	P 354C	.2%	P 414C	.36%
P 278C	.38%	P 323C	.0%	P 355C	.2%	P 415C	.30%
P 279C	.17%	P 324C	.49%	P 356C	.1%	P 416C	.17%
Reflex Blue C	.1%	P 325C	.23%	P 357C	.2%	P 417C	.15%
P 280C	.0%	P 326C	.8%	P 358C	.25%	P 418C	.8%
P 281C	.0%	P 327C	.1%	P 359C	.36%	P 419C	.2%
P 282C	.0%	P 328C	.0%	P 360C	.22%	P 420C	.52%
P 283C	.45%	P 329C	.0%	P 361C	.11%	P 421C	.42%
P 284C	.28%	P 330C	.2%	P 362C	.10%	P 422C	.35%
P 285C	.7%	P 3242C	.31%	P 363C	.10%	P 423C	.25%
P 286C	.1%	P 3252C	.20%	P 364C	.7%	P 424C	.15%
P 287C	.0%	P 3262C	.7%	P 365C	.61%	P 425C	.10%
P 288C	.0%	P 3272C	.1%	P 366C	.59%	P 426C	.3%
P 289C	.0%	P 3282C	.0%	P 367C	.40%	P 427C	.59%
P 290C	.53%	P 3292C	.0%	P 368C	.21%	P 428C	.47%
P 291C	.34%	P 3302C	.0%	P 369C	.14%	P 429C	.39%
P 292C	.23%	P 3245C	.30%	P 370C	.12%	P 430C	.26%
P 293C	.1%	P 3255C	.18%	P 371C	.8%	P 431C	.15%
P 294C	.1%	P 3265C	.7%	P 372C	.56%	P 432C	.9%
P 295C	.0%	P 3275C	.2%	P 373C	.50%	P 433C	.5%
P 296C	.0%	P 3285C	.1%	P 374C	.40%	P 434C	.56%
P 297C	.33%	P 3295C	.1%	P 375C	.24%	P 435C	.48%
P 298C	.16%	P 3305C	.2%	P 376C	.20%	P 436C	.37%
P 299C	.7%	P 3248C	.33%	P 377C	.16%	P 437C	.17%
P 300C	.0%	P 3258C	.20%	P 378C	.8%	P 438C	.7%

Note: Variance +/- 3%

P 439C	.3%	P 4645C	.33%	P 511C	.8%	P 552C	.53%
P 440C	.4%	P 4655C	.49%	P 512C	.13%	P 5463C	.0%
P 441C	.53%	P 4665C	.57%	P 513C	.19%	P 5473C	.4%
P 442C	.39%	P 4675C	.65%	P 514C	.51%	P 5483C	.12%
P 443C	.29%	P 4685C	.71%	P 515C	.64%	P 5493C	.21%
P 444C	.19%	P 469C	.11%	P 516C	.69%	P 5503C	.36%
P 445C	.4%	P 470C	.26%	P 517C	.72%	P 5513C	.51%
P 446C	.4%	P 471C	.44%	P 5115C	.8%	P 5523C	.59%
P 447C	.4%	P 472C	.69%	P 5125C	.15%	P 5467C	.1%
WarmGrey 1C	.57%	P 473C	.72%	P 5135C	.25%	P 5477C	.7%
WarmGrey 2C	.50%	P 474C	.76%	P 5145C	.36%	P 5487C	.19%
WarmGrey 3C	.45%	P 475C	.77%	P 5155C	.48%	P 5497C	.33%
WarmGrey 4C	.38%	P 4695C	.7%	P 5165C	.56%	P 5507C	.46%
WarmGrey 5C	.37%	P 4705C	.20%	P 5175C	.60%	P 5517C	.54%
WarmGrey 6C	.38%	P 4715C	.30%	P 518C	.6%	P 5527C	.63%
WarmGrey 7C	.30%	P 4725C	.42%	P 519C	.10%	P 553C	.7%
WarmGrey 8C	.29%	P 4735C	.54%	P 520C	.14%	P 554C	.7%
WarmGrey 9C	.21%	P 4745C	.60%	P 521C	.42%	P 555C	.9%
WarmGrey 10C	.20%	P 4755C	.71%	P 522C	.52%	P 556C	.35%
Warm Grey 11C	.17%	P 476C	.12%	P 523C	.60%	P 557C	.49%
Cool Grey 1C	.72%	P 477C	.16%	P 524C	.66%	P 558C	.58%
Cool Grey 2C	.65%	P 478C	.23%	P 5185C	.3%	P 559C	.63%
