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

PROJECT NAME

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 multipliers 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

Manditory 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 lamp rated over 100 watts either have a lamp efficacy of at least 60 lumens per watt or are controlled by a motion sensor § 132(a)
☐ Not Applicable
☒ All Luminaires with lamp 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	CONTROL IDENTIFICATION	CONTROL TYPE Auto Time Switch/Photosensor, etc	AREA CONTROLLED	NOTE TO FIELD

2005 Nonresidential Compliance Forms *January 2006*

LIGHTING COMPLIANCE SUMMARY LTG-2

PROJECT NAME ROOSEVELT II E.S. - BUILDING K DATE 10/11/07

ACTUAL LIGHTING POWER

LUMINAIRE	TYPE	NUMBER OF	WATTS PER LUMINAIRE (Including Ballast)	CEC DEFAULT? Y	N	TOTAL
1C	RECESSED 2 X 4	22	93	☒	☐	2046
1D	RECESSED 2 X 4	2	64	☒	☐	128
2	SURFACE 1 X 4	1	64	☒	☐	64
3	STRIP 4'	2	64	☒	☐	128

SUBTOTAL FROM THIS PAGE 2366
PLUS SUBTOTAL FROM CONTINUATION PAGE Ø
PORTABLE LIGHTING (From LTG-1 Part 3 of 3) Ø
LESS CONTROL CREDIT WATTS (From LTG-3) Ø
ADJUSTED ACTUAL WATTS 2366

ALLOWED LIGHTING POWER (Choose One Method)

COMPLETE BUILDING METHOD

BUILDING CATEGORY (From § 146(b) Table 1-M)	WATTS PER SF	COMPLETE BLDG. AREA	ALLOWED WATTS
SCHOOL	1.4	2800	3920

AREA CATEGORY METHOD

AREA CATEGORY (From § 146(b) Table 1-N)	WATTS PER SF	AREA (SF)	ALLOWED WATTS
TOTALS		AREA	WATTS

TAILORED METHOD

TOTAL ALLOWED WATTS (From LTG-4)

Nonresidential Compliance Form August 2001

CERTIFICATE OF COMPLIANCE (Part 1 of 3) LTG-1

PROJECT NAME ROOSEVELT II E.S. - BUILDING K DATE 10/11/07
PROJECT ADDRESS SAN BERNARDINO, CA.
PRINCIPAL DESIGNER-LIGHTING FBA ENGINEERING TELEPHONE 949 852 9995 Building Permit #
DOCUMENTATION AUTHOR STEVE ZAJICEK TELEPHONE Checked by/Date Enforcement Agency Use

GENERAL INFORMATION

DATE OF PLANS 6/9/05 BUILDING CONDITIONED FLOOR AREA 2800 CLIMATE ZONE
BUILDING TYPE ☒ NONRESIDENTIAL ☐ HIGH RISE RESIDENTIAL ☐ HOTEL/MOTEL GUEST ROOM
PHASE OF CONSTRUCTION ☒ NEW CONSTRUCTION ☐ ADDITION ☐ ALTERATION ☐ UNCONDITIONED (file affidavit)
METHOD OF LIGHTING COMPLIANCE ☒ COMPLETE BLDG. ☐ AREA CATEGORY ☐ TAILORED ☐ PERFORMANCE

STATEMENT OF COMPLIANCE

This Certificate of Compliance lists the building 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 preparer hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR STEVE ZAJICEK SIGNATURE [signature] DATE 10/11/07

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 this permit application. The proposed building has been designed to meet the envelope requirements contained in the applicable parts of Sections 110, 119, 130 through 132, 146 and 149 of Title 24, Part 6.

Please check 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 it 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.

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

PRINCIPAL LIGHTING DESIGNER-NAME STEVE ZAJICEK SIGNATURE [signature] DATE 10/11/07 LIC. # E10372

LIGHTING MANDATORY MEASURES

Indicate location on plans of Note Block for Mandatory Measure E-1.4

INSTRUCTIONS TO APPLICANT

For detailed instruction on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.
LTG-1: Required on plans for all submittals. Part 2 and 3 may be incorporated in schedule on plans.
LTG-2 Required for all submittals.
LTG-3: Optional. Use only if lighting control credits are taken.
LTG-4: Optional. Part 2 and 3 and LTG-5 are optional if Tailored Method is used.

