Drawn By: Quote #: DWG Ref:

DETAILS

NETWORK CONTROLLER INCLUDES THE FOLLOWING CAPABILITIES: 1. STANDALONE AND NETWORKED nLIGHT SYSTEM FUNCTIONALITY. ROOM TYPE 2. ASTRONOMICAL TIME CLOCK VIA SENSORVIEW SOFTWARE. BREAKROOMS/KITCHENS X X 100 7.5 10 10 | X | X 3. ETHERNET PORT TO CONNECT TO LAN/WAN NETWORK. CLASSROOMS X X 70 7.5 10 10 | X | X | | X | 4. AUTOMATIC DEMAND RESPONSE (ADR) CLIENT THAT ALLOWS CONFERENCE ROOMS X 70 7.5 10 10 | X | X ACTIVATION OF CONFIGURABLE LOAD SHED DIMMING LEVELS THROUGH AN OpenADR 2.0a VIRTUAL END NODE. COPY ROOMS X X 70 7.5 10 10 XX 5. SOFTWARE INTEGRATION FOR BACNET IP/MSTP BAS OR REST CORRIDORS/STAIRWELLS 100 7.5 50 10* | X | X | X API SYSTEMS. BACnet TESTING LABORATORIES LISTED B-BC. DUSK EXTERIOR 100 6. SECURITY FIPS PUBLICATION 140-2, LEVEL 1 INSIDE (VALIDATION CERTIFICATE PENDING); COMPLIES WITH CALIFORNIA X X 100 17.5 10 20 | X | X CIVIL CODE TITLE 1.81.26, SECURITY OF CONNECTED DEVICES, MULTIPURPOSE ROOMS APPROVED UNDER SENATE BILL NO. 327 (2018). X 70 7.5 10 10 | X | X 7. FOLLOW SB-327 END-USER AUTHENTICATION PROCESS TO OPEN OFFICE AREAS X | 100 | 7.5 | 10 | 10 | X | X PROVIDE A COMPLIANT SB-327 SYSTEM. PARKING GARAGE | X | X | 100 | 10 | 50 | 12.5 8. DEMAND RESPONSE READY DEVICE.

OCCUPANCY SENSOR

OPERATIONAL HOURS THE DIM LEVEL WILL GO TO 50% AFTER 7.5 MINUTES OF NO OCCUPANCY, AND THEN AFTER A TOTAL OF 10 MINUTES OF NO OCCUPANCY THE LIGHTS WILL TURN OFF. OWNER TO VERIFY TIME SCHEDULES.

100 | 10 | 50 | 12.5 | TBD | TBD

WALL SWITCH TO ACTIVATE A 2-HOUR OVERRIDE. OWNER TO VERIFY TIME SCHEDULES. *** AUTOMATIC SCHEDULING CONTROLS SHALL BE CAPABLE OF REDUCING THE LIGHTING BETWEEN 50% AND 90% AND HAVE A MINIMUM OF

REQUIRE 0-10V DIMMING WIRES TO BE PULLED THROUGH THE LCP, PER SECTION 130.2(c)2(A).

