

Indoor Air Quality Session Report

performed on 7/9/26

Sample Client

Sample Property
Portland, OR



Illumenair
15280 S Howards Mill Rd.
Mulino, OR 97042

Welcome to Your Illumenair Report

Thank you for choosing Illumenair for your indoor air quality assessment. This report presents the findings from your whole-property survey, conducted using professional-grade, real-time air quality instrumentation. Our goal is to give you a clear, actionable picture of the air throughout your home or workplace — room by room, compared against an outdoor baseline.

Illumenair measures ten core parameters in a single visit, with results available the same day - no laboratory wait required.

What We Measure

Mold	Real-time airborne mold spore detection, identified room by room.
Bacteria	Airborne bacterial particle counts; elevated levels can indicate HVAC or ventilation issues.
Viral Load	Submicron particle counts that reflect respiratory transmission risk in enclosed spaces.
VOCs	Volatile organic compounds from building materials, finishes, cleaning products, and furnishings. Includes formaldehyde from pressed-wood products and adhesives.
Carbon Monoxide	An odorless combustion gas; even low chronic exposure causes headaches, fatigue, and cognitive impairment.
Carbon Dioxide (CO₂)	A direct proxy for ventilation quality; elevated levels correlate with cognitive impairment and poor sleep.
Pollen	Indoor pollen counts reveal how effectively your home filters outdoor allergens.
Humidity	Room-by-room moisture mapping identifies conditions where biological contamination is likely to develop.
PM2.5	Fine particles small enough to penetrate lung tissue — a critical marker for combustion byproducts and smoke.
PM10	Coarse particles including dust, pollen fragments, and mold debris that trigger upper respiratory irritation.

Understanding Your Report

Included in Your Report

Mold Comparison Chart	Room-by-room airborne mold concentrations compared to the outdoor baseline.
Total Biological Matter Comparison Chart	Mold, Bacteria and Viral-load, and Pollen particle counts across all assessed areas.
Particulate Matter Comparison Chart	PM2.5 and PM10 readings for each room and the outdoor reference point.
VOC Comparison Chart	Volatile organic compound levels mapped across every area surveyed.
CO₂ Comparison Chart	Carbon dioxide readings that indicate ventilation quality room by room.
Area Result Summary	Findings breakdown from room to room.

Understanding the Limits of This Assessment

As with any measurement tool, there are important limitations you should understand before drawing conclusions from this report. The sections below explain the key factors that affect how results should be read and what they can — and cannot — tell you.

1. No Regulatory Standards for Airborne Biologicals

There are currently no federal, state, or industry-wide regulatory standards that define acceptable or unacceptable levels of airborne biological matter — including mold — inside occupied buildings. No government agency has established a threshold at which indoor mold concentrations are definitively considered safe or hazardous.

Because of this, all results in this report are interpreted using: published literature and guidance from relevant government agencies such as the CDC and EPA; peer-reviewed indoor air quality research; and Illumenair's professional experience. These interpretations represent informed professional judgment, not compliance with a fixed legal standard.

What this means for you

Results described as "elevated" or "above average" reflect a comparison against outdoor baseline levels and other areas of your property — not a violation of a regulatory limit. Recommendations in this report are based on best practices, not legal requirements.

2. Outdoor Air Conditions Affect Indoor Readings

The air outside your building directly influences the composition and concentration of bioaerosols inside. The following environmental factors can all impact your indoor results:

- Weather conditions at the time of inspection (rain, wind, humidity)
- Season and local pollen or mold cycles
- Time of day
- Local ecology, landscaping, and proximity to vegetation or soil

Before assessing the interior of your property, your Illumenair technician takes an outdoor baseline reading to measure ambient bioaerosol levels at your specific location on the day of the inspection. Indoor results are compared against this local baseline rather than a generic standard.

In unusual cases where outdoor conditions are insufficient to establish a reliable baseline — for example, during heavy rain or extreme weather — additional calculations may be used to establish a reference for the assessment. Your technician will note this in the report when applicable.

3. The Instrument Measures Aerosolized Particles Only

Our instrumentation detects biological particles that are actively suspended in the air at the time of the assessment. This means:

- Mold, bacteria, and other biologicals present on surfaces but not currently airborne will not be detected by the instrument.
- Settled dust, dormant spores, or contamination confined to wall cavities, subfloor spaces, or material surfaces requires separate testing methods to identify.
- Conditions can change rapidly — a result of "normal" today does not guarantee normal conditions at all times.

Surface contamination vs. airborne contamination

A room may have visible mold or surface contamination that does not yet appear elevated in airborne readings — and vice versa. This report reflects airborne conditions at the time of inspection only. If you have visible mold or known water damage, additional testing methods may be warranted. If there is visible mold, depending on the circumstances, the inspector may not run a "Resuspension" scan, to avoid spreading contamination further. An initial "Quiescent" scan will typically be run.

4. Technician Observations and Additional Testing

In addition to instrument readings, your technician may conduct a visual inspection of your property and document observable mold growth, water staining, moisture damage, or other relevant conditions. Your report may include:

- Photographs of areas of concern noted during the inspection.
- Written observations based on the technician's knowledge, training, and professional experience.
- Results from any supplemental sampling methods the technician chose to employ.

Any written observations or supplemental sampling results represent the technician's independent professional findings and are distinct from the instrument data. Results between different sampling methods may vary. Illumenair technicians exercise their own professional discretion in determining what to document and report.

