

FIG. 1

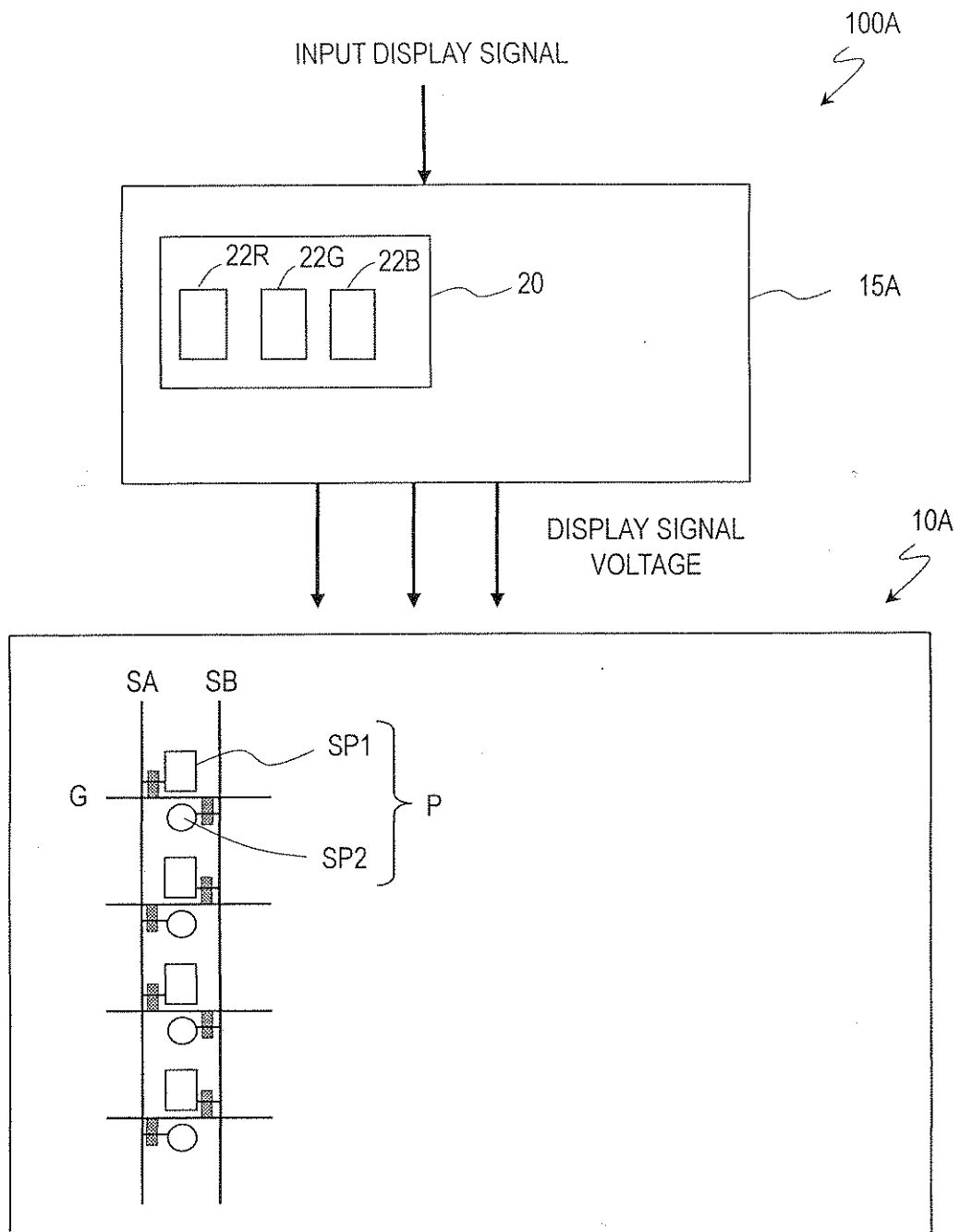


FIG. 2

