

**MEDIATEK**

CONFIDENTIAL B

**HW ABF**



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# Support Chip

- MT6771

# What is ABF

- Correct the blooming effect caused by sensor or lens refraction.

W/O ABF



W/ ABF



# Block Diagram

Input Image



ROI Detection



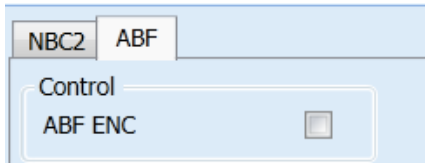
ABF Correction



Output Image

# Function

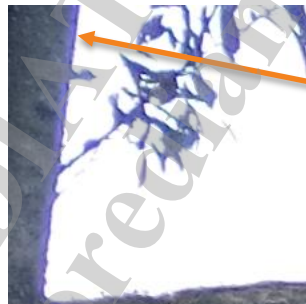
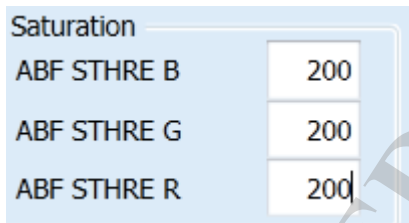
## ■ Control



Checked: on, Unchecked: off

## ■ Saturation Threshold

- Blooming effect happens near Saturation Region most of the time
- When all of the R/G/B value exceed the given threshold value (STHRE R/ STHRE G/ STHRE B) are defined as the saturation region



Saturation Region:  
R: 255 G: 255 B: 255

Saturation Region:  
R: 174 G: 222 B: 255



# Filter Tuning

Filter	
ABF BF U OFST	20

ABF BIL IDX	2
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- Filter Strength: **BF\_U\_OFST** (0~63)

**BF\_U\_OFST** ↑, Strength ↑

- Filter Size: **BIL\_IDX** (0~2)

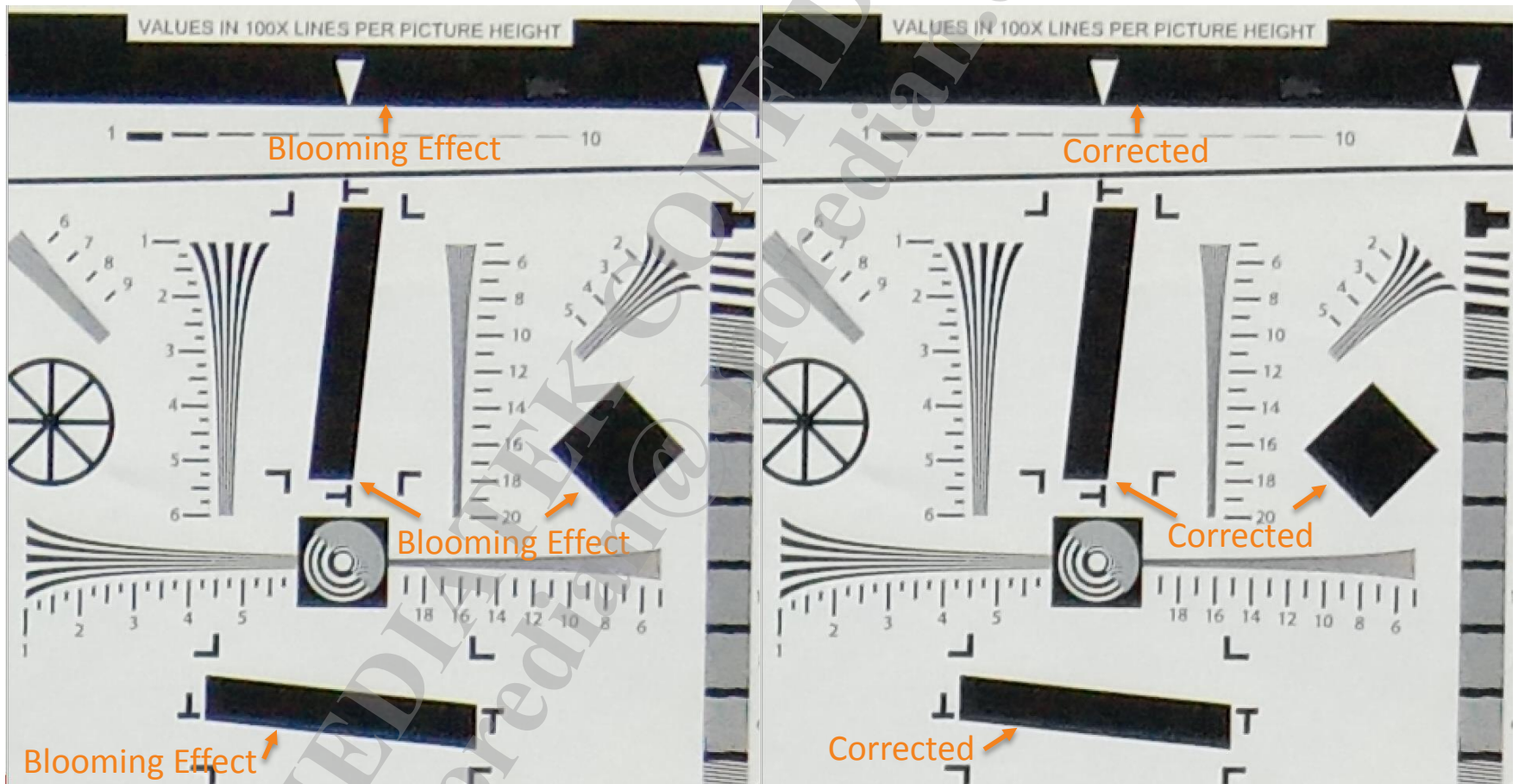
**BIL\_IDX** ↑, Filter Size ↑



# Sample Image

W/O ABF

W/ ABF





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*everyday genius*