

Voltage Drop

Example #5 - Temporary Job Site Light, Tripod, Corded (AC), Lumens 8000, Number of Lamp Heads 1

Technical Specs

Item	Temporary Job Site Light	Lamp Watts	500
Type - Job Site Lighting	Tripod	Color	Copper
Power Source - Job Site Lighting	Corded (AC)	Item - Job Site Lighting	Temporary Job Site Light
Lumens	8000	Lamp Included	Yes
Number of Lamp Heads	1	Rated Life	2000 hr.
Cord Length - Job Site Lighting	5 ft.	NEC Cord Designation	SJTW
Max. Extension Height	63"	Gauge/Conductor	18/3
Lighting Technology	Halogen	NEMA Plug Configuration	5-15P
Light Distribution - Job Site Lighting	Flood	Guard Type	Metal
IP Rating	IP54	Replacement Lamp	500W 4-5/8" T3
Safety Rated	Not Safety Rated	Features	Weatherproof ON/OFF Switch, Telescopes From 40" to 67" With "Easy Grip" Locking Nuts
Voltage	120VAC	Standards	UL, cUL



Gauge/Conductor	Ohms/kFT	Length (L) ft
18/3		
16/3		
14/3		
12/3		

Example #6

A single-phase, 240-volt air-conditioner is being installed for a small commercial building. The nameplate reads: "Minimum Circuit Ampacity 40 Amperes." The circuit originates at the main panel located 125 ft from the air-conditioner unit.

1. Determine the maximum voltage drop of the line recommended by the NEC?
2. What is the minimum size THWN CU conductors required and where in the NEC do you find this?
3. Determine the voltage drop due to the conductors. Does it meet the code requirement? If not, what should be done to meet the code?