

**LICENSE TO COVER  
Construction Permit LMS- 0000193193  
KJLB (FM) Lamar CO  
FACID 764002**

**TECHNICAL STATEMENTS**

**TRANSMITTER POWER OUTPUT**

**TRANSMITTER POWER OUTPUT = 1,639 WATTS  
MX2P-120F 2-channel combiner = 84% Efficiency  
215ft Andrew LDF4-50A = 73% Efficiency  
TWO BAY Nicmom BKG-77 Antenna = 1.00 Power Gain  
EFFECTIVE RADIATED POWER = 1,000 WATTS**

**SPECIAL OPERATING CONDITIONS:**

**The facility herein is a combined operation with that of co-owned translator K204GV (FX) Lamar CO FACID 83645. The attached proof of performance measurement demonstrates that sufficient measurements have been made to establish that the operation authorized in this construction permit is in compliance with the spurious emissions requirements of 47 C.F.R. Sections 73.317(b) through 73.317(d). All measurements were made with both stations simultaneously utilizing the shared antenna.**

**The K204GV facility is not eligible to operate on channel 204 yet, per Special Operating Conditions on that Construction Permit, but was temporarily operated on channel 204 for the purpose of this test and measurement.**

# Equipment Performance Checklist:

Call Letters: KJLB Date: 11/20/2023

Newly installed equipment? (Transmitter, Sub Carrier, Antenna, Etc.)

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Gates Air Transmitter, and COMTECH Combiner

73.317(b) Emissions between 120 & 240 khz deviation at least -25db from Unmodulated Carrier -72

73.317(c) Emissions between 240 & 600 khz deviation at least -35db from Unmodulated Carrier -76

73.317(d) Emissions occurring above 600 khz deviation at least -80db from Unmodulated Carrier -75

(Lesser of -80db or  $43+10 \text{ Log "Power in Watts"}$ ) -73

73.317(e) PreEmpahsis does not exceed 75us ✓ (total throughout entire air-chain)

73.1545(d)1 Unmodulated Carrier Frequency not to exceed 2000Hz from assigned +20hz

Modulation/Modulated Deviation Not to exceed 75khz + 0.5X SCA Injection

Total Modulation X

SCA 1 Injection X

SCA 2 Injection X NO TEST AUTHORITY

Remote Control Tested/Calibrated Calibrated / Tested

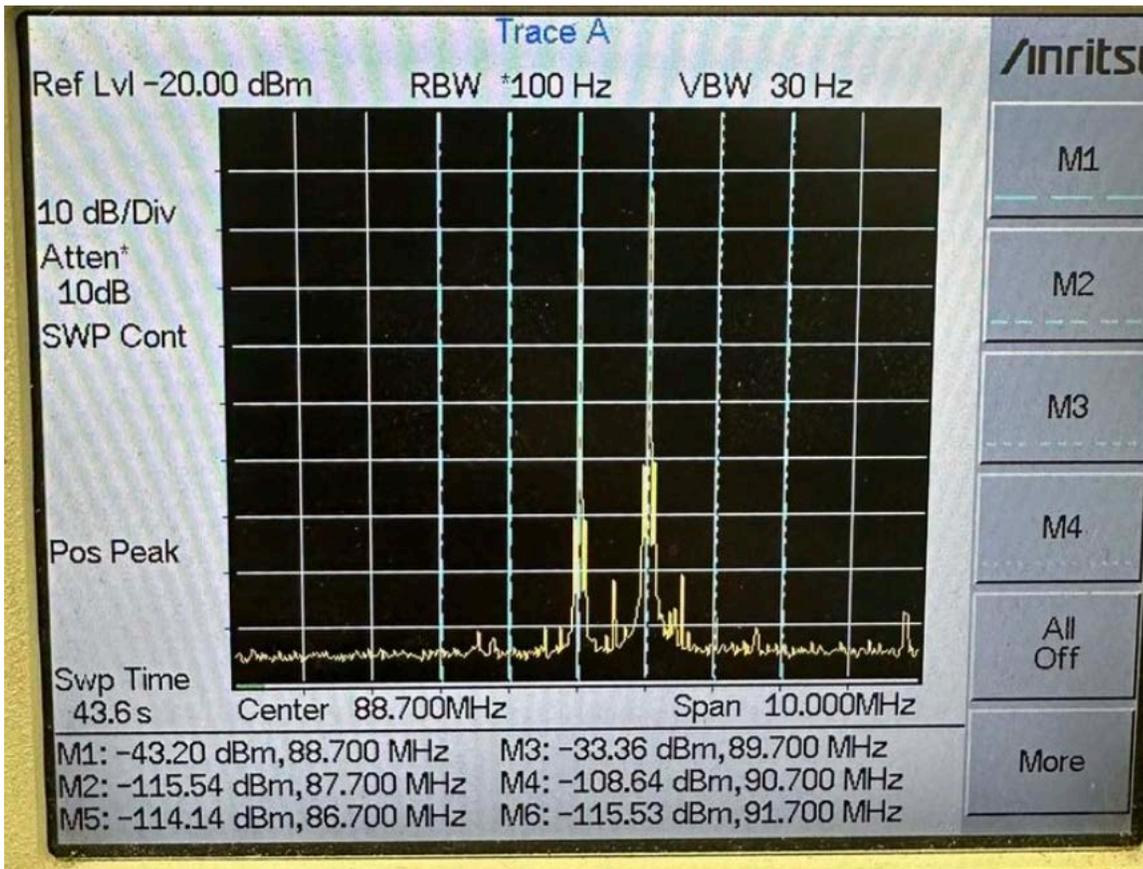
Tower Lights Monitoring Tested/Calibrated NON-OWNER TOWER

