

**Engineering Statement
In Support of an
Application for a Construction Permit
KCVK(FM), Otterville, Missouri**

KCVK Protected/KMAJ Interfering FM Overlap Study

KCVK
Channel = 299A
Max ERP = 2.5 kW
RCAMSL = 405 M
N. Lat = 383921
W. Lng = 925427

KMAJ
Channel = 299C1
Max ERP = 100 kW
RCAMSL = 541 M
N. Lat = 390045
W. Lng = 950146

Protected
60 dBu

Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)		Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
000.0	002.5000	0151.3	027.8		093.0	100.0000	0277.7	184.3	37.4
010.0	002.5000	0155.2	028.2		092.9	100.0000	0277.7	189.2	36.4
020.0	002.5000	0151.4	027.8		093.3	100.0000	0277.7	193.9	35.6
030.0	002.5000	0142.9	027.1		094.0	100.0000	0277.8	198.2	34.8
040.0	002.5000	0138.4	026.8		094.7	100.0000	0278.1	202.1	34.1
050.0	002.5000	0145.0	027.3		095.4	100.0000	0278.4	206.1	33.4
060.0	002.5000	0136.5	026.6		096.5	100.0000	0278.6	208.8	33.0
070.0	002.5000	0133.3	026.3		097.6	100.0000	0279.0	211.1	32.6
080.0	002.5000	0135.2	026.5		098.7	100.0000	0279.0	213.2	32.3
090.0	002.5000	0130.1	026.1		099.9	100.0000	0279.6	214.0	32.2
100.0	002.5000	0134.8	026.5		101.1	100.0000	0279.7	215.0	32.0
110.0	002.5000	0138.3	026.8		102.4	100.0000	0280.0	215.1	32.0
120.0	002.5000	0135.7	026.5		103.6	100.0000	0280.1	214.0	32.2
130.0	002.5000	0140.3	026.9		104.8	100.0000	0279.7	212.8	32.4
140.0	002.5000	0143.0	027.1		106.0	100.0000	0279.4	210.8	32.7
150.0	002.5000	0147.0	027.5		107.1	100.0000	0278.8	208.1	33.1
160.0	002.5000	0141.0	027.0		107.9	100.0000	0278.2	204.4	33.7
170.0	002.5000	0139.5	026.9		108.6	100.0000	0277.8	200.4	34.4
180.0	002.5000	0148.7	027.6		109.4	100.0000	0277.4	196.4	35.1
190.0	002.5000	0152.1	027.9		109.9	100.0000	0277.1	191.8	35.9
200.0	002.5000	0142.9	027.1		109.8	100.0000	0277.2	187.0	36.9
210.0	002.5000	0150.1	027.7		109.9	100.0000	0277.1	182.1	37.8
220.0	001.7347	0133.1	024.3		108.5	100.0000	0277.8	178.6	38.5
230.0	001.0989	0148.8	023.0		107.5	100.0000	0278.4	175.4	39.0
240.0	000.6970	0155.3	021.1		106.3	100.0000	0279.3	173.5	39.4
250.0	000.4687	0165.1	019.8		105.1	100.0000	0279.7	172.1	39.6
260.0	000.3920	0174.2	019.4		104.0	100.0000	0280.0	170.6	39.9
270.0	000.3331	0172.5	018.6		102.9	100.0000	0280.1	170.3	40.0
280.0	000.3331	0166.0	018.2		101.8	100.0000	0279.8	170.2	40.0
290.0	000.3331	0169.4	018.4		100.7	100.0000	0279.7	170.2	40.0
300.0	000.3920	0170.6	019.3		099.6	100.0000	0279.4	170.1	40.0
310.0	000.4687	0185.6	020.9		098.3	100.0000	0279.0	170.1	40.0
320.0	000.6970	0191.0	023.2		096.8	100.0000	0278.8	170.5	39.9
330.0	001.0989	0176.2	024.8		095.4	100.0000	0278.4	172.5	39.5
340.0	001.7347	0164.3	026.6		094.1	100.0000	0277.9	175.5	39.0
350.0	002.5000	0155.1	028.1		093.2	100.0000	0277.7	179.4	38.3