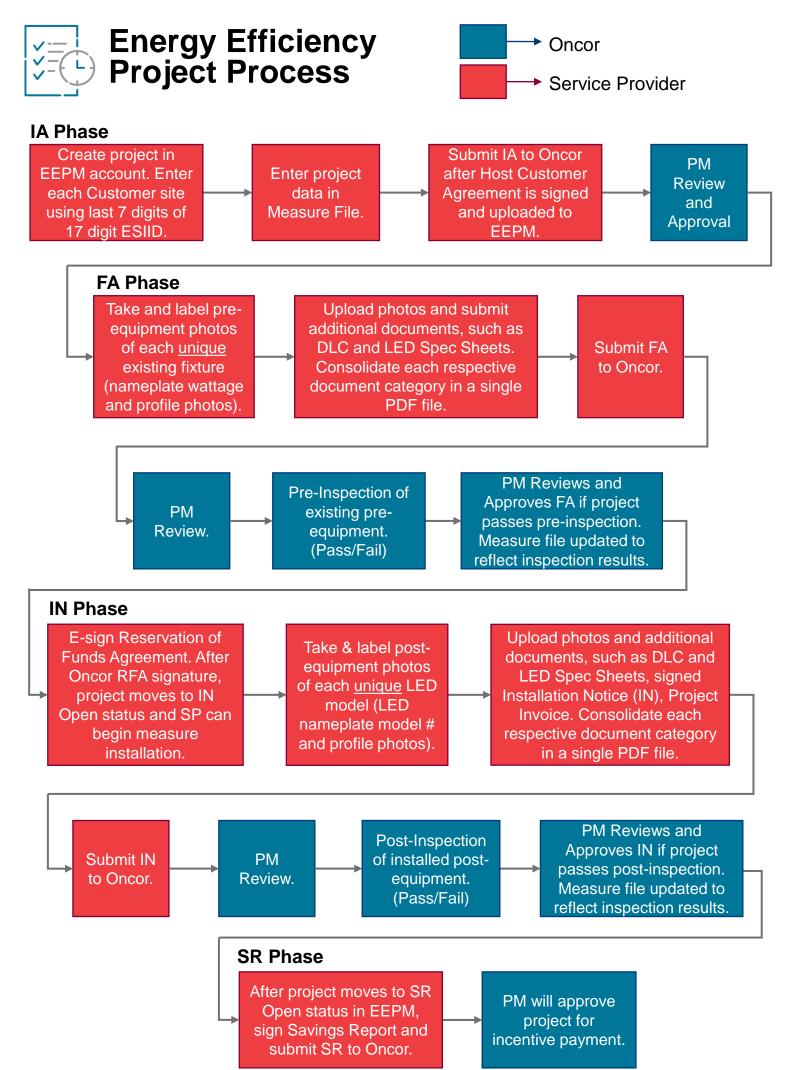
ENERGY EFFICIENCY

Measure File Guide Lighting – Retrofit

January 2025





IA Phase - Measure File



Define Areas

ghting	Retrofit DEFINE ARE	EAS FIXTURES				
	1	2	3	4	5	6
	Site Name*	Area Type*	uilding Type*	Conditioning*	re-Controls*	ost-Controls*
	Ŧ	-	Ŧ	-	-	Ŧ
14	Example Site	Breakroom	Warehouse: Non-refrig	Air Conditioned 🤟	No controls measures	No controls measures
15	Example Site	Conference Room	Warehouse: Non-refrig	Air Conditioned	Occupancy Sensor	Occupancy Sensor
16	Example Site	Open Office	Warehouse: Non-refrig	Air Conditioned 🤝	Occupancy Sensor	Occupancy Sensor
17	Example Site	Show space	Warehouse: Non-refrig	Air Conditioned 🤝	Occupancy Sensor	Occupancy Sensor

- 1. Site Name: Refers to the location where the Lighting Retrofit Project is being implemented.
- 2. Area Type: Refers to distinct, identifiable spaces within a site. For example, if a site includes both an unconditioned warehouse without controls and a conditioned office space with controls, a separate line should be added for the office space.
- **3.** Building Type: Determines the number of operating hours. Select the building type that represents the majority of the square footage (e.g., a warehouse with an attached office is categorized as a warehouse, not an office).
- **4. Air Conditioning**: If area is air-conditioned, select the appropriate cooling type (e.g., airconditioned, evaporative cooling, medium-temperature refrigeration, or low-temperature refrigeration). If the area is not air-conditioned, select "Unconditioned/Uncooled."
- **5. Pre-Controls**: If the space has no existing controls, select "No Control Measures." For outdoor spaces or those lit by daylight, select the appropriate option. If controls exist, choose the corresponding type (e.g., occupancy sensor, personal tuning, institutional tuning, or a combination of these).
- 6. **Post-Controls**: If the project includes installing or updating controls, select the appropriate control type. If no updates or installations are planned, select the same option chosen under Pre-Controls.

