

THE BLOOM EFFECT – Experimental Series

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Sample Overview

BLOOM-01 – Control

- Tap water
- No turbine
- No laser

BLOOM-02 – Turbine Only

- Tap water
- 12V turbine
- No laser
- Runtime: 10 minutes

BLOOM-03 – 50mW Laser

- Tap water
- 12V turbine
- 50mW green laser (532nm)
- Laser directed into the sky / space
- Runtime: 10 minutes

BLOOM-04 – 200mW Laser

- Tap water
- 12V turbine
- 200mW green laser (532nm)
- Laser directed into the sky / space
- Runtime: 10 minutes

THE BLOOM EFFECT

Experimental Series 1 – Water, Turbine and Laser

Researcher: Dr. Andre Fraidl

Date: 15.06.26

Sample ID: Bloom-01-control

EXPERIMENTAL SETUP

Water Source

Water Volume (Liters)

Turbine Used

- ☐ 12V Turbine
- ☐ F50-80V Turbine

Laser Used

- ☒ No turbine
- ☐ No Laser
- ☐ 50mW Green Laser (532nm)
- ☐ 200mW Green Laser (532nm)

Laser Direction

- ☐ Space

Runtime

10 Minutes

ENVIRONMENTAL CONDITIONS

Air Temperature: °C

Water Temperature Before Test: -1- °C

Water Temperature After Test: -1- °C

Weather Conditions:

ELECTRICAL MEASUREMENTS

Time (min)	Turbine Voltage (V)	Laser Voltage (V)	Current (A)	Power (W)
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

CALCULATIONS

Turbine

Average Turbine Voltage:

_____ V

Maximum Turbine Voltage:

_____ V

Minimum Turbine Voltage:

_____ V

Laser

Average Laser Voltage:

_____ V

Maximum Laser Voltage:

_____ V

Minimum Laser Voltage:

_____ V

Current

Average Current:

_____ A

Maximum Current:

_____ A

Power

Average Power:

_____ W

Maximum Power:

_____ W

Total Energy Produced

Average Power $\times$ Runtime

_____ Wh

OBSERVATIONS

Visual observations:

Unusual behavior:

WATER ANALYSIS SUBMISSION

Samples submitted:

- ☐ BLOOM-01 Control
- ☐ BLOOM-02 Turbine Only
- ☐ BLOOM-03 50mW Laser
- ☐ BLOOM-04 200mW Laser

THE BLOOM EFFECT

Experimental Series 1 – Water, Turbine and Laser

Researcher: Dr. Andre Fraidl

Date: 15.06.26

Sample ID: Bloom-02 - Turbine only

EXPERIMENTAL SETUP

Water Source

Water Volume (Liters)

Turbine Used

☒ 12V Turbine

☐ F50-80V Turbine

Laser Used

☐ No turbine

☒ No Laser

☐ 50mW Green Laser (532nm)

☐ 200mW Green Laser (532nm)

Laser Direction

☐ Space

Runtime

10 Minutes

ENVIRONMENTAL CONDITIONS

Air Temperature: _____ °C

Water Temperature Before Test: _____ °C

Water Temperature After Test: _____ °C

Weather Conditions:

ELECTRICAL MEASUREMENTS

Time (min)	Turbine Voltage (V)	Laser Voltage (V)	Current (A)	Power (W)
0	12,14			
1	Avg 12,14			
2	12,23			
3	12,26			
4	12,26			
5	12,26			
6	12,27			
7	12,28			
8	12,28			
9	12,30			
10	12,30 12,28			

CALCULATIONS

Turbine

Average Turbine Voltage:

12,25 V

Maximum Turbine Voltage:

12,30 V

Minimum Turbine Voltage:

12,14 V

Laser

Average Laser Voltage:

_____ V

Maximum Laser Voltage:

_____ V

Minimum Laser Voltage:

_____ V

Current

Average Current:

_____ A

Maximum Current:

_____ A

Power

Average Power:

_____ W

Maximum Power:

_____ W

Total Energy Produced

Average Power $\times$ Runtime

_____ Wh

OBSERVATIONS

Visual observations:

Unusual behavior:

