FiberLocator API Cheat Sheet

FiberLocator
A CCMI BUSINESS

FiberLocator uses plain HTTPS requests to retrieve JSON data about carriers and networks, map images depicting those objects for use in web mapping platforms, or reports as JSON, GeoJSON, webmap tiles (WMTS), .pdf, .png, or .csv files.			
BASICS		https://app.fiberlocator.com/doc/api.html#authentication-2	
To access the FiberLocator API, you need a FiberLocator account. Contact us at https://www.fiberlocator.com/contact/			
base endpoint			https://app.fiberlocator.com/rest
access using cookies	POST	Login to FiberLocator and add the cookies file to your request.	/login
access using a token	POST	Retrieve your token to use embeded in the requested endpoint https://app.fiberlocator.com/rest/{token}.	/token
layer names and attributes	GET	Retrieve a "table of contents" listing of available map/data layers available to you along with layer attributes.	/layers/toc
CARRIERS		https://app.fiberlocator.com/doc/api.html#fiberlocator-carriers	
Retrieve data about a specific carrier or list of carriers in a bounding box returned as JSON.			
carrier names and IDs	GET	List all carrier names and IDs. IDs can then be used to retrieve information about a single carrier.	/carriers
single carrier lookup by ID	GET	Retrieve information about a single carrier.	/carrier/{id}
bbox lookup of carriers and lit building count	GET	Get the names of carriers and the number of lit buildings that are in view.	/carriers/inview/{bbox}
radius lookup of carriers and lit building count	GET	Retrieve carriers and number of lit buildings within distance of a given location.	/carriers/inview/{lon}/{lat}/{radius}
LAYERS		https://app.fiberlocator.com/doc/api.html#fiberlocator-finding-data	
Map layers form the basis for many services provided by FiberLocator. Each fiber network and list of carrier's lit buildings are contained in separate layers. Layers are organized by branches. some branches (notably, buildings, metro, and longhaul) can be used in some APIs as a hint to include all layers assigned to that branch. this feature can be used, for instance, to request a composite tile containing all the carriers` buildings or networks of a specific branch. Data returned as a JSON			
composite layer names		line data: **longhaul, metro** point data: **central_offices, data_centers_colocated, data_centers_enterprise, data_centers_hyperscale, internet_exchanges, lit_bldgs, sub_landings**	
layer names	GET	Quick listing of all available machine-readable layer names.	/layers
layers with bbox	GET	Retrieve a listing of available layers and their bounding boxes. The result is a FeatureCollection that could be used in other map applications.	/layers/extents
layers within a bbox	GET	Return the layers whose features (lines or points) can be found within the requested bounds.	/layers/inview/{bbox}/{layers}
layer metadata	GET	Get known information about a single layer	/layers/metadata/{layer_name}
LOCATIONS		https://app.fiberlocator.com/doc/api.html#fiberlocator-querying-locations	
Retrieve carrier and lit building data for a specific address or longitude/latitude returned as JSON.			
layer info by location	GET	Retrieve network layer and lit building info within a radius of a given longitude/latitude coordinate or address. The address should contain as much information as known (street, city, postal code) in a single string.	/info/near/{address}/{radius} /info/near/{lon}/{lat}/{radius}
nearest providers	GET	Retrieve a list of providers nearest to the given location with default radius of 5 km.	/info/nearest/providers/{address} /info/nearest/providers/{lon}/{lat}
distance to nearest network	GET	A simplified endpoint that returns just the distance to the nearest network. Max radius of 10,000 meters.	/info/nearest/{lon}/{lat}/{radius}
a-z location search	GET	Retrieve provider data for a starting (A) location and one or more ending (Z) locations. Limit of 5 locations.	/info/a-z
fiber distance report	GET	Search for an address and return the 5 nearest fiber network carriers to it, and include any carriers already providing service at the given address. If the map parameter is not included or set true, this endpoint also returns two URLs. The first is to retrieve a static PNG map of the location including any fiber networks in the vicinity, and the second is for a static PNG legend image.	/info/distance/{address} /info/map/{maptoken} /info/legend/{maptoken}

MAP TILES		https://app.fiberlocator.com/doc/api.html#fiberlocator-maps-and-tiles	
FiberLocator includes a REST Web Map Tile Service (WMTS) for retrieving images containing over a thousand separate layers of network and building data based on the Open Geospatial Consortium specification.			
wmts capabilities	GET	The WMTS specification offers an initial request in the form of a Capabilities document, which defines what our server is able to return to you and can inform client applications such as QGIS or ArcGIS, so that you can import network layer images directly to a desktop GIS. Data returned as XML.	/maps/wmts/1.0.0/WMTSCapabilities.xml
wmts tile service	GET	Retrieve a single 256 x 256 pixel PNG image, as part of a collection to form a map. Data returned as .png file.	/maps/wmts/{layer_name}/webmercator/{z}/{x}/{y}.png
GEOSPATIAL FEATURES		https://app.fiberlocator.com/doc/api.html#fiberlocator-feature-data	
Features are geographic entities that describe real world places or objects, such as a network line or a lit building. These endpoints return GeoJSON objects that may be utilized in ArcGIS or QGIS or other GIS software to allow for various spatial analyses.			
geojson radius	GET	Retrieve a GeoJSON FeatureCollection around a location. Radius is limited to 2000 meters. Individual layers to include are limited to 5.	/features/collection/{lon}/{lat}/{radius}/{layer_name}.geojson /features/collection/{address}/{radius}/{layer_name}.geojson
geojson filtered	GET	Filters can include an address or longitude/latitude along with a radius (as above). You may include 'find_census_block=true' instead of a radius value and the API will determine the Census Block Group FIPS code of your requested location. If you know the Block Group you're interested in you may use that ('census_block_id') in place of address or lon/lat. If a Block Group is used, any 'radius' value will be ignored.	/features/collection/filtered.geojson /features/collection/filtered.zip query options: string (address, census_block_id, carrier, layers), integer(radius), float(longitude, latitude), boolean(find_census_block)
PRINT OUTPUT		https://app.fiberlocator.com/doc/api.html#fiberlocator-printing	
Create a static PNG image or PDF document suitable for printing, with many options.			
printing	GET	Pass in either a longitude, latitude, and radius values, or a bounding box array in order to define the edges of your map. FiberLocator uses a set of predefined zoom scales, and may expand your map's boundaries slightly to ensure your requested location is entirely in view.	/print/{format}
PREFERENCES		https://app.fiberlocator.com/doc/api.html#fiberlocator-preferences	
Units, set as 'ft' (feet) or 'm' (meters), defines the default measure used for both input and output in other endpoints. By default, units is set to 'm'.			
get units	GET	Retrieve the default unit of measure currently set.	/units
set units	POST	Set default measure, feet or meters, used for input and output in other endpoints.	/units/{units}
HELPFUL LINKS			
FiberLocator API docs		https://app.fiberlocator.com/doc/api.html	
OpenAPI specification		https://swagger.io/specification/	
Open Geospatial Consortium		https://www.ogc.org/	
layers definition		https://doc.arcgis.com/en/arcgis-online/reference/layers.htm	
WMTS specification		WMTS - Operations — OGC e-Learning 2.0.0 documentation (opengeospatial.github.io)	
Calculating x, y coordinates for		https://wiki.openstreetmap.org/wiki/Slippy_map_tilenames	
FCC API for FIPS codes		https://geo.fcc.gov/api/census/#!/block/get_block_find	
curl		https://everything.curl.dev/	