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$$16]^3 \left( \frac{Y_{dis}}{Y_{wp}} \right) \left( \frac{L_{dis}^*}{L_{wp}^*} \right) r(r - 1.0) \left( \frac{Y_{wp}}{Y_{dis}} \right) \left[ \frac{(100/r + 16)}{116} \right]^{-3} \left( \frac{Y_{wp}}{Y_{dis}} \right) \left[ \frac{(100/r' + 16)}{116} \right]^{-3} r'(r' - 1.0)$$

u' - v'

가 D

가 Yr

(SR)

$$SR = [-0.751*(Yr) + 3.190]*D + [-0.159*(Yr) + 0.176]$$

가

(radiomete

r)

가

(A) (F2,F5,F8 F11)

1

2

CIE LAB

가

가 , CIE LAB

가

(1)

$$L^*_{wp} = 50 \quad L^*_{dis} = 100, L^*_{wp}$$

$$L^*_{wp} = 116[(Y_{wp}/Y_{dis})^{1/3}] - 16 = 50 \quad (1)$$

$$Y_{wp}/Y_{dis} \quad (2)$$

$$Y_{wp}/Y_{dis} = [(50+16)/116]^3 \quad (2)$$

12.5° 9300 ° K 60 cd/m<sup>2</sup> (L\*) (a\* b\*) 2 × 2 mm<sup>2</sup>  
 0.2 12.0 cd/m<sup>2</sup>  
 2° CIE LAB a\* b\* - 10 +10  
 2 sec 12.0 cd/m<sup>2</sup> , 200 msec , 1800 msec  
 F8 a\* b\* , F2,F5  
 1

(u' - v')

	u'	v'	색온도(° K)
F2	0.2203	0.4996	4230
F8	0.2092	0.4881	5000
F5	0.1927	0.4769	6350
D65	0.1980	0.4680	6500
디스플레이기기	0.1848	0.4388	9300

3 , F2  
 3 , (L)  
 가 (L')  
 L'/L u' - v'  
 , F2 4  
 4 , 가 33 cd/m<sup>2</sup> ( A)  
 9300 ° K F2 12.1 % , 61 cd/m<sup>2</sup> ( B) 95 cd/m<sup>2</sup> ( C) 1  
 4.5% 21.5% 가 가

, F8 F5 5 6  
 , 7 가 가 7  
 2 D , (3) D 1 (Shift Ratio;SR) (best fit)  
 , (3) D 1

$$SR = A * D + B \dots (3)$$

(3) A B 가 2 , 8  
 ( Y<sub>wp</sub> / Y<sub>dis</sub> )

2. (SR) SR=A\*D+B

휘도 ( cd/m <sup>2</sup> )	기울기 (A)	절편 (B)
A: ~30	2.108	0.0649
B: ~60	2.351	-0.0194
C: ~90	2.859	-0.0945

, 8 A,B (4) (5)  
 1

$$A = -0.751*(Y_r) + 3.190 \dots (4)$$

$$B = -0.159*(Y_r) + 0.176 \dots (5)$$

(D) (Yr) (SR) (6)

$$SR = [-0.751*(Yr) + 3.190]*D + [-0.159*(Yr) + 0.176] \quad (6)$$

(6)

$$Yr=1.0 \quad (6) \quad (7)$$

$$SR = 2.439*D + 0.017 \quad (7)$$

ht locus)

가

가

가

가

$u' - v'$

$x - y$

가

8  
(daylig

$x - y$

가

가  
가가

$u' - v'$   
 $u' - v'$

(

8)

$$v' = -36.317u'^2 + 16.687u' - 1.4114 \quad (8)$$

(simplex algorithm)

가 가  
가

(lookup table)

가

가

가

가

가

(57)

1.

가

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;

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2.

1 ,

,

3.

2 ,

4.

2 ,

( Y<sub>dis</sub> ) ( L\*<sub>dis</sub> )

( Y<sub>wp</sub> ) ( L\*<sub>wp</sub> )

,

(100/r+16)/116] <sup>3</sup>

가

r(r 1.0)

( Y<sub>wp</sub>/Y<sub>dis</sub> ) [

5.

2 ,

( Y<sub>dis</sub> ) ( L\*<sub>dis</sub> )

( Y<sub>wp</sub> ) ( L\*<sub>wp</sub> )

,

[(100/r' +16)/116] <sup>-3</sup>

가

r'(r' 1.0)

( Y<sub>wp</sub>/Y<sub>dis</sub> )

6.

