

# Zone Modes and Metering Modes

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# Modes

- Basic Zone Modes
  - Automatic
  - SCN
  
- Creative Zones
  - Program
  - Av – Aperture Priority
  - Tv – Shutter Priority
  - M – Manual
  - B - Bulb



# A- Automatic



- ▶ Point and Shoot
  - ▶ Auto ISO, AI Focus, Evaluative Metering – display light button does work
- ▶ Things you cannot do
  - ▶ Deliberately lighten or darken an image with Exposure Compensation
  - ▶ Use AE Lock to lock in an exposure reading
  - ▶ Manually select a focusing point
  - ▶ Set an ISO speed
  - ▶ Select a specific Picture Style
  - ▶ Change metering mode
  - ▶ Choose a particular White Balance setting
  - ▶ Change to single-frame or continuous drive settings
  - ▶ Activate Highlight Tone Priority
  - ▶ Set any Custom Functions

# SCN – Scene mode

- ▶ Portrait
  - ▶ One shot, Auto ISO, Evaluative Metering, large aperture
- ▶ Landscape
  - ▶ One shot, Auto ISO, Evaluative Metering, small aperture
- ▶ Close-up
  - ▶ One shot, Auto ISO, Evaluative Metering, medium aperture
- ▶ Sports
  - ▶ AI Servo, Continuous, Auto ISO, Evaluative Metering, large aperture
- ▶ Night Portrait
  - ▶ One shot, Auto ISO, large aperture, Evaluative Metering
- ▶ Handheld Night Scene
  - ▶ Takes 4 images and combines, Evaluative metering



# SCN – Scene mode – what we can learn?

- ▶ Portrait
  - ▶ One shot, Auto ISO, Evaluative Metering, large aperture
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## Creative Zone – P mode



- Program – does not stand for Professional
  - Same as A (Auto)
  - But all built-in camera features and menu settings become possible. Without leaving the comfort of fully automatic exposure control
  - It will get you in the right church and a pew
  - A good place to “go” if you are confused. Sort of like the “go home” button your GPS

## Creative Zone – Av



### ➤ Aperture Priority

- You select the DOF (Depth of Field) shutter speed will follow to maintain the correct exposure
- 2.8 – Portrait – blurred background - bokeh
- 5.6 -- Group photo
- 12 – Landscape
- Smaller the number the larger the opening
- The larger the number the smaller the opening

## Creative Zone – Tv



- Shutter Priority – you change the Shutter speed and the Aperture will follow to maintain correct exposure
  - When you're trying to stop action
  - If you want to make moving objects look blurry
  - When you're using a telephoto lens without a tripod
  - If lighting conditions are changing constantly or the subject is moving



## Creative Zone M



- Manual mode
  - You control both the Aperture and the Shutter
  - Suggest you try this with your ISO set to auto