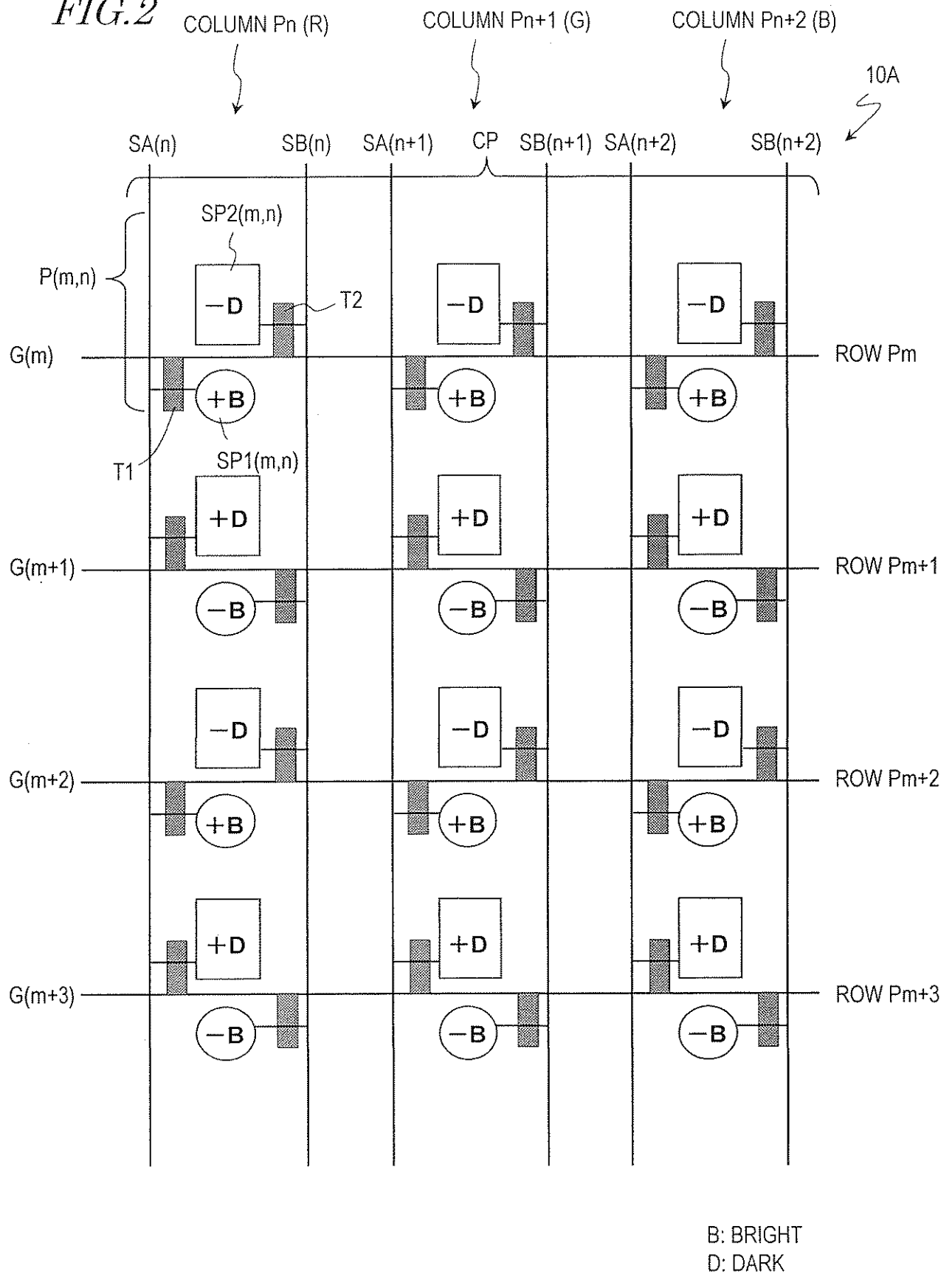


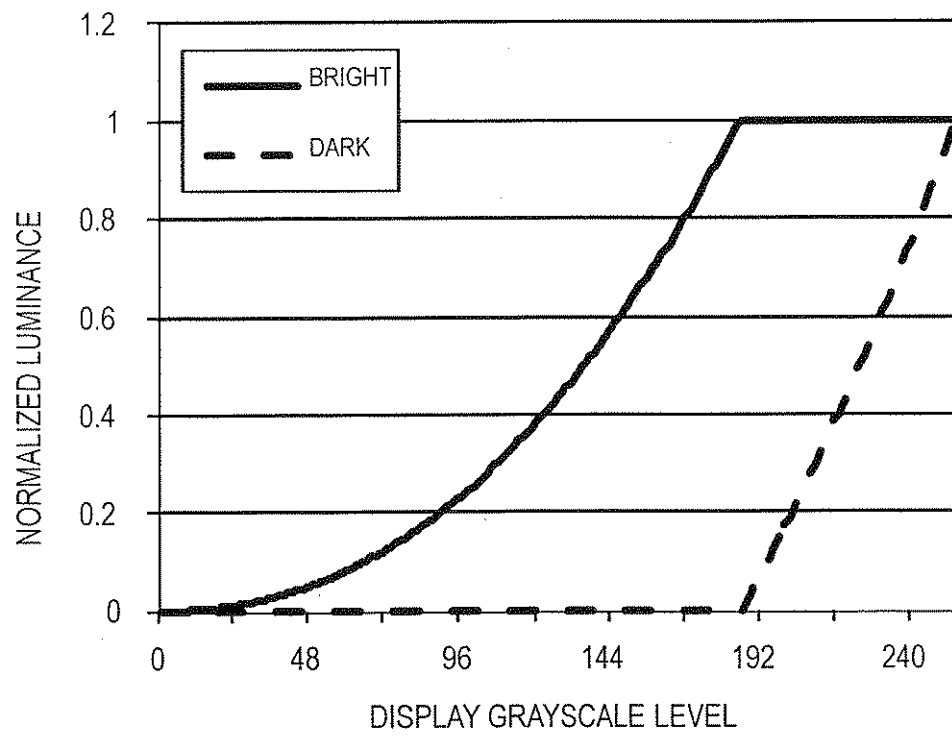
