Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.1 [EL15][1]	Lighting controls installed to uniformly reduce the lighting load by at least 50%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1 [EL18][1]	Occupancy sensors installed in required spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1, C405.2.2.3 [EL23][2]	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.2.1 [EL22][2]	Automatic controls to shut off all building lighting installed in all buildings.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3 [EL16][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3, C405.2.3.1, C405.2.3.2 [EL20][1]	Primary sidelighted areas are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3, C405.2.3.1, C405.2.3.3 [EL21][1]	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL4][1]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL8][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.3 [EL6][1]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.4.1 [FI18][1]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C408.2.5.1 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.3 [FI33][1]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

ALL DRAWINGS, SPECIFICATIONS AND COPIES THEREOF ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER; THEY ARE TO BE USED ONLY WITH RESPECT TO THIS PROJECT AND ARE NOT TO BE USED ON ANY OTHER PROJECT OR EXTENSIONS TO THIS PROJECT, EXCEPT BY WRITTEN AGREEMENT AND APPROPRIATE COMPENSATION TO THE ENGINEER. SUCH DOCUMENTS ARE TO BE RETURNED OR SUITABLY ACCOUNTED FOR THE ENGINEER ON REQUEST AT THE COMPLETION OF THE WORK.

COMcheck Software Version 4.1.0.0
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: EPC CENTENNIAL HALL - LTG UPGRADE
Project Type: New Construction

Construction Site: 200 CASCADE AVE. COLORADO SPRINGS, CO
Owner/Agent:
Designer/Contractor:

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Aud Seating (Common Space Types:Auditorium Seating Area)	2430	0.57	1385
3-Entry / Circ spaces (Common Space Types:Corridor/Transition >=8 ft wide)	1840	0.59	1086
2-Diaz / Platform area (Common Space Types:Classroom/Lecture/Training)	1280	1.12	1434
		Total Allowed Watts =	3904

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Aud Seating (Common Space Types:Auditorium Seating Area)				
LED: C: CYLINDER: Other:	1	22	58	1269
LED: P / P8: COVE LTG: Other:	1	9	57	511
3-Entry / Circ spaces (Common Space Types:Corridor/Transition >=8 ft wide)				
LED: G: CYLINDER: Other:	1	5	58	288
LED: M: DN LTG: Other:	1	10	55	550
LED: T1: GALLERY ART LTG: Other: Exemption:Display Lighting in Galleries/Museums	1	16	16	Exempt
2-Diaz / Platform area (Common Space Types:Classroom/Lecture/Training)				
LED: G1: CYLINDER: Other:	1	15	58	866
LED: J: FORUM COVE LTG: Other:	1	10	33	330
LED: T2: TV BROADCAST LTG: Other: Exemption:Theatrical/Photographic Lighting	1	11	36	Exempt
		Total Proposed Watts =		3815

Interior Lighting PASSES: Design 2% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.0.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

