```
GET
```

```
FILE='C:\Users\common\Desktop\Color Correction\p3700-correction.sav'.
UNIANOVA Distance BY BGLValue FGLValue Region
   /METHOD=SSTYPE(3)
   /INTERCEPT=INCLUDE
   /POSTHOC=Region(BONFERRONI)
   /EMMEANS=TABLES(BGLValue) COMPARE ADJ(BONFERRONI)
   /EMMEANS=TABLES(FGLValue) COMPARE ADJ(BONFERRONI)
   /EMMEANS=TABLES(Region) COMPARE ADJ(BONFERRONI)
   /PRINT=DESCRIPTIVE
   /CRITERIA=ALPHA(.05)
   /DESIGN=BGLValue FGLValue Region BGLValue*FGLValue BGLValue*Region FGLValue
*Region BGLValue*FGLValue*Region.
```

# **Univariate Analysis of Variance**

Output Created		19-May-2013 15:24:39
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700-correction.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	9200
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Distance BY BGLValue FGLValue Region /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Region (BONFERRONI) /EMMEANS=TABLES(BGLValue) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES(FGLValue) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES(Region) COMPARE ADJ(BONFERRONI) /PINT=DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=BGLValue FGLValue Region BGLValue*FGLValue BGLValue*Region FGLValue*FGLValue*Region.

Resources	Processor Time	0:00:00.094
	Elapsed Time	0:00:00.093

[DataSet1] C:\Users\common\Desktop\Color Correction\p3700-correction.sav

### **Between-Subjects Factors**

		N
BGLValue	0	3204
	1	5996
FGLValue	0	3536
	1	5664
Region	1	1957
	2	1482
	3	1303
	4	1261
	5	1375
	6	1822

#### **Descriptive Statistics**

BGLValue	FGLValue	Region	Mean	Std. Deviation	N
0	0	1	4.8718E1	2.74291220E1	223
		2	4.9954E1	3.12869904E1	87
		3	4.5848E1	3.05229639E1	103
		4	2.7658E1	2.02388115E1	217
		5	4.1598E1	2.83804344E1	274
		6	3.7857E1	2.36710194E1	325
		Total	4.0387E1	2.70765990E1	1229
	1	1	3.1170E1	2.99411324E1	439
		2	2.8990E1	2.80218793E1	425
		3	2.1758E1	1.75916998E1	354
		4	1.2600E1	8.71641596E0	259
		5	1.2418E1	1.47234406E1	200
		6	2.0048E1	2.13703472E1	298

#### **Descriptive Statistics**

BGLValue	/ariable:Distar FGLValue	Region	Mean	Std. Deviation	N
0	1	Total	2.3002E1	2.39396884E1	1975
	Total	1	3.7081E1	3.02590307E1	662
		2	3.2553E1	2.96375783E1	512
		3	2.7187E1	2.34415275E1	457
		4	1.9464E1	1.68490774E1	476
		5	2.9286E1	2.76441117E1	474
		6	2.9338E1	2.42736511E1	623
		Total	2.9670E1	2.65664319E1	3204
1	0	1	6.3483E1	1.82696224E1	418
		2	6.5565E1	2.04990325E1	172
		3	6.4695E1	1.95968334E1	258
		4	7.6662E1	3.25159252E1	352
		5	9.5317E1	3.57938823E1	515
		6	7.2546E1	2.43193155E1	592
		Total	7.5217E1	2.94800922E1	2307
	1	1	4.9314E1	3.13613862E1	877
		2	5.5999E1	3.53191730E1	798
		3	4.5158E1	3.00568231E1	588
		4	3.4015E1	2.36673882E1	433
		5	4.4047E1	4.01751362E1	386
		6	4.6355E1	3.35166403E1	607
		Total	4.7264E1	3.32525034E1	3689
	Total	1	5.3888E1	2.85885204E1	1295
		2	5.7695E1	3.33697197E1	970
		3	5.1116E1	2.87294916E1	846
		4	5.3138E1	3.51057983E1	785
		5	7.3352E1	4.54596481E1	901
		6	5.9287E1	3.21189647E1	1199
		Total	5.8019E1	3.46339521E1	5996

# **Descriptive Statistics**

Dependent \	Dependent Variable:Distance								
BGLValue	FGLValue	Region	Mean	Std. Deviation	N				
Total	0	1	5.8346E1	2.29778574E1	641				
		2	6.0321E1	2.56784599E1	259				
		3	5.9318E1	2.47135661E1	361				
		4	5.7973E1	3.71036301E1	569				
		5	7.6662E1	4.20679762E1	789				
		6	6.0252E1	2.92474206E1	917				
		Total	6.3111E1	3.31176452E1	3536				
	1	1	4.3262E1	3.20473354E1	1316				
		2	4.6613E1	3.53777398E1	1223				
		3	3.6364E1	2.84292995E1	942				
		4	2.6000E1	2.20481041E1	692				
		5	3.3252E1	3.68951092E1	586				
		6	3.7692E1	3.24978659E1	905				
		Total	3.8804E1	3.24590001E1	5664				
	Total	1	4.8202E1	3.02219110E1	1957				
		2	4.9009E1	3.42737910E1	1482				
		3	4.2723E1	2.93021689E1	1303				
		4	4.0427E1	3.37717326E1	1261				
		5	5.8161E1	4.53397471E1	1375				
		6	4.9046E1	3.28918574E1	1822				
		Total	4.8146E1	3.47835384E1	9200				

#### **Tests of Between-Subjects Effects**

Dependent Variable:Distance

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3.641E6	23	158317.714	193.994	.000
Intercept	1.388E7	1	1.388E7	17005.457	.000
BGLValue	1303020.347	1	1303020.347	1596.647	.000
FGLValue	965902.584	1	965902.584	1183.562	.000
Region	111884.706	5	22376.941	27.419	.000
BGLValue * FGLValue	17466.305	1	17466.305	21.402	.000
BGLValue * Region	153903.143	5	30780.629	37.717	.000
FGLValue * Region	129813.729	5	25962.746	31.813	.000
BGLValue * FGLValue * Region	82450.973	5	16490.195	20.206	.000
Error	7488512.528	9176	816.098		
Total	3.246E7	9200			
Corrected Total	1.113E7	9199			

a. R Squared = .327 (Adjusted R Squared = .325)

