CERTIFICATE OF COMPLIANCE (Part 1 of 2) OLTG-1-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10
PROJECT ADDRESS: 2155 TRUMBLE ROAD, PERRIS, CA 92570
PRINCIPAL DESIGNER LIGHTING: PITASSI ARCHITECTS, INC. — TELEPHONE: (909) 980-1361
DOCUMENTATION AUTHOR: LRA ENGINEERS — TELEPHONE: (951) 737-4569
Building Permit — Checked by Date — Enforcement Agency Use

GENERAL INFORMATION

DATE OF PLANS: 1-7-10 — OUTDOOR LIGHTING ZONES (✓ one): ☐ LZ1 ☐ LZ2 ☑ LZ3 ☐ LZ4

FUNCTION TYPE: ☑ OUTDOOR LIGHTING ☐ OUTDOOR SIGNS ☐ INDOOR SIGNS

PHASE OF CONSTRUCTION: ☑ NEW CONSTRUCTION ☐ ADDITIONS ☐ ALTERATIONS

STATEMENT OF COMPLIANCE

This Certificate of Compliance lists outdoor lighting system specifications need to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to building lighting requirements.

The documentation prepared hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR: CIRILO G. RESALADO JR.P.E. — SIGNATURE: [signature] — DATE: 1-7-10

The Principal Lighting Designer hereby certifies that the proposed outdoor lighting and signs design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with the permit application. The proposed building has been designed to meet the lighting requirements contained in the applicable parts of Sections 110, 116, 130 through 132, 146, and 149 of Title 24, Part 6. Please ✓ one:

☑ I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation, and that I am licensed in the State of California as a civil engineer or electrical engineer, or I am a licensed architect.

☐ I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Codes Sections 5537, 5538 and 6737.1.

(These sections of the Business and Professions Code are printed in full in the Nonresidential Manual.)

PRINCIPAL ENVELOPE DESIGNER NAME: CIRILO G. RESALADO JR.P.E. — SIGNATURE: [signature] — DATE: 1-7-10 — LIC #: E - 16914

INSTRUCTIONS TO APPLICANT/OUTDOOR LIGHTING COMPLIANCE & WORKSHEETS (✓ box if worksheet is included)

For detailed instructions on the use of this set of Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.

☑ OLTG-1-C	Certificate of Compliance. Required on all plans for all submittals for outdoor lighting. Part 2 of 2 may be incorporated in schedules on the plans.
	Either LTG-1-C or OLTG-1-C may be used for signs as follows: 1. Use LTG-1-C if the project consists only of indoor signs 2. Use LTG-1-C if the project consists of indoor lighting, and outdoor or indoor signs, but no other outdoor lighting 3. Use OLTG-1-C if the project consists only of outdoor signs 4. Use OLTG-1-C if the project consists of outdoor lighting, and indoor or outdoor signs, but no other indoor lighting
☑ OLTG-2-C	LIGHTING COMPLIANCE SUMMARY. Applicable Parts required for ALL outdoor lighting allowances (Except for Signs)
☑ OLTG-3-C	AREA CALCULATION WORKSHEETS. Applicable parts required for all outdoor area calculations.
☐ OLTG-4-C	SIGN LIGHTING COMPLIANCE. Required for all internally and externally illuminated signs, for both indoor and outdoor signs.

CERTIFICATE OF COMPLIANCE (Part 2 of 2) OLTG-1-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10

Lighting Schedules on Plans Show that Outdoor Lighting Meets Allowed Lighting Power:

✓
☐ Lighting power allowances for general site illumination on OLTG-2-C Part 1 of 4
☑ Not Applicable
☐ Lighting power allowances for local ordinances or for security motion/time on OLTG-2-C Part 2 of 4
☑ Not Applicable
☑ Lighting power allowances for specific applications, other than vehicle service stations with canopies on OLTG-2-C Part 3 of 4
☑ Not Applicable
☐ Lighting power allowances for vehicle service station canopies on OLTG-2-C Part 4 of 4
☑ Not Applicable
☐ Sign lighting compliance on OLTG-4-C
☑ Not Applicable

Mandatory Measures on Plans Show that Outdoor Lighting Meets Outdoor Lighting Controls and Equipment indicate location on plans of Note Block for Mandatory Measure

✓
☐ Installed lighting power has been determined in accordance with § 130(c)1
☑ Not Applicable
☐ All permanently installed luminaires with lamps rated over 100 watts either have a lamp efficacy of as least 60 lumens per watt or are controlled by a motion sensor § 132(a)
☑ Not Applicable
☐ All Luminaires with lamps rated greater than 175 watts in hardscape areas, including parking lots, building entrances, canopies, and all outdoor sales areas meet the Cutoff Requirements of § 132(b)
☑ Not Applicable
☐ All permanently installed outdoor lighting meets the Control Requirements of § 132(c)1
☑ Not Applicable
☑ Building facades, parking lots, garages, canopies, and outdoor sales areas meet the Multi Level Lighting Requirements of §132(c)2
☑ Not Applicable

