UF Report

2025-08-01 to 2025-09-01

■ Executive Summary

Robot deployment during 2025-08-01 to 2025-09-01 processed 112.0 total tasks, covering 501,633.0 square feet with 88.1 total running hours.

2

Total Robots

501,633.0

Sq Ft Cleaned vs last: +46603.0 sq ft

71.6%

Coverage vs last: +71.6%

88.1

Total Running Hours
vs last: +88.1 hrs

2.9

Avg Daily Running Hours per Robot (hrs/robot) vs last: +2.9 hrs/robot 17/33

Days with Tasks vs last: +17.0 days

32.3 kWh

Energy Used vs last: +32.3 kWh

6 Key Achievements

- 112.0 total tasks processed during reporting period
- 501,633.0 square feet cleaned across all locations
- · 2.0 robots actively deployed and monitored
- 75.0 charging sessions during the period

Individual Robot Performance

Key Metrics: Utilization: Working hours / Uptime hours × 100. Measures productive time efficiency. **Health Score:** Overall robot health (0-100) based on availability (40%), task success (20%), efficiency (20%), mode performance (10%), and battery health (10%).

Robot ID	Location	Total Tasks	Tasks Completed	Total Area Cleaned	Average Coverage	Days with Tasks	Running Hours	Utilization	Health Score
811135422060228	Building 43 Marston Science Library	42	26	265,677 sq ft	72.0%	17	50.1 hrs	6.3%	86.0 (Good)
811135422060216	Building 205 Dental Science	70	45	235,955 sq ft	71.1%	13	38.0 hrs	4.8%	86.5 (Good)

Individual Robot ROI Breakdown

Investment and ROI analysis per robot based on lease model and operational savings.

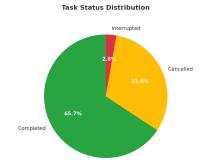
Robot ID	Months Deployed	Total Investment	Cumulative Savings	ROI
811135422060216	2	\$3,000.00	\$737.36	24.6%
811135422060228	2	\$3,000.00	\$830.24	27.7%

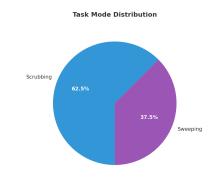
Task & Schedule Performance

Task Management Efficiency

Task tracking across all facilities: 112 total tasks with 46,603 sq ft total coverage and 47.2 minutes average task duration.

Metric	Total	Completed	In Progress	Average Duration
All Facilities	112	71	0	47.2 min (vs last: +47.2 min)

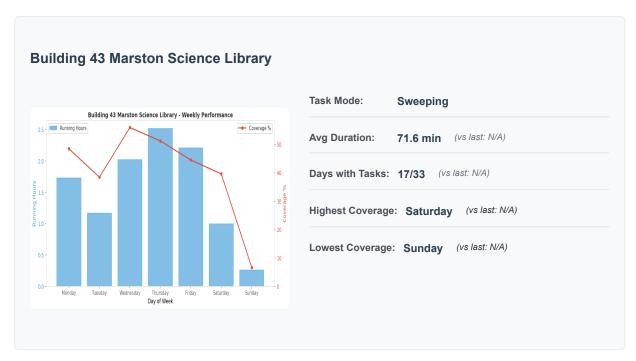




Task Efficiency by Location

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

Building 43 Marston Science Library

Performance metrics for Building 205 Dental Science:

Performance metrics for Building 43 Marston Science

70 total tasks, 235,955 sq ft total area cleaned, 71.1% average coverage, 6210.7 sq ft/hour time efficiency, and 1.0 sq ft/fl oz water efficiency.

