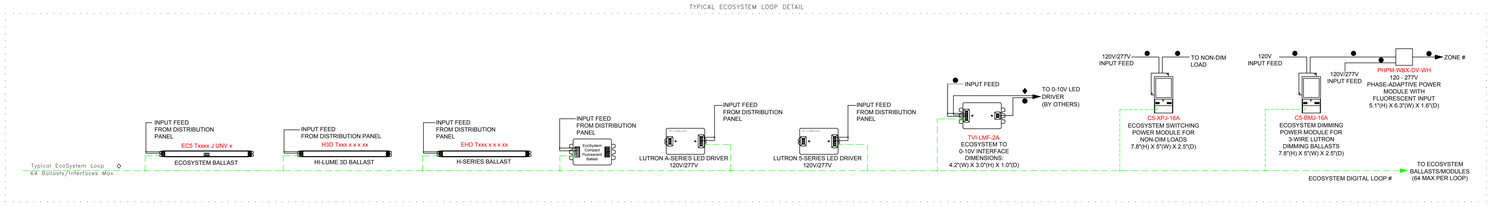
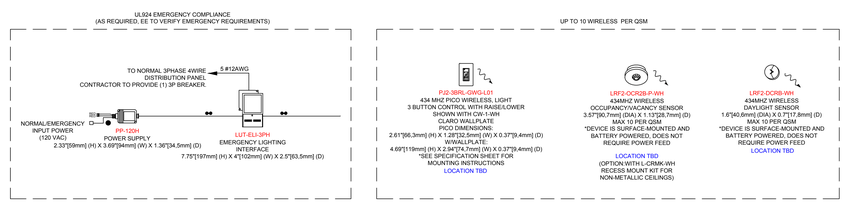
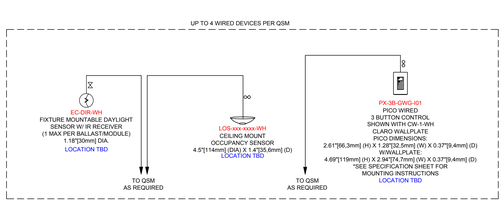
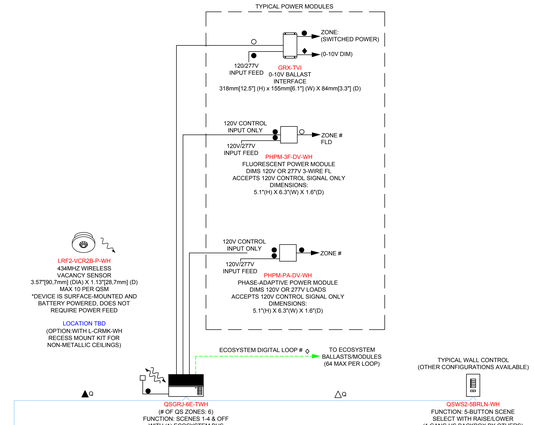
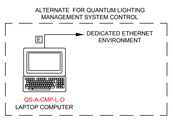


