

Bar Harbor Project Center

Dark Sky 2015

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Abstract

The purpose of this project was to protect Acadia National Park's night sky through quantitative and qualitative analysis of the Mount Desert Island lightscape. The project updated the external lighting inventory for the park, analyzed the light pollution coming from Bar Harbor, and conducted sky quality analysis of Acadia's night sky. The project culminated in the submission of an application for provisional Dark Sky Park certification to Acadia.

Acknowledgements

The team would like to thank John Kelly, Abe Miller-Rushing, Clayton Gilley, and Michael Marion for all the information they provided about Acadia National Park. This information was invaluable for the project. The team would also like to thank Professor Robert Traver, who helped the initial formulation of the project proposal, as well as Professor Frederick Bianchi, the project advisor.

Executive Summary

The night sky over Acadia National Park is in jeopardy. This is due to light pollution caused by major tourism and the surrounding towns. This project sought to help protect the night sky by analysis of the problems on Mount Desert Island. Techniques included inventorying, unintrusive evaluation, and sky quality measurements.

The primary focus of this project was the compilation of an updated inventory of external lighting fixtures within Acadia National Park. The inventory consists of information on all lighting fixtures, including shielding and lumen output. This information will be used by the park to assess how it can minimize its impact on the night sky.

The towns around Acadia are major contributors to skyglow. To document this, the project included an evaluation of Bar Harbor's commercial district. External lights were located on business properties. These lights were then assessed based on the same criteria used in the external lighting inventory for the park. A map was created using colors to illustrate the rate of compliance with outdoor lighting standards.

This project also included sky quality measurements within Acadia National Park. These measurements are used to quantify how dark the night sky is. Previous projects have examined this before. The findings of this project indicated little change from previous studies.

After completing the inventory, it was found that Acadia was 55% compliant with the International Dark Sky Association's outdoor lighting standards. Suggestions were made to the park on how to improve their outdoor lighting fixtures to have a lower impact on the night sky. These results did, however, prompt the park to pursue a provisional International Dark Sky Association certification. The team drafted an application packet for the park to facilitate this effort.

Future projects should focus on maintaining an updated inventory, as well as supporting the park in further developments toward full Dark Sky Park certification. Updated sky quality readings should be conducted periodically to monitor the health of the night sky.

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Authorship

All sections of the paper were edited by all members of the team. Below is a list of the primary authors of each section.

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Introduction

Acadia National Park is on Mt. Desert Island off the coast of Maine. The park's mission is to preserve the natural environment while making it accessible to the public. One major way ANP does this is through its proximity to towns. The Island has three major settlements on it: Bar Harbor, Northeast Harbor, and Southwest Harbor. These towns are major tourist attractions because they offer easy access to nature. However, the development of these towns threatens the natural environment around Acadia. One way the towns threaten the natural environment is light pollution. Acadia National Park is one of the few remaining areas where the night sky is still clearly visible. Unfortunately, as the towns produce more light pollution the view of celestial bodies is obscured. This jeopardizes preservation of the natural environment, one of the primary directives of the National Park Service.

The NPS is unable to directly affect what towns around the parks do. For Acadia National Park, this means that light emissions on MDI are left unchecked. Previous research has shown that the primary source of light pollution on MDI is the towns. This illustrates the need for guidance on managing the MDI lightscape within Acadia National Park and in the surrounding towns.

To manage the lightscape, Acadia National Park must have a clear idea of exactly what lights are in the park to begin with. An inventory of lights was created in 2011, but had not been updated since. Furthermore, the lights outside the park must be managed to maintain the night sky over Acadia, but the park has no jurisdiction over these towns. Given some political power, Acadia National Park could help the towns reduce their lighting impact on the sky over Mount Desert Island. This project updated the previous inventory of lights to provide Acadia with information about its own impact on the lightscape. In an effort to reduce light emissions from surrounding towns, this project collected data for the park about the surrounding towns. This helps the park by giving them quantitative data to influence the townships.

Literature Review

This chapter presents the literature that is necessary to understand light pollution and its effects on Acadia National Park. It outlines the national parks' struggle with light pollution, identifies organizations seeking to protect the night sky, examines and proposes light policy, and surveys the state of public involvement with preserving the dark skies.

2.1 National Parks and Light Pollution

National parks are places set aside to conserve the natural beauty or historical value of an area. The first national park was Yellowstone National park, established in 1872. Since then, the roster of national parks has grown to include 407 locations. To manage these locations, the National Parks Service (NPS) was created in 1916. The goal of the NPS is twofold. The first part of their goal is to preserve the sites of the national parks. The second part is to ensure that they remain accessible to the public (National Parks Services, 2015).

This dual purpose creates a difficulty. The NPS seeks to protect the parks, but by making them accessible they expose the parks to environmental peril. Light pollution is one of these perils. Visitors unwittingly cause strain on the parks, making it clear to the NPS that more action must be taken to ensure the parks remain beautiful for years to come.

2.1.1 Call to Action

The NPS is preparing to celebrate their hundredth year of natural stewardship in 2016. To usher in the next century of service, the NPS created a plan to better meet its two goals. This plan is called the *Call to Action* (National Parks Service, 2015). The *Call to Action* was introduced in recent years to set a path towards continued exceptional service to both nature conservation and public engagement. The plan includes goals to improve the public's access, enhance public education, preserve of the parks, and enhance the overall functionality of the NPS. Each park is working to fulfill these goals prior to the 2016 centennial mark (National Parks Services, 2015).

2.1.2 Acadia National Park

Located on Mt. Desert Island off the coast of Maine, Acadia National Park was established in 1919. Originally no more than 6,000 acres, the park has since grown to 46,000 acres (Kaiser, 2010). This growth has pushed the bounds of the park closer to the major towns on Mt. Desert Island: Bar Harbor, Southwest Harbor, and Northeast Harbor. While proximity to these towns provides easy access to the park, it comes at a cost. People living in an area inevitably cause some amount of pollution in the natural environment (Kocifaj & Lamphar, 2014). This creates a larger challenge when it comes to preserving the park's natural beauty. A prime example of this can be found by looking at the night sky.

2.1.3 Light Pollution and its Causes

Light pollution is the scattering of light in the atmosphere (Rabaza et al, 2014). This can come from various sources, both natural and artificial. These include particulates in the air, the moon and stars, and artificial lighting from cities and towns (Albers et al, 2001). Light pollution is a quickly growing problem in expanding urban areas. In 2001, 93% of the United States population lived in an area with night sky brightness greater than natural light, with 30% living under night skies with brightness greater than 27 times that of natural light (Cinzano et al, 2001).

As people move into an area, the number of lights in that area increases. This inevitably creates urban light pollution, called skyglow, in the surrounding areas (Kocifaj and Lamphar, 2014). While it is true that urban areas obscure the night sky, the population model for estimating light pollution is not entirely accurate. However, when urban population data is paired with robust light scattering models, a much more accurate account of lighting at night can be created (Albers et al, 2001). This combined model also takes into account particulates in the air, cloud cover, and other atmospheric conditions. This is important because these factors are not directly affected by population (Cinzano et al, 2001). This is relevant to National Parks because generally they are not near cities and other urban areas (Albers et al, 2001).

2.1.4 The Lighting Problem

The night sky is something often forgotten in urban environments, but in the national parks it is a precious resource. Previous studies of light pollution show that in 1990 many of our national parks had clear night skies. However, the combination of

rapidly growing populations and high light output per capita has exceeded the model's predictions. Fortunately the models can still be used to pinpoint national parks that are or will be threatened by these factors (Albers, 2001).

Lighting at night is important for both activity and safety. The drawback is that too much artificial light can obscure the night sky. Light in towns is necessary for safety, but an issue arises when that light spills into the sky as skyglow. Skyglow obstructs the visibility of celestial bodies (Kocifaj & Lamphar, 2014). The man-made skyglow is not the only factor that contributes to night sky brightness. There are other sources. These include the stars in the Milky Way, the moonlight, and light reflected by air molecules. Though their effect is significant, it is also natural. Thus to ensure the preservation of the diminishing, natural, dark skies, reducing artificial light is key.

2.2 International Dark-Sky Association

The International Dark-Sky Association is a non-profit organization whose goal is

to preserve the night sky. This group recognizes that the night sky is worth preserving in a way analogous to land preservation. By raising awareness for this waning resource the IDA seeks to save more of the night sky from light



Figure 1: IDA Dark Sky Parks

pollution's glare. Therefore, any area that receives IDA Dark Sky Park recognition will

be well known for its starry skies. This recognition also motivates parks to maintain their dark skies through action, outreach, and public education (IDA, 2014).

However, eligibility guidelines have to be met to obtain recognition. These guidelines state that a "park" area can be any land protected by the public with 24/7 access and exceptional night sky quality. The IDA determines sky quality via three classifications called Sky Quality Tiers. The tiers are Gold, Silver, and Bronze. These tiers are based on several criteria including philosophy, artificial light & skyglow, observable sky phenomena, nocturnal environment, visual limiting magnitude, Bortle sky class, and the Unihedron sky quality meter (IDA, 2013).

Minimum requirements to meet the standards of these Sky Quality Tiers are extensive. For all parks a complete Lightscape Management Plan must be developed. The LMP will include current outdoor lighting standards, an illumination level policy, and



Figure 2: Compliant vs Non-Compliant Lighting

ensure fully shielded fixtures and energy efficient bulbs to minimize environmental impact. Even with the LMP the IDA also requires that the park shows its commitment to these changes. Nominated areas must monitor light pollution levels, organize dark sky education programs, and maintain signs indicating IDA Dark Sky Park status. Although this

designation cannot be taken away, its legitimacy is threatened if minimum requirements are not maintained (IDA, 2013).

In order to be considered for Dark Sky Park status, the park must show its commitment to maintaining a dark sky by making 66% of its external light fixtures

compliant with its Lightscape Management Plan. This requirement is important because the parks must set an example for how to properly light its outdoor areas for everyone that visits, as well as businesses around the park.

IDA DSP recognition provides many benefits to a park area. The IDA will support member organizations and work side-by-side with the park to advance dark sky goals. The location will be designated as a Dark Sky Park on IDA's web page. As a Dark Sky Park it can display the IDA logo as recognition of the park's involvement with the IDA. This logo can be used in reference to the park area when raising awareness and promoting the preservation of its sky (IDA, 2013).

2.3 Light Policy

Acadia National Park, being a National Park, follows the National Park Service's (NPS) Management Policies. These policies are outlined in a document last updated in 2006. Section 4.10 of this document concerns lighting policy within the National Parks. This section dictates that the NPS will limit artificial lighting use to where necessary, use minimal-impact lighting techniques, and shield the use of artificial lights.

Beyond the parks, communities can also contribute to the reduction of light pollution. Creating light policies is an essential part of this. In efforts to tackle the issue of light pollution the IDA and the Illuminating Engineering Society (IES) developed a Model Lighting Ordinance (MLO) to address the need of an outdoor lighting regulation. The MLO acts as a guide to help municipalities set lighting standards to reduce the negative effects of manmade lighting (Darksky, 2014).

Some organizations disagree with the MLO model. The Illinois Coalition for Responsible Outdoor Lighting state that it is not the best model to follow for setting light regulations. Instead they created their own model by looking at the Pattern Outdoor Lighting Code (POLC) updated by the Naval US Observatory. Many municipalities follow POLC to develop a set of lighting ordinances for their own city or town (illinoislighting, 2011).