Cool Grey 3C	.58%	P 479C	.53%	P 5195C	.7%	P 5535C	.0%
Cool Grey 4C	.52%	P 480C	.69%	P 5205C	.18%	P 5545C	.5%
Cool Grey 5C	.46%	P 481C	.74%	P 5215C	.33%	P 5555C	.15%
Cool Grey 6C	.40%	P 482C	.76%	P 5225C	.44%	P 5565C	.22%
Cool Grey 7C	.34%	P 483C	.13%	P 5235C	.58%	P 5575C	.35%
Cool Grey 8C	.29%	P 484C	.34%	P 5245C	.68%	P 5585C	.42%
Cool Grey 9C	.29%	P 485C	.74%	P 525C	.7%	P 5595C	.52%
Cool Grey 10C	.16%	P 486C	.77%	P 526C	.13%	P 560C	.1%
Cool Grey 11C	.13%	P 487C	.78%	P 527C	.18%	P 561C	.2%
P 448C	.7%	P 488C	.78%	P 528C	.48%	P 562C	.2%
P 449C	.11%	P 489C	.78%	P 529C	.60%	P 563C	.22%
P 450C	.18%	P 490C	.7%	P 530C	.64%	P 564C	.29%
P 451C	.45%	P 491C	.16%	P 531C	.70%	P 565C	.41%
P 452C	.59%	P 492C	.21%	P 532C	.3%	P 566C	.54%
P 453C	.63%	P 493C	.51%	P 533C	.4%	P 5605C	.3%
P 454C	.68%	P 494C	.67%	P 534C	.6%	P 5615C	.9%
P 4485C	.8%	P 495C	.69%	P 535C	.33%	P 5625C	.19%
P 4495C	.19%	P 496C	.74%	P 536C	.43%	P 5635C	.36%
P 4505C	.33%	P 497C	.4%	P 537C	.55%	P 5645C	.46%
P 4515C	.43%	P 498C	.7%	P 538C	.62%	P 5655C	.54%
P 4525C	.55%	P 499C	.13%	P 539C	.5%	P 5665C	.60%
P 4535C	.64%	P 500C	.42%	P 541C	.6%	P 567C	.1%
P 4545C	.68%	P 501C	.61%	P 542C	.23%	P 568C	.1%
P 455C	.13%	P 502C	.67%	P 543C	.33%	P 569C	.1%
P 456C	.30%	P 503C	.69%	P 544C	.42%	P 570C	.21%
P 457C	.43%	P 4975C	.3%	P 545C	.50%	P 571C	.35%
P 458C	.69%	P 4985C	.15%	P 5395C	.1%	P 572C	.41%
P 459C	.74%	P 4995C	.26%	P 5405C	.10%	P 573C	.49%
P 460C	.73%	P 5005C	.37%	P 5415C	.16%	P 574C	.10%
P 461C	.77%	P 5015C	.50%	P 5425C	.27%	P 575C	.15%
P 462C	.10%	P 5025C	.57%	P 5435C	.25%	P 576C	.21%
P 463C	.23%	P 5035C	.66%	P 5445C	.56%	P 577C	.51%
P 464C	.29%	P 504C	.7%	P 5455C	.63%	P 578C	.57%
P 465C	.33%	P 505C	.15%	P 546C	.1%	P 579C	.64%
P 466C	.65%	P 506C	.21%	P 547C	.1%	P 580C	.67%
P 467C	.69%	P 507C	.51%	P 548C	.1%	P 5743C	.7%
P 468C	.72%	P 508C	.64%	P 549C	.23%	P 5753C	.12%
P 4625C	.6%	P 509C	.70%	P 550C	.31%	P 5763C	.20%
P 4635C	.20%	P 510C	.75%	P 551C	.41%	P 5773C	.33%

Note: Variance +/- 3%

P 5783C	.45%	P 1355U	.77%	P 202U	.22%	P 261U	.15%
P 5793C	.58%	P 1365U	.79%	P 203U	.72%	P 262U	.13%
P 5703C	.64%	P 1375U	.76%	P 204U	.73%	P 2563U	.73%
P 5747C	.3%	P 1385U	.49%	P 205U	.73%	P 2573U	.62%
P 5757C	.10%	P 1395U	.23%	P 206U	.71%	P 2583U	.56%
P 5767C	.22%	P 1405U	.15%	P 207U	.38%	P 2593U	.40%
