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IDEAlliance®

G7 System Certification Application Data Sheet

FujiFilm ColorPath Sync

The IDEAlliance Print Properties Working Group has established a certification process for G7 Systems. In accordance with this process The G7 System Certification Program is designed to evaluate the ability of a candidate system to calibrate a printing device to meet the G7 greyscale definition using four 1-D Curves within the tolerances outlined in this document. All evaluations are based on the parameters of the G7 Specification (draft 2008). The following information is intended to assist producers and consumers in the use of the vendor system as specified for creating the four 1-D Curves.

1. Manufacturer

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Certified Dec 6, 2010

2. Product

Fujifilm ColorPath Sync

3. Manufacturer Instruction Summary

a. Create Project

i. Navigate to Sync Website: www.taskero.com
ii. Enter username and password
iii. Click on Sync tab near top left
iv. Create New Project
v. Select a Press from the list of presses
vi. At top right click Add Project
vii. Enter Project Name
viii. Include consumables and screening information in name
ix. Enter Target and Tolerance values if different then GRACoL®
x. Select Print Conditions tab and enter Print Conditions meta data
xi. Click Save Print Target button near bottom right of pageThis will save the project, create the first run in the project and take you to the upload window for the first run

b. Measure Run

i. Create measurement data
ii. Measure Press Sheets from the first run using Measuretool or Colorport

iii. Use reference files supplied in Sync training
iv. Save files in Spectral format not Lab
v. For sake of product certification the supplied Lab files were imported into Colorpath Sync using a special import utility.

c. Create 1st Set of Curves

i. Upload Files
ii. Do one of the following:
iii. If you just created the project you may already be on the upload page; if so, skip to 4b
iv. If you are logging in again go to www.taskero.com
v. Enter username and password
vi. Click on Sync tab near top left
vii. Select a Press from the list of presses
viii. Select the Project Name you created above
ix. Select the first Run's Name under the project
x. Click Add files button
xi. Select Files and click open
xii. You can use shift to select multiple files
xiii. Click Upload file button
xiv. Click Next : Analyze

d. Analyze Measurements

i. Analyze each measurement by selecting each individual chart in the Trendline and reviewing the data in the tabs below.
ii. Deselect the check box in the trendline for measurements which you do not want used for creating curves
iii. Click Next: Create Curves

e. Export Curves

i. Select a curve type from Curve Type Pulldown menu
ii. Click Export Curves
iii. Enter Curves and Close Run
iv. Enter Curves into RIP
v. Click Close Print Run
vi. Once the Print Run is closed the run can no longer be edited
vii. Double check that you will not need to deselect or add measurements, or change the export curve type

f. Create 2nd Run

i. Upload Files
ii. Select a Press from the list of presses
iii. Select the Project Name you created above
iv. Click Create to the right of the first Run's Name
v. Upload Files
vi. Click Add files button
vii. Select Files and click open
viii. You can use shift to select multiple files
ix. Click Upload file button
x. Click Next : Analyze

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g. Analyze Measurements

i. Analyze each measurement by selecting each individual chart in the Trendline and reviewing the data in the tabs below.
ii. Deselect the check box in the trendline for measurements which you do not want used for creating curves and for creating the averaged used in the report
iii. Choose what to do; Certify Project and lock it down or iterate the curves
iv. If after analyzing the measurements it appears that they meet the expectations for gray balance then *Certify the Project* by going to step 28
v. If after analyzing the measurements it appears that the curves need to be iterated in order to meet expectations for gray balance then skip to step 29
vi. Certify the Project by clicking on Generate PDF Report
vii. Click on Report Icon to create report
viii. The report is an average for all selected sheets in the current runs trendline.
ix. Warning executing the next step will lock down the project and prevent you from doing the following:
    1. Creating another run
    2. Changing the metadata
    3. Adding measurements
    4. Creating recalculated curves
x. Click on Certify Press Run
xi. You are now complete do not go further
xii. Click Next: Create Curves
xiii. Export Curves
xiv. Select a curve type from Curve Type Pulldown menu
xv. Click Export Curves
xvi. Enter Curves and Close Run
xvii. Enter Curves into RIP
xviii. Click Close Print Run
xix. Once the Print Run is closed the run can no longer be edited
xx. Double check that you will not need to deselect or add measurements, or change the export curve type

h. Create 3rd Run

i. Upload Files
ii. Select a Press from the list of presses
iii. Select the Project Name you created above
iv. Click Create to the right of the first Run's Name
v. Upload Files
vi. Click Add files button
vii. Select Files and click open
viii. You can use shift to select multiple files
ix. Click Upload file button

x. Click Next : Analyze

i. Analyze Measurements

i. Analyze each measurement by selecting each individual chart in the Trendline and reviewing the data in the tabs below.
ii. Deselect the check box in the trendline for measurements which you do not want used for creating report
iii. Certify the Project by clicking on Generate PDF Report
iv. Click on Report Icon to create report
v. The report is an average for all selected sheets in the current runs trendline.
vi. Warning: Executing the next step will lock down the project and prevent you from doing the following:
    1. Changing the meta data
    2. Adding measurements
    3. Creating recalculated curves
vii. Click on Certify Press Run
viii. You are now complete do not go further