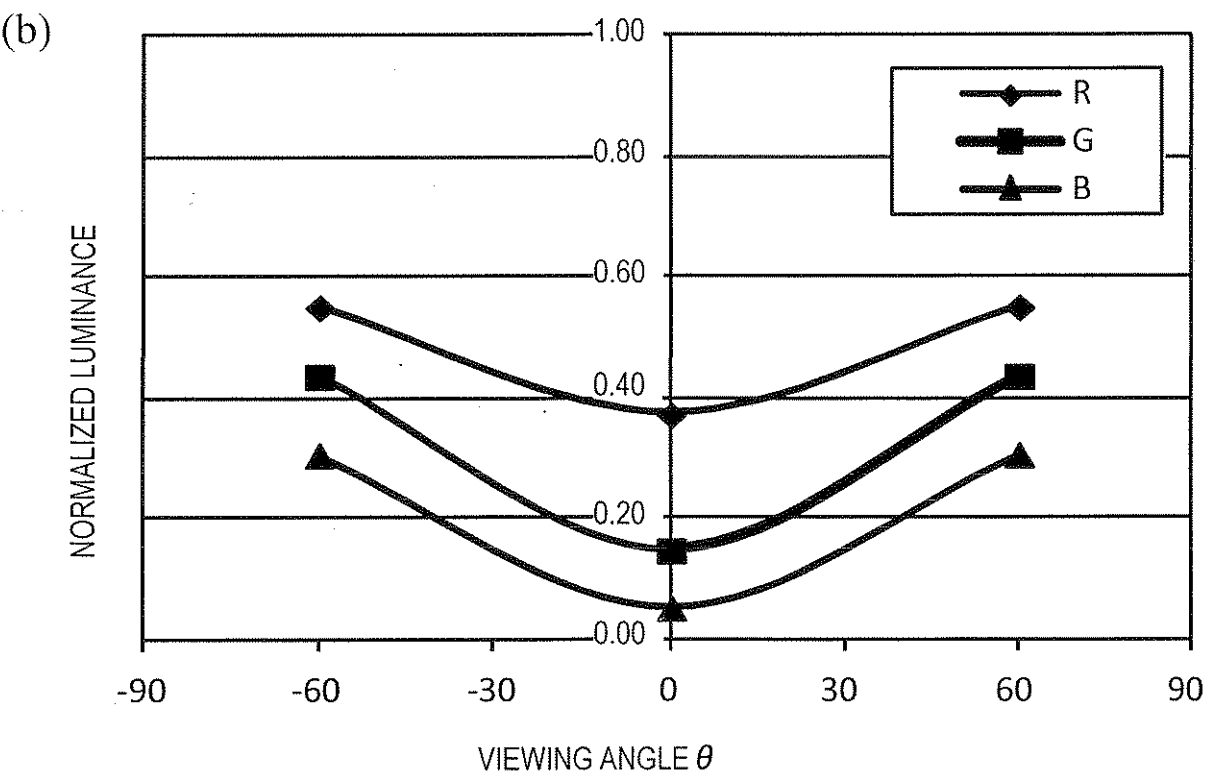
FIG. 3

