

April 19, 2018

I certify that the following FM translators have been checked for spurious emissions and modulation and that they comply with the requirements of 47 C.F.R. Sections 73.317(b) through 73.317(d).

Kailua-Kona HI K206EJ 89.1 MHz. & Kalaoa HI K217GG 91.3 MHz.

Measurements were taken using a calibrated RF spectrum analyzer connected to the transmission line through an in-line watt meter -50dB sample port. An 88-108 Band reject filter was used to check frequencies outside of FM BROADCAST band.

Signed:

Jeremy Estabrooks  
Field Engineer  
Calvary Chapel of Twin Falls, Inc.

### Intermod Calculation Sheet

|              |      |      | Fundamental | First Harmonic | Second Harmonic |  |
|--------------|------|------|-------------|----------------|-----------------|--|
| Frequency A: | 89.1 | -6.6 | 89.1        | 178.2          | 267.3           |  |
| Frequency B: | 91.3 | -6.4 | 91.3        | 182.6          | 273.9           |  |

Note: Frequency B should be the greater of the two.

|                              |       |       |  |       |   |
|------------------------------|-------|-------|--|-------|---|
| <b>Second Order Products</b> | 2.2   | N     |  | 1.2   | N |
|                              | 180.4 | N     |  | 87.9  | N |
|                              | 178.2 | N     |  | 91.5  | N |
|                              | 182.6 | N     |  | 178.2 | N |
| <b>Third Order Products</b>  | 93.5  | -72.1 |  | 179.4 | N |
|                              | 86.9  | N     |  | 180.6 | N |
|                              | 271.7 | N     |  | 267.3 | N |
|                              | 269.5 | N     |  | 268.5 | N |
|                              | 267.3 | N     |  | 269.7 | N |
|                              | 273.9 | N     |  | 270.9 | N |

Noise floor: -80

USB-SA44B Spectrum Analyzer -50dB port on Bird watt meter at combiner output  
88-108 Band reject filter used to check frequencies outside of FM BROADCAST band