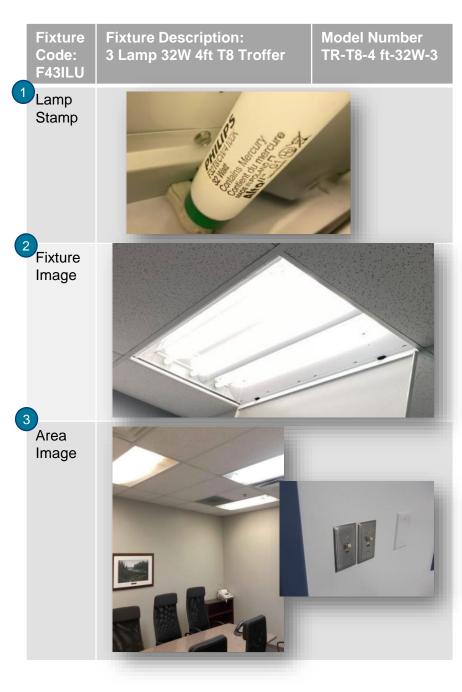
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		Site	Site		1	Area		3 Pre- 4 ent			5	6	-Equipment	t-Equipment		Savings & Incentive		
	Serial #	Site Name*	Site Line Item Or	Floor	Location/Room Description	Map Id	Area Type*	Pre-Fixture Code*	4 Pre- Fixtu	Non Op Fixtu	Post-Fixture Code*	Fixtu	Energy Star/LED Model # (as seen on Fixture)	New Fixture vs Retrofit Kit*	kW	kWh	Incentive(\$)	
	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	
21	21	MSU 👻	21	2	IT Room	181	AC No Controls 👻	F42ILU	2	0	LED023.5-FIXT	2	2BLT4R 30L ADP GZ10 LP840	Retrofit Kit	0.0683	259.2	33.44	
22	22	MSU 👻	22	2	Office 206	206	AC No Controls -	F42ILU	3	0	LED023.5-FIXT	3	2BLT4R 30L ADP GZ10 LP840	Retrofit Kit	0.1025	388.7	50.17	
23	23	MSU 👻	23	2	Conference Room	216	AC No Controls -	F42ILU	6	0	LED023.5-FIXT	6	2BLT4R 30L ADP GZ10 LP840	Retrofit Kit	0.2049	777.4	100.31	
24	24	MSU 🚽	24	2	Workroom 207	207	AC No Controls -	F42ILU	10	0	LED023.5-FIXT	10	2BLT4R 30L ADP GZ10 LP840	Retrofit Kit	0.3415	1295.8	167.19	
25	25	MSU 🚽	25	3	Storage	227	AC No Controls	F42ILU	6	0	LED039.5-FIXT	6	BLT4R A 48L ADP GZ10 LP840	Retrofit Kit	0,1099	416.9	53.80	

Fixtures

- 1. Location/room description: Provide the name and a detailed description of the location or room where the line items are being installed. The more specific, the easier it will be for inspectors to identify and verify the line items on the Measure File at the site.
- 2. Area Type: Select the appropriate area type from the "Define Areas" tab.
- **3. Pre-Fixture Code**: Click the magnifying glass above the measure file to choose the correct fixture code.
- 4. No. of Pre-Fixtures: Enter the number of existing fixtures in the Location/Room and specify how many are non-operational.
- 5. Post-Fixture Code: Use the rated wattage from the DLC or Energy Star sheet to select the fixture code, rounding up to the nearest half-watt.
- 6. No. of Post-Fixtures: Indicate the number of fixtures that will be upgraded in the selected area.
- **7. Energy Star/LED Model #**: Enter the Energy Star/LED model number as shown on the new fixture. It must match the documentation and inspection photos.
- 8. New Fixture vs. Retrofit Kit: Select whether the upgrade involves a Retrofit Kit or a New Fixture.

