The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
Formulation	4	F1 F2 F3 F4

Number of Observations Read	12
Number of Observations Used	12

The GLM Procedure

Dependent Variable: TensileStrength

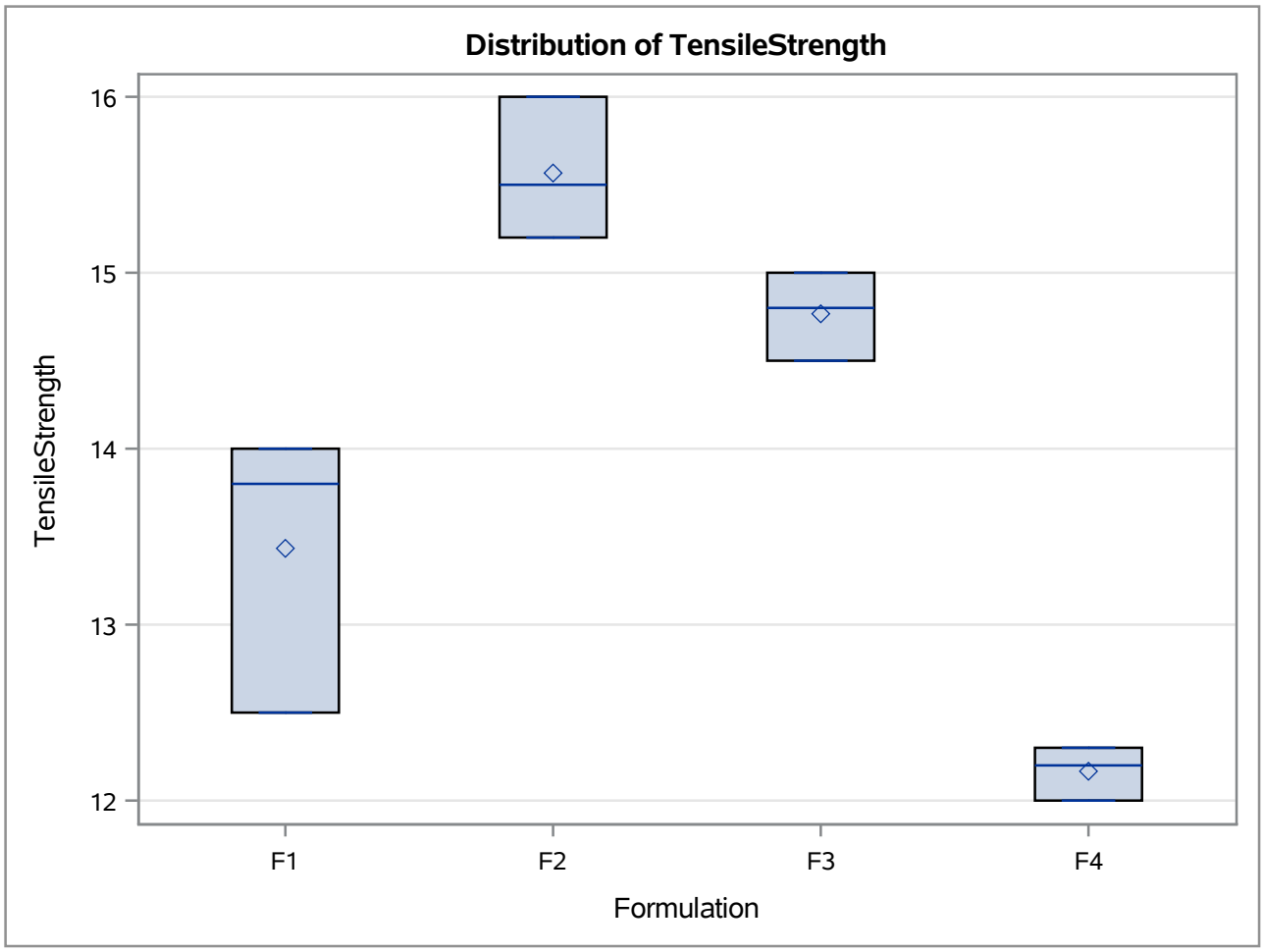
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	21.11166667	3.51861111	19.88	0.0024
Error	5	0.88500000	0.17700000		
Corrected Total	11	21.99666667			

