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| Phase 1 Experiment | | Technical Rep | Number of observation | Phase 2 Experiment | | DF of Animal in the between Runs stratum | Tag orthogonal to Animal in the within runs stratum | DF of residual in between animals stratum | Tag orthogonal to Treatment | Animal | | Treatment |
| Treatment | Bio Rep | Runs | Tags | Canonical Eff Factor | Average Eff Factor | Average Eff Factor |
| 2 | 2 | 2 | 8 | 2 | 4 | 0 | No (1 DF) | 1 | Yes | 1 (3) | 1 | 1 |
| 3 | 12 | 3 | 1 | No (1 DF) | 2 | No | 1 (4) | 1 | 0.8889 |
| 4 | 16 | 4 | 1 | No (1 DF) | 4 | Yes | 1 (6) | 1 | 1 |
| 5 | 20 | 5 | 2 | No (1 DF) | 5 | No | 1 (7) | 1 | 0.96 |
| 6 | 24 | 6 | 2 | No (1 DF) | 7 | Yes | 1 (9) | 1 | 1 |
| 7 | 28 | 7 | 3 | No (1 DF) | 8 | No | 1 (10) | 1 | 0.9796 |
| 8 | 32 | 8 | 3 | No (1 DF) | 10 | Yes | 1 (12) | 1 | 1 |
| 9 | 38 | 9 | 4 | No (1 DF) | 11 | No | 1 (13) | 1 | 0.9877 |
| 10 | 40 | 10 | 4 | No (1 DF) | 13 | Yes | 1 (15) | 1 | 1 |
| 2 | 3 | 12 | 3 | 0 | No (1 DF) | 1 | No | 1 (3) | 1 | 0.6667 |
| 4 | 24 | 6 | 1 | No (1 DF) | 4 | Yes | 1 (6) | 1 | 1 |
| 6 | 36 | 9 | 2 | No (1 DF) | 7 | No | 1 (9) | 1 | 0.9630 |
| 8 | 48 | 12 | 3 | No (1 DF) | 10 | Yes | 1 (12) | 1 | 1 |
| 10 | 50 | 15 | 4 | No (1 DF) | 13 | No | 1 (15) | 1 | 0.9867 |
| 2 | 4 | 16 | 4 | 0 | Yes | 2 | Yes | 1 (3) | 1 | 1 |
| 3 | 24 | 6 | 1 | Yes | 3 | Yes | 1 (4) | 1 | 1 |
| 4 | 32 | 8 | 1 | Yes | 5 | Yes | 1 (6) | 1 | 1 |
| 5 | 40 | 10 | 2 | Yes | 6 | Yes | 1 (7) | 1 | 1 |
| 6 | 48 | 12 | 2 | Yes | 8 | Yes | 1 (9) | 1 | 1 |
| 7 | 56 | 14 | 3 | Yes | 9 | Yes | 1 (10) | 1 | 1 |
| 8 | 64 | 16 | 3 | Yes | 11 | Yes | 1 (12) | 1 | 1 |
| 9 | 72 | 18 | 4 | Yes | 12 | Yes | 1 (13) | 1 | 1 |
| 10 | 80 | 20 | 4 | Yes | 13 | Yes | 1 (15) | 1 | 1 |

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| Phase 1 Experiment | | Technical Rep | Number of observation | Phase 2 Experiment | | DF of Animal in the between Runs stratum | Tag orthogonal to Animal in the within runs stratum | DF of residual in between animals stratum | Tag orthogonal to Treatment | Animal | | Treatment |
| Treatment | Bio Rep | Runs | Tags | Canonical Eff Factor | Average Eff Factor | Average Eff Factor |
| 2 | 4 | 2 | 16 | 2 | 8 | 0 | No (3 DF) | 3 | Yes | 1 (7) | 1 | 1 |
| 6 | 24 | 3 | 1 | No (3 DF) | 6 | No | 1 (10) | 1 | 0.8889 |
| 8 | 32 | 4 | 1 | No (3 DF) | 10 | Yes | 1 (14) | 1 | 1 |