Nonresidential Compliance Form January 2001

CERTIFICATE OF COMPLIANCE (Part 2 of 3) LTG-1

PROJECT NAME ROOSEVELT II E.S. - BUILDING F DATE 6/9/05

INSTALLED LIGHTING SCHEDULE

Name	LUMINAIRE DESCRIPTION	LAMPS Type DESCRIPTION	LAMPS No. of Lamps	LAMPS Watts Per Lamp	BALLASTS Type DESCRIPTION	BALLASTS No. of Ballast	Luminaire No. of Lumin.	Luminaire Watts/ Lumin.	TOTAL WATTS
1A	RECESSED 2 X 4	F32T8	3	32	E	2	24	116	10778
3	STRIP 1 X 4	F32T8	2	32	E	1	64	4	256
6B	SURFACE 1 X 4	F32T8	2	32	E	1	64	8	512

Lighting Schedule on Plans Shows Exterior Lighting Meets
☐ Efficacy and Control Requirement of § 130(c)
☐ Control Requirements of § 131(f)

SUBTOTAL FROM THIS PAGE 11556
PLUS SUBTOTAL FROM CONTINUATION PAGE Ø
PORTABLE LIGHTING (From LTG-1 Part 3 of 3) Ø
LESS CONTROL CREDIT WATTS (From LTG-3) Ø
ADJUSTED ACTUAL WATTS 11556

MANDATORY AUTOMATIC CONTROLS

CONTROL LOCATION (Room #)	CONTROL IDENTIFICATION	CONTROL TYPE (Auto Time Switch, Exterior, etc.)	SPACE CONTROLLED	NOTE TO FIELD

CONTROLS FOR CREDIT

CONTROL LOCATION (Room # or Dwg. #)	CONTROL IDENTIFICATION	CONTROL TYPE (Occupant, Daylight, Dimming, etc.)	LUMINAIRES CONTROLLED TYPE	LUMINAIRES CONTROLLED # OF LUMINAIRES	NOTE TO FIELD

NOTES TO FIELD - For Building Department Use Only

Nonresidential Compliance Form August 2001

LIGHTING COMPLIANCE SUMMARY (Part 1 of 4) OLTG-2-C

PROJECT NAME DATE

LIGHTING POWER ALLOWANCES - GENERAL SITE ILLUMINATION - (Table 147-A)

A: Lighting Applications Category (Table 147-A)	B: Area (ft^2) or Length (LF)	C: Allotted LPD W/ft^2 or W/LF	D: Allotted Watts (B x C)	E: Code for Luminaire Type	F: Description	G: Cutoff Designation	H: Lamp Type	I: Number of Lamps per Luminaire	J: Watts per Lamp	K: Number of Ballast per Luminaire	L: Watts per Luminaire	M: If CEC Default	N: Number of Luminaire	O: Installed Watts (L x N)
Hardscape - vehicle	149649	Ø.15	22447.35	1Ø	HPS Parking		HPS	1	25Ø		31Ø		24	744Ø
				11	BOLLARD		HPS	1	1ØØ		13Ø		13	169Ø
Total Allotted Watts			22447.35									Total Installed Watts		913Ø

Allotted Watts (B–D); Luminaire (E–G); Lamps/Ballasts (H–K); Installed Watts (L–O)

2005 Nonresidential Compliance Forms *January 2006*

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

PROJECT NAME Roosevelt DATE Ø9/30/Ø8
PROJECT ADDRESS SAN BERNARDINO, CA.
PRINCIPAL DESIGNER-LIGHTING FBA ENGINEERING TELEPHONE 949-852-9995 Building Permit #
DOCUMENTATION AUTHOR FBA ENGINEERING TELEPHONE 949-852-9995 Checked by/Date Enforcement Agency Use

GENERAL INFORMATION

DATE OF PLANS Ø3/Ø2/Ø6 OUTDOOR LIGHTING ZONE (Π 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 preparer hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR STEPHEN R ZAJICEK SIGNATURE [signature] DATE Ø9/30/Ø8

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 this permit application. The proposed building has been designed to meet the lighting requirements contained in the applicable parts of Sections 110, 119, 130 through 132, 146, and 149 of Title 24, Part 6. **Please Πone:**

☒ 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.

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

PRINCIPAL LIGHTING DESIGNERS NAME STEPHEN R ZAJICEK SIGNATURE [signature] DATE Ø9/30/Ø8 LIC. # EIØ372

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

For detailed instructions on the use of this and all 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 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 solely 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 solely 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 CALCULATIONS 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