Metric	Performance	vs Last Period
Total Area Cleaned	235,955 sq ft	N/A
Average Coverage	71.1%	N/A
Running Hours	38.0 hours	N/A
Time Efficiency	6210.7 sq ft/hr	N/A
Power Efficiency	17,714 sq ft/kWh	N/A
Water Efficiency	1.0 sq ft/fl oz	N/A

Library: 42 total tasks, 265,677 sq ft total area cleaned, 72.0% average coverage, 5303.6 sq ft/hour time efficiency, and 0.0 sq ft/fl oz water efficiency.

Metric	Performance	vs Last Period
Total Area Cleaned	265,677 sq ft	N/A
Average Coverage	72.0%	N/A
Running Hours	50.1 hours	N/A
Time Efficiency	5303.6 sq ft/hr	N/A
Power Efficiency	13,976 sq ft/kWh	N/A
Water Efficiency	0.0 sq ft/fl oz	N/A

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

Area Cleaned (sq ft)

vs last: N/A

Running Hours

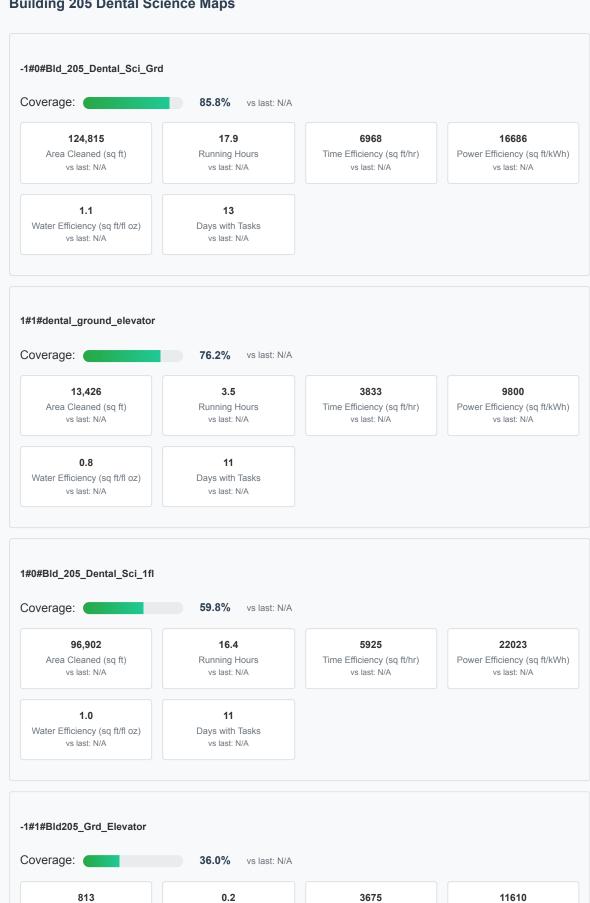
vs last: N/A

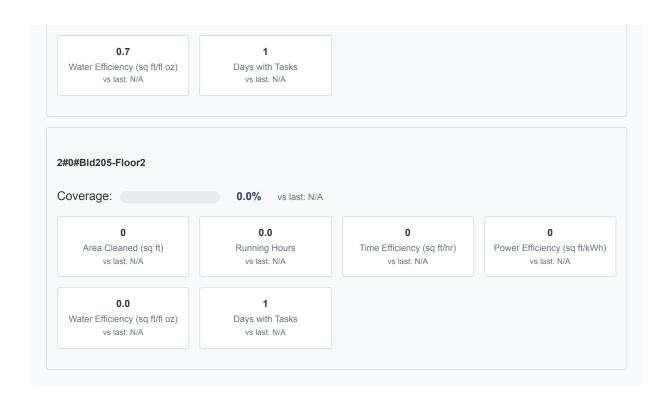
Time Efficiency (sq ft/hr)