# **Estimated Marginal Means**

# 1. BGLValue

#### **Estimates**

Dependent Variable:Distance

			95% Confidence Interval		
BGLValue	Mean	Std. Error	Lower Bound	Upper Bound	
0	31.552	.567	30.441	32.663	
1	59.430	.407	58.633	60.228	

#### **Pairwise Comparisons**

Dependent Variable: Distance

Dependent variable. Distance								
						95% Confidence Interval for Difference		
(I) BG	LValue	(J) BGLValue	Mean Difference (I- J)	Std. Error	Sig. <sup>a</sup>	Lower Bound	Upper Bound	
	0	1	-27.878	.698	.000	-29.246	-26.511	
	1	0	27.878	.698	.000	26.511	29.246	

Based on estimated marginal means

- \*. The mean difference is significant at the .05 level.
- a. Adjustment for multiple comparisons: Bonferroni.

#### **Univariate Tests**

Dependent Variable: Distance

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	1303020.347	1	1303020.347	1596.647	.000
Error	7488512.528	9176	816.098		

The F tests the effect of BGLValue. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

# 2. FGLValue

#### **Estimates**

Dependent Variable: Distance

			95% Confidence Interval		
FGLValue	Mean	Std. Error	Lower Bound	Upper Bound	
0	57.492	.561	56.392	58.592	
1	33.490	.414	32.677	34.302	

#### **Pairwise Comparisons**

Dependent Variable: Distance

Ворог	acine var	lable.Distance				95% Confidence Interval for Difference	
(I) FG	LValue	(J) FGLValue	Mean Difference (I- J)	Std. Error	Sig. <sup>a</sup>	Lower Bound	Upper Bound
	0	1	24.003	.698	.000	22.635	25.370
	1	0	-24.003	.698	.000	-25.370	-22.635

Based on estimated marginal means

- \*. The mean difference is significant at the .05 level.
- a. Adjustment for multiple comparisons: Bonferroni.

#### **Univariate Tests**

Dependent Variable: Distance

Воронасти					
	Sum of Squares	df	Mean Square	F	Sig.
Contrast	965902.584	1	965902.584	1183.562	.000
Error	7488512.528	9176	816.098		

The F tests the effect of FGLValue. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

# 3. Region

#### **Estimates**

Dependent Variable: Distance

			95% Confidence Interval		
Region	Mean	Std. Error	Lower Bound	Upper Bound	
1	48.172	.725	46.751	49.592	
2	50.128	1.033	48.103	52.152	
3	44.365	.961	42.481	46.249	
4	37.734	.833	36.100	39.368	
5	48.346	.820	46.738	49.953	
6	44.202	.706	42.818	45.586	

# **Pairwise Comparisons**

Dependent Variable:Distance

	variable:Distan				95% Confidence Interval for Difference		
(I) Region	(J) Region	Mean Difference (I- J)	Std. Error	Sig. <sup>a</sup>	Lower Bound	Upper Bound	
1	2	-1.956	1.262	1.000	-5.660	1.748	
	3	3.807*	1.204	.024	.273	7.341	
	4	10.438 <sup>*</sup>	1.104	.000	7.195	13.680	
	5	174	1.094	1.000	-3.387	3.039	
	6	3.970 <sup>*</sup>	1.012	.001	1.000	6.940	
2	1	1.956	1.262	1.000	-1.748	5.660	
	3	5.763 <sup>*</sup>	1.411	.001	1.620	9.905	
	4	12.394	1.327	.000	8.497	16.290	
	5	1.782	1.319	1.000	-2.090	5.654	
	6	5.926 <sup>*</sup>	1.251	.000	2.253	9.599	
3	1	-3.807	1.204	.024	-7.341	273	
	2	-5.763 <sup>*</sup>	1.411	.001	-9.905	-1.620	
	4	6.631 <sup>*</sup>	1.272	.000	2.896	10.366	
	5	-3.980 <sup>*</sup>	1.263	.025	-7.690	271	
	6	.163	1.192	1.000	-3.338	3.664	
4	1	-10.438 <sup>*</sup>	1.104	.000	-13.680	-7.195	
	2	-12.394 <sup>*</sup>	1.327	.000	-16.290	-8.497	
	3	-6.631 <sup>*</sup>	1.272	.000	-10.366	-2.896	
	5	-10.612 <sup>*</sup>	1.169	.000	-14.044	-7.179	
	6	-6.468 <sup>*</sup>	1.092	.000	-9.675	-3.261	

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

<sup>\*.</sup> The mean difference is significant at the .05 level.

#### **Pairwise Comparisons**

Dependent Variable: Distance

	variable.Distail				95% Confidence Interval for Difference	
(I) Region	(J) Region	Mean Difference (I- J)	Std. Error	Sig. <sup>a</sup>	Lower Bound	Upper Bound
5	1	.174	1.094	1.000	-3.039	3.387
	2	-1.782	1.319	1.000	-5.654	2.090
	3	3.980*	1.263	.025	.271	7.690
	4	10.612	1.169	.000	7.179	14.044
	6	4.144*	1.082	.002	.967	7.320
6	1	-3.970 <sup>*</sup>	1.012	.001	-6.940	-1.000
	2	-5.926 <sup>*</sup>	1.251	.000	-9.599	-2.253
	3	163	1.192	1.000	-3.664	3.338
	4	6.468*	1.092	.000	3.261	9.675
	5	-4.144*	1.082	.002	-7.320	967

Based on estimated marginal means

- a. Adjustment for multiple comparisons: Bonferroni.
- \*. The mean difference is significant at the .05 level.

