

Order Plans @ WWW.LDMLINE.COM

### COMcheck Software Version 4.1.1.0 Interior Lighting Compliance Certificate

**Section 1: Project Information**

Energy Code: 2009 IECC  
Project Title: BURGER KING  
Project Type: New Construction

Construction Site: 290 Longstreet St, Kingstree, SC 29555  
Owner/Agent: Bruce Daniels, Carolina Franchise Holdings, LLC, P.O. Box 711, Greenwood, SC 29648  
Designer/Contractor: J. Michael Jones, P.E., Marshall & Bollwerk Eng., Inc., 8881 Highway 92, Suite 400, Woodstock, GA 30189, 578-785-0333, mjones@mbinc.net

**Section 2: Interior Lighting and Power Calculation**

A Area Category	B Floor Area (ft²)	C Allowed Watts / ft²	D Allowed Watts (B x C)
DINING (Dining, Cafeteria/Fast Food)	2300	1.4	3220
Total Allowed Watts =			3220

**Section 3: Interior Lighting Fixture Schedule**

A Fixture ID - Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixtures	D Fixture Watt.	E (C x D)
DINING (Dining, Cafeteria/Fast Food, 2300 sq ft)				
LED 1: Type "Q", "Q1": LED Other Fixture Unit 60W:	1	25	10	250
LED 2: Type "Q4": LED Other Fixture Unit 15W:	1	17	15	255
LED 3: Type "Q4w": LED Other Fixture Unit 15W:	1	2	12.5	25
LED 4: Type "A": LED A Lamp 9W:	1	2	10	20
LED 5: Type "M": LED A Lamp 60W:	1	4	8	24
LED 6: Type "T": LED Panel 60W:	1	10	80	1080
LED 7: Type "P": LED MR 10W:	1	1	10	10
LED 8: Type "P": LED Linear 33W:	1	1	48	48
Total Proposed Watts =				1713

**Section 4: Requirements Checklist**

Lighting Wattage:  
 1. Total proposed watts must be less than or equal to total allowed watts.  
Allowed Watts: 3220, Proposed Watts: 1713, Complies: YES

Controls, Switching, and Wiring:  
 2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.  
 3. Daylight zones have individual lighting controls independent from that of the general area lighting.

Project Title: BURGER KING  
Data filename: Y:\2019 Jobs\AKA\Burger King\Kingstree, SC\Energy\BK Kingstree, SC - Lighting (IECC 2009).cck  
Date: 08/22/19  
Page 2 of 4

Exceptions:  
 Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.  
 Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.

**Section 5: Compliance Statement**

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.1.0 and to comply with the mandatory requirements in the Requirements Checklist.

J. Michael Jones, PE  
Name - Title: Designer Date: 8/22/19

Project Title: BURGER KING  
Data filename: Y:\2019 Jobs\AKA\Burger King\Kingstree, SC\Energy\BK Kingstree, SC - Lighting (IECC 2009).cck  
Report date: 08/22/19  
Page 2 of 4

### COMcheck Software Version 4.1.1.0 Exterior Lighting Compliance Certificate

**Section 1: Project Information**

Energy Code: 2009 IECC  
Project Title: BURGER KING  
Project Type: New Construction  
Exterior Lighting Zone: 2 (Neighborhood Business District)

Construction Site: 290 Longstreet St, Kingstree, SC 29555  
Owner/Agent: Bruce Daniels, Carolina Franchise Holdings, LLC, P.O. Box 711, Greenwood, SC 29648  
Designer/Contractor: J. Michael Jones, P.E., Marshall & Bollwerk Eng., Inc., 8881 Highway 92, Suite 400, Woodstock, GA 30189, 578-785-0333, mjones@mbinc.net

