# **UF Report**

2025-09-01 to 2025-09-22

## **■** Executive Summary

Robot deployment during 2025-09-01 to 2025-09-22 processed 63.0 total tasks, covering 336,831.0 square feet with 56.5 total running hours.

2

Total Robots

336,831.0

Sq Ft Cleaned

vs last: -13414.0 sq ft

88.0%

Coverage

vs last: +17.2%

56.5

Total Running Hours

vs last: -27.5 hrs

2.5

Avg Daily Running Hours per Robot (hrs/robot)

vs last: -0.4 hrs/robot

15/23

Days with Tasks vs last: -1.0 days

22.6 kWh

**Energy Used** 

vs last: -8.3 kWh

## **6** Key Achievements

- 63.0 total tasks processed during reporting period
- 336,831.0 square feet cleaned across all locations
- 2.0 robots actively deployed and monitored
- 80.0 charging sessions during the period

### Individual Robot Performance

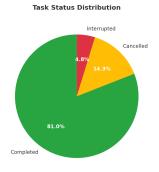
Robot ID	Location	Total Tasks	Tasks Completed	Total Area Cleaned	Average Coverage	Days with Tasks	Running Hours
811135422060228	Building 43 Marston Science Library	25	20	173,240 sq ft	87.0%	13	30.8 hrs
811135422060216	Building 205 Dental Science	38	31	163,591 sq ft	89.1%	10	25.7 hrs

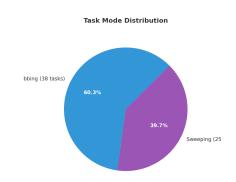
## Task & Schedule Performance

## **Task Management Efficiency**

Task tracking across all facilities: 63 total tasks with 31,292 sq ft total coverage and 53.8 minutes average task duration.

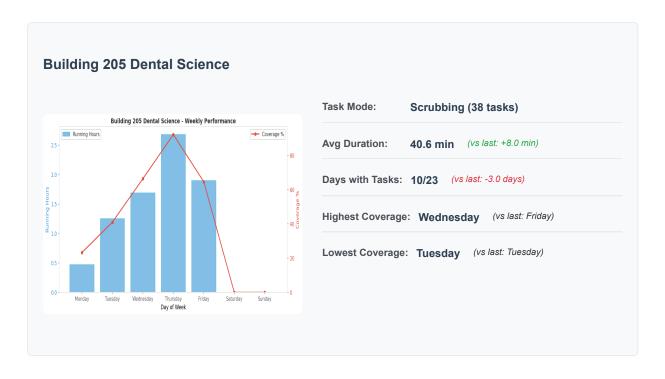
Metric	Total	Completed	In Progress	Average Duration
All Facilities	63	51	0	53.8 min (vs last: +8.0 min)





## **Task Efficiency by Location**

Daily task performance showing running hours and coverage efficiency patterns for each location. Each chart displays actual operational data to identify location-specific performance trends.





## Facility-Specific Performance

### **Building 205 Dental Science**

Performance metrics for Building 205 Dental Science: 38 total tasks, 163,591 sq ft total area cleaned, 89.1% average coverage, 6363.4 sq ft/hour time efficiency, and 1.4 sq ft/fl oz water efficiency.

### **Building 43 Marston Science Library**

Performance metrics for Building 43 Marston Science Library: 25 total tasks, 173,240 sq ft total area cleaned, 87.0% average coverage, 5621.2 sq ft/hour time efficiency, and 0.0 sq ft/fl oz water efficiency.

Metric	Performance	vs Last Period
Total Area Cleaned	163,591 sq ft	-72364.0 sq ft
Average Coverage	89.1%	+18.0%
Running Hours	25.7 hours	-12.3 hrs
Time Efficiency	6363.4 sq ft/hr	+152.7 sq ft/hr
Power Efficiency	17,801 sq ft/kWh	+87.0 sq ft/kWh
Water Efficiency	1.4 sq ft/fl oz	+0.4 sq ft/fl oz

Metric	Performance	vs Last Period
Total Area Cleaned	173,240 sq ft	-72022.0 sq ft
Average Coverage	87.0%	+16.6%
Running Hours	30.8 hours	-15.2 hrs
Time Efficiency	5621.2 sq ft/hr	+292.0 sq ft/hr
Power Efficiency	12,957 sq ft/kWh	-970.0 sq ft/kWh
Water Efficiency	0.0 sq ft/fl oz	0 sq ft/fl oz

# **Map-Specific Performance**

Coverage: (actual area / planned area) × 100. Area Cleaned: sum of actual cleaned area converted to sq ft. Running Hours: sum of task durations converted from seconds. Power Efficiency: area cleaned / energy consumption. Time Efficiency: area cleaned / running hours. Water Efficiency: area cleaned / water consumption. Days with Tasks: unique dates when tasks occurred.

