

Why You Don't See What You Thought You Saw

Limitations of Mobile Video
Recording in Impaired Driving Cases
and How to Mitigate Them



- Focus
- Lighting
- Orientation
- Picture
- Sound



Focus

- Principle – Defocus / Depth of field
- Equipment – Auto focus / f-stop
- Your lens – Camera lens
- Enhancing – Sharpen image

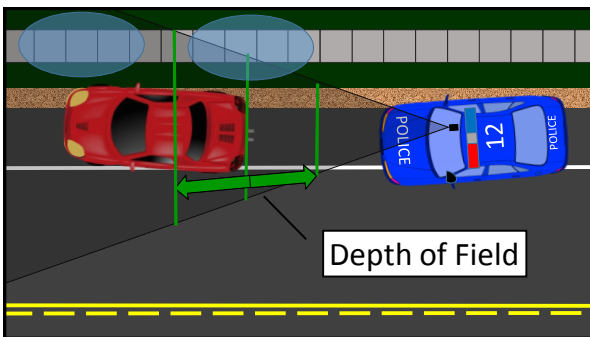


Defocus



Depth of Field





Eyes v. Camera

- Eyes
 - Focus based on point of view
- Camera
 - Focus based on object position, movement and light



Enhance v. Edit

- Enhance = to raise to a higher degree, intensify, magnify
- Edit = to expunge or eliminate



Sharpening



Lighting

- Principle – Lumens / Exposure
- Equipment – Aperture
- Your pupil – Camera aperture
- Enhancing – Adjusting Exposure



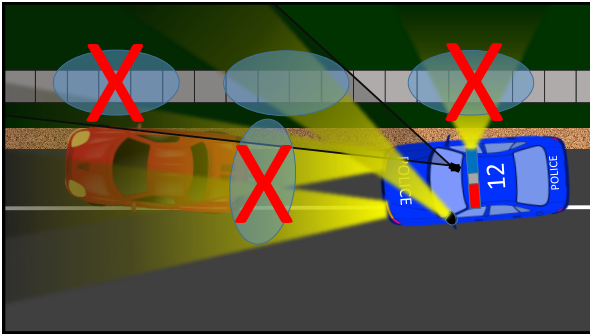
Lumens

1 to 12.57



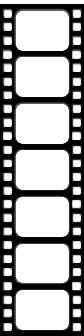
Exposure





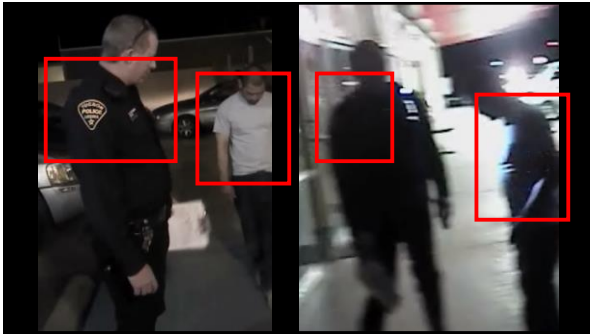
Eyes v. Camera

- Eyes
 - Adjustment based on point of view
 - Can take 4 seconds to 30 minutes
- Camera
 - Adjust to total light only & quickly




Adjusting Exposure





Orientation

- Principle – Perspective / Angle
- Equipment – Lens size / Position
- Your view – Camera view
- Enhancing – Digital zoom