# Creative Zone B

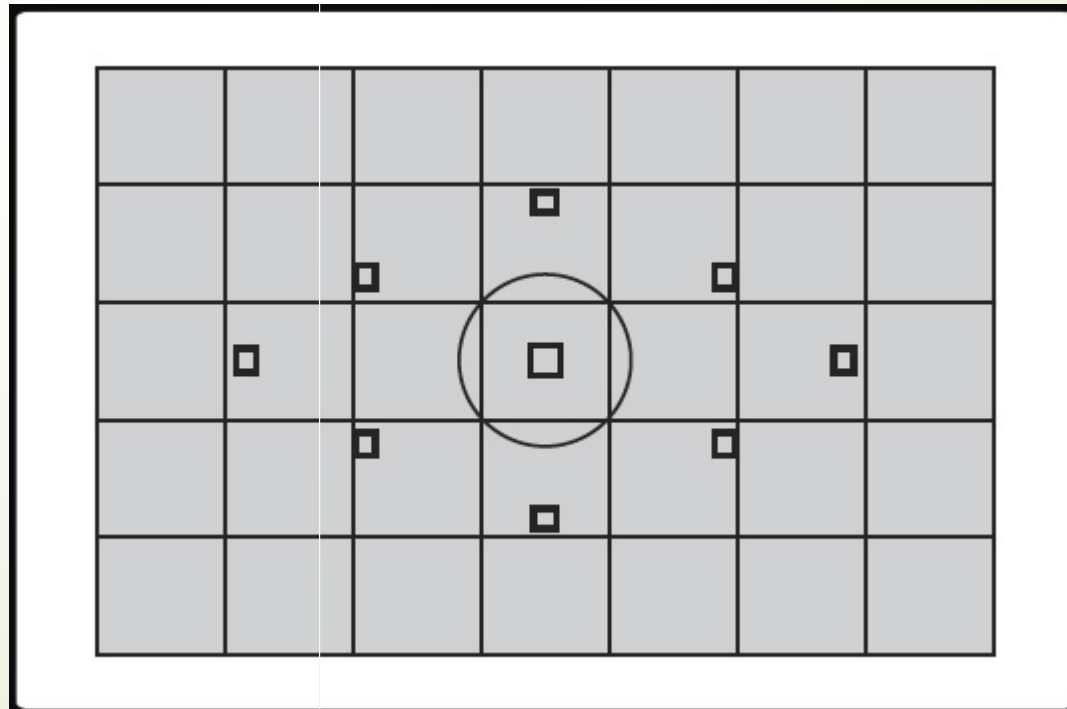
## ► Bulb

- Control how long the shutter is open with a remote control
- Shutter release wired or wireless



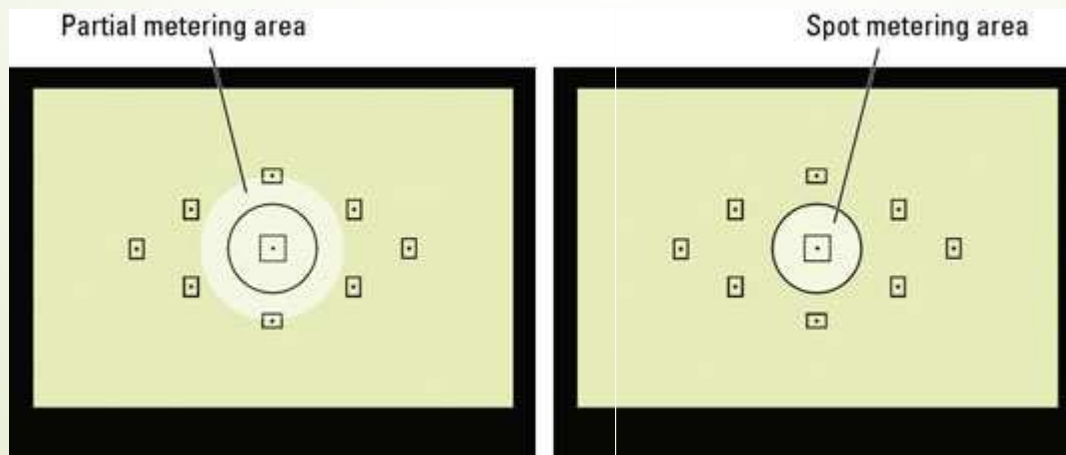
# Metering Modes – measure the light

- Evaluative
  - Can do off-center subjects
  - Weighted toward the active focus point



# Metering modes

- Partial - measures *mostly* from the center
- Spot – measures only from the selected AF point –
  - So small (3%) that it is difficult to use
  - Could be used in creative situations
  - Subject in the shade and the background is bright

