Test Plan 1

Test Author: Kenny Chen							
Test Case Name:	Power Distribution and Sensor Operation					**Test ID #:**	TP-TST1
Description:	Battery must supply enough power to all modules in the system. We will be looking at voltages across devices and ensure each module turns on.					**Type:**	▪ white box ☐ black box ☐ _____
Tester Information							
	Name of Tester:					**Date:**	
	HW/SW Version:	HW V1.1, SW V1.0				**Time:**	
	Setup:	3 AA batteries (ways to connect TBD)					

STEP	Action	Expected Result	PASS	FAIL	N/A	Comments
1	Place senor into dry soil	None.				
2	Turn on device by connecting the batteries	Initial sampling of soil moisture level. LED for the pump will be lit to indicate operation.				
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	Overall test result:					

Test Plan 2

Test Author: Kenny Chen							
Test Case Name:	Time and Code Verification				**Test ID #:**		TP-TST2
Description:	The system will use set time intervals to initiate sampling. Then ensure proper sensor data collection and process.				**Type:**		▪ white box □ black box □ _____
Tester Information							
	Name of Tester:					**Date:**	
	HW/SW Version:	HW V1.1, SW V1.0				**Time:**	
	Setup:	Dry soil and a cup of water					

STEP	Action	Expected Result	PASS	FAIL	N/A	Comments
1	Place sensor into dry soil	None.				
2	Turn on device	Initial sampling and water dispensing.				
3	Wait on timer	Timer is set to resample every 24 hours in a fully functioning product. But for testing, we can adjust the code to resample within 10 minutes. **It is recommended for testing to swap out the soil with another dry pot to ensure proper operation.				
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	Overall test result:					

Test Plan 3

Test Author: Kenny Chen			
Test Case Name:	Controlled release	**Test ID #:**	TP-TST3
Description:	The system will have controlled release of the volume of water.	**Type:**	▪ white box □ black box □ _____

Tester Information

	Name of Tester:		**Date:**	
	HW/SW Version:	HW V1.1, SW V1.0	**Time:**	
	Setup:	Will require a container of water and dry soil		

STEP	Action	Expected Result	PASS	FAIL	N/A	Comments
1	Place sensor into dry soil	None.				
2	Place dispensing tube into a cup or beaker	None.				
3	Turn on device	Initial sampling and water dispensing.				
4	Measure the volume of water	The dispensed volume of water should match the product design specification. For testing, we will set the dispensed liquids to 2 US cups or 16 fluid ounces.				
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	Overall test result:					