#### **Univariate Tests**

Dependent Variable:Distance

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	111884.706	5	22376.941	27.419	.000
Error	7488512.528	9176	816.098		

The F tests the effect of Region. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

# **Post Hoc Tests**

# Region

# **Multiple Comparisons**

# Distance Bonferroni

Bornerroni					95% Confidence Interval	
		Mean				
(I) Region	(J) Region	Difference (I- J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	-8.0657711E-1		1.000	-3.6947225E0	2.0815683E0
	3	5.47902624E0	1.0214E0	.000	2.4801146E0	8.4779378E0
	4	7.77539172E0	1.0315E0	.000	4.7466478E0	1.0804135E1
	5	-9.9589563E0	1.0052E0	.000	-1.2910357E1	-7.0075553E0
	6	-8.4400812E-1		1.000	-3.5745027E0	1.8864865E0
2	1			1.000	-2.0815683E0	3.6947225E0
	3	6.28560335E0	1.0848E0	.000	3.1003882E0	9.4708185E0
	4	8.58196884E0	1.0944E0	.000	5.3686505E0	1.1795287E1
	5	-9.1523792E0	1.0696E0	.000	-1.2292903E1	-6.0118549E0
	6	-3.7431011E-2		1.000	-2.9713236E0	2.8964616E0
3	1	-5.4790262E0	1.0214E0	.000	-8.4779378E0	-2.4801146E0
	2	-6.2856033E0	1.0848E0	.000	-9.4708185E0	-3.1003882E0
	4	2.29636548E0	1.1284E0	.628	-1.0168657E0	5.6095966E0
	5	-1.5437982E1	1.1044E0	.000	-1.8680663E1	-1.2195301E1
	6	-6.3230343E0	1.0364E0	.000	-9.3660283E0	-3.2800403E0
4	1	-7.7753917E0	1.0315E0	.000	-1.0804135E1	-4.7466478E0
	2	-8.5819688E0	1.0944E0	.000	-1.1795287E1	-5.3686505E0
	3	-2.2963654E0	1.1284E0	.628	-5.6095966E0	1.0168657E0
	5	-1.7734348E1	1.1138E0	.000	-2.1004638E1	-1.4464057E1
	6	-8.6193998E0	1.0464E0	.000	-1.1691798E1	-5.5470015E0
5	1	9.95895631E0	1.0052E0	.000	7.0075553E0	1.2910357E1
	2	9.15237920E0	1.0696E0	.000	6.0118549E0	1.2292903E1
	3	1.54379825E1	1.1044E0	.000	1.2195301E1	1.8680663E1
	4	1.77343480E1	1.1138E0	.000	1.4464057E1	2.1004638E1
	6	9.11494819E0	1.0205E0	.000	6.1187656E0	1.2111130E1
6	1			1.000	-1.8864865E0	3.5745027E0
	2			1.000	-2.8964616E0	2.9713236E0
	3	6.32303437E0	1.0364E0	.000	3.2800403E0	9.3660283E0
	4	8.61939985E0	1.0464E0	.000	5.5470015E0	1.1691798E1
	5	-9.1149481E0	1.0205E0	.000	-1.2111130E1	-6.1187656E0

Based on observed means.
The error term is Mean Square(Error) = 816.098.

USE ALL.

<sup>\*.</sup> The mean difference is significant at the .05 level.