### **Building 205 Dental Science Maps**

Map Name	Coverage %	vs Last Period
2#0#Bld205-Floor2	98.9%	+98.9%
-1#0#Bld_205_Dental_Sci_Grd	97.2%	+11.4%
1#1#dental_ground_elevator	89.8%	+13.6%
1#0#Bld_205_Dental_Sci_1fl	78.8%	+19.0%

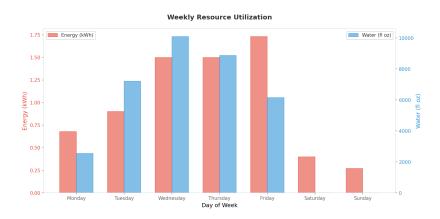
#### **Building 43 Marston Science Library Maps**

Map Name	Coverage %	vs Last Period
1#1#43_Main_areaMarston_Library_F1	95.1%	+28.4%
2#0#43_Marston_library_2nd	90.9%	+5.5%
1#0#43_Marston_Library_F1	80.8%	+20.8%
5#0#Marston-5th-floor	59.5%	-35.5%

## Resource Utilization & Efficiency

#### **Resource Performance**

Resource utilization: 22.60 kWh total energy consumption, 114280 fl oz total water usage, 14930 sq ft per kWh energy efficiency, and 377 sq ft per gallon water efficiency.



#### **Energy Usage by Facility**

- Building 205 Dental Science: 9.2 kWh (vs last: -4.1 kWh)
- Building 43 Marston Science Library: 13.4 kWh (vs last: -4.2 kWh)

#### Water Usage by Facility

- Building 205 Dental Science: 114280 fl oz (vs last: -116161.0 fl oz)
- Building 43 Marston Science Library: 0 fl oz (vs last: 0 fl oz)

### Financial Performance

Financial analysis based on actual resource usage: \$0.00/sq ft average cost per square foot, \$0.00 total operational cost, 42.1 hours saved compared to manual cleaning, and \$1,052.60 in realized savings.

Operational Metric	Value	vs Previous Period	Notes
Cost per Sq Ft	\$0.00/sq ft	0	Operational efficiency (water + energy cost per area)
Total Operational Cost	\$0.00	0	Robot operational cost this period
ROI	42.6%	+16.5%	Return on Investment (cumulative savings ÷ total investment × 100)
Total Investment	\$6,000.00	N/A	Cumulative lease investment (\$1500/month per robot)
Cost Efficiency Improvement	100.0%	+0.0%	Efficiency improvement vs manual cleaning
Water Cost	\$0.00	0	Water resource cost component
Energy Cost	\$0.00	0	Energy resource cost component

## **ROI** Calculation Method

**ROI Formula:** Cumulative Savings ÷ Total Investment × 100

**Investment:** \$1,500/month per robot × months elapsed (rounded up for billing)

Cumulative Savings: All-time savings from first robot task to end of reporting period

Chart Note: ROI trend shows daily cumulative values (not weekly averages, as ROI is cumulative by nature)



## **Financial Impact Summary**

\$1,052.60

Manual Cleaning Cost vs last: -451.2

\$12,631.16

Annual Projected Savings

vs last: -5414.5

\$1,278.20/month

Monthly Savings Rate

vs last: +494.4

\$1,052.60

Savings Realized

\$2,556.40

Cumulative Savings

vs last: +988.8

42.1 hrs

Hours Saved vs Manual

vs last: -18.1 hrs

4.7 months

Payback Period

vs last: 0 months

Financial calculations based on actual resource usage, lease model, and human cleaning speed benchmarks.

## Charging Sessions Performance

Charging patterns and battery management during the reporting period: 80 total sessions, 339.5 minutes average duration, and 20.8% average power gain per session.

80

**Total Charging Sessions** 

vs last: +8.0 sessions

339.5 min

Avg Charging Duration

vs last: +32.7 min

81.0 min

Median Charging Duration

vs last: -60.0 min

+20.8%

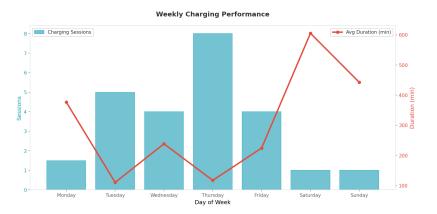
Avg Power Gain per Session

vs last: -1.6%

+8.0%

Median Power Gain per Session

vs last: +1.0%



# **Charging Patterns by Location**

Location	Total Sessions	Avg Duration	Median Duration	Avg Power Gain	Median Power Gain
Building 205 Dental Science	vs last: +5.0 sessions	258.5 min vs last: +1.2 min	16.0 min vs last: -91.0 min	+12.9% vs last: -6.4%	+1.0% vs last: -5.0%
Building 43 Marston Science Library	36 vs last: +3.0 sessions	422.8 min vs last: +61.5 min	192.0 min vs last: +20.5 min	+30.6% vs last: +4.4%	+31.0% vs last: +14.0%

# **©** Conclusion

2025-09-01 To 2025-09-22 performance summary: 81.0% task completion rate across 2.0 robot(s), 63.0 tasks completed, 336,831.0 sq ft cleaned, 80.0 charging sessions, and 42.6% return on investment.

#### **UF Report**

Period: 2025-09-01 to 2025-09-22 Robots Included: 2

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