

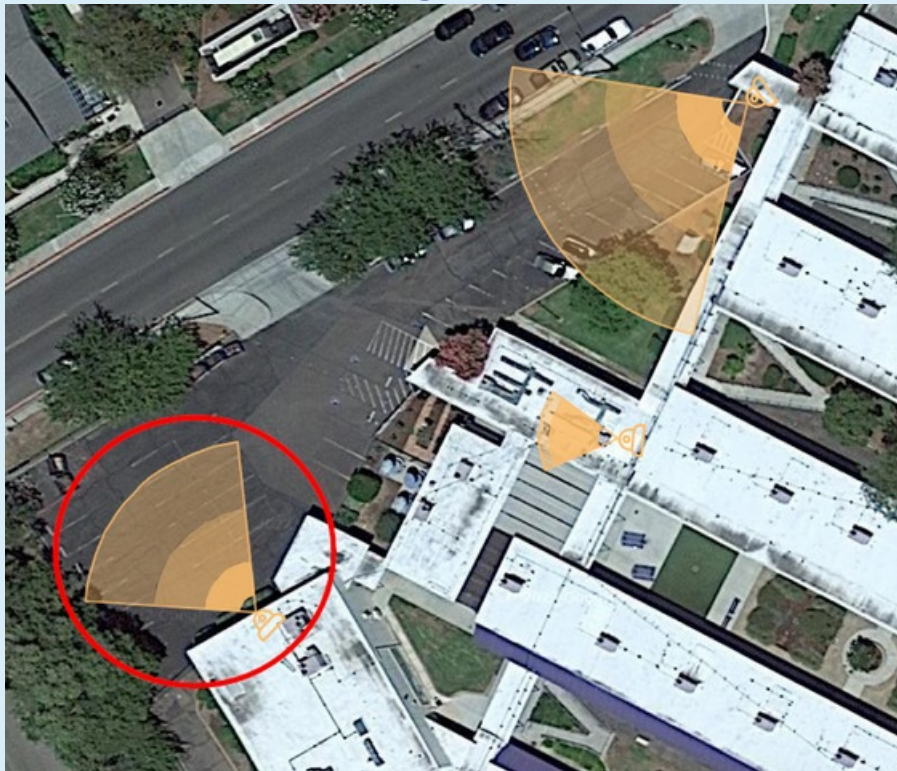
Analysis: Omnilert Gun Detection Test Performed 08/31/2022

Last Modified on 04/09/2024 12:53 pm PDT

This test was performed to evaluate the detection capabilities of the Omnilert Gun Detection solution in conjunction with selected surveillance cameras at Felicita and the District Office.

We began testing at Felicita at 6am on 8/31/22, waited until full daylight was available at 6:20, then met at the District Office to complete our testing.

Felicita parking lot cam 1



We got no detections from this camera. Below is a clip that I would like to review and understand how no weapons were detected. The officer at the top right with the rifle is at ~20ppf range, so not getting a detection there is understandable. However, the officer headed towards the bottom of frame pulls his weapon and holds it up well within advertised detection range. Could it be the object detection bounding box added by the camera?

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Here's a full resolution screenshot:



And the ppf approximation from IPVM:

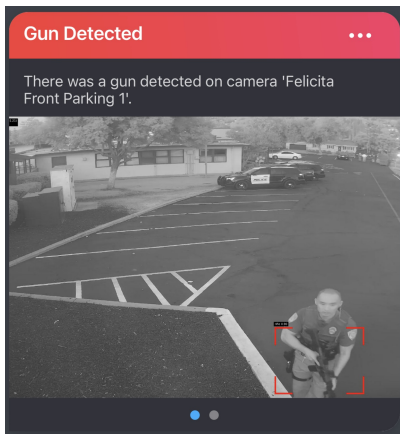


Felicita parking cam 2

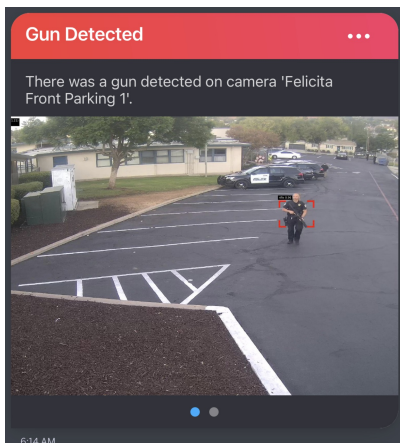


We got two detections from this camera once we were out of low-light conditions:

