

How to Use Color-Navi

Metallic-CCM



KCC Corporation



Set up & Preparation

Making Formula using Color-Navi

Color DB

Question

1. Set up

1

Components



Computer

- CPU : Core2 Duo 2.4Ghz
- RAM : 4GB
- HDD : 100GB

Semi-Booth (for Trial pannels)



Color-Navi

- CCM Software
- Careful of virus

Baromatch

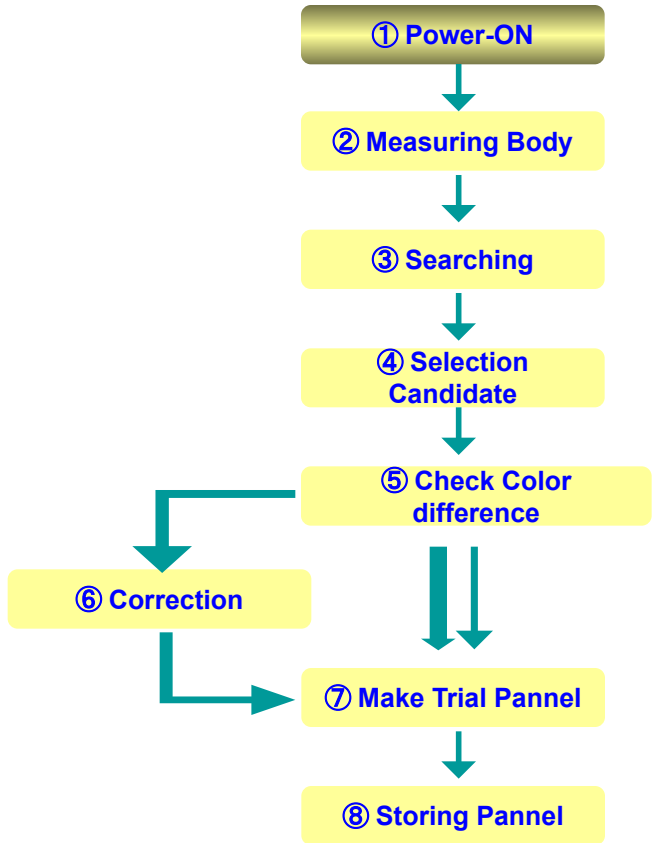


Spectrophotometer

- AA Battery (4ea)
- USB Connection Cable

2. How to use CCM (Metallic)

1 Power On



Computer On



Connecting Spectrophotometer

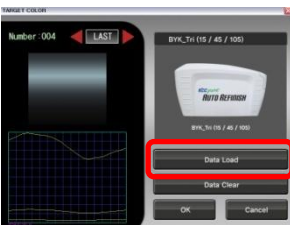
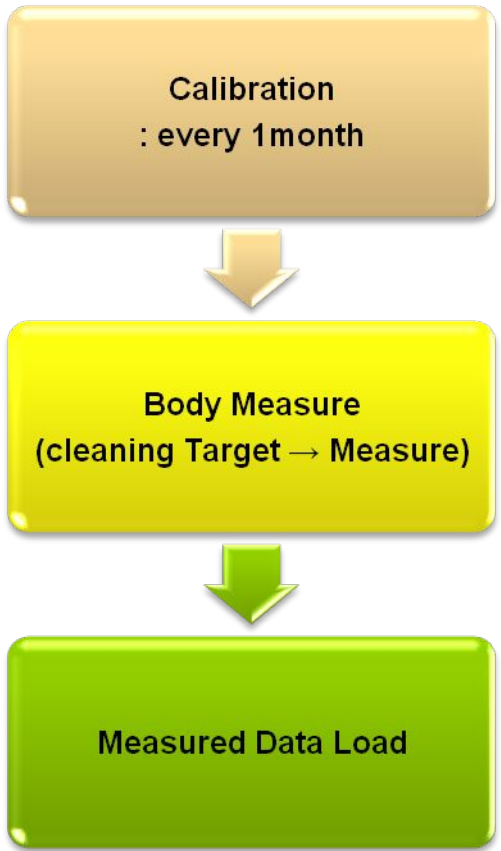
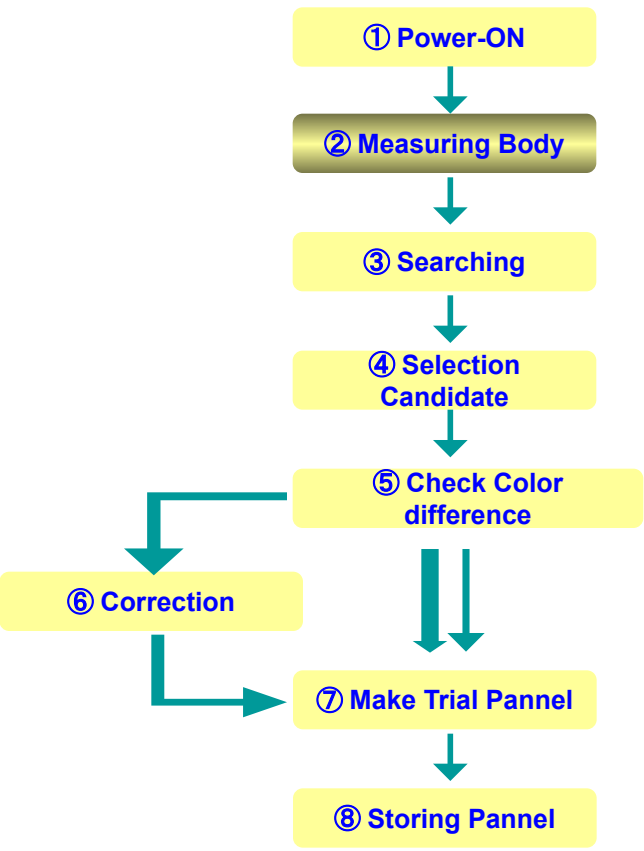