5. Scope and Use of Results

The results contained in this report are specific to this property, on this date, under the conditions present at the time of inspection. Please note the following:

- Results pertain only to this assessment and may not be used to evaluate any other building or location.
- Results reflect a snapshot in time. Air quality conditions can change due to weather, occupant activity, HVAC changes, or other factors.
- This report may not be reproduced in part without the written consent of Illumenair. Reproduction in full must include all pages and this limitations section.
- This report does not constitute a warranty or guarantee regarding the health, safety, or habitability of the property.
- Illumenair's total liability is limited to the fees paid for this specific assessment. Illumenair is not responsible for costs associated with remediation, repairs, or decisions made in reliance on this report.

Area-by-Area Comparison Results

Each chart in this report shows how every assessed area compares to the others and to the outdoor baseline collected at the time of your inspection. The mold comparison charts use a three-tier color system to make elevated readings immediately recognizable.

Color Code Guide — Mold Charts

NORMAL

Green — Normal. Mold concentrations in this area are consistent with what we would expect to find under normal indoor conditions relative to the outdoor baseline measured on the day of your inspection.

ABOVE AVG

Yellow — Above Average. Mold concentrations are moderately elevated compared to the outdoor baseline and to other areas of the property. These rooms may benefit from additional inspection to identify any contributing moisture source.

ELEVATED

Red — Elevated. Mold concentrations are significantly higher or ecologically different from the outdoor baseline. These areas warrant follow-up inspection to locate and address the underlying source.

The comparison charts are a general overview showing how areas relate to each other. Every scanned area from your session is included in each chart.

Questions?

Please contact Illumenair at (971) 363-5626 or info@illumenair.com. We're happy to walk you through any aspect of your report.

CLIENT

Sample Client

ADDRESS

Sample Property, Portland, OR

ASSESSOR

Jim Gray

ASSESSMENT DATE

July 9, 2026

Overall Summary

The inspection identified elevated mold levels in several areas of the home. The primary bathroom is elevated in the stable (quiescent) air, while the primary closet, the offices, and the primary bedroom show elevated readings when the area and settled dust are disturbed. Several areas also showed elevated VOC and CO₂ levels. Conditions like this are common and generally addressable with the steps outlined below.

Mold Readings — Rooms Requiring Attention

AREA	TEST TYPE	READING (P/M ³)	SEVERITY
Primary bathroom	Quiescent	30,362	RED
Primary closet	Resuspension	190,000	YELLOW
Landing office	Resuspension	59,000	YELLOW
Upstairs office	Resuspension	40,000	YELLOW
Primary bedroom	Resuspension	38,000	YELLOW
Primary bathroom drain & under cabinet	Source Tracking	26,377	YELLOW
Laundry	Resuspension	25,000	YELLOW
Upstairs bathroom drain & under cabinet	Source Tracking	18,875	YELLOW
Laundry drain & perimeter	Source Tracking	18,000	YELLOW

Other Flagged Parameters

VOC — above 400 ppb advisory level

Primary bathroom drain & cabinet 670 ppb	Laundry drain & perimeter 669 ppb	Primary bathroom 666 ppb
Upstairs bathroom drain & cabinet 666 ppb	Upstairs office 663 ppb	Primary bedroom 662 ppb
Upstairs bathroom 662 ppb	Spare bedroom 660 ppb	Primary closet 659 ppb
Landing office 656 ppb	Laundry 654 ppb	Powder drain 652 ppb
Powder 637 ppb	Kitchen drain & cabinet 632 ppb	Kitchen dining 616 ppb

CO₂ — above 1,000 ppm (ventilation)

Primary bathroom 1,218 ppm	Laundry 1,169 ppm	Upstairs bathroom 1,142 ppm	Spare bedroom 1,117 ppm
Upstairs office 1,086 ppm	Landing office 1,035 ppm	Primary bedroom 1,035 ppm	Powder 1,007 ppm

