17.31

data drug;

input batch$ sample$ tablet$ hardness;

cards;

1 1 1 85

1 1 2 94

1 1 3 91

1 1 4 98

1 1 5 85

1 1 6 96

1 1 7 93

1 2 1 76

1 2 2 87

1 2 3 90

1 2 4 91

1 2 5 88

1 2 6 94

1 2 7 96

1 3 1 95

1 3 2 98

1 3 3 94

1 3 4 96

1 3 5 99

1 3 6 100

1 3 7 93

2 1 1 108

2 1 2 100

2 1 3 105

2 1 4 109

2 1 5 104

2 1 6 102

2 1 7 108

2 2 1 117

2 2 2 106

2 2 3 103

2 2 4 109

2 2 5 100

2 2 6 104

2 2 7 102

2 3 1 101

2 3 2 108

2 3 3 100

2 3 4 99

2 3 5 117

2 3 6 109

2 3 7 105

3 1 1 71

3 1 2 85

3 1 3 78

3 1 4 68

3 1 5 85

3 1 6 67

3 1 7 76

3 2 1 81

3 2 2 70

3 2 3 84

3 2 4 83

3 2 5 72

3 2 6 81

3 2 7 78

3 3 1 72

3 3 2 68

3 3 3 80

3 3 4 72

3 3 5 75

3 3 6 79

3 3 7 74

;

Run;

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proc glm data=drug;

class batch sample tablet;

model hardness= batch sample(batch)/E1;

random sample(batch);

test H=batch E=sample(batch);

run;

Quit;