INDOOR LIGHTING POWER ALLOWANCE — LTG-5-C

PROJECT NAME	DATE
City of Palm Springs Animal Care Facility	11/18/2009

ALLOWED LIGHTING POWER (Choose One Method)

COMPLETE BUILDING METHOD - CONDITIONED SPACES

BUILDING CATEGORY (From Section 146 Table 146-B)	WATTS PER SF	COMPLETE BLDG. AREA	ALLOWED WATTS
Comp Bldg Medical and Clinic	1.10	19,638	21,602

AREA CATEGORY METHOD - CONDITIONED SPACES

AREA CATEGORY (From Section 146 Table 146-C)	WATTS PER SF	AREA (SF)	ALLOWED WATTS
PAGE TOTAL			
BUILDING TOTAL			
		AREA	WATTS

TAILORED METHOD - CONDITIONED SPACES

TOTAL ALLOWED WATTS (From LTG-6-C or from computer run.)

UNCONDITIONED SPACES

Complete Building and Area Catagory Methods Category (From Section 146 Table 146-B&C)	WATTS PER SF	AREA (SF)	ALLOWED WATTS
Comp Bldg Medical and Clinic	1.10	1,019	1,121
PAGE TOTAL		1,019	1,121
BUILDING TOTAL		1,019	1,121
		AREA	WATTS

TAILORED METHOD - UNCONDITIONED SPACES

TOTAL UNCONDITIONED SPACES ALLOWED WATTS (From LTG-5-C and LTG-6-C)

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

PROJECT NAME: City of Palm Springs Animal Care Facility		DATE: 11/18/2009
PROJECT ADDRESS: Palm Springs		Building Permit #
PRINCIPAL DESIGNER - LIGHTING: Gerry L. Green	TELEPHONE: (858) 676-9776	
DOCUMENTATION AUTHOR: Kruse & Associates	TELEPHONE: (858) 676-9776	Checked by/Date Enforcement Agency Use

GENERAL INFORMATION

DATE OF PLANS: 11/18/09 — OUTDOOR LIGHTING ZONE: ☐ LZ1 ☐ LZ2 ☒ LZ3 ☐ LZ4

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

PHASE OF CONSTRUCTION: ☒ NEW CONSTRUCTION ☐ ADDITION ☐ ALTERATION

STATEMENT OF COMPLIANCE

This Certificate of Compliance lists the 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: Keith Kruse — SIGNATURE: [signature] — DATE: 11/18/09

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 Sections 110, 119, 130 through 132, and 146,and 149 of Title 24, Part 6.

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 the exemption to 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 LIGHTING DESIGNER - NAME: Gerry L. Green — SIGNATURE: [signature] — DATE: 11/18/09 — LIC. #: 15691

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

☒ 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, 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, outdoor or indoor signs, but no other indoor lighting.

☒ OLTG-2-C: LIGHTING COMPLIANCE SUMMARY. Applicable parts required for ALL outdoor lighting allowances (Except Signs).

☒ OLTG-3-C: AREA CALCULATIONS WORKSHEET. 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	DATE
City of Palm Springs Animal Care Facility	11/18/2009

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

☒ Lighting power allowance for general site illumination on OLTG-2-C Part 1 of 4
☐ Not Applicable

☐ Lighting power allowance 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

Mandatory Measures on Plans Show that Outdoor Lighting Meets Outdoor Lighting Controls And Equipment

☒ Installed lighting power has been determined in accordance with Section 130(c)1
☐ Not Applicable

☒ All permanently installed luminaires with lamps rated over 100 Watts either have a lamp efficacy of at least 60 lumins per Watt or are controlled by a motion sensor per Section 132(a)
☐ Not Applicable

☒ All Luminaires with lamps rated greater than 175 Watts in hardscape area, including parking lots, building entrances, canopies, and all outdoor sales areas meet the Cutoff Requirements of Section 132(b)
☐ Not Applicable

☒ All permanently installed outdoor lighting meets the control requirements of Section 132(c)1
☐ Not Applicable

☒ Building facades, parking lots, garages, canopies, and outdoor sales areas meet the Multi-Level Lighting Requirements of Section 132(c)
☐ Not Applicable

MANDATORY AUTOMATIC CONTROLS

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

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

Project Name	Date
City of Palm Springs Animal Care Facility	11/18/2009

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

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	Allotted Watts			Luminaire		Lamps/Ballasts					Installed Watts			
Lighting Application Category (Table 147-A)	Area (sq. ft.) or Length (LF)	Alloted LPD W/ft. sq. or W/LF	Allotted Watts (B x C)	Code	Description	Cutoff Designation	Lamp Type	Lamps per Luminaire	Watts per Lamp	Ballast per Luminaire	Watts per Luminaire	If CEC Default	Number of Luminaires	Installed Watts (L x N)
Hardscape - Lineal	539	4.00	2,156	H	50w High Pressure Sodium		S50	1	50	1.0	61.0	X	1	61
				U	(1) 32w Compact Fluorescent Triple 4 Pin Elec			1	32	1.0	35.0	X	2	70
				AC	(2) 26w Compact Fluorescent Quad 2 Pin			2	26	1.0	57.0	X	15	855
				AH	70w Metal Halide		M70	1	70	1.0	86.0	X	22	1,892
Parking	30,440	0.15	4,566	T	150w High Pressure Sodium		S150	1	150	1.0	173.0	X	9	1,557
				T1	150w High Pressure Sodium		S150	1	150	1.0	173.0	X	1	173
				T2	150w High Pressure Sodium		S150	1	150	1.0	173.0	X	2	346

