



KCF Technologies, Inc.
 336 S. Fraser St.
 State College, PA 16801

RE FCC ID: Z5I-BMD345

To the certification reviewer:

We are hereby applying for *limited* modular approval of the above-referenced FCC ID, based on compliance with all of the criteria as detailed below.

Sincerely,

A handwritten signature in black ink that reads "Micah Gregory".

Micah Gregory
 Manager, Hardware Engineering
 March 10, 2023

Part 15 Unlicensed Single Modular Transmitter Approval Justification per 15.212

Requirement per 15.212	reference
(i) The radio elements of the modular transmitter must have their own RF shielding.	The radio portion of this module has been shielded, please see (9b) Module Photo.pdf"
(ii) The modular transmitter must have buffered modulation/data inputs (if such inputs are provided).	All modulation and data inputs are buffered by circuitry on the transmitter chip (nRF52840).
(iii) The modular transmitter must have its own power supply regulation.	Power supply regulation is provided by external circuitry over the range of 3.3 ± 0.15 VDC.
(iv) The modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b) and 15.204(c).	The antenna is internal to the host and is not alterable or removable.
(v) The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing for compliance with Part 15 parameters.	For this <i>limited</i> modular approval, testing was performed with the module located inside of the intended host device (SD-BASE-4).

<p>(vi) The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number. If the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module.</p>	<p>The label is shown in the attached document (9b) Module Photo.pdf”</p>
<p>(vii) The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization.</p>	<p>The module complies fully with the operating requirements of Part 15 section 247 as demonstrated in the test report exhibit “104699147LEX-002.3 FCC RSS RSE Final.pdf”. The host manual includes a statement of compliance with FCC Part 15.</p>
<p>(viii) The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.</p>	<p>The host is a fixed installation device and is not for handheld or mobile use. The host manual indicates that humans should be at least 20 cm from the device during normal operation. The device has been calculated to be compliant according to FCC Part 1 Section 1310: Limits for Maximum Permissible Exposure (MPE) (Limits for General Population / Uncontrolled Exposure). See attached test report: “104699147LEX-023.1 MPE Final.pdf”</p>