Run Program (Color-Navi)



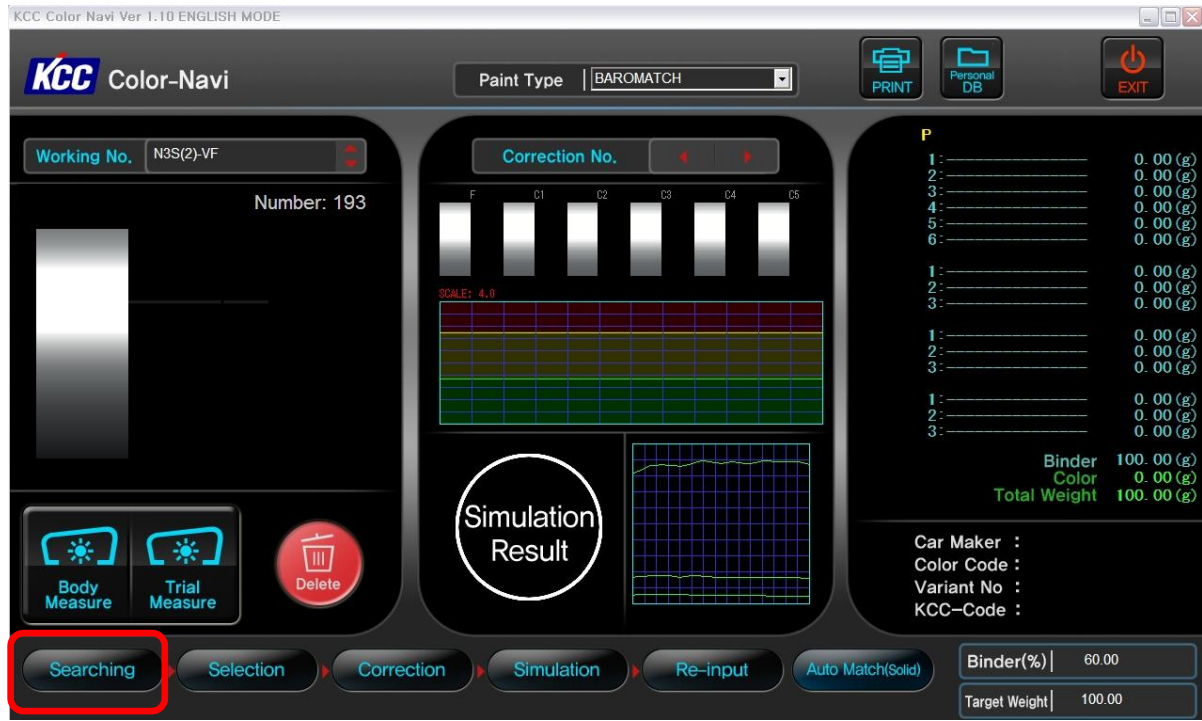
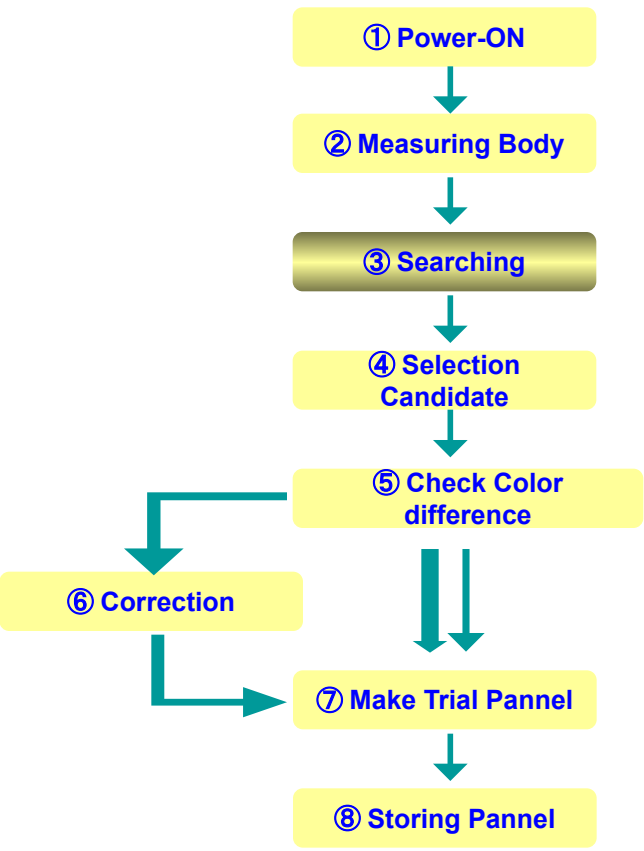
2. How to use CCM (Metallic)

