TECHNICAL STATEMENT
KDPS DES MOINES, IOWA 201A
DES MOINES INDEPENDENT SCHOOL DISTRICT
FCC FORM 340
NOVEMBER 2021

This Technical Statement is prepared on behalf of Des Moines Independent School District for a minor change in the license of KDPS. It is updating the tower location, the tower overall height, the tower elevation, the antenna height Above Ground Level, and the antenna. The antenna radiation center Above Mean Sea Level and the Effective Radiated Power will remain the same.

The tower location is updating the coordinates from N. 41°-35'-00.9", W. 93°-38'-28.7" NAD 83 to N. 41°-35'-02.0", W. 93°-38'-29.5" " NAD 83. (Figure 1 shows the change as 0.00 km.) The overall tower height, not given before, is being updated to 124 meters. The tower elevation is being corrected from 274 meters, which wrongly included the height of the building as part of the elevation, to 251.5 meters. The antenna height AGL is being corrected from 76 meters, which did not include the building height, to 98.5 meters. The antenna is changing from horizontal to circular polarization.

The antenna radiation center AMSL stays the same at 350 meters and the ERP remains at 5.2 kW.

Figure 1: Shows compliance with contour overlaps except for with respect to KWDM. See figure 2.

Figure 2: Shows that the contour overlap between the interference contour of KDPS with the service contour of 3rd adjacent station KWDM before and after the minor modification is exactly the same in population, 7,657, and area, 5.49 sq. km.

Figure 3: Shows that there will not be any overlap of either KDPS or KKLG interference contours (F50,10), with the other station's corresponding protected contour, (F50,50).

Figure 4: Shows that there will not be any overlap of either KDPS or KQLF interference contours (F50,10), with the other station's corresponding protected contour, (F50,50).

Figure 5: Shows FCC 60 dbμ contour.

Figure 6: Shows FCC FM Model calculator for RF exposure. Note that the height used in the calculation does not include the height of the building. The exposure is determined at the bottom of the tower.