FIG.4

(a)

	R	G	B
BRIGHT	180	120	80
DARK	180	120	80



(c)

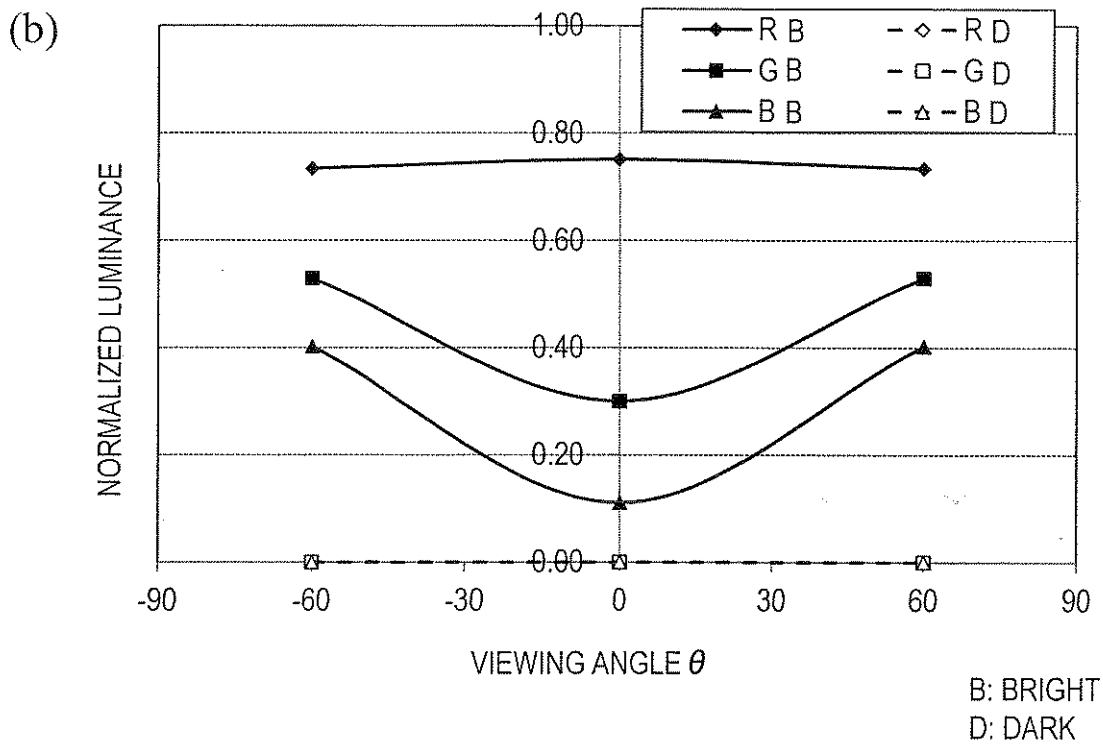
$\Delta u'v'=0.057$

		R	G	B
NORMALIZED LUMINANCE	FRONT	0.375	0.150	0.055
	OBLIQUE 60°	0.554	0.440	0.309
VIEWING ANGLE LUMINANCE RATIO (OBLIQUE/FRONT)		1.48	2.94	5.65
RGB LUMINANCE RATIO (RELATIVE TO HIGHEST GRAYSCALE LEVEL COLOR)	FRONT	1.00	0.40	0.15
	OBLIQUE 60°	1.00	0.79	0.56
RGB LUMINANCE RATIO VARIATION (OBLIQUE-FRONT)		0.00	0.39	0.41

FIG.5

(a)

	R	G	B
BRIGHT	232	157	104
DARK	0	0	0



(c)

