

Voltage Drop Analysis

Notification Appliances

FCPS-24S6 Notification Appliance Circuit (3.0 amps)

Source Voltage: 20.40 VDC Low Line

Protected Premises: <u>SUM LARGE CORP.</u>		Date: <u>9/12/2011</u>
Address: <u>343 INDUSTRIAL BLVD.</u>		City: <u>KANSAS CITY</u>
State: <u>KS</u>	Zip: <u>84518</u>	Note: _____
Prepared By: <u>FIRE SYSTEMS DESIGN GROUP</u>		Phone: <u>405-254-5030</u>
Address: <u>P.O. Box 31131</u>		City: <u>Edmond</u>
State: <u>OK</u>	Zip: <u>73003</u>	

Device #	PartNumber	Current (amps)	Distance (Feet)		Circuit Voltage @ Each Device				
			Between	Total	10 AWG	12 AWG	14 AWG	16 AWG	18 AWG
1	HSW(R)C-15CD	0.0820	46	46	20.33	20.27	20.21	20.10	19.93
2	HSW(R)C-15CD	0.0820	69	115	20.23	20.09	19.96	19.70	19.30
3	HSW(R)C-75CD	0.1480	48	163	20.17	19.99	19.80	19.46	18.91
4	STW(R)C-75CD	0.1350	54	217	20.12	19.89	19.67	19.25	18.57
5	HSW(R)C-95CD	0.1760	41	258	20.09	19.84	19.60	19.13	18.39
6	HSW(R)C-15CD	0.0820	48	306	20.08	19.82	19.56	19.07	18.29
7	HSW(R)C-15CD	0.0820	45	351	20.07	19.80	19.54	19.04	18.24
Total Current:		0.7870	% Voltage Drop:		1.63	2.93	4.23	6.67	10.57
					Go	Go	Go	Go	Go

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