

**MONTANA STATE UNIVERSITY - BILLINGS**  
**KGLZ-FM**  
**RF Radiation Compliance**

OET Bulletin 65 Edition 97-01

July 25, 2017

# **MONTANA STATE UNIVERSITY - BILLINGS**

## **RF Radiation Compliance**

This report is to show compliance with the FCC established guidelines for exposure to RF electromagnetic fields as described in OET Bulletin 65 Edition 97-01. The stations and methods are described below.

### **Facilities:**

<b>Facility ID</b>	<b>Call Sign</b>	<b>Freq</b>	<b>Antenna</b>	<b>HAGL</b>	<b>ERP</b>
174030	KGLZ-FM	88.5	4 Bay	16 Meters	5.15 kw V / H
50357	KZMT-FM	101.1	7 Bay	45.7 Meters	90.5 kw V / H
27517	KBLL-FM	99.5	4 Bay	27.5 Meters	12 kw V / H
8668	KMTX-FM	105.3	6 Bay	35 Meters	31 kw V / H

All stations were operating at full power while tests were being conducted.

### **Survey Meter**

The measurements were performed using a NARDA Model 8718 B meter S/N 6053 and a NARDA Model 8764D probe S/N 6010. The meter and probe designed to measure electromagnetic fields with respect to human exposure from 100 kHz to 300 GHz. The instrument was last calibrated on 5-27-05.

### **General Population / Uncontrolled Exposure:**

In regard to General Population / Uncontrolled Exposure. A Narda survey meter model 8718B with an 8761D probe was used in the area. All power density in this report were measured in  $\mu W / cm^2$  from 300 KHz to 3.0 GHz. Max hold was used while walking around the area with the probe being moved between ground and the 2 meter level. The highest level recorded was near the base of the tower. The level recorded was  $308 \mu W / cm^2$ . Other measurements were taken around the area and are listed on the chart below. This shows compliance with OET Bulletin 65 Edition 97-01 for General Population / Uncontrolled Exposure.

To meet compliance with Uncontrolled Exposure Limits a fence needs to be constructed around the tower area. The measurements were taken with the proposed fence in place. RFR signs are already in place marking where the fence is to be built. Drawing 1 shows the addition of the fence around the tower base.

### **Occupational / Controlled Exposure:**

The Occupational / Controlled Exposure measurements were made using the same meter and methods as the General Population / Uncontrolled measurements. All measurements fell below the allowed level for Occupational / Controlled Exposure.

A spreadsheet showing the levels included in this report. The station is shown to be in compliance with the OET Bulletin 65 Edition 97-01 for Occupational / Controlled Exposure.

Spatial averaging was used for some measurements.

All measurements were taken on by myself Richard Jones on 7-25-17 and are true and accurate to the best of my knowledge.

Richard Jones  
RJ Engineering

# KGLZ-FM

88.5 Mhz

KGLT-FM	Ref#	Field Strength $\mu W / cm^2$	Location
Run Ref. Number: 00	1	40	Front door of building
Date: 6-25-17	2	110	20 ft out from propane tank
	3	120	NW RFR sign
Model 8718 S/N: 6053	4	50	West RFR sign
	5	90	Directly in front of antennas 84ft from the building
Probe: 8761DS/N: 06010	6	30	93 feet South of the tower
	7	130	Base of KMTX-FM tower
Freq: 99.9 MHz      Cor. Factor: 1.00			
Avg Mode: N/A			

# KGLZ-FM Drawing 1

