

Technical Statement

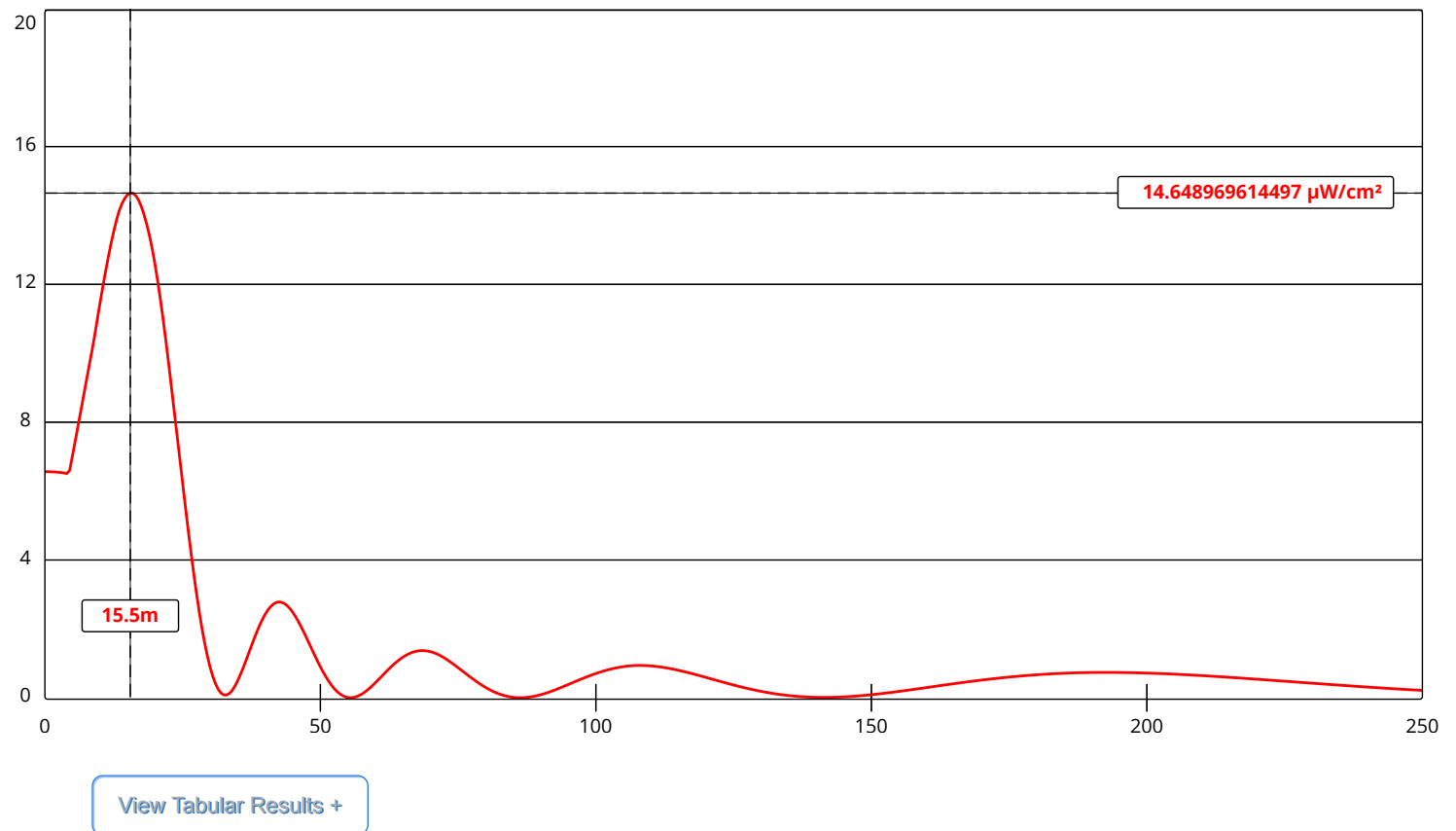
This Technical Statement was prepared on behalf of Harrison Radio Stations, Inc., (“Harrison”), permittee of station KCWD, Channel 241C2, Harrison, AR. The tower that collapsed on June 22nd has been re-built and a new ERI LPX-6C antenna has been installed at the same radiation center as was originally authorized. This modification may be made via a modification of license per §73.1690(c)(1) which allows for the replacement of an omnidirectional antenna provided the height of antenna radiation center is not more than 2 meters above or 4 meters below the authorized values. Since the applicant is using a different manufacturer’s omnidirectional antenna, this Form 302 application corrects the Transmitter Power Output (TPO) and demonstrates compliance with the Commission’s radio frequency radiation guidelines (see Exhibit 1). No other changes are proposed.

KCWD TRANSMISSION SYSTEM CALCULATION

Effective Radiated Power:	8 kilowatts H & V
Antenna	ERI, LPX-6C 6 BAY Full Wavelength spaced Circular Polarization
Antenna Gain	3.303
LINE EFFICIENCY:	0.848
TPO:	2.856 KW (ROUNDED TO 2.85 KW PER 73.212)

FM Model

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data [published in 1985 by the EPA](http://nepis.epa.gov/Exe/ZyNET.exe/2000ED2W.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A\zyfiles\Index%20Data\81thru85\Txt\00000003\2000ED2W.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h|-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p|f&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL) (<http://nepis.epa.gov/Exe/ZyNET.exe/2000ED2W.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A\zyfiles\Index%20Data\81thru85\Txt\00000003\2000ED2W.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h|-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p|f&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>). [▼ Show More....](#)



Channel Selection	Channel 241 (96.1 MHz) ▼		
Antenna Type +	EPA Type 3: Opposed U Dipole ▼		
Height (m)	<input type="text" value="52"/>	Distance (m)	<input type="text" value="250"/>
ERP-H (W)	<input type="text" value="8000"/>	ERP-V (W)	<input type="text" value="8000"/>
Num of Elements	<input type="text" value="6"/>	Element Spacing (λ)	<input type="text" value="1"/>
Num of Points	<input type="text" value="500"/>	Apply	