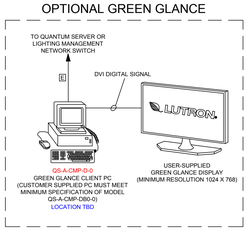


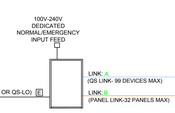


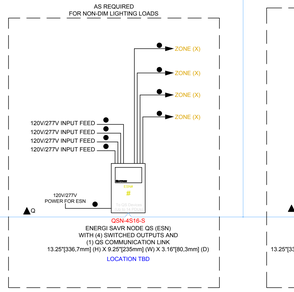


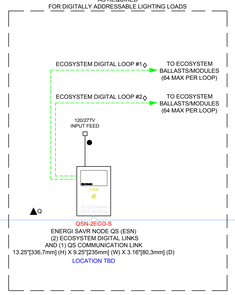


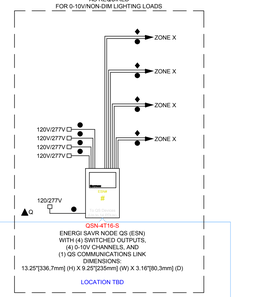
OPTIONAL GREEN GLANCE



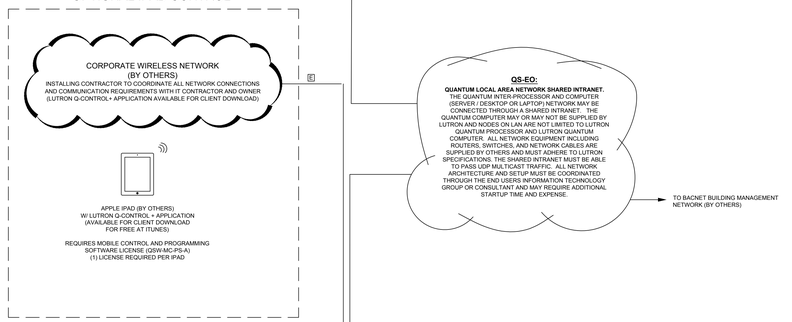


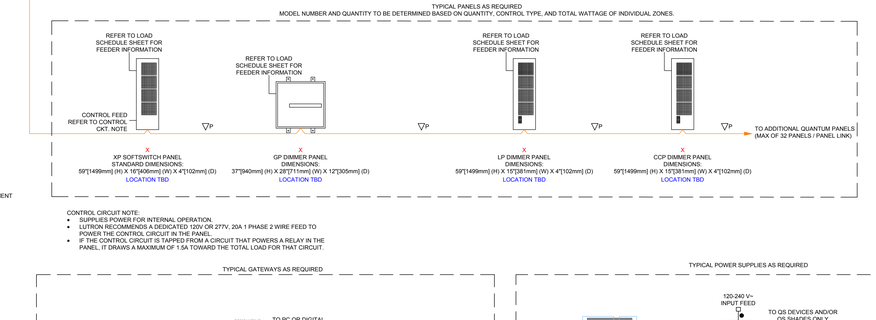


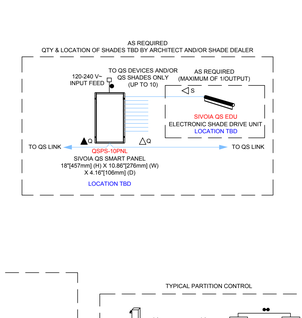


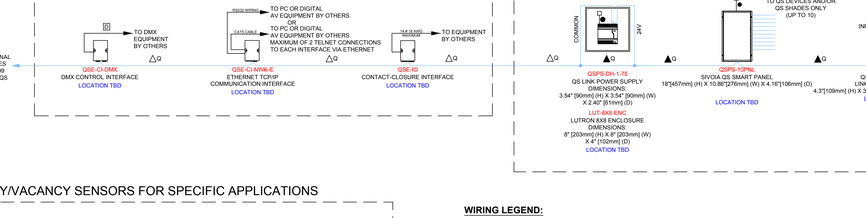


OPTIONAL IPAD CONTROL

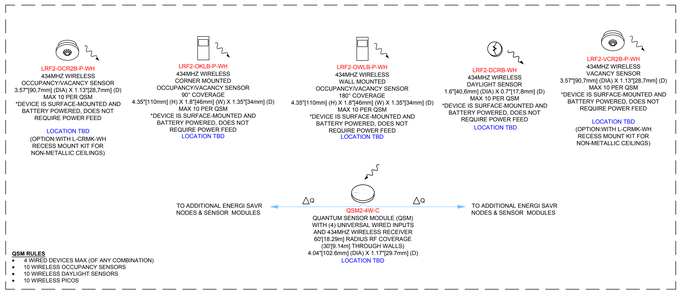








ALTERNATIVE OCCUPANCY/VACANCY SENSORS FOR SPECIFIC APPLICATIONS



WIRING LEGEND:

△Q QS CONTROL LINK (SEE WIRE DESCRIPTION BELOW)
▲Q QS CONTROL LINK (SEE WIRE DESCRIPTION BELOW)
(CONNECT WIRES 1, 3 AND 4. DO NOT CONNECT WIRE # 2)

QS WIRING AS REQUIRED BY CONTROL LINK LENGTH
(REFER TO QS SMART PANEL POWER SUPPLY WIRING GUIDE FOR SHADE WIRING NOTES):