P 5777C	.35%	P 141U	.69%	P 208U	.21%	P 2603U	.34%
P 5787C	.49%	P 142U	.72%	P 209U	.17%	P 2613U	.26%
P 5797C	.58%	P 143U	.71%	P 210U	.83%	P 2623U	.19%
P 5807C	.63%	P 144U	.73%	P 211U	.85%	P 2567U	.67%
P 581C	.11%	P 145U	.47%	P 212U	.85%	P 2577U	.58%
P 582C	.22%	P 146U	.23%	P 213U	.83%	P 2587U	.49%
P 583C	.38%	P 147U	.12%	P 214U	.51%	P 2597U	.31%
P 584C	.61%	P 148U	.71%	P 215U	.29%	P 2607U	.31%
P 585C	.67%	P 149U	.71%	P 216U	.17%	P 2617U	.25%
P 586C	.68%	P 150U	.73%	P 217U	.85%	P 2627U	.18%
P 587C	.72%	P 151U	.74%	P 218U	.86%	P 263U	.73%
P 801C	.7%	P 152U	.47%	P 219U	.76%	P 264U	.57%
P 802C	.29%	P 153U	.28%	Rubine Red U	.76%	P 265U	.35%
P 803C	.71%	P 154U	.20%	P 220U	.39%	P 266U	.24%
P 804C	.71%	P 155U	.70%	P 221U	.32%	P 267U	.20%
P 805C	.69%	P 156U	.70%	P 222U	.16%	P 268U	.18%
P 806C	.70%	P 157U	.71%	P 223U	.83%	P 269U	.14%
P 807C	.50%	P 158U	.71%	P 224U	.80%	P 2635U	.63%
P 871C	.15%	P 159U	.49%	P 225U	.83%	P 2645U	.53%
P 872C	.14%	P 160U	.24%	P 226U	.83%	P 2655U	.45%
P 873C	.15%	P 161U	.13%	P 227U	.41%	P 2665U	.36%
P 874C	.18%	P 176U	.86%	P 228U	.21%	Violet U	.26%
P 875C	.19%	P 177U	.86%	P 229U	.13%	P 2685U	.22%
P 876C	.15%	P 178U	.86%	P 230U	.84%	P 2695U	.17%
P 877C	.17%	Warm Red U	.86%	P 231U	.83%	P 270U	.45%
Yellow U	.79%	P 179U	.53%	Rhod. Red U	.83%	P 271U	.34%
WarmRed U	.79%	P 180U	.31%	P 233U	.51%	P 272U	.26%
Rubine Red U	.79%	P 181U	.17%	P 234U	.26%	P 273U	.13%
Rhod. Red U	.76%	P 1765U	.86%	P 235U	.17%	P 274U	.12%
Purple U	.79%	P 1775U	.86%	P 236U	.82%	P 275U	.11%
Violet U	.25%	P 1785U	.86%	P 237U	.80%	P 276U	.10%
Reflex Blue U	.6%	P 1788U	.86%	P 238U	.82%	P 2705U	.47%
Process Blue U	.7%	P 1795U	.63%	P 239U	.81%	P 2715U	.36%
Green U	.7%	P 1805U	.33%	P 240U	.47%	P 2725U	.24%
Yellow 012U	.79%	P 1815U	.21%	P 241U	.30%	P 2735U	.19%
Orange 021U	.79%	P 182U	.86%	P 242U	.16%	P 2745U	.15%
Red 032U	.76%	P 183U	.86%	P 243U	.80%	P 2755U	.15%
Blue 072U	.5%	P 184U	.86%	P 244U	.81%	P 2765U	.14%
Process Yellow U	.79%	P 185U	.86%	P 245U	.79%	P 277U	.46%
Process Magenta U	.79%	P 186U	.58%	P 246U	.75%	P 278U	.37%
Process Cyan U	.7%	P 187U	.32%	P 247U	.53%	P 279U	.21%
Process Black U	.4%	P 188U	.18%	P 248U	.28%	Reflex B U	.8%
P 100U	.79%	P 189U	.72%	P 249U	.14%	P 280U	.8%
P 101U	.79%	P 190U	.72%	P 250U	.84%	P 281U	.9%
P 102U	.79%	P 191U	.74%	P 251U	.83%	P 282U	.8%