2005 Nonresidential Compliance Forms *January 2006*

CERTIFICATE OF COMPLIANCE (Part 2 of 3) LTG-1

PROJECT NAME ROOSEVELT II E.S. - BUILDING K DATE 10/11/07

INSTALLED LIGHTING SCHEDULE

Name	LUMINAIRE DESCRIPTION	LAMPS Type DESCRIPTION	LAMPS No. of Lamps	LAMPS Watts Per Lamp	BALLASTS Type DESCRIPTION	BALLASTS No. of Ballast	Luminaire No. of Lumin.	Luminaire Watts/ Lumin.	TOTAL WATTS
1C	RECESSED 2 X 4	F32T8	3	32	E	2	22	93	2046
1D	RECESSED 2 X 4	F32T8	2	32	E	1	2	64	128
2	SURFACE 1 X 4	F32T8	2	32	E	1	1	64	64
3	STRIP 4'	F32T8	2	32	E	1	2	64	128

Lighting Schedule on Plans Shows Exterior Lighting Meets
☐ Efficacy and Control Requirement of § 130(c)
☐ Control Requirements of § 131(f)

SUBTOTAL FROM THIS PAGE 2366
PLUS SUBTOTAL FROM CONTINUATION PAGE Ø
PORTABLE LIGHTING (From LTG-1 Part 3 of 3) Ø
LESS CONTROL CREDIT WATTS (From LTG-3) Ø
ADJUSTED ACTUAL WATTS 2366

MANDATORY AUTOMATIC CONTROLS

CONTROL LOCATION (Room #)	CONTROL IDENTIFICATION	CONTROL TYPE (Auto Time Switch, Exterior, etc.)	SPACE CONTROLLED	NOTE TO FIELD

CONTROLS FOR CREDIT

CONTROL LOCATION (Room # or Dwg. #)	CONTROL IDENTIFICATION	CONTROL TYPE (Occupant, Daylight, Dimming, etc.)	LUMINAIRES CONTROLLED TYPE	LUMINAIRES CONTROLLED # OF LUMINAIRES	NOTE TO FIELD

NOTES TO FIELD - For Building Department Use Only

Nonresidential Compliance Form August 2001

LIGHTING COMPLIANCE SUMMARY LTG-2

PROJECT NAME ROOSEVELT II E.S. - BUILDING F DATE 6/9/05

ACTUAL LIGHTING POWER

LUMINAIRE	TYPE	NUMBER OF	WATTS PER LUMINAIRE (Including Ballast)	CEC DEFAULT? Y	N	TOTAL
1A	RECESSED 2 X 4	116	93	☒	☐	10788
3A	STRIP 1 X 4	4	64	☒	☐	256
6B	SURFACE 4'	8	64	☒	☐	512

SUBTOTAL FROM THIS PAGE 11556
PLUS SUBTOTAL FROM CONTINUATION PAGE Ø
PORTABLE LIGHTING (From LTG-1 Part 3 of 3) Ø
LESS CONTROL CREDIT WATTS (From LTG-3) Ø
ADJUSTED ACTUAL WATTS 11556

ALLOWED LIGHTING POWER (Choose One Method)

COMPLETE BUILDING METHOD

BUILDING CATEGORY (From § 146(b) Table 1-M)	WATTS PER SF	COMPLETE BLDG. AREA	ALLOWED WATTS
SCHOOL	1.4	8500	11900

AREA CATEGORY METHOD

AREA CATEGORY (From § 146(b) Table 1-N)	WATTS PER SF	AREA (SF)	ALLOWED WATTS
TOTALS		AREA	WATTS

TAILORED METHOD

TOTAL ALLOWED WATTS (From LTG-4)

Nonresidential Compliance Form August 2001

LICENSED ARCHITECT JAMES M. STINSON C19098 RENEWAL 02/28/ STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER STEPHEN R. ZAJICEK No. E 10372 Exp. 09-30-12 ELECTRICAL STATE OF CALIFORNIA

FBA Engineering
Consulting Electrical Engineers
3420 Irvine Avenue Suite 200
Newport Beach, California 92660-3189
TEL: 949 852 9995 FAX: 949 852 1657
EMAIL: fba@fbaengineering.net
FBA # 270.032

DATE | REVISIONS

P S W C GROUP
ARCHITECTS / PLANNERS
1887 BUSINESS CENTER DR., SUITE 3, SAN BERNARDINO, CA. 92408
909/890-2233 FAX. 909/890-2644

ROOSEVELT II
ELEMENTARY SCHOOL
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
1261 W. 16TH STREET, SAN BEERNARDINO, CA.

TITLE 24 CALCULATIONS

JOB NO. P520
DRAWN BY FBA
DATE 12/8/2011

E-1.6

RE-BID #F09-02 ROOSEVELT II (HENRY) E.S. NEW CONSTRUCTION BID ISSUANCE SET 12/09/11

Filename: I:\270\032\E-1.6.dwg (jmusick) Dimscale: 1=1(PS) Date: DEC 07, 2011 Time: 9:49 AM Xrefs: TITLEBLOCK