2 Measuring Body



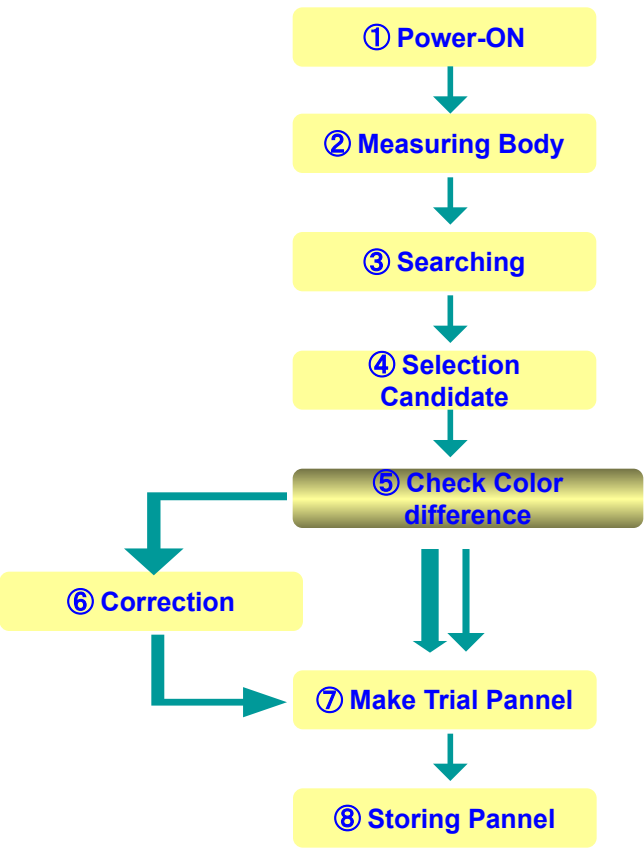
2. How to use CCM (Metallic)