Notes:

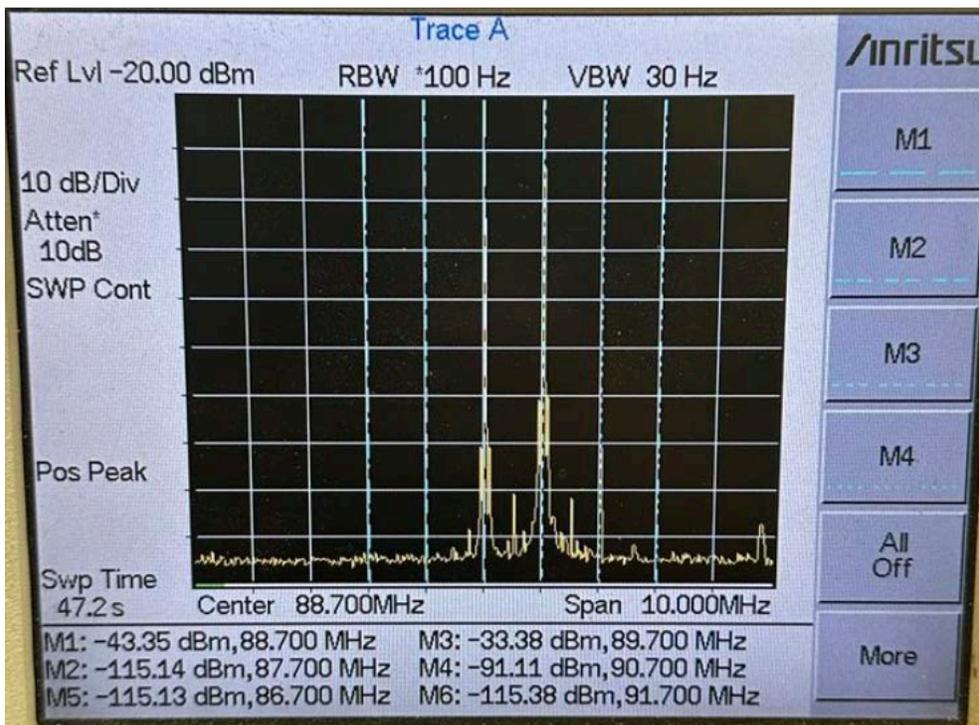
KJLB is installed using a shared PSI antenna (PSIFMLB-2A), a COMTECH combiner (FM 2-Pole 120 mm Manifold Combiner), in order to meet the above requirements.

Measurements above were taken using an Anritsu MS2711D Spectrum Analyzer and a Bird Metering port installed after the output of the combiner. Measurements were taken with the cooperation of KCSE 90.7 who powered down briefly for our testing.

Signed Alex R. McKenzie Print: Alex McKenzie



KSCE OFF



KSCE ON

# Federal Communications Commission

## FM BROADCAST STATION CONSTRUCTION PERMIT

**Permittee**

Great Plains Christian Radio,  
Inc.  
PO Box 991  
Meade, KS, 67864

<b>Call Sign</b>	<b>Facility ID</b>
	764002

<b>File Number</b> 0000193193	<b>This Permit Modifies License File No.</b> 0000165727	
<b>Filing Date</b> 06/10/2022	<b>Grant Date</b> 07/13/2022	<b>Expiration Date</b> 12/20/2024

<b>Community of License</b> City: LAMAR State: CO	<b>Frequency (MHz)</b> 89.7	<b>Station Channel</b> 209	<b>Station Class</b> A
<b>Hours of Operation:</b> Unlimited			
<b>Facility Type:</b> Noncommercial Educational			

<b>Transmitter</b> Certified for Compliance. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.	<b>Transmitter Output Power</b> As required to achieve authorized ERP.
<b>Antenna Type</b> Non-Directional	<b>Antenna Coordinates (NAD 83)</b> Latitude 38-2-10.0 N Longitude 102-35-58.6 W
<b>Major Lobe Directions</b> Not Applicable	

	<b>Horizontally Polarized Antenna</b>	<b>Vertically Polarized Antenna</b>
<b>Effective Radiated Power in the Horizontal Plane (kW)</b>	1.0	1.0

<b>Height of Radiation Center Above Ground (meters)</b>	60	60
<b>Height of Radiation Center Above Mean Sea Level (meters)</b>	1214	1214
<b>Height of Radiation Center Above Average Terrain (meters)</b>	70	70

<b>Antenna Structure Registration Number</b> 1207786	<b>Overall Height of Antenna Structure Above Ground (meters)</b> See the registration for this antenna structure.
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**Obstruction Marking and Lighting Specifications for Antenna Structure**  
See the registration for this antenna structure.

**Special Operating Conditions or Restrictions**  
The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

- BEFORE PROGRAM TESTS COMMENCE, sufficient measurements shall be made to establish that the operation authorized in this construction permit is in compliance with the spurious emissions requirements of 47 C.F.R. Sections 73.317(b) through 73.317(d). All measurements must be made with all stations simultaneously utilizing the shared antenna. These measurements shall be submitted to the Commission along with the application for FM broadcast license.

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules(See Section 83.875).

Pursuant to Section 73.3598, this Construction Permit will be subject to automatic forfeiture unless construction is complete and application for license is filed prior to expiration.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.