



Describe in detail what happened in the scene.

RGB-based VLM

The scene is **dark**, with only **a few distant lights** visible, including **a green traffic light** and some other indistinct lights that appear to be from vehicles or street lamps.

**Limitations**

Low dynamic range

Event-based VLM

The scene shows a street intersection with a **pedestrian crossing**. **A person** is crossing the street, and there are **traffic lights** and **road signs** indicating directions for vehicles

**Limitations**

No color/texture

Our RGBE-VLM(RGB+Event)

The scene shows a car driving on a road **at night**, approaching an intersection. The **traffic light is green**, and there are **other vehicles visible** in the distance. **Two pedestrians** are crossing the road, and there are **street signs** and trees lining the sides of the road.

**Advantage**

HDR +RGB texture

R✓E✗R+E✓

Green  
signal

R✗E✓R+E✓

Pedestrians  
Crossing

R✗E✓R+E✓

Vehicles  
ahead

R✓E✗R+E✓

At Night

R✗E✓R+E✓

Street  
Signs