**Section 2: Exterior Lighting Area/Surface Power Calculation**

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradeable Wattage	E Allowed Watts (B x C)	F Proposed Watts
QT (Drive-up windows/doors)	2 windows or doors	400	No	800	80
MAIN ENTRY (Main entry)	3 ft of door width	20	Yes	60	40
SIDE & REAR (Other door (not main entry))	6 ft of door width	20	Yes	120	80
CANOPYES (Free standing/attached sales canopy)	150 ft²	0.5	Yes	90	280
EXT WALL/CANOPYES (Illuminated length of facade wall or surface)	40 ft	2.5	No	100	180
Total Tradeable Watts =				270	416
Total Allowed Supplemental Watts** =				900	
Total Allowed Watts =				1170	

**Section 3: Exterior Lighting Fixture Schedule**

A Fixture ID - Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixtures	D Fixture Watt.	E (C x D)
QT (Drive-up windows/doors: 2 windows or doors): Non-tradeable Wattage				
LED 3: Type "M": LED Other Fixture Unit 40W:	1	2	40	80
MAIN ENTRY (Main entry 3 ft of door width): Tradeable Wattage				
LED 9 copy 1: Type "M": LED Other Fixture Unit 40W:	1	1	40	40
SIDE & REAR (Other door (not main entry) 6 ft of door width): Tradeable Wattage				
LED 10: Type "M": LED Panel 40W:	1	1	50	50
LED 9 copy 1: Type "M": LED Other Fixture Unit 40W:	1	1	40	40
CANOPYES (Free standing/attached sales canopy 150 ft²): Tradeable Wattage				
LED 9 copy 1: Type "M": LED Other Fixture Unit 40W:	1	7	40	280
EXT WALL/CANOPYES (Illuminated length of facade wall or surface 40 ft): Non-tradeable Wattage				
LED 8: Type "L": LED Other Fixture Unit 60W:	1	3	60	180
Total Tradeable Proposed Watts =				416

**Section 4: Requirements Checklist**

Project Title: BURGER KING  
Data filename: Y:\2019 Jobs\AKA\Burger King\Kingstree, SC\Energy\BK Kingstree, SC - Lighting (IECC 2009).cck  
Date: 08/22/19  
Page 3 of 4

Lighting Wattage:  
 1. Within each non-tradeable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradeable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.  
Compliance: Passes using supplemental allowance watts.

Controls, Switching, and Wiring:  
 2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting.  
 3. Lighting not designated for dusk-to-dawn operation is controlled by either a photosensor (with time switch), or an astronomical time switch.  
 4. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.  
 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

Exterior Lighting Efficacy:  
 6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumens/watt.

Exceptions:  
 Lighting that has been claimed as exempt and is identified as such in Section 3 table above.  
 Lighting that is specifically designated as required by a health or life safety statute, ordinance or regulation.  
 Emergency lighting that is automatically off during normal building operation.  
 Lighting that is controlled by motion sensor.

**Section 5: 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 lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.1.0 and to comply with the mandatory requirements in the Requirements Checklist.

J. Michael Jones, PE  
Name - Title: Designer Date: 8/22/19

Project Title: BURGER KING  
Data filename: Y:\2019 Jobs\AKA\Burger King\Kingstree, SC\Energy\BK Kingstree, SC - Lighting (IECC 2009).cck  
Report date: 08/22/19  
Page 4 of 4

B1916

DATE	RELEASE
08.26.19	FOR CONSTRUCTION

CHECKED BY: JMJ  
DRAWN BY: JMJ

NOTE: THESE DRAWINGS ARE THE PROPERTY OF ARIE KOHN ARCHITECTS, P.C. AND SHALL NOT BE USED, REPRODUCED, AND/OR MODIFIED WITHOUT WRITTEN CONSENT FROM ARIE KOHN ARCHITECTS, P.C.

DRAWINGS FOR:  
BRUCE DANIELS  
CAROLINA RE HOLDINGS, LLC  
P.O. BOX 711  
GREENWOOD, SC 29649  
646-462-5481



AKA  
ARIE KOHN ARCHITECTS, PC  
74 WOODSTOCK ROAD, ROSWELL, GA 30075  
TEL: (770) 642-9030 FAX: (770) 642-3785  
EMAIL: arie@akohmarch.com