| 10 | 40 | 5 | 2 | No (3 DF) | 13 | Yes | 1 (17) | 1 | 0.96 |
| 4 | 3 | 24 | 3 | 0 | No (3 DF) | 3 | No | 1(7) | 1 | 0.6667 |
| 8 | 48 | 6 | 1 | No (3 DF) | 10 | Yes | 1(14) | 1 | 1 |
| 12 | 72 | 9 | 2 | No (3 DF) | 17 | No | 1(21) | 1 | 0.9630 |
| 2 | 4 | 16 | 2 | 0 | No (1 DF) | 1 | Yes | 1 (3) | 1 | 1 |
| 3 | 24 | 3 | 1 | No (1 DF) | 2 | No | 1 (4) | 1 | 0.8889 |
| 4 | 32 | 4 | 0 | No (1 DF) | 5 | Yes | 1(7) | 1 | 1 |
| 5 | 40 | 5 | 1 | No (1 DF) | 6 | No | 1(8) | 1 | 0.96 |
| 6 | 48 | 6 | 1 | No (1 DF) | 8 | Yes | 1(10) | 1 | 1 |
| 7 | 56 | 7 | 2 | No (1 DF) | 9 | No | 1 (11) | 1 | 0.9796 |
| 8 | 64 | 8 | 1 | No (1 DF) | 12 | Yes | 1 (14) | 1 | 1 |
| 9 | 72 | 9 | 2 | No (1 DF) | 13 | No | 1 (15) | 1 | 0.9877 |
| 10 | 80 | 10 | 2 | No (1 DF) | 15 | Yes | 1 (17) | 1 | 1 |

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| Phase 1 Experiment | | Technical Rep | Number of observation | Phase 2 Experiment | | DF of Animal in the between Runs stratum | Tag orthogonal to Animal in the within runs stratum | DF of residual in between animals stratum | Tag orthogonal to Treatment | Animal | | Treatment | |
| Treatment | Bio Rep | Runs | Tags | Can Eff Factor | Ave Eff Factor | Can Eff Factor | Ave Eff Factor |
| 3 | 2 | 2 | 12 | 3 | 4 | 1 (1 Trt) | No (1 DF) | 1 | Yes | 1 (4) | 1 | 1, 0.75 | 0.8571 |
| 4 | 24 | 6 | 2 (2 Trt) | No (1 DF) | 6 | Yes | 1 (9) | 1 | 0.9375(2) | 0.9375 |
| 6 | 36 | 9 | 4 (2 Trt) | No (1 DF) | 10 | Yes | 1 (13) | 1 | 23/24, 7/8 | 0.9148 |
| 8 | 48 | 12 | 5 (2 Trt) | No (1 DF) | 15 | Yes | 1 (18) | 1 | 0.9375 |  |
| 10 | 60 | 15 | 7 (2 Trt) | No (1 DF) | 19 | Yes | 1 (22) | 1 | 0.9243 |  |
| 4 | 3 | 36 | 9 | 2 (2 Trt) | No (3 DF) | 4 | Yes | 1 (9) | 1 | 0.9375 |  |
| 8 | 72 | 18 | 5 (2 Trt) | No (3 DF) | 13 | Yes | 1 (18) | 1 | 0.9375 |  |
| 2 | 4 | 24 | 6 | 1 (1 Trt) | Yes | 2 | Yes | 1 (4) | 1 | 0.8571 |  |
| 3 | 36 | 9 | 2 (2 Trt) | Yes | 4 | Yes | 1 (6) | 1 | 0.825 |  |
| 4 | 48 | 12 | 2 (2 Trt) | Yes | 7 | Yes | 1 (9) | 1 | 0.9375 |  |
| 5 | 60 | 15 | 4 (2 Trt) | Yes | 8 | Yes | 1 (10) | 1 | 0.8382 |  |
| 6 | 72 | 18 | 4 (2 Trt) | Yes | 11 | Yes | 1 (13) | 1 | 0.9148 |  |
| 7 | 84 | 21 | 5 (2 Trt) | Yes | 13 | Yes | 1 (15) | 1 | 0.8914 |  |
| 8 | 96 | 24 | 5 (2 Trt) | Yes | 16 | Yes | 1 (18) | 1 | 0.9375 |  |
| 9 | 108 | 27 | 7 (2 Trt) | Yes | 17 | Yes | 1 (19) | 1 | 0.8854 |  |
