



# Interior Lighting Compliance Certificate

## Project Information

Energy Code: 90.1 (2013) Standard  
 Project Title: Taco Bell  
 Project Type: New Construction

Construction Site: Walton Boulevard Pontiac, MI 48340	Owner/Agent: Bob Grabowski Dortch Enterprises, LLC 8487 Retreat Dr. Grand Blanc, MI 48439 810-771-4500 ext 1018 bgrabowski@dortchenterprises.com	Designer/Contractor: Diane Barry EAM Engineers, Inc 180 High Oak Rd Bloomfield, MI, MI 48304 248-528-2670 dbarry@eam-engineers.com
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## Allowed Interior Lighting Power

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts / ft <sup>2</sup>	D Allowed Watts (B X C)
1-Dining: Cafeteria/Fast Food	2241	0.90	2017
Total Allowed Watts =			2017

## Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Dining: Cafeteria/Fast Food				
LED 1: B2: 2X2 LED RECESSED TROFFER: Other:	1	2	45	90
LED 2: B4: 2X4 LED RECESSED TROFFER: Other:	1	8	45	360
LED 3: B4E: SAME AS BE EXCEPT WITH BATTERY: Other:	1	6	45	270
LED 4: C1W: 6" RECESSED LED DOWN LIGHT: Other:	1	20	14	280
LED 5: F7: 12" PENDANT LED DOWN LIGHT: Other:	1	6	20	120
LED 6: F19C: 3" PENDANT LED DOWN LIGHT: Other:	1	1	9	9
Total Proposed Watts =				1129

**Interior Lighting PASSES: Design 44% 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 90.1 (2013) Standard requirements in COMcheck Version 4.1.5.4 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Salim Sessine P.E.  
 Name - Title \_\_\_\_\_ Signature \_\_\_\_\_



2022.29.06  
 Date \_\_\_\_\_



# Exterior Lighting Compliance Certificate

## Project Information

Energy Code: 90.1 (2013) Standard  
 Project Title: Taco Bell  
 Project Type: New Construction  
 Exterior Lighting Zone: 2 (Light industrial area with limited nighttime use (LZ2))

Construction Site: Walton Boulevard Pontiac, MI 48340	Owner/Agent: Bob Grabowski Dortch Enterprises, LLC 8487 Retreat Dr. Grand Blanc, MI 48439 810-771-4500 ext 1018 bgrabowski@dortchenterprises.com	Designer/Contractor: Diane Barry EAM Engineers, Inc 180 High Oak Rd Bloomfield, MI, MI 48304 248-528-2670 dbarry@eam-engineers.com
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## Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Driveway	10730 ft2	0.06	Yes	644
Parking area	8187 ft2	0.06	Yes	491
East Side (Drive-up windows/doors)	2 windows	400	No	800
Front Entrance Door (Main entry)	6 ft of door	20	Yes	120
Kitchen Door (Other door (not main entry))	3 ft of door	20	Yes	60
Side Door (Other door (not main entry))	3 ft of door	20	Yes	60
Drive Thru Side (Illuminated length of facade wall or surface)	28 ft	2.5	No	70
Front Entrance Side (Illuminated length of facade wall or surface)	28 ft	2.5	No	70
Total Tradable Watts (a) =				1375
Total Allowed Watts =				2315
Total Allowed Supplemental Watts (b) =				600

- (a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
- (b) A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

## Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
<u>Driveway (10730 ft2): Tradable Wattage</u>				
LED 1: A1/A4: SINGLE POLE MTD LED LIGHT: Other:	1	3	189	567
<u>Parking area (8187 ft2): Tradable Wattage</u>				
LED 2: A1/A4: SINGLE POLE MTD LED LIGHT: Other:	1	4	189	756
<u>East Side ( Drive-up windows/doors 2 windows or doors): Non-tradable Wattage</u>				
LED 3: G1: RECESSED LED CANOPY LIGHT: Other:	1	3	14	42
<u>Front Entrance Door ( Main entry 6 ft of door width): Tradable Wattage</u>				
LED 4: E2E: LED WALL MTD LIGHT W/BATTERY: Other:	1	1	10	10
<u>Kitchen Door ( Other door (not main entry) 3 ft of door width): Tradable Wattage</u>				
LED 5: E2E: LED WALL MTD LIGHT W/BATTERY: Other:	1	1	10	10
<u>Side Door ( Other door (not main entry) 3 ft of door width): Tradable Wattage</u>				

A	B	C	D	E
Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	Lamps/ Fixture	# of Fixtures	Fixture Watt.	(C X D)
LED 6: E2E: LED WALL MTD LIGHT W/BATTERY: Other:	1	1	10	10
<u>Drive Thru Side ( Illuminated length of facade wall or surface 28 ft): Non-tradable Wattage</u>				
LED 7: D1: DECORATIVE LED WALL SCONCE: Other:	1	2	11	22
<u>Front Entrance Side ( Illuminated length of facade wall or surface 28 ft): Non-tradable Wattage</u>				
LED 8: D1: DECORATIVE LED WALL SCONCE: Other:	1	4	11	44
Total Tradable Proposed Watts =				1353

**Exterior Lighting PASSES: Design 31% better than code**

**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 90.1 (2013) Standard requirements in COMcheck Version 4.1.5.4 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Salim Sessine P.E.

Name - Title

Signature



2022.29.06

Date



# Inspection Checklist

Energy Code: 90.1 (2013) Standard

Requirements: 100.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2, 8.4.1.1, 8.4.1.2, 8.7 [PR6] <sup>2</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
4.2.2, 9.4.3, 9.7 [PR4] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.7 [PR8] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [EL10] <sup>2</sup>	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
9.4.1.1 [EL1] <sup>2</sup>	Automatic control requirements prescribed in Table 9.6.1, for the appropriate space type, are installed. Mandatory lighting controls (labeled as 'REQ') and optional choice controls (labeled as 'ADD1' and 'ADD2') are implemented.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.4.1.1 [EL2] <sup>2</sup>	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.4.1.2 [EL11] <sup>2</sup>	Parking garage lighting is equipped with required lighting controls and daylight transition zone lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
9.4.1.1f [EL13] <sup>1</sup>	Daylight areas under skylights and roof monitors that have more than 150 W combined input power for general lighting are controlled by photocontrols.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	<b>Exception:</b> Requirement does not apply.
9.4.1.4 [EL3] <sup>2</sup>	Automatic lighting controls for exterior lighting installed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.4.1.3 [EL4] <sup>1</sup>	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.6.2 [EL8] <sup>1</sup>	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
8.7.1 [FI16] <sup>3</sup>	Furnished as-built drawings for electric power systems within 30 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
8.7.2 [FI17] <sup>3</sup>	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
9.2.2.3 [FI18] <sup>1</sup>	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Interior Lighting fixture schedule for values.
9.4.2 [FI19] <sup>1</sup>	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Exterior Lighting fixture schedule for values.

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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