R-Square	Coeff Var	Root MSE	TensileStrength Mean
0.959767	3.008679	0.420714	13.98333

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Formulation	3	20.17000000	6.72333333	37.98	0.0007
Thickness	1	0.28125000	0.28125000	1.59	0.2631
Temperature	0	0.00000000	.	.	.
Humidity	0	0.00000000	.	.	.
Thickness*Temperatur	1	0.36920455	0.36920455	2.09	0.2083
Thickness*Humidity	1	0.29121212	0.29121212	1.65	0.2558
Temperature*Humidity	0	0.00000000	.	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Formulation	0	0.00000000	.	.	.
Thickness	1	0.47350941	0.47350941	2.68	0.1629
Temperature	0	0.00000000	.	.	.
Humidity	0	0.00000000	.	.	.
Thickness*Temperatur	1	0.59438095	0.59438095	3.36	0.1264
Thickness*Humidity	1	0.29121212	0.29121212	1.65	0.2558
Temperature*Humidity	0	0.00000000	.	.	.

The GLM Procedure

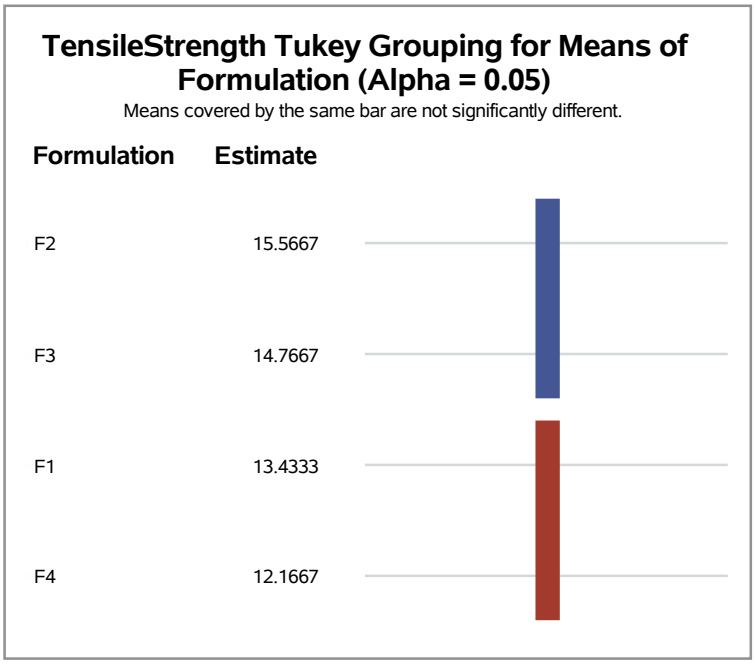


The GLM Procedure

Tukey's Studentized Range (HSD) Test for TensileStrength

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	5
Error Mean Square	0.177
Critical Value of Studentized Range	5.21819
Minimum Significant Difference	1.2675