The town of Bar Harbor has its own lighting ordinance. This ordinance regulates all site plans filed after December, 4 2008 to comply with exterior lighting requirements. These requirements include a threshold for maximum lumens to be used and that all new lighting fixtures follow IES specifications. Bar Harbor's ordinance fulfills two goals: to protect the environment by preserving the night sky and conserving energy, but still allowing people to use lights at night (Town of Bar Harbor, 2008).

Two other towns on MDI also have lighting ordinances. Southwest Harbor has an ordinance for exterior lighting standards. The ordinance states that the lights should be shielded and designed to have minimal effects on neighboring properties (Town of Southwest Harbor, 2011). The Town of Mount Desert also has a lighting ordinance. This ordinance addresses the preservation of the night sky. It states that all outdoor lighting needs to be retrofitted to be dark skies friendly and calls for reducing the amount of street lights to minimize light pollution (Town of Mount Desert, 2009).

2.4 Public Involvement

Light pollution, like many other environmental issues, needs public attention. There are multiple programs and campaigns around the world dedicated to raising awareness of the diminishing, natural night sky.

2.4.1 The Dark Skies Awareness Project

The United Nations Educational, Scientific and Cultural Organization declared 2009 the International Year of Astronomy. The Dark Skies Awareness was created as a Cornerstone project for that year. This project was the result of collaboration between several organizations, including the International Astronomy Union and the UNESCO, that were concerned with preserving the night sky (darkskiesawareness, 2009). There are multiple citizen-science programs that promote the preservation of the night sky around the world. These programs were developed because of the Dark Skies Awareness Project.

2.4.2 GLOBE at Night

GLOBE at Night was established in 2006 and has seen its activities increase since the International Year of Astronomy. GLOBE aims to raise awareness of the impact of light pollution by asking people to measure their night sky brightness and submit their observations. The results over the years show that this program is a huge success. People from 115 different countries have contributed more than 100,000 measurements. The success of this program is clear evidence of the effectiveness of citizen science programs (globeatnight.org, 2014).

2.4.3 Let There Be Night

Another citizen science program is Let There Be Night. This is an educational program designed for students between grades 3-8. It was created to help students realize the scope of sky glow and its effect on the night sky. In 2009 over 3400 student participated in the program. Students were asked to observe Orion over several clear

nights. Then they were asked to build a model out of LEGOs to illustrate the effects of light pollution and how much of the night sky is gone (lettherebenight, 2009).

2.4.4 Acadia Night Sky Festival

Beyond protecting the night sky, there are also programs aimed at celebrating it. One such program is the Acadia Night Sky Festival. The Acadia Night Sky Festival is an annual event that promotes both enjoyment and preservation of Acadia's night sky. This festival began as a celebration after the successful vote on implementing the 2009 lighting ordinance in Bar Harbor. The festival promotes the beauty of the dark sky on Mount Desert Island through guided star gazing events. In addition, it fosters knowledge of good lighting practices to preserve the night sky (acadianightskyfestival, 2014).

2.5 Previous Work on MDI

Previous work in researching the dark sky was conducted on MDI. In 2011, Christine M. Kercell created an inventory of lights within Acadia National Park. This inventory includes locations, pictures, and technical information of every fixture in the park. It also includes information on whether or not the fixtures are fully shielded and thus compliant with the park's Lightscape Management Plan. In 2013, a team from WPI built on work provided by College of the Atlantic. The WPI team documented the quality of the night sky and generated a baseline for future teams (Roth, et al, 2013). In 2014 a second WPI team collected more data on night sky light levels and prepared a detailed sky quality map. In addition, they created a video that promotes Acadia's night sky, and began review of the IDA certification process. (Plenefisch, et al, 2014)

Methodology

The primary objective of this project was to protect the night sky on Mt. Desert Island (MDI). This was achieved by using preservation techniques within Acadia National Park and noninvasive research outside the park. The updating of the lighting inventory and the push towards IDA recognition presents these approaches.

3.1 Light Management within Acadia

The first part of the project gathered information inside Acadia. Quantitative data on the quality of the sky was gathered alongside qualitative data on lighting fixtures in use in the park.

3.1.1 Evaluating Sky Quality

Sky quality is a measure of the brightness of the night sky. Past teams measured the quality of the night sky on MDI to provide baseline data (Ruth, et al, 2013;



Figure 3: Moon Phase Chart July 2015

Plenefisch, et al, 2014). These measurements were repeated to maintain current quality readings on the sky. Current quality readings are essential to knowing where and how the park may improve its night sky. The team used Unihedron Sky Quality Meters (SQM), the same device used by previous teams, to take these readings. These readings were done 2 nights to either side of the new moon, to avoid using

July 2015

mathematics to adjust for the light of the moon in the readings. The creation of a new campground on the Schoodic Peninsula necessitated taking readings on Schoodic Peninsula to create a baseline for future readings.

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Figure 4: Unihedron Software Snip

3.1.2 Light Inventory



In order to improve the night sky within Acadia, the park must monitor all the light

that it emits. Kercell's inventory of lights from 2011 identified all the lights within the park. However, the inventory had not been updated since its initial creation. This inventory of lights was provided for the team at the beginning of the project. The inventory was used as a guide to document all the changes to the lightscape that occurred within the past four years. Following Kercell's format, the team added

Figure 5: Lighting Inventory Map

pictures and information on every light fixture within the park that had been changed. The team walked around with a clipboard and documented changes in light fixtures. For new fixtures, maps were created in Microsoft Excel. Each fixture location was marked on these maps. Information concerning these lights was added once the framework of the inventory was complete. Lights were evaluated based on the shielding of the light, being compliant if they emit no light at or above the horizontal.

3.2 Light Management outside Acadia

Protecting Acadia's dark sky goes beyond the park itself. Awareness must be raised outside the park. The park has many programs that educate the public about the night sky and how to protect it. However, Acadia's lack of jurisdiction in many areas of MDI limits the effect that the park's stance on lighting has on actual lighting policy.

3.2.1 Evaluating Lighting Efficiency

Previous teams have determined the towns of MDI have a significant impact on the sky quality. Reducing light pollution from these towns on the island will significantly improve sky quality in and around Acadia National Park. In order to provide Acadia with data suitable for action, the team conducted light efficiency surveys within Bar Harbor. Using the tax maps of Bar Harbor, each property's use of lighting was evaluated. The shielded and unshielded external lights were counted for each property. A percentage of unshielded lights was then generated for each property, and a heatmap was created using Photoshop to color in each property in the commercial areas of Bar Harbor.

3.2.2 Lighting Policy

One effective way to manage light pollution is with ordinances. Currently, there are ordinances to help reduce light pollution in Bar Harbor and Southwest Harbor. However, these ordinances can be modified to more effectively reduce light pollution and protect Acadia's night sky. Even though the park does not have jurisdiction, suggestions were made to the park on how to influence local municipalities. The quantitative and qualitative data gathered in the Bar Harbor Lighting Survey provides Acadia with a tool to influence policy changes for Bar Harbor.

3.3 Certification

To be certified as an International Dark Sky Association Dark Sky Park, an area must meet the minimum requirements set out by the International Dark Sky Association. Previous work in Acadia showed the team that Acadia met many of the minimum requirements, but the application had not been completed, and a few key pieces of information had not been gathered. The largest of these was the lighting inventory necessary to show the light fixtures in the park. The IDA requires 66% of all fixtures in the park to be compliant with the park's Lightscape Management Plan. For Acadia, this means that their lights must be fully shielded and emit no light at or above the horizontal. In order to progress in the application for IDA recognition, Acadia needed a figure for how many lights were compliant. Acadia did not meet the 66% requirement.

However, the IDA offers provisional certification for parks not meeting all the requirements. Compiling the application was done mostly by the WPI team. The team wrote out an action plan for the park, a necessary part of the application. The team also provided evidence for sky quality using the data collected with the Sky Quality Meters.

The last piece of the application is a letter from the park illustrating commitment to maintaining a Dark Sky Park. For this requirement, the WPI team handed the application over to the park staff, who will take the last steps to finish and submit the application

3.4 Summary

Preserving Acadia's night sky requires two approaches to light management. First, Acadia needs to manage the lights within its borders. Then the towns around Acadia need to manage their own lights more efficiently. Within the park, the team updated the lighting inventory, which helps the park determine the best course of action regarding light upgrades. Outside the park the team performed a survey on Bar Harbor's lights. This survey will be used as a tool for the park to influence Bar Harbor's lighting standards. The tools created by the team will be used in the future to help ensure that Acadia's skies will remain dark.

3.5 Ethics

The team adhered to all ethical standards. The data was collected in a nonintrusive manner. All data collected was complete to the best of the team's knowledge.

3.6 Timeline

Task	6/15	6/22	6/29	7/6	7/13	7/20	7/27	8/1
Dark Sky Project								
Lighting Inventory								
SQM								
Light Evaluation								
Final Paper								

Figure 6: Timeline of Project

Results

This chapter will discuss and expand on the findings of the team on Mount Desert Island. The findings aim to provide information useable by the park to advance its Dark Sky Initiative.

4.1 Lighting Inventory

The Lighting Inventory provided a clear outline of the current state of ANP's



compliant lighting status. The Park had a total of 928 external lighting fixtures. Of these fixtures, 511 were compliant. These findings indicate that ANP has increased its percentage of compliant fixtures from 41% in

2011 to 55% in 2015, an increase of 14%. The inventory and these results were provided to the park along with recommendations on how to continue to raise the percentage of compliant lights. Suggestions were made based on what lights would be easiest to change and what lights would have the most impact on the lightscape if changed. These are found in Appendix A.

Figure 7: Bar Graph of Lighting by Location

4.2 Bar Harbor Lighting Analysis

Evaluation of the external lights in the commercial area of Bar Harbor confirmed previous findings. The glare seen from the top of Cadillac Mountain is the result of Bar Harbor's inefficient lighting practices. The analysis was both quantitative and qualitative. The analysis showed the number of compliant and non-compliant fixtures on each building. The map resulting from this analysis provides an illustration of the amount of unnecessary lights in town. These results will act as a baseline for future studies in towns around Acadia.



Figure 8: Bar Harbor Tax Maps Colored Based on Total Lights and Compliant Percentage

4.3 Sky Quality Measurements

A total of twenty seven distinct points were chosen for sky quality measurements. The points provided a thin coverage of ANP including its new acquisition on Schoodic Peninsula. All readings were found to be above 20 mpsas, satisfying the IDA's Bronze tier sky quality criteria. The average reading was a 21.48 mpsas, falling within the range



for Silver tier sky quality. The findings indicated little or no change to the quality of the sky scape since the previous year. These measurements can be found in Appendix E.

Figure 9: Sky Quality Measurements

4.4 IDA Provisional Application

Findings indicated that although Acadia National Park would not qualify for full DSP status, it would be able to apply for Provisional status. The team formulated a proposed application for Provisional Dark Sky Park Status. The application was submitted to the park for review and approval. Submitting the application to the IDA was left to the park to complete. Becoming a Provisional DSP will aid the park in gathering funds to update its light fixtures in order to become a full IDA DSP. This application can be found in Appendix C.

Recommendations

The results of the team's work advanced ANP's progress towards full IDA DSP certification. Continual work by the park and future teams is needed to complete this objective. The following outlines the recommended course of action for both ANP and future WPI teams working on this problem.