| 10 | 120 | 30 | 7 (2 Trt) | Yes | 20 | Yes | 1 (13) | 1 | 0.9243 |  |

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| Phase 1 Experiment | | Technical Rep | Number of observation | Phase 2 Experiment | | DF of Animal in the between Runs stratum | Tag orthogonal to Animal in the within runs stratum | DF of residual in between animals stratum | Tag orthogonal to Treatment | Animal | | Treatment |
| Treatment | Bio Rep | Runs | Tags | Canonical Eff Factor | Average Eff Factor | Average Eff Factor |
| 3 | 4 | 2 | 24 | 3 | 8 | 1 (1 Trt) | No (3 DF) | 5 | Yes | 1 (10) | 1 | 0.9677 |
| 8 | 48 | 6 | 2 (2 Trt) | No (3 DF) | 16 | Yes | 1 (21) | 1 | 0.9844 |
| 8 | 3 | 72 | 9 | 2 (2 Trt) | No (7 DF) | 12 | Yes | 1 (21) | 1 | 0.9844 |
| 2 | 4 | 24 | 3 |  |  |  |  |  |  |  |
| 4 | 48 | 6 |  |  |  |  |  |  |  |
| 6 | 72 | 9 |  |  |  |  |  |  |  |
| 8 | 96 | 12 |  |  |  |  |  |  |  |
| 10 | 120 | 15 |  |  |  |  |  |  |  |

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| Phase 1 Experiment | | Technical Rep | Number of observation | Phase 2 Experiment | | DF of Animal in the between Runs stratum | Tag orthogonal to Animal in the within runs stratum | DF of residual in between animals stratum | Tag orthogonal to Treatment | Animal | | Treatment |
| Treatment | Bio Rep | Runs | Tags | Canonical Eff Factor | Average Eff Factor | Average Eff Factor |
| 4 | 2 | 2 | 16 | 4 | 4 | 1 | No (1DF) | 2 | Yes | 1 (6) | 1 | 1 |
| 3 | 24 | 6 | 2 | No (1DF) | 5 | No | 1 (9) | 1 | 0.96 |
| 4 | 32 | 8 | 3 | No (1DF) | 8 | Yes | 1 (12) | 1 | 1 |
| 5 | 40 | 10 | 4 | No (1DF) | 11 | No | 1 (15) | 1 | 0.9863 |
| 6 | 48 | 12 | 5 | No (1DF) | 14 | Yes | 1 (18) | 1 | 1 |
| 7 | 56 | 14 | 6 | No (1DF) | 17 | No | 1 (21) | 1 | 0.9931 |
| 8 | 64 | 16 | 7 | No (1DF) | 20 | Yes | 1 (24) | 1 | 1 |
| 9 | 72 | 18 | 8 | No (1DF) | 23 | No | 1 (27) | 1 | 0.9959 |
| 10 | 80 | 20 | 9 | No (1DF) | 26 | Yes | 1 (30) | 1 | 1 |
| 2 | 3 | 24 | 6 | 1 | No (1DF) | 2 | No | 1 (6) | 1 | 0.8571 |
| 3 | 36 | 9 | 2 | No (1DF) | 5 | No | 1 (9) | 1 | 0.96 |
| 4 | 48 | 12 | 3 | No (1DF) | 8 | Yes | 1 (12) | 1 | 1 |
| 5 | 60 | 15 |  |  |  |  |  |  |  |
| 6 | 72 | 18 |  |  |  |  |  |  |  |
| 7 | 84 | 21 |  |  |  |  |  |  |  |
| 8 | 96 | 24 |  |  |  |  |  |  |  |
| 9 | 108 | 27 |  |  |  |  |  |  |  |
| 10 | 120 | 30 |  |  |  |  |  |  |  |
| 2 | 4 | 32 | 8 | 1 | Yes | 3 | Yes | 1 (6) | 1 | 1 |
| 3 | 48 | 12 | 2 | Yes | 6 | Yes | 1 (9) | 1 | 1 |