MANDATORY AUTOMATIC CONTROLS

CONTROL LOCATION (Room #, Area #, or Description)	CONTROL IDENTIFICATION	CONTROL TYPE (Auto Time Switch, Dimming, Photosensor, etc.)	SPACE CONTROLLED (Lists the location of controlled lights)	✓ If Control is for Daylighting	NOTE TO FIELD
MAINTENANCE	-	AUTO. TIME SWITCH	FACADE		

CERTIFICATE OF COMPLIANCE (Part 1 of 4) LTG-1-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10
PROJECT ADDRESS: 2155 TRUMBLE ROAD, PERRIS, CA 92570
PRINCIPAL DESIGNER LIGHTING: PITASSI ARCHITECTS, INC. — TELEPHONE: (909) 980-1361
DOCUMENTATION AUTHOR: LRA ENGINEERS — TELEPHONE: (951) 737-4569
METHOD OF COMPLIANCE: COMPLETE BUILDING
Building Permit — Checked by Date — Enforcement Agency Use

GENERAL INFORMATION

DATE OF PLANS: 1-7-10 — BUILDING CONDITIONED FLOOR AREA: - S.F. — CLIMATE ZONE:

BUILDING TYPE: ☑ NONRESIDENTIAL ☐ HIGH RISE RESIDENTIAL ☐ HOTEL/MOTEL GUEST ROOM ☐ CONDITIONED SPACES ☑ UNCONDITIONED SPACES ☐ INDOOR/OUTDOOR SIGNS

PHASE OF CONSTRUCTION: ☑ NEW CONSTRUCTION ☐ ADDITION ☐ ALTERATION

METHOD OF COMPLIANCE

☐ PERFORMANCE ☑ COMPLETE BUILDING ☐ AREA CATEGORY ☐ TAILORED ☐ COMMON LIGHTING

STATEMENT OF COMPLIANCE

This Certificate of Compliance lists the lighting features and performance specifications need to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to building lighting requirements.

The documentation prepared hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR: CIRILO G. RESALADO JR.P.E. — SIGNATURE: [signature] — DATE: 1-7-10

The Principal Lighting Designer hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with the permit application. The proposed building has been designed to meet lighting requirements contained in the applicable parts of Sections 110, 116, 130-132, 146, 148, & 149 of Title 24, Part 6.

☑ The plans & specifications meet the requirements of Part 6 (Sections 90-123a). ☑ The installation certificates meet the requirements of Part 6 (110-115-103a 3).
☐ The operation & maintenance information meet the requirements of Part 6 (10-103a).
Please check one. (These sections of the Business and Professions Code are printed in full in the Nonresidential Manual.)
☑ I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer or electrical engineer, or I am a licensed architect.
☐ I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
☐ I affirm that I am eligible under Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5537, 5538 and 6737.1.

PRINCIPAL ENVELOPE DESIGNER NAME: CIRILO G. RESALADO JR.P.E. — SIGNATURE: [signature] — DATE: 1-7-10 — LIC #: E - 16914

LIGHTING MANDATORY MEASURES

✓ ☑ indicate location on plans of Note Block for Mandatory Measure. EB-0.1

LIGHTING COMPLIANCE FORMS & WORKSHEETS (check box if worksheet is included)

☑ LTG-1-C, Parts 1 of 4 and 2 of 4	Certificate of Compliance. Part 1 of 4 and 2 of 4 are required for all submittals
☐ LTG-1-C, Parts 3 of 4	Certificate of Compliance. Part 3 of 4 are required only if Control Credits are claimed
☑ LTG-1-C, Parts 4 of 4	Certificate of Compliance. Part 4 of 4 submittal is required when lighting controls are installed
☑ LTG-2-C	Indoor Lighting Schedule
☐ LTG-3-C	Portable Lighting Worksheet
☐ LTG-4-C	Lighting Controls Credit Worksheet
☑ LTG-5-C	Indoor Lighting Power Allowance
☐ LTG-6-C	Tailored Method Worksheet
☐ LTG-7-C	Room Cavity Ratio Worksheet
☐ LTG-8-C	Common Lighting Systems Method Worksheet
☐ LTG-9-C	Line Voltage Track Lighting Worksheet
☐ OLTG-4-C	Signs (Use OLTG-4-C Sign Worksheet in Chapter 8, Outdoor Lighting and Signs Chapter)

CERTIFICATE OF COMPLIANCE (Part 2 of 4) LTG-1-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10