Yellow U	.79%	P 192U	.72%	P 252U	.80%	P 283U	.39%
P 103U	.46%	P 193U	.39%	Purple U	.79%	P 284U	.29%
P 104U	.27%	P 194U	.24%	P 253U	.60%	P 285U	.15%
P 105U	.15%	P 195U	.14%	P 254U	.37%	P 286U	.8%
P 106U	.79%	P 196U	.71%	P 255U	.19%	P 287U	.8%
P 107U	.79%	P 197U	.74%	P 256U	.60%	P 288U	.7%
P 108U	.79%	P 198U	.72%	P 257U	.53%	P 289U	.8%
P 109U	.78%	P 199U	.72%	P 258U	.32%	P 290U	.43%
P 110U	.44%	P 200U	.53%	P 259U	.19%	P 291U	.28%
P 1345U	.75%	P 201U	.30%	P 260U	.15%	P 292U	.21%

Note: Variance +/- 3%

P 293U . . . . .	.9%	P 3255U . . . . .	.16%	P 372U . . . . .	.61%	P 425U . . . . .	.14%
P 294U . . . . .	.9%	P 3265U . . . . .	.13%	P 373U . . . . .	.54%	P 426U . . . . .	.7%
P 295U . . . . .	.8%	P 3275U . . . . .	.8%	P 374U . . . . .	.45%	P 427U . . . . .	.54%
P 296U . . . . .	.9%	P 3285U . . . . .	.9%	P 375U . . . . .	.23%	P 428U . . . . .	.42%
P 297U . . . . .	.31%	P 3295U . . . . .	.9%	P 376U . . . . .	.19%	P 429U . . . . .	.33%
P 298U . . . . .	.19%	P 3305U . . . . .	.8%	P 377U . . . . .	.18%	P 430U . . . . .	.23%
P 299U . . . . .	.13%	P 3248U . . . . .	.31%	P 378U . . . . .	.14%	P 431U . . . . .	.16%
P 300U . . . . .	.8%	P 3258U . . . . .	.21%	P 379U . . . . .	.72%	P 432U . . . . .	.11%
P 301U . . . . .	.9%	P 3268U . . . . .	.15%	P 380U . . . . .	.65%	P 433U . . . . .	.8%
P 302U . . . . .	.9%	P 3278U . . . . .	.12%	P 381U . . . . .	.51%	P 434U . . . . .	.15%
P 303U . . . . .	.8%	P 3288U . . . . .	.12%	P 382U . . . . .	.28%	P 435U . . . . .	.34%
P 2975U . . . . .	.37%	P 3298U . . . . .	.11%	P 383U . . . . .	.34%	P 436U . . . . .	.24%
P 2985U . . . . .	.23%	P 3308U . . . . .	.10%	P 384U . . . . .	.26%	P 437U . . . . .	.14%
P 2995U . . . . .	.14%	P 331U . . . . .	.43%	P 385U . . . . .	.20%	P 438U . . . . .	.10%
P 3005U . . . . .	.8%	P 332U . . . . .	.32%	P 386U . . . . .	.74%	P 439U . . . . .	.9%
P 3015U . . . . .	.9%	P 333U . . . . .	.16%	P 387U . . . . .	.67%	P 440U . . . . .	.8%
P 3025U . . . . .	.8%	Green U . . . . .	.6%	P 388U . . . . .	.55%	P 441U . . . . .	.41%
P 3035U . . . . .	.9%	P 334U . . . . .	.5%	P 389U . . . . .	.39%	P 442U . . . . .	.29%
P 304U . . . . .	.39%	P 335U . . . . .	.7%	P 390U . . . . .	.34%	P 443U . . . . .	.23%
P 305U . . . . .	.23%	P 336U . . . . .	.8%	P 391U . . . . .	.25%	P 444U . . . . .	.15%
P 306U . . . . .	.20%	P 337U . . . . .	.41%	P 392U . . . . .	.19%	P 445U . . . . .	.9%
