## U.S. Fish and Wildlife



## Suggested Exterior Lighting

- As a rule of thumb, fixtures should not emit any light at a vertical angle of greater than 90° straight down from the fixture (i.e. "Fully Shielded" or "Zero Uplight").
- Where external lighting not necessary for safety, building entrance, or circulation is being used, lights should automatically shut off (e.g. with timers) from at least midnight to 6:00 am local time.
- Ideally avoid or at least extinguish exterior vanity lighting (e.g., spotlights) or extinguish at time-certain (e.g, 10:00 pm local) especially during periods of breeding and bird migration when inclement weather may cause bird "fall out."
- Avoid using celebratory spot lighting since light beams have been well documented to attract migratory birds (Manville 2007, 2013).