3 Searching



2. How to use CCM (Metallic)

5 Check how different



KCC Color Navi Ver 1.10 ENGLISH MODE

KCC Color-Navi

Paint Type | BAROMATCH

PRINT Personal DB EXIT

Working No. GAR

Number: 198

Correction No. < >

Highlight: 1.31
Face: 0.36
Shade: 0.45

SCALE: 4.0

Good

Body Measure Trial Measure Delete

C1	
1:	KM702 14.73 (g)
2:	KM700 2.05 (g)
3:	KM204 3.40 (g)
4:	KM203 0.65 (g)
5:	KM300 0.40 (g)
6:	KM605 0.72 (g)
1:	KM807 2.82 (g)
2:	0.00 (g)
3:	0.00 (g)
1:	KM907 0.91 (g)
2:	KM904 0.73 (g)
3:	0.00 (g)
1:	KA69F 5.41 (g)
2:	KM101 0.11 (g)
3:	0.00 (g)
Binder	66.71 (g)
Color	31.93 (g)
Total Weight	98.64 (g)

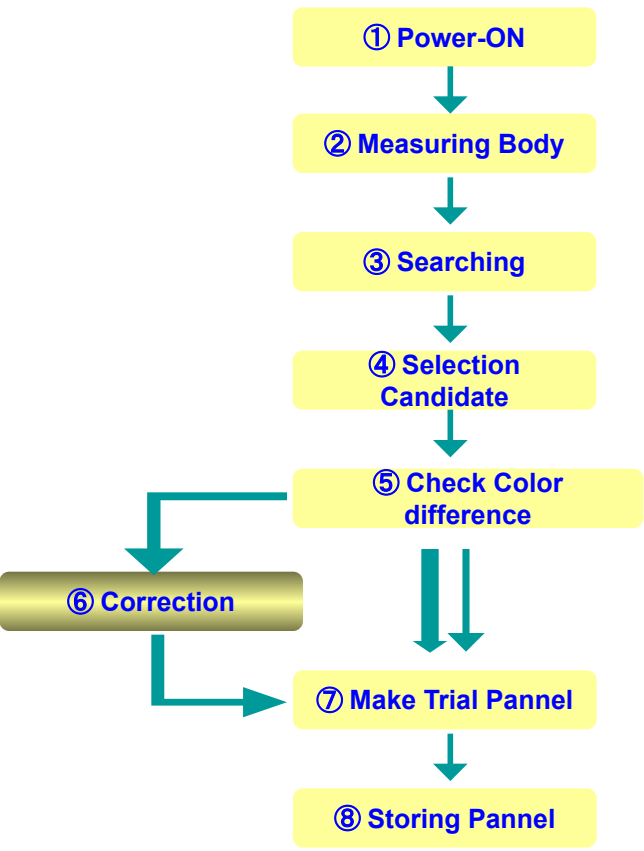
Car Maker : GM-DAEWOO
Color Code : 273000
Variant No : GAR
KCC-Code : KB0105. A7

Searching Selection Correction Simulation Re-input Auto Match(Solid)

Binder(%) | 67.63
Target Weight | 100.00

2. How to use CCM (Metallic)

6 Auto-correction / Manual Simulation



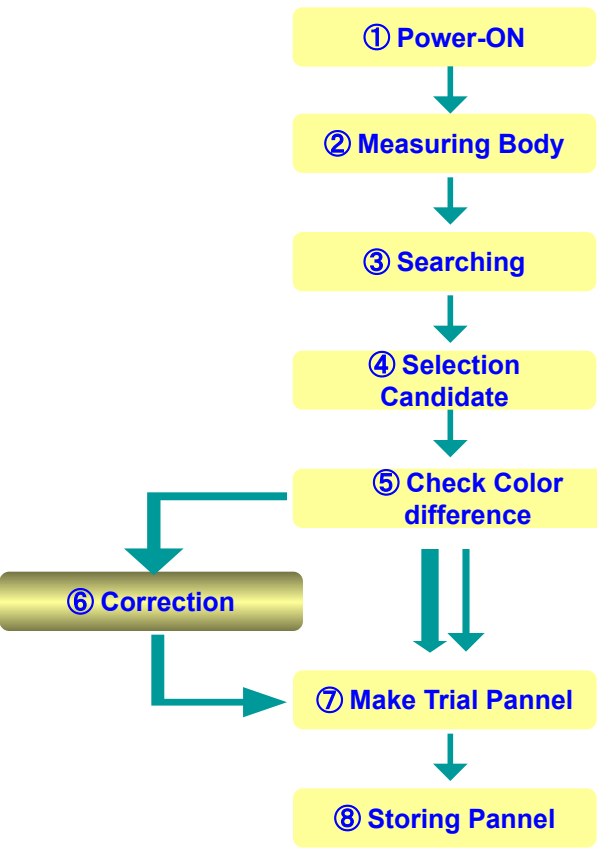
① Move to next step.
(Now you are C1, after click here, then you'll be C2)