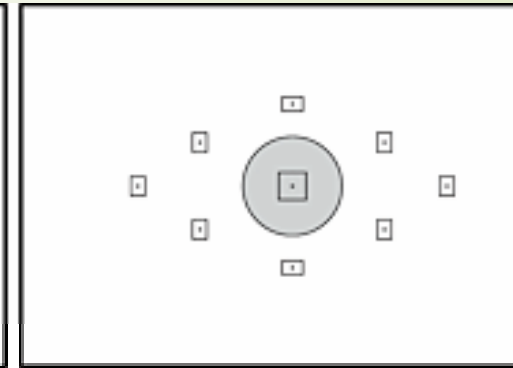
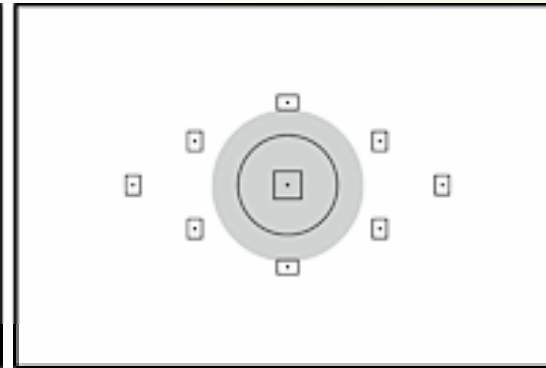
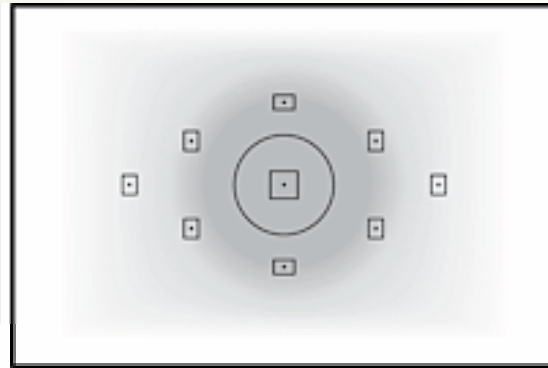
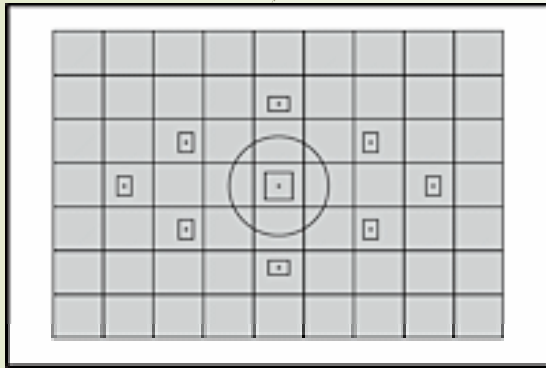


Evaluative

Center








Partial

Spot



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## Metering Modes

Canon	Nikon
 Evaluative	 Matrix
 Partial	
 Spot	 Spot
 Center Weighted Average	 Center Weighted

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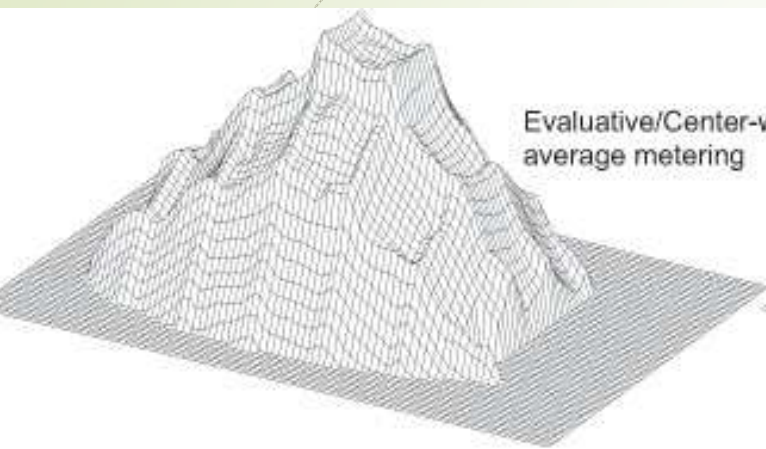


