



SOLVING A WAVE OF EMI COMPLIANCE PROBLEMS

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Federal Communications Commission
Authorization and Evaluation Division

REFERENCE

FCC ID: LLB2020001

March 9, 2022

RE: Request for Limited Modular Approval

APPLICANT: Aclara Technologies, LLC.

Item	Modular approval Requirement	Meets	Justification
(1)	The radio elements must have the radio frequency circuitry and must be shielded. Physical/discrete and tuning capacitors may be located external to the shield but must be on the module assembly.	No	<i>The ACM module fully complied with all standards without a shield over the RF section. The module does not depend on any other shielding.</i>
(2)	The module shall have buffered modulation/data input(s) (if such inputs are provided) to ensure that the module will comply with the requirements set out in the applicable FCC rules with any type of input signal.	Yes	<i>The SPI interface uses buffered CMOS inputs and outputs. There is a 64-byte TX/RX FIFO buffer internal to the Si4467. The SPI Interface only allows data transfer to the transceiver and has no effect on the modulation or data rate of the RF transmitted signal.</i>
(3)	The module shall have its own power supply regulation on the module. This is to ensure that the module will comply with the requirements set out in the applicable standard regardless of the design of the power supplying circuitry in the host device which houses the module.	Yes	<i>The Host Board power supply shall provide a regulated 3.6 VDC output voltage with less than 20mVAC of ripple. The power supply shall be capable of supplying up to 1.0 Amp of current and regulate the 3.6V output voltage to +/- 5% tolerance</i>
(4)	The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per §§ 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b);	Yes	<i>The product is professionally installed only. The installations are controlled by Aclara. Only approved antennas will be used. No External amplifiers will be used. The product will not be sold to the general public.</i>
(5)	The module shall be tested for compliance with the applicable standard in a stand-alone configuration, i.e. the module must not be inside another device during testing.	Yes	<i>The product was tested with an external power supply with no additional filtering. The product was tested on a representative PCB that had no additional shielding.</i>
(6)	The module must be labeled with its permanently affixed FCC ID label, or use an electronic display (see KDB Publication 784748)	Yes	<i>The FCC ID label format is included in the filing. The product will always be inside another enclosure during actual use.</i>
(7)	The module must comply with all specific rules applicable to the transmitter, including all the conditions provided in the integration instructions by the grantee	Yes	<i>It is only professionally installed by utility companies. It will not be sold to the general public. Aclara will control the end product into which the module will be installed and will be maintained, such that full compliance of the end product is always ensured.</i>
(8)	The module must comply with RF exposure requirements	Yes	<i>Refer to RF exposure Exhibit. The transmitter meets MPE calculations of 47 CFR 1.1310.</i>

Aclara will only sell the RF module while connected to Aclara products. Radiometrics has been authorized by Aclara Technologies, LLC to act as an agent in the preparation of their submittal request for Modular Approval.

Sincerely,

Joseph Strzelecki
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Authorized Agent for Aclara Technologies, LLC.
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