5.1 ANP Recommendations

In order to organize the recommendations to the park, two lighting update scenarios were examined. The first of these was what the team felt were the simplest lights to update. These include similar lights grouped together closely, broken lights, and fixtures that the park already has solutions to. These fixtures from the inventory are organized into a table, with the recommended course of action listed with each individual fixture. These suggested changes would bring the park over the requisite 66% for the IDA's Dark Sky Park recognition. The simplest lights to update will allow the park to do this at the lowest cost of labor and light fixtures. Below is a simplified version of the update scenario.

Location	Number of lights
Park Headquarters	43
Jordan Pond House	53
Seawall Campground	44
Total	141

The second scenario examined by the team was the highest impact scenario. The suggestions made to the park in this scenario are those that would have the largest impact on the night sky, disregarding cost of replacement. These suggestions include changing fixtures that emit a large amount of light, such as floodlights. These lights are difficult to replace because they are often mounted on buildings and pointed away to make useful light away from any structures. To make that same usable light, the park would need to install posts to mount downward-facing shielded fixtures. The cost of installing these extra structures would bring up the overall cost of updating to the IDA's requisite 66%. While these suggestions have the largest impact on the night sky, they would also require larger allocations of funding than the simplest solutions. The full tables for updating for these two scenarios may be found in Appendix A.

5.2 Future Work

The final task for Acadia's DSP certification, excluding compilation of the application, is obtaining the required two-thirds compliant lighting in the park. Future teams should ensure the Lighting Inventory is kept up to date, allowing the park to move on to full IDA DSP certification as soon as possible. In addition to updating the inventory, SQM readings need to be continued to maintain eligibility for DSP status.

Conclusion

Acadia National Park is on its way to official status as a DSP with the IDA. This is important for protecting the night sky over Mount Desert Island. If the park follows the team's suggestions, the park can qualify for the IDA's compliance standards. These standards are the main obstacles for the park's full certification. Once the park is compliant, it may apply for Dark Sky Park status.

After inventorying the lights within the park, the team has found that the park has made progress in updating to dark-sky fixtures. The park administration is working to take steps towards protecting the night sky. The inventory will be used to further the administrator's efforts. The park will use the inventory as a guide to determine where they must make updates. This is an invaluable piece of information for the park. Further teams in Acadia should make a point to continue this work; to keep the inventory current; to maintain good dark-sky standards.

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Appendices

Appendix A: Proposed Solutions for Lighting Compliance

Introduction

These suggestions are proposed to Acadia National Park by the 2015 Worcester Polytechnic Institute Dark Sky Team consisting of Rayan Alsoby, Lucas Muntz, Liam Ogren, and Charlie Sinkler

This document includes information on two different solutions the Park could follow to help with reaching the 66% compliant lighting that is required by the IDA to become a dark sky park. The two proposed solutions will refer to the lighting inventory document to address the fixtures. The information will include the fixture code, the current application of the light, the suggested fix, and the number of lights that are in a similar situation.

The two solution are as follows: a simple solution and a highest impact solution. The simple solution looks fixtures that would be easier for the park to retrofit. The highest impact solution focuses on the lights that have the highest impact on the night sky.



Examples of good lighting from Blackwoods Campground:





Figure 1: Wall mounted shielded fixture

Figure 2: Celling mounted shielded fixture

Figure 3: Shielded path lighting

Simple Solution

This list is compiled from the Lighting Inventory, using fixture numbers to identify lights.

The lights included in this list are those that are concentrated in an area and are easiest

to change and are usually of the same type:

- Wall mounted lights
- Path Lights
- Celling lights
- Broken or unused fixtures

Typical suggested changes are to:

- Replace lights with wall or ceiling mounted, or path lights that are fully-shielded fixtures. These are defined as not emitting any light at or above the horizontal.
- Remove the fixture if it is not in use.
- Remove the diffuser so the light does not diffuse at or above the horizontal.

Fixture Number	Current Use	Suggested Change	Number of Fixtures
HQ1-2, HQ5-6, HQ8, HQ15	Building Entry	Remove the diffuser	6
HQ7, HQ9-10, HQ12-13, HQ16, HQ19, HQ22-23, HQ25, HQ27, HQ31, HQ34-35, HQ41-42, HQ58- 59, HQ65-66, HQ71, HQ77-78, HQ89, HQ91-92	Area/ Building Lighting	Replace with wall mounted shielded fixtures	26
HQ28, HQ60-61	Not in use	Remove Fixture	3

HQ17-18, HQ20- 21, HQ36-38, HQ43, HQ70	Area/ Building Lighting	Replace with recessed fixture	9
JPH16-38, JPH42, JPH94- 107	Path Lighting	Replace with shielded path lighting	38
JPH39-41	Path Lighting, Sunken into the ground	Remove or Replace with shielded path lighting	3
JPH9, JPH14, JPH43-47, JPH55-56	Area/ Building Lighting	Replace with wall mounted shielded fixtures.	9
JPH54	Not in use	Remove Fixture	1
JPH57-58	Building Lighting	Replace with recessed fixture, or make it fully shielded	2
SW79	Garage, not in use	Remove Fixture	1
SW21-24	Path Lighting	Replace with shielded path fixtures.	4
SW5, SW52-59, SW79	Area/ Building Lighting	Replace with a wall mounted shielded fixtures.	10
SW33-51	Path Lighting	Replace with shielded fixtures or install better shielding	19
SW68-77	Area/ Building Lighting	Replace with recessed or shielded fixtures	10
		Total Number of Lights	141

Highest Impact Solution

This list is compiled from the Lighting Inventory, using fixture numbers to identify lights.

The lights included in this list are those that have the highest impact on the night sky:

- Unshielded lights
- High output lights
- Upward-facing lights

Typical suggested changes are to:

- Replace lights with shielded fixtures, which would be wall or ceiling mounted, fully-shielded fixtures. These are defined as not emitting any light at or above the horizontal.
- Replace lights with post lamps. These are pole-mounted, fully shielded lights that also do not emit any light at or above the horizontal. These are useful for area lighting away from buildings.

The most common issue with lighting in the park, as far as impact on the night sky is

concerned, is the common use of floodlights from buildings as area lighting. Because of

the need to point these fixtures out and away from buildings to create useful lighting

areas, the fixtures put a lot of light into the sky. Replacing these with properly placed

post-mounted shielded lighting would be a major step forward for the park.

Fixture Number	Current Use	Suggested Change	Number of Fixtures
BW1, BW2	Flag Lighting	Replace with better shielded lighting or Pole mounted lighting pointing down	2

BW34, BW35	Area Lighting	Replace with shielded post lamp,	2
		rather than building-mounted flood	
BW63-66	Building Lighting	Replace with a wall mounted shielded fixtures.	4
CM1, CM2	Area Lighting	Replace with better shielded lighting or Pole mounted lighting pointing down	2
CM4	Area Lighting	Replace with better shielded lighting or Pole mounted lighting pointing down	1
DH1-3	Building Lighting	Replace with a wall mounted shielded fixtures.	3
DH4	Area Lighting	Replace with shielded post lamp, pointing down	1
EL1, EL2, EL4-7	Area/Building Lighting	Replace with a wall mounted shielded fixtures.	6
ES2-4, ES6-7, ES9-10	Building Lighting	Replace with a wall mounted shielded fixtures.	7
FM1-3	Area/Building Lighting	Replace with a wall mounted shielded fixtures.	3

HF9-16	Area/Building	Replace with shielded fixtures, or	8
	Lighting	install shielded post lamps and	
		remove building lights	
HQ11	Area Lighting	Replace with shielded fixtures, or	1
		install shielded post lamps and	
		remove building lights	
HQ12	Building	Replace with a wall mounted	1
	Lighting	Silleided lixidies.	
HQ24	Area Lighting	Replace with shielded fixtures, or	1
		install shielded post lamps and	
		remove building lights	
HQ30	Area Lighting	Replace with a wall mounted shielded fixtures.	1
HQ39-40	Flag Lighting	Replace with flagpole-mounted	2
		downward lighting (shielded)	
HQ48	Area Lighting	Replace with post lamp or other	1
		shielded solution	
HQ55	Area Lighting	Replace with post lamp or other	1
		shielded solution	

HQ62-63	Area Lighting	Replace with post lamp or other	2
		shielded solution	
HQ67-69	Area Lighting	Replace with post lamp or other	3
		shielded solution	
HQ74-75	Building	Replace with shielded building	2
	Lighting	light	
HQ76	Area Lighting	Replace with post lamp or other	1
		shielded solution	
HQ79-80	Streetlight	Replace with shielded Streetlight	2
HQ91-92	Building	Replace with shielded building	2
	Lighting	light	
HC49	Area/Path	Replace with shielded path	1
	Lighting	lighting or shielded post lamp	
		(This fixture in particular seems	
		out of place, not thought through)	
IH3-4	Area Lighting	Replace with shielded fixture or	2
		post lamp	
IF2-3	Area Lighting	Replace with shielded fixture or	2
		post lamp	

JPH8, JPH15	Building	Replace with shielded fixture or	2
	Lighting	post lamp	
JPH54, JPH59	Area Lighting	Replace with shielded fixture or	2
		post lamp	
JPH108	Area/Street	Rotate down, if needed more	1
	lighting	illumination area, install another	
		post lamp pointed down.	
NC1-2, NC5	Building	Replace with a wall mounted	3
	Lighting		
NC4	Area Lighting	Replace with shielded fixture or	1
		post lamp	
SB1-4	Building	Replace with a wall mounted shielded fixtures.	4
	Lighting		
SBH3	Building	Replace with shielded fixture	1
	Lighting	(especially bad; bare bulb)	
SP1-2	Sign Lighting	Replace with downward-facing	2
		shielded lighting	
SP11	Area Lighting	Replace with shielded fixture or	1
		post lamp	

SP52, SP55,	Area Lighting	Replace with shielded fixture or	9
SP58, SP60,		post lamp	
SP65, SP69-71,			
SP163			
SW1-2	Area Lighting	Replace with shielded fixture or	2
		post lamp	
SW27-30	Area/Stage	Replace with shielded fixtures or	4
	Lighting	post lamps facing down. Stage	
		lights can be recessed	
SW52-59	Building	Replace with a wall mounted shielded fixtures.	8
	Lighting		
SW79-82	Area/Building	Replace with shielded fixtures or	4
	Lighting	post lamps	
TI1	Area Lighting	Replace with shielded fixture or	1
		post lamp	
WS15-20	Area/Stable	Replace with shielded fixtures or	6
	Lighting	post lamps	
	<u>.</u>	Total Number of Lights	115

Appendix B: Simplified Provisional IDA DSP Status Checklist

- Initial SQMs
 - Include heatmap from last year
 - Have 20 data points with GPS coordinates in a table
- At least bronze sky quality criteria met
 - o 20 or greater in Unihedron scale
 - Pictures of Milky Way and Andromeda Galaxy
- Documented intent to create a dark sky park
 - Letter from John Kelly
 - Letter from Sheridan Steele
- Action Plan
 - Examine Park's efforts since 2011
 - Show the intent of the park to improve lighting.

