	OCP Ready v1 Data Center Site Assessment	*QScale Q01*		
	Self Assessment Status:	COMPLETE-MEETS REQUIREMENTS		
	Data Center Location Name	QScale Q01		
	Data Center Location Address	2280 Albert-Dion St, Levis, Quebec, Canada		
	Site Development Category:	1. Multi-tenant Build in Progress - (estimated live services by XX/XX/XXXX)	01/01/2024	
	Site Description: IT Technical Space (White Space) Area	Phase 1 & 2 Already in production and sold. Phase 3 & 4 under construction: 60,000 sq. ft. white space available, starting in January 2026.		
	Site Description: Critical IT Power	Phase 3 & 4: 28MW IT commissioned. The Campus has 142MW secured power capacity. QScale-owned 266MVA 2N 120kV substation with active-active utility feeds.		
	Site Description: Network Provider Availability	All major Canadian telecom providers are present. 100Gbs links available.		
	Site Description: Facility Features	Flexibility to host power-intensive liquid-cooled racks of 400kW+ density along with more traditional air-cooled servers in the same environment. Free cooling up to 80% of the year due to cold climate.		
	Site Description: Other Services	Next-generation waste-heat energy recovery and reuse system. Among the least expensive green power in North America and the world. Stable, predictable, regulated, and affordable hydropower.		
	Date Original Assessment is Completed	01/01/2024		
	Re-Assessment Date:	8/4/2026		

Ref:	REQUIREMENTS - Attribute (Must have an Optimum or Acceptable result)	Parameter	Result	Notes/ Actual Parameters
1.0	**ACCESS**			
1.0-A	Building Access	1. Loading dock with lift or leveler	**Optimum**	
1.0-B	Delivery pathway, Loading dock to Goods in	1. ≥2.75m (108in) H x ≥2.4m (96in) W x ≥2.4m (96in) D unobstructed access and threshold free	**Optimum**	
1.0-C	Delivery pathway, Goods in to White space	1. ≥2.4m (96in) H x ≥1.8m (72in) W unobstructed access and threshold free	**Optimum**	
1.0-D	Corridor floor rolling load	1. ≥680kg (1500lb) (6.67kN)	**Optimum**	
1.0-E	Unboxing/pre-staging/storage area floor uniform load	1. ≥1221kg/m2 (250lb/ft2) (11.97kN/m2)	**Optimum**	
1.0-F	Unboxing/pre-staging/storage area floor concentrated load	1. ≥680kg (1500lb) (6.67kN)	**Optimum**	
1.1	**RAMPS**			
1.1-A	Gradient	1. Not Applicable - No Ramps Required	**Optimum**	
1.1-B	Width	1. Not Applicable - No Ramps Required	**Optimum**	
1.1-C	Landing area	1. Not Applicable - No Ramps Required	**Optimum**	
1.1-D	Railings	1. Not Applicable - No Railings Required	**Optimum**	
1.2	**LIFTS / ELEVATORS**			
1.2-A	Weight loading	1. ≥1500kg (3300lbs)	**Optimum**	
1.2-B	Door height	1. ≥2.4m (96in) Lift /Elevator door opening height (not internal cabin)	**Optimum**	
1.2-C	Width	1. ≥1.5m (60in) Unobstructed door opening width	**Optimum**	
1.2-D	Depth	1. ≥1.5m (60in) Unobstructed cabin depth	**Optimum**	
2.0	**IT TECHNICAL SPACE (WHITE SPACE)**			
2.0-A	Floor rolling load	1. ≥680kg (1500lb) (6.67kN)	**Optimum**	
2.0-B	Floor uniform load	1. ≥1221kg/m2 (250lb/ft2) (11.97kN/m2)	**Optimum**	
2.0-C	Floor concentrated load	1. ≥680kg (1500lb) (6.67kN)	**Optimum**	
2.0-D	Finished floor to ceiling height	1. ≥4.5m (178in)	**Optimum**	
2.0-E	Access floor clearance	1. Not Applicable - No Access Floor	**Optimum**	
2.1	**ELECTRICAL**			
2.1-A	Number of independent circuits to the rack	1. 2N (A+B)	**Optimum**	
2.1-B	Maximum circuit capacity	1. 3ϕ 32A/230V	**Optimum**	Larger circuits also available.
2.1-C	Circuit voltage	1. 400/230 VAC nominal	**Optimum**	415/240 VAC
2.1-D	Circuit frequency	1. 47-63 Hz	**Optimum**	
2.1-E	Power receptacle / WIP Type	1. IEC60309 532R6W	**Optimum**	Receptacles provisioned per circuit capacity and customer requirements.
2.1-F	Circuit receptacle location	1. Overhead	**Optimum**	

