ROBOT PERFORMANCE TESTING GUIDELINES

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NaviFloor Robotics, Inc.

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1. PURPOSE AND SCOPE

1. These Robot Performance Testing Guidelines ("Guidelines") establ

2. These Guidelines apply to all AMR models utilizing the Company's

2. DEFINITIONS

1. "Performance Test" means the comprehensive evaluation of an AM

2. "Test Environment" refers to the Company's designated testing faci

3. "Testing Officer" means a qualified Company engineer certified in A

3. MANDATORY TESTING REQUIREMENTS

1. Basic Navigation Testing

a) Surface Recognition Accuracy (minimum 99.8%)

b) Obstacle Detection Range (0.1-15 meters)

c) Path Planning Efficiency (2 seconds response time)

d) Multi-Surface Transition Performance

2. Load Testing

a) Static Load Capacity Verification

b) Dynamic Load Stability Assessment

c) Emergency Stop Under Load

d) Incline Performance (up to 15 grade)

3. Environmental Testing

a) Temperature Range (-10 C to 45 C)

b) Humidity Tolerance (10-90% non-condensing)

c) Dust/Particulate Resistance

d) EMI/EMC Compliance

4. TESTING PROCEDURES

1. Pre-Test Requirements

a) Full system diagnostic check

b) Calibration of all sensors

c) Battery charge verification (minimum 90%)

d) Testing environment certification

2. Testing Sequence

a) Basic functionality tests

b) Advanced navigation scenarios

c) Load-bearing operations

d) Environmental stress testing

e) Extended duration testing (minimum 72 hours)

3. Data Collection Requirements

a) Continuous logging of all sensor data

b) Video documentation of critical tests

c) Performance metrics recording

d) Error event logging

5. PERFORMANCE STANDARDS

1. Navigation Accuracy

a) Position accuracy: 5mm

b) Rotation accuracy: 0.5

c) Path deviation: 15mm

2. Safety Systems

a) Emergency stop response: 0.3 seconds

b) Obstacle avoidance success rate: 99.99%

c) Collision prevention distance: 500mm minimum

3. Operational Efficiency

a) Battery life: 12 hours continuous operation

b) Charging time: 4 hours (0% to 100%)

c) Task completion rate: 98%

6. DOCUMENTATION AND REPORTING

1. Required Documentation

a) Test results summary

b) Performance metrics analysis

c) Error logs and resolution reports

d) Environmental condition records

2. Certification Requirements

a) Testing Officer signature

b) Quality Control verification

c) Technical Director approval

d) Safety compliance certification

7. NON-COMPLIANCE AND REMEDIATION

1. Any AMR failing to meet the standards specified herein shall be imm

2. Remediation procedures must be documented and approved by the

3. Three consecutive test failures shall trigger a mandatory design rev

8. CONFIDENTIALITY

1. All testing data, procedures, and results are considered Confidentia

9. AMENDMENTS

1. These Guidelines may be amended only by written authorization fro

10. CERTIFICATION

The undersigned hereby certifies these Guidelines as approved and i
of the Effective Date.

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Dr. Elena Kovacs

Chief Research Officer

Date:

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Marcus Depth

Chief Technology Officer

Date:

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