Process Blue U . . . . .	.9%	P 338U . . . . .	.26%	P 393U . . . . .	.82%	P 446U . . . . .	.23%
P 307U . . . . .	.8%	P 339U . . . . .	.15%	P 394U . . . . .	.77%	P 447U . . . . .	.7%
P 308U . . . . .	.8%	P 340U . . . . .	.9%	P 395U . . . . .	.72%	Warm Grey 10U . . . . .	.66%
P 309U . . . . .	.8%	P 341U . . . . .	.11%	P 396U . . . . .	.58%	Warm Grey 20U . . . . .	.58%
P 310U . . . . .	.24%	P 342U . . . . .	.10%	P 397U . . . . .	.37%	Warm Grey 30U . . . . .	.45%
P 311U . . . . .	.14%	P 3375U . . . . .	.32%	P 398U . . . . .	.31%	Warm Grey 40U . . . . .	.39%
P 312U . . . . .	.12%	P 3385U . . . . .	.21%	P 399U . . . . .	.27%	Warm Grey 50U . . . . .	.36%
P 313U . . . . .	.9%	P 3395U . . . . .	.14%	P 3935U . . . . .	.85%	Warm Grey 60U . . . . .	.27%
P 314U . . . . .	.7%	P 3405U . . . . .	.9%	P 3945U . . . . .	.83%	Warm Grey 70U . . . . .	.23%
P 315U . . . . .	.7%	P 3415U . . . . .	.7%	P 3955U . . . . .	.79%	Warm Grey 80U . . . . .	.20%
P 316U . . . . .	.8%	P 3425U . . . . .	.7%	P 3965U . . . . .	.70%	Warm Grey 90U . . . . .	.17%
P 3105U . . . . .	.31%	P 3435U . . . . .	.6%	P 3975U . . . . .	.38%	Warm Grey 100U . . . . .	.15%
P 3115U . . . . .	.20%	P 344U . . . . .	.46%	P 3985U . . . . .	.23%	Warm Grey 110U . . . . .	.14%
P 3125U . . . . .	.14%	P 345U . . . . .	.36%	P 3995U . . . . .	.16%	Cool Grey 10U . . . . .	.67%
P 3135U . . . . .	.8%	P 346U . . . . .	.27%	P 400U . . . . .	.53%	Cool Grey 20U . . . . .	.60%
P 3145U . . . . .	.10%	P 347U . . . . .	.11%	P 401U . . . . .	.43%	Cool Grey 30U . . . . .	.53%
P 3155U . . . . .	.8%	P 348U . . . . .	.9%	P 402U . . . . .	.34%	Cool Grey 40U . . . . .	.44%
P 3165U . . . . .	.8%	P 349U . . . . .	.10%	P 403U . . . . .	.28%	Cool Grey 50U . . . . .	.39%
P 317U . . . . .	.47%	P 350U . . . . .	.9%	P 404U . . . . .	.21%	Cool Grey 60U . . . . .	.31%
P 318U . . . . .	.29%	P 351U . . . . .	.39%	P 405U . . . . .	.14%	Cool Grey 70U . . . . .	.29%
P 319U . . . . .	.19%	P 352U . . . . .	.32%	Black U . . . . .	.8%	Cool Grey 80U . . . . .	.23%
P 320U . . . . .	.8%	P 353U . . . . .	.20%	P 406U . . . . .	.53%	Cool Grey 90U . . . . .	.20%
P 321U . . . . .	.7%	P 354U . . . . .	.7%	P 407U . . . . .	.44%	Cool Grey 100U . . . . .	.18%
P 322U . . . . .	.8%	P 355U . . . . .	.8%	P 408U . . . . .	.34%	Cool Grey 110U . . . . .	.15%
