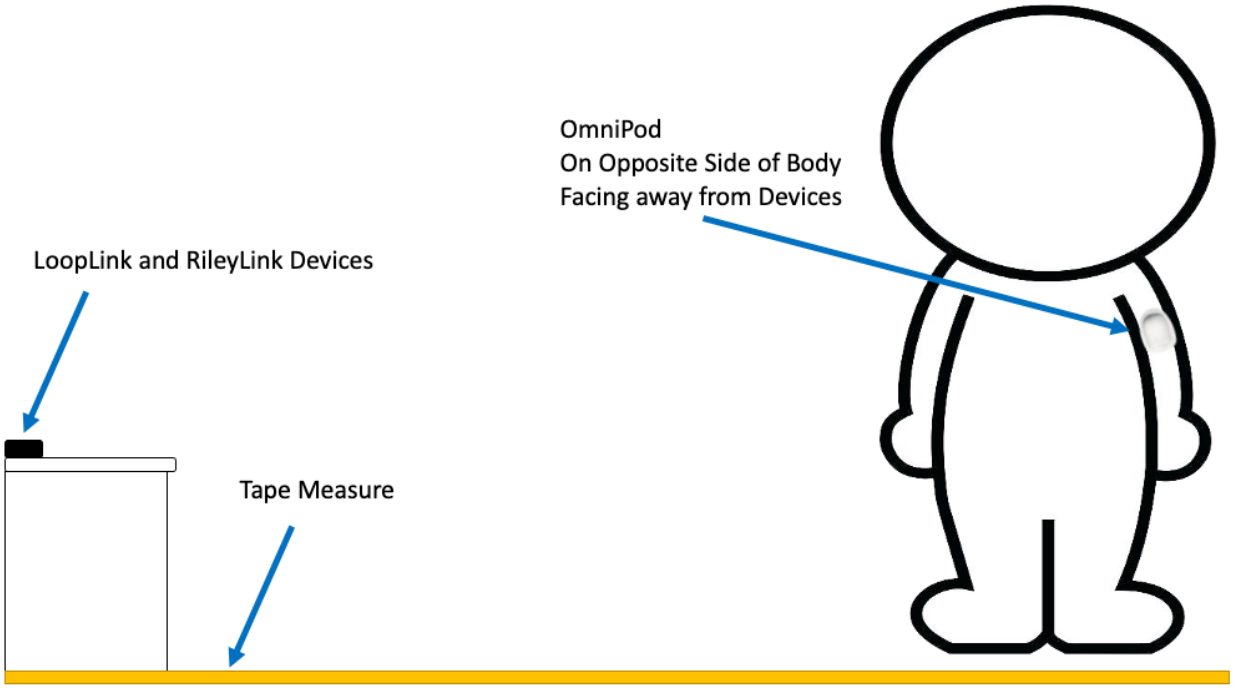
Introduction:

I wanted to design a test to determine LoopLink and RileyLink W2 general communications range indoors line of sight through a BoW. (Bag of Water = plump human Jeremy Lucas). Below is the test and my initial findings.



Materials:

1.) Fully charged LoopLink 433Mhz and RileyLink W2 433Mhz
2.) Measuring tape to mark distance
3.) Connected and in use OmniPod attached to human
4.) Loop v2.2.4 (Auto Bolus Branch - Master)

Methods:

1.) Place LoopLink and RileyLink W2 on countertop or table at equal height.
2.) Measure and mark off distance with tape measure
3.) Take Measurements and Run Test Method with OmniPod opposite the devices so that the signal must transmit through/(around) the BoW (human)

Test Method:

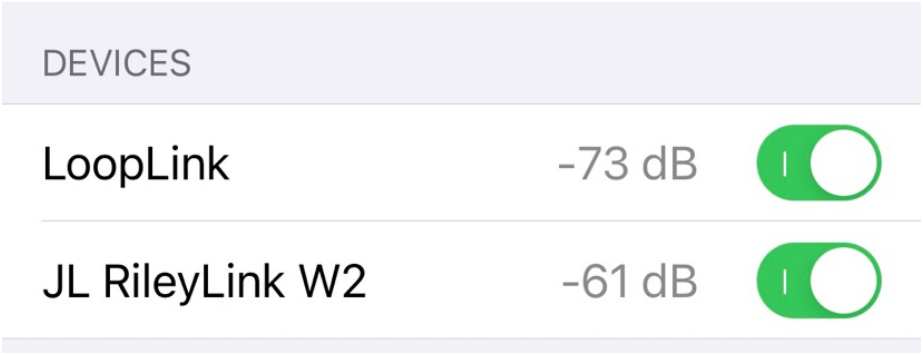
1.) Record Distance along Tape Measure
2.) Enable LoopLink Device Only in Loop App
    a. Settings > Pod > Devices - (LoopLink Enable)
3.) Record LoopLink Bluetooth RSSI
4.) Read Pod Status
    a. Settings > Pod > Diagnostics – (Read Pod Status)
5.) Record Pod Status Results for LoopLink
6.) Enable RileyLink W2 Device Only in Loop App
    a. Settings > Pod > Devices - (RileyLink Enable)
7.) Record RileyLink W2 Bluetooth RSSI
8.) Read Pod Status
    a. Settings > Pod > Diagnostics – (Read Pod Status)
9.) Record Pod Status Results for RileyLink W2

If OmniPod Read Pod Status = No Response. Repeat Test 3 times. If No Response consecutive 3 times Record No Response.

Results:

Feet	LoopLink BLE RSSI	LoopLink Pod RSSI	RileyLink W2 BLE RSSI	RileyLink W2 Pod RSSI
5	-73	29	-61	24
10	-76	27	-71	32
11	-76	25	-73	25
13	-82	No Response	-78	25
15	-75	No Response	-76	No Response

Measurement 5 Feet



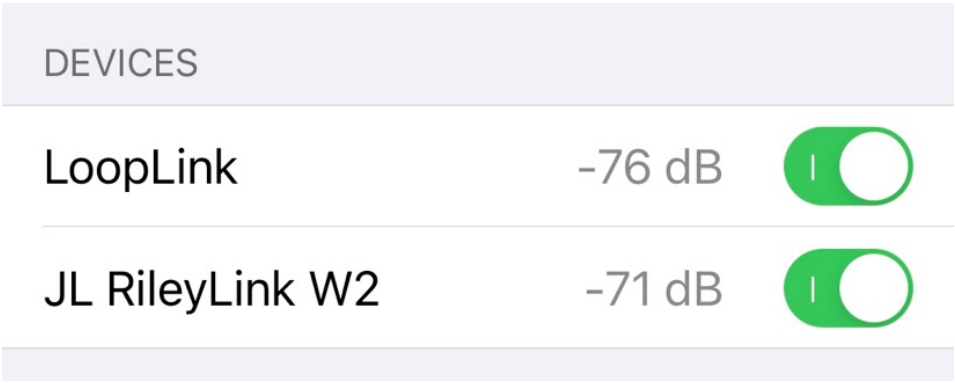
LoopLink

```
Read Pod Status…

Pod Active: 24 minutes
Delivery Status: Temp basal running
Pulses (incl. prime & insert): 6.25 U
Reservoir Level: 50+ U
Last Bolus Not Delivered: 0.00 U
Alerts:
RSSI: 29
Receiver Low Gain: 0
```

RileyLink W2

```
Read Pod Status…

Pod Active: 25 minutes
Delivery Status: Temp basal running
Pulses (incl. prime & insert): 6.25 U
Reservoir Level: 50+ U
Last Bolus Not Delivered: 0.00 U
Alerts:
RSSI: 24
Receiver Low Gain: 1
```

Measurement 10 Feet



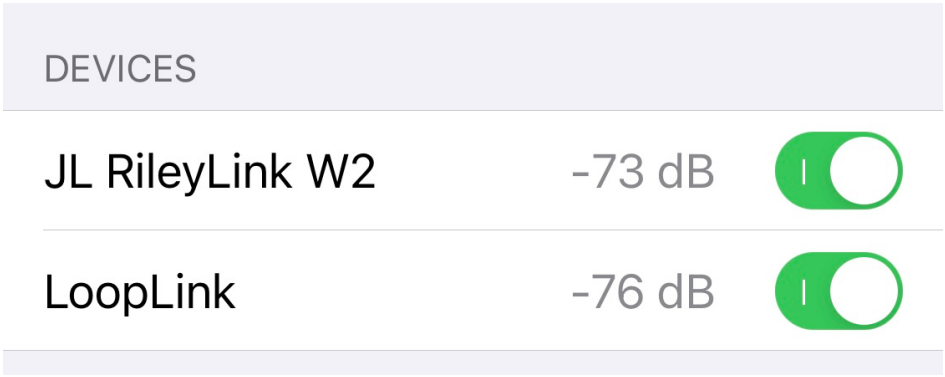
LoopLink

```
Read Pod Status…

Pod Active: 27 minutes
Delivery Status: Temp basal running
Pulses (incl. prime & insert): 6.25 U
Reservoir Level: 50+ U
Last Bolus Not Delivered: 0.00 U
Alerts:
RSSI: 27
Receiver Low Gain: 0
```

