

SpectraLux Corporation  
12335 134th Court NE  
Redmond, WA 98052

5/20/2004

Letter Reference Number: 05-20-04-LFT001

Reference (1) FCC DLink+ Submittal Letter Dated April 14, 2004, Ltr. Ref. No. 04-14-04-LFT001  
(2) Email from Mary Ellen to Les Thorpe dated 5/17/2004 re: additional data needed for FCC submittal

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Attachments: (1) Appendix E: Letter Requesting Confidentiality  
(2) Appendix M: Test Results

Dear Mary Ellen,

**Subject: Addendum to Submission of Data Delineated in FCC Submittal Checklist**

The purpose of this correspondence is to provide and update to Reference (1) based upon items listed in Reference (2). Additionally, the purpose is to resubmit a modified Appendix E of Reference (1). The following are the items listed in Reference (2) with responses:

Item 1: I will take care of this one. Mary Ellen

**Response: No action required.**

Item 2: Please provide RF power output data showing compliance to FCC CFR 47 Section 87.131/ 87.137 and FCC CFR 47 Section §2.1046. Please note the following -

2.1046 (a) For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in §2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

2.1046 (c) For measurements conducted pursuant to paragraphs (a) and (b) of this section, all calculations and methods used by the applicant for determining carrier power or peak envelope power, as appropriate, on the basis of measured power in the radio frequency load attached to the transmitter output terminals shall be shown. Under the test conditions specified, no components of the emission spectrum shall exceed the limits specified in the applicable rule parts as necessary for meeting occupied bandwidth or emission limitations.

**Response: The power output is delineated in Reference (1). The test data has now been provided in Attachment (2).**

Item 3: Please provide frequency stability data showing compliance to FCC CFR 47 Section 87.133 and Section §2.1055.

**Response: The frequency stability is delineated in Reference (1). The test data has now been provided in Attachment (2).**

Item 4: Incomplete emissions designator on form 731. Please provide the entire emissions designator in accordance with CFR 47 Section 2.201 & 2.202.

**Response: The entire designator is 12.5WD7 (refer to Occupied Bandwidth for the test that determines the 12.5 KHz bandwidth in Appendix M). The 12 KHz was chosen as it was the maximum occupied bandwidth over the entire operating frequency range of the unit.**

Item 5: Please provide the occupied bandwidth data plots showing compliance to CFR 47 Section §2.1049 and 87.135/ 87.137?.

**Response: The occupied bandwidth was measured at the low end, mid range and upper end of the unit's operating frequency range. The measurements were taken as close to -20 dBc as possible. The results are contained in Attachment (2).**

Item 6: I will take care of this one. Mary Ellen  
**No action required.**

Item 7: Please provide the following information in accordance with CFR 47 Section 2.1033(6): Range of operating power values or specific operating power levels, and description of any means provided for variation of operating power.

**Response: In Mode 0 the minimum operating power is 9 watts. In Mode 2, the minimum operating power is 14 watts. For both modes, the maximum operating power is 25 watts. These figures are per the RTCA Minimum Operating Performance Requirements. Refer to Attachment (2) for test results.**

Item 8: Please provide the following information in accordance with CFR 47 Section 2.1033(7): Maximum power rating as defined in the applicable part(s) of the rules.

**Response: The maximum power rating is 25 watts (delineated by RTCA DO-281).**

Item 9: Please provide the following information in accordance with CFR 47 Section 2.1033(10):

A schematic diagram and 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.

**Response: Refer to Reference (1).**

Item 10: Please provide the following information in accordance with CFR 47 Section 2.1033(13): For equipment employing digital modulation techniques, a detailed description of the modulation system to be used, including the response characteristics (frequency, phase and amplitude) of any filters provided, and a description of the modulating wavetrain, shall be submitted for the maximum rated conditions under which the equipment will be operated.

**Response: Refer to Reference (1).**

Item 11: In summary of tests required, please provide the following information in accordance with CFR 47 Section 2.1033(14): The data required by §§2.1046 through 2.1057, inclusive, measured in accordance with the procedures set out in §2.1041. Please also include set up Photos of the tests performed.

**Response: Refer to Attachment (2).**

Item 12: Please provide the appropriate antenna installation instructions in the users manual including antenna separation for RF exposure compliance?

**Response: This is not applicable for our unit.**

Item 13: Please provide a list of ALL equipment used for FCC testing and it calibration dates.

**Response: Refer to Attachment (2).**

Item 14: Please provide emissions data showing compliance to CFR 47 Section 2.1051 and 87.139.

**Response: Refer to Attachment (2).**

Item 15: Please provide emissions data showing compliance to CFR 47 Section 2.1053 and 87.139.

**Response: Refer to Attachment (2).**

Item 16: Please provide modulation characteristics data showing compliance to CFR 47 Section 2.0147 and 87.141.

**Response: This is not applicable since we do not have the capability to transmit voice.**

Item 17: Please provide a copy of the original FAA notification letter as specified in CFR 47 Section 87.147.

**Response: Refer to Reference (1).**

Item 18: Please provide data showing RF exposure compliance.

**Response: Not applicable.**



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