

**APPLICATION FOR AUXILIARY STATION LICENSE**  
**CUMULUS LICENSING LLC**  
**KQSM-FM RADIO STATION**  
**CH 221C3 - 92.1 MHZ - 0.6 KW**  
**FAYETTEVILLE, ARKANSAS**  
**June 2018**

**EXHIBIT A**

**KQSM-FM Transmission System Calculations**

Effective Radiated Power:	0.6 Kilowatts (Horizontal/Vertical)
Antenna:	NICOM BKG 77-3-M 3 bay full wavelength spaced antenna
Power Gain:	1.55
Transmission Line:	CommScope AVA7-50
(200 feet / 61 meters)	1 5/8 inch foam dielectric
Efficiency:	91.69 %
Required Transmitter Power Output To Reach Effective Radiated Power:	0.422 Kilowatts (422 Watts)

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BXPH-20170526ABI	
Channel:	221C3 - 92.1 MHZ
Effective Radiated Power:	1.5 Kilowatts (H/V)
Geographic Coordinates:	North Latitude 36° 08' 50" West Longitude 94° 11' 25"
Antenna Center of Radiation:	AGL 91.0 meters AMSL 499.0 meters HAAT 113.0 meters
Antenna Structure Registration Number:	1200512