TOTAL CONTROL LINK LENGTH	WIRE GAUGE	AVAILABLE FROM LUTRON IN ONE CABLE:
LESS THAN 500ft (153 m)	POWER (TERMINALS 1&2): 1 PAIR 18 AWG (1.0 mm²)	GRX-CBL-346S OR GRX-PCBL-346S
	DATA (TERMINALS 3,4&): 1 PAIR 22 AWG (0.5 mm²), TWISTED AND SHIELDED*	
500ft (153 m) TO 2,000ft (600 m)**	POWER (TERMINALS 1&2): 1 PAIR 12 AWG (4 mm²)	GRX-CBL-46S OR GRX-PCBL-46S
	DATA (TERMINALS 3&4): 1 PAIR 22 AWG (0.5 mm²), TWISTED AND SHIELDED*	

*ALTERNATE DATA-ONLY CABLE: USE APPROVED DATA LINK CABLE (22 AWG [0.5 mm²] TWISTED/SHIELDED) FROM BELDEN (MODEL # 9461).

**TOTAL LENGTH OF THE QS LINK MUST NOT EXCEED 2,000 ft (600 m).

QS SMART PANEL POWER SUPPLY (QSPS-PX-10-60) QS WIRING GUIDE				
MAXIMUM DEVICES PER ONE OUTPUT		MAXIMUM DISTANCE PER ONE OUTPUT BASED ON WIRE GAUGE		
SHADES + CONTROLS		12 AWG (4 mm²) QSH-CBL-L-500 QSH-CBLP-L-500	16 AWG (1.5 mm²) QSH-CBL-M-500 QSH-CBLP-M-500	18 AWG (1.0 mm²) GRX-CBL-346S-500
NONE	UP TO 50 POWER DRAW UNITS	1,250 ft (375 m)	500 ft (150 m)	250 ft (75 m)
NONE	UP TO 25 POWER DRAW UNITS	2,000 ft (600 m)	1,000 ft (300 m)	600 ft (175 m)

QS INDIVIDUAL POWER SUPPLY (QSPS-PX-1-50 OR QSPS-J-1-50) QS WIRING GUIDE				
MAXIMUM DEVICES PER ONE OUTPUT		MAXIMUM DISTANCE PER ONE OUTPUT BASED ON WIRE GAUGE		
SHADES + CONTROLS		12 AWG (4 mm²) QSH-CBL-L-500 QSH-CBLP-L-500	16 AWG (1.5 mm²) QSH-CBL-M-500 QSH-CBLP-M-500	18 AWG (1.0 mm²) GRX-CBL-346S-500
NONE	UP TO 8 POWER DRAW UNITS	2,000 ft (600 m)	1,500 ft (460 m)	

◁S

QS SMART PANEL POWER SUPPLY (QSPS-PX-10-60) SHADE WIRING GUIDE				
MAXIMUM DEVICES PER ONE OUTPUT		MAXIMUM DISTANCE PER ONE OUTPUT BASED ON WIRE GAUGE		
SHADES + CONTROLS		12 AWG (4 mm²) QSH-CBL-L-500 QSH-CBLP-L-500	16 AWG (1.5 mm²) QSH-CBL-M-500 QSH-CBLP-M-500	18 AWG (1.0 mm²) GRX-CBL-346S-500
1 SIVOIA QS SHADE OR DRAPERY	UP TO 1 POWER DRAW UNIT	500 ft (150 m)	200 ft (60 m)	125 ft (35 m)
2 SIVOIA QS ROLLER 64™ x 30 IP (2 ft x5 ft) EACH		200 ft (60 m)	75 ft (20 m)	50 ft (15 m)
3 SIVOIA QS ROLLER 64™ x 20 IP (1.6 ft x5 ft) EACH				
2 SIVOIA QS ROLLER 100™ x 50 IP (4.6 ft x5 ft) EACH				

QS INDIVIDUAL POWER SUPPLY (QSPS-PX-1-50 OR QSPS-J-1-50) SHADE WIRING GUIDE				
MAXIMUM DEVICES PER ONE OUTPUT		MAXIMUM DISTANCE PER ONE OUTPUT BASED ON WIRE GAUGE		
SHADES + CONTROLS		12 AWG (4 mm²) QSH-CBL-L-500 QSH-CBLP-L-500	16 AWG (1.5 mm²) QSH-CBL-M-500 QSH-CBLP-M-500	18 AWG (1.0 mm²) GRX-CBL-346S-500
1 SIVOIA QS SHADE OR DRAPERY	UP TO 1 POWER DRAW UNIT	250 ft (75 m)	100 ft (30 m)	50 ft (15 m)