Appendix C: Provisional Application

Acadia National Park Provisional

Application

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INTRODUCTION

With the Centennial Anniversary for the National Parks occurring in 2016, a new focus has been put on preserving the natural resources of the National Parks. One of the resources warranting attention is the night sky. Acadia National Park in Maine is highly renowned for its exceptional night sky quality. It draws many people every year to see the stars for both recreation and research. Driven by the approaching Centennial, ANP has been working hard to gain a better understanding of their skyscape. Various teams from several private institutes have been brought in to study it, and their findings have suggested ANP is nearly eligible for the International Dark Sky Association's Dark Sky Park certification. The following is an application for Provisional Dark Sky Park status for Acadia. The Park believes that provisional certification would provide the incentive needed to push for the changes to become fully certified as a DSP within the next three years.

LETTERS OF INTENT

SKY QUALITY INTERPRETATION

SKY QUALITY MEASUREMENTS

Latitude	Longitude	mag/arcsec^2
44.3756532	-68.2336106	21.14
44.3782027	-68.2287363	20.94
44.3599067	-68.1882377	21.42
44.3298488	-68.1837037	21.36
44.3143356	-68.1960952	21.32
44.3029621	-68.2027713	21.35
44.3198806	-68.2532924	21.22
44.3115794	-68.2853811	21.21
44.3639737	-68.3061702	21.25
44.3755419	-68.2610955	21.22
44.2370400	-68.3022360	21.87
44.2336580	-68.3203580	21.65
44.2824880	-68.3863360	21.49
44.2789000	-68.3818390	23.04
44.2777240	-68.3741730	21.77
44.3329700	-68.4038580	21.69
44.3320360	-68.3868530	21.56
44.3136670	-68.3368300	21.85
44.3802724	-68.0677388	21.40
44.3820293	-68.0629590	21.46

44.3844873	-68.0655339	21.31
44.3743998	-68.0711435	21.40
44.3653747	-68.0762110	21.33
44.3427967	-68.0599993	21.42
44.3331055	-68.0610641	21.35
44.3389776	-68.0452531	21.49
44.3465582	-68.0457081	21.52
44.3628210	-68.0393110	21.38

ACTION PLAN

Acadia National Park meets or exceeds the bronze criteria for nearly all IDA requirements. However, its lights are not all compliant with the National Park Service Lightscape Management Plan. Acadia National Park has been working to update its lightscape. An inventory of lights was created in 2011 to help the park with these efforts. In 2011, 41% of all light fixtures in the park were compliant with the National Park Service's Lightscape Management guidelines found in the 2006 NPS Management Policies. While this is not an impressive number, the park has made strides towards low impact lighting policies.

Blackwoods Campground, one of the three major campgrounds within the park, was updated with nearly all fully-shielded LED fixtures, bringing the compliance for the blackwoods area to 77%. New lights include those around the restrooms as well as lowlevel path lighting. These are on timers to reduce the impact on the night sky.

Schoodic Woods Campground, the newest campground in the park was designed with the night sky in mind. While the campground is not complete, the lighting has been installed. 96% of these lights are shielded and compliant with the Lightscape Management guidelines from the NPS.

Though steps have been taken to improve the percentage of compliant lights within park boundaries, the park still has obstacles to overcome prior to reaching the two-thirds compliant requirement from the IDA. The inventory of lights was updated by a team from Worcester Polytechnic Institute in the summer of 2015. The update illuminated the changes that Acadia National Park had made to its lightscape since

2011. Previously, 41% of light fixtures in the park were compliant. In 2015, 53% of lights were found to be compliant.

More work needs to be done in ANP to meet the compliance threshold set by the IDA. With nearly 1000 lights in the park, a change of 13% means almost 130 light fixtures must be updated to meet the two-thirds requirement. ANP has shown these changes are not impossible. Between 2011 and 2015, they increased their percentage of compliant fixtures by 12%, raising it from 41% to 53%.

The Worcester Polytechnic Institute team has written a table of the fixtures that are not compliant that would be simple fixes for the park. Generally, these fixtures are not ideal for their purpose. The solutions have already been implemented elsewhere in the park and are useful and effective. One such example is the newly updated restroom lights in the Blackwoods Campground, which are a clear improvement over the previous lights. The park already has experience working with these lights, and installing them would be simply a matter of raising the money. There are enough fixtures in the park that have clear solutions that replacing them would bring the park over the two-thirds mark very rapidly.

All that remains for the park is acquiring the resources needed to make these changes throughout ANP. The provisional status will give the leverage needed to become two thirds compliant within the next three years. Lighting Retrofits Phase 1:

Location	Number of lights
Park Headquarters	44
Jordan Pond House	53
Seawall Campground	43
Total	140

Appendix D: Lighting Survey:

Main Street:

Building Number	Non-compliant Fixtures	Compliant Fixtures
1	6	0
2	4	0
3	4	1
4	2	0
5	2	0
6	6	4
7	7	3
8	5	0
9	2	2
10	2	0
11	6	7
12	4	0
13	8	0
14	7	4
15	2	1
16	2	1
17	0	0
18	2	1
19	2	0

20	2	1
21	3	0
22	6	4
23	1	0
24	5	0
25	2	1
26	7	0
27	1	0
28	3	0
29	4	0
30	8	0
31	2	7
32	5	0
33	1	0
34	4	1
35	8	0
36	3	2
37	6	0
38	9	0
39	8	0
40	45	5
41	11	1
42	4	18
43	4	28
44	14	0
45	5	17
46	4	0
47	9	0
48	4	7
49	1	6
50	0	5
51	2	0
52	3	2
53	4	0
54	2	4
55	2	2
56	2	0
57	0	4
58	15	0
59	5	9
60	35	30
61	7	11
62	2	0
63	5	1
64	7	0

65	2	0
66	10	1
67	1	8
68	2	1
69	31	1

Cottage Street:

Building Number	Non-compliant Fixtures	Compliant Fixtures
1	4	4
2	8	0
3	0	0
4	1	0
5	7	2
6	4	0
7	7	0
8	3	4
9	4	5
10	0	0
11	2	6
12	6	10
13	6	0
14	5	6
15	3	0
16	3	4
17	37	4
18	1	0
19	13	0
20	2	0
21	3	0
22	27	0
23	8	18
24	12	2
25	4	1
26	12	4
27	3	3

Rodick Street and Rodick Place:

Building Number	Non-compliant Fixtures	Compliant Fixtures
1	7	1
2	12	5
3	11	8

4	2	1
5	7	0
6	12	4
7	7	0
8	3	2
9	11	0
10	8	13
11	6	0
12	2	0
13	2	4
14	2	0

West Street:

Building Number	Non-compliant Fixtures	Compliant Fixtures
1	20	6
2	17	9
3	14	0
4	8	2
5	13	0

Appendix E: Sky Quality Measurements

Latitude	Longitude	mag/arcsec^2	Date
44.3756532	-68.2336106	21.14	7/14/2015
44.3782027	-68.2287363	20.94	7/14/2015
44.3599067	-68.1882377	21.42	7/14/2015
44.3298488	-68.1837037	21.36	7/14/2015
44.3143356	-68.1960952	21.32	7/14/2015
44.3029621	-68.2027713	21.35	7/14/2015
44.3198806	-68.2532924	21.22	7/14/2015
44.3115794	-68.2853811	21.21	7/14/2015
44.3639737	-68.3061702	21.25	7/14/2015
44.3755419	-68.2610955	21.22	7/14/2015
44.2370400	-68.3022360	21.87	7/16/2015
44.2336580	-68.3203580	21.65	7/16/2015
44.2824880	-68.3863360	21.49	7/16/2015
44.2789000	-68.3818390	23.04	7/16/2015
44.2777240	-68.3741730	21.77	7/16/2015
44.3329700	-68.4038580	21.69	7/16/2015

44.3320360	-68.3868530	21.56	7/16/2015
44.3136670	-68.3368300	21.85	7/16/2015
44.3802724	-68.0677388	21.40	7/16/2015
44.3820293	-68.0629590	21.46	7/16/2015
44.3844873	-68.0655339	21.31	7/16/2015
44.3743998	-68.0711435	21.40	7/16/2015
44.3653747	-68.0762110	21.33	7/16/2015
44.3427967	-68.0599993	21.42	7/16/2015
44.3331055	-68.0610641	21.35	7/16/2015
44.3389776	-68.0452531	21.49	7/16/2015
44.3465582	-68.0457081	21.52	7/16/2015
44.3628210	-68.0393110	21.38	7/16/2015

Appendix F: Lighting Inventory

Acadia National Park External Lighting Inventory

Last Updated July 2015

Introduction

The following is the current lighting inventory of external light fixtures in Acadia National Park. This inventory is an update of the original inventory conducted in 2011 by Christine M. Kercell. The purpose of this inventory is to track the Park's progress towards eligibility for the International Dark Sky Association's Dark Sky Park certification and to track the Park's compliance with the National Park Service's lightscape guidelines. These can be found in section 4.10 of the 2006 Management Policies.

INFORMATION IN THE INVENTORY:

This document contains information on all exterior lighting fixtures within the boundaries of Acadia National Park. The information covers the location, type, wattage, shielding type, lumen output, whether the light is compliant with IDA DSP requirements, and a count of lights. An automatically updating statistics page is included. This page includes information on how many lights are at each location in the park, how many are compliant or non-compliant, and how many lights need to be changed to reach two thirds compliant and ninety percent complaint.

UPDATING THE INVENTORY:

The inventory can be updated in Microsoft Excel. The inventory should be updated at least every three years to monitor changes in the Park's lightscape. Included below is a map of the locations included in this inventory, for ease of updating. This map should be updated with new points if necessary, and points may be removed if all lights in an area are removed.

Cells that are red were missing information at the time of the update. These should be completed as soon as the information becomes available.

The inventory has a statistics page that will automatically update with the lights added to the inventory, however if new areas are introduced in the document as separate sheets, as is the format of the previous areas, the statistics page will need to be edited. All area maps were created using Microsoft Excel's draw function.

Summary

This inventory includes all exterior light fixtures within the park. The fixtures are marked as compliant or non-compliant primarily based on their shielding. There are exceptions to this distinction. Alarm lighting was excluded from the inventory due to the inability of these lights to be compliant and due to their negligible impact on the night sky. Historic lighting like the fixtures at Brown Mountain Gatehouse were marked as compliant as permitted by the IDA guidelines for low lumen output, special fixtures. Lights under a structure were considered on a case by case basis. If the structure extended below the horizontal of the light, the fixtures were marked as shielded and compliant. The exceptions should be noted in the park's Lightscape Management Plan when it is created.

Results from the updates in 2015 found the park to have 928 light fixtures. Of these fixtures, 511, or 55.06%, are compliant fixtures. This is up 14% from the 41% found in the original inventory of 2011. To reach the 66% compliant fixtures required for IDA DSP certification, the park needs to update 102 non-compliant fixtures assuming no fixtures are added or completely removed. To reach the next benchmark of 90% compliant fixture, 325 non-compliant fixtures must be retrofitted. A complete readout of statistics for the inventory can be found at the end of this document.