100

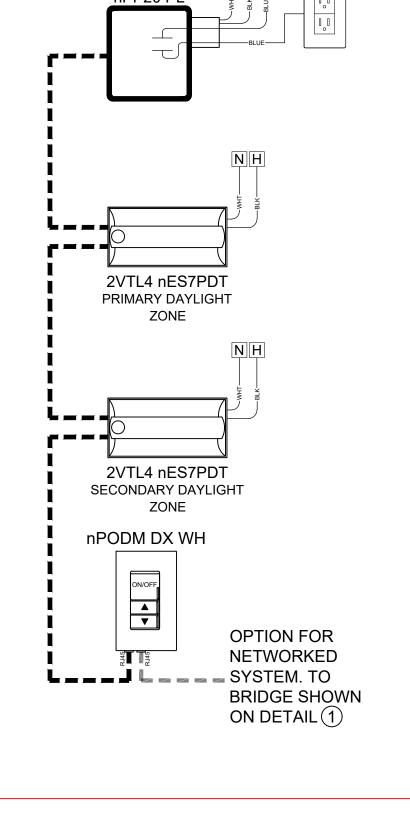
X 70 7.5 10 10

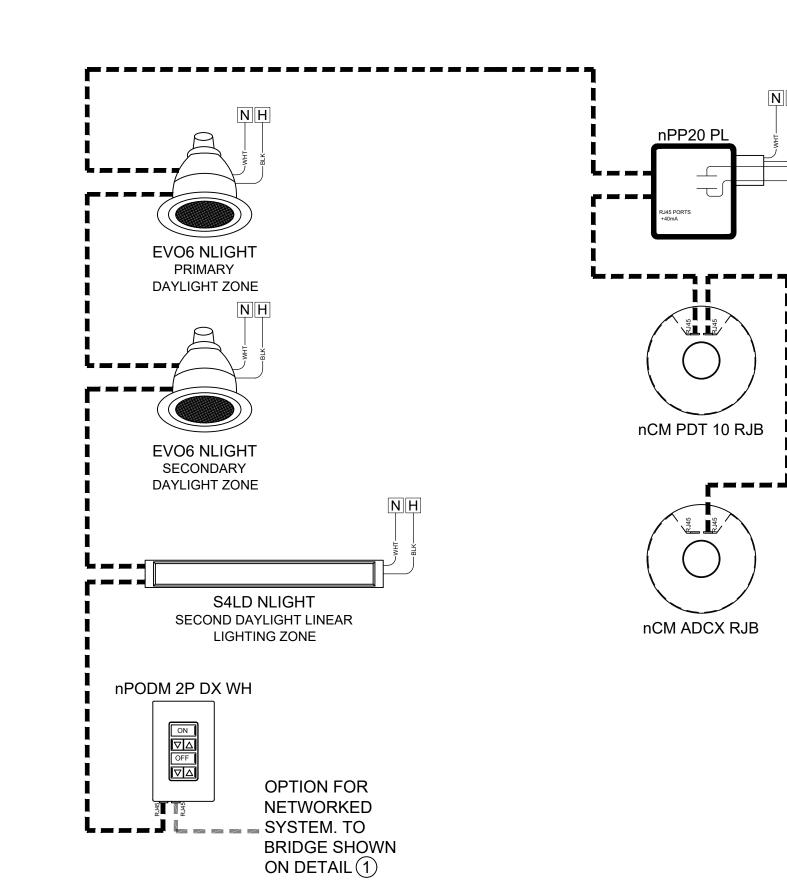
X X 70 7.5 10 10

10

100 | 7.5 | 10 | 10

2VTL4 nES7PDT PRIMARY DAYLIGHT 2VTL4 nES7PDT SECONDARY DAYLIGHT ZONE nPODM DX WH **OPTION FOR** NETWORKED L____ SYSTEM. TO **BRIDGE SHOWN**







X X | X

TBD

TBD

| X | X | X |

| X | X | X

| X | X

XX

| X | X

TIME CLOCK

WALL SWITCH DAYLIGHT SENSOR OTHER

| X

WAREHOUSES

RESTAURANTS/STORES

SMALL OFFICES < 250 SQ FT

STORAGE ROOMS > 100 SQ FT

RESTROOMS

* DURING OPERATIONAL HOURS THE LIGHTING DIM LEVEL WILL GO TO 50% AFTER 7.5 MINUTES OF NO OCCUPANCY. OUTSIDE OF ** 5 MINUTES BEFORE THE LIGHTING IS SCHEDULED TO TURN OFF, THE LIGHTS WILL TURN OFF FOR 1 SECOND AND THEN GO BACK TO IT'S

PREVIOUS DIMMING LEVEL. THIS BLINK WARNING PREVENTS FALSE OFFS AND GIVES AUTHORIZED PERSONNEL A WARNING TO PRESS TWO NIGHTTIME PERIODS. DIMMING CONTROLLED AT FIXTURE LEVEL, USING NLIGHT AIR WIRELESS LIGHTING COTNROLS WILL NOT

nPODM DX WH _____ 2VTL4 nES7PDT GENERAL LIGHTING ZONE **OPTION FOR NETWORKED**

SYSTEM. TO

BRIDGE SHOWN

L___SYSTEM. TO

BRIDGE SHOWN

ON DETAIL (1)

ON DETAIL (1)

nECYD NLTAIR G2

nECY MVOLT ENC GFXK

nlight backbone network detail

CONNECTION TO LAN/WAN FOR

SENSORVIEW SOFTWARE, ADR ∫

ADDITIONAL nECY CONTROLLERS

SIGNAL, COMMUNICATION TO
{ }

AND/OR BAS INTEGRATION ackslash

TO ADDITIONAL nLIGHT DEVICES

REQUIRED OR AS INDICATED ON

AND/OR ENABLED FIXTURES IF

FLOOR PLANS

SMALL OFFICE DETAIL

N.T.S.