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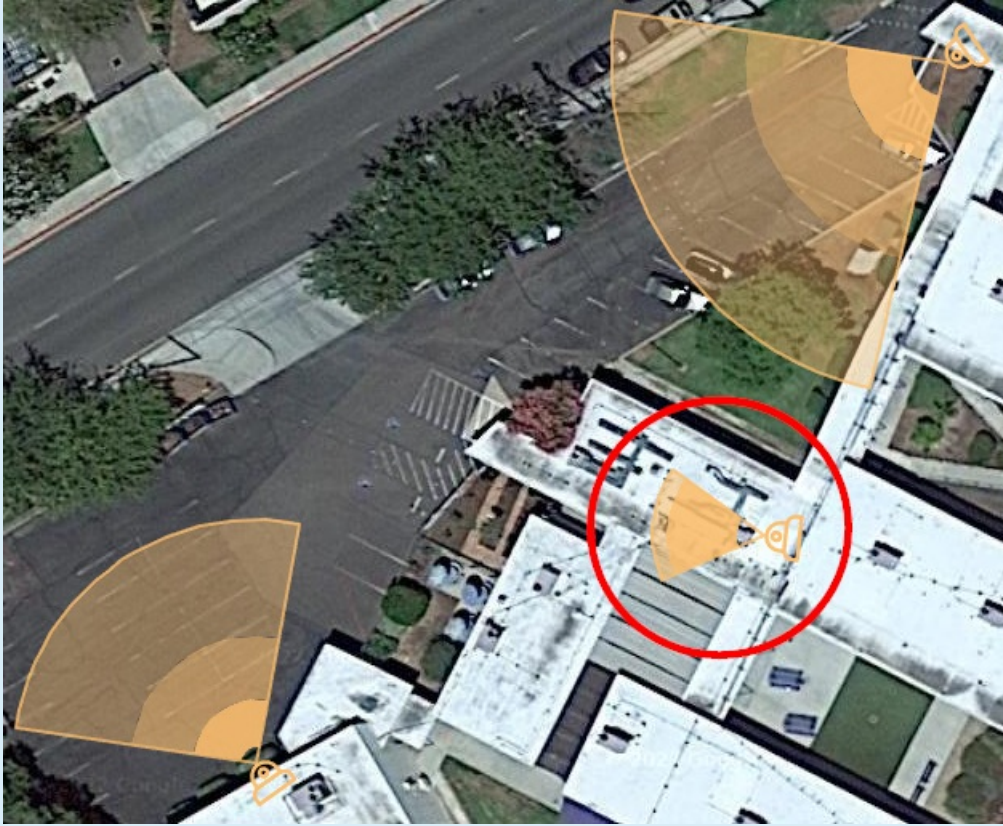


The officer was walking around with a rifle for a significant amount of time, and we only got these two detections, so that's a concern.

Raw footage:

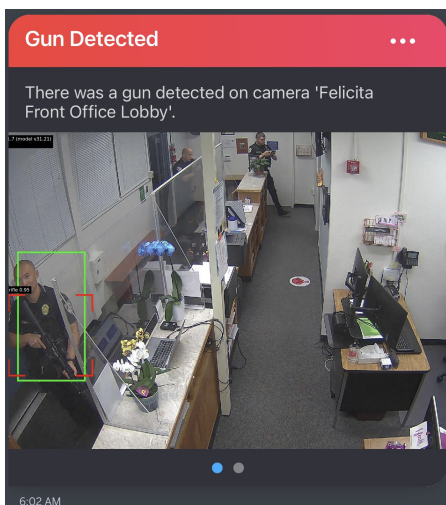
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- Your browser does not support HTML5 video.