Mold & Moisture Deep-Dive

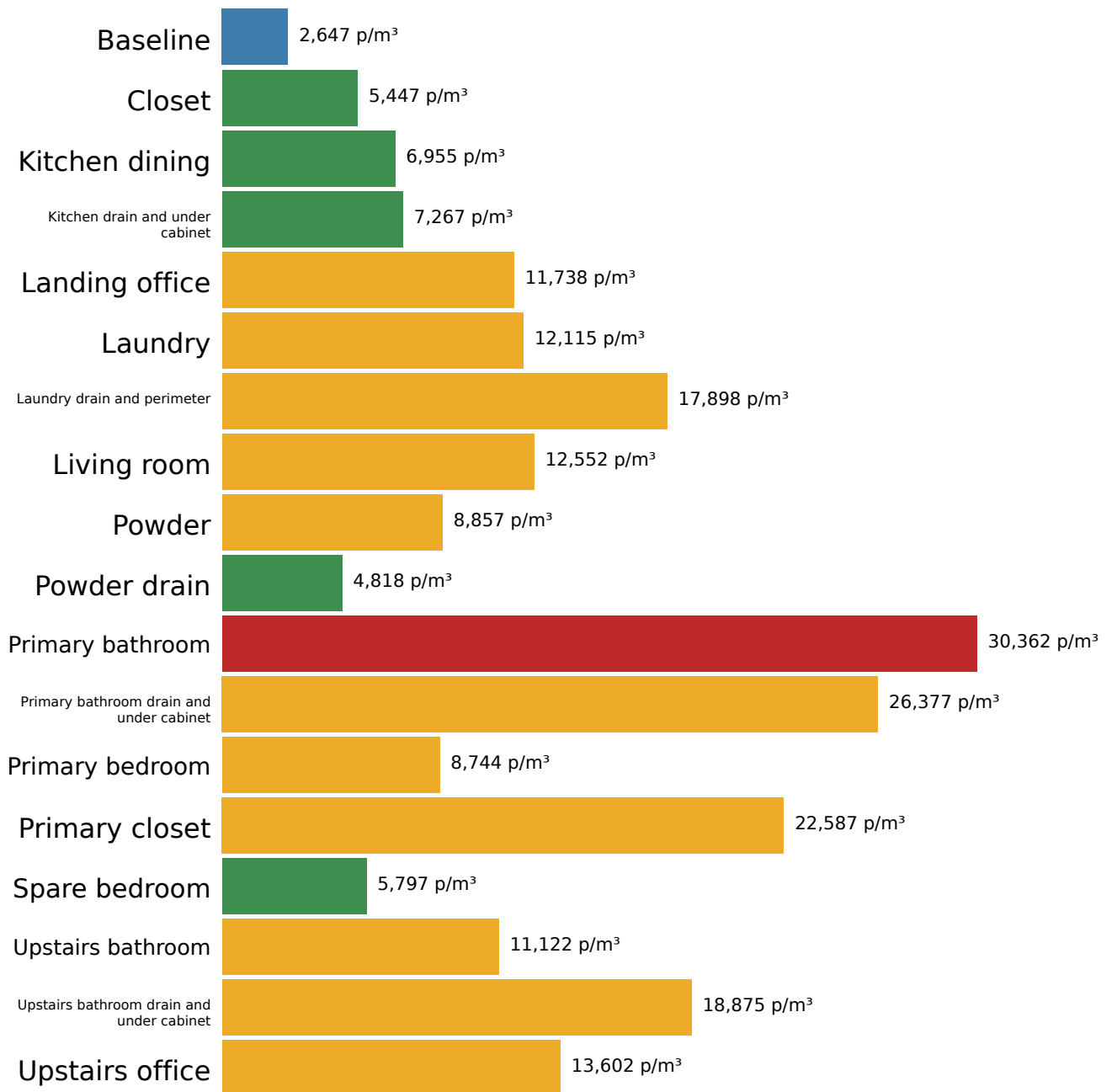
There appears to be a roof leak over the primary bathroom.
 The primary toilet seal is leaking.

Suggested Next Steps

- 1 Consider having a roofing contractor investigate and repair the leak.
- 2 Consider having a plumber solve the rocking issue (maybe the floor isn't level, or the toilet has a low spot hitting the flange, or the flange has a high spot) and then reseal the toilet.
- 3 Consider cleaning the carpets in the areas of elevated mold readings.
- 4 Consider airing out the house often to lower VOC and carbon dioxide levels.

Scan-by-Scan Mold Comparison

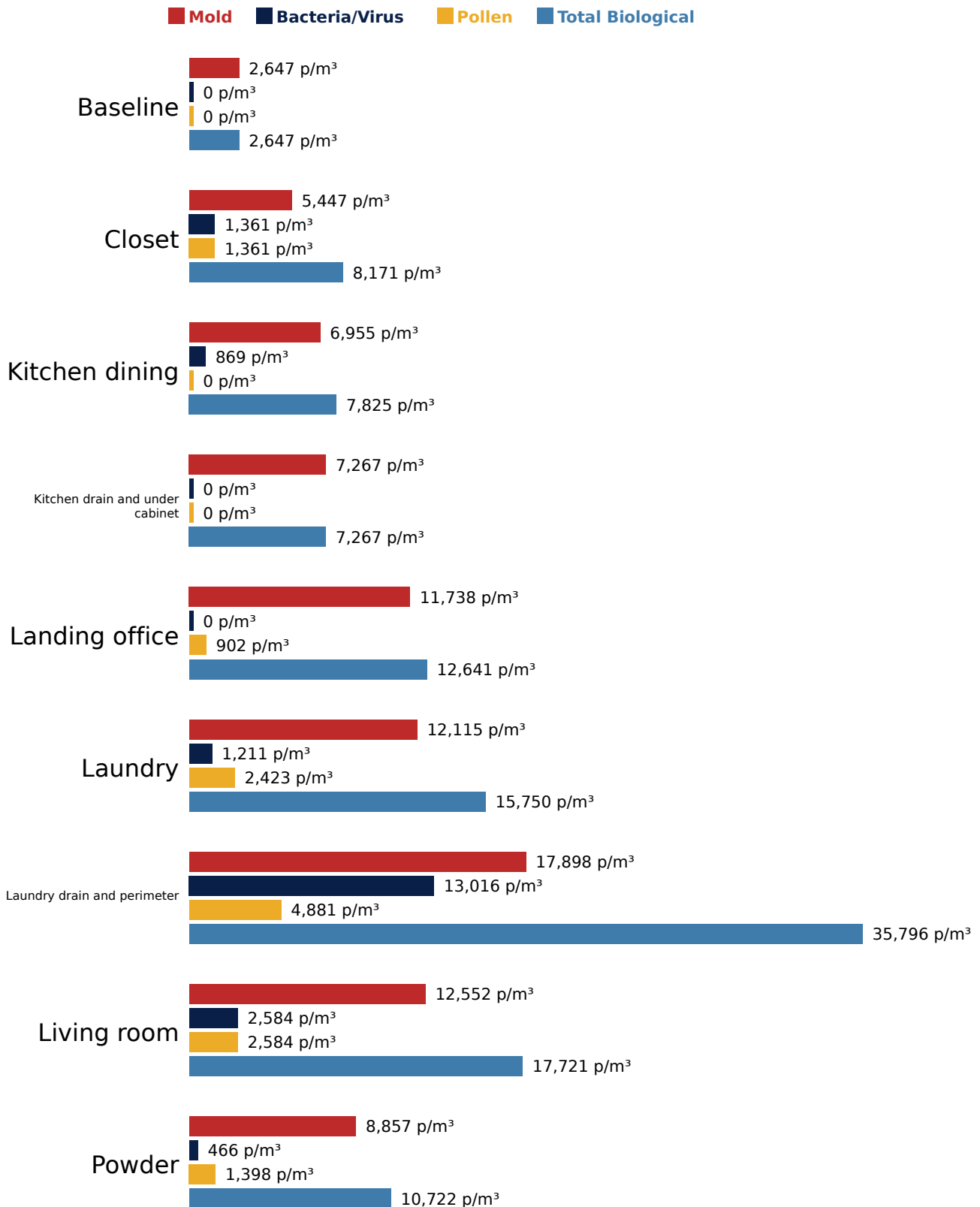
The Scan by Scan Mold Comparison shows all the readings in particles per cubic meter (p/m^3) in one chart, for each area, and can be used to compare rooms to each other and to the baseline scan (if present).