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COMPUTE filter_$=(Type = "BP" & Method = "TD").
VARIABLE LABEL filter_$ 'Type = "BP" & Method = "TD" (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
UNIANOVA Distance BY BGLValue FGLValue Region
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=Region(BONFERRONI)
  /EMMEANS=TABLES(BGLValue) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(FGLValue) COMPARE ADJ(BONFERRONI)
  /EMMEANS=TABLES(Region) COMPARE ADJ(BONFERRONI)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /DESIGN=BGLValue FGLValue Region BGLValue*FGLValue BGLValue*Region FGLValue
*Region BGLValue*FGLValue*Region.
```

# **Univariate Analysis of Variance**

Output Created		19-May-2013 15:28:05
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700-correction.sav
	Active Dataset	DataSet1
	Filter	Type = "BP" & Method ="TD" (FILTER)
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	4600
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		UNIANOVA Distance BY BGLValue FGLValue Region /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Region (BONFERRONI) /EMMEANS=TABLES(BGLValue) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES(FGLValue) COMPARE ADJ(BONFERRONI) /EMMEANS=TABLES(Region) COMPARE ADJ(BONFERRONI) /PMMEANS=TABLES(Region) COMPARE ADJ(BONFERRONI) /PRINT=DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=BGLValue FGLValue Region BGLValue*FGLValue BGLValue*Region FGLValue*Region BGLValue*FGLValue*Region.
Resources	Processor Time	0:00:00.078
	Elapsed Time	0:00:00.078

[DataSet1] C:\Users\common\Desktop\Color Correction\p3700-correction.sav

#### **Between-Subjects Factors**

		N
BGLValue	0	1602
	1	2998
FGLValue	0	1785
	1	2815
Region	1	966
	2	764
	3	631
	4	623
	5	724
	6	892

# **Descriptive Statistics**

BGLValue	/ariable:Distan FGLValue	Region	Mean	Std. Deviation	N
0	0	1	3.6728E1	2.49666167E1	106
		2	3.8504E1	2.66143521E1	47
		3	4.0035E1	2.77154510E1	47
		4	2.1493E1	1.76777213E1	115
		5	2.4598E1	1.57737604E1	143
		6	2.5441E1	1.95328566E1	166
		Total	2.8521E1	2.17525661E1	624
	1	1	1.8973E1	2.61565783E1	208
		2	1.5528E1	1.85543669E1	226
		3	1.2256E1	1.12227196E1	161
		4	7.7680E0	6.01879399E0	128
		5	4.7863E0	3.54209324E0	103
		6	8.7443E0	1.31157019E1	152
		Total	1.2521E1	1.73183561E1	978
	Total	1	2.4967E1	2.70608865E1	314
		2	1.9484E1	2.19107463E1	273
		3	1.8533E1	2.00916484E1	208
		4	1.4263E1	1.46075109E1	243
		5	1.6303E1	1.56638716E1	246
		6	1.7460E1	1.87166034E1	318
_		Total	1.8753E1	2.06897862E1	1602
1	0	1	5.5943E1	1.64361157E1	213
		2	5.8893E1	1.79860631E1	96
		3	5.7370E1	1.80864181E1	127
		4	7.0925E1	3.13178286E1	182
		5	8.4164E1	3.37513719E1	268
		6	6.4732E1	2.26173218E1	275
		Total	6.7288E1	2.75159471E1	1161
	1	1	4.0273E1	2.88526080E1	439
		2	4.1893E1	3.04979140E1	395
		3	3.6228E1	2.68394795E1	296
		4	2.5805E1	2.05007247E1	198
		5	3.2767E1	3.39895016E1	210
		6	3.6556E1	3.22664617E1	299
		Total	3.6947E1	2.97142528E1	1837

# **Descriptive Statistics**

BGLValue	/ariable:Distan FGLValue	Region	Mean	Std. Deviation	N
1	Total	1	4.5392E1	2.64983616E1	652
		2	4.5217E1	2.92601990E1	491
		3	4.2576E1	2.63698922E1	423
		4	4.7415E1	3.45869840E1	380
		5	6.1584E1	4.23779311E1	478
		6	5.0055E1	3.13773102E1	574
		Total	4.8697E1	3.24415802E1	2998
Total	0	1	4.9558E1	2.16353311E1	319
		2	5.2192E1	2.32001305E1	143
		3	5.2688E1	2.24072731E1	174
		4	5.1785E1	3.60812313E1	297
		5	6.3439E1	4.04345812E1	411
		6	4.9942E1	2.87196293E1	441
		Total	5.3735E1	3.16140773E1	1785
	1	1	3.3425E1	2.97115815E1	647
		2	3.2298E1	2.96172341E1	621
		3	2.7783E1	2.53305243E1	457
		4	1.8723E1	1.86208022E1	326
		5	2.3559E1	3.08449213E1	313
		6	2.7183E1	3.03380548E1	451
		Total	2.8461E1	2.85574377E1	2815
	Total	1	3.8753E1	2.83342757E1	966
		2	3.6022E1	2.95506117E1	764
		3	3.4650E1	2.69512136E1	631
		4	3.4484E1	3.27692554E1	623
		5	4.6198E1	4.15761526E1	724
		6	3.8435E1	3.16510780E1	892
		Total	3.8268E1	3.22245876E1	4600

#### **Tests of Between-Subjects Effects**

Dependent Variable:Distance

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.908E6	23	82964.360	132.394	.000
Intercept	4343623.963	1	4343623.963	6931.544	.000
BGLValue	721601.162	1	721601.162	1151.529	.000
FGLValue	518414.855	1	518414.855	827.285	.000
Region	21572.193	5	4314.439	6.885	.000
BGLValue * FGLValue	20953.135	1	20953.135	33.437	.000
BGLValue * Region	66212.984	5	13242.597	21.133	.000
FGLValue * Region	37554.223	5	7510.845	11.986	.000
BGLValue * FGLValue * Region	55731.885	5	11146.377	17.787	.000
Error	2867531.911	4576	626.646		
Total	1.151E7	4600			
Corrected Total	4775712.194	4599			

a. R Squared = .400 (Adjusted R Squared = .397)