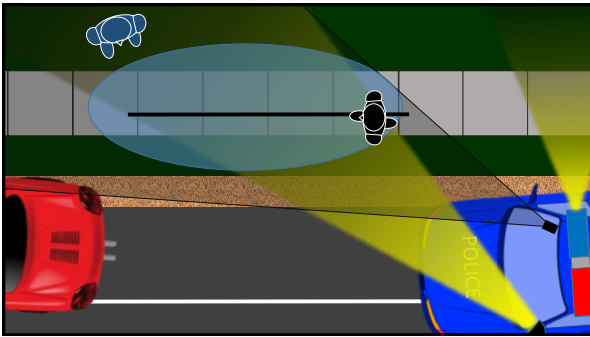


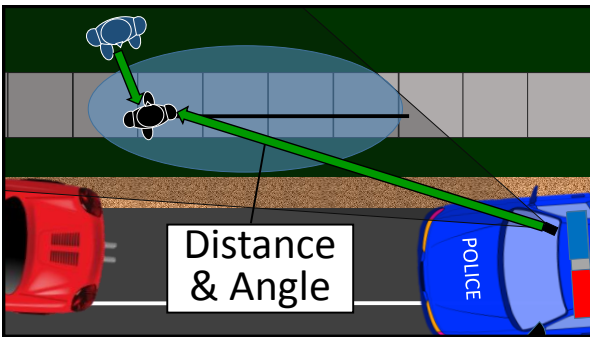
Perspective Distortion



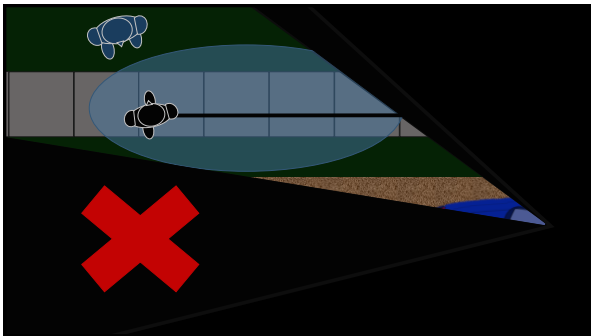
55 mm 45 mm 35 mm 24 mm 18 mm







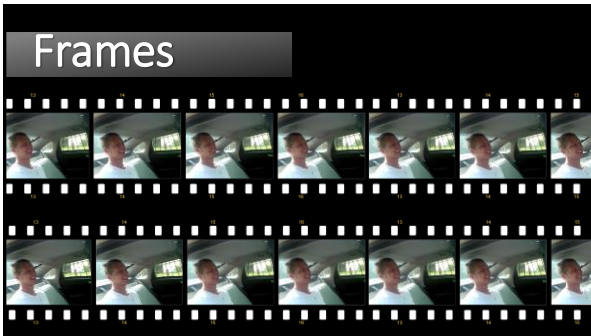


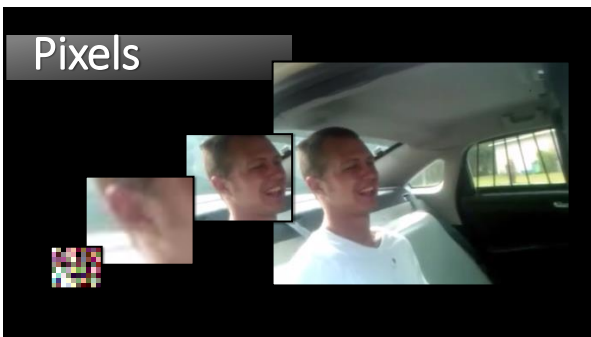


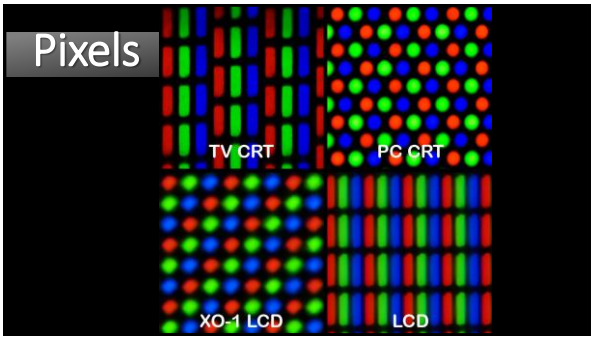
Picture

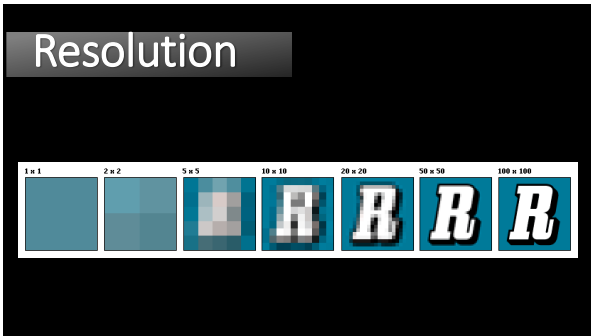
- Principle – FPS / Pixels / Resolution
- Equipment – FPS / resolution
- Your retina – Camera “film”
- Enhancing images – Snap shots













Eyes v. Camera

- Eyes
 - Constantly adjusting (saccade)
 - Millions of signals per second
- Camera
 - 24-30 Still pictures per second





Sound

- Principle – Sound waves
- Equipment – Lavalier
- Your ears – Camera microphone(s)
- Enhancing audio – Subtitles





Ears v. Microphone

- Ears
 - 20 Hz to 20 kHz
 - Direction and distance
- Microphone
 - 20 Hz to 20 kHz



Step One

Making the video

- Focus
- Lighting
- Orientation
- Picture
- Sound



Mind your P's & Q's

- Polite
- Professional
- Purposeful
- Parrot
- Quiet



Step Two

Enhancing the video

- Can't enhance what's not there
- What did you see?
- Help everyone else see it
- Zoom, sharpen, expose, highlight



Step Three

Showing the video

- Purpose of MVR
- YOUR evidence - use pause button!
- Don't assume they saw that!
- Don't assume they know why they didn't see that!



Purpose of MVR

Purpose: Protect Police
Ability: Capture Context
Benefit: Enhance Evidence



*The Best Evidence in a DUI
Case with MVR is still
YOU!*

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