$\Delta u'v' = 0.056$

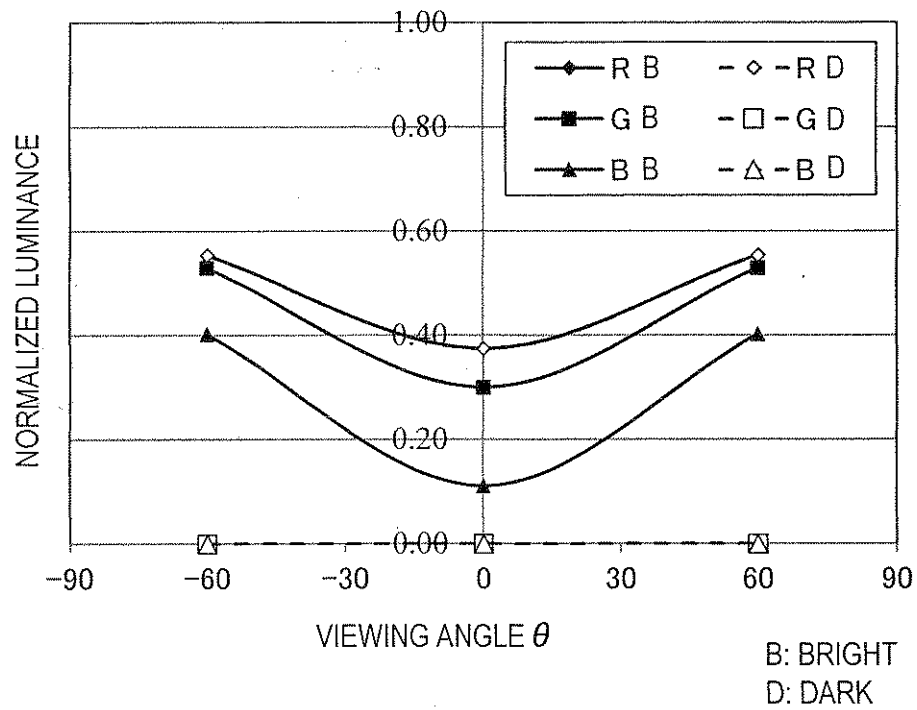
		R	G	B
NORMALIZED LUMINANCE	FRONT	0.375	0.150	0.056
	OBLIQUE 60°	0.367	0.265	0.201
VIEWING ANGLE LUMINANCE RATIO (OBLIQUE/FRONT)		0.98	1.76	3.63
RGB LUMINANCE RATIO (RELATIVE TO HIGHEST GRAYSCALE LEVEL COLOR)	FRONT	1.00	0.40	0.15
	OBLIQUE 60°	1.00	0.72	0.55
RGB LUMINANCE RATIO VARIATION (OBLIQUE-FRONT)		0.00	0.32	0.40

FIG. 6

(a)

	R	G	B
BRIGHT	180	157	104
DARK	180	0	0

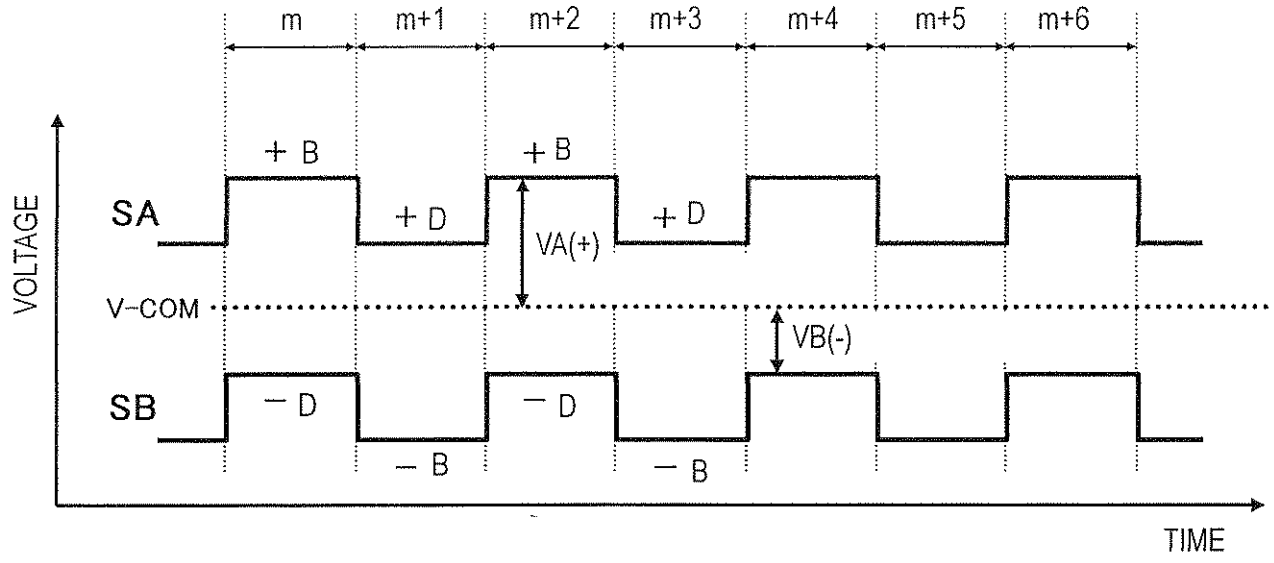
(b)



