

Resistor Calculations:

Voltage Range: 5V

Blue LED Forward Voltage: 3.3V

Green LED Forward Voltage: 2.2V

Desired LED Current: 15mA

$R = (\text{Power Supply V} - \text{Forward V}) / \text{Desired Current}$

Blue LED  $R = (5V - 3.3V) / 15mA = 113.34 \text{ Ohms}$

With 100 Ohm Resistor:

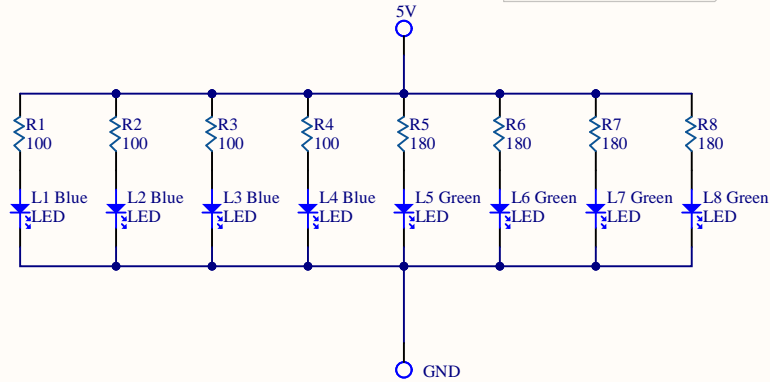
$I = (5V - 3.3V) / 100 = 17mA$

Green LED  $R = (5V - 2.2V) / 15mA = 186.67 \text{ Ohms}$

With 180 Ohm Resistor:

$I = (5V - 2.2V) / 180 = 15.56mA$

Max Current: 20mA



LED Strip Length is 22cm.  
Length: Components are spaced 2cm apart. Width: Wing width is 10mm, LEDs are 3mm long and resistors are 1.60mm long.

Title		
Nav Lights		
Size	Number	Revision
A4		
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File:	C:\Users\...\NavLightsSchem.SchDoc	Drawn By: Neel B and Kevin S