# **Estimated Marginal Means**

# 1. BGLValue

#### **Estimates**

Dependent Variable: Distance

·			95% Confidence Interval		
BGLValue	Mean	Std. Error	Lower Bound	Upper Bound	
0	21.238	.702	19.862	22.615	
1	50.463	.499	49.485	51.441	

#### **Pairwise Comparisons**

Dependent Variable:Distance

						95% Confiden Differe	
(I) BG	iLValue	(J) BGLValue	Mean Difference (I- J)	Std. Error	Sig. <sup>a</sup>	Lower Bound	Upper Bound
	0	1	-29.225	.861	.000	-30.913	-27.536
	1	0	29.225	.861	.000	27.536	30.913

Based on estimated marginal means

- \*. The mean difference is significant at the .05 level.
- a. Adjustment for multiple comparisons: Bonferroni.

#### **Univariate Tests**

Dependent Variable:Distance

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	721601.162	1	721601.162	1151.529	.000
Error	2867531.911	4576	626.646		

The F tests the effect of BGLValue. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

# 2. FGLValue

#### **Estimates**

Dependent Variable: Distance

			95% Confidence Interval		
FGLValue	Mean	Std. Error	Lower Bound	Upper Bound	
0	48.236	.690	46.882	49.590	
1	23.465	.515	22.456	24.474	

#### **Pairwise Comparisons**

Dependent Variable: Distance

Ворог	idone var	lable:Distance				95% Confiden	
(I) FG	LValue	(J) FGLValue	Mean Difference (I- J)	Std. Error	Sig. <sup>a</sup>	Lower Bound	Upper Bound
	0	1	24.771	.861	.000	23.082	26.459
	1	0	-24.771	.861	.000	-26.459	-23.082

Based on estimated marginal means

- \*. The mean difference is significant at the .05 level.
- a. Adjustment for multiple comparisons: Bonferroni.

### **Univariate Tests**

Dependent Variable: Distance

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	518414.855	1	518414.855	827.285	.000
Error	2867531.911	4576	626.646		

The F tests the effect of FGLValue. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

# 3. Region

#### **Estimates**

Dependent Variable:Distance

			95% Confide	nce Interval
Region	Mean	Std. Error	Lower Bound	Upper Bound
1	37.980	.912	36.193	39.767
2	38.705	1.230	36.293	41.117
3	36.473	1.232	34.058	38.888
4	31.498	1.029	29.480	33.516
5	36.579	.993	34.632	38.527
6	33.869	.876	32.152	35.586

#### **Pairwise Comparisons**

Dependent Variable: Distance

	variable.Distail				95% Confiden Differ	ce Interval for ence
(N.B.)	( )	Mean Difference (I-	Otal France	Sig. <sup>a</sup>	Lower Doug	Linner Bound
(I) Region	(J) Region 2	J) 726	Std. Error 1.531	1.000	Lower Bound -5.222	Upper Bound 3.771
'						
	3	1.507	1.532	1.000	-2.993	6.007
	4	6.481	1.375	.000	2.444	10.519
	5	1.401	1.348	1.000	-2.559	5.360
	6	4.111 <sup>*</sup>	1.264	.017	.399	7.823
2	1	.726	1.531	1.000	-3.771	5.222
	3	2.232	1.741	1.000	-2.880	7.345
	4	7.207	1.604	.000	2.496	11.918
	5	2.126	1.581	1.000	-2.518	6.770
	6	4.837*	1.510	.021	.402	9.272
3	1	-1.507	1.532	1.000	-6.007	2.993
	2	-2.232	1.741	1.000	-7.345	2.880
	4	4.975 <sup>*</sup>	1.605	.029	.260	9.689
	5	106	1.582	1.000	-4.753	4.541
	6	2.604	1.511	1.000	-1.834	7.043
4	1	-6.481 <sup>*</sup>	1.375	.000	-10.519	-2.444
	2	-7.207 <sup>*</sup>	1.604	.000	-11.918	-2.496
	3	-4.975 <sup>*</sup>	1.605	.029	-9.689	260
	5	-5.081 <sup>*</sup>	1.430	.006	-9.282	880
	6	-2.370	1.352	1.000	-6.339	1.599

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

<sup>\*.</sup> The mean difference is significant at the .05 level.

#### **Pairwise Comparisons**

Dependent Variable: Distance

	variable.Distair				95% Confiden Differe	
(I) Region	(J) Region	Mean Difference (I- J)	Std. Error	Sig. <sup>a</sup>	Lower Bound	Upper Bound
5	1	-1.401	1.348	1.000	-5.360	2.559
	2	-2.126	1.581	1.000	-6.770	2.518
	3	.106	1.582	1.000	-4.541	4.753
	4	5.081 <sup>*</sup>	1.430	.006	.880	9.282
	6	2.710	1.324	.611	-1.179	6.600
6	1	-4.111 <sup>*</sup>	1.264	.017	-7.823	399
	2	-4.837 <sup>*</sup>	1.510	.021	-9.272	402
	3	-2.604	1.511	1.000	-7.043	1.834
	4	2.370	1.352	1.000	-1.599	6.339
	5	-2.710	1.324	.611	-6.600	1.179

Based on estimated marginal means

- a. Adjustment for multiple comparisons: Bonferroni.
- \*. The mean difference is significant at the .05 level.

#### **Univariate Tests**

Dependent Variable:Distance

·	Sum of Squares	df	Mean Square	F	Sig.
Contrast	21572.193	5	4314.439	6.885	.000
Error	2867531.911	4576	626.646		

The F tests the effect of Region. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

# **Post Hoc Tests**

# Region

#### **Multiple Comparisons**

# Distance Bonferroni

Bonierroni					95% Confide	ence Interval
		Mean				
(I) Region	(J) Region	Difference (I- J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	2.73078012E0	1.2119E0	.364	-8.285211E-1	6.2900813E0
	3	4.10225873E0	1.2813E0	.021		7.8651888E0
