P802.1CS Link-local Registration Protocol D2.6 contains text stating that a reserved TCP port number will be obtained for LRP. The application for this port number was declined by the Internet Assigned Numbers Authority.

IANA APPLICATION FOR TCP PORT NUMBER:

7. Please explain why a unique port assignment is necessary as opposed to a port in range (49152-65535) or existing port.
[A User Port is required because the LRP proxy service must be accessible from resource-constrained systems such as industrial automation devices that do not make DNS queries.]

RESPONSE FROM IANA

This request does not appear to justify the need for an assigned port number. It should be sufficient to register the service name only.

This environment is either very localized direct or to a local proxy; in either case, mDNS should be more than sufficient to discover the dynamic port on which the service operates.

Resource constraint is not a sufficient justification for not using mDNS for discovery. That protocol works on devices as simple as an Arduino.

SUGGESTED TEXT FOR P802.1CS COVER LETTER

- No LRP reserved TCP port number (Table 6-1 on page 34) has been assigned. The Internet Assigned Numbers Authority has initially declined the request, stating that it should be sufficient to register the service name only, and that mDNS (multicast Domain Name Server, RFC6762) should be more than sufficient to discover the dynamic port on which the service operates. There are at least two additional possibilities: pursuing the TCP port request further; and including a TCP port number in the LLDP LRP TCP Discovery TLV.