Anova Checklist

Assumptions (Factors)	Method used to test assumption	Result of method	Decision (Met or did not meet assumption)
1 Dep Var	*Inherent in data set*		*Met*
1 Ind var w/ >2 levels	*Inherent in data set*		*Met*
Independence of Observations	*Inherent in data set*		*Met*
Normal Distribution	*S-W, any graph (P-P,Q-Q)-Choose a few*	*Groups 3, 5 6 - not normally distributed (S-W test and histograms and Q-Q plots)-Choose a few*	*Not met*
No Outliers	*Box Plot*	*3 extreme outliers*	*Not Met*
Homogeneity of Var	*Levene's Test*	*Test outcome p = .168*	*Met*

Levels (Weight_group example)	Shapiro-Wilkes test Significance (p value)	P-P Interpretation (Normal or Not Normal)	Histogram Interpretation (Normal or Not Normal)
</= 100	*.365*	*~normal*	*~ Normal or not normal*
101-125	*.260*	*~normal*	*~ Normal or not normal*
126-150	*.000013*	*Not normal - skew*	*~ Normal or not normal*
151-175	*.489*	*~normal*	*~ Normal or not normal*
176-200	*.037*	*Not normal - skew*	*~ Normal or not normal*
>200	*.000047*	*Not normal - skew*	*~ Normal or not normal*

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Levels (Example Weight_group)	Mean	Median	Skewness	Kurtosis	Normally Distributed?
<100 (Lv1)	*159.68*	*159*	*-.248*	*-.599*	*YES*
101-125(Lv2)	*167.27*	*174*	*-.288*	*-.092*	*YES (OR Close)*
126-150(Lv3)	*171.48*	*169.5*	*.593*	*5.305*	*YES*
151-175(Lv4)	*182.51*	*185.50*	*-.095*	*0.033*	*YES*
176-200(Lv5)	*191.88*	*185*	*.849*	*1.513*	*NO*
>201(Lv6)	*229.26*	*222.0*	*1.611*	*5.58*	*NO*

Weight Group	Decision - Normally Distributed or Not Normally Distributed
<100 (Lv1)	*Normally Distributed*
101-125(Lv2)	*Normally Distributed*
126-150(Lv3)	*Not Normally Distributed*
151-175(Lv4)	*Normally Distributed*
176-200(Lv5)	*Normally Distributed*
>201(Lv6)	*Not Normally Distributed*