# NIKON

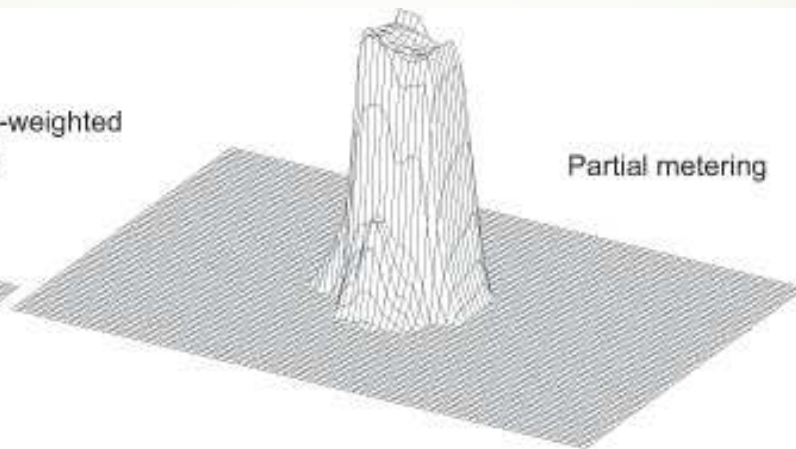


1. spot
2. matrix
3. center-weighted

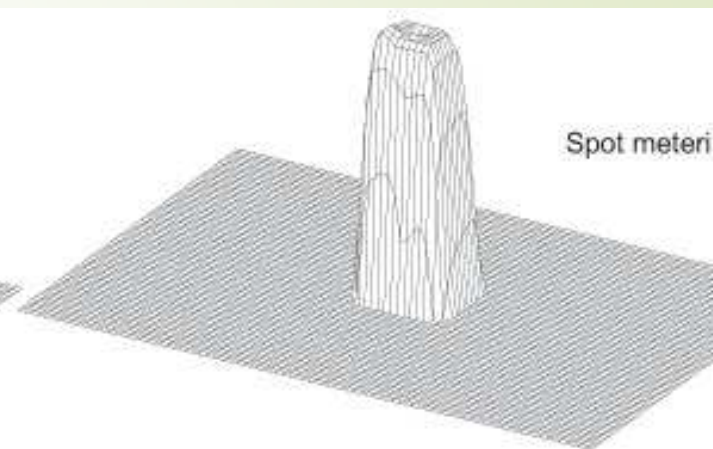




Evaluative/Center-weighted average metering



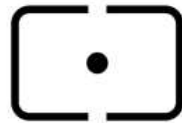
Partial metering



Spot metering

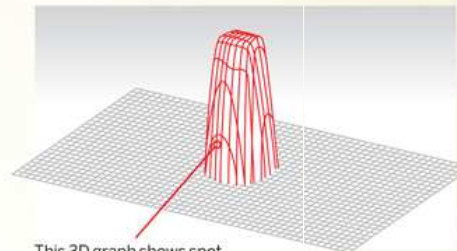
# At-a-glance guide to metering modes

How each of the metering patterns works, and when to use them

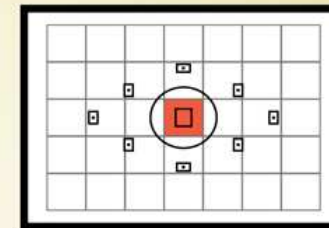


## Spot metering

Spot metering only measures the intensity of light over a small circular area in the centre of the viewfinder. The average is then calculated by measuring just 2-4% of the picture area.



This 3D graph shows spot metering's central bias

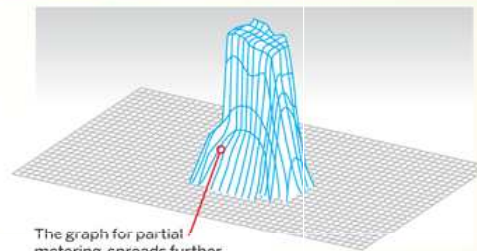


The centre circle in the viewfinder gives a rough guide to a spot meter's coverage

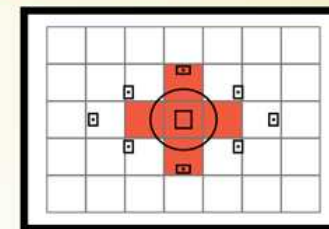


## Partial metering

This metering mode measures the intensity of the light over a larger circular area than in Spot mode. The average is then calculated by measuring 8-13% of the picture area.