	4	4.26845533E0	1.2862E0	.014		8.0459712E0
	5	-7.4453441E0	1.2305E0	.000	-1.1059130E1	-3.8315581E0
	6		1.1624E0	1.000	-3.0957120E0	3.7317421E0
2	1	-2.7307801E0	1.2119E0	.364	-6.2900813E0	
	3	1.37147861E0	1.3465E0	1.000	-2.5831224E0	5.3260796E0
	4	1.53767521E0	1.3513E0	1.000	-2.4308072E0	5.5061576E0
	5	-1.0176124E1	1.2983E0	.000	-1.3989085E1	-6.3631626E0
	6	-2.4127650E0	1.2339E0	.759	-6.0366799E0	1.2111498E0
3	1	-4.1022587E0	1.2813E0	.021	-7.8651888E0	-3.393286E-1
	2	-1.3714786E0	1.3465E0	1.000	-5.3260796E0	2.5831224E0
	4		1.4138E0	1.000	-3.9858957E0	4.3182889E0
	5	-1.1547602E1	1.3633E0	.000	-1.5551312E1	-7.5438928E0
	6	-3.7842436E0	1.3021E0	.055	-7.6083484E0	
4	1	-4.2684553E0	1.2862E0	.014	-8.0459712E0	-4.909394E-1
	2	-1.5376752E0	1.3513E0	1.000	-5.5061576E0	2.4308072E0
	3	-1.6619659E-1	1.4138E0	1.000	-4.3182889E0	3.9858957E0
	5	-1.1713799E1	1.3679E0	.000	-1.5731221E1	-7.6963777E0
	6	-3.9504402E0	1.3070E0	.038	-7.7888983E0	-1.119821E-1
5	1	7.44534419E0	1.2305E0	.000	3.8315581E0	1.1059130E1
	2	1.01761243E1	1.2983E0	.000	6.3631626E0	1.3989085E1
	3	1.15476029E1	1.3633E0	.000	7.5438928E0	1.5551312E1
	4	1.17137995E1	1.3679E0	.000	7.6963777E0	1.5731221E1
	6	7.76335927E0	1.2522E0	.000	4.0859166E0	1.1440801E1
6	1	-3.1801507E-1	1.1624E0	1.000	-3.7317421E0	3.0957120E0
	2	2.41276504E0	1.2339E0	.759	-1.2111498E0	6.0366799E0
	3	3.78424365E0	1.3021E0	.055	-3.986108E-2	7.6083484E0
	4	3.95044025E0	1.3070E0	.038		7.7888983E0
	5	-7.7633592E0	1.2522E0	.000	-1.1440801E1	-4.0859166E0

Based on observed means.
The error term is Mean Square(Error) = 626.646.

SORT CASES BY BGLValue.

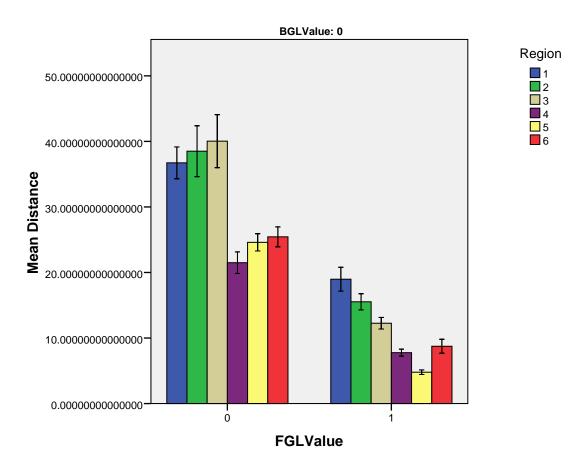
SPLIT FILE LAYERED BY BGLValue.

 $<sup>^{\</sup>ast}.$  The mean difference is significant at the .05 level.

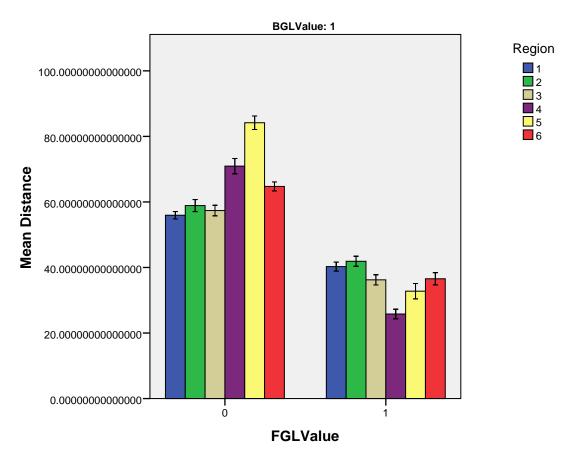
```
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=FGLValue MEANSE(Distance, 1)[na
me="MEAN_Distance" LOW="MEAN_Distance_LOW" HIGH="MEAN_Distance_HIGH"] Region
MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
 SOURCE: s=userSource(id("graphdataset"))
 DATA: FGLValue=col(source(s), name("FGLValue"), unit.category())
 DATA: MEAN_Distance=col(source(s), name("MEAN_Distance"))
 DATA: Region=col(source(s), name("Region"), unit.category())
 DATA: LOW=col(source(s), name("MEAN_Distance_LOW"))
 DATA: HIGH=col(source(s), name("MEAN_Distance_HIGH"))
 COORD: rect(dim(1,2), cluster(3,0))
 GUIDE: axis(dim(3), label("FGLValue"))
 GUIDE: axis(dim(2), label("Mean Distance"))
 GUIDE: legend(aesthetic(aesthetic.color.interior), label("Region"))
 GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
 SCALE: linear(dim(2), include(0))
 ELEMENT: interval(position(Region*MEAN_Distance*FGLValue), color.interior(R
egion), shape.interior(shape.square))
 ELEMENT: interval(position(region.spread.range(Region*(LOW+HIGH)*FGLValue))
, shape.interior(shape.ibeam))
END GPL.
```

### **GGraph**

	Notes	- 
Output Create	ed	19-May-2013 15:32:10
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700-correction.sav
	Active Dataset	DataSet1
	Filter	Type = "BP" & Method ="TD" (FILTER)
	Weight	<none></none>
	Split File	BGLValue
	N of Rows in Working Data File	4600
Syntax		GGRAPH /GRAPHDATASET NAME=" graphdataset" VARIABLES=FGLValue MEANSE (Distance, 1)[name=" MEAN_Distance" LOW=" MEAN_Distance_LOW" HIGH=" MEAN_Distance_HIGH"] Region MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource(id ("graphdataset")) DATA: FGLValue=col(source(s), name("FGLValue"), unit.category()) DATA: MEAN_Distance=col(source (s), name("MEAN_Distance")) DATA: Region=col(source(s), name("Region"), unit.category()) DATA: LOW=col(source(s), name ("MEAN_Distance_LOW")) DATA: HIGH=col(source(s), name ("MEAN_Distance_HIGH")) COORD: rect(dim(1,2), cluster (3,0)) GUIDE: axis(dim(3), label ("FGLValue")) GUIDE: axis(dim(2), label("Mean Distance")) GUIDE: degend(aesthetic (aesthetic.color.interior), label ("Region")) GUIDE: text.footnote(label("Error Bars: +/- 1 SE")) SCALE: linear(dim(2), include(0)) ELEMENT: interval(position (Region*MEAN_ Distance*FGLValue), color.interior (Region), shape.interior(shape. square)) ELEMENT: interval(position(region. spread.range(Region*(LOW+HIGH) *FGLValue)), shape.interior(shape. ibeam)) END GPL.
Resources	Processor Time	0:00:00.546
	Elapsed Time	0:00:00.562



Error Bars: +/- 1 SE



Error Bars: +/- 1 SE

\* Chart Builder.

#### **GGRAPH**

/GRAPHDATASET NAME="graphdataset" VARIABLES=FGLValue MEANSE(Distance, 1)[na me="MEAN\_Distance" LOW="MEAN\_Distance\_LOW" HIGH="MEAN\_Distance\_HIGH"] Region MISSING=LISTWISE REPORTMISSING=NO

/GRAPHSPEC SOURCE=INLINE.

#### BEGIN GPL

