

Science Olympiad 2017-2018 Season

WiFi Lab Checklist / Data Sheet

Version 1.0

Event and Construction Requirements

- 1. Competitors construct only 1 antenna
- 2.a. Reference materials secured in 3 ring binder
- 2.b. Competitors bring up to 2 calculators
- 2.c. Antenna is labeled and impounded
- 2.f. Competitors must be able to answer questions about the antenna per the Building Policy
- 3.b. Antenna fits into 15.0x15.0x15.0 cm box
- 3.b. Antenna solely supported by backplane
- 3.c. Antenna has SMA-Male connector
- 3.d. No commercial antenna parts / magnets
- 3.e. No energy sources
- 3.f. Won't damage testing setup

Impound Bonus

Antenna impounded in labeled box	Y	N
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Graphs / Tables (each item can get 0 – 2 points)

Data spans one variable range	_____
At least 10 data points	_____
Proper labeling (e.g. title, name, units)	_____
Number of graphs/tables (x 0.5 points)	_____
Labeled device picture/diagram	_____

Part I: Written Test

Exam Score	_____
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Penalties

No successful connections	Y	N
DQed for unsafe operation / no antenna	Y	N
Construction violations corrected	Y	N
Missed impound	Y	N

Team Verification

4.n. I verify the event supervisor has reviewed with me my team's recorded vehicle testing data.

Signature _____

Team Information

Team #: _____

Team Name:

Competitor Names:

Connection Attempt 1

Distance	_____
Connection successful?	Y N
Competition violations?	Y N
Max distance?	Y N
Average dBm reading	_____

Connection Attempt 2

Distance	_____
Connection successful?	Y N
Competition violations?	Y N
Max distance?	Y N
Average dBm reading	_____

Connection Attempt 3

Distance	_____
Connection successful?	Y N
Competition violations?	Y N
Max distance?	Y N
Average dBm reading	_____