2.1-G	Upstream UPS options	1. UPS and non UPS feeds available	Optimum	
2.1-H	Rack-based batteries permitted	1. Allowed	Optimum	
2.1-I	Generator load acceptance time	1. <60 seconds	Optimum	
2.2	COOLING			
2.2-A	Rack airflow direction	1. Front to Back	Optimum	
2.2-B	Air containment methods	1. Not Applicable - Rear Door Heat Exchangers (RDHx) Deployed (notes required)	Optimum	Various cooling configurations supported such as direct liquid cooling, immersion cooling, RDHx and hot aisle containment pods with in-row coolers. Designed for each customer to meet their load types and requirements.
2.2-C	Maximum rack density	1. ≥12kw	Optimum	Rack density can be much higher when using direct liquid cooling, immersion cooling and RDHx.
2.2-D	Minimum cold aisle width	1. Not Applicable - Rear Door Heat Exchangers (RDHx) Deployed (notes required)	Optimum	No fixed aisle widths are prescribed. Floor layout is fully customizable to meet customer load types, density, and requirements.
2.2-E	Minimum free width cold aisle (Inside cage)	1. Not Applicable - Rear Door Heat Exchangers (RDHx) Deployed (notes required)	Optimum	No fixed aisle widths are prescribed. Floor layout is fully customizable to meet customer load types, density and requirements.
2.2-F	Minimum hot aisle width	1. Not Applicable - Rear Door Heat Exchangers (RDHx) Deployed (notes required)	Optimum	No fixed aisle widths are prescribed. Floor layout is fully customizable to meet customer load types, density and requirements.
2.2-G	Inlet air conditions	1. ASHRAE Class A1 Allowable	Optimum	
2.2-H	Air quality	2. Other (Notes required)	Acceptable	Outside air brought into the building is filtered with a minimum of MERV-A8 (pre-filter) and MERV-A13 filters (Final filters). Filters A-rated in accordance with ASHRAE 52.2 appendix J.
2.2-I	Temperature rise	1. ≥12 Deg C DeltaT	Optimum	
2.2-J	Cabinet blanking of open space	1. Mandatory	Optimum	
2.3	CABLING			
2.3-A	Cabling infrastructure pathways	1. Top and Front of rack fed	Optimum	Cabling infrastructure is overhead, with layout custom designed to customer floor layout and requirements.
2.3-B	Overhead Network Infrastructure containment levels	1. 3 Levels (Intra-Pod cabling; Inter-Pod cabling; OOB cabling)	Optimum	3 levels of overhead network cabling trays is the designed standard type. Trays are deployed per customer fit-out requirements.
2.3-C	Fibre Type (if installed)	1. OS2 & OM4	Optimum	OS2 fiber is standard. Can also install alternative cabling plants custom per customer requirements.
2.3-D	Fibre connection presentation (if installed)	1. Interchangable LC Duplex and MPO	Optimum	LC Duplex and MPO is standard. Can also install alternative cabling plants custom per customer requirements.
	CONSIDERATIONS (For information only)	**Parameter**	**Result**	**Notes**
3.0	SERVICE			
3.0-A	Replacement PSU Modules	2. Secure storage available	Acceptable	QScale does not stock customer IT system hardware components. Secure storage is available for customers to store their spare parts.
3.0-B	Replacement BBU Modules	2. Secure storage available	Acceptable	QScale does not stock customer IT system hardware components. Secure storage is available for customers to store their spare parts.
3.0-C	Option to monitor PSUs and BBUs	1. Yes	Optimum	QScale can facilitate third party local support for these activities.
3.0-D	Remote hands for PSU and BBU replacement or expansion	1. Yes	Optimum	
3.0-E	Remote hands for OCP IT hardware replacement or expansion	1. Yes	Optimum	
4.0	EFFICIENCY			
4.0-A	Site Operations Standards	1. OCP Critical Facility Operations Guidelines	Optimum	
4.0-B	Site PUE Monitoring	1. Continuously monitored	Optimum	
4.0-C	Site Design PUE	1. <1.2	Optimum	
4.0-D	Site Annualized PUE Current Achievement	1. <1.2	Optimum	The predicted annualized PUE was confirmed to be below 1.2 during the ASHRAE Level 1 to 5 IST testing. However, due to contractual restrictions, we are unable to publish the actual figures
4.0-E	Site WUE Monitoring	1. Continuously monitored	Optimum	Site design currently does not consume water for cooling (dry coolers only). In the eventuality that evaporative systems are used in the future, water usage will be monitored continuously.
4.0-F	Site CUE Monitoring	1. Continuously monitored	Optimum	
5.0	OPENNESS			

5.0-A	PUE Published	2. Available upon request	**Acceptable**	
5.0-B	Facility Design Drawings & Files	2. Available to view upon request	**Acceptable**	