2 ,

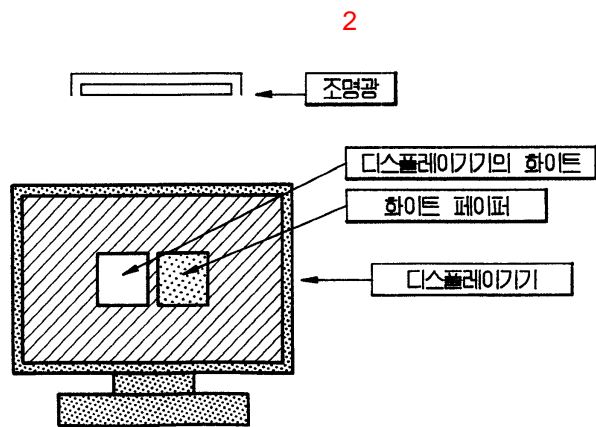
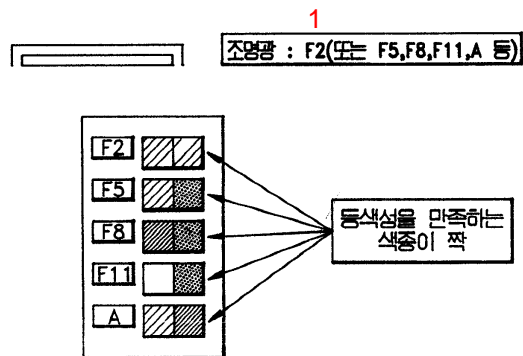
u' - v'

가 D

가 Yr

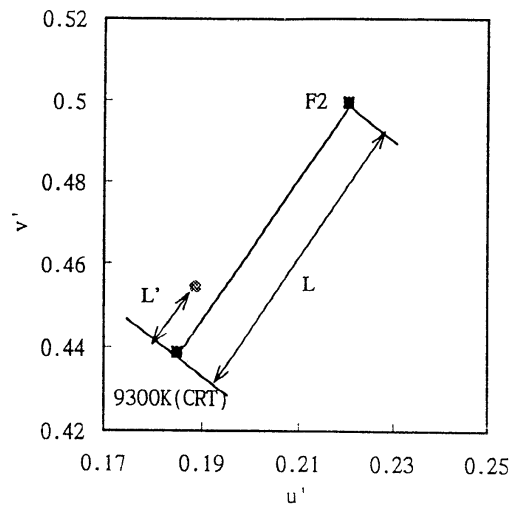
(SR)

$$SR = [-0.751 \cdot (Y_r) + 3.190] \cdot D + [-0.159 \cdot (Y_r) + 0.176]$$

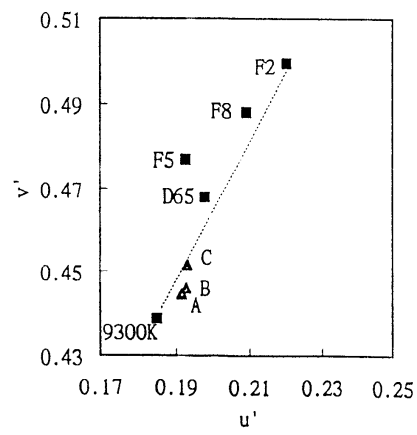




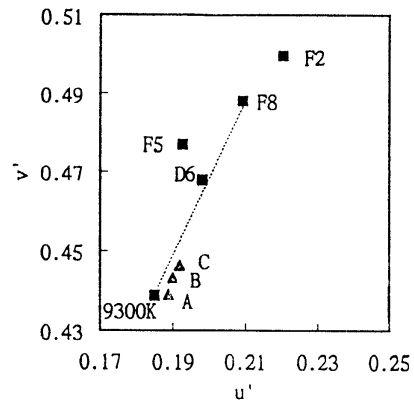
3



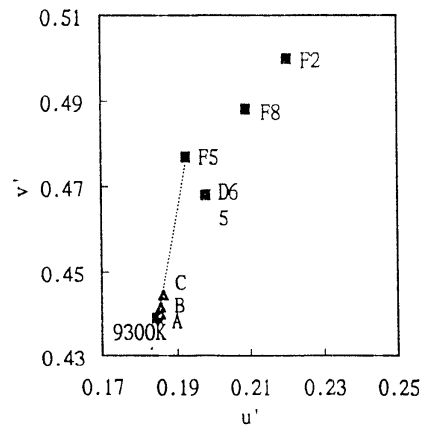
4



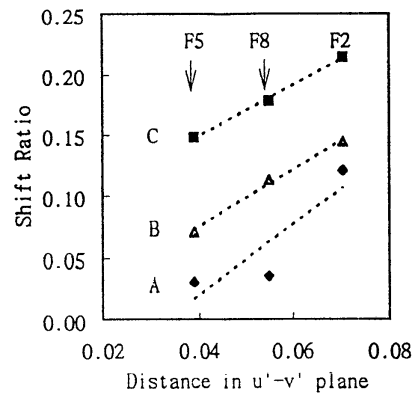
5



6



7



8

