FIRE-LITE ALARMS
by Honeywell

Voltage Drop Analysis

MS-9200UDLS Control Panel w/XRM-24B (2.5-amp circuit)

Notification Appliances - NAC #1

Source Voltage: 19.18 VDC Terminal Voltage

Protected Premises: Maine Hstorical Society **Date:** 2/6/14

Address: 1000 Riverside St **City:** Portland

State: ME **Zip:** 04103 **Note:** Storage for MHS/PPL

Prepared By: Timothy Parent **Phone:** (207)576-9255

Address: 187 Washington St **City:** Auburn

State: ME **Zip:** 04211

Device #	Part Number	Current (amps)	Distance (Feet)		Circuit Voltage @ Each Device				
			Between	Total			14 AWG		
1	P2R110	0.2210	25	25			18.97		
2	SR15	0.0660	5	30			18.93		
3	SR15	0.0660	2	32			18.92		
4	PC2RH150	0.2700	67	99			18.49		
5	PC2RH150	0.2700	11	110			18.44		
6	PC2RH150	0.2700	65	175			18.25		
7	P2RK110	0.2210	2	177			18.24		
	Total Current:	1.3840	**% Voltage Drop:**				4.88		
							Go		

~~Strikethrough~~ indicates a value below the device's minimum voltage at indicated location and wire gauge.

These calculations assume a worst-case source voltage as measured by UL with the batteries depleted to 20.4 volts. Under AC power and for most of the drain cycle of the batteries, the circuit voltages will be substantially higher and thus, would support a greater number of devices. A device's minimum operating voltage is derived from the UL-requirement that it operate within a Regulated Voltage Range (16VDC - 33VDC).