Felicita lobby cam

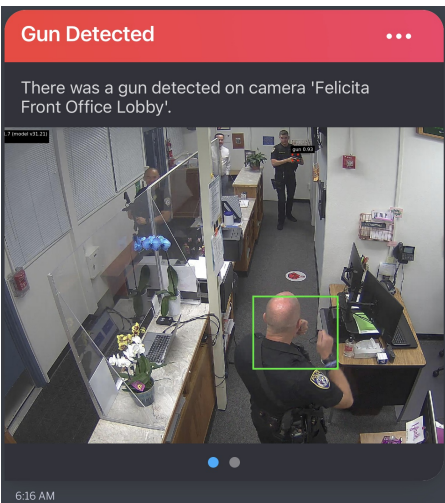
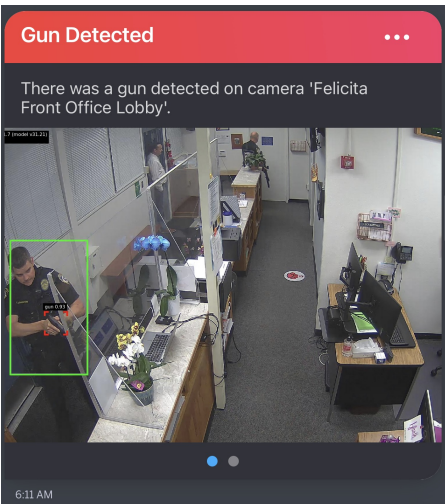
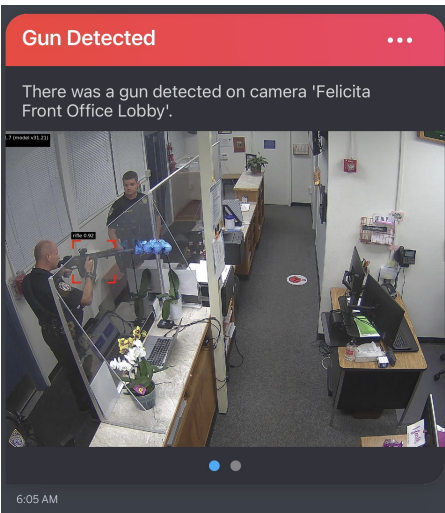


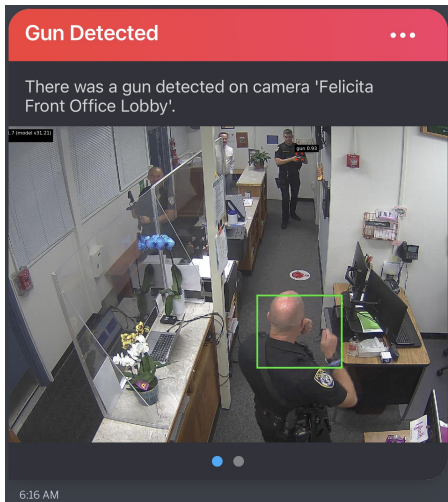
None of the detections occurred as the officers came in the public entrance (the far door from the camera view), so that's a camera mounting location issue, but in my opinion it also missed a large number of opportunities for detection--for instance, the second detection screenshot below shows the officer with the rifle in frame and very visible, but the detection is from the handgun in the foreground.

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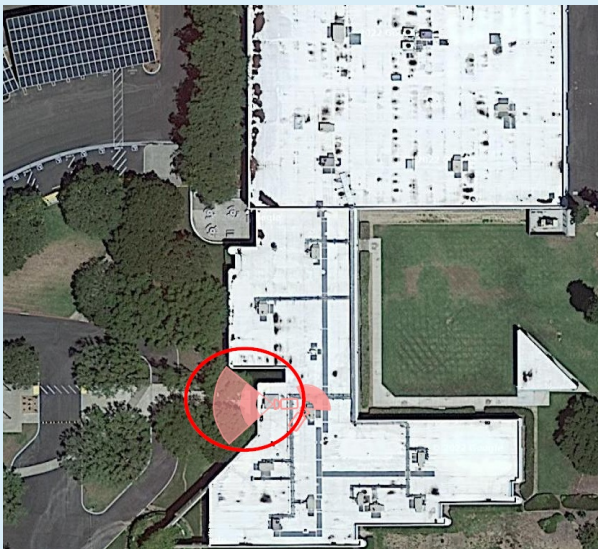