INSTALLED INDOOR LIGHTING POWER FOR CONDITIONED AND UNCONDITIONED SPACES

	INSTALLED WATTS
INSTALLED LIGHTING, CONDITIONED SPACES (From LTG-2-C)	2,414
PORTABLE LIGHTING (From LTG-3-C)	+
LIGHTING CONTROL CREDIT, CONDITIONED SPACES (From LTG-4-C)	- -
CONDITIONED SPACE ADJUSTED INSTALLED LIGHTING POWER	= 2,414
INSTALLED LIGHTING, UNCONDITIONED SPACES (From LTG-2-C)	
LIGHTING CONTROL CREDIT, UNCONDITIONED SPACES (From LTG-4-C)	-
UNCONDITIONED SPACE ADJUSTED INSTALLED LIGHTING POWER	=

ALLOWED INDOOR LIGHTING POWER FOR CONDITIONED SPACES

✓
☑ COMPLETE BUILDING METHOD (from LTG-5-C)
☐ AREA CATEGORY METHOD (from LTG-5-C)
☐ TAILORED METHOD (from LTG-5-C)

	ALLOWED WATTS
ALLOWED LIGHTING POWER	2,425

ALTERNATE COMPLIANCE

✓
☐ PERFORMANCE METHOD
☐ COGEN LIGHTING SYSTEM (from LTG-5-C)

ALLOWED INDOOR LIGHTING POWER FOR UNCONDITIONED SPACES (From LTG-5-C) _____ Watts

MANDATORY LIGHTING MEASURES FOR INDOOR LIGHTING AND DAYLIT AREAS

MANDATORY INDOOR AND DAYLIGHTING AUTOMATIC CONTROLS

CONTROL LOCATION (Room #, Area #, or Description)	CONTROL IDENTIFICATION	CONTROL TYPE (Auto Time Switch, Dimming, Photosensor, etc.)	SPACE CONTROLLED (Lists the location of controlled lights)	✓ If Control is for Daylighting	NOTE TO FIELD
MAINTENANCE	-	AUTO. TIME SWITCH	MAINTENANCE		

CERTIFICATE OF COMPLIANCE (Part 4 of 4) LTG-1-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10

Designer:

This form is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for lighting systems. The designer is required to check the boxes by all acceptance tests that apply and list all equipment that require an acceptance test. If all equipment of a certain type requires a test, list the equipment description and the number of systems to be tested in parentheses. The NJ number designates the Section in the Appendix of the Nonresidential ACM Manual that describes the test. Also indicate the person responsible for performing the tests (i.e. the installing contractor, design professional or an agent selected by the owner). Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

Building Departments:

Systems Acceptance. Before an occupancy permit is granted for a newly constructed building or space, or a new space-conditioning system serving a building or space is operated for normal use, all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance. In addition a Certificate of Acceptance, MECH-1-A, Forms shall be submitted to the building department that:

A. Certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of § 10-103(b) and Title 24 Part 6.

Test Description	Test Performed By:
✓ LTG-2-A: Lighting Control Acceptance Document • Occupancy Sensor Acceptance • Manual Daylight Controls Acceptance • Automatic Time Switch Control Acceptance Equipment requiring acceptance testing _____	
✓ LTG-3-A: Automatic Daylighting Controls Acceptance Document Equipment requiring acceptance testing _____	

LIGHTING COMPLIANCE SUMMARY (Part 3 of 4) OLTG-2-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10

Lighting Power Allowance for Specific Applications (TABLE 147-B) - Other Than Vehicle Service Station with Canopies

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Allowed Watts			Luminaire Description			Lamps/Ballasts				Design Watts				
Lighting Applications Category (Table 147-B)	Area Allowance (W/ft²)	Area Allowance (Watts)	Adjustment (W/Fixture)	Qty. of Fixtures	Description	Control Description	Lamp Type	Number of Lamps per Luminaire	Watts per Lamp	Number of Ballasts per Luminaire	Watts per Ballast	Luminaire Watts	✓ If CEC Default	Number of Luminaires	Design Watts (L x N)	Allowed Watts (Area or Adjustment)
BUILDING	2.304	0.35	806		TYPE "DD"		MH	1	50	1	58	✓	7	406	406
FACADES															

ILLUMINATED AREA CALCULATION WORKSHEET (Part 3 of 5) OLTG-3-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10

A. Outdoor Sales Lot Frontage and Sales Area

A	B	C	D	E	F	G	H
	If an Outdoor Sales Frontage allowance was used, subtract that area from the Gross Illuminated Area						
Gross Illuminated Area (By)	Mounting height of Sales Frontage Luminaires (feet)	3 x B	Distance (to jaw view) from frontage luminaire to front edge of Sales Lot	Sales Lot Frontage Length (feet)	Sales Frontage Area (C - D) x E (By)	Overlapping Areas of Another Application	Sales Lot Area A - F - G

Checklist

☐ § 147(b) 1 B - Each portion of all illuminated areas has been assigned only one lighting application, and the applications are consistent with the actual use of the areas.