FA Stage – Pre-Inspection





For each unique pre-fixture code provide the following:

- 1. Lamp Stamp: A clear, focused photo image of the lamp/tube showing wattage.
- 2. Fixture Image: A profile shot that clearly shows the number of lamps inside the fixture, allowing the inspector to count them.
- 3. Area Image: Several area photos ed on of the locations/rooms listed in the Measure Fixture file. Include photos of any controls or occupancy sensors. Try to take photos with lights turned on.

Tips:

- Each fixture line should include a detailed location/room description and/or Map ID reference sufficient to locate the fixture line during inspections. Include any project building maps that will help the Service Provider Inspection Contact locate each location/room or Map ID listed in the Measure Fixture file.
- If a location/room to be retrofitted has fixtures not being replaced (e.g., existing LEDs), list these fixtures in EEPM using the same pre- and postfixture codes and quantities.
- Any LED to be installed that is not DLC or Energy Star certified should have a post fixture code showing "Non Qualifying LED".
- All document categories should be consolidated in single PDF files and uploaded in EEPM.

Building Type Documentation:

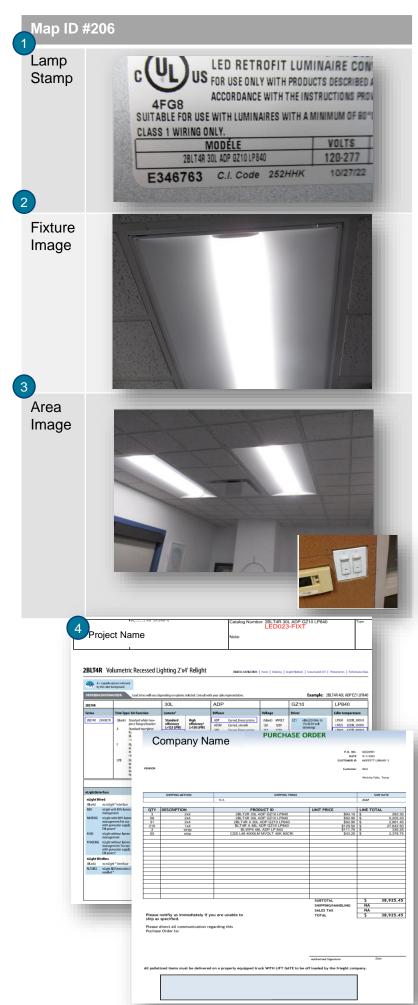
- Include clear photo(s) of building type (exterior/interior).
- For manufacturing buildings with multiple shifts, include production area photos and a letter/email from the Customer with total weekly operation hours broken down by each shift and the product being manufactured.
- For outdoor lighting operating dusk to dawn, provide a letter/e-mail from the Customer indicating that the lights operate dusk to dawn using photocell, time, or building management system.
- For air-conditioned buildings, include photo of RTU/chiller, or use an aerial image (e.g., Google Maps).

Supporting Documentation:

- **DLC/ENERGY STAR Screenshot:** Ensure that the DLC/ES reported wattage matches the fixture code in the Measure File. Variable wattage LEDs must be reported at the highest wattage.
- **LED Specification Sheets:** Showing ordering code breakdown and option description...

IN Phase – Post-Inspection





For each unique post-fixture code provide the following:

- 1. Lamp Stamp: A clear, focused photo image of the LED nameplate showing a readable model number. The LED nameplate model number should exactly match the reported model in the Measure fixture file and be consistent with the DLC and/or Energy Star certification sheet model number.
- 2. Fixture Image: A profile shot.
- 3. Area Image: Several area photos ed on of the locations/rooms listed in the Measure Fixture file. Include photos of any controls or occupancy sensors.
- 4. Supporting Documentation:
 - DLC/ENERGY STAR Screenshot: Ensure that the DLC/ES reported wattage matches the fixture code in the Measure File. Variable wattage LEDs must be reported at the highest wattage.
 - LED Spec Sheets: Ordering code breakdown and option description.
 - **Project Invoice:** Includes Customer name, project address, labor materials and other cost associated with installation of the lighting.

Tips:

- Each fixture line should include a detailed location/room description and/or Map ID reference sufficient to locate the fixture line during inspections.
- If a location/room to be retrofitted has fixtures not being replaced (e.g., existing LEDs), list these fixtures in EEPM using the same pre- and post-fixture codes and quantities.
- Any LED to be installed that is not DLC or Energy Star certified should have a post fixture code showing "Non Qualifying LED".
- All document categories should be consolidated in single PDF files and uploaded in EEPM.