

Engineering Statement

In Support of an

Application for a Construction Permit

WCYN-FM, Cynthiana, Kentucky

WCYN Protected/WLTO Interfering FM Overlap Study

WCYNFM BLH19911105KB
Channel = 272A
Max ERP = 1.9 kW
RCAMSL = 368 M
N. Lat = 38 24 39
W. Lng = 84 19 07

WLTO BLH20010501ACB
Channel = 273A
Max ERP = 6 kW
RCAMSL = 386.7 M
N. Lat = 37 57 37
W. Lng = 84 32 42

Protected
60 dBu

Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
000.0	001.9000	0126.7	024.3	014.8	006.0000	0093.3	076.9	42.4
010.0	001.9000	0128.4	024.4	017.8	006.0000	0091.4	077.8	42.0
020.0	001.9000	0130.5	024.6	020.9	006.0000	0087.4	078.3	41.7
030.0	001.9000	0125.4	024.2	024.0	006.0000	0083.4	077.8	41.6
040.0	001.9000	0130.6	024.6	027.1	006.0000	0081.1	077.5	41.6
050.0	001.9000	0126.8	024.3	030.1	006.0000	0080.1	076.0	41.9
060.0	001.9000	0128.8	024.4	033.1	006.0000	0080.1	074.5	42.3
070.0	001.9000	0118.8	023.6	035.6	006.0000	0079.1	071.7	43.0
080.0	001.9000	0112.7	023.1	038.0	006.0000	0078.1	068.8	43.8
090.0	001.9000	0114.1	023.2	040.5	006.0000	0078.1	066.0	44.5
100.0	001.9000	0109.4	022.8	042.3	006.0000	0081.6	062.5	45.8
110.0	001.9000	0108.7	022.7	044.0	006.0000	0085.2	059.0	47.2
120.0	001.9000	0110.3	022.9	045.5	006.0000	0085.4	055.3	48.5
130.0	001.9000	0117.3	023.5	047.1	006.0000	0085.3	051.5	49.9
140.0	001.8365	0123.3	023.8	047.7	006.0000	0085.2	047.4	51.3
150.0	001.1641	0131.2	022.0	044.7	006.0000	0085.6	043.7	52.7
160.0	000.7328	0134.7	019.9	040.3	006.0000	0078.1	041.1	53.0
170.0	000.4645	0122.4	016.9	034.1	006.0000	0079.4	040.4	53.4
180.0	000.2938	0120.6	014.7	029.2	006.0000	0080.2	040.5	53.5
190.0	000.1862	0117.6	012.9	025.1	006.0000	0082.5	041.2	53.4
200.0	000.1200	0109.8	011.3	021.9	006.0000	0086.0	042.5	53.2
210.0	000.1200	0110.0	011.3	019.3	006.0000	0090.0	042.7	53.6
220.0	000.1200	0101.3	010.8	017.0	006.0000	0092.5	043.6	53.4
230.0	000.1862	0110.0	012.5	013.6	006.0000	0093.4	043.2	53.7
240.0	000.2938	0115.2	014.4	009.7	006.0000	0094.0	043.5	53.6
250.0	000.4645	0103.4	015.3	006.9	006.0000	0095.5	045.1	53.1
260.0	000.7328	0103.9	017.5	003.2	006.0000	0098.5	047.0	52.6
270.0	001.1641	0106.4	020.0	359.8	006.0000	0101.3	050.0	51.7
280.0	001.8365	0114.4	023.1	357.0	006.0000	0101.5	054.1	50.1
290.0	001.9000	0116.5	023.4	357.9	006.0000	0101.5	058.1	48.7
300.0	001.9000	0124.2	024.1	359.1	006.0000	0101.5	062.0	47.3
310.0	001.9000	0131.4	024.6	000.8	006.0000	0100.6	065.8	46.0
320.0	001.9000	0134.3	024.9	003.2	006.0000	0098.5	069.2	44.9
330.0	001.9000	0144.5	025.7	005.5	006.0000	0096.7	072.6	43.8
340.0	001.9000	0144.5	025.7	008.4	006.0000	0095.0	074.9	43.0
350.0	001.9000	0132.8	024.7	011.7	006.0000	0093.8	076.0	42.7