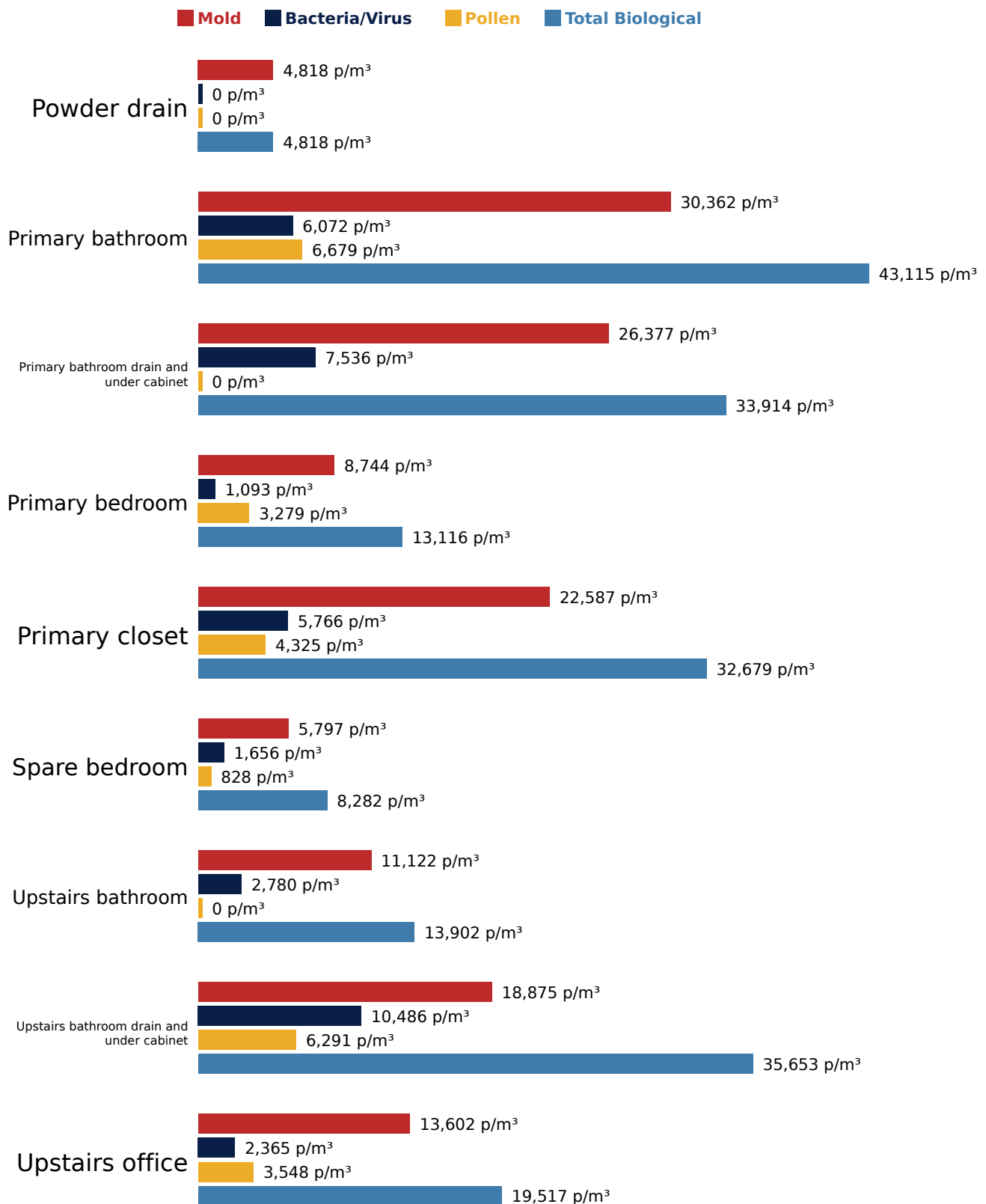
p/m^3

Scan-by-Scan Total Bio Comparison

The Scan by Scan Total Bio Comparison shows every bioaerosol that InstaScope tests for, on one graph and broken down by each area in particles per cubic meter (p/m³). This graph is especially useful for those wanting to understanding areas with exceptionally high levels of exposure on various types of bioaerosols.