vs last: N/A

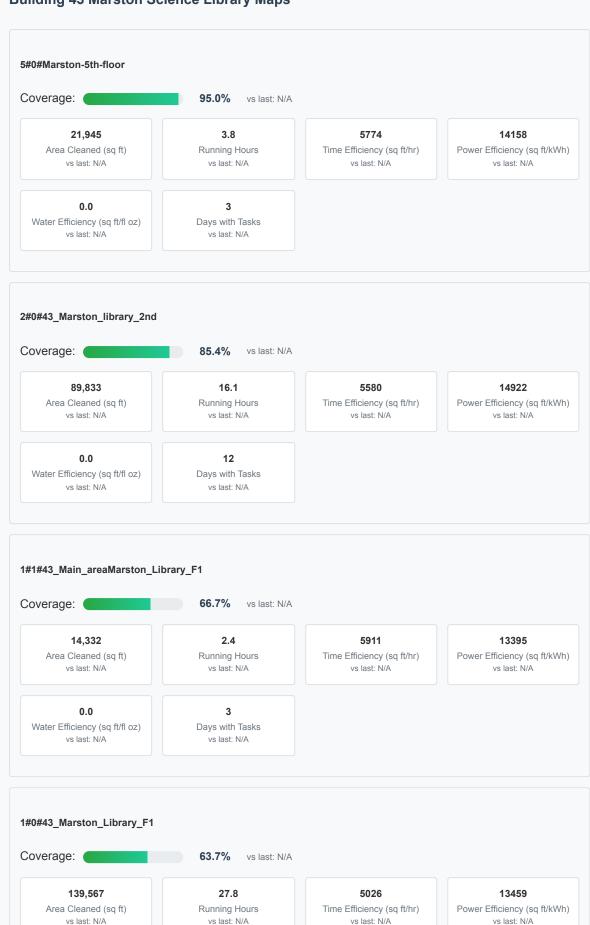
Power Efficiency (sq ft/kWh)

vs last: N/A



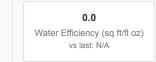


Building 43 Marston Science Library Maps



vs last: N/A

vs last: N/A



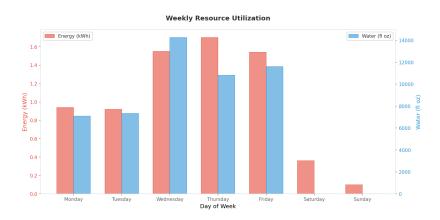
12 Days with Tasks vs last: N/A



Resource Utilization & Efficiency

Resource Performance

Resource utilization: 32.30 kWh total energy consumption, 230441 fl oz total water usage, 15516 sq ft per kWh energy efficiency, and 279 sq ft per gallon water efficiency.



Energy Usage by Facility

- Building 205 Dental Science: 13.3 kWh (vs last: N/A)
- Building 43 Marston Science Library: 19.0 kWh (vs last: N/A)

Water Usage by Facility

- Building 205 Dental Science: 230441 fl oz (vs last: N/A)
- Building 43 Marston Science Library: 0 fl oz (vs last: N/A)

Robot Health & Utilization Analysis

Comprehensive health and utilization metrics for each robot, including uptime/downtime analysis and component-level health scores.

Metric Definitions

Utilization: Working hours / Uptime hours × 100. Indicates how efficiently the robot's available time is used for productive tasks.

Availability: Percentage of time robot is online and

available (weight: 40%)

Task Success: Percentage of successfully

completed tasks (weight: 20%)

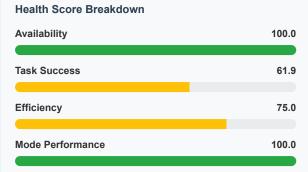
Efficiency: Task efficiency score based on performance metrics (weight: 20%)

Mode Performance: Performance in different cleaning modes like sweeping/scrubbing (weight: 10%)

Battery Health: Battery State of Health (SOH)

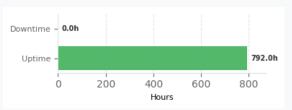
percentage (weight: 10%)

Robot 811135422060228 (Building_43_Marston_Library) - Health: 86.0 (Good) | Utilization: 6.3%