RileyLink W2

```
Read Pod Status…

Pod Active: 27 minutes
Delivery Status: Temp basal running
Pulses (incl. prime & insert): 6.25 U
Reservoir Level: 50+ U
Last Bolus Not Delivered: 0.00 U
Alerts:
RSSI: 32
Receiver Low Gain: 0
```

Measurement 11 Feet



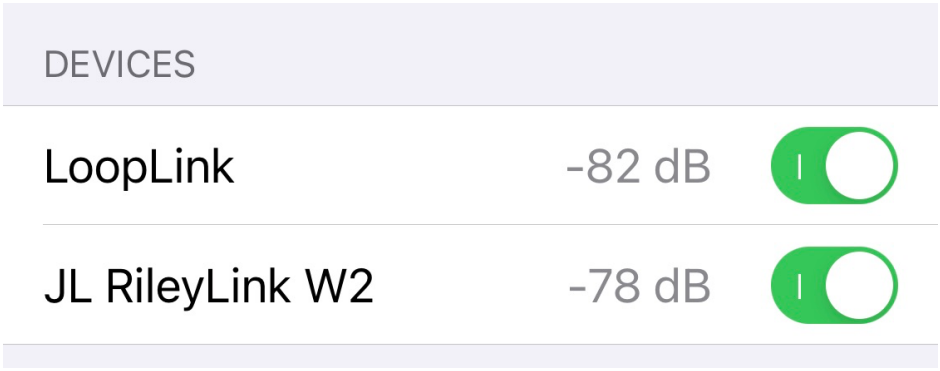
LoopLink

```
Read Pod Status…

Pod Active: 35 minutes
Delivery Status: Temp basal running
Pulses (incl. prime & insert): 6.25 U
Reservoir Level: 50+ U
Last Bolus Not Delivered: 0.00 U
Alerts:
RSSI: 25
Receiver Low Gain: 0
```

RileyLink W2

```
Read Pod Status…

Pod Active: 34 minutes
Delivery Status: Temp basal running
Pulses (incl. prime & insert): 6.25 U
Reservoir Level: 50+ U
Last Bolus Not Delivered: 0.00 U
Alerts:
RSSI: 25
Receiver Low Gain: 0
```

Measurement 13 Feet



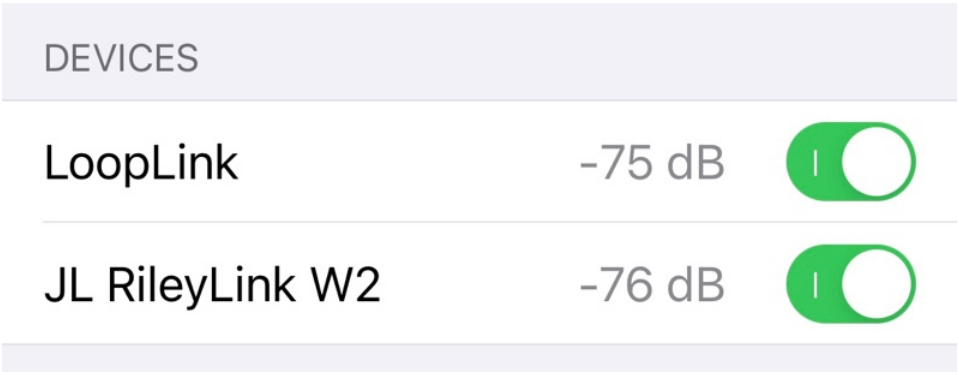
LoopLink

```
Read Pod Status…

No response from pod
```

RileyLink W2

```
Read Pod Status…

Pod Active: 32 minutes
Delivery Status: Temp basal running
Pulses (incl. prime & insert): 6.25 U
Reservoir Level: 50+ U
Last Bolus Not Delivered: 0.00 U
Alerts:
RSSI: 25
Receiver Low Gain: 0
```

Measurement 15 Feet



LoopLink

```
Read Pod Status…

No response from pod
```

RileyLink

```
Read Pod Status…

No response from pod
```