P 323U . . . . .	.7%	P 356U . . . . .	.8%	P 409U . . . . .	.27%	P 448U . . . . .	.12%
P 324U . . . . .	.40%	P 357U . . . . .	.9%	P 410U . . . . .	.22%	P 449U . . . . .	.15%
P 325U . . . . .	.21%	P 358U . . . . .	.46%	P 411U . . . . .	.13%	P 450U . . . . .	.18%
P 326U . . . . .	.14%	P 359U . . . . .	.40%	P 412U . . . . .	.9%	P 451U . . . . .	.34%
P 327U . . . . .	.9%	P 360U . . . . .	.25%	P 413U . . . . .	.48%	P 452U . . . . .	.50%
P 328U . . . . .	.9%	P 361U . . . . .	.21%	P 414U . . . . .	.44%	P 453U . . . . .	.63%
P 329U . . . . .	.9%	P 362U . . . . .	.18%	P 415U . . . . .	.32%	P 454U . . . . .	.68%
P 330U . . . . .	.10%	P 363U . . . . .	.15%	P 416U . . . . .	.23%	P 4485U . . . . .	.17%
P 3242U . . . . .	.26%	P 364U . . . . .	.14%	P 417U . . . . .	.19%	P 4495U . . . . .	.24%
P 3252U . . . . .	.20%	P 365U . . . . .	.60%	P 418U . . . . .	.12%	P 4505U . . . . .	.37%
P 3262U . . . . .	.13%	P 366U . . . . .	.50%	P 419U . . . . .	.6%	P 4515U . . . . .	.49%
P 3272U . . . . .	.9%	P 367U . . . . .	.40%	P 420U . . . . .	.49%	P 4525U . . . . .	.60%
P 3282U . . . . .	.8%	P 368U . . . . .	.22%	P 421U . . . . .	.47%	P 4535U . . . . .	.70%
P 3292U . . . . .	.7%	P 369U . . . . .	.19%	P 422U . . . . .	.35%	P 4545U . . . . .	.74%
P 3302U . . . . .	.7%	P 370U . . . . .	.19%	P 423U . . . . .	.26%	P 455U . . . . .	.18%
P 3245U . . . . .	.28%	P 371U . . . . .	.14%	P 424U . . . . .	.19%	P 456U . . . . .	.26%

Note: Variance +/- 3%

P 457U . . . . .	.42%	P 503U . . . . .	.70%	P 536U . . . . .	.40%	P 5625U . . . . .	.20%
P 458U . . . . .	.66%	P 4975U . . . . .	.10%	P 537U . . . . .	.49%	P 5635U . . . . .	.28%
P 459U . . . . .	.71%	P 4985U . . . . .	.22%	P 538U . . . . .	.60%	P 5645U . . . . .	.40%
P 460U . . . . .	.80%	P 4995U . . . . .	.30%	P 539U . . . . .	.8%	P 5655U . . . . .	.52%
P 461U . . . . .	.83%	P 5005U . . . . .	.42%	P 540U . . . . .	.8%	P 5665U . . . . .	.64%
P 462U . . . . .	.13%	P 5015U . . . . .	.56%	P 541U . . . . .	.9%	P 567U . . . . .	.8%
P 463U . . . . .	.20%	P 5025U . . . . .	.64%	P 542U . . . . .	.21%	P 568U . . . . .	.9%
P 464U . . . . .	.26%	P 5035U . . . . .	.74%	P 543U . . . . .	.29%	P 569U . . . . .	.8%
P 465U . . . . .	.51%	P 504U . . . . .	.10%	P 544U . . . . .	.40%	P 570U . . . . .	.19%
P 466U . . . . .	.60%	P 505U . . . . .	.17%	P 545U . . . . .	.55%	P 571U . . . . .	.31%