The REG Procedure
Model: MODEL1
Dependent Variable: TensileStrength

Number of Observations Read	12
Number of Observations Used	12

Analysis of Variance

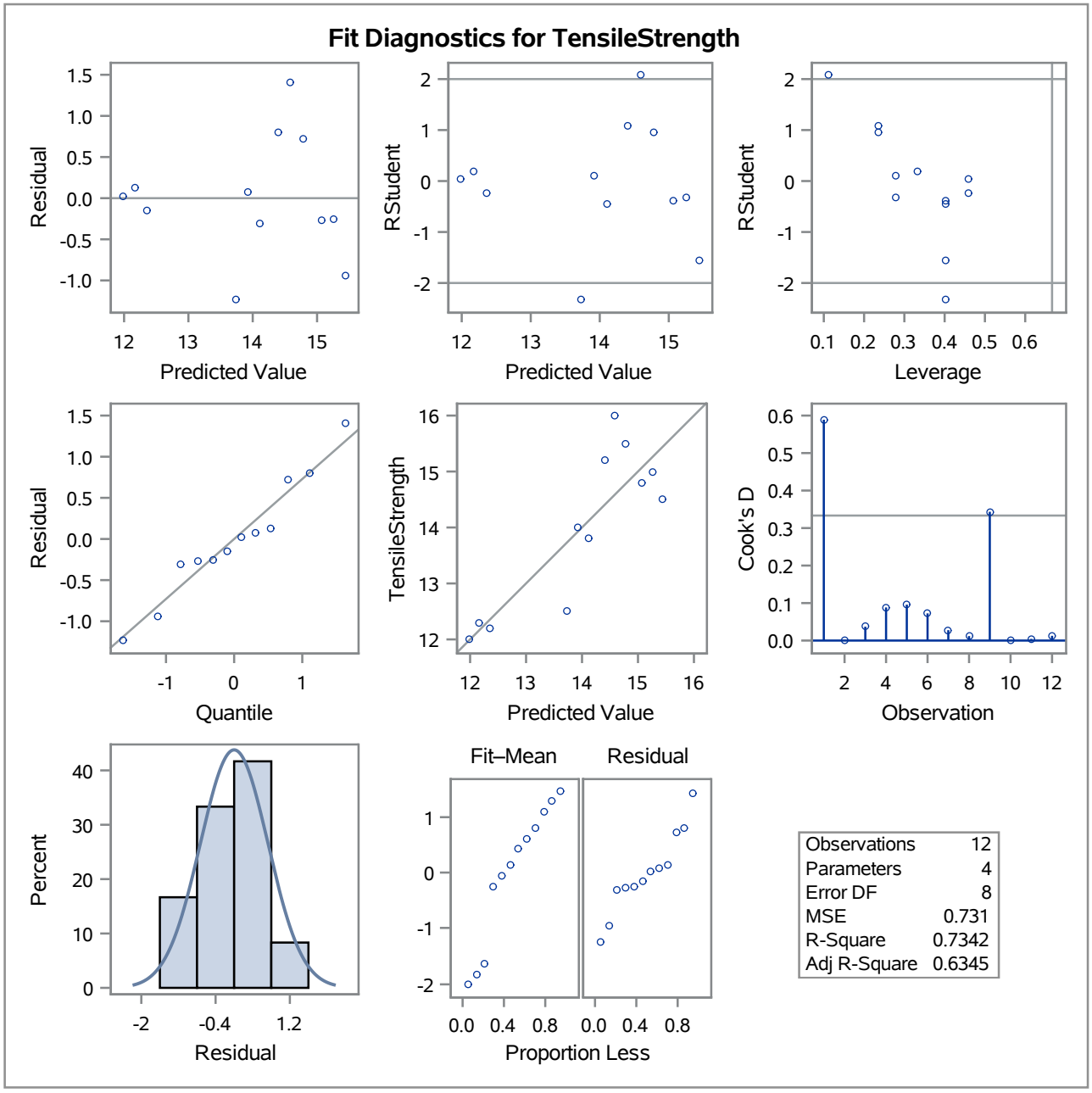
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	16.14903	5.38301	7.36	0.0109
Error	8	5.84764	0.73095		
Corrected Total	11	21.99667			

Root MSE	0.85496	**R-Square**	0.7342
Dependent Mean	13.98333	**Adj R-Sq**	0.6345
Coeff Var	6.11413		