| 4 | 64 | 16 | 3 | Yes | 9 | Yes | 1 (12) | 1 | 1 |
| 5 | 80 | 20 | 4 | Yes | 12 | Yes | 1 (15) | 1 | 1 |
| 6 | 96 | 24 | 5 | Yes | 15 | Yes | 1 (18) | 1 | 1 |
| 7 | 112 | 28 | 6 | Yes | 18 | Yes | 1 (21) | 1 | 1 |
| 8 | 128 | 32 | 7 | Yes | 21 | Yes | 1 (24) | 1 | 1 |
| 9 | 144 | 36 | 8 | Yes | 24 | Yes | 1 (27) | 1 | 1 |
| 10 | 160 | 40 | 9 | Yes | 27 | Yes | 1 (30) | 1 | 1 |
| Phase 1 Experiment | | Technical Rep | Number of observation | Phase 2 Experiment | | DF of Animal in the between Runs stratum | Tag orthogonal to Animal in the within runs stratum | DF of residual in between animals stratum | Tag orthogonal to Treatment | Animal | | Treatment |
| Treatment | Bio Rep | Runs | Tags | Canonical Eff Factor | Average Eff Factor | Average Eff Factor |
| 4 | 2 | 2 | 16 | 2 | 8 | 0 | No (3DF) | 2 | No (1DF) | 1 (7) | 1 | 1 |
| 3 | 24 | 3 | 1 | No (3DF) | 4 | No | 1 (10) | 1 | 0.8889 |
| 4 | 32 | 4 | 1 | No (3DF) | 8 | Yes | 1 (14) | 1 | 1 |
| 5 | 40 | 5 | 2 | No (3DF) | 11 | No | 1 (17) | 1 | 0.96 |
| 6 | 48 | 6 | 2 | No (3DF) | 15 | No | 1 (21) | 1 | 0.96 |
| 7 | 56 | 7 | 3 | No (3DF) | 18 | No | 1 (24) | 1 | 0.9796 |
| 8 | 64 | 8 | 3 | No (3DF) | 22 | Yes | 1 (28) | 1 | 1 |
| 9 | 72 | 9 | 4 | No (3DF) | 25 | No | 1 (31) | 1 | 0.9877 |
| 10 | 80 | 10 | 4 | No (3DF) | 29 | No | 1 (35) | 1 | 0.9863 |
| 2 | 3 | 24 | 3 |  |  |  |  |  |  |  |
| 4 | 48 | 6 |  |  |  |  |  |  |  |
| 6 | 72 | 9 |  |  |  |  |  |  |  |
| 8 | 96 | 12 |  |  |  |  |  |  |  |
| 10 | 120 | 15 |  |  |  |  |  |  |  |
| 2 | 4 | 32 | 4 | 0 | No (1DF) | 3 | Yes | 1 (7) | 1 | 1 |
| 3 | 48 | 6 | 1 | No (1DF) | 6 | No | 1 (10) | 1 | 0.96 |
| 4 | 64 | 8 | 1 | No (1DF) | 10 | Yes | 1 (14) | 1 | 1 |
| 5 | 80 | 10 | 2 | No (1DF) | 13 | No | 1 (17) | 1 | 0.9863 |
| 6 | 96 | 12 | 2 | No (1DF) | 17 | Yes | 1 (21) | 1 | 1 |
| 7 | 112 | 14 | 3 | No (1DF) | 20 | No | 1 (24) | 1 | 0.9931 |
| 8 | 128 | 16 | 3 | No (1DF) | 24 | Yes | 1 (28) | 1 | 1 |
| 9 | 144 | 18 | 4 | No (1DF) | 27 | No | 1 (31) | 1 | 0.9959 |
| 10 | 160 | 20 | 4 | No (1DF) | 31 | Yes | 1 (35) | 1 | 1 |

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| Phase 1 Experiment | | Technical Rep | Number of observation | Phase 2 Experiment | | DF of Animal in the between Runs stratum | Tag orthogonal to Animal in the within runs stratum | DF of residual in between animals stratum | Tag orthogonal to Treatment | Animal | | Treatment | |
