

# Corrigendum Corrigendum to "Local Dimming Algorithm of Automotive LCD Instrument Based on Otsu and Maximum Entropy"

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In the article titled "Local Dimming Algorithm of Automotive LCD Instrument Based on Otsu and Maximum Entropy" [1], Figures 2–9 have been replaced within the article due to legal reasons. As a result of this the change to the sample figures, Table 3 has also been revised and updated within the article. This does not affect the conclusions of the article.



FIGURE 2: Block effect simulation diagram.



FIGURE 3: Effect comparison of backlight smoothing algorithm: (a) original image; (b) backlight image; (c) traditional BMA; (d) improved BMA.



FIGURE 4: Effect comparison of pixel compensation algorithm: (a) original image; (b) backlight image; (c) traditional pixel compensation; (d) improved pixel compensation.





FIGURE 5: Sample image: (a) low brightness; (b) high brightness; (c) low contrast; (d) high contrast.

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FIGURE 6: Low brightness image simulation diagram: (a) max; (b) average; (c) sqrt; (d) SD; (e) ECM; (f) CDF; (g) IMF; (h) new.





(b)





(g)

(h)

FIGURE 7: High brightness image simulation diagram: (a) max; (b) average; (c) sqrt; (d) SD; (e) ECM; (f) CDF; (g) IMF; (h) new.

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(g)

(h)

FIGURE 8: Low contrast image simulation diagram: (a) max; (b) average; (c) sqrt; (d) SD; (e) ECM; (f) CDF; (g) IMF; (h) new.



(g)

(h)

FIGURE 9: High contrast image simulation diagram: (a) max; (b) average; (c) sqrt; (d) SD; (e) ECM; (f) CDF; (g) IMF; (h) new.

Algorithm	Low brightness				High brightness				Low contrast				High contrast			
	SER	OFR	CR	SUM	SER	OFR	CR	SUM	SER	OFR	CR	SUM	SER	OFR	CR	SUM
Max	65	80	60	70.71	70	80	68	68.73	70	80	80	77.20	75	80	80	78.33
Average	85	50	70	63.38	80	80	85	83.16	80	62	80	69.17	80	80	85	81.92
Sqrt	65	65	50	60.34	70	80	72	71.26	70	74	70	72.40	75	85	80	79.74
SD	80	60	60	64.09	70	80	80	76.33	70	70	80	71.19	75	85	85	81.66
ECM	70	70	60	66.89	70	80	75	73.16	70	74	80	73.60	75	85	80	79.74
CDF	80	70	60	68.94	70	80	80	76.33	70	71	80	71.80	75	85	80	79.74
IMF	85	55	80	68.91	70	80	85	79.50	80	62	80	69.17	75	85	85	81.66
New	85	85	70	80.34	80	80	85	83.16	80	82	80	81.20	80	85	85	83.33

TABLE 3: Objective evaluation results.

### References

 T. Liu and C. Tang, "Local Dimming Algorithm of Automotive LCD Instrument Based on Otsu and Maximum Entropy," *Journal* of Nanomaterials, vol. 2022, Article ID 5244088, 9 pages, 2022.