☐ § 147(b) 2 B - Measured in plan view, only illuminated sections of outdoor sales frontage areas that are immediately adjacent to the principal viewing location and unobstructed viewing length, and are within a 3 mounting heights of the frontage have been used. Luminaires qualifying for this allowance are located in plan view between the principal viewing location and the frontage outdoor sales.

B. Building Façade Area

A	B	C	D	E	F	G	H
				Area (By) to Subtract from the Gross Illuminated Area Do not double count any areas			
Designated Name and Orientation	Length	Height	Gross Area (B x C)	Areas covered by signs	Areas for which Illumination is Obstructed by Other Objects and Area Not Illuminated	Sub Total (E + F)	Net Area Available for Façade Lighting (D - G)
SOUTH FACADE	64'-0"	16'-0"	1,024 SF				1,024 SF
EAST FACADE	40'-0"	16'-0"	640 SF				640 SF
WEST FACADE	40'-0"	16'-0"	640 SF				640 SF
						Total	2304 SF

Checklist

☑ § 147(b) 1 B - Each portion of all illuminated areas has been assigned only one lighting application, and the applications are consistent with the actual use of the areas.

☑ § 147(b) 2 A - Only facades areas that are illuminated without obstruction or interference, by one or more luminaires, have been used.

INDOOR LIGHTING SCHEDULE (Part 1 of 2) LTG-2-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10

INSTALLED LIGHTING POWER FOR CONDITIONED SPACES

A	B	C	D	E	F	G	H	I	J
Luminaire		Lamps/Ballasts				Installed Watts			
Name	Type Description	Lamp Type	Number of Lamps per Luminaire	Watts Per Lamp	Number of Ballast per Luminaire	Watts per Luminaire	✓ If CEC Default	Number of Luminaires	Installed Watts (G x I)
C	4' SURFACE	F32T8	2	32	1 (B)	54	✓	1	54
J	LOW BAY	MH	1	250	1	295	✓	8	2360

PAGE TOTAL	2,414
BUILDING TOTAL (sum of all pages)	+
PORTABLE LIGHTING (From LTG-3-C)	+
CONTROL CREDIT (from LTG-4-C)	-
ADJUSTED ACTUAL WATTS	= 2,414

INDOOR LIGHTING POWER ALLOWANCE LTG-5-C

PROJECT NAME: PERRIS VALLEY BIG LEAGUE DREAMS - MAINTENANCE BUILDING — DATE: 1-7-10

ALLOWED LIGHTING POWER (Choose One Method)

COMPLETE BUILDING METHOD - CONDITIONED SPACES

BUILDING CATEGORY (From § 148 Table 148-B)	WATTS PER (SF)	COMPLETE BLDG. AREA	ALLOWED WATTS

AREA CATEGORY METHOD - CONDITIONED SPACES

A	B	C	D
AREA CATEGORY (From § 148 Table 148-C)	WATTS PER (SF)	AREA (SF)	ALLOWED WATTS
		TOTALS AREA	WATTS

TAILORED METHOD - CONDITIONED SPACES

TOTAL ALLOWED WATTS (From LTG-6-C) _____

UNCONDITIONED SPACES

A	B	C	D
Complete Building and Area Category Methods CATEGORY (From § 148 Table 148-B & C)	WATTS PER (SF)	AREA PER (SF)	ALLOWED WATTS
GEN CONMERCIAL & INDUSTRIAL WORK BLDG-LOW BAY	1.0	2,425	2,425
		TOTALS AREA	WATTS

TAILORED METHOD - UNCONDITIONED SPACES

TOTAL UNCONDITIONED SPACES ALLOWED WATTS (From LTG-6-C and LTG-6-C) _____

MIG
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CONSULTANT:

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PERRIS VALLEY Big League Dreams

2155 Trumble Road
Perris, California 92570

SHEET TITLE
MAINTENANCE BUILDING TITLE 24 LIGHTING CALCULATIONS

100% CONSTRUCTION DOCUMENT

DATE	REVISIONS

STAMP

REGISTERED PROFESSIONAL ENGINEER — CIRILO G. RESALADO — No. E16914 — Exp. 6-30-11 — ELECTRICAL — STATE OF CALIFORNIA

CHECKED BY	DATE
LRA	
DATE 01-07-10	FILE NAME
DRAWN BY CR	SHEET EB-5.3
JOB NO. 05208.00	
SCALE NONE	178 OF 313 SHEETS

MAINTENANCE BUILDING TITLE 24 OUTDOOR LIGHTING CALCULATIONS

MAINTENANCE BUILDING TITLE 24 INDOOR LIGHTING CALCULATIONS