The graph for partial metering spreads further across frame

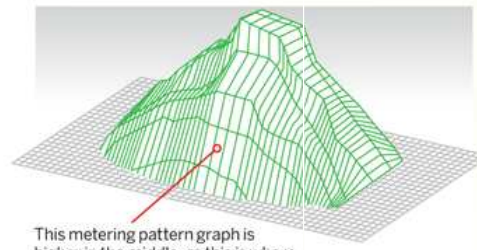


The coverage of the partial meter spreads out slightly beyond the viewfinder's centre circle

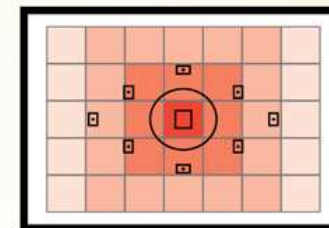


## Centre-weighted average metering

This light metering mode measures the light across the whole picture area, but strongly biases the reading to the centre of the viewfinder area. Unlike with Evaluative, it does not take the focus into account, so uses the same averaging pattern for every shot.



This metering pattern graph is higher in the middle, as this is where the meter concentrates its attention

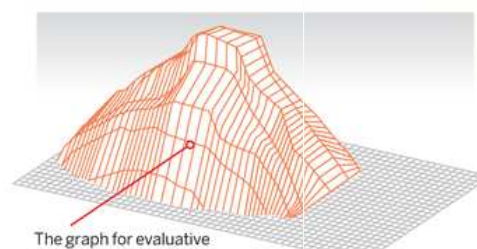


Main metering zone is bounded by the seven central focus points (SLRs with nine AF points)

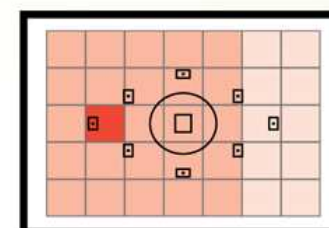


## Evaluative metering

The default metering mode on many DSLRs, and the only option if you choose one of the basic automatic exposure modes. Measures light across the whole frame, but strongly biases the reading to the area around the autofocus point currently being used.



The graph for evaluative metering changes shape, depending on where the subject is

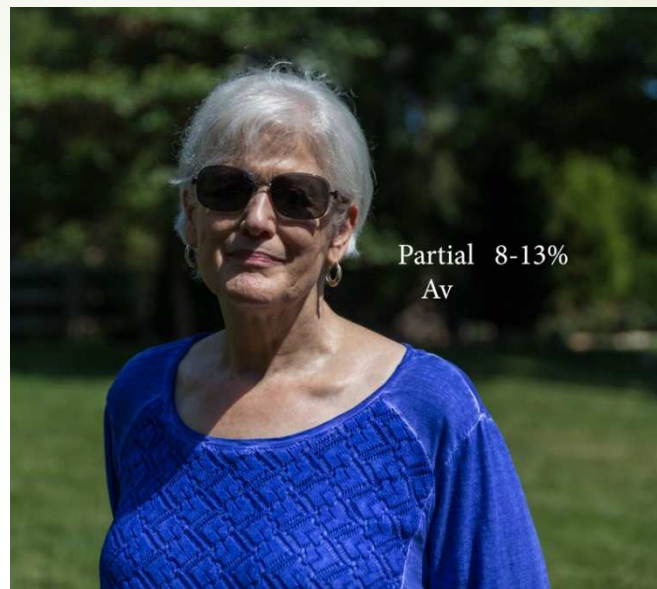


Main zone of interest will depend on which of the autofocus points has been used





Evaluative  
Av Mode



Partial 8-13%  
Av



Center Weighted  
Av Mode



Spot Focus - Metering  
Manual Mode



# My Favorites

- Av with Auto ISO
- Manual with Auto ISO
- Side note – in his “heyday”. Tom Watson hit 1000 golf balls a day – just for practice.