??
(60$cm\times$
60$cm\times$
110cm)??
10cm
??
??
??
20cm
45°3cm
??
??(a)
??(b)
??(a)
$ImageN1$
??(a)
$NorthImageS1$
??(a)
$SouthImageW1$
??(a)
$WestImageE1$
??(a)
$East$
$ImageT1Top$
$ImageN2, ImageS2, ImageW2, ImageE2, ImageT2$

?
?
?
YC_bC_r
$RGBRGB$
$YC_bC_rYC_bC_r$

$$Y = (0.256*R)+(0.504*G)+(0.098*B)+16C_b = -(0.148*R)-(0.291*G)+(0.439*B)+128C_r = (0.439*R)-(0.368*G)-(0.$$
(1)

$near-$
$whitenear-$
$white$
$near-$
$white$
$near-$
$white$
?$R_{gain}G_{gain}$
B_{gain}

$$R_{gain} = Y_{max}/R_{avew}G_{gain} = Y_{max}/G_{avew}B_{gain} = Y_{max}/B_{avew}$$
(2)

$R_{avew}G_{avew}B_{avew}RedGreenBlueY_{max}$
$$R_{gain} = Y_{max}/R_{avew}G_{gain} = Y_{max}/G_{avew}B_{gain} = Y_{max}/B_{avew}$$
(3)

$RGBR^{'}G^{'}B^{'}$
?
?
?
R, G, BC^i_{org}
$C^i_{cap}C^i_{org}C^i_{cap}RGBf(R, G, B)R, G, B$
?
?
?
$\dot{\imath}m$
$2mn$
$2mnk =$
$[k_1, k_2]$

$$p = p^{'}+(p^{'}-p_0)[k_1(x^2+y^2)+k_2(x^2+y^2)^2]q = q^{'}+(q^{'}-q_0)[k_1(x^2+y^2)+k_2(x^2+y^2)^2]$$
(4)

(p, q)
$(p^{'}, q^{'})$
k_1k_2
(p_0, q_0)
?
?
?
?
?
?
?
?
??$(a), (b), (c), (d)$

$(E), (W), (N), (S)$
$(a)(b)(c)(d)$