(c)

$$\Delta u'v' = 0.034$$

		R	G	B
NORMALIZED LUMINANCE	FRONT	0.375	0.150	0.056
	OBLIQUE 60°	0.554	0.265	0.201
VIEWING ANGLE LUMINANCE RATIO (OBLIQUE/FRONT)		1.48	1.76	3.63
RGB LUMINANCE RATIO (RELATIVE TO HIGHEST GRAYSCALE LEVEL COLOR)	FRONT	1.00	0.40	0.15
	OBLIQUE 60°	1.00	0.48	0.36
RGB LUMINANCE RATIO VARIATION (OBLIQUE-FRONT)		0.00	0.08	0.22

FIG. 7

B: BRIGHT
D: DARK

FIG. 8

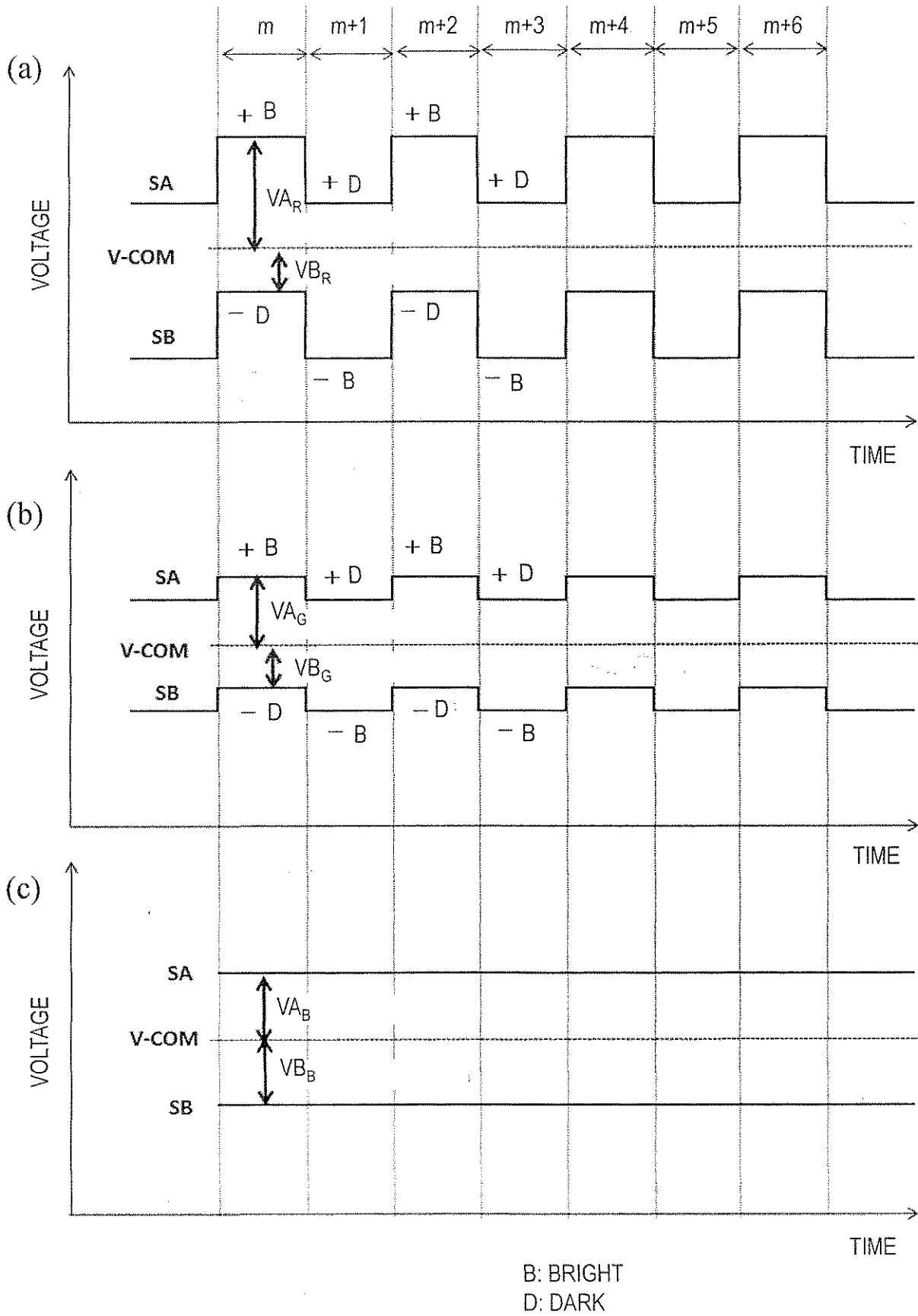


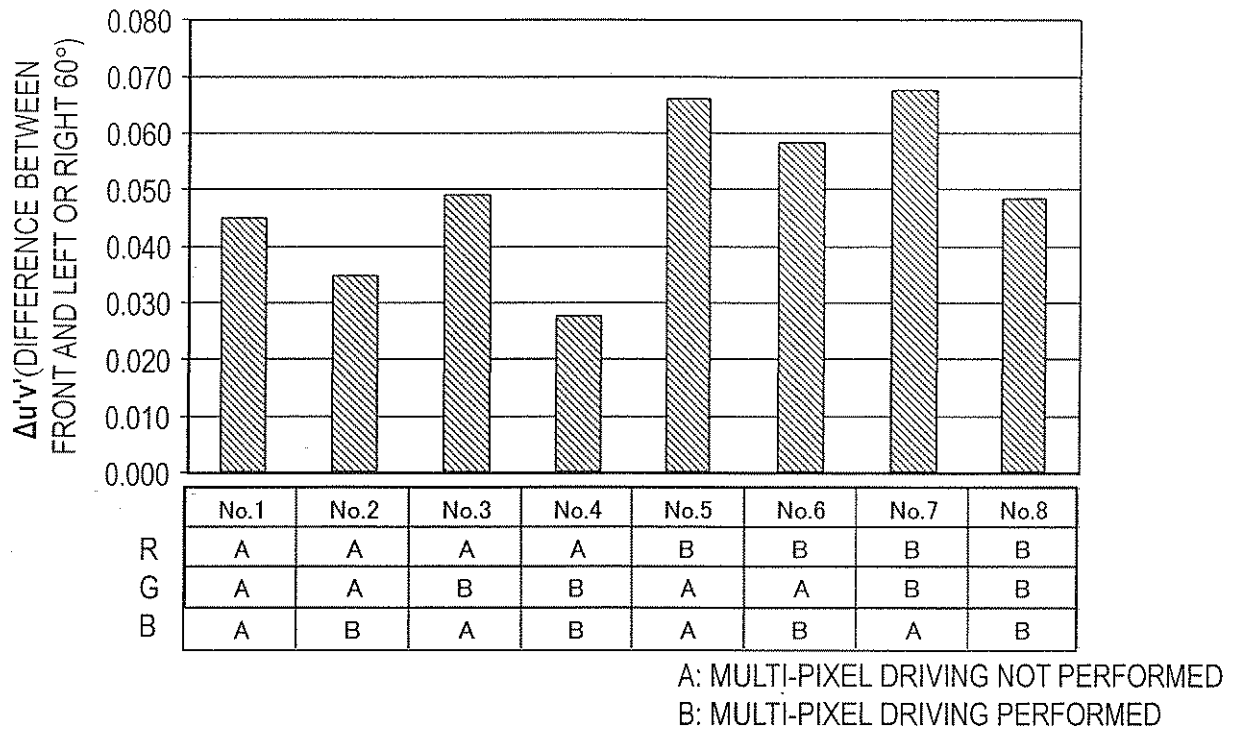
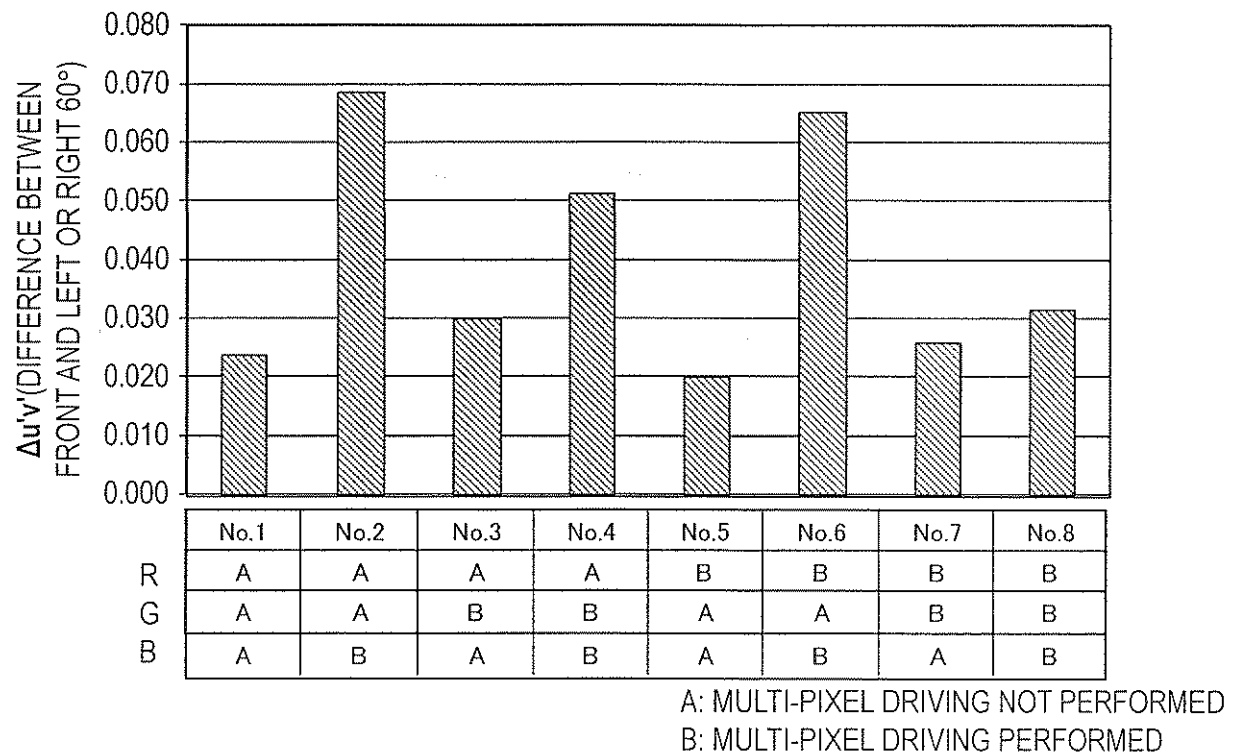
FIG. 9*FIG. 10*