```
SOURCE: s=userSource(id("graphdataset"))

DATA: FGLValue=col(source(s), name("FGLValue"), unit.category())

DATA: MEAN_Distance=col(source(s), name("MEAN_Distance"))

DATA: Region=col(source(s), name("Region"), unit.category())

DATA: LOW=col(source(s), name("MEAN_Distance_LOW"))

DATA: HIGH=col(source(s), name("MEAN_Distance_HIGH"))

COORD: rect(dim(1,2), cluster(3,0))

GUIDE: axis(dim(3), label("FGLValue"))

GUIDE: axis(dim(2), label("Mean Distance"))
```

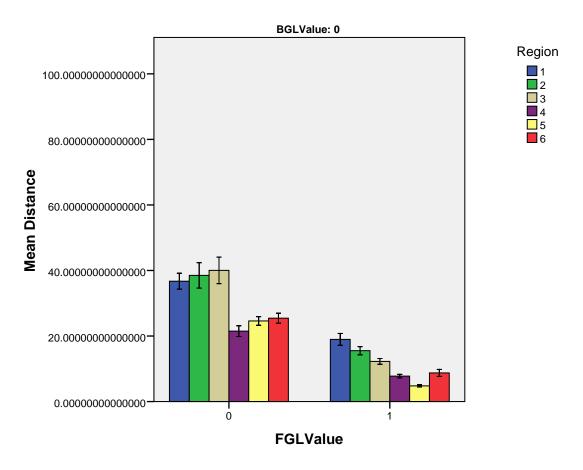
```
GUIDE: legend(aesthetic(aesthetic.color.interior), label("Region"))
GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
SCALE: linear(dim(2), include(0), max(100))
ELEMENT: interval(position(Region*MEAN_Distance*FGLValue), color.interior(Region), shape.interior(shape.square))
ELEMENT: interval(position(region.spread.range(Region*(LOW+HIGH)*FGLValue)), shape.interior(shape.ibeam))
END GPL.
```

# **GGraph**

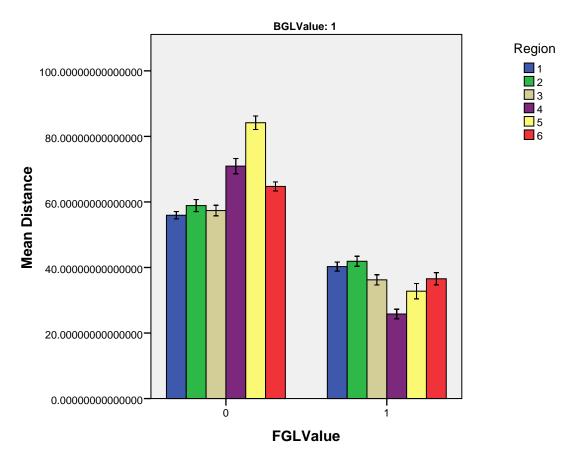
Output Created		19-May-2013 15:33:28
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700-correction.sav
	Active Dataset	DataSet1
	Filter	Type = "BP" & Method ="TD" (FILTER)
	Weight	<none></none>
	Split File	BGLValue
	N of Rows in Working Data File	4600

1		
Syntax		GGRAPH /GRAPHDATASET NAME=" graphdataset" VARIABLES=FGLValue MEANSE (Distance, 1)[name=" MEAN_Distance" LOW=" MEAN_Distance_LOW" HIGH=" MEAN_Distance_HIGH"] Region MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource(id ("graphdataset")) DATA: FGLValue=col(source(s), name("FGLValue"), unit.category()) DATA: MEAN_Distance=col(source (s), name("MEAN_Distance")) DATA: Region=col(source(s), name("Region"), unit.category()) DATA: LOW=col(source(s), name ("MEAN_Distance_LOW")) DATA: HIGH=col(source(s), name ("MEAN_Distance_HIGH")) COORD: rect(dim(1,2), cluster (3,0)) GUIDE: axis(dim(3), label ("FGLValue")) GUIDE: axis(dim(2), label("Mean Distance")) GUIDE: legend(aesthetic (aesthetic.color.interior), label ("Region")) GUIDE: text.footnote(label("Error Bars: +/- 1 SE")) SCALE: linear(dim(2), include(0), max(100)) ELEMENT: interval(position (Region*MEAN_ Distance*FGLValue), color.interior (Region), shape.interior(shape. square)) ELEMENT: interval(position(region. spread.range(Region*(LOW+HIGH) *FGLValue)), shape.interior(shape. ibeam)) END GPL.
Resources P	rocessor Time	0:00:00.219
E	lapsed Time	0:00:00.219

[DataSet1] C:\Users\common\Desktop\Color Correction\p3700-correction.sav



Error Bars: +/- 1 SE



Error Bars: +/- 1 SE

```
SPLIT FILE OFF.
SORT CASES BY NuetralValue.
SPLIT FILE LAYERED BY NuetralValue.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=NuetralValue MEANSE(Distance, 1
)[name="MEAN_Distance" LOW="MEAN_Distance_LOW" HIGH="MEAN_Distance_HIGH"] BGL
Value MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
 SOURCE: s=userSource(id("graphdataset"))
 DATA: NuetralValue=col(source(s), name("NuetralValue"), unit.category())
 DATA: MEAN_Distance=col(source(s), name("MEAN_Distance"))
 DATA: BGLValue=col(source(s), name("BGLValue"), unit.category())
 DATA: LOW=col(source(s), name("MEAN_Distance_LOW"))
 DATA: HIGH=col(source(s), name("MEAN_Distance_HIGH"))
```

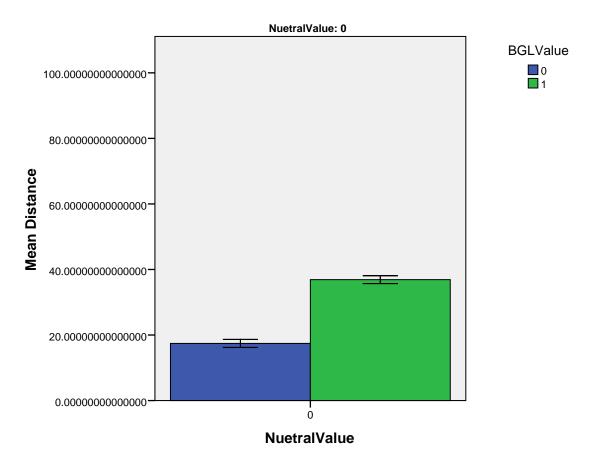
```
COORD: rect(dim(1,2), cluster(3,0))
GUIDE: axis(dim(3), label("NuetralValue"))
GUIDE: axis(dim(2), label("Mean Distance"))
GUIDE: legend(aesthetic(aesthetic.color.interior), label("BGLValue"))
GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
SCALE: linear(dim(2), include(0), max(100))
ELEMENT: interval(position(BGLValue*MEAN_Distance*NuetralValue), color.interior(BGLValue), shape.interior(shape.square))
ELEMENT: interval(position(region.spread.range(BGLValue*(LOW+HIGH)*NuetralValue)), shape.interior(shape.ibeam))
END GPL.
```

# **GGraph**

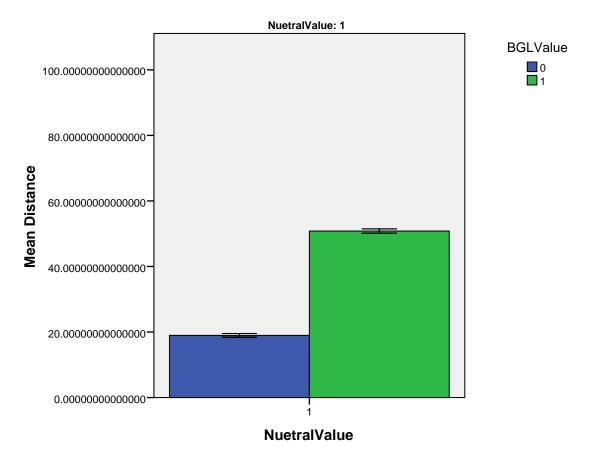
Output Created		19-May-2013 15:38:40
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700-correction.sav
	Active Dataset	DataSet1
	Filter	Type = "BP" & Method ="TD" (FILTER)
	Weight	<none></none>
	Split File	NuetralValue
	N of Rows in Working Data File	4600

Syntax	GGRAPH /GRAPHDATASET NAME=" graphdataset" VARIABLES=NuetralValue MEANSE (Distance, 1)[name=" MEAN_Distance" LOW=" MEAN_Distance_LOW" HIGH=" MEAN_Distance_HIGH"] BGLValue MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource(id ("graphdataset")) DATA: NuetralValue=col(source(s), name("NuetralValue"), unit. category()) DATA: MEAN_Distance=col(source (s), name("MEAN_Distance")) DATA: BGLValue"), unit.category()) DATA: LOW=col(source(s), name ("MEAN_Distance_LOW")) DATA: HIGH=col(source(s), name ("MEAN_Distance_HIGH")) COORD: rect(dim(1,2), cluster (3,0)) GUIDE: axis(dim(3), label ("NuetralValue")) GUIDE: axis(dim(2), label("Mean Distance")) GUIDE: legend(aesthetic (aesthetic.color.interior), label ("BGLValue")) GUIDE: legend(aesthetic (aesthetic.color.interior), label ("BGLValue")) GUIDE: legend(aesthetic (aesthetic.color.interior), label ("BGLValue")) GUIDE: logend(aesthetic (aesthetic.color.interior), label ("BGLValue")) GUIDE: logend(aesthetic)
Resources Processor Time	0:00:00.234
Elapsed Time	0:00:00.234

[DataSet1] C:\Users\common\Desktop\Color Correction\p3700-correction.sav



Error Bars: +/- 1 SE



Error Bars: +/- 1 SE