OPEN OFFICE DETAIL

2VTL4 nES7PDT PRIMARY DAYLIGHT 2VTL4 nES7PDT SECONDARY DAYLIGHT 2VTL4 nES7PD1 GENERAL LIGHTING ZONE nPODM DX WH

OPTION FOR NETWORKED

CONFERENCE DETAIL

GENERAL NOTES:

1. DETAILS AND DESIGN IS BASED ON AN nLIGHT LIGHTING CONTROLS SYSTEM.

2. DETAILS ARE DIAGRAMMATIC AND FOR REFERENCE OF SYSTEM AND ROOM TYPE REQUIREMENTS TO MEET BASIS OF DESIGN. REFER TO MANUFACTURERS SHOP DRAWINGS FOR QUANTITIES

3. LIGHTING CONTROL SUBMITTALS FOR NETWORKED SYSTEM

3.1. SHOP DRAWINGS SHOWING QUANTITY AND LOCATION OF ALL DEVICES.

3.2. STANDALONE/NETWORK SINGLE LINE DIAGRAM. 3.3. BASIS OF DESIGN PROGRAMMING OPERATION FOR EACH ROOM TYPE 3.4. DEVICE CUTSHEETS.

4. MANUFACTURER OR FACTORY REPRESENATIVE TO INCLUDE STARTUP AND COMMISSIONING OF THE LIGHTING CONTROL SYSTEM. MUST INCLUDE A SITE VISIT FOR THE FOLLOWING: 4.1. A PRE-CONSTRUCTION MEETING TO CONFIRM DESIGN AND

FIELD INSTALLATION REQUIREMENTS. 4.2. PROGRAMMING AND COMMISSIONING OF THE LIGHTING CONTROL SYSTEM TO MEET THE BASIS OF DESIGN AND TITLE 24 REQUIREMENTS.

4.3. MAINTENANCE / OWNER WALK THROUGH FOR MAKING FINAL ADJUSTMENTS TO PROGRAMMING. 5. CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHTING CONTROL DEVICES, CABLES, ACCESSORIES AS REQUIRED BY

MANUFACTURER'S RECOMMENDATION TO PROVIDE A COMPLETE AND FULLY FUNCTIONAL COMPLIANT TITLE 24 6. ALL DEVICES SHALL BE MOUNTED AND INSTALLED IN

ACCESSIBLE CEILING LOCATIONS. CONTRACTOR WILL VERIFY BEST FIT LOCATIONS IN THE FIELD.

7. CONTRACTOR TO VERIFY COMPATIBILITY BETWEEN DIMMING POWERPACKS AND INSTALLED FIXTURES.

8. CONTACT SDLA FOR COMPLETE nLIGHT LIGHTING CONTROLS BOM, CONTROLS@SDTLG.COM - PHONE # 858-505-1055.

TITLE 24 COMPLIANCE:

1. MANUAL AREA CONTROLS, SECTION 130.1(a).

2. MULTI-LEVEL LIGHTING CONTROLS, SECTION 130.1(b). 3. SHUT-OFF CONTROLS, **SECTION 130.1(c)**.

4. AUTOMATIC DAYLIGHTING CONTROLS, **SECTION 130.1(d)**. 5. DEMAND RESPONSE CONTROLS, **SECTION 130.1(e)** AND **SECTION**

6. CONTROLS INTERACTIONS, SECTION 130.1(f). 7. CIRCUIT CONTROLS FOR 120-VOLT CONTROLLED RECEPTACLES

8. INDOOR LIGHTING CONTROLS BASIS OF DESIGN (SEE SDLA

BASIS OF DESIGN TO COMPLY WITH T24), SECTION 120.8(c). 9. CONTACT SDLA FOR COMPLETE nLIGHT LIGHTING CONTROLS BOM, CONTROLS@SDLTG.COM - PHONE # 858-505-1055.

SYSTEM OPERATIONS TRAINING OPTIONS, PER SECTION

 2-HOUR ONSITE OR REMOTE TRAINING. 2. 2-DAY IN PERSON OR REMOTE TRAINING @ SDLA, AT CUSTOMER

THE 2-DAY IN PERSON OR REMOTE TRAINING.