Total Allotted Watts: 6,722 — Total Installed Watts: 4,954

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

Project Name	Date
City of Palm Springs Animal Care Facility	11/18/2009

LIGHTING POWER ALLOWANCE FOR SPECIFIC APPLICATIONS (Table 147-B) - Other than Vehicle Station without Canopies

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Allotted Watts			Luminaire		Lamps/Ballasts					Design Watts				
Lighting Application Category (Table 147-B)	Area (sq. ft.) or Length (LF)	Alloted LPD W/ft. sq. or W/LF	Allotted Watts (B x C)	Code	Description	Cutoff Designation	Lamp Type	Lamps per Luminaire	Watts per Lamp	Ballast per Luminaire	Watts per Luminaire	If CEC Default	Number of Luminaires	Installed Watts (L x N)	Allowed Watts (Min of D or O)
Canopy	7,403	0.50	3,702	AC	(2) 26w Compact Fluorescent Quad 2 Pin			2	26	1.0	57.0	X	15	855	1,617
				AG	(1) 26w Compact Fluorescent Triple 4 Pin Elec			1	26	1.0	28.0	X	18	504	
				AH	70w Metal Halide		M70	1	70	1.0	86.0	X	3	258	

ILLUMINATED AREA CALCULATION WORKSHEET (Part 1 of 5) OLTG-3-C

PROJECT NAME	DATE
City of Palm Springs Animal Care Facility	11/18/2009

Hardscape - Method (i)

A. Hardscape for automotive vehicular use, including parking lots, driveways and site roads.

A	B	C	D	E	F	G	H
		Areas (SF) to Subtract from within the Illuminated Area					
Lighting Application (Table 147-B)	Actual Paved Area + 5' perimeter of adjacent unpaved land. Includes planters and land. Includes planters and landscaped areas less than 10' wide that are enclosed by hardscape on at least 3 sides.	Area between poles or luminaires that are > 6 times the mounting height distance (If Applicable)	Overlapping areas of another application or luminaire	Building Areas	Areas obstructed by signs or other structures	Sub total of areas to subtract (C + D + E + F)	Illuminated Area (B - G)
Parking	30,440	0	0	0	0	0	30,440

B. Hardscape for pedestian use, including plazas, sidewalks, walkways and bikeways

A	B	C	D	E	F	G	H
		Areas (SF) to Subtract from within the Illuminated Area					
Lighting Application (Table 147-B)	Actual Paved Area + 5' of unpaved land on either side of path of travel. Shall include all contiguous paved area before including adjacent grounds.	Area between poles or luminaires that are > 6 times the mounting height distance (If Applicable)	Overlapping areas of another application or luminaire	Building Areas	Areas obstructed by signs or other structures	Sub total of areas to subtract (C + D + E + F)	Illuminated Area (B - G)

Checklist
☐ Section 147 (c)1 B - Each portion of all illuminated areas has been assigned only one lighting application, and the applications are consistent with actual use of the areas.
☐ Section 147 (c)1 A - General Illumination areas includes only those illuminated areas that are in the bounds of the Application and are within a square pattern around a luminaire that is six times the luminaire mounting height, with the luminaire in the middle of the patttern, less any areas that are within buildings, under canopies, beyond property lines, or obstructed by signs or other structures.

ILLUMINATED AREA CALCULATION WORKSHEET (Part 2 of 5) OLTG-3-C

PROJECT NAME	DATE
City of Palm Springs Animal Care Facility	11/18/2009

A. Hardscape Method ii

Hardscape for driveways, site roads, sidewalks, walkways and bikeways

A	B
List Specific Application (Table 147-A)	Length of 25' wide path incorporating as much of he paved area as possible.
Hardscape - Lineal	539

Checklist
☐ Section 147 (c)1 B - Each portion of all illuminated areas has been assigned only one lighting application, and the applications are consistent with actual use of the areas.
☐ Section 147 (c)1 B Method ii - General illumination areas for site roadway, driveway, sidewalk, walkway, or bikeway includes only those illuminated areas that are in the bounds of the Application and includes a 25 foot wide area running along the axis of the path of travel and much of the paved area as possible.

