

**MINOR CHANGE APPLICATION**  
**HILO CHRISTIAN BROADCASTING CORP.**  
**KCIF RADIO STATION**  
**CH 212A - 90.3 MHZ - 5.0 KW**  
**HILO, HAWAII**  
**July 2004**

**EXHIBIT B**

**Channel 6 Television Interference Analysis**

The proposed KCIF is located within the distance specified in §73.525(a)(1) of the rules as it relates to KLEI, Channel 6, Kailua Kona, Hawaii. KLEI operates with an effective radiated power of 52.5 kilowatts with a height above average terrain of 887 meters. The KLEI site is located at North Latitude 19° 42' 56" and West Longitude 155° 55' 00".

The proposed KCIF facility will operate with a vertically polarized antenna with an effective radiated power of 5.0 kilowatts. The proposed KCIF site is outside the Grade B contour of KLEI. For the purposes of these calculations, no power rating for the use of a vertical only antenna will be made. The 47 dBu (50/50) Grade B contour of KLEI is shown on Exhibit B1. Based on the proposed KCIF channel, the 68.8 dBu (50/10) contour would have to cross the 47 dBu protected contour of the affected TV station for interference to result. As Exhibit B1 shows there is no overlap of contours between KCIF and KLEI. As such, this proposal is in compliance with §73.525 with respect to KLEI.

**KLEI**

BLCT-19880427KF  
Latitude: 19-42-56 N  
Longitude: 155-55-00 W  
ERP: 52.50 kW  
Channel: 06Z  
Frequency: 85.0 MHz  
AMSL Height: 1760.0 m

Graham Brock, Inc. - Broadcast Technical Consultants

**KCIF Proposed**

Latitude: 19-38-14 N  
Longitude: 155-03-19 W  
ERP: 5.00 kW  
Channel: 212A  
AMSL Height: 162.0 m

KLEI 47 dBu (GRADE B)

KCIF 68.8 dBu (50/10)

**EXHIBIT B1**  
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Scale 1:750,000  
0 10 20 30 km