4. Tolerances (per manufacturer)

IDEAlliance Tolerances

Metric	Ave	Max
dF*	1.5	3
dL*		1.5

Fujifilm Tolerances

Quartile	Ave dF*	Ave dL*
0-25%	0.75	0.50
26-50%	1.00	0.75
51-75%	1.50	1.00
76-100	2.00	1.50

5. Validation Process

To validate that the G7 calibration process has been successful, a target consisting of at least the patch values listed in Appendix A shall be printed through the calculated correction curves using the same print settings in use when the calibration was calculated.

a. Validating NPDC

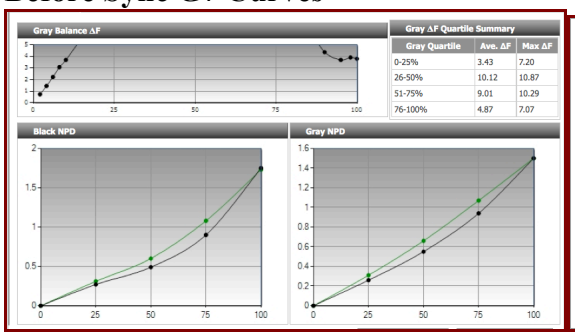
To validate NPDC correction, both the K-only scale and the CMY-only scale shall be measured with a densitometer or spectrophotometer and the neutral density (K channel or Visual channel) values recorded for each patch. The densitometer should be zeroed on the substrate, or else the white patch density should be subtracted from itself and all other patches to produce "relative ND" values. When these relative ND values are graphed, they must correlate to one of

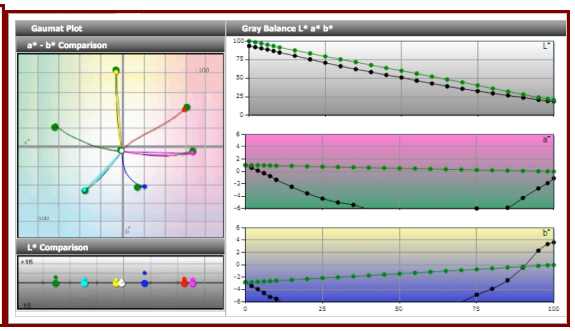
the curves shown in Appendix B or an average of two neighboring curves within the tolerances described in (section 1?)

b. Validating Gray Balance

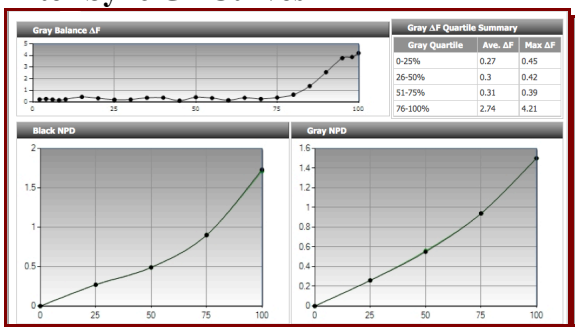
To validate gray balance correction, the CMY-only scale shall be measured with a spectrophotometer and the a* and b* values recorded for each patch. When graphed, these a* and b* values must correlate to the graph shown in Appendix C within the tolerances described in Section 2.

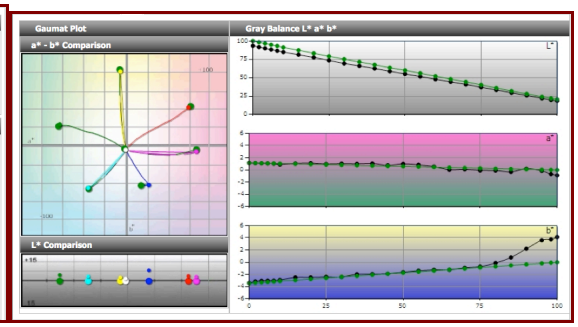
Before Sync G7 Curves





After Sync G7 Curves





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Annex A

Target CMYK values
Below are the patch values for the sync 150

LGOROWLENGTH 6
CREATED 4/26/10
KEYWORD SampleID
KEYWORD SAMPLE_NAME
NUMBER_OF_FIELDS 6
BEGIN_DATA_FORMAT
SampleID SAMPLE_NAME CMYK_C CMYK_M CMYK_Y CMYK_K
END_DATA_FORMAT
NUMBER_OF_SETS 150
BEGIN_DATA