② After move next step, please click here, then you can get a corrected formula.

2. How to use CCM (Metallic)

6 Auto-Correction / Manual Simulation



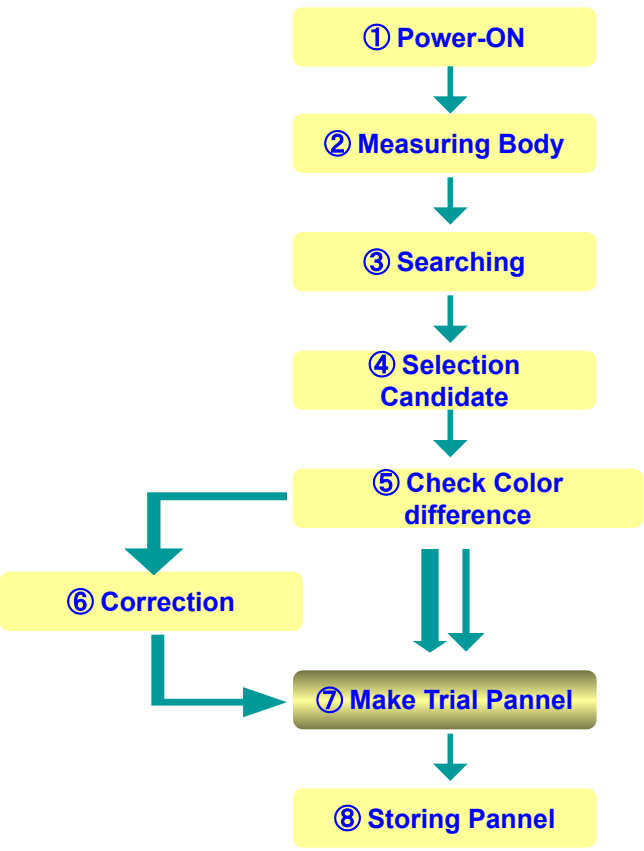
Tip :

- ① You can make manual formula which has smaller dE at specific degree.
- ② You can also make formula which will be close to actual viewing, even though that formula drive to bigger dE.



2. How to use CCM (Metallic)

7 Make Trial Panel



KCC Color-Navi Ver 1.10 ENGLISH MODE

Paint Type | BAROMATCH

Working No. GAR

Number: 198

Highlight: 0.00

Face: 0.20

Shade: 0.32

Correction No.

Simulation Result

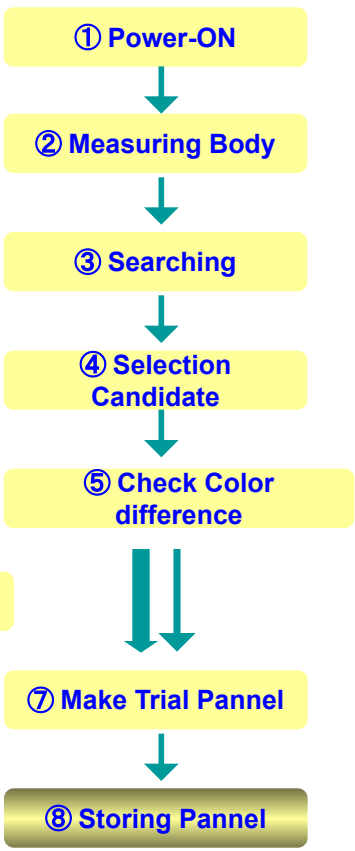
C2		
1:	KM702	15.95 (g)
2:	KM700	1.89 (g)
3:	KM204	3.29 (g)
4:	KM203	0.65 (g)
5:	KM300	0.20 (g)
6:	KM605	0.72 (g)
1:	KM807	2.72 (g)
2:		0.00 (g)
3:		0.00 (g)
1:	KM907	0.94 (g)
2:	KM904	0.70 (g)
3:		0.00 (g)
1:	KA69F	4.74 (g)
2:	KM101	0.14 (g)
3:		0.00 (g)
	Binder	66.71 (g)
	Color	31.93 (g)
	Total Weight	98.64 (g)