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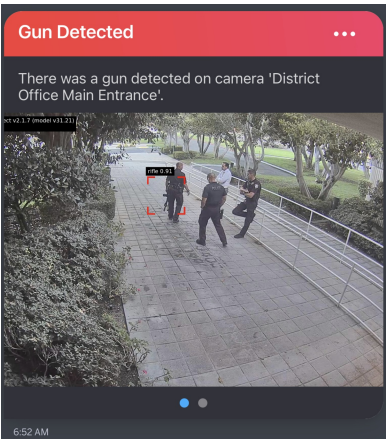
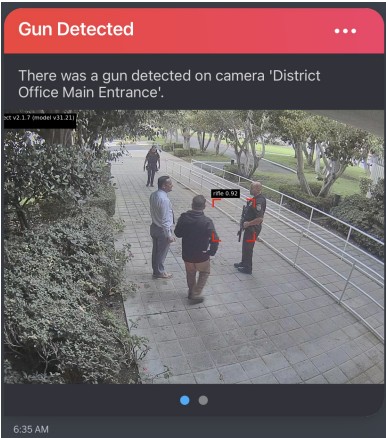
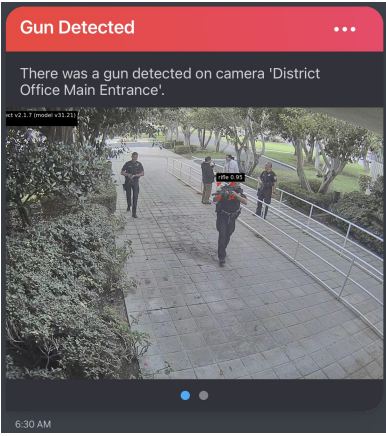


District Office entrance camera

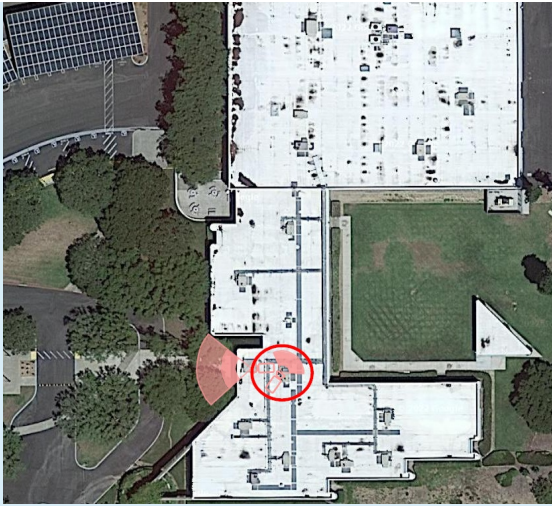


There were 3 detections from this older Sony camera, but detection alerts came slowly and there were much fewer detections than expected given how many times the officers walked in and out of frame with weapons drawn.