B. Building Entrances without Canopies

A	B	C
Width of Door plus 3 feet on each side	Smaller of 18 ft or distance to the edge of the property line	Area (sf) (A x B)

Checklist
☐ Section 147 (c)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.
☐ Section 147 (c)1 A - General illumination areas includes only those illuminated areas that in the bounds of the Application and are with a square pattern around a luminaire that is six times the luminaire mounting height, with the luminaire in the middle of the pattern, less any areas that are within buildings, under canopies, beyond property lines, or obstructed by a signs or other structures.

ILLUMINATED AREA CALCULATION WORKSHEET (Part 4 of 5) OLTG-3-C

PROJECT NAME	DATE
City of Palm Springs Animal Care Facility	11/18/2009

Ornamental Lighting, Canopies, Vehicle Service Station Hardscape, and Outdoor Dining

A	B	C	D	E	F	G
		Areas (SF) to Subtract from within the Illuminated Area				
Lighting Application (Table 147-B)	Gross Illuminated Area of Application (SF)	Area between poles or luminaires that are > 6 times the mounting height distance	Overlapping areas of another application or luminaire	Areas obstructed by signs or other structures	Sub total of areas to subtract (C + D + E)	Illuminated Area (B-F)
Non-sales Canopy	7,403	0	0	0	0	7,403

Checklist
☐ Section 147 (c)1 B - Each portion of all illuminated areas has been assigned only one lighting application, and the applications are consistent with actual use of the areas.
☐ Section 147 (c)1 C - The area of ornamental lighting includes no more than the total area of the site external to building. Luminaires used for ornamental lighting employ lamps rated 100 watts or less, and are not used to determine LPD for general illumination.
☐ Section 147 (c)2 D - Measured in plan view, the areas of illuminated canopies include the horizontal projection of the canopies.
☐ Section 147 (c)1 F - The area of vehicle service station hardscape includes only illuminated hardscape areas beyond the horizontal projection of the canopy in plan view.
☐ Section 147 (c)1 I - The area of outdoor dining area includes only illuminated hardscape areas used to serve and consume food and beverages.

LIGHTING MANDATORY MEASURES — LTG-MM

PROJECT NAME	DATE
City of Palm Springs Animal Care Facility	11/18/2009

	DESCRIPTION	Designer	Enforcement
☒	131(d)1 For every floor, all interior lighting systems shall be equipped with a separate automatic control to shut off the lighting. This automatic control shall meet the requirements of Section 119 and may be an occupancy sensor, automatic time switch, or other device capable of automatically shutting off the lighting.		
☒	131(d)2 Override for Building Lighting Shut-off: The automatic building shut-off system is provided with a manual, accessible override switch in sight of the lights. The area of override is not to exceed 5,000 square feet.		
☒	119(h) Automatic Control Devices Certified: All automatic control devices specified are certified, all alternate equipment shall be certified and installed as directed by the manufacturer.		
☒	111 Fluorescent Ballast and Luminaires Certified: All fluorescent fixtures specified for the project are certified and listed in the Directory. All installed fixtures shall be certified.		
☒	131(a) Individual Room/Area Controls: Each room and area in this building is equipped with a separate switch or occupancy sensor device for each area with floor-to-ceiling walls.		
☒	131(b) Uniform Reduction for Individual Rooms: All rooms and areas greater than 100 square feet and more than 0.8 watts per square foot of lighting load shall be controlled with bi-level switching for uniform reduction of lighting within the room.		
☒	131(c) Daylight Area Control: All rooms with windows and skylights that are greater than 250 square feet and that allow for the effective use of daylight in the area shall have 50% of the lamps in each daylit area controlled by a separate switch; or the effective use of daylight cannot be accomplished because the windows are continuously shaded by a building on the adjacent lot. Diagram of shading during different times of the year is included on plans.		
☒	131(e) Display Lighting. Display lighting shall be separately switched on circuits that are 20 amps or less.		

NOTES

CERTIFICATE OF ACCEPTANCE (LTG-1-A) AND ALL APPLICABLE ACCEPTANCE DOCUMENTS SHALL BE SUBMITTED TO THE FILED INSPECTOR DURING CONSTRUCTION. CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL THESE FORMS ARE REVIEWED AND APPROVED.

PREVAILING WAGE JOB

JAN 19 2010 ESTIMATING

BID SET

REGISTERED PROFESSIONAL ENGINEER GERALD L. GREEN No. E015691 Exp. 06-30-10 ELECTRICAL STATE OF CALIFORNIA

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12245 WORLD TRADE DRIVE, STE. A
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Not for Construction

PALM SPRINGS ANIMAL CARE FACILITY

4575 E. MESQUITE AVE.
PALM SPRINGS, CA 92262

CITY OF PALM SPRINGS
PROJECT NO. CP. 07-24

APN: 680-020-010

Issue

Rev	Date	By	Description
1	11/23/09		BLDG. PERMIT SET
2	01/18/10		BID SET

Drawn By
Checked By
Job No.
Issue Date
Scale NTS

Reference North
Drawing Title

TITLE-24

E6.2

Sheet

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