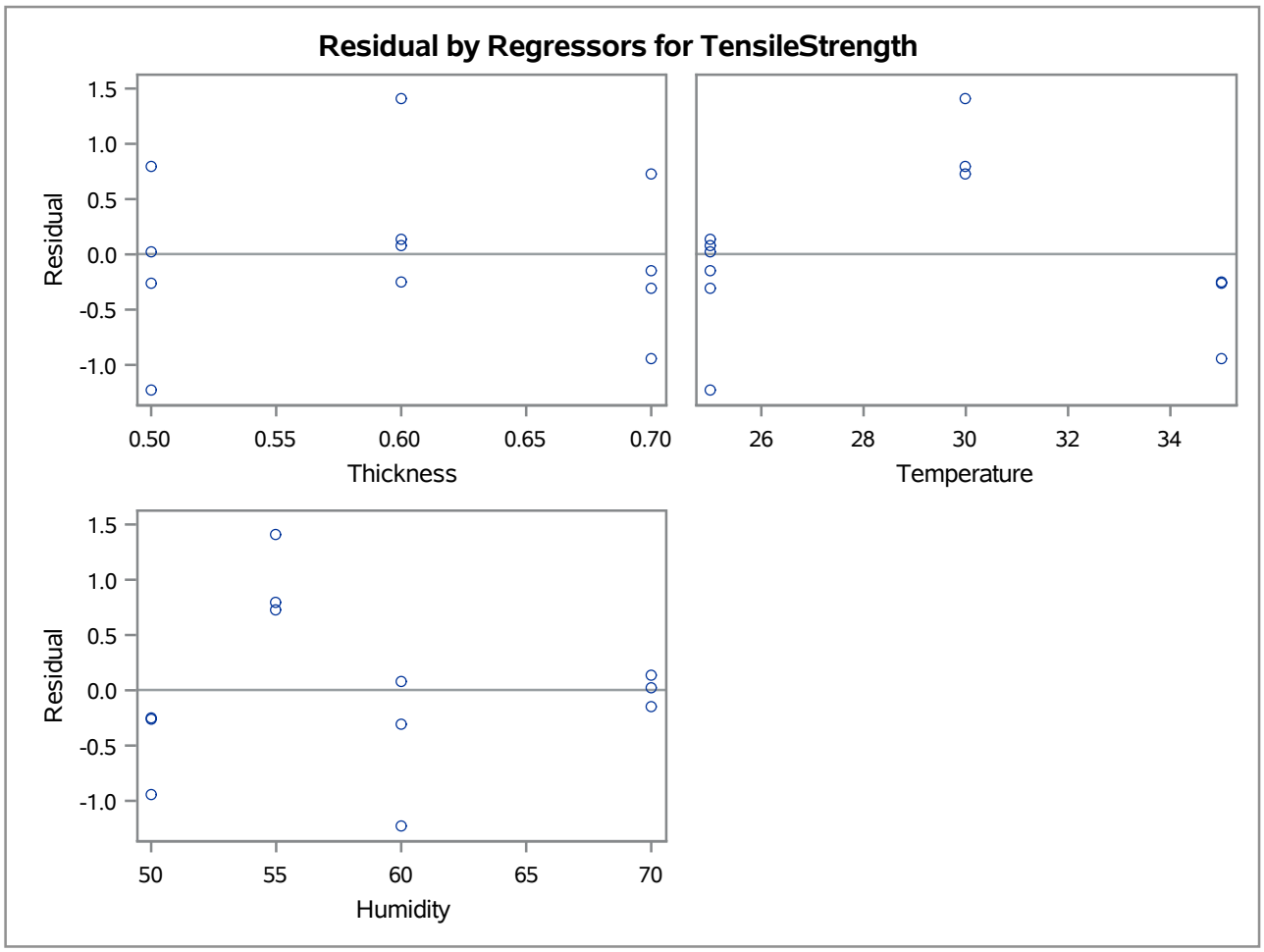
Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	24.38611	7.33736	3.32	0.0105
Thickness	1	1.87500	3.02274	0.62	0.5523
Temperature	1	-0.04222	0.11922	-0.35	0.7324
Humidity	1	-0.17556	0.06684	-2.63	0.0303

