



# Interior Lighting Compliance Certificate

## Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation  
Project Title: Courtyard Inn, Lake City, FL  
Project Type: New Construction

Construction Site: Lake City, Florida  
Owner/Agent:  
Designer/Contractor:

## Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed  
Reduced Lighting Power, 1.0 credit

## Allowed Interior Lighting Power

| A<br>Area Category   | B<br>Floor Area<br>(ft <sup>2</sup> ) | C<br>Allowed<br>Watts / ft <sup>2</sup> | D<br>Allowed<br>Watts |
|--|---------------------------------------|---|-----------------------|
| 1-Guestroom (Common Space Types:Guest Room)                            | 49346                                 | 0.69                                    | 34049                 |
| 2-Food Preparation (Common Space Types:Food Preparation)               | 730                                   | 0.95                                    | 694                   |
| 3-Storage (Common Space Types:Storage)                                 | 2395                                  | 0.57                                    | 1365                  |
| 4-Corridor (Common Space Types:Corridor/Transition <8 ft wide)         | 9278                                  | 0.59                                    | 5474                  |
| 5-Meeting (Common Space Types:Conference/Meeting/Multipurpose)         | 957                                   | 0.96                                    | 919                   |
| 6-Stairwell (Common Space Types:Stairwell)                             | 2214                                  | 0.52                                    | 1151                  |
| 7-Lobby (Common Space Types:Lobby - General)                           | 1691                                  | 0.90                                    | 1522                  |
| 8-Lounge (Common Space Types:Lounge/Breakroom)                         | 2230                                  | 0.56                                    | 1249                  |
| 9-Restroom (Common Space Types:Restrooms)                              | 365                                   | 0.77                                    | 281                   |
| 10-Elec./Mech./ Pool Equip. (Common Space Types:Electrical/Mechanical) | 871                                   | 0.39                                    | 340                   |
| 11-Fitness (Gymnasium/Fitness Center:Exercise Area)                    | 1103                                  | 0.45                                    | 496                   |
| 12-Office (Common Space Types:Office - Enclosed)                       | 626                                   | 0.84                                    | 526                   |
| 13-Laundry (Common Space Types:Laundry/Washing Area)                   | 985                                   | 0.39                                    | 384                   |
| 14-Breakroom (Common Space Types:Lounge/Breakroom)                     | 256                                   | 0.56                                    | 143                   |
| Total Allowed Watts =  |                                       |   | 48593                 |

## Proposed Interior Lighting Power

| A<br>Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast | B<br>Lamps/<br>Fixture | C<br># of<br>Fixture | D<br>Fixture<br>Watt. | E<br>(C X D) |
|---|------------------------|----------------------|-----------------------|--------------|
| <u>1-Guestroom (Common Space Types:Guest Room)</u>                |                        |                      |                       |              |
| LED 1: D202: Other:   | 2                      | 136                  | 15                    | 2040         |
| LED 21: D198: Other:  | 2                      | 136                  | 70                    | 9520         |
| LED 22: R77: Other:   | 1                      | 136                  | 9                     | 1224         |
| LED 23: R94: Other:   | 1                      | 312                  | 12                    | 3744         |
| <u>2-Food Preparation (Common Space Types:Food Preparation)</u>   |                        |                      |                       |              |
| LED 27: B06: Other:   | 1                      | 11                   | 64                    | 704          |
| LED 28: B07: Other:   | 1                      | 2                    | 50                    | 100          |
| <u>3-Storage (Common Space Types:Storage)</u>                     |                        |                      |                       |              |

