

1776978 Cedar Falls, IA, Showing Protection to KNWS-FM , Channel: 270  
 Geographic Coordinates: N. 42 30 08.00 W. 92 20 27.00  
 74.1204(d) Study - Using GLOBE 30 SEC Terrain Database  
 Translator or LPFM Maximum Licensed ERP = 0.25 kW, Channel: 268  
 Translator or LPFM Antenna Height AG = 57.2 meters  
 1776978 Antenna Model = 3-Bay full-wave

Protected Station's Contour = 78.30383 dBu  
 Translator's or LPFM's full Interference contour 118.30383

Review Azimuth = 0 Degrees True  
 Horizontal Relative Field at Review Azimuth = 1.000  
 Translator/LPFM ERP on the horizontal at Review Azimuth = 0.25 kW  
 Distance between stations = 42.3 km  
 Protected Station= KNWS-FM, 100 kW, 762 M meters COR AMSL

Depression Angle From Degree(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.2500	134.8275	134.8275	057.200
05.00	0.9	1.0	0.2025	121.3448	120.8830	046.624
10.00	0.635	1.0	0.1008	085.6155	084.3148	042.333
15.00	0.292	1.0	0.0213	039.3696	038.0281	047.010
20.00	0.025	1.0	0.0002	003.3707	003.1674	056.047
25.00	0.232	1.0	0.0135	031.2800	028.3493	043.981
30.00	0.294	1.0	0.0216	039.6393	034.3286	037.380
35.00	0.225	1.0	0.0127	030.3362	024.8500	039.800
40.00	0.072	1.0	0.0013	009.7076	007.4364	050.960
45.00	0.107	1.0	0.0029	014.4265	010.2011	046.999
50.00	0.267	1.0	0.0178	035.9989	023.1397	029.623
55.00	0.377	1.0	0.0355	050.8300	029.1549	015.563
60.00	0.432	1.0	0.0467	058.2455	029.1227	006.758
65.00	0.436	1.0	0.0475	058.7848	024.8435	003.923
70.00	0.402	1.0	0.0404	054.2007	018.5377	006.268
75.00	0.346	1.0	0.0299	046.6503	012.0740	012.139
80.00	0.276	1.0	0.0190	037.2124	006.4619	020.553
85.00	0.202	1.0	0.0102	027.2352	002.3737	030.068
90.00	0.126	1.0	0.0040	016.9883	000.0000	040.212