

Cubic Transportation Systems Limited

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RE: FCC ID LVCVAL2LTE01

Dear Sir or Madam,

Please find attached application for a Class 2 Permissive Change application for the FCC ID LVCLVA2LTE01. The purpose of this application is to address the grant restrictions that appear for the original LTE module and to certify the device with the Wireless Cellular module and a newly designed remote "pole mounted" antenna.

This radio may be used in conjunction with the radios certified under FCC ID: LVCVAL2LTE02 and FCC ID: Z64-WL18DBMOD to enable the following wireless communications for Cubic Transportation System, Inc.'s Validator 2:

- NFC 13.56Mhz
- Wi-Fi / BT
- Wireless Cellular Module

Please note the following for reference:

SAR reports:

There are 2 SAR reports for the device:

- 1) RF Exposure Lab report #20181210.

This report covers FCC ID LVCVAL2, with the following wireless modules

- WLAN – 2.4 GHz
- NFC 13.56 MHz

- 2) UL-SAR-RP13040245-116A V1.0 - Cubic - FCC - Part 1_Main
UL-SAR-RP13040245-116A V1.0 - Cubic - FCC - Part 2_Photo
UL-SAR-RP13040245-116A V1.0 - Cubic - FCC - Part 3a_Plot_Cal_Cert
UL-SAR-RP13040245-116A V1.0 - Cubic - FCC - Part 3b_Cal Cert

This report covers the remote "pole mounted" antenna.

Additional SAR testing for the LTE Radio FCC ID: LVCVAL2LTE01 is not required. This unit is professionally installed, and the remote pole mounted antenna distance is required to be located 248mm (9.7") from the validator's main assembly which contains the User Interface, the NFC Radio, WLAN Radio and their associated antennas.

As per KDB Publication 447498 Simultaneously SAR testing is not required, refer to SAR exemption letter within this application.

Due to the similarities between this device (FCC ID: LVCVAL02L TE02), the previously tested device (103679095LEX-003 and 103679095LEX-006.1) and (FCC ID: LVCVAL02) No additional retesting of this radio was deemed necessary according to test report 104339733LEX-001.1 Section 2.

Wireless Cellular Module

Is a certified Module covered under FCC ID: N7NHL7588. A change in ID was granted by the FCC is covered under FCC ID: LVCLAVLTE01.

Testing was initially performed according to part 22, Part 24, and Part 27 and is covered by report 103679095LEX-003.

Due to the relocation of the antenna, an additional spurious emission test was performed according to part 15C, Part 22, 24, and 27 and is covered by test report 104339733LEX-001.1.

Regards

A handwritten signature in black ink, appearing to read "Richard Rowlands".

Richard Rowlands
VP Engineering