

FAARM Power Requirements

Description	Base Power Consumption (kW)	Diversity Factor	Power with Diversity Factor (kW)	Comment
Clean Facility Requirements				N.A.
Water Shield	5	1	5	Estimated by dlp, possible shared with others
Veto Shield	5	1	5	Estimated by dlp, confirm with Prisca
Ultra-Sensitive Immersion Tank	20	1	20	Confirm with Kara Keeter
Gamma Counting Stations	15	1	15	From FAARM documentation
XIA Alpha Counting Stations	1	1	1	from Richard Schnee
Emanation chambers	1	1	1	From Prisca Cushman
Other Alpha/Beta counters	2	0.5	1	
Beta/Alpha Sensitive Surface Screeners	10	1	10	From FAARM documentation, 10 clean, 5 dirty
Novel Screeners and R&D Space	10	0.5	5	Estimated by dlp
Clean Machine Shop	10	0.25	2.5	Estimate based on Majorana
Wet Chemistry	5	0.5	2.5	Estimated by dlp
Bio storage and sample prep	5	0.5	2.5	From FAARM documentation, 20 amps at 220 v
Cryogen infrastructure				N.A.
Water purification infrastructure	10	1	10	Estimate based on LUX
Radon mitigation				Not included at this time
Electroforming				Located in another space
Intermediate Overburden Level				N.A.
Surface				N.A.
Lighting	22.7	0.7	15.9	Space by space summary
Miscellaneous receptacle loads	22.7	0.2	4.5	
Control room and office	5	0.7	3.5	
Air handlers	75	1	75	Extrapolated from LUX/MJ
Subtotal	224.3		179.4	
Chillers	112.2		89.7	50 percent of subtotal
Total (all on)	336.5	Total w/ Diversity	269.1	