J TANNER, PE — Name - Title
Signature
7/23/2020 — Date

COMcheck Software Version 4.1.0.0
Inspection Checklist

Energy Code: 2015 IECC

Requirements: 0.0% were addressed directly in the COMcheck software

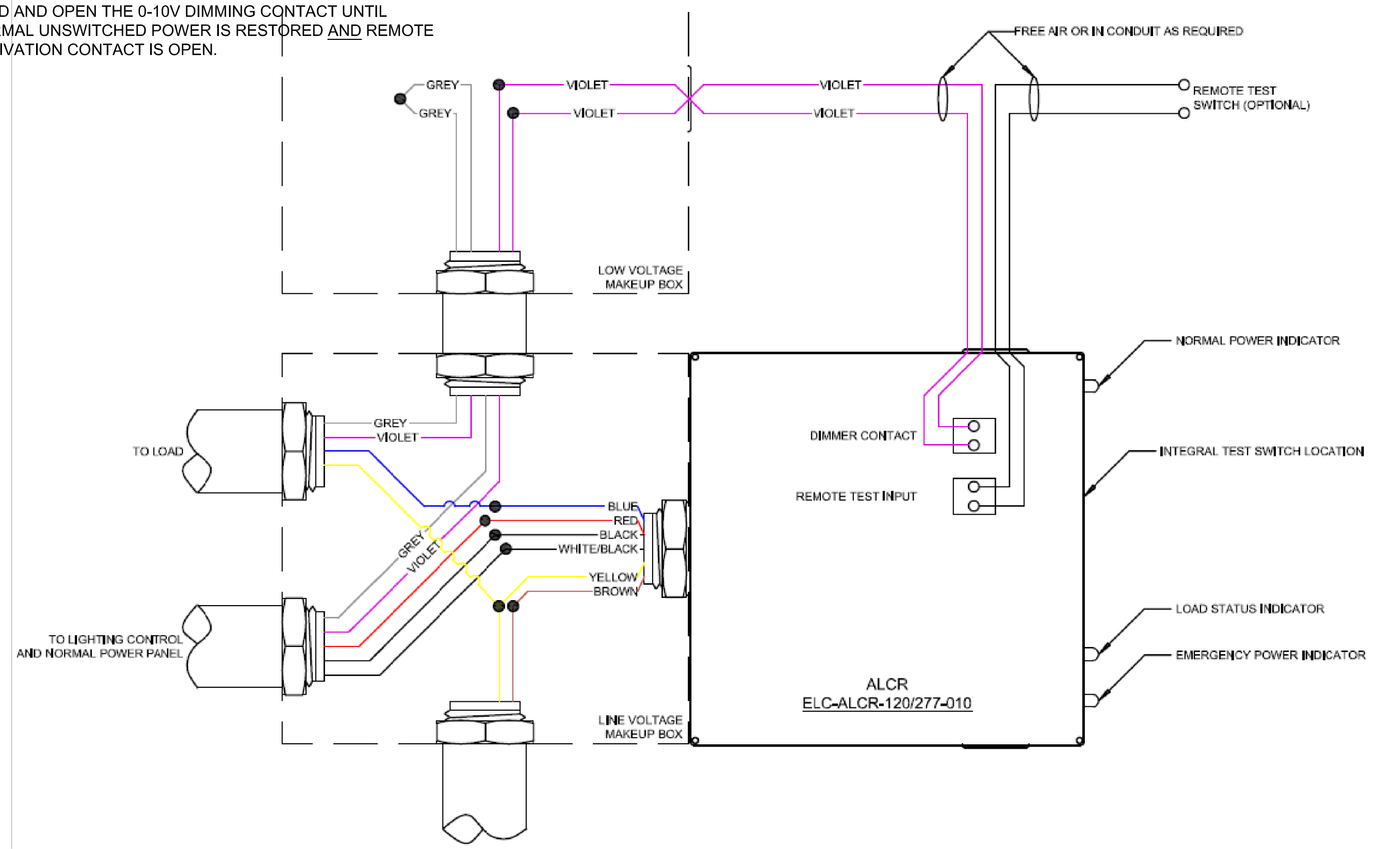
Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

OPERATING SUMMARY:

EMERGENCY LIGHTING LOAD SHALL TRACK THE STATE OF THE NORMAL SWITCH LEG IF NORMAL UNSWITCHED POWER IS PRESENT AND REMOTE ACTIVATION CONTACT IS OPEN. UPON LOSS OF NORMAL UNSWITCHED POWER OR CLOSING THE REMOVE ACTIVATION CONTACT, THE RELAY SHALL SWITCH ON AND HOLD ON EMERGENCY LIGHTING LOAD AND OPEN THE 0-10V DIMMING CONTACT UNTIL NORMAL UNSWITCHED POWER IS RESTORED AND REMOTE ACTIVATION CONTACT IS OPEN.