BW3	155		Building entry	YES		YES
BW4			Area lighting	YES		YES
BW5			Area lighting	YES		YES
BW6			Area lighting	YES		YES
BW7		Vantage 6" H.F. Lensed, 4- pin, 18W CFL, 120V	Bus stop	YES	NO	YES
BW8		Vantage 6" H.F. Lensed, 4- pin, 18W CFL, 120V	Bus stop	YES	NO	YES
BW9		Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Bus stop	YES	NO	YES
BW10		Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Bus stop	YES	NO	YES

BW11	Building entry	YES	YES
BW12	Building entry	YES	YES
BW13	Building entry	YES	YES
BW14	Building entry	YES	YES
BW15	Building entry	YES	YES
BW16	Building entry	YES	YES
BW17	Building entry	YES	YES
BW18	Building entry	YES	YES

BW19		Building entry	YES		YES
BW20		Building entry	YES		YES
BW21		Building entry	YES		YES
BW22	Ceiling mount; 13W CFL	Building entry	NO	YES	NO
BW23		Building entry	YES		YES
BW24		Path lighting	YES		YES
BW25		Path lighting	YES		YES
BW26		Path lighting	YES		YES
BW27		Path lighting	YES		YES
------	------------------------------	----------------	-----	----	-----
BW28		Path lighting	YES		YES
BW29	90W Halogen, hooded flood	Stage lighting	Ν	NO	NO
BW30	90W Halogen, hooded flood	Stage lighting	NO	NO	NO
BW31	90W Halogen, hooded flood	Stage lighting	NO	NO	NO
BW32		Area lighting	YES		YES
BW33		Area lighting	YES		YES
BW34	90W Halogen, hooded flood	Area lighting	NO	NO	NO

BW35	90W Halogen, hooded flood	Area lighting	NO	NO	NO
BW36		Area lighting	YES		YES
BW37		Area lighting	YES		YES
BW38		Area lighting	YES		YES
BW39	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	NO, needs repair	YES	NO
BW40	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW41	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW42	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES

BW43	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW44	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW45	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	NO, needs repair	YES	NO
BW46	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW47	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW48	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW49	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW50	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES

BW51	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW52	Progress P5224-31WB Speciality, 13W, 12V	Path lighting	YES	YES	YES
BW53		Path lighting	YES		YES
BW54		Path lighting	YES		YES
BW55		Path lighting	YES		YES
BW56		Path lighting	YES		YES
BW57		Building entry	YES		YES
BW58		Building entry	YES		YES

BW59		Building entry	YES		YES
BW60		Building entry	YES		YES
BW61		Building entry	YES		YES
BW62		Building entry	YES		YES
BW63	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
BW64	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
BW65	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
BW66	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO

		Brown Mou	ntain Gatehouse	(BM)		
		(BM4)				
		FMSS 59784	BM3			
			вид)		
			BM1			
Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
BM1	14	Exterior wall lantern	Area lighting	NO	VES	VES Historic
Diff1		13W CFL	Area lighting	NO	115	Building
BM2		Exterior wall lantern, 13W CFL	Area lighting	NO	YES	YES, Historic Building
BM3		Exterior Pendant; incandescent	Residential building entry	NO	NO	YES, Historic Building
	P					
BM4		Exterior Pendant; incandescent	Area lighting; gatehouse gateway	NO	NO	YES, Historic Building
	-0-					

							79
	·	Cadilla	c Moun	tain (CM)			
		(M3)		FMSS 59813	M		
	FMSS F0811			i.			
	57011						
Code	Photo	Fixture	Арр	lication	Fully-Shielded	<1000 lumens	Compliance
CM1		Halogen wall mount	Area	lighting	NO	NO	NO
CM2		Halogen wall mount	Area	lighting	NO	NO	NO
CM3		Glare Buster GB-2000	Area	lighting	YES	YES	YES
CM4	R	Hooded flood	Area	lighting	NO	NO	NO

	Derm	nott House (DH)			
	en: F 5	Der2	EHI		
Code Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
DH1	Wall lantern, 60W, incandescent candelabra	Area lighting; garage	NO	YES	NO
DH2	Wall mount, incandescent	Residential building entry	NO	NO	NO
DH3	Wall lantern, 60W, incandescent candelabra	Residential building entry	NO	YES	NO
DH4	Post light, 60W, incandescent candelabra	Area lighting	NO	YES	NO



EL4	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
EL5	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
EL6	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
EL7	13W, Fluorescent; photocell	Area lighting	NO	YES	NO



ES2	E	Canlet, Non-metellis compact fluorescent vaproproof fixture, 26W	Building entry	NO	NO	NO
ES3		Canlet, Non-metellis compact fluorescent vaproproof fixture, 26W	Building entry	NO	NO	NO
ES4		Canlet, Non-metellis compact fluorescent vaproproof fixture, 26W	Building entry	NO	NO	NO
ES5		Recessed, fluorescent 4ft T8 tube	Accent	YES	NO	YES
ES6		Canlet, Non-metellis compact fluorescent vaproproof fixture, 26W	Area lighting	NO	NO	NO
ES7		Canlet, Non-metellis compact fluorescent vaproproof fixture, 26W	Building entry	NO	NO	NO
ES8		Recessed, fluorescent 4ft T8 tube	Accent	YES	NO	YES
ES9		Canlet, Non-metellis compact fluorescent vaproproof fixture, 26W	Area lighting	NO	NO	NO

ES10	Canlet, Non-metellis compact fluorescent vaproproof fixture, 26W	Building entry	NO	NO	NO
ES11	Recessed, fluorescent 4ft T8 tube	Accent	YES	NO	YES
ES12	Philips/Hadco Pro filer, PA2, 250W high pressure sodium	Area lighting	YES	NO	YES
ES13	Philips/Hadco Pro filer, PA2, 250W high pressure sodium	Area lighting	YES	NO	YES
ES14	Philips/Hadco Pro filer, PA2, 250W high pressure sodium	Area lighting	YES	NO	YES



		Har	den Farm (HF)			
	FMSS 59729	4(11) 4(11) (4(13) (4(13)) (4(+F12 HF5 FMSS 59722	4F5 4F7 4B	(FF)	
Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
HF1		60W/13W, square recessed	Residential building entry	YES	YES	YES
HF2		60W/13W, square recessed	Residential building entry	YES	YES	YES
HF3		60W/13W, square recessed	Residential building entry	YES	YES	YES
HF4		60W/13W, square recessed	Residential building entry	YES	YES	YES

HF5	60W/13W, square recessed	Residential building entry	YES	YES	YES
HF6	60W/13W, square recessed	Residential building entry	YES	YES	YES
HF7	60W/13W, square recessed	Residential building entry	YES	YES	YES
HF8	60W/13W, square recessed	Residential building entry	YES	YES	YES
HF9	Wall mounting fluorescent, 26W	Residential building entry	NO	NO	NO
HF10	Wall mounting fluorescent, 26W	Residential building entry	NO	NO	NO
HF11	Wall mounting fluorescent, 26W	Residential building entry	NO	NO	NO
HF12	Wall mounting fluorescent, 26W	Residential building entry	NO	NO	NO

HF13	The second secon	Wall mounting fluorescent, 26W	Residential building entry	NO	NO	NO
HF14	-	Wall mounting fluorescent, 26W	Residential building entry	NO	NO	NO
HF 15	The second secon	Wall mounting fluorescent, 26W	Residential building entry	NO	NO	NO
HF16		Wall mounting fluorescent, 26W	Residential building entry	NO	NO	NO



HQ2	0	Halo H7ICAT, recessed, 13W CFL	Building entry	NO	YES	NO
HQ3		Halo H7ICAT, recessed, 13W CFL	Building entry	YES	YES	YES
HQ4		Halo H7ICAT, recessed, 13W CFL	Building entry	YES	YES	YES
HQ5	0	Halo H7ICAT, recessed, 13W CFL	Building entry	NO	YES	NO
HQ6	O	Halo H7ICAT, recessed, 13W CFL	Building entry	NO	YES	NO
HQ7		Wallpack	Area lighting	NO	NO	NO
HQ8		Halo H7ICAT, recessed, 13W CFL	Building entry	NO	YES	NO
HQ9		Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO

HQ10	Wallpack	Area lighting	NO	NO	NO
HQ11	Non-hooded double flood, 13W CFL	Area lighting; garages	NO	YES	NO
HQ12	Stonco Roughlyte Wall Mount	Area lighting	NO	NO	NO
HQ13	Wallpack	Area lighting	NO	NO	NO
HQ14	Wall mount, 13W CFL	Building entry	YES	YES	YES
HQ15	Halo H7ICAT, recessed, 13W CFL	Building entry	NO	YES	NO
HQ16	Wallpack, High Pressure Sodium, 50W	Area lighting	NO	NO	NO
HQ17	Metal halide canopy, 50- 150W	Area lighting; curatorial garage	NO	NO	NO

HQ18	-	Metal halide canopy, 50- 150W	Area lighting; curatorial garage	NO	NO	NO
HQ19		Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ20		Metal halide canopy, 50- 150W	Building entry	NO	NO	NO
HQ21		Metal halide canopy, 50- 150W	Building entry	NO	NO	NO
HQ22		Wallpack; High pressure sodium; 50W	Area lighting	NO	NO	NO
HQ23		Wallpack	Area lighting	NO	NO	NO
HQ24	C.	Non-hooded flood, 13W CFL	Area lighting	NO	YES	NO
HQ25		Wallpack	Area lighting	NO	NO	NO

HQ26		Halo H7ICAT, recessed, 26W CFL	Building entry	YES	NO	YES
HQ27		Wallpack	Area lighting	NO	NO	NO
HQ28	Te	Flood; Non-hooded Not in use	Building entry	NO	NO	NO
HQ29		Wall mount, 13W CFL	Building entry	YES	YES	YES
HQ30		Hooded flood, motion sensor	Area lighting	NO	NO	NO
HQ31	0	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ32		Hooded flood, photo sensor	Area lighting	NO	NO	NO
HQ33		Halogen flood	Area lighting	NO	NO	NO

HQ34	8	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ35	8	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ36		Non-recessed, 13W CFL	Building entry	NO	YES	NO
HQ37	0	Non-recessed, 13W CFL	Building entry	NO	YES	NO
HQ38		Non-recessed, 13W CFL	Building entry	NO	YES	NO
HQ39		Non-hooded Flood Light, 750 lumens, 120V, 16W	Accent, flag	NO	YES	NO
HQ40		Non-hooded Flood Light, 750 lumens, 120V, 16W	Accent, flag	NO	YES	NO
HQ41		GE Wallighter 70 Luminaire, 50W, 120V, photocell	Building entry	NO	YES	NO

HQ42		Kenall Lightmate, incandescent, 120V	Building entry	NO	NO	NO
HQ43		Kenall Lightmate, incandescent, 120V	Accent, kiosk	NO	NO	NO
HQ44	0	Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ45		Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ46		Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ47		Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ48		Non-hooded flood, 13W flood CFL	Area lighting	NO	YES	NO
HQ49		Recessed, 13W CFL	Residential building entry	YES	YES	YES

HQ50	Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ51	Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ52	Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ53	Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ54	Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ55	Non-hooded flood, 13W flood CFL	Area lighting	NO	YES	NO
HQ56	Recessed, 13W CFL	Residential building entry	YES	YES	YES
HQ57	Recessed, 13W CFL	Residential building entry	YES	YES	YES

HQ58	1	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ59	1	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ60		Non-hooded flood; not in use	Building entry	NO	NO	NO
HQ61		500W Quartz Flood; not in use	Area lighting	NO	NO	NO
HQ62	500	Non-hooded Flood, 13W	Area lighting	NO	YES	NO
HQ63	6.76	Non-hooded Flood, 90W Halogen	Area lighting	NO	NO	NO
HQ64		Employee use only; bulbs disconnected	Accent; vending machine	YES	YES	YES
HQ65		Wall mount	Building entry	NO	NO	NO