Car Maker : GM-DAEWOO
Color Code : 273000
Variant No : GAR
KCC-Code : KB0105_A7

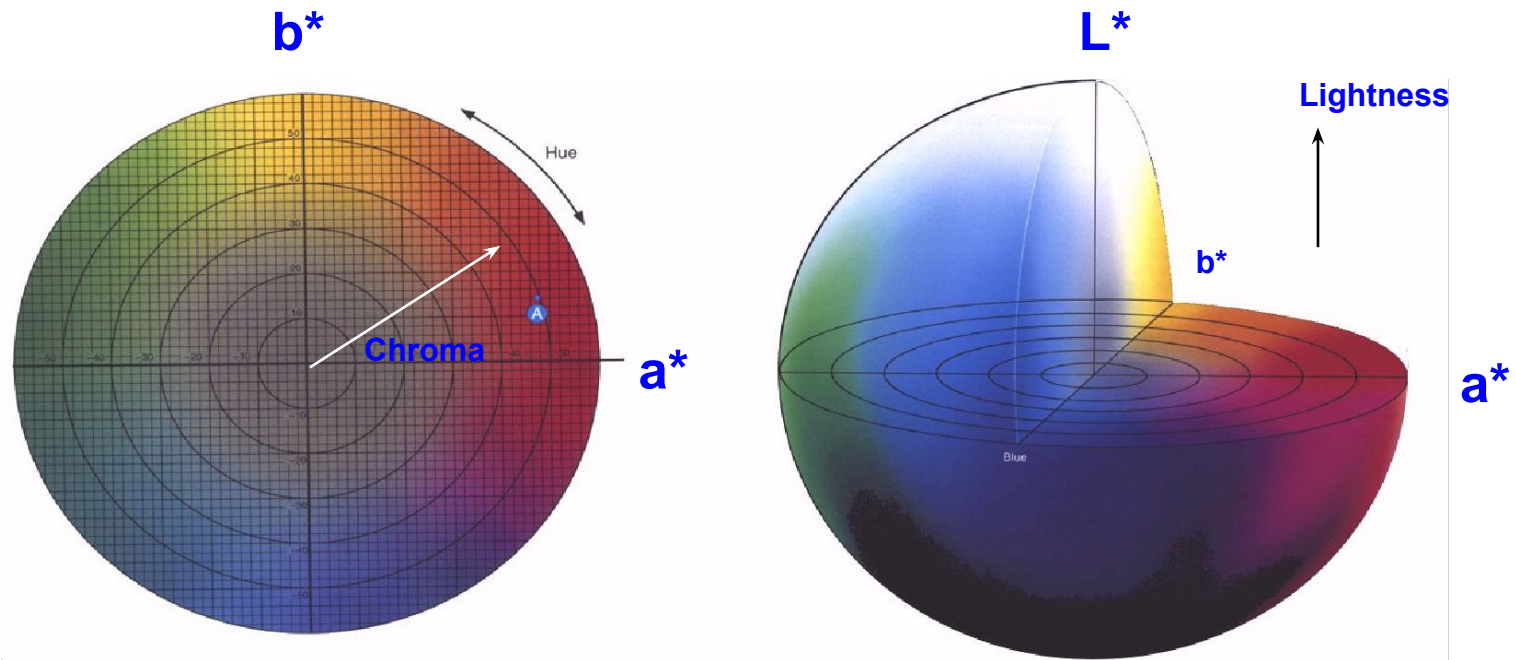
Binder(%) | 67.63
Target Weight | 100.00