The REG Procedure
Model: MODEL1
Dependent Variable: TensileStrength

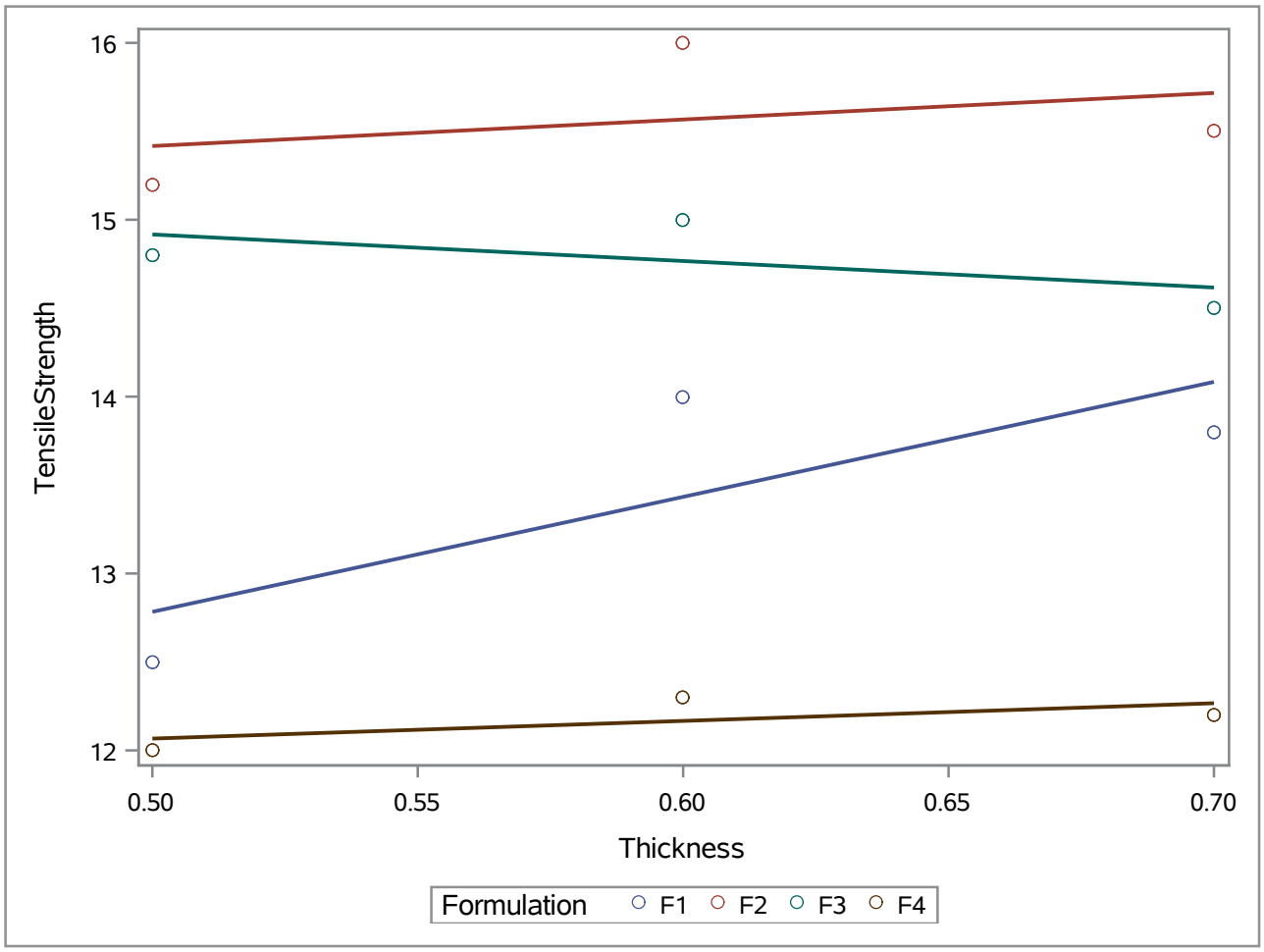


The REG Procedure
Model: MODEL1
Dependent Variable: TensileStrength



The MEANS Procedure

Variable	N	Mean	Std Dev	Minimum	Maximum
Thickness	12	0.6000000	0.0852803	0.5000000	0.7000000
Temperature	12	28.7500000	4.3301270	25.0000000	35.0000000
Humidity	12	58.7500000	7.7239298	50.0000000	70.0000000
TensileStrength	12	13.9833333	1.4141064	12.0000000	16.0000000


16
15
14
13
12
TensileStrength
0.50
0.55
0.60
0.65
0.70
Thickness
Formulation
F1
F2
F3
F4

The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
Formulation	4	F1 F2 F3 F4