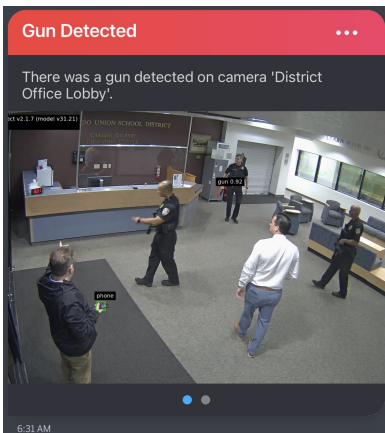
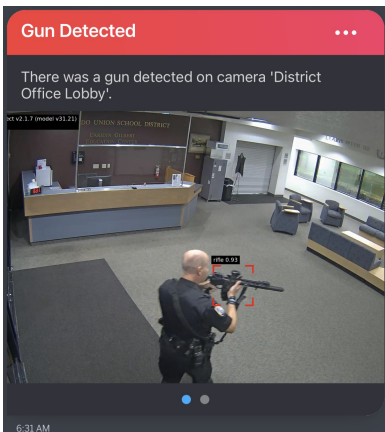
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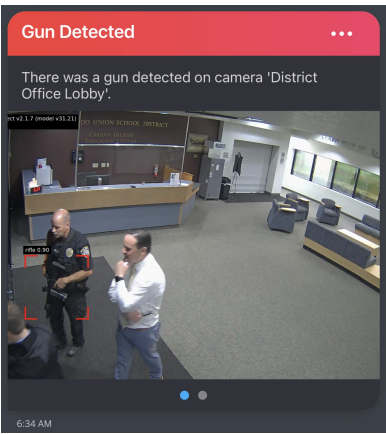
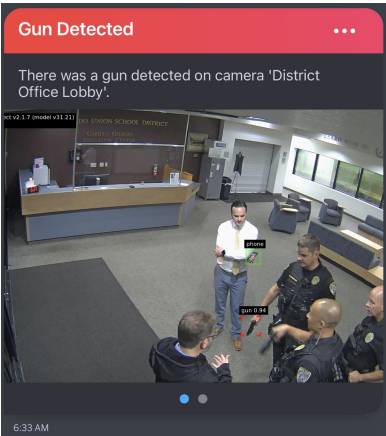
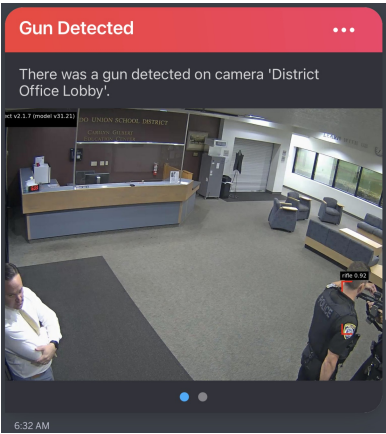
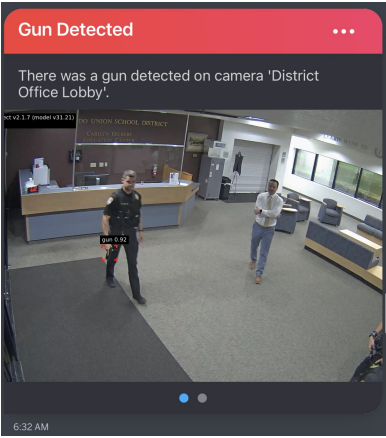


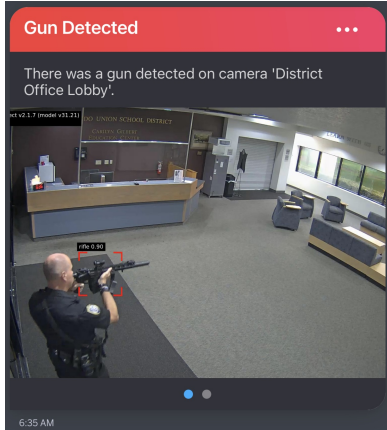
District Office lobby cam



This camera had 7 detections, but we would have expected many more from the amount of time spent in front of the camera with weapons displayed.

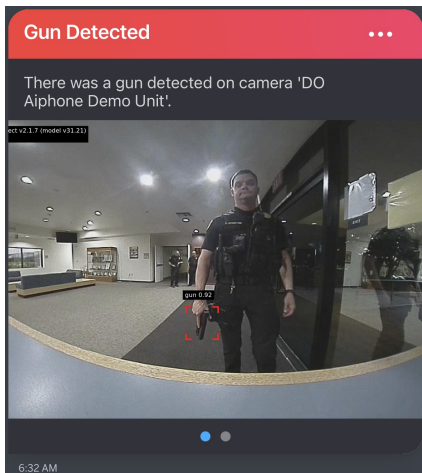






District Office Aiphone test unit (for site gates)

This was a test to see if this lower pixel unit that we plan to deploy to all sites' main entrance gates. There's no raw footage for this detection.



Gun Detected



There was a gun detected on camera 'DO Aiphone Demo Unit'.

ect v2.1.7 (model v31.21)



6:34 AM