

VOLTAGE DROP CALCULATIONS

USM - Masterton Hall
Portland, ME

Circuit 1

Amperage 1.56
Length of Run 289

Voltage Drop **9.87%**

VDC Applied **18.03**

Circuit 2

Amperage 0.92
Length of Run 150

Voltage Drop **3.02%**

VDC Applied **19.68**

Circuit 3

Amperage 1.06
Length of Run 240

Voltage Drop **5.57%**

VDC Applied **19.06**

Circuit 4

Amperage 0.518
Length of Run 110

Voltage Drop **1.25%**

VDC Applied **20.1**

Circuit 5

Amperage 1.48
Length of Run 336

Voltage Drop **10.89%**

VDC Applied **17.79**

Circuit 6

Amperage 1.31
Length of Run 283

Voltage Drop **8.12%**

VDC Applied **18.45**

Voltage Drop Parameters:
16 VDC = Minimum Power to any Appliance
4.4 VDC = Maximum Permissible Voltage Drop in Wiring System
20.4 VDC = Reduced Battery Potential at End of Life