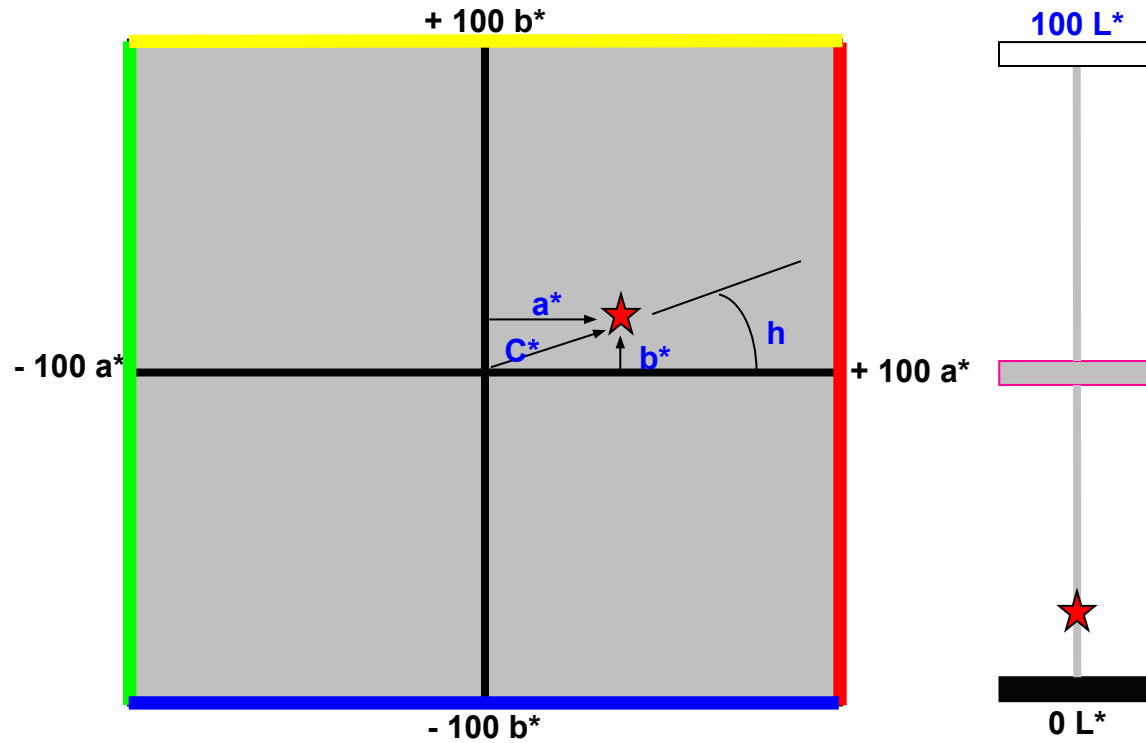
2. How to use CCM (Metallic)

8 Storing Panel



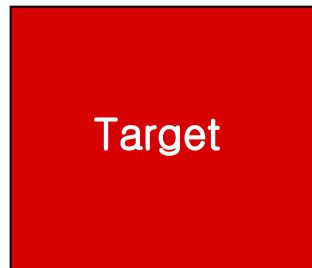
CIE Lab UCS (Uniform Color Space)



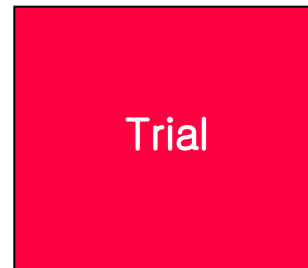


Illum	L^*	a^*	b^*
BARN RED 4X D65	30.86	44.04	18.50

Color difference



$L^* = 30.86$
 $a^* = 44.04$
 $b^* = 18.50$



$L^* = 32.91$ $DL^* = 2.05$
 $a^* = 46.66$ $Da^* = 2.62$
 $b^* = 19.54$ $Db^* = 1.04$

=
Trial is ..
Lighter
Redder
More Yellowish

* CIE_Lab

- CIELab
 - +DL* Lighter
 - DL* Darker
 - +Da* Redder (or) less Green
 - Da* more Greenish (or) less Red
 - +Db* more Yellowish (or) less Blue
 - Db* more Bluish (or) less Yellow

$$\Delta E^*_{ab} = \left[(\Delta L^*)^2 + (\Delta a^*)^2 + (\Delta b^*)^2 \right]^{1/2}$$