



Global Product Certification
EMC-EMF Safety Approvals

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To: Federal Communications Commission

Attention: Certification Officer **Date:** August 7, 2017

EMC Ref: M161205

Subject: FCC ID: XP9CIOF1701 (Additional information request)
TIMCO Job No# 1344AC17

Company: Beam Communications Pty Ltd
FCC ID: XP9CIOF1701
EUT: Thuraya WE

POA: Please revise FCC ID format to FCC ID: YP9CIOF1701.

EMCT: Corrected – Please refer to revised POA

Label Sample & Location:

FCC ID listed on the label doesn't match what is listed on Form 731-item 4, please revise.

EMCT: Corrected – Please refer to revised label exhibit.

The FCC specifies the format for disclosing the FCC ID of certified modules on the host device's label (See [KDB Publication 784748 D01](#)). Please revise as needed.

EMCT: Label revised to meet correct format. Please refer to revised label exhibit.

We note an RF safety decal, indicating the minimum separation distance to be maintained is 0.70-meters. However, this is not supported by the RF Exposure report provided. Please explain or revise.

EMCT: RF Exposure report and User Manual revised to clarify and support RF Safety decal indicated on EUT label.

Refer to revised User Manual exhibit (pg 5) and Report Number M161205-6R1_FCC2-1091_CIOF1701.

We note the inclusion in this application of a Declaration of Conformity for authorization under Part 15B. However, per [FCC Rule 2.1077\(a\)\(3\)](#), the responsible party making the declaration must be a party within the United States. Since this applicant is not, who will be the responsible party for this DoC?

EMCT: This application does not include a Declaration of Conformity for authorization under Part 15B. The applicable unintentional radiator compliance was via FCC Part 15B Verification.

The FCC logo has been removed from the label – Please refer to revised label exhibit.

Internal Photos:

Please remove metal shielding from RF PCB board. We must be able to view these components. This would be an additional photograph.

Please show all sides of all PCB boards.

Please highlight the antennas employed by the certified modules incorporated into this product.

EMCT: Please refer to revised exhibit – CIOF1701_Int Photos

Test report/Application Form: According to FCC website, your test lab is not FCC accredited and recognized for the testing scope required for this application for certification. Please explain.

EMCT: We apologize for the confusion regarding this matter. This has been discussed with TIMCO and we have advised that our testing was performed prior to 13 July 2017 (EMCT Registration No. 90560).

User Guide:

The RF Exposure statement in the User Guide does not specify a minimum separation to be maintained from any person to ensure compliance with FCC RF Exposure requirements. If different separations are required for the exclusion zone and other zones, these should be clearly specified. Please revise.

EMCT: Please refer to revised User Manual (now specifying the minimum separation distance, etc). – pg 5.

The FCC requires that the host OEM user manual must also contain clear instructions on how end users can find and/or access the module and the FCC ID (See [KDB Publication 784748 D01](#)). Please revise as needed.

EMCT: Please refer to revised User Manual – pg 6.

Tune-up Document: This exhibit is unclear as to what the maximum transmitter output power is for this device. It suggests that this might be +33 dBm, but this value does not comport with that shown on the 731 Form. Please revise. Please also indicate the tune-up tolerances that might apply, not just the nominal power level.

EMCT: Please refer to revised Tune-Up exhibit – CONF_TUNPRO (refer to page 1 – Measurement uncertainty add – hence higher measured value. Form 731 therefore unchanged).

Parts List: Per [FCC rule 2.1033\(c\)\(10\)](#), the FCC requires a description of all circuitry and devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation, and for limiting power (i.e. a Parts List). Please provide.

EMCT: Please refer to revised Parts List exhibit – CONF_TUNPRO

Operational Description:

Per [FCC rule 2.1033\(c\)\(8\)](#), applications for certification under rule parts other than Part 15 require information concerning the power input to final stage of transmitter: DC Voltages and Currents. This information could not be found. Please provide.

All supported modulations and emissions should be detailed in the Operational Description.

Both certified modules impose antenna gain and other restrictions on use. Please amend this exhibit to demonstrate that these restrictions were respected in this design.

EMCT: Please refer to revised Operational Description exhibit – CONF_OPDES

RF Exposure Report:

Since this device is a hotspot, simultaneous transmission is expected (Satellite + Wi-Fi; LTE + Wi-Fi). Additionally, we note that the grants of authorization for the certified modules impose colocation limitations. However, there was no treatment of this. Please revise.

Since the report includes field strength measurements in the areas outside of the main antenna exclusion zone, the equipment details specified in [KDB Publication 865664 D02](#), Sections 2.1 e) and f) are necessary. Please amend to include those details.

EMCT: Please refer to revised test report - Report Number M161205-6R1_FCC2-1091_CIOF1701

RF Test Report:

The various supported modulation schemes should be accounted for in the measured data provided (such as RF Power Output). Please revise.

EMCT: Please refer to revised test report - Report Number M161205-2R1_FCC25_CIOF1701, page 5.

Receiver settings should also show the detector employed in the measurements. Please revise.

EMCT: Please refer to revised test report - Report Number M161205-2R1_FCC25_CIOF1701, pp 12,14, 26, 29, 31, 37 and 39.

We could not locate Radiated Emissions testing in this report, as require per [FCC Rule 2.1053](#). Note that the Test Set-up Photographs provided also do not show radiated test configurations.

EMCT: Please refer to revised test report - Report Number M161205-2R1_FCC25_CIOF1701, page 24

EMCT: Please refer to revised Test Setup Photo Exhibit including the radiated emissions test setup photos.

731 Form:

The Frequency Tolerance and Emissions Designator(s) are to be specified for Licensed services on this form. Please revise.

We note that the power level shown on the 731 Form appears to be a conducted RF Output Power. Yet, [FCC Rule 25.204](#) specifies power in terms of EIRP. Please explain or revise.

EMCT: Please refer to revised Form 731, item 14.