Scan-by-Scan Bio Comparison, continued

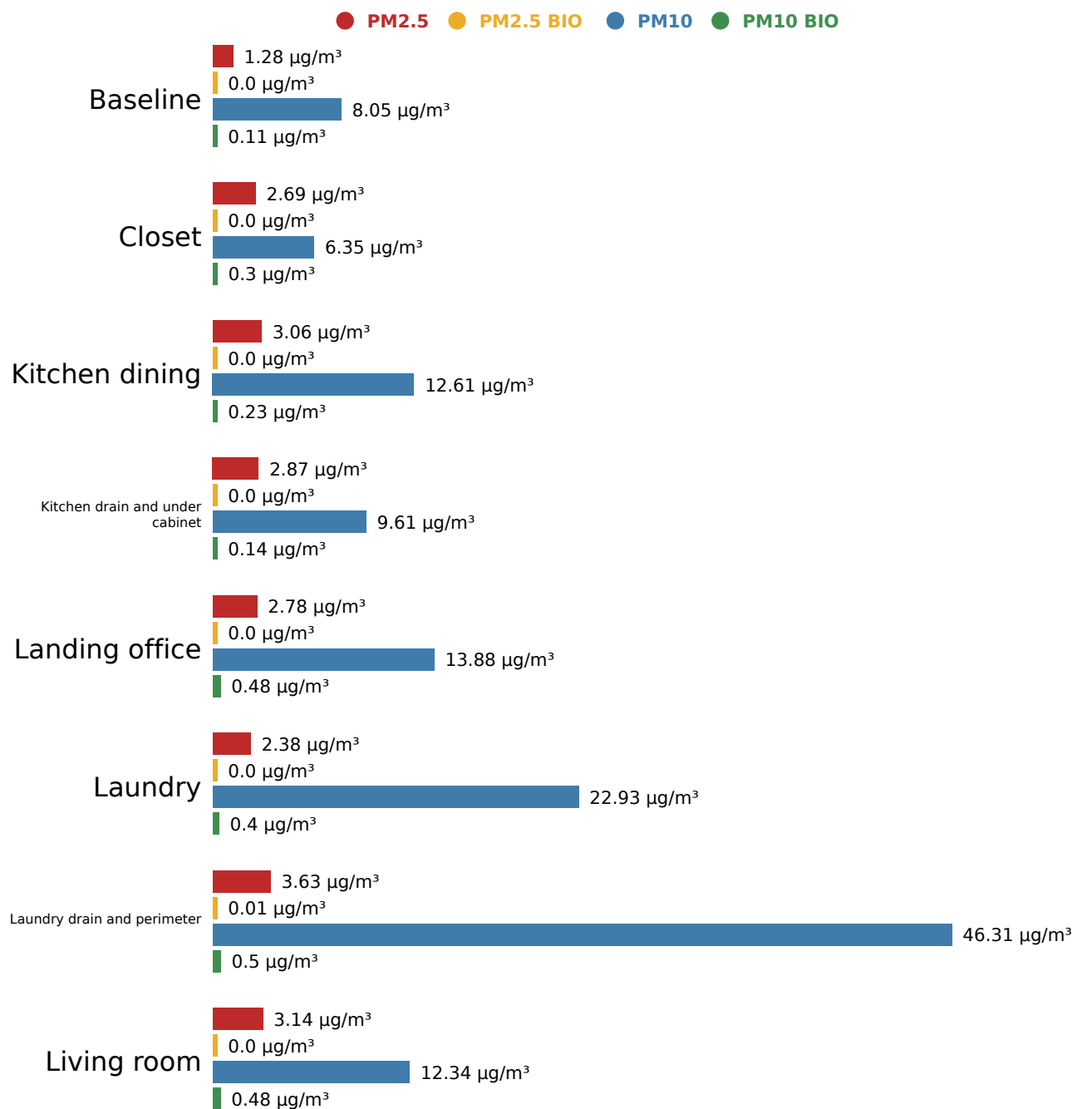


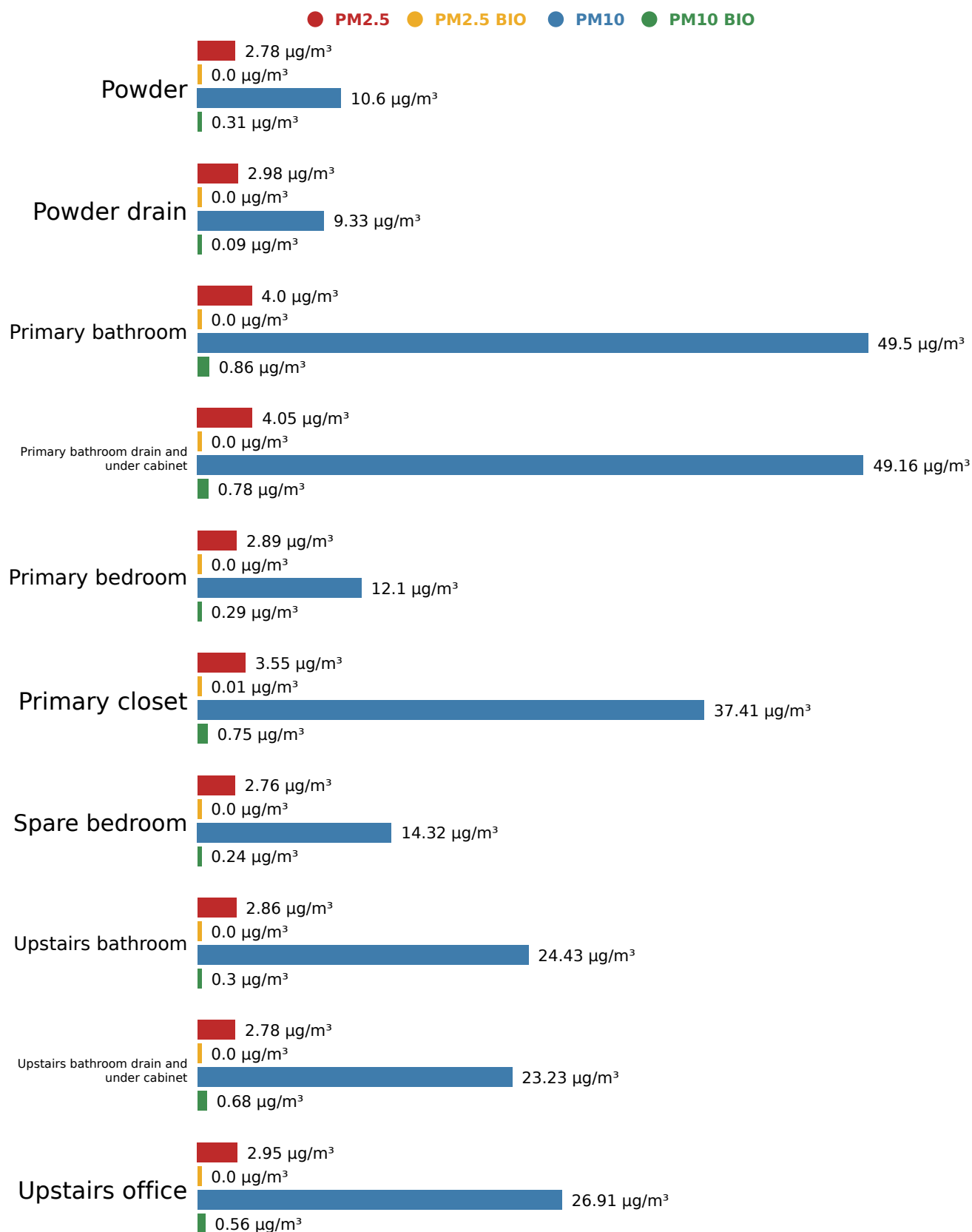
Scan-by-Scan Total PM Comparison

The Scan by Scan PM Comparison chart shows each area's PM_{2.5}, PM_{2.5} Bio, PM₁₀ and PM₁₀Bio levels as they compare to each other in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

The EPA's National Ambient Air Quality Standards (NAAQS) define the amount in weight (expressed as particle mass PM) of 'fine' particles (smaller than $2.5\mu\text{m}$) and 'coarse' particles (smaller than $10\mu\text{m}$) that are acceptable for ambient air. For reference, the average human hair is about $70\mu\text{m}$ in diameter.

The NAAQS standards are used by regulatory agencies (OSHA) and non-governmental organizations (NIOSH, ACGIH, ASHRAE) to regulate air pollution and judge the quality of indoor air. The fine particle (PM_{2.5}) exposure standard is $35\mu\text{g}/\text{m}^3$; the coarse particle (PM₁₀) is $150\mu\text{g}/\text{m}^3$. Buildings whose airborne particle concentrations exceed this should be remediated.