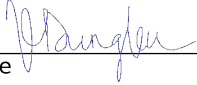
| A<br>Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast             | B<br>Lamps/<br>Fixture | C<br># of<br>Fixture | D<br>Fixture<br>Watt. | E<br>(C X D) |
|---|------------------------|----------------------|-----------------------|--------------|
| LED 15: J05: Other:   | 1                      | 24                   | 36                    | 864          |
| LED 26: B01: Other:   | 1                      | 2                    | 41                    | 82           |
| LED 27: B10: Other:   | 1                      | 1                    | 47                    | 47           |
| <u>4-Corridor (Common Space Types:Corridor/Transition &lt;8 ft wide)</u>      |                        |                      |                       |              |
| LED 21: R86: Other:   | 1                      | 148                  | 12                    | 1776         |
| LED 28: D04: Other:   | 3                      | 155                  | 78                    | 12090        |
| LED 29: R90: Other:   | 1                      | 22                   | 22                    | 484          |
| LED 30: R87: Other:   | 1                      | 47                   | 17                    | 799          |
| <u>5-Meeting (Common Space Types:Conference/Meeting/Multipurpose)</u>         |                        |                      |                       |              |
| LED 24: R90: Other:   | 1                      | 11                   | 22                    | 242          |
| LED 25: R92: Other:   | 1                      | 12                   | 32                    | 384          |
| <u>6-Stairwell (Common Space Types:Stairwell)</u>                             |                        |                      |                       |              |
| LED 29: R87: Other:   | 1                      | 24                   | 17                    | 408          |
| <u>7-Lobby (Common Space Types:Lobby - General)</u>                           |                        |                      |                       |              |
| LED 30: R90: Other:   | 1                      | 6                    | 22                    | 132          |
| LED 25: B11: Other:   | 1                      | 6                    | 28                    | 168          |
| LED 31: B12: Other:   | 1                      | 3                    | 42                    | 126          |
| LED 32: B13: Other:   | 1                      | 2                    | 56                    | 112          |
| LED 33: B14: Other:   | 1                      | 8                    | 9                     | 72           |
| LED 34: J11: Other:   | 1                      | 36                   | 3                     | 108          |
| <u>8-Lounge (Common Space Types:Lounge/Breakroom)</u>                         |                        |                      |                       |              |
| LED 37: R90: Other:   | 1                      | 24                   | 22                    | 528          |
| LED 37: J09: Other:   | 1                      | 20                   | 4                     | 80           |
| LED 25: R92: Other:   | 1                      | 30                   | 32                    | 960          |
| LED 35: B14A: Other:  | 1                      | 12                   | 9                     | 108          |
| LED 36: J12: Other:   | 1                      | 3                    | 16                    | 48           |
| LED 38: LM-406: Other:  | 1                      | 3                    | 100                   | 300          |
| <u>9-Restroom (Common Space Types:Restrooms)</u>                              |                        |                      |                       |              |
| LED 47: R70: Other:   | 1                      | 7                    | 13                    | 91           |
| LED 26: MIRROR: Other:  | 3                      | 2                    | 39                    | 78           |
| <u>10-Elec./Mech./ Pool Equip. (Common Space Types:Electrical/Mechanical)</u> |                        |                      |                       |              |
| LED 50: J05: Other:   | 1                      | 12                   | 36                    | 432          |
| LED 38: B10: Other:   | 1                      | 47                   | 47                    | 2209         |
| <u>11-Fitness (Gymnasium/Fitness Center:Exercise Area)</u>                    |                        |                      |                       |              |
| LED 52: K03: Other:   | 1                      | 10                   | 56                    | 560          |
| LED 53: R70: Other:   | 1                      | 2                    | 13                    | 26           |
| LED 37: R98: Other:   | 1                      | 2                    | 16                    | 32           |
| <u>12-Office (Common Space Types:Office - Enclosed)</u>                       |                        |                      |                       |              |
| LED 29: B01: Other:   | 1                      | 15                   | 41                    | 615          |
| <u>13-Laundry (Common Space Types:Laundry/Washing Area)</u>                   |                        |                      |                       |              |
| LED 27: B06: Other:   | 1                      | 15                   | 64                    | 960          |
| <u>14-Breakroom (Common Space Types:Lounge/Breakroom)</u>                     |                        |                      |                       |              |
| LED: B01: Other:  | 1                      | 6                    | 41                    | 246          |
| Total Proposed Watts =  |                        |                      |                       | 42499        |

**Interior Lighting PASSES: Design 13% better than code**

## Interior Lighting Compliance Statement

*Compliance Statement:* The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

DUNG DUC VU, Ph.D, P.E, LEED AP  
Name - Title

Signature 

02/25/2022  
Date

Project Title: Courtyard Inn, Lake City, FL  
Data filename:

Report date: 02/25/22  
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# Exterior Lighting Compliance Certificate

## Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation  
Project Title: Courtyard Inn, Lake Mary, FL  
Project Type: New Construction  
Exterior Lighting Zone: 3 (Other (LZ3))

Construction Site:  
Lake City, Florida

Owner/Agent:

Designer/Contractor:

## Allowed Exterior Lighting Power

| A<br>Area/Surface Category                  | B<br>Quantity | C<br>Allowed<br>Watts / | D<br>Tradable<br>Wattage | E<br>Allowed Watts<br>(B X C) |
|---|---------------|-------------------------|--------------------------|-------------------------------|
| Entry canopy (Entry canopy)                 | 1990 ft2      | 0.4                     | Yes                      | 796                           |
| Ooutdoor Pool/ Patio (Special feature area) | 5100 ft2      | 0.11                    | Yes                      | 561                           |
| Parking Area (Parking area)                 | 101505 ft2    | 0.06                    | Yes                      | 6090                          |
| Total Tradable Watts (a) =                  |               |                         |                          | 7447                          |
| Total Allowed Watts =                       |               |                         |                          | 7447                          |
| Total Allowed Supplemental Watts (b) =      |               |                         |                          | 500                           |

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.