LOCATION, OR VIDEOCONFERENCING SOFTWARE. 3. VIDEO TRAINING GIVEN TO EVERYONE WHO PARTICIPATES IN

4. CONTACT SDLA FOR TRAINING, CONTROLS@SDLTG.COM -PHONE # 858-505-1055.

nLIGHT REST API SPECIFICATIONS:

ACUITY BRANDS SYSTEM - nLIGHT CONTROLLER SHALL BE COMPATIBLE WITH REST API OVER AN ENCRYPTED HTTPS CONNECTION. READ AND WRITE CONNECTION SHALL BE SECURABLE WITH A USERNAME/PASSWORD PAIR. PASSWORDS TO HAVE ADJUSTABLE COMPLEXITY TO COMPLY WITH CUSTOMER PASSWORD REQUIREMENTS

1. WRITE ACCESS OF END DEVICES CONNECTED TO THE SYSTEM CONTROLLER SHALL BE MADE AVAILABLE THROUGH:

1.1. WRITE ACCESS SHALL INCLUDE COMMAND OF DEVICE-RELAY-STATE, DEVICE-DIM-LEVEL,

GROUP-RELAY-STATE, AND GROUP-DIM-LEVEL. 1.2. GROUPING OF DEVICES FOR GROUP-RELAY-STATE AND GROUP-DIM-LEVEL WRITE ACCESS SHALL BE AUTOMATICALLY GENERATED BY THE SYSTEM CONTROLLER AND SHALL NOT REQUIRE CREATION BY

THIRD PARTY SYSTEMS. 1.3. GROUP-RELAY-STATE AND GROUP-DIM-LEVEL RESPONSE TO REST API SHALL BE AVAILABLE WITHOUT REQUIRING MULTIPLE POST COMMANDS.

2. READ ACCESS OF END DEVICES (EMBEDDED nLIGHT FIXTURES) CONNECTED TO THE SYSTEM CONTROLLER SHALL BE MADE

AVAILABLE THROUGH: 2.1. READ ACCESS SHALL INCLUDE DEVICE-ONLINE/OFFLINE STATUS, DEVICE-OCCUPANCY-STATE, GROUP-OCCUPANCY-STATE, MEASURED-LIGHT-LEVEL, DEVICE-RELAY-STATE, DEVICE-DIM-LEVEL, GROUP-RELAY-STATE, AND GROUP-DIM-LEVEL

2.2. GROUP OF DEVICES FOR GROUP-OCCUPANCY-STATE, GROUP-RELAY-STATE, AND GROUP-DIM-LEVEL READ ACCESS SHALL BE AUTOMATICALLY GENERATED BY THE SYSTEM CONTROLLER AND SHALL NOT REQUIRE CREATION

BY THIRD PARTY SYSTEMS. 3. CONTACT SDLA FOR SETUP OF RESPI CONTROLS@SDLTG.COM -PHONE # 858-505-1055.

AND DEVICES USED FOR EACH SPACE AND NETWORK.

SHALL INCLUDE THE FOLLOWING DOCUMENTS (NOT LIMITED TO

DS - nCM ADCX RJB 16 AMP (120/227V) POWER/RELAY PACK WITH 0-10V DIMMING CONTROL, CHASE NIPPLE MOUNTING

DP - nPP16 D EFP SUBSCRIPT REFERENCES CIRCUIT/ZONE OF CONTROL 20 AMP (120V) RELAY PACK FOR PLUG LOAD CONTROL, CHASE NIPPLE MOUNTING

PASSIVE DUAL TECHNOLOGY (PDT)

PIR/MICROPHONICS/BOTH

OS - nCM PDT 10 RJB

LOW VOLTAGE

PL - nPP20 PL SUBSCRIPT REFERENCES CIRCUIT/ZONE OF CONTROL 5 AMP (120/227V) POWER/RELAY PACK PHASE DIMMING CONTROL.

CHASE NIPPLE MOUNTING (277V NOT AVAILABLE WITH ELV) PCD - nSP5 PCD (2W, 3W, MLV, ELV 120) SUBSCRIPT REFERENCES CIRCUIT/ZONE OF CONTROL LOW VOLTAGE ON/OFF TOGGLE SWITCH WITH DIMMING

LIGHTING CONTROLS LEGEND AND DESCRIPTIONS

EXTENDED RANGE 360° SENSOR-CEILING MOUNT, LOW VOLTAGE,

DETECTION TECHNOLOGY SHALL BE SELECTABLE AS FOLLOWS:

