DOCKETED

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STATE OF CALIFORNIA

INSTITUTIONAL TUNING PAF ACCEPTANCE DOCUMENT

CEC-NRCA-LTI-05-A (Revised 03/16)

CALIFORNIA ENERGY COMMISSION

PROJECT NUMBER: 1604-00001

CERTIFICATE OF ACCEPTANCE - NRCA-LTI-05-A		
Verification		
Project Name:	Enforcement Agency:	Permit Number:
Project Address:	City:	Zip Code:

Note: Submit one Certificate of Acceptance for each system that must demonstrate compliance.	*Enforcement Agency Use: Checked by/Date:*

B. NA7.7.6.2.1 CONSTRUCTION INSPECTION	
Prior to Functional testing, verify the followings:	
01	☐ The controls or the methods of controlling the maximum output of luminaires is such that the maximum light output of the controlled lighting system can be limited. Further, • ☐ Check the box if the controls or the method of controlling are manual controls • ☐ Check the box if the controls or the method of controlling are occupancy sensing controls • ☐ Check the box if the controls or the method of controlling are automatic daylighting controls • ☐ Check the box if the controls or the method of controlling are type other than the above - , (fill in the following space)
02	☐ The controls or the methods of controlling the maximum output of luminaires is such that the normal operation of the controlled lighting does not override the maximum light output. Further, • ☐ Check the box if the controls or the method of controlling are manual controls • ☐ Check the box if the controls or the method of controlling are occupancy sensing controls • ☐ Check the box if the controls or the method of controlling are automatic daylighting controls • ☐ Check the box if the controls or the method of controlling are type other than the above - , (fill in the following space)
03	☐ The controls are not readily accessible to unauthorized personnel.

C. NA7.7.6.2.2 FUNCTIONAL TEST	
Fill out Section I (Observation of the systems during Institutioanl Tuning), if acceptance testing is performed during tuning of the lighting system. Alternatively, fill out Section II (Verification of systems already tuned), if acceptance testing is performed after the lighting system has been tuned.	
01	For buildings with up to seven (7) enclosed areas claiming the Institutional Tuning PAF (power adjustment factor), all areas shall be tested.
02	For buildings with more than seven (7) areas claiming this PAF, random sampling may be done on seven of the larger enclosed areas with tuned dimming systems. If any of the areas in the sample group of seven areas fails the acceptance test, another group of seven areas must be tested. If any tested system fails, it shall be tuned until it passes the test.
03	The acceptance test technician shall either observe the first seven (7) systems being successfully tuned or shall verify systems that have already been tuned using the sampling protocol described in NA7.7.6.2.
04	If the acceptance test technician is observing the tuning of the system, the party responsible for the tuning shall certify that the remainder of the system is tuned in a similar manner. The party shall submit a separate institutional tuning PAF acceptance form to demostrate that the remainder of the system meets the requirements of NA7.7.6.2.

II. Verification of systems already tuned		**Tested Space Number**				
Step 1: Measurement of tuned lighting system		**1**	**2**	**3**	**4**	**5**
(a)	Set all lighting controls except Institutional Tuning controls to provide maximum output of tested system. Controls set to maximum light output include but not limited to: manual dimmers, multilevel occupancy sensing, and automatic daylighting controls.	☐	☐	☐	☐	☐
(b)	Measure full light output at location where most of the illuminance is due to the controlled lighting. Fill out this row with the measured light output level.	fc	fc	fc	fc	fc
	Alternatively, measure current draw of the controlled lighting with full light output at location where most of the illuminance is due to the controlled lighting. Fill out this row with the measured current draw.	A	A	A	A	A
Step 2: Measurement of lighting system with Institutional Tuning overriden						
(a)	Reset Institutional Tuning controls to allow full light output. Set all lighting controls to provide maximum output of tested system including but not limited to: Institution Tuning control, manual dimmers, multilevel occupancy sensing, and automatic daylighting controls.	☐	☐	☐	☐	☐
(b)	Measure full light output at the same location as in Step 1. Fill out this row with the measured light output level	fc	fc	fc	fc	fc
	Alternatively, measure the power draw of the same circuit with full light output at the same location as in Step 1. Fill out this row with the measured current draw.	A	A	A	A	A
(c)	Calculate ((Line 1b / Line 2b) x 100%).	%	%	%	%	%
	Is the calculation result of the above line equal to 85% or less? (Y – passes the test; N – fails the test.)					
Step 3: Restore Institutional Tuning settings						
(a)	If tested system passed the test in Step 2, restore Institutional Tuning settings.	☐	☐	☐	☐	☐