(b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

## Proposed Exterior Lighting Power

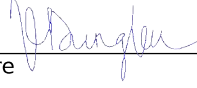
| A<br>Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast             | B<br>Lamps/<br>Fixture | C<br># of<br>Fixture | D<br>Fixture<br>Watt. | E<br>(C X D) |
|---|------------------------|----------------------|-----------------------|--------------|
| <u>Entry canopy (Entry canopy, 1990 ft2): Tradable Wattage</u>                |                        |                      |                       |              |
| LED 6: Other:   | 1                      | 12                   | 52                    | 624          |
| LED 10: Other:  | 3                      | 21                   | 9                     | 189          |
| LED 10: Other:  | 1                      | 2                    | 18                    | 36           |
| LED 11: Other:  | 1                      | 6                    | 12                    | 72           |
| LED 11: Other:  | 1                      | 4                    | 60                    | 240          |
| <u>Outdoor Pool/ Patio (Special feature area, 5100 ft2): Tradable Wattage</u> |                        |                      |                       |              |
| LED 5: Other:   | 1                      | 12                   | 32                    | 384          |
| LED 10: Other:  | 1                      | 2                    | 20                    | 40           |
| <u>Parking Area (Parking area, 101505 ft2): Tradable Wattage</u>              |                        |                      |                       |              |
| LED 1: SB: Other:   | 2                      | 5                    | 268                   | 1340         |
| LED 8: SC: Other:   | 3                      | 6                    | 402                   | 2412         |
| LED 10: SD: Other:  | 4                      | 1                    | 536                   | 536          |
| Total Tradable Proposed Watts =   |                        |                      |                       | 5873         |

## Exterior Lighting Compliance Statement

*Compliance Statement:* The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

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Name - Title

Signature



02/25/2022  
Date



# COMcheck Software Version COMcheckWeb

## Mechanical Compliance Certificate

### Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation  
Project Title: Courtyard Inn, Lake Mary, FL  
Location: Lake City, Florida  
Climate Zone: 2a  
Project Type: New Construction

Construction Site: Lake City, Florida  
Owner/Agent:  
Designer/Contractor:

### Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed  
Reduced Lighting Power, 1.0 credit

### Mechanical Systems List

#### Quantity System Type & Description

- 116 PTAC 1 (Single Zone):  
Packaged Terminal Heat Pump  
Heating Mode: Capacity = 7 kBtu/h,  
Proposed Efficiency = 4.00 COP, Required Efficiency = 3.34 COP  
Cooling Mode: Capacity = 7 kBtu/h,  
Proposed Efficiency = 13.00 EER, Required Efficiency: 11.90 EER
- 24 PTAC 2 (Single Zone):  
Packaged Terminal Heat Pump  
Heating Mode: Capacity = 8 kBtu/h,  
Proposed Efficiency = 3.70 COP, Required Efficiency = 3.18 COP  
Cooling Mode: Capacity = 10 kBtu/h,  
Proposed Efficiency = 12.20 EER, Required Efficiency: 11.00 EER
- 7 AHU-1.1, 1.2, 1.3, 1.5, 1.7, 1.10 (Single Zone):  
Split System Heat Pump  
Heating Mode: Capacity = 52 kBtu/h,  
Proposed Efficiency = 9.20 HSPF, Required Efficiency = 8.20 HSPF  
Cooling Mode: Capacity = 54 kBtu/h, , Air Economizer  
Proposed Efficiency = 16.00 SEER, Required Efficiency: 14.00 SEER
- 1 AHU-1.8 (Single Zone):  
Split System Heat Pump  
Heating Mode: Capacity = 46 kBtu/h,  
Proposed Efficiency = 9.20 HSPF, Required Efficiency = 8.20 HSPF  
Cooling Mode: Capacity = 47 kBtu/h,  
Proposed Efficiency = 16.00 SEER, Required Efficiency: 14.00 SEER
- 2 AHU-1.4, 1.9 (Single Zone):  
Split System Heat Pump  
Heating Mode: Capacity = 24 kBtu/h,  
Proposed Efficiency = 9.20 HSPF, Required Efficiency = 8.20 HSPF  
Cooling Mode: Capacity = 33 kBtu/h,  
Proposed Efficiency = 16.00 SEER, Required Efficiency: 14.00 SEER
- 1 FCU-1 (Single Zone):  
Cooling: 1 each - Split System, Capacity = 22 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: None  
Proposed Efficiency = 15.00 SEER, Required Efficiency: 14.00 SEER
- 1 MAU-1 (Single Zone):  
Heating: 1 each - Central Furnace, Gas, Capacity = 810 kBtu/h

**Quantity System Type & Description**

Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et  
Cooling: 1 each - Single Package DX Unit, Capacity = 730 kBtu/h, Air-Cooled Condenser, Air Economizer  
Proposed Efficiency = 12.10 EER, Required Efficiency: 9.80 EER + 11.4 IEER

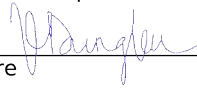
- 7 Water Heater:  
Gas Storage Water Heater, Capacity: 100 gallons, Input Rating: 199 kBtu/h  
Proposed Efficiency: 92.00 % Et, Required Efficiency: 80.00 % Et

**Mechanical Compliance Statement**

*Compliance Statement:* The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

DUNG DUC VU, Ph.D, P.E, LEED AP  
Name - Title

Signature



02/25/2022  
Date