1	A1	25	0	0	0
2	B1	100	50	100	0
3	C1	50	100	100	0
4	D1	75	25	25	0
5	E1	0	100	0	50
6	F1	100	100	50	50
7	A2	50	0	0	0
8	B2	10	3	3	0
9	C2	10	12	12	0
10	D2	25	75	25	0
11	E2	50	100	0	50
12	F2	0	0	100	50
13	A3	75	0	0	0
14	B3	25	10	10	0
15	C3	15	18	18	0
16	D3	75	75	25	0
17	E3	100	100	0	50
18	F3	50	0	100	50
19	A4	100	0	0	0
20	B4	37	18	18	0
21	C4	25	28	28	0
22	D4	100	50	50	0
23	E4	0	0	50	50
24	F4	100	0	100	50
25	A5	0	25	0	0
26	B5	50	28	28	0
27	C5	37	40	40	0
28	D5	50	100	50	0
29	E5	50	0	50	50
30	F5	0	50	100	50

31	A6	0	50	0	0
32	B6	63	40	40	0
33	C6	50	54	54	0
34	D6	100	100	50	0
35	E6	100	0	50	50
36	F6	50	50	100	50
37	A7	0	75	0	0
38	B7	75	54	54	0
39	C7	63	68	68	0
40	D7	25	25	75	0
41	E7	0	50	50	50
42	F7	100	50	100	50
43	A8	0	100	0	0
44	B8	85	68	68	0
45	C8	75	80	80	0
46	D8	75	25	75	0
47	E8	100	50	50	50
48	F8	0	100	100	50
49	A9	0	0	25	0
50	B9	95	80	80	0
51	C9	85	93	93	0
52	D9	25	75	75	0
53	E9	0	100	50	50
54	F9	50	100	100	50
55	A10	0	0	50	0
56	B10	5	6	3	0
57	C10	17	6	11	0
58	D10	50	50	100	0
59	E10	50	100	50	50
60	F10	100	100	100	50
61	A11	0	0	75	0
62	B11	15	18	10	0
63	C11	25	10	18	0
64	D11	5	3	3	0
65	E11	0	0	0	5
66	F11	50	40	40	25
67	A12	0	0	100	0
68	B12	25	28	18	0
69	C12	37	18	28	0
70	D12	10	7	7	0
71	E12	0	0	0	10
72	F12	50	40	40	50
73	A13	0	0	0	0
74	B13	37	40	28	0
75	C13	50	28	40	0
76	D13	15	11	11	0

77	E13	0	0	0	15
78	F13	75	66	66	50
79	A14	50	50	0	0
80	B14	50	54	40	0
81	C14	63	40	54	0
82	D14	20	15	15	0
83	E14	0	0	0	20
84	F14	50	0	0	50
85	A15	100	50	0	0
86	B15	63	68	54	0
87	C15	75	54	68	0
88	D15	25	19	19	0
89	E15	0	0	0	25
90	F15	100	0	0	50
91	A16	50	100	0	0
92	B16	75	80	68	0
93	C16	85	68	80	0
94	D16	30	23	23	0
95	E16	0	0	0	30
96	F16	0	50	0	50
97	A17	100	100	0	0
98	B17	85	93	80	0
99	C17	95	80	93	0
100	D17	40	31	31	0
101	E17	0	0	0	40
102	F17	50	50	0	50
103	A18	50	0	50	0
104	B18	5	3	6	0
105	C18	17	11	6	0
106	D18	50	40	40	0
107	E18	0	0	0	50
108	F18	100	50	0	50
109	A19	100	0	50	0
110	B19	15	10	18	0
111	C19	25	18	10	0
112	D19	60	50	50	0
113	E19	0	0	0	60
114	F19	100	0	0	100
115	A20	0	50	50	0
116	B20	25	18	28	0
117	C20	37	28	18	0
118	D20	70	60	60	0
119	E20	0	0	0	70
120	F20	0	100	0	100
121	A21	0	100	50	0
122	B21	37	28	40	0