HQ66		Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ67	Conco-	Non-hooded Flood, 13W	Area lighting	NO	YES	NO
HQ68	6.00	Non-hooded Flood, 13W	Area lighting	NO	YES	NO
HQ69	C TO	Non-hooded Flood, 13W	Area lighting	NO	YES	NO
HQ70		Stonco Vapor proof, 26W CFL	Building entry	NO	NO	NO
HQ71		Wallpack	Area lighting	NO	NO	NO
HQ72		Metal Halide, 150-175W	Area lighting; gas pump	YES	NO	YES
HQ73		Bob Bechtold-trailer	Area lighting; gas pump	YES	NO	YES

HQ74		Building entry	NO		NO
HQ75		Building entry	NO		NO
HQ76	500W Quartz Flood	Area lighting	NO	NO	NO
HQ77	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ78	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Building entry	NO	YES	NO
HQ79	Westinghouse, OV-25, 150W	Streetlight	NO	NO	NO
HQ80	Westinghouse, OV-25, 150W	Streetlight	NO	NO	NO
HQ81		Building entry	YES		YES

HQ82	Building entry	YES	YES
HQ83	Area lighting	YES	YES
HQ84	Area lighting	YES	YES
HQ85	Building entry	YES	YES
HQ86	Building entry	YES	YES
HQ87	Building entry	YES	YES
HQ88	Building entry	YES	YES
HQ89	Area lighting	NO	YES

HQ90	Building entry	YES	YES
HQ91	Building entry	NO	NO
HQ92	Building entry	NO	NO



Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
HC1		Aluminum Pathlyte PL39, 27W, 12V	Path lighting	NO	YES	NO
HC2		Hooded Flood, 25W, 12V	Path lighting	NO	YES	NO
HC3		Aluminum Pathlyte PL39, 27W, 12V	Path lighting	NO	YES	NO
HC4		Aluminum Pathlyte PL39, 27W, 12V	Path lighting	NO	YES	NO
HC5		Aluminum Pathlyte PL39, 27W, 12V	Path lighting	NO	YES	NO
HC6		GE WFL Wallighter Luminaire, 22W, 120V, photocell	Building entry	NO	NO	NO
HC7		Wallpack	Area Lighting	NO	NO	NO

HC8	GE WFL Wallighter Luminaire, 22W, 120V, photocell	Building entry	NO	NO	NO
HC9	Prescolite, CFR813EB, 8 in Round Open Recessed 2 13W Twin Tube 4-Pin Elec. CFL	Building entry	YES	YES	YES
HC10	8 in Round Open Recessed, 13W 2-pin	Building entry	YES	YES	YES
HC11	8 in Round Open Recessed	Building entry	YES	YES	YES
HC12	Prescolite, CFR813EB, 8 in Round Open Recessed 2 13W Twin Tube 4-Pin Elec. CF	Building entry	YES	YES	YES
HC13	Prescolite, CFR813EB, 8 in Round Open Recessed 2 13W Twin Tube 4-Pin Elec. CFL	Building entry	YES	YES	YES
HC14	Prescolite, CFR813EB, 8 in Round Open Recessed 2 13W Twin Tube 4-Pin Elec. CFL	Building entry	YES	YES	YES
HC15	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO

HC16	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO
HC17	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO
HC18	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO
HC19	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO
HC20	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO
HC21	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO
HC22	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO
HC23	Wall mounted tread light, fluorescent	Path lighting	NO	YES	NO

HC24		Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
HC25	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
HC26	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
HC27	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
HC28	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
HC29	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
HC30	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
HC31	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
HC32	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; kiosk	YES	NO	YES
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HC33	0	Set powered by Fiber- optic 175 metal halide generator	Accent; kiosk	YES	YES	YES
HC34- 36		Set powered by Fiber- optic 175 metal halide generator	Accent; kiosk	YES	YES	YES
HC37- 39		Set powered by Fiber- optic 175 metal halide generator	Accent; kiosk	YES	YES	YES
HC40		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
HC41		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
HC42		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
HC43		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES

HC44		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
HC45		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
HC46	-3-	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Residential building entry	NO	YES	NO
HC47		Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Residential building entry	NO	YES	NO
HC48		Post light, 13W CFL	Area Lighting	NO	YES	NO
HC49			Area Lighting	NO		NO

	Isle au Haut (IH)						
	FMSS 62677						
	FMSS 62673 FMSS 9762						
Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance	
IH1		GE WFL Wallighter Luminaire, 22W, 120V, photocell	Area lighting	NO	NO	NO	
IH2		GE WFL Wallighter Luminaire, 22W, 120V, photocell	Area lighting	NO	NO	NO	
IH3		Wall mounted non- hooded flood	Area lighting	NO	NO	NO	

IH4	Wall mounted non- hooded flood, motion sensor	Area lighting	NO	NO	NO
IH5	GE WFL Wallighter Luminaire, 22W, 120V, photocell	Building Entry	NO	NO	NO
IH6	Wallpack	Area lighting	NO	NO	NO
IH7	Wallpack	Area lighting	NO	NO	NO
IH8	RAB WP1 Cutoff, 26W	Building Entry	NO	NO	NO

		FMS 6241 (F1 FMSS 6242	slesford (IF)			
Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
IF1		Wall mount, incandescent	Area lighting	NO	NO	NO
IF2		Non-hooded flood with motion sensor	Area lighting	NO	NO	NO
IF3		Non-hooded double flood, 13W CFL	Area lighting	NO	YES	NO
IF4		Wall mount, incandescent	Area lighting	NO	NO	NO





Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
JPH1	ł	Exterior pendant, 13W CFL	Area lighting; gatehouse gateway	NO	YES	YES, Historic Building
JPH2		Wall mount, 13W CFL	Area lighting	NO	YES	YES, Historic Building
ЈРНЗ		Exterior pendant, 13W CFL	Building entry, residential	NO	YES	YES, Historic Building
JPH4		RAB LPACK, 10-13W LED	Streetlight/ Area Lighting	YES	YES	YES
JPH5		RAB LPACK, 10-13W LED	Streetlight/ Area Lighting	YES	YES	YES
JPH6	7	Non-hooded flood, halogen	Emergency	NO	NO	NO
JPH7		Square Recessed	Residential building entry	YES	YES	YES

JPH8	Non-hooded double- flood, halogen	Building entry	NO	NO	NO
JPH9	Wallpack	Building entry	NO	NO	NO
JPH10	RAB LPACK, 10-13W LED	Streetlight/ Area Lighting	YES	YES	YES
JPH11	RAB LPACK, 10-13W LED	Streetlight/ Area Lighting	YES	YES	YES
JPH12	RAB LPACK, 10-13W LED	Streetlight/ Area Lighting	YES	YES	YES
JPH13	RAB LPACK, 10-13W LED	Streetlight/ Area Lighting	YES	YES	YES
JPH14	Wallpack	Residential building entry	NO	NO	NO
JPH15	Non-hooded flood, halogen	Residential building entry	NO	NO	NO

JPH16	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH17	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH18	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH19	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH20	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH21	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH22	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH23	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO

JPH24	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH25	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH26	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH27	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH28	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH29	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH30	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH31	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO

JPH32	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH33	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH34	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH35	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH36	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH37	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH38	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH39	Philips/Hadco, Beacon, 13W CFL	Path lighting; sunken	NO	YES	NO

JPH40	Philips/Hadco, Beacon, 13W CFL	Path lighting; sunken	NO	YES	NO
JPH41	Philips/Hadco, Beacon, 13W CFL	Path lighting; sunken	NO	YES	NO
JPH42	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH43	Round wall form, flourescent	Area lighting	NO	YES	NO
JPH44	Round wall form, flourescent	Path lighting	NO	YES	NO
JPH45	Round wall form, flourescent	Path lighting	NO	YES	NO
JPH46	Round wall form, flourescent	Path lighting	NO	YES	NO
JPH47	Round wall form, flourescent	Area lighting	NO	YES	NO

JPH48	Recessed, incandescent	Accent; information center	YES	YES	YES
JPH49	Recessed, incandescent	Accent; information center	YES	YES	YES
JPH50	Recessed, incandescent	Accent; information center	YES	YES	YES
JPH51	Recessed, incandescent	Accent; information center	YES	YES	YES
JPH52	Recessed, incandescent	Accent; information center	YES	YES	YES
JPH53	Recessed, incandescent	Accent; information center	YES	YES	YES
JPH54	Wall mount, quartz	Area lighting	NO	NO	NO
JPH55	Wall mount, 13W CFL	Area lighting	NO	YES	NO

JPH56	Wall mount, 13W CFL	Area lighting	NO	YES	NO
JPH57	Ceiling lamp, 13W CFL	Area lighting; loading dock	NO	YES	NO
JPH58	Ceiling lamp, 13W CFL	Area lighting; loading dock	NO	YES	NO
JPH59	6"x10" 300W quartz lamp, motion sensor and photocell	Area lighting; loading dock	NO	NO	NO
JPH60	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH61	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH62	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH63	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES

JPH64	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH65	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH66	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH67	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH68	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH69	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH70	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH71	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES

JPH72	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH73	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH74	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH75	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH76	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH77	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH78	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH79	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES

JPH80	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH81	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH82	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH83	LiteForms LD6, 6" LED Cylindars	Accent	YES	YES	YES
JPH84	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH85	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH86	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH87	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES

JPH88	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH89	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH90	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH91	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH92	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
Sehar	Kim Lighting SL3, 4-pin, 42W CFL, 120V	Path lighting	YES	NO	YES
JPH94	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH95	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO

JPH96	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH97	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH98	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH99	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH100	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH101	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH102	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH103	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO

JPH104	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH105	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH106	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH107	Philips/Hadco, Beacon, 13W CFL	Path lighting	NO	YES	NO
JPH108	Post lamp	Streetlight; area lighting	NO; needs rotated face- down	NO	NO; needs rotated face- down

	Mildred Gilley Residence (MG)							
			FMSS 59734					
Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance		
MG1		Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Residential building entry	NO	YES	NO		



NC4	Non-hooded Flood, 13W CFL	Area lighting	NO	YES	NO
NC5	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO



SB2	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SB3	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SB4	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SB5	Fairpoint Communications; flourescent	Accent; payphone	YES	YES	YES

	Sand Beach House (SBH)							
Residence			Garage	KBHA		BH3 FMSS 59967		
Code	Photo	Fixture	Арр	lication	Fully-Shielded	<1000 lumens	Compliance	
SBH1		Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Residential building entry		NO	YES	NO	
SBH2	6	Progress Lighting, Outdoor Jelly Jar Fixture, wall mount, 13W	Build	ing entry	NO	YES	NO	
SBH3	2	Wall mount, CFL	Build	ing entry	NO	NO	NO	
SBH4		Non-hooded Flood, CFL	Build	ing entry	NO	NO	NO	







Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
SP1		Non-hooded flood	Accent, entrance sign	NO	NO	NO
SP2			Accent, entrance sign	NO		NO
SP3		BeveLED Downlight, 120V, 20W	Building Entry	YES	NO	YES
SP4	E-	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP5		Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP6	6.0	Duallite Twin Head with Mounting Plate, OCDRB0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP7		Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP8	Fluorescent tube, not in use	Accent, sign	NO	YES	NO
SP9	Wallpack	Building Entry	NO	NO	NO
SP10	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP11	Non-hooded flood light, motion sensor and photocell	Area Lighting	NO	NO	NO
SP12	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP13	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP14	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP15	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP16		Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP17		Wall mount, incandescent	Building entry	NO	NO	YES, historic building
SP18		Wall mount, incandescent	Building entry	NO	NO	YES, historic building
SP19		Wall mount, incandescent	Building entry	NO	NO	YES, historic building
SP20	0	LED Retrofit Downlight, 120V, 28W	Building Entry	YES	NO	YES
SP21		Post light, incandescent	Building entry	NO	NO	YES, historic building
SP22		Post light, incandescent	Building entry	NO	NO	YES, historic building
SP23		Wall mount, incandescent	Building entry	NO	NO	YES, historic building