◪	INPUT POWER (NORMAL-EMERGENCY)
□	INPUT POWER (NORMAL)
●	2 #12AWG (4 mm²)
○	3 #12AWG (4 mm²)
◆	0-10V SIGNAL 2 #18AWG (1.0 mm²)
◇	ECOSYSTEM BUS/LOOP: LUTRON CABLE (QS-CBL-2YB-GR-1 (2 #16 CONDUCTOR NON-PLENUM) OR C-FIRE-S-216-CU-1 (2 #16 CONDUCTOR PLENUM RATED). OTHERWISE USE 2 #16 AWG (1.5 mm²) BY OTHERS.
E	CAT5E OR BETTER CABLE FOR LUTRON NETWORK TERMINATED WITH RJ45 CONNECTORS (TO BE PROVIDED BY OTHERS). 328 ft (100 m) MAXIMUM RUN.
▽P	PANEL LINK (SEE WIRE DESCRIPTION BELOW)
▼P	PANEL LINK (SEE WIRE DESCRIPTION BELOW) (CONNECT WIRES 1, 2, 3 AND 4. DO NOT CONNECT WIRE # 5)
	LUTRON CABLE QSX-CBL-46L (5 CONDUCTOR NON-PLENUM) OR GRX-PCBL-46L (5 CONDUCTOR PLENUM RATED). OTHERWISE USE 2 #12 AWG (4 mm²), 1 BELDEN #9461 AND BETWEEN PANELS ADD 1 #18 AWG (1.0 mm²) FOR EMERGENCY SENSING CABLE BY OTHERS.
F	FIBER OPTIC CABLE FOR LUTRON NETWORK TERMINATED WITH APPROPRIATE FIBER OPTIC CONNECTORS (TO BE PROVIDED BY OTHERS). NOTE: REQUIRES DEDICATED FIBER OPTIC LINK (SINGLE-MODE OR MULTI-MODE).

◪	1-WAY RF COMMUNICATION
⊙⊙	2-WAY RF COMMUNICATION
○○	2 #18AWG (1.0 mm²)
⧗	LUTRON SENSOR CABLE C-CBL-5225 OTHERWISE USE 3 #22 AWG (1.0 mm²)
⧗	LUTRON SENSOR CABLE C-CBL-5225 OTHERWISE USE 4 #22 AWG (1.0 mm²)
D	DMX CONTROL
◐	DALI LINK

CONCEPT DRAWING NOTES:
CONTROL SYSTEM DRAWING IS PROVIDED FOR CONCEPTUAL PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION, EXACT EQUIPMENT REQUIREMENTS, INCLUDING LOCATIONS AND QUANTITIES, SHOULD BE VERIFIED IN ACCORDANCE WITH THE MOST UP-TO-DATE ARCHITECTURAL PLANS, SPECIFICATIONS AND WINDOW SCHEDULES/DETAILS. CONTROL INTENT AND SPECIFICATIONS. SHADE EQUIPMENT SHOULD BE VERIFIED IN ACCORDANCE WITH ARCHITECTURAL PLANS, SPECIFICATIONS AND WINDOW SCHEDULES/DETAILS

LED DIMMING REQUIRES AN EXACT MATCH BETWEEN THE LED ARRAY, DRIVER AND CONTROL. LUTRON CANNOT GUARANTEE COMPATIBILITY OR PERFORMANCE WITHOUT TESTING THIS COMBINATION.

TO CONFIRM WHAT PRODUCTS LUTRON HAS AVAILABLE OR WHAT INTERFACES MAY BE REQUIRED, CALL 1-877-GMA-LEDS OR CHECK LUTRON'S PRODUCT COMPATIBILITY MATRIX ON-LINE AT WWW.LUTRON.COM/LED.

TO REQUEST THE TESTING OF AN LED PRODUCT BY LUTRON MANUFACTURERS CAN FILL OUT AN LED EVALUATION REQUEST FORM ON-LINE AT WWW.LUTRON.COM/LED OR CONTACT LEDS@LUTRON.COM.

LUTRON CAN GUARANTEE COMPATIBILITY AND PERFORMANCE OF LUTRON HI-LUME A-SERIES LED DRIVERS USED WITH APPROPRIATE LUTRON CONTROLS. THE HI-LUME A-SERIES LED DRIVER CAN BE USED ON PRODUCTS UNDER 40 WATTS WITH SUITABLE MOUNTING LOCATIONS. PLEASE REFER TO THE SPECIFICATION SUBMITTAL SHEET FOR FURTHER INFORMATION.