AUTOMATIC DIMMING CONTROL PHOTOCELL- CEILING MOUNT,

1-ZONE = S1 - nPODM DX 2-ZONE = S2 - nPODM 2P DX 4-ZONE = S4 - nPODM 4P DX SUBSCRIPT REFERENCES ZONE OF CONTROL

LOW VOLTAGE SCENE SELECTOR WITH DIMMING 2-SCENE = SS2 - nPODM 4S DX 4-SCENE = SS4 - nPODM 4S DX

SUBSCRIPT REFERENCES ZONE OF CONTROL LOW VOLTAGE GRAPHIC TOUCHSCREEN CONTROLLER, INCLUDES 16-ZONES AND 16-SCENES WITH DIMMING GFXX - nPOD GFX

LOW VOLTAGE WALL SWITCH OCCUPANCY SENSOR WITH ON/OFF/RAISE/LOWER, PASSIVE DUAL TECHNOLOGY (PDT) WS - nWSX PDT LV DX

SUBSCRIPT REFERENCES ZONE OF CONTROL

SUBSCRIPT REFERENCES ZONE OF CONTROL

SB-327 SPECIFICATION REQUIREMENTS:

1. **SENATE BILL No. 327** - LIHGTING CONTROLS MUST COMPLY WITH CALIFORNIA CIVIL CODE 1.81.26.

2. GENERATION OF AUTHENTICAION - THE DEVICE MUST CONTAIN A SECURITY FEATURE THAT REQUIRES A USER TO GENERATE A NEW MEANS OF AUTHENTICATION BEFORE ACCESS IS GRANTED TO THE DEVICE FOR THE FIRST TIME.

3. AUTHENTICATION - METHOD OF VERIFYING OF A USER. PROCESS, OR DEVICE TO ACCESS RESOURCES IN A INFORMATION SYSTEM.

4. SECURITY FEATURE - A FEATURE OF A DEVICE DESIGNED TO PROVIDE SECURITY FOR THAT DEVICE. U.S. GOVERNMENT STANDARD OF FEDERAL INFORMATION PROCESSING STANDARD (FIPS) 140-2, LEVEL 1 COMPLIANT.

SB-327 AUTHENTICATION PROCESS:

1. REQUIRES 3 POINTS OF CONTACT - FACILITIES DEPARTMENT, OWNER'S REP, AND IT DEPARTMENT (EMAIL AND CONTACT

REQUIRES 2 DATES FOR SCHEDULING. 3. INTEGRATION REQUIREMENTS (IP ADDRESS, SUBNET MASK, AND

4. CONTACT SDLA FOR AUTHENTICATION SETUP, CONTROLS@SDLTG.COM - PHONE # 858-505-1055.

BUILDING MANAGEMENT SYSTEMS INTEGRATION SPECIFICATIONS:

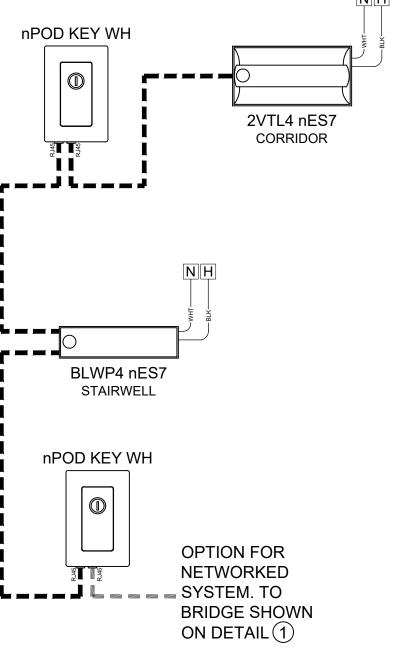
1. BACnet TESTING LABORATORIES (BTL) LISTED AS A BACnet BUILDING CONTROLLER (B-BC).

2. OPTIONAL AUTOMATIC DEMAND RESPONSE CLIENT OPTION ALLOWS ACTIVATION OF CONFIGURABLE LOAD SHED DIMMING LEVELS THROUGH AN OpenADR 2.0a VIRTUAL END NODE.

REQUIRES OUTBOUND IP CONNECTION TO UTILITY DRAS. 3. ENHANCED SECURITY PROVIDED BY BOTH: 3.1. HTTPS SERVER

3.2. U.S. GOVERNMENT SECURITY STANDARD OF FEDERAL INFORMATION PROCESSING STANDARD (FIPS) PUBLICATION 140-2, LEVEL 1, INSIDE (VALIDATION CERTIFICATE PENDING).

4. CONTACT SDLA FOR INTEGRATION WITH BMS, CONTROLS@SDLTG.COM - PHONE # 858-505-1055.



___________ SYSTEM. TO

nCM PDT 10 RJB

nCM ADCX RJB

REV DATE

Scale: NOT TO SCALE