THE BLOOM EFFECT

Experimental Series 1 – Water, Turbine and Laser

Researcher: Dr. Andre Fraidl

Date: 15.08.26

Sample ID: BLOOM 03- 50mW/400

EXPERIMENTAL SETUP

Water Source

Water Volume (Liters)

Turbine Used

- ☒ 12V Turbine
- ☐ F50-80V Turbine

Laser Used

- ☐ No turbine
- ☐ No Laser
- ☒ 50mW Green Laser (532nm)
- ☐ 200mW Green Laser (532nm)

Laser Direction

- ☒ Space

Runtime

10 Minutes

ENVIRONMENTAL CONDITIONS

Air Temperature: _____ °C

Water Temperature Before Test: _____ °C

Water Temperature After Test: _____ °C

Weather Conditions:

ELECTRICAL MEASUREMENTS

Time (min)	Turbine Voltage (V)	Laser Voltage (V)	Current (A)	Power (W)
0	7,13		0,05	0,3
1	7,21		0,05	0,3
2	7,22		0,05	0,3
3	7,30		0,05	0,3
4	7,23		0,05	0,3
5	7,24		0,05	0,3
6	7,28		0,05	0,3
7	7,31		0,06	0,4
8	7,23		0,05	0,3
9	7,23		0,05	0,3
10	7,10		0,05	0,3

CALCULATIONS

Turbine

Average Turbine Voltage:

7,23 V

Maximum Turbine Voltage:

7,31 V

Minimum Turbine Voltage:

7,10 V

Laser

Average Laser Voltage:

_____ V

Maximum Laser Voltage:

_____ V

Minimum Laser Voltage:

_____ V

Current

Average Current:

0,051 A

Maximum Current:

0,06 A

Power

Average Power:

0,31 W

Maximum Power:

0,4 W

Total Energy Produced

Average Power $\times$ Runtime

0,0569 Wh

OBSERVATIONS

Visual observations:

Unusual behavior:

WATER ANALYSIS SUBMISSION

Samples submitted:

- ☐ BLOOM-01 Control
- ☐ BLOOM-02 Turbine Only
- ☐ BLOOM-03 50mW Laser
- ☐ BLOOM-04 200mW Laser

THE BLOOM EFFECT

Experimental Series 1 – Water, Turbine and Laser

Researcher: Dr. Andre Fraidl

Date:

15.06.20

Sample ID: Bloom 04 - 200mW green

EXPERIMENTAL SETUP

Water Source

Water Volume (Liters)

Turbine Used

☒ 12V Turbine

☐ F50-80V Turbine

Laser Used

☐ No turbine

☐ No Laser

☐ 50mW Green Laser (532nm)

☒ 200mW Green Laser (532nm)

Laser Direction

☒ Space

Runtime

10 Minutes

ENVIRONMENTAL CONDITIONS

Air Temperature: _____ °C

Water Temperature Before Test: _____ °C

Water Temperature After Test: _____ °C

Weather Conditions:

ELECTRICAL MEASUREMENTS

Time (min)	Turbine Voltage (V)	Laser Voltage (V)	Current (A)	Power (W)
0	6,87		0,06	0,4
1	6,87		0,06	0,4
2	6,87		0,06	0,4
3	6,84		0,06	0,4
4	6,81		0,06	0,4
5	6,84		0,06	0,4
6	6,84		0,06	0,4
7	7,00		0,06	0,4
8	7,00		0,06	0,4
9	6,88		0,06	0,4
10	7,16		0,05	0,3

CALCULATIONS

Turbine

Average Turbine Voltage:

6,81 V

Maximum Turbine Voltage:

7,16 V

Minimum Turbine Voltage:

6,81 V

Laser

Average Laser Voltage:

_____ V

Maximum Laser Voltage:

_____ V

Minimum Laser Voltage:

_____ V

Current

Average Current:

0.058 A

Maximum Current:

0.06 A

Power

Average Power:

0.381 W

Maximum Power:

0.40 W

Total Energy Produced

Average Power $\times$ Runtime

0.065 Wh

OBSERVATIONS

Visual observations:

Unusual behavior:

WATER ANALYSIS SUBMISSION

Samples submitted:

- ☐ BLOOM-01 Control
- ☐ BLOOM-02 Turbine Only
- ☐ BLOOM-03 50mW Laser
- ☐ BLOOM-04 200mW Laser