IF USING UNTESTED, NON-LUTRON LED DRIVERS REQUIRING 0-10V CONTROL, PERFORMANCE AND COMPATIBILITY CANNOT BE GUARANTEED BY LUTRON. PRODUCTS FOLLOWING THE IEC STANDARD 60929 ARE MORE LIKELY TO PROVIDE ACCEPTABLE PERFORMANCE RESULTS. DETERMINATION OF RESULT ACCEPTABILITY IS UP TO THE USER'S DISCRETION.

IF USING UNTESTED, NON-LUTRON LED DRIVERS REQUIRING PHASE CONTROL, PERFORMANCE AND COMPATIBILITY CANNOT BE GUARANTEED BY LUTRON. A-SERIES OR ELV PRODUCTS PROVIDING HIGH END AND LOW END TRIM ADJUSTMENTS ARE MORE LIKELY TO PROVIDE ACCEPTABLE PERFORMANCE RESULTS. DETERMINATION OF RESULT ACCEPTABILITY IS UP TO THE USER'S DISCRETION.

WIRING NOTES:

QS LINK RULES

THE FOLLOWING LINK RULES MUST BE OBSERVED FOR PROPER OPERATION:

- THIS IS A TOPOLOGY-FREE LINK (T-TAP, HOME-RUN, ETC. IS OK); REFER TO TABLE BELOW FOR WIRE RUN LIMITS.
- IF WIRED DIFFERENTLY THAN WHAT IS SHOWN, POWER DRAW UNIT REQUIREMENTS NEED TO BE CONFIRMED. SEE POWER DRAW UNITS (PDUs) SPECIFICATION SHEET INCLUDED IN THIS SUBMITTAL.
- MAXIMUM OF 512 OUTPUTS (BALLASTS, SHADES, CONTACT CLOSURES, ETC.).
- MAXIMUM OF 100 OCCUPANCY SENSORS, 100 DAYLIGHT SENSORS/RADIO SHADOW SENSORS AND 100 KEYPADS.
- MAXIMUM OF 100 QS DEVICES (SUCH AS A GRAFIK EYE® QS, SEETOUCH® QS KEYPAD, SMART PANEL POWER SUPPLY (QSPS-Px-10-60), ESN, OR SIVOIA® QS SHADE / DRAPERY DRIVE UNIT). QUANTUM PROCESSOR COUNTS AS 1 DEVICE PER LINK.
- MAXIMUM OF 100 ZONES - SUCH AS A SIVOIA QS SHADE / DRAPERY DRIVE UNIT, OR A LIGHTING ZONE ON A GRAFIK EYE QS (DOES NOT APPLY TO QUANTUM SYSTEMS).
- THE 10 OUTPUTS ON A QSPS-Px-10-60 CANNOT EXCEED A COMBINED LENGTH OF 2,000 ft (600 m).

PANEL LINK RULES

PANEL(S) BASED ON _____ DATED XX.XX.XX FROM _____

THE FOLLOWING LINK RULES MUST BE OBSERVED FOR PROPER OPERATION:

- PANELS ARE DAISY-CHAINED ON ONE OF THE CONFIGURABLE LINKS PER LUTRON'S DRAWING, HOWEVER THEY DO NOT HAVE TO BE IN THE ORDER SHOWN.
- DO NOT HOME-RUN OR T-TAP THIS WIRING LINK. ALL CIRCUITS NEED TO BE LANDED IN THESE PANELS PER LUTRON'S PANEL SCHEDULES.
- THE MAXIMUM WIRE LENGTH OF A PANEL LINK IS 2,000 ft (600 m). A MX-RPTR IS USED TO EXTEND THE LENGTH OF A LINK ANOTHER 2,000 ft (600 m). A MAXIMUM OF (3) MX-RPTRS MAY BE USED PER LINK FOR MAXIMUM LENGTH OF 8,000 ft (2,400 m) PER LINK.
- IF A PANEL IS MOVED TO ANOTHER LINK, OR THE LOADS ARE NOT WIRED AS SHOWN IN LUTRON PANEL SCHEDULES, LUTRON MUST BE NOTIFIED. THIS INFORMATION IS IMPORTANT F