P 467U . . . . .	.70%	P 506U . . . . .	.23%	P 5395U . . . . .	.65%	P 572U . . . . .	.38%
P 468U . . . . .	.76%	P 507U . . . . .	.45%	P 5405U . . . . .	.10%	P 573U . . . . .	.49%
P 4625U . . . . .	.14%	P 508U . . . . .	.51%	P 5415U . . . . .	.17%	P 574U . . . . .	.14%
P 4635U . . . . .	.20%	P 509U . . . . .	.61%	P 5425U . . . . .	.23%	P 575U . . . . .	.19%
P 4645U . . . . .	.36%	P 510U . . . . .	.66%	P 5435U . . . . .	.38%	P 576U . . . . .	.23%
P 4655U . . . . .	.47%	P 511U . . . . .	.12%	P 5445U . . . . .	.51%	P 577U . . . . .	.40%
P 4665U . . . . .	.63%	P 512U . . . . .	.16%	P 5455U . . . . .	.60%	P 578U . . . . .	.53%
P 4675U . . . . .	.74%	P 513U . . . . .	.24%	P 546U . . . . .	.9%	P 579U . . . . .	.59%
P 4685U . . . . .	.79%	P 514U . . . . .	.45%	P 547U . . . . .	.10%	P 580U . . . . .	.68%
P 469U . . . . .	.15%	P 515U . . . . .	.59%	P 548U . . . . .	.10%	P 5743U . . . . .	.11%
P 470U . . . . .	.27%	P 516U . . . . .	.71%	P 549U . . . . .	.26%	P 5753U . . . . .	.16%
P 471U . . . . .	.41%	P 517U . . . . .	.79%	P 550U . . . . .	.35%	P 5763U . . . . .	.20%
P 472U . . . . .	.65%	P 5115U . . . . .	.11%	P 551U . . . . .	.45%	P 5773U . . . . .	.32%
P 473U . . . . .	.74%	P 5125U . . . . .	.18%	P 552U . . . . .	.54%	P 5783U . . . . .	.42%
P 474U . . . . .	.79%	P 5135U . . . . .	.27%	P 5463U . . . . .	.6%	P 5793U . . . . .	.55%
P 475U . . . . .	.84%	P 5145U . . . . .	.40%	P 5473U . . . . .	.10%	P 5803U . . . . .	.62%
P 4695U . . . . .	.14%	P 5155U . . . . .	.51%	P 5483U . . . . .	.15%	P 5747U . . . . .	.9%
P 4705U . . . . .	.22%	P 5165U . . . . .	.65%	P 5493U . . . . .	.21%	P 5757U . . . . .	.16%
P 4715U . . . . .	.30%	P 5175U . . . . .	.76%	P 5503U . . . . .	.36%	P 5767U . . . . .	.22%
P 4725U . . . . .	.46%	P 518U . . . . .	.11%	P 5513U . . . . .	.52%	P 5777U . . . . .	.33%
P 4735U . . . . .	.57%	P 519U . . . . .	.13%	P 5523U . . . . .	.64%	P 5787U . . . . .	.44%
P 4745U . . . . .	.65%	P 520U . . . . .	.19%	P 5467U . . . . .	.8%	P 5797U . . . . .	.55%
P 4755U . . . . .	.73%	P 521U . . . . .	.40%	P 5477U . . . . .	.13%	P 5807U . . . . .	.62%
P 476U . . . . .	.15%	P 522U . . . . .	.51%	P 5487U . . . . .	.20%	P 581U . . . . .	.16%
P 477U . . . . .	.22%	P 523U . . . . .	.61%	P 5497U . . . . .	.30%	P 582U . . . . .	.23%