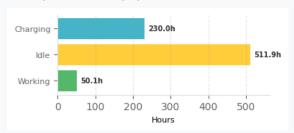


Time Distribution

Uptime vs Downtime



Working vs Idle vs Charging



Uptime: 792.0h (100.0%)

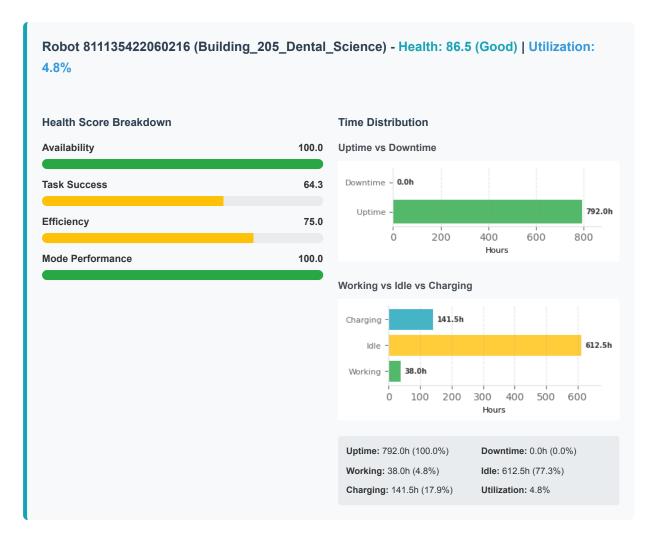
Working: 50.1h (6.3%)

Charging: 230.0h (29.0%)

Downtime: 0.0h (0.0%)

Idle: 511.9h (64.6%)

Utilization: 6.3%



§ Financial Performance

Financial analysis based on actual resource usage: \$0.00/sq ft average cost per square foot, \$0.00 total operational cost, 62.7 hours saved compared to manual cleaning, and \$1,567.60 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	26.1%	+26.1%	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%	+100.0%	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



Financial Impact Summary

\$1,567.60

Manual Cleaning Cost

vs last: +1567.6

\$18,811.24

Annual Projected Savings

vs last: +18811.2

\$1,567.60

Savings Realized

vs last: +1567.6

\$1,567.60

Cumulative Savings

vs last: +1567.6

62.7 hrs

Hours Saved vs Manual

vs last: +62.7 hrs

7.7 months

Payback Period vs last: 0 months

\$783.80/month

Monthly Savings Rate

vs last: +783.8

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: 75 total sessions, 337.8 minutes average duration, and 22.9% average power gain per session.

75

Total Charging Sessions vs last: +75.0 sessions

337.8 min

Avg Charging Duration vs last: +337.8 min

150.0 min

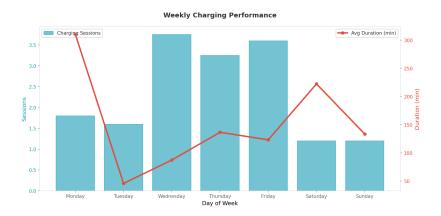
Median Charging Duration vs last: +150.0 min

+22.9%

Avg Power Gain per Session vs last: +22.9%

+7.0%

Median Power Gain per Session vs last: +7.0%



Charging Patterns by Location

Location	Total	Avg	Median	Avg Power	Median Power
	Sessions	Duration	Duration	Gain	Gain
Building 205 Dental Science	39	257.3 min	107.0 min	+19.3%	+6.0%
	vs last: N/A				
Building 43 Marston Science	36	418.2 min	175.0 min	+26.7%	+21.0%
Library	vs last: N/A				

© Conclusion

2025-08-01 To 2025-09-01 performance summary: 63.4% task completion rate across 2.0 robot(s), 112.0 tasks completed, 501,633.0 sq ft cleaned, 75.0 charging sessions, and 26.1% return on investment.

UF Report

Period: 2025-08-01 to 2025-09-01

Robots Included: 2

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