SP24	Post light, incandescent	Building entry	NO	NO	YES, historic building
SP25	Wall mount, incandescent	Building entry	NO	NO	YES, historic building
SP26	Wall mount, incandescent	Building entry	NO	NO	YES, historic building
SP27	Wall mount, incandescent	Building entry	NO	NO	YES, historic building
SP28	Wall mount, incandescent	Building entry	NO	NO	YES, historic building
SP29	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP30	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP31	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP32	Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP33	Wall mount, unused	Area Lighting	NO	NO	NO
SP34	Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP35	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP36	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP37	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP38	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP39	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES

SP40	1.	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP41		Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP42		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP43		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP44		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP45		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP46		Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP47	Î	Fluorescent bollard	Path Lighting	YES	YES	YES
SP48		Fluorescent bollard	Path Lighting	YES	YES	YES
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SP49		Fluorescent bollard	Path Lighting	YES	YES	YES
SP50		Non-hooded flood light	Area Lighting	NO	NO	NO
SP51		Fluorescent Wall mount	Area Lighting	YES	YES	YES
SP52	19/0/	Non-hooded flood light	Area Lighting	NO	NO	NO
SP53		Fluorescent bollard	Path Lighting	YES	YES	YES
SP54		Fluorescent bollard	Path Lighting	YES	YES	YES
SP55		Non-hooded double- flood light	Area Lighting	NO	NO	NO

SP56	Fluorescent Wall mount	Area Lighting	YES	YES	YES
SP57	Fluorescent Wall mount	Area Lighting	YES	YES	YES
SP58	Non-hooded flood light	Area Lighting	NO	NO	NO
SP59	Fluorescent Wall mount	Area Lighting	YES	YES	YES
SP60	Non-hooded flood light	Area Lighting	NO	NO	NO
SP61	Fluorescent Wall mount	Area Lighting	YES	YES	YES
SP62	LED Retrofit Downlight, 120V, 28W	Building Entry	YES	NO	YES
SP63	LED Retrofit Downlight, 120V, 28W	Building Entry	YES	NO	YES

SP64	LED Retrofit Downlight, 120V, 28W	Building Entry	YES	NO	YES
SP65	Non-hooded flood light	Area Lighting	NO	NO	NO
SP66	Fluorescent Wall mount	Area Lighting	YES	YES	YES
SP67	Fluorescent Tread light	Path Lighting	YES	YES	YES
SP68	Fluorescent Tread light	Path Lighting	YES	YES	YES
SP69	Non-hooded flood light	Area Lighting	NO	NO	NO
SP70	Non-hooded flood light	Area Lighting	NO	NO	NO
SP71	Non-hooded flood light	Area Lighting	NO	NO	NO

SP72	Fluorescent Wall mount	Area Lighting	YES	YES	YES
SP73	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP74	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP75	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP76	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP77	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP78	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP79	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP80	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP81	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP82	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP83	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP84	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP85	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP86	Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP87	Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES

SP88	Hadco Profiler Area Lyte, PA2	Streetlight	YES	NO	YES
SP89	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP90	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP91	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP92	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP93	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP94	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP95	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP96	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP97	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP98	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP99	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP100	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP101	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP102	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP103	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP104	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP105	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP106	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP107	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP108	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP109	Tread light	Accent	YES	YES	YES
SP110	Tread light	Accent	YES	YES	YES
SP111	Tread light	Accent	YES	YES	YES

SP112		Tread light	Accent	YES	YES	YES
SP113		Tread light	Accent	YES	YES	YES
SP114	•	Tread light	Accent	YES	YES	YES
SP115		Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP116		Vaportight V Series, VWX151, 13W CFL	Building Entry	NO	YES	NO
SP117	00	Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP118		Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP119		BeveLED Downlight, 120V, 20W	Building Entry	YES	NO	YES

SP120	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP121	BeveLED Downlight, 120V, 20W	Building Entry	YES	NO	YES
SP122	Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP123	Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP124	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP125	Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP126	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP127	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO

SP128		Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP129		Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP130	HARM.	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP131		Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP132		AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP133		Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP134		AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP135		Wallpack with photocell	Building Entry	NO	NO	NO

SP136		AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP137	0.0	Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP138	-0-	BeveLED Downlight, 120V, 20W	Building Entry	YES	NO	YES
SP139	6,000	Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP140	-0-	BeveLED Downlight, 120V, 20W	Building Entry	YES	NO	YES
SP141	- C	Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP142		BeveLED Downlight, 120V, 20W	Building Entry	YES	NO	YES
SP143	C	Duallite Twin Head with Mounting Plate, OCDRW0605, 6V, 5W	Security/Emergency	NO	YES	NO

SP144	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP145	Wallpack	Area Lighting	NO	NO	NO
SP146	Wallpack	Area Lighting	NO	NO	NO
SP147	Wallpack	Area Lighting	NO	NO	NO
SP148	Wallpack	Area Lighting	NO	NO	NO
SP149	Wallpack	Area Lighting	NO	NO	NO
SP150	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP151	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES

SP152	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP153	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP154	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP155	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP156	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP157	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP158	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP159	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES

SP160	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP161	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP162	Wall mount, incandescent	Building entry	NO	NO	NO
SP163	Non-hooded double flood	Area Lighting	NO	NO	NO
SP164	Halogen wall mount	Area lighting	NO	NO	NO
SP165	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP166	Duallite Twin Head with Mounting Plate, OCDRB0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP167	Wall mount, incandescent	Building entry	NO	NO	NO

SP168	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP169	High pressure sodium wall mount	Area Lighting	NO	NO	NO
SP170	Recessed ceiling fixture	Building entry	YES	NO	YES
SP171	Recessed ceiling fixture	Building entry	YES	NO	YES
SP172	Recessed ceiling fixture	Building entry	YES	NO	YES
SP173	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP174	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP175	Duallite Twin Head with Mounting Plate, OCDRB0605, 6V, 5W	Security/Emergency	NO	YES	NO

SP176	Ceiling mounted fixture	Building Entry	NO	NO	NO
SP177	Ceiling mounted fixture	Building Entry	NO	NO	NO
SP178	Recessed ceiling fixture	Building entry	YES	NO	YES
SP179	Recessed ceiling fixture	Building entry	YES	NO	YES
SP180	Exterior pendant, fluorescent	Building entry	NO	NO	NO
SP181	Solar-powered path LED	Path Lighting	NO	YES	NO
SP182	Solar-powered path LED	Path Lighting	NO	YES	NO
SP183	Solar-powered path LED	Path Lighting	NO	YES	NO

SP184	Solar-powered path LED	Path Lighting	NO	YES	NO
SP185	Solar-powered path LED	Path Lighting	NO	YES	NO
SP186	Solar-powered path LED	Path Lighting	NO	YES	NO
SP187	Solar-powered path LED	Path Lighting	NO	YES	NO
SP188	Solar-powered path LED	Path Lighting	NO	YES	NO
SP189	Solar-powered path LED	Path Lighting	NO	YES	NO
SP190	Solar-powered path LED	Path Lighting	NO	YES	NO
SP191	Exterior pendant, 26W CFL	Area Lighting	NO	NO	NO

SP192	Exterior pendant, 26W CFL	Area Lighting	NO	NO	NO
SP193	Exterior pendant, 26W CFL	Area Lighting	NO	NO	NO
SP194	Exterior pendant, 26W CFL	Area Lighting	NO	NO	NO
SP195	Exterior pendant, 26W CFL	Area Lighting	NO	NO	NO
SP196	Exterior pendant, 26W CFL	Area Lighting	NO	NO	NO
SP197	Exterior pendant, 26W CFL	Area Lighting	NO	NO	NO
SP198	Exterior pendant, 26W CFL	Area Lighting	NO	NO	NO
SP199	Wallpack	Area Lighting	NO	NO	NO

SP200	Wallpack	Area Lighting	NO	NO	NO
SP201	Wallpack	Area Lighting	NO	NO	NO
SP202	Wallpack	Area Lighting	NO	NO	NO
SP203	Wallpack	Area Lighting	NO	NO	NO
SP204	Stonco Vaporproof, 26W CFL	Security/Emergency	NO	NO	NO
SP205	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP206	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP207	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP208	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP209	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP210	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP211	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP212	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP213	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP214	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP215	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP216	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP217	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP218	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP219	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP220	Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP221	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP222	Stonco Vaporproof, 26W CFL	Security/Emergency	NO	NO	NO
SP223	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO

SP224	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP225	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP226	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP227	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP228	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP229	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP230	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP231	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO

SP232		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP233		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP234		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP235		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP236	0	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP237		Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP238		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP239	05,	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO

SP240		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP241	0	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP242		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP243	0	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP244	05.	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP245	<u>O</u>	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP246		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP247		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO

SP248		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP249	5	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP250		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP251	H. H.	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP252		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP253	T	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP254		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP255		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO

SP256	0	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP257		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP258		Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP259		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP260		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP261	<u>Ē</u>	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP262	Ó	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP263	Ô	Wall mount, 15W CFL	Area Lighting	NO	NO	NO

SP264		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP265	0.5	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP266	25.	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP267	05.	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP268		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP269	6	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP270	6	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP271		Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO

SP272	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP273	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP274	Wall mount, 15W CFL	Area Lighting	NO	NO	NO
SP275	Cento 150 Wall Mounted Luminaire, 120V, 13W CFL	Building Entry	NO	YES	NO
SP276	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP277	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP278	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP279	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP280	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP281	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP282	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP283	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP284	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP285	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP286	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP287	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES

SP288	Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP289	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP290	Duallite Twin Head with Mounting Plate, OCDRB0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP291	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP292	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP293	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP294	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP295	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES

SP296	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP297	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP298	Duallite Twin Head with Mounting Plate, OCDRB0605, 6V, 5W	Security/Emergency	NO	YES	NO
SP299	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP300	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP301	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP302	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP303	Duallite Twin Head with Mounting Plate, OCDRB0605, 6V, 5W	Security/Emergency	NO	YES	NO

SP304	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP305	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP306	Bevel Downlight, 120V, 42W CFL	Building Entry	YES	NO	YES
SP307	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP308	AAL, Wedge, 120V, 32W CFL	Area Lighting	YES	NO	YES
SP309	KIM, EL807, 120V 5W LED	Path lighting	YES	YES	YES
SP310	KIM, EL807, 120V 5W LED	Path lighting	YES	YES	YES
SP311	KIM, EL807, 120V 5W LED	Path lighting	YES	YES	YES

SP312		AAL, Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES
SP313		Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP314		Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP315		Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP316		Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP317		Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP318		Mitre Medium Scale, 120V, 26 W	Path Lighting	YES	NO	YES
SP319	N/A	Kenall Lightmate, incandescent, 120V	Building Entry	NO	NO	NO

SP320	N/A	Non-hooded double flood, 13W CFL	Area Lighting	NO	YES	NO
SP321	N/A	Kenall Lightmate, incandescent, 120V	Building Entry	NO	NO	NO
SP322		AAL, Mitre Large Scale, 120V, 42 W	Area Lighting	YES	NO	YES










Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
SWC1		Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC2			Path lighting	YES		YES
SWC3		Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC4		Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC5		Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC6		Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC7		Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES

SWC8	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC9	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC10	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC11		Path lighting	YES		YES
SWC12	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC13	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC14	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC15		Path lighting	YES		YES

SWC16	Path lighting	YES		YES
SWC17	Path lighting	YES		YES
SWC18 Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC19	Path lighting	YES		YES
SWC20	Path lighting	YES		YES
SWC21	Path lighting	YES		YES
SWC22	Path lighting	YES		YES
SWC23	Path lighting	YES		YES

			100
	Path lighting	YES	YES
SWC25	Path lighting	YES	YES
SWC26	Path lighting	YES	YES
SWC27	Path lighting	YES	YES
SWC28	Path lighting	YES	YES
SWC29	Path lighting	YES	YES
SWC30	Path lighting	YES	YES
SWC31	Path lighting	YES	YES

SWC32	Path lighting	YES	YES
SWC33	Path lighting	YES	YES
SWC34	Path lighting	YES	YES
SWC35	Area lighting	YES	YES
SWC36	Seat lighting	YES	YES
SWC37	Seat lighting	YES	YES
SWC38	Seat lighting	YES	YES
SWC39	Seat lighting	YES	YES

SWC40	Seat lighting	YES	YES
SWC41	Seat lighting	YES	YES
SWC42	Seat lighting	YES	YES
SWC43	Seat lighting	YES	YES
SWC44	Seat lighting	YES	YES
SWC45	Seat lighting	YES	YES
SWC46	Seat lighting	YES	YES
SWC47	Seat lighting	YES	YES

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SWC48		Area lighting	YES		YES
SWC49	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC50	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC51	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC52	Mitre Large Scale, 120V, 42 W	Street lighting	YES	NO	YES
SWC53		Building entry	YES		YES
SWC54		Area lighting	YES		YES
SWC55		Area lighting	YES		YES

SWC56	Building entry	YES	YES
SWC57	Area lighting	YES	YES
SWC58	Area lighting	YES	YES
SWC59	Sewage Pump Light	NO	YES
SWC60	Area lighting	YES	YES
SWC61	Area lighting	YES	YES
SWC62	Building entry	YES	YES
SWC63	Area lighting	YES	YES

SWC64	Area lighting	YES	YES
SWC65	Area lighting	YES	YES
SWC66	Area lighting	YES	YES
SWC67	Area lighting	YES	YES
SWC68	Area lighting	YES	YES
SWC69	Area lighting	YES	YES
SWC70	Area lighting	YES	YES
SWC71	Area lighting	YES	YES

SWC72	Area lighting	YES	YES
SWC73	Building entry	YES	YES
SWC74	Sewage Pump Light	NO	YES
SWC75	Building entry	YES	YES
SWC76	Area lighting	YES	YES
SWC77	Area lighting	YES	YES
SWC78	Building entry	YES	YES
SWC79	Building entry	YES	YES

SWC80	Building entry	YES	YES
SWC81	Area lighting	YES	YES
SWC82	Area lighting	NO	NO
SWC83	Area lighting	NO	NO
SWC84	Area lighting	YES	YES
SWC85	Building entry/ Area lighting	NO	NO
SWC86	Area lighting	YES	YES
SWC87	Building entry	YES	YES

SWC88	Building entry	YES	YES
SWC89	Building entry	YES	YES







Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
SW1		90 Halogen Non-hooded Flood	Area lighting	NO	NO	NO
SW2	6	90 Halogen Non-hooded Flood	Area lighting	NO	NO	NO
SW3			Building entry	YES	YES	YES
SW4			Building entry	YES	YES	YES
SW5		Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Area lighting	NO	YES	NO
SW6		Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; bus stop	YES	NO	YES
SW7	0	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; bus stop	YES	NO	YES

SW8	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; bus stop	YES	NO	YES
SW9	Vantage 6" H.F. Lensed, 4- pin, 18W, 120V CFL	Accent; bus stop	YES	NO	YES
SW10	13W CFL, Not in use; may be removed	Accent; information kiosk	YES	YES	YES
SW11	13W CFL, Not in use; may be removed	Accent; information kiosk	YES	YES	YES
SW12	13W CFL, Not in use; may be removed	Accent; information kiosk	YES	YES	YES
SW13	13W CFL, Not in use; may be removed	Accent; information kiosk	YES	YES	YES
SW14		Path lighting	YES	YES	YES
SW15		Path lighting	YES	YES	YES

SW16		Path lighting	YES	YES	YES
SW17		Path lighting	YES	YES	YES
SW18		Path lighting	YES	YES	YES
SW19		Path lighting	YES	YES	YES
SW20		Path lighting	YES	YES	YES
SW21	Post light, 13W CFL	Path lighting	NO	YES	NO
SW22	Post light, 13W CFL	Path lighting	NO	YES	NO
SW23	Post light, 13W CFL	Path lighting	NO	YES	NO

SW24	Post light, 13W CFL	Path lighting	NO	YES	NO
SW25	Post lamp	Area lighting	YES	NO	YES
SW26	Post lamp	Area lighting	YES	NO	YES
SW27	Hooded Flood, 90W Halogen, dimmer	Area lighting	NO	NO	NO
SW28	Non-hooded Flood, 90W Halogen, dimmer	Stage lighting	NO	NO	NO
SW29	Non-hooded Flood, 90W Halogen, dimmer	Stage lighting	NO	NO	NO
SW30	Hooded flood, 90W Halogen, dimmer	Area lighting	NO	NO	NO
SW31	Post lamp	Area lighting	YES	NO	YES

SW32	Post lamp	Area lighting	YES	NO	YES
SW33	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW34	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW35	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW36	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW37	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW38	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW39	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO

SW40	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW41	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW42	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW43	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW44	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW45	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW46	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW47	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO

SW48	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW49	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW50	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW51	Ceiling mount, 7W CFL	Path lighting	NO	YES	NO
SW52	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SW53	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SW54	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SW55	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO

SW56		Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SW57		Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SW58		Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SW59	RMIESALEXT	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Building entry	NO	YES	NO
SW60			Building entry	YES		YES
SW61			Building entry	YES		YES
SW62			Building entry	YES		YES
SW63			Building entry	YES		YES

SW64			Building entry	YES		YES
SW65			Building entry	YES		YES
SW66)		Building entry	YES		YES
SW67			Building entry	YES		YES
SW68		Ceiling mount	Residential building entry	NO	NO	NO
SW69		Ceiling mount	Residential building entry	NO	NO	NO
SW70		Ceiling mount	Residential building entry	NO	NO	NO
SW71		Ceiling mount	Residential building entry	NO	NO	NO

SW72	Ceiling mount	Residential building entry	NO	NO	NO
SW73	Ceiling mount	Residential building entry	NO	NO	NO
SW74	Ceiling mount	Area lighting	NO	NO	NO
SW75	Ceiling mount	Residential building entry	NO	NO	NO
SW76	Ceiling mount	Area lighting	NO	NO	NO
SW77	Ceiling mount	Building entry	NO	NO	NO
SW78	Exterior wall lantern, not in use	Area lighting; garage	NO	NO	NO
SW79	Exterior wall lantern, incandescent	Residential building entry	NO	NO	NO

SW80	Non-hooded Flood, 90W	Residential building entry	NO	NO	NO
SW81	Non-hooded Flood, 90W	Area lighting; garage	NO	NO	NO
SW82	Non-hooded Flood, 90W	Residential building entry	NO	NO	NO

		Somes S	ound Residence (S	SR)		
		SR	SSR1	FMSS 59736		
Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
SSR1		Wall mount in us	Area lighting	NO	NO	NO
SSR2		Progress Lighting, Outdoor Jelly Jar Fixture wall mount, 13W	Residential building e, entry	NO	YES	NO





TI4-14	Set powered by Fiber- optic 175 metal halide generator	Accent; information kiosk	YES	YES	YES
TI15	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Bulding Entry; Restroom	NO	YES	NO
TI16	Kenall Herculux 4000, fluorescent, (2) 13W 2- pin CFL	Bulding Entry; Restroom	NO	YES	NO

						214
Wildwood Stables (WS)						
	FMSS 59997	WS5 WS3 WS4 FMSS 59998	FMSS 60002 FMSS 60002 FMSS FMSS (vs1) (vs1	ws17 ws17	5 (VS18) F 6 (VS20) FMSS 59999	FMSS 60001 MSS 0000
Code	Photo	Fixture	Application	Fully-Shielded	<1000 lumens	Compliance
WS1		Kenall Herculux 4000, fluorescent	Building entry	NO	YES	NO
WS2			Building entry	YES		YES
WS3			Building entry	YES		YES
WS4			Area lighting; barn	YES		YES

WS5		Area lighting; barn	YES		YES
WS6	Non-hooded Flood, 90W	Area lighting; stable	NO	NO	NO
WS7	Non-hooded Flood, 90W	Area lighting; stable	NO	NO	NO
WS8		Area lighting	YES		YES
WS9		Area lighting	YES		YES
WS10		Area lighting	YES		YES
WS11		Area lighting	YES		YES
WS12		Area lighting	YES		YES

WS13	Roughlite Series Vaportight, WXL11GC, 100W	Area lighting; stable	NO	NO	NO				
WS14	Roughlite Series Vaportight, WXL11GC, 100W	Area lighting; stable	NO	NO	NO				
WS15	Non-hooded Flood, 90W	Area lighting; stable	NO	NO	NO				
WS16	Non-hooded Flood, 90W	Area lighting; stable	NO	NO	NO				
WS17	Non-hooded Flood, 90W	Area lighting; stable	NO	NO	NO				
WS18	Non-hooded Flood, 90W	Area lighting; stable	NO	NO	NO				
WS19	Non-hooded Flood, 90W	Area lighting; stable	NO	NO	NO				
WS20	Non-hooded Flood, 90W	Area lighting; stable	NO	NO	NO				
	Total Lights:		Compliant Fixtures		% Compliant		Non Compliant		Possible Compliant %
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SP	322		191		59.32%		131		14.12%
JPH	108		50		46.30%		58		6.25%
HQ	92		30		32.61%		62		6.68%
SWC	89		86		96.63%		3		0.32%
SW	82		29		35.37%		53		5.71%
BW	66		52		78.79%		14		1.51%
HC	49		28		57.14%		21		2.26%
WS	20		9		45.00%		11		1.19%
HF	16		8		50.00%		8		0.86%
TI	16		13		81.25%		3		0.32%
ES	14		7		50.00%		7		0.75%
IH	8		0		0.00%		8		0.86%
EL	7		1		14.29%		6		0.65%
NC	5		1		20.00%		4		0.43%
SB	5		1		20.00%		4		0.43%
BM	4		4		100.00%		0		0.00%
CM	4		1		25.00%		3		0.32%
DH	4		0		0.00%		4		0.43%
IF	4		0		0.00%		4		0.43%
SBH	4		0		0.00%		4		0.43%
FM	3		0		0.00%		3		0.32%
SH	3		0		0.00%		3		0.32%
SSR	2		0		0.00%		2		0.22%
MG	1		0		0.00%		1		0.11%
	All Park		All Compliant		Total % Complaint		All Non Compliant		Needed for 66%:
	928		511		55.06%		417		102
								Needed for 90%:	
								325	