

STATION	K206EV	FMX	CALCULATED FOR				K206EV			
LOCATION	HUNTSVILLE, TX		ERP OF 0.092 KILOWATTS H & V				HUNTSVILLE, TX			
CHANNEL	FM TRANSLATOR	206					FM TRANSLATOR			

COMPUTED LINE LOSSES - BASED ON MANUFACTURES DATA AT OPERATING FREQUENCY

DESCRIPTION AND LENGTH NEAREST FOOT	SIZE/TYPE	LENGTH	EXTRA LOSS (dB) (IF ANY)	SECTION LOSS (dB)	TOTAL (dB)	FREQ:	206	CH
JUMPER ANT	TRANSMISSION LINE	FEET		0.000	0.000			
VERTICAL RUN	TRANSMISSION LINE	1/2" FOAM LDF4-50A	350.00	2.181	2.181	0.6230		
BLD TO TOWER	TRANSMISSION LINE	1/2" FOAM LDF4-50A	30.00	0.187	0.187	0.6230		
JUMPER TRANS	TRANSMISSION LINE			0.000	0.000			
MISC ANT/LINE/TERMINATION CONNECTOR LOSSES		QYN	2.00	0.030	0.030	0.0149		

TOTAL FEET (MIXED)		380.00	COMPUTED SYSTEM LOSSES	
			SUBTOTAL	2.397
CLIENT PROVIDED LOSSES (IF ANY)				0.000
			TOTAL	2.397

dB Line Loss (with jumpers, line, and connector losses) from above

dB additional losses (Bandpass filter if used, example Telewave TBPC 1008-2)

dB additional losses (example Kintronic AM isolation coil)

Total System Loss in dB

57.58% Transmission System Efficiency Factor = Eff (%)

COMPUTED TPO NEAREST WATT	
320	

105%	0.336	TPO HIGH LIMIT
100%	0.320	NOMINAL
90%	0.288	TPO LOW LIMIT

0.092 kW	-10.362 dBk	STATION MAXIMUM ERP
0.500 X (Gain)	-3.010 dBd	ANTENNA GAIN PER ANT SPEC SHEET
0.184 kW	-7.352 dBk	ANTENNA INPUT
0.136 kW	2.397 dB	SYSTEM TOTAL LOSSES
0.320 kW	-4.955 dBk	TRANSMITTER POWER

Math Proof Check					
TPO	X	EFF	X	ANT G	= ERP
0.320		57.58%		0.500	0.092

ANTENNA SPECIFIED	
MAKE	SWR
MODEL	FM1-1
BAYS	1
SPACING	1.00
MODE	OMNI
CIRCULAR	H & V
ANT GAIN	0.500

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