```
SPLIT FILE OFF.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=NuetralValue MEANSE(Distance, 1
)[name="MEAN_Distance" LOW="MEAN_Distance_LOW" HIGH="MEAN_Distance_HIGH"] BGL
Value MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
 SOURCE: s=userSource(id("graphdataset"))
 DATA: NuetralValue=col(source(s), name("NuetralValue"), unit.category())
 DATA: MEAN_Distance=col(source(s), name("MEAN_Distance"))
 DATA: BGLValue=col(source(s), name("BGLValue"), unit.category())
 DATA: LOW=col(source(s), name("MEAN_Distance_LOW"))
 DATA: HIGH=col(source(s), name("MEAN_Distance_HIGH"))
 COORD: rect(dim(1,2), cluster(3,0))
 GUIDE: axis(dim(3), label("NuetralValue"))
```

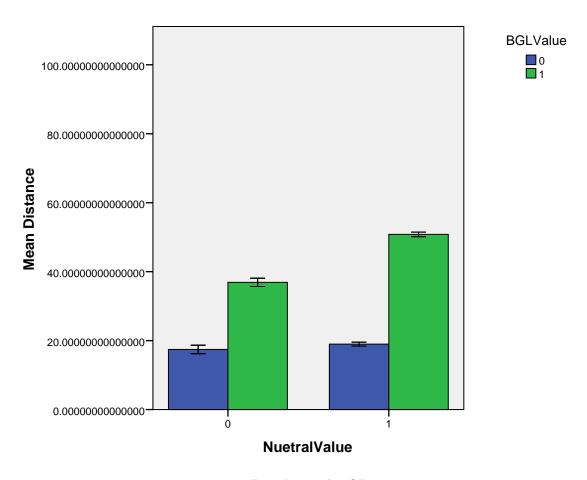
```
GUIDE: axis(dim(2), label("Mean Distance"))
GUIDE: legend(aesthetic(aesthetic.color.interior), label("BGLValue"))
GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
SCALE: linear(dim(2), include(0), max(100))
ELEMENT: interval(position(BGLValue*MEAN_Distance*NuetralValue), color.inte
rior(BGLValue), shape.interior(shape.square))
ELEMENT: interval(position(region.spread.range(BGLValue*(LOW+HIGH)*NuetralValue)), shape.interior(shape.ibeam))
END GPL.
```

# **GGraph**

Output Created		19-May-2013 15:39:56
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700-correction.sav
	Active Dataset	DataSet1
	Filter	Type = "BP" & Method ="TD" (FILTER)
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	4600

Syntax	GGRAPH /GRAPHDATASET NAME=" graphdataset" VARIABLES=NuetralValue MEANSE (Distance, 1)[name=" MEAN_Distance" LOW=" MEAN_Distance_LOW" HIGH=" MEAN_Distance_HIGH"] BGLValue MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource(id ("graphdataset")) DATA: NuetralValue=col(source(s), name("NuetralValue"), unit. category()) DATA: MEAN_Distance=col(source (s), name("MEAN_Distance")) DATA: BGLValue=col(source(s), name("BGLValue"), unit.category()) DATA: LOW=col(source(s), name ("MEAN_Distance_LOW")) DATA: HIGH=col(source(s), name ("MEAN_Distance_HIGH")) COORD: rect(dim(1,2), cluster (3,0)) GUIDE: axis(dim(3), label ("NuetralValue")) GUIDE: axis(dim(2), label("Mean Distance")) GUIDE: legend(aesthetic (aesthetic.color.interior), label ("BGLValue")) GUIDE: text.footnote(label("Error Bars: +/- 1 SE")) SCALE: linear(dim(2), include(0), max(100)) ELEMENT: interval(position (BGLValue*MEAN_Distance*Nuetral Value), color.interior(BGLValue), shape.interior(shape.square)) ELEMENT: interval(position (FROM PROM PROM PROM PROM PROM PROM PROM P
Resources Processor Time	0:00:00.156
Elapsed Time	0:00:00.157

 $[DataSet1] C: \Users \\ \common\\ \Desktop\\ \Color Correction\\ \color 3700-correction.sav$ 



Error Bars: +/- 1 SE