EM EGRESS LTG - OVERRIDE OF 0-10V DIMMER

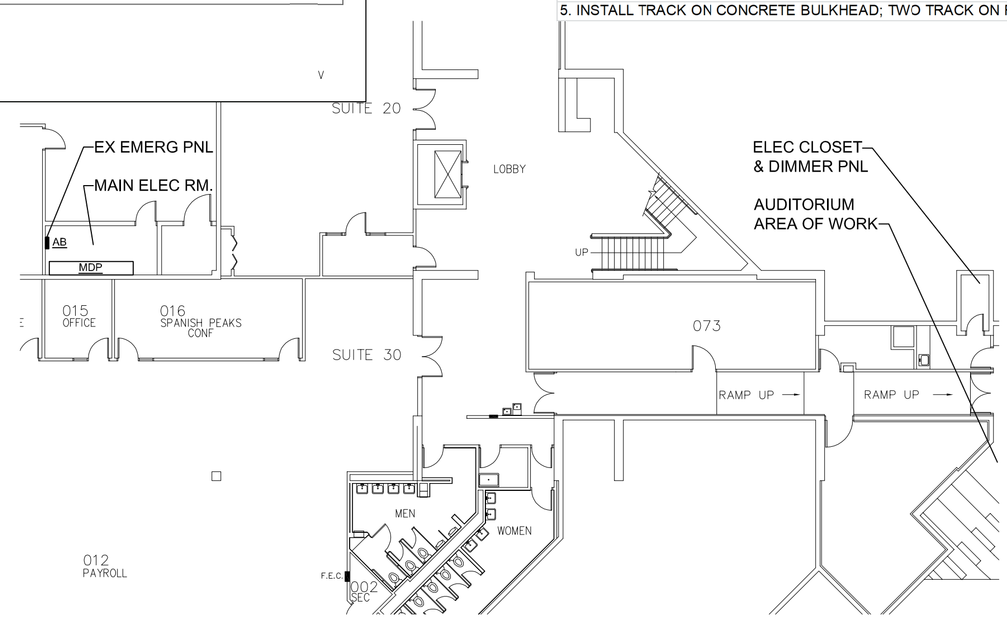
NO SCALE — FOR REFERANCE ONLY

LIGHT FIXTURE SCHEDULE

TYPE	MFGR	CATALOG NO.	LAMPS DIM	LAMPS TYPE	VOLT	MTG	DESCRIPTION	LUMENS	TOTAL WATTS	NOTES
C	LITHONIA	LDN6CYL-30-50-LO6-AR-LD-MVOLT-GZ1-ACC-90CRI-DWHG	0-10V	LED		PENDANT	SUSPENDED CYLINDER	5000	57.7	
G1	LITHONIA	LDN6CYL-30-50-LO6-AR-LD-MVOLT-GZ1-FCM-90CRI-DWHG	0-10V	LED		SURFACE	SURFACE MTD CYLINDER	5000	57.7	
J	LITHONIA	ZL1N-L46-3000LM-FST-MVOLT-30K-90CRI-WH	0-10V	LED		SURFACE	FORUM COVE LIGHT	3300	33	
M	PRESCOLITE	RLC8HL-DM1-8LCHL-XXL-30K-9-*	0-10V	LED		RECESS	DOWN LT - 8-in RETROFIT	4500	52	2
M-ALT	LITHONIA	LDN*RV-30-50-LR-*-AR-LD-MVOLT-GZ1-90CRI	0-10V	LED		RECESS	DOWN LT - 8-in RETROFIT	5000	55	2
P	FINELITE	S11-LED-4-H-830-SC-96W-120 (4-FT ASSYM DISTR)	0-10V	LED		SURFACE	8-FT UPPER COVE LIGHT	3565	28.4	1
P8	FINELITE	S11-LED-8-H-830-SC-96W-120 (4-FT ASSYM DISTR)	0-10V	LED		SURFACE	8-FT UPPER COVE LIGHT	7130	56.8	1
T1	JUNO	T262L-**MTG-G2-30K-97CRI-PDIM-FL-BL	POLY	LED		TRACK	ART TRACK - TRACK HEAD	1214	15.9	
T1	JUNO	T 8FT-BL	-	-		SURFACE	ART TRACK - 8FT TRACK	-	-	
T1	JUNO	T38-BL	-	-		na	ART TRACK - END FEED	-	-	
T2	JUNO	T255L-G2-30K-90CRI-PDIM-SP-WH with CCLBL-469 LOUVER		LED			STAGE/PODIUM TRACK SPOT	2894	35.5	
T2A	JUNO	T255L-G2-30K-90CRI-PDIM-NFL-WH with CCLBL-469 LOUVER		LED			STAGE TRACK NARROW FLD	2894	35.5	
T2	JUNO	T-10FT-WH with T34-WH CONNECTOR		LED			STAGE/PODIUM TRACK	-	-	
T2	JUNO	T-4FT-WH with T34-WH CONNECTOR		LED			STAGE/PODIUM TRACK	-	-	
DIM	CHAMSYS	QUICK Q - 10 LTG CONSOLE (DMX512, ETHERNET)	DMX	-		TABLETOP	STAGE DIMMING SYSTEM	-	-	4
TH	Chauvet	OVATION E160-WW-26 LED (26-DEG LENS)	DMX	LED		BATTENS	THEATRICAL LTS - 26DEG	6657	103	3,4
X	Dual-Lite	LXUGWE	-	-	LED	120/277	UNIVERSAL LED EXIT LGHT (Green/White)		3	

GENERAL NOTES:
1. SUBSTITUTION OF FIXTURES IS ACCEPTABLE UNO; IF FIXTURES MEET ALL THE RATINGS/FEATURES/AETHETICS OF THE SCHEDULED FIXTURES.
2. ALL FIXTURES SHALL BE LED, 3000K, AND INCLUDE 0-10V DIMMING (TO 1%) UNLESS NOTED OTHERWISE.