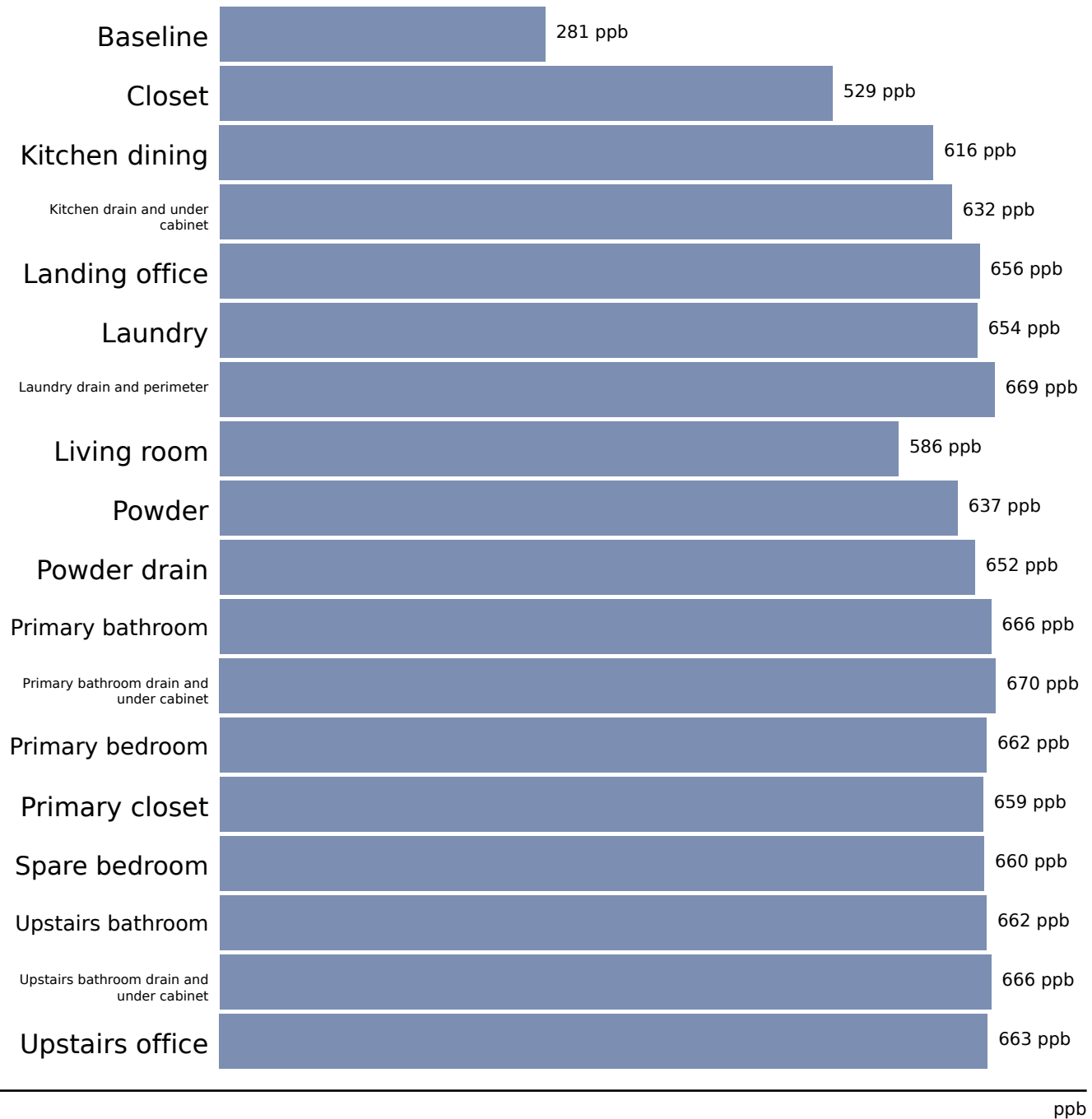


Scan-by-Scan PM Comparison, continued

µg/m³

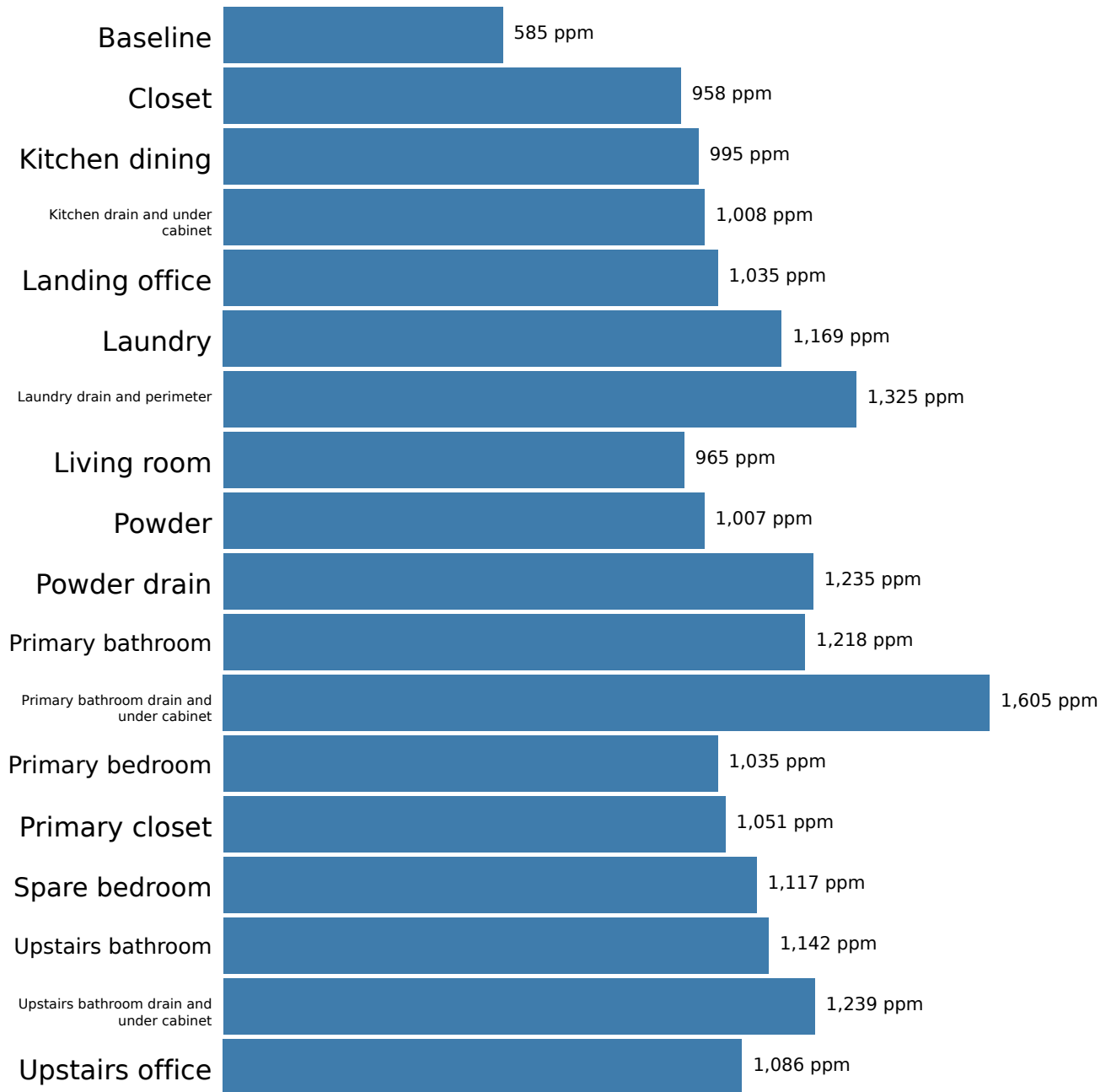
Scan-by-Scan VOC Comparison

The Scan by Scan VOC Comparison chart shows each area's VOC levels, in parts per billion (ppb), as they compare to each other.



Scan-by-Scan CO₂ Comparison

The Scan by Scan CO₂ Comparison chart shows each area's CO₂ levels in parts per million (ppm) as they compare to each other.



ppm

Area Result Summaries

Below are the Area Result Summaries that show a breakdown of information of every area scanned. For each room, you can see the GYR color code for mold results, quiescent and resuspended results if applicable, total biological breakdowns, and source tracking results for any sections of the room that picked up increased levels of mold. Photos and additional source tracking details appear at the end of the report.