| Treatment | Bio Rep | Runs | Tags | Can Eff Factor | Ave Eff Factor | Can Eff Factor | Ave Eff Factor |
| 6 | 2 | 2 | 24 | 6 | 4 | 2 (2 Trt) | No (1 DF) | 3 | Yes | 1 (9) | 1 | 1(3), 0.75 (2) | 0.8823 |
| 3 | 36 | 9 | 4 (4 Trt) | No (1 DF) | 2 | No | 1 (4) | 1 | 0.9167 (2), 0.8889, 0.75 (2) | 0.8370 |
| 4 | 48 | 12 | 5 (4 Trt) | No (1 DF) | 12 | Yes | 1 (18) | 1 | 1, 0.9375(2), 0.8125(2) | 0.8937 |
| 5 | 60 | 15 | 7 (5 Trt) | No (1 DF) | 16 | No | 1 (22) | 1 | 0.9523, 0.9, 0.8836, 0.8235, 0.8 | 0.8759 |
| 6 | 72 | 18 | 8 (4 Trt) | No (1 DF) | 21 | Yes | 1 (27) | 1 | 1,  0.875 (4) | 0.8974 |
| 7 | 84 | 21 | 10 (5 Trt) | No (1 DF) | 25 | No | 1 (31) | 1 | 0.9286, 0.9164, 0.8571(2), 0.8489 | 0.8803 |
| 8 | 96 | 24 | 11 (5 Trt) | No (1 DF) | 30 | Yes | 1 (36) | 1 | 0.9375 (2), 0.875 (3) | 0.8990 |
| 9 | 108 | 27 | 13 (5 Trt) | No (1 DF) | 34 | No | 1 (40) | 1 | 0.9272, 0.9167, 0.8872, 0.8611, 0.8399 | 0.8852 |
| 10 | 120 | 30 | 14 (5 Trt) | No (1 DF) | 39 | Yes | 1 (45) | 1 | 0.9 (5) | 0.9 |

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| Phase 1 Experiment | | Technical Rep | Number of observation | Phase 2 Experiment | | DF of Animal in the between Runs stratum | Tag orthogonal to Animal in the within runs stratum | DF of residual in between animals stratum | Tag orthogonal to Treatment | Animal | | Treatment | |
| Treatment | Bio Rep | Runs | Tags | Can Eff Factor | Ave Eff Factor | Can Eff Factor | Ave Eff Factor |
| 8 | 2 | 2 | 32 | 8 | 4 | 3 (3 Trt) | No (1 DF) | 4 | Yes | 1 (12) | 1 | 1(4), 3/4(2), 1/2 | 0.8077 |
| 3 | 48 | 12 | 5 (6 Trt) | No (1 DF) | 10 | No | 1 (18) | 1 | 1, 11/12(2), 8/9, 3/4(2), 2/3 | 0.8261 |
| 4 | 64 | 16 | 7 (7 Trt) | No (1 DF) | 16 | Yes | 1 (24) | 1 | 0.963 (2), 0.875 (2), 0.7866 (2), 0.75 | 0.8498 |
| 5 | 80 | 20 | 9 (7 Trt) | No (1 DF) | 22 | No | 1 (30) | 1 | 9/10(3), 43/50, 4/5(3) | 0.8489 |
| 6 | 96 | 24 | 11 (6 Trt) | No (1 DF) | 28 | Yes | 1 (36) | 1 | 1, 5/6 (6) | 0.8537 |
| 7 | 112 | 28 | 13 (7 Trt) | No (1 DF) | 34 | No | 1 (42) | 1 | 6/7(6), 41/49 | 0.8542 |
| 8 | 128 | 32 | 15 (7 Trt) | No (1 DF) | 40 | Yes | 1 (48) | 1 | 0.9192(2), 0.875, 0.8308(2), 0.8125(2) | 0.8545 |
| 9 | 144 | 36 | 17 (7 Trt) | No (1 DF) | 46 | NO | 1 (54) | 1 | 8/9(2), 71/81 , 5/6 (3) | 0.8546 |
| 10 | 160 | 40 | 19 (7 Trt) | No (1 DF) | 52 | Yes | 1 (60) | 1 | 0.9, 0.8854(2), 0.85(2), 0.8146(2) | 0.8559 |