Number of Observations Read	12
Number of Observations Used	12

The GLM Procedure

Dependent Variable: TensileStrength

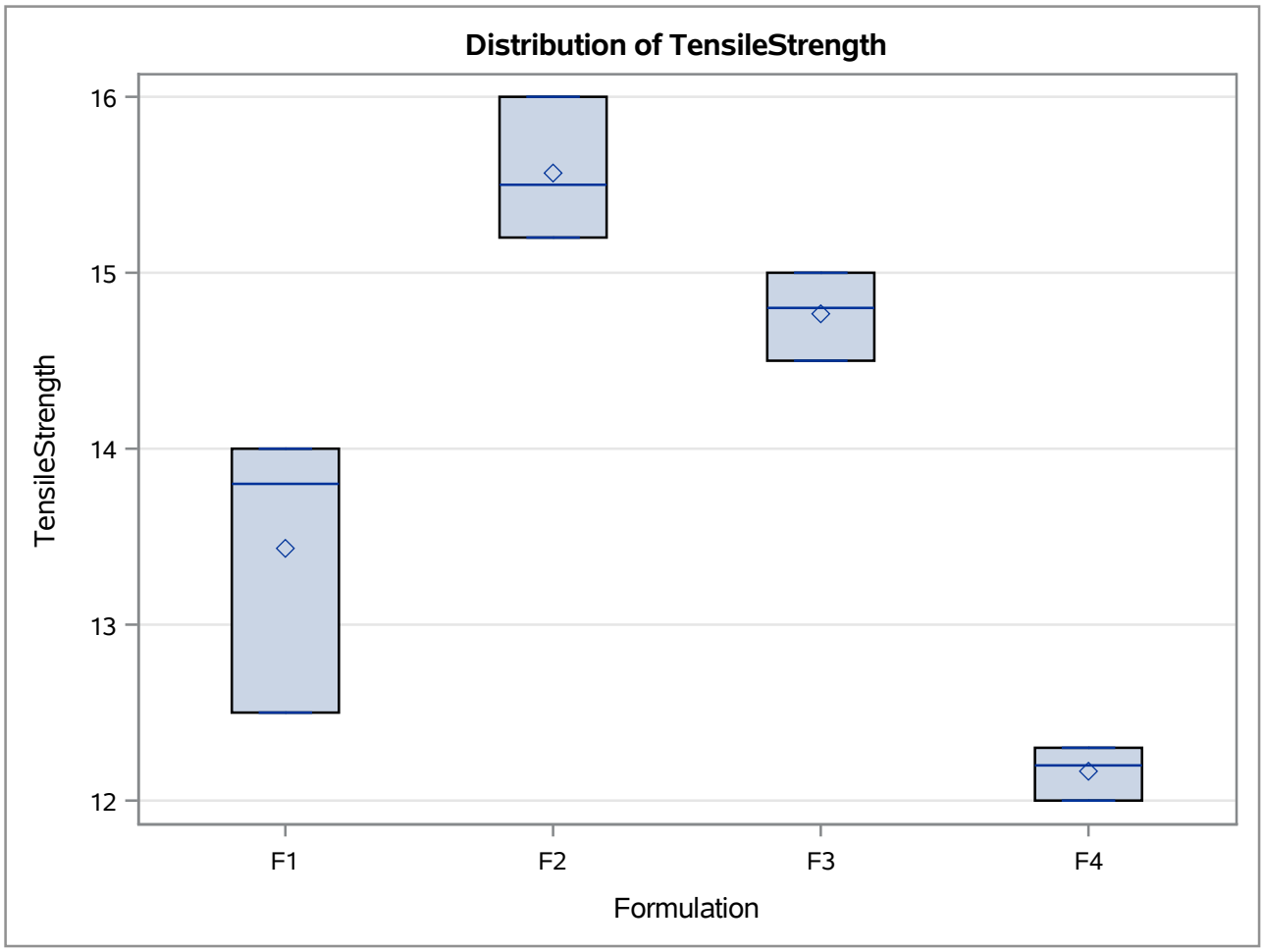
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	20.45125000	5.11281250	23.16	0.0004
Error	7	1.54541667	0.22077381		
Corrected Total	11	21.99666667			

R-Square	Coeff Var	Root MSE	TensileStrength Mean
0.929743	3.360184	0.469866	13.98333

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Formulation	3	20.17000000	6.72333333	30.45	0.0002
Thickness	1	0.28125000	0.28125000	1.27	0.2962
Humidity	0	0.00000000	.	.	.
Temperature	0	0.00000000	.	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Formulation	1	4.30222222	4.30222222	19.49	0.0031
Thickness	1	0.28125000	0.28125000	1.27	0.2962
Humidity	0	0.00000000	.	.	.
Temperature	0	0.00000000	.	.	.

The GLM Procedure



The GLM Procedure

Tukey's Studentized Range (HSD) Test for TensileStrength

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	7
Error Mean Square	0.220774
Critical Value of Studentized Range	4.68121
Minimum Significant Difference	1.2699