P 478U . . . . .	.27%	P 524U . . . . .	.70%	P 5507U . . . . .	.38%	P 583U . . . . .	.36%
P 479U . . . . .	.50%	P 5185U . . . . .	.10%	P 5517U . . . . .	.50%	P 584U . . . . .	.60%
P 480U . . . . .	.66%	P 5195U . . . . .	.14%	P 5527U . . . . .	.63%	P 585U . . . . .	.67%
P 481U . . . . .	.76%	P 5205U . . . . .	.26%	P 553U . . . . .	.10%	P 586U . . . . .	.71%
P 482U . . . . .	.81%	P 5215U . . . . .	.39%	P 554U . . . . .	.13%	P 587U . . . . .	.78%
P 483U . . . . .	.14%	P 5225U . . . . .	.49%	P 555U . . . . .	.16%	P 5815U . . . . .	.13%
P 484U . . . . .	.30%	P 5235U . . . . .	.65%	P 556U . . . . .	.9%	P 5825U . . . . .	.20%
P 485U . . . . .	.31%	P 5245U . . . . .	.74%	P 557U . . . . .	.37%	P 5835U . . . . .	.27%
P 486U . . . . .	.85%	P 525U . . . . .	.12%	P 558U . . . . .	.45%	P 5845U . . . . .	.37%
P 486U . . . . .	.85%	P 526U . . . . .	.17%	P 559U . . . . .	.52%	P 5855U . . . . .	.52%
P 487U . . . . .	.85%	P 527U . . . . .	.25%	P 5535U . . . . .	.6%	P 5865U . . . . .	.61%
P 488U . . . . .	.85%	P 528U . . . . .	.47%	P 5545U . . . . .	.10%	P 5875U . . . . .	.65%
P 489U . . . . .	.85%	P 529U . . . . .	.61%	P 5555U . . . . .	.17%	Pantone 801U . . . . .	.6%
P 490U . . . . .	.13%	P 530U . . . . .	.69%	P 5565U . . . . .	.26%	P 802U . . . . .	.25%
P 491U . . . . .	.18%	P 531U . . . . .	.73%	P 5575U . . . . .	.42%	P 803U . . . . .	.85%
P 492U . . . . .	.23%	P 5255U . . . . .	.11%	P 5585U . . . . .	.48%	P 804U . . . . .	.85%
P 493U . . . . .	.49%	P 5265U . . . . .	.16%	P 5595U . . . . .	.58%	P 805U . . . . .	.84%
P 494U . . . . .	.60%	P 5275U . . . . .	.22%	P 560U . . . . .	.6%	P 806U . . . . .	.84%
P 495U . . . . .	.68%	P 5285U . . . . .	.35%	P 561U . . . . .	.7%	P 807U . . . . .	.53%
P 496U . . . . .	.77%	P 5295U . . . . .	.44%	P 562U . . . . .	.8%	P 871U . . . . .	.21%
P 497U . . . . .	.9%	P 5305U . . . . .	.57%	P 563U . . . . .	.21%	P 872U . . . . .	.21%
P 498U . . . . .	.12%	P 5315U . . . . .	.69%	P 564U . . . . .	.28%	P 873U . . . . .	.24%
P 499U . . . . .	.16%	P 532U . . . . .	.7%	P 565U . . . . .	.40%	P 874U . . . . .	.26%
P 500U . . . . .	.35%	P 533U . . . . .	.9%	P 566U . . . . .	.46%	P 875U . . . . .	.26%
P 501U . . . . .	.51%	P 534U . . . . .	.10%	P 5605U . . . . .	.9%	P 876U . . . . .	.23%
P 502U . . . . .	.51%	P 535U . . . . .	.29%	P 5615U . . . . .	.12%	P 877U . . . . .	.35%

Note: Variance +/- 3%