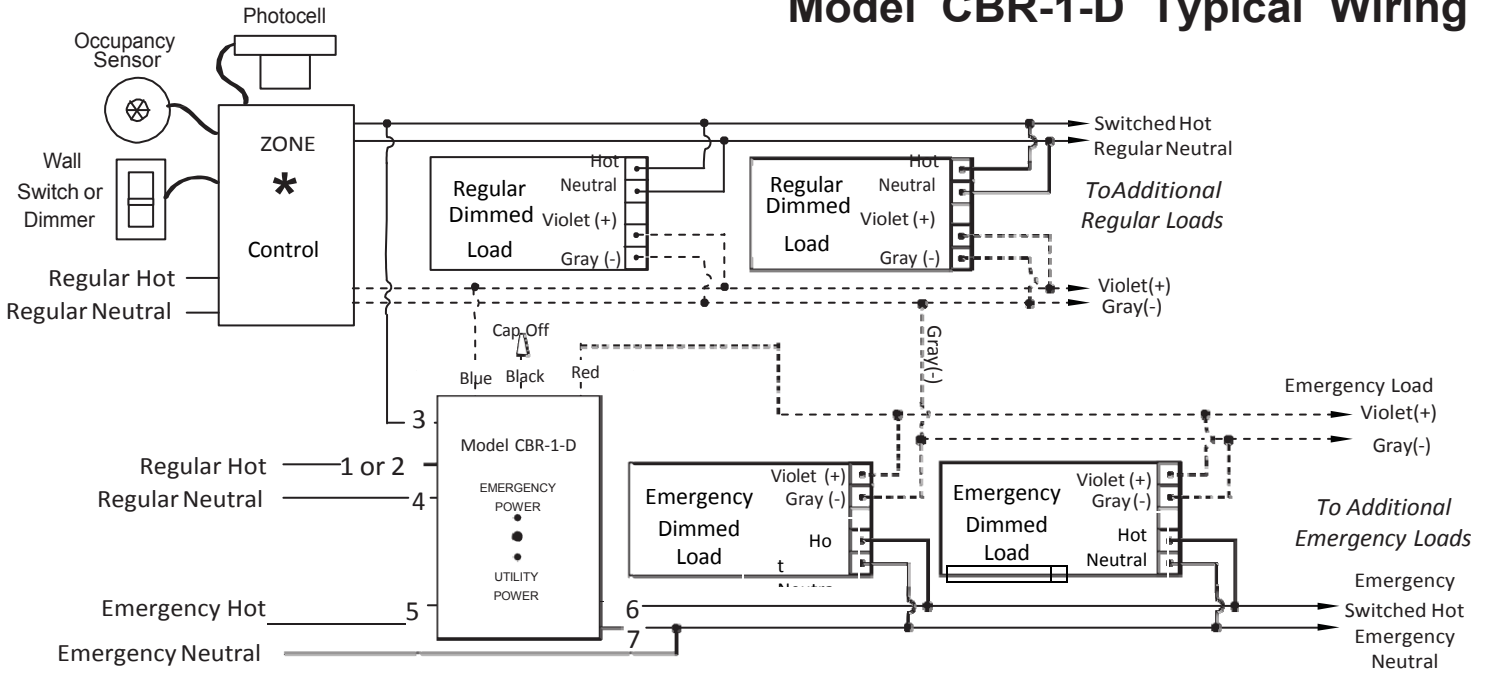


Model CBR-1-D Typical Wiring



REGULAR POWER WIRING		
Wire #	Color	Connection
1	Black	Regular Hot (120V)
2	Orange	Regular Hot (277V)
3	Red	Switched Hot
4	White	Regular Neutral

EMERGENCY POWER WIRING		
Wire #	Color	Connection
5	Blue	Emergency Hot
6	Yellow	Emergency Load Hot
7	White/Blue Stripe	Emergency Neutral

PLENUM CABLE B LOW VOLTAGE WIRING	
Blue	Dimmer Violet(+)
	Emergency Load
Red	Violet(+)
Black	Cap Off

- * NOTE: Zone Control device can be any combination of the following:
- Intelligent zone controller including both low voltage dimming output & line voltage switching output.
 - Line voltage switching devices (such as occupancy sensor contact, time clock, relay panel) & low voltage dimming devices including photocells, wall dimmers, & other low voltage dimming signals (0-10V or digital).

Theory of Operation

- Normal Operation:** The zone control device turns on and off both regular and emergency luminaires simultaneously. The zone dimmer control dims regular and emergency luminaires simultaneously. Switched and dimmed control of emergency luminaires is accomplished through **Emergency Power Dimmer Control, CBR-1-D**.
- Emergency Operation:** Wire input #1 or #2 and neutral are connected internally to a utility power sensing circuit. During a utility power interruption, the **CBR-1-D** energizes wire #6, which switches on emergency load(s) regardless of switch position. Additionally, the low voltage dimming circuit is disconnected from the emergency load(s), which are then brought to full brightness (100%), regardless of dimmer position.
- Automatic Diagnostic & Testing Operation:** When the zone control is turned off, such as at the end of the day, the emergency luminaires stay on at full brightness for 2.5 seconds & indicate that an emergency power source was available & that the CBR-1-D, ballast, & lamp(s) are all functioning correctly. This satisfies the monthly test requirement required by law. When extended duration testing is desired, such as during initial start-up foot candle readings, the manual test button can be pressed.
- Emergency Power Clarification:** Emergency Line power is supplied at all times from a 24 hour emergency power panel. During normal time this panel is supplied with utility power. During a utility power failure, it is supplied with generator or equivalent power.