Closet Summary

AREA STATS

VOC 529_{ppb}CO₂ 958_{ppm}

Humidity 46%

Temp 71°F

PARTICULATE MATTER (P/M³)

MOLD 

POLLEN

BACTERIA/VIRUS

TOTAL BIO

Quiescent

5.4K

1.4K

1.4K

8.2K

Resuspension

10K

0

0

10K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Kitchen dining Summary

AREA STATS

VOC 616_{ppb}CO₂ 995_{ppm}

Humidity 48%

Temp 71°F

PARTICULATE MATTER (P/M³)

MOLD 

POLLEN

BACTERIA/VIRUS

TOTAL BIO

Quiescent

7K

0

870

7.8K

Resuspension

10K

0

1.2K

11K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Kitchen drain and under cabinet Summary

AREA STATS

VOC 632_{ppb}CO₂ 1008_{ppm}

Humidity 47%

Temp 72°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	7.3K	0	0	7.3K
Resuspension	1.8K	0	0	1.8K

OBSERVATIONS

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SOURCE TRACKING MOLD

—

Landing office Summary

AREA STATS

VOC 656_{ppb}CO₂ 1035_{ppm}

Humidity 47%

Temp 72°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	12K	900	0	13K
Resuspension	59K	11K	8.3K	78K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Laundry Summary

AREA STATS

VOC 654_{ppb}CO₂ 1169_{ppm}

Humidity 48%

Temp 74°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	12K	2.4K	1.2K	16K
Resuspension	25K	2.2K	6.7K	34K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Laundry drain and perimeter Summary

AREA STATS

VOC 669_{ppb}CO₂ 1325_{ppm}

Humidity 46%

Temp 74°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	18K	4.9K	13K	36K
Resuspension	18K	3.1K	3.1K	25K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Living room Summary

AREA STATS

VOC 586_{ppb}CO₂ 965_{ppm}

Humidity 49%

Temp 71°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	13K	2.6K	2.6K	18K
Resuspension	14K	860	0	15K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Powder Summary

AREA STATS

VOC 637_{ppb}CO₂ 1007_{ppm}

Humidity 48%

Temp 71°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	8.9K	1.4K	470	11K
Resuspension	12K	0	1.1K	13K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Powder drain Summary

AREA STATS

VOC 652_{ppb}CO₂ 1235_{ppm}

Humidity 49%

Temp 72°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	4.8K	0	0	4.8K
Resuspension	3.7K	0	0	3.7K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Primary bathroom Summary

AREA STATS

VOC 666_{ppb}CO₂ 1218_{ppm}

Humidity 53%

Temp 72°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	30K	6.7K	6.1K	43K
Resuspension	21K	8.9K	6.6K	36K

OBSERVATIONS

Toilet rocks and toilet wax seal is broken

SOURCE TRACKING MOLD

—

Primary bathroom drain and under cabinet Summary

AREA STATS

VOC 670_{ppb}CO₂ 1605_{ppm}

Humidity 53%

Temp 72°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	26K	0	7.5K	34K
Resuspension	11K	3.2K	3.2K	17K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Primary bedroom Summary

AREA STATS

VOC 662_{ppb}CO₂ 1035_{ppm}

Humidity 49%

Temp 72°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	8.7K	3.3K	1.1K	13K
Resuspension	38K	6K	19K	64K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Primary closet Summary

AREA STATS

VOC 659_{ppb}CO₂ 1051_{ppm}

Humidity 46%

Temp 73°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	23K	4.3K	5.8K	33K
Resuspension	190K	41K	34K	270K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Spare bedroom Summary

AREA STATS

VOC 660_{ppb}CO₂ 1117_{ppm}

Humidity 45%

Temp 73°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	5.8K	830	1.7K	8.3K
Resuspension	23K	5.5K	4.1K	32K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Upstairs bathroom Summary

AREA STATS

VOC 662_{ppb}CO₂ 1142_{ppm}

Humidity 46%

Temp 73°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	11K	0	2.8K	14K
Resuspension	3.4K	1.7K	3.4K	8.5K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Upstairs bathroom drain and under cabinet Summary

AREA STATS

VOC 666_{ppb}CO₂ 1239_{ppm}

Humidity 46%

Temp 73°F

PARTICULATE MATTER (P/M³)

	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	19K	6.3K	10K	36K
Resuspension	6.1K	2.4K	1.2K	9.8K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—

Upstairs office Summary

AREA STATS

VOC 663_{ppb}CO₂ 1086_{ppm}

Humidity 44%

Temp 73°F

PARTICULATE MATTER (P/M³)

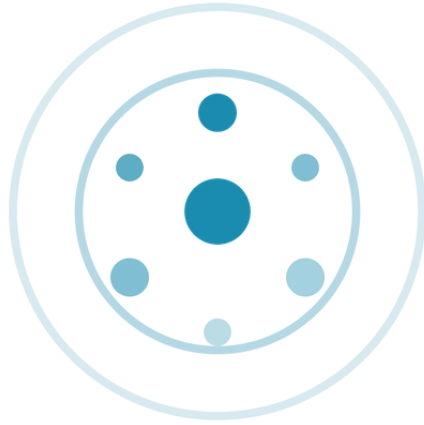
	MOLD 	POLLEN	BACTERIA/VIRUS	TOTAL BIO
Quiescent	14K	3.5K	2.4K	20K
Resuspension	40K	12K	24K	75K

OBSERVATIONS

—

SOURCE TRACKING MOLD

—



illumenair

Thank you for trusting us with your
indoor air quality testing

As a small family business, we would love it
if you would leave us a Google review!



<https://g.page/r/CZ3v7BdPUWpBEBM/review>