FIG. 11

(a)

R 0		G							
		0	1	2	3	4		120	255
B	0								
	1								
	2								
	3								
	4								
	80								
	255								

(b)

R 180		G							
		0	1	2	3	4		120	255
B	0								
	1								
	2						•		
	3						•		
	4						•		
	80								
	255								

	BRIGHT	DARK
G	157	0
B	104	0

(c)

R 255		G							
		0	1	2	3	4		120	255
B	0								
	1								
	2								
	3								
	4								
	80								
	255								

FIG.12

	INPUT GRAYSCALE LEVEL			OUTPUT GRAYSCALE LEVEL					
	R	G	B	R		G		B	
				BRIGHT	DARK	BRIGHT	DARK	BRIGHT	DARK
	0	0	0						
	⋮	⋮	⋮						
	0	0	255						
	⋮	⋮	⋮						
	0	255	255						
	⋮	⋮	⋮						
EXAMPLE	135	135	135	176	0	135	135	135	135
	⋮	⋮	⋮						
	180	120	80	180	180	157	0	104	0
	⋮	⋮	⋮						
	255	255	255						

FIG.13

	INPUT GRAYSCALE LEVEL			OUTPUT GRAYSCALE LEVEL							
	R	G	B	R		G		B		Ye	
				BRIGHT	DARK	BRIGHT	DARK	BRIGHT	DARK	BRIGHT	DARK
	0	0	0								
	⋮	⋮	⋮								
	0	0	255								
	⋮	⋮	⋮								
	0	255	255								
	⋮	⋮	⋮								
	255	255	255								