123	C21	50	40	28	0
124	D21	75	66	66	0
125	E21	0	0	0	75
126	F21	100	100	0	100
127	A22	50	0	100	0
128	B22	50	40	54	0
129	C22	63	54	40	0
130	D22	80	72	72	0
131	E22	0	0	0	80
132	F22	0	0	100	100
133	A23	100	0	100	0
134	B23	63	54	68	0
135	C23	75	68	54	0
136	D23	90	84	84	0
137	E23	0	0	0	90
138	F23	100	0	100	100
139	A24	0	50	100	0
140	B24	75	68	80	0
141	C24	85	80	68	0
142	D24	95	92	92	0
143	E24	0	0	0	95
144	F24	0	100	100	100
145	A25	0	100	100	0
146	B25	85	80	93	0
147	C25	95	93	80	0
148	D25	100	100	100	0
149	E25	0	0	0	100
150	F25	100	100	100	100

END_DATA

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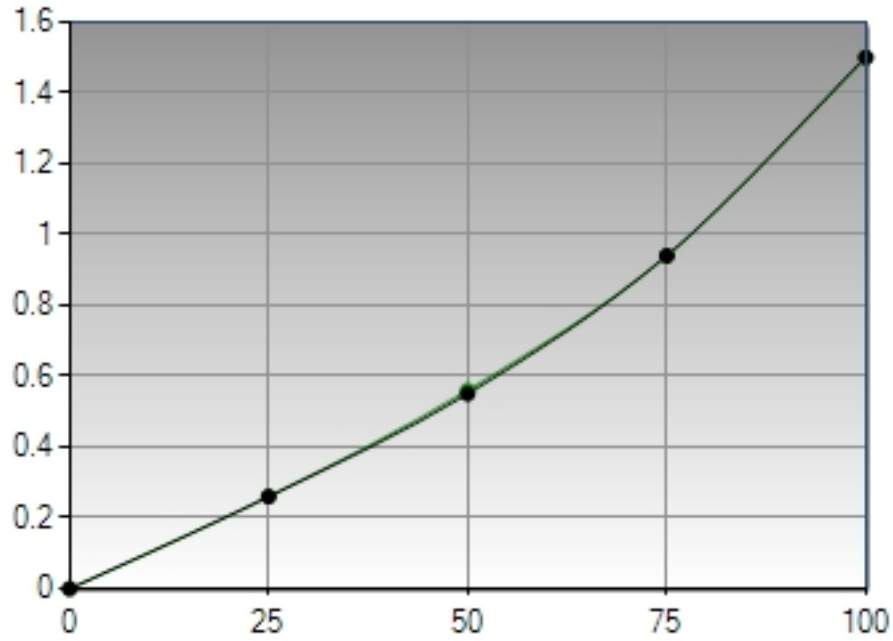
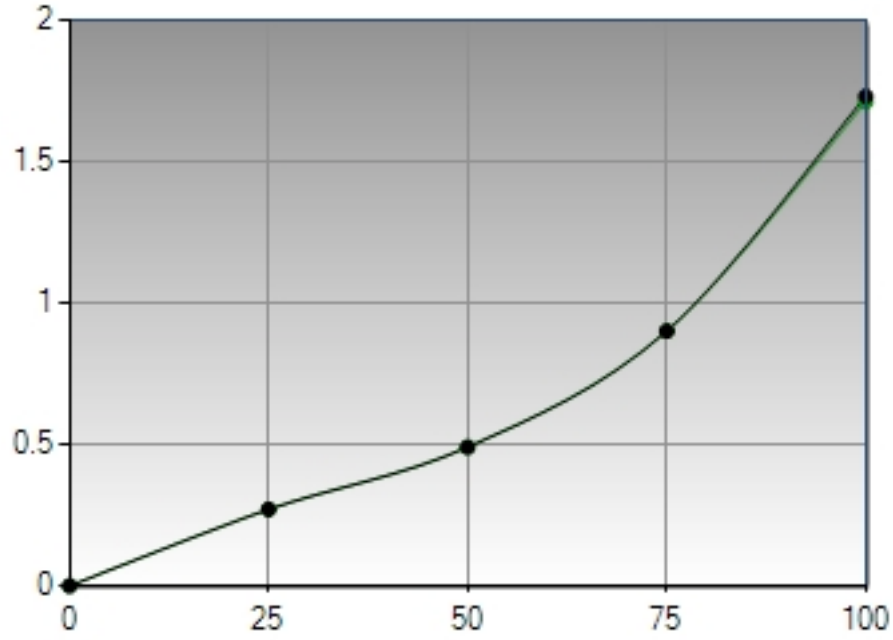
Annex B

NPDC FanGraphs
CMY



K



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Annex C

Gray Balance Graphs