

STATION	K206EV	FMX
LOCATION	HUNTSVILLE, TX	
CHANNEL	FM TRANSLATOR	

CALCULATED FOR
ERP OF 0.092 KILOWATTS H & V

K206EV
HUNTSVILLE, TX
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)
JUMPER ANT	TRANSMISSION LINE	FEET		0.000	0.000
VERTICAL RUN	TRANSMISSION LINE	1/2" FOAM LDF4-50A FEET	350.00	2.181	2.181
BLD TO TOWER	TRANSMISSION LINE	1/2" FOAM LDF4-50A FEET	30.00	0.187	0.187
JUMPER TRANS	TRANSMISSION LINE			0.000	0.000
MISC ANT/LINE/TERMINATION CONNECTOR LOSSES		QYN	2.00	0.030	0.030

FREQ:	206 MHz	CH
FREQUENCY SENSITIVE COMPONENTS		
0.6230	DB PER 100 FT	SYSTEM JUMPER AT ANTENNA
0.6230	DB PER 100 FT	VERTICAL RUN ON TOWER
0.6230	DB PER 100 FT	HORIZONTAL RUN TO TX BLD
0.0149	DB PER PAIR	SYSTEM JUMPER AT TRANSMITTER
0.0149	DB PER PAIR	TERMINATING CONNECTOR LOSSES

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

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

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

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