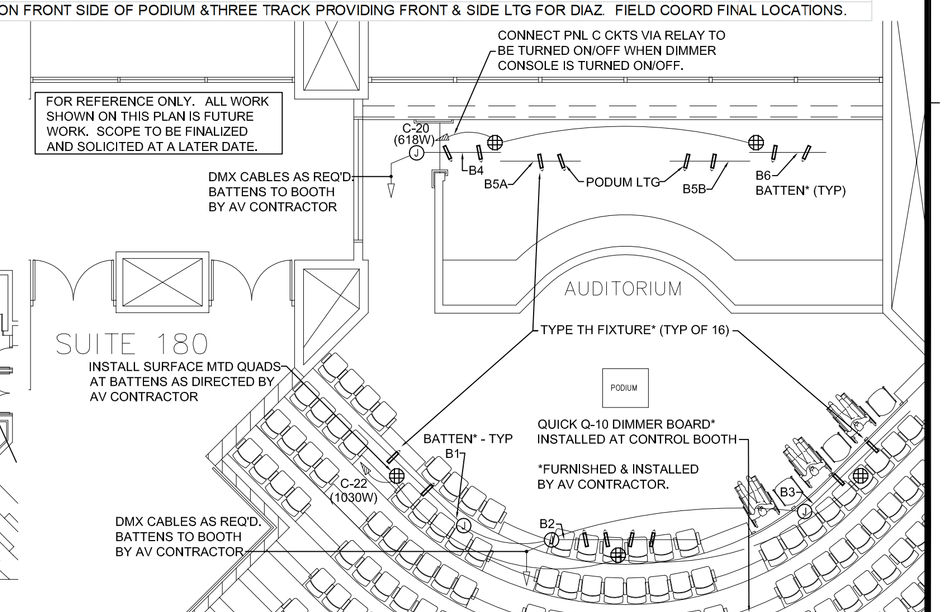
NOTES:
1. FIELD VERIFY AVAILABLE COVE WIDTHS. MOUNT FIXTURES TO ELIMINATE LIGHT SHINING ON AIR GRILLES.USING SHIMS, SHIELD OR SIMILAR. SEE SECTION ON SHT E1.
2. RETROFIT SHALL MOUNT WITHIN EXISTING HOUSING AND HAVE 0-10V DIMMING. REVISE MFGR/CAT NO AS REQUIRED to FIT EXISTING FIXTURE.
3. PEAK LM: 69399 CD, ILLUM @ 5m: 2766 LUX. THEATRICAL LIGHT SHALL INCLUDE BLK SCHED 80 PIPE BATTENS, C-CLAMPS, 30-IN SAFETY CABLES, MTG HARDWARE DMX CABLES, DMX SPLITTERS, TERMINATORS, CABLE MGMT DEVICES, MTG HARDWARE AND ALL ANCILLIARY COMPONENTS. FORD AV, DENVER CO. 720-374-2345. TYPE TH ALTERNATE:
4. THEATRICAL LIGHTING SYSTEM IS FUTURE WORK (NIC). DO NOT INCLUDE "DIM" OR "TH" FIXTURES OR ASSOCIATED WORK IN BID.
5. INSTALL TRACK ON CONCRETE BULKHEAD; TWO TRACK ON FRONT SIDE OF PODIUM &THREE TRACK PROVIDING FRONT & SIDE LTG FOR DIAZ. FIELD COORD FINAL LOCATIONS.



NORTH

PARTIAL PLAN - LOWER LVL - POWER

SCALE: 1/16" = 1' - 0"



NORTH

FUTURE WORK (NIC) - THEATRICAL LTG

SCALE: 1/8" = 1' - 0"

RED ROCK CONSULTING ENGINEERS
815 S. 25th St. Ste. 203.
Colorado Springs, CO 80904
Tel: 719-685-1266

EL PASO COUNTY

COLORADO REGISTERED PROFESSIONAL ENGINEER 28627 7/23/20

EPC - CENTENNIAL HALL LIGHTING UPGRADE

200 CASCADE AVE., COLORADO SPRINGS, CO

PLANS, DETAILS & SCHEDULE

MARK	REVISION	DATE

PROJECT NO: 20010
DRAWN: CAD
CHECKED: JT
ISSUE DATE: 7/23/20

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