Presenter 1: My family has a beach house on this beach during the summer. There’s a street on one side of the house, and the beach is right behind it! There are lights on the street, but they don’t really light up the street very well. There are always a lot of people walking around, and sometimes it’s hard to see them.

Presenter 2: The coolest thing about the beach house is that sea turtles lay eggs on this beach! The babies are so cute! We’re not allowed to go on the beach when the eggs are there or they’re hatching. The scientists who watch the eggs and sea turtles say that a lot of them are dying before they get to the water, even though they keep as many predators away as possible. Tracks appear in the sand in the morning show that hatchlings were unfortunately heading toward the street and away from the water. Sea turtles are endangered, and I wish I could do something to help them make it to the water.

Lights: 2 low pressure sodium street lights, 3 incandescent lamps on the back of the house, 1 incandescent lamp on the front of the house, 8 incandescent path lights from the back of the house down to the beach. All lights are on from dusk until dawn, which is about 11 hours a night.

One low pressure sodium street light has:
Wattage: 55
Lumens: 7800

One incandescent light bulb has:
Wattage: 60
Lumens: 840

Highway

Presenter 1: I’m a mom, and I have to commute from my home in the suburbs to the city center to get to work. I take the highway to get there. A lot of times, I have to drive home at night. There are streetlights on the highway, but they tend to shine in my eyes making it very hard to see. I’m scared that I’m going to get in a car accident some day.

Lights: 2 metal halide bulbs per pole, one pole every 1.5 miles (2.4 km), estimated 10 miles (16 km) of freeway travel. All lights are on from dusk until dawn, which is about 11 hours a night.

One metal halide bulb has:
Wattage: 1000
Lumens: 110,000
Presenter 1: I’m an astronomer at the observatory, located on a mountain outside of town. We do a lot of great research here! We’re becoming concerned, however, because as the city is growing and the light pollution is starting to affect us up here. If the lights get too bad, this observatory will become obsolete.

Presenter 2: I’m another astronomer at this observatory. We use red lights up here at night so that people can see and are safe, but so that they don’t interfere much at all with the telescopes. However, the city is starting to install LED billboards along the highway that runs by the mountain. These billboards are really going to affect the astronomers because they emit every color. Astronomers can’t take out all the colors from their images!

Lights: 2 LED billboards, 2 metal halide bulbs per pole, one pole every 1.5 miles (2.4 km), estimated 10 miles (16 km) of freeway travel. All lights are on from dusk until dawn, which is about 11 hours a night.

One LED light has:
Wattage: 202
Lumens: 13,620

One metal halide bulb has:
Wattage: 1000
Lumens: 110,000

Park

Presenter 1: I take my kids to this park a lot. There are some globe lights that come on after dark, but they don’t really light up the playground very well. I’m worried about my kids tripping while they’re playing.

Presenter 2: I come running at this park with my dog in the evening. The paths aren’t very well lit, even where there are lights. I think I’m going to have to find a new place to run, but this is the closest park to where I live.

Lights: Globe lights with incandescent bulbs, 2 by playground, 8 lights on paths. All lights are on from dusk until dawn, which is about 11 hours a night.

One incandescent light bulb has:
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Wattage: 60
Lumens: 840

School

Presenter 1: I’m the principal of this school. Our building is pretty old and some aspects need to be updated. We also spend a lot of money on electricity, and we need to save money somewhere to help with the updates needed.

Presenter 2: My son is on the student government at this school. Many times I have to pick him up after their meetings or events when it’s dark. The lights in the parking lot aren’t very good at lighting up the area. I worry about his safety. What if other cars can’t see him?

Lights: 12 low pressure sodium lights in parking lot, 10 metal halide security lights in wall packs on building. All lights are on from dusk until dawn, which is about 11 hours a night.

One low pressure sodium street light has:
Wattage: 55
Lumens: 7800

One metal halide light has:
Wattage: 400
Lumens: 36,000

Shopping Center

Presenter 1: I’m the manager of a store in this shopping center. There are a lot of parking lot lights that are really bright. I’m concerned because our store has been broken into three times in the last year. If this continues, we’ll have to close.

Presenter 2: I’m the manager of another store in this shopping center. Our rent and utility payments is really expensive. My store tries to keep our energy costs down, but all the stores split the electric bill for the parking lot lights.

Lights: 25 halogen parking lot lights, 10 low pressure sodium wall packs on buildings. All lights are on from dusk until dawn, which is about 11 hours a night.

One halogen bulb has:
Wattage: 75
The National Optical Astronomy Observatory’s
IYL2015 QLT Kit
Settings Video

Lumens: 1500

One low pressure sodium street light has:
Wattage: 55
Lumens: 7800

Sports Field

Presenter 1: I’m a soccer coach, and my team has practice here in the evenings. There are lights on the fields, but they’re really really bright. My kids complain that if the ball is kicked up high, they can’t see where it is. There are also tons of moths and gnats that fly around the lights, so the kids are always swatting them away.

Presenter 2: My daughter has soccer practice at these fields. The field lights are so bright that when I come to pick her up, I can’t tell what field she’s playing on because everything is washed out. I don’t want her roaming around the fields looking for me.

Lights: 6 poles per playing field, each with 12 halogen bulbs per pole. All lights are on from dusk until dawn, which is about 11 hours a night.

One halogen bulb has:
Wattage: 75
Lumens: 1500

Suburban

Presenter 1: I live in a suburb or neighborhood. This is my street and this is my house. There are streetlights on my street, which are great so I can see at night. But sometimes, they’re kind of annoying, like when they shine through my window and curtains at night when I’m trying to sleep. Also, my grandparents live out in the country, and they can see so many stars! I wish I could see them from my house!

Presenter 2: I also live on this street. Sometimes when I’m driving with my parents at night, they say it’s hard to see because the streetlights are too bright and shining in their eyes. One time, they almost hit our neighbor’s dog because they couldn’t see it because of the bright lights.

Lights: 4 street lights with high pressure sodium bulbs, one house has a globe light with an incandescent bulb. All lights are on from dusk until dawn, which is about 11 hours a night.
One high pressure sodium bulb has:
Wattage: 400
Lumens: 50,000

One incandescent light bulb has:
Wattage: 60
Lumens: 840